

PPL companies

# 2014 Business Plan Electric Sales Forecast

*July 11, 2013*

# Combined Company energy sales less than 1% lower in 2014 Plan vs. 2013 Plan

- *Slow growth for national and global economy*
  - *Advanced economies expected to grow 1.9% thru 2014*
  - *Low threat of US recession thru 2014*
- *KU energy sales slightly higher than prior plan due to small increase in residential use per customer, lower KY unemployment, and increase in current count of small commercial customers vs. 2013 Plan.*
- *LG&E energy sales below prior plan driven by weaker commercial outlook; current small commercial customer count below 2013 Plan.*

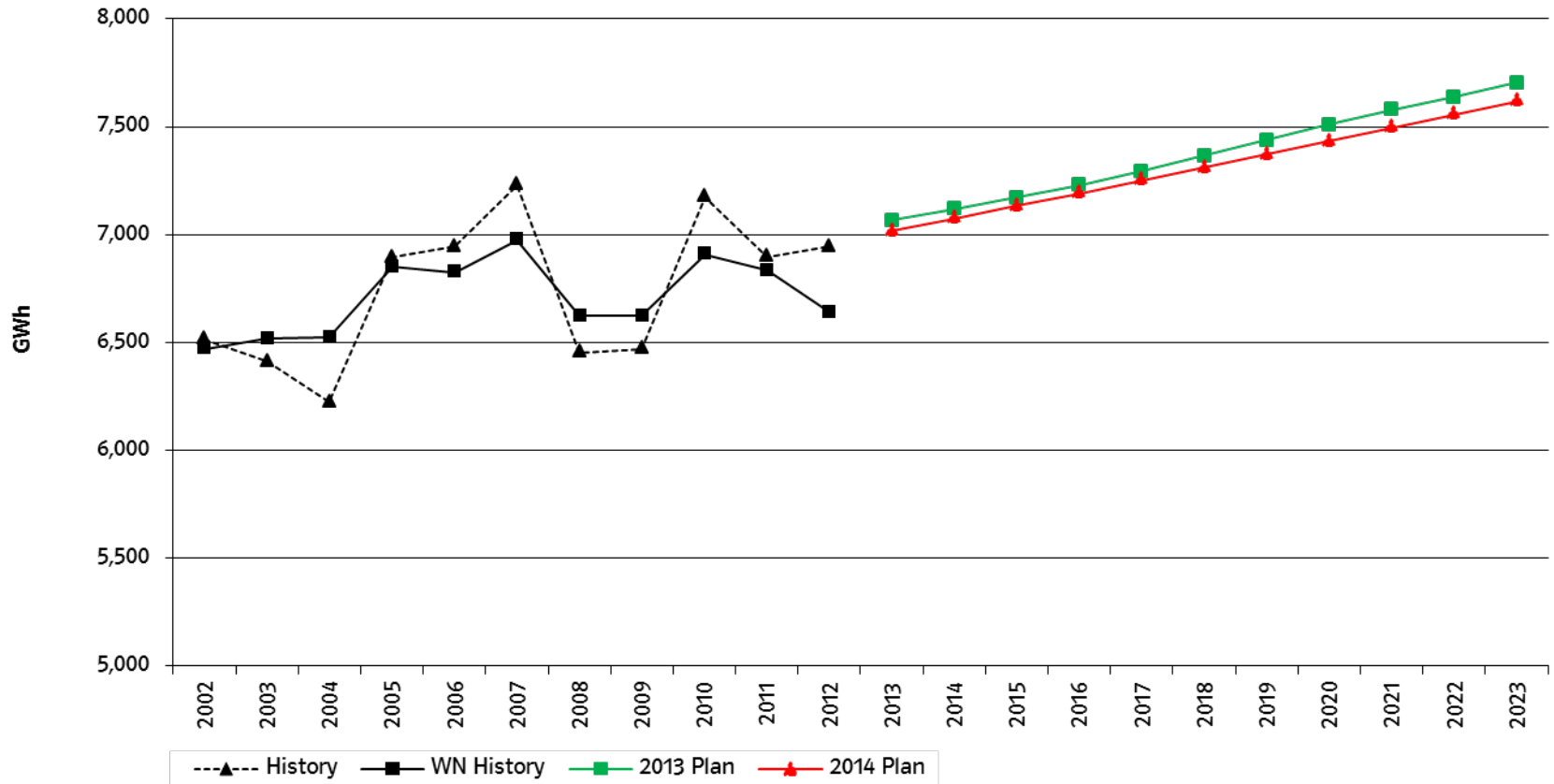
	Total Company Sales (GWh)				KU/ODP Sales (GWh)				LG&E Sales (GWh)			
	2014 Plan	2013 Plan	Delta	% Change	2014 Plan	2013 Plan	Delta	% Change	2014 Plan	2013 Plan	Delta	% Change
2013*	33,463	33,710	(247)	-0.7%	21,677	21,491	186	0.9%	11,786	12,219	(433)	-3.5%
2014	33,630	33,902	(272)	-0.8%	21,722	21,591	131	0.6%	11,908	12,311	(403)	-3.3%
2015	33,797	34,096	(299)	-0.9%	21,813	21,686	126	0.6%	11,985	12,410	(426)	-3.4%
2016	34,044	34,270	(226)	-0.7%	21,967	21,767	200	0.9%	12,077	12,503	(426)	-3.4%
2017	34,258	34,421	(163)	-0.5%	22,109	21,836	274	1.3%	12,148	12,585	(437)	-3.5%
2018	34,544	34,693	(149)	-0.4%	22,290	22,013	277	1.3%	12,253	12,679	(426)	-3.4%
5-year CAGR	0.64%	0.58%			0.56%	0.48%			0.78%	0.74%		

\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.



# Peak Demand is lower, consistent with slightly lower energy forecast

### Combined Company Summer Peak Demand - 10 Year View



\* Peak demand values shown are before the impact of Direct Load Control.

# 2013 KU-ODP energy expected to remain slightly above 2013 Plan for balance of 2013

Revenue Class	Jan - May 2013 KU/ODP Plan to Plan				Jun - Dec 2013 KU/ODP Plan to Plan			
	2014 Plan (GWh)	2013 Plan (GWh)	Variance (GWh)	Pct Var	2014 Plan (GWh)	2013 Plan (GWh)	Variance (GWh)	Pct Var
<i>Residential</i>	2,869	2,829	40	1.4%	3,775	3,737	38	1.0%
<i>Commercial</i>	1,669	1,658	11	0.7%	2,488	2,424	63	2.6%
<i>Industrial</i>	2,898	2,854	44	1.5%	4,295	4,353	(59)	-1.3%
<i>Public Authority/Other</i>	1,421	1,386	35	2.5%	2,263	2,249	13	0.6%
<b>Total</b>	<b>8,857</b>	<b>8,727</b>	<b>130</b>	<b>1.5%</b>	<b>12,820</b>	<b>12,764</b>	<b>56</b>	<b>0.4%</b>

Revenue Class	KU/ODP Jan - May Year over Year				KU/ODP Jun - Dec Year over Year			
	2014 Plan (GWh)	2012 WN Actuals (GWh)	Variance (GWh)	Pct Var	2014 Plan (GWh)	2012 WN Actuals (GWh)	Variance (GWh)	Pct Var
<i>Residential</i>	2,869	2,707	162	6.0%	3,775	3,822	(47)	-1.2%
<i>Commercial</i>	1,669	1,679	(10)	-0.6%	2,488	2,500	(12)	-0.5%
<i>Industrial</i>	2,898	2,914	(16)	-0.5%	4,295	4,014	281	7.0%
<i>Public Authority/Other</i>	1,421	1,433	(12)	-0.8%	2,263	2,148	115	5.4%
<b>Total</b>	<b>8,857</b>	<b>8,733</b>	<b>124</b>	<b>1.4%</b>	<b>12,820</b>	<b>12,484</b>	<b>336</b>	<b>2.7%</b>





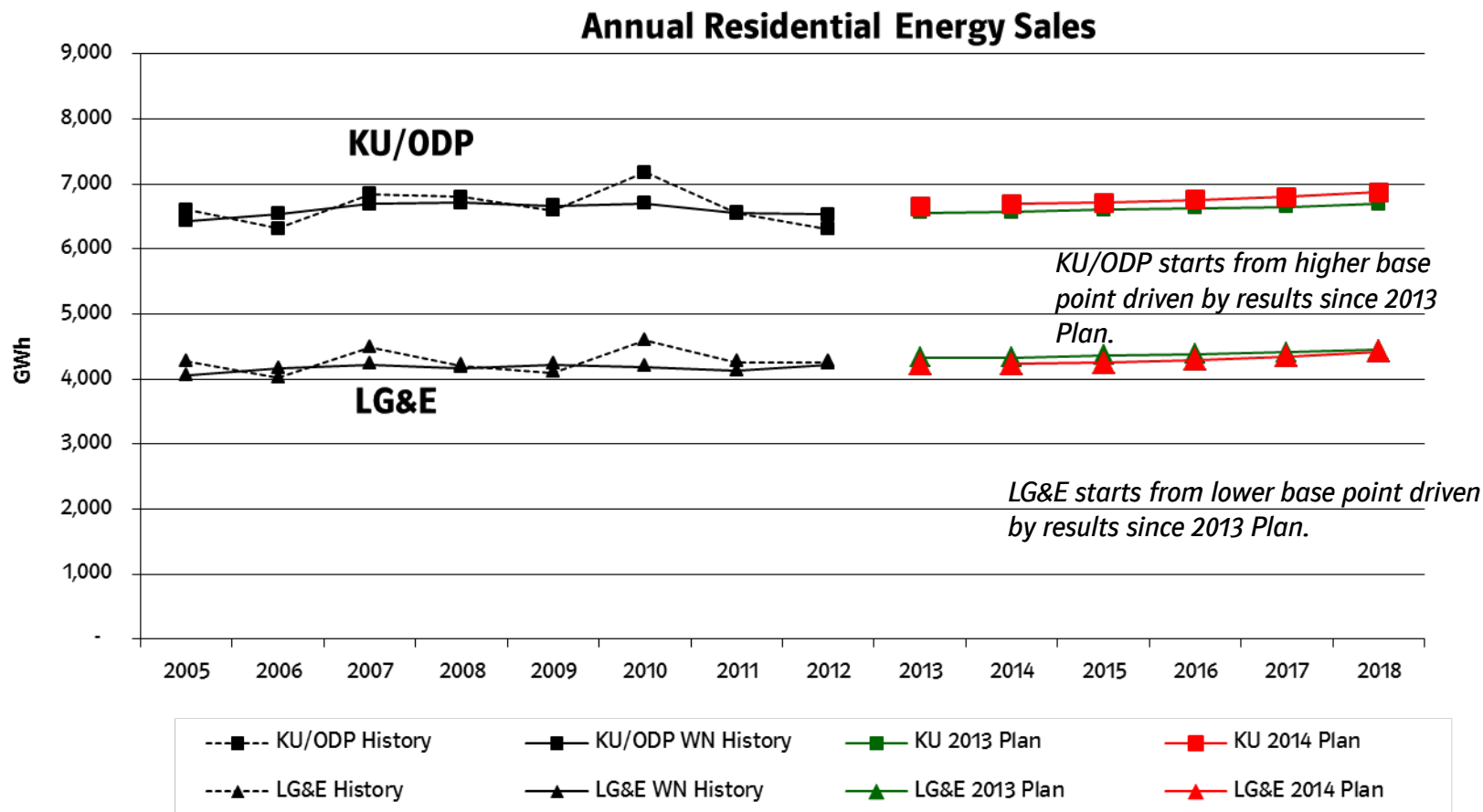
# 2013 LG&E energy below 2013 Plan for the balance of the year, consistent with first five months

Revenue Class	Jan - May 2013 LGE Plan to Plan				Jun - Dec 2013 LGE Plan to Plan			
	2014 Plan (GWh)	2013 Plan (GWh)	Variance (GWh)	Pct Var	2014 Plan (GWh)	2013 Plan (GWh)	Variance (GWh)	Pct Var
<i>Residential</i>	1,538	1,579	(41)	-2.6%	2,689	2,751	(62)	-2.2%
<i>Commercial</i>	1,428	1,484	(56)	-3.8%	2,230	2,345	(115)	-4.9%
<i>Industrial</i>	1,083	1,074	9	0.8%	1,669	1,642	27	1.6%
<i>Public Authority/Other</i>	454	515	(61)	-11.8%	694	829	(134)	-16.2%
<b>Total</b>	<b>4,503</b>	<b>4,652</b>	<b>(149)</b>	<b>-3.2%</b>	<b>7,283</b>	<b>7,566</b>	<b>(284)</b>	<b>-3.8%</b>

Revenue Class	LGE Jan - May Year over Year				LGE Jun - Dec Year over Year			
	2014 Plan (GWh)	2012 WN Actuals (GWh)	Variance (GWh)	Pct Var	2014 Plan (GWh)	2012 WN Actuals (GWh)	Variance (GWh)	Pct Var
<i>Residential</i>	1,538	1,540	(2)	-0.1%	2,689	2,684	5	0.2%
<i>Commercial</i>	1,428	1,455	(27)	-1.9%	2,230	2,255	(25)	-1.1%
<i>Industrial</i>	1,083	1,036	47	4.5%	1,669	1,626	43	2.7%
<i>Public Authority/Other</i>	454	482	(28)	-5.8%	694	697	(3)	-0.4%
<b>Total</b>	<b>4,503</b>	<b>4,513</b>	<b>(10)</b>	<b>-0.2%</b>	<b>7,283</b>	<b>7,262</b>	<b>21</b>	<b>0.3%</b>



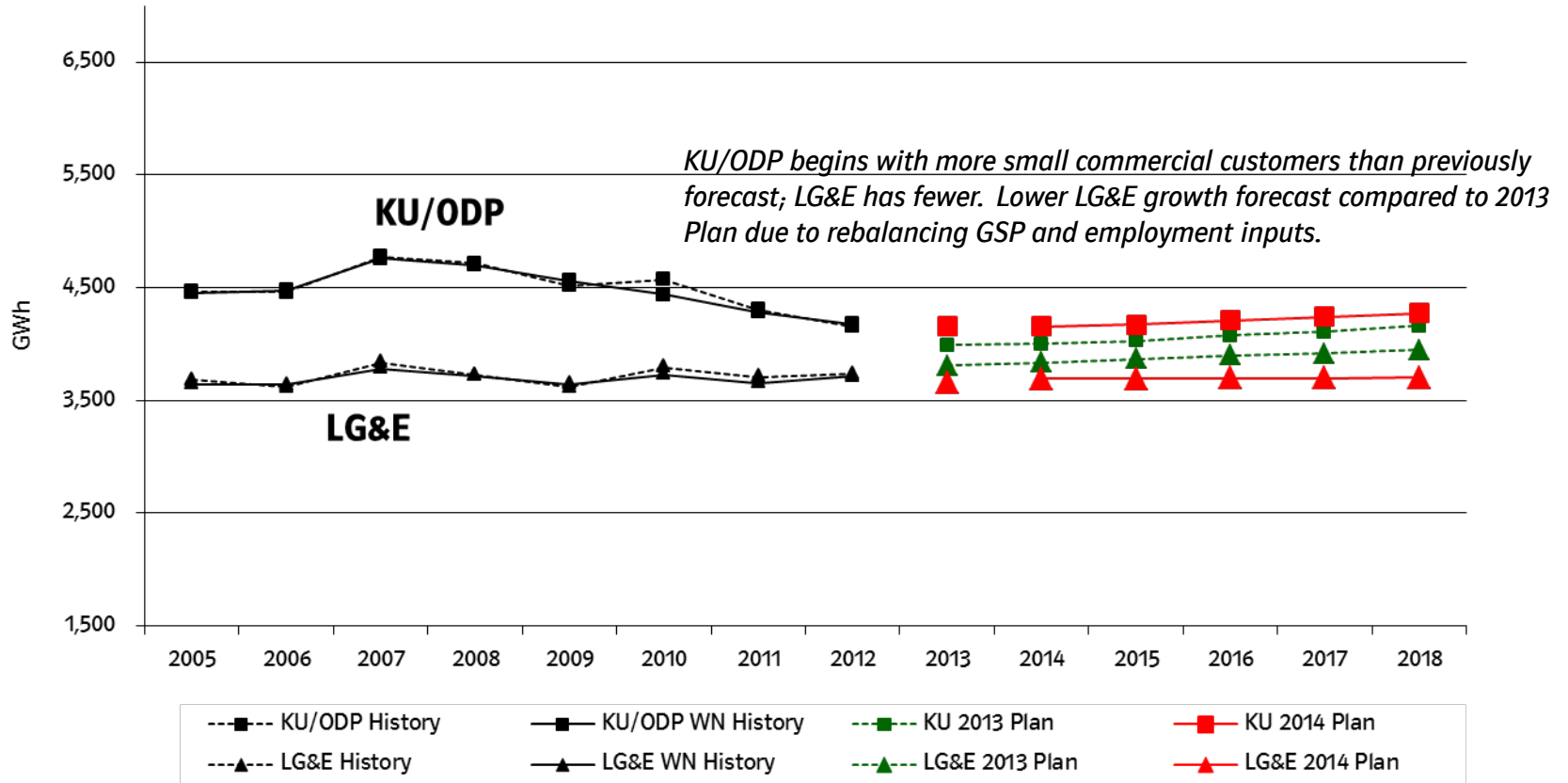
# Residential sales forecast is slightly higher for KU and slightly lower for LG&E



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

# Compared to 2013 Plan, commercial sales higher in KU and lower in LG&E

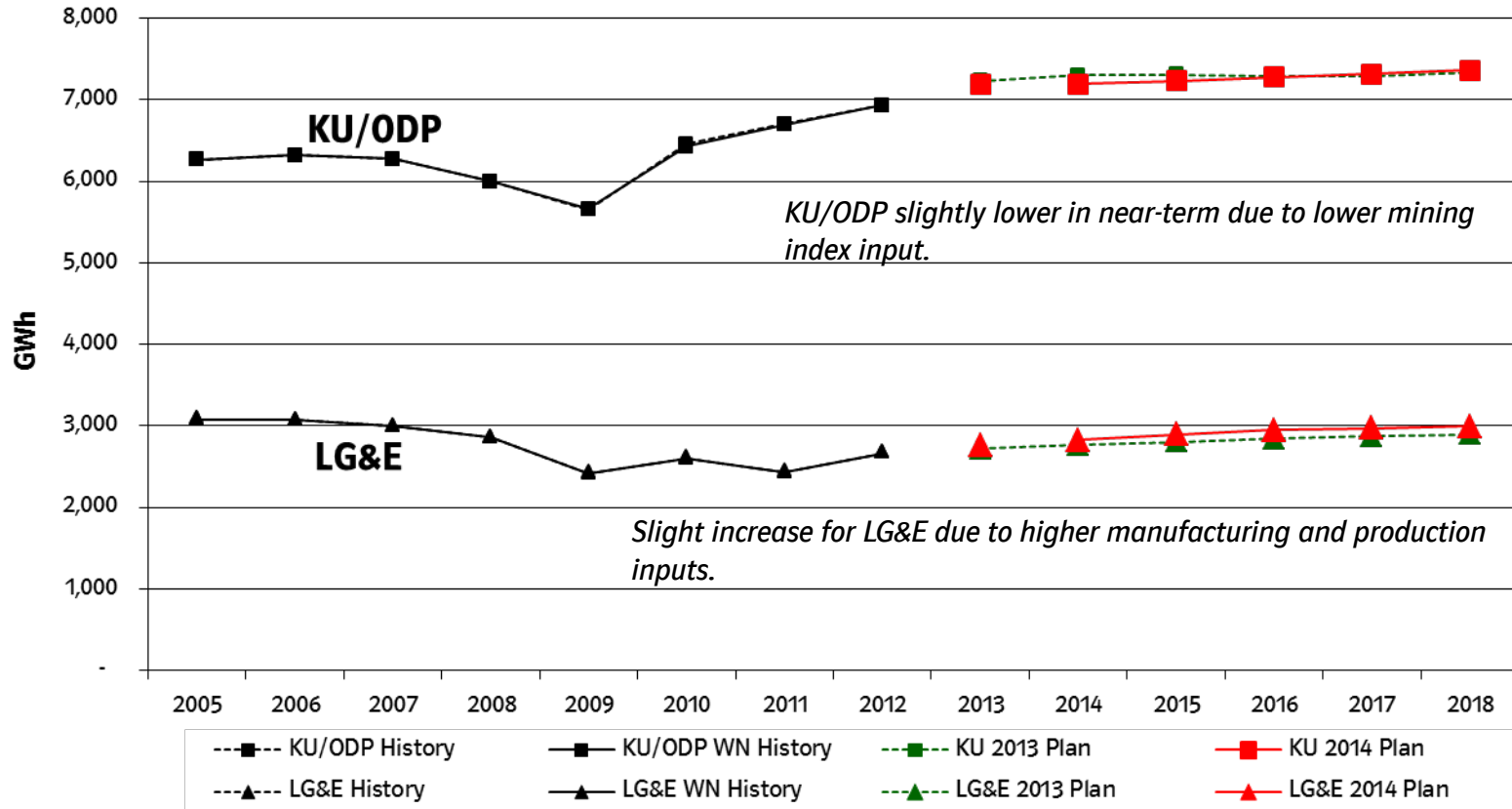
### Annual Commercial Energy Sales



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

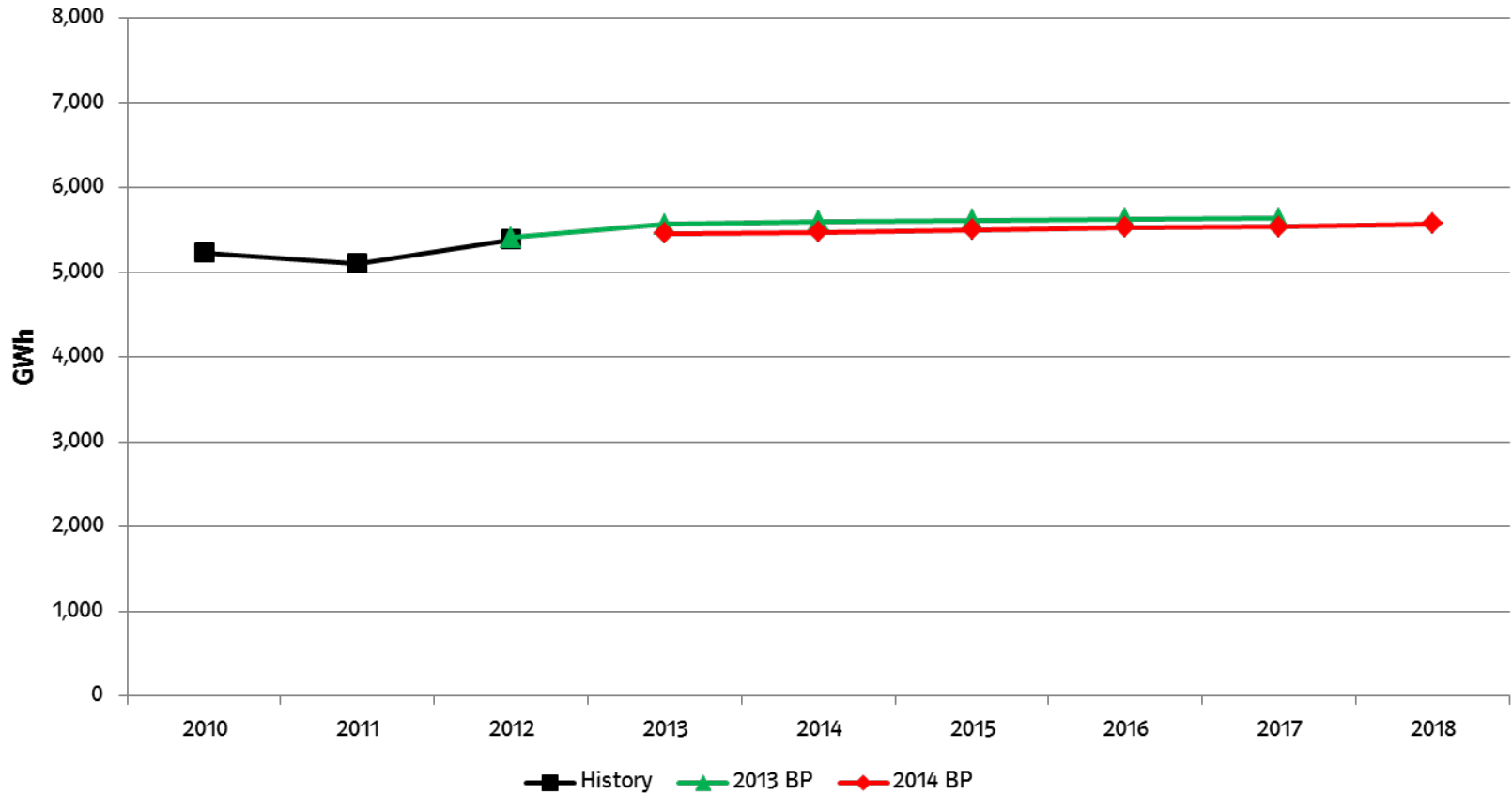
# Slow growth expected in industrial class consistent with prior Plan

### Annual Industrial Energy Sales



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

### Major Accounts History and Forecast



## Changes in Major Account sales: 2014BP v. 2013BP

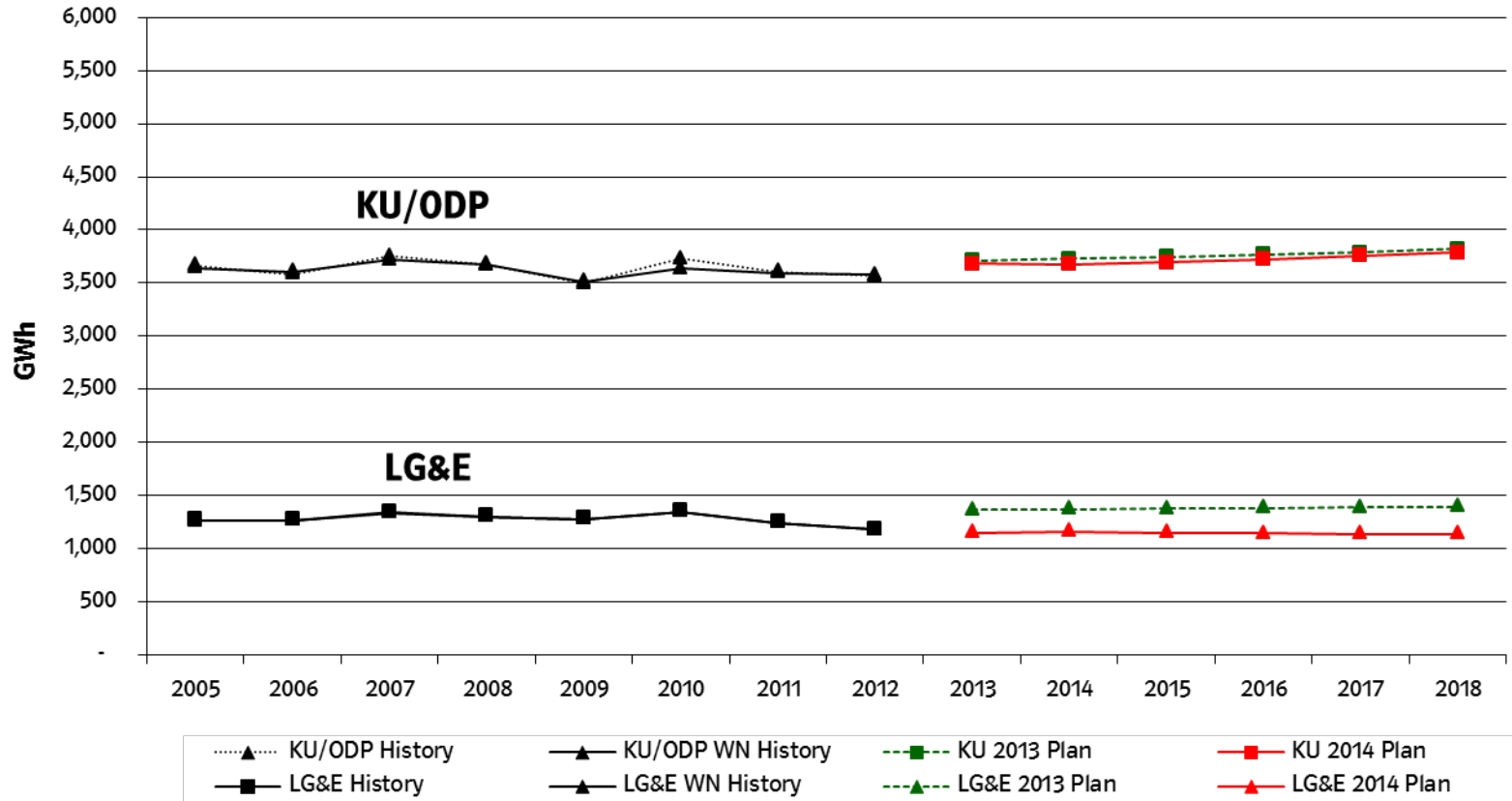
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- *Carbide energy forecast decreased by 54 GWh annually.*
- *Fort Knox energy is reduced by 2 GWh in 2014 increasing to a reduction of 29 GWh in 2017 annually as peak demand is reduced by 20 MW by 2018 due to installation of gas-fired generators.*
- *Dow Corning energy is increased by 30 GWh annually in 2014BP due to a 6 MVA load expansion that was not in 2013BP.*
- *North American Stainless energy is decreased by 59 GWh consistent with recent customer discussions.*
- *UK energy reduced by 16 GWh due to new energy efficiency activities that were not in the 2013BP.*



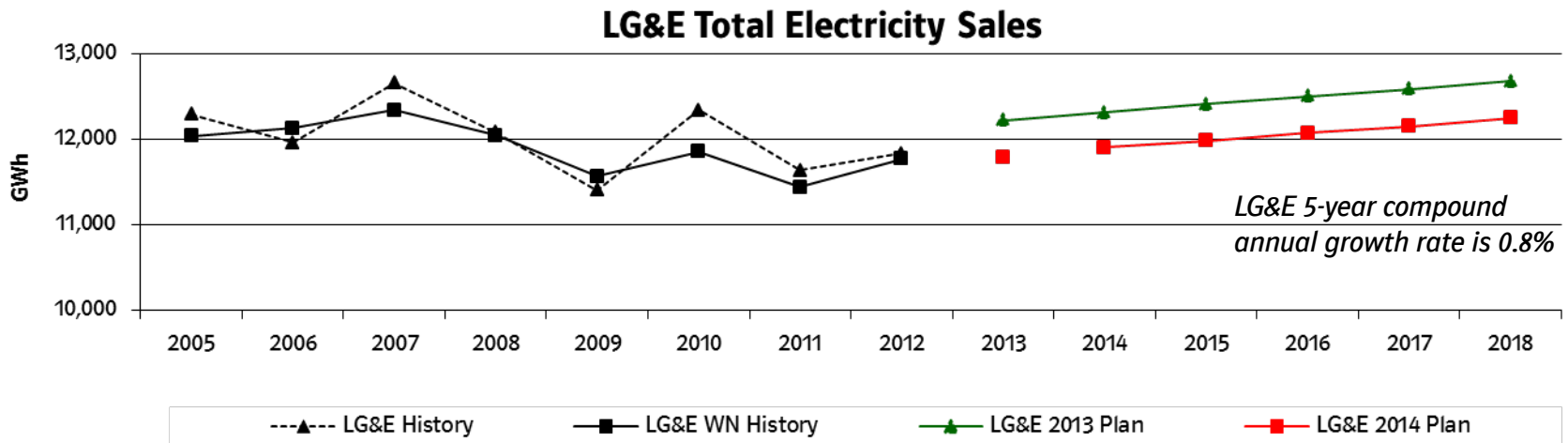
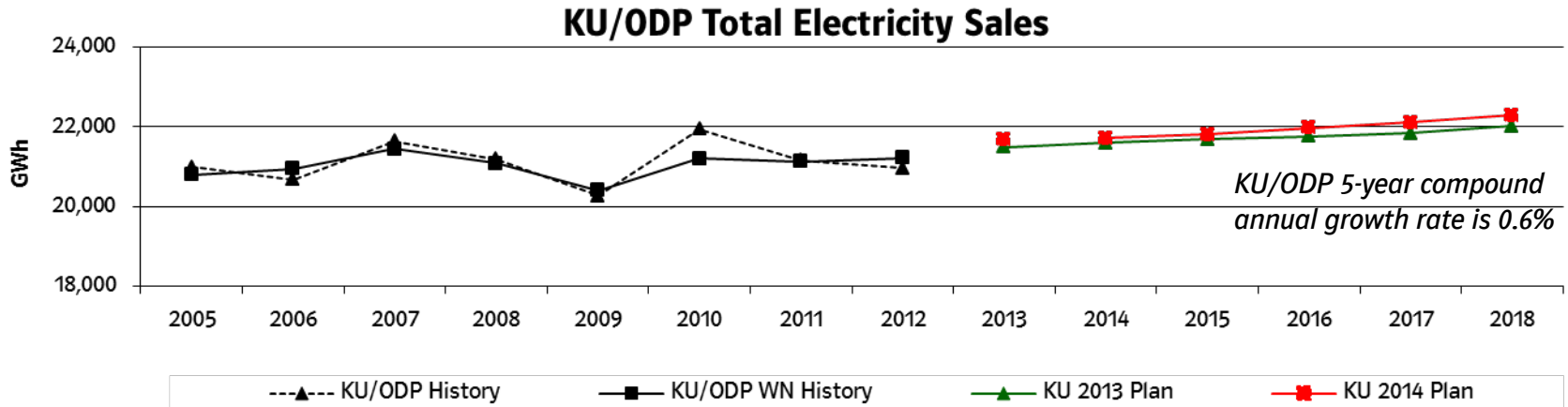
# LG&E Public Authority sales reflect lower Ft. Knox usage

### Annual Public Authority/Other Energy Sales



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

# KU energy sales up slightly vs. 2013 Plan; LG&E results reflect lower commercial forecast

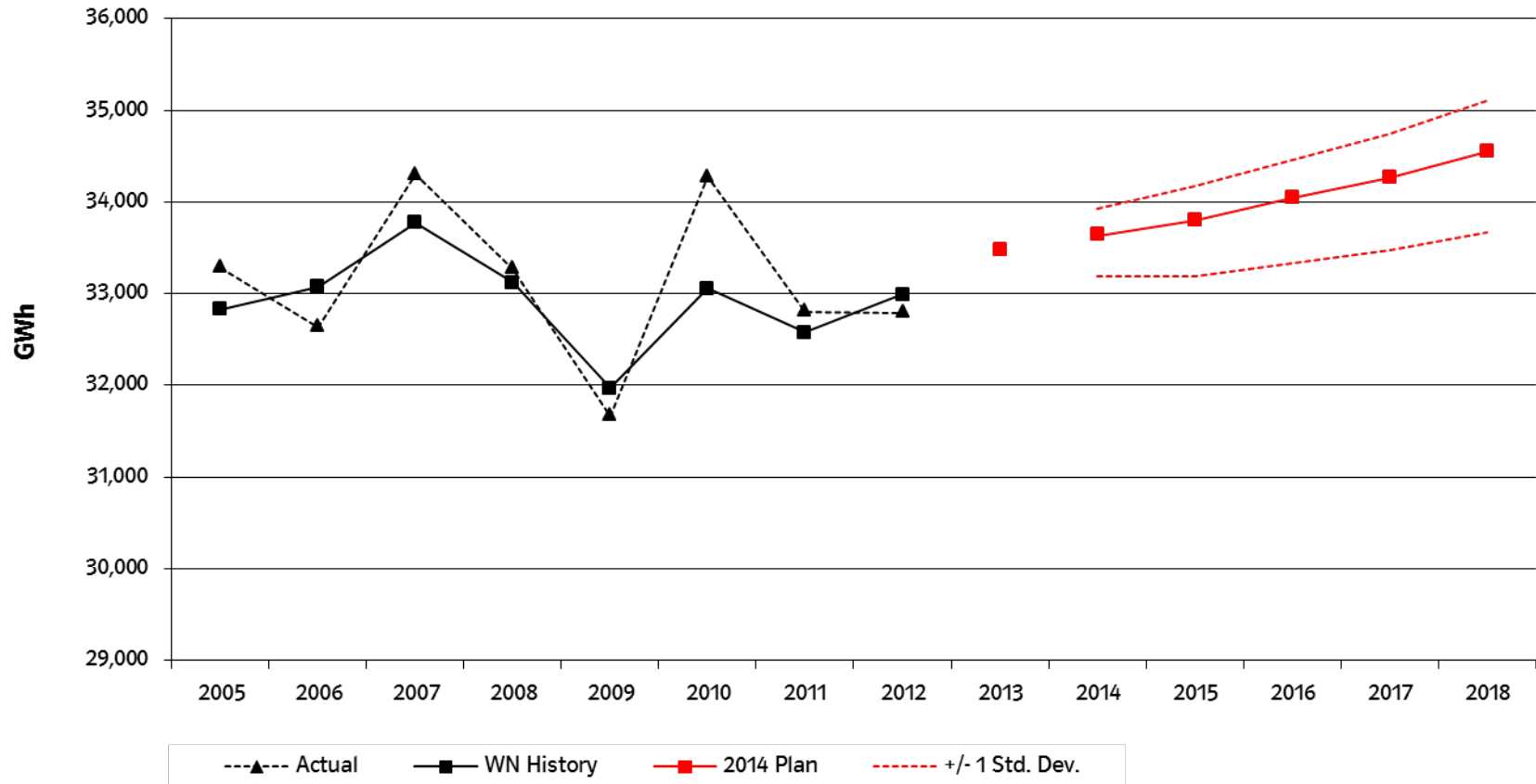


\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.



# Sales risk based on IHS GSP risk scenario

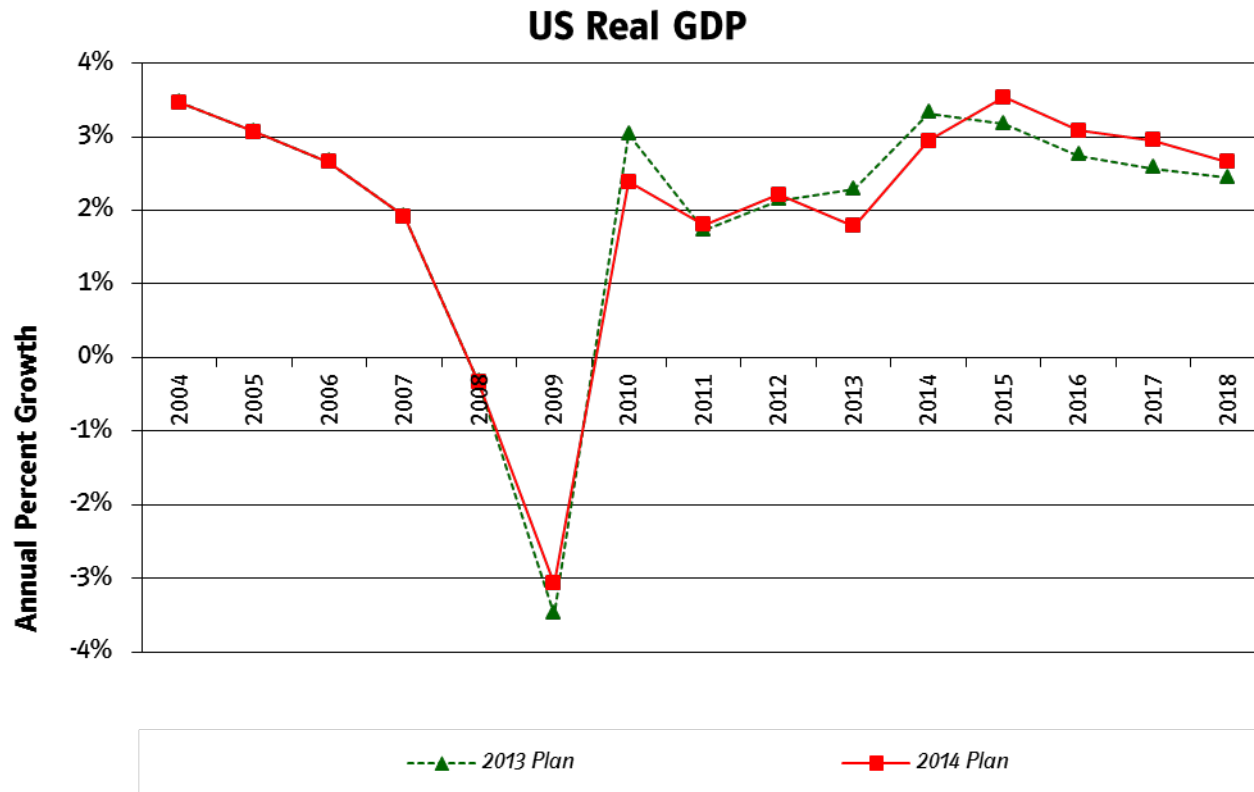
Combined Company Total Electricity Sales



# Appendix A - Macroeconomic Inputs

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# US GDP forecast lower near term vs. prior Plan



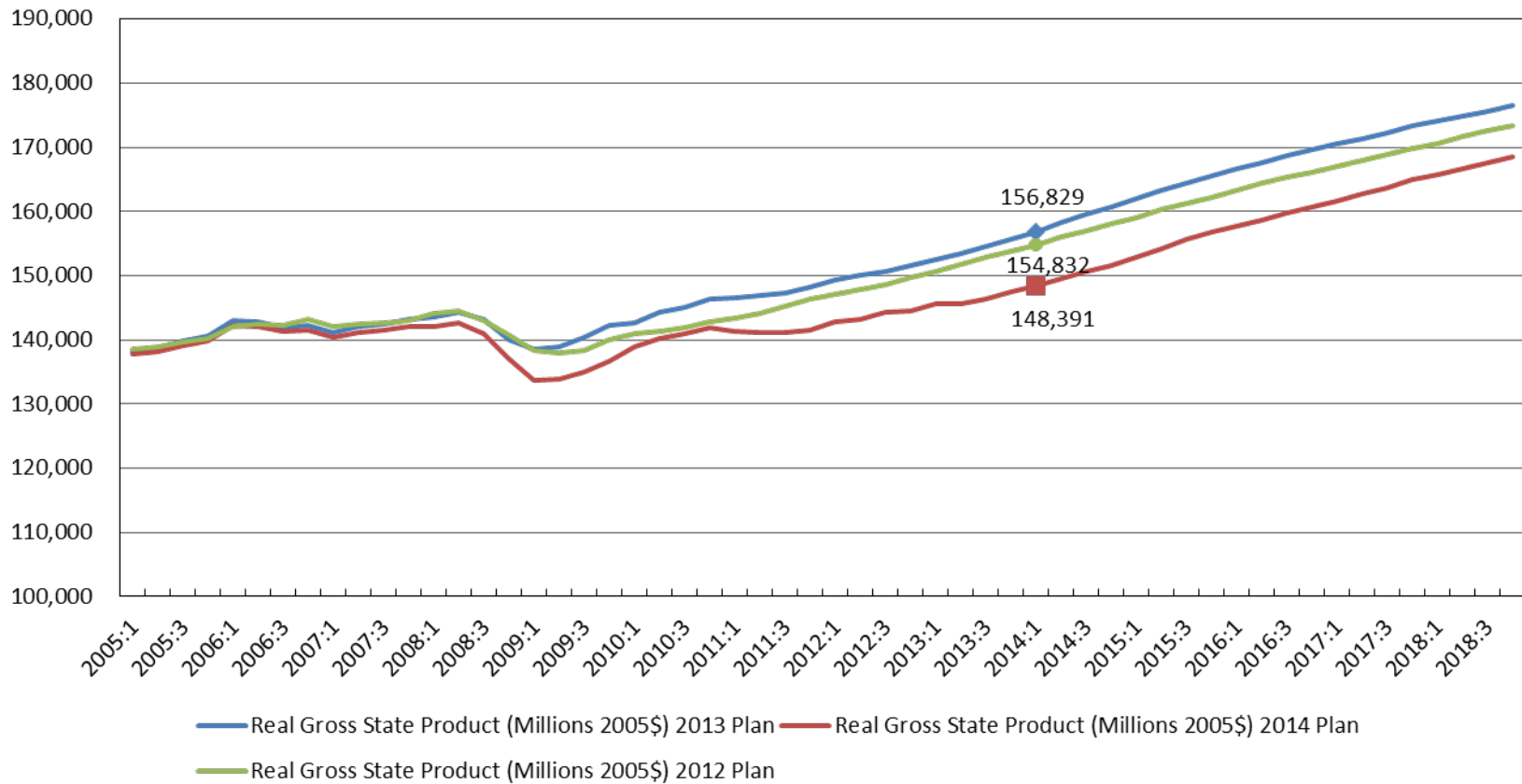
Source: IHS Global Insight



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# Kentucky GSP continues trend of lower revisions

## Kentucky GSP



Source: IHS Global Insight



# Appendix B - Customer Data

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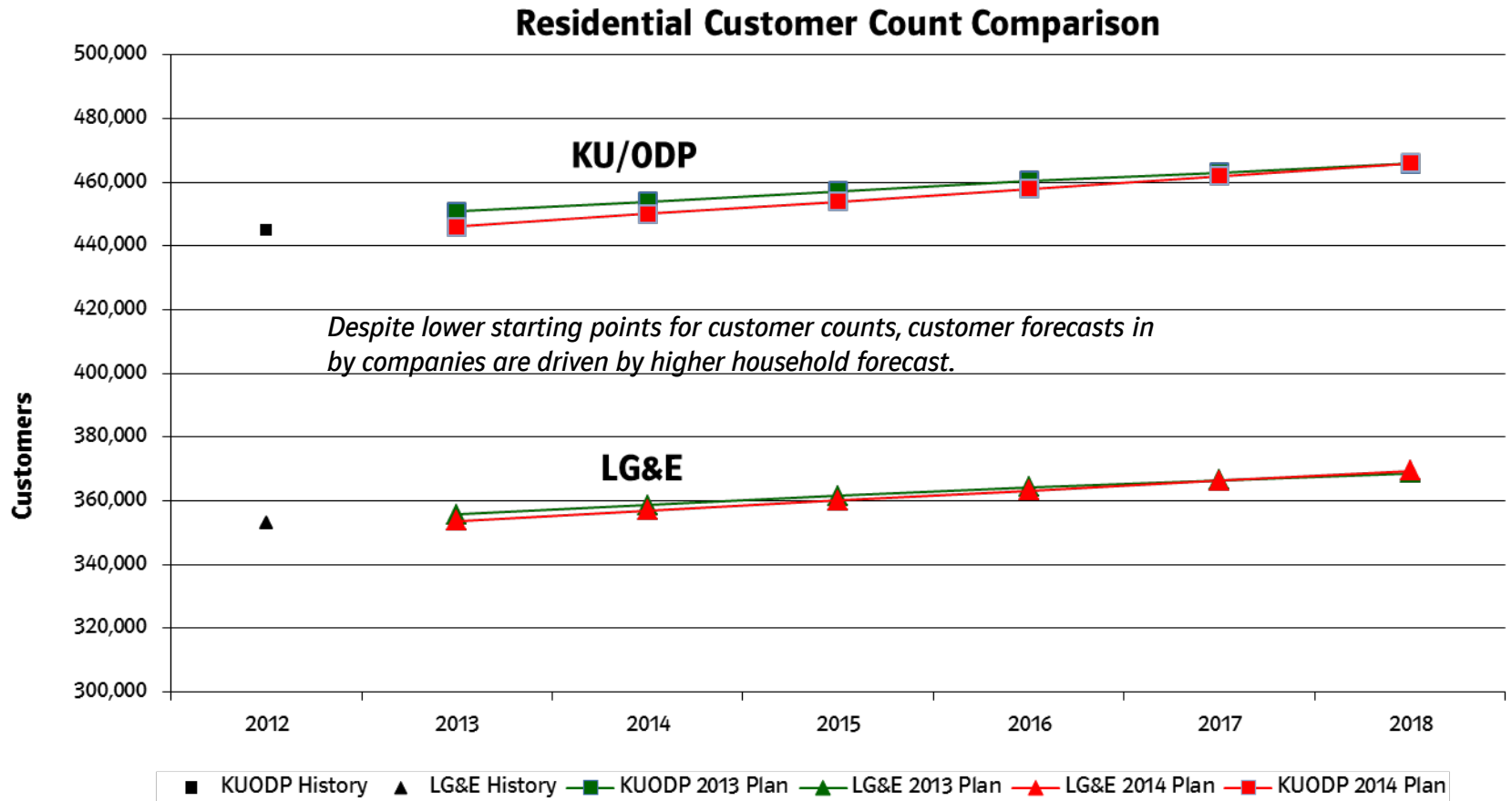
# Customers by Rate

		Current				Current	
	Rate Category	Contract Count*	Forecast for 2014		Rate Category	Contract Count*	Forecast for 2014
<b>KU/ODP</b>	AES	790	800	<b>LG&amp;E</b>	CPS-Pri	56	56
	GS	86,001	86,171		CPS-Sec	2,568	2,523
	LTOD-Pri	54	56		CTOD-Pri	32	35
	PS-Pri	302	264		CTOD-Sec	129	142
	PS-Sec	5,532	5,267		GS	44,251	44,448
	RS	446,414	450,199		IPS-Pri	25	21
	RTS	46	45		IPS-Sec	263	249
	TOD-Pri	139	161		ITOD-Pri	64	68
	TOD-Sec	271	327		ITOD-Sec	59	63
	FLS	1	1		RS	353,817	356,974
	Muni Pumping	12	12		RTS	12	12
	Municipals	12	12			<u>401,274</u>	<u>404,590</u>
		<u>539,573</u>	<u>543,315</u>				

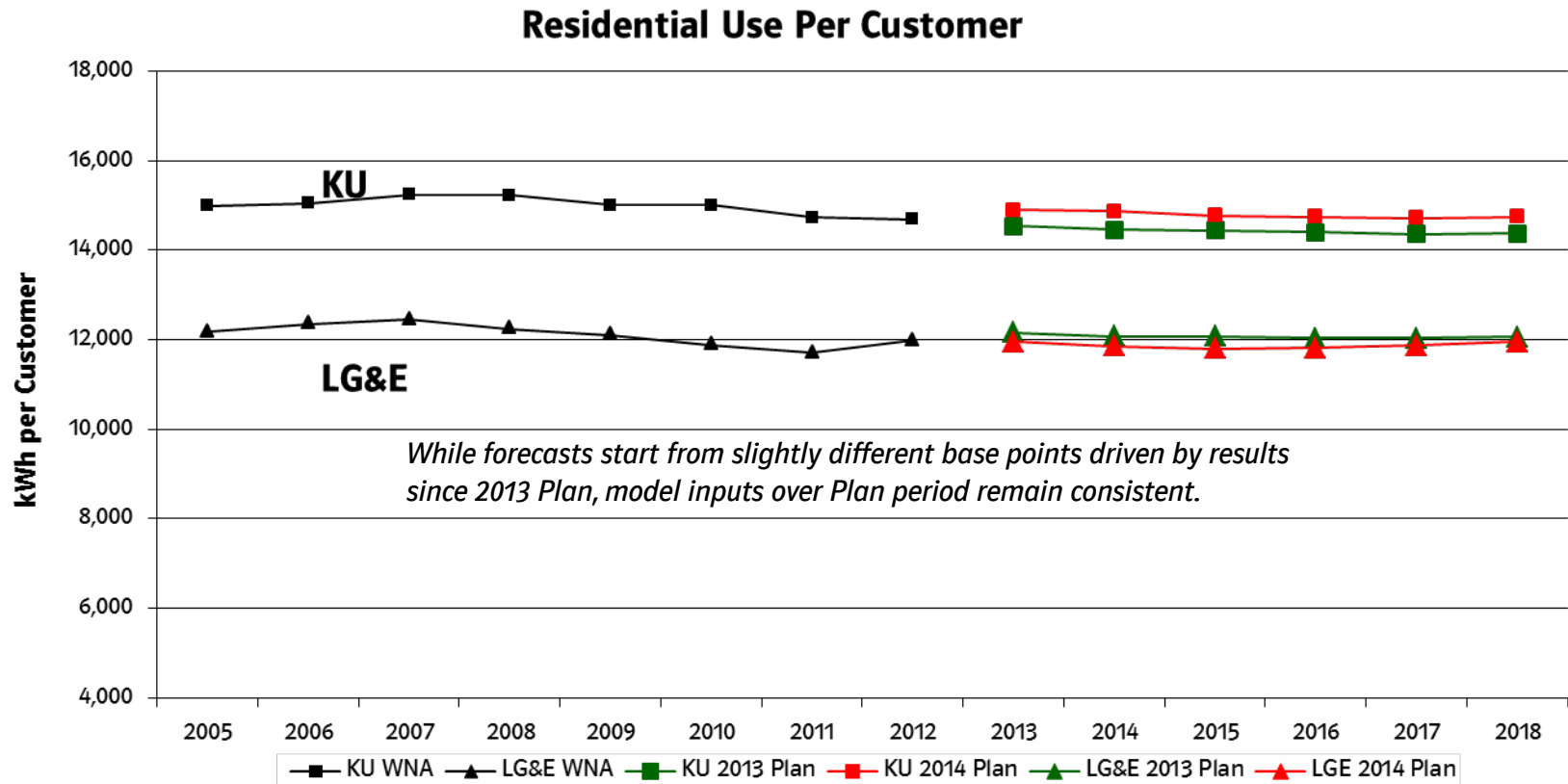
\* Average of Jan-Apr 2013



# Residential customer growth slightly below 2013BP



# KU use per customer slightly higher than 2013 Plan; LG&E largely consistent with 2013 Plan



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.



# Appendix C – Balance of 2013 and Long-term Sales Forecasts

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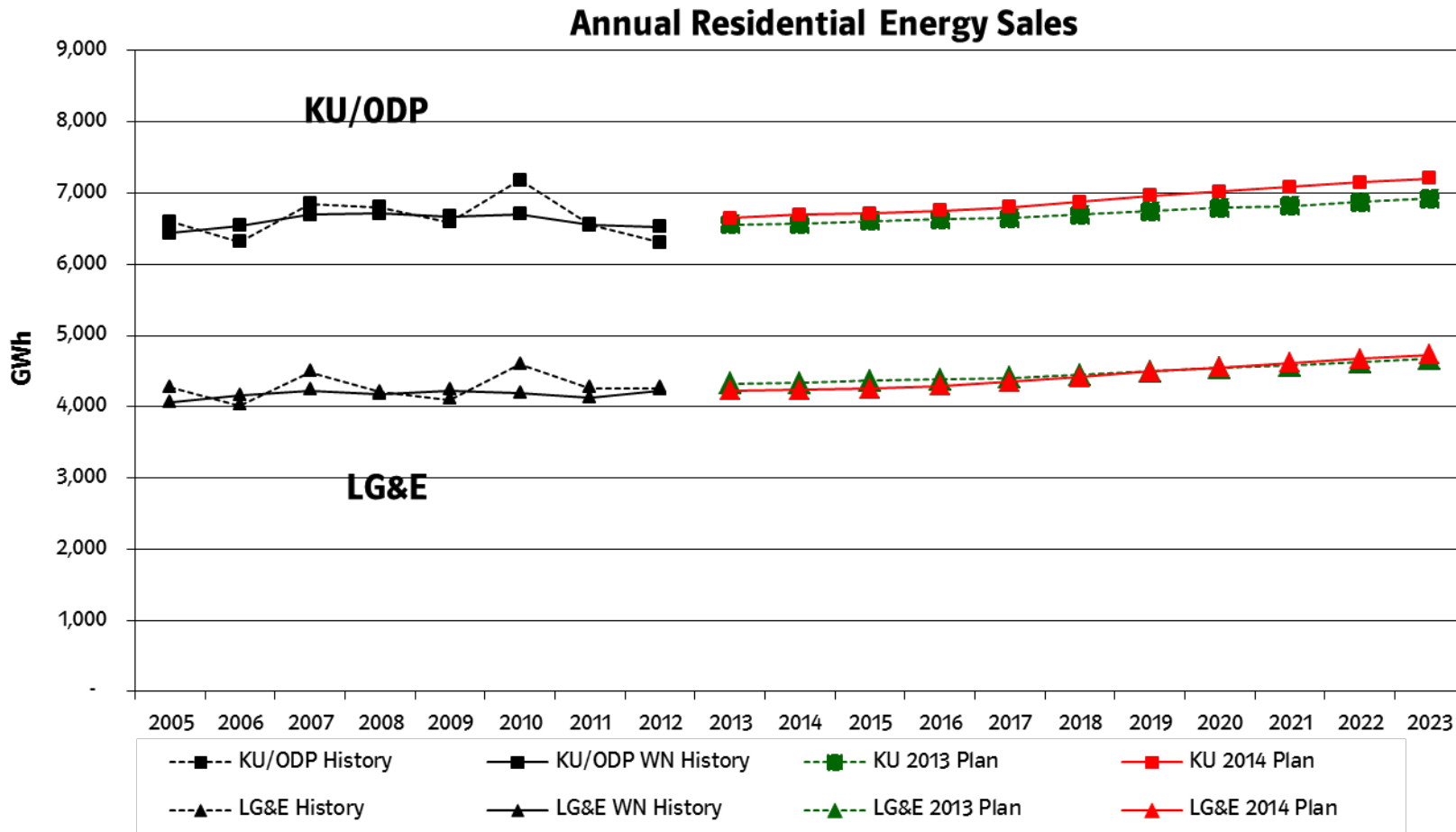
# Combined Company energy expected to be 1.1% below 2013BP for balance of 2013

Jan - May 2013 Combined Company Plan to Plan					Jun - Dec 2013 Combined Company Plan to Plan			
Revenue Class	2014 Plan	2013 Plan	Variance		2014 Plan	2013 Plan	Variance	
	(GWh)	(GWh)	(GWh)	Pct Var			(GWh)	(GWh)
<i>Residential</i>	4,407	4,407	(0)	0.0%	6,464	6,488	(24)	-0.4%
<i>Commercial</i>	3,096	3,142	(46)	-1.5%	4,718	4,769	(52)	-1.1%
<i>Industrial</i>	3,981	3,928	53	1.3%	5,964	5,995	(32)	-0.5%
<i>Public Authority/Other</i>	1,876	1,901	(25)	-1.3%	2,957	3,078	(121)	-3.9%
<b>Total</b>	<b>13,360</b>	<b>13,379</b>	<b>(19)</b>	<b>-0.1%</b>	<b>20,103</b>	<b>20,331</b>	<b>(228)</b>	<b>-1.1%</b>

Combined Company Jan - May Year over Year					Combined Company Jun - Dec Year over Year			
Revenue Class	2014 Plan	2012 WN	Variance		2014 Plan	2012 WN	Variance	
	(GWh)	Actuals (GWh)	(GWh)	Pct Var		(GWh)	Actuals (GWh)	(GWh)
<i>Residential</i>	4,407	4,247	160	3.8%	6,464	6,506	(42)	-0.6%
<i>Commercial</i>	3,096	3,134	(38)	-1.2%	4,718	4,755	(37)	-0.8%
<i>Industrial</i>	3,981	3,950	31	0.8%	5,964	5,640	324	5.7%
<i>Public Authority/Other</i>	1,876	1,915	(39)	-2.0%	2,957	2,845	112	4.0%
<b>Total</b>	<b>13,360</b>	<b>13,246</b>	<b>114</b>	<b>0.9%</b>	<b>20,103</b>	<b>19,746</b>	<b>357</b>	<b>1.8%</b>



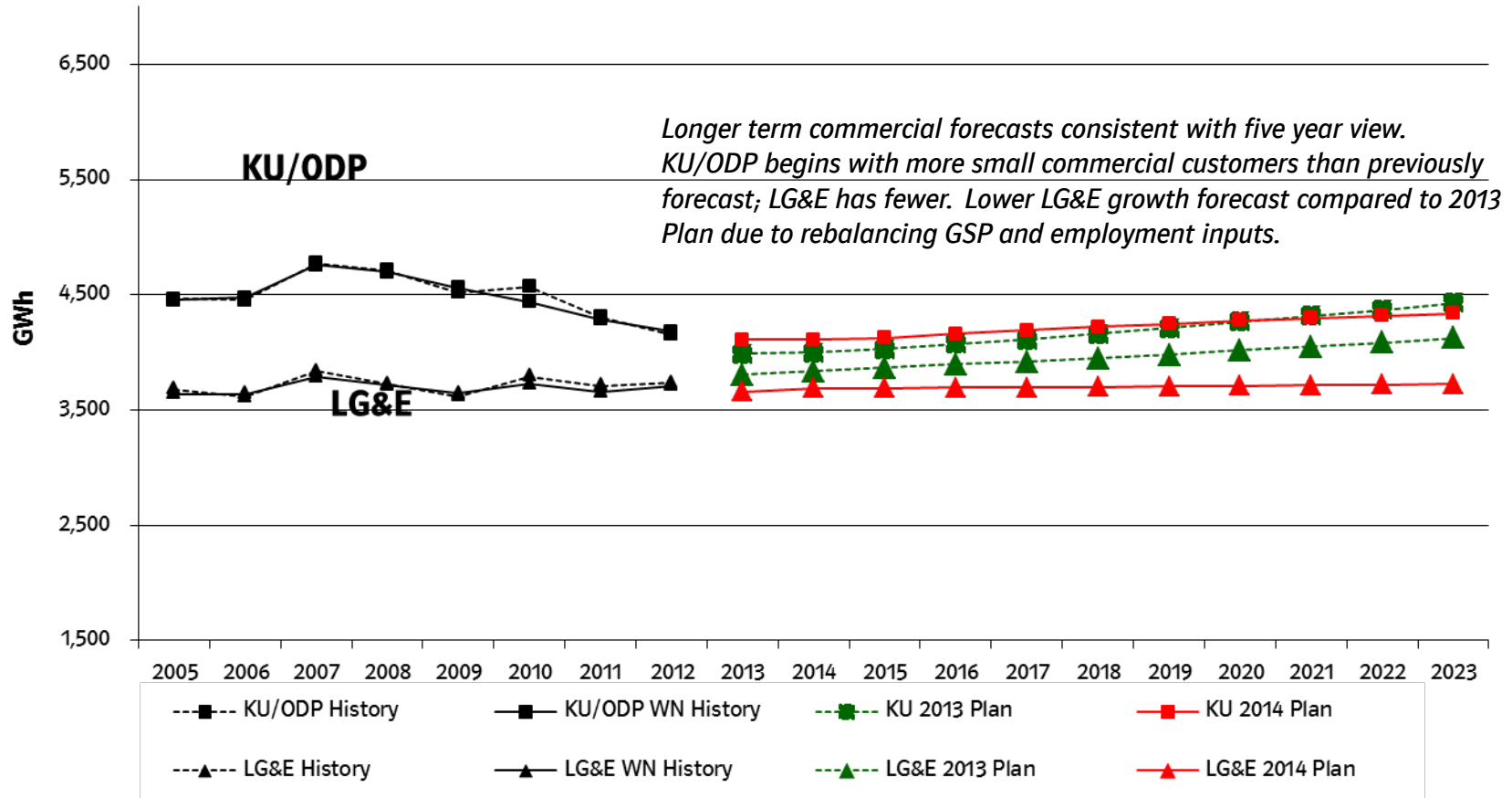
# Residential energy sales are higher in the long term due to higher household forecasts



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

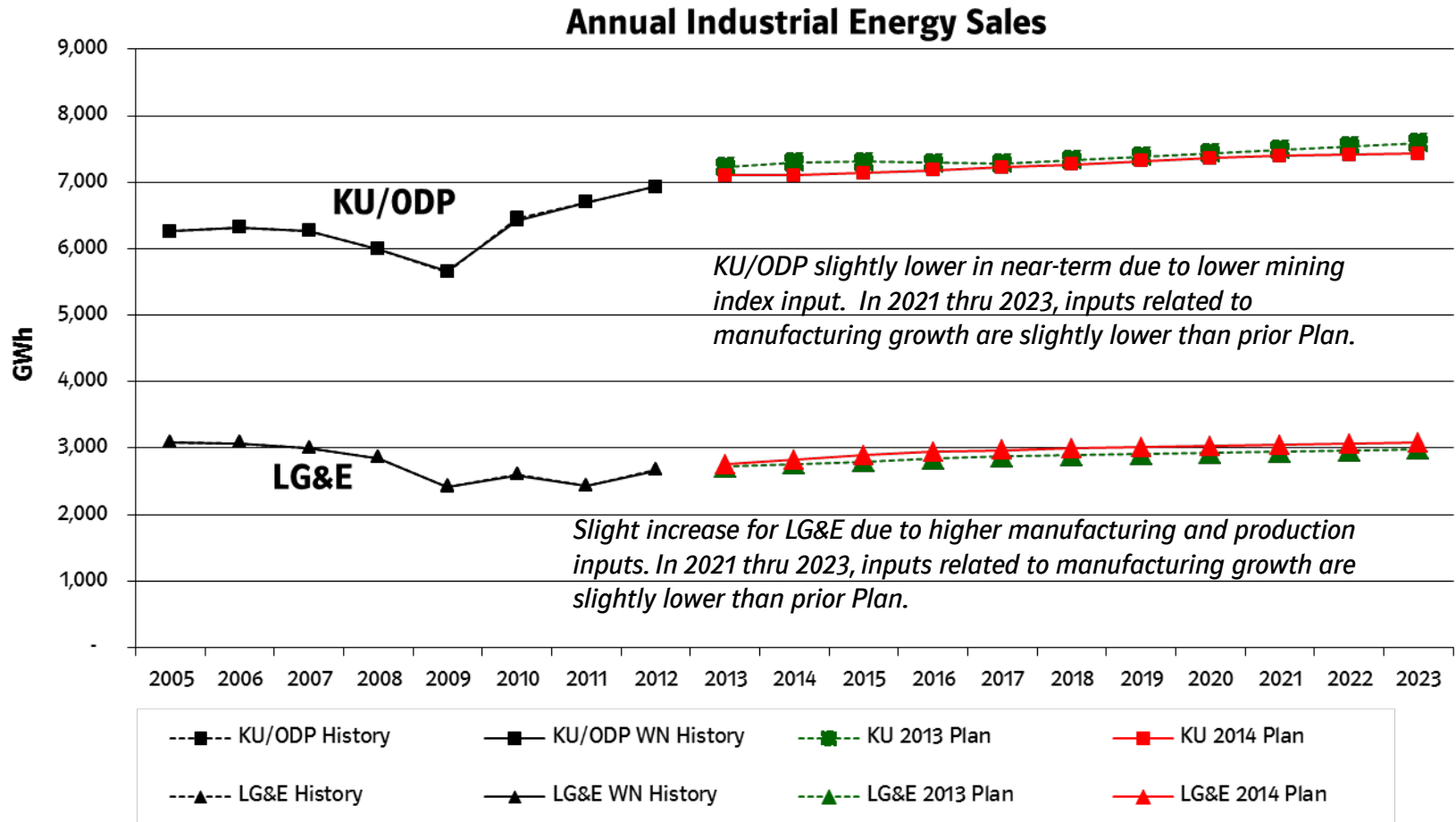
# Commercial sales are lower for KU and LG&E in 10 years due to

## Annual Commercial Energy Sales



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

# Slow growth expected in Industrial sales



\* In 2014 Plan forecast, 2013 value is a weather-normalized 5+7 forecast.

# Large Industrial billing demands below 2013 BP driven by lower coal mining

Period	2014 Plan	2013 Plan	Delta	Pct Var	2014 Plan	2013 Plan	Delta	Pct Var
	MW Billed	MW Billed			MVA Billed	MVA Billed		
	Rates	Rates			Rates	Rates		
2013 YTD	12,246	11,691	555	4.7%	25,733	26,925	(1,192)	-4.4%
2013 BoY	19,026	17,903	1,123	6.3%	36,920	39,469	(2,549)	-6.5%
2014	31,277	29,570	1,707	5.8%	63,922	67,496	(3,574)	-5.3%
2015	32,143	29,584	2,558	8.6%	64,528	67,842	(3,314)	-4.9%
2016	32,473	29,621	2,852	9.6%	65,128	67,994	(2,866)	-4.2%
2017	32,452	29,663	2,789	9.4%	65,558	68,269	(2,710)	-4.0%
2018	32,426	29,832	2,594	8.7%	66,043	68,700	(2,657)	-3.9%

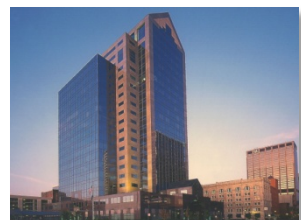
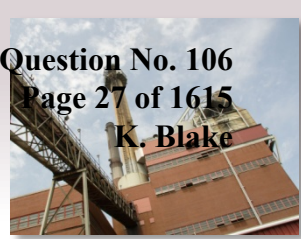




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# 2014 Business Plan Gas Volume Forecast

*July 11, 2013*



# Key Forecast Inputs

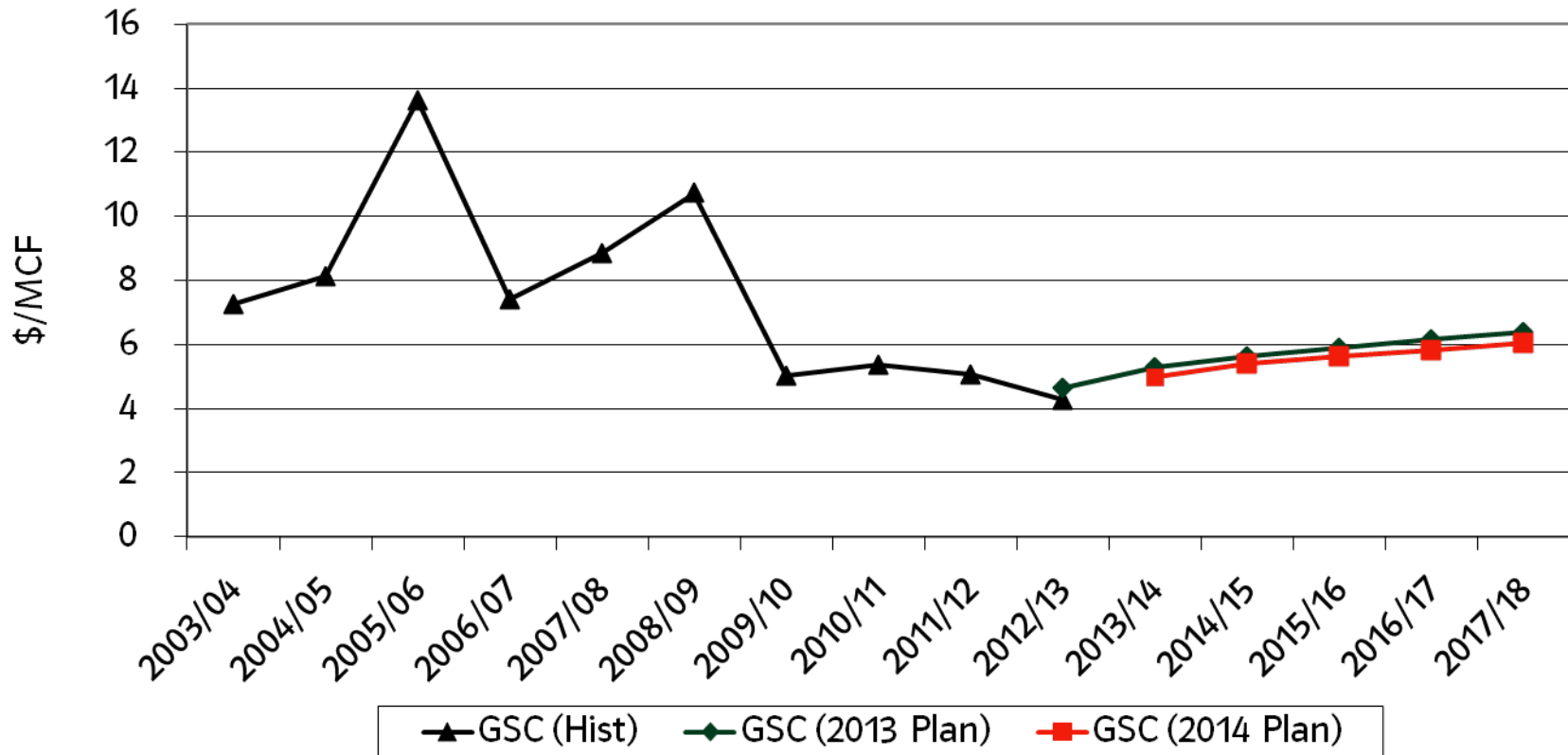
- *Economy: Indicators for the Kentucky economy are mixed. Good news on employment but GSP growth remains slow.*
  - *Unemployment in Kentucky fell from 10.4% in February 2011 to 7.8% in March 2013.*
  - *The mining industry contracted in 2012 which weighed down growth in Kentucky RGSP despite gains in other areas.*
- *Customer Growth: Reduced expectations for Residential and Commercial customer counts compared to 2013 Plan. Commercial customers expected to decline in near term.*
- *Major Accounts: Large reduction in Lubrizol's forecast lowers the overall Major Account forecast compared to last year.*





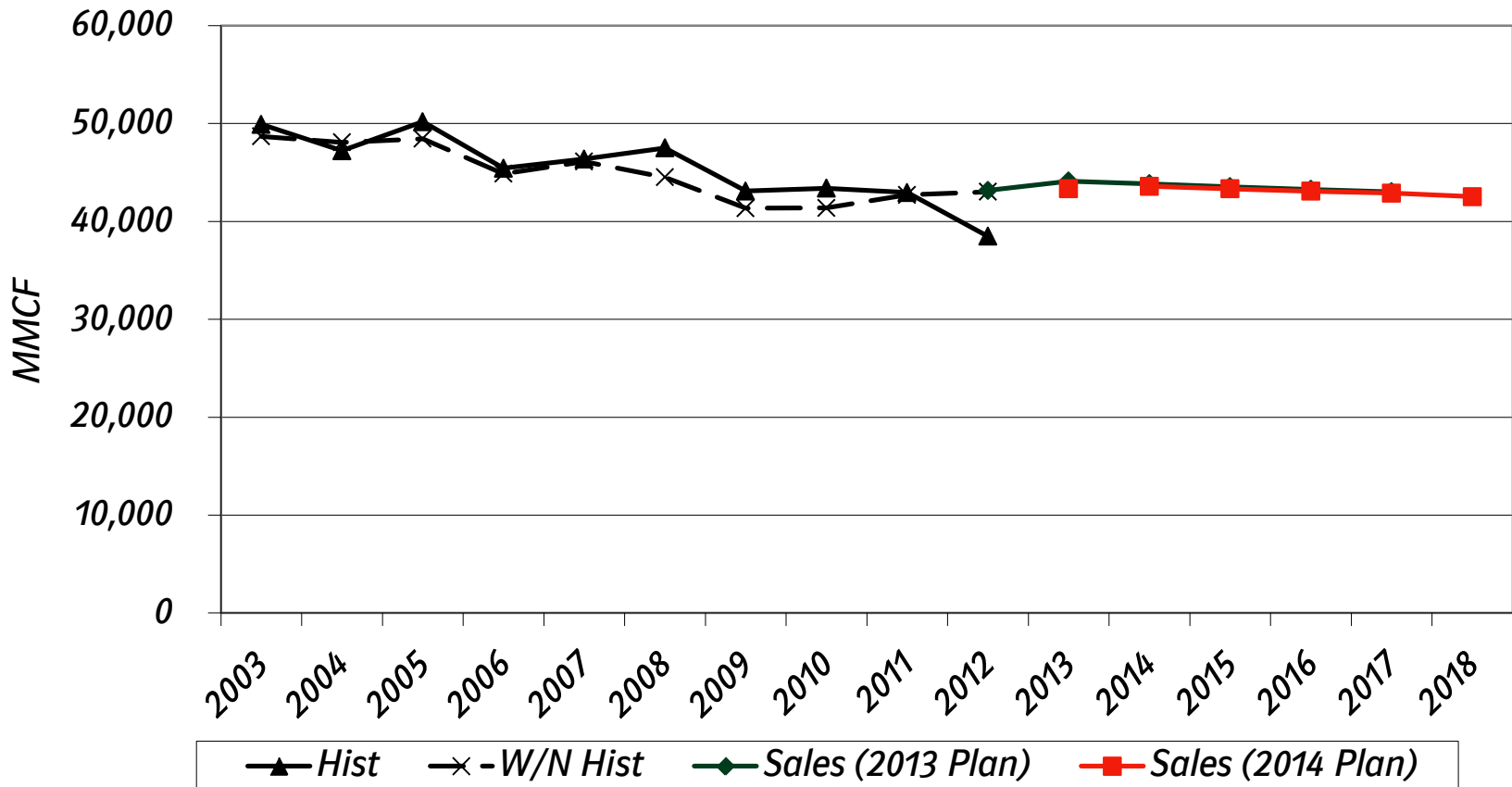
# Gas supply cost for the winter 2013/14 is expected to be 5.8% lower plan to plan

**Average Gas Supply Cost - Winter Months  
(November - February)**



# 2012 WN usage consistent with 2013 Plan

## Annual Gas Volumes (excluding gas used for LG&E generation)

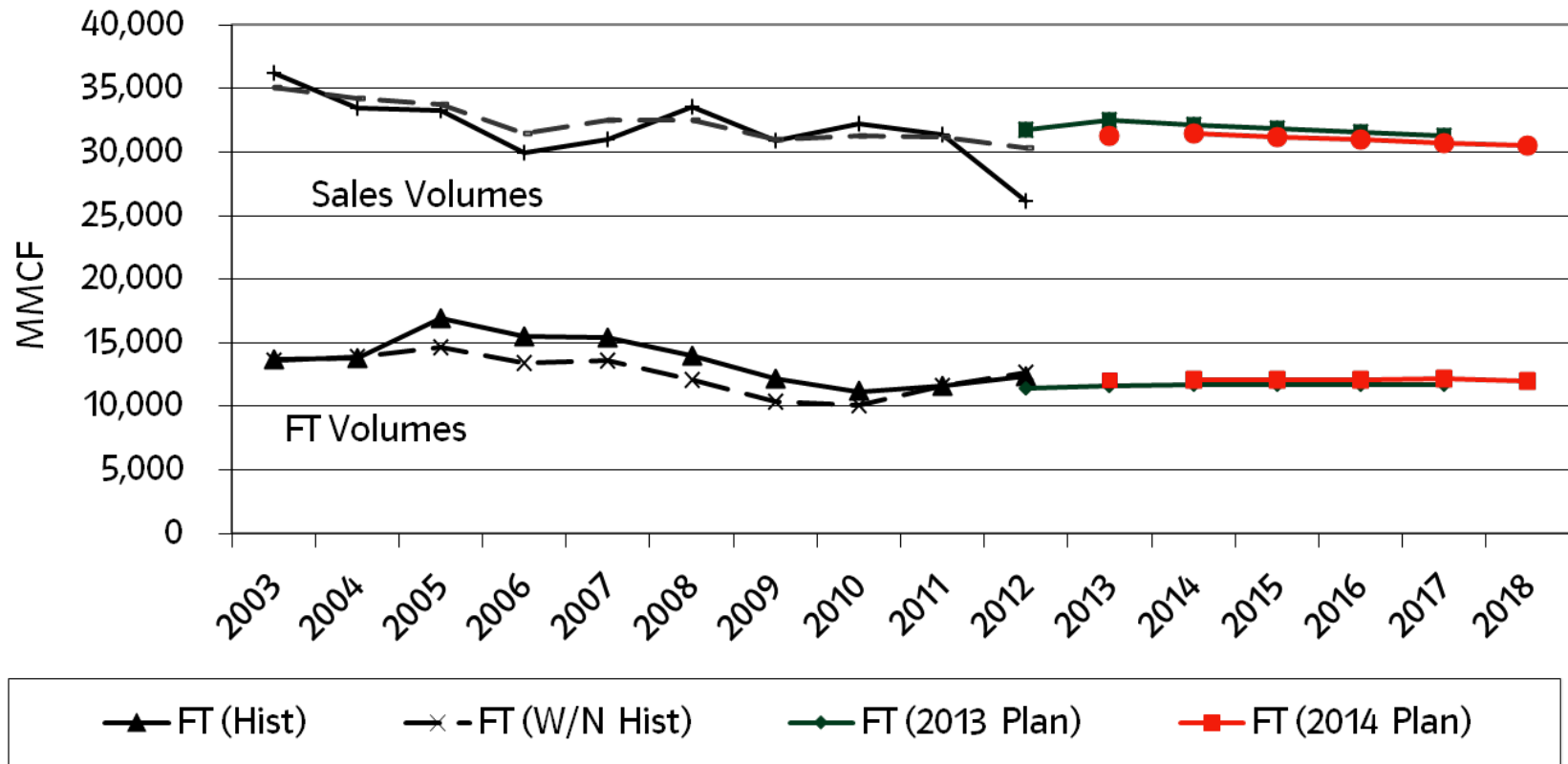


2013 value for the 2014 Plan includes 2 months of WN Actuals



# Sales volumes decrease compared to last year's plan; Transportation increases slightly

**Annual Sales & Firm Transportation (FT) Volumes  
(excluding gas used for LG&E generation)**

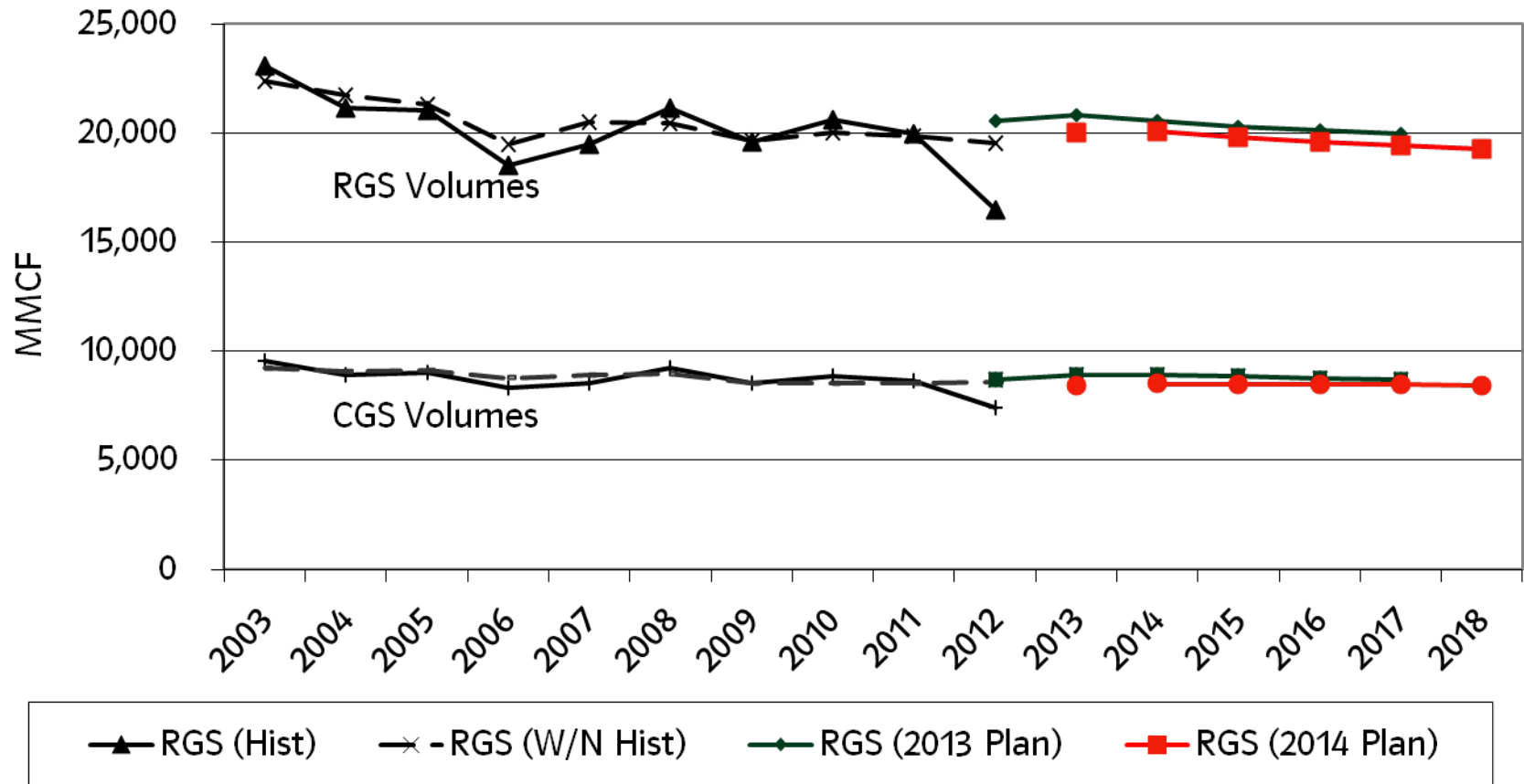


2013 value for the 2014 Plan includes 2 months of WN Actuals



# RGS and CGS annual volumes both lower than 2013 Plan

## Annual RGS & CGS Sales Volumes

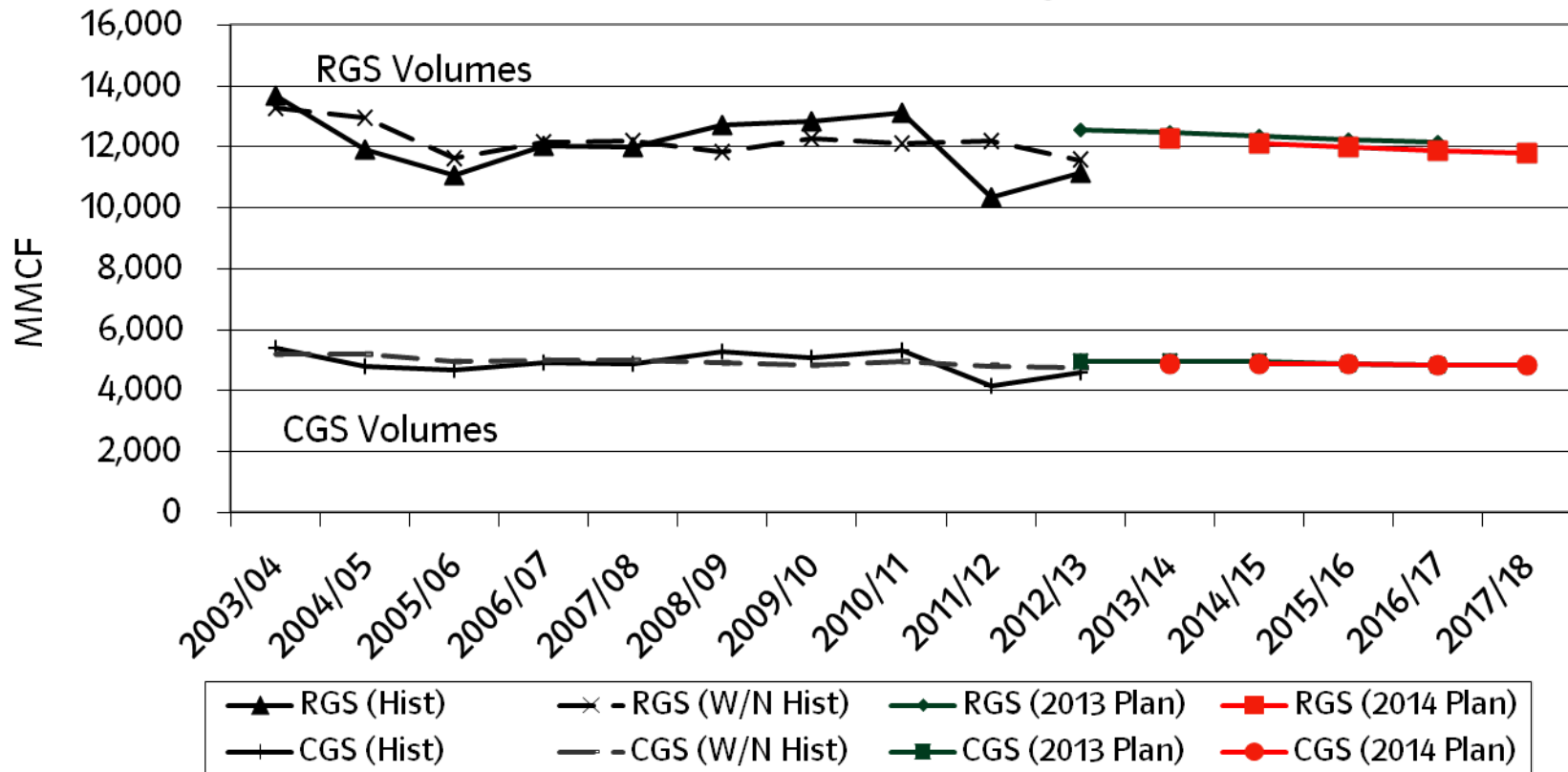


2013 value for the 2014 Plan includes 2 months of WN Actuals



# Compared to the 2013 Plan, RGS volumes are slightly lower for the winter of 2013/14

## Winter RGS & CGS Sales Volumes (November - February)



2013 value for the 2014 Plan includes 2 months of WN Actuals

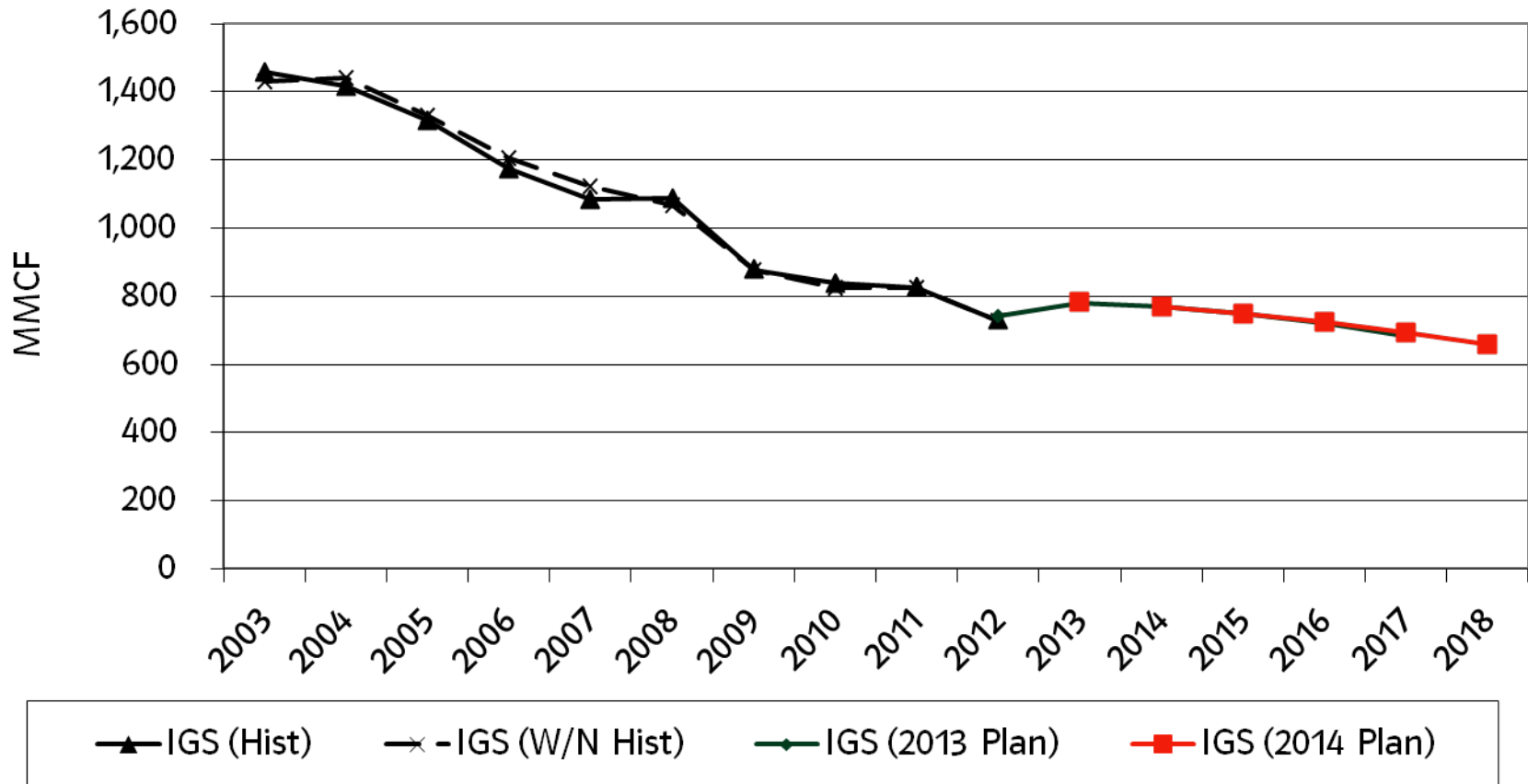
# Summary of Residential Gas Sales Forecasts

- *Gains in efficiency and improvements in thermal integrity of homes result in a slightly lower forecast than the 2013 Plan.*
  - *The efficiency of the average stock of natural gas appliances has increased to reflect new technology options, especially for water heating.*
  - *The ARRA tax credits have been extended through this year.*
- *EIA recently lowered home size projections based on the most recent data from the Census Bureau. Results in slightly downward revision to the natural gas sales outlook.*
- *Slightly lower customer forecast reflects trends in recent history.*



# IGS sales decline driven by slow customer loss

## Annual IGS Sales Volumes

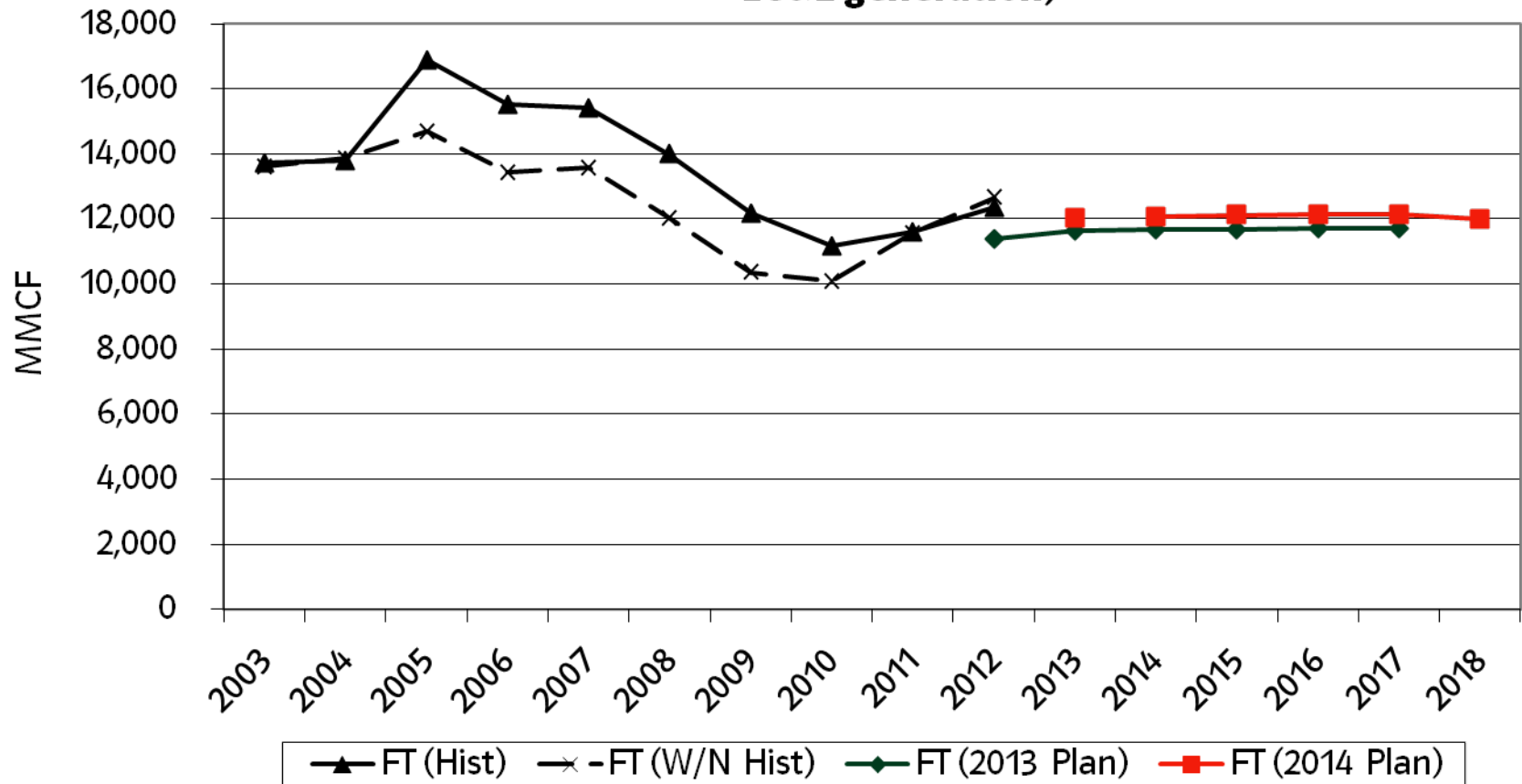


2013 value for the 2014 Plan includes 2 months of WN Actuals



# Firm Transportation (FT) volumes higher after growth in 2011 and 2012

**Annual Firm Transportation (FT) Volumes (excluding gas used for LG&E generation)**



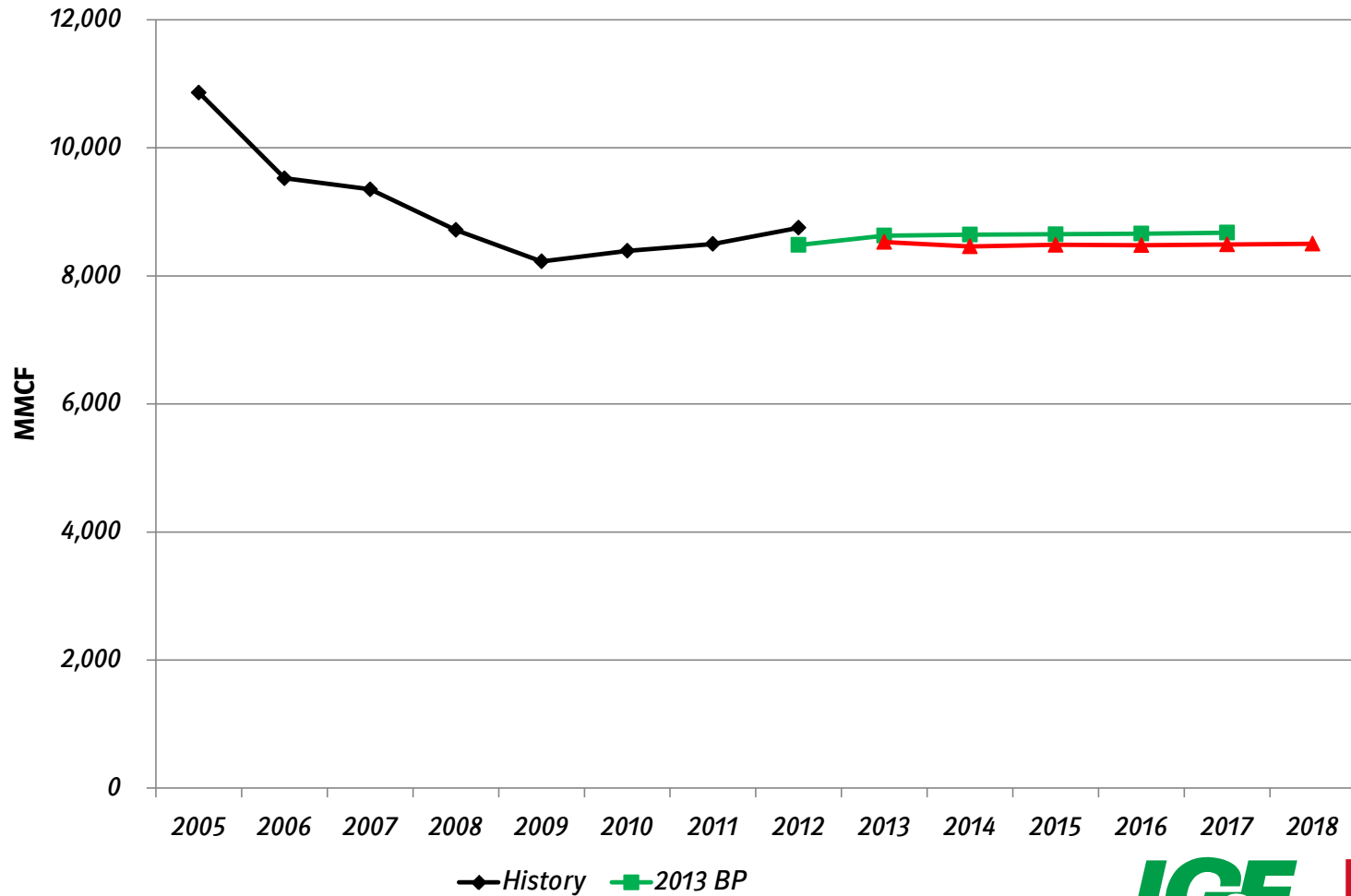
2013 value for the 2014 Plan includes 2 months of WN Actuals





# Slightly lower expectations driven by Solae closing and decreases expected from Fort Knox and Lubrizol

## Major Accounts History and Forecast



## Key Points and Significant Drivers

- *Of the 24 individually forecasted customers in the 2014 Plan, 12 have higher forecasts than last year, 11 have lower forecasts than last year, and 1 forecast did not change*
- *Lubrizol plans to cut natural gas usage to about 20% of historical levels driven partially by biomass project (burning wood chips).*
- *The 2014 forecast for Ford LAP is 68% higher (380,000 MCF) than the previous forecast as Escape production increases.*
- *Solae closed in December 2012. This amounts to about 250,000 MCF of lost usage.*
- *The 2014 forecast for Fort Knox is 99.5% lower (171,000 MCF) than the previous forecast. Fort Knox will tie into the Texas Gas Pipeline directly as well as continue their own onsite natural gas production. Remaining usage is only from the commercial gas service prior to completion of pipeline tie.*

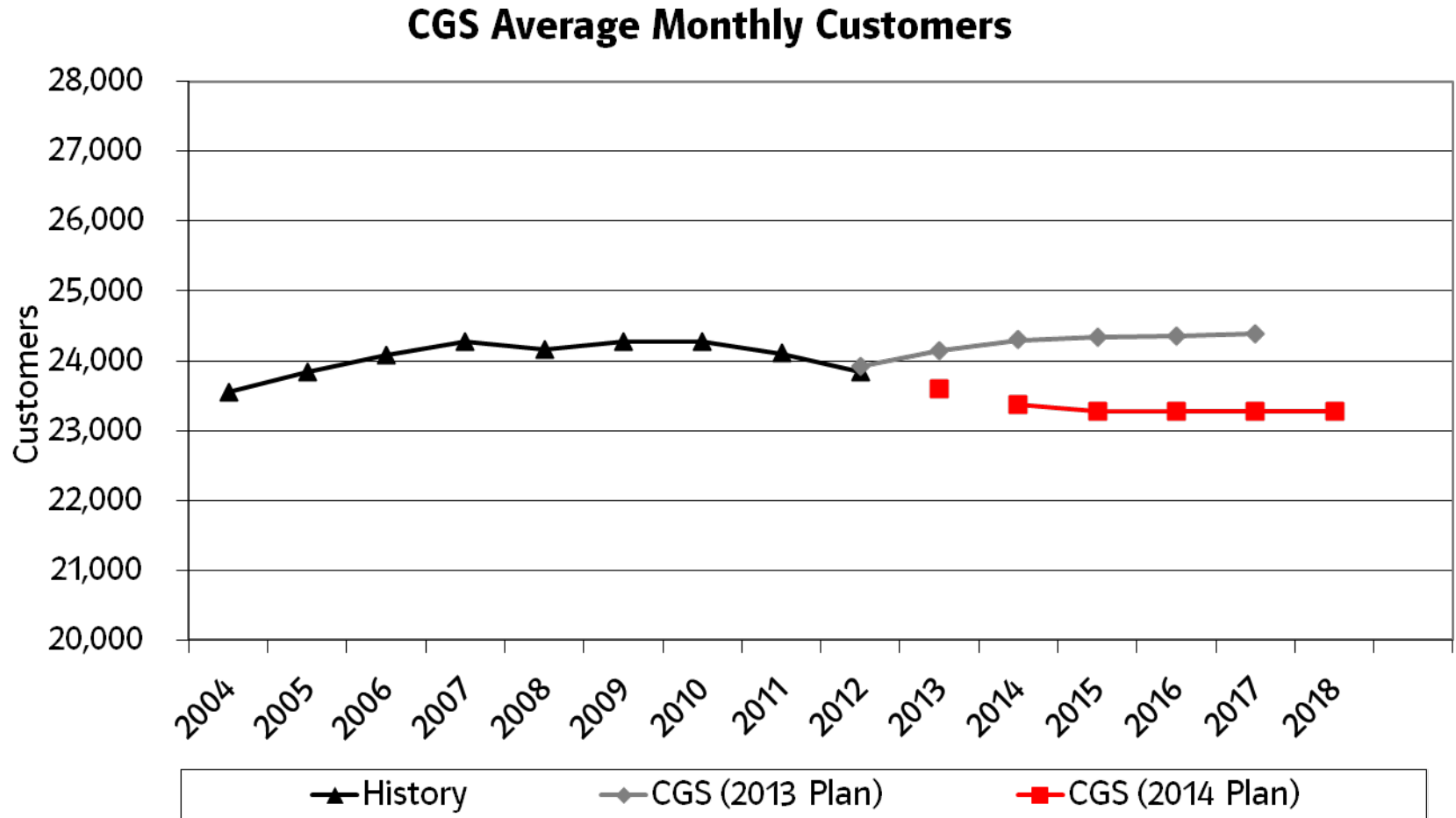


# Appendix

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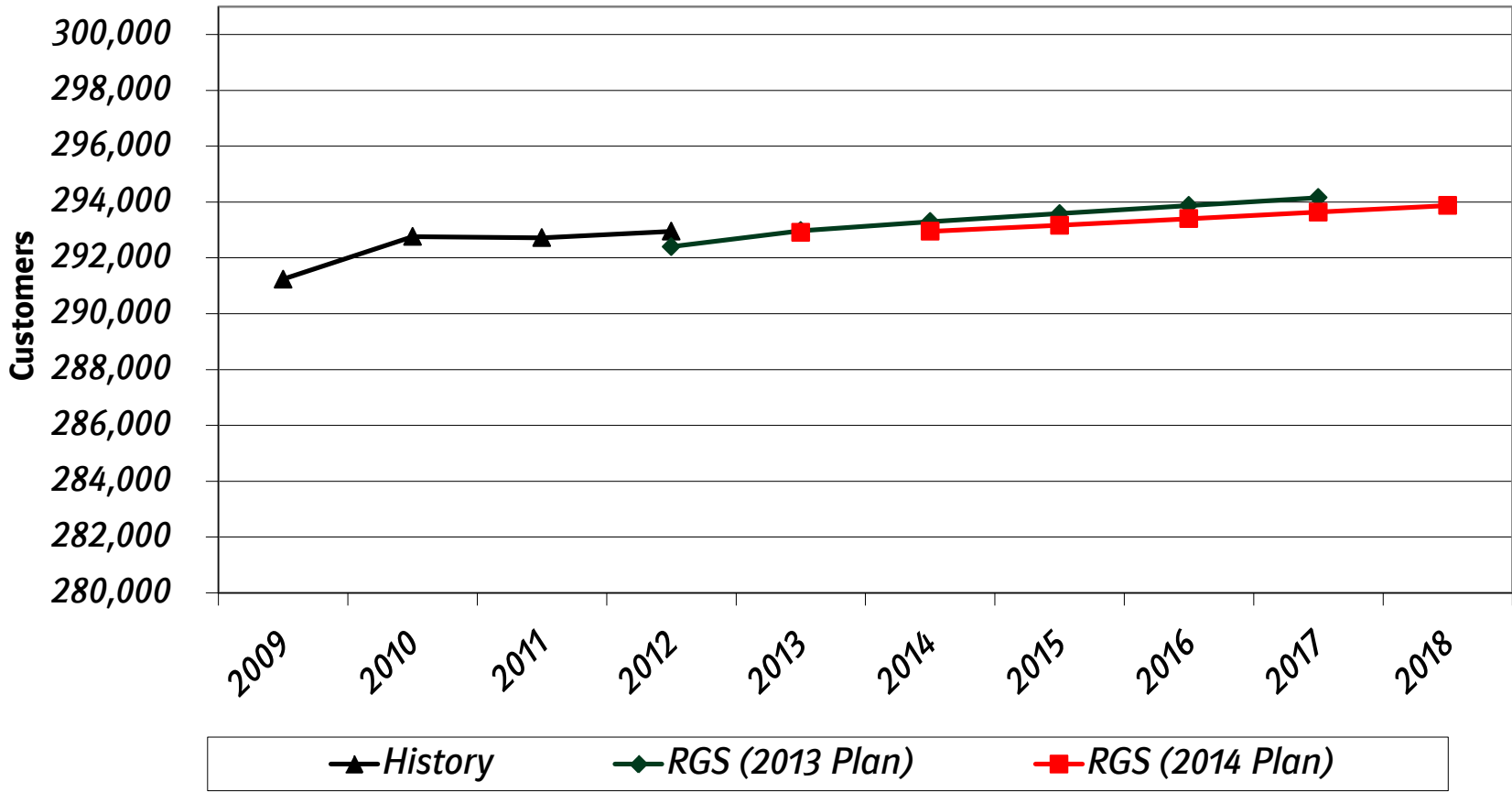
# CGS Customer forecast declines in near term



# RGS Customer forecast slightly lower than 2013

## BP

### RGS Average Monthly Customers

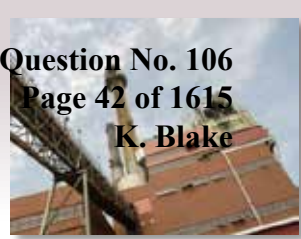




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# 2014 Business Plan Generation & OSS Forecast

*Generation Planning & Analysis  
September 12, 2013*



# 2014 Plan Summary

- *Compared to 2013 Plan, native load production costs (\$/MWh) in 2014 Plan are lower.*
  - *Lower coal prices drive reductions in native load production costs throughout planning period.*
- *OSS contribution is slightly lower in 2014, mostly unchanged in 2015-16, and slightly higher in 2017+.*
  - *Reporting of OSS contribution no longer includes opportunity costs for ECR expense and transmission losses.*

<b>Native Load Production Costs (\$/MWh)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>CAGR</b>
2013 Plan	30.18	31.97	34.72	36.43	37.22	5.4%
2014 Plan	29.68	30.62	32.32	33.92	35.12	4.3%

<b>OSS Contribution (\$M)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
2013 Plan	2.7	1.2	1.0	0.7	1.5
2014 Plan	2.1	1.3	0.9	1.2	1.8



# Key Changes in Planning Assumptions & Inputs

- *Plan over plan, coal prices are 4.4% lower in 2014 and approximately 8% lower in 2015-18.*
  - *Electricity and gas prices are mostly unchanged, but hourly electricity prices (based on history) are assumed to be less volatile.*
- *Coal unit availability consistent with prior plan except for:*
  - *Added 13 weeks to 2-week TC2 outage in spring 2014 to replace burners.*
  - *2013 Plan assumed Cane Run would operate 2 of 3 units beginning October 2014 for CR7 operator training; additionally, 2014 Plan assumes '2-of-3' operation in March-April 2014.*
  - *Plan assumes Green River 3-4 will be retired October 1, 2014; final Green River 3-4 retirement decision will be made summer of 2014.*
- *Brown 1-2 operate without constraints beyond MATS compliance deadline with NALCO fuel additive.*
- *Expansion plan includes reserve margin purchase in 2016-17 and 2x1 NGCC in 2018.*
  - *Reserve margin purchase (165 MW in 2016-17).*
  - *Fixed capacity costs (~\$8.2 million/year in 2016-17).*
  - *Site for 2018 2x1 NGCC to be determined.*



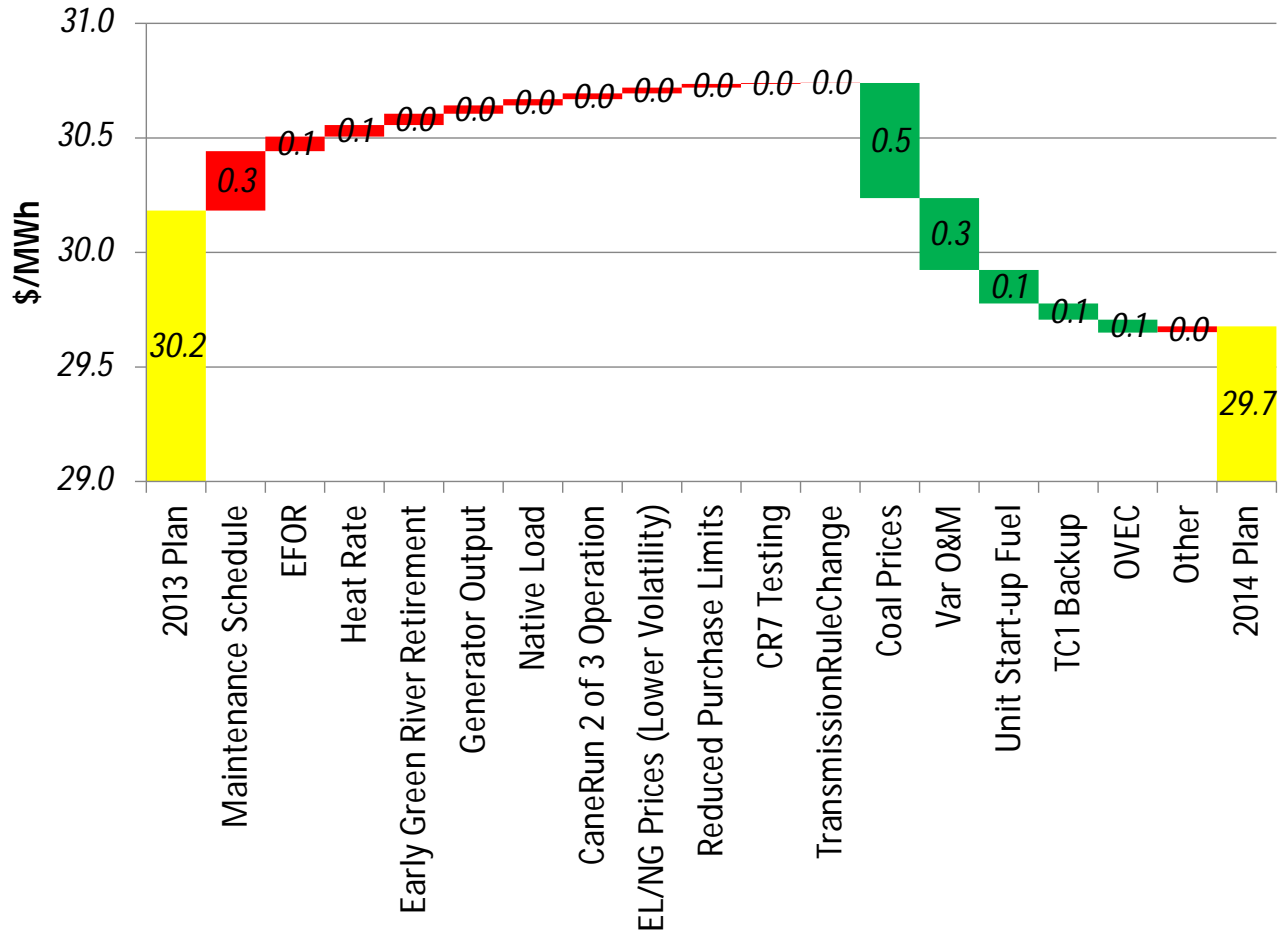
# Modeled EFOR assumptions are mostly unchanged

- *Plan EFOR assumptions are slightly higher for Cane Run and Green River (based on recent history and reduction in maintenance scope).*
- *To better model uncertainty in high sulfur fuel burn, one EFOR value was developed for the Mill Creek, Ghent, and Trimble Count 1 coal units. TC1's EFOR increased slightly as a result.*
- *TC2 EFOR held constant at 6%; 2013 Plan assumed improvement to 5.6%.*
- *Consistent with 2013 Plan, 2014 KPI reporting will continue to be based on a different (lower) set of 'target' EFORs.*
  - *Target EFOR for system is 5.0%.*

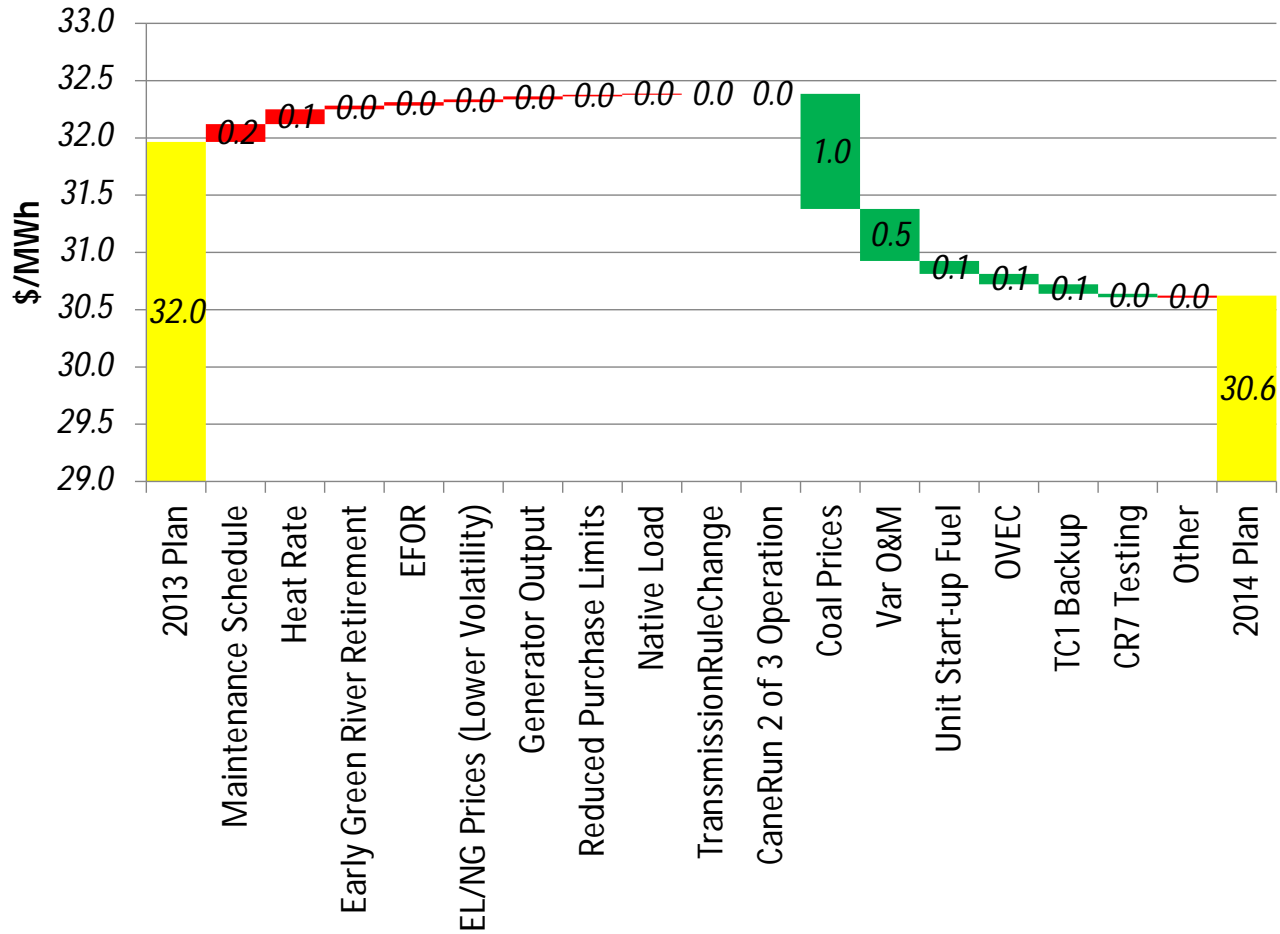
	Modeled EFOR Assumptions for 2014			Target
	2013 Plan	2014 Plan	Difference	
BR1	5.6%	5.6%	0.0%	5.6%
BR2	5.6%	5.6%	0.0%	5.6%
BR3	5.6%	5.6%	0.0%	5.6%
CR4	7.3%	7.8%	0.5%	6.8%
CR5	7.3%	7.8%	0.5%	6.8%
CR6	7.3%	7.8%	0.5%	6.8%
GH1	5.6%	5.6%	0.0%	5.0%
GH2	5.6%	5.6%	0.0%	5.0%
GH3	5.6%	5.6%	0.0%	5.0%
GH4	5.6%	5.6%	0.0%	5.0%
GR3	7.3%	7.8%	0.5%	7.0%
GR4	7.3%	7.8%	0.5%	7.0%
MC1	5.6%	5.6%	0.0%	5.0%
MC2	5.6%	5.6%	0.0%	5.0%
MC3	5.6%	5.6%	0.0%	5.0%
MC4	5.6%	5.6%	0.0%	5.0%
TC1	5.1%	5.6%	0.5%	4.0%
TC2	5.6%	6.0%	0.4%	3.8%
LGE/KU Steam	5.7%	5.9%	0.2%	5.0%



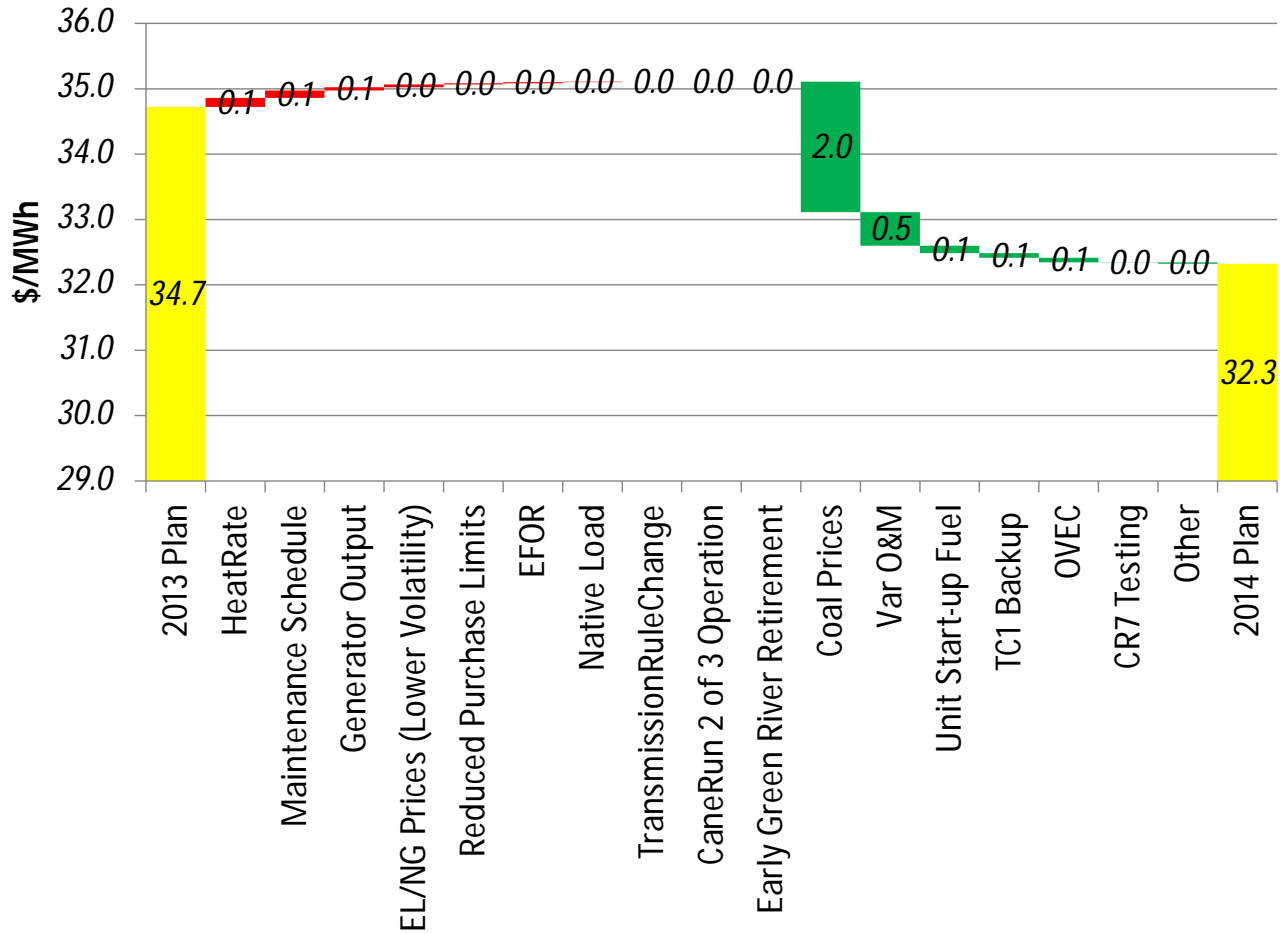
# In 2014, lower coal prices more than offset impact of added planned maintenance on native load production costs



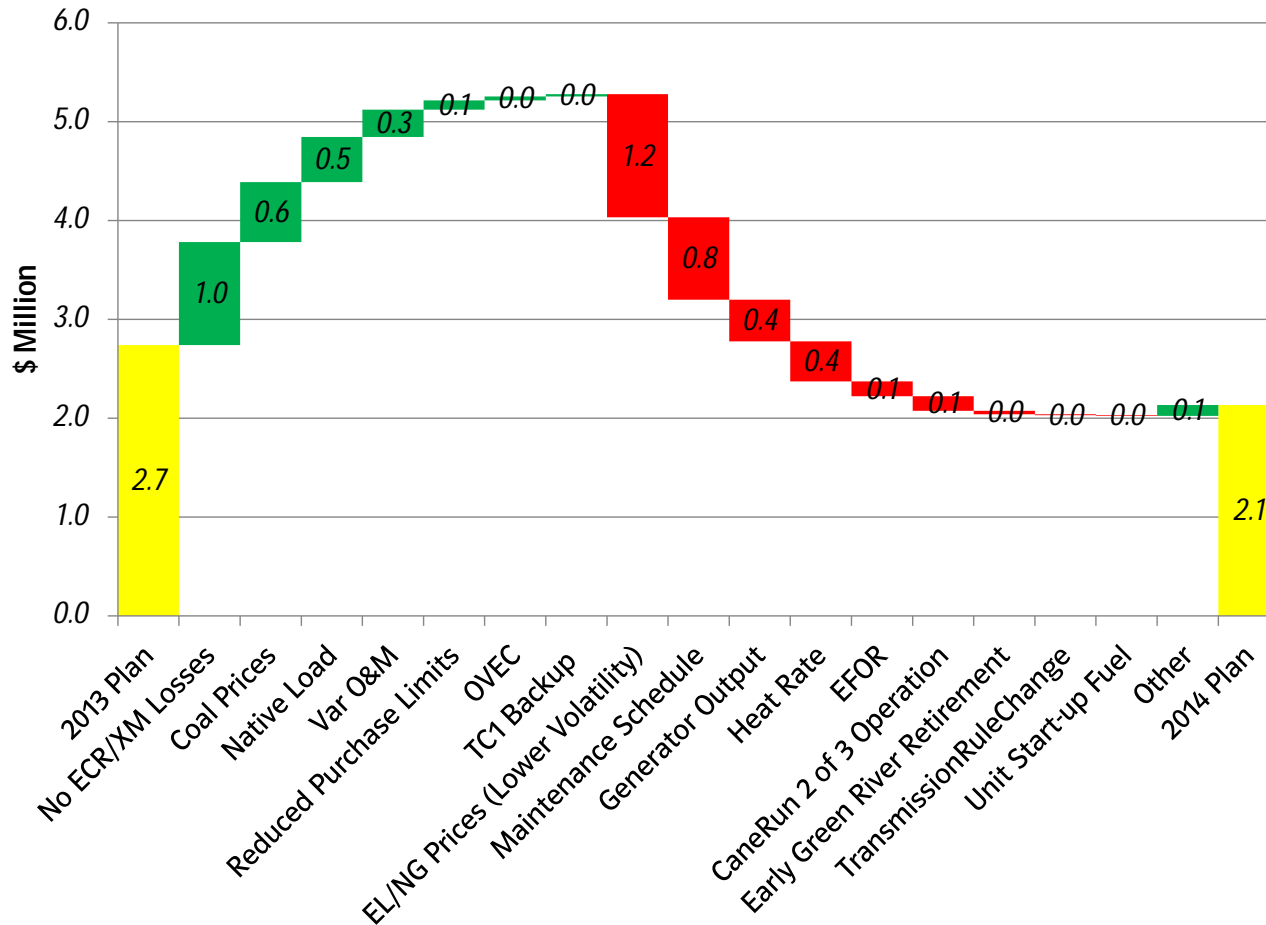
# Lower coal prices drive reduction in native load production costs in 2015



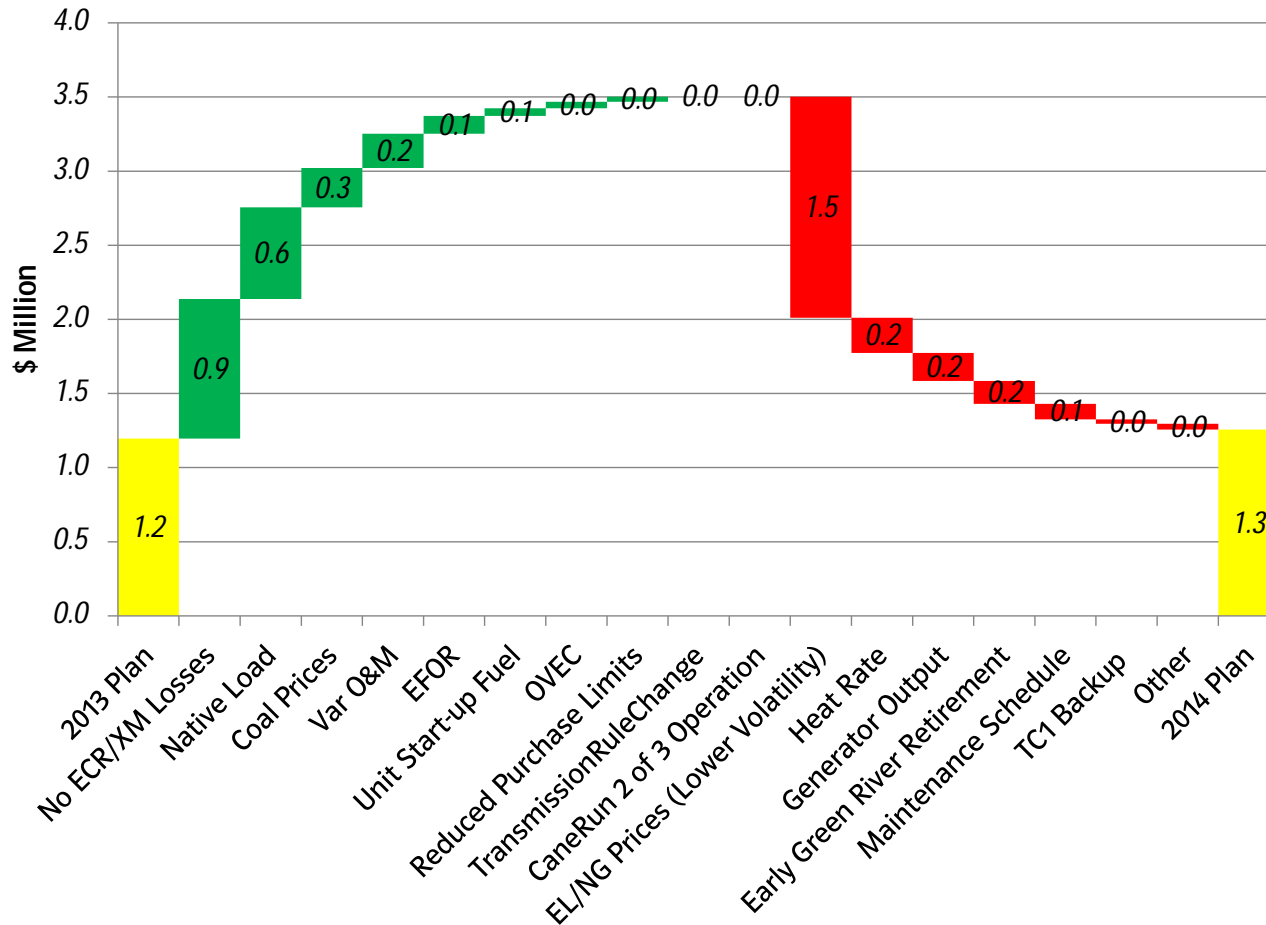
# Lower coal prices drive reduction in native load production costs in 2016



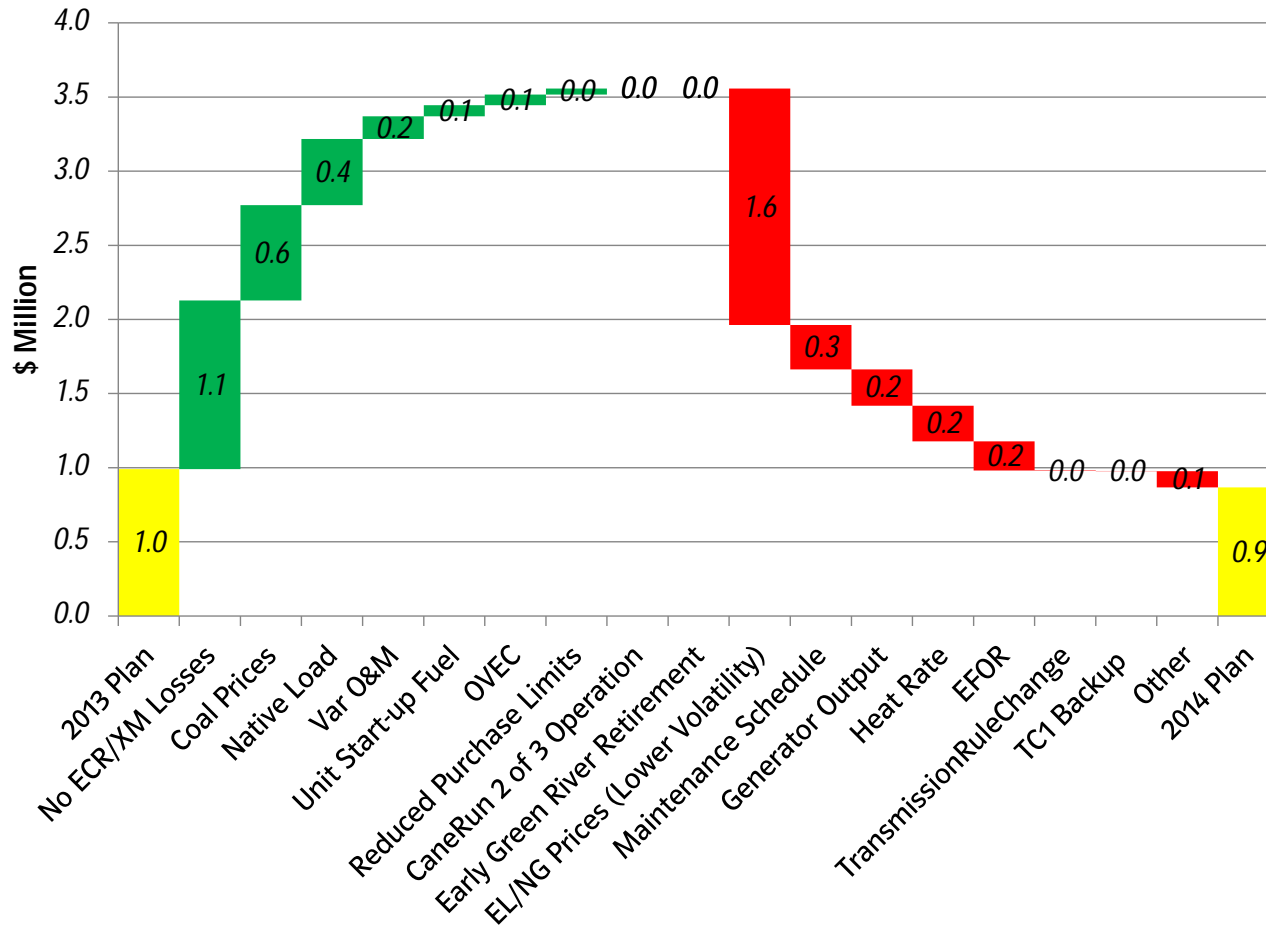
# OSS contribution in 2014 is slightly lower



# OSS contribution in 2015 is mostly unchanged



# OSS contribution in 2016 is mostly unchanged



# Key Risks and Uncertainties

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- *TC2 performance post burner replacement*
- *CR7 testing and commissioning date*
- *CR7 performance after commissioning*
- *Coal unit performance in 2014 post installation of environmental retrofits*
  - *GH3: Spring 2014 (baghouse)*
  - *GH4: Fall 2014 (baghouse/turbine overhaul)*
  - *MC4: Fall 2014 (baghouse/FGD/turbine overhaul)*
- *Generally, transition of system as we retire small coal units and commission CR7*



# Appendix



# 2014 Plan – Assumptions

- *Plan EFOR assumptions are based on historical EFOR values. 'Target' EFORs will continue to be the basis for KPI reporting and are unchanged.*
- *For the purposes of computing production costs, the following will be assumed:*
  - *CR6 unavailable 3/1/14 – 4/30/14 and 10/1/14 – 4/30/15*
  - *10/1/2014 retirement date for GR3-4*
  - *5/1/2015 commercial date for CR7*
  - *5/1/2015 retirement date for CR4-6*
- *TC2 will be available at full load (732 MW summer; 760 MW winter) throughout the planning period; TC2 will be on control after spring 2014 outage.*
- *At least one Brown unit must be operating at all times.*
- *At least two Cane Run coal units must be operating during June-August; at least one Cane Run coal unit must be operating during rest of year.*
- *PR11-13 unavailable from November through March (gas pressure); PR11-12 will also be unavailable in 2014 if PR13 is operating.*
- *FGDs will continue to operate at normal SO<sub>2</sub> removal levels.*

# 2014 Plan – Assumptions

- *Expansion plan:*
  - *Target reserve margin of 16% (within range 15-17%)*
  - *2016-17: 165 MW Reserve Margin Purchase (Jan-Dec)*
  - *6/2018: 2X1 CC*
- *Spinning reserve requirements:*
  - *Contingency: Spinning 253MW, (100 MW of 253 MW is supplemental - supplied by quick-start units)*
  - *75 MW regulating*
  - *75 MW NAS*
- *Off-system sales cannot be generated by CTs (same assumption in 2014 Plan)*
- *Baghouse installation schedule:*
  - *2014: GH3, GH4, MC4*
  - *2015: BR3, GH1, GH2, MC1, MC2, TC1*
  - *2016: MC3*
- *NALCO*
  - *2015: BR1, BR2 (beginning 4/16)*

# 2014 Plan – Assumptions

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- *FGD installation schedule:*
  - 2014: *new MC4 FGD*
  - 2015: *Combined MC1 & 2 FGD*
  - 2016: *new MC3 FGD*
- *TC2 burners and warranty work:*
  - 2014: *TC2 (15 Weeks)*
- *No turbine upgrades*

# 2014 Plan – Assumptions

- *Turbine Overhaul schedule:*
  - 2014: MC4, GH4
  - 2015: GH1, BR1
  - 2016: None
  - 2017: BR2, TC1
  - 2018: GH3, TC2
  
- *Market Volume Limits:*
  - *Hourly sales limited to 600 MW in all months*
  - *Hourly purchases (reduced from 2013 Plan)*
    - *5x16 limited to 300 MW, reduced from 400 MW*
    - *2x16 limited to 200 MW, reduced from 450 MW*
    - *7x8 limited to 150 MW, reduced from 200 MW*
  
- *Market Electricity Prices*
  - *Consistent with July-approved prices*
  - *Hourly pricing shaped to correspond with historical load shape*

# 2014 Plan – Assumptions

- *CAIR continues*

## *Emission Allowance Prices (\$/ton emitted)*

<i>Year</i>	<i>Annual NOx</i>	<i>Seasonal NOx</i>	<i>SO<sub>2</sub></i>
<i>2014</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2015</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2016</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2017</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2018</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2019</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2020</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2021</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2022</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>
<i>2023</i>	<i>45</i>	<i>21.50</i>	<i>1.50</i>

# Based on GADS data (and assuming TC2 is offline), there's a 5% chance that at least 1,100-1,150 MW will be unavailable

## Distribution of Unavailable MWs (Weekdays Only, No TC2, 2000-2011)

Unavailable MWs	Count of Weekday		Cumulative Probability	Unavailable MWs	Count of Weekday		Cumulative Probability
	Hours	Probability			Hours	Probability	
0-50	9,110	12.1%	12.1%	1150-1200	566	0.8%	95.7%
50-100	4,073	5.4%	17.5%	1200-1250	565	0.8%	96.5%
100-150	4,345	5.8%	23.3%	1250-1300	548	0.7%	97.2%
150-200	5,265	7.0%	30.3%	1300-1350	311	0.4%	97.6%
200-250	4,331	5.8%	36.1%	1350-1400	278	0.4%	98.0%
250-300	3,418	4.6%	40.7%	1400-1450	252	0.3%	98.3%
300-350	3,601	4.8%	45.5%	1450-1500	163	0.2%	98.5%
350-400	3,210	4.3%	49.7%	1500-1550	179	0.2%	98.8%
400-450	3,619	4.8%	54.5%	1550-1600	131	0.2%	99.0%
450-500	4,465	5.9%	60.5%	1600-1650	125	0.2%	99.1%
500-550	3,560	4.7%	65.2%	1650-1700	128	0.2%	99.3%
550-600	3,569	4.8%	70.0%	1700-1750	82	0.1%	99.4%
600-650	2,996	4.0%	74.0%	1750-1800	115	0.2%	99.6%
650-700	2,726	3.6%	77.6%	1800-1850	94	0.1%	99.7%
700-750	2,195	2.9%	80.5%	1850-1900	34	0.0%	99.7%
750-800	1,990	2.6%	83.2%	1900-1950	47	0.1%	99.8%
800-850	2,027	2.7%	85.9%	1950-2000	22	0.0%	99.8%
850-900	1,566	2.1%	87.9%	2000-2050	52	0.1%	99.9%
900-950	1,141	1.5%	89.5%	2050-2100	33	0.0%	99.9%
950-1000	1,354	1.8%	91.3%	2100-2150	3	0.0%	99.9%
1000-1050	1,098	1.5%	92.7%	2150-2200	27	0.0%	100.0%
1050-1100	951	1.3%	94.0%	2200+	19	0.0%	100.0%
1100-1150	736	1.0%	95.0%				

*Note: Based on GADS data. Planned outage, non-curtailing, and reserve shutdown events are ignored.*



# Early Green River 3-4 retirement does not raise reliability concerns for winter 2014/15; O&M savings more than offset increase in production costs

## Resource Summary

2014-15 Week of...	Dec 29th	Jan 5th	Jan 12th	Jan 19th	Jan 26th	Feb 2nd	Feb 9th	Feb 16th	Feb 23rd
<i>Total Resources*</i>	8,144	8,144	8,144	8,144	8,144	8,144	8,144	8,144	8,144
<i>Access to Markets</i>	0	0	0	0	0	0	0	0	0
<i>Planned Outages</i>	-4	-4	-4	-4	-4	-4	-4	-4	-4
<i>Curtaillable</i>	133	133	133	133	133	133	133	133	133
<i>Total Supply</i>	8,273	8,273	8,273	8,273	8,273	8,273	8,273	8,273	8,273
<i>Peak Demand</i>	5,642	5,965	6,047	6,087	6,008	5,791	5,644	5,474	5,300
<i>Contingency Reserves</i>	328	328	328	328	328	328	328	328	328
<i>Total Demand</i>	5,970	6,293	6,375	6,415	6,336	6,119	5,972	5,802	5,628
<b>Reserve Capacity</b>									
<i>No Retirements</i>	2,303	1,980	1,898	1,858	1,937	2,154	2,301	2,471	2,645
<i>GR3-4 Retirement</i>	2,134	1,811	1,729	1,689	1,768	1,985	2,132	2,302	2,476
<i>GR3-4 &amp; CR6 Retirement</i>	1,894	1,571	1,489	1,449	1,528	1,745	1,892	2,062	2,236
<i>GR3-4 &amp; CR6 Retirement/500 MW unit out</i>	1,394	1,071	989	949	1,028	1,245	1,392	1,562	1,736
<b>LOL Probability with Normal Weather &amp; No Access to Markets</b>									
<i>No Retirements</i>	0.1%	0.4%	0.7%	0.7%	0.6%	0.2%	0.1%	0.0%	0.0%
<i>GR3-4 Retirement</i>	0.2%	0.7%	1.1%	1.1%	0.8%	0.3%	0.2%	0.0%	0.0%
<i>GR3-4 &amp; CR6 Retirement</i>	0.3%	1.4%	1.8%	1.8%	1.4%	0.7%	0.3%	0.1%	0.1%
<i>GR3-4 &amp; CR6 Retirement/500 MW unit out</i>	1.4%	4.6%	6.8%	8.1%	5.7%	2.6%	1.4%	0.5%	0.3%

- \*Total resources exclude all of Paddy's Run from Nov thru Mar; includes OVEC, 6 MW derate on both GH3 & GH4 (baghouse)
- Early GR3-4 retirement reduces O&M by \$6 M; increases production costs by \$3 M.
- Final retirement decision will be made next summer pending successful TC2 burner replacement.





# Electricity price elasticity to load

- *Elasticity reflects the deviation between daily vs. monthly avg. electricity price corresponding to the expected deviation between daily vs. monthly avg. load.*
  - *1.7 elasticity is average for PJM-SI since 2006.*
  - *2.5 elasticity used in recent business plans.*
- *Lower elasticity reflects lower volatility.*
  - *PJM-SI price volatility has declined since 2007 as prices have declined.*

<i>PJM-SI (\$/MWh)</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013 YTD</i>
<i>Avg. Price</i>	<i>49</i>	<i>55</i>	<i>33</i>	<i>39</i>	<i>39</i>	<i>31</i>	<i>34</i>
<i>Std. Dev.</i>	<i>29</i>	<i>33</i>	<i>14</i>	<i>20</i>	<i>24</i>	<i>18</i>	<i>15</i>

# 2014 Maintenance increases by 12 weeks

Maintenance-Weeks

	2014 Plan					2013 Plan					2014 Plan - 2013 Plan				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Brown 1	3	8	3	1	3	8	1	4	1	3	(5)	7	(1)	-	-
Brown 2	4	1	3	8	1	1	1	4	8	1	3	-	(1)	-	-
Brown 3	3	7	3	1	3	3	4	3	1	3	-	3	-	-	-
Ghent 1	3	8	4	2	4	3	8	4	2	4	-	-	-	-	-
Ghent 2	2	6	4	3	3	2	6	4	3	3	-	-	-	-	-
Ghent 3	6	5	2	3	8	6	5	2	3	8	-	-	-	-	-
Ghent 4	8	-	3	3	4	8	2	3	3	4	-	(2)	-	-	-
Green River 3	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Green River 4	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Cane Run 4	2	-	-	-	-	3	-	-	-	-	(1)	-	-	-	-
Cane Run 5	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Cane Run 6	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Mill Creek 1	1	6	1	4	1	1	6	1	4	1	-	-	-	-	-
Mill Creek 2	4	6	4	1	4	4	6	4	1	4	-	-	-	-	-
Mill Creek 3	1	2	9	4	1	1	6	1	4	1	-	(4)	8	-	-
Mill Creek 4	12	1	4	1	4	10	1	4	1	4	2	-	-	-	-
Trimble County 1	2	5	2	9	2	-	4	-	8	-	2	1	2	1	2
Trimble County 2	16	5	5	5	9	6	-	4	-	8	10	5	1	5	1
Cane Run 7	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-
<b>Totals</b>	<b>75</b>	<b>60</b>	<b>47</b>	<b>45</b>	<b>47</b>	<b>63</b>	<b>50</b>	<b>38</b>	<b>39</b>	<b>44</b>	<b>12</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>3</b>
<b>MW-Maint Wks *</b>	<b>32,218</b>	<b>24,272</b>	<b>20,410</b>	<b>19,665</b>	<b>21,947</b>	<b>24,471</b>	<b>21,338</b>	<b>15,998</b>	<b>16,357</b>	<b>20,535</b>	<b>7,747</b>	<b>2,933</b>	<b>4,412</b>	<b>3,307</b>	<b>1,412</b>

\* Coal + CR7 Only

## Notes:

2014: Moved BR1 TO to 2015; TC2 burner replacement outage

2015: BR1 TO moved from 2014; BR3 increase due to baghouse installation; MC3 FGD/baghouse moved to 2016; TC outages per plant request

2016: MC3 outage from 2015



PPL companies

# Modeled EFOR assumptions are slightly higher

(%)	2014 Plan					2013 Plan					2014 Plan - 2013 Plan				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
<i>Brown 1</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Brown 2</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Brown 3</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Ghent 1</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Ghent 2</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Ghent 3</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Ghent 4</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Green River 3</i>	7.8	8.1	N/A	N/A	N/A	7.3	7.6	N/A	N/A	N/A	0.5	0.5	N/A	N/A	N/A
<i>Green River 4</i>	7.8	8.1	N/A	N/A	N/A	7.3	7.6	N/A	N/A	N/A	0.5	0.5	N/A	N/A	N/A
<i>Tyrone 3</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Cane Run 4</i>	7.8	8.1	N/A	N/A	N/A	7.3	7.6	N/A	N/A	N/A	0.5	0.5	N/A	N/A	N/A
<i>Cane Run 5</i>	7.8	8.1	N/A	N/A	N/A	7.3	7.6	N/A	N/A	N/A	0.5	0.5	N/A	N/A	N/A
<i>Cane Run 6</i>	7.8	8.1	N/A	N/A	N/A	7.3	7.6	N/A	N/A	N/A	0.5	0.5	N/A	N/A	N/A
<i>Mill Creek 1</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Mill Creek 2</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Mill Creek 3</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Mill Creek 4</i>	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	0.0
<i>Trimble County 1</i>	5.6	5.6	5.6	5.6	5.6	5.1	5.1	5.1	5.1	5.1	0.5	0.5	0.5	0.5	0.5
<i>Trimble County 2</i>	6.0	5.6	5.1	5.1	5.1	5.6	5.1	5.1	5.1	5.1	0.4	0.5	0.0	0.0	0.0
<i>Cane Run 7</i>	N/A	7.0	6.0	5.0	5.0	N/A	7.0	7.0	7.0	7.0	N/A	N/A	-1.0	-2.0	-2.0
<b>Total EFOR</b>	<b>5.9</b>	<b>5.9</b>	<b>5.6</b>	<b>5.5</b>	<b>5.5</b>	<b>5.7</b>	<b>5.7</b>	<b>5.6</b>	<b>5.6</b>	<b>5.6</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.1</b>
<i>Total MOR</i>	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0
<i>Total EUOR</i>	8.3	8.3	7.8	7.7	7.7	8.2	8.0	7.9	7.9	7.9	0.2	0.2	0.0	-0.1	-0.1

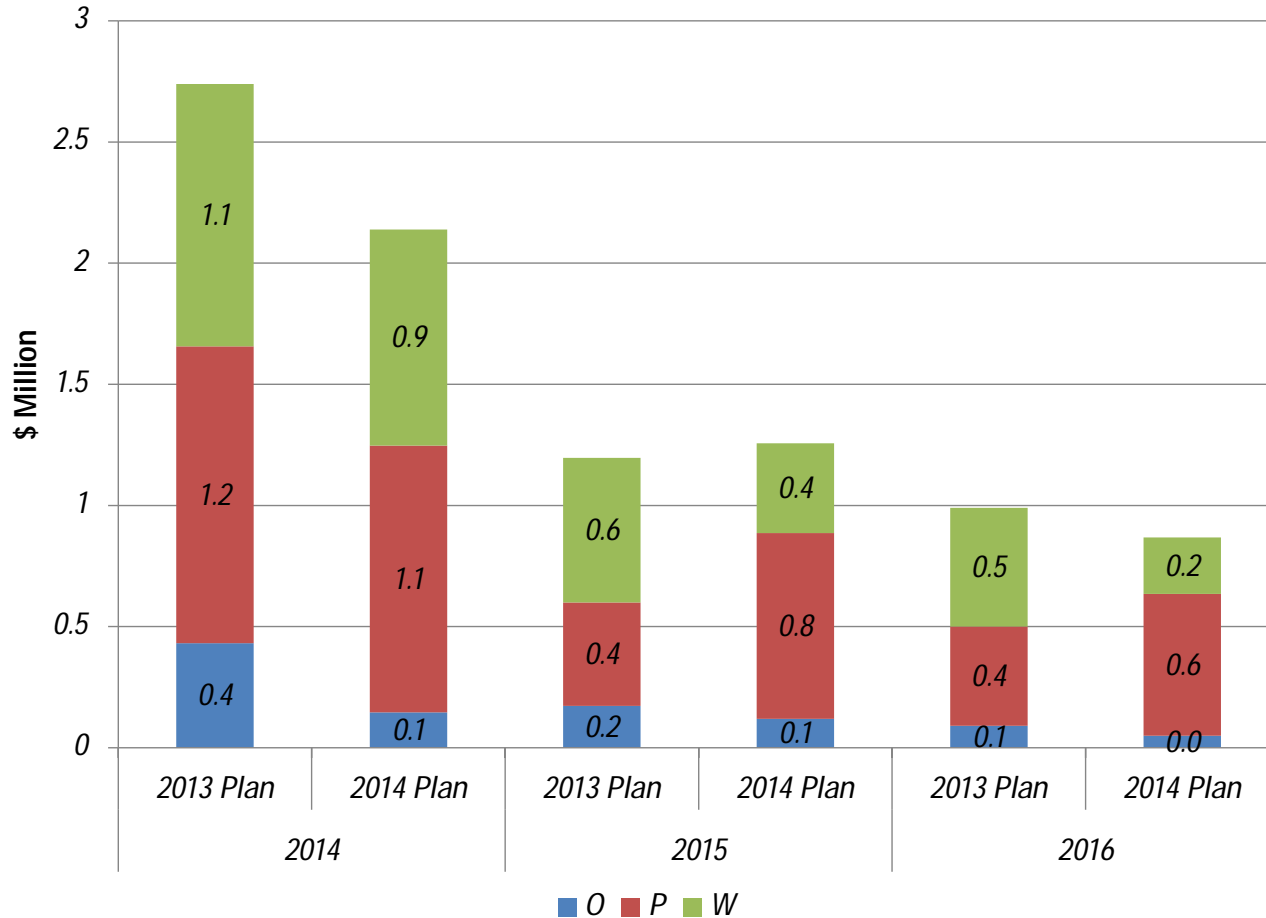


# Dispatch order comparison

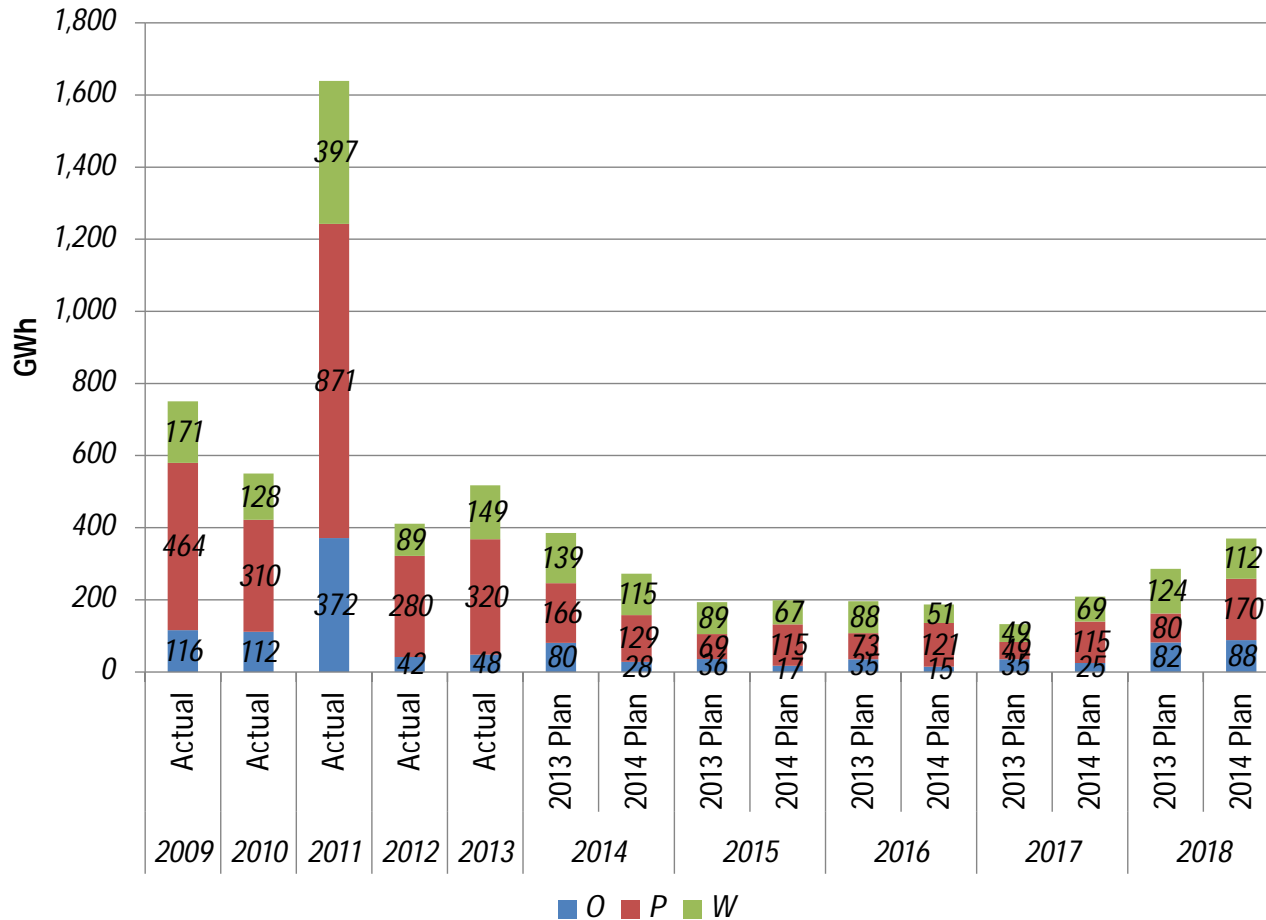
	2014		2015		2016		2017		2018	
	2013Plan	2014Plan	2013Plan	2014Plan	2013Plan	2014Plan	2013Plan	2014Plan	2013Plan	2014Plan
Brown 1	18	18	18	17	14	13	14	14	15	15
Brown 2	17	17	15	14	13	12	13	13	14	14
Brown 3	19	19	19	16	15	14	15	15	16	16
Cane Run 4	14	15	9	15						
Cane Run 5	11	11	6	13						
Cane Run 6	15	14								
Cane Run 7			5	11	3	11	2	10	4	10
CC2X1									6	12
Ghent 1	6	9	12	8	8	8	9	9	10	9
Ghent 2	4	4	4	4	5	3	8	3	9	4
Ghent 3	13	13	13	10	9	9	11	11	12	11
Ghent 4	12	12	16	12	11	10	12	12	13	13
Green River 3	16	16	14							
Green River 4	7	8	3							
RM Purchase						15		16		
Mill Creek 1	5	3	10	6	6	5	5	6	3	5
Mill Creek 2	3	2	8	5	7	5	3	5	2	6
Mill Creek 3	8	6	11	3	12	6	10	8	11	8
Mill Creek 4	9	7	17	9	10	7	7	7	8	7
OVEC-K Release	10	10	7	7	4	4	6	4	7	3
OVEC-L Release	10	10	7	7	4	4	6	4	7	3
Trimble County 1	2	5	2	2	2	2	4	2	5	2
Trimble County 2	1	1	1	1	1	1	1	1	1	1



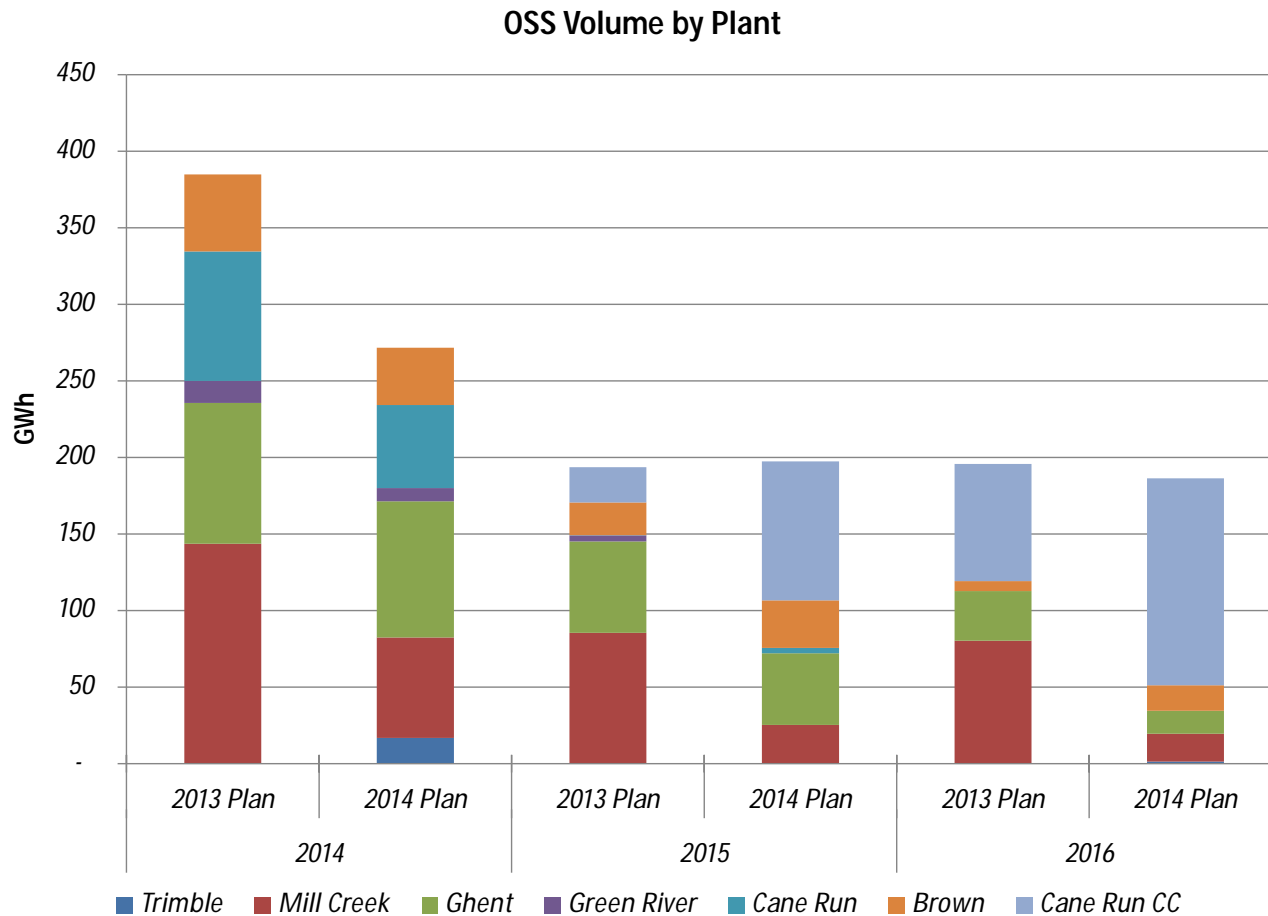
# OSS Contribution by Peak-type



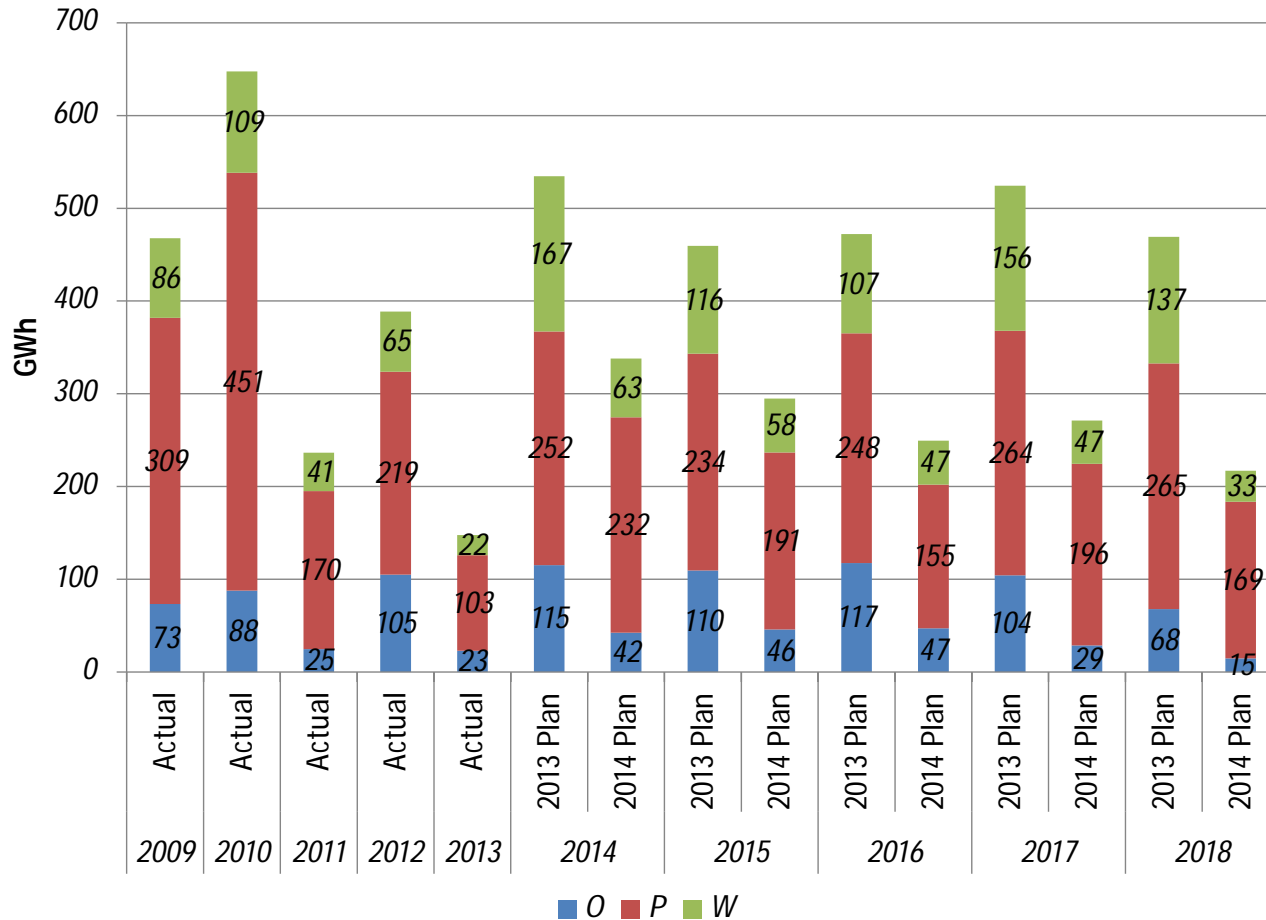
# OSS volumes lower in 2014



# OSS from Cane Run 7 increases

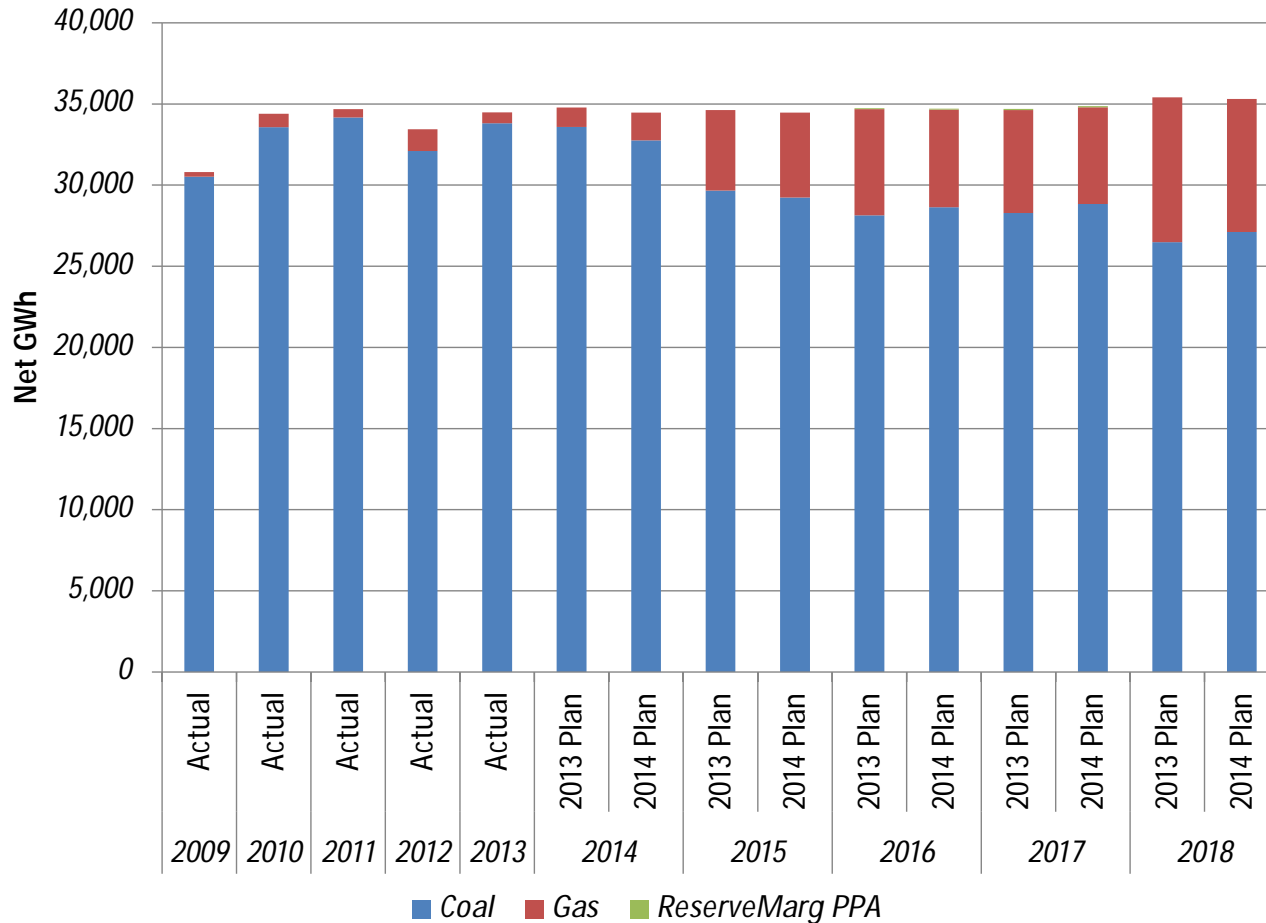


# Economy purchases lower (and more in line with history) due to reduced purchase limits





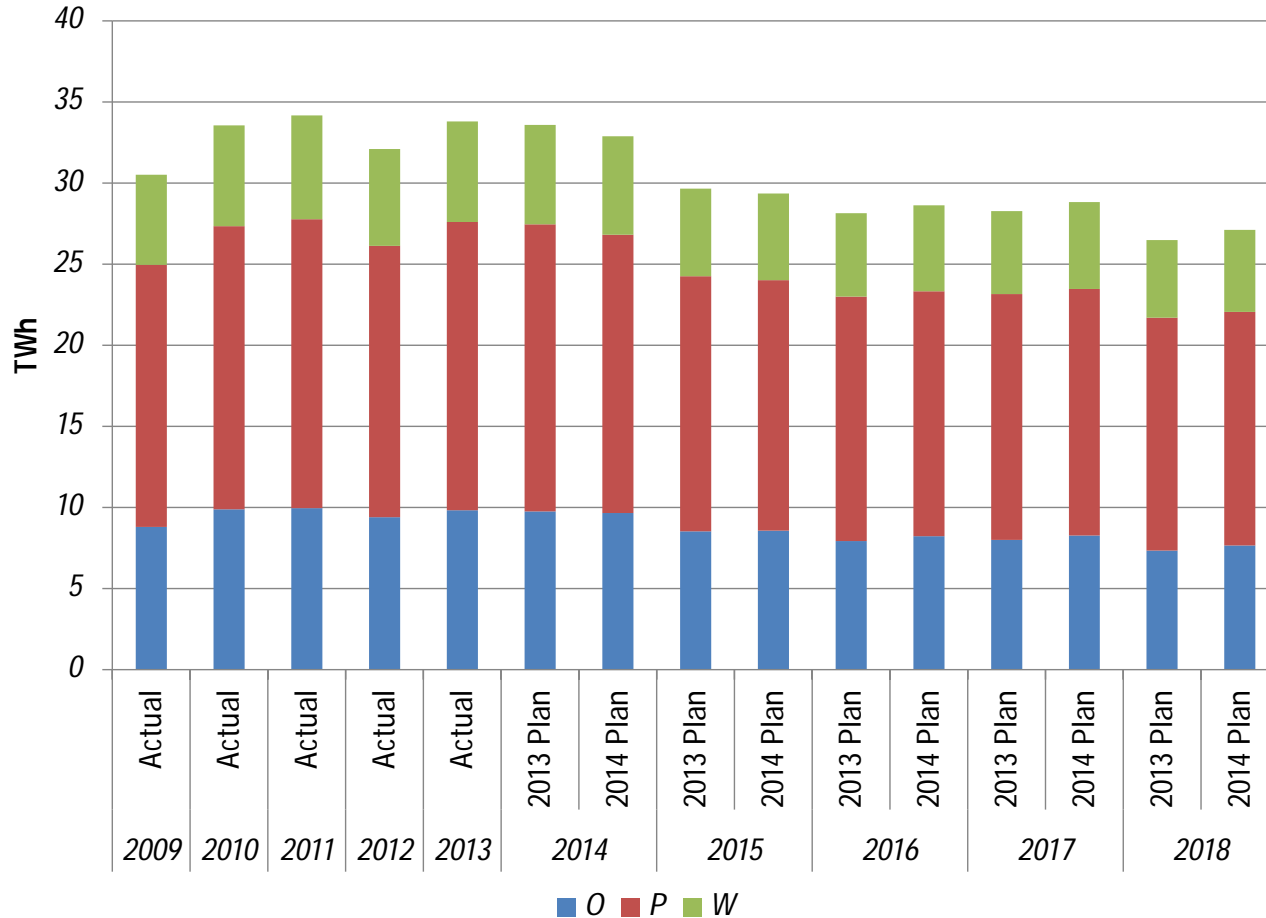
# Total coal and gas generation remains mostly unchanged in 2014 Plan



2013: 7 + 5



# Compared to 2013 Plan, coal generation in 2014 Plan is mostly unchanged

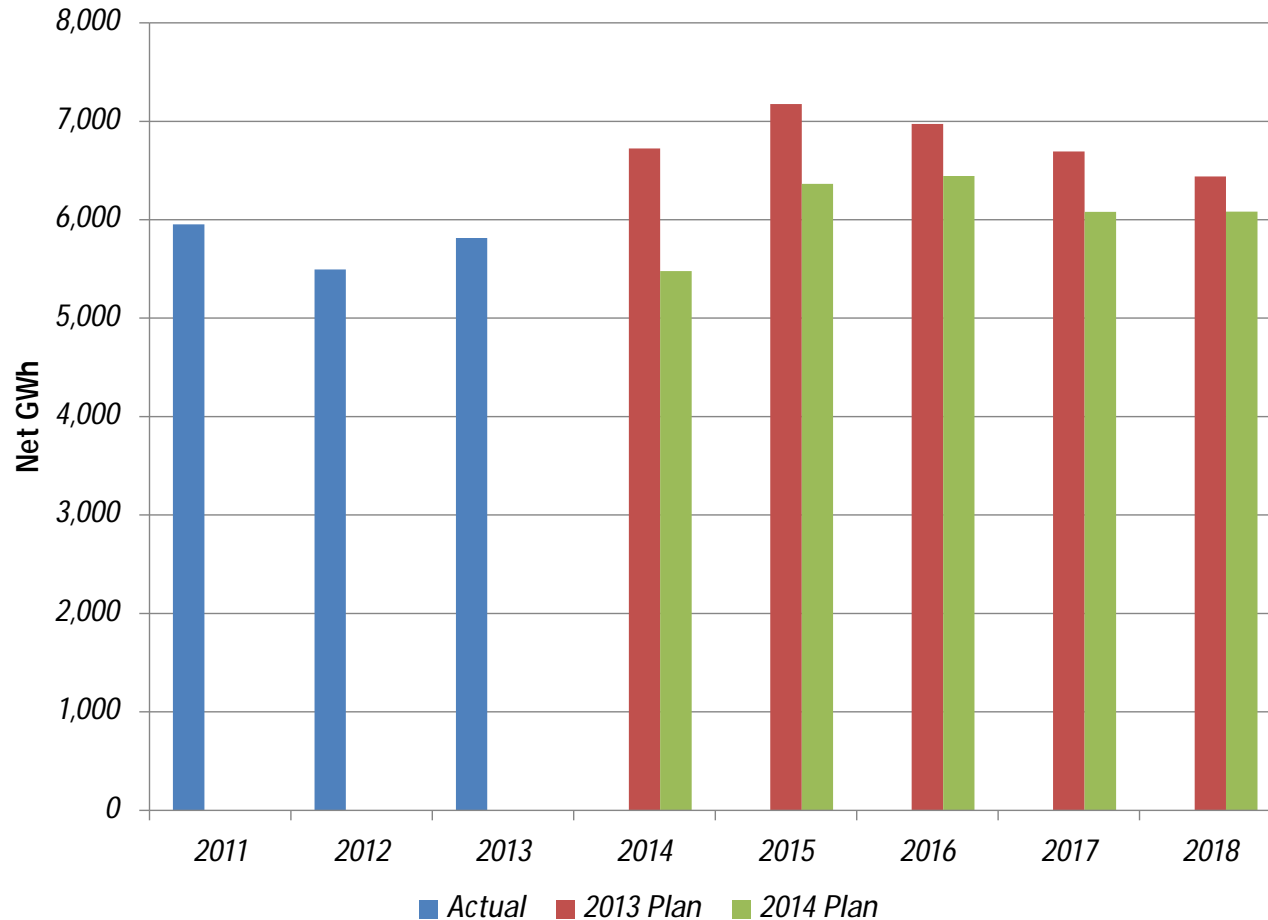


Note: TC1 & 2 at 75%



PPL companies

# Trimble coal generation decreases in 2014 Plan primarily due to additional weeks of maintenance

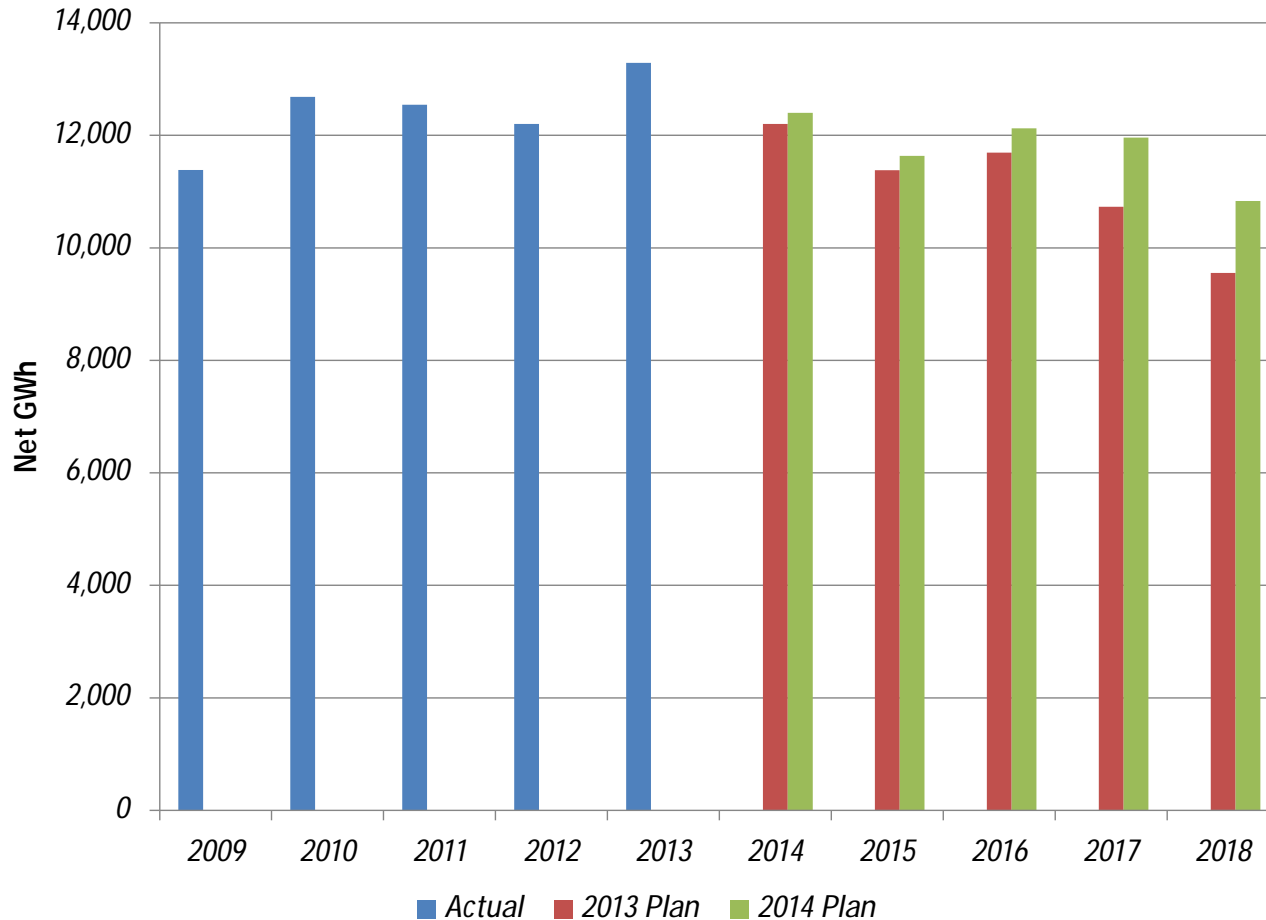


2013: 7 + 5



PPL companies

# Ghent generation in the 2014 Plan increases mostly due to change in VOM

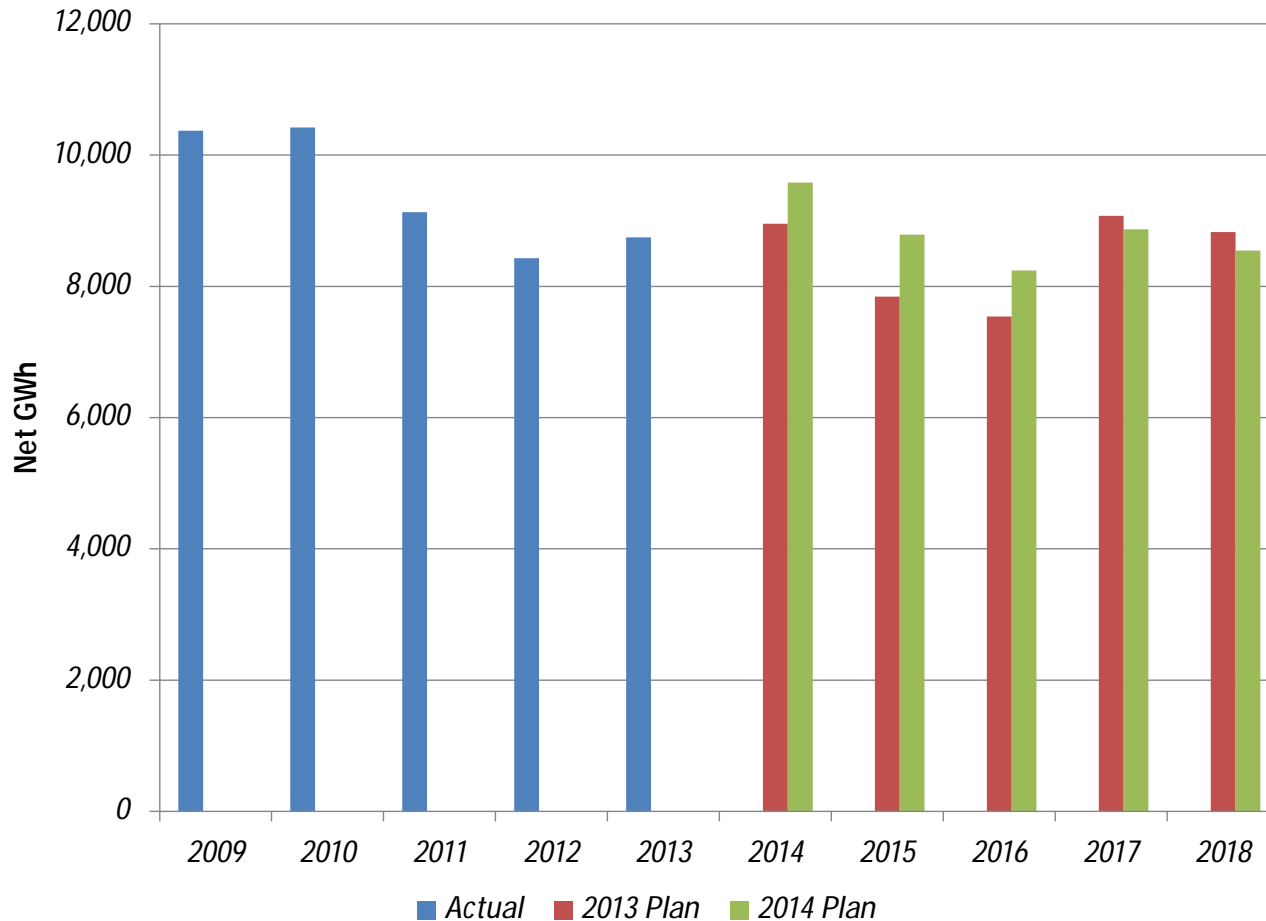


2013: 7 + 5



PPL companies

# Mill Creek generation is higher in 2014-2016 due to lower coal prices; lower in 2017+ due to system VOM differences

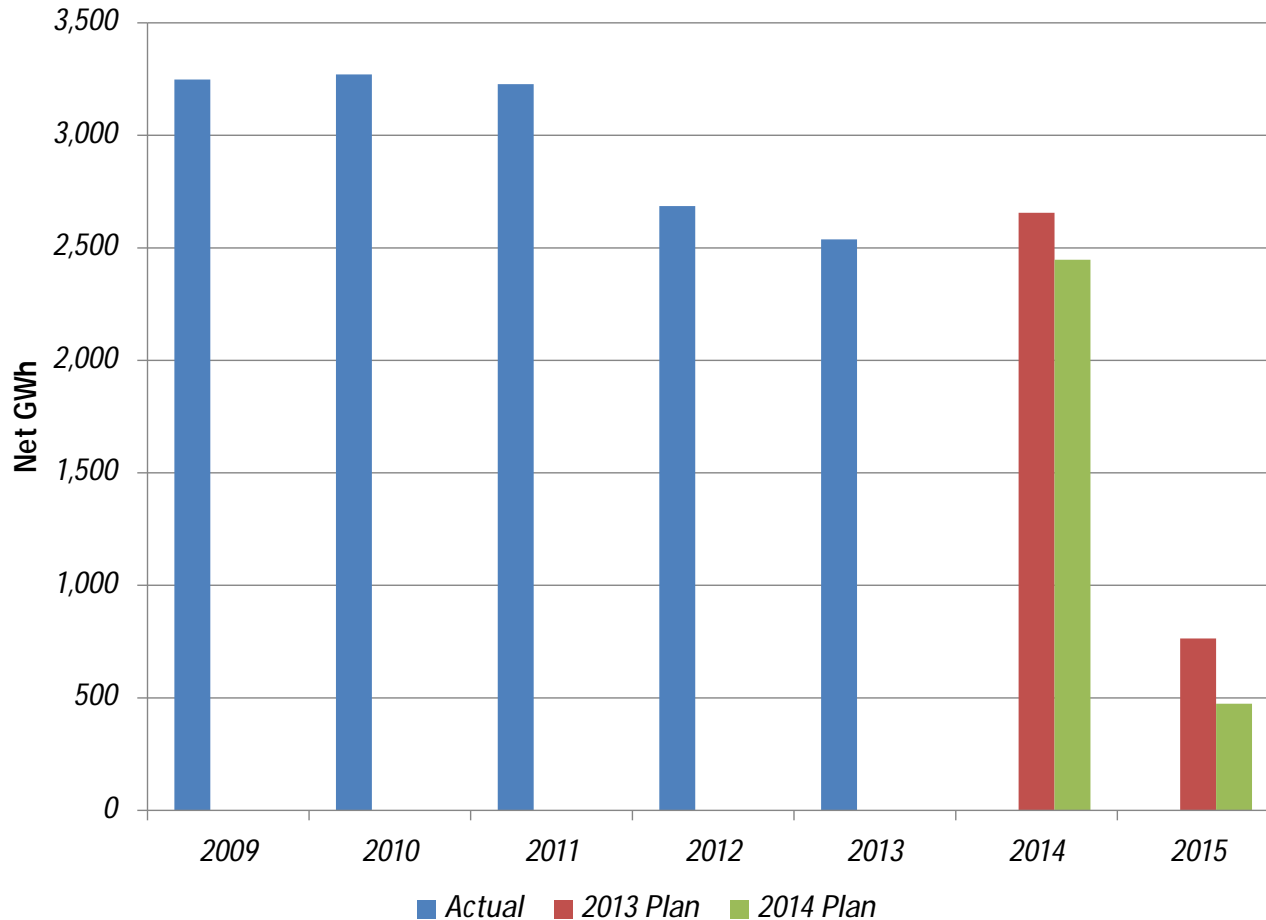


2013: 7 + 5



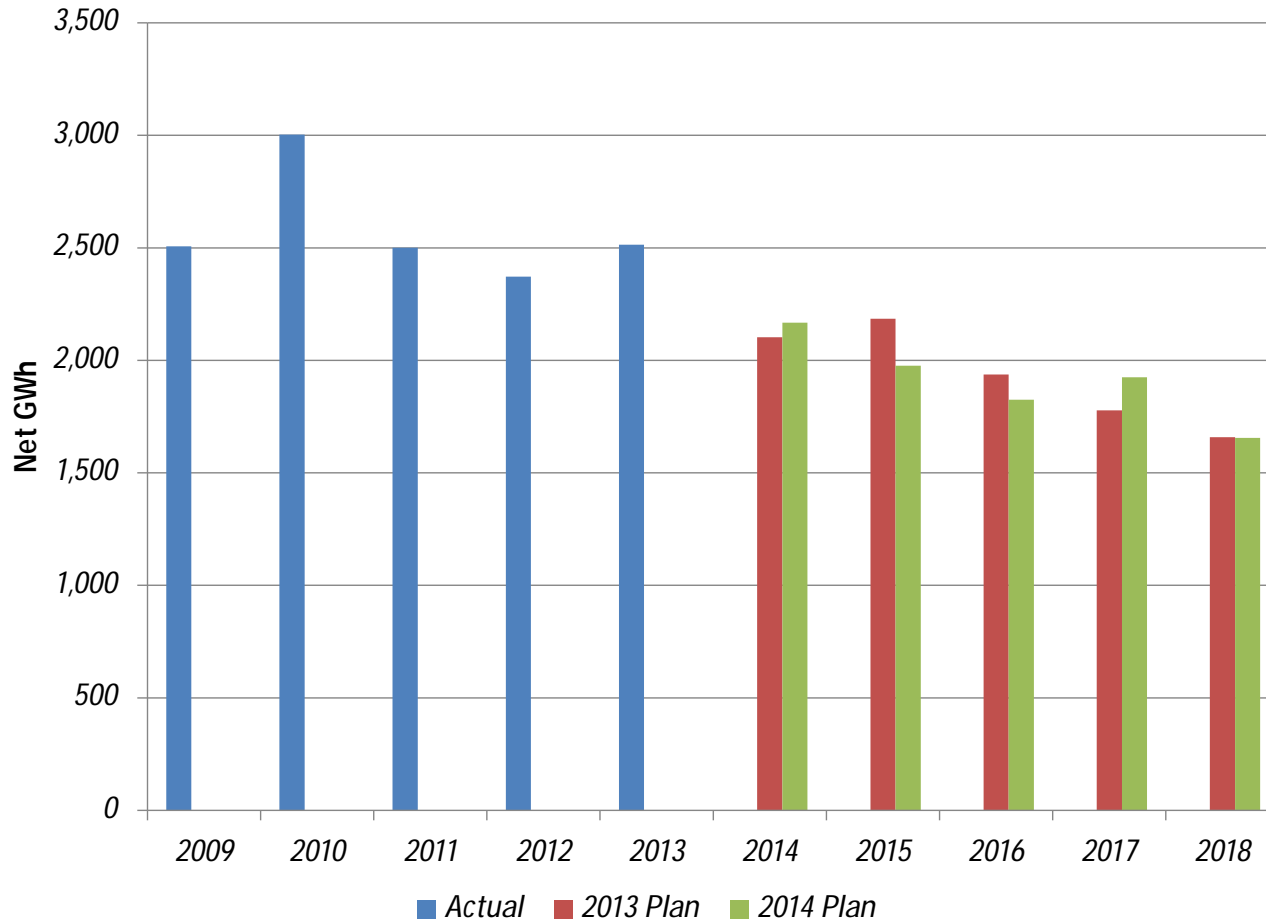
PPL companies

# Cane Run coal generation decreases in 2014-15 due to change in system coal prices



2013: 7 + 5

# Brown coal generation continues to decline over planning period

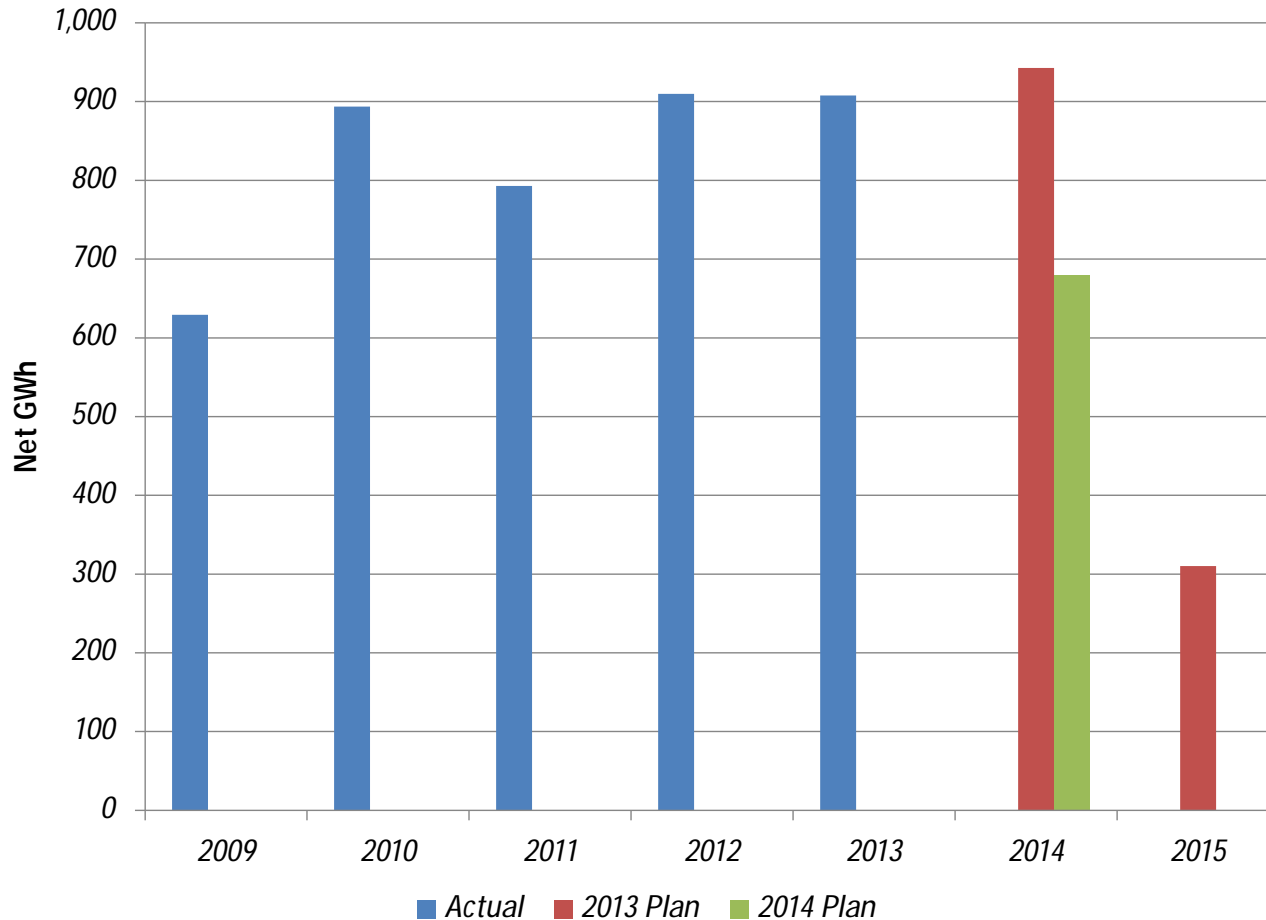


2013: 7 + 5



PPL companies

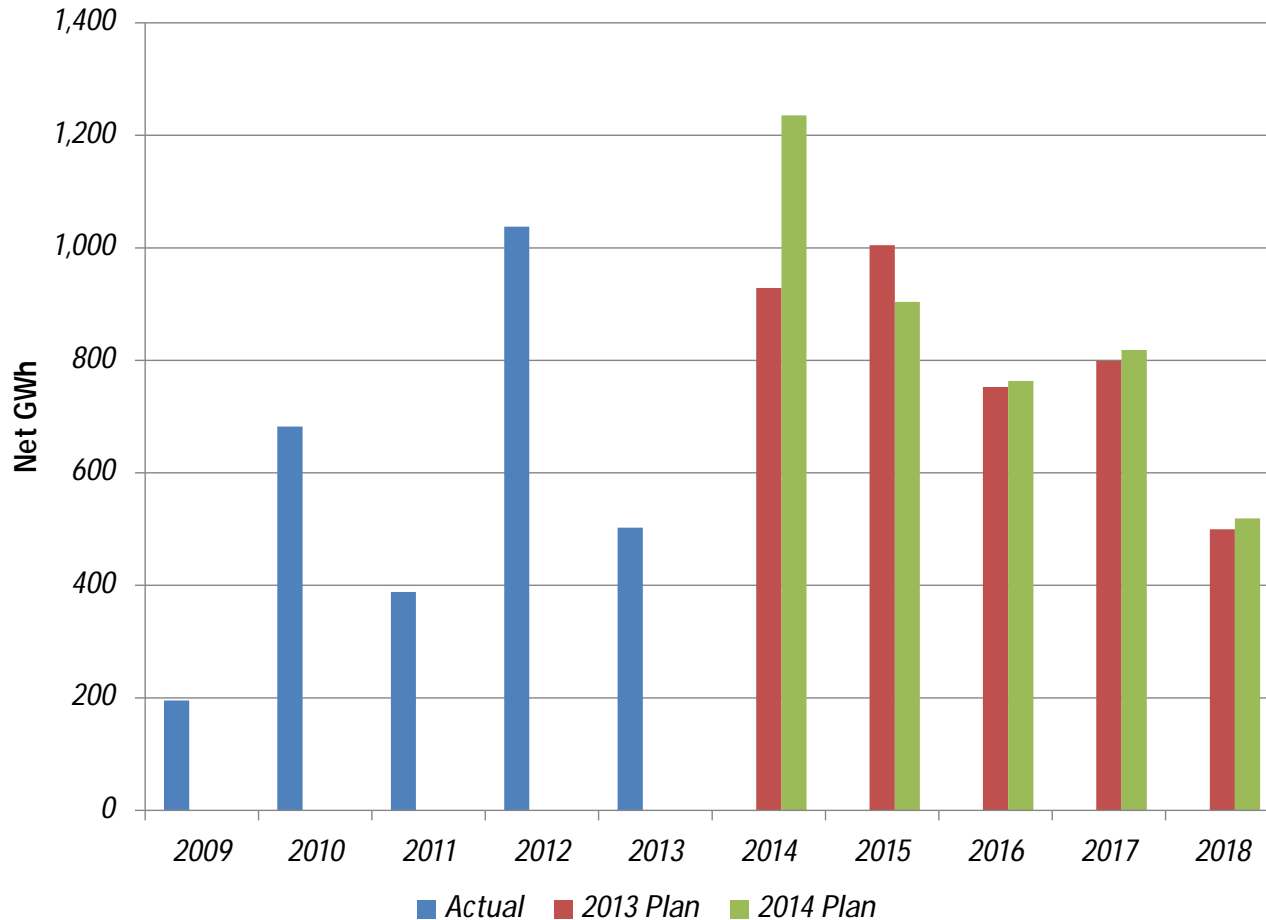
# Green River generation decreases in 2014 Plan primarily due to early retirement



2013: 7 + 5

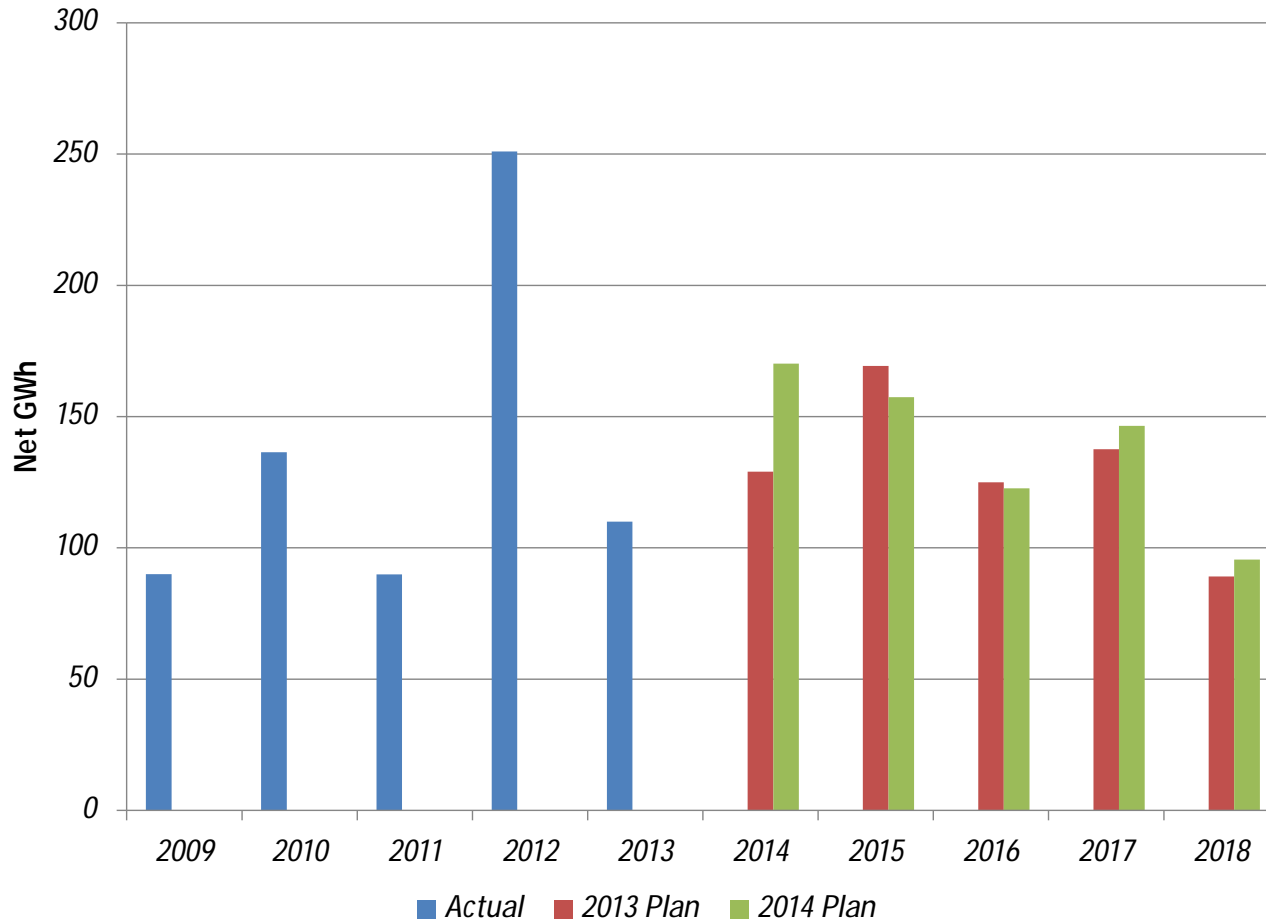


# Trimble CT generation increases in 2014 primarily due to additional maintenance at Trimble coal units; decreases in 2015 due partly to CR7 testing; mostly unchanged in 2016-18



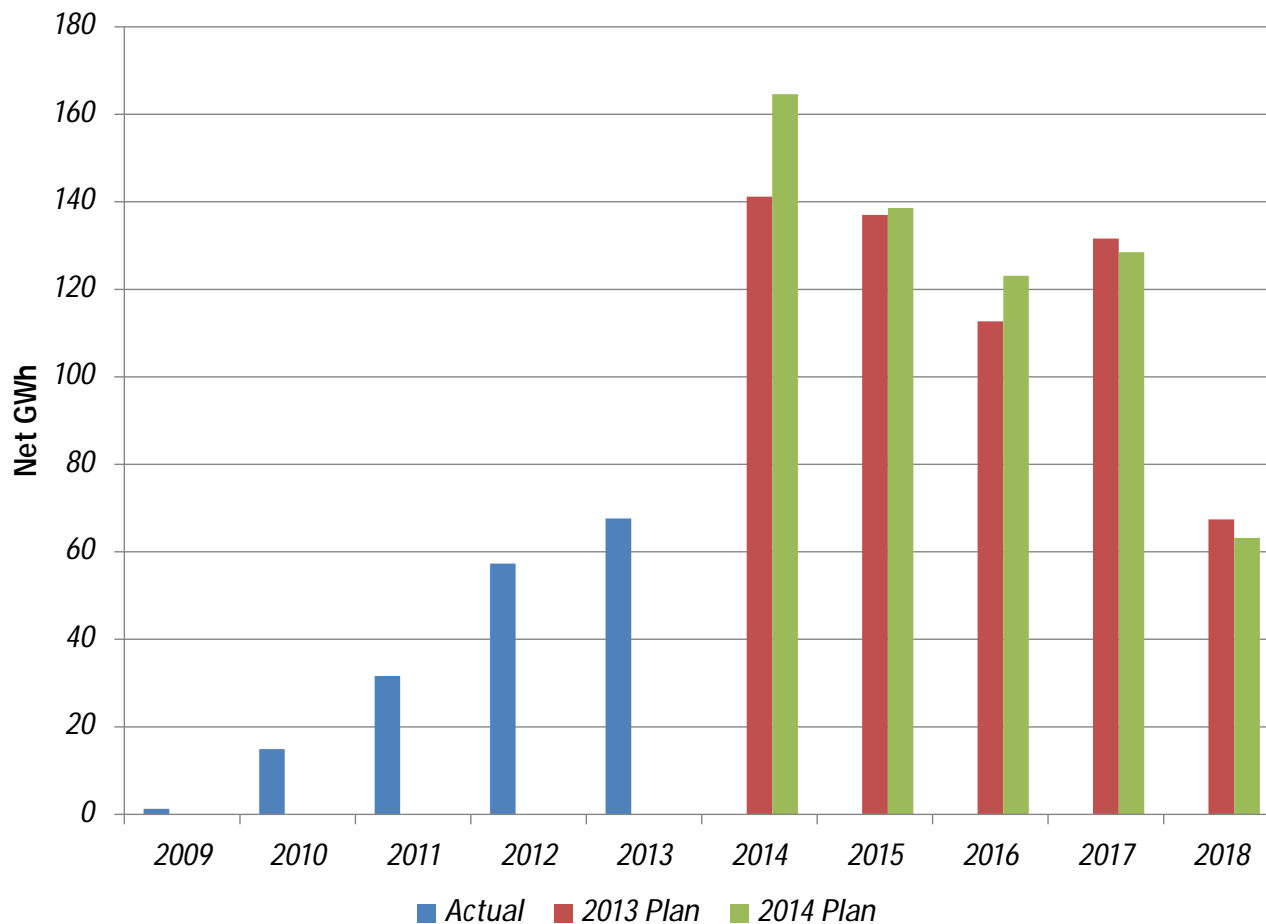
2013: 7 + 5

# Brown CT generation increases in 2014 primarily due to additional maintenance at Trimble coal units; mostly unchanged in 2015-18



2013: 7 + 5

# Paddy's Run 13 generation increases in 2014 primarily due to additional maintenance at Trimble coal unit; mostly unchanged in 2015-18



2013: 7 + 5

# VOM drives generation differences between 2013 and 2014 Plans

VOM (\$/MWh)	2014			2015			2016			2017		
	2013 Plan	2014 Plan	Diff	2013 Plan	2014 Plan	Diff	2013 Plan	2014 Plan	Diff	2013 Plan	2014 Plan	Diff
Brown 1	1.11	0.89	(0.22)	1.12	2.14	1.02	4.38	2.65	(1.73)	4.70	2.47	(2.22)
Brown 2	1.06	0.88	(0.18)	1.08	1.77	0.69	3.98	2.26	(1.72)	4.65	2.25	(2.40)
Brown 3	1.98	2.17	0.19	5.42	5.93	0.51	5.95	7.58	1.63	5.77	7.83	2.06
Cane Run 4	4.46	4.14	(0.32)	4.43	4.39	(0.05)	-	-	-	-	-	-
Cane Run 5	4.13	3.87	(0.26)	4.09	4.09	(0.00)	-	-	-	-	-	-
Cane Run 6	6.02	5.87	(0.15)	6.06	5.98	(0.08)	-	-	-	-	-	-
Ghent 1	3.03	2.74	(0.29)	4.96	3.75	(1.21)	5.21	3.94	(1.27)	5.67	4.34	(1.33)
Ghent 2	2.10	1.11	(0.99)	3.67	1.94	(1.74)	3.91	2.06	(1.85)	4.21	2.37	(1.84)
Ghent 3	4.65	3.51	(1.14)	4.60	3.56	(1.04)	5.49	3.83	(1.66)	6.00	4.37	(1.63)
Ghent 4	5.38	3.62	(1.75)	6.40	4.14	(2.26)	6.39	4.13	(2.26)	7.53	5.05	(2.47)
Mill Creek 1	0.66	0.63	(0.03)	1.86	3.17	1.31	2.58	3.89	1.32	2.80	3.85	1.05
Mill Creek 2	0.67	0.64	(0.03)	2.04	2.94	0.91	3.04	3.88	0.84	3.06	3.61	0.55
Mill Creek 3	1.42	1.25	(0.17)	5.78	1.59	(4.19)	6.15	5.19	(0.97)	6.68	5.06	(1.62)
Mill Creek 4	4.85	1.41	(3.44)	4.63	4.22	(0.41)	4.71	4.53	(0.18)	4.75	4.07	(0.68)
Trimble 1	1.34	1.44	0.09	2.15	2.11	(0.04)	2.26	2.83	0.56	2.41	3.24	0.84
Trimble 2	1.72	1.74	0.02	1.79	1.73	(0.06)	1.87	1.79	(0.08)	1.94	1.81	(0.13)



# 2014 heat rate assumptions are mostly unchanged in 2014 Plan

	2013 Plan	2014 Plan	Difference (2014 Plan vs 2013 Plan) Percent Change	
CR4	10,740	11,380	640	5.6%
CR5	10,380	10,380	0	0.0%
CR6	10,390	10,070	(320)	-3.2%
MC1	10,490	10,490	0	0.0%
MC2	10,420	10,420	0	0.0%
MC3	10,450	10,530	80	0.8%
MC4	10,730	10,730	0	0.0%
TC1	10,500	10,470	(30)	-0.3%
TC2	9,340	9,230	(110)	-1.2%
BR1	10,560	10,560	0	0.0%
BR2	10,270	10,270	0	0.0%
BR3	10,800	10,800	0	0.0%
GH1	10,680	10,790	110	1.0%
GH2	10,750	10,600	(150)	-1.4%
GH3	10,950	10,850	(100)	-0.9%
GH4	11,100	10,900	(200)	-1.8%
GR3	12,250	13,260	1,010	7.6%
GR4	10,650	10,650	0	0.0%
CR7	6,629	6,890	261	3.8%



# CT Usage (MWh/Start, RunHours/Start) consistent with history

CT Generation (GWh)

	ACTUAL				(6+6)	2014 Plan				
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BR5, 8-11	18	34	16	24	13	25	27	19	30	16
BR6, 7	63	95	62	223	101	144	130	104	117	79
PR13	1	15	31	56	79	164	139	123	128	63
TC5-10	195	682	376	1,034	573	1,236	904	763	818	519
	278	826	485	1,337	766	1,570	1,199	1,009	1,094	677

2013 Plan

1,199	1,311	990	1,068	656
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CT Generation (GWh)/Start

	ACTUAL				(6+6)	2014 Plan				
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BR5, 8-11	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2
BR6, 7	0.6	0.7	0.6	1.2	0.8	0.7	0.7	0.7	0.8	0.7
PR13	0.6	0.8	0.6	0.8	0.7	1.0	0.8	0.8	0.8	0.6
TC5-10	0.7	0.9	0.7	1.7	0.9	1.1	0.9	1.0	1.1	0.8
	0.5	0.8	0.6	1.4	0.8	1.0	0.8	0.9	0.9	0.7

2013 Plan

0.9	1.0	0.9	0.9	0.8
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CT Starts (# starts)

	ACTUAL				(6+6)	2014 Plan				
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BR5, 8-11	112	137	88	103	115	141	152	131	162	96
BR6, 7	101	139	110	185	126	198	183	142	148	107
PR13	2	18	49	68	110	172	171	154	152	101
TC5-10	292	779	509	626	652	1,097	1,027	754	778	627
	507	1,073	756	982	1,003	1,607	1,532	1,181	1,239	931

2013 Plan

1,286	1,309	1,075	1,158	854
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CT Run Hours/Start

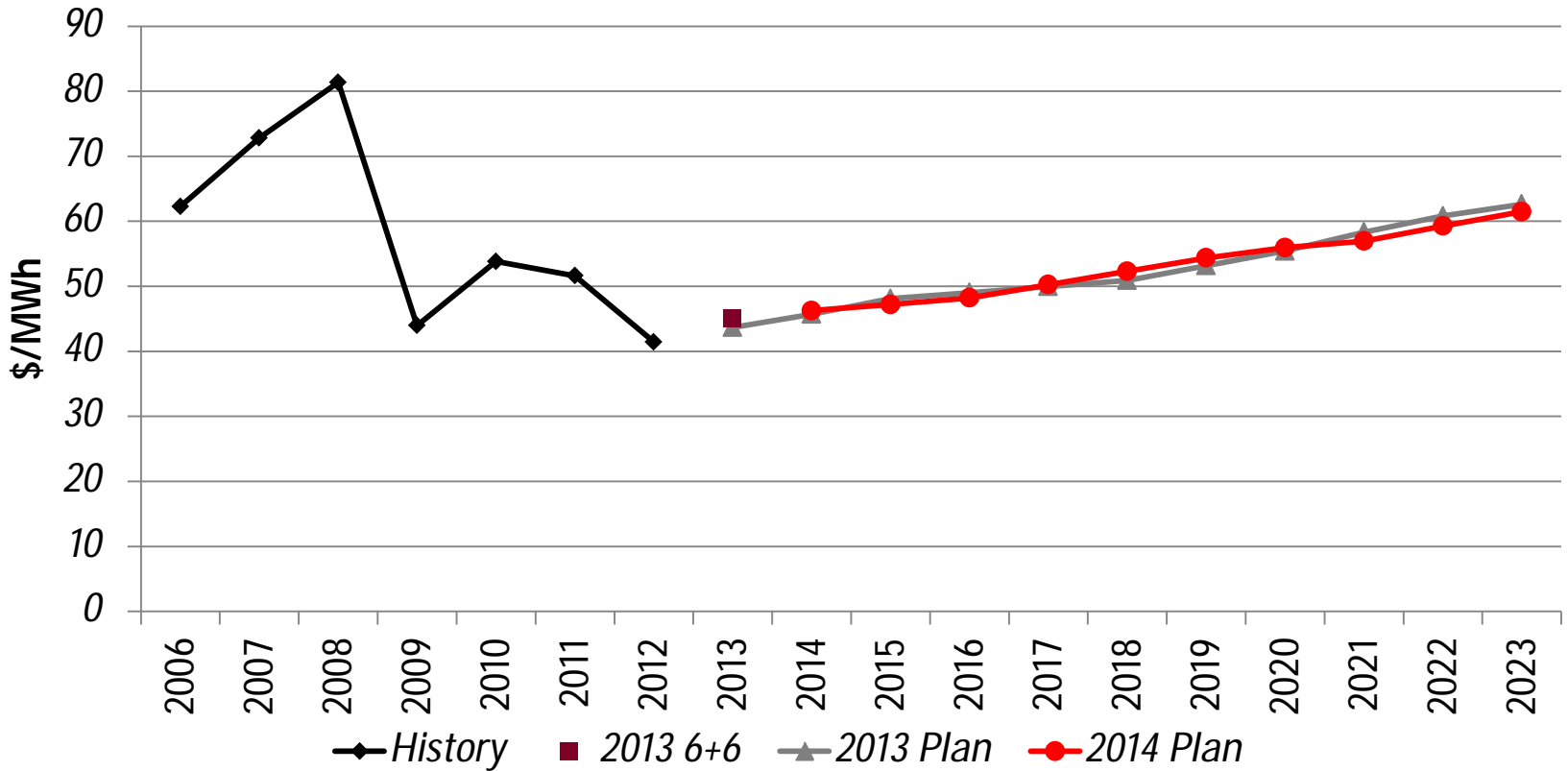
	ACTUAL				(6+6)	2014 Plan				
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BR5, 8-11	3.4	4.6	4.3	4.3	2.9	3.6	3.6	3.0	3.6	3.4
BR6, 7	7.7	8.7	7.0	10.1	8.3	7.2	7.0	6.7	7.2	7.2
PR13	4.7	5.9	5.4	6.9	8.1	11.1	9.5	9.6	9.8	7.5
TC5-10	5.8	7.8	7.3	11.9	8.6	8.1	6.7	7.5	7.7	6.3
	5.6	7.4	6.8	10.4	7.9	8.0	6.8	7.2	7.3	6.2

2013 Plan

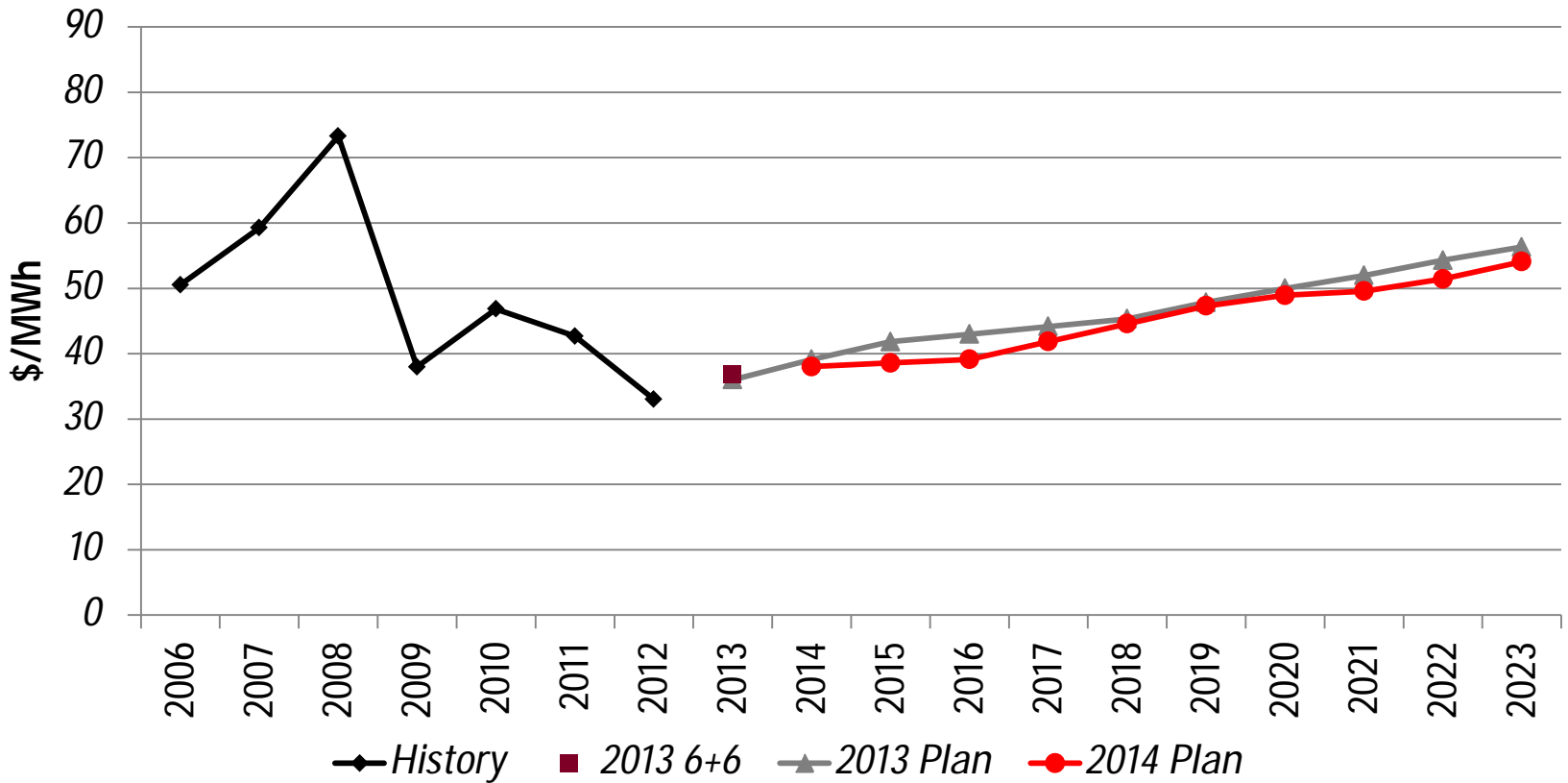
7.5	7.9	7.1	7.2	6.1
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# Compared to the 2013 BP, on-peak PJM-West electricity prices are mostly unchanged



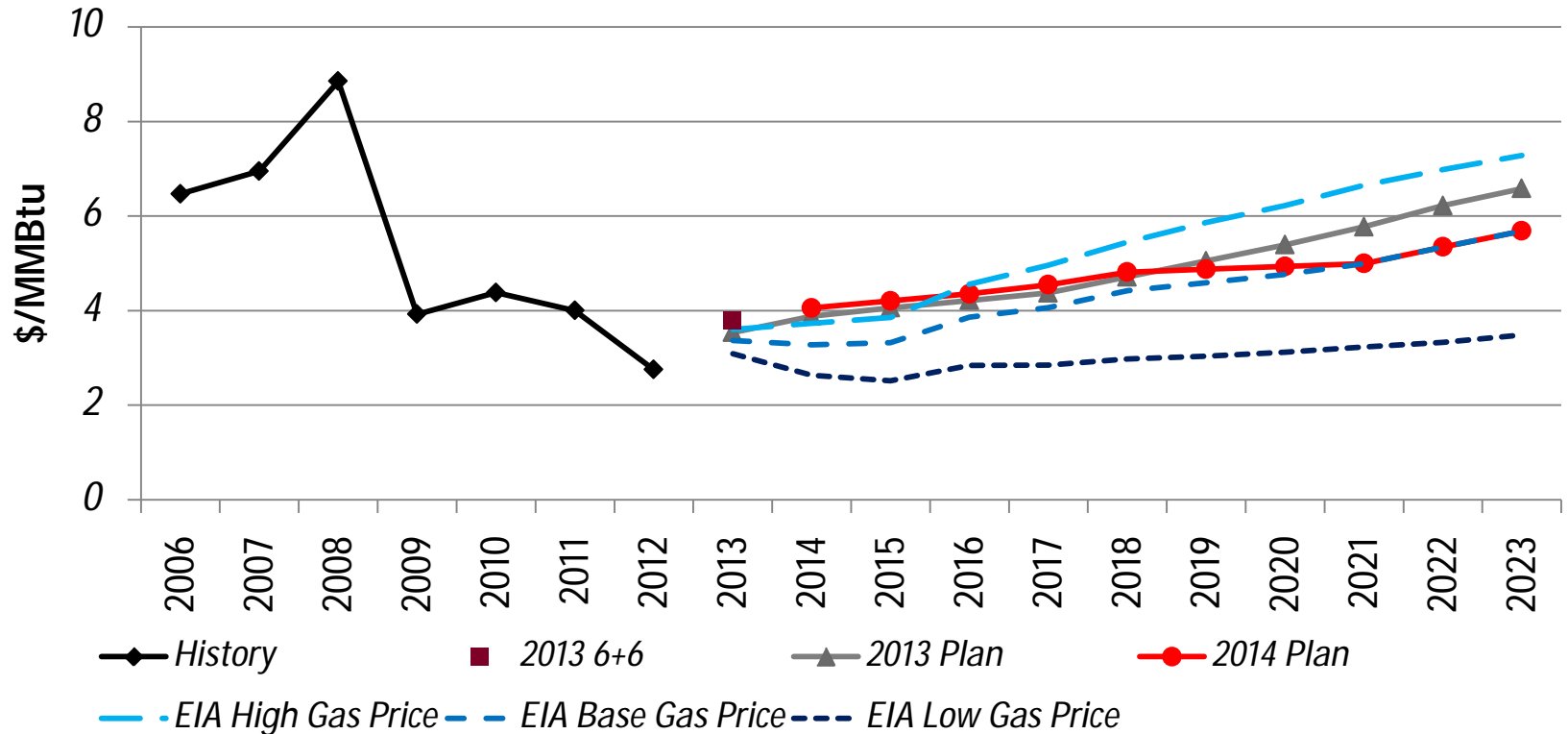
- 2014-2016 prices are ICE forward market prices as of June 24, 2013.
- Long-term prices from 2019 are modeled in AURORA.
- 2017-2018 prices are interpolated.



- 2014-2016 prices are ICE forward market prices as of June 24, 2013.
- Long-term prices from 2019 are modeled in AURORA.
- 2017-2018 prices are interpolated.

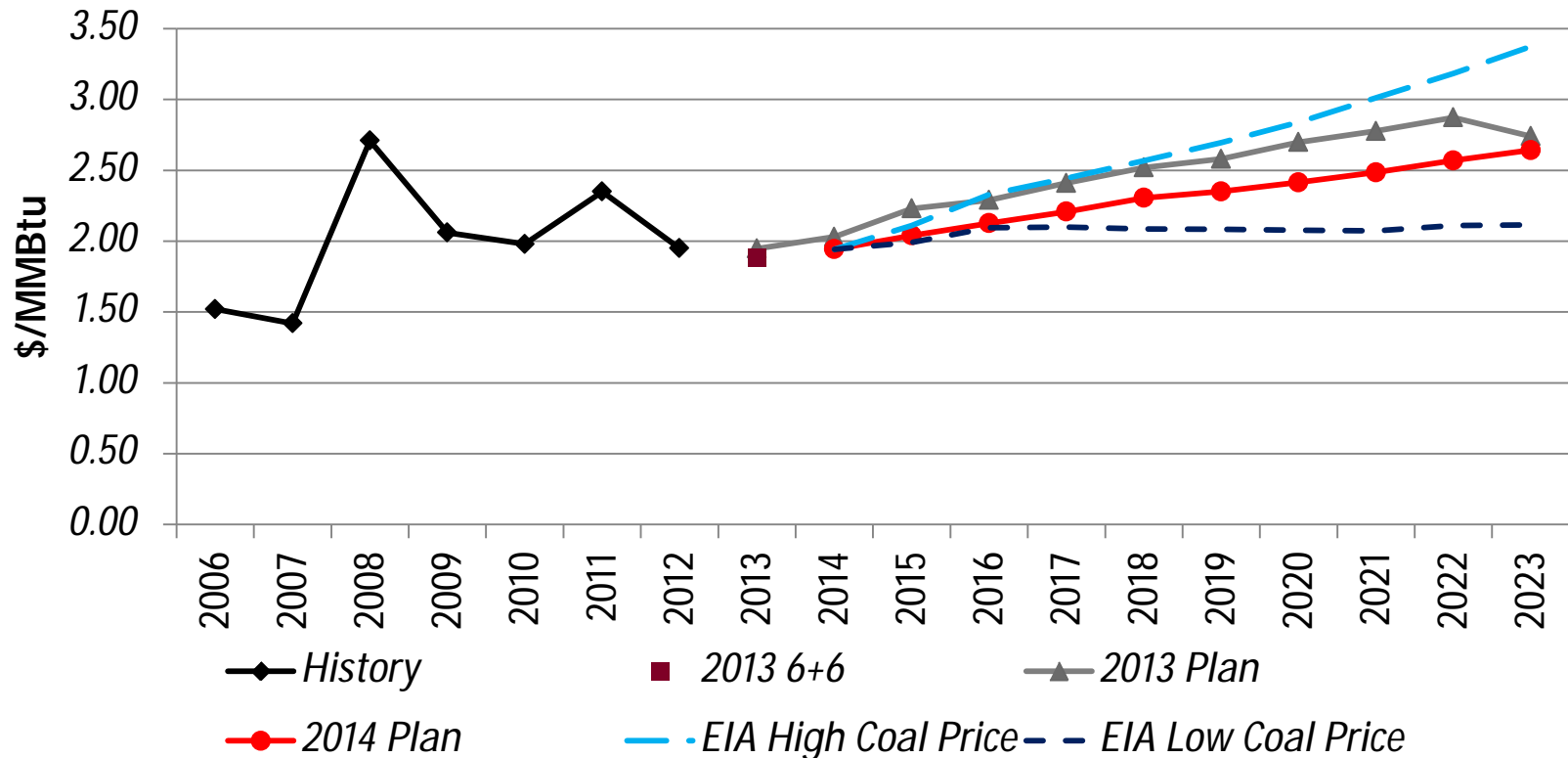


# Henry Hub natural gas outlook slightly higher in near term



- 2014-2018 prices are NYMEX forward market prices as of June 24, 2013.
- Long-term prices from 2021 are EIA's Annual Energy Outlook Reference Case (April 2013)
- 2019-2020 prices are interpolated.

# Illinois Basin high sulfur coal prices lower



- Coal prices represent blend of bid information and Wood Mackenzie's Spring 2013 outlook through 2018. Thereafter, prices reflect EIA's (April 2013) forecasted growth rates.

# 2014 Fuel Cost Comparison - Annual Averages

Fuel Expense (¢/mmBTU)					Delta	
		2013 Forecast (6+6)	2014 Plan 2014	2013 Plan 2014	2014 Plan 2014 - 2013 Plan 2014	% Change
<b>COAL</b>	<i>BR</i>	301	316	320	(4)	-1%
	<i>GH</i>	223	235	234	2	1%
	<i>GR</i>	244	253	264	(11)	-4%
	<i>CR</i>	227	239	240	(1)	-1%
	<i>MC</i>	240	239	259	(19)	-7%
	<i>TC</i>	232	235	231	3	1%
	<i>TC PRB</i>	247	238	255	(17)	-7%
<b>GAS</b>	<i>Gas BR</i>	408	452	433	18	4%
	<i>Gas LGE</i>	396	425	409	16	4%
	<i>Gas PR</i>	407	410	402	8	2%
	<i>Gas Haef</i>	617	672	748	(77)	-10%
<b>OIL</b>	<i>Oil</i>	1742	2045	2148	(103)	-5%

# 2015 Fuel Cost Comparison - Annual Averages

Fuel Expense (¢/mmBTU)				Delta	
		2014 Plan 2015	2013 Plan 2015	2014 Plan 2015 - 2013 Plan 2015	% Change
<b>COAL</b>	<i>BR</i>	309	320	(11)	-3%
	<i>GH</i>	243	245	(2)	-1%
	<i>GR</i>	N/A	269	N/A	N/A
	<i>CR</i>	259	246	13	5%
	<i>MC</i>	241	275	(35)	-13%
	<i>TC</i>	233	234	(1)	0%
	<i>TC PRB</i>	252	260	(7)	-3%
<b>GAS</b>	<i>Gas BR</i>	467	451	16	4%
	<i>Gas LGE</i>	440	427	13	3%
	<i>Gas PR</i>	425	420	5	1%
	<i>Gas Haef</i>	687	766	(79)	-10%
<b>OIL</b>	<i>Oil</i>	1794	2224	(430)	-19%

# 2016 Fuel Cost Comparison - Annual Averages

Fuel Expense (¢/mmBTU)				Delta	
		2014 Plan 2016	2013 Plan 2016	2014 Plan 2016 - 2013 Plan 2016	% Change
<b>COAL</b>	<i>BR</i>	315	330	(16)	-5%
	<i>GH</i>	250	264	(14)	-5%
	<i>GR</i>	N/A	N/A	N/A	N/A
	<i>CR</i>	N/A	N/A	N/A	N/A
	<i>MC</i>	244	292	(48)	-16%
	<i>TC</i>	242	260	(18)	-7%
	<i>TC PRB</i>	255	260	(5)	-2%
<b>GAS</b>	<i>Gas BR</i>	483	467	15	3%
	<i>Gas LGE</i>	456	444	12	3%
	<i>Gas PR</i>	440	436	5	1%
	<i>Gas Haef</i>	703	782	(80)	-10%
<b>OIL</b>	<i>Oil</i>	1829	2193	(364)	-17%

# Peak and Energy Comparison

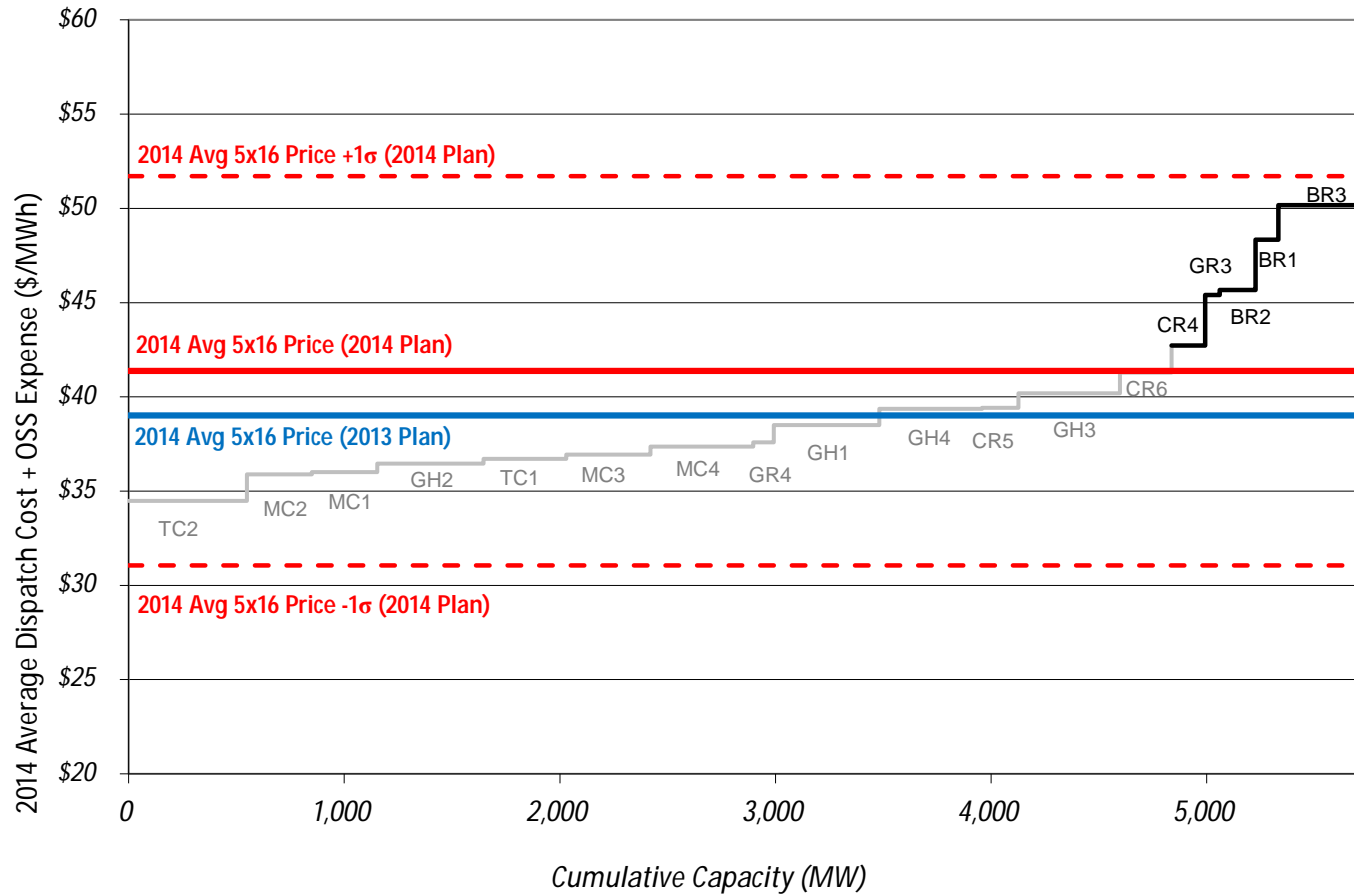
Peak Delta (2014 Plan - 2013 Plan)

MW	2014	2015	2016	2017	2018
Jan	102	96	112	125	123
Feb	31	28	43	55	58
Mar	(83)	(92)	(87)	(72)	(73)
Apr	(30)	(30)	(23)	(13)	(13)
May	(123)	(128)	(119)	(110)	(110)
Jun	191	179	212	209	200
Jul	191	205	215	189	164
Aug	(42)	(35)	(33)	(23)	(15)
Sep	(37)	(39)	(31)	(16)	(13)
Oct	8	3	10	23	29
Nov	(32)	(35)	(25)	(14)	(14)
Dec	65	70	105	96	99
<b>Peak</b>	<b>(22)</b>	<b>(12)</b>	<b>(7)</b>	<b>(6)</b>	<b>(15)</b>

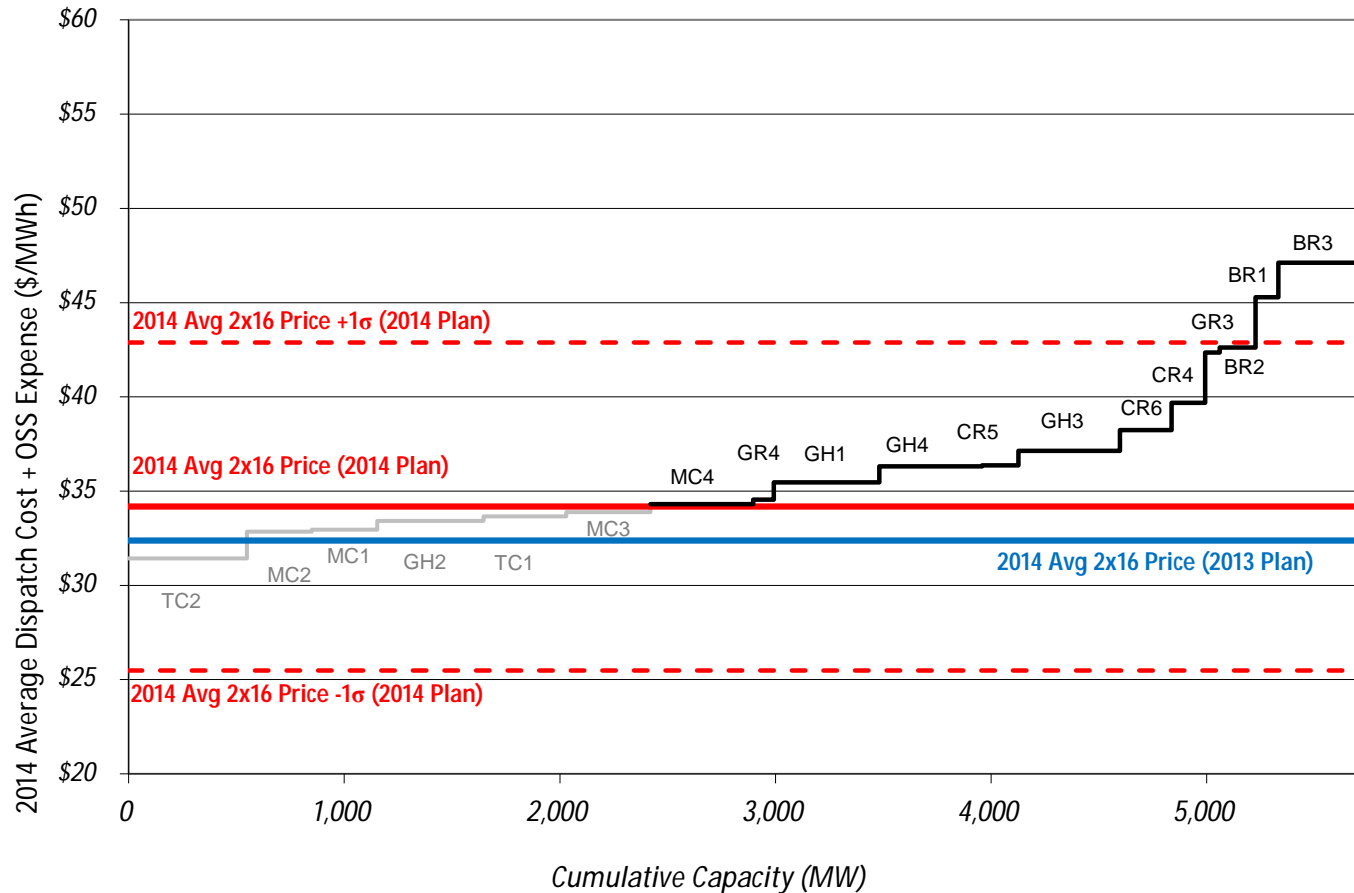
Energy Delta (2014 Plan - 2013 Plan)

GWh	2014	2015	2016	2017	2018
Jan	(59)	(61)	(54)	(47)	(46)
Feb	(25)	(27)	(19)	(14)	(13)
Mar	(13)	(14)	(7)	(1)	0
Apr	(13)	(14)	(7)	(3)	(1)
May	(41)	(43)	(37)	(31)	(31)
Jun	(30)	(34)	(29)	(23)	(21)
Jul	(33)	(38)	(31)	(26)	(24)
Aug	(27)	(33)	(17)	(16)	(15)
Sep	13	10	17	22	24
Oct	1	(1)	5	11	12
Nov	1	(1)	5	11	12
Dec	(10)	(14)	(9)	(2)	0
<b>Total</b>	<b>(236)</b>	<b>(270)</b>	<b>(182)</b>	<b>(120)</b>	<b>(103)</b>

# 2014 5x16 Average Dispatch Cost (OSS)

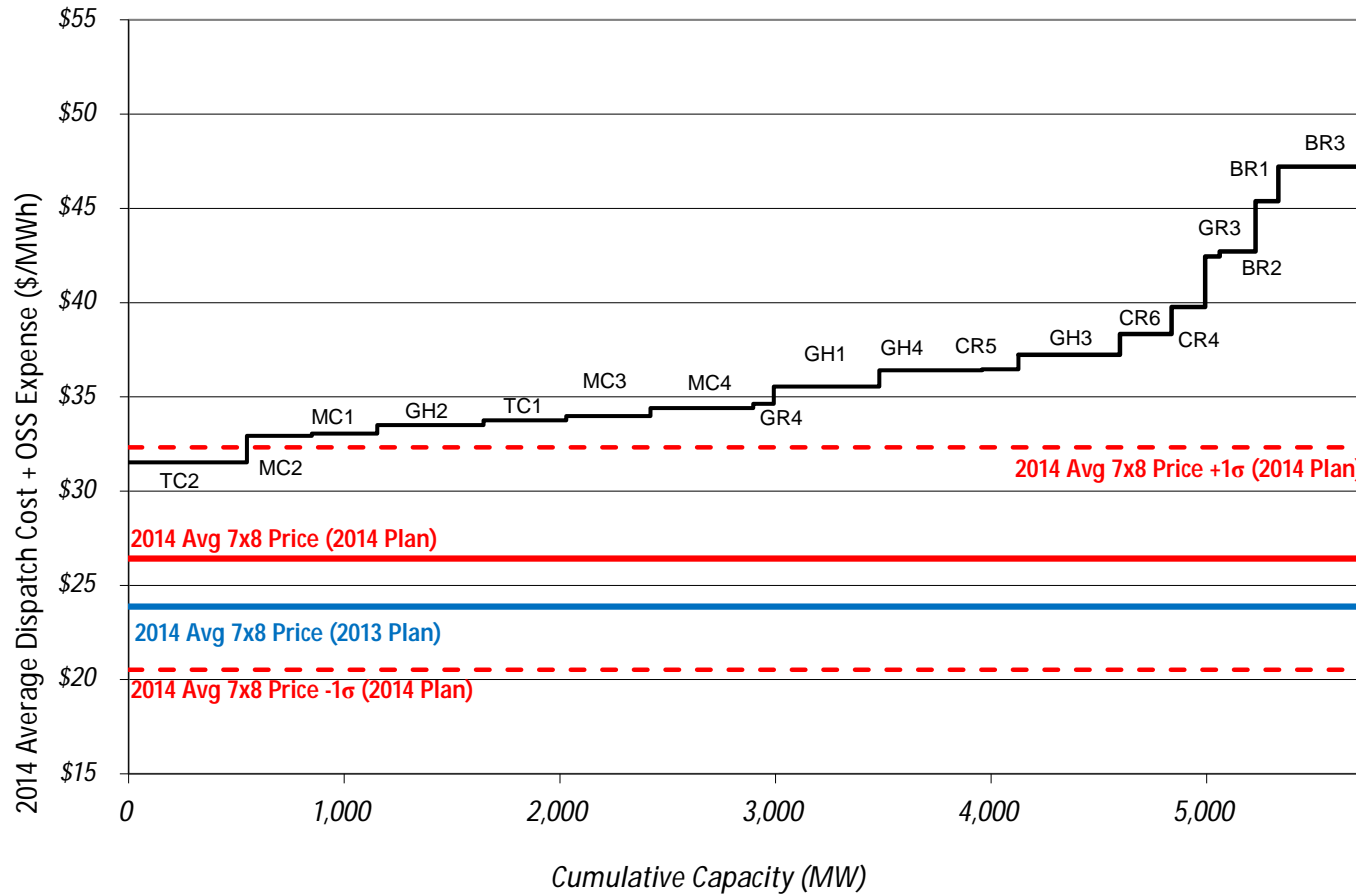


# 2014 2x16 Average Dispatch Cost (OSS)

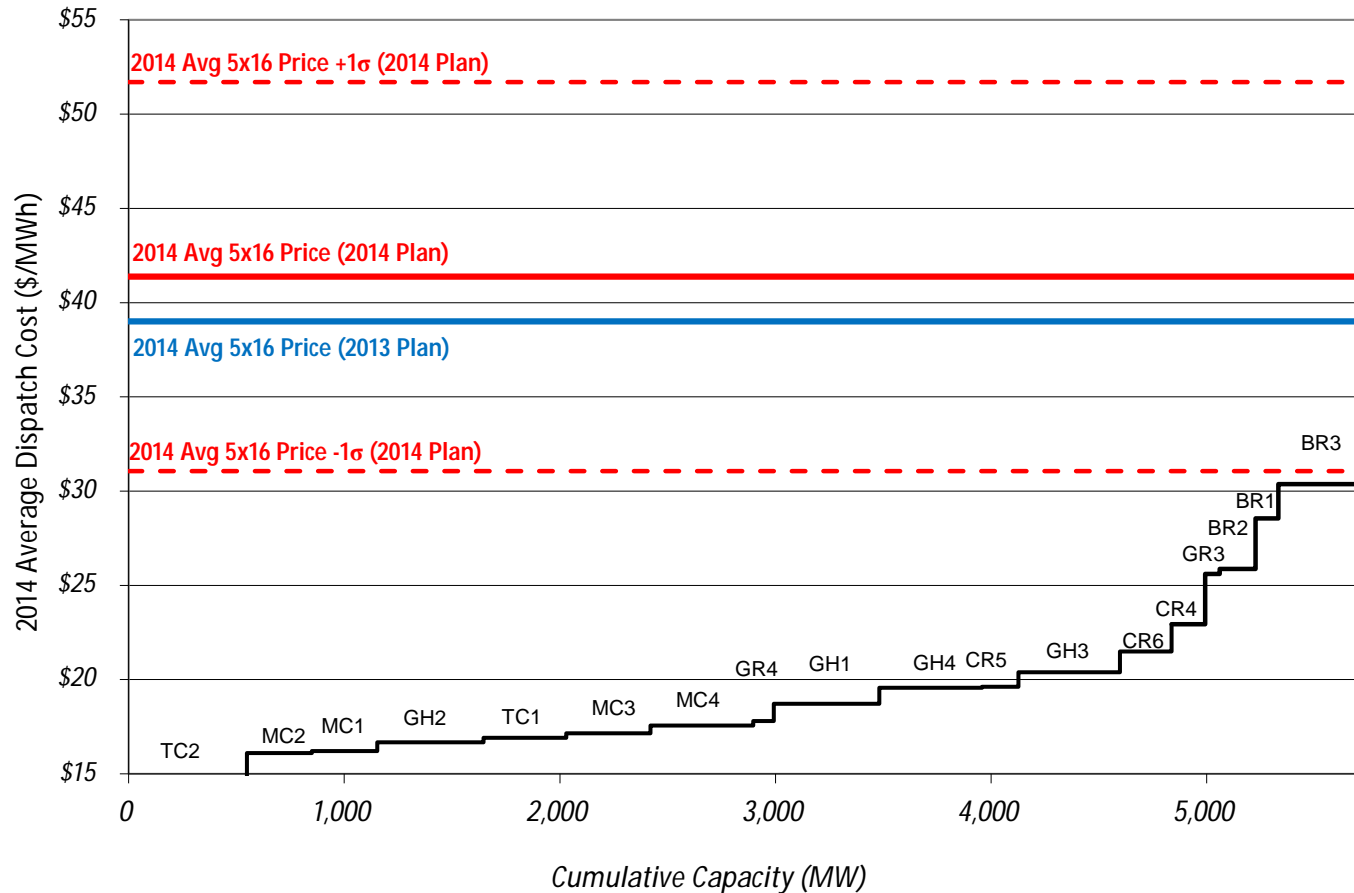




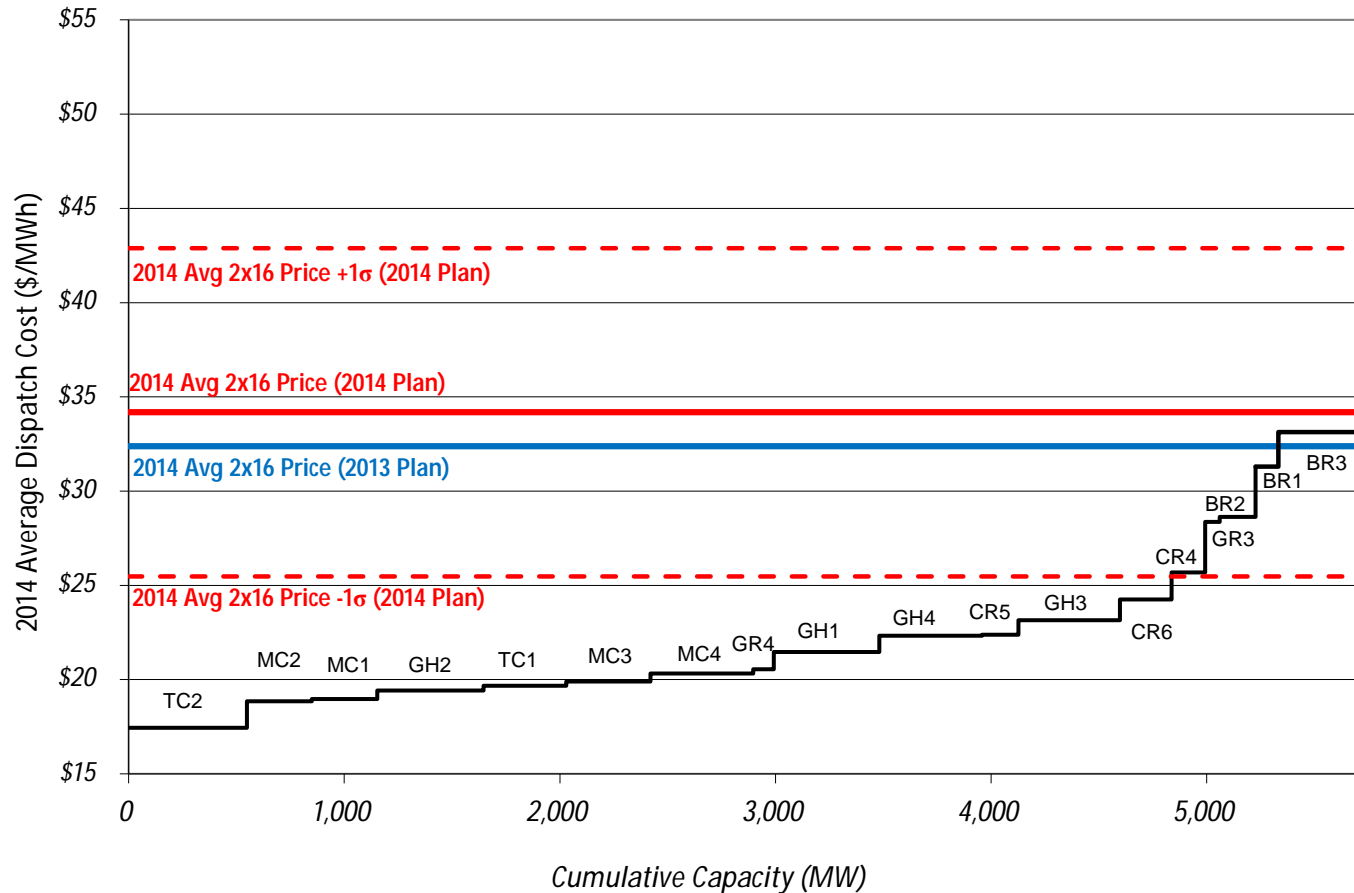
# 2014 7x8 Average Dispatch Cost (OSS)



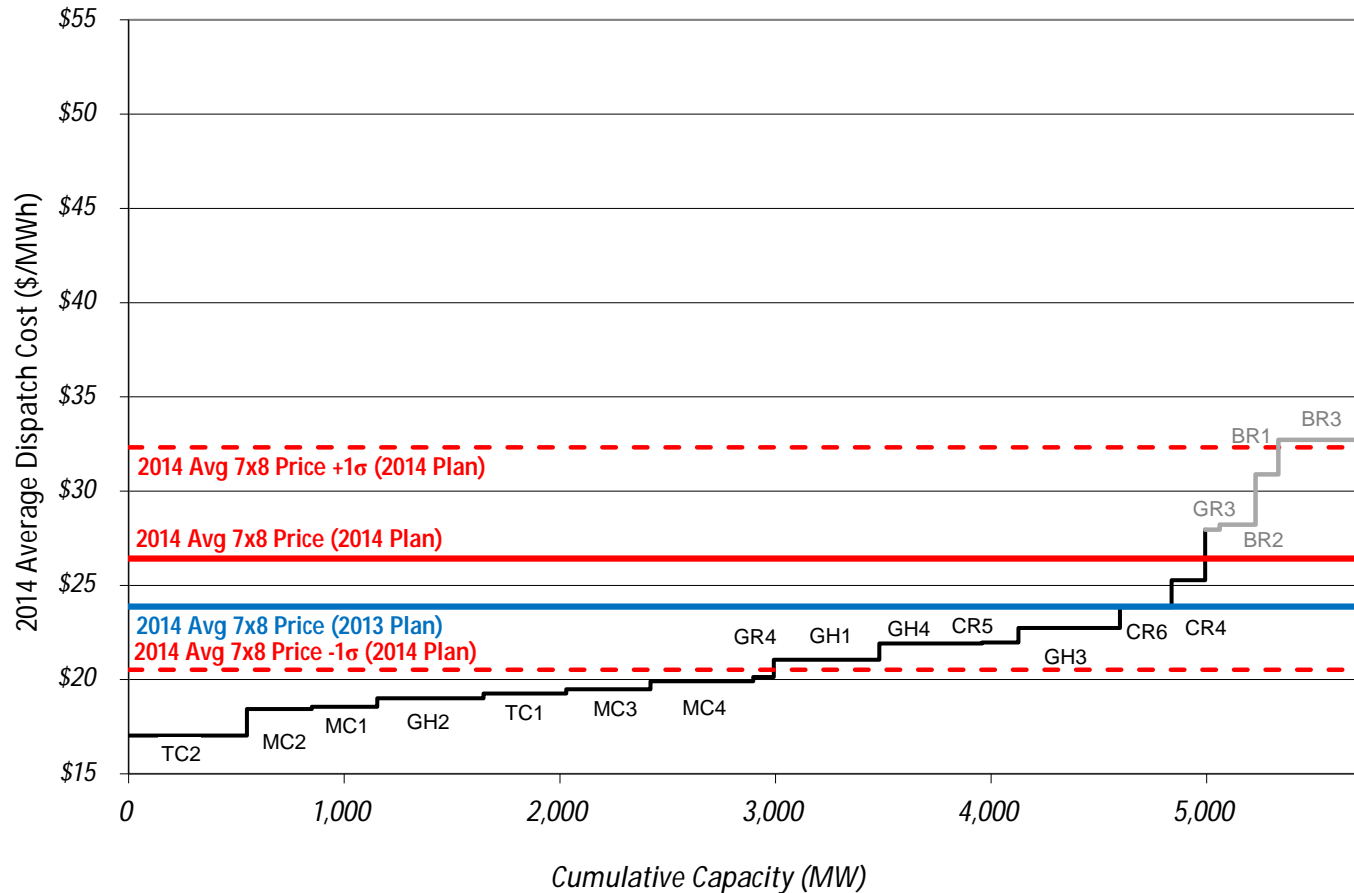
# 2014 5x16 Average Dispatch Cost (Purch)



# 2014 2x16 Average Dispatch Cost (Purch)



# 2014 7x8 Average Dispatch Cost (Purch)



# 2014 Maintenance Schedule Changes

2014

## Weekly Maintenance Detail

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/6																		
1/13																		
1/20																		
1/27																		
2/3																		Yellow
2/10																		Yellow
2/17					Red													Yellow
2/24					Red													Yellow
3/3	Red	Yellow			Red													Yellow
3/10	Black	Yellow			Red						Yellow							Yellow
3/17	Black				Red		Red		Red				Red			Yellow		Yellow
3/24	Yellow				Red													Yellow
3/31					Red		Black					Black	Red					Yellow
4/7					Black													Yellow
4/14					Black		Yellow						Yellow			Red		Black
4/21		Red			Black		Yellow							Black			Yellow	Black
4/28		Red			Black				Yellow	Black				Black				Yellow
5/5					Black					Red				Red				Yellow
5/12																		Yellow
5/19																		Yellow
5/26																		Yellow
Summer Season																		
9/1																		
9/8																		
9/15																		
9/22																		
9/29					Black											Black		
10/6					Black											Black		Black
10/13					Black											Black		Black
10/20							Yellow		Black								Yellow	Red
10/27							Yellow		Black								Yellow	Red
11/3																		Red
11/10																		Red
11/17					Black		Black											Red
11/24					Black													Red
12/1																Yellow		
12/8																		
12/15																		
12/22																		
12/29																		

■ Removed from 2013 Plan     
 ■ Added to 2014 Plan     
 ■ Unchanged



# 2015 Maintenance Schedule Changes

2015  
Weekly Maintenance Detail

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2	CR7
1/5																			
1/12																			
1/19																			
1/26																			
2/2																			
2/9																			
2/16																			
2/23																			
3/2	■				■														
3/9	■				■								■						
3/16	■				■								■						
3/23	■				■								■					■	
3/30	■				■								■					■	
4/6	■				■								■					■	
4/13	■				■								■					■	
4/20	■				■								■					■	
4/27		■												■					
5/4		■												■					
5/11		■												■					
5/18		■												■					
5/25		■												■					
Summer Season																			
8/31																			
9/7																			
9/14																			
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12/14																			
12/21																			
12/28																			

■ Removed from 2013 Plan     
 ■ Added to 2014 Plan     
 ■ Unchanged



# 2016 Maintenance Schedule Changes

2016

## Weekly Maintenance Detail

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	MC1	MC2	MC3	MC4	TC1	TC2	CR7
1/4														
1/11														
1/18														
1/25														
2/1														
2/8														
2/15														
2/22														
2/29														
3/7														
3/14														
3/21														
3/28														
4/4														
4/11														
4/18														
4/25														
5/2														
5/9														
5/16														
5/23														
5/30														
6/6														
Summer Season														
8/29														
9/5														
9/12														
9/19														
9/26														
10/3														
10/10														
10/17														
10/24														
10/31														
11/7														
11/14														
11/21														
11/28														
12/5														
12/12														
12/19														
12/26														

■ Removed from 2013 Plan    
 ■ Added to 2014 Plan    
 ■ Unchanged



# Reserve margin need without 2016-17 PPA and 2018 NGCC is 100-300 MWs

## Reserve Margin Need without RM Purchases or next unit

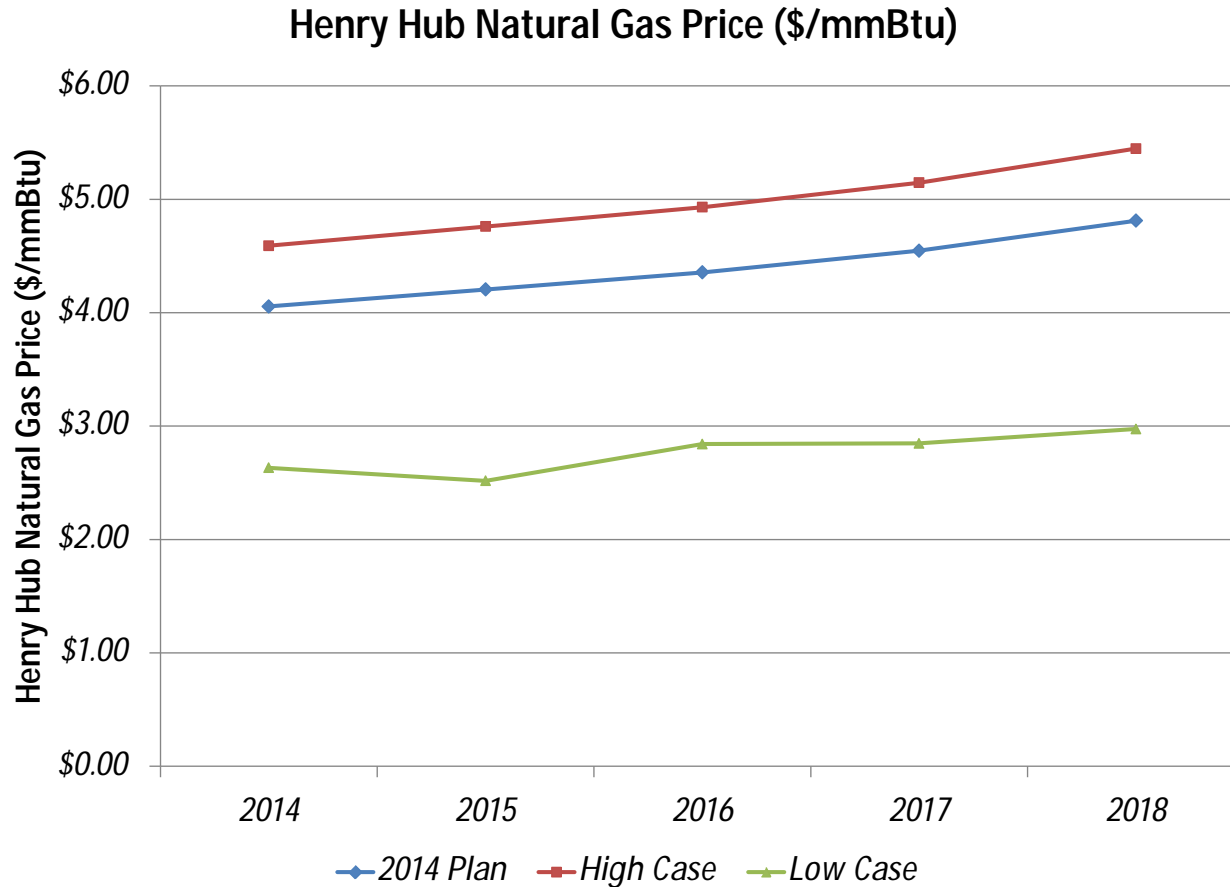
Reserve Margin Target: 16%

(MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b><u>2013 Plan</u></b>											
Net Load	6,821	6,860	6,903	6,954	7,010	7,077	7,144	7,212	7,281	7,337	7,403
Existing Supply	8,162	8,172	7,326	7,314	7,331	7,293	7,312	7,313	7,313	7,318	7,314
New Capacity	0	0	666	0	0	0	0	0	0	0	0
Reserve Margin	1,341	1,312	1,089	1,025	987	882	834	767	699	648	577
Reserve Margin %	19.7%	19.1%	15.8%	14.7%	14.1%	12.5%	11.7%	10.6%	9.6%	8.8%	7.8%
Reserve Margin Need	-249	-214	16	87	135	250	310	387	466	526	608
<b><u>2014 Plan</u></b>											
Net Load	6,786	6,838	6,892	6,948	7,004	7,062	7,120	7,178	7,237	7,296	7,350
Existing Supply	8,065	8,089	7,316	7,317	7,323	7,285	7,306	7,303	7,305	7,306	7,306
New Capacity	0	0	640	0	0	0	0	0	0	0	0
Reserve Margin	1,280	1,251	1,064	1,009	958	863	826	765	709	650	595
Reserve Margin %	18.9%	18.3%	15.4%	14.5%	13.7%	12.2%	11.6%	10.7%	9.8%	8.9%	8.1%
Reserve Margin Need	-194	-157	38	102	162	267	313	383	449	517	581





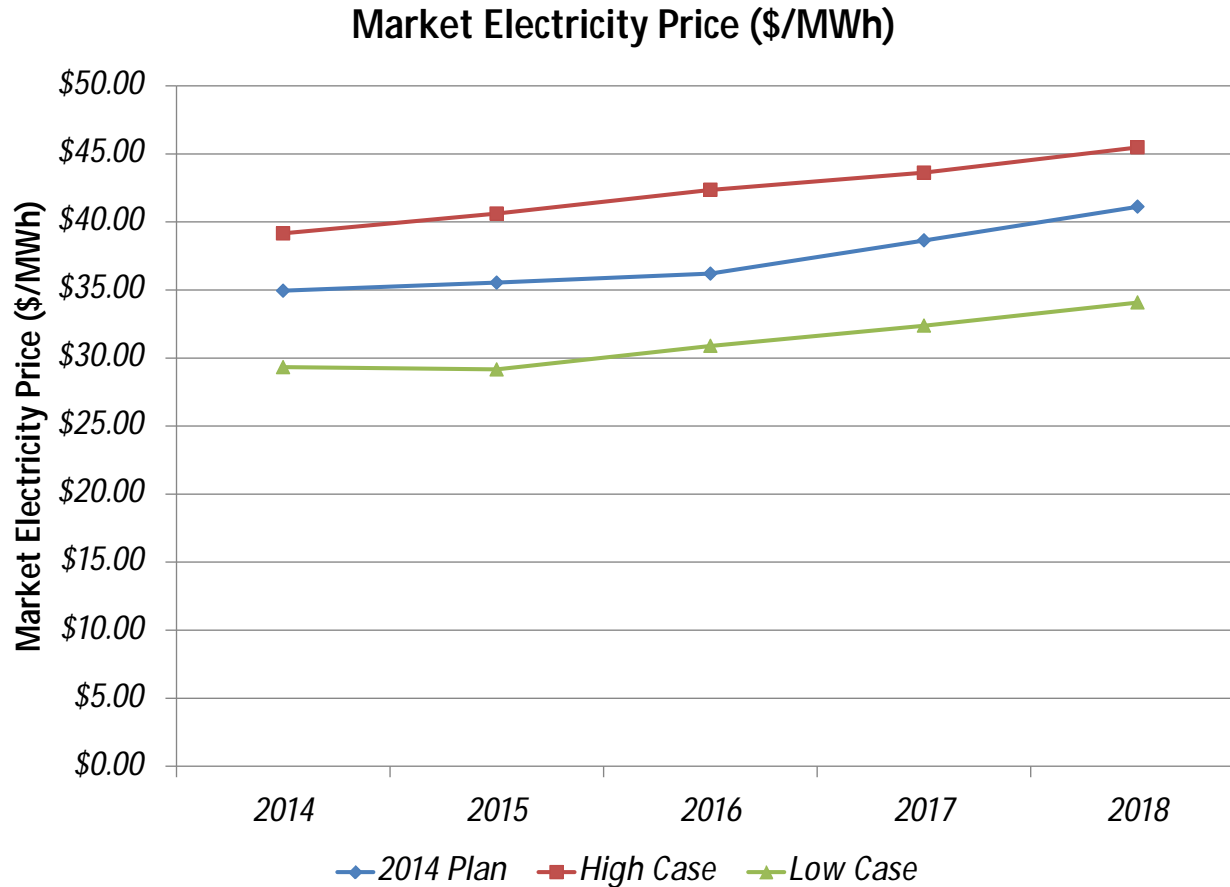
# Natural Gas Price Scenarios



High and low gas price scenarios are from EIA.



# Electricity Price Scenarios



*High and low electricity price scenarios are from EIA.*



# Unit availability uncertainty

## *2104 EFORs Sensitivities*

Percentile	BR Sta	CR Sta	GR Sta	TC2	GH/MC/TC1
10%	2.8%	4.8%	4.8%	6.0%	4.0%
Avg.	5.6%	7.8%	7.8%	6.0%	5.6%
90%	7.0%	11.7%	11.7%	12.0%	6.2%

## *2015 EFORs Sensitivities*

Percentile	BR Sta	CR Sta	GR Sta	TC2	GH/MC/TC1
10%	2.8%	5.1%	5.1%	6.0%	4.0%
Avg.	5.6%	8.1%	8.1%	6.0%	5.6%
90%	7.0%	12.0%	12.0%	12.0%	6.2%

## *2016 EFORs Sensitivities*

Percentile	BR Sta	CR Sta	GR Sta	TC2	GH/MC/TC1
10%	2.8%	5.4%	5.4%	6.0%	4.0%
Avg.	5.6%	8.4%	8.4%	6.0%	5.6%
90%	7.0%	12.3%	12.3%	12.0%	6.2%

*Note: EFORs for GH, MC and TC1 are modeled as a group and therefore have less variability.*



# Production costs and OSS contribution are impacted by uncertainty in weather/load, electricity/gas prices, and unit availability

<b>Native Load Production Cost (\$/MWh)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<i>5<sup>th</sup> Percentile</i>	28.33	27.65	29.89	30.79	31.84
<i>2014 Plan</i>	29.68	30.62	32.32	33.92	35.12
<i>95<sup>th</sup> Percentile</i>	30.36	31.75	33.70	34.89	35.96
<b>OSS Contribution (\$M)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<i>5<sup>th</sup> Percentile</i>	0.0	0.0	0.0	0.0	0.0
<i>2014 Plan</i>	2.1	1.3	0.9	1.2	1.8
<i>95<sup>th</sup> Percentile</i>	7.4	5.4	5.8	5.7	6.4

- *More upside exists in forecast of OSS contribution than downside.*

# Gas price uncertainty increases variability in fuel burn after Cane Run 7 comes on line in 2015

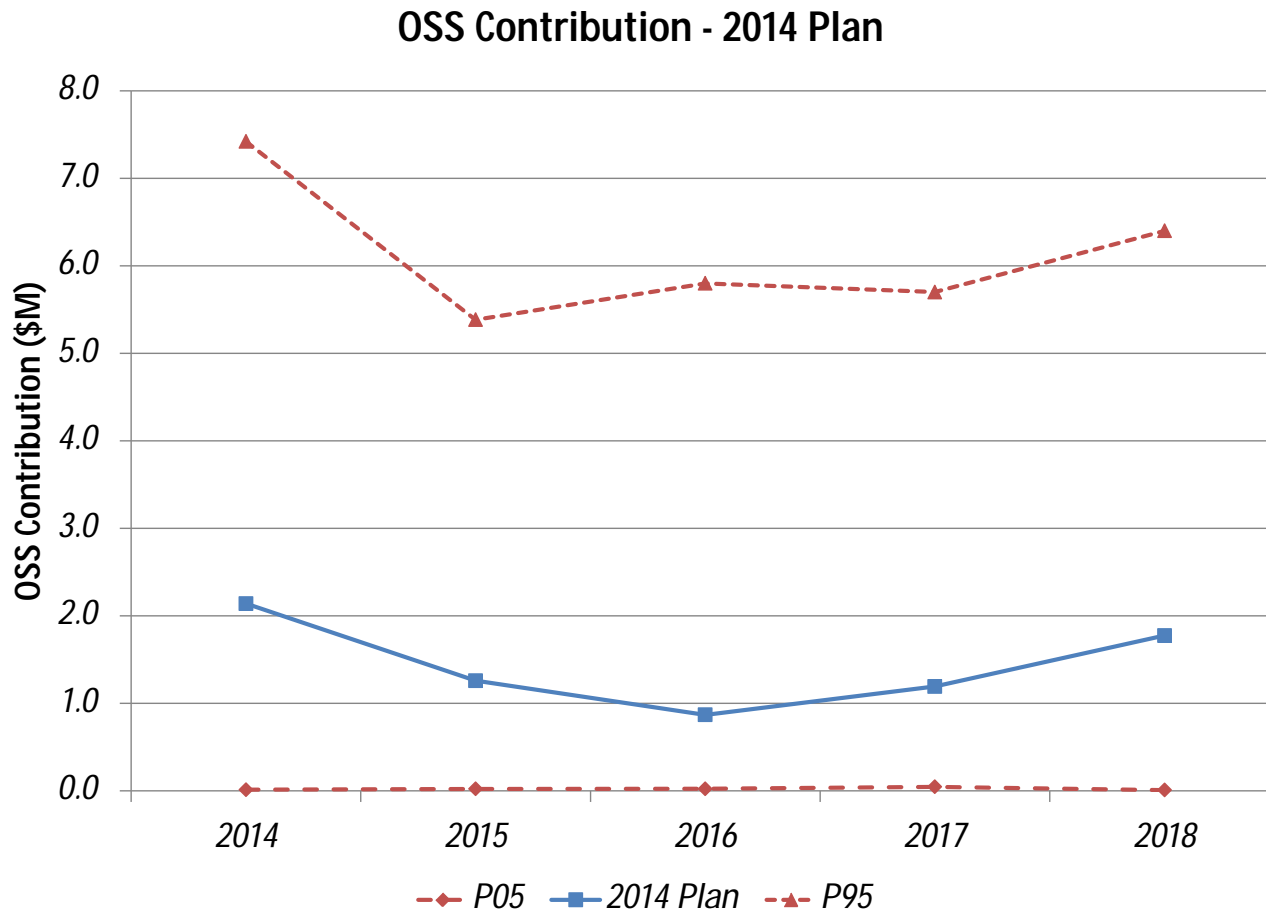
<b>Gas Burn (GBtu)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<i>5<sup>th</sup> Percentile</i>	15,635	33,432	37,520	34,786	44,370
<i>2014 Plan</i>	18,165	40,977	45,293	45,233	58,941
<i>95<sup>th</sup> Percentile</i>	67,521	115,494	110,032	115,176	151,939

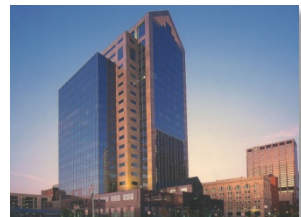
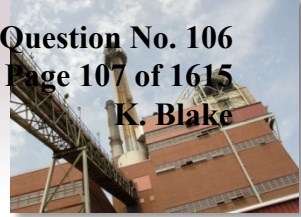
  

<b>Coal Burn (GBtu)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<i>5<sup>th</sup> Percentile</i>	286,073	222,855	226,083	223,516	206,112
<i>2014 Plan</i>	347,000	309,566	303,926	306,539	288,357
<i>95<sup>th</sup> Percentile</i>	358,518	329,244	325,286	332,436	312,534

- *5<sup>th</sup> and 95<sup>th</sup> percentile values are based on the results of 1,200+ simulations. Range of outcomes reflects the uncertainty in weather/load, market electricity/gas prices, and unit availability.*

# OSS contribution is impacted by uncertainty in weather, electricity/gas prices, and unit availability





**PPL companies**

# Project Engineering

# 2014 Business Plan

*September 12, 2013*

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- Major Assumptions
- Financial Performance
  - *Operating Expense*
  - *Cost of Sales / Gross Margin (if applicable)*
  - *Capital*
  - *Headcount*
  - *Key Performance Indicators*
- Plan Risks
- Appendix



# 2014BP Highlights

- **Project Engineering's plan contains a net reduction of \$53M from 2014-2018 plan over plan.**
- **Reductions include:**
  - **The elimination of the BR 1 & 2 PJFF of \$235M.**
  - **CCR Ruling (pond closures) reduced by \$114M due to moving money into 2019.**
  - **The Black Start projects were reduced by \$22M due to only budgeting Cane Run and Trimble County while removing them at Paddys Run and Brown.**
- **Increases include:**
  - **Brown CCR of \$90M due to timing, an increase to the CCR transport estimate, and adding contingency back into the 2014BP.**
  - **Mill Creek CCR increased by \$58M due to the inclusion of the CCR Transport System not included in the 2013BP and adding contingency back into the 2014BP.**
  - **Trimble County CCR increased by \$107M due to refining estimates because of permitting delays and layout changes, as well as, adding contingency into the 2014BP that was removed from the 2013BP.**
  - **Mill Creek Air Compliance increased by \$26M due to a shift in the timing of the work and EPC trending above Target Cost.**
  - **The remaining \$37M increase is the cumulative amount of the remaining PE projects.**
- **While establishing the 2014BP, Project Engineering again undertook an effort to shift contingency to the later years of projects or to the latter stage of specific tasks in an effort to reduce budgeting of income from CAPEX spend that is not expected as base spend.**
- **Brown 3 PJFF is included in the 2014BP.**

# Major Assumptions

## 1. Regulatory

1.1 *The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.*

1.2 *Target Reserve Margin of 16%, within a range of 15%-17%.*

- *Consistent with 2013 BP.*

1.3 Reserve sharing under the TVA Reserve Sharing Agreement is 253 MW's effective June 1, 2013 (the date at which EKPC joins PJM).

1.4 *LG&E and KU remain committed to burning higher sulfur fuels.*

## 2. Proposed or Expected New Environmental Regulations for Air and Water

2.1 *Final Cross State Air Pollution Rules (CSAPR) were issued in July 2011, with the order being stayed on December 30, 2011, and completely struck down on August 21, 2012.*

- Existing Clean Air Interstate Rule (CAIR) stays in effect for all of the planning cycle.



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.2 Mercury and Air Toxics Standards (MATS) final rules were issued February 16, 2012.

- *Including a potential delay of up to one year that can be applied for, the compliance date will be April 16, 2016.*
- *A second, additional year of delay can be obtained in certain hardship cases, including retirements that could adversely impact transmission reliability. None of the LKE projects are counting on that second year of delay.*

### 2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> and SO<sub>2</sub>. The final attainment designations for the short term NO<sub>x</sub> standard have been delayed for up to three years due to inadequate monitoring. Based on the new short term SO<sub>2</sub> standards, compliance requirements must be in place by June 2017.

- *The Mill Creek Wet (WFGD) FGD project is expected to mitigate the area in Jefferson County that has been proposed as non-attainment.*

### 2.4 The EPA issued its proposal on PM NAAQS on December 14, 2012.

- *The current annual Particular Matter standard for (PM)<sub>2.5</sub> of 15 ug/M<sup>3</sup> was lowered to 12ug/M<sup>3</sup>.*
- *EPA data indicates Jefferson and Bullitt Counties could be non-attainment.*
- *Implementation is expected between 2021 and 2025.*
- *The recent modifications at Gallagher Station, the shutting down of Cane Run 4, 5, and 6, and the baghouses, scrubbers, and dry sorbent injection systems at Mill Creek should mitigate concerns in Jefferson County.*
- *In general, on units adding baghouses, LKE should be compliant.*



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.5 The EPA is scheduled for a 2013 re-evaluation of the 8-hour ozone standard. Due to litigation, they were prepared to issue an early revision that would have been much lower with large impacts industry wide; however, they instead decided to re-instate the 2008 NAAQS Ozone 8-hour standard.

- *Non Quality Assured 2012 monitor data indicates Jefferson County as non-attainment with the 1997 and the 2008 standard.*
  - Likely Case: Shutdown of Cane Run 4, 5 and 6 mitigates the issue.
  - Worst Case: SCRs are needed at Mill Creek 1 and 2 to mitigate the issue, which are not accounted for in the 2014BP.

2.6 Cane Run Coal will be retired May 1, 2015.

- Combined cycle replacement available on that date.
- LMAPCD has granted a 6-month extension to continue coal operation if needed.
- There are 23 employees expected to retire or take the severance, and 48 will be placed elsewhere.

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.7 Green River Coal will be retired October 1, 2014.

- *This presumes that the one-year extension does not apply in situations where no environmental controls are being added.*
- *A Transmission Capital project (Matanzas) is slated to be completed in October, 2013 which will provide greater flexibility around running the Green River units.*
  - However, the impact from Big Rivers potentially shutting down Unit(s) is uncertain.
- *Of the 24 employees expected to be placed (with an additional 15 retiring/taking severance), they will be split between Customer Services Meter Reading (11) and Power Generation (13).*



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.8 On March 21, 2011 EPA published a final rule that identified non-hazardous secondary materials that are considered solid wastes when combusted.

- *Boiler cleaning waste affected and disposal by burning in the boiler will be prohibited unless we are permitted as a “commercial and industrial solid waste incinerator”.*
- *State is researching the need for SIP revision.*
  - If not needed, effective April 2016 (three years from rule).
  - If needed, up to three additional years (2019).
    - ❖ *This has O&M implications.*

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.9 GHG New Source Performance Standards (NSPS) for new sources

- EPA announced proposed rule on 04/13/2012. On June 25, 2013 the President directed the EPA to re-propose the rule for new sources by September 20, 2013.
- EPA's initial rule proposed a CO2 limit of 1,000 lbs/MWh (gross).
- Affects new units only (Coal-Fired Units, Integrated Gas Combined Cycle (IGCC), Natural Gas Combined Cycle (NGCC)).
  - *Cane Run 7 NGCC is the only unit in the LKE fleet currently impacted.*
    - ❖ Cane Run 7 NGCC emission rate estimated at 800 lbs/MWh (gross) during full load operation.
  - *New simple cycle turbines not affected.*

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.10 President Obama's "climate action plan" announced on June 25, 2013 will target CO<sub>2</sub> reductions to existing coal-fired power plants.

- Proposed standards to be announced June, 2014.
- EPA is still under a settlement agreement with environmental groups to pursue climate new source performance standards under Clean Air Act section 111 (d).
- A large amount of uncertainty exists, both on content and timing.

2.11 The 2011 ECR compliance plan settlement and CPCN were approved December 16, 2011 and included the following air quality controls:

- *A new Mill Creek 4 WFGD (December 2014).*
- *A new Mill Creek 3 WFGD (June 2016) as approved by the KPSC on February 15, 2013.*
- *A new Mill Creek 1 and 2 (combined) WFGD (May 2015).*
- *Fabric Filters on Ghent 1-4, Mill Creek 1-4, Brown 3, and Trimble County 1.*
  - 2014 in-service: GH3 (May), GH4 (November), MC4 (December)
  - 2015 in-service: BR3 (April), GH1 (May), GH2 (November), MC1 (May), MC2 (May), TC1 (October)
    - ❖ *The existing precipitators on Brown 3, Ghent 1 and Ghent 2 will be removed.*
  - 2016 in-service: MC3 (June) in conjunction with the new PJFF tie-in outage.



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

- *2.12 Significant O&M and cost of sales (~\$50M per year) will be incurred as remaining units become operational for MATS Compliance.*
- *Costs will begin ramping up in 2014 as units are completed.*
  - Additional limestone usage at Mill Creek 1 and 2 WFGD.
  - Additional hydrated lime injection to protect bags at all baghouse installations.
  - Powdered Activated Carbon (PAC) Injection at all installations.
- *Prior to 180 days after the compliance date of April 16, 2015 (or April 16, 2016 for units that have been granted an extension), all units must have completed a boiler tune-up with specific documentation of improvements and procedures and effects on CO and NO<sub>x</sub>.*
  - EPA has intent to allow for the boiler tune-up to occur prior to the compliance date, however, further clarification that is needed by the EPA should be forthcoming.

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.13 EPA has negotiated a delay in issuing the final regulations for 316(b).

- *The final rule now must be issued by November 4, 2013.*
- *A Five-Year implementation period is expected.*
- *Current capital estimate (pre-Level I) to comply is \$3M each for Mill Creek, Trimble County, Ghent, and Brown ( ½ in 2015, ½ in 2016).*
  - *Additional chemicals (as O&M) may also be required.*
- *Dollars could shift out further should there be any type of delays.*
- *There is no mandate for cooling towers at the current time (MC1 is a sensitivity in 2017).*

### 2.14 Effluent water guideline draft proposal was issued April 19, 2013, with the final rule targeted to be issued May 22, 2014 (though unlikely they will meet that date).

- *Timing expected to coincide with final rules on coal combustion residuals (CCR's).*
- *A Five-Year implementation period is expected.*
- *Separately, as a part of the Ghent KPDES permitting, a mercury discharge limit of 51 ppt was imposed by the State. This is anticipated to require accelerating the Ghent water treatment project from the current 2014BP.*
- *Ultimate implementation timing as well as scope are uncertain at this time.*
  - *Eight options being considered from very good to very bad on the industry, will likely end up in the middle.*
- *A placeholder per station is included (\$60M Ghent, \$60M Mill Creek, \$40M Brown, \$15M (Net) Trimble County, and \$10M Cane Run) until engineering estimates can be performed in 2014.*
- *Dollars are split in 2017 and 2018 equally, but likely will vary by facility based on permit renewal dates.*
  - *O&M for chemicals will also be needed.*



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.15 Internal Combustion Engine and Reciprocating Internal Combustion Engines (IC & RICE) regulation finalized in 2010.

- Non-certified engines purchased after 2005 must be tested for compliance and may need “tailpipe” controls for particulates, NO<sub>x</sub> and Volatile Organic Compounds (VOC) emissions.
- Existing Emergency Compression engines <500HP require compliance with “work practice standards” including hour meter by May, 2013.
- Existing Emergency Spark engines <500HP require compliance with “work practice standards” including hour meter by October 2013.

### 2.16 Ghent Consent Decree negotiated SO<sub>3</sub> (H<sub>2</sub>SO<sub>4</sub>) permitted emission limits with EPA in 2012.

- Additional testing will be necessary and engineering studies may be required.
- Ghent 2 additional SO<sub>3</sub> control equipment (BACT) already installed.
- Permit includes operational monitoring of SO<sub>3</sub> control equipment.
- SIC Monitors will be required for each unit.
- *Additional emissions testing needed for correlation per the Compliance Assurance Monitoring (CAM) Plan.*

### 2.17 Cane Run Landfill Dust Suppressant.

- *Chemical suppressant is to be added during dry weather to the open landfill area to mitigate dust.*



# Major Assumptions

## 3. Expansion/Capacity

3.1 A combined cycle unit (Cane Run 7) will be added May 1, 2015 at the Cane Run location.

- *2 x 1, 640 MW Summer Net (Ownership is 78% KU, 22% LG&E).*
- *Cane Run Coal retired on date CR7 meets Commercial Operation.*
- *CCN approved in September, 2012.*
- *Expense profile based on a Long-Term Services Agreement being in place.*

3.2 A second combined cycle unit will be added May 1, 2018 (ownership is 50% KU, 50% LG&E).

- *The location is still to be determined (Most likely either Brown or Green River).*
- *2 x 1, 640 MW Summer Net (similar to CR7) with other options for a comparable number of MW's being considered.*
- *Expense profile based on a Long-Term Services Agreement being in place.*

3.3 Some reserve margin purchases for 2016 and 2017 will likely still be needed ( ~165MW).

3.4 The third combined cycle will come on-line May 1, 2025.

3.5 Brown 1 and 2 are included through the planning period, but without fabric filters.

- *The Nalco product, to keep mercury emissions lower, will be utilized.*



# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.6 *The four Ohio Falls units still to be rehabilitated (the other four are complete) have the following scheduled completion dates.*

*Unit 1 (March 2014)*

*Units 2, 4 and 8 will be January, 2015, October, 2015, and July, 2016, but the order is uncertain and being implemented on worst conditioned unit at the time getting priority.*

3.7 *Black start additions (for system restoration purposes) will take place in 2017 and 2018.*

- *Trimble County Site 2017 in-service.*
- *Cane Run Site 2018 in-service.*



# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.8 Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.

- *Group 3 consists of the older, smaller CT's.*
- *No Group 3 units are being retired in the plan.*

3.9 *Biomass co-firing projects for 2 units is a sensitivity, not included in the base Business Plan.*

3.10 *Landfill gas projects are a sensitivity and are not included in the base Business Plan.*

- *No activity currently taking place.*
- *Current natural gas prices do not support this type of project.*

3.11 *A carbon capture and sequestration (CCS) demonstration facility for 100 MW is a sensitivity.*

- *A small scale pilot project hosted by Brown Station and primarily funded through the UK CMRG and the DOE takes place in 2013-2016.*



# Major Assumptions

## 4. Coal Combustion Residuals (CCR's)

### 4.1 *EPA issued two proposals for public input for coal combustion residuals (CCR's) in June 2010.*

- *Final rules are expected in April, 2014 and once final rules are issued there will be a five-year implementation period with an additional two years to close existing ponds. Ponds are expected to be eliminated for ash storage.*
- *EPA is looking to tie the timing of CCR's and effluent water (see 2.14) together.*
  - *Environmental groups are suing for an earlier release.*
  - *Congress is working on a bi-partisan effort.*
  - *Plan includes 2017 - 2020 to construct new process ponds followed by pond closures.*
  - *A designation of "Hazardous" vs. "Non-Hazardous" appears to be trending toward "Non-Hazardous".*
  - *While the scope would not change, a designation of "hazardous" would reduce beneficial re-use opportunities for structural fill and gypsum for wallboard.*
  - *All landfill projects are based on a "non-hazardous" designation.*

### 4.2 *Trimble County Landfill and Transport.*

- *An alternative footprint is being pursued.*
- *The projected in-service date is 4Q, 2017 for the transport and treatment system, based on a landfill permit being issued by the Kentucky Division of Waste Management in November, 2014 (application submitted November, 2013, approved in 12 months).*
  - *Phase 1 of the landfill is planned for full operations in 2Q, 2018.*
- *This would allow for a 2.75 year construction schedule and would leave a 2 year operating buffer on the BAP at the current projected CCR generation rates from Generation Planning.*



# Major Assumptions

## **4. Coal Combustion Residuals (CCR's) (Cont.)**

- 4.3 *Brown Ash Pond is being converted to a landfill, with an expected in-service date of April 2015 for Phase 1.***
- ***KYDWM permit expected September/October 2013.***
  - ***Construction schedule is approximately 18 months.***
  - ***All three phases will be staged concurrently to meet permit requirements.***
  - ***Phase II and III authority will be sought in the next ECR filing.***
- 4.4 *Ghent Landfill Phase 1 construction will be substantially completed by 4Q 2013, with significant O&M starting in 1Q 2014.***
- ***The transport component will go into service in 2Q 2014.***
  - ***All permit approvals have been received, however, a new KPDES permit is still needed for water run-off.***
- 4.5 *A new Mill Creek landfill is forecasted to be in-service by December 31, 2019.***
- ***Landfill location assumption is 1.5 miles from Mill Creek with a 1.5 mile transport pipe conveyor.***
- 4.6 *The Cane Run MSE Wall will be completed in 3<sup>rd</sup> Quarter 2014.***
- 4.7 *The Cane Run Landfill will be closed in 2016 after coal generation has ceased.***
- 4.8 *The Cane Run Ash pond Cap & Closure project will be completed in 2017.***
- 4.9 *All CCR Capital Projects use an annual escalation rate of 4.0%.***





# Major Assumptions

## 5. Operational and Other

### 5.1 Annual escalation rates for internal labor, contract labor and materials are as follows:

- *Internal labor: 3.0%.*
- *Contract/services labor: 3.0% for general, 3.5% for highly skilled (welders).*
- *Chemicals: 6.0% for specialty (Nalco), 5.0% for commodity (Brenntag)*
- *Fuels and additives 5.0%.*
- *All other non-labor 2.0%.*

### 5.2 Planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years, with the following exceptions:

- Brown units 1 and 3 over-lap by 2 weeks every other year.
- Cane Run units are 3 week outages one year with no outage the next year, with this cycle repeating.
- Trimble County 1 is 4 week outages one year with no outage the next year, with this cycle repeating.
- Trimble County 2 will have an annual outage until the unit becomes consistently reliable.

# Major Assumptions

## 5. Operational and Other (Cont.)

### 5.3 The next turbine overhauls by unit are as follows:

- 2014 : Mill Creek 4, Ghent 4.
- 2015 : Ghent 1, Brown 1
- 2016 : None scheduled.
- 2017: Brown 2, Trimble 1
- 2018: Ghent 3, Trimble 2

### 5.4 The permanent burner replacements for TC2 are scheduled to be installed in the Spring, 2014.

### 5.5 Significant generator rewind/stator rewind dollars are included in the 2013-2017 timeframe.

- *Brown 2 generator (stator and rotor) rewind in 2017 (some dollars also in 2016).*
- *Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.*
  - The spare sets will be installed on MC4 in 2014, MC3 in 2019, MC2 in 2020, and MC1 in 2021.

### 5.6 The corrosion fatigue inspection schedule is as follows:

- 2014: Ghent 4
- 2015: Ghent 1, Mill Creek 1
- 2016: Brown 1, Mill Creek 2, Mill Creek 4
- 2017: Brown 2, Mill Creek 1, Mill Creek 4, TC1
- 2018: Brown 3, Ghent 1, Ghent 3, TC2

# Major Assumptions

## 5. Operational and Other (Cont.)

5.7 The High Energy Piping (HEP) inspection schedule is as follows:

- 2014: *Brown 1, Ghent 3, Ghent 4, Mill Creek 4, TC2*
- 2015: *Ghent 1, Ghent 2, Mill Creek 3*
- 2016: *Brown 3, Mill Creek 2, TC2*
- 2017: *Brown 2, Mill Creek 1, TC1*
- 2018: *Brown 1, Ghent 1, Ghent 3, Ghent 4, Mill Creek 2, Mill Creek 4*

5.8 *The fuel procurement plan is pushing toward higher chlorine ILL. Basin fuels, which will drive burner modifications on at least two Mill Creek units and two Ghent units.*

- *Permit changes may also be needed.*

5.9 Targets for percentage of fuel hedged in the 2014 Business Plan are as follows:

- Year 1 90%-100%
- Year 2 80%-95%
- Year 3 40%-90%
- Year 4 30%-70%
- Year 5 10%-50%
- Year 6 0%-30%



# Major Assumptions

## 5. Operational and Other (Cont.)

### 5.10 Combustion turbine outages in the plan:

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense – approximately 10%) vs. new parts (capital – approximately 90%).
- The first set of hot gas path inspections for Trimble CT's are complete as of the Spring, 2013. The cycle starts again with one unit in 2016, two units in 2017, two units in 2018, and one unit in 2019.
- Brown C inspections by unit are as follows:
  - ❖ Unit 9 in 2013
  - ❖ Unit 10 in 2015
  - ❖ Unit 6 in 2018
  - ❖ Unit 7 in 2019
  - ❖ Unit 11 in 2020
  - ❖ Unit 5 in 2023
  - ❖ Unit 8 in 2021
- The expiration date for the Brown 6 and 7 Long-Term Services Agreements (LTSA) is October 1, 2016 based on the 13-year criteria.
  - ❖ Replacement LTSA's are not expected.
- *The CT component outages for Cane Run 7 are a Combustion Inspection 2017, Hot Gas Path Inspection 2019, and Combustion Inspection 2022.*
  - ❖ Cane Run 7 CT's are covered under a signed LTSA.
  - ❖ The turbine/generator overhaul will be every seven years, with the first one in 2022.



# Major Assumptions

## 5. Operational and Other (Cont.)

5.11 NERC Cyber Security Solution (all coal-fired stations plus Paddy's Run and Haefling) is included, along with Microsoft Upgrades for Ghent and Trimble County due to 2014 de-support of Windows XP.

5.12 CIP Version 4 will have an effective date of April 1, 2014, with CIP version 5 effective July 1, 2015.

**5.13 Plan includes completing the demolition of Paddy's Run Coal Plant in 2015-2016, and complete demolition of Canal Station in 2017-2018. Paddy's chimneys were removed in 2013.**

5.14 Cost of removal reserves at 12/31/15 are projected to be:

- Tyrone \$5M
- Green River \$12M
- Cane Run \$35M

5.15 Expected write-offs to expense include:

- Cane Run M&S \$8M (2015)
- Green River M&S \$2M (2015)
- Ghent Ash Handling M&S \$1M (2014)
- Mill Creek FGD M&S \$1.5M (2016)

5.16 A MAXIMO Upgrade (tied to Oracle Upgrade) will be completed in August, 2013.

5.17 The Proysm run dated August 14<sup>th</sup> is the official generation forecast for the 2014 Business Plan.



# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	\$270	\$395	\$300	\$300	\$300	\$309	\$318
Non Labor	\$624	\$405	\$500	\$500	\$500	\$510	\$520
Subtotal OPEX/Other expense	\$894	\$800	\$800	\$800	\$800	\$819	\$838
Gross Margin Expenses <sup>1</sup>	\$1,185						
Total Income Statement items	\$2,079	\$800	\$800	\$800	\$800	\$819	\$838

<sup>1</sup> \$1,183 of Cane Run Landfill charges were written off to Gross Margin Expense.

# 2014-2018 OPEX/Other Expense Reconciliation

## (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Prior Plan	\$800	\$820	\$841	\$862	\$884
Drivers:					
Change in Escalation Methods	\$0	(\$20)	(\$41)	(\$43)	(\$46)
Current Plan	<u>\$800</u>	<u>\$800</u>	<u>\$800</u>	<u>\$819</u>	<u>\$838</u>



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis (x \$1M)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Environmental</b>							
Brown CCR	\$7	\$18	\$43	\$34	\$10	\$3	\$13
Cane Run CCR	(\$2)	\$0	\$0	\$0	\$0	\$0	\$0
Ghent CCR	\$131	\$82	\$28	\$2	\$0	\$0	\$0
TC CCR (Net)	\$16	\$3	\$3	\$48	\$113	\$74	\$9
MC CCR	\$0	\$0	\$0	\$1	\$7	\$7	\$57
Brown 3 SCR	\$35	\$3	\$0	\$0	\$0	\$0	\$0
FGD Program	\$2	(\$0)	\$0	\$0	\$0	\$0	\$0
Env. Air - Studies	(\$3)	\$0	\$0	\$0	\$0	\$0	\$0
Env. Air - Brown	\$5	\$12	\$37	\$43	\$4	\$0	\$0
Env. Air - Ghent	\$61	\$235	\$202	\$92	\$4	\$0	\$0
Env. Air - Mill Creek	\$66	\$247	\$248	\$223	\$117	\$3	\$0
Env. Air - TC (Net)	\$4	\$11	\$39	\$59	\$5	\$0	\$0
Env. Compliance - CCR Ruling	\$0	\$0	\$2	\$5	\$50	\$133	\$190
Env. Compliance - Effluent Water	\$0	\$1	\$2	\$1	\$8	\$98	\$98
Env. Compliance - Water Intake	\$0	\$0	\$1	\$6	\$6	\$0	\$0
<b>New Generation Capacity</b>							
TC2 (Net)	\$14	(\$1)	\$1	\$3	\$0	\$0	\$0
Ohio Falls	\$19	\$16	\$17	\$16	\$10	\$0	\$0
NGCC 2015 - CR7	\$66	\$319	\$125	\$36	\$0	\$0	\$0
NGCC 2018	\$0	\$2	\$1	\$85	\$394	\$155	\$45
<b>Other</b>							
CR & TC Black Start	\$0	\$0	\$0	\$4	\$18	\$30	\$18
CR MSE Wall, Ash Pond & Landfill Closure	\$2	\$6	\$4	\$3	\$3	\$1	\$0
Paddys Demolition	\$1	\$0	\$1	\$8	\$7	\$0	\$0
Canal Demolition	\$0	\$0	\$1	\$0	\$0	\$7	\$6
TC2 DSI System	\$0	\$3	\$3	\$0	\$0	\$0	\$0
Other	\$2	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Capital and Cost of Removal</b>	<u>\$427</u>	<u>\$957</u>	<u>\$756</u>	<u>\$668</u>	<u>\$757</u>	<u>\$511</u>	<u>\$434</u>





## Capital Reconciliation (w COR) – Accrual Basis

(x \$1M)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Prior Plan	\$879	\$674	\$693	\$461	\$381
Changes:					
Brown CCR	(\$38)	(\$34)	(\$10)	(\$3)	(\$6)
Cane Run CCR Closure	(\$0)	(\$1)	(\$3)	(\$1)	\$0
Ghent CCR	(\$16)	(\$2)	\$1	\$2	\$9
TC CCR (Net)	\$98	(\$15)	(\$113)	(\$74)	(\$4)
MC CCR	\$12	(\$1)	(\$7)	(\$6)	(\$56)
TC2 (Net)	(\$1)	(\$3)	\$0	\$0	\$0
TC2 DSI System	(\$3)	\$0	\$0	\$0	\$0
Ohio Falls	\$2	(\$0)	(\$9)	\$0	\$0
NGCC 2015 - CR7	\$4	(\$1)	\$0	\$0	\$0
NGCC 2018	\$1	\$18	(\$13)	\$5	(\$2)
NGCC 2025	\$0	\$0	\$0	\$0	\$3
Paddys Demolition	(\$1)	(\$8)	(\$6)	\$3	\$5
Canal Demolition	(\$1)	\$0	\$1	(\$2)	(\$1)
TC & CR Black Start <sup>1</sup>	\$0	(\$4)	(\$18)	(\$30)	(\$18)
Env. Air - Brown	\$68	\$97	\$70	\$0	\$0
Env. Air - Ghent	\$5	(\$10)	(\$3)	\$0	\$0
Env. Air - Mill Creek	(\$15)	(\$58)	\$51	(\$3)	\$0
Env. Air - TC (Net)	\$3	(\$1)	(\$0)	\$0	\$0
Env. Compliance - CCR Ruling	\$5	\$29	\$3	\$61	\$16
Effluent Water	(\$1)	(\$1)	(\$8)	\$0	\$0
Water Intake	(\$1)	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0
Current Plan	<u>\$756</u>	<u>\$668</u>	<u>\$757</u>	<u>\$511</u>	<u>\$434</u>

<sup>1</sup> Black Starts were part of Generation Services budget in 2013BP

# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Director	1	1	1	1	1	1	1
Managers - Major Capital Projects	5	5	5	5	5	5	5
Procurement Manager	1	1	1	1	1	1	1
HR/IR Manager	1	1	1	1	1	1	1
Contract Administrator	3	4	4	4	4	4	4
Project Planning Coordinator	1	1	1	1	1	1	1
Engineers - Lead	4	4	4	4	4	4	4
Engineers - Chemical	2	1	1	1	1	1	1
Engineers - Civil	3	4	4	4	4	4	4
Engineers - Electrical	3	4	4	4	4	4	4
Engineers - Mechanical	2	2	2	2	2	2	2
Project Coordinators	20	20	20	20	20	20	20
Safety Specialists	4	4	4	4	4	4	4
Administrative Assistants	4	4	4	4	4	4	4
<b>Subtotal</b>	<b>54</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>	<b>56</b>
<b>Coop/Intern Students</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
<b>Total</b>	<b>62</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>64</b>
From 2013 Business Plan		61	61	61			
Variance to 2013 Business Plan		3	3	3			

Plan over Plan increases (decreases)

Increase Coops from 5 to 8



# 2014 Business Plan Risks

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- **Acceleration of compliance dates by EPA from assumed dates in 2014BP.**
- **Available craft labor resources.**
- **Execution of “no float” schedule on Mill Creek 3 WFGD & PJFF.**
- **Receiving permits on landfills at Trimble County and Brown within assumed timeframes.**
- **Performance of EPC contractors.**
- **Performance of equipment during commissioning, startup, and initial operation periods**



# Appendix



# Capital Review – Brown CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Main Pond Phase I	\$38	\$73	\$73	\$35	\$35
Aux Pond/Main Pond Phase II	\$20	\$25	\$25	\$5	\$5
Landfill Phase I & Transport	\$109	\$57	\$59	(\$52)	(\$50)
Landfill Phase II	\$28	\$0	\$0	(\$28)	(\$28)
<b>Total</b>	<b>\$195</b>	<b>\$155</b>	<b>\$157</b>	<b>(\$40)</b>	<b>(\$38)</b>

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Main Pond Phase I	\$38	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38
Aux Pond/Main Pond Phase II	\$17	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$20
Landfill Phase I & Transport	\$21	\$37	\$5	\$0	\$0	\$0	\$0	\$0	\$63
Landfill Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$19	\$26
<b>Total 2013 BP</b>	<b>\$76</b>	<b>\$40</b>	<b>\$5</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7</b>	<b>\$19</b>	<b>\$147</b>
<b>2014 BP</b>									
Main Pond Phase I	\$38	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38
Aux Pond/Main Pond Phase II	\$17	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$20
Landfill Phase I & Transport	\$19	\$15	\$43	\$32	\$0	\$0	\$0	\$0	\$109
Landfill Phase II	\$0	\$0	\$0	\$2	\$10	\$3	\$13	\$0	\$28
<b>Total 2014 BP</b>	<b>\$74</b>	<b>\$18</b>	<b>\$43</b>	<b>\$34</b>	<b>\$10</b>	<b>\$3</b>	<b>\$13</b>	<b>\$0</b>	<b>\$195</b>
<b>Variance to 2013 BP</b>									
Main Pond Phase I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Aux Pond/Main Pond Phase II	\$0	(\$0)	(\$0)	\$0	\$0	\$0	\$0	\$0	(\$0)
Landfill Phase I & Transport	\$1	\$22	(\$37)	(\$32)	\$0	\$0	\$0	\$0	(\$46)
Landfill Phase II	\$0	\$0	\$0	(\$2)	(\$10)	(\$3)	(\$6)	\$19	(\$2)
<b>Total Variance to 2013 BP</b>	<b>\$2</b>	<b>\$22</b>	<b>(\$38)</b>	<b>(\$34)</b>	<b>(\$10)</b>	<b>(\$3)</b>	<b>(\$6)</b>	<b>\$19</b>	<b>(\$48)</b>

### Key Messages

- The ECR Filing for Phase I of the Landfill and the Transport system was made in June 2011.
- \$16M was moved in 2011 from the Main Pond Phase I to the Aux Pond Phase II (\$4M) and the Landfill Phase I (\$12M).



# Capital Review – Cane Run CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Cane Run MSE Wall	\$5	\$5	\$0	\$0	(\$5)
Cane Run Ash Pond and Landfill Closure	\$15	\$15	\$0	\$0	(\$15)
Total	\$20	\$20	\$0	\$1	(\$20)

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Cane Run MSE Wall	\$2	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$5
Cane Run Ash Pond and Landfill Closure	\$0	\$3	\$3	\$1	\$0	\$0	\$0	\$0	\$8
Total 2013 BP	\$3	\$5	\$3	\$2	\$0	\$0	\$0	\$0	\$13
<b>2014 BP</b>									
Cane Run MSE Wall	\$2	\$2	\$1	\$0	\$0	\$0	\$0	\$0	\$5
Cane Run Ash Pond and Landfill Closure	\$0	\$4	\$3	\$3	\$3	\$1	\$0	\$0	\$15
Total 2014 BP	\$2	\$6	\$4	\$3	\$3	\$1	\$0	\$0	\$20
<b>Variance to 2013 BP</b>									
Cane Run MSE Wall	\$0	(\$0)	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0
Cane Run Ash Pond and Landfill Closure	\$0	(\$1)	(\$0)	(\$2)	(\$3)	(\$1)	\$0	\$0	(\$7)
Total Variance to 2013 BP	\$0	(\$1)	(\$0)	(\$1)	(\$3)	(\$1)	\$0	\$0	(\$7)

### Key Messages

- ECR Filing on MSE Wall and Cap & Closure projects have not yet been filed with PSC.
- Change in scope from New Landfill to an MSE Wall was made in 2012.



# Capital Review – Ghent CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Landfill Phase I/Fines & Transport	\$323	\$303	\$205	(\$19)	(\$118)
Landfill Phase II, III, Close & Cap	<u>\$135</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$135)</u>	<u>(\$135)</u>
Total	\$457	\$303	\$205	(\$154)	(\$253)

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Landfill Phase I	\$44	\$0	\$10	\$1	\$1	\$2	\$0	\$0	\$56
Fines & Transport	\$173	\$54	\$3	\$0	\$0	\$0	\$0	\$0	\$230
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$112</u>	<u>\$112</u>
Total 2013 BP	\$217	\$54	\$12	\$1	\$1	\$2	\$0	\$112	\$398
<b>2014 BP</b>									
Landfill Phase I	\$43	\$11	\$8	\$2	\$0	\$0	\$0	\$4	\$68
Fines & Transport	\$164	\$71	\$20	\$0	\$0	\$0	\$0	\$0	\$255
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$135</u>	<u>\$135</u>
Total 2014 BP	\$206	\$82	\$28	\$2	\$0	\$0	\$0	\$138	\$457
<b>Variance to 2013 BP</b>									
Landfill Phase I	\$1	(\$11)	\$2	(\$2)	\$1	\$2	\$0	(\$4)	(\$11)
Fines & Transport	\$10	(\$17)	(\$18)	\$0	\$0	\$0	\$0	\$0	(\$25)
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$23)</u>	<u>(\$23)</u>
Total Variance to 2013 BP	\$10	(\$28)	(\$16)	(\$2)	\$1	\$2	\$0	(\$27)	(\$59)

### Key Messages

- The increase over the ECR Filing is due to the Transport System going from Preliminary to Level I engineering, unexpected underground interferences, excusable events with EPC, and final permit design against design.



# Capital Review – Mill Creek CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Mill Creek Landfill Expansion	\$89	\$0	\$0	(\$89)	(\$89)
Mill Creek CCRT - Transport	<u>\$82</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$82)</u>	<u>(\$82)</u>
<b>Total</b>	<b>\$171</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$171)</b>	<b>(\$171)</b>

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Mill Creek Landfill Expansion	\$0	\$0	\$12	\$0	\$0	\$1	\$0	\$36	\$50
Mill Creek CCRT - Transport	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Total 2013 BP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1</b>	<b>\$0</b>	<b>\$36</b>	<b>\$50</b>
<b>2014 BP</b>									
Mill Creek Landfill Expansion	\$0	\$0	\$0	\$1	\$7	\$2	\$14	\$65	\$89
Mill Creek CCRT - Transport	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$5</u>	<u>\$43</u>	<u>\$34</u>	<u>\$82</u>
<b>Total 2014 BP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1</b>	<b>\$7</b>	<b>\$7</b>	<b>\$57</b>	<b>\$99</b>	<b>\$171</b>
<b>Variance to 2013 BP</b>									
Mill Creek Landfill Expansion	\$0	\$0	\$12	(\$1)	(\$7)	(\$1)	(\$13)	(\$29)	(\$38)
Mill Creek CCRT - Transport	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$5)</u>	<u>(\$43)</u>	<u>(\$34)</u>	<u>(\$82)</u>
<b>Total Variance to 2013 BP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12</b>	<b>(\$1)</b>	<b>(\$7)</b>	<b>(\$6)</b>	<b>(\$56)</b>	<b>(\$63)</b>	<b>(\$120)</b>

### Key Messages

- Transport was not budgeted in the 2013BP.





# Capital Review – Trimble County CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	Total Projection	Current Authority	ECR Filing	Variance to Authority	Variance to ECR Filing
BAP/GSP	\$29	\$30	\$25	\$1	(\$4)
Landfill Phase I/Treatment & Transport	\$277	\$73	\$73	(\$205)	(\$205)
Landfill Phase II, III, & IV	\$148	\$0	\$0	(\$148)	(\$148)
Holcim	\$9	\$9	\$8	(\$0)	(\$1)
Total	\$463	\$111	\$106	(\$352)	(\$358)

### Business Plan Comparison

	Pre-2013	2013	2014	2015	2016	2017	2018	Post 2018	Total
<b>2013 BP</b>									
BAP/GSP	\$29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29
Landfill Phase I	\$9	\$17	\$55	\$10	\$1	\$0	\$0	\$0	\$92
Treatment & Transport	\$6	\$18	\$46	\$23	\$0	\$0	\$0	\$0	\$93
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$174	\$175
Holcim	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9
Total 2013 BP	\$53	\$35	\$101	\$33	\$1	\$0	\$0	\$174	\$397
<b>2014 BP</b>									
BAP/GSP	\$28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29
Landfill Phase I	\$9	\$2	\$2	\$19	\$28	\$32	\$8	\$12	\$112
Treatment & Transport	\$7	\$1	\$1	\$29	\$86	\$42	\$0	\$0	\$165
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148	\$148
Holcim	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9
Total 2014 BP	\$53	\$3	\$3	\$48	\$113	\$74	\$9	\$160	\$463
<b>Variance to 2013 BP</b>									
BAP/GSP	\$1	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Landfill Phase I	\$0	\$16	\$53	(\$9)	(\$27)	(\$32)	(\$8)	(\$12)	(\$21)
Treatment & Transport	(\$1)	\$16	\$46	(\$6)	(\$86)	(\$42)	(\$0)	\$0	(\$72)
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26	\$26
Holcim	(\$0)	(\$0)	\$0	\$0	\$0	\$0	\$0	\$0	(\$0)
Total Variance to 2013 BP	(\$0)	\$32	\$98	(\$15)	(\$113)	(\$74)	(\$8)	\$14	(\$66)

### Key Messages

- All numbers are net of IMPA/IMEA reimbursement.
- The increase over the ECR Filing is due to refined engineering on the Transport System, permit delays, new landfill layout, and project contingencies added.
- Permitting issues have delayed Phase I at least 2 years.



# Capital Review – Ohio Falls

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Ohio Falls	\$138	\$130	(\$7)

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
2013 BP	\$80	\$19	\$19	\$16	\$1	\$0	\$0	\$0	\$135
2014 BP	\$79	\$16	\$17	\$16	\$10	\$0	\$0	\$0	\$138
Variance to 2013 BP	\$1	\$3	\$2	(\$0)	(\$9)	\$0	\$0	\$0	(\$3)

### Key Messages

- Above figures include removal costs of \$9.7M.
- 74% of this project has been negotiated into a lump sum contract with Voith.
- Variance driven by need to rewind all generators not originally included in scope.



# Capital Review – Cane Run 7

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
CCGT 2015 Cane Run	\$549	\$559	\$10

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
2013 BP	\$85	\$309	\$130	\$35	\$0	\$0	\$0	\$0	\$559
2014 BP	\$69	\$319	\$125	\$36	\$0	\$0	\$0	\$0	\$549
Variance to 2013 BP	\$17	(\$10)	\$4	(\$1)	\$0	\$0	\$0	\$0	\$10

- The CCGT 2015 modeled on a 2 x 1, 640MW (summer, net) and assumes a 2nd quarter 2015 in-service date.



# Capital Review – NGCC 2018

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
CCGT 2018	\$683	\$5	(\$677)

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
2013 BP	\$1	\$1	\$2	\$103	\$382	\$161	\$43	\$0	\$692
2014 BP	\$0	\$2	\$1	\$85	\$394	\$155	\$45	\$0	\$683
Variance to 2013 BP	\$1	(\$1)	\$1	\$18	(\$12)	\$5	(\$2)	\$0	\$9

- The CCGT 2018 is modeled after CR7 with 10% added plus 4% escalation



# Capital Review – Black Starts

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Blackstart - Trimble County	\$34	\$0	(\$34)
Black Start - Cane Run	<u>\$35</u>	<u>\$0</u>	<u>(\$35)</u>
Total	\$70	\$0	(\$70)

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Black Start - Trimble County	\$0	\$0	\$0	\$0	\$0	\$11	\$22	\$0	\$34
Black Start - Cane Run	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$18</u>	<u>\$35</u>	<u>\$0</u>	<u>\$52</u>
Total 2013 BP	\$0	\$0	\$0	\$0	\$0	\$29	\$57	\$0	\$86
<b>2014 BP</b>									
Black Start - Trimble County	\$0	\$0	\$0	\$4	\$14	\$16	\$0	\$0	\$34
Black Start - Cane Run	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$4</u>	<u>\$14</u>	<u>\$18</u>	<u>\$0</u>	<u>\$35</u>
Total 2014 BP	\$0	\$0	\$0	\$4	\$18	\$30	\$18	\$0	\$70
<b>Variance to 2013 BP</b>									
Black Start - Trimble County	\$0	\$0	\$0	(\$4)	(\$14)	(\$5)	\$22	\$0	(\$1)
Black Start - Cane Run	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$4)</u>	<u>\$4</u>	<u>\$17</u>	<u>\$0</u>	<u>\$17</u>
Total Variance to 2013 BP	\$0	\$0	\$0	(\$4)	(\$18)	(\$1)	\$39	\$0	\$16

### Key Messages

- 2013BP for Black Start was on Generation Services Budget.
- 2013BP amounts for Cane Run were actually for Paddys Run and Brown on the Gen Services budget.
- Project Engineering took the Gen Services budget and added 5% for non-PE Labor expenses and 5% contingency.



# Capital Review – Paddys Run & Canal Demolition

## Accrual Basis, \$Millions Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Paddy's Run Demolition	\$17	\$2	(\$15)
Canal Demolition	<u>\$13</u>	<u>\$0</u>	<u>(\$13)</u>
<b>Total</b>	<b>\$30</b>	<b>\$2</b>	<b>(\$28)</b>

## Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Paddy's Run Demolition	\$2	\$0	\$0	\$0	\$1	\$3	\$5	\$3	\$15
Canal Demolition	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$1</u>	<u>\$5</u>	<u>\$5</u>	<u>\$4</u>	<u>\$15</u>
<b>Total 2013 BP</b>	<b>\$2</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2</b>	<b>\$8</b>	<b>\$10</b>	<b>\$8</b>	<b>\$30</b>
<b>2014 BP</b>									
Paddy's Run Demolition	\$1	\$0	\$1	\$8	\$7	\$0	\$0	\$0	\$17
Canal Demolition	<u>\$0</u>	<u>\$0</u>	<u>\$1</u>	<u>\$0</u>	<u>\$0</u>	<u>\$7</u>	<u>\$6</u>	<u>\$0</u>	<u>\$13</u>
<b>Total 2014 BP</b>	<b>\$1</b>	<b>\$0</b>	<b>\$1</b>	<b>\$8</b>	<b>\$7</b>	<b>\$7</b>	<b>\$6</b>	<b>\$0</b>	<b>\$30</b>
<b>Variance to 2013 BP</b>									
Paddy's Run Demolition	\$1	(\$0)	(\$1)	(\$8)	(\$6)	\$3	\$5	\$3	(\$3)
Canal Demolition	<u>(\$0)</u>	<u>\$0</u>	<u>(\$1)</u>	<u>\$0</u>	<u>\$1</u>	<u>(\$2)</u>	<u>(\$1)</u>	<u>\$4</u>	<u>\$2</u>
<b>Total Variance to 2013 BP</b>	<b>\$1</b>	<b>(\$0)</b>	<b>(\$1)</b>	<b>(\$8)</b>	<b>(\$6)</b>	<b>\$1</b>	<b>\$4</b>	<b>\$8</b>	<b>(\$1)</b>

## Key Messages

- \$1.1M was spent in 2012 for the stack demolition on Paddy's Run. The remaining amounts were shifted out to 2014 through 2018.



# Capital Review – Brown Air Compliance

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Brown 1	\$5	\$5	\$109	\$0	\$104
Brown 2	\$5	\$5	\$118	\$0	\$113
Brown 3	<u>\$92</u>	<u>\$10</u>	<u>\$117</u>	<u>(\$82)</u>	<u>\$25</u>
Total	\$101	\$20	\$344	(\$81)	\$242

## Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Brown 1	\$0	\$0	\$30	\$49	\$36	\$0	\$0	\$0	\$115
Brown 2	\$0	\$0	\$32	\$52	\$38	\$0	\$0	\$0	\$122
Brown 3	<u>\$3</u>	<u>\$24</u>	<u>\$42</u>	<u>\$39</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$109</u>
Total 2013 BP	\$3	\$24	\$105	\$140	\$74	\$0	\$0	\$0	\$346
<b>2014 BP</b>									
Brown 1	\$0	(\$0)	\$1	\$2	\$2	\$0	\$0	\$0	\$4.9
Brown 2	\$0	(\$0)	\$1	\$2	\$2	\$0	\$0	\$0	\$4.9
Brown 3	<u>\$5</u>	<u>\$13</u>	<u>\$36</u>	<u>\$38</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$91.7</u>
Total 2014 BP	\$5	\$12	\$37	\$43	\$4	\$0	\$0	\$0	\$101
<b>Variance to 2013 BP</b>									
Brown 1	(\$0)	\$0	\$30	\$46	\$34	\$0	\$0	\$0	\$110
Brown 2	(\$0)	\$0	\$32	\$50	\$36	\$0	\$0	\$0	\$117
Brown 3	<u>(\$2)</u>	<u>\$12</u>	<u>\$6</u>	<u>\$1</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$17</u>
Total Variance to 2013 BP	(\$2)	\$12	\$68	\$97	\$70	\$0	\$0	\$0	\$245

## Key Messages

- The ECR Filing excluded removal costs of \$2M.
- BR 1 & 2 Fabric Filter removed from 2014BP.
- BR 1 & 2 amounts is SAM Mitigation only.



# Capital Review – Ghent Air Compliance

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Ghent 1	\$145	\$123	\$164	(\$21)	\$19
Ghent 2	\$129	\$129	\$165	(\$0)	\$36
Ghent 3	\$169	\$147	\$198	(\$23)	\$29
Ghent 4	<u>\$144</u>	<u>\$121</u>	<u>\$185</u>	<u>(\$23)</u>	<u>\$41</u>
Total	\$587	\$519	\$712	(\$67)	\$125

### Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
<b>2013 BP</b>									
Ghent 1	\$7	\$29	\$66	\$21	\$0	\$0	\$0	\$0	\$123
Ghent 2	\$7	\$16	\$46	\$58	\$1	\$0	\$0	\$0	\$129
Ghent 3	\$16	\$83	\$46	\$1	\$0	\$0	\$0	\$0	\$147
Ghent 4	<u>\$8</u>	<u>\$62</u>	<u>\$49</u>	<u>\$2</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$121</u>
Total 2013 BP	\$38	\$191	\$207	\$83	\$1	\$0	\$0	\$0	\$519
<b>2014 BP</b>									
Ghent 1	\$10	\$48	\$60	\$27	\$0	\$0	\$0	\$0	\$145
Ghent 2	\$10	\$23	\$35	\$58	\$4	\$0	\$0	\$0	\$129
Ghent 3	\$24	\$95	\$50	\$1	\$0	\$0	\$0	\$0	\$169
Ghent 4	<u>\$10</u>	<u>\$69</u>	<u>\$58</u>	<u>\$7</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$144</u>
Total 2014 BP	\$54	\$234	\$202	\$92	\$4	\$0	\$0	\$0	\$587
<b>Variance to 2013 BP</b>									
Ghent 1	(\$3)	(\$19)	\$6	(\$6)	\$0	\$0	\$0	\$0	(\$21)
Ghent 2	(\$3)	(\$6)	\$11	\$1	(\$3)	\$0	\$0	\$0	(\$0)
Ghent 3	(\$7)	(\$12)	(\$4)	\$0	\$0	\$0	\$0	\$0	(\$23)
Ghent 4	<u>(\$3)</u>	<u>(\$7)</u>	<u>(\$8)</u>	<u>(\$5)</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$23)</u>
Total Variance to 2013 BP	(\$16)	(\$44)	\$5	(\$10)	(\$3)	\$0	\$0	\$0	(\$67)

### Key Messages

- \$100M was removed from GH Air Projects on the 2013BP.
- 2014BP reflects actual costs needed for project completion based on firm price EPC award.
- SCR Turn-Downs were removed in the amounts for units 1, 3 & 4.
- SAM Mitigation is not included in the amounts for all Ghent units.





# Capital Review – Mill Creek Air Compliance

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	Total Projection	Current Authority	ECR Filing	Variance to Authority	Variance to ECR Filing
Mill Creek 1	\$171	\$191	\$331	\$20	\$160
Mill Creek 2	\$168	\$190	\$328	\$22	\$160
Mill Creek 3	\$287	\$287	\$223	(\$0)	(\$64)
Mill Creek 4	\$272	\$270	\$386	(\$3)	\$113
<b>Total</b>	<b>\$899</b>	<b>\$938</b>	<b>\$1,268</b>	<b>\$39</b>	<b>\$369</b>

### Business Plan Comparison

	Pre-2013	2013	2014	2015	2016	2017	2018	Post 2018	Total
<b>2013 BP</b>									
Mill Creek 1	\$17	\$71	\$57	\$19	\$27	\$0	\$0	\$0	\$191
Mill Creek 2	\$19	\$68	\$52	\$21	\$30	\$0	\$0	\$0	\$190
Mill Creek 3	\$10	\$32	\$54	\$108	\$84	\$0	\$0	\$0	\$287
Mill Creek 4	\$33	\$123	\$69	\$18	\$27	\$0	\$0	\$0	\$270
<b>Total 2013 BP</b>	<b>\$79</b>	<b>\$294</b>	<b>\$232</b>	<b>\$165</b>	<b>\$168</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$938</b>
<b>2014 BP</b>									
Mill Creek 1	\$14	\$52	\$60	\$32	\$13	\$0	\$0	\$0	\$171
Mill Creek 2	\$14	\$51	\$54	\$36	\$14	\$0	\$0	\$0	\$168
Mill Creek 3	\$9	\$37	\$35	\$130	\$73	\$3	\$0	\$0	\$287
Mill Creek 4	\$27	\$105	\$98	\$25	\$17	\$0	\$0	\$0	\$272
<b>Total 2014 BP</b>	<b>\$63</b>	<b>\$245</b>	<b>\$248</b>	<b>\$223</b>	<b>\$117</b>	<b>\$3</b>	<b>\$0</b>	<b>\$0</b>	<b>\$899</b>
<b>Variance to 2013 BP</b>									
Mill Creek 1	\$3	\$19	(\$3)	(\$14)	\$14	\$0	\$0	\$0	\$20
Mill Creek 2	\$5	\$17	(\$2)	(\$15)	\$16	\$0	\$0	\$0	\$22
Mill Creek 3	\$1	(\$5)	\$18	(\$22)	\$11	(\$3)	\$0	\$0	(\$0)
Mill Creek 4	\$6	\$18	(\$29)	(\$8)	\$10	(\$0)	\$0	\$0	(\$3)
<b>Total Variance to 2013 BP</b>	<b>\$15</b>	<b>\$49</b>	<b>(\$15)</b>	<b>(\$58)</b>	<b>\$51</b>	<b>(\$3)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$39</b>

### Key Messages

- \$13M related to the MC 3 and 4 SAM are not included in the ECR filing as it was part of an earlier filing. The ECR filing does not include removal costs of \$8M.
- Variance is due to actual Target Price based EPC, FGD, Equipment, and Fabric Filter EPA contracts being less than the Level I Engineering Study performed by Black & Veatch. The ECR Filing was based on that Level I Study.
- 2013BP included \$21M per unit of G-Max Management Contingency



# Capital Review – Trimble County Air Compliance

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Trimble 1	\$118	\$10	\$124	(\$108)	\$6

## Business Plan Comparison

	<u>Pre-2013</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Post 2018</u>	<u>Total</u>
2013 BP	\$4	\$10	\$42	\$58	\$5	\$0	\$0	\$0	\$118
2014 BP	\$4	\$11	\$39	\$59	\$5	\$0	\$0	\$0	\$118
Variance to 2013 BP	(\$0)	(\$1)	\$3	(\$1)	(\$0)	\$0	\$0	\$0	\$0

## Key Messages

- All numbers are net of IMPA/IMEA reimbursement.

# Capital Review – CCR Ruling

## Accrual Basis, \$Millions

There is no ECR Filing or Approved Authority Amount associated with the CCR Ruling Projects.

### Business Plan Comparison

	Pre-2013	2013	2014	2015	2016	2017	2018	Post 2018	Total
<b>2013 BP</b>									
Brown	\$0	\$0	\$1	\$0	\$1	\$0	\$0	\$0	\$2
Ghent	\$0	\$0	\$3	\$20	\$22	\$127	\$128	\$0	\$300
Green River	\$0	\$0	\$0	\$0	\$11	\$0	\$16	\$17	\$43
Pineville	\$0	\$0	\$0	\$0	\$3	\$2	\$0	\$0	\$6
Tyrone	\$0	\$0	\$0	\$0	\$0	\$2	\$1	\$0	\$2
Cane Run	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Mill Creek	\$0	\$0	\$2	\$12	\$15	\$36	\$33	\$0	\$98
Trimble	\$0	\$0	\$1	\$2	\$2	\$26	\$27	\$0	\$58
<b>Total 2013 BP</b>	\$0	\$0	\$8	\$34	\$53	\$193	\$206	\$17	\$511
<b>2014 BP</b>									
Brown	\$0	\$0	\$0	\$0	\$2	\$2	\$16	\$14	\$33
Ghent	\$0	\$0	\$1	\$3	\$34	\$97	\$107	\$80	\$323
Green River	\$0	\$0	\$1	\$1	\$6	\$6	\$0	\$0	\$13
Pineville	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$2	\$5
Tyrone	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$2	\$5
Cane Run	\$0	\$0	\$0	\$1	\$1	\$0	\$0	\$0	\$1
Mill Creek	\$0	\$0	\$1	\$0	\$5	\$21	\$17	\$3	\$47
Trimble	\$0	\$0	\$0	\$0	\$1	\$7	\$46	\$41	\$95
<b>Total 2014 BP</b>	\$0	\$0	\$2	\$5	\$50	\$133	\$190	\$142	\$522
<b>Variance to 2013 BP</b>									
Brown	\$0	\$0	\$1	\$0	(\$1)	(\$1)	(\$16)	(\$14)	(\$31)
Ghent	\$0	\$0	\$2	\$17	(\$12)	\$29	\$22	(\$80)	(\$23)
Green River	\$0	\$0	(\$1)	(\$1)	\$4	(\$6)	\$16	\$17	\$30
Pineville	\$0	\$0	\$0	\$0	\$3	\$2	(\$2)	(\$2)	\$1
Tyrone	\$0	\$0	\$0	\$0	(\$0)	\$1	(\$2)	(\$2)	(\$3)
Cane Run	\$0	\$0	(\$0)	(\$1)	(\$1)	\$0	\$0	\$0	(\$0)
Mill Creek	\$0	\$0	\$2	\$11	\$9	\$15	\$16	(\$3)	\$51
Trimble	\$0	\$0	\$1	\$2	\$0	\$19	(\$18)	(\$41)	(\$37)
<b>Total Variance to 2013 BP</b>	\$0	\$0	\$5	\$29	\$3	\$61	\$16	(\$126)	(\$12)

### Key Messages

- Majority of projects remained in 2015 through 2019 in the 2014 BP due to timing and uncertainty of ruling. Costs in 2014 in the 2014 BP are mainly engineering and development of construction packages.
- 2013BP contained an additional \$508M associated with plant closures outside the scope of the Business Plan Period.





**PPL companies**

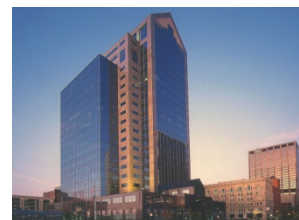
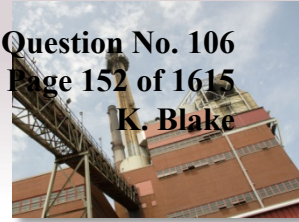
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# Energy Supply and Analysis

## 2014 Business Plan

*December 6, 2013*

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# Plan Highlights

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## Key Objectives

- Optimize the utilization of existing assets to provide reliable, low cost energy.
- Procure coal and gas necessary to cost-effectively operate generating plants.
- Provide high quality analysis to enhance decision-making.
- Implement processes required to meet reliability standards.
- Improve analysis capability and knowledge related to retail customer energy usage to support energy efficiency and resource planning efforts.



# Major Assumptions

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- Analysis needed to support major company initiatives (KPSC filings) and strategic planning can be met by existing staff levels.
- Municipal rate case and new generation CCN will require significant support in 2014.
- Retirement risk in Fuels department is growing over the planning period so a new position is temporarily planned for that area in mid-2014 to allow adequate time for training and development.

# 2014 Plan Summary

- Compared to 2013 Plan, native load production costs (\$/MWh) in 2014 Plan are lower.
  - *Lower coal prices drive reductions in native load production costs throughout planning period.*
- OSS contribution is slightly lower in 2014, mostly unchanged in 2015-16, and slightly higher in 2017+.
  - *Reporting of OSS contribution no longer includes opportunity costs for ECR expense and transmission losses.*

<b>Native Load Production Costs (\$/MWh)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>CAGR</b>
2013 Plan	30.18	31.97	34.72	36.43	37.22	5.4%
2014 Plan	29.68	30.62	32.32	33.92	35.12	4.3%

<b>OSS Contribution (\$M)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
2013 Plan	2.7	1.2	1.0	0.7	1.5
2014 Plan	2.1	1.3	0.9	1.2	1.8





# Headcount down slightly from 2013 BP

- Trading Manager Retirement in 2013 is not back-filled.
- Open Consumer Behavior Analyst Position, and open Sales Analyst positions are filled in 2013.
- An additional headcount in Fuels beginning in January 2015 prepares for future retirement.
- Generation Planning retirement in mid-2015.
- Fuels retirement complete in mid-2018 reduces staffing back to 2013 level.

	<i>Fcst</i>	<i>2014 Business Plan</i>					<i>Change in Business Plans</i>					
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<i>VP Energy Supply</i>	2	2	2	2	2	2	0	0	0	0	0	0
<i>Power Supply</i>	23	23	23	23	23	23	-1	-1	-1	-1	-1	-1
<i>Director P &amp; A</i>	2	2	2	2	2	2	0	0	0	0	0	0
<i>Economic Analysis</i>	6	6	6	6	6	6	0	0	0	0	0	0
<i>Sales Analysis</i>	6	6	6	6	6	6	0	0	0	0	0	0
<i>Generation Planning</i>	8	8	7	7	7	7	0	0	-1	-1	-1	-1
<i>Fuels Management</i>	5	5	6	6	6	5	0	0	1	1	1	0
<i>Fuels Risk Management</i>	2	2	2	2	2	2	0	0	0	0	0	0
<i>Fuels &amp; By Products</i>	10	10	10	10	10	10	0	0	0	0	0	0
<i>Total Headcount w/o Interns</i>	64	64	64	64	64	63	-1	-1	-1	-1	-1	-2

2013 Business Plan has been adjusted for Reorganizaton of Business Information Department.



# Labor savings achieved each plan year

	\$000's									
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<i>VP Energy Supply</i>										
<i>Power Supply</i>	-1	-1	-1	-1	-1	\$200	\$206	\$212	\$219	\$225
<i>Director P &amp; A</i>										
<i>Business Information</i>										
<i>Economic Analysis</i>										
<i>Sales Analysis</i>										
<i>Generation Planning</i>		-1	-1	-1	-1		\$75	\$155	\$159	\$164
<i>Fuels Management</i>		1	1	1	0		-\$155	-\$159	-\$164	-\$84
<i>Fuels Risk Management</i>										
<i>Fuels &amp; By Products</i>										
<i>Total Headcount w/o Interns</i>						\$200	\$127	\$208	\$214	\$305



# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Opex Expenses							
Raw Labor	6,456	5,904	5,948	6,142	6,268	6,443	6,566
Burdens	1,808	1,653	1,641	1,695	1,729	1,778	1,812
Non labor Regulated Trading	209	403	340	338	345	389	395
Non labor Business Information	19	5	-	-	-	-	-
Non labor Director Energy PF&A	25	58	58	58	59	60	62
Non labor Generation Planning	129	294	261	264	270	277	283
Non labor Economic Analysis	84	219	196	196	200	207	212
Non labor Sales Analysis	75	128	121	123	125	129	131
Non labor VP Energy Marketing	38	39	36	37	38	53	55
Non labor Allocated Support	-	-	-	-	-	-	-
Non-labor Fuels Management	34	94	91	90	91	98	100
Non-labor Fuels Admin	407	463	576	574	586	620	632
Non-labor Fuels Risk Management	67	130	79	77	79	86	88
Non-labor Other	333	-	-	-	-	-	-
Total OPEX for EBIT	<u>9,684</u>	<u>9,390</u>	<u>9,347</u>	<u>9,594</u>	<u>9,790</u>	<u>10,140</u>	<u>10,336</u>



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Prior Plan - Adjusted	10,003	10,282	10,570	10,865	11,169
Drivers:					
No Backfill Mgr. Trading	(200)	(206)	(212)	(219)	(225)
Decrease in Non-labor	(456)	(562)	(572)	(511)	(528)
WFP Increase 1 Fuels in '15	-	155	159	164	169
WFP Retirement 1/2 yr. Fuels in '18	-	-	-	-	(85)
WFP Retirement 1/2 yr. Gen Pln in '15	-	(75)	(155)	(159)	(164)
Current Plan	<u>9,347</u>	<u>9,594</u>	<u>9,790</u>	<u>10,140</u>	<u>10,336</u>



# Financial Performance

## 2012-2018 OSS Margin (\$000)

	2012	2013	7+5 2013	2013 MTP	2014 Business Plan				
	Actual	Budget	Forecast	2014	2014	2015	2016	2017	2018
OSS Margin before Transmission Expense	4,082	4,565	4,616	3,888	2,988	1,972	1,626	2,048	3,313
Transmission Expense (Internal)	2,363	1,365	750	1,148	849	715	759	857	1,540
<b>Total OSS Margin</b>	<b>1,719</b>	<b>3,200</b>	<b>3,866</b>	<b>2,740</b>	<b>2,139</b>	<b>1,257</b>	<b>867</b>	<b>1,191</b>	<b>1,773</b>

### Off-system Sales Volume-GWh

On-peak	282	240	263	166	128	114	121	114	170
Off-peak	47	107	39	80	28	17	15	25	88
Weekend	89	118	126	139	115	67	51	69	112
<b>Total</b>	<b>418</b>	<b>465</b>	<b>428</b>	<b>385</b>	<b>271</b>	<b>198</b>	<b>187</b>	<b>208</b>	<b>370</b>



# Financial Performance

## 2012-2018 Margin Expenses / Cost of Sales (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Internal Transmission Exp (OSS)	2,363	956	849	715	759	857	1,540
RSG Expense (OSS)	729	1,084	478	350	292	402	785
3rd Party Transmission (OSS)	22	7	-	-	-	-	-
Internal Transmission Exp (NL)	-	-	1,708	1,622	1,547	1,854	1,681
RSG Expense (NL)	-	-	351	406	372	392	284
3rd Party Transmission (NL)	-	-	430	370	315	355	275
EKPC NITS - Perm (NL)	-	-	1,942	1,978	2,029	2,070	2,111
Industrial Coal Sales (Fuels)	806	821	831	832	832	849	866
<b>Total Margin/Cost of Sales</b>	<b>3,920</b>	<b>2,868</b>	<b>6,589</b>	<b>6,273</b>	<b>6,146</b>	<b>6,778</b>	<b>7,541</b>



## 2014-2018 Margin/Cost of Sales Reconciliation (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
<u>Mechanism recoverable</u>					
Prior Plan					
Drivers					
Current Plan					
<u>Other</u>					
Prior Plan	7,917	6,913	7,239	7,484	8,388
<u>Drivers</u>					
RTO Fees for OSS	(122)	58	(2)	188	213
Internal Trans for OSS	(298)	126	110	385	514
RTO Fees for NL	(400)	(288)	(331)	(361)	(528)
Internal Trans for NL	(270)	(305)	(560)	(577)	(574)
EKPC NITS	(6)	(9)	2	3	2
3rd Party Trans for NL	(242)	(216)	(290)	(321)	(451)
Industrial Coal Sales	10	(6)	(22)	(23)	(23)
Current Plan	<u>6,589</u>	<u>6,273</u>	<u>6,146</u>	<u>6,778</u>	<u>7,541</u>



## 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
TC Gas Meter Project	8	-	-	-	-	-	-
CTS/AFB Upgrade	19	403	61	-	-	-	-
Process Improvement Tools	28	228	196	256	256	256	256
Fuelworx/Aligne	-	18	-	-	-	-	-
<b>Total Capital and COR</b>	<b>55</b>	<b>649</b>	<b>257</b>	<b>256</b>	<b>256</b>	<b>256</b>	<b>256</b>





2014-2018  
 Capital Reconciliation (w COR) –Accrual Basis  
 (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Prior Plan	250	250	250	250	250
Changes:					
Burdens	6	6	6	6	6
Current Plan	<u>256</u>	<u>256</u>	<u>256</u>	<u>256</u>	<u>256</u>



# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Regulated Trading	24	23	23	23	23	23	23
Business Information	4	0	0	0	0	0	0
Director Planning & Analysis	2	2	2	2	2	2	2
Economic Analysis	7	6	6	6	6	6	6
Sales Analysis	5	6	6	6	6	6	6
Generation Planning	8	8	8	7	7	7	7
VP Energy Marketing	2	2	2	2	2	2	2
Fuels Management	5	5	5	6	6	6	5
Fuels by Products	8	10	10	10	10	10	10
Fuels Risk Managemet	4	2	2	2	2	2	2
Subtotal	69	64	64	64	64	64	63
Co-ops	0	2	2	2	2	2	2
<b>TOTAL w/ Co-op</b>	<b>69</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>66</b>	<b>65</b>
From 2013 MTP (excl Bus Info)		66	66	66	66	66	66
Variance to 2012 MTP		0	0	0	0	0	-1

*changes from prior plan:*

Reg Trading - Manager Trading			-1	-1	-1	-1	-1
Fuels Mgmt - Future Retirement				1	1	1	
Gen Planning - Retirement				-1	-1	-1	-1
Co-op Fuels Risk Mgmt.			1	1	1	1	1



# Plan Risks

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- OSS margin impacts of native load variation due to weather, unit availability, and transmission system capacity
- TC2 performance post burner replacement
- CR7 testing and commissioning date
- CR7 performance after commissioning
- Coal unit performance in 2014 post installation of environmental retrofits
  - *GH3: Spring 2014 (baghouse)*
  - *GH4: Fall 2014 (baghouse/turbine overhaul)*
  - *MC4: Fall 2014 (baghouse/FGD/turbine overhaul)*
- Transition of system to fewer, larger units
- Workforce transition due to retirements

# Appendix



## Year over Year Walk Forward OPEX and Other Expense (\$000)

<b>2012 Actual</b>	<b>9,684</b>
Bus Info Reorganization	(523)
Labor - 3% merit increase	248
Other	(19)
<b>2013 FC</b>	<b>9,390</b>
Labor - merit increase	226
Other (including add'l reductions)	(269)
<b>2014 Budget</b>	<b>9,347</b>
Labor merit increase - 3%	231
Other (including add'l reductions)	16
<b>2015 Plan</b>	<b>9,594</b>
Labor merit increase - 3%	237
Other (including add'l reductions)	(41)
<b>2016 Plan</b>	<b>9,790</b>
Labor merit increase - 3%	242
Other (including add'l reductions)	108
<b>2017 Plan</b>	<b>10,140</b>
Labor merit increase - 3%	246
Other (including add'l reductions)	(50)
<b>2018 Plan</b>	<b>10,336</b>



## 2012-2018 Headcount progression

2012 Headcount	69
- Elim Bus Info	-4
- Mgr Trading	-1
- Co-op Students	2
	66
2013 Headcount FC	66
-No Changes	
	66
2014 Headcount Budget	66
- Early Hire Fuels Mgmt for future retirement	1
- Retirement Generation Planning	-1
	66
2015 Headcount Plan	66
- No Changes	
	66
2016 Headcount Plan	66
- No Changes	
	66
2017 Headcount Plan	66
- Fuels Management Retirement	-1
	65
2018 Headcount Plan	65



## 2012-2018 Industrial Coal Sales

### Gross Margin (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Revenue:							
ICS Revenue	1,133	1,027	1,042	1,042	1,042	1,063	1,084
Expense:							
ICS Cost of Sales	806	823	831	831	831	849	865
Gross Margin	<u>327</u>	<u>204</u>	<u>211</u>	<u>211</u>	<u>211</u>	<u>214</u>	<u>219</u>





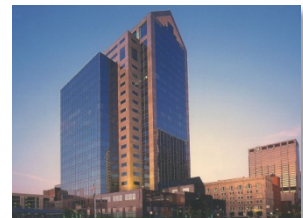
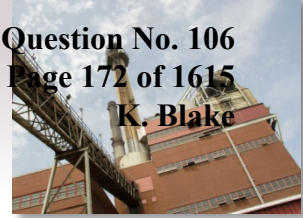
**PPL companies**

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# Power Generation 2014 Business Plan

*Revised November 25, 2013*

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# Plan Highlights

- ***Addition of generation capacity - Cane Run Unit 7 CCGT scheduled for commercial operation May 1, 2015 and a second CCGT planned for May 1, 2018 (site not yet determined)***
- ***Planned retirements of coal generating units at Green River (October 2014) and Cane Run (April 2015)***
- ***Major investment and integration of environmental compliance control equipment***
- ***Generation forecast for the planning period assumes continued trend of more gas fired production based on current projections for gas prices***
- ***Expenses associated with environmental systems at Ghent, Brown and Trimble were previously in ECR mechanism have now shifted to base O&M expense starting in 2013***
- ***Required landfill expansion at Ghent, Brown and Trimble stations***
- ***Increased resource needs to meet and maintain compliance with incremental regulatory requirements***
- ***Trimble County Unit 2 resolution of existing issues and warranty claims***
- ***Brown 1 and 2 remain in the generation mix without baghouses (Nalco additive included)***



# Major Assumptions

## 1. Regulatory

- 1.1 The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.
- 1.2 Target Reserve Margin of 16%, within a range of 15%-17%.
  - Consistent with 2013 BP.
- 1.3 Reserve sharing under the TVA Reserve Sharing Agreement is 253 MW's effective June 1, 2013 (the date at which EKPC joins PJM).
- 1.4 LG&E and KU remain committed to burning higher sulfur fuels.

## 2. Proposed or Expected New Environmental Regulations for Air and Water

- 2.1 Final Cross State Air Pollution Rules (CSAPR) were issued in July 2011, with the order being stayed on December 30, 2011, and completely struck down on August 21, 2012.
  - Existing Clean Air Interstate Rule (CAIR) stays in effect for all of the planning cycle.



# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.2 Mercury and Air Toxics Standards (MATS) final rules were issued February 16, 2012.

- Including a potential delay of up to one year that can be applied for, the compliance date will be April 16, 2016.
- A second, additional year of delay can be obtained in certain hardship cases, including retirements that could adversely impact transmission reliability. None of the LKE projects are counting on that second year of delay.

### 2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> and SO<sub>2</sub>. The final attainment designations for the short term NO<sub>x</sub> standard have been delayed for up to three years due to inadequate monitoring. Based on the new short term SO<sub>2</sub> standards, compliance requirements must be in place by June 2017.

- The Mill Creek Wet (WFGD) FGD project is expected to mitigate the area in Jefferson County that has been proposed as non-attainment.

### 2.4 The EPA issued its proposal on PM NAAQS on December 14, 2012.

- The current annual Particulate Matter standard for (PM)<sub>2.5</sub> of 15 ug/M<sup>3</sup> was lowered to 12ug/M<sup>3</sup>.
  - This puts Jefferson and Bullitt Counties as non-attainment.
  - Implementation is expected between 2021 and 2025.
  - The recent modifications at Gallagher Station, the shutting down of Cane Run 4, 5, and 6, and the baghouses, scrubbers, and dry sorbent injection systems at Mill Creek should mitigate concerns in Jefferson County.
  - In general, on units adding baghouses, LKE should have no trouble being compliant.



# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.5 The EPA is scheduled for a 2013 re-evaluation of the 8-hour ozone standard. Due to litigation, they were prepared to issue an early revision that would have been much lower with large impacts industry wide; however, they instead decided to re-instate the 2008 NAAQS Ozone 8-hour standard.

- Non Quality Assured 2012 monitor data indicates Jefferson County as non-attainment with the 1997 and the 2008 standard.
  - Likely Case: Shutdown of Cane Run 4, 5, and 6 mitigates the issue.
  - Worst Case: SCRs are needed at Mill Creek 1 and 2 to mitigate the issue, which are accounted for in the 2014BP.

2.6 Cane Run Coal will be retired May 1, 2015.

- Combined cycle replacement available on that date.
- Should that date slip a few days, the coal can continue to run that same number of days.
- There are 23 employees expected to retire or take the severance, and 48 will be placed elsewhere.

2.7 Green River Coal will be retired October 1, 2014.

- This presumes that the one-year extension does not apply in situations where no environmental controls are being added.
- A Transmission Capital project (Matanzas) is slated to be completed in October, 2013 which will provide greater flexibility around running the Green River units.
  - However, the impact from Big Rivers potentially shutting down the Wilson Unit is uncertain.
- Of the 24 employees expected to be placed (with an additional 15 retiring/taking severance), they will be split between Customer Services Meter Reading (11) and Power Generation (13).



# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

- 2.8 On March 21, 2011 EPA published a final rule that identified non-hazardous secondary materials that are considered solid wastes when combusted.
- Boiler cleaning waste affected and disposal by burning in the boiler will be prohibited unless we are permitted as a “commercial and industrial solid waste incinerator”.
  - State is researching the need for SIP revision.
    - If not needed, effective April 2016 (three years from rule).
    - If needed, up to three additional years (2019).
      - This has O&M implications.
- 2.9 GHG New Source Performance Standards (NSPS) for new sources
- EPA announced proposed rule on 04/13/2012.
    - Clean Air Act requires EPA to take final action on proposed rule within one year of publication, by April 13, 2013.
      - EPA did not meet deadline.
  - Only addresses CO<sub>2</sub> with limit of 1,000 lbs/MWh(gross).
  - Affects new units only (Coal-Fired Units, Integrated Gas Combined Cycle (IGCC), Natural Gas Combined Cycle (NGCC)).
    - Cane Run 7 NGCC is the only unit in the LKE fleet currently impacted.
      - Cane Run 7 NGCC emission rate estimated at 800 lbs/MWh (gross) during full load operation.
    - New simple cycle turbines not affected.



# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

**2.10 President Obama's "climate action plan" announced on June 25, 2013 will target CO<sub>2</sub> reductions to existing coal-fired power plants.**

- **Proposed standards to be announced June, 2014.**
- **EPA is still under a settlement agreement with environmental groups to pursue climate new source performance standards under Clean Air Act section 111 (d).**
- **A large amount of uncertainty exists, both on content and timing.**

**2.11 The 2011 ECR compliance plan settlement and CPCN were approved December 16, 2011, and include the following air quality controls:**

- **A new Mill Creek 4 WFGD (December 2014).**
- **A new Mill Creek 3 WFGD (June 2016).**
  - **this is a deviation to the plan that was approved, which was for a refurbishment.**
- **A new Mill Creek 1 and 2 (combined) WFGD (May 2015).**
- **Fabric Filters on Ghent 1-4, Mill Creek 1-4, Brown 3, and Trimble County 1.**
  - **2014 in-service: GH3 (May), GH4 (November), MC4 (December)**
  - **2015 in-service: BR3 (April), GH1 (May), GH2 (November), MC1 (May), MC2 (May), TC1 (October)**
    - ❖ **The existing precipitators on Ghent 1 and 2 will be removed.**
  - **2016 in-service: MC3 (June) in conjunction with the new PJFF tie-in outage.**
- **The Brown 1-2 Fabric Filters were removed from the 2011 ECR plan as part of the settlement. The fabric filters are not included in the 2014 BP. Brown 1 and 2 do remain in the generation mix through the planning period, however.**
  - **With Nalco additive included for coal treatment and WFGD slurry Mercury absorbent.**
  - **Run times may be limited.**



# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.12 Significant O&M and cost of sales (~\$50M per year) will be incurred as remaining units become operational for MATS Compliance.

- Costs will begin ramping up in 2014 as units are completed.
  - Additional limestone usage at Mill Creek 1 and 2 WFGD.
  - Additional hydrated lime injection to protect bags at all baghouse installations.
  - Powdered Activated Carbon (PAC) Injection at all installations.
- Prior to 180 days after the compliance date of April 16, 2015 (or April 16, 2016 for units that have been granted an extension), all units must have completed a boiler tune-up with specific documentation of improvements and procedures and effects on CO and NO<sub>x</sub>.
  - EPA has intent to allow for the boiler tune-up to occur prior to the compliance date, however, further clarification that is needed by the EPA should be forthcoming.

2.13 EPA has negotiated a delay in issuing the final regulations for 316(b).

- The final rule now must be issued by November 4, 2013.
- A Five-Year implementation period is expected.
- Current capital estimate to comply is \$3M each for Mill Creek, Trimble County, Ghent, and Brown ( ½ in 2015, ½ in 2016).
  - Additional chemicals (as O&M) may also be required.
- Dollars could shift out further should there be any type of delays.
- There is no mandate for cooling towers at the current time (Mill Creek 1 is a sensitivity in 2017).





# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

- 2.14 Effluent water guideline draft proposal was issued April 19, 2013, with the final rule targeted to be issued May 22, 2014 (though unlikely they will meet that date).
- Timing expected to coincide with final rules on coal combustion residuals (CCR's).
  - A Five-Year implementation period is expected, however, a mercury discharge limit of 51 ppt for Ghent as part of its KPDES permit could move up the timing of the Ghent related expenditures.
  - Ultimate implementation timing as well as scope are uncertain at this time.
    - Eight options being considered from very good to very bad on the industry, will likely end up in the middle.
  - A placeholder per station is included (\$60M Ghent, \$60M Mill Creek, \$40M Brown, \$20M Trimble County, and \$10M Cane Run) until engineering estimates can be performed in 2014.
  - The dollars are split ½ in 2017 and ½ in 2018, however, they could vary by facility based on permit renewal dates.
    - O&M for chemicals will also be needed.
- 2.15 Internal Combustion Engine and Reciprocating Internal Combustion Engines (IC & RICE) regulation finalized in 2010.
- Non-certified engines purchased after 2005 must be tested for compliance and may need “tailpipe” controls for particulates, NOx and Volatile Organic Compounds (VOC) emissions.
  - Existing Emergency Compression engines <500HP require compliance with “work practice standards” including hour meter by May, 2013.
  - Existing Emergency Spark engines <500HP require compliance with “work practice standards” including hour meter by October 2013.



# Major Assumptions (cont.)

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.16 Ghent Consent Decree negotiated SO<sub>3</sub> (H<sub>2</sub>SO<sub>4</sub>) permitted emission limits with EPA in 2012.

- Additional testing will be necessary and engineering studies may be required.
- Ghent 2 additional SO<sub>3</sub> control equipment (BACT) is complete.
- Permit includes operational monitoring of SO<sub>3</sub> control equipment.
- SIC Monitors will be required for each unit.
- Additional emissions testing needed for correlation per the Compliance Assurance Monitoring (CAM) Plan.

### 2.17 Cane Run Landfill Dust Suppressant.

- Chemical suppressant is to be added during dry weather to the open landfill area to mitigate dust.

# Major Assumptions (cont.)

## 3. Expansion/Capacity

3.1 A combined cycle unit (Cane Run 7) will be added May 1, 2015 at the Cane Run location.

- 2 x 1, 640 MW Summer Net (Ownership is 78% KU, 22% LG&E).
- Replacing Cane Run Coal retired on that date.
- CCN approved in September, 2012.
- Expense profile based on a Long-Term Services Agreement being in place.

3.2 A second combined cycle unit will be added May 1, 2018 (ownership is 50% KU, 50% LG&E).

- The location is still to be determined (Most likely either Brown or Green River).
- 2 x 1, 640 MW Summer Net, with other options for a comparable number of MW's being considered (i.e. two 1 X 1's).
- Expense profile based on a Long-Term Services Agreement being in place.

3.3 Some reserve margin purchases for 2016 and 2017 will likely still be needed ( ~165MW).

3.4 The third combined cycle will come on-line May 1, 2025.

3.5 Brown 1 and 2 are included through the planning period, but without fabric filters.

- The Nalco product, to keep mercury emissions lower, will be utilized.

3.6 The four Ohio Falls units still to be rehabilitated (the other four are complete) have the following scheduled completion dates.

- Unit 1 (March 2014)
- Units 3, 4 and 8 will be January, 2015, October, 2015, and July, 2016, but the order is uncertain and being implemented on worst conditioned unit at the time getting priority



# Major Assumptions (cont.)

## 3. Expansion/Capacity (Cont.)

- 3.7 Black start additions (for system restoration purposes) will take place in 2017 and 2018.
- Trimble County Site 2017 in-service.
  - Cane Run Site 2018 in-service.
- 3.8 Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.
- Group 3 consists of the older, smaller CT's.
  - No Group 3 units are being retired in the plan.
- 3.9 Biomass co-firing projects for 2 units is a sensitivity, not included in the base Business Plan.
- 3.10 Landfill gas projects are a sensitivity, not included in the base Business Plan.
- No activity currently taking place.
  - The only scenario at current natural gas prices would be if a company is doing it for Corporate Social Responsibility purposes and LKE partnered with them in some capacity.
- 3.11 A carbon capture and sequestration (CCS) demonstration facility for 100 MW is a sensitivity.
- A much smaller scale demonstration project hosted by Brown Station and primarily funded through DOE takes place in 2013-2016.



# Major Assumptions (cont.)

## **4. Coal Combustion Residuals (CCR's)**

### **4.1 EPA issued two proposals for public input for coal combustion residuals (CCR's) in June 2010.**

- Final rules are expected in April, 2014 and once final rules are issued there will be a five-year implementation period with an additional two years to close existing ponds. Ponds are expected to be eliminated for ash storage.
- EPA is looking to tie the timing of CCR's and effluent water (see 2.14) together.
  - Environmental groups are suing for an earlier release.
  - Congress is working on a bi-partisan effort.
  - Expected timeframe of 2018 - 2020 on pond closures and 2017-2018 on construction of new process ponds.
  - A designation of "Hazardous" vs. "Non-Hazardous" appears to be strongly trending toward "Non-Hazardous".
  - The designation will not change the capital plan but would reduce beneficial re-use opportunities for structural fill and gypsum for wallboard if declared "hazardous".

### **4.2 Trimble County Landfill and Transport.**

- An alternative footprint is being pursued.
- The projected in-service date is September, 2017 for the transport and treatment system, based on a landfill permit being issued by the Kentucky Division of Waste Management in October, 2014 (application submitted November, 2013, approved in 12 months).
  - Phase 1 of the landfill is planned for full operations in April, 2018.
- This would allow for a 2.75 year construction schedule and would leave a 2.0 year buffer on the BAP at the current projected generation rates of CCR from Generation Planning.

### **4.3 Brown Ash Pond is being converted to a landfill, with an expected in-service date of April 2015 for Phase 1.**

- KYDWM permit expected September/October 2013.
- Construction schedule is approximately 18 months.
- All three phases will be staged concurrently.



# Major Assumptions (cont.)

## **4. Coal Combustion Residuals (CCR) (Cont.)**

**4.4 Ghent Landfill Phase 1 construction will be substantially completed by 4Q 2013, with significant O&M starting in 1Q 2013.**

- **The transport component will not go into service until 2Q 2014.**
- **All permit approvals have been received, however, a new KPDES permit is still needed for water run-off.**

**4.5 A new Mill Creek landfill will be in-service by December 31, 2019.**

- **Landfill location assumption is 1.5 miles from Mill Creek with a 1.5 mile transport pipe conveyer.**

**4.6 The Cane Run MSE Wall will be completed in 3<sup>rd</sup> Quarter 2014.**

**4.7 The Cane Run Landfill will be closed in 2016 after generation has ceased.**

**4.8 The Cane Run Ash pond Cap & Closure project will be completed in 2017.**

**4.9 All CCR Capital Projects use an annual escalation rate of 4.0%.**



# Major Assumptions (cont.)

## •5. Operational and Other

### 5.1 Annual escalation rates for internal labor, contract labor and materials are as follows:

- Internal labor: 3.0%.
- Contract/services labor: 3.0% for general, 3.5% for highly skilled (welders).
- Chemicals: 6.0% for specialty (Nalco), 5.0% for commodity (Brenntag)
- Fuels and additives 5.0%.
- All other non-labor 2.0%.

### 5.2 Planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years, with the following exceptions:

- Brown units 1 and 3 over-lap by 2 weeks every other year.
- Cane Run units are 3 week outages one year with no outage the next year, with this cycle repeating.
- Trimble County 1 is 4 week outages one year with no outage the next year, with this cycle repeating.
- Trimble County 2 will have an annual outage until the unit becomes consistently reliable.



# Major Assumptions (cont.)

## 5. Operational and Other (Cont.)

### 5.3 The next turbine overhauls by unit are as follows:

- 2014 : Mill Creek 4, Ghent 4.
- 2015 : Ghent 1, Brown 1
- 2016 : None scheduled.
- 2017: Brown 2, Trimble 1
- 2018: Ghent 3, Trimble 2

### 5.4 The permanent burner replacements for TC2 are scheduled to be installed in the Spring, 2014.

### 5.5 Significant generator rewind/stator rewind dollars are included in the 2013-2017 timeframe.

- Brown 2 generator (stator and rotor) rewind in 2017 (some dollars also in 2016).
- Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.
  - The spare sets will be installed on MC4 in 2014, MC3 in 2019, MC2 in 2020, and MC1 in 2021.

### 5.6 The corrosion fatigue inspection schedule is as follows:

- 2014: Ghent 4
- 2015: Ghent 1, Mill Creek 1
- 2016: Brown 1, Mill Creek 2, Mill Creek 4
- 2017: Brown 2, Mill Creek 1, Mill Creek 4, TC1
- 2018: Brown 3, Ghent 1, Ghent 3, TC2





# Major Assumptions (cont.)

## 5. Operational and Other (Cont.)

### 5.7 The High Energy Piping (HEP) inspection schedule is as follows:

- 2014: Brown 1, Ghent 3, Ghent 4, Mill Creek 4, TC2
- 2015: Ghent 1, Ghent 2, Mill Creek 3
- 2016: Brown 3, Mill Creek 2, TC2
- 2017: Brown 2, Mill Creek 1, TC1
- 2018: Brown 1, Ghent 1, Ghent 3, Ghent 4, Mill Creek 2, Mill Creek 4

### 5.8 The fuel procurement plan is pushing toward higher chlorine ILL. Basin fuels, which will drive burner modifications on at least two Mill Creek units and two Ghent units.

- Permit changes may also be needed.

### 5.9 Targets for percentage of fuel hedged in the 2014 Business Plan are as follows:

- Year 1 90%-100%
- Year 2 80%-95%
- Year 3 40%-90%
- Year 4 30%-70%
- Year 5 10%-50%
- Year 6 0%-30%



# Major Assumptions (cont.)

## 5. Operational and Other (Cont.)

### 5.10 Combustion turbine outages in the plan:

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense – approximately 10%) vs. new parts (capital – approximately 90%).
- The first set of hot gas path inspections for Trimble CT's are complete as of the Spring, 2013. The cycle starts again with one unit in 2016, two units in 2017, two units in 2018, and one unit in 2019.
- Brown C inspections by unit are as follows:
  - ❖ Unit 9 in 2013
  - ❖ Unit 10 in 2015
  - ❖ Unit 6 in 2018
  - ❖ Unit 7 in 2019
  - ❖ Unit 11 in 2020
  - ❖ Unit 5 in 2023
  - ❖ Unit 8 in 2021
- The expiration date for the Brown 6 and 7 Long-Term Services Agreements (LTSA) is October 1, 2016 based on the 13-year criteria.
  - ❖ Replacement LTSA's are not expected.
- The CT component outages for Cane Run 7 are a Combustion Inspection 2017, Hot Gas Path Inspection 2019, and Combustion Inspection 2022.
  - ❖ Cane Run 7 CT's are covered under a signed LTSC.
  - ❖ The turbine/generator overhaul will be every seven years, with the first one in 2022.

5.11 NERC Cyber Security Solution (all coal-fired stations plus Paddy's Run and Haefling) is included, along with Microsoft Upgrades for Ghent and Trimble County due to 2014 de-support of Windows XP.

5.12 CIP Version 4 will have an effective date of April 1, 2014, with CIP version 5 effective July 1, 2015.



# Major Assumptions (cont.)

## 5. Operational and Other (Cont.)

5.13 Complete demolition of Paddy's Run Coal Plant will take place 2015-2016, and complete demolition of Canal Station 2017-2018. Paddy's stacks were removed in 2013.

5.14 Cost of removal reserves at 12/31/15 are projected to be:

- Tyrone \$5M
- Green River \$12M
- Cane Run \$35M

5.15 Expected write-offs to expense include:

- Cane Run M&S \$8M (2015)
- Green River M&S \$2M (2015)
- Ghent Ash Handling M&S \$1M (2014)
- Mill Creek FGD M&S \$1.5M (2016)

5.16 A MAXIMO Upgrade (tied to Oracle Upgrade) will be completed in August, 2013.

5.17 The proysm run dated August 14<sup>th</sup> is the official generation forecast for the 2014 Business Plan.



# Financial Performance

## 2014-2018 Target Reconciliations – OPEX (\$000)

	2014	2015	2016	2017	2018
	Plan	Plan	Plan	Plan	Plan
<u>OPEX 2013 BP to 2014 Target</u>					
Prior Plan	254,286	255,773	235,636	240,422	269,425
Changes:					
Feb 2013 Re-org	(2,205)	(2,270)	(2,337)	(2,406)	(2,477)
Remove COO expenses	(647)	(664)	(681)	(698)	(716)
IT O&M Commitment Transfer	(148)	(151)	(154)	(157)	(160)
Current Plan	<u>251,287</u>	<u>252,689</u>	<u>232,464</u>	<u>237,161</u>	<u>266,072</u>

# Financial Performance

## Plan over Plan summary total costs (\$000)

	2014	2015	2016	2017	2018
	Plan	Plan	Plan	Plan	Plan
<b><u>Total Controllable Costs Compare to prior plan</u></b>					
<b><u>Prior Plan</u></b>					
OPEX	251,287	252,689	232,464	237,161	266,072
Non Mechanism COS	47,467	38,519	35,080	36,234	37,774
Total Non Mechanism Costs	298,754	291,208	267,544	273,396	303,846
ECR COS	36,127	67,393	100,415	104,005	110,684
Total Controllable Costs	334,881	358,600	367,960	377,400	414,530
<b><u>Current Plan</u></b>					
OPEX	245,051	245,305	234,688	243,051	267,478
Non Mechanism COS	43,124	36,896	35,691	37,532	37,672
Total Non Mechanism Costs	288,174	282,201	270,379	280,582	305,150
ECR COS	27,158	44,800	59,098	66,123	67,220
Total Controllable Costs	315,332	327,001	329,477	346,705	372,370
<b><u>Variance - Fav (Unfav)</u></b>					
OPEX	6,236	7,384	(2,223)	(5,889)	(1,406)
Non Mechanism COS	4,344	1,623	(611)	(1,298)	103
<b>Total Non Mechanism Costs</b>	<b>10,580</b>	<b>9,007</b>	<b>(2,835)</b>	<b>(7,187)</b>	<b>(1,304)</b>
ECR COS	8,969	22,593	41,318	37,882	43,463
Total Controllable Costs	19,549	31,599	38,483	30,696	42,160

# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Company Labor	87,233	90,436	97,774	98,148	94,349	94,952	101,680
Resident Contractors	22,898	23,981	24,473	20,702	19,554	19,766	20,755
Maintenance	56,131	64,516	65,211	69,000	66,048	68,144	69,285
Outages	40,974	21,724	34,637	35,993	31,996	33,958	41,240
Operations	22,703	22,453	22,956	21,462	22,741	26,230	34,519
Subtotal OPEX/Other expense	229,939	223,110	245,051	245,305	234,688	243,051	267,478
Gross Margin Expenses *	57,122	58,133	70,282	81,696	94,789	103,654	104,892
* (see next slide for detail)							
Total Income Statement items	287,061	281,242	315,332	327,001	329,477	346,705	372,370



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Adjusted Prior Plan	251,287	252,689	232,464	237,161	266,072
Drivers:					
Change in GR closure date (2015 to 2014)	(105)	(7,764)			
Inventory write offs - Ghent and Mill Creek	878		1,455		
Move BR1 outage from 2014 to 2015	(4,176)	5,293			
Move MC3 outage from 2015 to 2016		(2,800)	2,800		
Additional TC1 outage in 2017				3,485	
Outage schedule scope and timing updates	262	(33)	288	(2,107)	(2,640)
Labor	(2,362)	(2,332)	(4,551)	(2,370)	(1,716)
Changes in Maintenance and Operations expense	(565)	388	2,480	7,032	5,771
Other Small Various Puts and Takes	(169)	(136)	(249)	(150)	(8)
Current Plan	<u>245,051</u>	<u>245,305</u>	<u>234,688</u>	<u>243,051</u>	<u>267,478</u>
<b>Plan To Plan Variance</b>	<b><u>6,236</u></b>	<b><u>7,384</u></b>	<b><u>(2,223)</u></b>	<b><u>(5,889)</u></b>	<b><u>(1,406)</u></b>



# Financial Performance

## 2012-2018 Margin Expenses / Cost of Sales/ ECR (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Gross Margin Elements</b>							
<u>ECR</u>							
Labor	1,715	316	686	609	626	637	657
Resident Contractors (primarily landfill)	866	2,169	3,470	4,967	4,989	5,695	5,940
Environmental Maint & Ops	740	262	1,046	1,033	1,049	2,027	2,271
ECR Maintenance SDRS	4,956	-	-	-	-	-	-
ECR Baghouse Maintenance	-	-	122	2,282	4,004	4,084	4,166
ECR Activated Carbon	1,662	-	1,913	11,753	22,722	24,362	24,401
ECR Landfill Operations	-	1,873	3,838	3,926	4,033	5,870	5,937
ECR Fly Ash Disposal	194	-	-	-	-	-	-
ECR Nox Emission Allowances	3	0	-	-	-	-	-
ECR Nox Reduction Reagent	1,235	1,063	849	523	430	438	447
ECR Other Waste Disposal	-	227	1,350	1,350	1,350	1,377	1,405
ECR Scrubber Reactant Ex	6,910	-	-	-	-	-	-
ECR Sorbent Injection Operation	202	55	80	84	88	90	92
ECR SO2 Emission Allowances	89	112	-	-	-	-	-
ECR Sorbent Reactant - Reagent Only	11,242	14,098	13,804	18,273	19,808	21,542	21,905
Total ECR	29,814	20,175	27,158	44,800	59,098	66,123	67,220





# Financial Performance

## 2012-2018 Margin Expenses / Cost of Sales/Non ECR (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Gross Margin Elements</b>							
<u>Non-ECR</u>							
Resident Contractors	534	179	707	728	750	765	780
Environmental Maint & Ops	-	391	-	-	-	-	-
Mercury Monitors Operations	-	112	186	186	190	193	197
Activated Carbon	-	877	3,401	4,621	4,374	4,878	5,282
Other Waste Disposal	2,945	1,951	2,329	1,439	1,102	1,124	1,147
NOx Emission Allowances	60	64	54	-	-	-	0
NOx Reduction Reagent	8,201	9,365	10,307	10,471	10,242	10,407	10,493
Scrubber Reactant Ex	15,569	24,579	25,027	16,821	15,643	16,672	16,303
SO2 Emission Allowances	36	14	31	31	31	32	32
Sorbent Injection Operation	(133)	1	-	-	-	-	-
Sorbent Reactant - Reagent Only	96	425	1,082	2,599	3,359	3,460	3,438
<b>Total Non-ECR</b>	<b>27,308</b>	<b>37,957</b>	<b>43,124</b>	<b>36,896</b>	<b>35,691</b>	<b>37,532</b>	<b>37,672</b>
<b>Total Gross Margin</b>	<b>57,122</b>	<b>58,133</b>	<b>70,282</b>	<b>81,696</b>	<b>94,789</b>	<b>103,654</b>	<b>104,892</b>



	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<u>ECR Prior Plan</u>	36,127	67,393	100,415	104,005	110,684
Drivers:					
Lower price of Activated Carbon	(2,426)	(22,994)	(42,275)	(42,824)	(48,676)
Change in SAM Mitigation (Sorbent Reagent costs)	(1,188)	3,274	5,027	5,657	5,678
Change in baghouse Mtce (BR3)	(237)	1,346	3,055	3,257	3,322
Lower Cost estimates for landfill maintenance	(3,138)	(4,140)	(6,925)	(3,769)	(3,580)
Change in Service date of Brown landfill (2015 from 2014)	(2,251)				
Other Small Various Puts and Takes	271	(79)	(199)	(203)	(207)
<u>ECR Current Plan</u>	<u>27,158</u>	<u>44,800</u>	<u>59,098</u>	<u>66,123</u>	<u>67,220</u>
<b>Plan To Plan Variance</b>	<b>8,969</b>	<b>22,593</b>	<b>41,318</b>	<b>37,882</b>	<b>43,463</b>
<u>Non-ECR Prior Plan</u>	47,467	38,519	35,080	36,234	37,774
Drivers:					
Scrubber Reactant lower cost projections	(5,180)	(3,225)	(264)	289	(1,026)
NOX Reactant higher cost projections	1,141	1,557	1,146	922	838
Other Small Various Puts and Takes	(304)	45	(270)	87	84
<u>Non-ECR Current Plan</u>	<u>43,124</u>	<u>36,896</u>	<u>35,691</u>	<u>37,532</u>	<u>37,672</u>
<b>Plan To Plan Variance</b>	<b>4,344</b>	<b>1,623</b>	<b>(611)</b>	<b>(1,298)</b>	<b>103</b>
<b>Grand Total Gross Margin Expense</b>	<b>70,282</b>	<b>81,696</b>	<b>94,789</b>	<b>103,654</b>	<b>104,892</b>

# 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

	2012	2013 FC	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Environmental Mechanism (ECR)</b>							
133088 BR FGD Agitator Repl 16	-	-	-	-	595	-	-
140375 BR3 Spare HWRS Pump	-	394	-	403	-	-	-
135122 MC1 PJFF BC 2018	-	-	-	-	-	-	1,626
135123 MC2 PJFF BC 2018	-	-	-	-	-	-	1,626
135102 BR3 PJFF BC 2018	-	-	-	-	-	-	1,839
137671LGE TC2 PJFF B&C	-	-	1,929	-	-	-	-
135124 MC3 PJFF BC 2018	-	-	-	-	-	-	1,936
135245LGE TC2 PJFF B&C 2017	-	-	-	-	-	-	2,083
135120 MC4 PJFF BC 2017	-	-	-	-	-	2,253	-
133939 BR3 SCR Catalyst	-	-	539	1,961	-	-	-
135281 GH3 PJFF BC 2017	-	-	-	-	-	2,704	-
135283 GH4 PJFF BC 2017	-	-	-	-	-	2,704	-
135279 GH2 PJFF BC 2018	-	-	-	-	-	-	2,758
135277 GH1 PJFF BC 2018	-	-	-	-	-	-	2,762
136640 GS RD Hg Contrl LGE	-	-	-	4,000	-	-	-
117136 CR Landfill Vertical Expansior	(2)	-	-	-	-	-	-
	(2)	394	2,468	6,363	595	7,661	14,630
<b>Required &gt;\$3M</b>							
124288 BR3 Generator Rewind 11-12	9,991	(92)	-	-	-	-	-
137600 CR Plant Closure	-	-	-	4,800	3,800	-	-
132921 MC3 Reheater	1,486	4,585	-	-	-	-	-
137594 GR Plant Closure	-	-	-	5,000	-	-	-
132804 MC3 BURNERS 2013	1,222	3,636	-	-	-	-	-
133468 GH3 SCR L1 Repl	-	-	-	1,063	2,510	-	-
133470 GH4 SCR L1 Repl	-	-	-	1,063	2,510	-	-
139669 BR1&2 Mercury Mitigation Sy:	-	3,000	572	-	-	-	-
134111LGE TC2 SCR L2 REPLACEMENT	-	-	-	-	3,207	84	-
112767 MC Landfill Expansion	-	149	456	95	1,875	263	263
All other less than \$3M	26,697	19,218	7,458	5,109	3,536	7,007	5,089
	39,396	30,496	8,486	17,130	17,439	7,354	5,352



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000) (cont.)

	2012	2013 FC	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>High Risk &gt;\$3M</b>							
123906 BRCT6 C Inspection 13	-	-	-	-	-	-	19,000
123907 BRCT9 C Inspection 11	1,444	6,710	902	2,242	-	-	-
135234 CR7 CCGT CI (2017)	-	-	-	-	-	10,333	-
139825 BR3 HP-IP Repl	-	-	-	-	-	-	9,975
131974 GH 3 Burner Repl	-	-	-	-	309	2,058	6,122
123910 BRCT10 C Inspection 12	-	-	1,532	6,743	-	-	-
131975 GH4 Burner Repl	-	295	7,390	300	-	-	-
127642 MC4 Burners	-	3,889	3,450	-	-	-	-
140105 CR7 CCGT INVENTORY	-	-	2,000	5,000	-	-	-
132924 MC4 Reheater	-	1,171	5,079	-	-	-	-
134561 PR13 Hot Gas Path Inspectio	-	-	-	-	-	-	6,120
135645 GH3 RH Outlet Header Repl	-	-	-	-	-	1,852	4,115
132002 TC CT HGP Insp #3	-	-	-	-	-	5,348	-
132000 TC CT HGP Insp #1	-	-	-	-	5,192	-	-
132001 TC CT HGP Insp #2	-	-	-	-	-	5,192	-
131116 GH Stacker Track Repl 1/2 E:	-	4,950	-	-	-	-	-
132901 MC4 Cooling Tower Fill	-	-	4,900	-	-	-	-
133741 GH3 Main Condenser Retube	-	-	-	-	-	3,087	1,574
139718 MC4 Inter SH Pendants	-	-	-	-	-	1,500	2,875
133971 BR2 Cooling Tower Rebuild	-	-	-	-	-	4,206	-
126592LGE TC CT HGPI LGE #5	4,070	(120)	-	-	-	-	-
126593LGE TC CT HGPI # 6	-	3,919	-	-	-	-	-
136649 MC4 Final SH Pendants	-	784	3,075	-	-	-	-
123911 BRCT10 Parts Recond 12	-	-	-	-	1,170	2,379	-
122086 DX1 OVERHAUL 09-10	2,924	570	-	-	-	-	-
133938 BR1 Cooling Tower Rebuild	-	-	1,365	1,960	-	-	-
137024 GH 138kv Switchgear Upgrad	-	-	-	360	2,478	463	-
140179 GH1 Air Heater Baskets	-	-	-	-	-	1,543	1,543
136648 MC3 Final SH Pendants	-	686	1,152	-	1,200	-	-
All other less than \$3M	3,009	27,115	31,882	28,562	18,236	17,423	21,278
	11,448	49,970	62,726	45,167	28,585	55,382	72,602



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000) (cont.)

	2012	2013 FC	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>All Other &gt;\$3M</b>							
131986 GH3 Turb Eff Upgr	-	-	-	-	1,029	3,087	8,231
131955 BR2 Gen Rewind	-	-	-	-	2,333	4,667	-
132961 MC2 DCS 2018	-	-	-	-	-	1,000	4,850
132965 MC4 DCS 2018	-	-	-	-	-	2,000	3,850
137473 GH3 Finishing SH Repl 2018	-	-	-	-	-	1,465	4,089
133102 GS GE 345kV Spr LGE	-	-	-	1,303	3,040	-	-
123837 MC2 FGD Refurbishment	3,636	-	-	-	-	-	-
132003 TC CT HGP Insp #4	-	-	-	-	-	-	3,529
132004 TC CT HGP Insp #5	-	-	-	-	-	-	3,529
137597 TY Plant Closure	-	600	-	2,273	600	-	-
140597LGE TC GAS IGNITION FUEL	-	-	306	3,134	-	-	-
134234 MC4 Generator Stator Bar	-	-	3,000	-	-	-	-
135638 MC3 Stator Bars	-	3,000	-	-	-	-	-
139722 MC2 Gen Stator Bar Purchas	-	3,000	-	-	-	-	-
All Other	26,749	12,789	17,035	32,238	23,352	28,206	30,264
	<b>30,385</b>	<b>19,389</b>	<b>20,341</b>	<b>38,946</b>	<b>30,353</b>	<b>40,424</b>	<b>58,342</b>
<b>Total Capital</b>	<b>81,227</b>	<b>100,249</b>	<b>94,021</b>	<b>107,606</b>	<b>76,973</b>	<b>110,822</b>	<b>150,926</b>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

K. Blake

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>2013 Capital BP</b>	<b>94,568</b>	<b>106,263</b>	<b>75,131</b>	<b>184,496</b>	<b>221,285</b>
<b>Changes &lt; ± \$3.0m</b>					
112767 MC Landfill Expansion	(1,444)	(5)	1,725	(12)	(12)
123827 BR1 Gen Rotor Rewind 08	(799)	1,606	-	-	-
123906 BRCT6 C Inspection 13	-	-	-	-	(1,000)
127579 MC1 ECONOMIZER	(1,000)	(4,000)	-	-	-
131116 GH Stacker Track Repl 1/2 East	-	(1,200)	(1,229)	-	-
131972 BRCT7 C Inspection	-	-	-	-	-
131974 GH 3 Burner Repl	-	-	(1,431)	(4,587)	6,122
131975 GH4 Burner Repl	3,098	(2,700)	-	-	-
131986 GH3 Turb Eff Upgr	-	-	1,029	3,087	8,231
131995 TC Generator Rewind	-	-	-	(6,953)	-
131997 TC2 ID Fan Rotor Ovhl	-	-	(3,100)	-	(3,100)
132000 TC CT HGP Insp #1	-	-	5,192	(5,064)	-
132002 TC CT HGP Insp #3	-	-	-	5,348	(5,216)
132003 TC CT HGP Insp #4	-	-	-	-	5,582
132005 TC CT HGP Insp #6	-	-	-	-	(5,216)
132925 MC4 Circ Water Line	-	-	-	-	(3,500)
132957 MC3 SCR Catalyst Layer 3	-	(2,200)	-	1,900	-
132958 MC3 SCR Catalyst Layer 4	-	1,358	-	(38)	(1,320)
132960 MC1 DCS Hardware	-	-	(1,000)	(5,000)	-
132965 MC4 DCS 2018	-	-	-	2,000	(2,150)
133000 MC3 Circ Water Line	-	-	-	(3,500)	-
133401 GH1 Condensate Polisher	-	-	-	-	(5,105)
133938 BR1 Cooling Tower Rebuild	(659)	1,960	-	-	-
134234 MC4 Generator Stator Bar	(5,000)	-	-	-	-
134372 GS PE PR BS - LGE	-	(6,100)	-	(10,000)	(20,000)
134373 GS PE BR BS - LGE	-	-	-	(7,500)	(14,500)
134374 GS PE TC BS - LGE	-	-	-	(11,400)	(22,100)
134561 PR13 Hot Gas Path Inspection	-	-	-	(6,000)	6,120
136097 DX Dam Leakage Rem Phase II	-	-	-	(4,841)	-
136640 GS RD Hg Contrl LGE	(4,000)	4,000	-	-	-
136642 MC2 Heater #3	-	513	(1,600)	-	-
136648 MC3 Final SH Pendants	1,000	-	200	(2,200)	-
137024 GH 138kv Switchgear Upgrade	1,152	(140)	(1,022)	(1,062)	-
137190 BR SW Lines Coating	-	-	(2,005)	-	-
137265 GH1 Upper Slope Repl 2022	330	2,058	-	-	-
137600 CR Plant Closure	-	(3,800)	3,800	-	-
139718 MC4 Inter SH Pendants	-	-	-	1,500	2,875
139825 BR3 HP-IP Repl	-	-	-	-	9,975
140105 CR7 CCGT INVENTORY	2,000	5,000	-	-	-
140107 OF Station Gantry Crane	-	-	2,000	-	-
140179 GH1 Air Heater Baskets	-	-	-	1,543	1,543
140202 GH Stacker Reclaimer Recic	-	-	-	2,572	-
140203 GH Barge Unloader Recir	-	-	2,469	-	-
140655 GS GE TCCT Hrdng LGE	465	-	-	-	-
131607LGE TC SDRS REACTANT TANK ROOF	229	2,064	-	(2,250)	-
131638LGE TC CT INSTALL 345KV CI	-	(1,495)	393	393	1,178
140657KU GS GE BRCT Hrdng KU	-	615	-	-	-
140597LGE TC GAS IGNITION FUEL	306	3,134	-	-	-
LTPGENLG Other LTP Generation Projects	(50)	(1,550)	(4,550)	(9,550)	(9,550)
All Other Changes < ± \$3.0m	3,824	2,227	971	(12,060)	(19,217)
<b>2014 Capital BP</b>	<b>94,021</b>	<b>107,606</b>	<b>76,973</b>	<b>110,822</b>	<b>150,926</b>



# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Mill Creek	215	220	225	226	226	226	227
Trimble County/CTs	152	161	173	175	176	173	178
Cane Run/Ohio Falls	116	122	123	57	56	54	53
Ghent	203	221	234	241	241	241	241
Brown/Dix/Tyrone	143	152	151	148	148	147	146
Green River	41	41	2	2	2	2	2
Generation Services	48	57	60	60	63	64	66
Other Generation Support	17	17	21	21	21	21	21
Budgeting/HR move	28						
2018 CCGT							48
Stranded Employees			11	31	23	9	0
Interns/temps	16	16	14	11	11	11	11
<b>TOTAL</b>	<b>979</b>	<b>1,007</b>	<b>1,014</b>	<b>972</b>	<b>967</b>	<b>948</b>	<b>993</b>
From 2013 Business Plan		1,007	1,026	967			
Variance to 2013 Business Plan		0	-12	5			
<b>TOTAL without Interns/Temps</b>	<b>963</b>	<b>991</b>	<b>1,000</b>	<b>961</b>	<b>956</b>	<b>937</b>	<b>982</b>
<u>Year to Year Increases (Decreases)</u>		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
1.) Maintenance /Operational*		28	-12	-43	-7	-20	42
2.) Compliance – NERC, FERC, CIP, etc.		3	0	0	0	0	0
3.) EPA/Environmental		11	11	0	0	0	0
4.) Admin/Engineering/Corporate/Interns**		-14	8	1	2	1	3
<b>TOTAL</b>		<b>28</b>	<b>7</b>	<b>-42</b>	<b>-5</b>	<b>-19</b>	<b>45</b>

\* Includes retirement of GR plant (net 28) in 2014; retirement of CR plant (net 51) in 2015 and addition of net 39 for CCGT in 2018

\*\* Includes move of 28 employees to CFO and HR in 2013



# Operational Performance

## Key Performance Indicators

KPI	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Generation (Twh) <sup>1</sup>	33.5	34.3	34.8	34.8	35.0	35.2	35.7
EAF (Steam)	79.4%	86.2%	82.6%	85.8%	86.6%	86.8%	87.3%
EFOR (Steam)	7.1%	5.6%	5.0%	5.0%	5.0%	5.0%	5.0%
Controllable Cost (\$M) <sup>2</sup>	\$287.1	\$281.2	\$325.3	\$336.3	\$338.9	\$353.2	\$378.8
Controllable Cost/mwh <sup>2</sup>	\$ 7.59	\$ 8.20	\$ 9.34	\$ 9.66	\$ 9.68	\$ 10.03	\$ 10.61
Recordable Injuries <sup>3</sup>	1.59	1.39	1.80	1.80	1.80	1.80	1.80
Lost Workday Case Rate <sup>4</sup>	0.34	0.00	0.40	0.40	0.40	0.40	0.40

<sup>1</sup> Steam Generation includes 75% of Trimble County 1 and 2.

<sup>2</sup> Controllable Costs include Utility O&M, Other Cost of Sales, and Below-the-Line expenses.

<sup>3</sup> The 2013 forecast for RIIR is the July YTD value

<sup>4</sup> The 2013 forecast for Lost Workday Case Rate is the July YTD value.

\*\* 2013 Forecast is from the 7&5 forecast.

*Red items still subject to change  
before final version complete*



PPL companies



# Plan Risks

- *Any subsequent changes to approved or proposed environmental regulations will impact the investment, construction and implementation of new systems in this plan*
- *Generation dispatch for the plan years is based on current view of regulations and assumptions on pricing for gas supply and allowances which is subject to significant changes to unit cost profiles and maintenance schedules if changes occur*
- *Integration of the major investment in new environmental compliance systems is tied to an extremely aggressive schedule that may impact normal operations of existing plants and could require changes to the outage planning schedule for tie in processes*
- *Availability of equipment and construction resources for major environmental compliance investment across the industry could lead to higher prices and impacts to planned schedule of completion*
- *Expansion of generating capacity and other generation changes consistent with approved integrated resource plan must be balanced with efforts to address transmission system load requirements. Additionally, the timing of retired coal and new CCGT availability will be critical.*
- *Reductions in this plan compared to the previous year's level could result in financial risk in the event of major equipment failure or unplanned events*



# Appendix



# Year over Year Walk Forward OPEX and Other Expense (\$000)

<b>2012 Actual</b>	229,939	<b>2015 Plan</b>	245,305
2013 Re-org	(1,724)	Labor	2,640
Labor	4,853	CR labor net of CR7 labor	(2,530)
Outages	(19,250)	CR severance	(3,909)
Maintenance	8,385	CR Resident Contractors	(1,560)
Other	907	CR 7 Maintenance	3,118
<b>2013 FC</b>	<u>223,110</u>	Inventory Write offs (CR)	(8,000)
Labor	5,946	Inventory Write offs (MC)	1,455
GR severance	2,297	Outages	(3,998)
Inventory Write offs GR	2,000	Maintenance	474
GR retirement labor	(904)	Other	<u>1,692</u>
GR retirement non labor	(3,177)	<b>2016 Plan</b>	234,688
Inventory Write offs Ghent	895	Labor	603
Outages	13,953	Inventory Write offs (MC)	(1,455)
Maintenance	(682)	Outages	1,962
Other	<u>1,613</u>	Maintenance	3,551
<b>2014 Budget</b>	245,051	Other	<u>3,701</u>
Labor	6,288	<b>2017 Plan</b>	243,051
GR severance	(2,297)	Labor	3,332
GR retirement labor	(3,046)	Outages	7,282
GR retirement non labor	(3,342)	2018 CCGT	11,037
CR severance	3,909	Maintenance	1,140
CR labor net of CR7 labor	(4,480)	Other	<u>1,637</u>
CR Resident Contractors	(2,984)	<b>2018 Plan</b>	<u>267,478</u>
Inventory Write offs (GR and Ghent)	(2,895)		
Inventory Write offs (CR)	8,000		
Outages	1,659		
Maintenance	(554)		
Other	<u>(3)</u>		
<b>2015 Plan</b>	245,305		

# Year over Year Walk Forward GMEXP / Cost of Sales (\$000)

<u>ECR</u>		<u>Non Mechanism</u>	
<b>2012 Actual</b>	29,814	<b>2012 Actual</b>	27,308
Scrubber costs moved from ECR to non ECR	(11,866)	Scrubber costs moved from ECR to non ECR	11,866
Landfill Operations (Ghent)	1,873	Scrubber reactant	(2,857)
Other	355	Activated Carbon	877
<b>2013 FC</b>	20,175	Other	763
Activated Carbon (MC and Ghent)	1,913	<b>2013 FC</b>	37,957
Landfill Operations (Ghent)	3,266	Scrubber reactant	448
Other	1,804	Activated Carbon	2,524
<b>2014 Budget</b>	27,158	NOX reduction reagent	942
Activated Carbon (MC, Ghent, Brown, TC)	9,840	Sorbent reactant	658
Sorbent reactant	4,469	Other	595
Baghouse Maintenance	2,160	<b>2014 Budget</b>	43,124
Landfill Operations (Ghent and Brown)	1,585	Scrubber reactant	(8,205)
Other	(413)	Sorbent reactant	1,517
<b>2015 Plan</b>	44,800	Other	461
Activated Carbon (MC, Ghent, Brown, TC)	10,968	<b>2015 Plan</b>	36,896
Baghouse Maintenance	1,722	Scrubber reactant	(1,178)
Sorbent reactant	1,534	Sorbent reactant	759
Other	73	Other	(786)
<b>2016 Plan</b>	59,098	<b>2016 Plan</b>	35,691
Activated Carbon (MC, Ghent, Brown, TC)	1,641	Scrubber reactant	1,029
Landfill Operations (Ghent, Brown, Trimble)	2,543	Activated Carbon	504
Sorbent reactant	1,735	Other	307
Other	1,106	<b>2017 Plan</b>	37,532
<b>2017 Plan</b>	66,123	Scrubber reactant	(369)
Sorbent reactant	363	Activated Carbon	403
Landfill Operations (Ghent, Brown, Trimble)	312	Other	105
Other	423	<b>2018 Plan</b>	37,672
<b>2018 Plan</b>	67,220		



# 2012-2018 Headcount progression

<b>2012 Headcount (including interns)</b>	979	<b>2015 Headcount Plan</b>	972
Feb 2013 Re-org (move to CFO and HR)	(28)	Transferred from retired facilities (CR)	(8)
Plant Operations (all other plants)	28	Plant Operations	1
Environmental/Compliance (primarily Ghent)	14	Engineering Support	2
Commercial Operations (balance sheet)	2	Commercial Operations (O&M)	(1)
Commercial Operations (O&M)	5	Administrative Support	1
Engineering Support	4		<hr/>
Administrative Support	3	<b>2016 Headcount Plan</b>	967
	<hr/>	Transferred from retired facilities (CR)	(14)
<b>2013 Headcount FC</b>	1,007	Plant Operations (retirements)	(6)
Green River Retirement	(39)	Engineering Support	2
Transferred from retired facilities	11	Administrative Support	(1)
Plant Operations (Trimble Co)	9		<hr/>
Plant Operations (all other plants)	7	<b>2017 Headcount Plan</b>	948
Environmental/Compliance (Ghent)	11	Transferred from retired facilities (CR - moved to CCGT)	(9)
Commercial Operations (O&M)	5	2018 CCGT	48
Engineering Support	2	Plant Operations (retirements)	3
Administrative Support	3	Engineering Support	2
Intern	(2)	Commercial Operations (O&M)	1
	<hr/>		<hr/>
<b>2014 Headcount Budget</b>	1,014	<b>2018 Headcount Plan</b>	993
Cane Run Retirement	(71)		
Transferred from retired facilities (CR and GR net)	20		
Plant Operations	8		
Engineering Support	1		
Administrative Support	3		
Intern	(3)		
	<hr/>		
<b>2015 Headcount Plan</b>	972		



## Other Balance Sheet Costs (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Stores Expense							
Labor	2,616	2,530	2,918	2,771	2,833	2,874	3,040
Non labor	959	252	405	416	427	435	444
Total	<u>3,575</u>	<u>2,782</u>	<u>3,323</u>	<u>3,187</u>	<u>3,260</u>	<u>3,309</u>	<u>3,484</u>
Local Engineering							
Labor	199	80	59	39	-	-	-
Non labor	201	118	-	-	-	-	-
Total	<u>401</u>	<u>198</u>	<u>59</u>	<u>39</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Other Costs	<u><u>3,975</u></u>	<u><u>2,979</u></u>	<u><u>3,382</u></u>	<u><u>3,226</u></u>	<u><u>3,260</u></u>	<u><u>3,309</u></u>	<u><u>3,484</u></u>

# 2014 Plan Updated Historical Turbine Outage Schedule

K. Blake

	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23		
GH1	█			█						█							█								█										
GH2						█									█							█							█						
GH3					█								█									█						█							
GH4			█									█							█							█						█			
BR1	█								█								█									█								█	
BR2				█							█								█									█							
BR3		█					█										█						█						█						
GR3			█									█																							
GR4				█	█								█			█																			
TY3					█								█																						
CR4					█									█									█												
CR5				█							█								█																
CR6					█							█									█														
MC1	█					█						█			█								█											█	
MC2					█								█										█								█				
MC3					█									█								█										█			
MC4	█											█				█										█									█
TC1					█						█										█							█							
TC2																																			
Overhauls	4	1	2	3	5	6	2	0	1	1	3	4	4	3	3	1	2	2	2	2	1	2	4	1	2	2	0	2	2	3	1	2	3	0	
Historical																																			
Most Recent																																			
2014 Plan																																			

VG - Valves and Generator



PPL companies

# 2014 Maintenance increases by 12 weeks

Maintenance-Weeks

	2014 Plan					2013 Plan					2014 Plan - 2013 Plan				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Brown 1	3	8	3	1	3	8	1	4	1	3	(5)	7	(1)	-	-
Brown 2	4	1	3	8	1	1	1	4	8	1	3	-	(1)	-	-
Brown 3	3	7	3	1	3	3	4	3	1	3	-	3	-	-	-
Ghent 1	3	8	4	2	4	3	8	4	2	4	-	-	-	-	-
Ghent 2	2	6	4	3	3	2	6	4	3	3	-	-	-	-	-
Ghent 3	6	5	2	3	8	6	5	2	3	8	-	-	-	-	-
Ghent 4	8	-	3	3	4	8	2	3	3	4	-	(2)	-	-	-
Green River 3	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Green River 4	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Cane Run 4	2	-	-	-	-	3	-	-	-	-	(1)	-	-	-	-
Cane Run 5	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Cane Run 6	3	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Mill Creek 1	1	6	1	4	1	1	6	1	4	1	-	-	-	-	-
Mill Creek 2	4	6	4	1	4	4	6	4	1	4	-	-	-	-	-
Mill Creek 3	1	2	9	4	1	1	6	1	4	1	-	(4)	8	-	-
Mill Creek 4	12	1	4	1	4	10	1	4	1	4	2	-	-	-	-
Trimble County 1	2	5	2	9	2	-	4	-	8	-	2	1	2	1	2
Trimble County 2	16	5	5	5	9	6	-	4	-	8	10	5	1	5	1
Cane Run 7	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-
<b>Totals</b>	<b>75</b>	<b>60</b>	<b>47</b>	<b>45</b>	<b>47</b>	<b>63</b>	<b>50</b>	<b>38</b>	<b>39</b>	<b>44</b>	<b>12</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>3</b>
<b>MW-Maint Wks *</b>	<b>32,218</b>	<b>24,272</b>	<b>20,410</b>	<b>19,665</b>	<b>21,947</b>	<b>24,471</b>	<b>21,338</b>	<b>15,998</b>	<b>16,357</b>	<b>20,535</b>	<b>7,747</b>	<b>2,933</b>	<b>4,412</b>	<b>3,307</b>	<b>1,412</b>

\* Coal + CR7 Only

Notes:

2014: Moved BR1 TO to 2015; TC2 burner replacement outage

2015: BR1 TO moved from 2014; BR3 increase due to baghouse installation; MC3 FGD/baghouse moved to 2016; TC outages per plant request

2016: MC3 outage from 2015



PPL companies





**PPL companies**

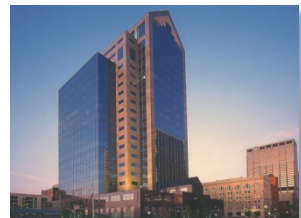
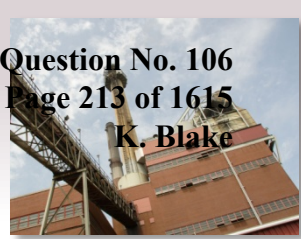
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# Transmission

# 2014 Business Plan

*December 6, 2013*

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- Major Assumptions
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# Plan Highlights

- *The 2014-2018 Transmission Business Plan is designed to meet the overall goals of safety, regulatory compliance, system reliability, and operational performance.*
- *Significant Plan over Plan Changes:*
  - *Work force planning changes and associated headcount increases:*
    - *Compliance*
    - *Contractor/Employee Balance*
    - *Operational Improvement*
  - *Increased capital funding in major initiatives:*
    - *Additional projects driven by new generation supply*
    - *Additional projects identified in the Transmission Expansion Plan and through interconnection agreements driven by long term system planning requirements to reliably serve firm load*
    - *Additional work identified to complete line rating verifications associated with the 2010 NERC Alert*
    - *High reject rate from wood pole inspections driven by KPSC regulations, resulting in significantly larger volume of replacements*
  - *Modest O&M Funding Increase Primarily to Address Compliance Needs*
  - *Continuation of gross margin expenses associated with the MISO Exit Agreement*



# Major Assumptions

## 1. Regulatory and Compliance

### 1.1 Cyber Security:

- 1.1.1 CIP Version 4 implements 17 criteria for identifying critical assets (known as Brightline Criteria) and compliance with V4 will be required starting October 1, 2014. FERC has issued a NOPR proposing to skip CIP V4 and implement CIP V5 on an accelerated schedule. It is assumed that the implementation timeframe for CIP v5 will be 24 months from FERC approval and require compliance by 2016.
- 1.1.2 It is assumed CIP V5 will require secure networks to the substations as well as increased physical security. It is also assumed that fewer than 30 substations will be impacted.
- 1.1.3 It is assumed that additional CIP versions beyond 5 will occur outside this 5 year plan.

### 1.2 2010 NERC Alert-Line Rating:

- 1.2.1 All lines over 100kV will be surveyed and the line rating verified by the end of 2014.
- 1.2.2 Beginning in 2015 all lines 100kV and above must be surveyed every 5 years. The survey data for some lines has already been gathered and will be analyzed in 2014 and 2015 (\$0.3m O&M in each year). Ongoing surveying and analyses of these lines is expected to cost \$1.2m annually (O&M) beginning in 2016.
- 1.2.3 Ongoing surveys are not expected to result in material capital expenditures.

### 1.3 The Plan does not include any capital funding for the following:

- 1.3.1 FERC Order 1000 Regional and Interregional Planning
- 1.3.2 Proposed Revisions to NERC Reliability Planning Standards
- 1.3.3 FERC Order 754 Single Point of Failure Data Request

### 1.4 Gross margin expenses related to the MISO Exit Agreement will continue.

# Major Assumptions

## 2. Expansion Plan and Native Load

- 2.1 Reliability projects in the Business Plan are based on the 2013 annual Transmission Expansion Plan (TEP) which is the most current information known to the Companies; however, the Independent Transmission Organization (ITO) has not yet approved the 2013 TEP. It is assumed that the ITO will approve the TEP without significant revisions. Therefore, the Plan does not include any projects that could result from the ITO's proposed changes to the Companies' Transmission Planning Guidelines used in the TEP.
- 2.2 The Transmission work related to the addition of Cane Run 7 should be completed by the time the plant is operational with the exception of replacements of the 138kV Transformers which will be in service in 2018.
- 2.3 A Combined Cycle Gas Turbine will be in-service, at Green River, by May 1, 2018.
- 2.3.1 This is a placeholder for the unknown Transmission costs. It is assumed that \$97m is needed throughout the plan period, with spending to begin in 2015.
- 2.4 The Plan assumes estimated costs for increased line ratings on certain 69kV lines as a result of the 2013 TEP. Detailed costs will be developed after surveying and subsequent analyses are completed.
- 2.5 The plan does not include capital for new customer requests for long-term transmission service. There are currently no long term transmission service requests that are expected to require material capital.
- 2.6 Connection costs for native load are coordinated with Distribution planning requirements and are estimated at \$20m over the 5 year plan.

# Major Assumptions

## 3. Asset Management

- 3.1 Additional improvements to Cascade asset management software are delayed beyond the 5 year plan. Transmission PI historian will be implemented.
- 3.2 The Plan assumes one 138/69kV transformer failure per year at a cost of \$1.5m.
- 3.3 The Plan assumes other equipment failure rates based on a 5 year average.
- 3.4 The Plan includes funding for Storm Damage (Capital and O&M) based on a 5 year average.
- 3.5 The Plan includes funding for the targeted proactive breaker replacements based on risk criteria.
- 3.6 The Plan includes funding for targeted proactive protection and control replacements based on risk criteria.
- 3.7 The Plan does not include funding for a comprehensive program to proactively replace aging assets.
- 3.8 The new wood pole inspection cycle is six years and began in January 2013. It is assumed that the current rejection rate of 10.5% will continue throughout the 5 year plan. Funding in the Plan assumes a replacement wood pole cost of \$28k per pole and maintaining a 2 year backlog through the inspection cycle.
- 3.9 The steel pole inspection cycle is 12 years and began in January 2013. It is assumed that steel pole inspections will not result in material incremental costs throughout the Plan.
- 3.10 The Static wire upgrade program will resume in 2015
- 3.11 The Plan assumes O&M expenses for asset maintenance will be consistent with historical trends.



# Major Assumptions

## 4. ITO & RC

- 4.1 Transerv will be retained as the ITO service provider to LGE/KU at escalated costs to the existing contract
- 4.2 TVA will be retained as the Reliability Coordinator (RC) at escalated costs to the existing contract



# Major Assumptions

## 5. Operational and Other

5.1 The Plan assumes these material lead times:

6.1.1 Estimates – LiDAR (4 weeks on site) / (4 weeks to process the data)

6.1.2 Steel Poles – 40 weeks or more

6.1.3 Transformers – 45 weeks

6.1.4 Breakers – 16 weeks

5.2 The Plan assumes required outages will be obtained when needed to meet construction schedules.

5.3 The Plan assumes “finite” or “reasonable” lead times on all Right-of-Way (ROW) land acquisitions

## 5.4 Annual Escalation Rates

5.4.1. Internal labor: 3.0%

5.4.2 Contract labor: 3.0%

5.5 Project contingency is assumed at 5%



# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	8,723	9,115	9,029	9,586	9,699	10,063	10,562
Burdens	2,407	2,515	2,491	2,645	2,676	2,776	2,914
Line Clearing	5,521	5,875	5,908	6,677	7,314	7,963	8,616
Aerial and Ground Inspections	318	878	1,157	1,300	1,326	1,352	1,380
Storms	549	395	290	296	302	308	314
NERC LiDAR Testing	15	49	250	255	1,200	1,224	1,248
EKPC Amortization	499	504	84	-	-	-	-
Other Non-labor	10,040	9,992	9,600	10,338	10,406	11,214	11,448
Subtotal OPEX/Other expense	28,072	29,323	28,809	31,097	32,923	34,900	36,482
Gross Margin Expenses *	19,204	14,793	11,467	12,081	12,730	13,359	14,248
* (see Margin slide for detail)							
Total Income Statement items	47,276	44,116	40,276	43,178	45,653	48,259	50,730



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	2014 <u>Budget</u>	2015 <u>Plan</u>	2016 <u>Plan</u>	2017 <u>Plan</u>	2018 <u>Plan</u>
Prior Plan	30,485	33,037	34,319	35,606	36,971
Drivers:					
Substation Maintenance	470	585	609	633	478
Aerial Patrol - Helicopter Service	370	377	385	393	400
Storms - 5 year average	260	265	271	276	281
EMS - Outside Services - Compliance	300	306	312	318	325
Protection - Outside Services Compliance	-	245	250	255	260
Labor Increases	252	406	420	432	445
Bulk Electric System LiDAR	250	(945)	(24)	(24)	(25)
Reduce IN BAT	(250)	(100)	(102)	(104)	(106)
Reduce Climbing Inspection 2014 only	(120)	-	-	-	-
Reduce Operations Outside Services	(300)	(306)	(312)	(318)	(325)
Timing of Back-up Control Center	(200)	(400)	(400)	(200)	-
Reduce FERC Order 1000 Expenses	(276)	(282)	(287)	(293)	(299)
Reduce Lines Vegetation LiDAR	(60)	(60)	(60)	(60)	(60)
Reduce Transerv Consulting	(320)	(326)	(333)	(340)	(346)
EMS Reorganization with IT	(1,302)	(1,334)	(1,368)	(1,402)	(1,437)
EMS Other Non-labor Reductions	(162)	(164)	(166)	(168)	(170)
Eliminate Lines Switch Maintenance	(131)	(134)	(136)	(139)	(142)
Reduce Tower Painting	(150)	(150)	(150)	-	-
Reduce Dir. Strat & Plan outside serv.	(172)	(172)	(217)	-	-
Other	(135)	248	(87)	35	231
Current Plan	<u>28,809</u>	<u>31,097</u>	<u>32,923</u>	<u>34,900</u>	<u>36,482</u>



# Financial Performance

## 2012-2018 Margin Expenses / Cost of Sales (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Margin Expenses							
<b><u>Mechanism Recoverable</u></b>							
Total	-	-	-	-	-	-	-
<b><u>All Other</u></b>							
Internal Transmission - NL	1,930	933	-	-	-	-	-
RSG Expense - NL	206	462	-	-	-	-	-
3rd Party Transmission - NL	772	491	-	-	-	-	-
EKPC NITS - Perm - NL	1,801	1,900	-	-	-	-	-
TVA - Reliability	1,944	2,067	2,117	2,191	2,268	2,346	2,429
SPP/Transerv - ITO	6,454	2,671	2,931	3,077	3,231	3,338	3,672
OMU - Depancaking	1,228	1,564	985	1,053	1,125	1,203	1,286
KMPA - Depancaking	4,869	4,705	5,434	5,760	6,106	6,472	6,861
Total	19,204	14,793	11,467	12,081	12,730	13,359	14,248



## 2014-2018 Margin/Cost of Sales Reconciliation (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
<u>Mechanism recoverable</u>					
Prior Plan					
Drivers					
Current Plan					
<u>Other</u>					
Prior Plan	5,174	5,277	5,383	5,491	5,600
<u>Drivers</u>					
KMPA - not included in 2013 BP	5,434	5,760	6,106	6,472	6,860
OMU - not included in 2013 BP	985	1,053	1,125	1,203	1,286
TVA decrease in expenses	(126)	(96)	(66)	(34)	3
Transerv increase in expenses	-	87	182	227	499
Current Plan	<u>11,467</u>	<u>12,081</u>	<u>12,730</u>	<u>13,359</u>	<u>14,248</u>



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Generation Expansion Plan (GEP)</b>							
Green River 2018 CCGT - Transmission	-	-	-	10,000	30,234	46,494	10,000
Cane Run CCGT - Transmission	1,167	16,728	13,563	4,908	-	-	4,369
<b>Ongoing Capital</b>							
TEP/ITO	4,557	6,703	3,142	15,343	2,726	13,143	13,784
Pole Replacement	13,782	12,081	12,000	14,958	16,741	17,082	19,195
Lines Renewal/Rebuild	3,922	1,110	1,569	976	6,023	17,852	3,609
Breakers	8,265	7,371	2,071	3,064	3,343	3,681	3,492
Transformers	3,206	6,979	2,311	1,425	1,425	1,425	1,425
Control Houses	(0)	811	-	-	3,741	2,706	1,947
Hardware/Software	2,469	1,864	1,035	1,081	1,218	4,201	610
Relays	385	626	627	1,121	1,178	1,197	1,215
Relocations	(81)	1,664	1,741	1,929	285	285	270
RTUs	277	449	713	1,462	1,565	1,711	1,745
Storm Restoration	1,931	868	1,021	1,021	1,021	1,021	1,021
Distribution Taps	867	1,112	-	2,085	3,513	8,674	5,367
<b>Special Projects</b>							
TC2	289	-	-	-	-	-	-
Louisville Upgrades	6,574	14,561	12,104	-	-	-	-
Line Clearance NERC Alert	10,943	13,298	19,382	-	-	-	-
Line Clearance NESC - 69kV	367	1,318	-	-	8,173	-	-
Back-up Control Center	121	108	475	-	7,514	3,122	-
Cyber Security (CIP)	334	1,363	1,624	1,140	1,141	1,140	1,140
Matanzas	7,602	5,703	-	320	-	-	-
KMPA	1,144	-	-	-	-	-	-
<b>Other</b>	<b>8,084</b>	<b>7,841</b>	<b>3,510</b>	<b>3,344</b>	<b>3,302</b>	<b>3,497</b>	<b>3,693</b>
<b>Total Capital</b>	<b>76,205</b>	<b>102,558</b>	<b>76,888</b>	<b>64,178</b>	<b>93,146</b>	<b>127,232</b>	<b>72,884</b>



## Capital Reconciliation (w COR) –Accrual Basis (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Prior Plan	67,545	58,619	56,088	77,342	52,363
Changes:					
Green River 2018 CCGT - Transmission	-	(488)	18,401	34,161	10,000
Cane Run CCGT - Transmission	1,308	968	(4,000)	-	4,369
Line Clearance NERC Alert	2,955	-	-	-	-
Line Clearance NESC - 69kV	(3,000)	(3,000)	4,501	(4,000)	(3,181)
Louisville Area Upgrade	2,328	(6,464)	-	-	-
TEP/ITO	2,992	14,868	(1,974)	4,843	(1,262)
Transformers	456	(3,525)	1,425	(1,625)	325
Pole Replacements	9,031	8,558	8,941	5,504	10,995
Control Houses	(2,245)	(3,015)	1,191	1,156	447
Distribution Taps	(2,299)	(4,082)	409	5,170	393
Cyber Security (CIP)	(687)	1,057	1,041	1,039	1,040
Breakers	61	1,039	1,018	1,006	1,017
Back-Up Control Center	(3,157)	-	7,514	3,122	-
Other	1,599	(357)	(1,412)	(487)	(3,621)
Current Plan	<u>76,888</u>	<u>64,178</u>	<u>93,146</u>	<u>127,232</u>	<u>72,884</u>



# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
VP Transmission	1	1	1	1	1	1	1
Director Operations	4	4	4	4	4	4	4
System Operations	27	31	32	32	32	32	32
Balancing Authority	11	9	9	9	9	9	9
Energy Management System	13	9	10	11	11	11	11
Lines Construction	28	29	30	30	30	30	30
Substation Construction	11	15	16	18	20	20	20
Substation Protection	17	20	21	22	22	22	22
Director Strategy & Planning	2	2	2	2	2	2	2
Strategy & Planning	12	13	14	15	15	15	15
Reliab Performance & Standards	5	4	4	4	4	4	4
Policy and Tariffs	3	3	3	3	3	3	3
Reliability & Compliance	5	4	4	4	4	4	4
Interns / Temporary	4	4	8	8	8	8	8
<b>TOTAL</b>	<b>143</b>	<b>148</b>	<b>158</b>	<b>163</b>	<b>165</b>	<b>165</b>	<b>165</b>
From 2013 Business Plan		150	151	151			
Variance to 2013 Business Plan		-2	7	12			
<u>Year to Year Increases (Decreases)</u>		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
1.) Maintenance /Operational		7	9	5	2		
2.) Compliance – NERC, FERC, CIP, etc.		-2	1				
3.) EPA/Environmental							
4.) Administrative/Corporate							
<b>TOTAL</b>		<b>5</b>	<b>10</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>

Note: Five individuals (4 FTE's and 1 Intern) were transferred from the EMS department to IT on September 16, 2013.



# Operational Performance

## Key Performance Indicators

<u>KPI</u>	<u>2012 Year End</u>	<u>2013 Forecast</u>	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Recordable Injury Incident Rate - Employees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recordable Injury Incident Rate - Contractors	1.7	0.4	2.7	2.7	2.7	2.7	2.7
SAIDI (minutes)	10.7	11.6	11.6	11.6	11.6	11.6	11.6

The 2013 Recordable Injury Incident Rate forecast is from the 7+5 forecast and assumes no additional injuries in 2013.





# Plan Risks

- Estimated costs for regulatory and compliance requirements could be materially higher.
- Transmission expansion costs related to new power supply expansion plans may be materially higher.
- Transmission expansion costs related to the annual transmission expansion plan could be materially higher.
  - *The risk of major changes to the existing regional power generation fleet exists which would impact power flows. This risk is primarily the result of environmental requirements on existing and the challenging economic environment for our neighboring entities (i.e., BREC, OMU, OVEC, etc.),. This could result in additional transmission expansion projects not known at this time.*
  - *Revisions to the Companies Transmission Planning Guidelines as recommended by the ITO could result in more expansion projects not known at this time.*
- Actual costs for work related to line clearance, equipment failures, pole replacements and storm restoration could exceed estimated costs.
- Project contingency costs could exceed 5%.
- Capital projects could be delayed if unable to get the necessary outages
- Future transmission requests related to the Bluegrass units could trigger the need for significant additional infrastructure upgrades (e.g. Clifty to CGE).



# Appendix



## 2012-2018 Transmission Revenue (\$000)

Item	2013 BP 2014 Budget	2014 Business Plan				
		2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>OATT Revenue:</b>						
EKPC	7,461	7,247	7,900	8,613	9,392	10,243
TVA	1,037	1,283	1,399	1,525	1,663	1,814
OMU Network	3,229	2,962	3,152	3,386	3,635	3,901
OMU PTP	3,898	3,959	4,230	4,522	4,010	2,597
KMPA	3,383	2,832	3,050	3,288	3,546	3,828
BREC	108	153	167	182	199	217
Hoosier	90	95	103	113	123	134
Various SFP and NF	-	1,200	1,284	1,374	1,470	1,573
<b>Subtotal OATT Revenue</b>	<b>19,206</b>	<b>19,731</b>	<b>21,286</b>	<b>23,003</b>	<b>24,039</b>	<b>24,307</b>
Intercompany - OSS	1,148	849	715	759	857	1,540
Intercompany - NL	1,978	1,708	1,622	1,547	1,854	1,681
OATT - MUNI	3,189	3,819	3,859	3,899	3,939	3,980
<b>Total Revenue</b>	<b>25,521</b>	<b>26,107</b>	<b>27,482</b>	<b>29,208</b>	<b>30,688</b>	<b>31,508</b>



# Year over Year Walk Forward OPEX and Other Expense (\$000)

<b>2012 Actual</b>	<b>28,072</b>
Increase in Labor	500
Line Clearing	354
Aerial Patrol & Inspections	560
Other	(163)
<b>2013 FC</b>	<b>29,323</b>
Increase in Labor	530
EMS Reorganization with IT	(1,302)
Substation Construction Maintenance	545
EMS Outside Services - Compliance	300
EKPC Amortization	(420)
Outside Consulting	53
Reduce Tower Painting	(150)
Other	(70)
<b>2014 Budget</b>	<b>28,809</b>
Increase in Labor	739
Line Clearing	500
Line Inspections	300
Substation Protection - Compliance	240
Substation Maintenance	115
Other	394
<b>2015 Plan</b>	<b>31,097</b>
Bulk Electric System LiDAR	945
Line Clearing	500
Other	381
<b>2016 Plan</b>	<b>32,923</b>
Line Clearing	500
Increase in Labor	491
Back Up Control Center Maintenance	200
Increase Tower Painting	150
Increase Outside Services	217
Other	419
<b>2017 Plan</b>	<b>34,900</b>
Line Clearing	500
Increase in Labor	659
Other	423
<b>2018 Plan</b>	<b>36,482</b>



## Year over Year Walk Forward GMEXP / Cost of Sales (\$000)

<b>2012 Actual</b>	<b>19,204</b>
Lower Internal Transmission Expense	(997)
KMPA/OMU Depancaking	172
Lower ITO expense - change to Transerv 9/1/12	(3,660)
Lower ITO expense - change to Transerv 9/1/12	74
<b>2013 FC</b>	<b>14,793</b>
Reclassification to Energy Supply & Analysis	(3,786)
KMPA/OMU	150
TVA/Transerv	310
<b>2014 Budget</b>	<b>11,467</b>
KMPA/OMU	394
TVA/Transerv	220
<b>2015 Plan</b>	<b>12,081</b>
KMPA/OMU	418
TVA/Transerv	231
<b>2016 Plan</b>	<b>12,730</b>
KMPA/OMU	444
TVA/Transerv	185
<b>2017 Plan</b>	<b>13,359</b>
KMPA/OMU	472
TVA/Transerv	417
<b>2018 Plan</b>	<b>14,248</b>



## 2012-2018 Headcount progression

2012 Headcount	143
EMS positions moved to IT	-3
CIP Compliance	1
System Operators / Analysts	3
Asset Management	2
Lines Construction	2
2013 Headcount FC	148
Compliance - CIP V5	1
Engineering	1
Project Management Support - Project Coordinator	1
Protection/Drafting Technicians	3
Interns / Temporary	4
2014 Headcount Budget	158
Engineering	1
EMS System Administrator	1
Protection Tech	1
Internal CAD Services - Drafting Tech	1
Project Management Support - Substation Inspector	1
2015 Headcount Plan	163
Internal CAD Services - Drafting Tech	1
Asset Management - Cascade Data Entry Coordinator	1
2016 Headcount Plan	165
2017 Headcount Plan	165
2018 Headcount Plan	165



## Other Balance Sheet Costs (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Stores Expense							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Local Engineering							
Labor	5,830	5,562	5,376	6,977	6,382	7,517	8,724
Non labor	1,107	595	-	-	-	-	-
Total	6,937	6,157	5,376	6,977	6,382	7,517	8,724
Other Balance Sheet							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Total Other Costs	<u>6,937</u>	<u>6,157</u>	<u>5,376</u>	<u>6,977</u>	<u>6,382</u>	<u>7,517</u>	<u>8,724</u>

# Louisville Area Upgrades

(\$000)

\$'000	Pre 2013	2013	2014	2015	2016	2017	2018	Total
	Actual	Forecast	Budget	Plan	Plan	Plan	Plan	
<b>1) Middletown 345kV Breakers</b>	2,718	0	-	-	-	-	-	2,718
<b>2) Kenzig Substation (New Albany) - Build a new 345kV line connecting Paddys West and DEM's Speed 345kV stations:</b>								
Kenzig Road 345kV Line (New Albany)	44	3,274	4,985	-	-	-	-	8,303
Kenzig Substation (New Albany)	63	6,493	3,890	-	-	-	-	10,446
Total	107	9,767	8,876	-	-	-	-	18,750
<b>3) Add a 4th Transformer to the Middletown Substation</b>								
Middletown 4th Transformer	3,862	4,121	3,228	-	-	-	-	11,211
Middletown Line Tap	580	(68)	-	-	-	-	-	513
Rebuild the Middletown Control House	1,439	740	-	-	-	-	-	2,179
Total	5,881	4,793	3,228	-	-	-	-	13,902
<b>4) Other Planning Projects</b>								
Watterson-Jeffersontown 138kV CTs	-	-	-	-	-	-	-	-
<b>Total</b>	<b>8,706</b>	<b>14,561</b>	<b>12,104</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>35,370</b>

Transmission reliability criteria has identified a significant need for upgrades within the Louisville Metro area (including system expansion in southern Indiana).



PPL companies



# Cane Run 7 Transmission Upgrades

(\$000)

\$'000s	2012	2013	2014	2015	2016	2017	2018	Total
	Actuals	Forecast	Budget	Plan	Plan	Plan	Plan	
Middletown to Watterson 138kV Line Upgrade	-	-	-	-	-	-	-	-
New 138kV CR SWYard-Network	-	6,374	2,350	-	-	-	-	8,724
New 138kV CR SWYard-Intrcn	-	1,970	758	-	-	-	-	2,728
New 345kV CR7 Line	-	1,148	3,324	2,246	-	-	-	6,718
Relocate 138kV CR7 Lines	-	1,116	4,083	2,246	-	-	-	7,445
Rpl 138/69kV CT at CRSW	-	-	-	-	-	-	-	-
Rpl 69kV Term Equip #1 at CRSW	-	-	-	187	-	-	-	187
Rpl 69kV Term Equip #2 at CRSW	-	-	-	228	-	-	-	228
Rpl 138/69kV Xfrmr #1 at CRSW	-	-	-	-	-	-	2,213	2,213
Rpl 138/69kV Xfrmr #2 at CRSW	-	-	-	-	-	-	2,156	2,156
Rpl 138kV Brks at CRS and PW	-	1,995	2,000	-	-	-	-	3,995
New 345kV CR Brks at Paddy's West	-	302	1,048	-	-	-	-	1,350
CR Contingency-Funding Proj	-	-	-	-	-	-	-	-
138kV CR New Brks	-	-	-	-	-	-	-	-
Replace Bus at Waterson Substation	-	-	-	-	-	-	-	-
Replace Switches at Middletown Sub	-	-	-	-	-	-	-	-
Bluegrass	-	-	-	-	-	-	-	-
345kV Transformer	1,167	2,126	-	-	-	-	-	3,293
Cane Run Control House	-	1,697	-	-	-	-	-	1,697
	1,167	16,728	13,563	4,908	-	-	4,369	40,735

These costs represent the Transmission Upgrades that will accompany the combined cycle generating unit to be installed by May 1, 2015. The relocation of the existing line is included in the Project Engineering budget along with the costs of constructing the combined cycle unit.



**NERC Alert Line Ratings Cost by Voltage****(\$000)**

\$'000

	<b>Pre 2013 Actual</b>	<b>2013 Forecast</b>	<b>2014 Budget</b>	<b>2015 Plan</b>	<b>2016 Plan</b>	<b>2017 Plan</b>	<b>2018 Plan</b>	<b>Total</b>
138kV	7,357	8,244	15,064	-	-	-	-	30,665
161kV	5,649	5,040	4,317	-	-	-	-	15,006
345kV	1,886	15	-	-	-	-	-	1,901
<b>Total</b>	<b>14,891</b>	<b>13,299</b>	<b>19,382</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47,572</b>



**Green River 2018 Combined Cycle - Transmission****(\$000)**

\$'000	2012	2013	2014	2015	2016	2017	2018	Total
	Actuals	Forecast	Budget	Plan	Plan	Plan	Plan	
Green River 2018 CCGT-Substation	-	-	-	3,000	6,000	12,000	3,000	24,000
Green River 2018 CCGT-Lines	-	-	-	7,000	14,000	28,000	7,000	56,000
PLN-Middletown to Midvalley	-	-	-	-	6,273	3,567	-	9,840
PLN-Midvalley to Finchville	-	-	-	-	3,962	2,928	-	6,889
	-	-	-	10,000	30,234	46,494	10,000	96,729





**PPL companies**

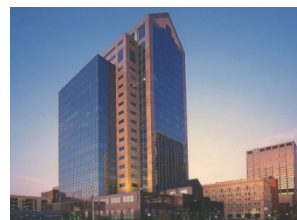
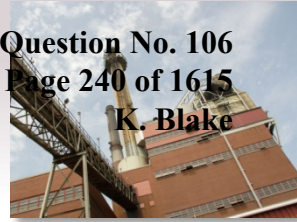
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# Electric Distribution

# 2014 Business Plan

*December 6, 2013*

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# Plan Highlights

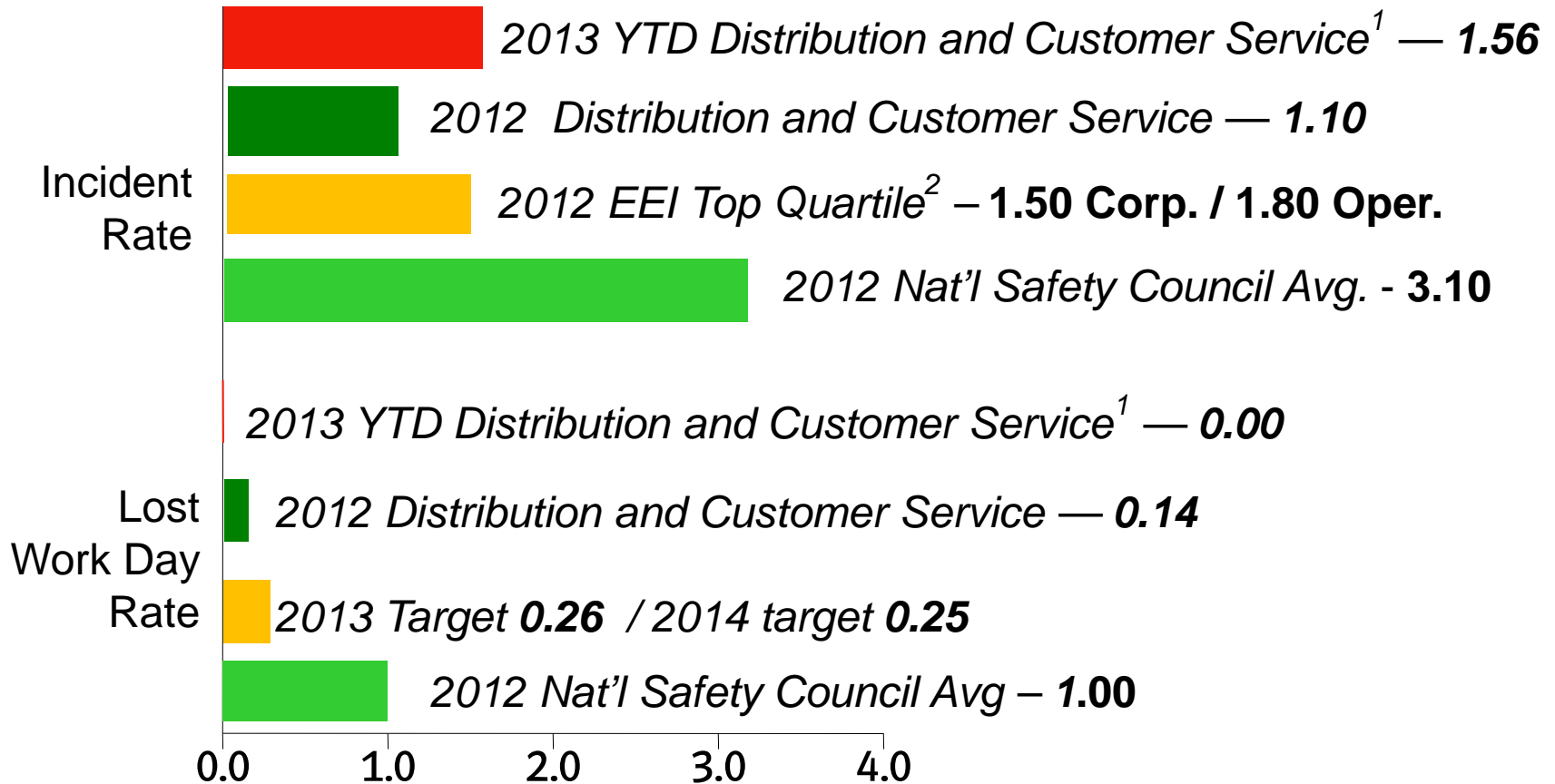
Electric Distribution's Business Plan provides for continued emphasis on the Company's core values of safety and customer satisfaction. Plan funding will continue to provide for safe, reliable and low cost electric service for customers, with priority given to the following:

- Employee and public safety including maintenance, inspections, and operations programs which assure regulatory compliance
- Electric system infrastructure construction to serve new customers and satisfy customer requested projects
- Electric system enhancements to meet existing and future customer loads and to improve contingency in critical areas of the system
- Technology improvements to enhance business processes and customer interfacing systems
- Asset replacements to address aging infrastructure
- Electric system hardening and protection to improve service reliability
- Continued provision of tools and equipment which enhance employee safety and assure operational efficiency



# Plan Highlights

## Safety Performance

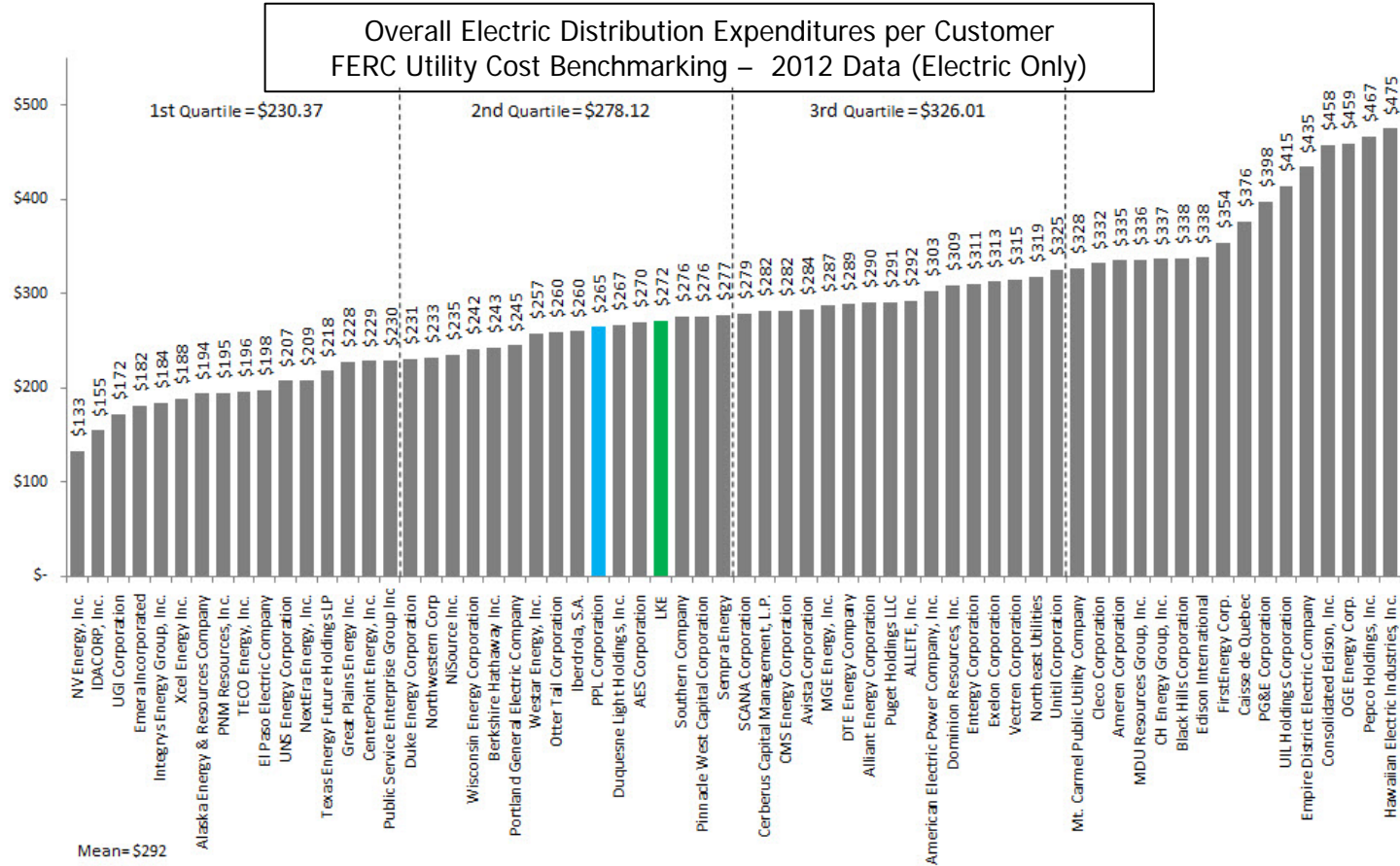


<sup>1</sup>As of July end 2013

<sup>2</sup> 1.50 represents total EEI Corporate Rate, electric generation, T&D, Gas, w/no nuclear plants companies

# Plan Highlights

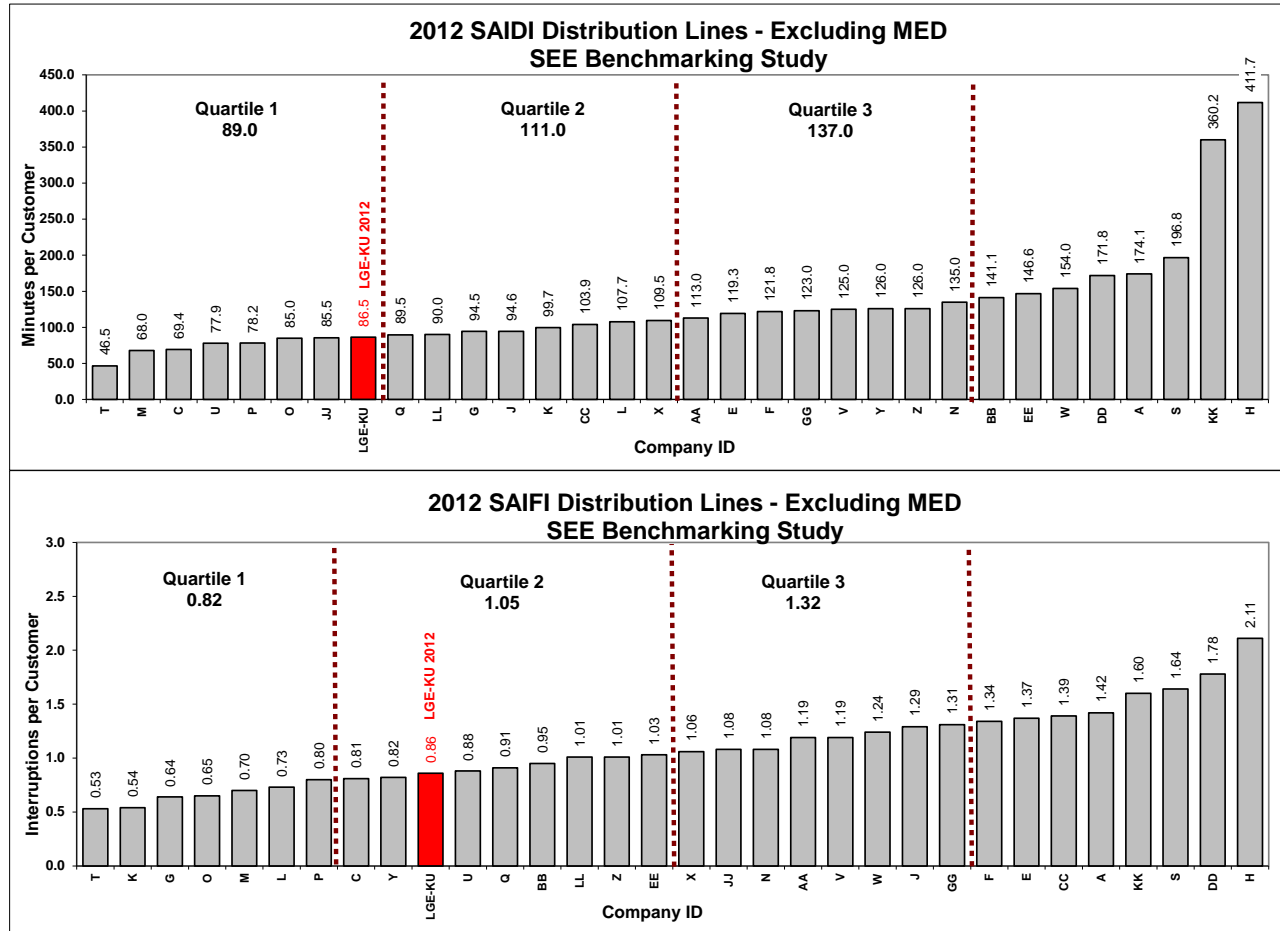
## Total DO Electric Cash Cost per Customer Performance





# Plan Highlights

## Reliability Performance



# Plan Highlights

- Safety and Wellness

- *Maintain industry leading performance*
- *Maintain synergies of a COO organization*
- *Continue efforts focusing on distracted driving and motor vehicle safety*
- *Continue commitment to workforce, business partners and public safety*
- *Continue identifying, sharing and capitalizing on industry best practices*
- *Support the Edumedics hypertension program*
- *Utilization of the Wellness Matching Grant by managers to fund departmental wellness initiatives with a physical exercise component*
- *Continue support of the Company Well Fairs*



# Plan Highlights

- Customer Experience

- *Continue to be responsive to customer requests for new service or infrastructure relocations*
- *Continue to identify and respond to opportunities to improve reliability performance*
- *Invest in aging infrastructure replacement to continue long term service reliability*
- *Continue focus on portraying a professional and positive customer image*
- *Continue to respond to all outage events in an efficient and effective manner*
- *Satisfy customer capacity needs*
- *Continue to build on technology which enhances business processes, reduces cycle times, and enhances communications with customers*



# Plan Highlights

- OPEX
  - *On target in 2013 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2013-2018 is 3.9%.*
  - *Major Initiatives:*
    - Line Clearance, Hazard Tree Program and Emerald Ash Borer removal
    - Regulatory Inspection and Maintenance Programs
    - Storm Response
  - *Major Financial Risks:*
    - Storm Restoration (activity in excess of 5 year average)



# Plan Highlights

- Capital
  - *On target in 2013 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2013-2018 is 5.3%.*
  - *Major Customer Initiatives:*
    - Continue Investments in Electric Infrastructure to Meet Projected Demand
    - Reliability Programs
    - Pole Inspection and Treatment Program
    - Downtown Network Initiatives: PILC Replacement Program, Manhole Replacement Program, Addition of Downtown Network Load Flow Model
    - System Enhancements to Improve Contingency
    - Aging Infrastructure Replacement
    - Work Management System Replacement
    - Heavy Duty Fleet Purchases



# Major Assumptions

- Customer expectations regarding levels of service and availability of information will continue to increase.
- Incremental headcount is mostly offset by a reduction in contractors as critical skills are returned in-house.
- New Business:
  - *Assumes moderate volume and inflationary increases through the planning period.*
  - *Funding included for known major customer expansions/additions.*
- Storm budgets are based on 5 year average.
- Continued focus on reliability, meeting native load requirements, and aging infrastructure.

# Major Assumptions

---

- Incremental expense of approximately \$3 million each year starting in April 2015 is due to additional tree removal caused by the emerald ash borer.
- KPSC order addressing reliability has minimal impact. The order creates the potential to drive further funding initiatives which are currently not included in the proposed EDO OPEX or Capital plan.
- Information Technology project funding is no longer included in the EDO Capital plan.

# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>OPEX/Other Expenses</b>							
<b>Labor</b>	<b>24,219</b>	<b>22,731</b>	<b>25,223</b>	<b>25,815</b>	<b>26,787</b>	<b>27,563</b>	<b>28,398</b>
<b>Non Labor</b>							
Line Clearance <sup>1</sup>	21,515	22,629	22,773	25,371	26,731	27,784	28,535
Storm Restoration <sup>2</sup>	5,542	5,511	4,301	4,274	4,405	5,164	5,267
Outside Services	8,147	7,667	10,129	10,199	10,288	10,494	10,705
Materials	4,108	4,224	4,192	4,448	4,542	4,633	4,725
Transportation and Equipment	4,747	5,227	5,085	5,033	5,135	5,238	5,342
Other Non Labor	2,890	1,616	1,095	1,191	1,210	1,234	1,261
<b>Total Non Labor</b>	<b>46,949</b>	<b>46,874</b>	<b>47,575</b>	<b>50,516</b>	<b>52,311</b>	<b>54,547</b>	<b>55,835</b>
<b>Subtotal OPEX/Other expense <sup>3</sup></b>	<b>71,168</b>	<b>69,605</b>	<b>72,798</b>	<b>76,331</b>	<b>79,098</b>	<b>82,110</b>	<b>84,233</b>
Gross Margin Expenses	-	-	-	-	-	-	-
<b>Total Income Statement items</b>	<b>71,168</b>	<b>69,605</b>	<b>72,798</b>	<b>76,331</b>	<b>79,098</b>	<b>82,110</b>	<b>84,233</b>

<sup>1</sup> Total Line Clearance including labor is \$22.4M for 2012, \$23.5M for 2013, \$23.6M for 2014, \$26.3M for 2015, \$27.7M for 2016, \$28.8M for 2017, and \$29.5M for 2018.

<sup>2</sup> Total Storm Restoration including labor is \$8.7M 2012, \$7.9M for 2013, \$6.8M for 2014 and 2015, \$7M for 2016, \$7.8M for 2017, and \$8M for 2018.

<sup>3</sup> 2012 actuals are not adjusted for re-organization transfers from/to GDO, IT, CFO, HR, and CS.





## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Prior Plan <sup>1</sup></b>	<b>73,072</b>	<b>74,902</b>	<b>76,697</b>	<b>78,493</b>	<b>80,329</b>
<b>Drivers:</b>					
Line Clearance - Ash Borer	-	(2,134)	(2,922)	(3,001)	(3,082)
Line Clearance - 5 yr. Cycle	400	400	400	300	300
Line Clearance - Hazard Tree	157	157	220	-	-
Storm Restoration - To 5 yr. ave.	(299)	(141)	(162)	(843)	(865)
WFP, A&G Impacts, etc.	(94)	179	180	181	184
Other	110	110	(117)	(254)	(441)
<b>Total Drivers (Increases)/Decreases</b>	<b>274</b>	<b>(1,429)</b>	<b>(2,401)</b>	<b>(3,617)</b>	<b>(3,904)</b>
<b>Current Plan</b>	<b>72,798</b>	<b>76,331</b>	<b>79,098</b>	<b>82,110</b>	<b>84,233</b>



## 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Electric Distribution</b>							
New Business	54,192	54,417	54,274	59,434	62,005	65,062	68,269
Enhance the Network	25,602	33,814	30,134	35,283	34,546	42,727	50,117
Maintain the Network	38,380	45,964	46,263	52,147	51,541	56,081	57,607
Repair the Network	11,873	11,646	11,346	12,081	12,348	12,618	12,895
Miscellaneous	314	3,274	909	3,998	4,012	4,025	4,041
<b>Total Capital and Cost of Removal</b>	<b><u>130,361</u></b>	<b><u>149,115</u></b>	<b><u>142,926</u></b>	<b><u>162,943</u></b>	<b><u>164,452</u></b>	<b><u>180,513</u></b>	<b><u>192,929</u></b>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Prior Plan</b>	<b>141,865</b>	<b>159,128</b>	<b>159,229</b>	<b>198,761</b>	<b>217,520</b>
<b>Changes:</b>					
Network Initiatives - PILC	(731)	(1,727)	(1,724)	(1,712)	(1,705)
Network Initiatives - Network Load Flow Modeling	(675)				
Network Initiatives - Manhole Cover Replacement	(450)	(449)			
Sys Enhancements - Portable/Spare Transformers				(3,500)	(1,027)
Sys Enhancements - At Risk Transformers		(2,568)	(2,637)	(2,708)	(2,781)
Sys Enhancements - Enhancements to Meet Demand	316	576	487	13,384	22,338
System Enhancements - Reliability Improvements	428			5,000	
Maintain - URD Cable Repl/Rejuv (Aging Infra)	(372)	(269)	(843)	(867)	(890)
Maintain - Aging Infrastructure	(282)	(1,024)	(4,405)	(729)	(648)
Storm Restoration - To 5 yr. Normalized Average		(200)	(200)	(200)	(200)
Purchase of Vehicles		2,000	2,000	7,500	7,500
New Business - Transformer Purchases	1,000		1,657	1,710	1,765
Other	(295)	(154)	442	370	239
<b>Total Changes (Increases)/Decreases</b>	<b>(1,061)</b>	<b>(3,815)</b>	<b>(5,223)</b>	<b>18,248</b>	<b>24,591</b>
<b>Current Plan</b>	<b>142,926</b>	<b>162,943</b>	<b>164,452</b>	<b>180,513</b>	<b>192,929</b>

# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
VP Electric Distribution	5	5	5	5	5	5	5
System Operations & LG&E Distribution	184	186	201	210	210	210	210
Electric Reliability	13	14	14	14	14	14	14
Electric Distribution (KU)	293	298	299	299	299	299	299
Safety & Security	19	22	23	23	23	23	23
Asset Management & Substations	156	158	162	165	168	171	171
Interns / Temporary Employees	6	7	6	6	6	6	6
<b>TOTAL</b>	<b>676</b>	<b>690</b>	<b>710</b>	<b>722</b>	<b>725</b>	<b>728</b>	<b>728</b>
From 2013 Business Plan		689	701	714			
Variance to 2013 Business Plan *		1	9	8			

\* 5 of the increased headcount in 2014 and 2015 are intern positions.

Year to Year Increases (Decreases)	2013	2014	2015	2016	2017	2018
1.) Maintenance / Operational	11	20	12	3	3	
2.) Compliance – NERC, FERC, CIP, etc.	1					
3.) EPA / Environmental						
4.) Administrative / Corporate	2					
<b>TOTAL</b>	<b>14</b>	<b>20</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>0</b>



# Operational Performance

## Key Performance Indicators

<u>KPI</u>	<u>2012 Year End</u>	<u>2013 Forecast</u>	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Safety	1.10	1.80	1.73	1.73	1.73	1.73	1.73
SAIFI	0.99	0.88	1.01	1.01	1.00	1.00	1.00
SAIDI	97.24	81.85	96.00	96.00	95.00	95.00	95.00
Cash Cost Per Customer	271.50	267.56	257.51	280.61	282.65	299.47	310.79



# Plan Risks

- Increased Capital and O&M Costs associated with Changing Regulations
- Economic Development and the Pace of the Economic Recovery
- Storm Restoration – Activity which Exceeds the 5 Year Average and Impacts the Ability to Execute Other Plan Items
- Unplanned Labor, Material, Equipment and Fuel Cost Price Increases
- Emerald Ash Borer Impact to Reliability



# Appendix



# Year over Year Walk Forward OPEX and Other Expense (\$000)

<b>2012 Actual</b>	<b>71,168</b>	<b>2016 Plan</b>	<b>79,098</b>
Labor Changes (Incl. re-org transfers)	(1,488)	Labor Changes	776
Line Clearance	1,114	Line Clearance (Incl. Ash Borer)	1,053
Non-Labor (Incl. IT Transfers)	<u>(1,189)</u>	Storm Restoration	759
		Net Other Changes	<u>424</u>
<b>2013 FC</b>	<b>69,605</b>	<b>2017 Plan</b>	<b>82,110</b>
Labor Changes (Excl. Security Transfer)	1,789	Labor Changes	836
Line Clearance	144	Line Clearance (Incl. Ash Borer)	751
Storm Restoration	(1,210)	Storm Restoration	103
Transfer of Security from CS (L and NL)	3,079	Net Other Changes	<u>433</u>
Net Other Changes	<u>(609)</u>		
<b>2014 Budget</b>	<b>72,798</b>	<b>2018 Plan</b>	<b>84,233</b>
Labor Changes	595		
Line Clearance (Incl. Ash Borer)	2,598		
Net Other Changes	<u>340</u>		
<b>2015 Plan</b>	<b>76,331</b>		
Labor Changes	972		
Line Clearance (Incl. Ash Borer)	1,360		
Storm Restoration	131		
Net Other Changes	<u>304</u>		
<b>2016 Plan</b>	<b>79,098</b>		

(Decreases)/Increases





## Target Adjustments to Prior Plan OPEX and Other Expense (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Net Target Adjustments</b>	<b>282</b>	<b>51</b>	<b>31</b>	<b>11</b>	<b>645</b>
<b>Adjustment Items:</b>					
Gas Franchise Fees - To GDO	578	590	590	590	590
Safety - Employee transfer from GDO	(150)	(150)	(155)	(159)	(164)
Transfer To GDO - SVP's Budget (Cover Lonnie B.)	262	265	265	265	265
IT - Remaining Headcount in EDO	(419)	(432)	(444)	(456)	(468)
Security - From CS	(3,114)	(3,183)	(3,269)	(3,357)	(3,448)
Transfer To GDO - Admin Assistant	50	52	53	55	56
<b>From 008810/018810:</b>					
VP Retail - To CS	43	44	45	47	48
Dir - GC&S - To GDO	403	412	424	437	450
HR - To Corp HR	711	733	755	778	801
Budgeting - To CFO	254	253	261	268	276
IT - To Corp IT	1,664	1,467	1,505	1,543	2,238
<b>Total Adjustments (Increases)/Decreases</b>	<b>282</b>	<b>51</b>	<b>31</b>	<b>11</b>	<b>645</b>

## 2012-2018 Headcount progression

<b>2012 Headcount</b>	<b>676</b>	<b>2014 Headcount Budget</b>	<b>710</b>
System Operations & LG&E Distribution	2	System Operations & LG&E Distribution	9
Electric Reliability	1	Asset Management & Substations	<u>3</u>
Distribution Operations (KU)	5		
Safety & Security	3	<b>2015 Headcount Plan</b>	<b>722</b>
Asset Management & Substations	2	Asset Management & Substations	<u>3</u>
Interns & Temporary Employees	<u>1</u>		
<b>2013 Headcount FC</b>	<b>690</b>	<b>2016 Headcount Plan</b>	<b>725</b>
System Operations & LG&E Distribution	15	Asset Management & Substations	<u>3</u>
Distribution Operations (KU)	1		
Safety & Security	1	<b>2017 Headcount Plan</b>	<b>728</b>
Asset Management & Substations	4		
Interns & Temporary Employees	<u>-1</u>	<b>2018 Headcount Plan</b>	<u><b>728</b></u>
<b>2014 Headcount Budget</b>	<b>710</b>		

(Decreases)/Increases

## Other Balance Sheet Costs (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Local Engineering							
Labor	14,507	14,851	14,795	15,504	17,986	18,476	19,031
Non labor	3,331	2,867	4,159	4,383	2,588	2,639	2,692
<b>Total</b>	<b>17,838</b>	<b>17,718</b>	<b>18,954</b>	<b>19,887</b>	<b>20,574</b>	<b>21,115</b>	<b>21,723</b>
 Transportation	 21,449	 22,432	 22,308	 23,086	 23,548	 24,019	 24,499
<b>Total Other Costs</b>	<b>39,287</b>	<b>40,150</b>	<b>41,262</b>	<b>42,973</b>	<b>44,122</b>	<b>45,134</b>	<b>46,222</b>

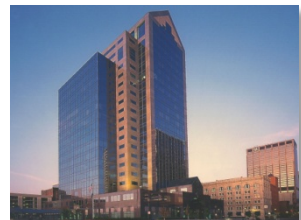
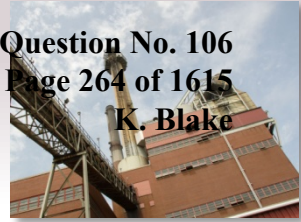


**PPL companies**

# Gas Distribution

## 2014 Business Plan

*December 6, 2013*



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# Plan Highlights

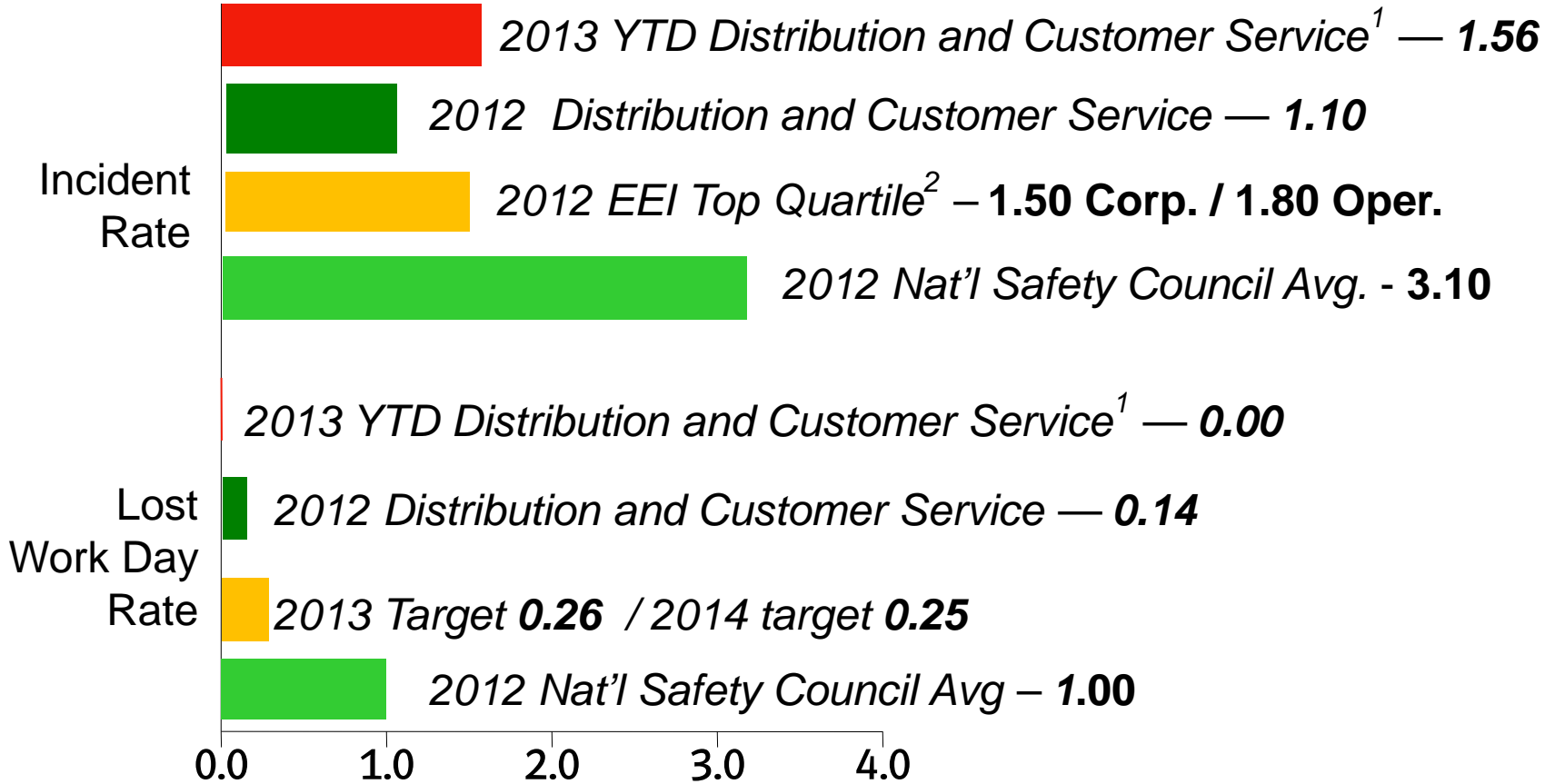
Customer satisfaction is a core value at LG&E and KU. Gas Distribution strives to provide safe, reliable, and low cost service to our customers, enhancing the quality of life in the areas we serve. We are committed to enhancing our relationship with our customers by delivering positive experiences that create value and build trust.

- Funding levels within the proposed plan are established with the following priorities in mind:
  - Employee and public safety including compliance with industry regulatory requirements
  - Performance in customer facing areas
  - Gas system service reliability
  - Asset replacement to address aging infrastructure
  - System enhancement and regulator station work to help meet system capacity
  - Technology to enhance customer experience
  - Continue sustained increases in capital investments for gas riser and service line ownership



# Plan Highlights

## Safety Performance



<sup>1</sup>As of July end 2013

<sup>2</sup> 1.50 represents total EEI Corporate Rate, electric generation, T&D, Gas, w/no nuclear plants companies

# Plan Highlights

- Safety and Wellness

- *Maintain industry leading performance*
- *Maximize synergies of a COO organization*
- *Distribution Integrity Management, Transmission Integrity Management, Public Awareness and Gas Control Room Management*
- *Continue commitment to workforce, business partners, and public safety*
- *Continue to focus on motor vehicle safety and distracted driving*
- *Continue sharing safety best practices throughout the industry*
- *Continue mock drills, leak detection training, and large scale outage restoration preparedness*
- *Continuous improvements for gas emergency response*
- *Support the Edumedics hypertension program*
- *Utilization of the Wellness Matching Grant by managers to fund departmental wellness initiatives with a physical exercise component*
- *Continue support of the Company Well Fairs*





# Plan Highlights

- Customer Experience

- *Continue to be responsive to customer requests for new service or infrastructure relocations*
- *Continue to identify and respond to opportunities to improve reliability performance*
- *Invest in aging infrastructure replacement to continue long term service reliability*
- *Continue focus on portraying a professional and positive customer image*
- *Continue to respond to all outage events in an efficient and effective manner*
- *Satisfy customer capacity needs*
- *Continue to build on technology which enhances business processes, reduces cycle times, and enhances communications with customers*
- *Continue communications process for major projects and large scale inspection activities*



# Plan Highlights

- Reliability and Infrastructure

- *Continue investments in gas system infrastructure to meet projected demand and regulatory requirements*
- *Invest in gas infrastructure replacement to address the aging system and improve system performance and reliability*
- *Invest in gas compression, gas processing equipment upgrades, pipeline replacements and gas storage wells to improve overall reliability, mitigate risk and maintain storage system deliverability*
- *Manage gas transmission pipeline construction related to new electric generation plants*



# Plan Highlights

- OPEX
  - *On target in 2013 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2013-2018 is 3.3%.*
  - *Major Initiatives:*
    - Industry Regulatory Compliance
    - Gas Tracker Programs
    - Pressure Testing for MAOPs (regulatory asset)
  - *Major Financial Risks:*
    - Industry Regulatory Uncertainty
    - MAOP
- Cost of Sales
  - *On target in 2013 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2013-2018 is (2.8%).*



# Plan Highlights

- Capital

- *On target in 2013 to achieve 7&5 approved forecast.*
- *Compounded Annual Growth Rate (CAGR) from 2013-2018 is (16.1%) or (5.6%) without Gas Tracker capital.*
- *Major Capital Initiatives:*
  - Reliability / Asset Replacement
  - Gas Leak Mitigation
  - Customer Gas Service Ownership and Service Riser Replacement Programs
  - Gas Compressor Station and System Enhancements
  - Gas Transmission/Distribution Integrity Management Programs

- ROE

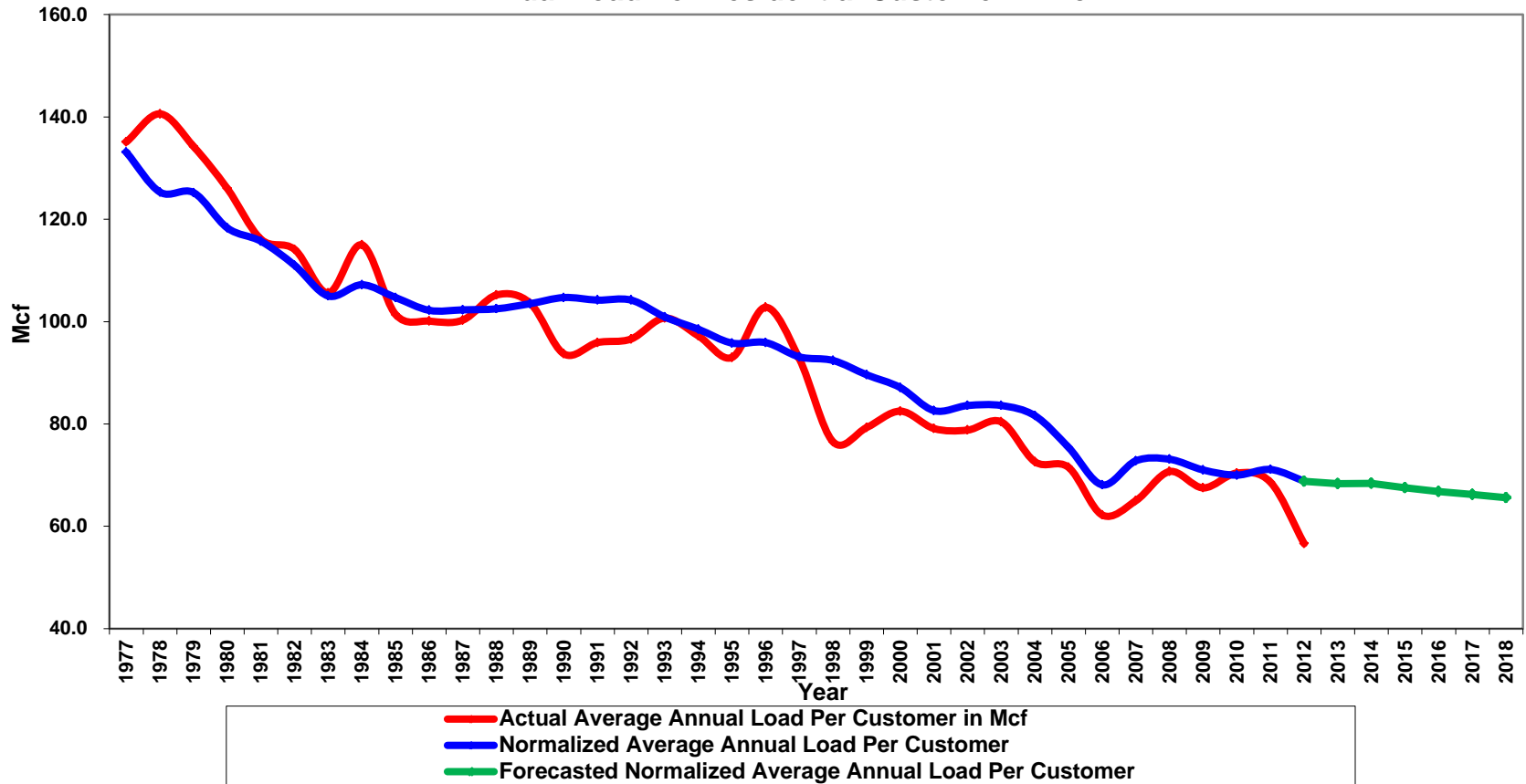
- *Last rate case – \$15m award with 10.1% pro-forma ROE.*
- *Potential regulatory asset for MAOP testing in next rate case.*
- *GLT program covers two-thirds of capital plan.*
- *Manage cost drivers and look for growth opportunities.*



# Plan Highlights

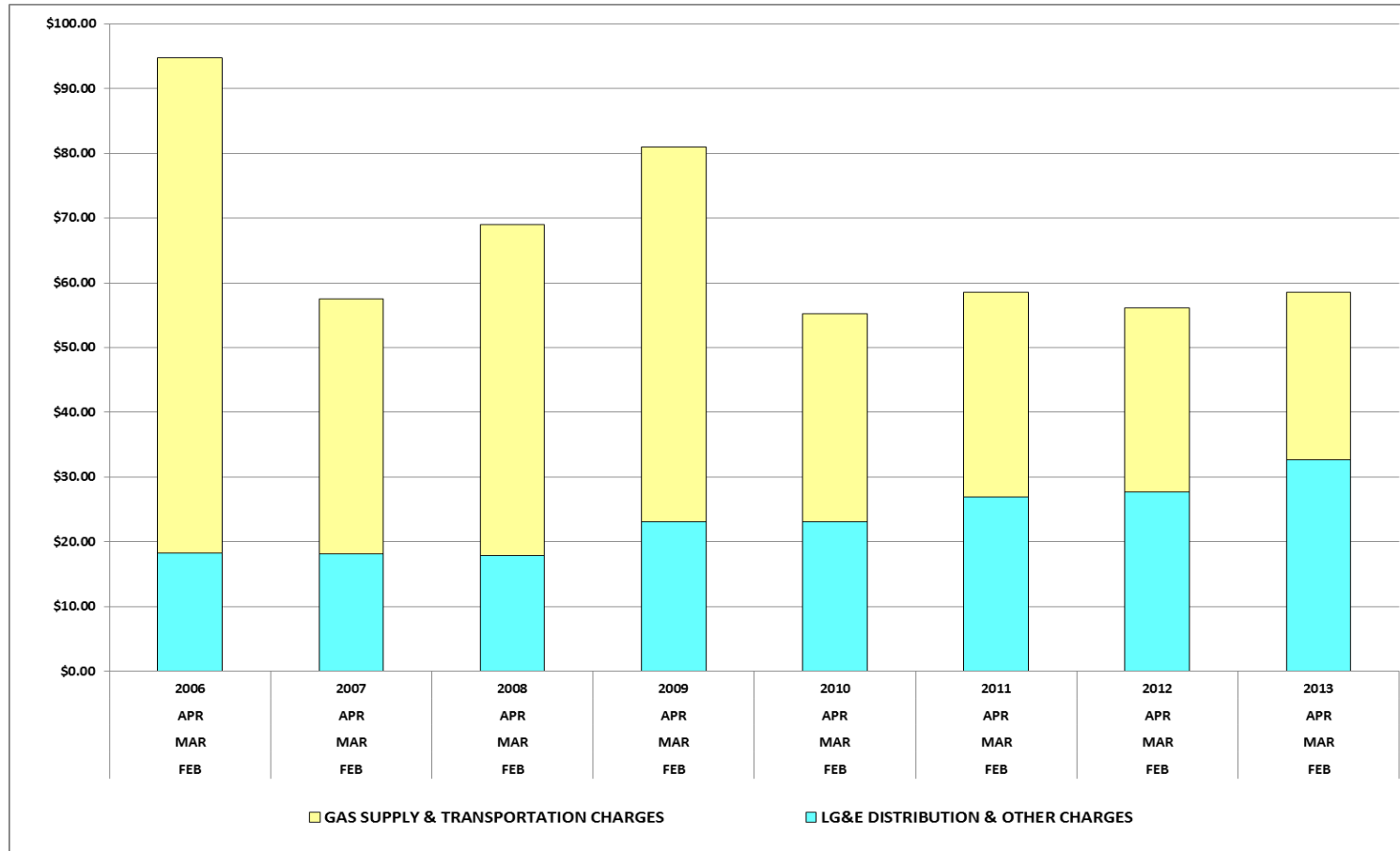
## Residential Gas Use per Customer

Actual vs. Normalized Average  
Annual Load Per Residential Customer in Mcf



# Plan Highlights

## Typical Monthly Residential Gas Bill by Component (6 Mcf/month)



# Plan Highlights

## Gas Delivered by Class in Bcf

<b>Class</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<i>Residential</i>	19.999	20.051	19.785	19.603	19.442	19.273
<i>Commercial</i>	8.651	8.880	8.864	8.855	8.830	8.806
<i>Industrial</i>	0.980	1.005	0.986	0.961	0.930	0.896
<i>Publ. Auth.</i>	1.705	1.547	1.548	1.527	1.523	1.531
<i>Transportation</i>	12.926	12.849	12.947	13.000	13.069	12.969
<i>Total</i>	44.261	44.332	44.130	43.946	43.794	43.475



# Major Assumptions

- Customer expectations regarding levels of service and availability of information will continue to increase.
- Incremental headcount is needed to meet increased regulatory and compliance demands as well as transfer critical knowledge in preparation for retirements.
- New Business assumes moderate volume and inflationary increases through the planning period.
- Continuation of the Gas Line Tracker mechanism, which was approved by the KPSC in 2012.
- Gas Supply Clause remains fundamentally unchanged.
- Continued focus on reliability initiatives.





# Major Assumptions

---

- New gas safety regulatory requirements will require operators to validate maximum allowable operating pressures (MAOPs) of gas transmission pipelines.
  - *Pre-1970 and Post-1970 costs are modeled as regulatory assets.*
- No capital is included if MAOP pressure testing determines capital work is required.
- No incremental costs are included for the GTI best practice study recommendations.
- Design gas day sendout decreases from 634,000 Mcf/day to 616,000 Mcf/day during the 5-year planning period (exclusive of reserve margin of 39,000 Mcf/day).

# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>OPEX/Other Expenses</b>							
<b>Labor</b>	<b>13,972</b>	<b>14,916</b>	<b>15,529</b>	<b>15,396</b>	<b>15,831</b>	<b>16,673</b>	<b>17,146</b>
<b>Non Labor</b>							
Inline Inspections	1,395	200	438	1,817	229	521	1,505
Outside Services	8,233	9,237	8,849	9,232	9,634	9,652	10,259
Materials	2,999	2,406	2,846	2,978	3,038	3,099	3,162
Transportation and Equipment	2,222	2,598	2,212	2,212	2,255	2,300	2,346
Other Non Labor	1,190	1,945	2,027	2,176	2,222	2,268	2,315
<b>Total Non Labor</b>	<b>16,039</b>	<b>16,386</b>	<b>16,372</b>	<b>18,415</b>	<b>17,378</b>	<b>17,840</b>	<b>19,587</b>
<b>Subtotal OPEX/Other expense <sup>1</sup></b>	<b>30,011</b>	<b>31,302</b>	<b>31,901</b>	<b>33,811</b>	<b>33,209</b>	<b>34,513</b>	<b>36,733</b>
Gross Margin Expenses	1,633	4,403	4,047	4,009	3,875	3,729	3,817
<b>Total Income Statement items</b>	<b>31,644</b>	<b>35,705</b>	<b>35,948</b>	<b>37,820</b>	<b>37,084</b>	<b>38,242</b>	<b>40,550</b>

<sup>1</sup> 2012 actuals are not adjusted for re-organization transfers from/to EDO.



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Prior Plan <sup>1</sup></b>	<b>36,824</b>	<b>37,615</b>	<b>36,120</b>	<b>34,222</b>	<b>35,056</b>
<b>Drivers:</b>					
Addition of Compressor Fuel to Gas Used Cr.	775	822	844	867	890
Magnolia - Booster Compressor Fuel	(153)	(162)	(166)	(171)	(175)
Magnolia - De-watering, training, cleaning	(218)	128	128	128	128
Gas Control - WFP	(236)	(228)	(234)	(240)	(247)
Regulatory - Corrosion Control	(397)	(403)	(514)	(527)	(542)
Regulatory - Inline Inspections	(277)	(1,822)	(202)	(500)	(1,785)
Regulatory - Direct Assessment of Lines	-	-	(175)	-	-
Regulatory - CIS HP System	-	-	(100)	(100)	(100)
Regulatory - MAOP Pressure Testing	5,000	5,000	2,700	-	-
OT Reduction	401	401	411	-	-
Other	28	68	219	252	154
<b>Total Drivers (Increases)/Decreases</b>	<b>4,923</b>	<b>3,804</b>	<b>2,911</b>	<b>(291)</b>	<b>(1,677)</b>
<b>Current Plan</b>	<b>31,901</b>	<b>33,811</b>	<b>33,209</b>	<b>34,513</b>	<b>36,733</b>

<sup>1</sup> Adjusted for re-organization transfers.

# Financial Performance

## 2012-2018 Margin Expenses / Cost of Sales (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Margin Expenses							
<b>Mechanism Recoverable</b>							
Gas Tracker	(313)	2,147	1,849	1,673	1,489	1,296	1,335
Fuel Gas	1,946	2,256	2,198	2,336	2,386	2,433	2,482
<b>Total Margin/Cost of Sales</b>	<b>1,633</b>	<b>4,403</b>	<b>4,047</b>	<b>4,009</b>	<b>3,875</b>	<b>3,729</b>	<b>3,817</b>



## 2014-2018 Margin/Cost of Sales Reconciliation (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
<u>Mechanism recoverable</u>					
<b>Prior Plan</b>	<b>4,495</b>	<b>4,267</b>	<b>4,029</b>	<b>3,779</b>	<b>3,867</b>
<b>Drivers</b>					
Gas Losses - Lower Rate	141	49	48	50	50
Gas Tracker - Accelerated Riser Replacements	307	209	106	-	-
<b>Total Drivers (Increases)/Decreases</b>	<b>448</b>	<b>258</b>	<b>154</b>	<b>50</b>	<b>50</b>
<b>Current Plan</b>	<b><u>4,047</u></b>	<b><u>4,009</u></b>	<b><u>3,875</u></b>	<b><u>3,729</u></b>	<b><u>3,817</u></b>



## 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Gas Distribution</b>							
New Business	4,143	5,526	5,623	5,848	6,080	6,460	6,774
Enhance the Network	21,061	24,039	25,641	25,922	27,392	2,328	2,394
Maintain the Network	41,041	47,276	48,135	54,641	51,327	53,779	22,537
Repair the Network	250	262	262	269	277	285	293
Miscellaneous	568	716	501	330	306	313	318
<b>Total Capital (w COR)</b>	<b>67,063</b>	<b>77,819</b>	<b>80,162</b>	<b>87,010</b>	<b>85,382</b>	<b>63,165</b>	<b>32,316</b>
<b>Gas Tracker</b>	0	48,404	55,761	57,808	60,003	35,950	10,222
<b>Total Capital (Excl. Gas Tracker)</b>	<b>67,063</b>	<b>29,415</b>	<b>24,401</b>	<b>29,202</b>	<b>25,379</b>	<b>27,215</b>	<b>22,094</b>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

K. Blake

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Prior Plan</b>	<b>76,312</b>	<b>89,978</b>	<b>90,760</b>	<b>72,170</b>	<b>51,814</b>
<b>Changes:</b>					
Gas Distribution - Strawberry Ln. Relocation	(810)				
Gas Regulatory - Lincoln Parkway Crossing Replacements	(726)				
Gas Regulatory - ILI Capital Modifications	(335)				
Gas Regulatory - Doe Run Piggability Muld to Past Doe Valley	1,254	(1,109)			
Muldraugh - Bells Ln. to Paddy's Run Main Replacement	(3,230)				
Muldraugh - East End Gas Transmission System Reinforcement	(475)	(1,330)	3,650	3,080	
Muldraugh - Mt. Washington/Lebanon Jct. Pipeline Project	(475)	(237)	(2,850)	(2,850)	11,600
Compressor Station Upgrades		12,500			(2,850)
Gas Control Projects and Upgrades	149	(2,320)	(297)	(609)	3,488
Gas Regulatory Projects - Pipeline Repairs, RCV's, etc.	121		1,380	550	570
Gas Storage Field Projects	221	(4,636)	3,018	7,148	5,008
Gas Distribution - System Enhancements				1,500	1,500
Other	456	100	477	186	182
<b>Total Changes (Increases)/Decreases</b>	<b>(3,850)</b>	<b>2,968</b>	<b>5,378</b>	<b>9,005</b>	<b>19,498</b>
<b>Current Plan</b>	<b>80,162</b>	<b>87,010</b>	<b>85,382</b>	<b>63,165</b>	<b>32,316</b>

# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
SVP Energy Delivery	2						
VP Gas Distribution		2	2	2	2	2	2
Gas Regulatory Services	24	27	28	28	28	28	28
Gas Management & Supply	5	5	5	5	5	5	5
Gas Operations, Construction & Engineering	92	105	106	104	105	105	104
Gas Storage, Control & Compliance	92	94	101	99	101	103	102
Interns / Temporary Employees	3	7	5	5	5	5	5
<b>TOTAL</b>	<b>218</b>	<b>240</b>	<b>247</b>	<b>243</b>	<b>246</b>	<b>248</b>	<b>246</b>
From 2013 Business Plan		230	230	230			
Variance to 2013 Business Plan		10	17	13			
<b>Year to Year Increases (Decreases)</b>		<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
1.) Maintenance / Operational		17	8	-4	3	2	-2
2.) Compliance – NERC, FERC, CIP, etc.			1				
3.) EPA / Environmental							
4.) Administrative / Corporate		5	-2				
<b>TOTAL</b>		<b>22</b>	<b>7</b>	<b>-4</b>	<b>3</b>	<b>2</b>	<b>-2</b>





# Operational Performance

## Key Performance Indicators

<u>KPI</u>	<u>2012 Year End</u>	<u>2013 Forecast</u>	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Safety	1.10	1.80	1.73	1.73	1.73	1.73	1.73



# Plan Risks

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- Increased Capital and O&M Costs due to Industry Regulatory Actions
- Additional Mitigation from Gas Transmission Line Inspections
- Economic Development and the Pace of the Economic Recovery
- Impact Associated with Possible Early Retirements
- Material and Equipment Price Increases
- Fuel Prices



# Appendix



# Year over Year Walk Forward OPEX and Other Expense (\$000)

<b>2012 Actual</b>	<b>30,011</b>	<b>2015 Plan</b>	<b>33,811</b>
Labor Changes (Inc. Re-Org Transfers)	944	Labor Changes	435
Pipeline In Line Inspections	(1,195)	Pipeline In Line Inspections	(1,588)
Other Non-Labor (Inc. re-org transfers)	<u>1,542</u>	Regulatory Corrosion, Line Assess., CIS HP	275
		Net Other Changes	<u>276</u>
<b>2013 FC</b>	<b>31,302</b>	<b>2016 Plan</b>	<b>33,209</b>
Labor Changes	613	Labor Changes	842
Pipeline In Line Inspections	238	Pipeline In Line Inspections	292
MAOP Gas Control Upgrades	(525)	Net Other Changes	<u>170</u>
Compressor Fuel Cr. From COS to OPEX	(775)		
Regulatory Corrosion, Line Assess., CIS HP	397	<b>2017 Plan</b>	<b>34,513</b>
Magnolia Booster Fuel and Maintenance	371	Labor Changes	473
Net Other Changes	<u>280</u>	Pipeline In Line Inspections	984
		Net Other Changes	<u>763</u>
<b>2014 Budget</b>	<b>31,901</b>	<b>2018 Plan</b>	<b>36,733</b>
Labor Changes	(133)		
Pipeline In Line Inspections	1,379		
Net Other Changes	<u>664</u>		
<b>2015 Plan</b>	<b>33,811</b>		

(Decreases)/Increases



# Year over Year Walk Forward GMEXP / Cost of Sales (\$000)

<b>2012 Actual</b>	<b>1,633</b>
Gas Tracker	2,460
Fuel Gas	<u>310</u>
<b>2013 FC</b>	<b>4,403</b>
Gas Tracker	(298)
Fuel Gas	<u>(58)</u>
<b>2014 Budget</b>	<b>4,047</b>
Gas Tracker	(176)
Fuel Gas	<u>138</u>
<b>2015 Plan</b>	<b>4,009</b>
Gas Tracker	(184)
Fuel Gas	<u>50</u>
<b>2016 Plan</b>	<b>3,875</b>
Gas Tracker	(193)
Fuel Gas	<u>47</u>
<b>2017 Plan</b>	<b>3,729</b>
Gas Tracker	39
Fuel Gas	<u>49</u>
<b>2018 Plan</b>	<b><u>3,817</u></b>

(Decreases)/Increases



## Target Adjustments to Prior Plan OPEX and Other Expense (\$000)

	2014 <u>Budget</u>	2015 <u>Plan</u>	2016 <u>Plan</u>	2017 <u>Plan</u>	2018 <u>Plan</u>
<b>Net Target Adjustments</b>	<b>(1,274)</b>	<b>(1,300)</b>	<b>(1,308)</b>	<b>(1,319)</b>	<b>(1,328)</b>
<b>Adjustment Items:</b>					
Gas Franchise Fees - From EDO	(578)	(590)	(590)	(590)	(590)
Transfer from CS - SVP's Retail	(131)	(131)	(131)	(131)	(131)
Dir - GC&S - Transfer from EDO	(403)	(412)	(424)	(437)	(450)
Transfer from EDO - SVP's DO	(262)	(265)	(265)	(265)	(265)
Safety - Employee Transfer To EDO	150	150	155	159	164
Transfer From EDO - Admin Assistant	(50)	(52)	(53)	(55)	(56)
<b>Total Adjustments (Increases)/Decreases</b>	<b><u>(1,274)</u></b>	<b><u>(1,300)</u></b>	<b><u>(1,308)</u></b>	<b><u>(1,319)</u></b>	<b><u>(1,328)</u></b>

# 2012-2018 Headcount progression

<b>2012 Headcount</b>	<b>218</b>	<b>2014 Headcount Budget</b>	<b>247</b>
Gas Regulatory	3	Gas Operations, Construction & Engineering	-2
Gas Operations, Construction & Engineering	13	Gas Storage, Control & Compliance	<u>-2</u>
Gas Storage, Control & Compliance	2		
Interns & Temporary Employees	<u>4</u>	<b>2015 Headcount Plan</b>	<b>243</b>
		Gas Operations, Construction & Engineering	1
<b>2013 Headcount FC</b>	<b>240</b>	Gas Storage, Control & Compliance	<u>2</u>
Gas Regulatory	1		
Gas Operations, Construction & Engineering	1	<b>2016 Headcount Plan</b>	<b>246</b>
Gas Storage, Control & Compliance	7	Gas Storage, Control & Compliance	<u>2</u>
Interns & Temporary Employees	<u>-2</u>		
		<b>2017 Headcount Plan</b>	<b>248</b>
<b>2014 Headcount Budget</b>	<b>247</b>	Gas Operations, Construction & Engineering	-1
		Gas Storage, Control & Compliance	<u>-1</u>
		<b>2018 Headcount Plan</b>	<b>246</b>
			<u>246</u>

(Decreases)/Increases



## Other Balance Sheet Costs (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Local Engineering							
Labor	2,180	1,741	1,774	1,748	1,777	1,830	1,885
Non labor	243	502	372	378	379	386	394
<b>Total</b>	<b>2,423</b>	<b>2,243</b>	<b>2,146</b>	<b>2,126</b>	<b>2,156</b>	<b>2,216</b>	<b>2,279</b>



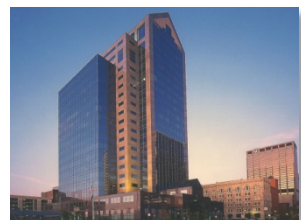
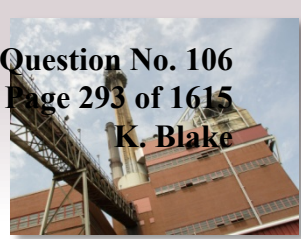


**PPL companies**

# Customer Services

# 2014 Business Plan

*December 6, 2013*



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- Plan Highlights
- Major Assumptions
- Financial Performance
  - *Operating Expense*
  - *Cost of Sales / Gross Margin (if applicable)*
  - *Capital*
  - *Headcount*
  - *Key Performance Indicators*
- Plan Risks
- Appendix

# Plan Highlights

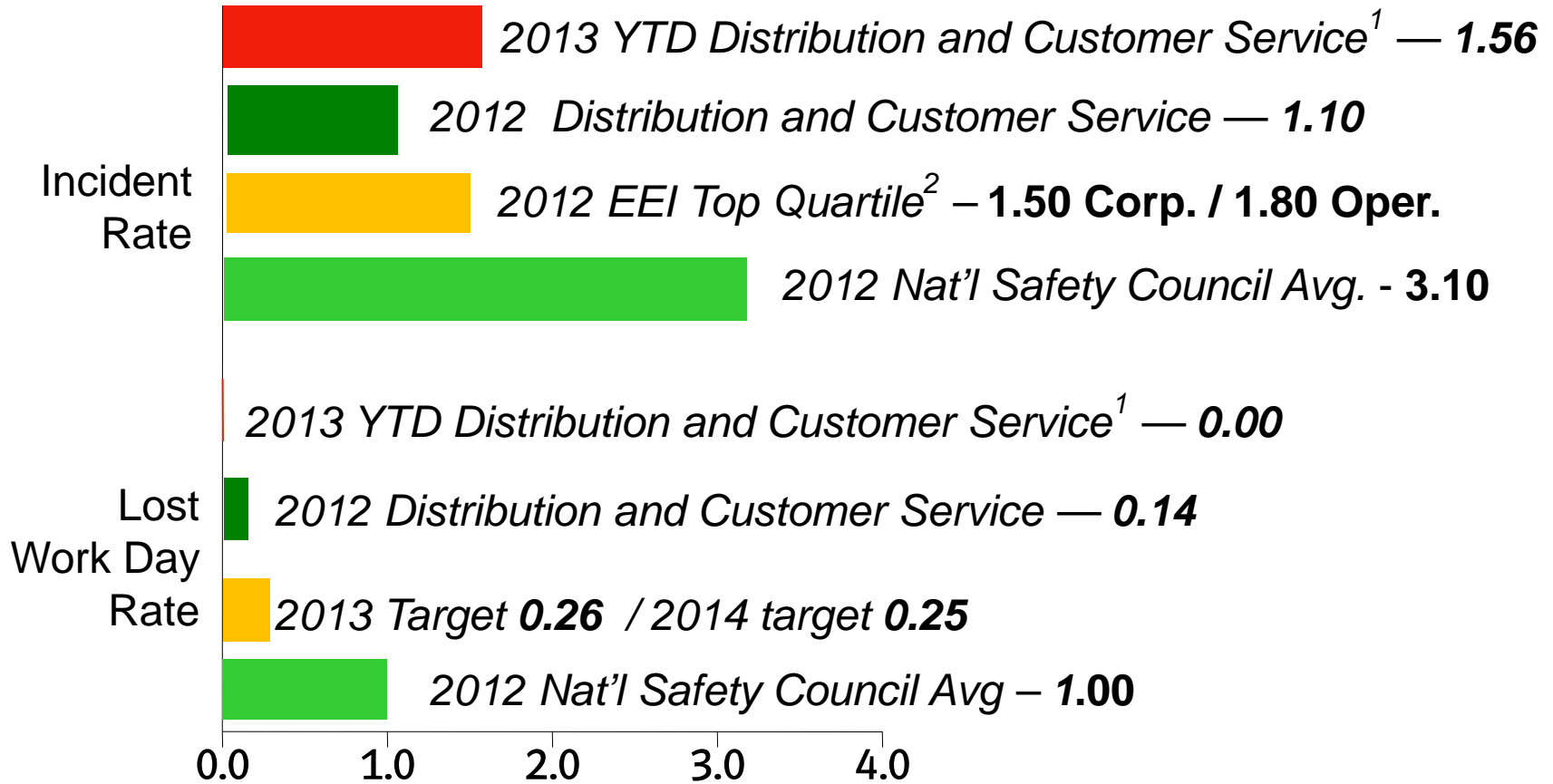
Customer focus is a core value at LG&E and KU. Customer Services strives to provide safe, reliable, and low cost service to our customers, enhancing the quality of life in the areas we serve. We are committed to enhancing our relationship with our customers by delivering positive experiences that create value and build trust.

- Funding levels within the proposed plan are established with the following priorities in mind:
  - Employee and public safety including compliance with industry regulatory requirements
  - Performance in customer facing areas
  - Facility improvements based on 2013 master facility study
  - Bad debt expense reduction from previous plan
  - Energy Efficiency program continuance aligned with a market potential study
  - Technology to enhance customer experience and operational efficiency



# Plan Highlights

## Safety Performance



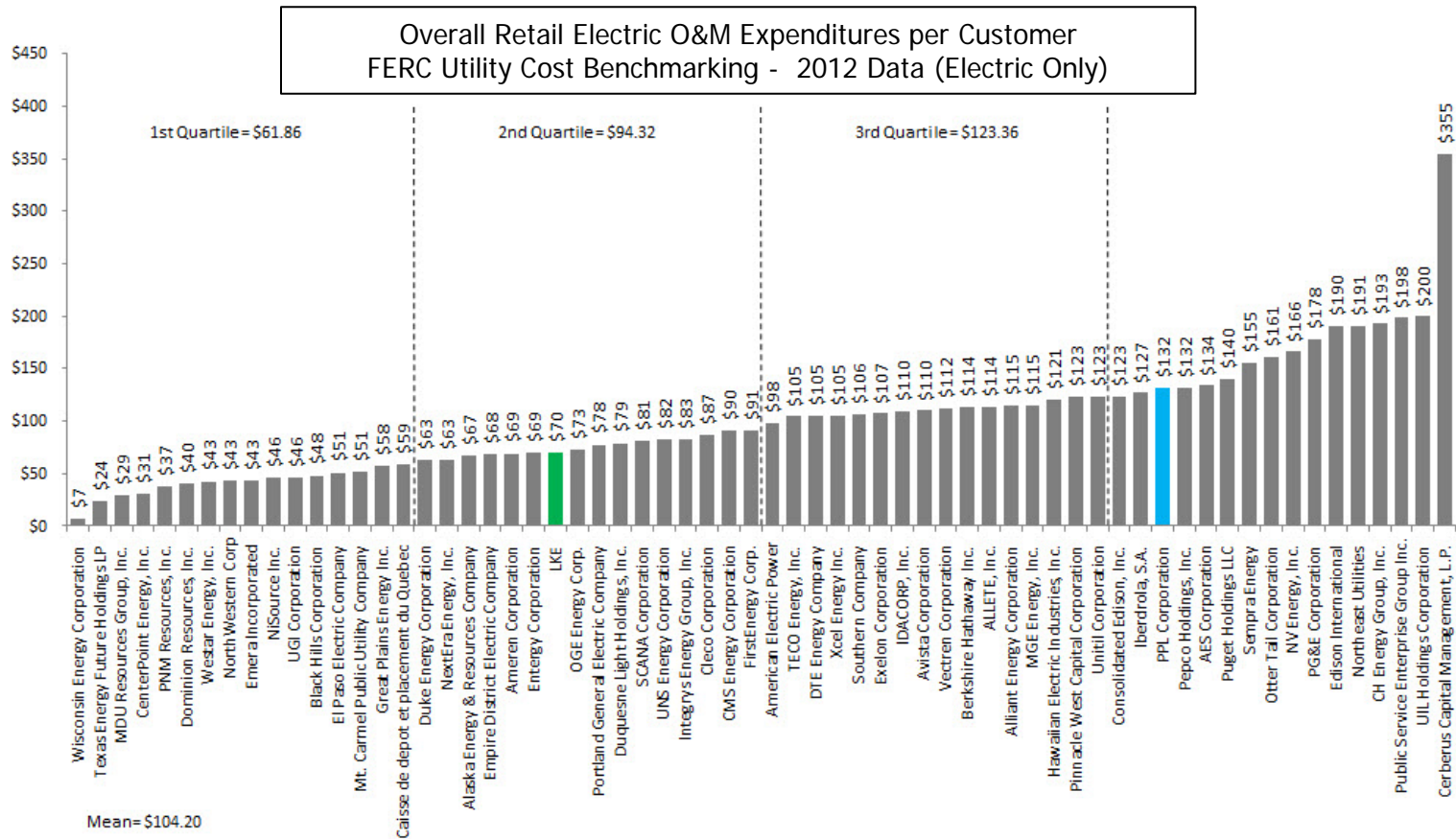
<sup>1</sup>As of July end 2013

<sup>2</sup> 1.50 represents total EEI Corporate Rate, electric generation, T&D, Gas, w/no nuclear plants companies



# Plan Highlights

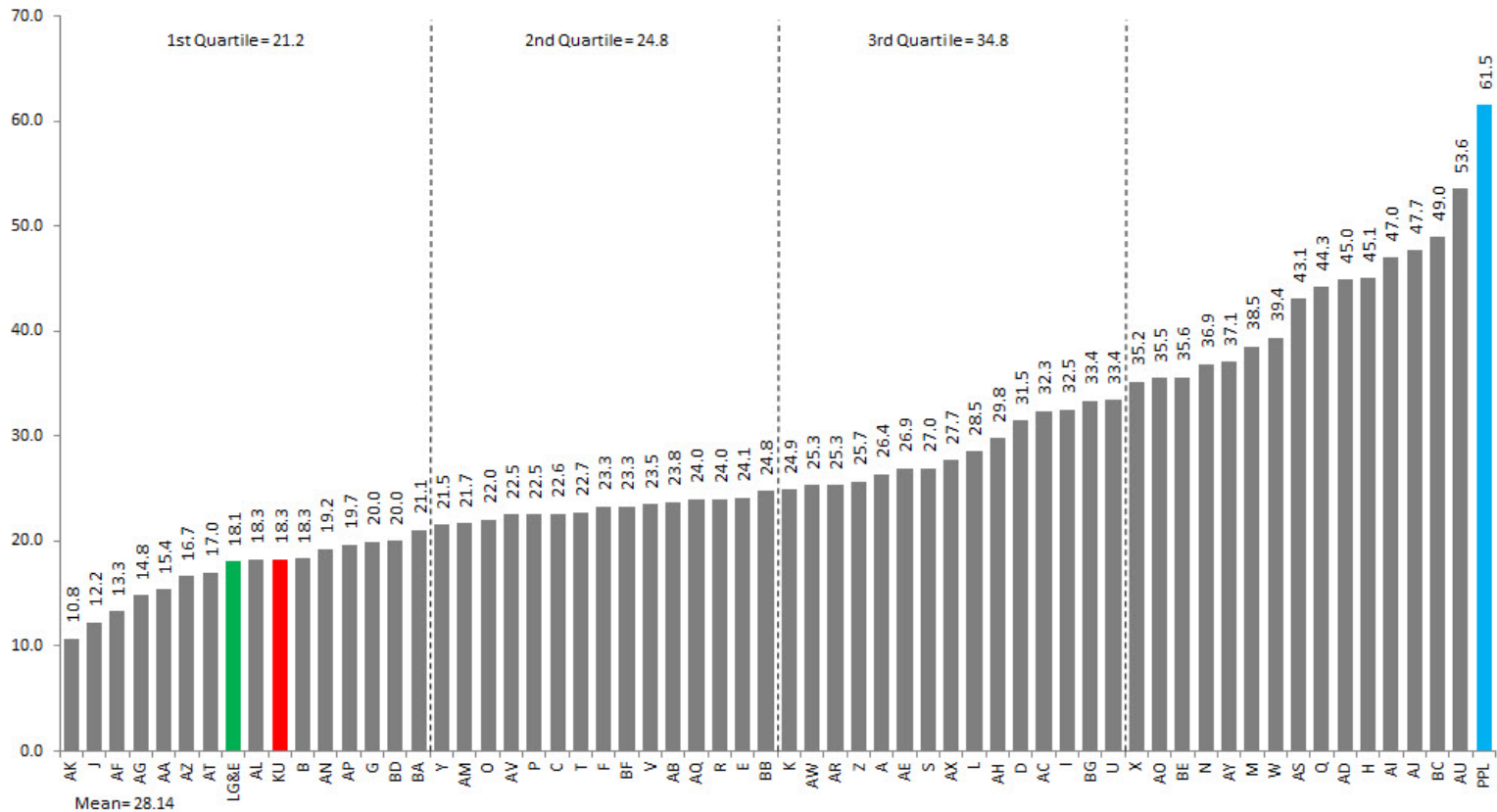
## Total Retail Electric O&M Cost per Customer Performance



# Plan Highlights

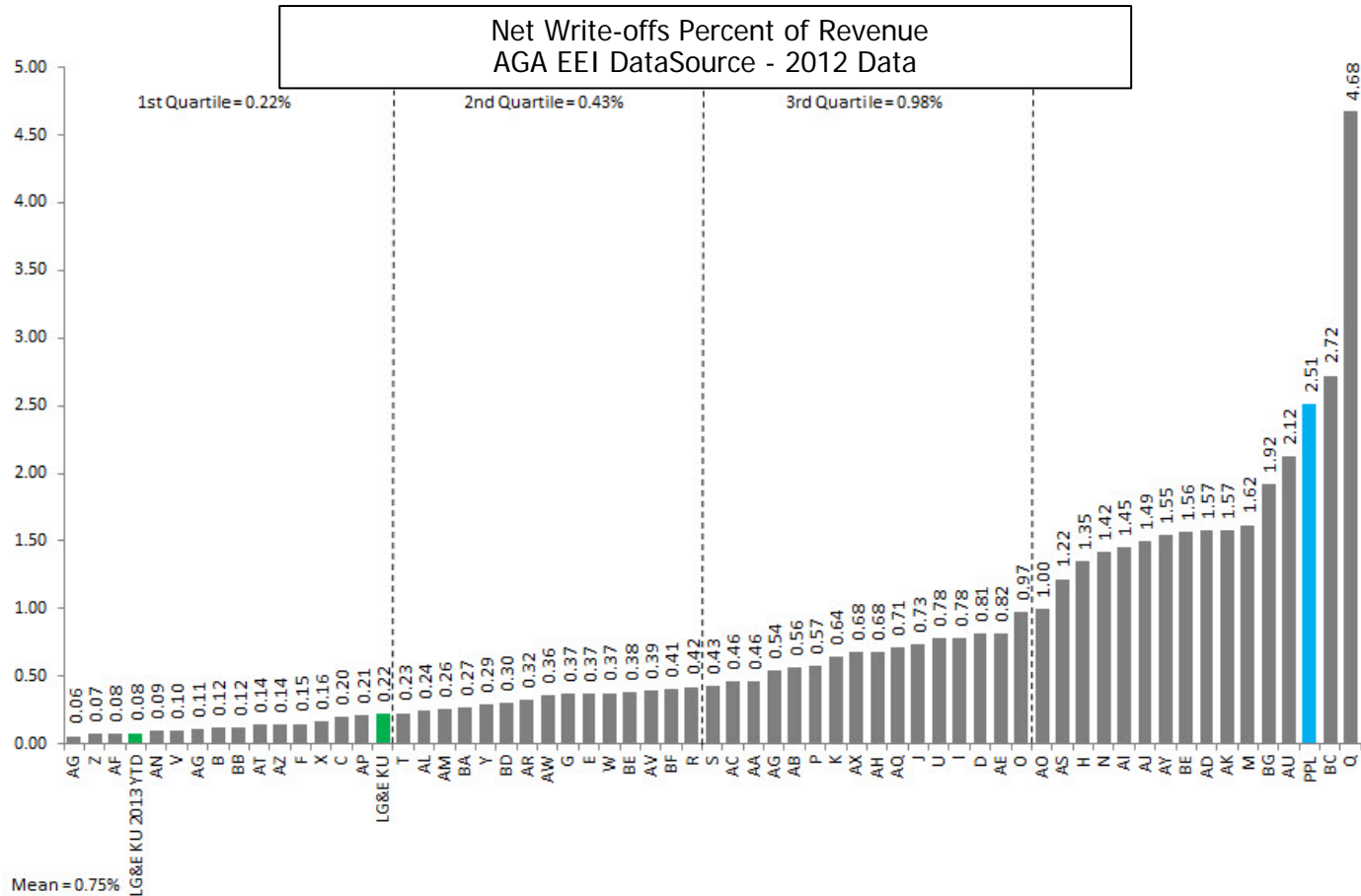
## Estimated Number of Days of Revenue Outstanding (ENDRO)

ENDRO  
AGA EEI DataSource - 2012 Data



# Plan Highlights

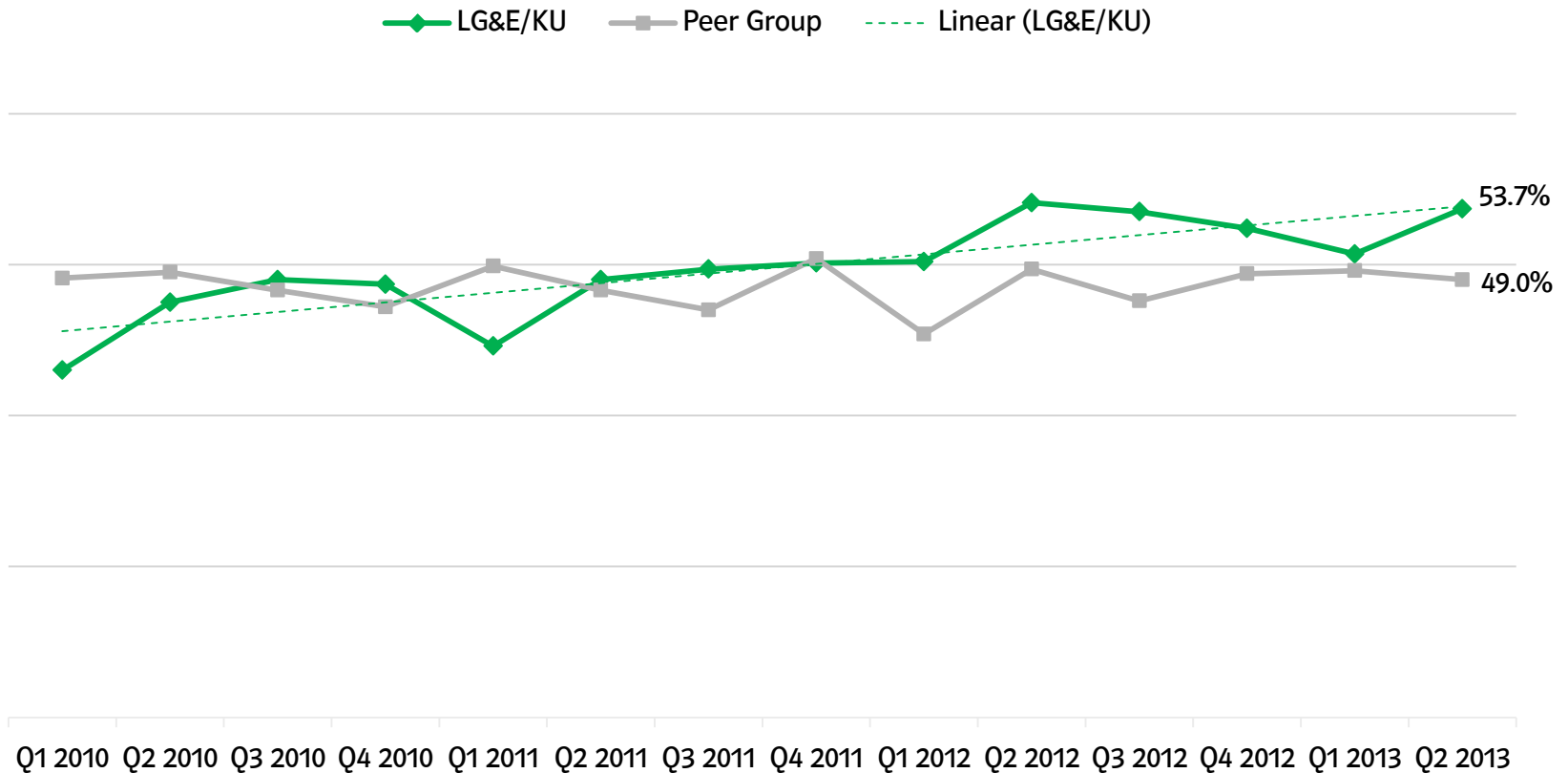
## Net Write-Offs as a Percent of Revenues to Ultimate Customers



# Plan Highlights

## Residential Customers – Satisfaction Survey

Measured as “Top Two Box” (score of 9 or 10 on 10-point scale)





# Plan Highlights

- Safety and Wellness

- *Maintain industry leading performance*
- *Maximize synergies in the COO organization*
- *Continue commitment to workforce, business partners and public safety*
- *Continue to focus on motor vehicle safety*
- *Continue sharing safety best practices throughout the industry*
- *Support the Edumedics hypertension program*
- *Utilization of the Wellness Matching Grant by managers to fund departmental wellness initiatives with a physical exercise component*
- *Continue support of the Company Well Fairs*



# Plan Highlights

- Customer Experience
  - Continue efforts on the “Customer Experience” strategy/initiative
  - Continue tracking new Customer Satisfaction Index in parallel to Top Two Box score on Company’s residential satisfaction study
  - Continue investments in enhanced customer contact channels and the migration to a Corporate “Unified Communications” platform
  - Enhance our “Customer Advocacy” role through partnerships with customer focus groups
  - Continue commitment to corporate citizenship and community involvement
  - Continue to deliver the current portfolio of customer energy efficiency programs, including customer education on the need for energy efficiency
  - Advance our understanding of customer behavior while gaining insight into customer needs



# Plan Highlights

- OPEX
  - *On target in 2013 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2013-2018 is 1.9%.*
  - *Major Initiatives:*
    - Customer Experience Strategy
    - Rate Case Filings
    - Right of Way Document Preservation Program
  - *Major Financial Risks:*
    - Customer Hardship and Uncollectible Accounts
    - Industry Regulatory Uncertainty



# Plan Highlights

- Cost of Sales

- *On target in 2013 to achieve 7&5 approved forecast.*
- *Compounded Annual Growth Rate (CAGR) from 2013-2018 is 2.9%.*
- *Major Initiatives:*
  - Energy Efficiency Continuance

- Capital

- *On target in 2013 to achieve 7&5 approved forecast.*
- *Compounded Annual Growth Rate (CAGR) from 2013-2018 is (5.1%).*
- *Major Capital Initiatives:*
  - Energy Efficiency Programs and Services
  - Master Facility Plan Implementation
  - Gas and Electric Meters



# Major Assumptions

- Customer expectations regarding levels of service and availability of information will continue to increase.
- The “customer experience” will continue to be a significant focus across the Company.
- Rate case filings during the planning period will impact customers and internal workloads.
- Incremental headcount is mostly offset by a reduction in contractors as critical skill sets are returned in-house as well as needs to promote strategic direction and coordination of business functions within LG&E and KU.
- Bad debt expense is based on .23% of 2013 Business Plan revenues in 2014-2016 and .25% of revenue in 2017 and .30% in 2018.



# Major Assumptions

---

- Incremental costs are included for facility improvements expected as an outcome of the master facility planning study being completed in 2013.
- Minimal regulatory and legislative action to mandate smart meter / smart grid occurs during the planning period.
- Energy Efficiency projects and education will continue to be an area of focus.
- Energy Efficiency Filing for program changes in 2015 is successful and results in approximately a \$3 million incremental program expense for each year 2015-2018 over previous Business Plan (Five existing programs expire December 2014).



# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual <sup>1</sup>	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>OPEX/Other Expenses</b>							
<b>Labor</b>	<b>34,574</b>	<b>36,727</b>	<b>38,631</b>	<b>41,438</b>	<b>43,714</b>	<b>45,079</b>	<b>46,465</b>
<b>Non-Labor</b>							
Bad Debt Expense	5,692	5,366	7,007	7,703	8,082	9,047	11,399
Contributions	1,714	2,099	1,828	1,849	1,890	2,032	1,974
Outside Services	24,020	23,716	21,214	20,732	20,723	21,218	21,656
Postage	5,062	4,998	5,285	5,386	5,493	5,601	5,712
Materials	2,256	2,609	2,418	2,636	2,394	2,507	2,562
Transportation	1,877	1,804	1,826	1,850	1,838	1,874	1,911
Other Non-Labor	7,794	9,534	3,046	3,156	3,158	3,573	3,674
<b>Total Non-Labor</b>	<b>48,415</b>	<b>50,126</b>	<b>42,624</b>	<b>43,312</b>	<b>43,578</b>	<b>45,852</b>	<b>48,888</b>
<b>Subtotal OPEX / Other Expense</b>	<b>82,989</b>	<b>86,853</b>	<b>81,255</b>	<b>84,750</b>	<b>87,292</b>	<b>90,931</b>	<b>95,353</b>
Gross Margin Expenses *							
* (see Margin slide for detail)	26,910	36,806	35,875	37,245	38,629	40,411	42,260
<b>Total Income Statement items</b>	<b>109,899</b>	<b>123,659</b>	<b>117,130</b>	<b>121,995</b>	<b>125,921</b>	<b>131,342</b>	<b>137,613</b>

<sup>1</sup> Actual costs for 2012 are not adjusted for re-organization transfers to / from EDO, GDO, HR, IT, CFO & Operating Services clearing.



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Prior Plan <sup>1</sup></b>	<b>85,027</b>	<b>88,209</b>	<b>91,253</b>	<b>93,763</b>	<b>99,190</b>
<b>Drivers:</b>					
Bad Debt Expense	3,103	3,293	3,819	3,330	3,833
Work-Force Plan Adjustments	66	(431)	(506)	(569)	(615)
Postage	(558)	(558)	(569)	(579)	(589)
Contract Renewals	(555)	(743)	(764)	(785)	(806)
Contributions	(179)	(166)	(174)	(281)	(189)
LG&E Center Operating Expenses	(135)	(140)	(149)	(156)	(164)
Non-Labor Reductions & Other	2,030	2,204	2,304	1,872	2,367
<b>Total Drivers (Incr) / Decr</b>	<b>3,772</b>	<b>3,459</b>	<b>3,961</b>	<b>2,832</b>	<b>3,837</b>
<b>Current Plan</b>	<b>81,255</b>	<b>84,750</b>	<b>87,292</b>	<b>90,931</b>	<b>95,353</b>

<sup>1</sup> Adjusted for re-organization and clearing transfers.





# Financial Performance

## 2012-2018 Margin Expenses / Cost of Sales (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Margin Expenses							
Mechanism Recoverable							
DSM Costs	26,910	36,806	35,875	37,245	38,629	40,411	42,260
Total Margin / Cost of Sales	26,910	36,806	35,875	37,245	38,629	40,411	42,260



## 2014-2018 Margin/Cost of Sales Reconciliation (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
<u>Mechanism recoverable</u>					
Prior Plan	35,366	34,245	35,629	37,411	39,260
Drivers : (Incr) / Decr					
New or Expanded Programs	(509)	(3,000)	(3,000)	(3,000)	(3,000)
Current Plan	<u><u>35,875</u></u>	<u><u>37,245</u></u>	<u><u>38,629</u></u>	<u><u>40,411</u></u>	<u><u>42,260</u></u>



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Retail</b>							
DSM	552	3,331	4,833	4,310	1,804	1,799	1,772
Other	682	125	425	425	428	431	435
<b>Total Retail</b>	<b>1,234</b>	<b>3,456</b>	<b>5,258</b>	<b>4,735</b>	<b>2,232</b>	<b>2,230</b>	<b>2,207</b>
<b>Metering</b>							
Meter Purchases	4,586	4,441	4,595	4,717	4,826	4,947	5,069
Other	380	251	556	532	550	553	560
<b>Total Metering</b>	<b>4,966</b>	<b>4,692</b>	<b>5,151</b>	<b>5,249</b>	<b>5,376</b>	<b>5,500</b>	<b>5,629</b>
<b>Operating Services</b>							
Tenant Improvements (LG&E Center)		2,370	1,845	1,845	1,845		
Furniture & Office Equipment (LG&E Center)			1,100	1,100	1,046	1,052	
Business Office & Ops Ctr Consolidation				5,386		5,529	
Facility Improvements	3,690	1,484	4,388	3,478	692	694	694
Other	1,342	519	2,270	1,817	1,988	1,044	1,113
<b>Total Operating Services</b>	<b>5,032</b>	<b>4,373</b>	<b>9,603</b>	<b>13,626</b>	<b>5,571</b>	<b>8,319</b>	<b>1,807</b>
<b>Total Capital and Cost of Removal</b>	<b>11,232</b>	<b>12,521</b>	<b>20,012</b>	<b>23,610</b>	<b>13,179</b>	<b>16,049</b>	<b>9,643</b>



# Capital Reconciliation (w COR) – Accrual Basis (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Prior Plan</b>	<b>16,051</b>	<b>16,180</b>	<b>14,016</b>	<b>12,276</b>	<b>12,526</b>
<b>Changes:</b>					
Energy Efficiency	1,036	2,361	2,453	(38)	(23)
Tenant Improvements (LG&E Center)	(1,845)	(1,845)	(1,845)		
Furniture & Equipment (primarily LG&E Center)	(1,161)	(1,360)	(1,139)	(1,047)	(55)
Meters & Equipment	(374)	(351)	(356)	(355)	(355)
Business Office & Ops Ctr Consolidation		(5,386)		(5,529)	
Facility Improvements	(1,649)	(58)	2,217	2,610	2,692
Wellness Center			(706)		
Electrical & Lighting	605	(580)	204	448	459
Other	(573)	(211)	9	138	165
<b>Total Changes : (Increases) / Decreases</b>	<b>(3,961)</b>	<b>(7,430)</b>	<b>837</b>	<b>(3,773)</b>	<b>2,883</b>
<b>Current Plan</b>	<b>20,012</b>	<b>23,610</b>	<b>13,179</b>	<b>16,049</b>	<b>9,643</b>

# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
VP Customer Services	2	2	2	2	2	2	2
Operating Services	31	38	38	42	43	43	43
Revenue Collection	208	217	225	227	227	227	227
Customer Services & Marketing	350	373	390	406	407	408	408
Customer Energy Efficiency	23	23	24	24	24	24	24
Interns / Temporary Employees	1	4	1	1	1	1	1
<b>TOTAL</b>	<b>615</b>	<b>657</b>	<b>680</b>	<b>702</b>	<b>704</b>	<b>705</b>	<b>705</b>
From 2013 Business Plan		653	652	667			
Variance to 2013 Business Plan		4	28	35			
<b>Year to Year Increases (Decreases)</b>		<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
1.) Maintenance / Operational		39	26	22	2	1	
2.) Compliance – NERC, FERC, CIP, etc.							
3.) EPA / Environmental							
4.) Administrative / Corporate		3	-3				
<b>TOTAL</b>		<b>42</b>	<b>23</b>	<b>22</b>	<b>2</b>	<b>1</b>	<b>0</b>



# Operational Performance

## Key Performance Indicators

<u>KPI</u>	<u>2012 Year End</u>	<u>2013 Forecast</u>	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Overall Customer Experience	9.02	8.50	8.50	8.50	8.50	8.50	8.50
Safety	1.10	1.80	1.73	1.73	1.73	1.73	1.73
Overall Customer Satisfaction (TIA Points)	25.00	18.00	18.00	18.00	18.00	18.00	18.00
O&M Cost per Customer - Retail Electric	70.07	78.93	82.89	86.01	88.32	91.60	96.02



# Plan Risks

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- Increased Capital and O&M Costs due to Industry Regulatory Actions
- Customer Hardship and Uncollectible Accounts
- Fuel Prices
- Future Energy Efficiency Regulatory Approvals
- Customer Satisfaction Impacts Due to Ongoing Rate Case Filings
- Future Regulatory or Legislative Smart Meter/Grid Requirements



# Appendix





# Year over Year Walk Forward OPEX and Other Expense (\$000)

<b>2012 Actual</b>	<b>82,989</b>	<b>2015 Plan</b>	<b>84,750</b>
Labor Changes (Inc. Re-Org Transfers)	2,153	Labor Changes	2,276
Bad Debt Expense	(326)	Scanning Initiative	(125)
Other Non-Labor (Inc. 2% Inf.)	<u>2,037</u>	Bad Debt Expense	379
		Net Other Changes	<u>12</u>
<b>2013 FC</b>	<b>86,853</b>	<b>2016 Plan</b>	<b>87,292</b>
Labor Changes (Exc. Security Transfer)	2,590	Labor Changes	1,365
Corporate Security & Business Continuity	(3,079)	Bad Debt Expense	965
Operating Services Clearing	(6,892)	Net Other Changes	<u>1,309</u>
Contract Renewals	330		
Facilities Master Planning Study	(300)	<b>2017 Plan</b>	<b>90,931</b>
Scanning Initiative (Real Estate & Right-of-Way)	100	Labor Changes	1,386
LG&E Center (HVAC, Fitness Center & Parking)	135	Bad Debt Expense	2,352
Bad Debt Expense	1,641	Net Other Changes	<u>684</u>
Net Other Changes	<u>(123)</u>		
<b>2014 Budget</b>	<b>81,255</b>	<b>2018 Plan</b>	<b>95,353</b>
Labor Changes	2,807		
Contract Renewals	188		
Scanning Initiative	(125)		
Bad Debt Expense	696		
Net Other Changes	<u>(71)</u>		
<b>2015 Plan</b>	<b>84,750</b>		

**Increases / (Decreases)**



## Target Adjustments to Prior Plan OPEX and Other Expense (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Net Target Adjustments</b>	<b>10,839</b>	<b>10,959</b>	<b>11,137</b>	<b>11,382</b>	<b>11,636</b>
<b>Adjustment Items:</b>					
IT : Transfer to CAO	121	123	126	128	131
SVP Retail : Transfer to GDO	131	131	131	131	131
Corporate Security & Business Continuity : Transfer to EDO	3,114	3,183	3,269	3,357	3,448
Energy Delivery Budgeting : Transfer to CFO	116	119	123	126	130
HR : Transfer to CAO	409	421	433	445	458
VP Customer Services : Transfer from EDO	(43)	(44)	(45)	(47)	(48)
Admin & Contract Services : Transfer to Clearing	5,776	5,975	6,096	6,219	6,342
Facilities Services : Transfer to Clearing	1,215	1,051	1,004	1,023	1,044
<b>Total Adjustments (Increases)/Decreases</b>	<b>10,839</b>	<b>10,959</b>	<b>11,137</b>	<b>11,382</b>	<b>11,636</b>



# Year over Year Walk Forward GMEXP / Cost of Sales (\$000)

<b>2012 Actual</b>	26,910
Additional Programs & Greater Customer Engagement	<u>9,896</u>
<b>2013 FC</b>	36,806
Additional Programs & Greater Customer Engagement	<u>(931)</u>
<b>2014 Budget</b>	35,875
Additional Programs & Greater Customer Engagement	<u>1,370</u>
<b>2015 Plan</b>	37,245
Additional Programs & Greater Customer Engagement	<u>1,384</u>
<b>2016 Plan</b>	38,629
Additional Programs & Greater Customer Engagement	<u>1,782</u>
<b>2017 Plan</b>	40,411
Additional Programs & Greater Customer Engagement	<u>1,849</u>
<b>2018 Plan</b>	<u>42,260</u>

**Increases / (Decreases)**



# 2012-2018 Headcount progression

<b>2012 Headcount</b>	<b>615</b>	<b>2014 Headcount Budget</b>	<b>680</b>
Operating Services & Business Process Mgmt	7	Operating Services & Business Process Mgmt	4
Revenue Collection & Metering	9	Revenue Collection & Metering	2
Customer Services & Marketing	23	Customer Services & Marketing	<u>16</u>
Energy Efficiency	0		
Interns & Temporary Employees	<u>3</u>	<b>2015 Headcount Plan</b>	<b>702</b>
		Operating Services & Business Process Mgmt	1
<b>2013 Headcount FC</b>	<b>657</b>	Customer Services & Marketing	<u>1</u>
Revenue Collection & Metering	8		
Customer Services & Marketing	17	<b>2016 Headcount Plan</b>	<b>704</b>
Energy Efficiency	1	Customer Services & Marketing	<u>1</u>
Interns & Temporary Employees	<u>-3</u>		
		<b>2017 Headcount Plan</b>	<b>705</b>
<b>2014 Headcount Budget</b>	<b>680</b>		
		<b>2018 Headcount Plan</b>	<u><b>705</b></u>

(Decreases) / Increases



## Other Balance Sheet Costs (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget <sup>1</sup>	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Operating Services Clearing</b>							
Labor	21						
Non labor	3,125	3,456	10,348	10,538	10,658	10,869	11,087
<b>Total Operating Services Clearing</b>	<b>3,146</b>	<b>3,456</b>	<b>10,348</b>	<b>10,538</b>	<b>10,658</b>	<b>10,869</b>	<b>11,087</b>
<b>Total Other Costs</b>	<b>3,146</b>	<b>3,456</b>	<b>10,348</b>	<b>10,538</b>	<b>10,658</b>	<b>10,869</b>	<b>11,087</b>

<sup>1</sup> Beginning in 2014, rent and operating expenses for the LG&E Center, KU General Office, Simpsonville and Morganfield facilities will be charged through clearing. These costs were previously included in O&M.



**PPL companies**

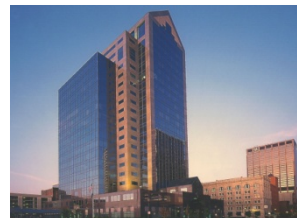
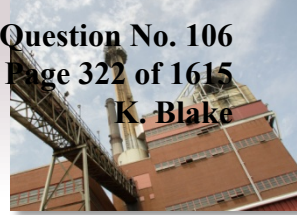
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# Chief Administrative Officer

## 2014 Business Plan

*December 2013*

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# Plan Highlights

- The 2014 Chief Administrative Officer O&M budget submitted for the 2014 Business Plan is \$104 million. The current business plan is \$1.6 million lower than the adjusted 2013 Business Plan due to overall CAO budget cuts.
- The 2014 CAO Capital budget is \$43.7 million and is \$8.5 million higher than the adjusted 2013 Business Plan. The increase is due primarily to the CCS upgrade.
  - *CCS Upgrade project increased \$7.4 million from the 2013 BP mainly as a result of timing. The 2014 CCS increase is largely offset by decreases in 2016 and 2018; the overall project increase is \$2.9 million over the 5-year period.*





# Major Assumptions

## Information Technology

- Safety & Regulatory
  - *Increased regulatory scrutiny at FERC, NERC and SERC as it relates to Critical Infrastructure Protection (CIP) and cyber security will drive the need for increased spending for both labor and information technology solutions to meet compliance requirements.*
- Customer Commitment
  - *As our primary interface with our customers, the CCS system will require additional upgrades and enhancements to continue to meet customer and business expectations. This will include release upgrades to the SAP applications and hardware refresh and expansion.*
  - *Enhancements to many of the other call center technologies such as the phone system will also be required.*
  - *Rate Case submissions will continue to occur on a regular basis requiring updates to the CCS system and customer billing.*



# Major Assumptions

## Information Technology

- Business Reliance on Technology
  - *Business reliance on information technology services to conduct day to day operations continues to expand. Large portions of everyone's job now requires automation.*
  - *Customers' expectations also continue to rise, creating the need for even greater levels of automation. Customer satisfaction can be impacted greatly by the use of technology to meet their needs.*
  - *This trend means that the reliability and availability of information technology services is critically important to the business. There is little tolerance for almost any kind of system outage.*
- Cyber Security Threats
  - *IT Security threats and data protection issues continue to increase. These threats are becoming even more sophisticated and difficult to overcome. Continued investment in protective and preventive measures to reduce these threats are required and included in the plan.*



# Major Assumptions

## Information Technology

- Major Initiatives
  - *Several new business initiatives are planned for deployment and included in the IT Business Plan.*
  - *A significant number of IT resources are tied to these capital projects.*
- Advances in New Technologies
  - *Technology continues to advance at an ever increasing pace. New technologies first introduced in the consumer space are making their way into the enterprise. This includes everything from smart phones to tablet PCs (iPads) to social media.*
  - *Leveraging these new technologies will be a major differentiator for productivity and customer satisfaction.*
  - *The current plans include the deployment of many of these new technologies such as Mobility, Virtual Desktop technology, Unified Communications and Collaboration tools, Business Intelligence and others.*
  - *Plans include working closely with the business to determine which of these technologies can deliver the greatest benefit.*



# Major Assumptions

## General Counsel

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- Legal
  - *No contingent budgets have been proposed.*
  - *Hourly rates of outside providers will not materially increase.*
  - *No significant developments in existing litigation matters or new material litigation claims arise.*
- Corporate Communications
  - *Maintaining positive brand image in light of increased activities by national and local environmental activists will require additional education and communication measures with key stakeholders.*
  - *The large number of construction projects will continue to require increased communications.*
  - *Energy Efficiency programs will continue to grow and will require support through targeted advertising/marketing programs.*



# Major Assumptions

## General Counsel

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- Corporate Responsibility
  - *Nonprofit organizations will continue to experience financial challenges.*
  - *Anticipate greater scrutiny of our community activities and heightened expectations for our role as a funding partner.*
  - *Increased criticism from environmental groups and other stakeholders will require strategic donations and new partnerships.*
- Compliance
  - *No material change in current role.*
  - *No new significant enforcement issues.*
  - *No significant increase in internal investigation obligations.*
  - *Increased emphasis on cyber security.*
  - *Implementation of CIP version four.*

# Major Assumptions

## General Counsel

- External Affairs
  - *Increased legislative and regulatory activity by local, state and federal governmental entities affecting the company's activities in the operational, regulatory and environmental areas.*
  - *Pressure by local, state and federal governmental entities upon the company to use its monopolistic status to enhance governmental revenues.*
  - *Public comparison of:*
    - *Levels of engagement and contributions with and to advocacy groups*
    - *PPL and LG&E/KU legislative and regulatory positions on various issues*
- Federal Regulation & Policy
  - *Uncertain implementation path of Order 1000 regional/interregional transmission planning and cost allocation rules.*



# Major Assumptions

## General Counsel

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- State Regulation & Rates
  - *Filing of two base rate cases for LG&E and KU in KY.*
  - *Revise the formula rates for FERC wholesale municipal and OATT customers.*
  - *One or more CPCN proceedings for generation facilities.*
  - *Possible smart-grid and smart-meter projects.*
  - *Possible Federal climate change and renewable legislation passed.*
  - *Filing of Integrated Resource Plan.*
- Environmental
  - *Coal fired utilities will face tighter limits resulting in increased regulatory and PR burden.*
  - *New environmental regulations will require added controls, compliance monitoring and reporting.*



# Major Assumptions

## Human Resources

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- Current and potential Federal legislative initiatives may significantly affect the existing landscape and costs associated with virtually every aspect of the workforce (benefits, compensation, union relations, safety, etc.)
- Wellness must continue to evolve as a means of containing healthcare costs
- The pace and complexity of regulatory compliance will continue to escalate
- Competition for talent will require more non-traditional sourcing
- Capital spend will be higher for 2014 given a pressing need to automate HR systems
- Staffing demands will continue at higher levels for the foreseeable future



# Major Assumptions

## Supply Chain

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- Openings created via retirements will be filled by a combination of current internal resources and hiring
- Agreed upon direction of the SC Centers of Excellence, while not formally endorsed by the current PPL SC leadership, will not be replaced by a new direction
- Project Quest will result in efficiency improvements to the way paper invoices are being received and processed
- Active engagement with the UK and UL Schools of Business will continue



# Financial Performance

## 2012-2018 OPEX and Other Expenses CAO Organization (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	40,235	43,549	49,992	51,999	53,822	55,767	57,687
Software/Hardware Maintenance	12,608	15,693	17,323	17,999	18,705	19,439	20,201
Outside Counsel	5,796	7,170	7,997	8,092	8,484	9,474	9,703
Other Outside Services	6,686	8,462	8,340	8,689	8,648	8,872	9,049
Fees, Permits & Licenses	2,808	3,512	3,477	3,285	3,284	3,350	3,417
Dues & Subscriptions	2,528	2,943	2,916	3,162	3,342	3,455	3,524
Donations	1,697	2,292	2,488	2,535	2,587	2,741	2,796
Advertising	1,488	1,599	1,639	1,672	1,705	1,739	1,774
Rate Case Amortization	1,246	1,681	1,032	2,226	1,193	2,853	1,660
Training, Travel & Meals	2,043	2,582	2,918	2,947	3,005	3,014	3,074
Other Non Labor	5,153	5,764	5,952	6,090	6,219	6,447	6,577
Total Income Statement items	<u>82,288</u>	<u>95,247</u>	<u>104,075</u>	<u>108,696</u>	<u>110,995</u>	<u>117,150</u>	<u>119,463</u>
From 2013 Business Plan - Adjusted		101,033	106,967	110,471	112,442	116,797	118,823
Variance to 2013 Business Plan		5,786	2,892	1,775	1,447	(353)	(639)



## 2014-2018 OPEX/Other Expense Reconciliation CAO Organization (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Prior Plan	106,967	110,471	112,442	116,797	118,823
Drivers:					
IT Labor Increases	(56)	(38)	34	383	1,468
IT Software Maintenance	1,000	1,590	1,964	2,358	2,120
IT Non-Labor Changes	(879)	(371)	(492)	(907)	(927)
SC Labor transfer from CFO	187	194	198	203	209
GC Outside Services Savings	(2,548)	(2,664)	(2,488)	(1,718)	(1,711)
Other GC, HR & SC	(596)	(486)	(663)	34	(519)
Current Plan	<u><u>104,075</u></u>	<u><u>108,695</u></u>	<u><u>110,995</u></u>	<u><u>117,150</u></u>	<u><u>119,463</u></u>



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis CAO Organization (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Information Technology</b>							
SAP/CCS/AMI	-	1,790	11,280	12,220	9,400	4,700	4,700
Cisco UC&C	1,426	3,670	2,700	1,233	300	779	-
Tech Refresh of Desktops & Laptops	-	1,925	2,128	2,275	2,363	2,490	3,073
Lockout/Tagout (LOTO) Replacement Sys	-	-	1,700	416	-	-	143
PACS Replacement	-	-	1,500	-	-	-	-
Fiber Reach Nodes Replacement	-	1,351	1,289	949	-	-	-
VDI	-	-	1,200	285	-	2,185	-
Mobile Dispatch/Infrastructure/Radio System	2,462	2,054	1,187	2,445	4,500	1,150	1,400
Call Center - Call Routing and Reporting	-	-	1,186	237	237	-	-
SE KY Transport Buildout	-	-	950	1,900	475	-	-
STORMS Work Management System Upgrade	-	-	800	-	-	-	-
CIP Compliance Infrastructure/Tools	417	1,080	750	750	750	750	750
Ventyx Field Services Enhancements	-	-	713	237	190	190	190
SDE Replacement	-	-	665	665	-	-	-
IPM Replacement (Open Text)	934	1,090	657	142	-	-	-
San Switch Refresh/San Capacity Expansion	-	1,225	645	1,057	952	255	967
Access Switch Rotation	-	-	500	500	500	500	500
Customer Communication - texting, mobile	-	-	475	475	475	261	261
Server Hardware Refresh	-	-	450	575	510	480	510
Simpsonville Electrical/Cooling/UPS Modification	-	-	380	-	-	-	1,092
IRAS Enhancements	-	-	285	950	-	-	475
Analog Sunset	-	-	218	618	713	-	-
Peoplesoft Upgrade/Enhancements	-	-	214	818	863	214	818



# 2012-2018 Capital Breakdown (w COR) – Accrual Basis CAO Organization (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Information Technology cont.</b>							
Oracle NMS	-	-	100	190	500	500	1,425
CFO Systems Capital/Oracle Upgrade	-	-	95	190	7,030	475	475
GIS/Smallworld GIS Migration	-	-	29	504	-	3,325	4,750
TOE enhancement/replacement	-	-	-	950	-	119	119
Gas Nomination System (GTS)	-	-	-	1,140	285	-	237
Design Tool Enhance/Replace	-	-	-	1,900	-	95	475
Security Event Management - Refresh	-	-	-	560	-	-	560
Quantar Repeaters Replacement	-	-	-	-	-	475	950
NE KY Transport Buildout	-	-	-	-	-	1,425	1,425
Megastar & DVM MW Replacement	-	-	-	-	713	712	-
Isilon NAS Refresh (BOC/SDC)	-	-	-	-	-	1,938	-
Enterprise Storage System Refresh	-	-	-	-	-	3,952	-
Enterprise Storage System Refresh	-	-	-	-	-	3,952	-
IVR - Major upgrades/changes	-	-	-	-	1,425	-	-
Electric OMS Replace/Upg-LGE	1,297	59	-	-	-	-	-
Storage Area Network Refresh	1,988	271	-	-	-	-	-
Server HW Refresh	897	740	-	-	-	-	-
Call Recording Replace-LGE13	-	945	-	-	-	-	-
Enterprise Information Mgmt-LGE12	934	1,090	-	-	-	-	-
KU MW Backbone Renovation	3,036	1,845	-	-	-	-	-
Work Mgmt System	781	3,548	-	-	-	-	-
Oracle Licenses - LGE13	-	3,959	-	-	-	-	-
TierC Rotation	2,670	-	-	-	-	-	-
EMS Transfer to IT	-	-	1,624	705	102	732	603
Other	15,701	9,939	9,256	10,415	9,686	8,676	13,521



## 2012-2018 Capital Breakdown (w COR) – Accrual Basis CAO Organization (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Supply Chain</b>							
Pole Racks	133	385	470	390	320	310	137
Other	58	-	110	210	210	35	35
<b>Human Resources</b>							
People Soft Upgrades/Enhancements	973	225	-	-	-	-	-
<b>General Counsel</b>							
Corporate Website	-	1,000	-	-	-	-	-
Environmental Equipment	-	-	100	100	100	100	100
Total Capital and Cost of Removal	<u>33,708</u>	<u>38,191</u>	<u>43,655</u>	<u>46,002</u>	<u>42,598</u>	<u>40,775</u>	<u>39,692</u>



## Capital Reconciliation (w COR) –Accrual Basis CAO Organization (\$000)

	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Prior Plan	35,114	37,888	36,329	34,624	47,349
Changes:					
CCS Upgrade	11,280	10,340	3,760	4,700	4,700
CCS Enhancements	(3,838)	(4,000)	(7,407)	(3,900)	(12,744)
SAP AMI Implementation	-	1,880	5,640	-	-
Lockout/Tagout Replace	1,200	416	-	-	143
CFO Systems Capital	-	-	6,347	-	-
GIS/Smallword	-	-	-	950	2,375
Customer Services	-	-	-	4,185	-
Other IT	89	(177)	(1,871)	231	(2,289)
Supply Chain Total	(190)	(345)	(200)	(15)	158
Current Plan	<u>43,655</u>	<u>46,002</u>	<u>42,598</u>	<u>40,775</u>	<u>39,692</u>

# Financial Performance

## CAO Organization

### 2012-2018 Headcount

<u>Department</u>	<u>2012 Year End</u>	<u>2013 Forecast</u>	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Information Technology	278	309	318	325	327	330	333
General Counsel CAO	92	101	105	106	106	106	106
Human Resources	35	56	56	56	56	56	56
Supply Chain	50	50	51	51	51	51	51
<b>TOTAL</b>	<b>455</b>	<b>516</b>	<b>530</b>	<b>538</b>	<b>540</b>	<b>543</b>	<b>546</b>
From 2013 Business Plan		503	509	514			
Variance to 2013 Business Plan		13	21	24			
<u>Year to Year Increases (Decreases)</u>		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
IT		16	9	7	2	3	3
Transfer of LOB's into IT		15	-	-	-	-	-
Transfer of HR into Corporate		19	-	-	-	-	-
HR Staffing Associate		1	-	-	-	-	-
HRIS Business Analyst		1	-	-	-	-	-
Supply Chain Storeroom Analyst		-	1	-	-	-	-
Communications		4	1	-	-	-	-
Environmental		1	1	1	-	-	-
Legal Attorney		1	1	-	-	-	-
Corporate Responsibility		1	1	-	-	-	-
Compliance Manager		1	-	-	-	-	-
Rates & Regulatory Analyst		1	-	-	-	-	-
<b>TOTAL</b>		<b>61</b>	<b>14</b>	<b>8</b>	<b>2</b>	<b>3</b>	<b>3</b>





# Plan Risks

## Information Technology

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- CIP version 5 compliance
- Potential reduction in system availability due to declining service level agreements with vendors based on our current versions
- Introduction of unified communication and collaboration technologies could pose change management challenges
- Acquiring skilled IT resources will continue to be a challenge for us and the rest of the industry
- Approximately 40 employees at risk to capital labor; CCS and UC&C are the most at risk projects in 2014 with nearly \$1.5 million allocated between them



# Plan Risks

## General Counsel

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- Legal
  - *New environmental regulations will continue to require extraordinary legal review and input.*
  - *The Company becomes embroiled in a significant legal dispute, including class action.*
- Corporate Communications
  - *Given increased ECR spending, planned rate cases and cost associated with the new EPA regulations, customer bills will continue to increase, potentially resulting in lower customer satisfaction levels.*
  - *National and local environmental activists will continue to threaten the Company's brand.*
- Corporate Responsibility
  - *Environmental groups will likely increase their activities and scrutiny requiring more community outreach.*



# Plan Risks

## General Counsel

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- Compliance
  - *NERC Reliability Standards, including Cyber Security Standards, are likely to be revised and affect resources.*
  - *PPL expectations regarding compliance programs, investigations and reporting may affect responsibilities and roles of the Compliance Department.*
  - *Extraordinary workload anticipated due to efforts to address open enforcement matters and expanding compliance programs.*
- Federal Regulation & Policy
  - *Unreasonable requirements for acceptance of FERC 1000 compliance filings.*
  - *Greater socialization of transmission costs across the entire region.*
  - *Increased pressure between state and federal regulators with respect to cost recovery.*
  - *Volatile and deteriorating regulatory climate in EPA.*



# Plan Risks

## General Counsel

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- External Affairs
  - *Upward pressure on customers electric rates due to increased capital expenditures for pollution control and base load generation construction. Environmental, energy efficiency and renewable portfolio standards legislation and Federal EPA regulations place substantial compliance costs on the company and its customers.*
  - *Local, State and Federal Budget shortfalls result in increased efforts to raise revenue through surcharges on the customer electric bill and increased corporate fees and taxes.*
  - *Political environment at the federal and state level becomes increasingly more challenging.*
  - *Push by industrials for limited wheeling.*



# Plan Risks

## General Counsel

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- State Regulation & Rates
  - *Growing rate base and operating expenses, coupled with regulatory lag, could make target returns difficult to achieve.*
  - *Commission and intervenor sensitivity to rising costs could result in punitive actions beyond law and precedent – prudence could be challenged more often particularly where actual costs exceed estimates.*
  - *Failure to get timely regulatory approvals for generation and transmission investment could put customer service and utility economics at risk.*
  - *Legislation that changes the regulatory structure (e.g. limited wheeling for industrials).*
  - *Increased scope and diversity of intervenors in proceedings.*



# Plan Risks

## General Counsel

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- Environmental
  - *Sharp increase in new environmental regulations and regulatory initiatives requiring additional EA staff and training.*
  - *Significant increase in the number of environmental permits and permit conditions required for daily company operations which necessitate outside contractors for specialized modeling, monitoring and testing.*
  - *Designation of coal combustion residuals as hazardous.*

# Plan Risks

## Human Resources

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- Economic pressures and impact on Human Resource management
- Effects of possible Federal legislation relating to benefits, compensation, labor, safety and taxation

# Plan Risks

## Supply Chain

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- Incremental PPL driven initiatives or new mandates will distract our internal business focus
- Workforce demographics will continue to challenge both our short and long term staffing strategies
- Incremental work not included in the existing Procurement Plans could require temporary sourcing resources





# Appendix



# Financial Performance

## 2012-2018 OPEX and Other Expenses Information Technology (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	21,521	23,658	28,439	29,800	30,991	32,291	33,534
Software/Hardware Maintenance	12,552	15,385	16,877	17,547	18,244	18,968	19,722
Outside Services	3,833	4,604	4,358	4,445	4,534	4,625	4,718
Training, Travel & Meals	818	945	1,028	1,049	1,071	1,122	1,145
Fees, Permits & Licenses	1	491	200	204	208	212	216
Dues & Subscriptions	168	119	66	67	69	70	72
Other Non Labor	3,600	3,942	4,229	4,313	4,400	4,488	4,577
Total Income Statement items	<u>42,493</u>	<u>49,144</u>	<u>55,197</u>	<u>57,426</u>	<u>59,516</u>	<u>61,777</u>	<u>63,984</u>
From 2013 Business Plan - Adjusted		50,394	55,131	56,245	58,010	59,943	61,323
Variance to 2013 Business Plan		1,250	(66)	(1,181)	(1,506)	(1,834)	(2,661)



# Year over Year Walk Forward OPEX and Other Expense Information Technology

2012 Actual	42,493
Labor	2,137
IT Software/Hardware Maint.	2,833
Non-Labor	1,681
<b>2013 FC</b>	<b>49,144</b>
Labor	4,781
IT Software/Hardware Maint.	1,492
Non-Labor	(220)
<b>2014 Budget</b>	<b>55,197</b>
Labor	1,361
IT Software/Hardware Maint.	670
Non-Labor	198
<b>2015 Plan</b>	<b>57,426</b>
Labor	1,191
IT Software/Hardware Maint.	697
Non-Labor	202
<b>2016 Plan</b>	<b>59,516</b>
Labor	1,300
IT Software/Hardware Maint.	724
Non-Labor	236
<b>2017 Plan</b>	<b>61,777</b>
Labor	1,244
IT Software/Hardware Maint.	753
Non-Labor	210
<b>2018 Plan</b>	<b>63,984</b>



# Financial Performance

## 2012-2018 OPEX and Other Expenses General Counsel & CAO (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	12,030	11,412	12,233	12,616	12,971	13,395	13,772
Outside Counsel	5,796	7,170	7,997	8,092	8,484	9,474	9,703
Other Outside Services	2,515	3,272	3,086	3,312	3,163	3,277	3,343
Fees, Permits & Licenses	2,803	3,022	3,277	3,081	3,076	3,138	3,201
Dues & Subscriptions	2,282	2,715	2,781	3,021	3,198	3,283	3,348
Donations	1,667	2,196	2,363	2,407	2,457	2,608	2,660
Advertising	1,487	1,586	1,618	1,650	1,683	1,717	1,751
Rate Case Amortization	1,246	1,681	1,032	2,226	1,193	2,853	1,660
Training, Travel & Meals	973	1,145	1,359	1,383	1,409	1,335	1,362
Other Non Labor	1,096	1,286	1,269	1,290	1,316	1,342	1,369
Total Income Statement items	<u>31,895</u>	<u>35,485</u>	<u>37,015</u>	<u>39,078</u>	<u>38,950</u>	<u>42,421</u>	<u>42,169</u>
From 2013 Business Plan - Adjusted		39,216	40,005	42,068	41,939	44,019	44,294
Variance to 2013 Business Plan		3,731	2,990	2,990	2,990	1,597	2,126



# Year over Year Walk Forward OPEX and Other Expense General Counsel & CAO

2012 Actual	31,895
Outside Counsel	1,373
Other Outside Services	757
Donations	530
Rate Case Amortization	430
Other	500
2013 FC	<u>35,485</u>
Outside Counsel	827
Labor	821
Rate Case Amortization	648
Other	(766)
2014 Budget	<u>37,015</u>
Rate Case Amortization	1,193
Labor Increases	384
Outside Services	320
Other Non Labor	166
2015 Plan	<u>39,078</u>
Rate Case Amortization	(1,032)
Labor Increases	355
Outside Services	243
Other Non Labor	306
2016 Plan	<u>38,950</u>
Rate Case Amortization	1,660
Labor Increases	424
Outside Services	1,104
Other Non Labor	283
2017 Plan	<u>42,421</u>
Rate Case Amortization	(1,193)
Labor Increases	377
Outside Services	295
Other Non Labor	269
2018 Plan	<u>42,169</u>



# Financial Performance

## 2012-2018 OPEX and Other Expenses Human Resources (\$000)

Item	2012 Actual*	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	3,721	5,371	5,988	6,173	6,355	6,482	6,675
Outside Services	307	560	866	901	919	937	956
Training, Travel & Meals	176	363	413	392	400	408	416
Software/Hardware Maint.	48	65	250	255	260	266	271
Donations	11	69	99	100	102	104	107
Dues & Subscriptions	37	64	45	46	47	48	49
Advertising	-	11	19	20	20	21	21
Other Non Labor	382	638	537	553	565	637	650
Total Income Statement items	<u>4,682</u>	<u>7,141</u>	<u>8,218</u>	<u>8,439</u>	<u>8,667</u>	<u>8,902</u>	<u>9,143</u>
From 2013 Business Plan - Adjusted		7,924	8,112	8,331	8,556	8,786	9,040
Variance to 2013 Business Plan		783	(107)	(108)	(111)	(116)	(103)

\*2012 Actuals are prior to re-org



## Year over Year Walk Forward OPEX and Other Expense Human Resources

2012 Actual	4,682
Line of Business Transfers to HR	1,991
Outside Services	254
Other Non Labor Items	214
2013 FC	<u>7,141</u>
Labor & Burden Increases	618
Outside Services	306
Software/Hardware	186
Other Non Labor Items	(33)
2014 Budget	<u>8,218</u>
Labor & Burden Increases	184
Other Non Labor Items	37
2015 Plan	<u>8,439</u>
Labor & Burden Increases	182
Other Non Labor Items	46
2016 Plan	<u>8,667</u>
Labor & Burden Increases	127
Other Non Labor Items	107
2017 Plan	<u>8,902</u>
Labor & Burden Increases	193
Other Non Labor Items	48
2018 Plan	<u>9,143</u>



# Financial Performance

## 2012-2018 OPEX and Other Expenses Supply Chain (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	2,963	3,109	3,332	3,411	3,506	3,599	3,706
Training, Travel & Meals	76	130	118	123	126	149	152
Dues & Subscriptions	41	45	24	27	28	54	55
Outside Services	31	25	29	32	32	33	34
Donations	18	26	27	27	28	28	29
Software/Hardware Maint.	6	59	11	12	12	12	13
Other Non Labor	83	83	103	121	129	174	179
Total Income Statement items	<u>3,218</u>	<u>3,477</u>	<u>3,645</u>	<u>3,753</u>	<u>3,862</u>	<u>4,050</u>	<u>4,167</u>
From 2013 Business Plan - Adjusted		3,498	3,719	3,827	3,936	4,049	4,166
Variance to 2013 Business Plan		21	74	74	74	(1)	(1)





# Year over Year Walk Forward OPEX and Other Expense Supply Chain

2012 Actual	3,218
Labor Increases	146
Other Non Labor Items	113
2013 FC	<u>3,477</u>
Transfer from CFO	185
Labor Increases	38
Other Non Labor Items	<u>(56)</u>
2014 Budget	<u>3,645</u>
Labor Increases	79
Other Non Labor Items	29
2015 Plan	<u>3,752</u>
Labor Increases	95
Other Non Labor Items	14
2016 Plan	<u>3,862</u>
Labor Increases	93
Other Non Labor Items	95
2017 Plan	<u>4,050</u>
Labor Increases	107
Other Non Labor Items	10
2018 Plan	<u>4,167</u>



## Other Balance Sheet Costs CAO Organization (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Stores Expense							
Labor	1,319	1,359	1,383	1,377	1,402	1,425	1,470
Non labor	712	675	695	709	723	737	752
Total	<u>2,031</u>	<u>2,034</u>	<u>2,078</u>	<u>2,085</u>	<u>2,125</u>	<u>2,162</u>	<u>2,222</u>
Regulatory Assets							
Non labor	2,833	-	3,580	1,400	3,580	1,400	3,580
Total	<u>2,833</u>	<u>-</u>	<u>3,580</u>	<u>1,400</u>	<u>3,580</u>	<u>1,400</u>	<u>3,580</u>
WKE							
Labor	9	-	-	-	-	-	-
Non labor	1,176	972	250	150	-	-	-
Total	<u>1,185</u>	<u>972</u>	<u>250</u>	<u>150</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Other Costs	<u><u>6,050</u></u>	<u><u>3,006</u></u>	<u><u>5,908</u></u>	<u><u>3,635</u></u>	<u><u>5,705</u></u>	<u><u>3,562</u></u>	<u><u>5,802</u></u>

# Headcount Progression Information Technology

<b>2012 Headcount</b>	<b>278</b>
WFP Additions	12
LOB Transfers	15
IT Business Relationship Mgr - Corporate Services-CAO	1
IT Business Relationship Mgr - Corporate Services-CFO	1
Middle are (Web Logic)	1
IT Compliance Analyst	1
<b>2013 Headcount FC</b>	<b>309</b>
Telecom	4
Security Analyst	2
Network Systems Engineer	1
BI Support	1
Service Desk Analyst	1
<b>2014 Headcount Budget</b>	<b>318</b>
Telecom	2
Network Systems Engineer	2
BI Support	1
Tester	1
Middle are (Web Logic)	1
<b>2015 Headcount Plan</b>	<b>325</b>
Network Systems Engineer	1
Workstation Technician for Mobile Support	1
<b>2016 Headcount Plan</b>	<b>327</b>
Network Systems Engineer	2
Telecom	1
<b>2017 Headcount Plan</b>	<b>330</b>
Network Systems Engineer	1
Workstation Technician for Mobile Support	1
Data Base Administrator	1
<b>2018 Headcount Plan</b>	<b>333</b>



# Headcount Progression General Counsel & CAO

<b>2012 Headcount</b>	92
Open Attorney Position filled in 2013	1
Rates & Regulatory Analyst	1
Compliance Manager	1
Corporate Responsibility Specialist	1
VP Communications Position filled in 2013	1
Communications - Director Media Relations Positon added	1
Communications - Brand and Advertising Specialist added	1
Communications - Social Media Specialist added	1
Communications - Web Specialist added	1
Communications - Administrative Assistant eliminated	-1
Environmental Scientist	1
<b>2013 Headcount FC</b>	<u>101</u>
Legal Corporate Attorney	1
Corporate Responsibility Manager	1
Environmental Scientist/Engineer	1
Communications - Intern	1
<b>2014 Headcount Budget</b>	<u>105</u>
Environmental Scientist/Engineer	1
<b>2015 Headcount Plan</b>	<u>106</u>
<b>2016 Headcount Plan</b>	<u>106</u>
<b>2017 Headcount Plan</b>	<u>106</u>
<b>2018 Headcount Plan</b>	<u>106</u>



# Headcount Progression

## Human Resources

<b>2012 Headcount</b>	35
Transfer of 19 Headcount into Corporate HR for Re-org	19
HRIS Business Analyst	1
Staffing Associate	1
	<hr/>
<b>2013 Headcount FC</b>	<hr/> 56 <hr/>
	<hr/>
<b>2014 Headcount Budget</b>	<hr/> 56 <hr/>
	<hr/>
<b>2015 Headcount Plan</b>	<hr/> 56 <hr/>
	<hr/>
<b>2016 Headcount Plan</b>	<hr/> 56 <hr/>
	<hr/>
<b>2017 Headcount Plan</b>	<hr/> 56 <hr/>
	<hr/>
<b>2018 Headcount Plan</b>	<hr/> 56 <hr/>

# Headcount Progression Supply Chain

<b>2012 Headcount</b>	50
<b>2013 Headcount FC</b>	<u>50</u>
Storeroom Specialist London	1
<b>2014 Headcount Budget</b>	<u>51</u>
<b>2015 Headcount Plan</b>	<u>51</u>
<b>2016 Headcount Plan</b>	<u>51</u>
<b>2017 Headcount Plan</b>	<u>51</u>
<b>2018 Headcount Plan</b>	<u>51</u>



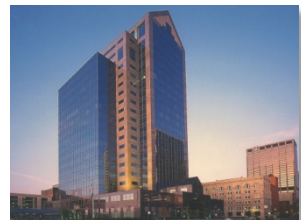
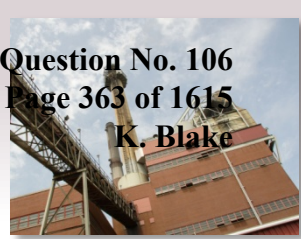
**PPL companies**

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# CFO Organization 2014 Business Plan

12/12/2013

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- Major Assumptions
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  - *Operating Expense*
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# Plan Highlights

- Operating expenses in all years are below the 2013 plan
- CFO budget is primarily labor costs (~75% of total annual budget)
- Audit, bank and insurance fees comprise approximately 20% of total annual costs.
  - *These costs have been reduced by \$0.6m from the prior plan.*
- All labor is budgeted to O&M.
- Continued focus on employee development and inter-departmental coordination following fall 2012 Employee Opinion Survey initiative



# Major Assumptions

- The 2014 Plan assumes fully staffed for all years with escalations of 3% for 2016 - 2023. With the exception of an intern employed for one year in 2014, headcount remains flat throughout the plan period.
- Non-labor expenditure types were escalated by 2% for 2016 - 2023.

# Financial Performance

## 2012-2018 OPEX and Other Expenses (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
OPEX/Other Expenses							
Labor	11,124	13,121	14,146	14,514	14,904	15,269	15,687
Audit Fees	1,601	1,804	1,665	1,744	1,779	1,815	1,851
Bank Fees	985	1,162	1,248	1,276	1,298	1,450	1,479
Insurance Mgmt Fee	876	749	787	807	823	839	856
Training, Travel and Meals	208	436	468	460	470	479	489
Other Outside Services	1,201	230	273	187	150	153	156
Other	490	633	485	464	446	512	522
Subtotal OPEX/Other expense	16,485	18,135	19,072	19,452	19,870	20,517	21,040



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

	<u>2014 Budget</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>	<u>2018 Plan</u>
Prior Plan	19,838	20,371	20,937	21,509	22,098
Drivers:					
Insurance Mgmt Fees	(291)	(293)	(299)	(305)	(311)
Audit Fees	(160)	(118)	(120)	(122)	(125)
Bank Fees	(219)	(221)	(228)	(107)	(110)
Labor	(256)	(310)	(374)	(467)	(521)
Outside Services	150	61	22	22	23
Other	10	(38)	(68)	(13)	(14)
	<u>(766)</u>	<u>(919)</u>	<u>(1,067)</u>	<u>(992)</u>	<u>(1,058)</u>
Current Plan	<u><u>19,072</u></u>	<u><u>19,452</u></u>	<u><u>19,870</u></u>	<u><u>20,517</u></u>	<u><u>21,040</u></u>



## 2012-2018 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Other</b>							
Oracle R12	2,448	4,941					
PeopleSoft Time and Labor	443	1,202	278				
Wallstreet Suites	-	708	78				
PowerPlant Prop Tax and Lease	236	222					
PowerPlant Budget	151						
Other	12	40					
<b>Total Capital and Cost of Removal</b>	<u>3,290</u>	<u>7,113</u>	<u>356</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

*NOTE: Does not include approximately \$0.2m per year for CFO Systems Capital included in the I.T. Enterprise Technology Plan*



# Financial Performance

## 2012-2018 Headcount

Department	2012 Year End	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
CFO	2	2	2	2	2	2	2
CONTROLLER	57	57	54	54	54	54	54
OPS BUD & FC	24	25	26	26	26	26	26
AUDIT	14	14	14	14	14	14	14
TREASURER	18	17	16	16	16	16	16
TAX	15	15	16	16	16	16	16
FIN. PLAN AND ANALYSIS	15	15	16	16	16	16	16
INTERNS/TEMPORARY	8	10	11	10	10	10	10
<b>TOTAL</b>	<b>153</b>	<b>155</b>	<b>155</b>	<b>154</b>	<b>154</b>	<b>154</b>	<b>154</b>
From 2013 Business Plan		153	153	153			
Variance to 2013 Business Plan		2	2	1			
<u>Year to Year Increases (Decreases)</u>		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
4.) Administrative/Corporate		2	0	-1			
<b>TOTAL</b>		<b>2</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>0</b>	<b>0</b>



# Plan Risks

- Integration of primary system changes and their impact on existing processes (Oracle R12, PeopleSoft Time and Labor, etc.)
- Limited resources available for special projects (i.e., future rate cases)
- Planned employee retirements in next few years place greater emphasis on knowledge transfer and effective timing of staffing changes

# Appendix





# Year over Year Walk Forward OPEX and Other Expense

Ops Bud/FC	2,100
Audit and Bank Fees	378
Training, Travel and Meals	228
Outside Services (primarily Oracle Archive Assessment Fees)	(971)
Other	(85)
<b>2013 FC</b>	<b>18,135</b>
Labor and burdens	1,024
Bank, insurance and audit Fees	145
Software MTCE transfer to IT	(77)
Other	(155)
<b>2014 Budget</b>	<b>19,072</b>
Labor and burdens	369
Audit Fees	79
Outside Services	(85)
Other	17
<b>2015 Plan</b>	<b>19,452</b>
Labor and burdens	390
Audit Fees	35
Other	(7)
<b>2016 Plan</b>	<b>19,870</b>
Labor and burdens	365
Audit and Bank Fees	187
Other	95
<b>2017 Plan</b>	<b>20,517</b>
Labor and burdens	418
Audit Fees	36
Other	69
<b>2018 Plan</b>	<b>21,040</b>



# 2012-2018 Headcount progression

<b>2012 Headcount</b>	<b>153</b>
Ops Bud/FC Intern & Proj. Eng. Analyst	2
Controller Group Intern	1
Payroll Clerk	<u>(1)</u>
<b>2013 Headcount FC</b>	<b>155</b>
Dist./Customer Services Budget Analyst	1
Audit Intern	1
Payroll Clerk	1
Financial Systems	<u>-3</u>
<b>2014 Headcount Budget</b>	<b>155</b>
Audit Intern	(1)
<b>2015 Headcount Plan</b>	<b>154</b>
<b>2016 Headcount Plan</b>	<b>154</b>
<b>2017 Headcount Plan</b>	<b>154</b>
<b>2018 Headcount Plan</b>	<u><b>154</b></u>



# Other Balance Sheet Costs (\$000)

Item	2012 Actual	2013 Forecast	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Local Engineering							
Labor	387	109	-	-	-	-	-
Non labor	51	4	-	-	-	-	-
Total	<u>438</u>	<u>113</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

*Note: Operations Budgeting & Forecast team previously charged local engineering prior to the 2013 departmental re-organization.*





**PPL companies**

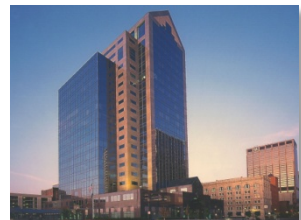
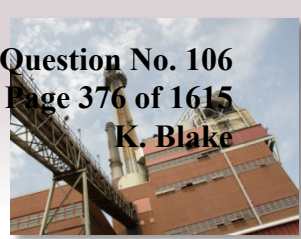
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# Corporate

# 2014 Business Plan

*January 13, 2014*

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# Table of Contents

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- Plan Highlights
- Major Assumptions
- Financial Performance
  - *Operating Expense*

# Major Assumptions

- *Pension based on actuarial calculations and assumptions:*
  - *Increases from previous plan driven by change to BB mortality scale, slight lowering of EROA rate, lump sum payouts in 2013 & 2014 and lower asset returns in 2013*
  - *Increases above offset favorable change in discount rate*
- *Medical expense based on experience for 2013 and national average increases of 7.5% annually for 2014-2018*
- *Property insurance increases driven by growth of assets in 2015*
- *Assumed amortization of regulatory assets will continue through plan periods based on rate case activity*
- *Allocation of PPL expenses received 0/13/2014*



## Financial Performance

### 2012-2018 OPEX and Other Expenses (\$000)

	2012 Actual	2013 Actual	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
<b>Operating Expenses</b>							
Pension/Post Retirement	39	41	35	36	34	33	32
Medical/Dental	21	27	29	31	34	36	39
Payroll taxes	17	18	22	22	23	24	24
401k Drop In	9	10	11	11	12	12	13
Other Benefits	4	7	7	8	8	8	9
PPL Expense Allocation	14	13	14	14	14	14	14
Incentive Compensation	15	14	13	13	13	13	14
Insurance Expense	11	13	12	15	17	18	20
Amortization of Storm expense	14	15	15	15	15	14	13
LGE Center and Other Facilities Expense	3	3	10	10	10	10	10
A&G Transfer Credit	(6)	(8)	(9)	(9)	(9)	(9)	(9)
IMEA/IMPA billings	(13)	(13)	(15)	(15)	(16)	(16)	(16)
Other	6	6	5	4	5	5	6
<b>Totals</b>	<b>135</b>	<b>146</b>	<b>150</b>	<b>157</b>	<b>161</b>	<b>165</b>	<b>169</b>
<b>Other (Income) and Expense</b>							
Other Income	(5)	(3)	(4)	(3)	(4)	(4)	(3)
PPL Expenses - External Affairs	1	-	-	-	-	-	-
Other Expenses	1	1	2	2	2	2	1
<b>Totals</b>	<b>(2)</b>	<b>(2)</b>	<b>(2)</b>	<b>(2)</b>	<b>(2)</b>	<b>(2)</b>	<b>(2)</b>



## 2014-2018 OPEX/Other Expense Reconciliation (\$000)

<u>Operating Expenses</u>	2014 Budget	2015 Plan	2016 Plan	2017 Plan	2018 Plan
Prior Plan	151	142	143	149	152
Drivers:					
Pension/Post Retirement	0	8	11	11	10
Payroll Taxes	2	2	2	3	3
A&G Transfer Credit	(1)	(1)	(1)	-	-
IMEA/IMPA billings	(1)	(1)	(2)	-	-
LGE Center and Other Facilities Expense	-	-	(1)	(1)	(1)
Contingency	-	4	7	1	2
PPL Expense Allocation	1	1	1	1	1
Other	(2)	1	1	2	2
Current Plan	<u>150</u>	<u>157</u>	<u>161</u>	<u>165</u>	<u>169</u>
 <u>Other (Income) and Expense</u>					
Prior Plan	(0)	(0)	(0)	0	0
Drivers:					
PPL Expenses - External Affairs	(1)	(1)	(1)	(1)	(1)
Other	(1)	(1)	(1)	(1)	(1)
Current Plan	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>





**2014 Plan Assumptions**

- Rate case filings:
  - KPSC and Virginia rate cases, ECR and GLT.
    - File in KY every two years with rate relief effective January 2015 and January 2017.
    - File in Virginia every two years with rate relief effective January 2014 and January 2016.
  - Maintain demand side management.
  - Maintain FERC formulary rates for KY municipals with rates reset each July 1
- ECR Future Filing:
  - July 1, 2014 [Mill Creek & Brown Landfills, Brown 1&2 Mercury Mitigation Injection System, CCRs, Water Intake 316b and Effluent Water Guidelines].
- Load forecasts reflect lower energy volumes and demand charges from previous plan amounts for the 2014 - 2018 period consistent with 2013 results
- 5-year CAGR retail electric load growth under 1.0 percent [weather-normalized]; retail gas load decline of -0.7 percent [weather-normalized].
- Utility capital structure maintained at 53 percent equity; Utility dividend policy equal to 65 percent of net income with LKE dividends to PPL factoring in the cash position of the LG&E and KU holding company.
- Combined cycle plant of 640 MW commercial operation May 1, 2015 [\$550 million].
- Combined cycle plant of 670 MW commercial operation May 1, 2018 [\$682 million].
- LIBOR rate assumptions in planning period.

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
3 Mo LIBOR	0.38%	0.79%	1.70%	2.61%	3.30%

- Three sources of short-term debt ("STD")

<u>Source of STD</u>	<u>Assumed STD rate</u>
Commercial Paper Program	LIBOR plus 20 bps
\$75 Million LKE local and regional bank facility	LIBOR plus 150 bps
\$300 Million PPL Line	LIBOR plus 150 bps

- Long-term interest rates of 10-Year Treasury plus 0.95 percent.

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
10 Yr Treasury	3.75%	4.25%	4.50%	4.75%	5.00%

- Newly issued long-term debt rates for Utilities [five basis points for issuance costs included].

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Rate on New Issues	4.70%	5.20%	5.45%	5.70%	5.95%
Issuance costs	0.05%	0.05%	0.05%	0.05%	0.05%
Total	<u>4.75%</u>	<u>5.25%</u>	<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>

- Pension expense based on Towers Watson actuarial analysis.
- CO<sub>2</sub> / Renewable Portfolio Standard legislation not effective for the Plan period.



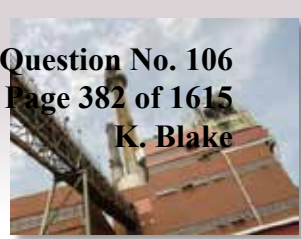
**PPL companies**

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# 2013 Business Plan Electric Sales Forecast

*July 11, 2012*

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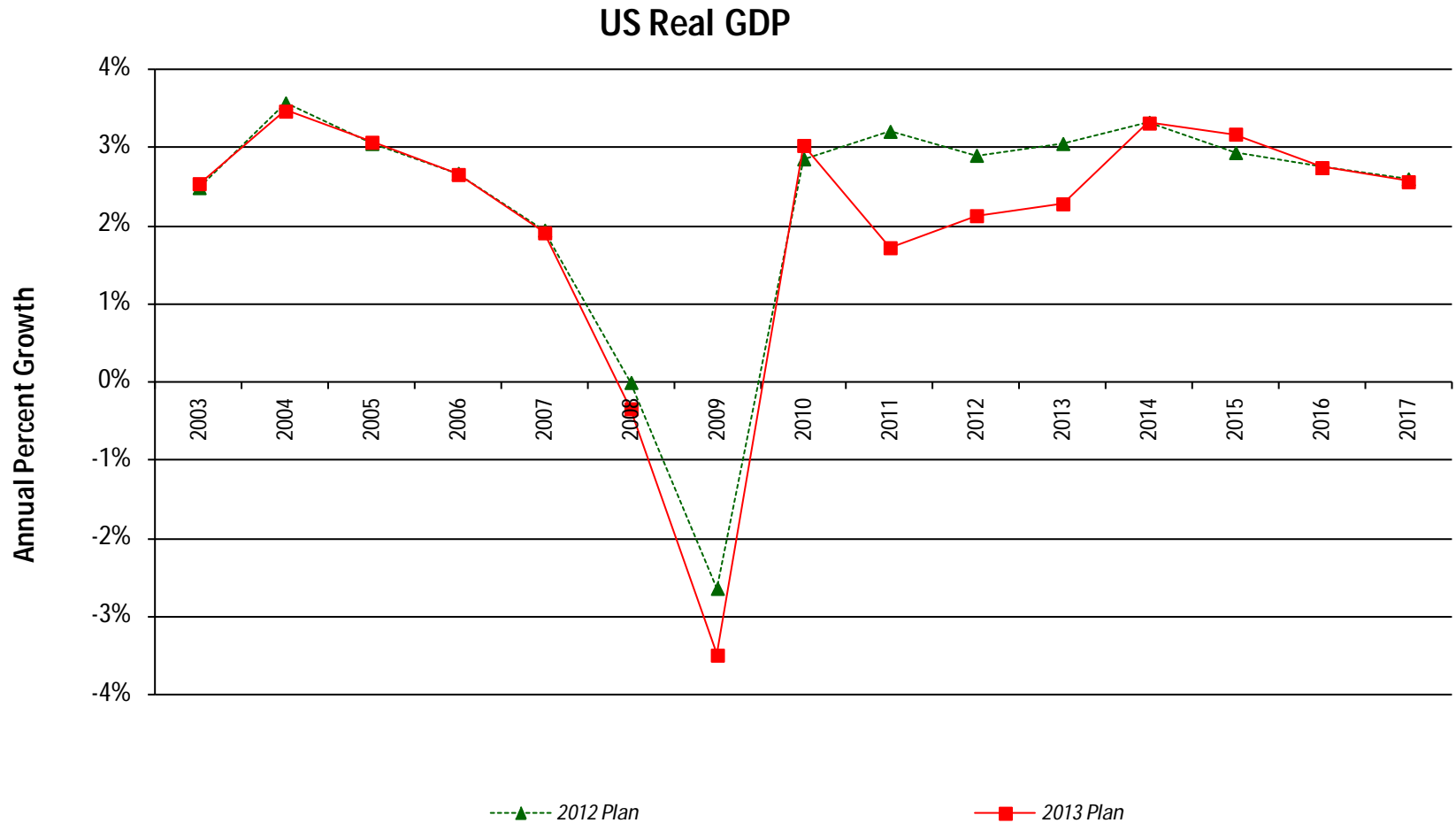
# Key observations in 2012 – Industrials still stronger than commercial sector

- *Compared to the first five months of 2011, total industrial sales are 6.5% (241 GWh) in January – May 2012*
- *North American Stainless showed strong production through June 2012 with expectation to stay at current levels through the forecast period.*
- *Carbide returns to full load in 2012 after explosion and shutdown in 2011*
- *Commercial sales continue to struggle. The recovery that was expected in 2011 has not been realized.*

# Global, National and State economy still have not reached stable footing

- *Destabilization in the Eurozone, including a Greek exit, contributes to dampened US GDP predictions.*
- *US is not currently expected to imitate European recession, but the threat of a recession in late 2012 or early 2013 is still considered a possibility by some forecasters.*
- *Kentucky has gained 70,000 jobs in the last two years, but needs to gain 50,000 more jobs to reach December 2007 levels.*
  - *Many of the new manufacturing jobs pay less than the jobs that were lost.*
- *The lending outlook has worsened in the last year. Small business lending is area of greatest concern.*
- *Personal Income for Kentucky residents did not grow in 2011 despite growth in GSP*

# US GDP forecast is lower in 2013 Plan



# Manufacturing and employment growth are bright spots for Kentucky economy

- *In April 2012, Kentucky unemployment declined to 8.3% from 10.4% in February 2011.*
  - *Unemployment was not expected to fall to this level until 2014.*
  - *The unemployment figure is bolstered by a decrease in labor force participation.*
- *Manufacturing employment grew consistently over the past 12 months*
- *Kentucky's Industrial Production Index increased by 4.9% from 2011Q2 to 2012Q2 which is stronger growth than the average year-over-year growth over the last two years*
- *Lower vacancy rates, increased housing permits, point towards a possible uptick in construction demand in forthcoming years*

# Balance of 2012 expected to be in line with 2012 Plan

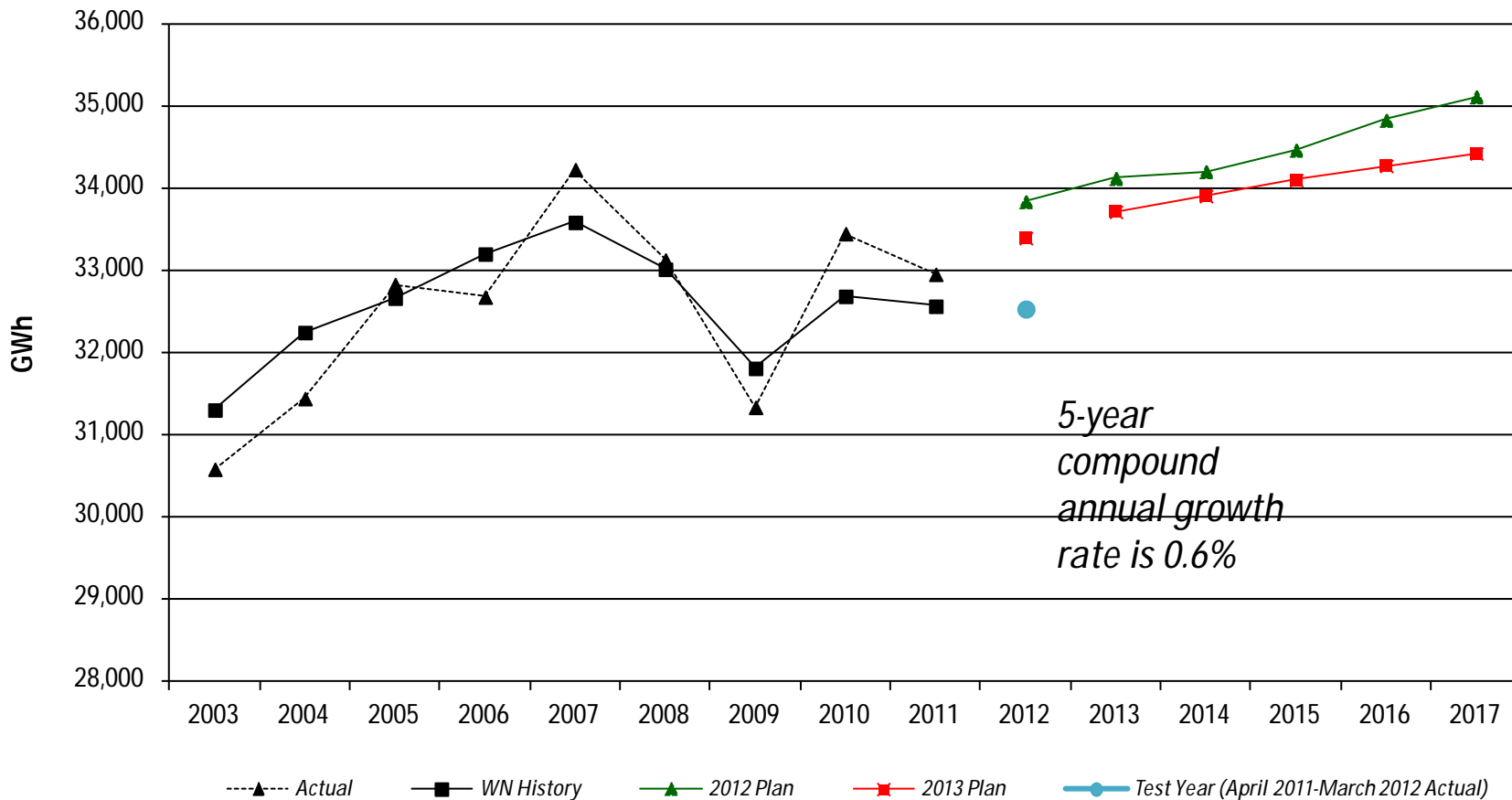
Class	May - Dec 2012			
	2013 Plan (GWh)	2012 Plan (GWh)	Variance (GWh)	Pct Var
<i>Residential</i>	7,083	6,827	256	3.7%
<i>Commercial</i>	7,261	7,516	(256)	-3.4%
<i>Industrial</i>	6,891	6,610	281	4.3%
<i>Municipals/Lighting</i>	1,224	1,548	(324)	-20.9%
<b>Total</b>	<b>22,458</b>	<b>22,502</b>	<b>(43)</b>	<b>-0.2%</b>

Company	May - Dec 2012			
	2013 Plan (GWh)	2012 Plan (GWh)	Variance (GWh)	Pct Var
<i>KU/ODP</i>	14,097	14,368	(271)	-1.9%
<i>LG&amp;E</i>	8,361	8,133	228	2.8%
<b>Total</b>	<b>22,458</b>	<b>22,502</b>	<b>(43)</b>	<b>-0.2%</b>



# 2013 Business Plan impacted by lower economic and commercial growth

Combined Company Total Electricity Usage

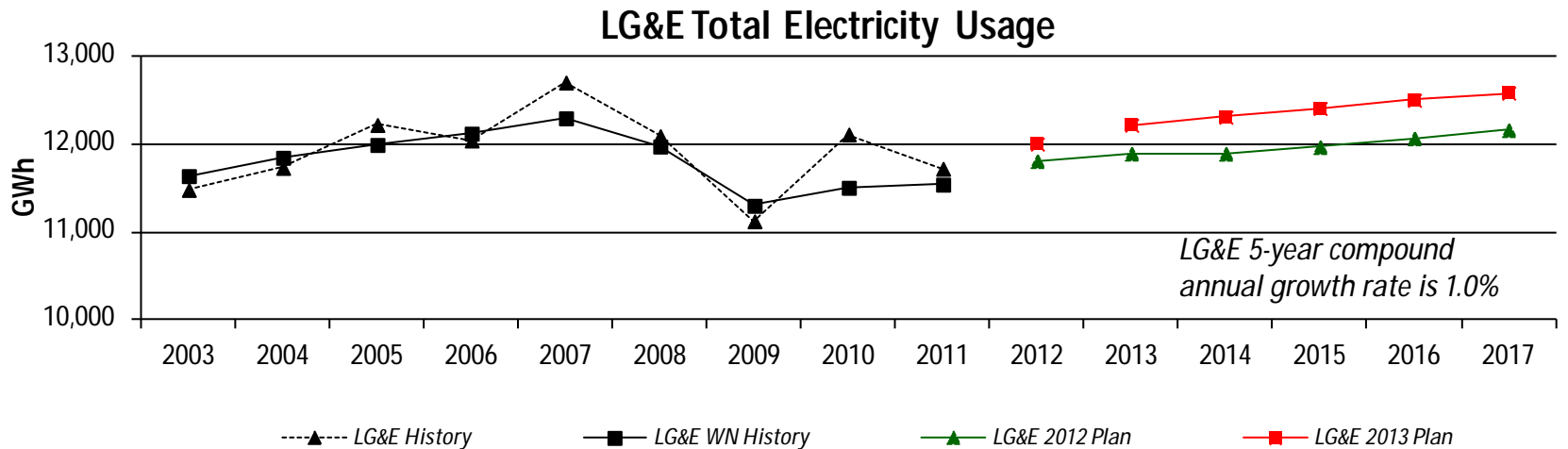
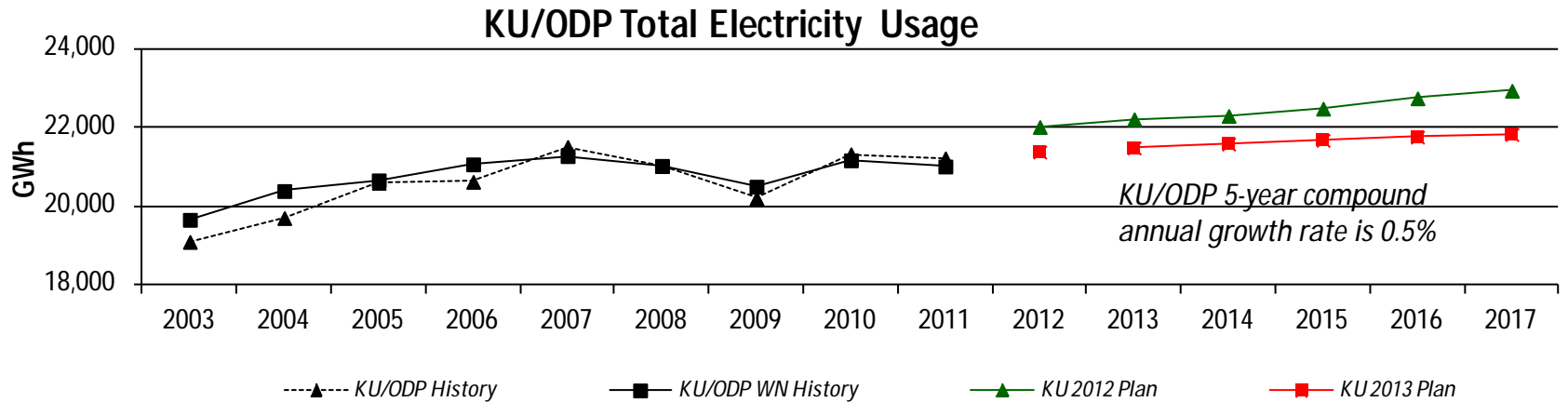


\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast





# KU decline driven by commercial sector; LG&E growth in industrial class

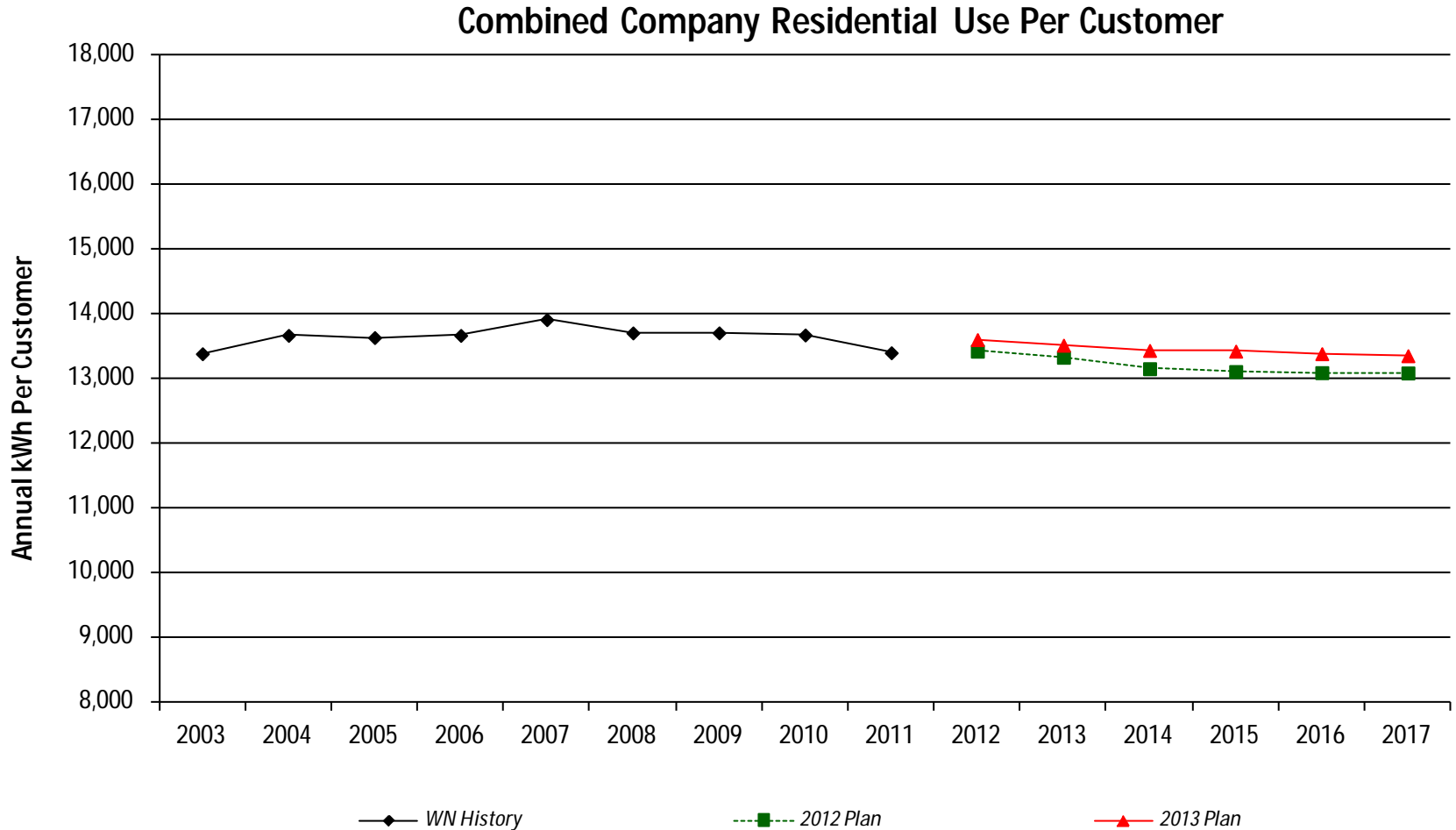


\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.

# RS Customer growth rate largely consistent with 2012 plan but starting at a lower level

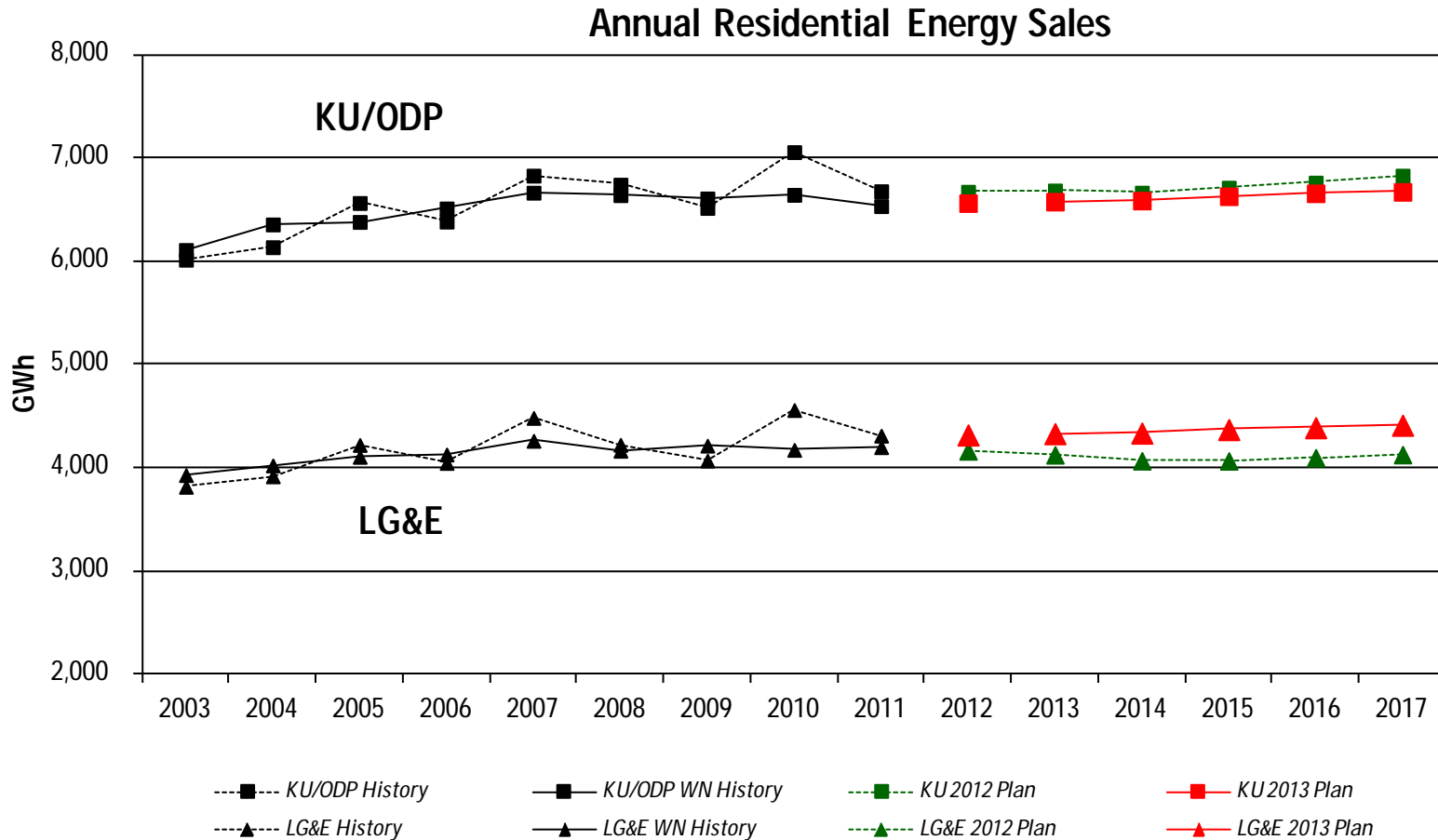


# Residential Use Per Customer slightly higher than 2012 Plan



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.

# LG&E residential forecast slightly higher than prior plan



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.

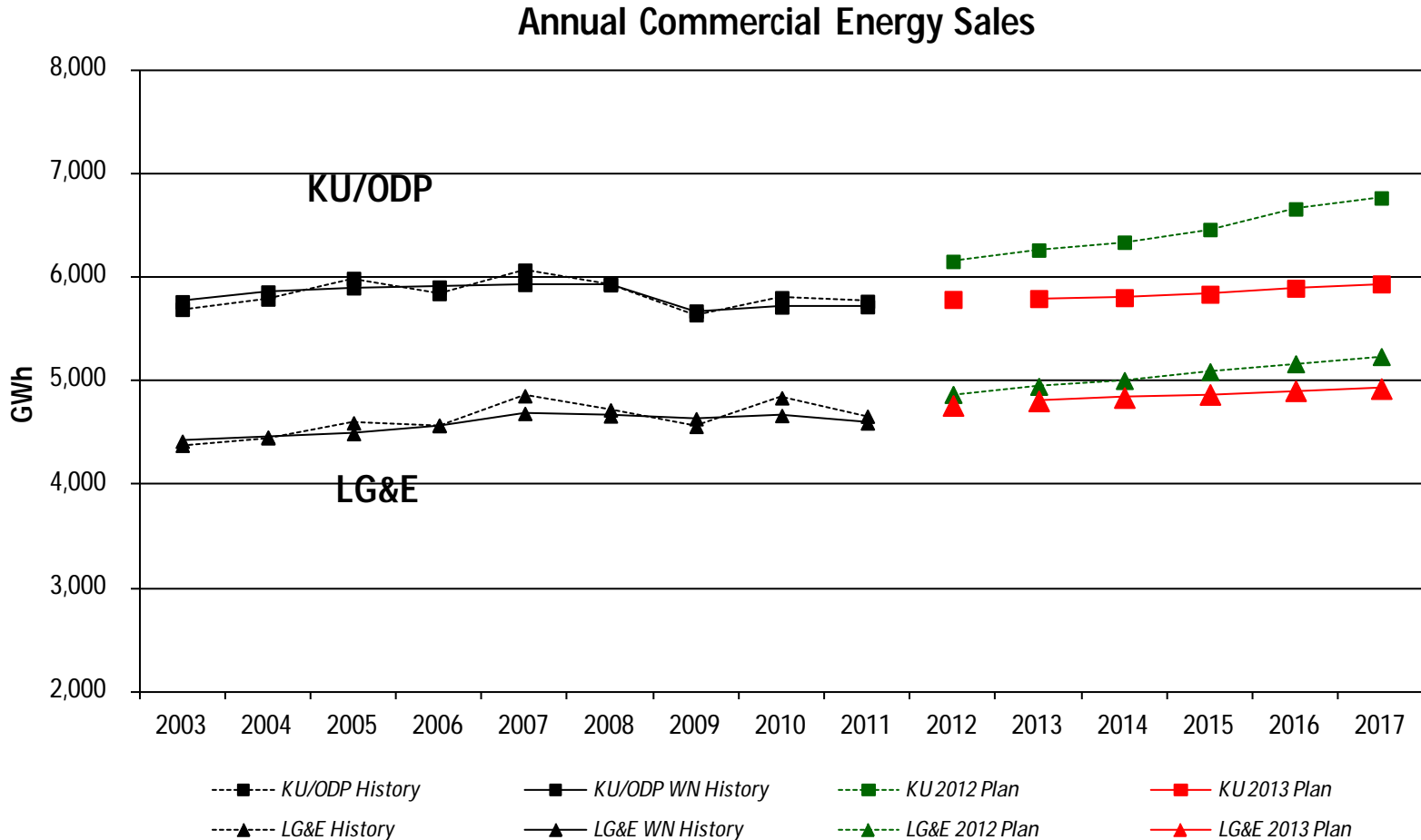
# Economic inputs continue to be a drag on residential outlook

KU Residential Variance (Plan to Plan)					
	2013	2014	2015	2016	2017
<b>2012 Plan (GWh)</b>	6,687	6,667	6,715	6,764	6,831
<i>Customer usage and modeled efficiencies</i>	52	67	31	31	8
<i>Economic inputs</i>	(135)	(126)	(94)	(104)	(110)
<i>Customer count</i>	(26)	(19)	(21)	(31)	(56)
<b>2013 Plan (GWh)</b>	6,579	6,589	6,631	6,660	6,674

LG&E Residential Variance (Plan to Plan)					
	2013	2014	2015	2016	2017
<b>2012 Plan (GWh)</b>	4,125	4,068	4,067	4,098	4,127
<i>Customer usage and modeled efficiencies</i>	251	312	352	354	369
<i>Economic inputs</i>	(22)	(28)	(33)	(40)	(46)
<i>Customer count</i>	(24)	(17)	(15)	(23)	(39)
<b>2013 Plan (GWh)</b>	4,331	4,336	4,371	4,389	4,412



# Reduction in KU large commercial outlook is key driver of lower commercial forecast



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast



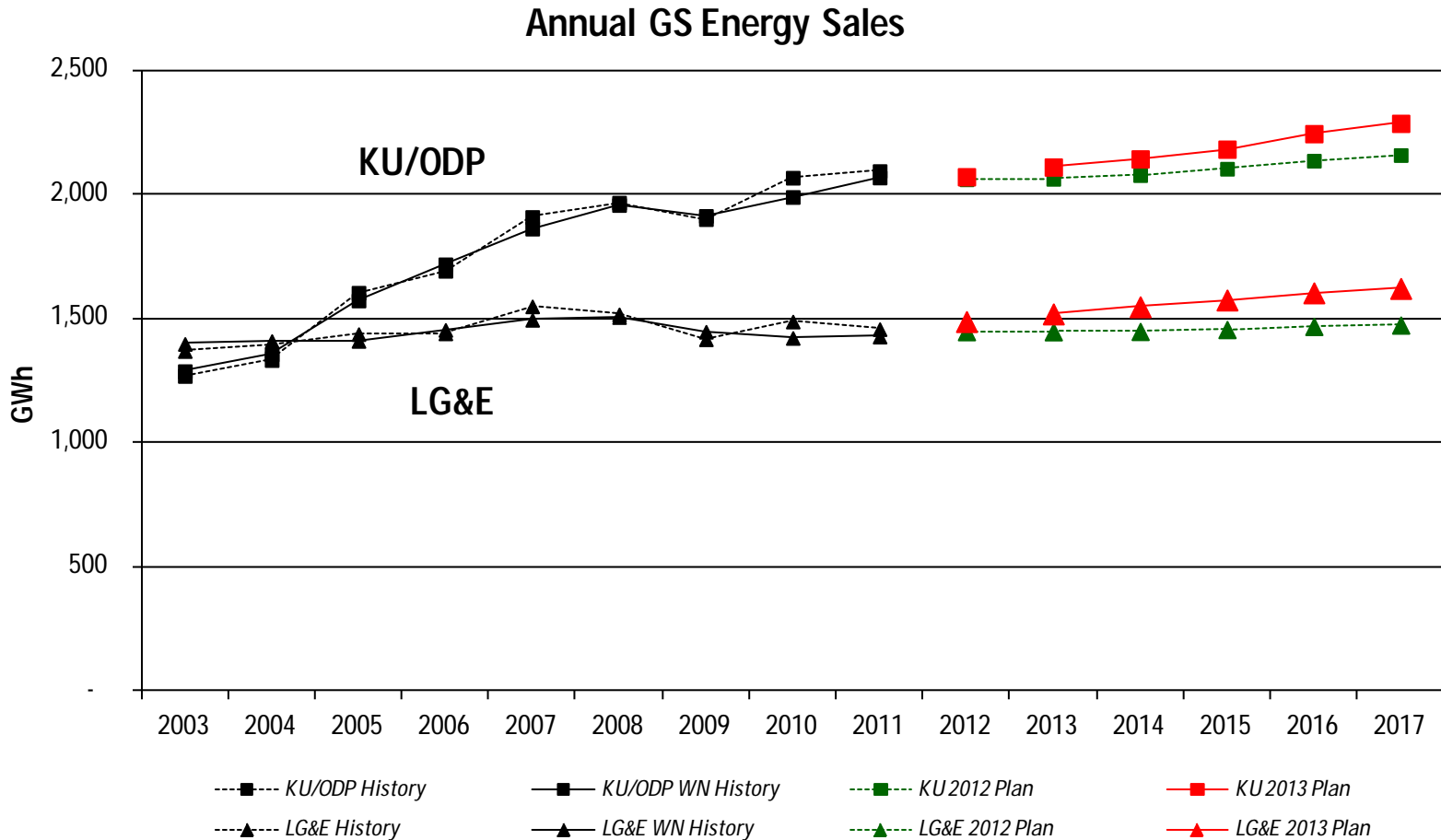
# Employment indices driving KU large commercial usage lower

KU Commercial Variance (Plan to Plan)					
	2013	2014	2015	2016	2017
<b>2012 Plan (GWh)</b>	6,262	6,338	6,460	6,659	6,764
<i>Customer usage and modeled efficiencies</i>	(15)	21	75	128	182
<i>Economic inputs</i>	(362)	(437)	(544)	(714)	(823)
<i>Customer count</i>	(91)	(118)	(154)	(180)	(188)
<b>2013 Plan (GWh)</b>	5,794	5,803	5,836	5,894	5,935

LG&E Commercial Variance (Plan to Plan)					
	2013	2014	2015	2016	2017
<b>2012 Plan (GWh)</b>	4,947	5,004	5,089	5,165	5,235
<i>Customer usage and modeled efficiencies</i>	22	48	64	94	107
<i>Economic inputs</i>	(157)	(205)	(272)	(347)	(413)
<i>Customer count</i>	(6)	(7)	(11)	(7)	(3)
<b>2013 Plan (GWh)</b>	4,807	4,839	4,869	4,905	4,926



# Small commercial growth higher than prior plan

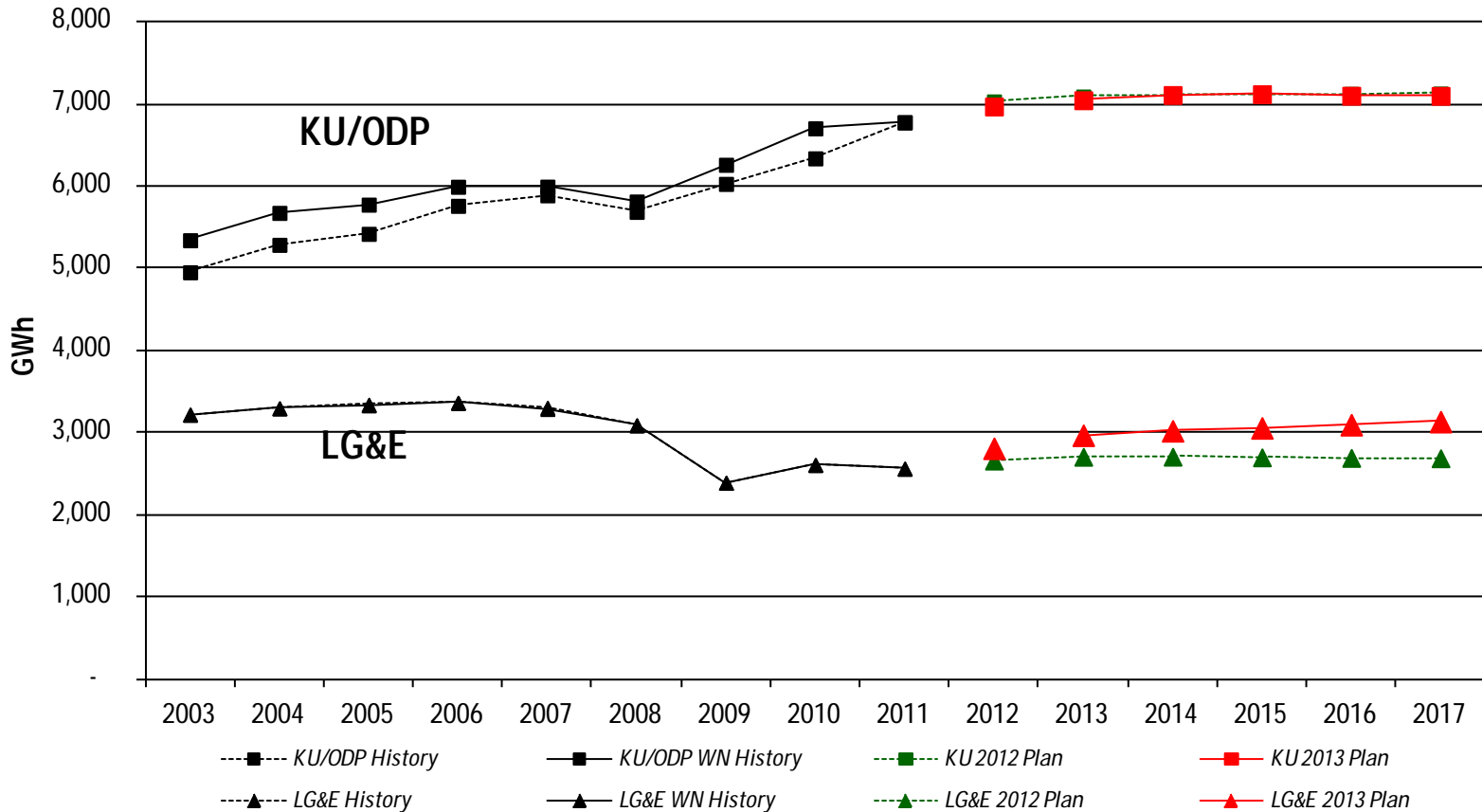


\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast



# LG&E industrial growth driven by return of Carbide and growth at Ford and GE

Annual Industrial Energy Sales



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.

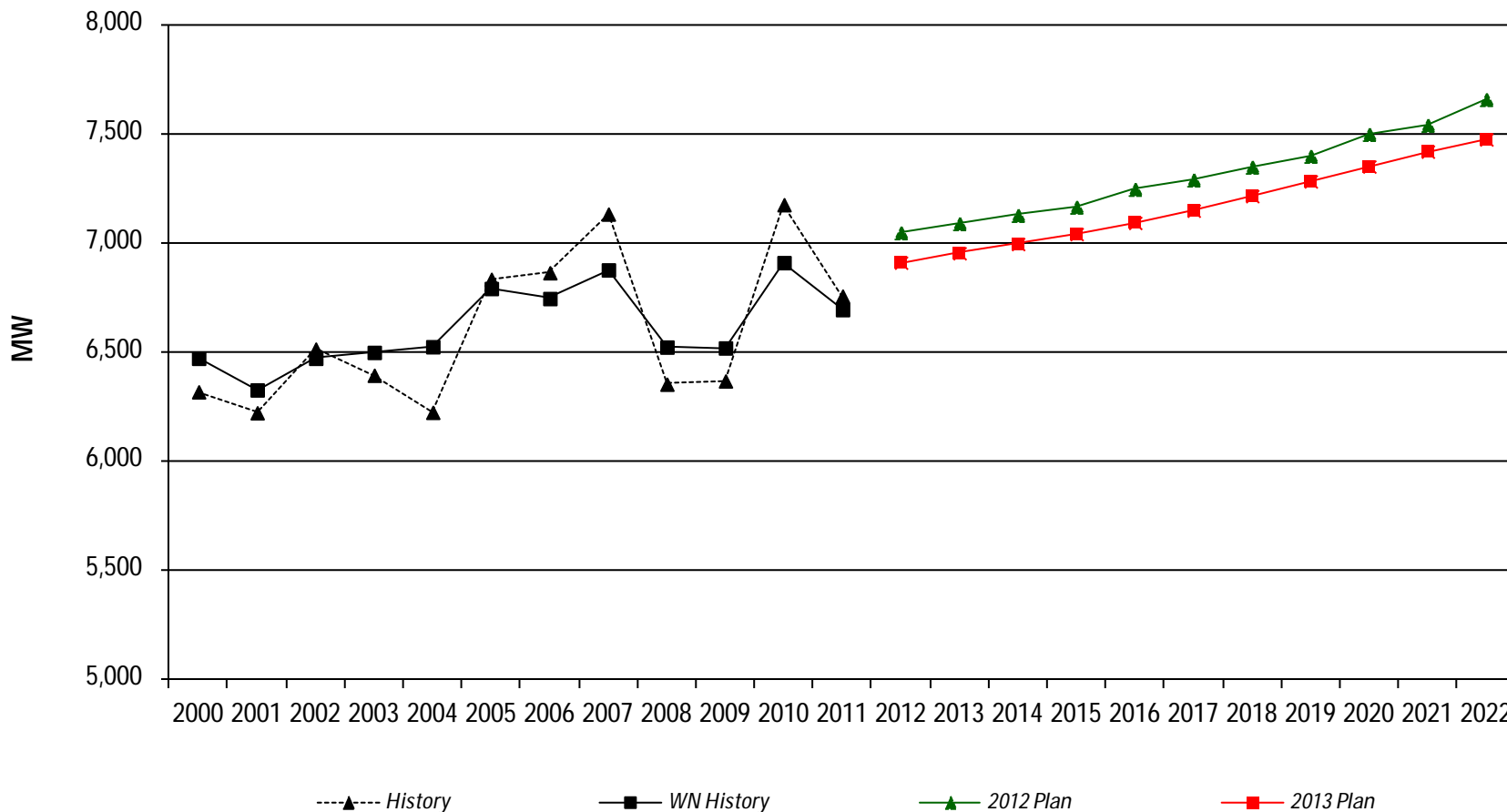
# Carbide and other major accounts driving LG&E industrials higher

	LG&E Industrial Variance (Plan to Plan)				
	2013	2014	2015	2016	2017
<b>2012 Plan (GWh)</b>	2,708	2,709	2,702	2,695	2,690
<i>Economic inputs - Manufacturing</i>	37	78	115	157	196
<i>Carbide</i>	166	168	171	174	177
<i>Other Major Accounts</i>	59	69	72	73	73
<b>2013 Plan (GWh)</b>	2,970	3,024	3,060	3,098	3,136



# Lower peak demand in 2013 Plan consistent with lower energy forecasts

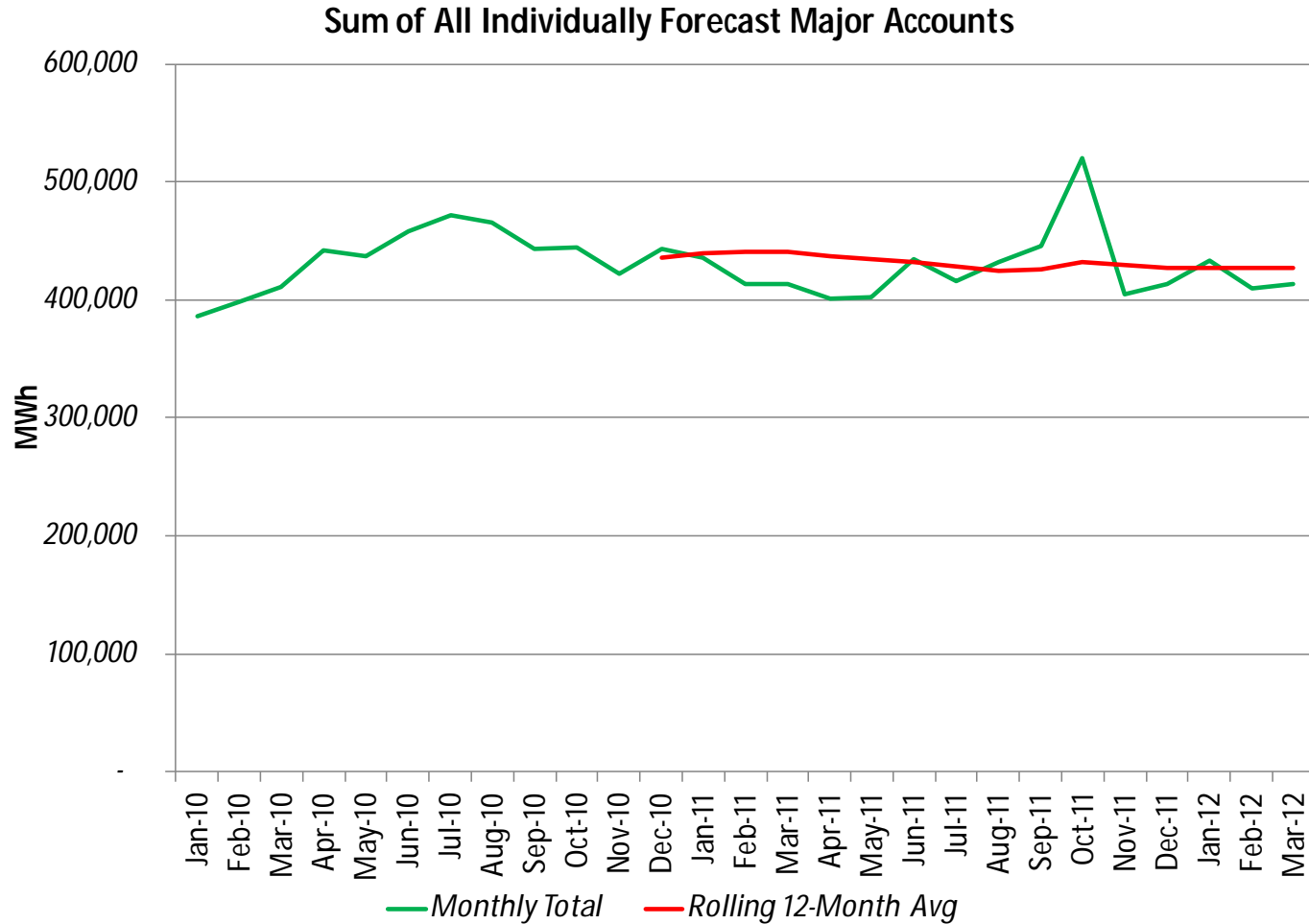
Combined Company Summer Peak Demand - 10 Year View



# Appendix

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7/11/2012



PPL companies

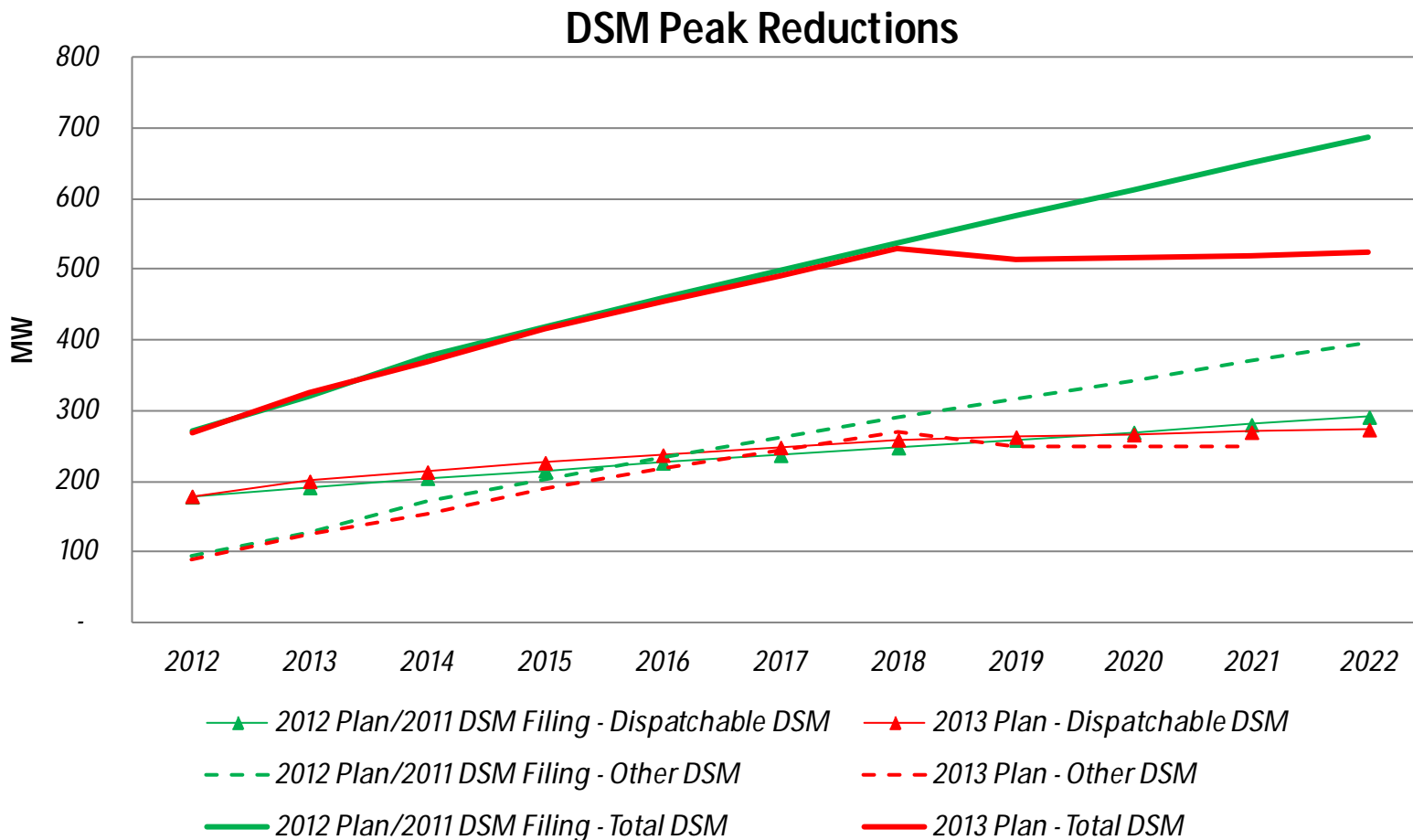
## Notable Changes in Major Account Forecasts for 2013

- *The 2013 BP is expecting higher usage from Carbide, Ford, Toyota, and GE*
- *19 of 26 individually forecasted major accounts have remained relatively flat from 2011 usage*
- *0 of 26 are expected to have a double-digit percentage decrease in usage; the 2012 MTP included below normal usage from Carbide and Ford LAP*
- *Recent completion of retooling is resulting in high output of Escapes from Ford LAP; Toyota also expects increase in demand as the auto industry recovers*
- *New product lines at GE means a boost in electricity usage; Expansion plans underway at Corning will result in increased usage in 2013 and beyond*

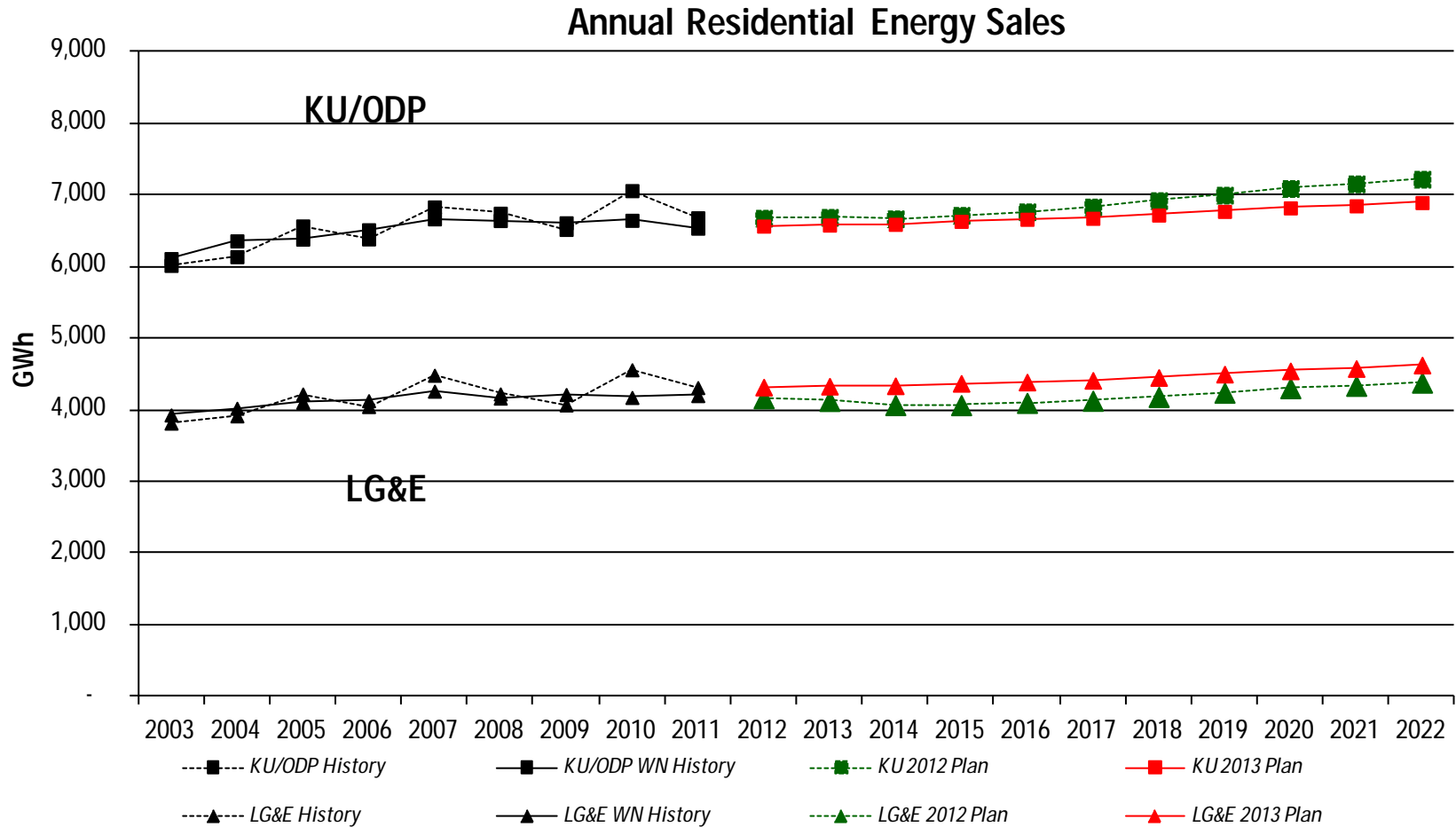
Biggest Gainers (GWh)	2011 Usage	2013 BP	Delta
<i>Carbide</i>	<i>75</i>	<i>277</i>	<i>202</i>
<i>Ford LAP</i>	<i>54</i>	<i>130</i>	<i>76</i>
<i>Toyota</i>	<i>395</i>	<i>445</i>	<i>49</i>
<i>General Electric</i>	<i>163</i>	<i>198</i>	<i>35</i>
<i>Corning</i>	<i>74</i>	<i>106</i>	<i>32</i>



# DSM assumptions for 2013 Plan consistent with 2011 DSM filing



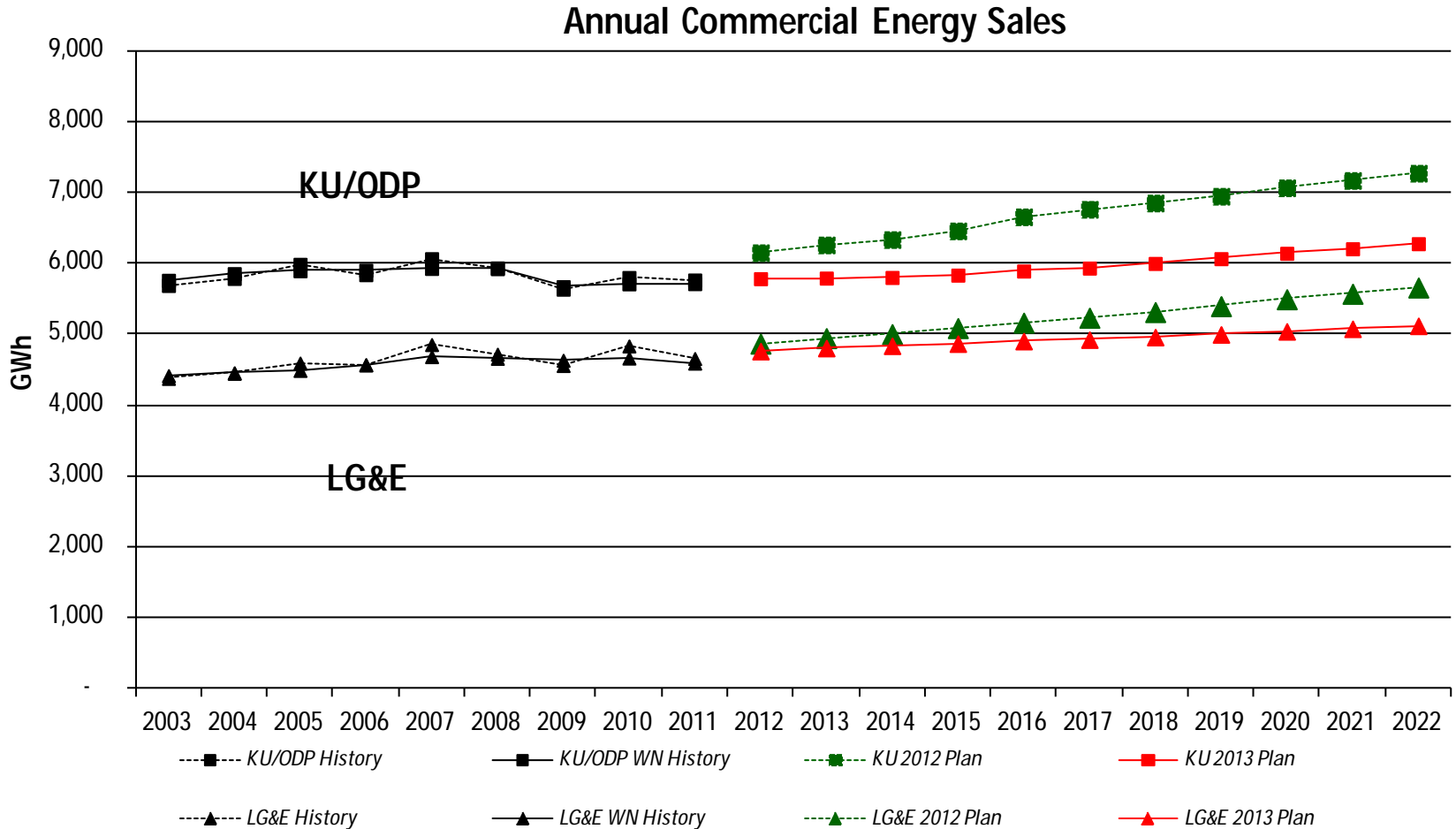
# Residential growth – 10 year view



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.

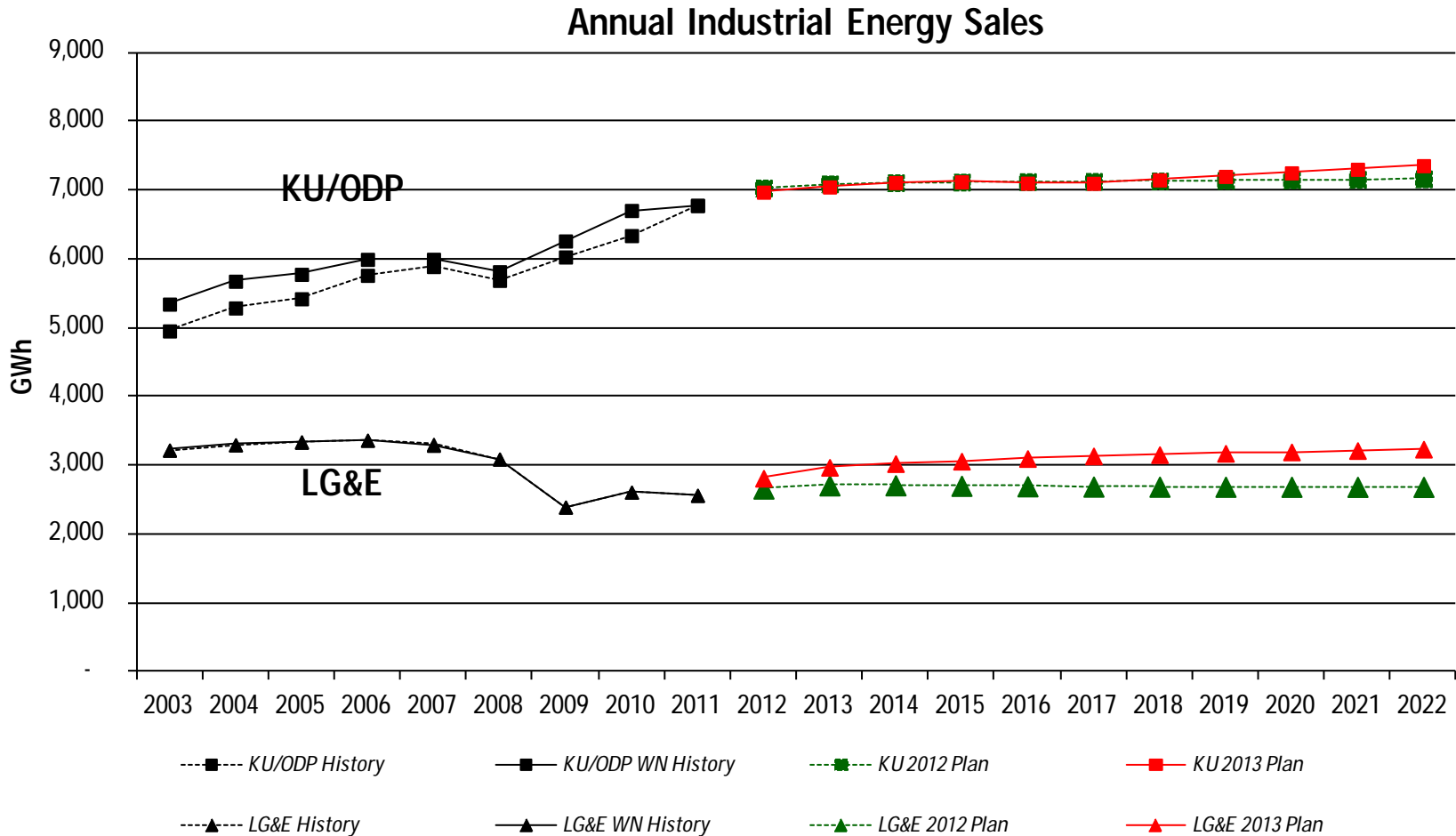


# Commercial growth lower in 2013 Plan



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.

# LG&E industrial growth driven by Major Accounts



\* In 2013 Plan forecast, 2012 value is a weather-normalized 4+8 forecast.



# Balance of Year and 2013 Variance by Company

June - Dec 2012					
Company	2013 BP (GWh)	2012 BP (GWh)	Variance (GWh)	Pct Var	
<i>KU/ODP</i>	12,603	12,781	(178)	-1.4%	
<i>LG&amp;E</i>	7,494	7,267	227	3.1%	
<b>Total</b>	<b>20,097</b>	<b>20,048</b>	<b>49</b>	<b>0.2%</b>	

Billed Energy Use in 2013					
Company	2013 BP (GWh)	2012 BP (GWh)	Variance (GWh)	Pct Var	
<i>KU/ODP</i>	21,491	22,223	(732)	-3.3%	
<i>LG&amp;E</i>	12,219	11,897	322	2.7%	
<b>Total</b>	<b>33,710</b>	<b>34,120</b>	<b>(410)</b>	<b>-1.2%</b>	



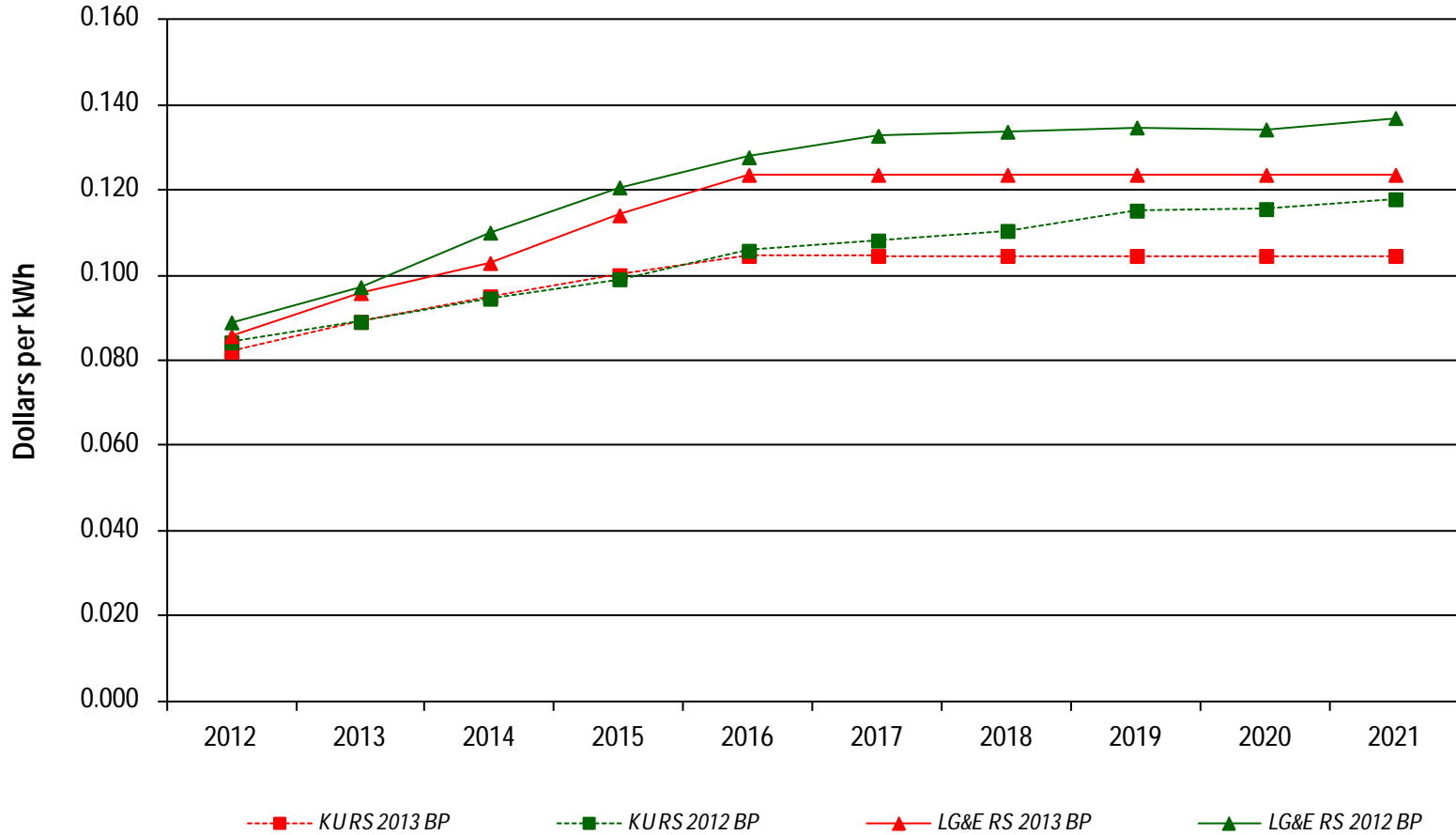
# Customers by Rate

		2012	Prediction for 2013			2012	Prediction for 2013
KU	AES	715	638	LG&E	CPS-Pri	53	59
	GS	84,597	85,513		CPS-Sec	2,574	2,464
	LTOD-Pri	53	56		CTOD-Pri	29	31
	PS-Pri	319	291		CTOD-Sec	116	148
	PS-Sec	5,641	5,204		GS	43,615	44,507
	RS	444,369	450,837		IPS-Pri	27	24
	RTS	46	46		IPS-Sec	284	242
	SQF	2	2		ITOD-Pri	61	76
	TES	721	443		ITOD-Sec	47	64
	TOD-Pri	120	142		LES	163	167
	TOD-Sec	148	191		LEV	3	8
	<u>536,731</u>	<u>543,362</u>	RS	352,304	355,770		
			RTS	11	11		
			TES	897	910		
				<u>400,188</u>	<u>404,479</u>		

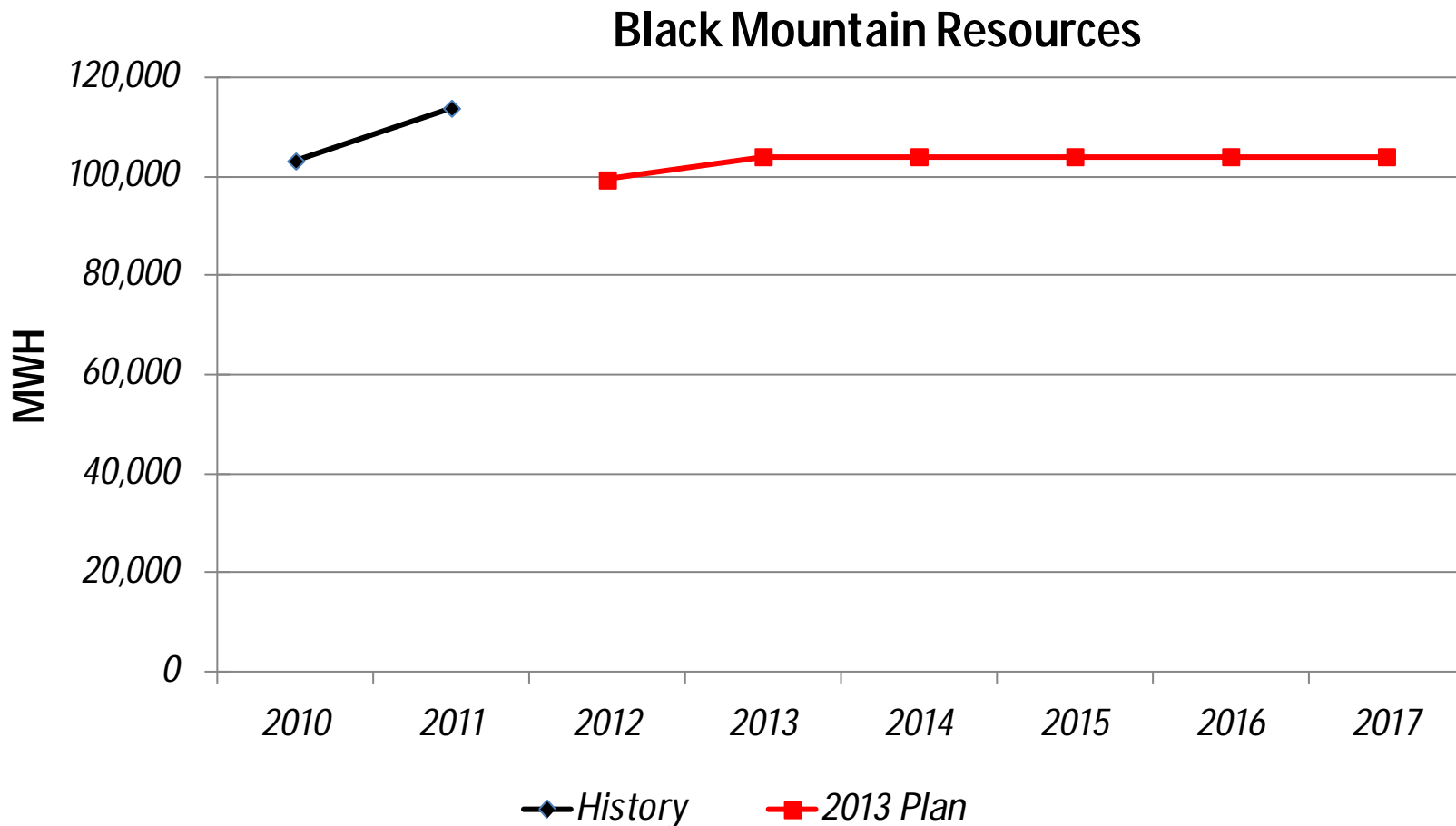


# Residential Rates slightly lower in 2013 Plan

Residential Rates by Company



# Black Mountain Resources' decline typical of mining customers

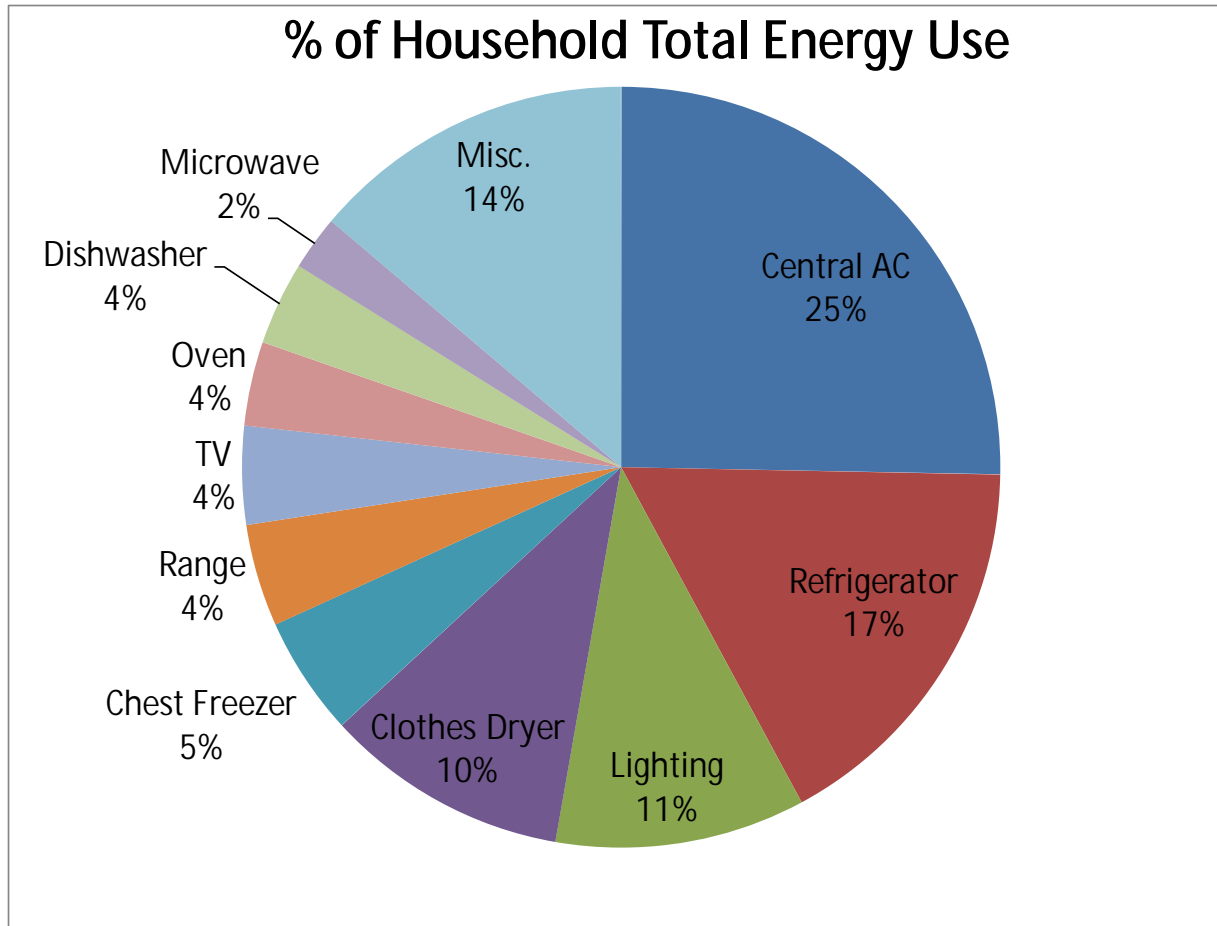


# Year-Over-Year change in SAE model inputs

Employment, Total Nonfarm		Households, Total		Population		Real Gross State Product (GSP)		Real Per Capita Personal Income		Real Personal Income		
% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		
-0.21%		-0.33%		-0.18%		1.49%		-3.77%		-3.94%		
2012 Prediction	2011 Prediction	2012 Prediction	2011 Prediction	2012 Prediction	2011 Prediction	2012 Prediction	2011 Prediction	2012 Prediction	2011 Prediction	2012 Prediction	2011 Prediction	
2011 Q2	1,788	1,799	1,730	1,732	4,369	4,373	146,958	144,066	29.5	30.6	128,939	133,723
2012 Q2	1,829	1,833	1,742	1,748	4,394	4,402	150,072	147,865	29.7	30.9	130,559	135,917
2013 Q2	1,862	1,862	1,754	1,764	4,422	4,432	153,466	151,684	30.4	31.3	134,266	138,811
2014 Q2	1,894	1,894	1,767	1,782	4,452	4,464	158,257	156,048	31.0	32.1	138,182	143,226
2015 Q2	1,925	1,921	1,782	1,801	4,484	4,497	163,219	160,249	31.7	32.9	141,925	148,018
2016 Q2	1,954	1,947	1,797	1,820	4,517	4,529	167,640	164,365	32.3	33.8	145,805	153,056
2017 Q2	1,978	1,961	1,810	1,826	4,551	4,562	171,381	168,018	32.8	34.6	149,166	157,635

\*All Estimates are expressed in thousands except for Real Personal Income and Real GSP which are expressed in terms of Millions 2005 USD

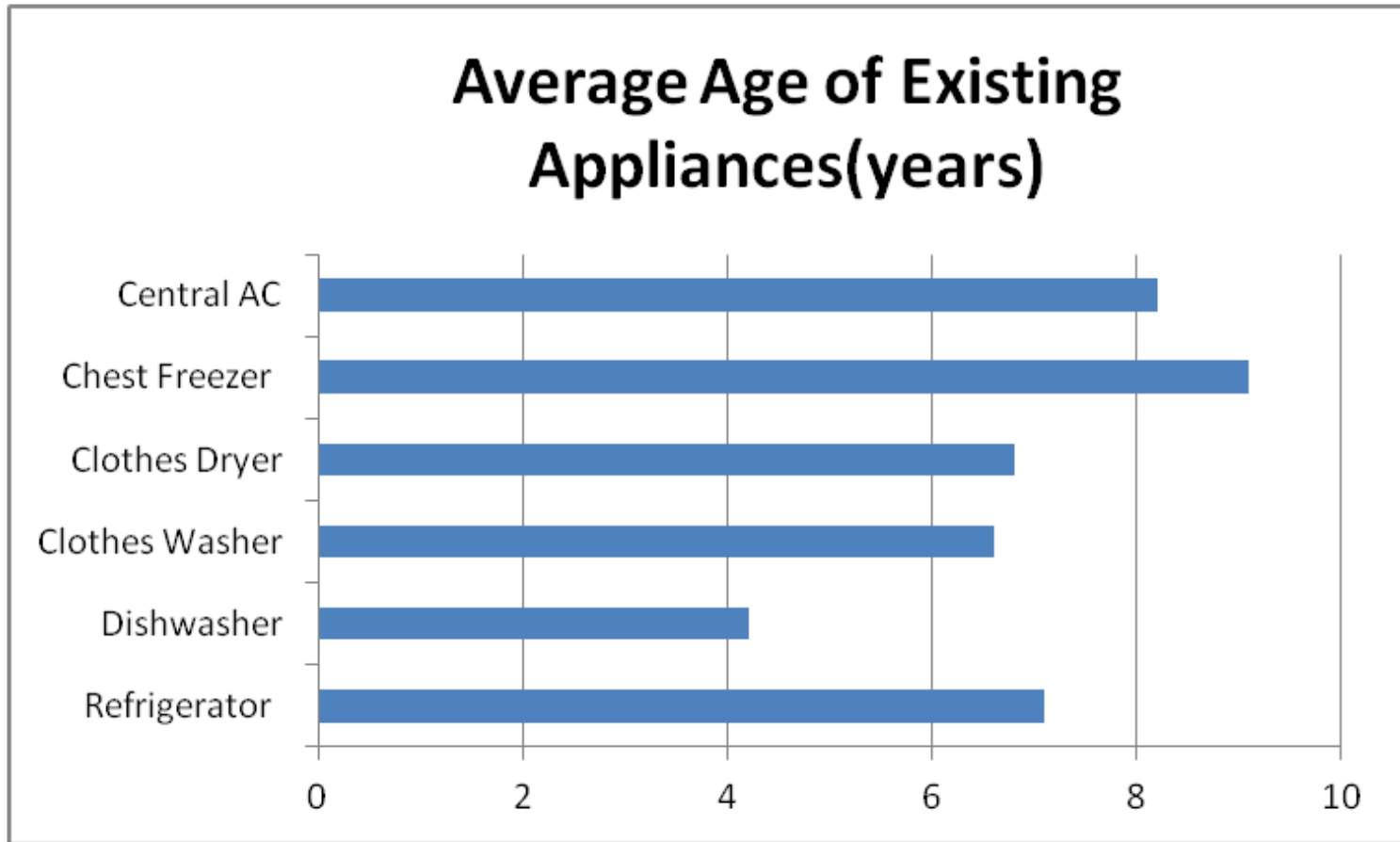
# Central A/C, refrigerator big electricity users in typical territory household



\* Household assumed to have gas heat and a % chance of having a gas clothes dryer.



# Average major appliance in service territory is less than ten years old





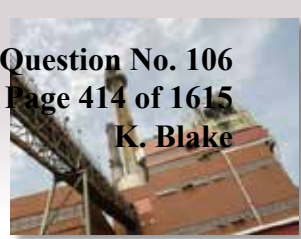
PPL companies

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# 2013 Business Plan Gas Volume Forecast

*July 11, 2012*

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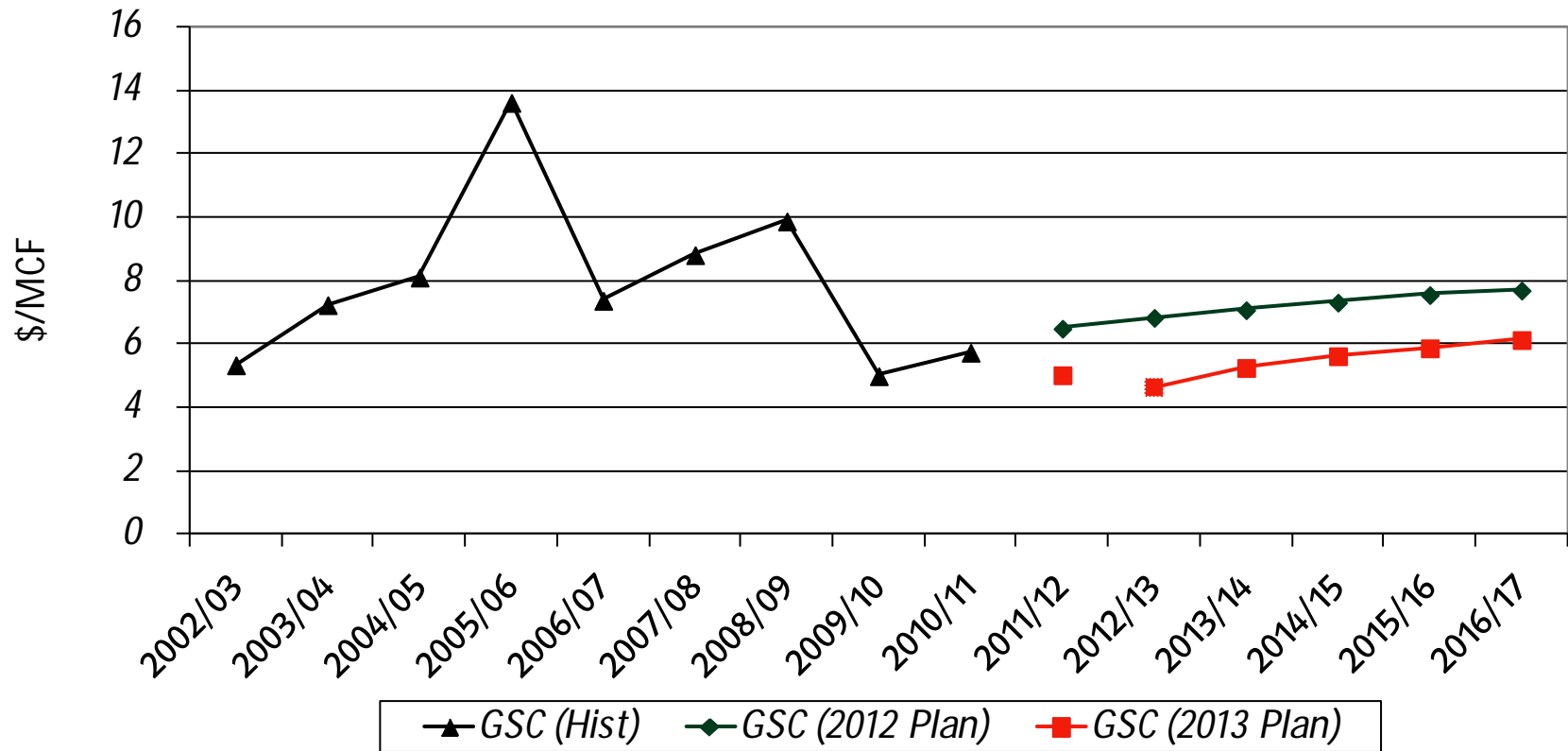
# Key Forecast & Macroeconomic Assumptions

- *Gas Supply Cost (GSC): GSC has been historically low since the 2009/2010 heating season.*
- *GSC for the winter 2012/2013 is expected to be 31% below the 2012 Business Plan projected value; moderate increases will resume in subsequent years.*
- *Economy: Indicators for the Kentucky economy are mixed. 2011 production and GSP growth did not meet expectations*
  - *Unemployment in Kentucky fell from 10.4% in February 2011 to 8.7% in February 2012.*
  - *The manufacturing sector is still carrying the Kentucky economy as commercial growth is slow.*
- *Housing: Residential vacancy rates are high, and new construction is still depressed.*
- *Major Accounts: Ford, Fort Knox, and AAK Foods have decreased usage expectations, leading to a dampened transportation forecast.*



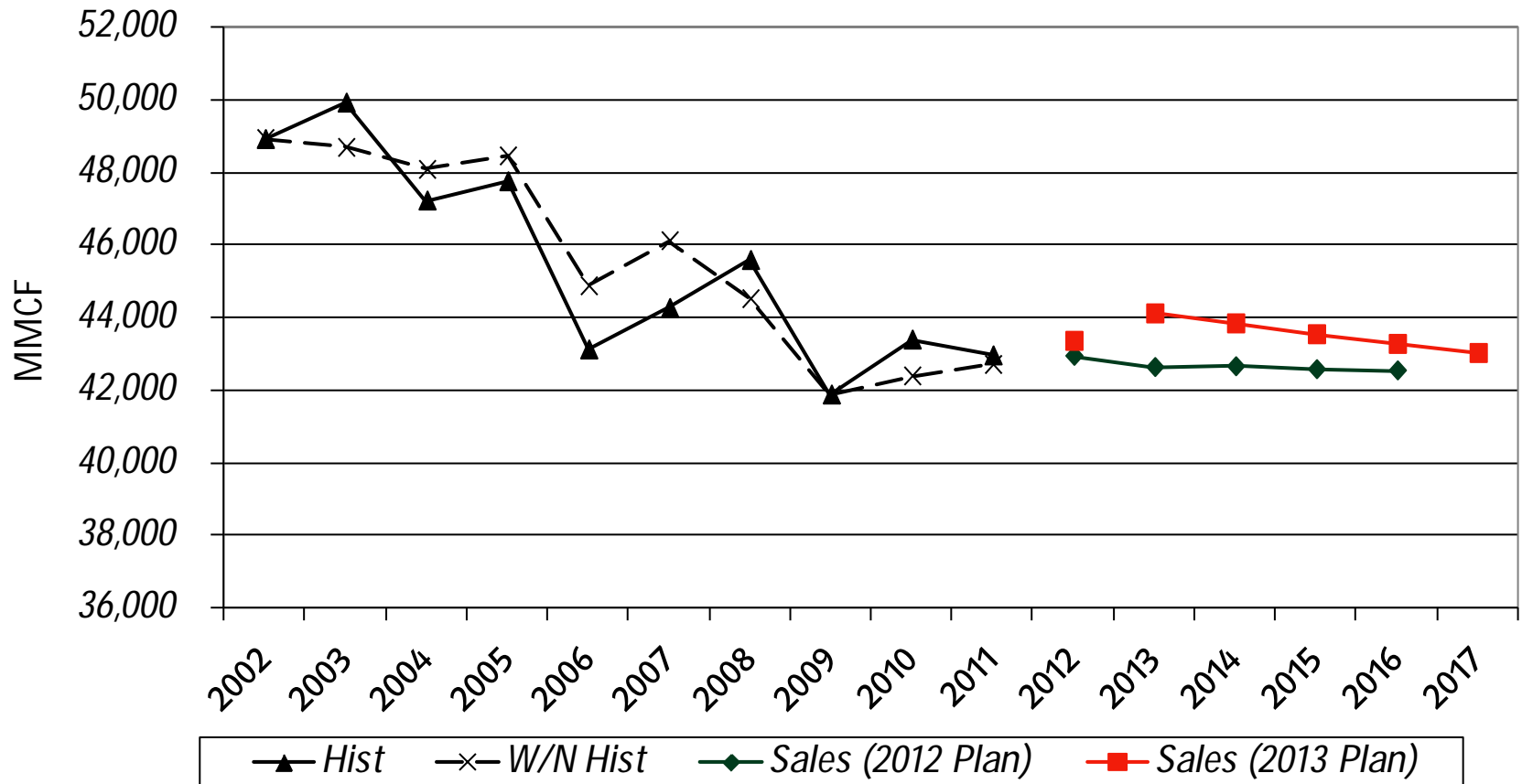
# Gas supply cost for the winter 2012/13 is expected to be 31% lower plan to plan

Average Gas Supply Cost - Winter Months  
(November - February)



# Lower prices lead to higher usage forecast in 2013 Plan

## Annual Gas Volumes (excluding gas used for LG&E generation)

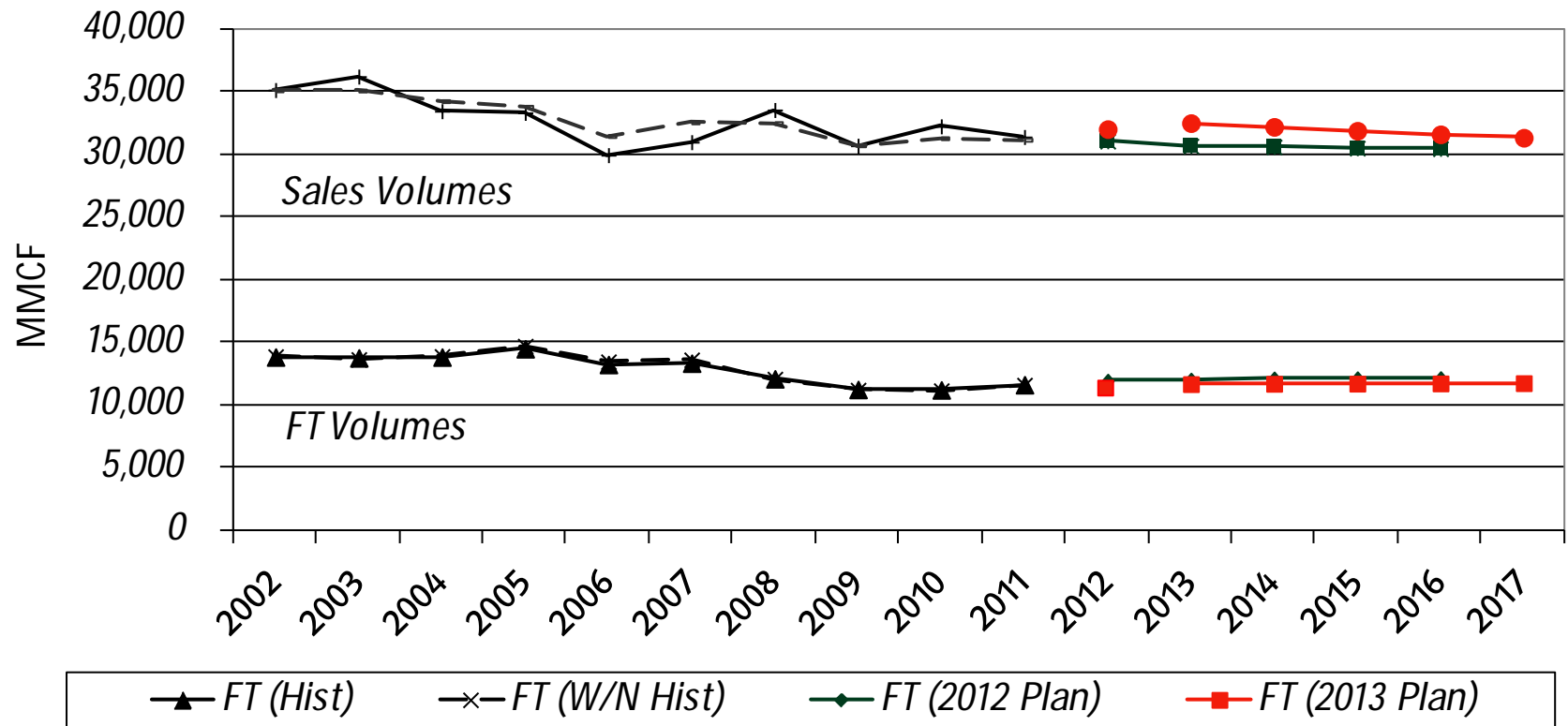


2012 value for the 2013 Plan includes 2 months of WN Actuals



# Sales volumes increase compared to last year's plan; Transportation decreases slightly

## Annual Sales & Firm Transportation (FT) Volumes (excluding gas used for LG&E generation)

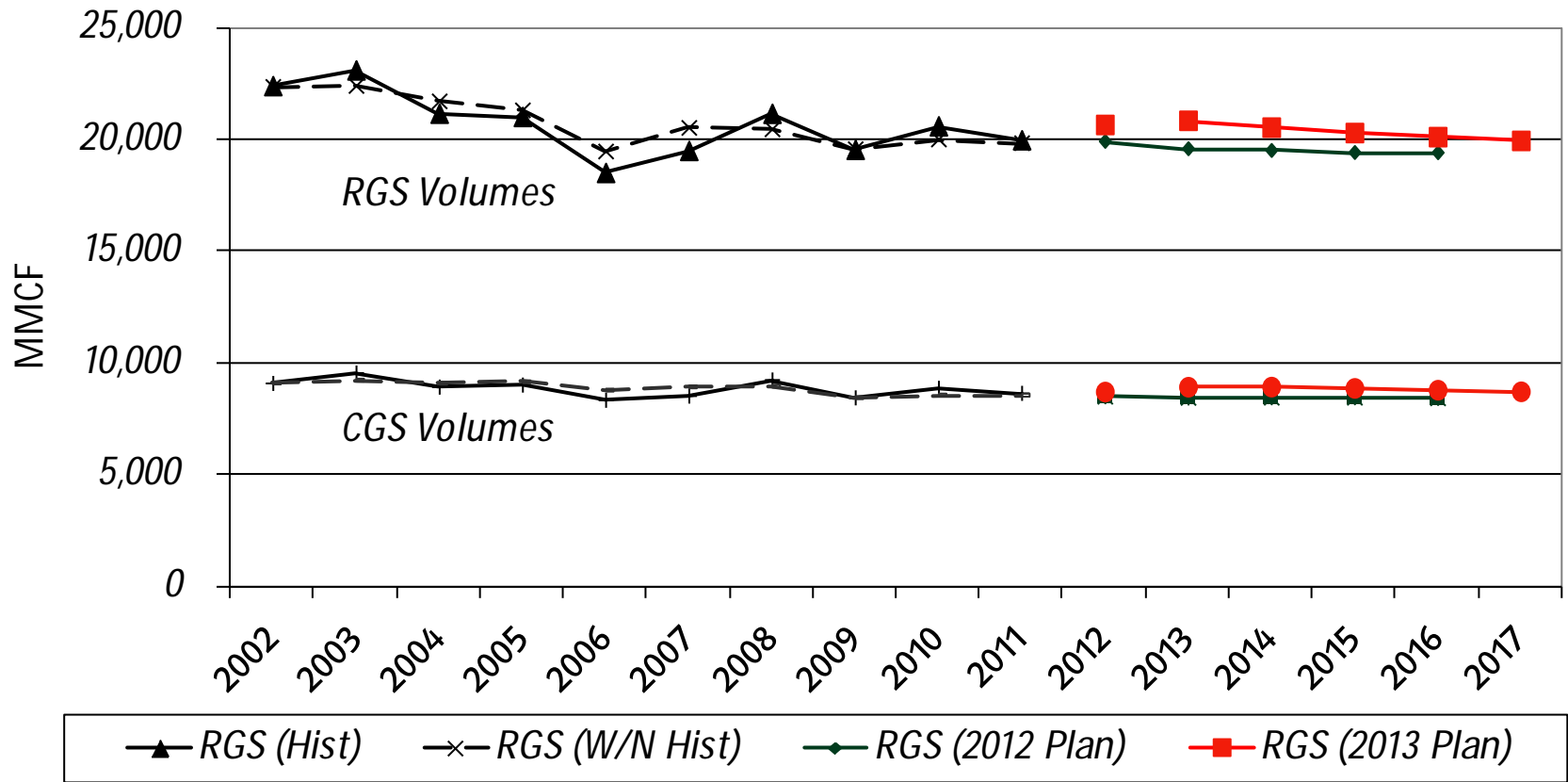


2012 value for the 2013 Plan includes 2 months of WN Actuals



# RGS and CGS annual volumes both higher than 2012 Plan, driven by significantly lower GSC

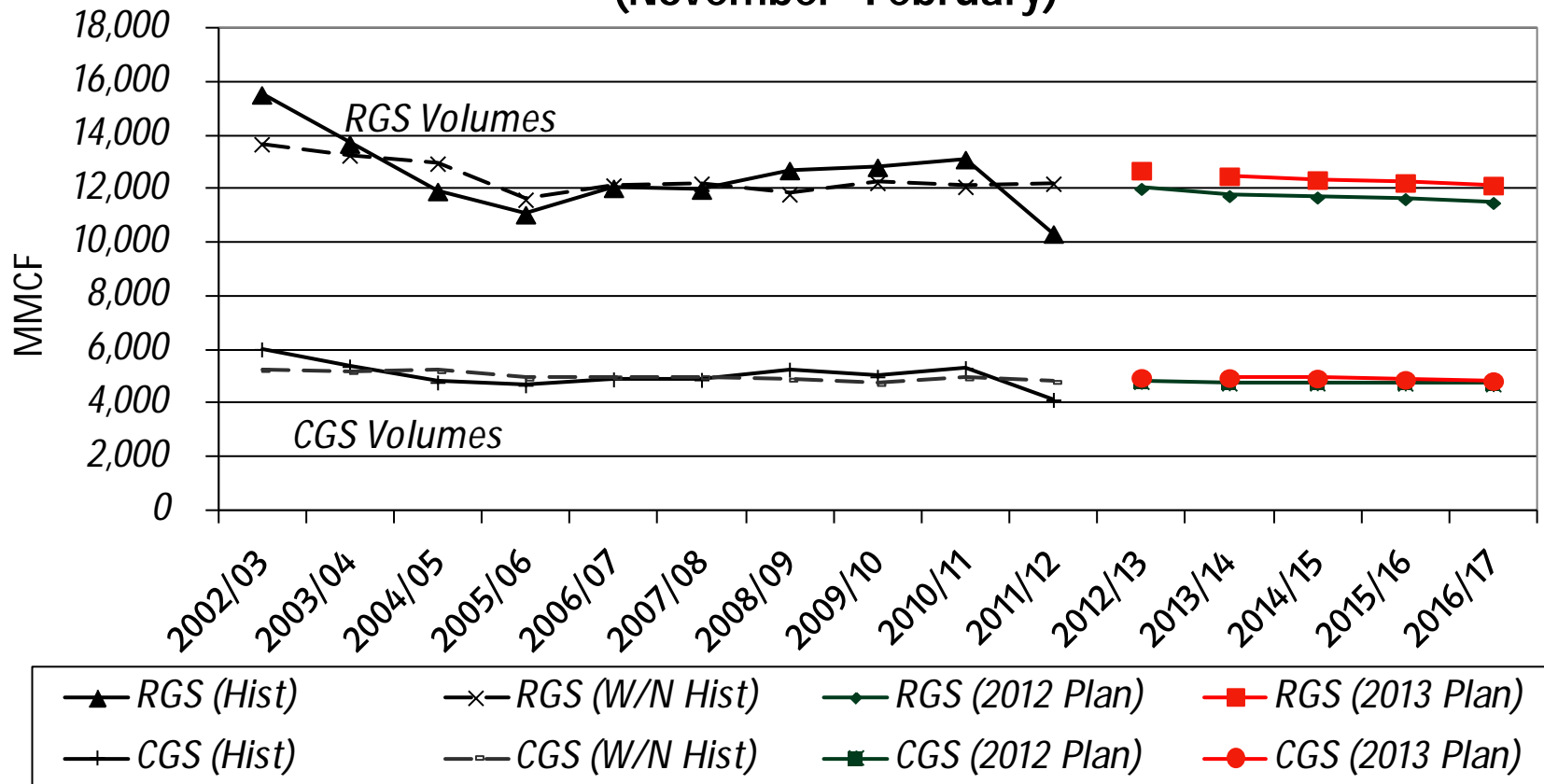
## Annual RGS & CGS Sales Volumes



2012 value for the 2013 Plan includes 2 months of WN Actuals

# Compared to the 2012 Plan, RGS and CGS volumes are slightly higher for the winter of 2012/13

## Winter RGS & CGS Sales Volumes (November - February)



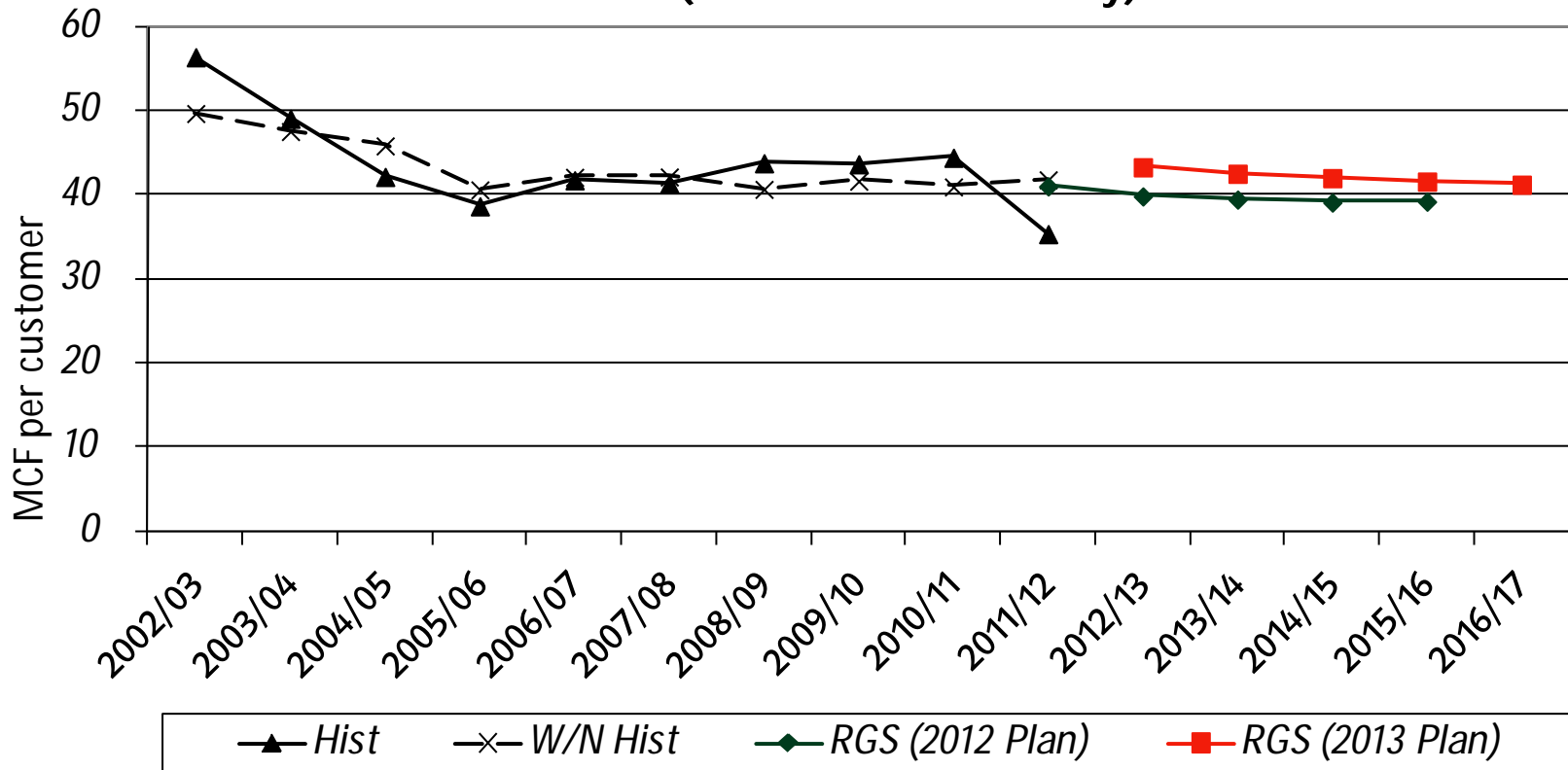
2012 value for the 2013 Plan includes 2 months of WN Actuals





# Residential use-per-customer forecast higher due to lower GSC forecast

## Winter Residential (RGS) Use-per-Customer (November - February)

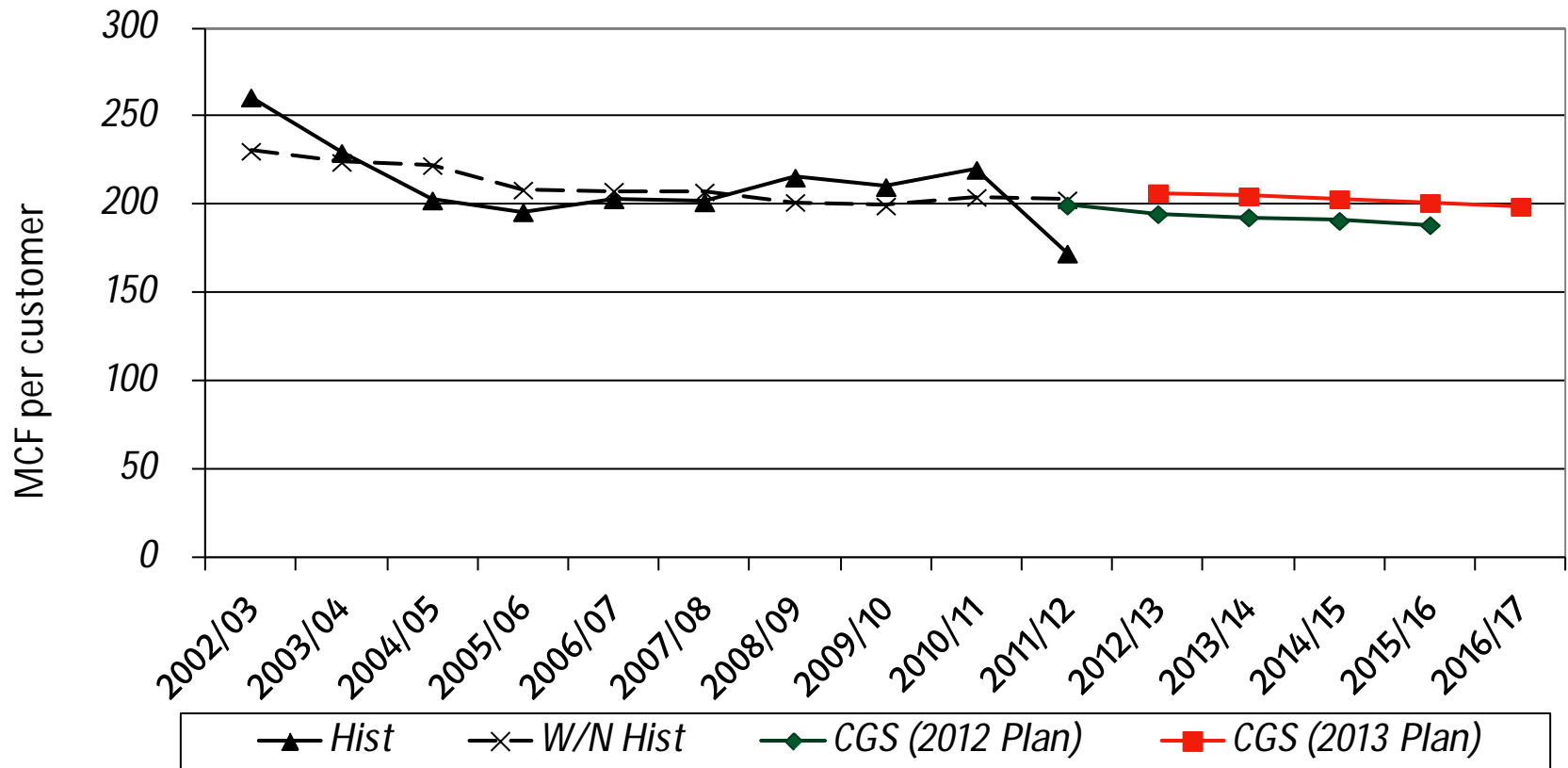


# Summary of Residential Gas Sales Forecasts

- *The Gas Supply Cost (GSC) is 26% below that used in the 2012 Plan forecast, which results in the 2013 Plan forecast's being higher than the 2012 Plan forecast.*
  - *After declining by 8% from the winter 2011/2012 to winter 2012/2013, the GSC increases at a faster rate compared to the GSC forecast used in the 2012 Plan.*
- *Slight gains in efficiency and a declining share of natural gas heating result do not offset the increase from the lower GSC.*
  - *Appliance stock is slightly more efficient than in the 2012 Plan.*
  - *Apartments, many having electric heating, continue to have high occupancy rates.*

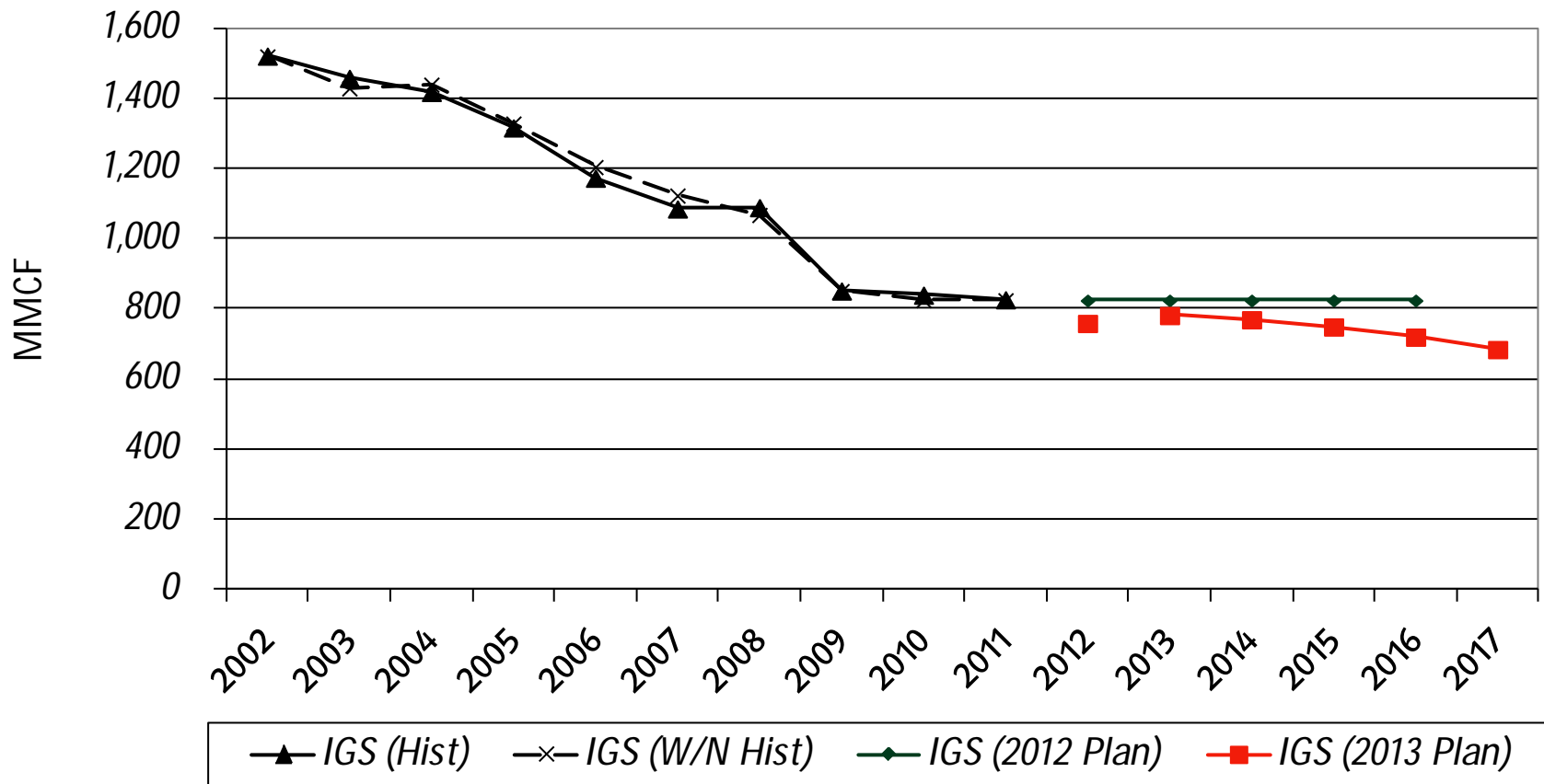
# After initial increase (due to low GSC) CGS use-per-customer follows a declining trend

## Winter Commercial (CGS) Use-per-Customer (November - February)



# IGS sales decline driven by slow customer loss

## Annual IGS Sales Volumes

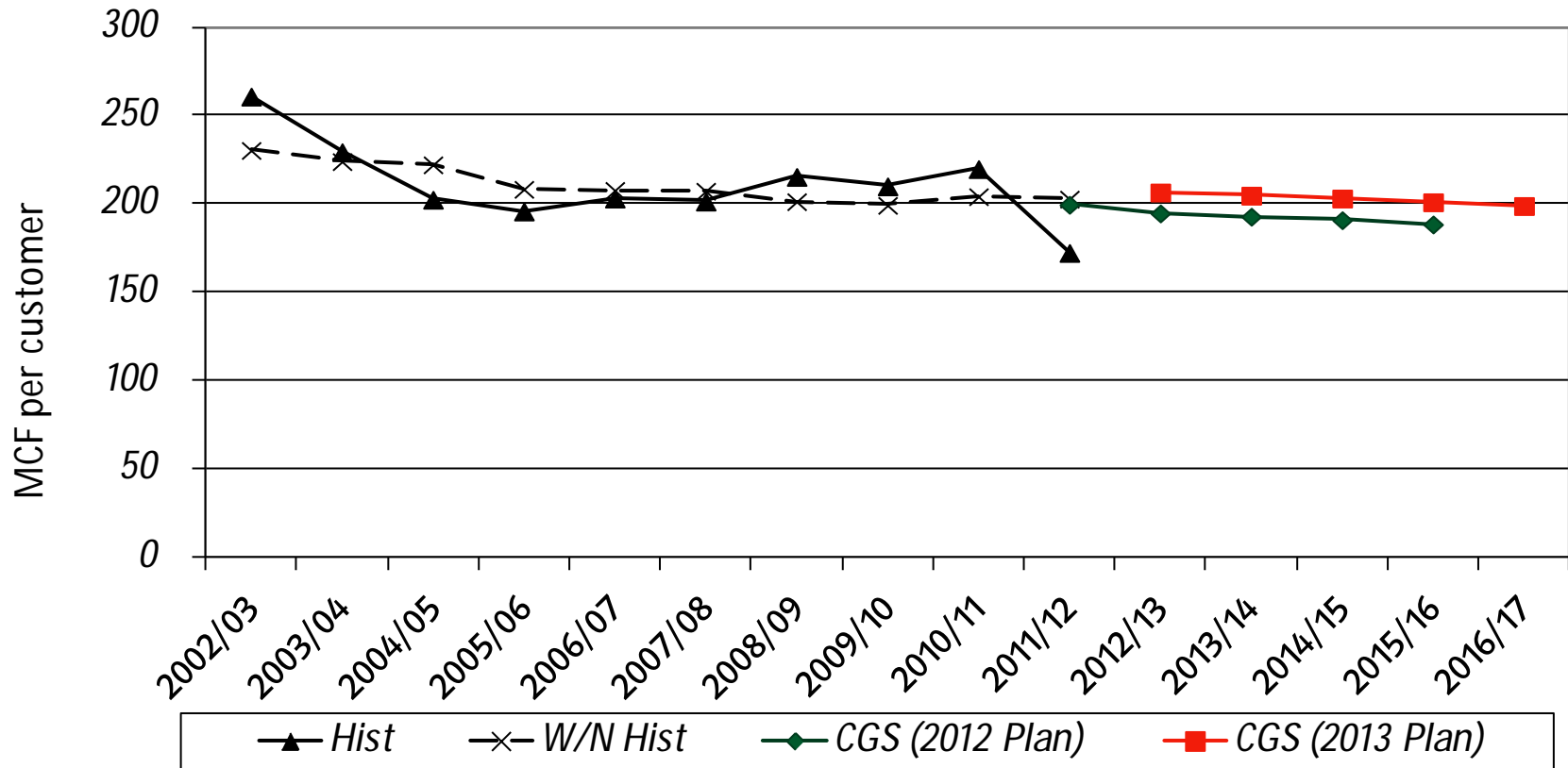


2012 value for the 2013 Plan includes 2 months of WN Actuals



# Firm Transportation (FT) volumes stay flat, driven by Major Account customers

## Winter Commercial (CGS) Use-per-Customer (November - February)

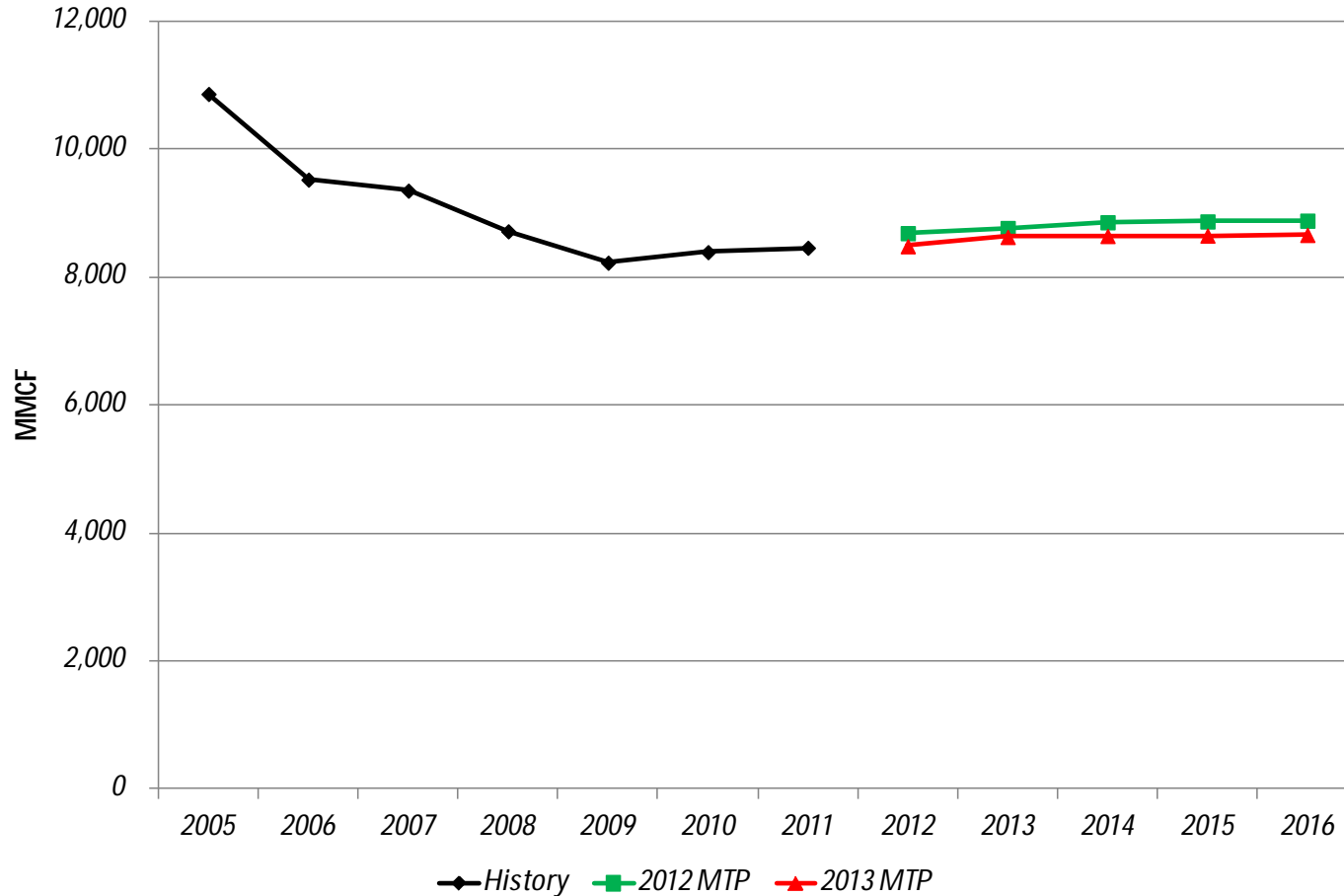


2012 value for the 2013 Plan includes 2 months of WN Actuals



# Declines in Ford, Fort Knox forecasts cause slightly lower expectations for 2013 Major Account usage

## Major Accounts History and Forecast



2012 value for the 2013 Plan includes 2 months of WN Actuals



PPL companies

# Major Accounts Key Points

- *Of the 24 individually forecasted customers in the 2013 Plan, 11 have higher forecasts than last year and 14 have lower forecasts than last year.*
- *Major Accounts: Customers whose decreased expected usage is driving a decrease in the transportation forecast include Ford, Fort Knox, and AAK Foods.*
- *The 2013 forecast for American Synthetic is 62% higher (291,000 MCF) than the previous forecast as their recent usage is trending upward as their production has increased.*
- *The 2013 forecast for Ford (combined) is over 11% lower (251,000 MCF) than the previous forecast due to dampened expectations of gas usage at the Louisville Assembly Plant.*
- *The 2013 forecast for Fort Knox is 42% lower (144,000 MCF) than the previous forecast due to continued switching to geothermal heat, lower than anticipated demand at the HR Center, and continued production of on-site gas.*





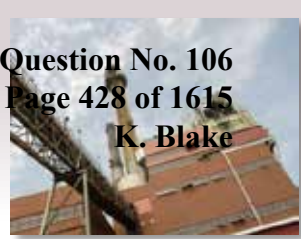
PPL companies

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# 2013 Business Plan Generation & OSS Forecast

*Generation Planning & Analysis  
September 7, 2012*

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# 2013 Plan Summary

- Compared to CSAPR Stay (Jan 2012) forecast, native load production costs in 2013 Plan are lower; OSS contribution is mostly unchanged in 2013 and slightly higher in 2014-2017.
- With CSAPR vacatur and retirement of coal units, the need to bank SO<sub>2</sub> allowances prior to 2016 is eliminated.
- Plan assumes Brown 1 and 2 are retrofitted with baghouses in 2016 and continue operation beyond long-term planning period.

<b>Native Load Production Costs (\$/MWh)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>CAGR</b>
2012 Plan	29.55	31.54	34.14	37.58	38.90	7.1%
CSAPR Stay (Jan 2012)	28.96	30.83	33.54	37.28	38.77	7.6%
2013 Plan	28.83	30.18	31.97	34.72	36.43	6.0%

<b>OSS Contribution (\$M)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
2012 Plan	11	5	1	0	0
CSAPR Stay (Jan 2012)	4	1	0	0	0
2013 Plan	3	3	1	1	1



## Background

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- *2012 Plan was updated in January to reflect CSAPR stay and new gas/electricity prices.*
- *'CSAPR Stay' forecast assumed CSAPR timeline would be delayed by 1 year (CSAPR Phase I begins 1/1/2013).*
  - *Lessened need to reduce SO<sub>2</sub> emissions prior to 2016.*
  - *Increased generation at Green River to be consistent with 2011 levels.*
  - *As a result, production costs in CSAPR Stay forecast were lower.*
- *Compared to 2012 Plan, electricity prices in CSAPR Stay forecast were 18% lower on average (gas prices 33% lower).*

# Key Changes in Planning Assumptions & Inputs

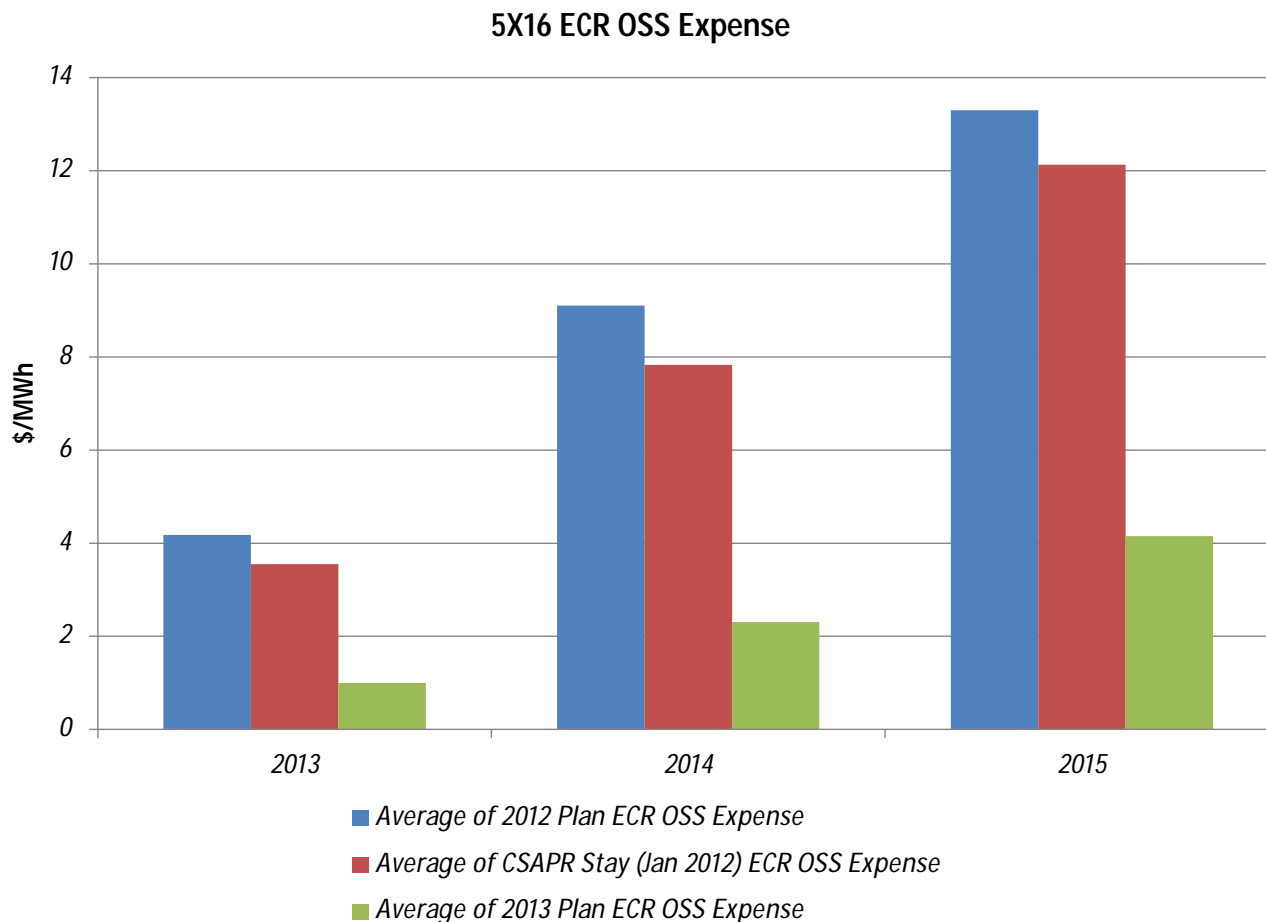
- *CAIR replaces CSAPR*
- *Electricity/gas prices are lower (see slides 38-41)*
  - *2013 5x16 electricity prices decreased by 5% compared to Jan-2012 prices (19% compared to July-2012 prices)*
  - *2013 gas prices decreased by 10% compared to Jan-2012 prices (31% compared to July-2012 prices)*
- *Coal prices are lower (see slides 34-36, 42)*
- *Expansion plan excludes Bluegrass units (495 MW)*
  - *Reserve Margin purchase in 2016-17 to meet 87 and 135 MW reserve margin need*
    - *165 MW PPA in 2016-17*
    - *Estimated \$9.56 million annual fixed capacity cost*
  - *2018 2X1 NGCC (June 1 start date) to meet 250 MW reserve margin need*
    - *If Brown 1 and 2 are retired, 2018 reserve margin need is 519 MW (see slide 54)*
  - *RFP planned for September 2012*
- *EFOR assumptions are slightly higher*
  - *Plan EFOR assumptions are based on historical EFOR values. However, 'target' EFORs will continue to be the basis for KPI reporting.*



# Key Changes in Planning Assumptions & Inputs

- *ECR OSS expense is lower*
  - *Reflects termination of 2005/06 ECR Plans.*
- *Timing of coal retirements and CR7 commissioning accelerated from 1/1/2016*
  - *4/16/2015 retirement date for TY3, GR3-4*
    - *TY3 unavailable throughout planning period*
  - *5/1/2015 retirement date for CR4-6*
    - *CR6 unavailable beginning 10/1/2014*
  - *5/1/2015 commercial operation date for CR7*
- *Revised modeled transmission constraints*
  - *At least one Brown coal unit (versus 3) must operate at all times (if available).*
  - *At least two Cane Run coal units must operate during June-August and at least one must operate during other months. Previously, assumed the need for two units during the week and one unit on the weekend.*
    - *Note: Continue to assume that at least one Green River unit must operate until transmission upgrades are completed.*

# ECR OSS expense in 2013 Plan is notably lower compared to prior plans



# EFOR assumptions in 2013 generation and O&M forecast are based on 'historical' EFORs

- *For the system, historical EFORs are 1.3% higher than the 'target' EFORs used in the 2012 Plan.*
- *EFOR assumptions are based on 5-10 years of historical data.*
- *Companies' fuel procurement methods were considered in developing EFOR assumptions.*
  - *For example, EFOR for units burning high sulfur coal were developed as a group.*

	EFOR Assumptions for 2013	
	2012 Plan	2013 Plan
BR1	5.0%	5.6%
BR2	5.0%	5.6%
BR3	5.0%	5.6%
CR4	5.9%	7.0%
CR5	5.9%	7.0%
CR6	5.9%	7.0%
GH1	4.4%	5.6%
GH2	4.4%	5.6%
GH3	4.4%	5.6%
GH4	4.4%	5.6%
GR3	7.0%	7.0%
GR4	7.0%	7.0%
MC1	4.4%	5.6%
MC2	4.4%	5.6%
MC3	4.4%	5.6%
MC4	4.4%	5.6%
TC1	3.5%	5.1%
TC2	3.3%	6.0%
LGE/KU Steam	4.5%	5.8%



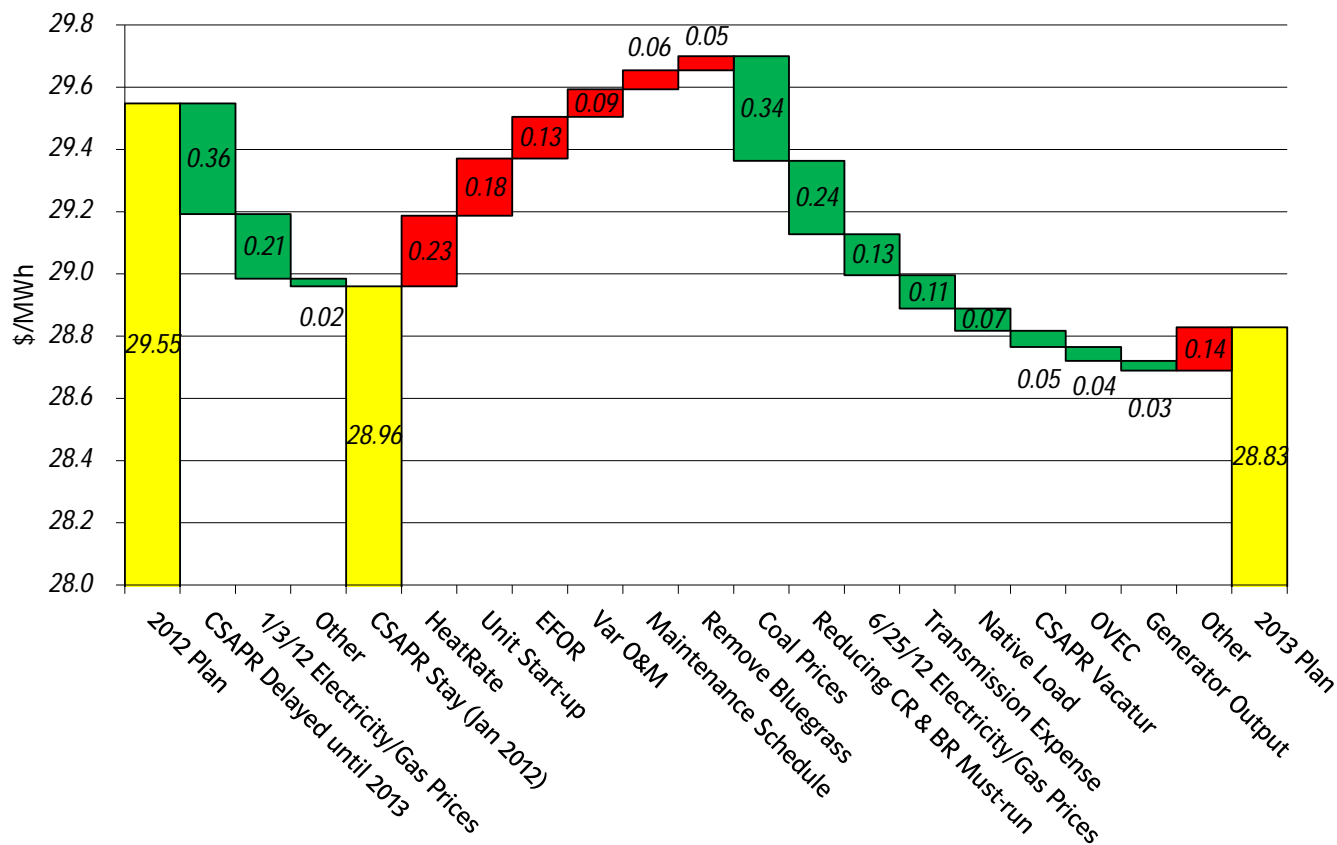
# Power Production is proposing to change EFOR 'targets' for 2013 KPI reporting

- *EFOR targets remain below industry top quartile levels.*
- *In the past 10 years, LG&E and KU have met the new 5% target on a system-wide basis 2 times.*

	EFOR Targets for 2013	
	2012 Plan	2013 Plan
BR1	5.0%	5.6%
BR2	5.0%	5.6%
BR3	5.0%	5.6%
CR4	5.9%	6.8%
CR5	5.9%	6.8%
CR6	5.9%	6.8%
GH1	4.4%	5.0%
GH2	4.4%	5.0%
GH3	4.4%	5.0%
GH4	4.4%	5.0%
GR3	7.0%	7.0%
GR4	7.0%	7.0%
MC1	4.4%	5.0%
MC2	4.4%	5.0%
MC3	4.4%	5.0%
MC4	4.4%	5.0%
TC1	3.5%	4.0%
TC2	<u>3.3%</u>	<u>3.8%</u>
LGE/KU Steam	4.5%	5.0%

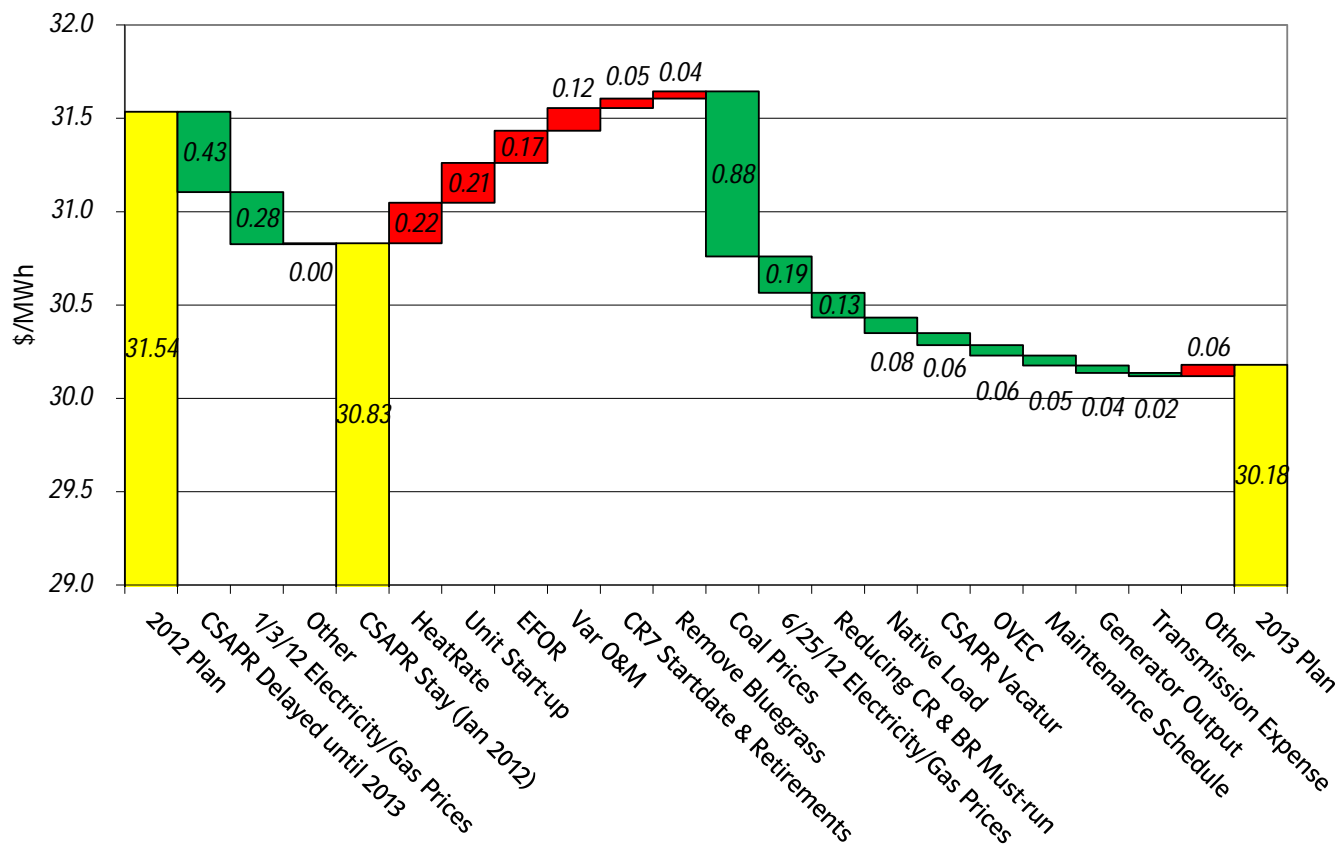


# Decreases in coal prices lower native load production costs in 2013

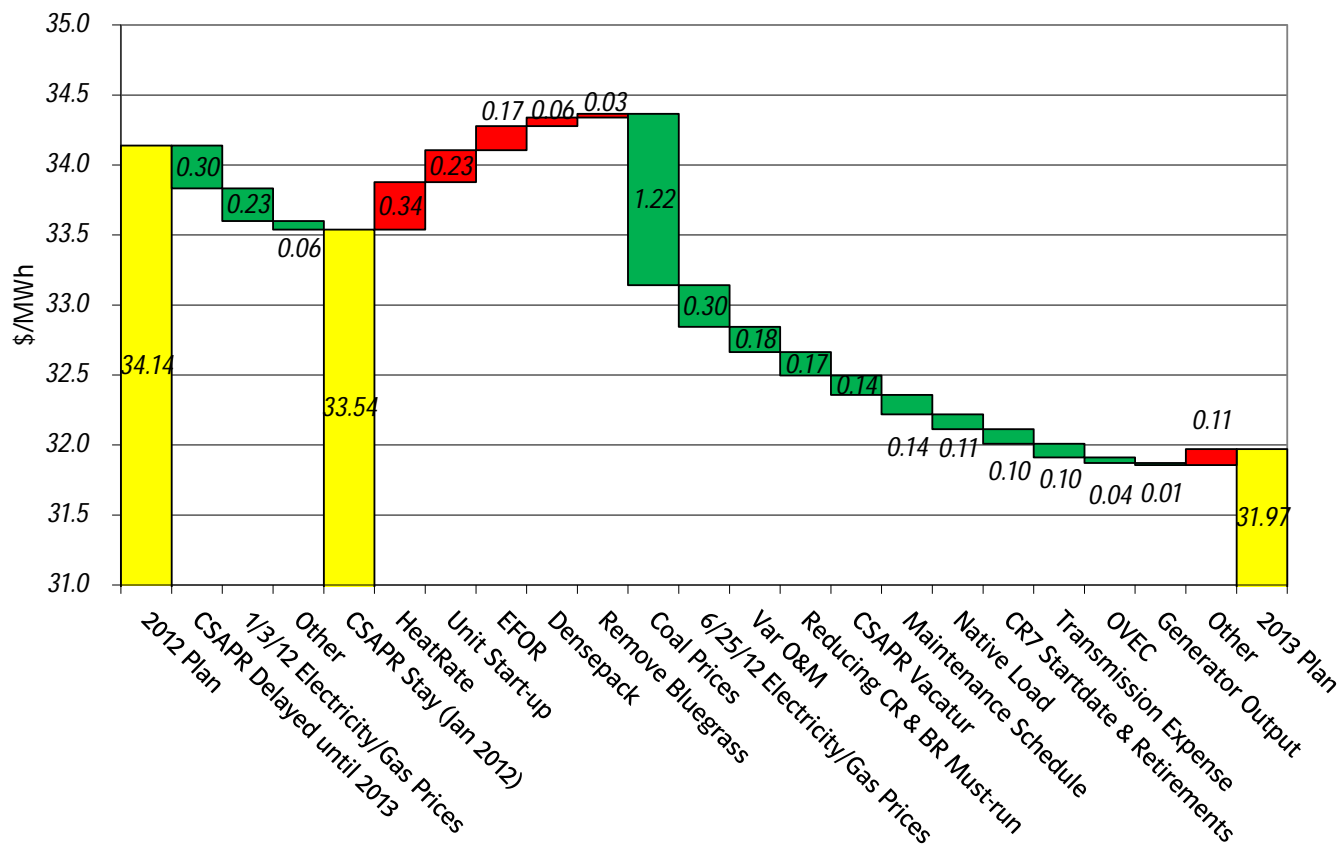




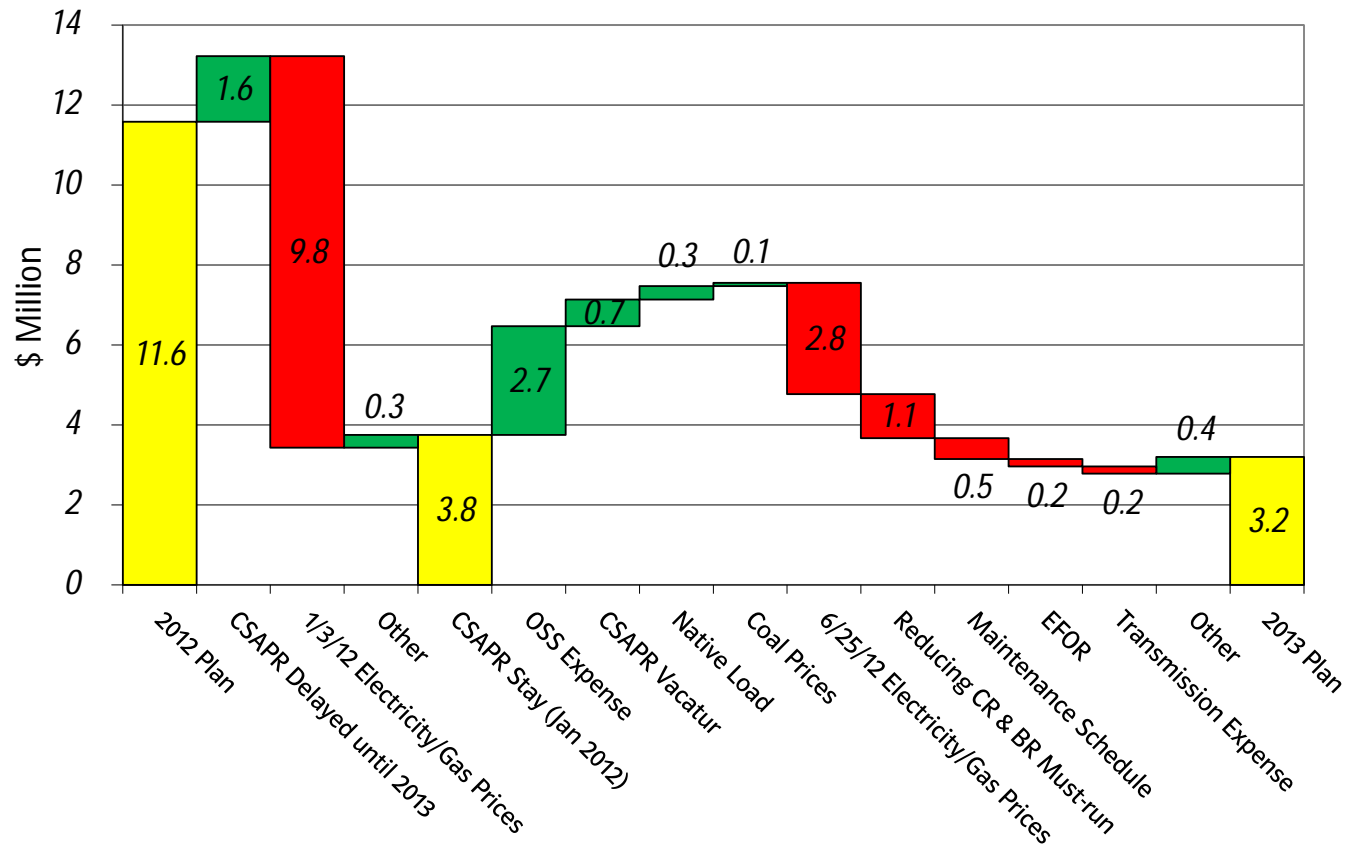
# Decreases in coal prices lower native load production costs in 2014



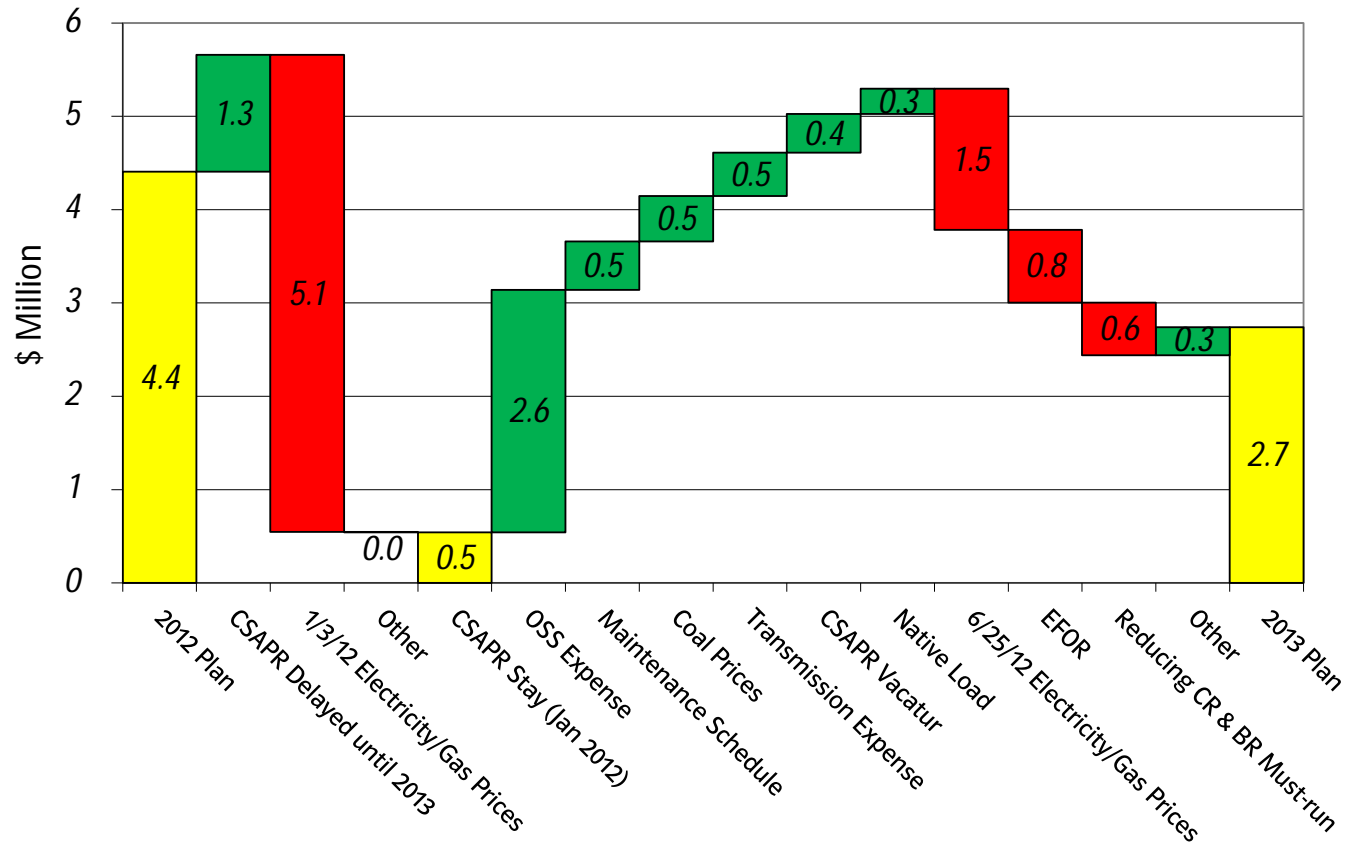
# Decreases in coal prices lower native load production costs in 2015



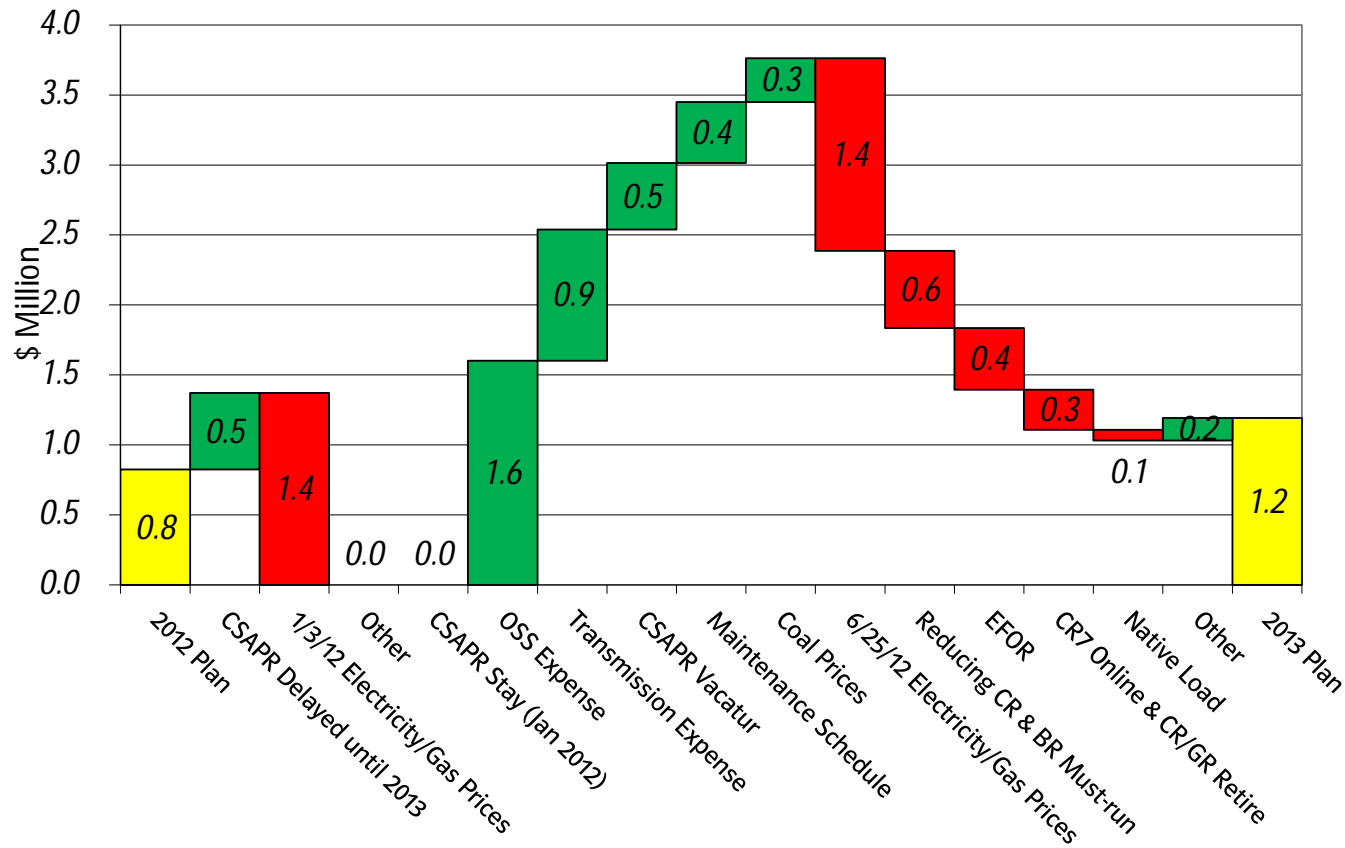
# OSS contribution in 2013 is mostly unchanged



# OSS contribution increases in 2014 primarily due to decreases in the OSS expense



# OSS contribution increases in 2015 primarily due to reductions in OSS and transmission expenses



# Gas price uncertainty increases variability in fuel burn after Cane Run 7 comes on line

Gas Burn (GBtu)	2013	2014	2015	2016	2017
5 <sup>th</sup> Percentile	7,349	10,281	31,842	39,438	39,079
2013 Plan	10,356	12,940	38,238	47,108	46,231
95 <sup>th</sup> Percentile	20,388	32,824	63,235	93,554	103,613

Coal Burn (GBtu)	2013	2014	2015	2016	2017
5 <sup>th</sup> Percentile	338,720	324,029	276,424	230,495	219,920
2013 Plan	356,348	353,594	312,679	298,647	299,788
95 <sup>th</sup> Percentile	372,955	368,293	330,824	321,356	322,003

- *5<sup>th</sup> and 95<sup>th</sup> percentile values are based on the results of 1,200+ simulations. Range of outcomes reflects the uncertainty in weather/load, market electricity/gas prices, and unit availability.*

# Production costs and OSS contribution are impacted by uncertainty in weather/load, electricity/gas prices, and unit availability

<b>Native Load Production Cost (\$/MWh)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<i>5<sup>th</sup> Percentile</i>	28.39	29.48	30.28	31.92	33.17
<i>2013 Plan</i>	28.83	30.18	31.97	34.72	36.43
<i>95<sup>th</sup> Percentile</i>	29.10	30.57	32.67	35.36	37.11

<b>OSS Contribution (\$M)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<i>5<sup>th</sup> Percentile</i>	2	1	0	0	0
<i>2013 Plan</i>	3	3	1	1	1
<i>95<sup>th</sup> Percentile</i>	12	11	5	4	3

- *Gas price uncertainty increases variability in production costs after Cane Run 7 comes on line.*
- *More upside exists in forecast of OSS contribution than downside.*

# Appendix





# 2013 Plan – Assumptions

- *Plan EFOR assumptions will be based on historical EFOR values. 'Target' EFORs will continue to be the basis for KPI reporting.*
- *For the purposes of computing production costs, the following will be assumed:*
  - *TY3 unavailable throughout planning period*
  - *CR6 unavailable 10/1/2014*
  - *4/16/2015 retirement date for TY3, GR3-4*
  - *5/1/2015 commercial date for CR7*
  - *5/1/2015 retirement date for CR4-6*
- *TC2 will be available at full load (732 MW summer; 760 MW winter) and on control throughout the planning period.*
- *At least one Brown coal unit must be operating at all times.*
- *At least two Cane Run coal units must be operating during June-August; at least one Cane Run coal unit must be operating during rest of year.*
- *At least one Green River unit must be committed until XM concerns are addressed.*
- *PR11-13 unavailable from November through March (gas pressure)*
- *FGDs will continue to operate at normal levels.*



# 2013 Plan – Assumptions

- *Expansion plan includes only 2011 IRP capacity expansion alternatives:*
  - *Target reserve margin of 16% (within range 15-17%)*
  - *2016-17: 165 MW Reserve Margin Purchase (Jan-Dec)*
  - *2018: 2X1 CC*
- *Spinning reserve requirements:*
  - *Contingency: Spinning 230 MW, (100 MW of 230 MW is supplemental - supplied by quick-start units)*
  - *75 MW regulating*
  - *75 MW NAS*
- *Sales cannot be generated by CTs (same assumption in 2012 Plan)*
- *Baghouse installation schedule:*
  - *2014: GH3, GH4, MC4*
  - *2015: BR3, GH1, GH2, MC1, MC2, MC3, TC1*
  - *2016: BR1, BR2 (pending analysis and decision by mid-2013)*
- *FGD installation schedule:*
  - *2014: MC4*
  - *2015: New/Refurbished MC1-3 FGD*



# 2013 Plan – Assumptions

- *No turbine upgrades*
- *CAIR replaces CSAPR*

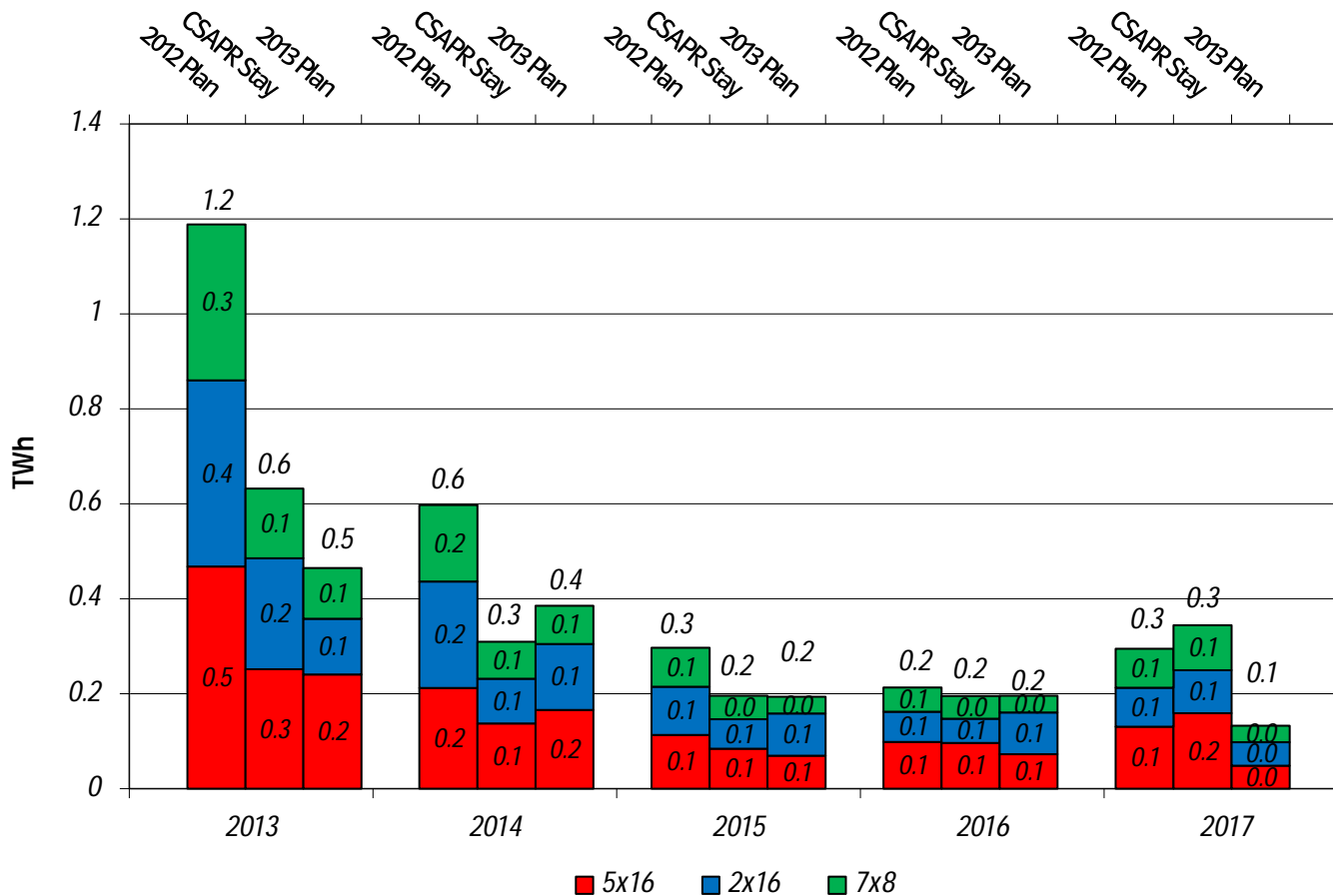
## *Emission Allowance Prices (\$/allowance)*

<i>Year</i>	<i>Annual NOx</i>		<i>Seasonal NOx</i>		<i>SO<sub>2</sub></i>	
	<i>CSAPR</i>	<i>CAIR</i>	<i>CSAPR</i>	<i>CAIR</i>	<i>CSAPR</i>	<i>CAIR</i>
<i>2013</i>	<i>N/A</i>	<i>50</i>	<i>N/A</i>	<i>20</i>	<i>N/A</i>	<i>1</i>
<i>2014</i>	<i>50</i>	<i>50</i>	<i>75</i>	<i>20</i>	<i>50</i>	<i>1</i>
<i>2015</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2016</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2017</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2018</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2019</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2020</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2021</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>
<i>2022</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>1</i>

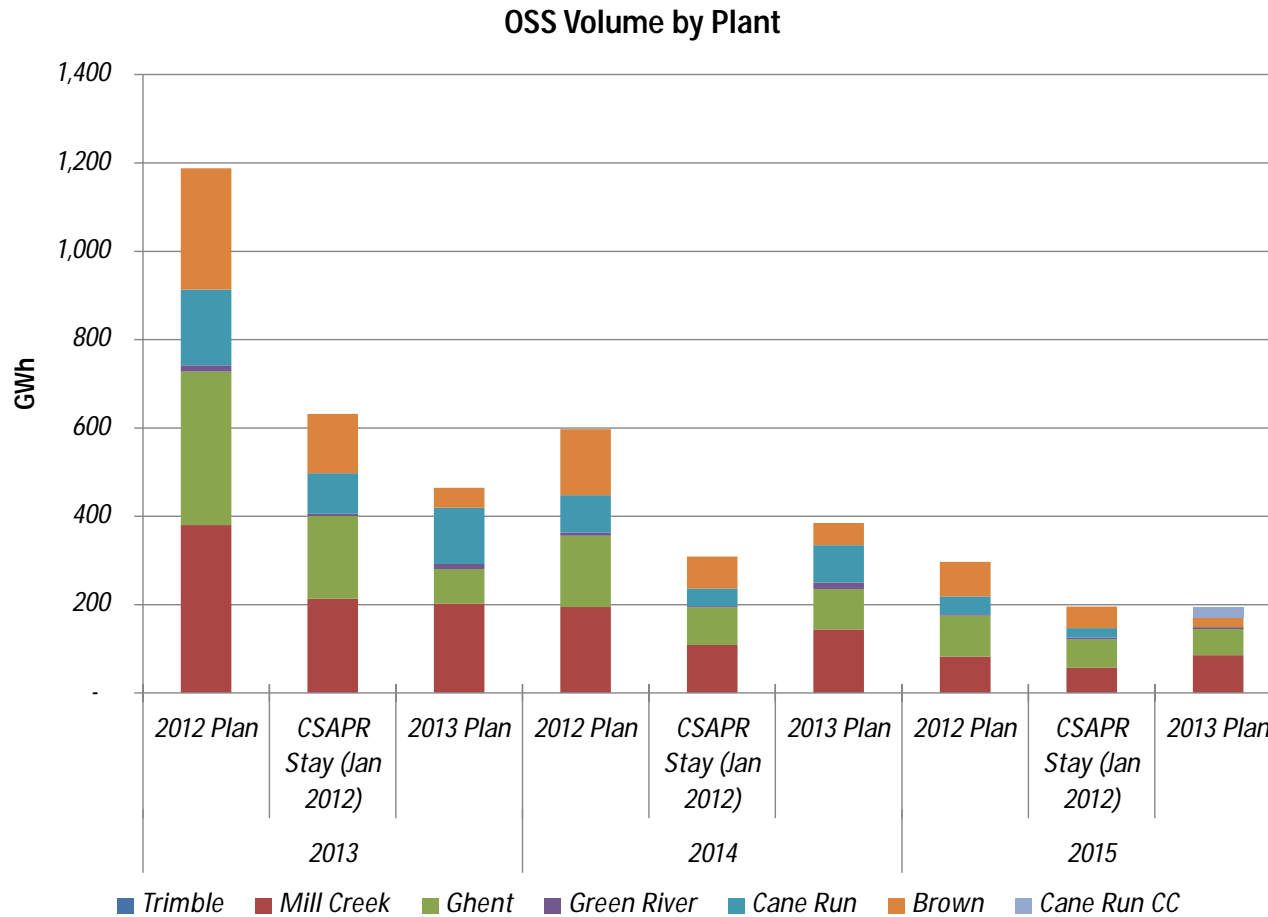
# 2013 Plan – Assumptions

- *Turbine Overhaul schedule:*
  - 2012: GH2, BR3, CR4, MC2
  - 2013: MC1
  - 2014: BR1, MC4, GH4
  - 2015: GH1
  - 2016: None
  - 2017: BR2, TC1
  
- *Market Volume Limits:*
  - Hourly sales limited to 600 MW in all months
  - Hourly purchases (same as 2012 Plan)
    - 5x16 limited to 400 MW
    - 2x16 limited to 450 MW
    - 7x8 limited to 200 MW
  
- *Market Electricity Prices*
  - Consistent with July-approved prices
  - Hourly pricing shaped to correspond with historical load shape

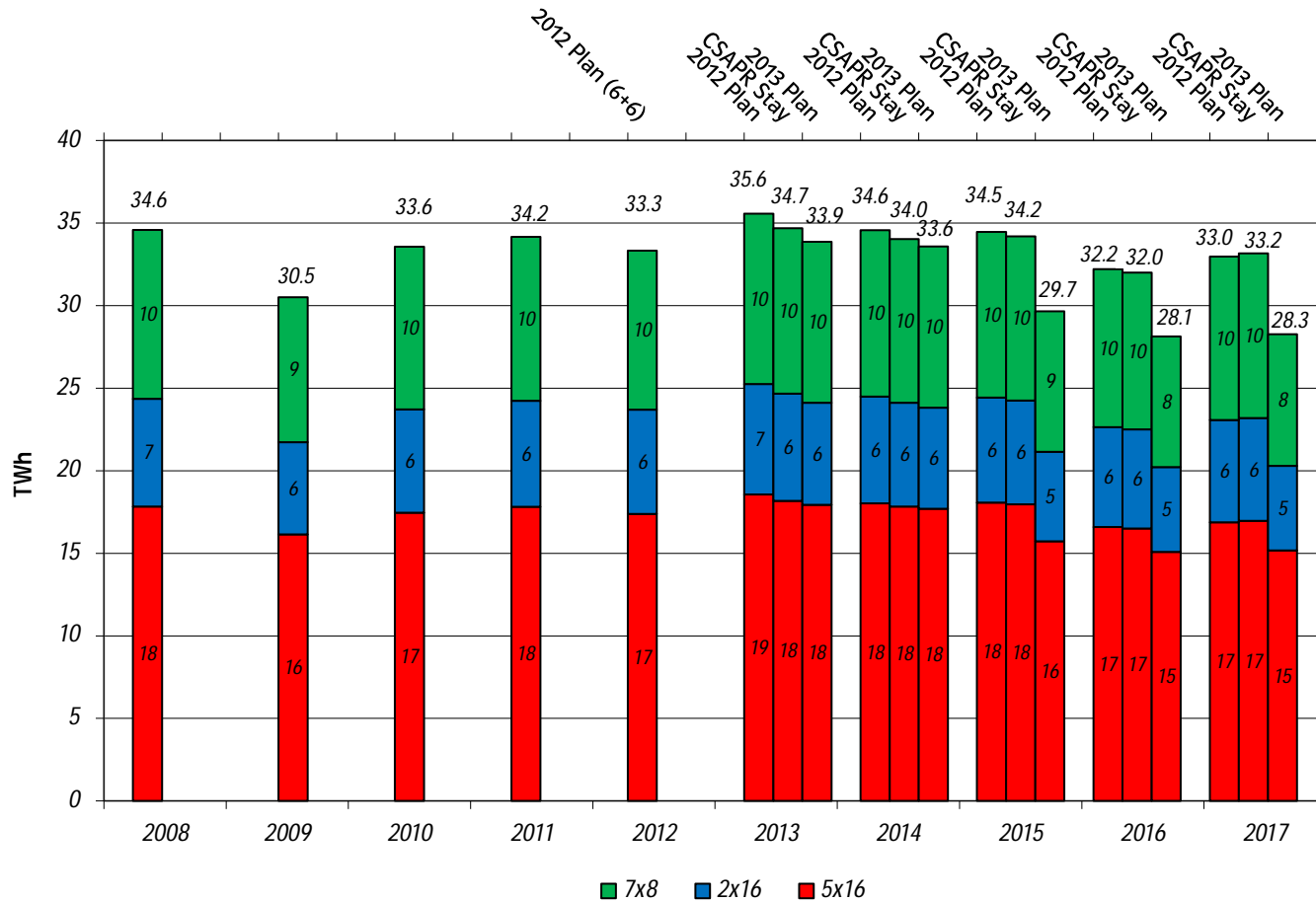
# Lower electricity prices decrease OSS volumes in 2013



# OSS from Brown and Ghent drop more in relation to other plants



# Steam Generation drops due to lower load forecast and lower gas prices

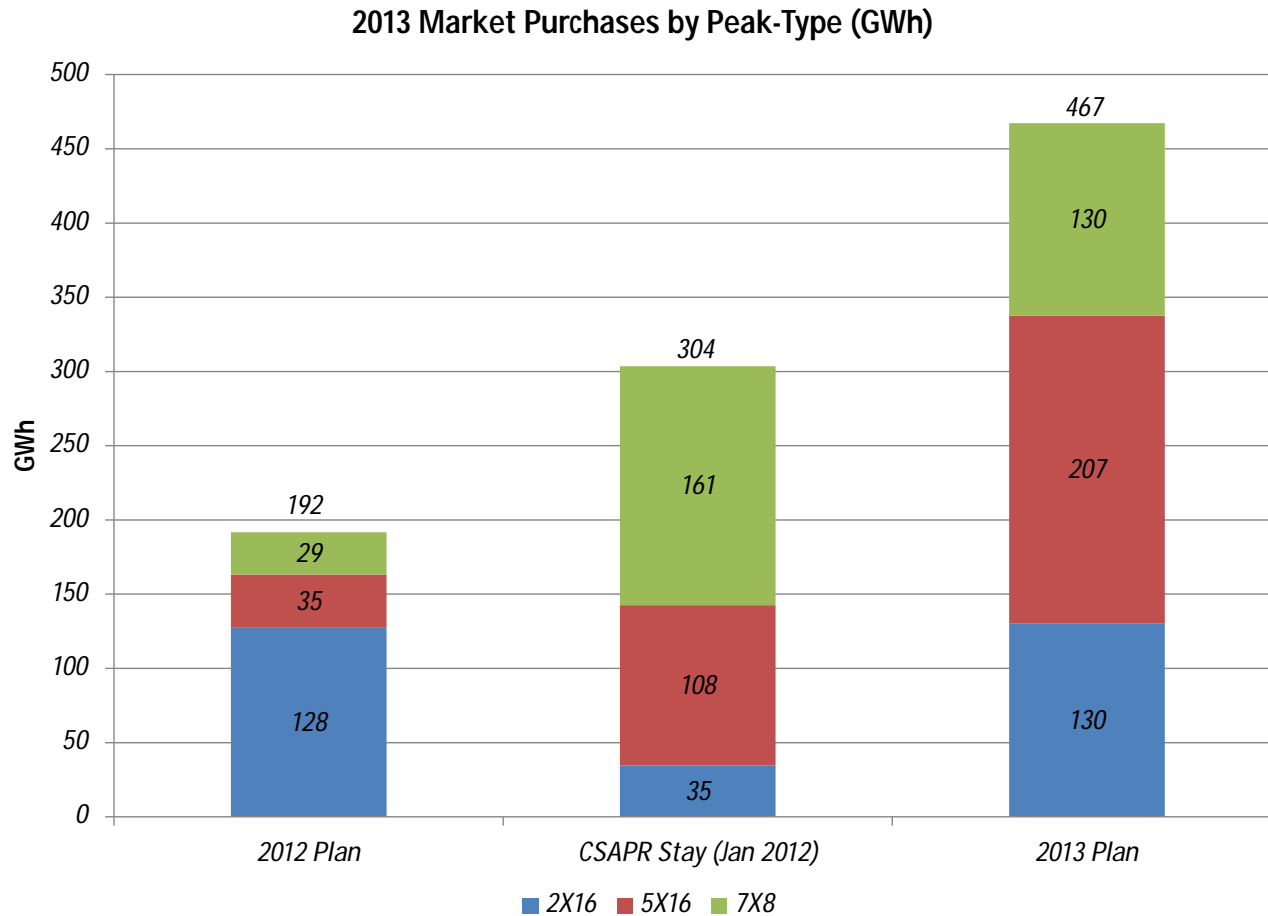


Note: TC1 & 2 at 75%



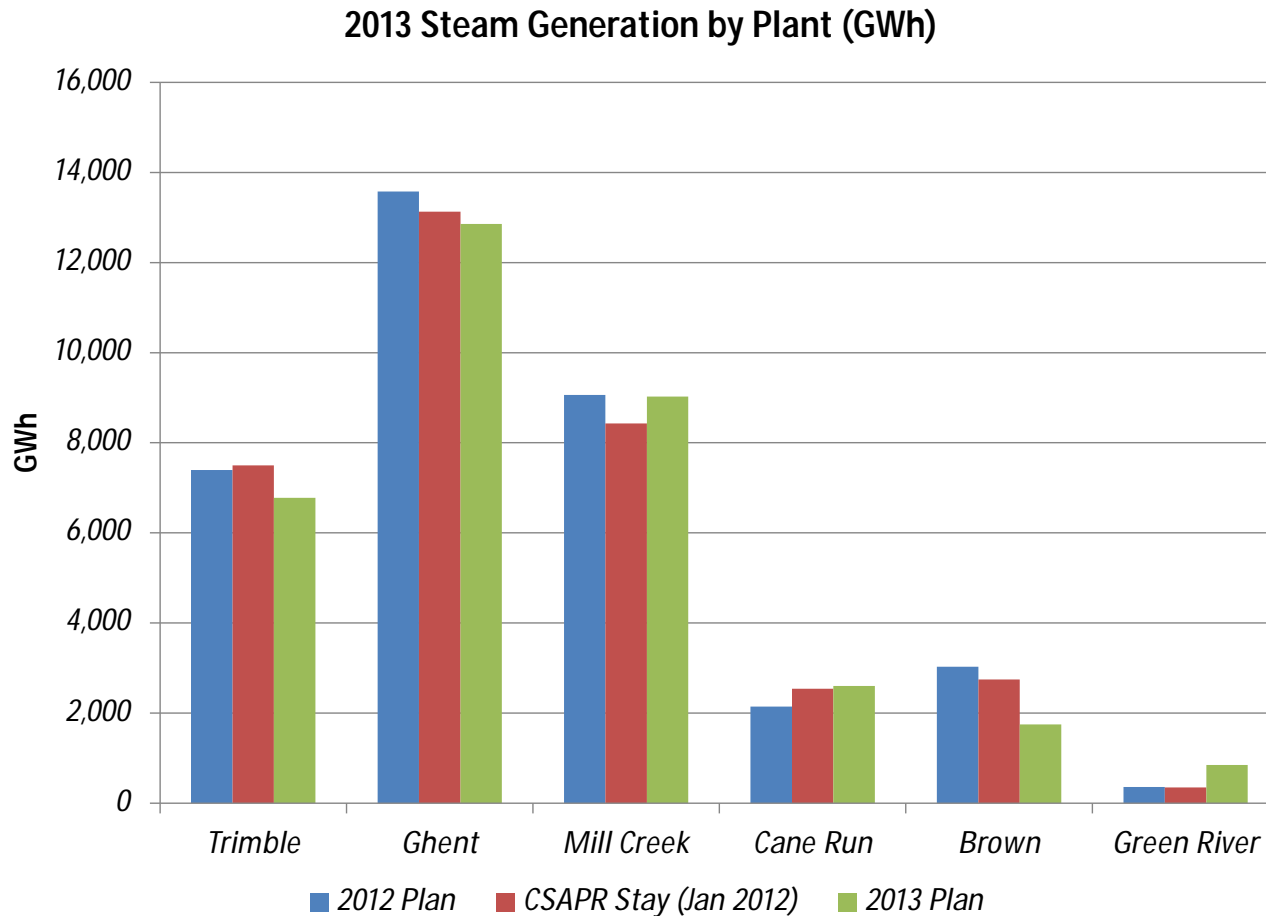
PPL companies

# Lower electricity prices increases economy purchases





# Generation drops significantly at Brown; increases at Cane Run, Mill Creek, and Green River



# Lower gas prices increase CT Usage

CT Generation (GWh)

				(6+6)	<u>2013 Plan</u>				
	2009	2010	2011	2012	2013	2014	2015	2016	2017
BR5	2	8	4	17	4	4	6	5	7
BR6	37	48	28	126	49	48	60	48	50
BR7	27	47	34	124	59	59	80	55	63
BR8, 11	12	17	6	21	10	12	14	10	11
BR9, 10	4	10	6	15	5	6	9	7	6
PR13	1	15	31	146	116	141	137	113	132
TC5-10	195	682	376	1,466	724	928	1,005	752	799
	<b>278</b>	<b>826</b>	<b>485</b>	<b>1,914</b>	<b>966</b>	<b>1,199</b>	<b>1,311</b>	<b>990</b>	<b>1,068</b>

2012 Plan

588 755 795 572 631

CSAPR Stay (Jan 2012)

744 840 764 547 596

CT Starts (# starts)

				(6+6)	<u>2013 Plan</u>				
	2009	2010	2011	2012	2013	2014	2015	2016	2017
BR5	18	22	15	41	24	26	31	26	27
BR6	61	59	56	92	57	68	70	53	64
BR7	39	80	54	100	71	79	90	63	77
BR8, 11	63	60	35	90	55	68	69	52	58
BR9, 10	31	55	38	67	33	42	48	41	43
PR13	2	18	49	120	160	164	152	144	156
TC5-10	292	779	504	687	706	840	848	697	734
	<b>506</b>	<b>1,073</b>	<b>751</b>	<b>1,198</b>	<b>1,105</b>	<b>1,286</b>	<b>1,309</b>	<b>1,075</b>	<b>1,158</b>

2012 Plan

824 996 987 731 824

CSAPR Stay (Jan 2012)

871 940 933 697 808

CT Generation (GWh)/Start

				(6+6)	<u>2013 Plan</u>				
	2009	2010	2011	2012	2013	2014	2015	2016	2017
BR5	0.1	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2
BR6	0.6	0.8	0.5	1.4	0.9	0.7	0.9	0.9	0.8
BR7	0.7	0.6	0.6	1.2	0.8	0.8	0.9	0.9	0.8
BR8, 11	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
BR9, 10	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1
PR13	0.6	0.8	0.6	1.2	0.7	0.9	0.9	0.8	0.8
TC5-10	0.7	0.9	0.7	2.1	1.0	1.1	1.2	1.1	1.1
	<b>0.6</b>	<b>0.8</b>	<b>0.6</b>	<b>1.6</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>

2012 Plan

0.7 0.8 0.8 0.8 0.8

CSAPR Stay (Jan 2012)

0.9 0.9 0.8 0.8 0.7

CT Run Hours/Start

				(6+6)	<u>2013 Plan</u>				
	2009	2010	2011	2012	2013	2014	2015	2016	2017
BR5	3.8	6.1	5.6	4.7	3.5	3.1	3.3	3.5	3.9
BR6	8.3	9.5	7.6	10.5	7.5	6.9	7.9	7.8	6.6
BR7	6.9	8.1	6.4	9.3	7.3	7.0	7.9	7.6	7.0
BR8, 11	3.5	4.8	4.0	4.0	3.6	3.4	4.2	3.9	4.0
BR9, 10	2.8	3.8	4.1	3.7	3.5	2.8	4.1	3.5	3.1
PR13	4.7	5.9	5.4	10.5	8.5	10.0	10.5	9.2	9.9
TC5-10	5.8	7.8	7.3	13.7	6.9	7.8	8.1	7.2	7.3
	<b>5.6</b>	<b>7.4</b>	<b>6.8</b>	<b>11.2</b>	<b>6.8</b>	<b>7.5</b>	<b>7.9</b>	<b>7.1</b>	<b>7.2</b>

2012 Plan

6.3 6.5 6.7 6.5 6.5

CSAPR Stay (Jan 2012)

6.5 7.1 6.6 6.6 6.3



# Load Factor increases across the CTs, GR; decreases at BR1-3, TC1-2

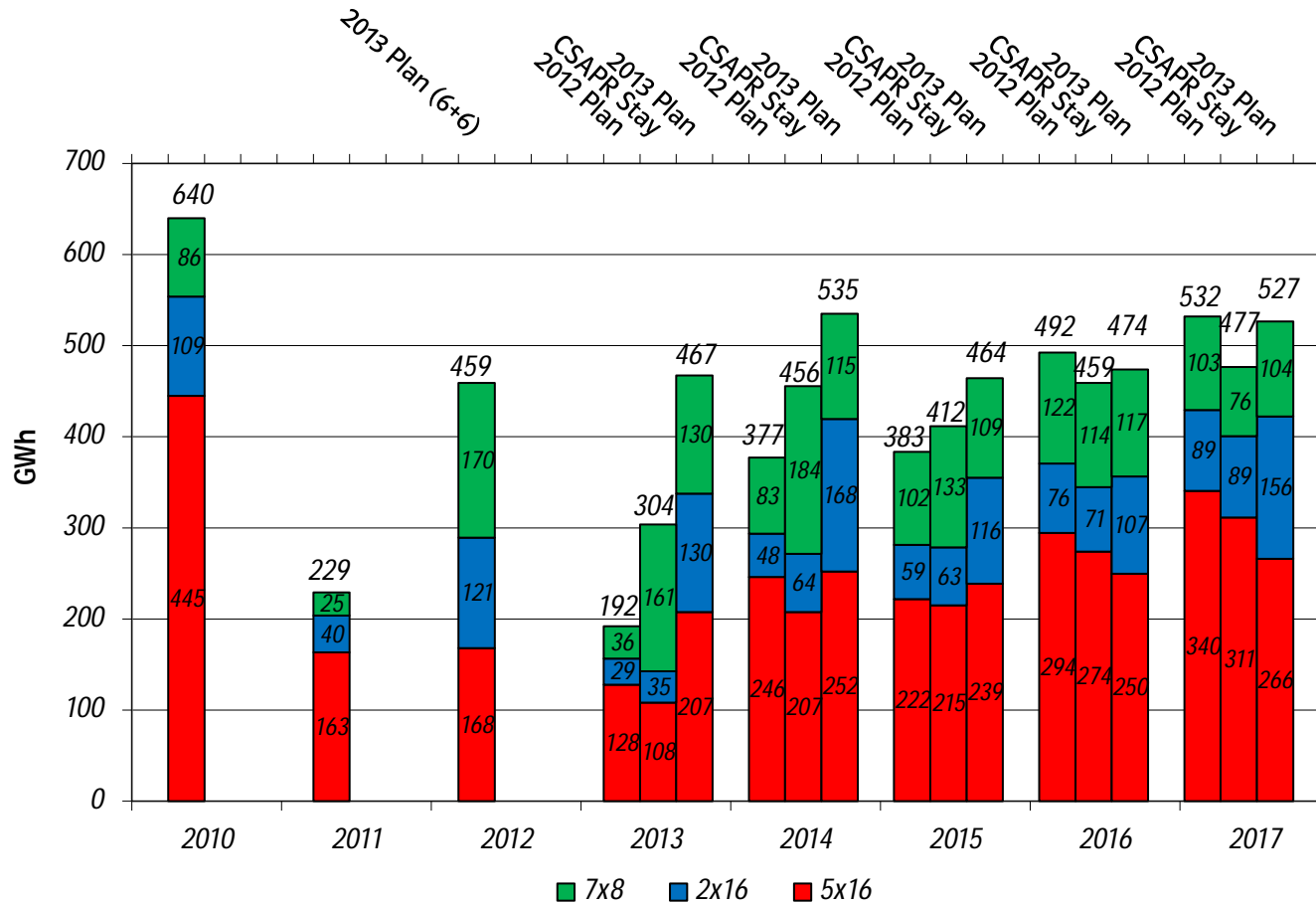
Load Factor (%)

	2013			2016		
	CSAPR			CSAPR		
	2012 Plan	Stay	2013 Plan	2012 Plan	Stay	2013 Plan
Brown 1	49%	48%	28%	44%	47%	38%
Brown 2	65%	63%	48%	55%	59%	62%
Brown 3	54%	46%	30%	53%	49%	29%
Cane Run 4	44%	48%	68%	N/A	N/A	N/A
Cane Run 5	58%	73%	69%	N/A	N/A	N/A
Cane Run 6	46%	54%	52%	N/A	N/A	N/A
Ghent 1	90%	87%	84%	90%	89%	81%
Ghent 2	87%	94%	91%	91%	98%	87%
Ghent 3	95%	86%	87%	87%	83%	77%
Ghent 4	82%	76%	83%	75%	74%	77%
Green River 3	15%	13%	45%	N/A	N/A	N/A
Green River 4	38%	38%	84%	N/A	N/A	N/A
Mill Creek 1	86%	91%	83%	87%	93%	77%
Mill Creek 2	81%	86%	88%	78%	85%	80%
Mill Creek 3	77%	62%	83%	75%	67%	57%
Mill Creek 4	82%	71%	80%	89%	83%	64%
Trimble County 1	98%	99%	93%	99%	99%	95%
Trimble County 2	98%	99%	95%	100%	100%	96%

Load Factor (%)

	2013			2016		
	CSAPR			CSAPR		
	2012 Plan	Stay	2013 Plan	2012 Plan	Stay	2013 Plan
Trimble Co 05	10%	15%	18%	11%	11%	19%
Trimble Co 06	11%	14%	14%	10%	10%	16%
Trimble Co 07	9%	10%	12%	9%	8%	14%
Trimble Co 08	8%	8%	10%	7%	7%	6%
Trimble Co 09	7%	9%	9%	6%	6%	10%
Trimble Co 10	5%	6%	7%	7%	7%	7%
Paddys Run 13	4%	1%	19%	4%	3%	18%
Brown 5	2%	3%	4%	2%	1%	5%
Brown 6	4%	4%	8%	2%	2%	6%
Brown 7	5%	5%	7%	3%	3%	7%
Brown 8	2%	3%	3%	1%	1%	3%
Brown 9	1%	1%	4%	1%	1%	4%
Brown 10	1%	1%	2%	1%	1%	3%
Brown 11	1%	1%	3%	1%	1%	2%
Cane Run 7	N/A	N/A	N/A	48%	48%	100%

# Lower electricity prices increase economy purchases in 2013-2015



# 2013 Maintenance increases by 7 weeks

	Maintenance-Weeks														
	2013 Plan					2012 Plan					2013 Plan - 2012 Plan				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Brown 1	1	8	1	4	1	1	8	1	3	1	-	-	-	1	-
Brown 2	3	1	1	4	8	3	4	1	1	8	-	(3)	-	3	-
Brown 3	1	3	4	3	1	1	3	4	3	1	-	-	-	-	-
Ghent 1	2	3	8	4	2	1	3	8	4	1	1	-	-	-	1
Ghent 2	2	2	6	4	3	1	1	5	4	2	1	1	1	-	1
Ghent 3	3	6	5	2	3	3	7	5	1	3	-	(1)	-	1	-
Ghent 4	2	8	2	3	3	1	8	1	3	1	1	-	1	-	2
Green River 3	1	3	-	-	-	1	3	1	-	-	-	-	(1)	-	-
Green River 4	3	1	-	-	-	3	1	3	-	-	-	-	(3)	-	-
Tyrone 3*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cane Run 4	-	3	-	-	-	-	3	-	-	-	-	-	-	-	-
Cane Run 5	4	-	-	-	-	3	-	-	-	-	1	-	-	-	-
Cane Run 6	1	3	-	-	-	-	3	-	-	-	1	-	-	-	-
Mill Creek 1	8	1	6	1	4	8	1	6	1	4	-	-	-	-	-
Mill Creek 2	1	4	6	4	1	1	4	6	4	1	-	-	-	-	-
Mill Creek 3	7	1	6	1	4	6	1	6	1	4	1	-	-	-	-
Mill Creek 4	1	10	1	4	1	2	8	1	4	1	(1)	2	-	-	-
Trimble County 1	4	-	4	-	8	4	-	4	-	8	-	-	-	-	-
Trimble County 2	2	6	-	4	-	-	4	-	4	-	2	2	-	-	-
<b>Totals</b>	<b>46</b>	<b>63</b>	<b>50</b>	<b>38</b>	<b>39</b>	<b>39</b>	<b>62</b>	<b>52</b>	<b>33</b>	<b>35</b>	<b>7</b>	<b>1</b>	<b>(2)</b>	<b>5</b>	<b>4</b>
<b>MW-Maint Wks **</b>	<b>16,863</b>	<b>24,471</b>	<b>21,338</b>	<b>15,998</b>	<b>15,077</b>	<b>13,766</b>	<b>22,923</b>	<b>20,805</b>	<b>14,923</b>	<b>13,173</b>	<b>3,097</b>	<b>1,549</b>	<b>534</b>	<b>1,075</b>	<b>1,904</b>

\* Inactive Reserve

\*\* Coal Only

**Notes:**

2013: 2 wks added to CR5 & 6 for Transmission, 2 wks to TC2 for Project Engineering warranty inspection, & 3 wks at Ghent for turbine cleans

2014: 2 wks added to TC2 for warranty inspection

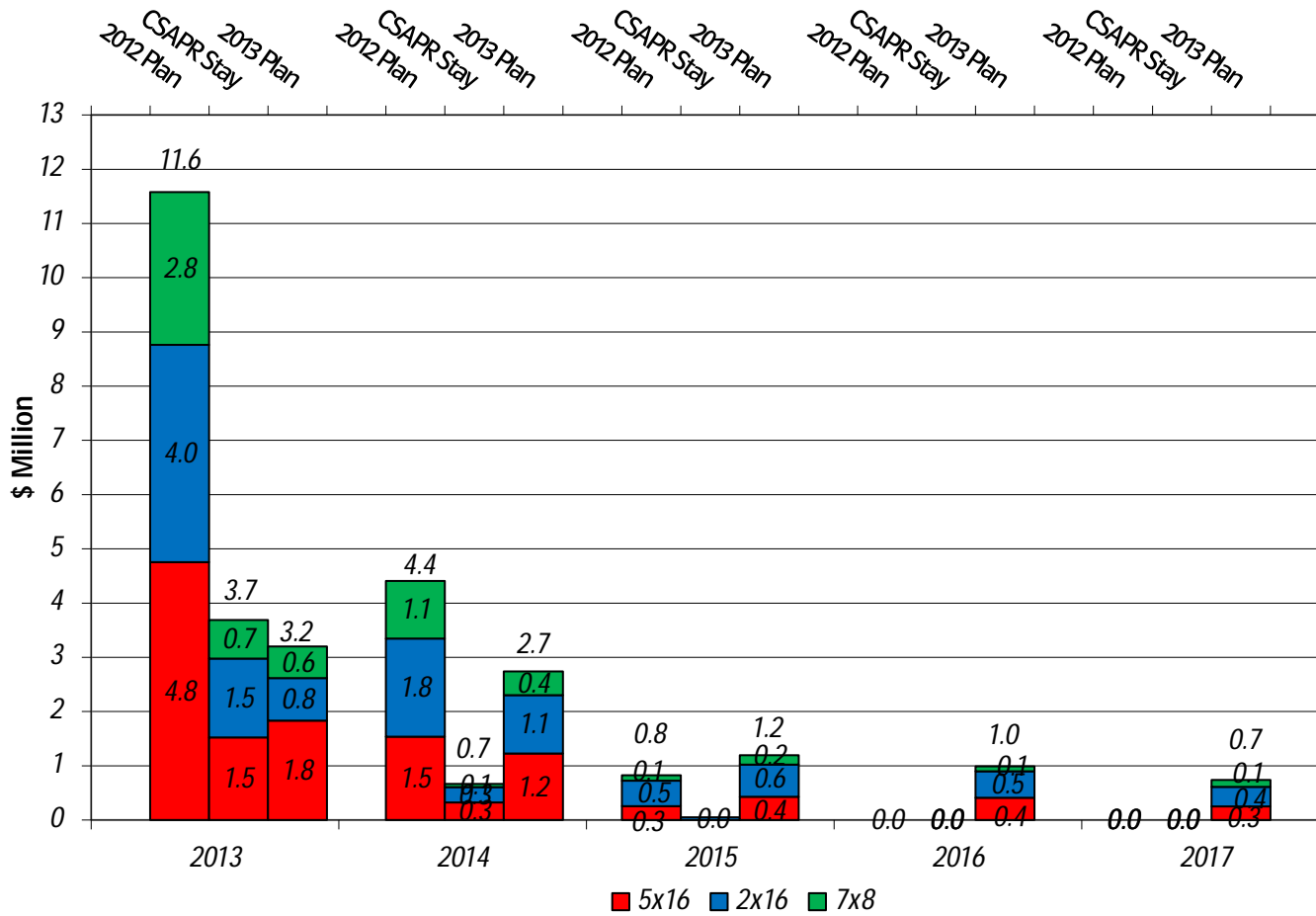
2016: wks added for BR1 & 2 for baghouse installation

Extra wks at Ghent for 2015+ are for turbine cleans



PPL companies

# Compared to CSAPR Stay forecast, OSS contribution is mostly unchanged in 2013 and slightly higher in 2014-2017



# Unit-by-unit and plant-by-plant EFOR changes from year-to-year

Unit	Historial EFORs (%)											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GH 1	2.4	2.5	12.9	3.8	3.0	4.6	8.1	7.9	6.3	12.0	2.6	4.3
GH 2	2.7	0.7	6.4	0.5	1.3	3.9	2.3	3.8	12.4	3.9	1.2	2.3
GH 3	1.6	1.7	2.0	4.4	1.6	1.7	1.2	14.9	8.3	4.3	7.4	3.1
GH 4	<u>2.2</u>	<u>2.0</u>	<u>3.4</u>	<u>2.0</u>	<u>0.3</u>	<u>1.5</u>	<u>2.9</u>	<u>0.8</u>	<u>4.0</u>	<u>3.8</u>	<u>3.2</u>	<u>3.6</u>
GH Sta	2.2	1.8	6.4	2.6	1.5	2.9	3.6	6.3	7.8	6.0	3.7	3.3
BR 1	5.4	4.5	3.6	2.2	3.8	3.2	2.4	5.4	16.4	13.5	2.6	4.5
BR 2	6.2	21.5	10.6	3.9	2.7	2.5	1.2	2.0	3.5	5.5	7.9	6.7
BR 3	<u>0.3</u>	<u>2.2</u>	<u>17.8</u>	<u>4.0</u>	<u>1.2</u>	<u>32.3</u>	<u>7.6</u>	<u>2.9</u>	<u>6.3</u>	<u>6.6</u>	<u>1.1</u>	<u>5.8</u>
BR Sta	2.5	7.5	14.0	3.7	2.0	19.7	5.2	3.0	7.1	7.0	3.1	5.8
GR 3	1.1	2.1	19.7	29.6	5.5	8.4	8.0	3.6	7.0	14.5	12.8	2.9
GR 4	<u>6.7</u>	<u>1.4</u>	<u>17.4</u>	<u>30.7</u>	<u>6.7</u>	<u>45.3</u>	<u>3.5</u>	<u>4.8</u>	<u>7.1</u>	<u>15.4</u>	<u>4.6</u>	<u>11.8</u>
GR Sta	4.5	1.7	18.1	30.2	6.2	31.1	5.1	4.3	7.0	15.1	7.9	8.1
CR 4	2.6	3.4	1.2	2.2	5.9	7.3	3.6	2.7	4.0	4.4	16.3	3.9
CR 5	7.8	4.8	12.0	4.7	7.9	3.2	4.4	8.4	14.5	3.8	3.9	4.9
CR 6	<u>4.2</u>	<u>7.9</u>	<u>38.9</u>	<u>4.1</u>	<u>4.0</u>	<u>7.4</u>	<u>3.6</u>	<u>13.2</u>	<u>12.5</u>	<u>10.3</u>	<u>9.3</u>	<u>7.2</u>
CR Sta	4.8	5.8	20.6	3.7	5.6	6.1	3.9	8.7	10.7	6.8	9.7	5.6
MC 1	3.6	11.9	9.6	2.3	5.6	3.7	5.7	3.7	6.0	4.7	4.9	4.7
MC 2	8.0	5.0	9.3	6.1	4.3	6.8	5.5	3.9	4.6	5.3	2.1	7.0
MC 3	2.3	7.3	8.0	4.7	3.7	6.0	6.0	3.7	3.0	5.1	5.8	8.7
MC 4	<u>11.5</u>	<u>13.9</u>	<u>13.1</u>	<u>9.2</u>	<u>3.7</u>	<u>17.6</u>	<u>5.5</u>	<u>4.4</u>	<u>6.2</u>	<u>3.0</u>	<u>5.0</u>	<u>10.5</u>
MC Sta	6.8	9.8	10.3	5.9	4.2	9.5	5.7	4.0	4.9	4.3	4.6	8.1
TC 1	3.1	2.9	5.4	3.3	0.5	3.0	1.9	4.0	2.7	8.7	11.8	7.5
TC 2												<u>10.3</u>
TC Sta	3.1	2.9	5.4	3.3	0.5	3.0	1.9	4.0	2.7	8.7	11.8	9.1

# 2013 generation and OSS forecast is based on 'historical' EFORs

(%)	2013 Plan					2012 Plan					2013 Plan - 2012 Plan				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
<i>Brown 1</i>	5.6	5.6	5.6	5.6	5.6	5.0	5.0	5.0	5.0	5.0	0.6	0.6	0.6	0.6	0.6
<i>Brown 2</i>	5.6	5.6	5.6	5.6	5.6	5.0	5.0	5.0	5.0	5.0	0.6	0.6	0.6	0.6	0.6
<i>Brown 3</i>	5.6	5.6	5.6	5.6	5.6	5.0	5.0	5.0	5.0	5.0	0.6	0.6	0.6	0.6	0.6
<i>Ghent 1</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Ghent 2</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Ghent 3</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Ghent 4</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Green River 3</i>	7.0	7.3	7.6	N/A	N/A	7.0	7.3	7.6	N/A	N/A	0.0	0.0	0.0	N/A	N/A
<i>Green River 4</i>	7.0	7.3	7.6	N/A	N/A	7.0	7.3	7.6	N/A	N/A	0.0	0.0	0.0	N/A	N/A
<i>Tyrone 3</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Cane Run 4</i>	7.0	7.3	7.6	N/A	N/A	5.6	5.9	6.2	N/A	N/A	1.4	1.4	1.4	N/A	N/A
<i>Cane Run 5</i>	7.0	7.3	7.6	N/A	N/A	5.6	5.9	6.2	N/A	N/A	1.4	1.4	1.4	N/A	N/A
<i>Cane Run 6</i>	7.0	7.3	7.6	N/A	N/A	5.6	5.9	6.2	N/A	N/A	1.4	1.4	1.4	N/A	N/A
<i>Mill Creek 1</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Mill Creek 2</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Mill Creek 3</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Mill Creek 4</i>	5.6	5.6	5.6	5.6	5.6	4.4	4.4	4.4	4.4	4.4	1.2	1.2	1.2	1.2	1.2
<i>Trimble County 1</i>	5.1	5.1	5.1	5.1	5.1	3.5	3.5	3.5	3.5	3.5	1.6	1.6	1.6	1.6	1.6
<i>Trimble County 2</i>	6.0	5.6	5.1	5.1	5.1	3.8	3.3	3.3	3.3	3.3	2.2	2.3	1.8	1.8	1.8
<i>Cane Run 7</i>	N/A	N/A	7.0	7.0	7.0	N/A	N/A	7.6	6.2	6.2	N/A	N/A	-0.6	0.8	0.8
<b>Total EFOR</b>	<b>5.8</b>	<b>5.8</b>	<b>5.9</b>	<b>5.7</b>	<b>5.6</b>	<b>4.5</b>	<b>4.5</b>	<b>4.8</b>	<b>4.5</b>	<b>4.5</b>	<b>1.3</b>	<b>1.3</b>	<b>1.0</b>	<b>1.2</b>	<b>1.1</b>
<i>Total MOR</i>	2.4	2.4	2.4	2.3	2.3	2.4	2.4	2.2	2.3	2.3	0.0	0.0	0.1	-0.1	-0.1
<i>Total EUOR</i>	8.2	8.2	8.2	7.9	7.9	6.9	6.9	7.1	6.8	6.8	1.3	1.3	1.1	1.1	1.1





# 2013 Fuel Cost Comparison - Annual Averages

Fuel Expense (¢/mmBTU)						Delta			
		2012 Forecast	2013 Plan	CSAPR Stay (Jan 2012)	2012 Plan	2013 Plan 2013 - CSAPR Stay (Jan 2012) 2013	% Change	2013 Plan 2013 - 2012 Plan 2013	% Change
		(6+6)	2013	2013	2013				
COAL	BR	310	314	302	306	12	4%	7	2%
	GH	230	228	233	235	(5)	-2%	(7)	-3%
	GR	254	258	288	284	(31)	-11%	(27)	-9%
	CR	228	237	236	260	0	0%	(24)	-9%
	MC	233	248	248	243	0	0%	5	2%
	TC	230	222	223	223	(1)	0%	(0)	0%
	TC PRB	267	258	296	298	(37)	-13%	(39)	-13%
GAS	Gas BR	295	398	442	569	(44)	-10%	(171)	-30%
	Gas LGE	280	373	411	537	(38)	-9%	(165)	-31%
	Gas PR	287	367	446	573	(80)	-18%	(207)	-36%
	Gas Haef	781	883	842	841	41	5%	42	5%
OIL	Oil	1742	1940	2299	2299	(358)	-16%	(358)	-16%

# 2014 Fuel Cost Comparison - Annual Averages

Fuel Expense (¢/mmBTU)					Delta			
		2013 Plan	CSAPR Stay (Jan 2012)	2012 Plan	2013 Plan 2014 - CSAPR Stay (Jan 2012) 2014	% Change	2013 Plan 2014 - 2012 Plan 2014	% Change
		2014	2014	2014				
COAL	BR	320	310	324	9	3%	(4)	-1%
	GH	234	245	249	(11)	-5%	(16)	-6%
	GR	264	302	307	(38)	-12%	(43)	-14%
	CR	240	241	270	(1)	0%	(30)	-11%
	MC	259	262	252	(3)	-1%	7	3%
	TC	231	245	246	(14)	-6%	(15)	-6%
	TC PRB	255	307	307	(52)	-17%	(52)	-17%
GAS	Gas BR	433	484	601	(51)	-11%	(167)	-28%
	Gas LGE	409	453	569	(44)	-10%	(160)	-28%
	Gas PR	402	489	604	(87)	-18%	(202)	-33%
	Gas Haef	918	884	873	34	4%	46	5%
OIL	Oil	2148	2354	2354	(206)	-9%	(206)	-9%



# 2015 Fuel Cost Comparison - Annual Averages

Fuel Expense (¢/mmBTU)					Delta			
		2013 Plan	CSAPR Stay (Jan 2012)	2012 Plan	2013 Plan 2015 - CSAPR Stay (Jan 2012) 2015	% Change	2013 Plan 2015 - 2012 Plan 2015	% Change
		2015	2015	2015				
COAL	BR	320	337	341	(17)	-5%	(20)	-6%
	GH	245	255	260	(10)	-4%	(15)	-6%
	GR	269	309	334	(40)	-13%	(65)	-19%
	CR	246	269	277	(23)	-9%	(32)	-12%
	MC	275	276	271	(0)	0%	5	2%
	TC	234	248	250	(15)	-6%	(16)	-6%
	TC PRB	260	307	307	(47)	-15%	(47)	-15%
GAS	Gas BR	451	563	620	(112)	-20%	(169)	-27%
	Gas LGE	427	531	588	(104)	-20%	(161)	-27%
	Gas PR	420	567	624	(147)	-26%	(204)	-33%
	Gas Haef	936	963	892	(27)	-3%	44	5%
OIL	Oil	2224	2436	2436	(211)	-9%	(211)	-9%



# Peak and Energy Comparison

Peak Delta (2013 Plan - 2012 Plan)

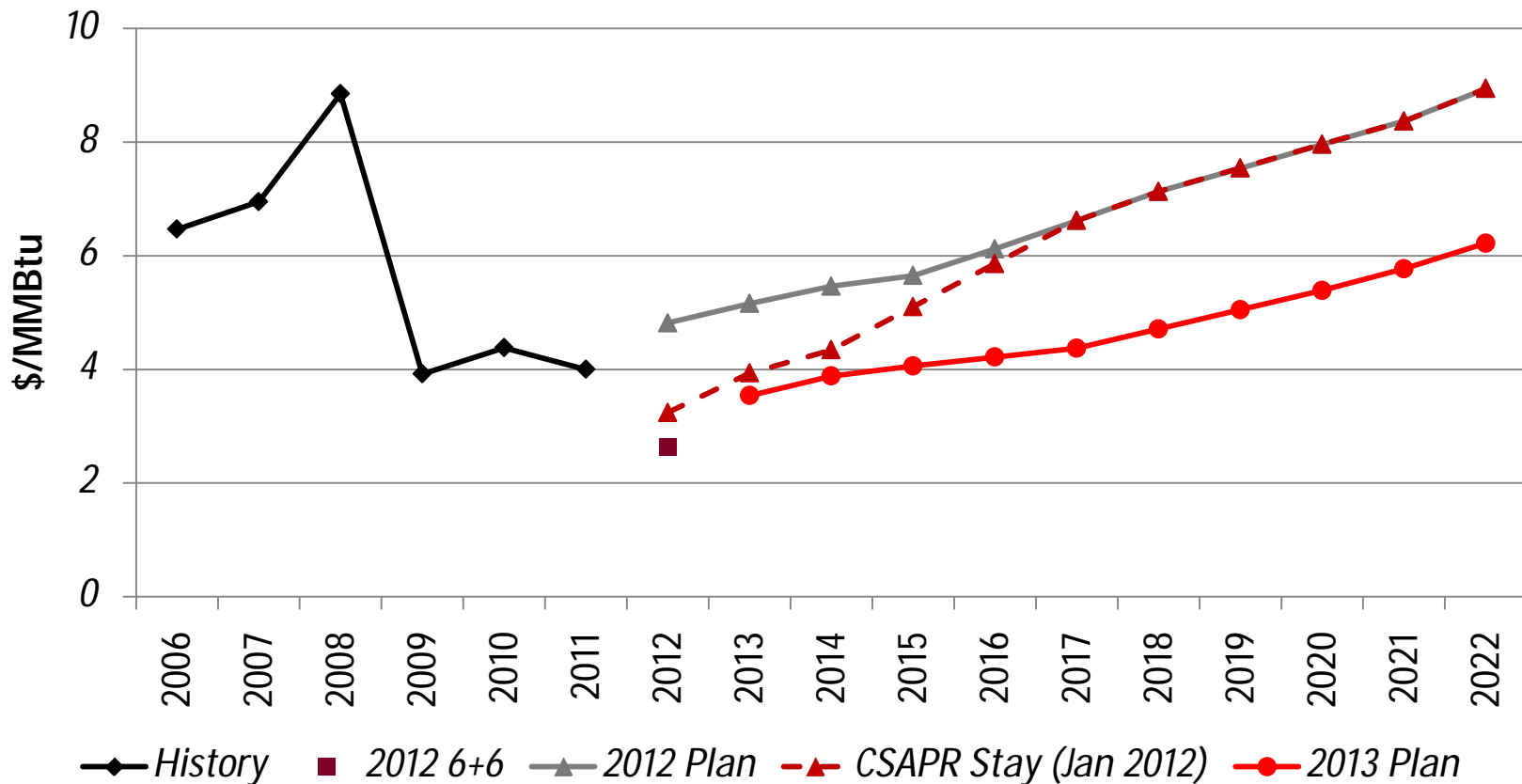
<i>MW</i>	2013	2014	2015	2016	2017
<i>Jan</i>	(488)	(439)	(452)	(494)	(502)
<i>Feb</i>	(635)	(618)	(632)	(681)	(701)
<i>March</i>	(792)	(784)	(758)	(701)	(791)
<i>April</i>	(481)	(461)	(464)	(514)	(515)
<i>May</i>	(421)	(401)	(420)	(438)	(444)
<i>June</i>	(301)	(270)	(221)	(333)	(345)
<i>July</i>	(361)	(167)	(156)	(376)	(231)
<i>August</i>	(137)	(132)	(124)	(81)	(142)
<i>Sept</i>	(348)	(291)	(334)	(316)	(352)
<i>Oct</i>	(532)	(497)	(511)	(551)	(565)
<i>Nov</i>	(481)	(462)	(465)	(486)	(508)
<i>Dec</i>	(1,024)	(1,017)	(1,041)	(1,145)	(1,156)
<b>Peak</b>	<b>(137)</b>	<b>(132)</b>	<b>(124)</b>	<b>(155)</b>	<b>(142)</b>

Energy Delta (2013 Plan - 2012 Plan)

<i>GWh</i>	2013	2014	2015	2016	2017
<i>Jan</i>	6	15	8	(11)	(25)
<i>Feb</i>	(58)	(50)	(56)	(70)	(86)
<i>March</i>	(60)	(52)	(59)	(79)	(89)
<i>April</i>	(56)	(50)	(52)	(69)	(76)
<i>May</i>	(23)	(17)	(23)	(40)	(51)
<i>June</i>	(17)	(6)	(14)	(27)	(39)
<i>July</i>	27	34	28	13	(3)
<i>August</i>	10	23	16	(11)	(17)
<i>Sept</i>	14	24	22	5	(4)
<i>Oct</i>	(72)	(69)	(75)	(91)	(102)
<i>Nov</i>	(10)	(3)	(8)	(24)	(34)
<i>Dec</i>	(207)	(198)	(206)	(222)	(240)
<b>Total</b>	<b>(447)</b>	<b>(347)</b>	<b>(420)</b>	<b>(626)</b>	<b>(764)</b>



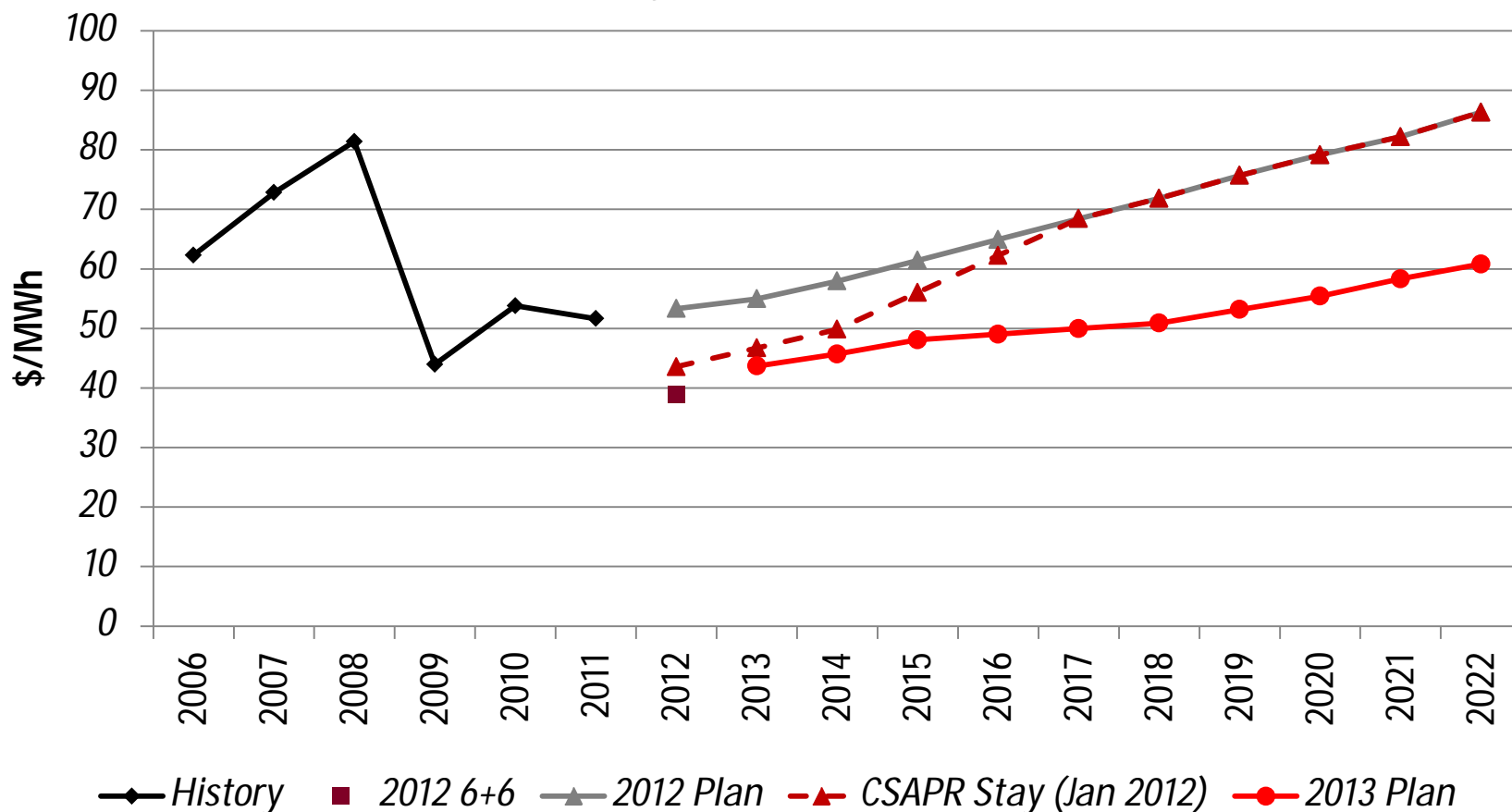
# Henry Hub Natural Gas Outlook Falls on Increased Supply

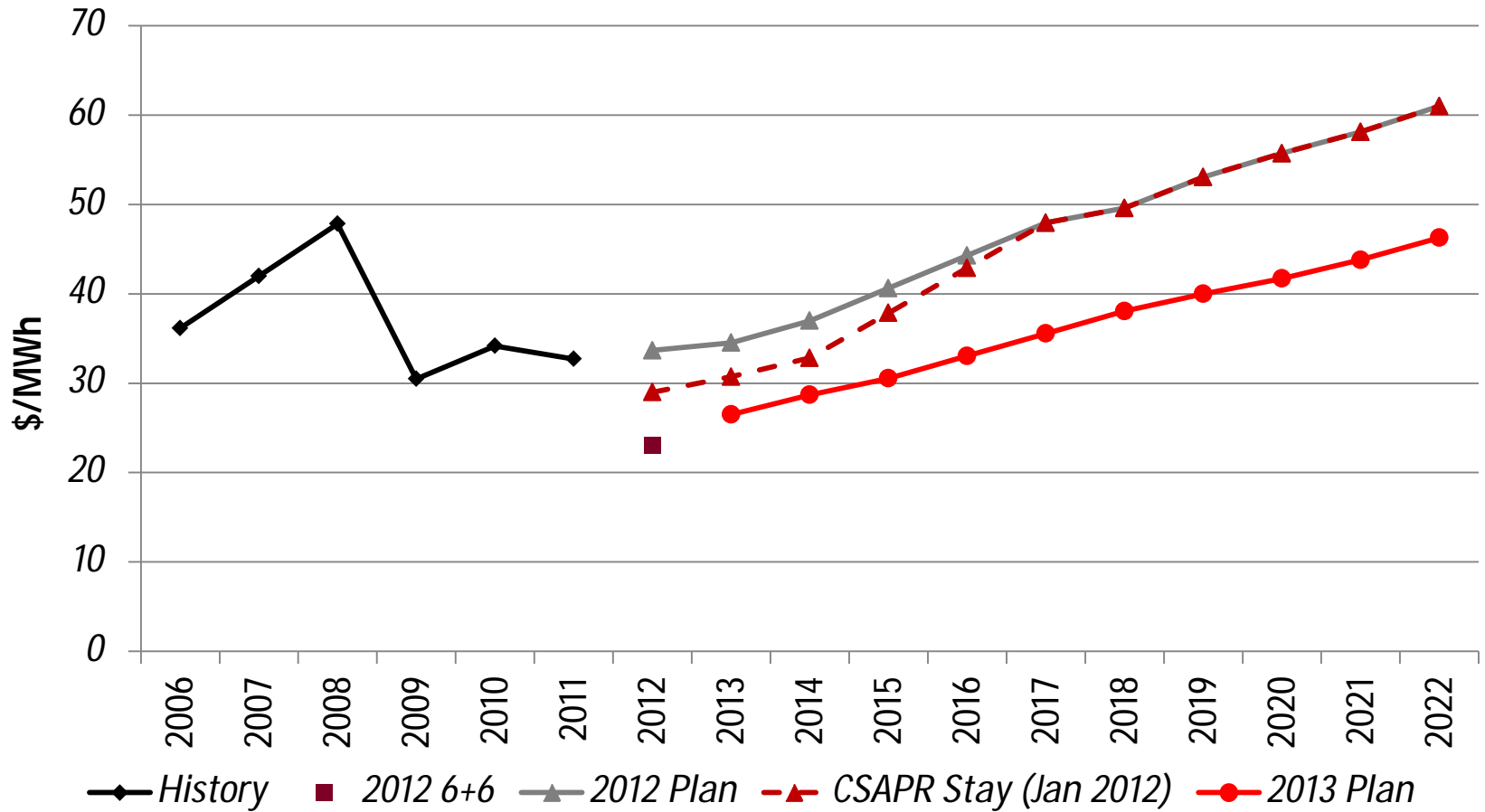


- Market view is NYMEX forward prices (Jan 2013 – Dec 2017) as of June 25, 2012.
- Long-term prices after 2019 are EIA's Annual Energy Outlook Reference Case, June 2012.
- 2017-2018 prices are interpolated.

# Electricity prices in 2013 Plan are lower compared to previous plans

Electricity: PJM-W Peak (5x16)

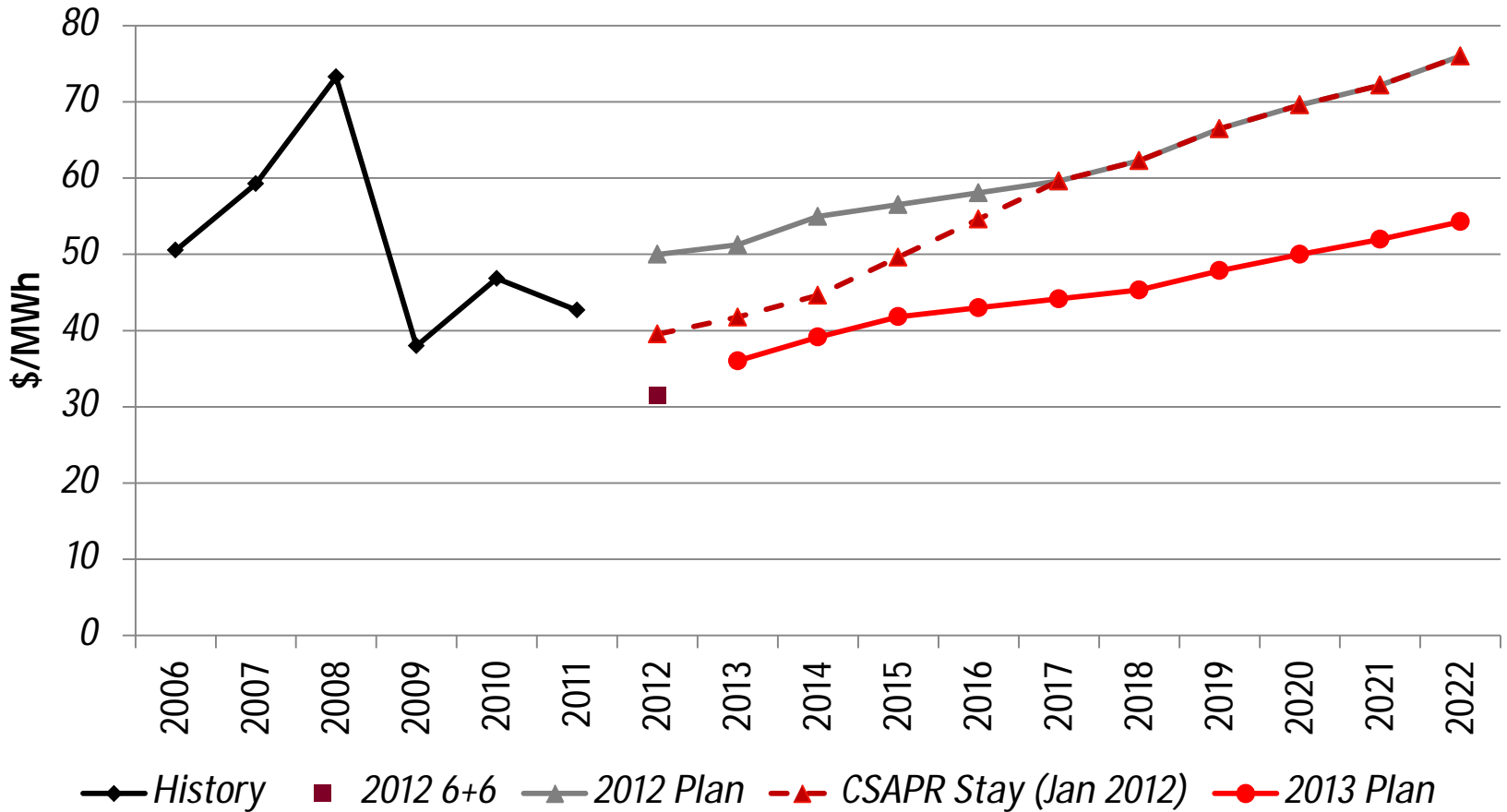




9/7/2012



PPL companies

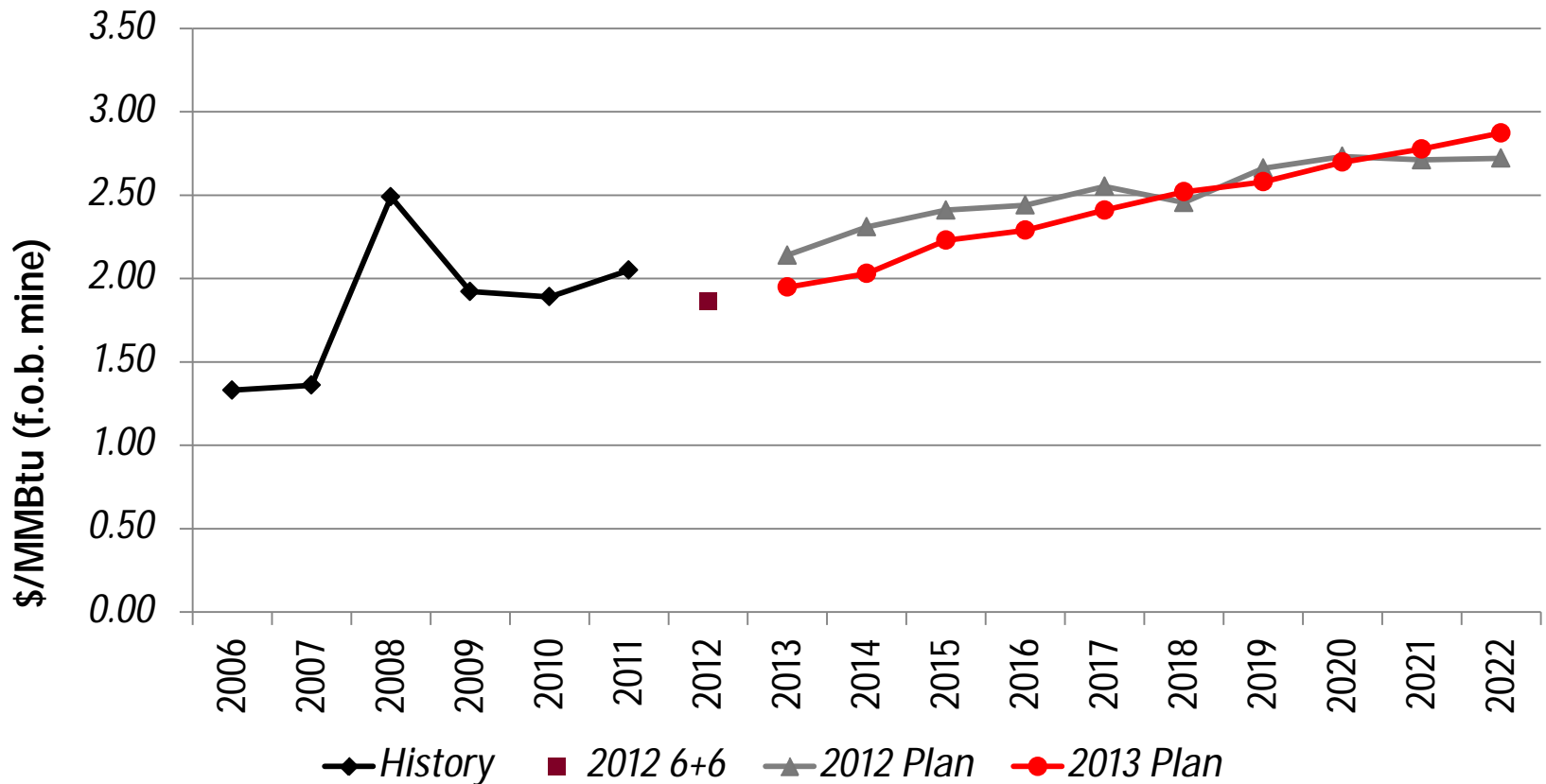


9/7/2012



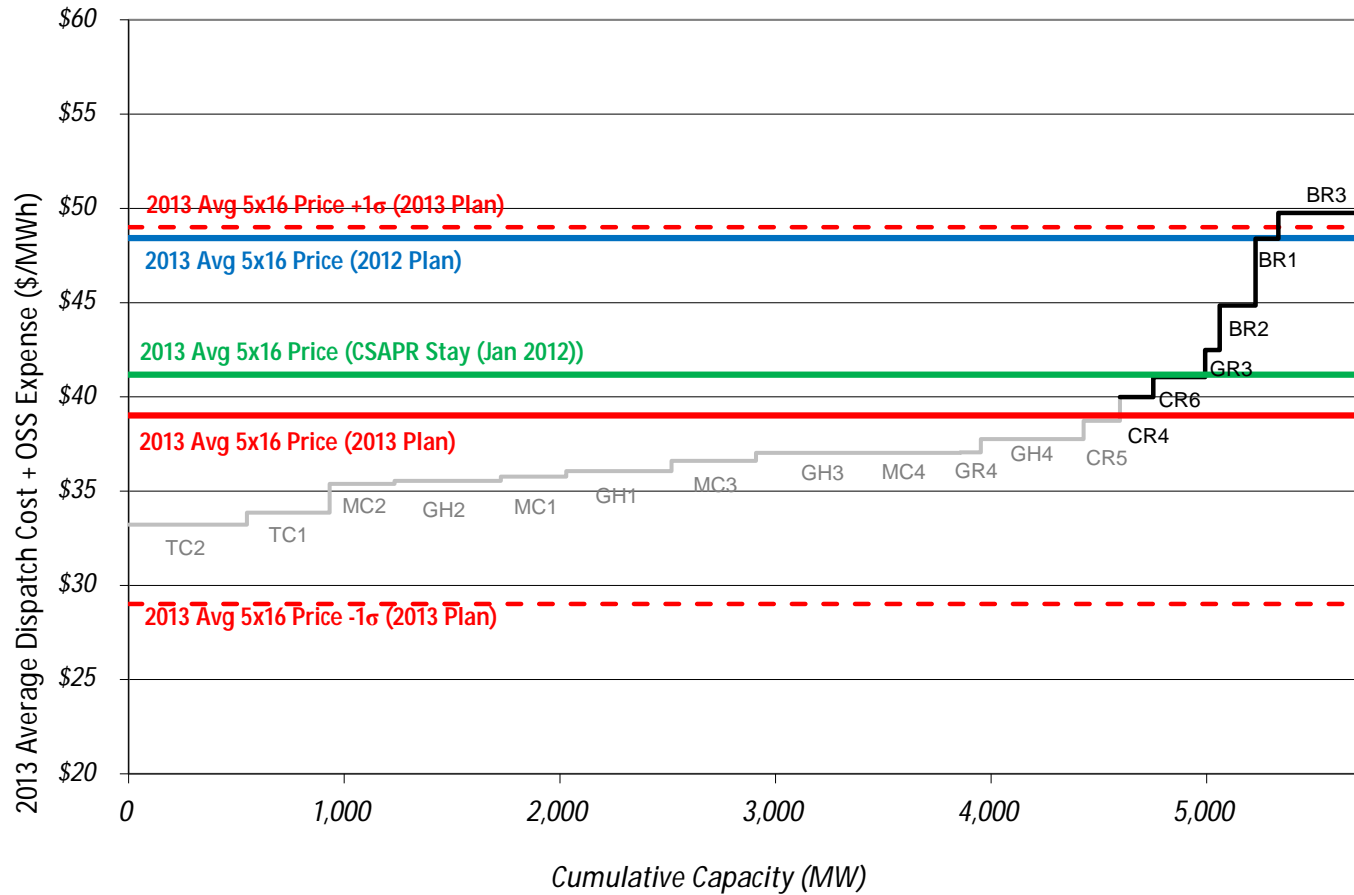


# Illinois Basin High Sulfur Coal Prices Slightly Lower in Near Term

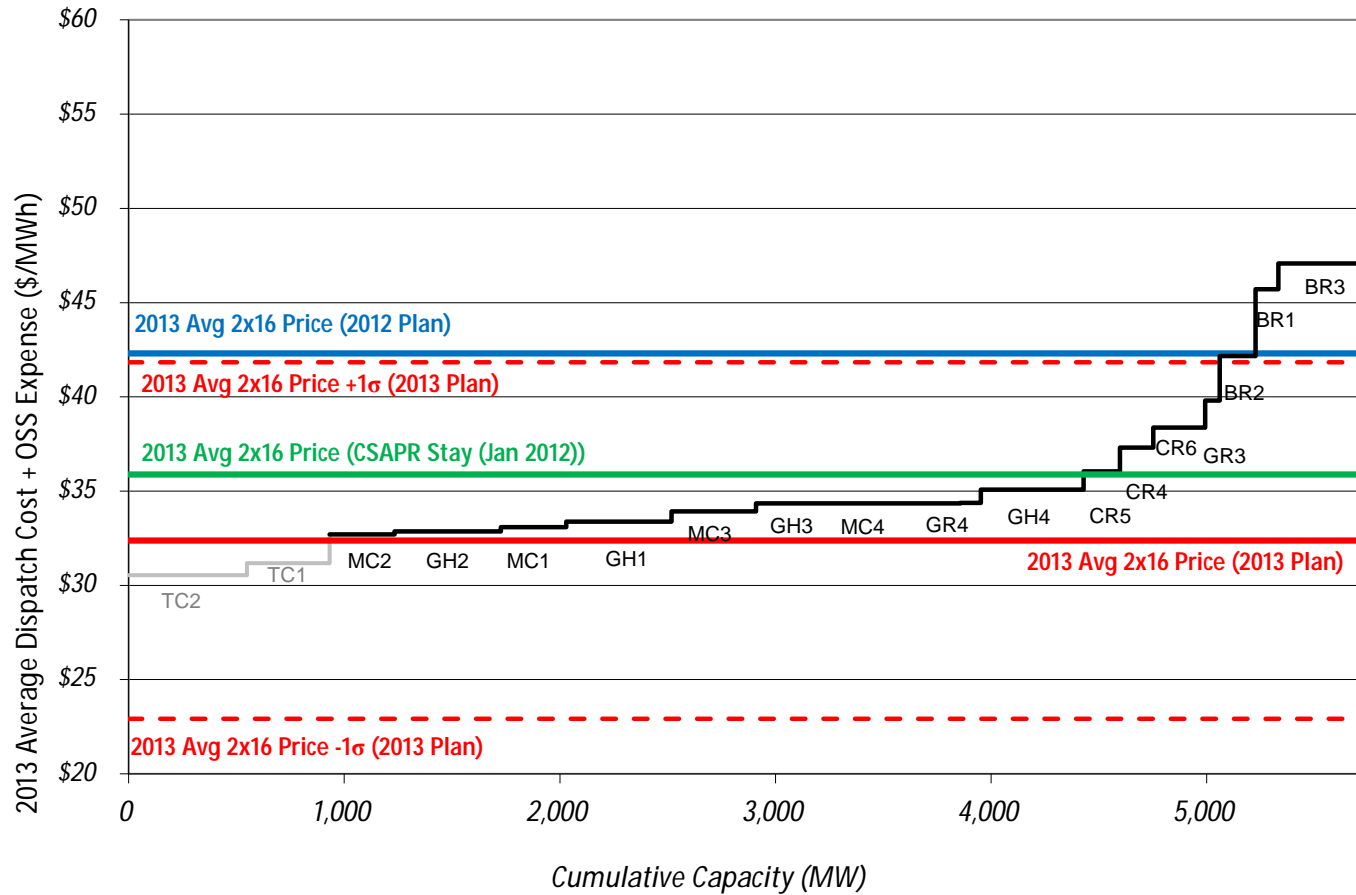


- Coal prices represent blend of bid information and Wood Mackenzie's Spring 2012 outlook.

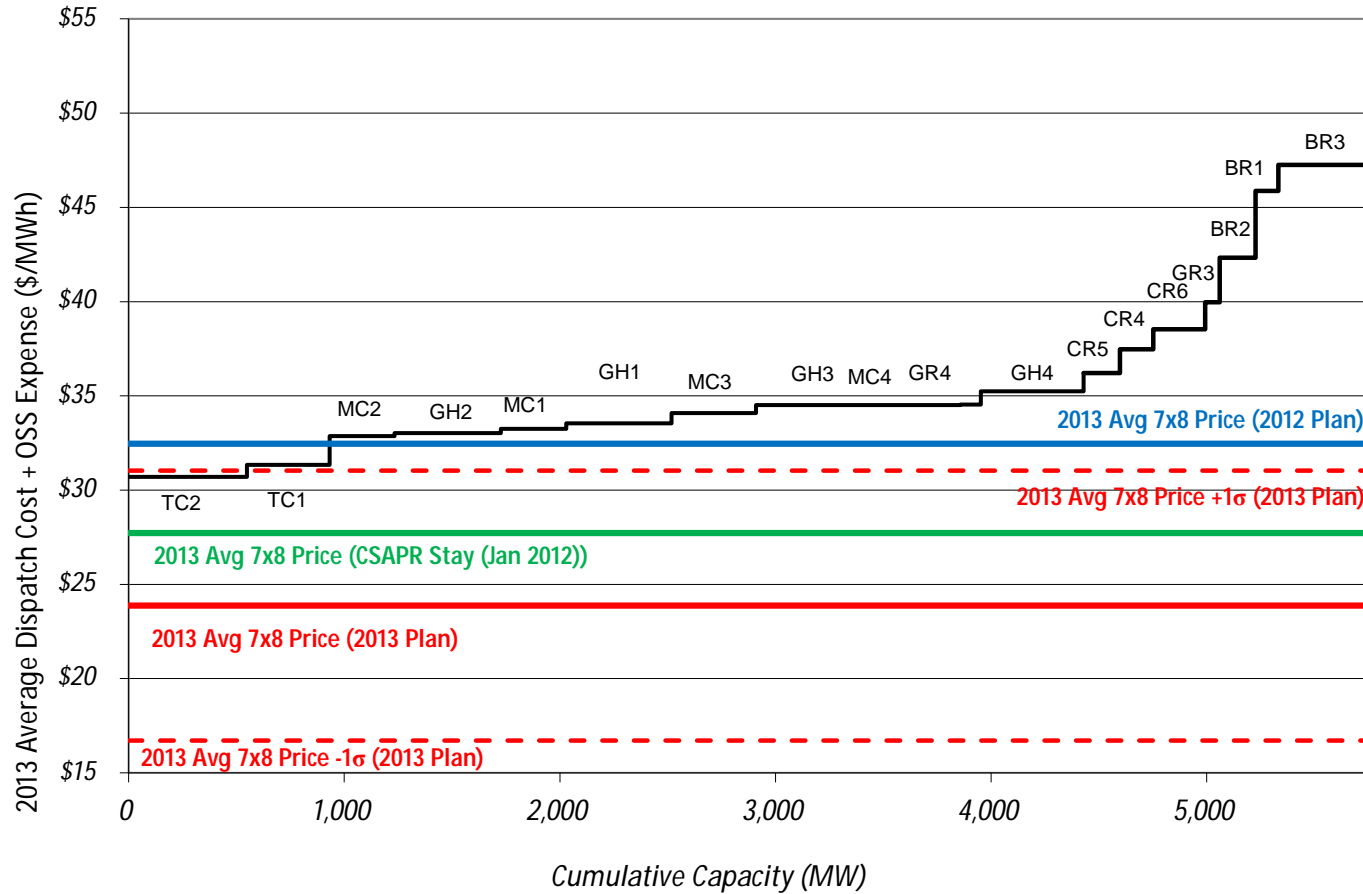
# 2013 5x16 Average Dispatch Cost (OSS)



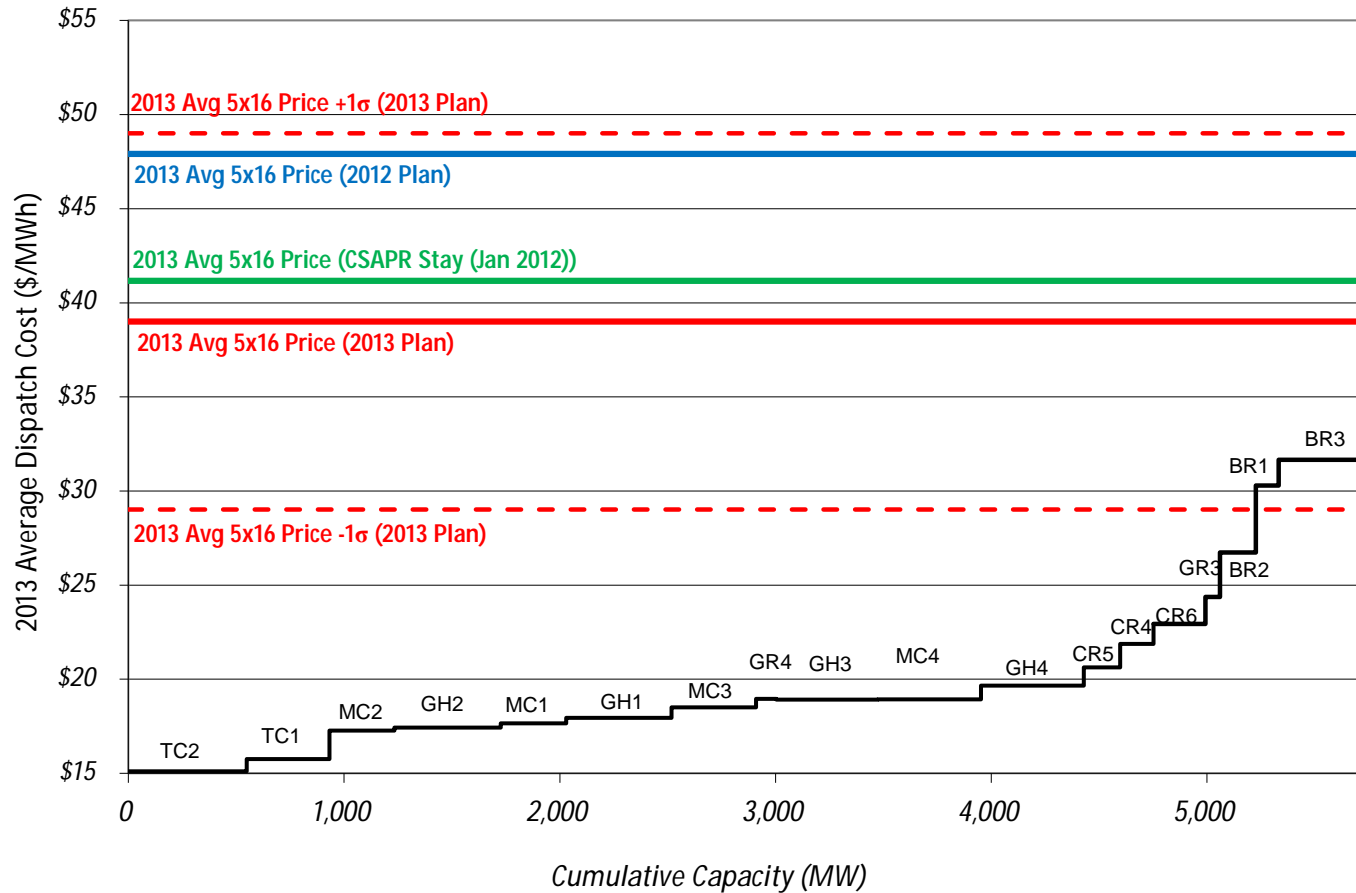
# 2013 2x16 Average Dispatch Cost (OSS)



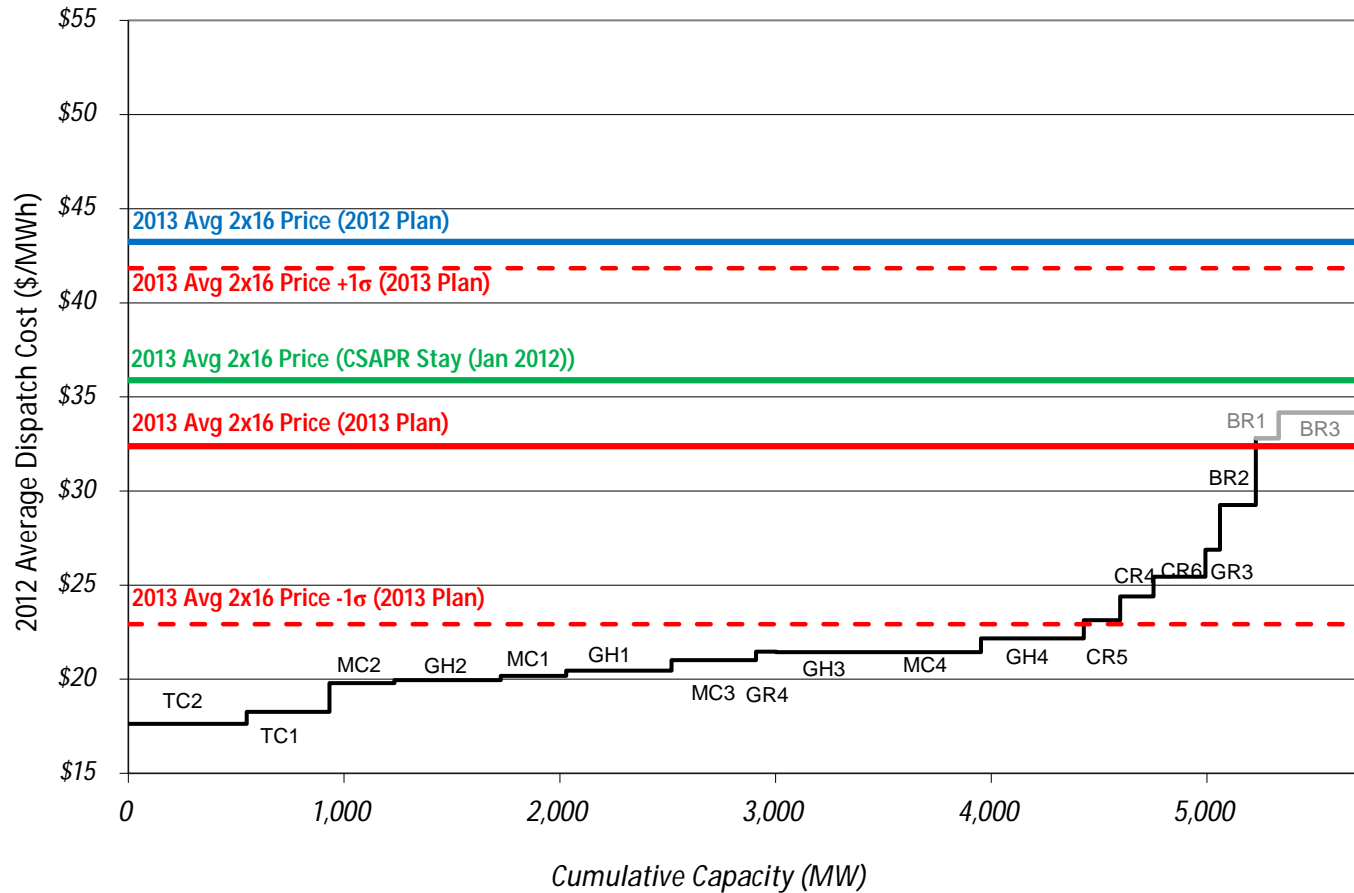
# 2013 7x8 Average Dispatch Cost (OSS)



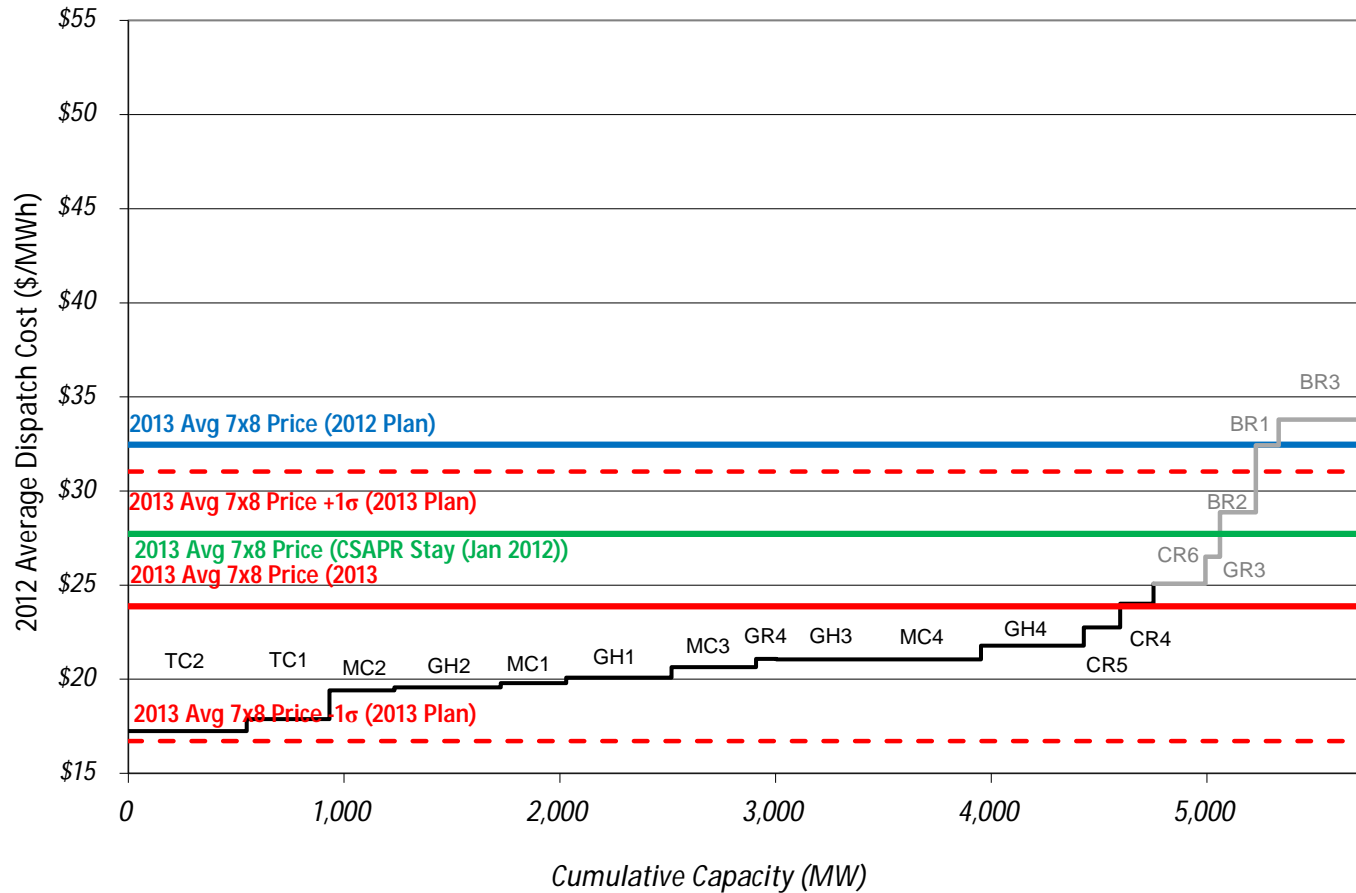
# 2013 5x16 Average Dispatch Cost (Purch)



# 2013 2x16 Average Dispatch Cost (Purch)



# 2013 7x8 Average Dispatch Cost (Purch)



# 2013 Maintenance Schedule Changes

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/7													Removed						
1/14																			
1/21												Added							
1/28																			
2/4																			
2/11																			
2/18																			
2/25													Removed	Removed					
3/4												Added	Added	Added			Added	Added	
3/11												Removed	Removed	Removed			Added	Added	
3/18												Removed	Removed	Removed					
3/25												Removed	Removed	Removed					Added
4/1									Unchanged			Added	Added	Unchanged					Added
4/8	Added						Added		Unchanged			Added	Added	Unchanged					
4/15	Added								Unchanged			Added	Added	Unchanged					
4/22		Removed										Added	Added	Unchanged					
4/29		Added			Added							Added	Added	Unchanged	Unchanged				
5/6	Removed	Added										Added	Added	Unchanged					
5/13																		Removed	
5/20					Removed														
5/27																			
6/3																			
Summer Season																			
9/2																			
9/9																			
9/16																			
9/23																		Removed	
9/30																		Unchanged	
10/7				Added														Unchanged	Added
10/14									Unchanged									Unchanged	Unchanged
10/21																		Unchanged	Unchanged
10/28																		Added	Unchanged
11/4																		Unchanged	Unchanged
11/11																		Removed	Unchanged
11/18																		Unchanged	Unchanged
11/25																		Unchanged	Unchanged
12/2																			
12/9																			
12/16																			
12/23																			

■ Removed from 2012 Plan

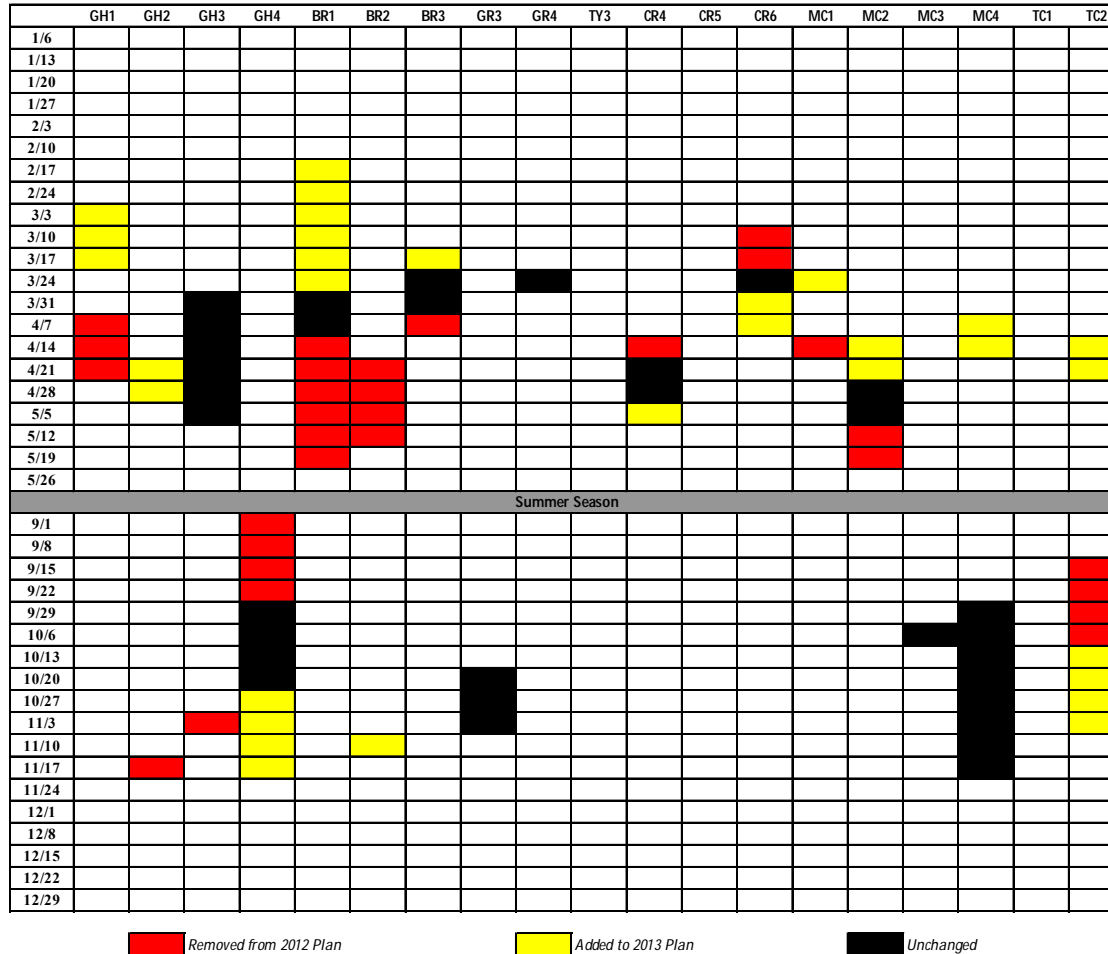
■ Added to 2013 Plan

■ Unchanged

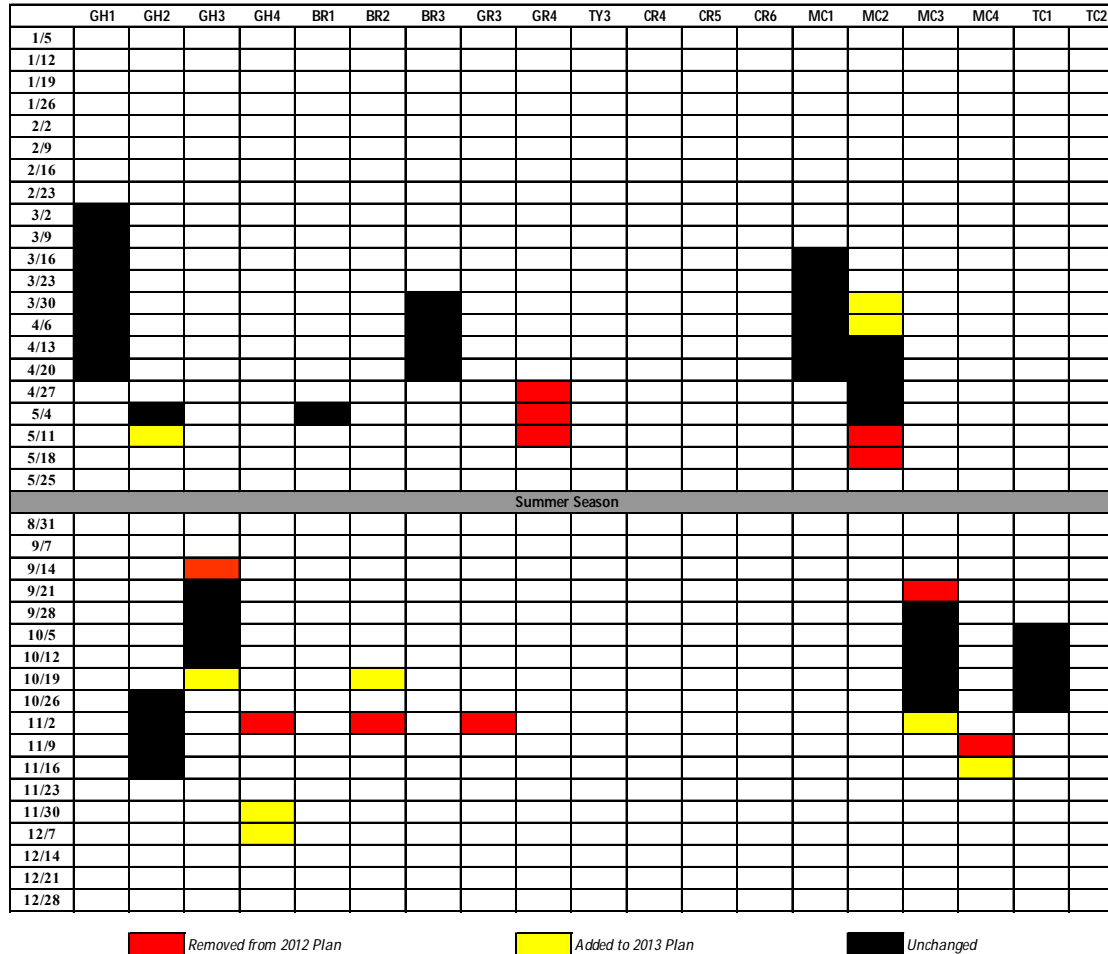




# 2014 Maintenance Schedule Changes



# 2015 Maintenance Schedule Changes



# 2016 Maintenance Schedule Changes

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/4																			
1/11																			
1/18																			
1/25																			
2/1																			
2/8																			
2/15																			
2/22																			
2/29																			
3/7		■																	
3/14		■																	
3/21		■																	
3/28		■			■	■	■												
4/4					■	■	■							■					
4/11	■				■	■	■												
4/18	■				■	■	■												
4/25	■				■	■	■												
5/2					■		■												
5/9					■		■												
5/16					■		■												
5/23					■		■												
Summer Season																			
8/29																			
9/5																			
9/12																■			
9/19																	■		
9/26																	■		■
10/3																	■		■
10/10			■														■		■
10/17			■														■		■
10/24			■														■		■
10/31			■														■		■
11/7																			■
11/14																■			■
11/21																			■
11/28																			■
12/5																			■
12/12																			■
12/19																			■
12/26																			■

■ Removed from 2012 Plan

■ Added to 2013 Plan


■ Unchanged




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# 2017 Maintenance Schedule Changes

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/2																			
1/9																			
1/16																			
1/23																			
1/30																			
2/6																			
2/13																			
2/20																			
2/27																			
3/6																			
3/13	Added					Unchanged													
3/20	Added					Unchanged													
3/27																Unchanged			
4/3		Added	Added		Added	Unchanged									Unchanged				
4/10	Removed	Added	Added			Unchanged								Unchanged					
4/17	Removed	Added	Added			Unchanged								Unchanged					
4/24						Unchanged								Unchanged					
5/1				Added															
5/8				Added															
5/15				Added															
5/22					Removed														
Summer Season																			
8/28																			
9/4																			
9/11				Removed															
9/18																			
9/25																			
10/2																			
10/9																			
10/16		Removed	Removed																
10/23		Removed	Removed																
10/30																			
11/6																			
11/13																			
11/20																			
11/27																			
12/4																			
12/11																			
12/18																			
12/25																			

 Removed from 2012 Plan

 Added to 2013 Plan

 Unchanged

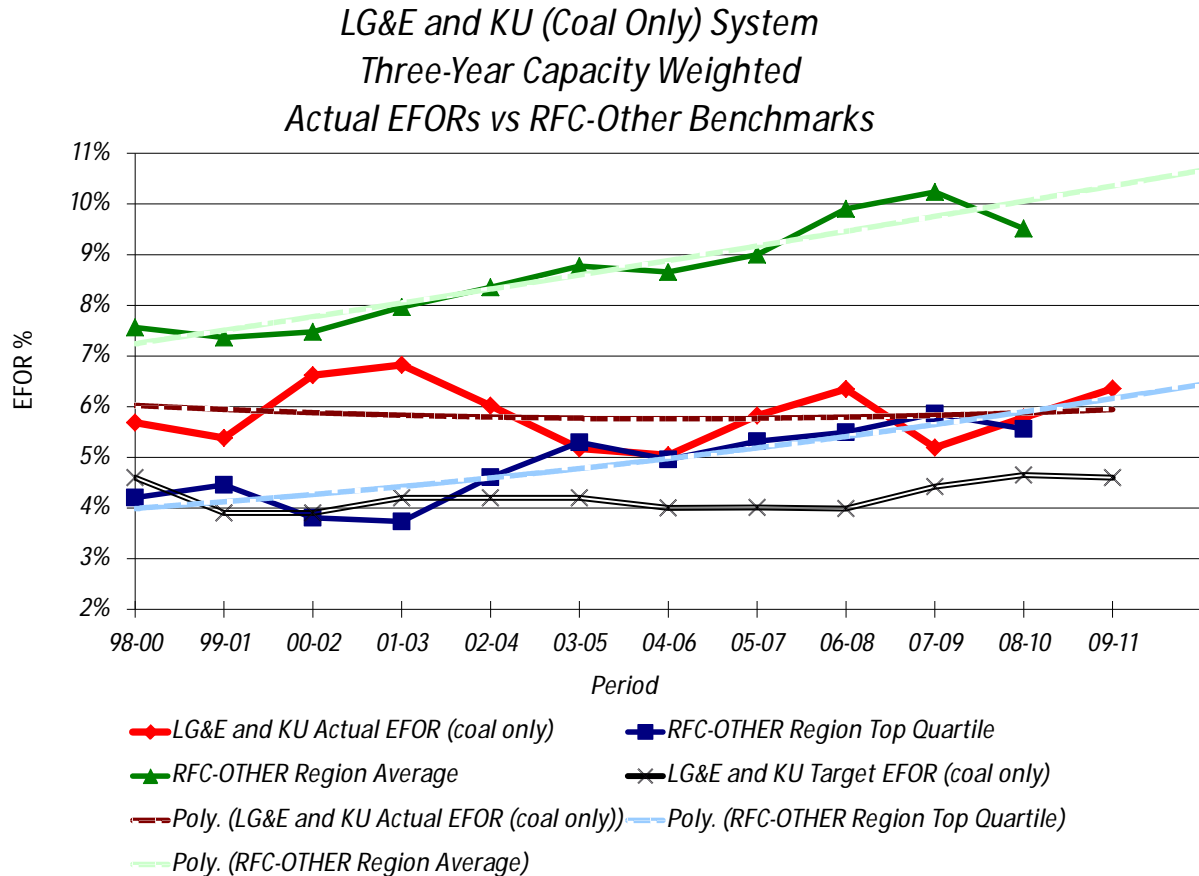


# Reserve Margin Need without 2016-17 Reserve Margin Purchase or 2018 NGCC

(MW)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>2012 Plan</b>										
Net Load	6,979	7,015	7,051	7,132	7,175	7,234	7,284	7,384	7,426	7,544
Existing Supply	8,079	8,051	8,053	7,305	7,305	7,305	7,305	7,305	7,305	7,305
New Capacity	495	0	0	640	0	0	0	0	0	0
Reserve Margin	1,595	1,531	1,497	1,308	1,265	1,206	1,156	1,056	1,014	896
Reserve Margin %	22.8%	21.8%	21.2%	18.3%	17.6%	16.7%	15.9%	14.3%	13.7%	11.9%
Reserve Margin Need	-478	-408	-369	-167	-117	-48	9	126	174	311
<b>2013 Plan</b>										
Net Load	6,821	6,860	6,903	6,954	7,010	7,077	7,144	7,212	7,281	7,337
Existing Supply	8,162	8,172	7,326	7,314	7,331	7,293	7,312	7,313	7,313	7,318
New Capacity	0	0	666	0	0	0	0	0	0	0
Reserve Margin	1,341	1,312	1,089	1,025	987	882	834	767	699	648
Reserve Margin %	19.7%	19.1%	15.8%	14.7%	14.1%	12.5%	11.7%	10.6%	9.6%	8.8%
Reserve Margin Need	-249	-214	16	87	135	250	310	387	466	526
<b>2013 Plan Without Brown 1-2</b>										
Net Load	6,821	6,860	6,903	6,954	7,010	7,077	7,144	7,212	7,281	7,337
Existing Supply	8,162	8,172	7,054	7,045	7,062	7,024	7,043	7,044	7,044	7,049
New Capacity	0	0	666	0	0	0	0	0	0	0
Reserve Margin	1,341	1,312	817	756	718	613	565	498	430	379
Reserve Margin %	19.7%	19.1%	11.8%	10.9%	10.2%	8.7%	7.9%	6.9%	5.9%	5.2%
Reserve Margin Need	-249	-214	288	356	404	519	579	656	735	795



# LG&E/KU EFOR is favorable to the benchmark average over the past 10+ years

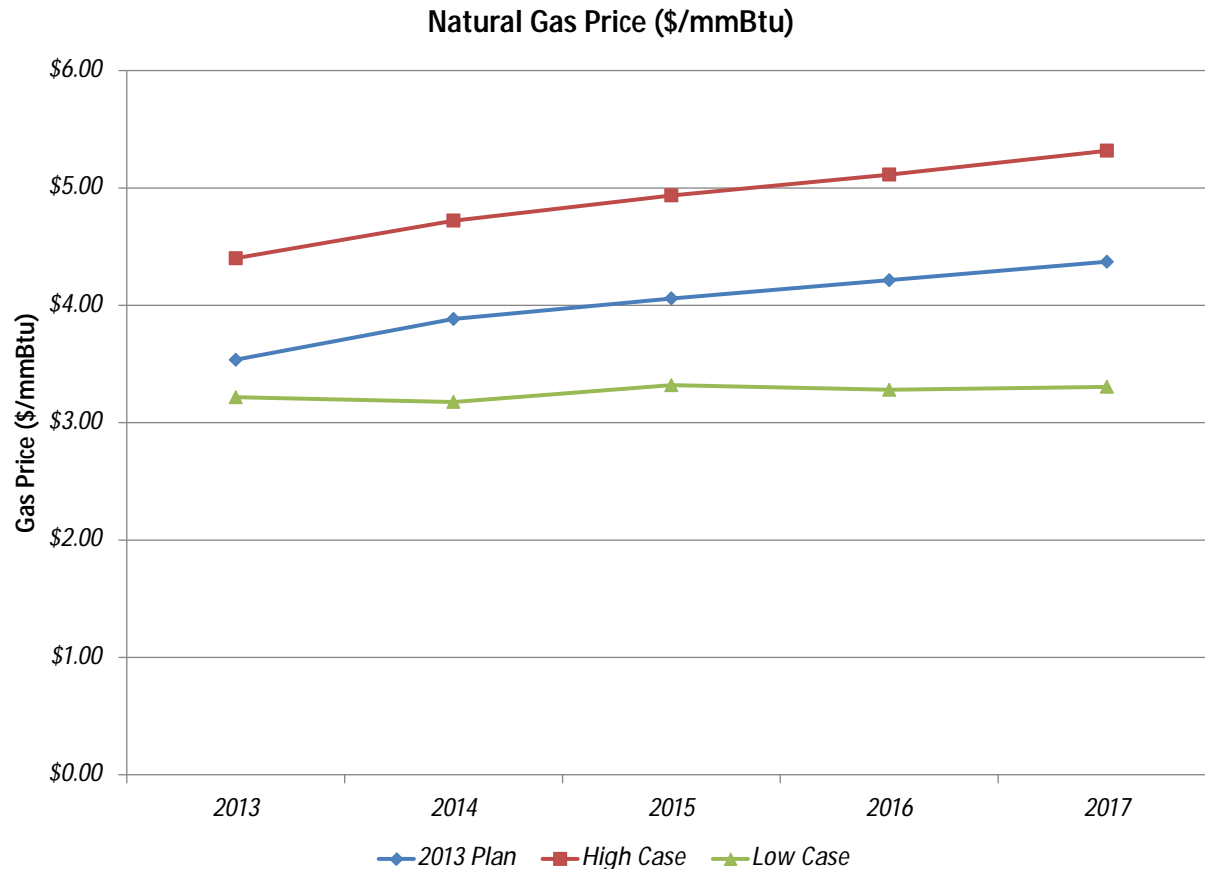


*Despite the relative improvement in EFOR (versus the benchmark), actual results have exceeded the companies' targets for the past 5+ years.*

# EFOR assumptions significantly impact fuel budgets/forecasts and reliability decisions

- *1% increase in EFOR assumption reduces forecasted coal burn by 285,000 tons.*
- *1% increase in EFOR assumption increases optimal reserve margin by approximate 1%.*
- *EFOR assumptions also impact forecasts of fuel expense, purchased power, off-system sales, and FAC disallowances.*

# Natural Gas Price Scenarios

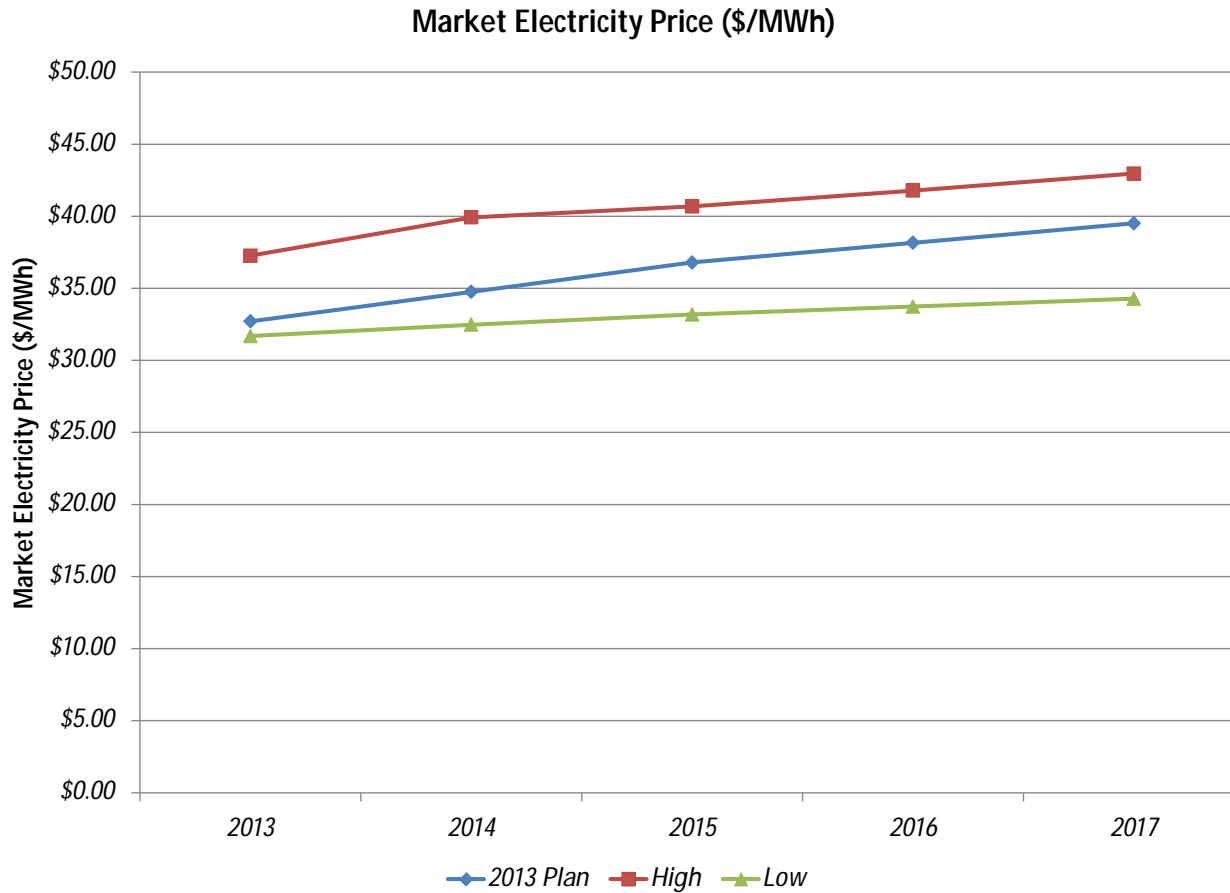


*High and low gas price scenarios are from EIA.*





# Electricity Price Scenarios



*High and low electricity price scenarios are from EIA.*



PPL companies

# Unit availability uncertainty

## 2013 EFORs Sensitivities

Percentile	CR Sta	GH Sta	GR Sta	MC Sta	TC 1	TC 2	BR Sta
10%	4.5%	4.0%	4.5%	4.0%	35%	6.0%	2.8%
50%	7.0%	5.6%	7.0%	5.6%	5.1%	8.0%	5.6%
90%	11.4%	6.0%	11.4%	6.0%	5.5%	12.0%	6.9%

## 2014 EFORs Sensitivities

Percentile	CR Sta	GH Sta	GR Sta	MC Sta	TC 1	TC 2	BR Sta
10%	4.8%	4.0%	4.8%	4.0%	35%	4.5%	2.8%
50%	7.3%	5.6%	7.3%	5.6%	5.1%	6.5%	5.6%
90%	11.7%	6.0%	11.7%	6.0%	5.5%	8.5%	6.9%

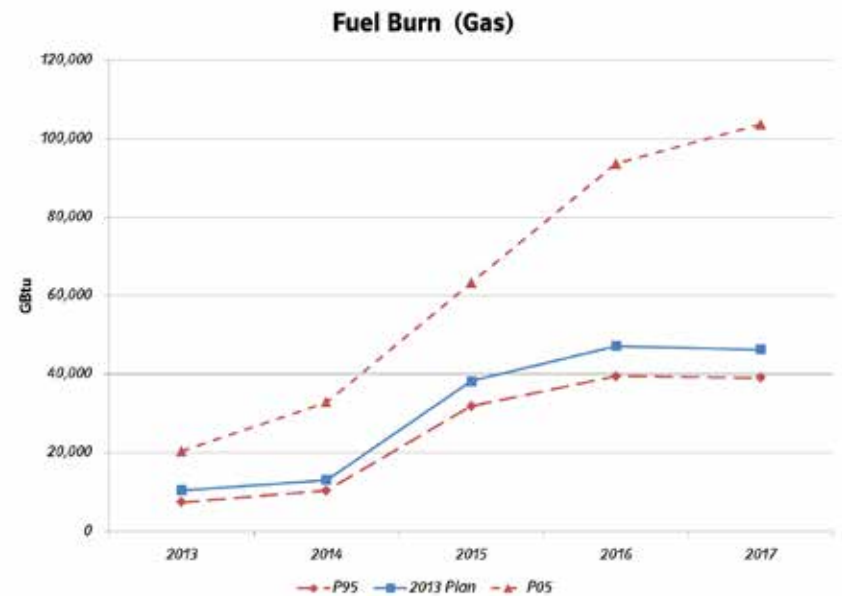
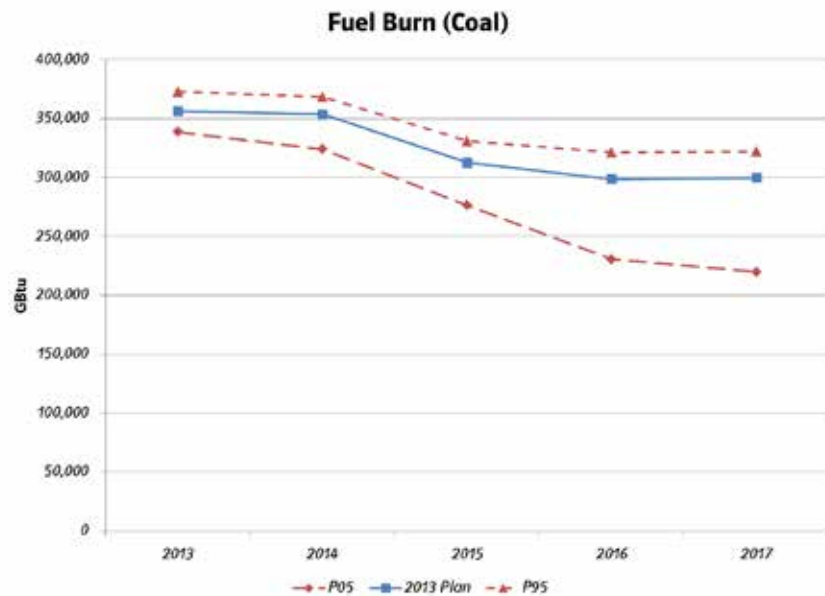
## 2015 EFORs Sensitivities

Percentile	CR Sta	GH Sta	GR Sta	MC Sta	TC 1	TC 2	BR Sta
10%	5.1%	4.0%	5.1%	4.0%	35%	3.1%	2.8%
50%	7.6%	5.6%	7.6%	5.6%	5.1%	5.1%	5.6%
90%	12.0%	6.0%	12.0%	6.0%	5.5%	5.5%	6.9%

Note: EFORs for GH, MC and TC1 are modeled as a group and therefore have less variability. C1 is m

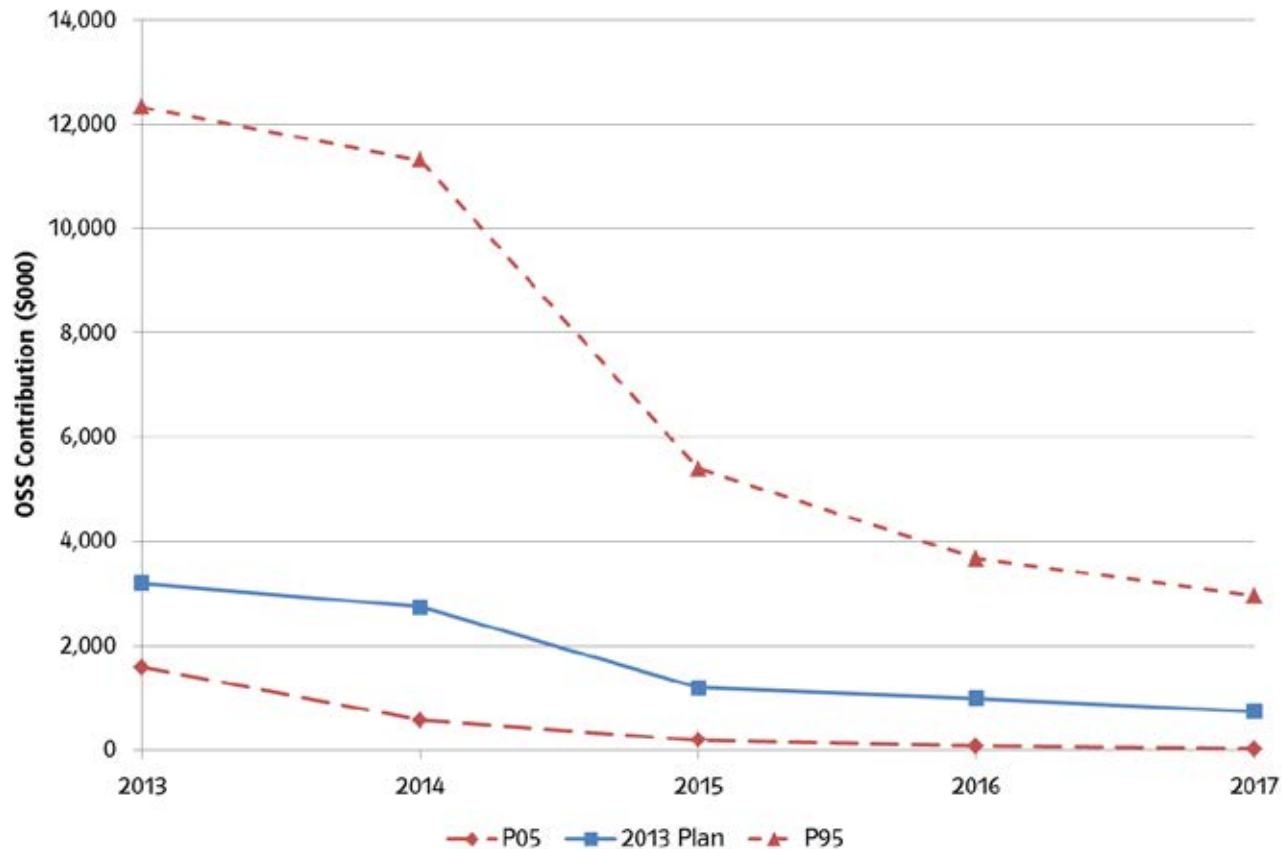


# Gas price uncertainty increases variability in fuel burn after Cane Run 7 comes on line

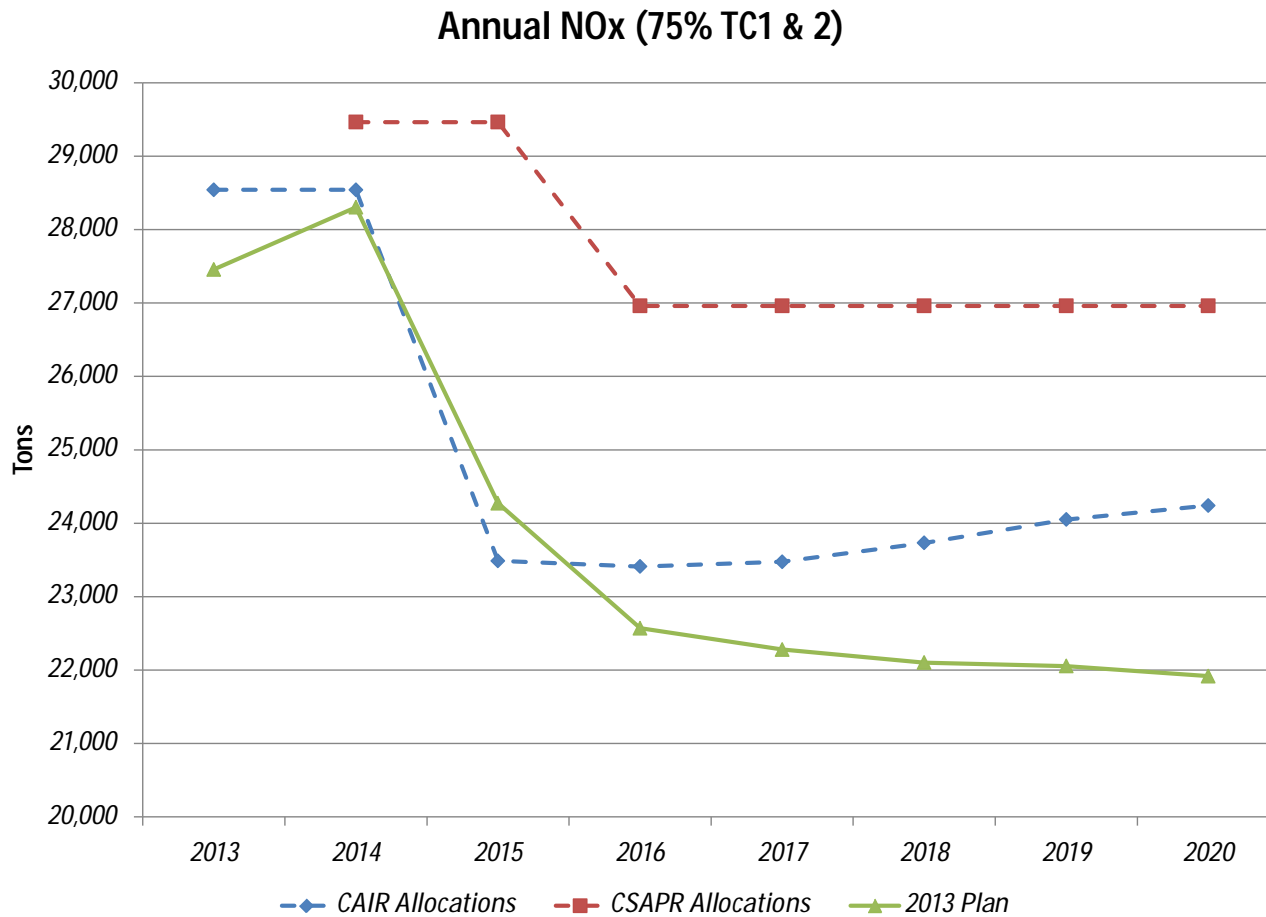


# OSS contribution is impacted by uncertainty in weather, electricity/gas prices, and unit availability

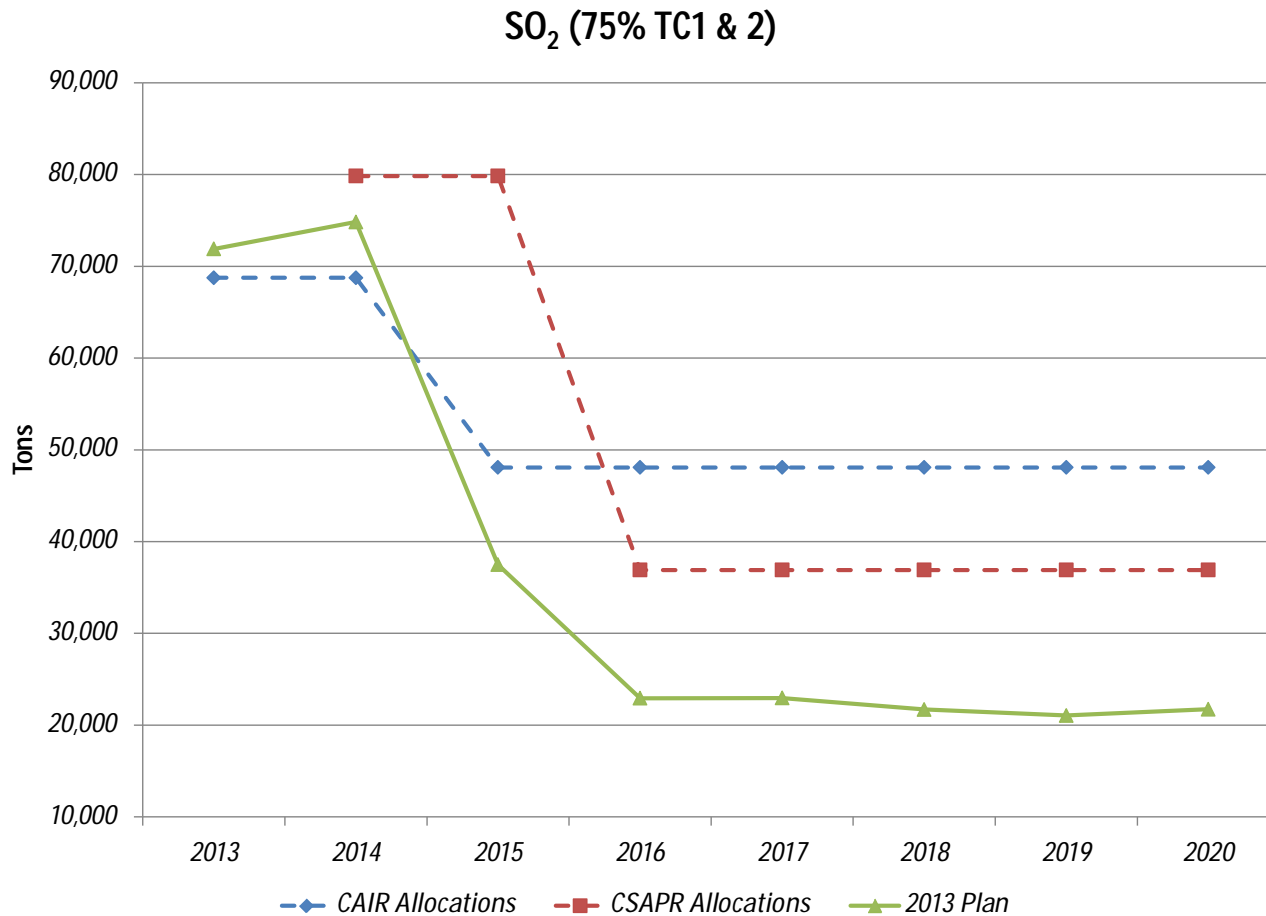
### OSS Contribution - 2013 Plan



# NOx emissions will be compliant with CAIR allocations



# SO<sub>2</sub> emissions will be compliant with CAIR allocations



Note: Current CAIR SO<sub>2</sub> bank contains 90,000+ allowances

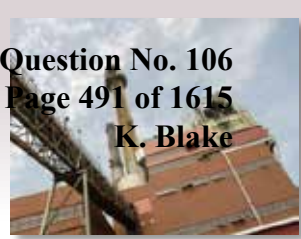


**PPL companies**

# Project Engineering

# 2013 Business Plan

*September 19, 2012*



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  - *Operating Expense*
  - *Cost of Sales / Gross Margin (if applicable)*
  - *Capital*
  - *Headcount*
- Plan Risks
- Appendix



# Plan Highlights

- **Key Items**
- Project Engineering's plan contains a net increase of \$283M from 2013 to 2017 over the prior plan. This is driven in large part due to an increase of \$629M by moving up the second NGCC to 2018 from 2021. Other increases include Brown CCR of \$13M and Trimble County CCR of \$49M due to pushing more money out of 2012 to later years. Reductions from the prior plan include \$300M to Environmental Air Projects due to contracts being lower than budgeted. Other decreases include Cane Run 7 lower by \$65M and Ghent CCR lower by \$34M due to moving more money into 2012. The remaining \$9M decrease is the cumulative amount of the remaining PE Projects.
- While establishing the 2013 BP, Project Engineering again undertook an effort to shift project contingency to the later years of projects or to the latter stage of specific tasks in an effort to reduce the budgeting of income from CAPEX spend that is not expected as base spend.



# Major Assumptions

## 1. Regulatory

1.1 *The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.*

1.2 *Target Reserve Margin of 16%, within a range of 15%-17%.*

- *Consistent with 2012 MTP/LTP.*
- *Reserve margin purchases are needed for summers of 2015 and 2016.*
  - *However, shortfall is <100 MW and could be covered in other ways.*

1.3 *Reserve sharing remains under the TVA/EKPC Reserve Sharing Agreement (~ 242 MW).*

1.4 *LG&E and KU remain committed to burning higher sulfur fuels.*

1.5 *The earliest that the next ECR filing can take place is July 1, 2013 (per the Settlement Agreement from the 2011 case).*

## 2. Proposed or Expected New Environmental Regulations for Air and Water

2.1 *Final Cross State Air Pollution Rules (CSAPR) were issued in July 2011, with the order being stayed on December 30, 2011, and completely struck down on August 21, 2012.*

- *Existing CAIR stays in effect for all of the planning cycle.*



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.2 Mercury and Air Toxics Standards (MATS) final rules were issued February 16, 2012.

- *Including a potential one year delay that can be applied for, the compliance date will be April 16, 2016.*
- A second, additional, year of delay can be obtained in certain hardship cases, including retirements that could adversely impact transmission reliability. None of the LKE projects are counting on that second year of delay.

### 2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> and SO<sub>2</sub>. The final attainment designations for the short term NO<sub>x</sub> standard have been delayed for up to three years due to inadequate monitoring. Based on the new short term SO<sub>2</sub> standards, compliance requirements must be in place by June 2017.

- *The Mill Creek FGD project is expected to mitigate the area in Jefferson County that has been proposed as non-attainment.*

### 2.4 *The EPA issued its proposal on PM NAAQS on June 14, 2012.*

- *Indications are that the current annual Particulate Matter standard for (PM)<sub>2.5</sub> of 15 ug/M<sup>3</sup> will be lowered, but not specifically by how much.*
- A range of 12 to 13 ug/M<sup>3</sup> was indicated, however EPA requested comment on dropping it to 11. A standard of 12 would put Jefferson County and Northern Kentucky in non-attainment, and 11 would put the entire state of Kentucky in non-attainment.
- Implementation is expected by 2018.
- The recent modifications at Gallagher Station, the shutting down of Cane Run 4, 5, and 6, and the baghouses at Mill Creek should mitigate concerns in Jefferson County.
- In general, on units with baghouses LKE should have no trouble with compliance.



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

- 2.5 The EPA is scheduled for a 2013 re-evaluation of the 8-hour ozone standard. Due to litigation, they were prepared to issue an early revision that would have been much lower with large impacts industry wide; however, they instead decided to re-instate the 2008 NAAQS Ozone 8-hour standard.
- *Non Quality Assured 2011 data indicates Jefferson County as non-attainment.*
    - Best Case: Quality Assured data shows attainment.
    - OK Case: Quality Assured data shows non-attainment, however shutdown of Cane Run 4, 5, and 6 mitigates the issue.
    - Worst Case: Quality Assured data shows non-attainment. SCRs are needed at Mill Creek 1 and 2 to mitigate the issue.
- 2.6 Cane Run Coal will be retired May 1, 2015.
- Combined cycle replacement available on that date.
  - This is eight months sooner than the IRP.
  - Of the employees remaining in excess of what is needed for combined cycle, approximately ½ will backfill retirements at other plants, and ½ will backfill contractors at other plants.
- 2.7 Tyrone Coal will be retired April 16, 2015.
- This aligns to the IRP.



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.8 Green River Coal will be retired April 16, 2015.

- *This presumes that the one-year extension does not apply in situations where no environmental controls are being added.*
- *A Transmission Capital project (Matanzas) is slated to be completed by June 30, 2013 which will provide greater flexibility around running the Green River units.*
- *Of the employees electing to be placed (and not taking severance), they will be split between Energy Delivery Meter Reading and Energy Services.*

### 2.9 On March 21, 2011 EPA published a final rule that identified non-hazardous secondary materials that are considered solid wastes when combusted.

- *Boiler cleaning waste affected and disposal by burning in the boiler will be prohibited unless we are permitted as a "commercial and industrial solid waste incinerator".*
- *On December 23, 2011 EPA proposed amendments.*
- *Kentucky currently has provisions in place to adopt the rule after amendments become final.*
- *Kentucky will allow 3 years to become effective (2015)*



# Major Assumptions

- ∨ Current GHG BACT is increased operational efficiency, however, carbon capture and storage (CCS) is on the horizon.
- ∨ Includes Carbon Dioxide, Methane, and Nitrous Oxide.
- ∨ Can mitigate by either a permit condition to limit emissions (i.e. limit on MWh) or apply BACT

# Major Assumptions

- Cane Run NGCC affected if proposed rule is published in the Federal Register prior to having a final permit.
  - ✓ Cane Run NGCC emission rate estimated at 800 lbs/MWh(gross) during full load operation.
- New simple cycle turbines not affected.

# Major Assumptions

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- 2014 in-service: GH3, GH4, MC4
- 2015 in-service: BR 3, GH1, GH2, MC1, MC2, MC3, TC1



# Major Assumptions

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- Additional limestone usage at Mill Creek 1 and 2 FGD.
- Additional hydrated lime injection to protect bags at all baghouse installations.
- Powdered Activated Carbon (PAC) Injection at all installations.
  
- EPA has intent to allow for the boiler tune-up to occur prior to the compliance date, however, further clarification that is needed by the EPA should be forthcoming.

# Major Assumptions

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# Major Assumptions

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# Major Assumptions

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- Additional emissions testing for correlation per the Compliance Assurance Monitoring (CAM) Plan.

# Major Assumptions

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# Major Assumptions

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# Major Assumptions

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# Major Assumptions

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- EPA's decision has been delayed until December 2012 at the earliest.
- The designation will not change the capital plan but would reduce beneficial re-use opportunities for structural fill and gypsum for wallboard if declared "hazardous".



# Major Assumptions

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- Material will be taken from the landfill and stored at the ash pond to begin the process of closing the existing ash pond.

# Major Assumptions

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# Major Assumptions

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# Major Assumptions

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- The spare sets will be installed on MC4 in 2014, MC3 in 2019, MC2 in 2020, and MC1 in 2021.

# Major Assumptions

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# Major Assumptions

- Cane Run 7 will be under an LTSA.

# Major Assumptions

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# Financial Performance

## 2011-2017 OPEX and Other Expenses (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Labor	\$257	\$645	\$375	\$375	\$384	\$394	\$404
Non Labor	\$262	\$430	\$425	\$425	\$436	\$447	\$458
Subtotal OPEX/Other expense	\$519	\$1,075	\$800	\$800	\$820	\$841	\$862
Gross Margin Expenses <sup>1</sup>		\$1,183					
Total Income Statement items	\$519	\$2,258	\$800	\$800	\$820	\$841	\$862

<sup>1</sup> \$1,183 of Cane Run landfill charges were written off to Gross Margin Expense.





# 2011-2017 Capital Breakdown (w COR)

Attachment to Response to AG- Question No. 106  
Page 517 of 1615  
K. Blake

## Accrual Basis (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Environmental</b>							
Brown CCR	\$11	\$9	\$40	\$5	\$0	\$0	\$0
Cane Run CCR	\$1	\$0	\$5	\$3	\$2	\$0	\$0
Ghent CCR	\$60	\$142	\$54	\$12	\$1	\$1	\$2
TC CCR (Net)	\$13	\$16	\$35	\$101	\$33	\$1	\$0
MC CCR	\$0	\$0	\$0	\$12	\$0	\$0	\$1
Brown 3 SCR	\$35	\$38	\$5	\$0	\$0	\$0	\$0
FGD Program	\$7	\$2	\$0	\$0	\$0	\$0	\$0
Env. Air - Studies	\$2	(\$3)	\$0	\$0	\$0	\$0	\$0
Env. Air - Brown	\$0	\$3	\$24	\$105	\$140	\$74	\$0
Env. Air - Ghent	\$5	\$46	\$231	\$249	\$100	\$1	\$0
Env. Air - Mill Creek	\$1	\$82	\$296	\$232	\$165	\$68	\$0
Env. Air - TC (Net)	\$0	\$4	\$10	\$42	\$58	\$5	\$0
Env. Compliance - CCR Ruling	\$0	\$0	\$0	\$8	\$34	\$53	\$193
Env. Compliance - Effluent Water	\$0	\$0	\$1	\$1	\$0	\$0	\$98
Env. Compliance - Water Intake	\$0	\$0	\$0	\$0	\$6	\$6	\$0
<b>New Generation Capacity</b>							
TC2 (Net)	\$6	\$15	\$7	\$0	\$0	\$0	\$0
Ohio Falls	\$17	\$20	\$19	\$19	\$16	\$1	\$0
NGCC 2015 - CR7	\$2	\$83	\$309	\$130	\$35	\$0	\$0
NGCC 2018	\$0	\$1	\$1	\$2	\$103	\$382	\$161
<b>Other</b>							
Mill Creek Limestone Mill	\$5	\$2	\$0	\$0	\$0	\$0	\$0
Paddys Demolition	\$0	\$2	\$0	\$0	\$0	\$1	\$3
Canal Demolition	\$0	\$0	\$0	\$0	\$0	\$1	\$5
Other	\$3	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Capital and Cost of Removal</b>	<b>\$166</b>	<b>\$461</b>	<b>\$1,037</b>	<b>\$921</b>	<b>\$691</b>	<b>\$593</b>	<b>\$461</b>



# 2013-2017 Capital Reconciliation (w COR) – Accrual Basis (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Prior Plan	\$1,057	\$1,090	\$822	\$104	\$347
Changes:					
Brown CCR	(\$9)	(\$4)	\$0	\$0	\$0
Cane Run CCR	(\$2)	\$1	\$3	\$1	\$0
Ghent CCR	\$29	\$5	\$0	\$0	(\$0)
TC CCR (Net)	\$43	(\$64)	(\$33)	(\$0)	\$5
MC CCR	(\$0)	(\$12)	\$12	\$0	(\$0)
TC2 (Net)	(\$7)	\$0	\$0	\$0	\$0
Ohio Falls	\$2	\$1	(\$14)	(\$1)	\$0
NGCC 2015 - CR7	(\$146)	\$93	\$104	\$15	\$0
NGCC 2018	(\$1)	(\$2)	(\$103)	(\$382)	(\$141)
Paddys Demolition	(\$0)	\$0	\$0	\$0	\$0
Canal Demolition	(\$0)	\$0	\$0	(\$1)	\$0
Env. Air - Brown	\$86	\$18	(\$95)	(\$74)	\$0
Env. Air - Ghent	(\$50)	(\$1)	\$62	\$3	\$0
Env. Air - Mill Creek	\$57	\$147	\$190	(\$54)	\$0
Env. Air - TC (Net)	\$11	(\$8)	\$5	\$1	\$0
Env. Compliance - CCR Ruling	\$5	(\$6)	\$0	\$1	\$23
Other					
Current Plan	<u>\$1,037</u>	<u>\$921</u>	<u>\$691</u>	<u>\$593</u>	<u>\$461</u>

Notes:

Negative numbers represent an increase to the 2013 BP

Positive numbers represent a decrease to the 2013 BP

Numbers are rounded to the nearest Million



# Financial Performance

## 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Director	1	1	1	1	1	1	1
Managers - Major Capital Projects	4	5	5	5	5	5	5
Procurement Manager	1	1	1	1	1	1	1
HR/IR Manager	1	1	1	1	1	1	1
Contract Administrator	2	3	3	3	3	3	3
Project Planning Coordinator	1	1	1	1	1	1	1
Engineers - Lead	4	4	4	4	4	4	4
Engineers - Chemical	0	1	1	1	1	1	1
Engineers - Civil	3	3	3	3	3	3	3
Engineers - Electrical	2	4	4	4	4	4	4
Engineers - Mechanical	2	3	3	3	3	3	3
Project Coordinators	15	20	20	20	20	20	20
Safety Specialists	3	4	4	4	4	4	4
Administrative Assistants	4	4	4	4	4	4	4
<b>Subtotal</b>	<b>43</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>55</b>
<b>Coop/Intern Students</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
<b>Total</b>	<b>48</b>	<b>61</b>	<b>61</b>	<b>61</b>	<b>61</b>	<b>61</b>	<b>61</b>
From 2012 MTP		61	61	61			
Variance to 2012 Business Plan		0	0	0			



# Plan Risks

- Risk associated with cost estimates have been reduced since all known equipment and construction contracts have been rolled into the Plan; however, cost estimates for the remaining scopes not under contract remain based on conceptual and/or Level I Engineering.
- Project cash flows are based on projected regulatory approvals, aggressive procurement by Project Engineering, and having sufficient legal support. In addition, it is assumed consideration will be given to modifying authority limits and LKE approval processes where needed to expedite approvals of invoice payments and smaller contracts.
- Mill Creek's target based EPC could be impacted on the Environmental Air Projects due to potential increased market demand on labor and materials as utilities across the country are pressed to comply with regulations in the same time frame.



# Appendix



# Capital Review – Brown CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Main Pond Phase I	\$38	\$73	\$73	\$35	\$35
Aux Pond/Main Pond Phase II	\$20	\$25	\$25	\$5	\$5
Landfill Phase I & Transport	\$63	\$57	\$59	(\$6)	(\$5)
Landfill Phase II	<u>\$26</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$26)</u>	<u>(\$26)</u>
Total	\$147	\$155	\$157	\$8	\$9

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Main Pond Phase I	\$38	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38
Aux Pond/Main Pond Phase II	\$15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15
Landfill Phase I & Transport	\$15	\$21	\$32	\$1	\$0	\$0	\$0	\$0	\$69
Landfill Phase II	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$33</u>	<u>\$33</u>
Total 2012 BP	\$68	\$21	\$32	\$1	\$0	\$0	\$0	\$33	\$154
<b>2013 BP</b>									
Main Pond Phase I	\$38	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38
Aux Pond/Main Pond Phase II	\$15	\$2	\$3	\$0	\$0	\$0	\$0	\$0	\$20
Landfill Phase I & Transport	\$14	\$6	\$38	\$5	\$0	\$0	\$0	\$0	\$63
Landfill Phase II	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$26</u>	<u>\$26</u>
Total 2013 BP	\$67	\$9	\$41	\$5	\$0	\$0	\$0	\$26	\$147
<b>Variance to 2012 BP</b>									
Main Pond Phase I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Aux Pond/Main Pond Phase II	(\$0)	(\$2)	(\$3)	\$0	\$0	\$0	\$0	\$0	(\$5)
Landfill Phase I & Transport	\$1	\$15	(\$6)	(\$4)	\$0	\$0	\$0	\$0	\$6
Landfill Phase II	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$7</u>	<u>\$7</u>
Total Variance to 2012 BP	\$1	\$13	(\$9)	(\$4)	\$0	\$0	\$0	\$7	\$7

### Key Messages

- The ECR Filing for Phase I of the Landfill and the Transport system was made in June 2011.
- \$16M was moved in 2011 from the Main Pond Phase I to the Aux Pond Phase II (\$4M) and the Landfill Phase I (\$12M).



# Capital Review – Cane Run CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Cane Run Landfill Phase I	\$0	\$19	\$19	\$19	\$19
Cane Run MSE Wall	\$5	\$5	\$0	\$0	(\$5)
Cane Run Ash Pond Cap & Closure	<u>\$8</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$7)</u>	<u>(\$8)</u>
<b>Total</b>	<b>\$13</b>	<b>\$24</b>	<b>\$19</b>	<b>\$11</b>	<b>\$6</b>

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Cane Run Landfill Phase I	\$3	\$1	\$3	\$4	\$5	\$2	\$0	\$0	\$17
Cane Run MSE Wall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cane Run Ash Pond Cap & Closure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Total 2012 BP</b>	<b>\$3</b>	<b>\$1</b>	<b>\$3</b>	<b>\$4</b>	<b>\$5</b>	<b>\$2</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17</b>
<b>2013 BP</b>									
Cane Run Landfill Phase I	\$2	(\$2)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cane Run MSE Wall	\$0	\$2	\$2	\$0	\$0	\$0	\$0	\$0	\$5
Cane Run Ash Pond Cap & Closure	<u>\$0</u>	<u>\$0</u>	<u>\$3</u>	<u>\$3</u>	<u>\$1</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$8</u>
<b>Total 2013 BP</b>	<b>\$2</b>	<b>\$0</b>	<b>\$5</b>	<b>\$3</b>	<b>\$2</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13</b>
<b>Variance to 2012 BP</b>									
Cane Run Landfill Phase I	\$1	\$3	\$3	\$4	\$5	\$2	\$0	\$0	\$17
Cane Run MSE Wall	\$0	(\$2)	(\$2)	(\$0)	(\$0)	(\$0)	\$0	\$0	(\$5)
Cane Run Ash Pond Cap & Closure	<u>\$0</u>	<u>(\$0)</u>	<u>(\$3)</u>	<u>(\$3)</u>	<u>(\$1)</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$8)</u>
<b>Total Variance to 2012 BP</b>	<b>\$1</b>	<b>\$0</b>	<b>(\$2)</b>	<b>\$1</b>	<b>\$3</b>	<b>\$1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5</b>

### Key Messages

- ECR Filing on MSE Wall and Cap & Closure projects have not yet been filed with PSC.
- Change in scope from New Landfill to an MSE Wall was made in 2012.
- Landfill Charges were moved to CR7 or written off to ECR Gross Margin Expense.



# Capital Review – Ghent CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Landfill Phase I/Fines & Transport	\$286	\$205	\$205	(\$82)	(\$82)
Landfill Phase II, III, Close & Cap	<u>\$112</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$112)</u>	<u>(\$112)</u>
Total	\$398	\$205	\$205	(\$194)	(\$194)

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Landfill Phase I	\$31	\$18	\$11	\$11	\$1	\$1	\$1	\$0	\$74
Fines & Transport	\$48	\$102	\$73	\$6	\$0	\$0	\$0	\$0	\$229
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$132</u>	<u>\$132</u>
Total 2012 BP	\$79	\$121	\$84	\$17	\$1	\$1	\$1	\$132	\$434
<b>2013 BP</b>									
Landfill Phase I	\$31	\$13	\$0	\$10	\$1	\$1	\$2	\$0	\$56
Fines & Transport	\$44	\$130	\$54	\$3	\$0	\$0	\$0	\$0	\$230
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$112</u>	<u>\$112</u>
Total 2013 BP	\$75	\$142	\$54	\$12	\$1	\$1	\$2	\$112	\$398
<b>Variance to 2012 BP</b>									
Landfill Phase I	\$0	\$6	\$11	\$2	\$0	\$0	(\$0)	\$0	\$18
Fines & Transport	\$4	(\$27)	\$19	\$4	\$0	\$0	\$0	\$0	(\$1)
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$20</u>	<u>\$20</u>
Total Variance to 2012 BP	\$4	(\$22)	\$29	\$5	\$0	\$0	(\$0)	\$20	\$36

### Key Messages

- The increase over the ECR Filing is due to the Transport System going from Preliminary to Level I engineering.
- The increase on the Landfill is driven by the scope adder of a composite liner.
- The decrease in the Fines & Transport is due to savings on equipment bids to date.
- Lowered escalation from 6% to 4%.
- Removed contingency that was not marked for use.





# Capital Review – Trimble County CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
BAP/GSP	\$29	\$30	\$25	\$1	(\$4)
Landfill Phase I/Fines & Transport	\$185	\$73	\$73	(\$112)	(\$112)
Landfill Phase II, III, & IV	\$175	\$0	\$0	(\$175)	(\$175)
Holcim	\$9	\$9	\$8	\$0	(\$1)
<b>Total</b>	<b>\$397</b>	<b>\$111</b>	<b>\$106</b>	<b>(\$286)</b>	<b>(\$292)</b>

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
BAP/GSP	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30
Landfill Phase I	\$6	\$46	\$20	\$10	\$0	\$0	\$0	\$0	\$84
Fines & Transport	\$4	\$37	\$58	\$28	\$0	\$0	\$0	\$0	\$126
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$180	\$186
Holcim	\$3	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$11
<b>Total 2012 BP</b>	<b>\$43</b>	<b>\$92</b>	<b>\$78</b>	<b>\$37</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6</b>	<b>\$180</b>	<b>\$436</b>
<b>2013 BP</b>									
BAP/GSP	\$28	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$29
Landfill Phase I	\$6	\$3	\$17	\$55	\$10	\$1	\$0	\$0	\$92
Fines & Transport	\$0	\$6	\$18	\$46	\$23	\$0	\$0	\$0	\$93
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$169	\$175
Holcim	\$2	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$9
<b>Total 2013 BP</b>	<b>\$37</b>	<b>\$16</b>	<b>\$35</b>	<b>\$101</b>	<b>\$33</b>	<b>\$1</b>	<b>\$6</b>	<b>\$169</b>	<b>\$397</b>
<b>Variance to 2012 BP</b>									
BAP/GSP	\$2	(\$1)	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Landfill Phase I	\$1	\$43	\$3	(\$45)	(\$10)	(\$0)	\$0	\$0	(\$8)
Fines & Transport	\$3	\$31	\$40	(\$19)	(\$23)	\$0	\$0	\$0	\$33
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11	\$11
Holcim	\$1	\$1	(\$0)	\$0	\$0	\$0	\$0	\$0	\$2
<b>Total Variance to 2012 BP</b>	<b>\$6</b>	<b>\$76</b>	<b>\$43</b>	<b>(\$64)</b>	<b>(\$33)</b>	<b>(\$0)</b>	<b>\$0</b>	<b>\$11</b>	<b>\$39</b>

### Key Messages

- All numbers are net of IMPA/IMEA reimbursement.
- The increase over the ECR Filing is due to refined engineering on the Transport System.
- Permitting issues have delayed Phase I until at least mid-2013.
- Removed all contingecny relating to Phase I and Transport.



# Capital Review – Brown SCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Brown SCR	\$102	\$185	\$185	\$83	\$83

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Post <u>2017</u>	<u>Total</u>
2012 BP	\$65	\$38	\$5	\$0	\$0	\$0	\$0	\$0	\$107
2013 BP	<u>\$60</u>	<u>\$38</u>	<u>\$5</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$102</u>
Variance to 2012 BP	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5

### Key Messages

- Variance driven by reductions on Balance of Plant items and release of unused contingency.
- The SCR will be in-service November 30th, 2012.



# Capital Review – Ohio Falls

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Ohio Falls	\$135	\$130	(\$4)

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Post <u>2017</u>	<u>Total</u>
2012 BP	\$63	\$24	\$21	\$20	\$2	\$0	\$0	\$0	\$131
2013 BP	\$60	\$20	\$19	\$19	\$16	\$1	\$0	\$0	\$135
Variance to 2012 BP	\$3	\$4	\$2	\$1	(\$14)	(\$1)	\$0	\$0	(\$4)

### Key Messages

- Above figures include removal costs of \$6.6M.
- 74% of this project has been negotiated into a lump sum contract with Voith.



# Capital Review – Cane Run 7

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
CCGT 2015 Cane Run 7	\$559	\$559	\$0

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Post <u>2017</u>	<u>Total</u>
2012 BP	\$3	\$37	\$163	\$223	\$139	\$15	\$0	\$0	\$579
2013 BP	\$2	\$83	\$309	\$130	\$35	\$0	\$0	\$0	\$559
Variance to 2012 BP	\$1	(\$46)	(\$146)	\$93	\$104	\$15	\$0	\$0	\$20

- The CCGT 2015 modeled on a 2 x 1, 640MW (summer, net) and assumes a 2nd quarter 2015 in-service date.



# Capital Review – NGCC 2018

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
CCGT 2018	\$692	\$1	(\$691)

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	Post <u>2017</u>	<u>Total</u>
2012 BP	\$3	\$0	\$0	\$0	\$0	\$0	\$19	\$768	\$790
2013 BP	\$0	\$1	\$1	\$2	\$103	\$382	\$161	\$43	\$692
Variance to 2012 BP	\$3	(\$1)	(\$1)	(\$2)	(\$103)	(\$382)	(\$141)	\$725	\$98

- The CCGT 2018 is modeled after CR7 with 10% added plus 4% escalation



# Capital Review – Paddy’s Run & Canal Demolition

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Paddy's Run Demolition	\$15	\$2	(\$13)
Canal Demolition	<u>\$15</u>	<u>\$0</u>	<u>(\$15)</u>
Total	\$30	\$2	(\$27)

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Paddy's Run Demolition	\$0	\$3	\$0	\$0	\$0	\$1	\$3	\$9	\$15
Canal Demolition	<u>\$0</u>	<u>\$2</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$5</u>	<u>\$9</u>	<u>\$15</u>
Total 2012 BP	\$0	\$4	\$0	\$0	\$0	\$1	\$8	\$17	\$30
<b>2013 BP</b>									
Paddy's Run Demolition	\$0	\$2	\$0	\$0	\$0	\$1	\$3	\$8	\$15
Canal Demolition	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$1</u>	<u>\$5</u>	<u>\$9</u>	<u>\$15</u>
Total 2013 BP	\$0	\$2	\$0	\$0	\$0	\$2	\$8	\$18	\$30
<b>Variance to 2012 BP</b>									
Paddy's Run Demolition	\$0	\$1	(\$0)	\$0	\$0	\$0	\$0	\$0	\$1
Canal Demolition	<u>\$0</u>	<u>\$2</u>	<u>(\$0)</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$1)</u>	<u>\$0</u>	<u>(\$1)</u>	<u>(\$0)</u>
Total Variance to 2012 BP	\$0	\$2	(\$0)	\$0	\$0	(\$1)	\$0	(\$1)	\$0

### Key Messages

- \$2.0M has been placed in 2012 for the stack demolition on Paddy's Run. The remaining amounts were shifted out to 2016 through 2019.



# Capital Review – Brown Air Compliance

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Brown 1	\$115	\$5	\$109	(\$110)	(\$6)
Brown 2	\$122	\$5	\$118	(\$117)	(\$5)
Brown 3	<u>\$109</u>	<u>\$5</u>	<u>\$117</u>	<u>(\$104)</u>	<u>\$8</u>
Total	\$346	\$15	\$344	(\$331)	(\$2)

## Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Brown 1	\$3	\$29	\$41	\$37	\$0	\$0	\$0	\$0	\$110
Brown 2	\$3	\$31	\$44	\$40	\$0	\$0	\$0	\$0	\$118
Brown 3	<u>\$0</u>	<u>\$2</u>	<u>\$25</u>	<u>\$46</u>	<u>\$45</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$118</u>
Total 2012 BP	\$5	\$62	\$111	\$123	\$45	\$0	\$0	\$0	\$346
<b>2013 BP</b>									
Brown 1	\$0	\$0	\$0	\$30	\$49	\$36	\$0	\$0	\$115
Brown 2	\$0	\$0	\$0	\$32	\$52	\$38	\$0	\$0	\$122
Brown 3	<u>\$0</u>	<u>\$3</u>	<u>\$24</u>	<u>\$42</u>	<u>\$39</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$109</u>
Total 2013 BP	\$0	\$3	\$24	\$105	\$140	\$74	\$0	\$0	\$346
<b>Variance to 2012 BP</b>									
Brown 1	\$3	\$29	\$41	\$7	(\$49)	(\$36)	\$0	\$0	(\$6)
Brown 2	\$3	\$31	\$44	\$8	(\$52)	(\$38)	\$0	\$0	(\$4)
Brown 3	<u>(\$0)</u>	<u>(\$1)</u>	<u>\$1</u>	<u>\$4</u>	<u>\$6</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$9</u>
Total Variance to 2012 BP	\$5	\$59	\$86	\$18	(\$95)	(\$74)	\$0	\$0	(\$0)

## Key Messages

- The ECR Filing excluded removal costs of \$2M.
- BR 1 & 2 are budgeted but currently on hold per PSC Ruling.
- BR 1 & 2 were moved out 1 year and escalated at 4%.
- SAM Mitigation is included in the BR 1 & 2 amounts.



# Capital Review – Ghent Air Compliance

## Accrual Basis, \$Millions

<u>Authority/ECR Comparison</u>	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Ghent 1	\$150	\$5	\$164	(\$145)	\$14
Ghent 2	\$162	\$5	\$165	(\$157)	\$2
Ghent 3	\$173	\$5	\$198	(\$168)	\$25
Ghent 4	\$147	\$5	\$185	(\$142)	\$38
<b>Total</b>	<b>\$632</b>	<b>\$20</b>	<b>\$712</b>	<b>(\$612)</b>	<b>\$79</b>

## Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Ghent 1	\$2	\$8	\$39	\$48	\$68	\$0	\$0	\$0	\$164
Ghent 2	\$4	\$5	\$29	\$43	\$86	\$4	\$0	\$0	\$171
Ghent 3	\$2	\$48	\$70	\$64	\$0	\$0	\$0	\$0	\$184
Ghent 4	\$2	\$28	\$43	\$92	\$8	\$0	\$0	\$0	\$173
<b>Total 2012 BP</b>	<b>\$9</b>	<b>\$88</b>	<b>\$182</b>	<b>\$247</b>	<b>\$162</b>	<b>\$4</b>	<b>\$0</b>	<b>\$0</b>	<b>\$692</b>
<b>2013 BP</b>									
Ghent 1	\$2	\$7	\$35	\$81	\$25	\$0	\$0	\$0	\$150
Ghent 2	\$1	\$14	\$20	\$55	\$71	\$1	\$0	\$0	\$162
Ghent 3	\$1	\$16	\$100	\$54	\$1	\$0	\$0	\$0	\$173
Ghent 4	\$1	\$8	\$76	\$59	\$2	\$0	\$0	\$0	\$147
<b>Total 2013 BP</b>	<b>\$5</b>	<b>\$46</b>	<b>\$231</b>	<b>\$249</b>	<b>\$100</b>	<b>\$1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$632</b>
<b>Variance to 2012 BP</b>									
Ghent 1	\$0	\$0	\$3	(\$32)	\$42	\$0	\$0	\$0	\$14
Ghent 2	\$2	(\$10)	\$10	(\$12)	\$15	\$3	\$0	\$0	\$9
Ghent 3	\$1	\$31	(\$30)	\$10	(\$1)	\$0	\$0	\$0	\$11
Ghent 4	\$0	\$20	(\$33)	\$33	\$6	\$0	\$0	\$0	\$26
<b>Total Variance to 2012 BP</b>	<b>\$4</b>	<b>\$42</b>	<b>(\$50)</b>	<b>(\$1)</b>	<b>\$62</b>	<b>\$3</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60</b>

## Key Messages

- The variance is due to comparing EPC bids and Fabric Filter equipment contracts to the estimates from 2012.
- \$25M kept in for needed Aux Power/Electrical issues at Ghent.
- SCR Turn-Downs were removed in the amounts for units 1, 3 & 4.
- SAM Mitigation is included in the amounts for all Ghent units.





# Capital Review – Mill Creek Air Compliance

## Accrual Basis, \$Millions

<u>Authority/ECR Comparison</u>	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Mill Creek 1	\$174	\$200	\$331	\$26	\$158
Mill Creek 2	\$169	\$194	\$328	\$25	\$159
Mill Creek 3	\$250	\$153	\$223	(\$97)	(\$27)
Mill Creek 4	\$251	\$289	\$386	\$38	\$135
<b>Total</b>	<b>\$844</b>	<b>\$837</b>	<b>\$1,268</b>	<b>(\$7)</b>	<b>\$424</b>

## Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Mill Creek 1	\$0	\$35	\$86	\$94	\$120	\$0	\$0	\$0	\$334
Mill Creek 2	\$0	\$34	\$84	\$93	\$119	\$0	\$0	\$0	\$331
Mill Creek 3	\$0	\$1	\$49	\$77	\$93	\$14	\$0	\$0	\$235
Mill Creek 4	\$9	\$113	\$134	\$115	\$22	\$0	\$0	\$0	\$393
<b>Total 2012 BP</b>	<b>\$10</b>	<b>\$183</b>	<b>\$353</b>	<b>\$380</b>	<b>\$354</b>	<b>\$14</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,294</b>
<b>2013 BP</b>									
Mill Creek 1	\$0	\$19	\$73	\$57	\$19	\$6	\$0	\$0	\$174
Mill Creek 2	\$0	\$19	\$68	\$52	\$21	\$9	\$0	\$0	\$169
Mill Creek 3	\$0	\$9	\$32	\$54	\$108	\$47	\$0	\$0	\$250
Mill Creek 4	\$1	\$35	\$123	\$69	\$18	\$6	\$0	\$0	\$251
<b>Total 2013 BP</b>	<b>\$1</b>	<b>\$82</b>	<b>\$296</b>	<b>\$232</b>	<b>\$165</b>	<b>\$68</b>	<b>\$0</b>	<b>\$0</b>	<b>\$844</b>
<b>Variance to 2012 BP</b>									
Mill Creek 1	(\$0)	\$16	\$13	\$36	\$102	(\$6)	\$0	\$0	\$160
Mill Creek 2	(\$0)	\$15	\$16	\$41	\$99	(\$9)	\$0	\$0	\$163
Mill Creek 3	(\$0)	(\$9)	\$18	\$24	(\$15)	(\$33)	\$0	\$0	(\$15)
Mill Creek 4	\$9	\$78	\$11	\$46	\$4	(\$6)	\$0	\$0	\$142
<b>Total Variance to 2012 BP</b>	<b>\$9</b>	<b>\$101</b>	<b>\$57</b>	<b>\$147</b>	<b>\$190</b>	<b>(\$54)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$450</b>

## Key Messages

- \$13M related to the MC 3 and 4 SAM are not included in the ECR filing as it was part of an earlier filing. The ECR filing does not include removal costs of \$8M.
- Variance is due to actual EPC, FGD, Equipment, and Fabric Filter contracts being less than the Level I Engineering Study performed by Black & Veatch. The ECR Filing and 2012 BP were based on that Level I Study.
- MC 3 & 4 SCR Turndowns were removed from plan.



# Capital Review – Trimble 1 Air Compliance

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Trimble 1	\$118	\$124	\$124	\$6	\$6

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
2012 BP	\$0	\$0	\$21	\$34	\$63	\$6	\$0	\$0	\$124
2013 BP	<u>\$0</u>	<u>\$4</u>	<u>\$10</u>	<u>\$42</u>	<u>\$58</u>	<u>\$5</u>	<u>\$0</u>	<u>\$0</u>	<u>\$118</u>
Variance to 2012 BP	(\$0)	(\$4)	\$11	(\$8)	\$5	\$1	\$0	\$0	\$6

### Key Messages

- Black & Veatch was not commissioned to due a Level I engineering study on Trimble 1, so the 2012 MTP figures are still Pre-Level 1 engineering.
- Variance is due to removal of contingency.



# Capital Review – Environmental air Business Plan Variance Summary

Accrual Basis, \$Millions  
Business Plan Comparison

## 2012 BP to 2013 BP Variance Breakdown by System

	<u>2012 BP</u>	<u>2013 BP</u>	<u>Variance</u>	<u>FF</u>	<u>FGD</u>	<u>SAM</u>	<u>SCR Turn- Down</u>	<u>SCR Upgrade</u>	<u>Total Variance</u>
Brown 1	\$110	\$115	(\$6)	(\$5)	\$0	(\$0)	\$0	\$0	(\$6)
Brown 2	\$118	\$122	(\$4)	(\$4)	\$0	(\$0)	\$0	\$0	(\$4)
Brown 3	\$118	\$109	\$9	\$9	\$0	\$0	\$0	\$0	\$9
Ghent 1	\$164	\$150	\$14	\$5	\$0	\$1	\$8	\$0	\$14
Ghent 2	\$171	\$162	\$9	\$9	\$0	(\$0)	\$0	\$0	\$9
Ghent 3	\$184	\$173	\$11	\$2	\$0	\$1	\$8	\$0	\$11
Ghent 4	\$173	\$147	\$26	\$16	\$0	\$1	\$8	\$0	\$26
Mill Creek 1	\$334	\$174	\$160	\$80	\$80	\$0	\$0	\$0	\$160
Mill Creek 2	\$331	\$169	\$163	\$82	\$81	\$0	\$0	\$0	\$163
Mill Creek 3	\$235	\$250	(\$15)	\$11	(\$43)	\$10	\$8	\$0	(\$15)
Mill Creek 4	\$393	\$251	\$142	\$47	\$74	\$9	\$8	\$3	\$142
Trimble County 1	<u>\$124</u>	<u>\$118</u>	<u>\$6</u>	<u>\$6</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$6</u>
<b>Total</b>	<b>\$2,455</b>	<b>\$1,940</b>	<b>\$515</b>	<b>\$258</b>	<b>\$192</b>	<b>\$21</b>	<b>\$41</b>	<b>\$3</b>	<b>\$515</b>



# Capital Review – CCR Ruling

## Accrual Basis, \$Millions

There is no ECR Filing or Approved Authority Amount associated with the CCR Ruling Projects.

### Business Plan Comparison

	<u>Pre-2012</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Post 2017</u>	<u>Total</u>
<b>2012 BP</b>									
Brown	\$0	\$0	\$0	\$1	\$0	\$1	\$0	\$1	\$3
Ghent	\$0	\$0	\$3	\$1	\$20	\$22	\$132	\$167	\$344
Green River	\$0	\$0	\$0	\$0	\$0	\$11	\$0	\$40	\$51
Pineville	\$0	\$0	\$0	\$0	\$0	\$4	\$3	\$0	\$6
Tyrone	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$1	\$3
Cane Run	\$0	\$0	\$0	\$0	\$0	\$0	\$15	\$19	\$34
Mill Creek	\$0	\$0	\$2	\$0	\$12	\$15	\$37	\$45	\$111
Trimble	\$0	\$0	\$1	\$0	\$2	\$2	\$27	\$35	\$67
<b>Total 2012 BP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5</b>	<b>\$2</b>	<b>\$34</b>	<b>\$54</b>	<b>\$216</b>	<b>\$307</b>	<b>\$619</b>
<b>2013 BP</b>									
Brown	\$0	\$0	\$0	\$1	\$0	\$1	\$0	\$0	\$2
Ghent	\$0	\$0	\$0	\$3	\$20	\$22	\$127	\$128	\$300
Green River	\$0	\$0	\$0	\$0	\$0	\$11	\$0	\$33	\$43
Pineville	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$2	\$6
Tyrone	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$1	\$2
Cane Run	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
Mill Creek	\$0	\$0	\$0	\$2	\$12	\$15	\$36	\$33	\$98
Trimble	\$0	\$0	\$0	\$1	\$2	\$2	\$26	\$27	\$58
<b>Total 2013 BP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$8</b>	<b>\$34</b>	<b>\$50</b>	<b>\$194</b>	<b>\$225</b>	<b>\$511</b>
<b>Variance to 2012 BP</b>									
Brown	\$0	\$0	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0
Ghent	\$0	\$0	\$3	(\$3)	\$0	\$0	\$5	\$39	\$44
Green River	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$7
Pineville	\$0	\$0	\$0	\$0	\$0	\$4	(\$1)	(\$2)	\$1
Tyrone	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cane Run	\$0	\$0	\$0	\$0	\$0	(\$0)	\$15	\$19	\$33
Mill Creek	\$0	\$0	\$2	(\$2)	(\$0)	\$0	\$1	\$12	\$14
Trimble	\$0	\$0	\$1	(\$1)	\$0	\$0	\$1	\$8	\$9
<b>Total Variance to 2012 BP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5</b>	<b>(\$6)</b>	<b>\$0</b>	<b>\$4</b>	<b>\$21</b>	<b>\$83</b>	<b>\$108</b>

### Key Messages

- Majority of projects remained in 2015 through 2019 in the 2013 BP due to timing and uncertainty of ruling. Costs in 2013 and 2014 in the 2013 BP are mainly engineering and development of construction packages.
- Variance is due to reducing escalation from 6% in the 2012 BP to 4% in the 2013 BP.
- Compliance Closure of Ponds is \$433M of the \$511M in the 2012 plan. There will be additional costs of \$508M associated with plant closure outside the scope of the LTP period.



# Capital Review – Contingency Analysis

\$ in Millions

Project	Total	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BR Ash Pond II	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CR MSE Wall	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CR Cap & Closure	\$1	\$0	\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GH Landfill	\$8	\$3	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GH Lanfill II	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$0	\$0	\$0
MC Landfill Expansion	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5	\$0	\$0
TC Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TC Landfill II	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5	\$0	\$0
BR SCR	\$2	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NGCC 2015 - CR7	\$22	\$0	\$18	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NGCC 2018	\$28	\$0	\$0	\$0	\$14	\$14	\$0	\$0	\$0	\$0	\$0
NGCC 2022	\$32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16	\$16
Env. Air - Brown	\$25	\$0	\$0	\$5	\$21	\$0	\$0	\$0	\$0	\$0	\$0
Env. Air - Ghent	\$46	\$0	\$17	\$28	\$1	\$0	\$0	\$0	\$0	\$0	\$0
Env. Air - Mill Creek	\$30	\$0	\$0	\$21	\$10	\$0	\$0	\$0	\$0	\$0	\$0
Env. Air - TC (Net)	\$6	\$0	\$0	\$5	\$1	\$0	\$0	\$0	\$0	\$0	\$0
Env. Compl. - CCR Ruling	\$47	\$0	\$0	\$0	\$3	\$5	\$35	\$4	\$0	\$0	\$0
<b>Total Contingency</b>	<b>\$259</b>	<b>\$5</b>	<b>\$39</b>	<b>\$63</b>	<b>\$50</b>	<b>\$20</b>	<b>\$35</b>	<b>\$6</b>	<b>\$10</b>	<b>\$16</b>	<b>\$17</b>



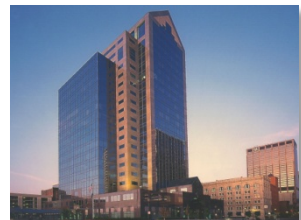
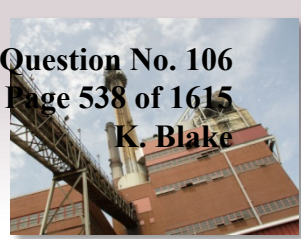


PPL companies

# Energy Marketing

## 2013 Business Plan

*September 11, 2012*



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# Plan Highlights

## Key Objectives

- Optimize the utilization of existing assets to provide reliable, low cost energy.
- Procure coal and gas necessary to cost-effectively operate generating plants.
- Provide high quality analysis to enhance decision-making.
- Improve business processes by identifying opportunities to deploy information technologies and enabling business information projects.
- Implement processes required to meet reliability standards.
- Improve analysis capability and knowledge related to retail customer energy usage to support energy efficiency and resource planning efforts.





# Major Assumptions

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- Analysis needed to support major company initiatives (KPSC filings) and strategic planning can be met by existing staff levels.
- Regulated Trading and Dispatch will meet future needs for more power and gas purchases by redeploying and training existing staff.
- Load forecast, commodity prices, and generation as approved by RCG.
- Coal inventory will be reduced to target levels via reduced purchases in 2013.

# 2013 Plan Summary

- *Compared to CSAPR Stay (Jan 2012) forecast, native load production costs in 2013 Plan are lower; OSS contribution is mostly unchanged in 2013 and slightly higher in 2014-2017.*
- *With CSAPR vacatur and retirement of coal units, the need to bank SO<sub>2</sub> allowances prior to 2016 is eliminated.*
- *Plan assumes Brown 1 and 2 are retrofitted with baghouses in 2016 and continue operation beyond long-term planning period.*

<b>Native Load Production Costs (\$/MWh)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>CAGR</b>
2012 Plan	29.55	31.54	34.14	37.58	38.90	7.1%
CSAPR Stay (Jan 2012)	28.96	30.83	33.54	37.28	38.77	7.6%
2013 Plan	28.83	30.18	31.97	34.72	36.43	6.0%

<b>OSS Contribution (\$M)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
2012 Plan	11	5	1	0	0
CSAPR Stay (Jan 2012)	4	1	0	0	0
2013 Plan	3	3	1	1	1



# 2013 Plan Summary

*Lower gas prices and earlier CR7 increase gas burn in 2013 Plan compared to previous plans*

<b>Gas Burn Volume (Gbtu)</b>	<b>2011 **</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
2012 Plan	5,833	8,529	6,707	8,528	8,871	24,185	22,934
CSAPR Stay (Jan 2012) *	5,833	15,786	8,106	9,231	8,460	24,102	20,638
2013 Plan *	5,833	18,139	10,355	12,940	38,238	47,108	46,231

<b>Gas Burn Total Dollars (\$M)</b>	<b>2011 **</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
2012 Plan	47	43	36	48	52	153	158
CSAPR Stay (Jan 2012) *	47	56	33	42	45	147	142
2013 Plan *	47	61	39	53	162	209	212

\* 2013 Plan & CSAPR Stay (Jan 2012) reflect 7 + 5 in 2012

\*\* 2011 represents actual values

Note: Generation only; does not include start-up/stabilization gas burn



# 2013 Plan Summary

*Economy purchases are somewhat higher in 2013 Plan due to lower electricity prices*

<b>Economy Purchase Volume (GWh)</b>	<b>2011 **</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<i>2012 Plan</i>	236	292	192	377	383	492	532
<i>CSAPR Stay (Jan 2012) *</i>	236	388	304	456	412	459	477
<i>2013 Plan *</i>	236	487	467	535	464	474	527

<b>Economy Purchase Total Dollars (\$M)</b>	<b>2011 **</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<i>2012 Plan</i>	11	12	9	17	16	25	29
<i>CSAPR Stay (Jan 2012) *</i>	11	14	8	14	15	22	26
<i>2013 Plan *</i>	11	16	14	17	17	17	19

\* 2013 Plan & CSAPR Stay (Jan 2012) reflect 7 + 5 in 2012

\*\* 2011 represents actual values



# 2013 Plan Summary

## Coal Consumption

	2011	2012 MTP	2012 FCAST	2013	2014	2015	2016	2017
TONS (Millions)	16.8	17.4	16.0	17.0	16.9	15.1	14.6	14.6
DOLLARS (\$M)	\$847	\$919	\$847	\$898	\$926	\$861	\$881	\$924



# Financial Performance

## 2011-2017 OPEX and Other Expenses (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Opex Expenses							
Raw Labor	6,406	6,299	6,529	6,725	6,927	7,134	7,348
Burdens	1,891	1,831	1,824	1,873	1,929	1,987	2,047
Non labor Regulated Trading	211	357	402	410	419	426	436
Non labor Business Information	6	80	154	157	161	164	167
Non labor Director Energy PF&A	56	52	59	59	61	61	63
Non labor Generation Planning	171	308	421	430	438	446	456
Non labor Economic Analysis	101	388	219	224	228	232	238
Non labor Sales Analysis	63	72	128	131	133	136	139
Non labor Operations Analysis	1	14	-	-	-	-	-
Non labor VP Energy Marketing	35	52	39	40	41	43	43
Non labor Allocated Support	2	5	5	5	5	5	5
Non-labor Fuels	730	620	792	807	822	842	856
Non-labor Other	175	124	82	82	84	86	86
Total OPEX for EBIT	<u>9,848</u>	<u>10,202</u>	<u>10,654</u>	<u>10,943</u>	<u>11,248</u>	<u>11,562</u>	<u>11,884</u>



## 2013-2017 OPEX/Other Expense Reconciliation (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	11,087	11,414	11,735	12,066	12,407
Drivers:					
Reduce Headcount by 3	(449)	(463)	(477)	(492)	(506)
Gen. Planning-IRP Supply Side Study	104	106	108	110	113
Economic Analysis - Lower Subscriptions	(89)	(91)	(93)	(94)	(96)
Other Miscellaneous	<u>1</u>	<u>(23)</u>	<u>(25)</u>	<u>(28)</u>	<u>(34)</u>
Current Plan	<u><u>10,654</u></u>	<u><u>10,943</u></u>	<u><u>11,248</u></u>	<u><u>11,562</u></u>	<u><u>11,884</u></u>



# Financial Performance

## 2011-2017 OSS Margin (\$000)

	2011	2012	7+5 2012	2012 MTP	2013 Business Plan				
	Actual	Budget	Forecast	2013	2013	2014	2015	2016	2017
OSS Margin before Transmission Expense	12,877	16,657	4,503	15,227	4,565	3,888	1,782	1,639	1,210
Transmission Expense (Internal)	5,052	3,633	2,615	3,647	1,365	1,148	589	649	272
Total OSS Margin	<u>7,825</u>	<u>13,024</u>	<u>1,888</u>	<u>11,580</u>	<u>3,200</u>	<u>2,740</u>	<u>1,193</u>	<u>990</u>	<u>938</u>

### Off-system Sales Volume-GWh

On-peak	864	453	148	467	240	166	69	73	48
Off-peak	373	357	43	328	107	80	35	35	35
Weekend	<u>397</u>	<u>399</u>	<u>80</u>	<u>392</u>	<u>118</u>	<u>139</u>	<u>89</u>	<u>88</u>	<u>49</u>
Total	<u>1,634</u>	<u>1,209</u>	<u>271</u>	<u>1,187</u>	<u>465</u>	<u>385</u>	<u>193</u>	<u>196</u>	<u>132</u>





# Financial Performance

## 2011-2017 Margin Expenses / Cost of Sales (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Internal Transmission Exp (OSS)	5,051	2,614	1,365	1,148	589	649	471
RSG Expense (OSS)	2,080	1,678	721	601	293	294	214
Industrial Coal Sales (Fuels)	345	797	821	821	838	854	872
Total Margin/Cost of Sales	<u>7,476</u>	<u>5,089</u>	<u>2,907</u>	<u>2,570</u>	<u>1,720</u>	<u>1,797</u>	<u>1,557</u>



## 2013-2017 Margin/Cost of Sales Reconciliation (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
<u>Mechanism recoverable</u>					
Prior Plan					
Drivers					
Current Plan					
<u>Other</u>					
Prior Plan	6,034	4,245	4,330	4,417	
<u>Drivers</u>					
RTO Fees	(868)	(235)	(559)	(576)	
Internal Transmission	(2,282)	(1,463)	(2,075)	(2,068)	
Industrial Coal Sales	23	23	24	24	
Current Plan	<u>2,907</u>	<u>2,570</u>	<u>1,720</u>	<u>1,797</u>	<u>1,557</u>



## 2011-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Environmental</b>	-	-	-	-	-	-	-
<b>New Generation Capacity</b>	-	-	-	-	-	-	-
<b>Generation</b>	-	-	-	-	-	-	-
<b>Distribution and Metering</b>	-	-	-	-	-	-	-
<b>Transmission</b>	-	-	-	-	-	-	-
<b>Other</b>							
TC Gas Meter Project	-	8	-				
CTS/AFB Upgrade	-	40	491				
Process Improvement Tools	(40)	202	250	250	250	250	250
<b>Total Capital and Cost of Removal</b>	<u>(40)</u>	<u>250</u>	<u>741</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	250	250	250	250	250
Changes:					
CTS/AFB Upgrade	491				
Current Plan	<u><u>741</u></u>	<u><u>250</u></u>	<u><u>250</u></u>	<u><u>250</u></u>	<u><u>250</u></u>

# Financial Performance

## 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Regulated Trading	25	24	24	24	24	24	24
Business Information	3	4	4	4	4	4	4
Director Planning & Analysis	2	2	2	2	2	2	2
Economic Analysis	4	7	6	6	6	6	6
Sales Analysis	5	5	6	6	6	6	6
Operations Analysis	3	0	0	0	0	0	0
Generation Planning	7	8	8	8	8	8	8
VP Energy Marketing	2	2	2	2	2	2	2
Subtotal	51	52	52	52	52	52	52
Fuels Management	5	5	5	5	5	5	5
Fuels by Products	9	8	10	10	10	10	10
Fuels Risk Managemet	2	4	2	2	2	2	2
Subtotal	16	17	17	17	17	17	17
Co-ops	1	1	1	1	1	1	1
<b>TOTAL w/ Co-op</b>	<b>68</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>
From 2012 MTP		72	73	73	73	73	
Variance to 2012 MTP		-2	-3	-3	-3	-3	
Manager Operations Analysis			-1	-1	-1	-1	
Reg Trading - Compliance Analyst			-1	-1	-1	-1	
Reg Trading - Gas Scheduler			-1	-1	-1	-1	



# Plan Risks

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- Higher than forecast native load due to weather cannibalizes off-system sales, increases power and gas purchases, and increases coal burn.
- Higher than planned generating outages, lower native load (due to weather or the economy), or extremely low gas prices decreases coal burn and put upward pressure on coal inventory.
- Availability of transmission capacity to make sales and purchase power.

# Appendix



## Year over Year Walk Forward OPEX and Other Expense

<b>2011 Actual</b>	<b>9,848</b>
Labor	(167)
Non-labor	521
<b>2012 FC</b>	<b>10,202</b>
Labor - primarily open positions	223
Other non-labor savings in 2012	229
<b>2013 Budget</b>	<b>10,654</b>
Labor increase - 3%	196
Burden increase - 3%	49
Non-labor increase - 2%	44
<b>2014 Plan</b>	<b>10,943</b>
Labor increase - 3%	202
Burden increase - 3%	56
Non-labor increase - 2%	47
<b>2015 Plan</b>	<b>11,248</b>
Labor increase - 3%	207
Burden increase - 3%	58
Non-labor increase - 2%	49
<b>2016 Plan</b>	<b>11,562</b>
Labor increase - 3%	214
Burden increase - 3%	60
Non-labor increase - 2%	48
<b>2017 Plan</b>	<b>11,884</b>





## 2011-2017 Headcount progression

2011 Headcount	68
-Analysts	2
	<hr/>
2012 Headcount FC	70
-No Changes	
	<hr/>
2013 Headcount Budget	70
-No Changes	
	<hr/>
2014 Headcount Plan	70
-No Changes	
	<hr/>
2015 Headcount Plan	70
-No Changes	
	<hr/>
2016 Headcount Plan	70
-No Changes	
	<hr/>
2017 Headcount Plan	<u>70</u>



# Other Balance Sheet Costs (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Stores Expense							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Local Engineering							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Other Balance Sheet							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Total Other Costs	-	-	-	-	-	-	-





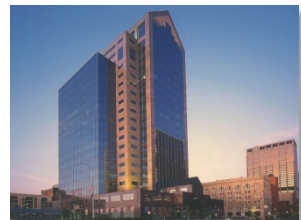
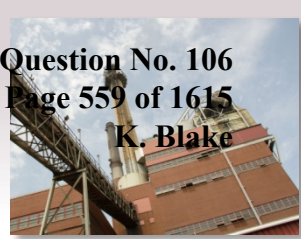
**PPL companies**

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# Power Generation Department 2013 Business Plan

*September 19, 2012*

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# Plan Highlights

- ***Addition of generation capacity - Cane Run Unit 7 CCGT scheduled for commercial operation May 1, 2015***
- ***Planned retirements of coal generating units at Cane Run, Green River and Tyrone stations***
- ***Major investment and integration of environmental compliance control equipment***
- ***Generation forecast for the planning period assumes continued trend of more gas fired production based on current projections for gas prices***
- ***Expenses associated with environmental systems at Ghent, Brown and Trimble were previously in ECR mechanism have now shifted to base O&M expense starting in 2013***
- ***Required landfill expansion at Ghent, Brown and Trimble stations***
- ***Increased resource needs to meet and maintain compliance with incremental regulatory requirements***
- ***Trimble County Unit 2 resolution of existing issues and warranty claims***
- ***Base Capital and OPEX plans are lower than comparable 2012 levels for this period which leads to expectations of maintaining current levels of operational performance***



# Major Assumptions

## 1. Regulatory

1.1 *The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.*

1.2 *Target Reserve Margin of 16%, within a range of 15%-17%.*

- *Consistent with 2012 MTP/LTP.*
- *Reserve margin purchases are needed for summers of 2015 and 2016.*
  - *However, shortfall is <100 MW and could be covered in other ways.*

1.3 *Reserve sharing remains under the TVA/EKPC Reserve Sharing Agreement (~ 242 MW).*

1.4 *LG&E and KU remain committed to burning higher sulfur fuels.*

1.5 *The earliest that the next ECR filing can take place is July 1, 2013 (per the Settlement Agreement from the 2011 case).*

## 2. Proposed or Expected New Environmental Regulations for Air and Water

2.1 *Final Cross State Air Pollution Rules (CSAPR) were issued in July 2011, with the order being stayed on December 30, 2011, and completely struck down on August 21, 2012.*

- *Existing CAIR stays in effect for all of the planning cycle.*

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.2 Mercury and Air Toxics Standards (MATS) final rules were issued February 16, 2012.

- *Including a potential one year delay that can be applied for, the compliance date will be April 16, 2016.*
- *A second, additional, year of delay can be obtained in certain hardship cases, including retirements that could adversely impact transmission reliability. None of the LKE projects are counting on that second year of delay.*

### 2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> and SO<sub>2</sub>. The final attainment designations for the short term NO<sub>x</sub> standard have been delayed for up to three years due to inadequate monitoring. Based on the new short term SO<sub>2</sub> standards, compliance requirements must be in place by June 2017.

- *The Mill Creek FGD project is expected to mitigate the area in Jefferson County that has been proposed as non-attainment.*

### 2.4 The EPA issued its proposal on PM NAAQS on June 14, 2012.

- *Indications are that the current annual Particulate Matter standard for (PM)<sub>2.5</sub> of 15 ug/M<sup>3</sup> will be lowered, but not specifically by how much.*
- *A range of 12 to 13 ug/M<sup>3</sup> was indicated, however EPA requested comment on dropping it to 11. A standard of 12 would put Jefferson County and Northern Kentucky in non-attainment, and 11 would put the entire state of Kentucky in non-attainment.*
- *Implementation is expected by 2018.*
- *The recent modifications at Gallagher Station, the shutting down of Cane Run 4, 5, and 6, and the baghouses at Mill Creek should mitigate concerns in Jefferson County.*
- *In general, on units with baghouses LKE should have no trouble with compliance.*

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.5 The EPA is scheduled for a 2013 re-evaluation of the 8-hour ozone standard. Due to litigation, they were prepared to issue an early revision that would have been much lower with large impacts industry wide; however, they instead decided to re-instate the 2008 NAAQS Ozone 8-hour standard.

- ***Non Quality Assured 2011 data indicates Jefferson County as non-attainment.***
  - **Best Case: Quality Assured data shows attainment.**
  - **OK Case: Quality Assured data shows non-attainment, however shutdown of Cane Run 4, 5, and 6 mitigates the issue.**
  - **Worst Case: Quality Assured data shows non-attainment. SCRs are needed at Mill Creek 1 and 2 to mitigate the issue.**

2.6 Cane Run Coal will be retired May 1, 2015.

- **Combined cycle replacement available on that date.**
- **This is eight months sooner than the IRP.**
- **Of the employees remaining in excess of what is needed for combined cycle, approximately ½ will backfill retirements at other plants, and ½ will backfill contractors at other plants.**

2.7 Tyrone Coal will be retired April 16, 2015.

- **This aligns to the IRP.**



# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

### **2.8 Green River Coal will be retired April 16, 2015.**

- *This presumes that the one-year extension does not apply in situations where no environmental controls are being added.*
- *A Transmission Capital project (Matanzas) is slated to be completed by June 30, 2013 which will provide greater flexibility around running the Green River units.*
- *Of the employees electing to be placed (and not taking severance), they will be split between Energy Delivery Meter Reading and Energy Services.*

### **2.9 On March 21, 2011 EPA published a final rule that identified non-hazardous secondary materials that are considered solid wastes when combusted.**

- *Boiler cleaning waste affected and disposal by burning in the boiler will be prohibited unless we are permitted as a "commercial and industrial solid waste incinerator".*
- *On December 23, 2011 EPA proposed amendments.*
- *Kentucky currently has provisions in place to adopt the rule after amendments become final.*
- *Kentucky will allow 3 years to become effective (2015)*

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.10 Greenhouse Gases (GHG) tailoring rule requirements began January 2011.

- **GHG Best Available Control Technology (BACT) will be required for permitting new units.**
  - ❖ *Current GHG BACT is increased operational efficiency, however, carbon capture and storage (CCS) is on the horizon.*
- **For modifications that will increase GHG emissions greater than the PSD threshold limit of 75,000 tons**
  - ❖ *Includes Carbon Dioxide, Methane, and Nitrous Oxide.*
  - ❖ *Can mitigate by either a permit condition to limit emissions (i.e. limit on MWh) or apply BACT.*

### 2.11 GHG New Source Performance Standards (NSPS)

- **EPA announced proposed rule on 03/27/2012.**
- **Only addresses CO<sub>2</sub> with limit of 1,000 lbs/MWh(gross).**
- **Affects new units only (Coal-Fired Units, Integrated Gas Combined Cycle (IGCC), Natural Gas Combined Cycle (NGCC)).**
  - *Cane Run NGCC affected if proposed rule is published in the Federal Register prior to having a final permit.*
    - ❖ *Cane Run NGCC emission rate estimated at 800 lbs/MWh(gross) during full load operation.*
  - *New simple cycle turbines not affected.*
- **Existing units to be addressed in a later ruling.**

# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

**2.12 The 2011 ECR compliance plan settlement and CCN were approved December 16, 2011, and will include the following air quality controls:**

- *A new Mill Creek 4 FGD (2014)*
- *A new Mill Creek 3 FGD (2015)*
- *A new Mill Creek 1 and 2 (combined) FGD (2015).*
- *Fabric Filters on Ghent 1-4, Mill Creek 1-4, Brown 3, and Trimble County 1.*
  - 2014 in-service: Gh3, Gh4, MC4
  - 2015 in-service: Br. 3, Gh1, Gh2, MC1, MC2, MC3, TC1
- *An SCR upgrade on Mill Creek 4.*
- *The Brown 1-2 Fabric Filters were removed from the 2011 ECR plan as part of the settlement. They are still in the 2013 Business Plan but have been pushed further out to 2016.*
  - The analysis by Generation Planning to determine their need will be completed in the first half of 2013.

# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

### **2.13 *Significant O&M and cost of sales (~\$70M per year) will be incurred as remaining units become operational for MATS Compliance.***

- ***Costs will begin ramping up in 2014 as units are completed.***
  - ***Additional limestone usage at Mill Creek 1 and 2 FGD.***
  - ***Additional hydrated lime injection to protect bags at all baghouse installations.***
  - ***Powdered Activated Carbon (PAC) Injection at all installations.***
- ***Prior to 180 days after the compliance date of April 16, 2015 (or April 16, 2016 for units that have been granted an extension), all units must have completed a boiler tune-up with specific documentation of improvements and procedures and effects on CO and NO<sub>x</sub>.***
  - ***EPA has intent to allow for the boiler tune-up to occur prior to the compliance date, however, further clarification that is needed by the EPA should be forthcoming.***

### **2.14 EPA has negotiated a delay in issuing the final regulations for 316(b).**

- ***The final rule now must be issued by June 27, 2013.***
- ***A Five-Year implementation period is expected.***
- ***Current estimate to comply is \$3M each for Mill Creek, Trimble County, Ghent, and Brown ( ½ in 2015, ½ in 2016).***
- ***Dollars could shift out further should there be any type of delays.***
- ***There is no mandate for cooling towers at the current time (Mill Creek 1 is a sensitivity in 2017).***

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.15 Effluent water guideline draft proposal is expected November 20, 2012, with the final rule issued April 28, 2014.

- *A Five-Year implementation period is expected.*
- *Ultimate implementation timing as well as scope are uncertain at this time.*
- *A placeholder per station is included (\$60M Ghent, \$60M Mill Creek, \$40M Brown, \$20M Trimble County, \$10M Cane Run, and \$10M Green River).*
- *The dollars are split ½ in 2017 and ½ in 2018, however, they could vary by facility based on permit renewal dates.*
- *Dollars could shift out further, should there be any type of delays.*

2.16 Internal Combustion Engine and Reciprocating Internal Combustion Engines (IC & RICE) regulation finalized in 2010.

- **Non-certified engines purchased after 2005 must be tested for compliance and may need "tailpipe" controls for particulates, NO<sub>x</sub> and Volatile Organic Compounds (VOC) emissions.**
- **Existing Emergency Compression engines <500HP require compliance with "work practice standards" including hour meter by May, 2013.**
- **Existing Emergency Spark engines <500HP require compliance with "work practice standards" including hour meter by October 2013.**

# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

### **2.17 Ghent will negotiate SO<sub>3</sub> (H<sub>2</sub>SO<sub>4</sub>) permitted emission limits with EPA in 2012.**

- **Additional testing will be necessary and engineering studies may be required.**
- **Ghent 2 will require additional SO<sub>3</sub> control equipment (BACT).**
- **Permit will include operational monitoring of SO<sub>3</sub> control equipment.**
- **Acid Dew Point Monitors (Breen Probe) or SIC Monitors will be required for each unit.**
- ***Additional emissions testing for correlation per the Compliance Assurance Monitoring (CAM) Plan.***

### **2.18 Cane Run Landfill Dust Suppressant.**

- ***Chemical suppressant is to be added during dry weather to the open landfill area to mitigate dust.***

## **3. Expansion/Capacity**

### **3.1 The simple cycle capacity of 495MW (Bluegrass site) is not acquired due to the adverse ruling by FERC.**

- **A two year Power Purchase Agreement is in place for approximately 165MW for 2016 and 2017, prior to the second combined cycle in service in 2018 (see 3.3).**

# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.2 *A combined cycle unit (Cane Run 7) will be added May 1, 2015 at the Cane Run location.*

- *2 x 1, 640 MW Summer Net (Ownership is 78% KU, 22% LG&E).*
- *Replacing Cane Run Coal retired on that date.*
- *CCN approval date of September, 2012.*
- *Expense profile based on a Long-Term Services Agreement being in place.*

3.3 *A second combined cycle unit will be added June 1, 2018 (ownership is 50% KU, 50% LG&E).*

- *The location is still to be determined.*
- *It had been 2021 when Bluegrass was to be acquired.*
- *2 x 1, 640 MW Summer Net.*
- *Generation Planning will study other sized options.*
- *Expense profile based on a Long-Term Services Agreement being in place.*

3.4 *The third combined cycle will come on-line June 1, 2022.*

- *It had been 2028 when Bluegrass was to be acquired.*

3.5 *Tyrone 3 will remain on inactive reserve, and then retired on April 16, 2015.*

3.6 *Brown 1 and 2 are still included long-term. A study to be completed first quarter 2013 will help determine if that is the case for the 2014 BP.*

3.7 *The five Ohio Falls units still to be rehabilitated (the other three are complete) have the following scheduled completion dates::*

*Unit 2 (January 2013)*

*Unit 8 (October 2013)*

*Unit 4 (July 2014)*

*Unit 3 (March 2015)*

*Unit 1 (December 2015)*

# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.8 *Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2015 and runs through 2018.*

- *Engineering to be done in 2013.*
- *The Paddy's Unit is 2018 in-service, Brown is 2017 in-service and Trimble is 2018 in-service.*

3.9 *Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.*

- *Group 3 consists of the older, smaller CT's.*
- *No Group 3 units are being retired in the plan.*

3.10 *Biomass co-firing projects for 2 units is a sensitivity, not included in the base Business Plan.*

3.11 *Landfill gas projects are a sensitivity, not included in the base Business Plan.*

- *No activity currently taking place.*
- *The only scenario at current natural gas prices would be if a company is doing it for Corporate Social Responsibility purposes and LKE partnered with them in some capacity.*

3.12 *A carbon capture and sequestration (CCS) demonstration facility for 100 MW is a sensitivity.*

- *A much smaller scale demonstration project hosted by Brown Station and primarily funded through DOE takes place in 2013-2016.*



# Major Assumptions

## **4. Coal Combustion Residuals (CCR's)**

### ***4.1 EPA issued two proposals for public input for coal combustion residuals (CCR's) in June 2010.***

- ***Final rules are expected in late 2012 and once final rules are issued there will be a five-year implementation period with an additional two years to close existing ponds. Ponds are expected to be eliminated for ash storage.***
- ***Expected timeframe of 2017-2019 on pond closures and 2016-2017 on construction of new process ponds.***
- ***A stay due to litigation is probable.***
- ***A designation of "Hazardous" vs. "Non-Hazardous" appears to be trending toward "Non-Hazardous".***
  - ***EPA's decision has been delayed until December 2012 at the earliest.***
- ***The designation will not change the capital plan but would reduce beneficial re-use opportunities for structural fill and gypsum for wallboard if declared "hazardous".***

### ***4.2 The Trimble County Fly Ash Loading Facility will be operational in November 2012.***

- ***A temporary agreement with Charah (started February, 2012) provides for barge load-outs to Holcim until the permanent system is in place.***

### ***4.3 Permit issues have delayed the Trimble County Landfill Phase I.***

- ***In-service date is scheduled for January 1, 2016, based on a landfill permit being issued by the Kentucky Division of Waste Management in late 2014.***
- ***The date remains highly in-flux until permit approvals are received.***

### ***4.4 Brown Ash Pond is being converted to a landfill, with an expected in-service date of January, 2014.***

# Major Assumptions

## **4. Coal Combustion Residuals (CCR) (Cont.)**

- 4.5 Ghent Landfill Phase 1 will be substantially completed by 6/30/2013, with significant O&M starting in mid-2013.**
- **All permit approvals have been received, however, a new KPSD permit is still needed for water run-off.**
- 4.6 The existing Cane Run Landfill Mechanically Stabilized Earth (MSE) Wall Foundation will be complete by June 30, 2013.**
- **Build-up of the wall will take place on an as-needed basis depending on CCR production rates.**
  - **Material will be taken from the landfill and stored at the ash pond to begin the process of closing the existing ash pond.**
- 4.7 Extension of the Mill Creek Landfill will be in the back part of the 10-year window. (Earliest timeframe it would need to be operational would be 2021.)**
- 4.8 All CCR Capital Projects use an annual escalation rate of 4.0%.**

## **5. Other Environmental (in addition to MATS and CCR's) Resulting in Significant Capital Additions**

- 5.1 The Brown 3 SCR will be in-service in the fourth quarter of 2012.**
- **Operating parameters under the consent decree will be very tight for Brown 3.**
  - **Dispatch related turndown on Unit 3 must be tracked.**
  - **SO<sub>3</sub> (H<sub>2</sub>SO<sub>4</sub>) emissions controls must be BACT and will include operational monitoring.**
  - **Becomes effective upon operation of SCR, however, with SCR installation running behind original schedule, we are complying with the H<sub>2</sub>SO<sub>4</sub> 12-month cap in 2012.**
  - **Test results indicate hydrated lime injection not needed until SCR operation begins, however, a re-confirmation test could potentially indicate needed mitigation prior to SCR operation and could include Units 1 and 2 as well as Unit 3.**

# Major Assumptions

## 6. Operational and Other

6.1 *Annual escalation rates for internal labor, contract labor and materials are as follows:*

- *Internal labor: 3.0%.*
- *Contract/services labor: 3.0% for general, 3.5% for highly skilled (welders).*
- *Chemicals: 6.0% for specialty (Nalco), 5.0% for commodity (Brenntag)*
- *Fuels and additives 5.0%*

6.2 *By the end of 2012, planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years, with the following exceptions:*

- *Brown units 1 and 3 over-lap by 2 weeks every other year.*
- *Cane Run units are 3 week outages one year with no outage the next year, with this cycle repeating.*
- *Trimble County units are 4 week outages one year with no outage the next year, with this cycle repeating.*

# Major Assumptions

## **6. Operational and Other (Cont.)**

### **6.3 The next turbine overhauls by unit are as follows:**

- **2012 : Ghent 2, Brown 3, Cane Run 4, Mill Creek 2.**
- **2013 : Mill Creek 1.**
- **2014 : Brown 1, Mill Creek 4, Ghent 4.**
- **2015 : Ghent 1.**
- **2016 : None scheduled.**
- **2017: Brown 2, Trimble 1**
- **2018: Ghent 3, Trimble 2**

### **6.4 Significant generator rewind/stator rewind dollars are included in the 2012-2016 timeframe.**

- **Brown 3 generator (stator and rotor) rewind in 2012.**
- **Brown 2 generator (stator and rotor) rewind in 2017 (some dollars also in 2016).**
- **Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.**
  - **The spare sets will be installed on MC3 in 2019, MC2 in 2020, MC1 in 2021, and MC4 in 2022.**

### **6.5 Corrosion fatigue inspection schedule is as follows:**

- **2013: Mill Creek 1, Mill Creek 3**
- **2014: Ghent 4, Mill Creek 4**
- **2015: Ghent 1**
- **2016: None scheduled.**
- **2017: Brown 2, TC1**
- **2018: Ghent 3, TC2**

# Major Assumptions

## **6. Operational and Other (Cont.)**

**6.6 High Energy Piping (HEP) inspection schedule is as follows:**

- **2013: Mill Creek 1, Mill Creek 3, Trimble County 1**
- **2014: Brown 1, Brown 2, Ghent 3, Ghent 4, Mill Creek 4, Trimble County 2**
- **2015: Brown 3, Ghent 2, Mill Creek 1, Mill Creek 3**
- **2016: Ghent 1, Mill Creek 2, Trimble County 2**
- **2017: Brown 2, Ghent 3, Mill Creek 1, TC1**
- **2018: Brown 1, Brown 3, Ghent 1, Ghent 4, Mill Creek 2, Mill Creek 4**

**6.7 The fuel procurement plan is pushing toward higher chlorine ILL. Basin fuels, which will drive burner modifications on at least two Mill Creek units and two Ghent units.**

- **Permit changes may also be needed.**

**6.8 Targets for percentage of fuel hedged in the 2013 Business Plan are as follows:**

- **Year 1 90%-100%**
- **Year 2 80%-95%**
- **Year 3 40%-90%**
- **Year 4 10%-50%**
- **Year 5 0%-30%**

# Major Assumptions

## 6. Operational and Other (Cont.)

### 6.9 Combustion turbine outages in the plan:

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense – approximately 15%) vs. new parts (capital – approximately 85%).
- The first set of hot gas path inspections for Trimble CT's are complete with the exception of unit 9 in Fall 2012 and Unit 10 in Spring 2013. The cycle starts again with two units in 2017, two units in 2018, and two units in 2019.
- Brown C inspections by unit are as follows:
  - ❖ Unit 9 in 2013
  - ❖ Unit 10 in 2015
  - ❖ Unit 6 in 2018
  - ❖ Unit 7 in 2019
  - ❖ Unit 11 in 2020
  - ❖ Unit 5 in 2021
  - ❖ Unit 8 in 2022
- The expiration date for the Brown 6 and 7 Long-Term Services Agreements (LTSA) is October 1, 2016 based on the 13-year criteria.
  - ❖ Replacement LTSA's are not expected.
- *The outages for Cane Run 7 are a Combustion Inspection 2017, Hot Gas Path Inspection 2019, and Combustion Inspection 2021.*

6.10 NERC Cyber Security Solution (all coal-fired stations plus Paddy's Run and Haefling) is included, along with Microsoft Upgrades for Ghent and Trimble County due to 2014 de-support of Windows XP.

6.11 CIP Version 4 will have an effective date of April 1, 2014.

- The effective date for version 5 is still uncertain.

# Major Assumptions

## 6. Operational and Other (Cont.)

- 6.11 CIP Version 4 will have an effective date of April 1, 2014.
- The effective date for version 5 is still uncertain.
- 6.12 Demolition (cost of removal) for Canal and Paddy's Run are as follows:
- 2012 \$2.0M
  - 2013-2014 \$0.0M
  - 2015 \$0.3M
  - 2016 \$1.8M
  - 2017 \$7.5M
  - 2018 \$10.0M
  - 2019 \$8.0M
  - Order of events will be demolition of Paddy's Run stacks, complete demolition of Paddy's Run Station (2015-2019), and complete demolition of Canal (2017-2019).
- 6.13 Demolition (cost of removal) for Pineville are \$250k in 2013 to address the Stack issues.
- 6.14 Cost of removal reserves at 12/31/15 are projected to be:
- Tyrone \$5M
  - Green River \$12M
  - Cane Run \$35M
- 6.15 A MAXIMO Upgrade (tied to Oracle Upgrade) will start in August, 2012 and end in August, 2013.
- 6.16 The prosym run from August 31, 2012 is the official generation forecast for the 2013 Business Plan.

## Target Reconciliations – OPEX and GMEXP (\$000)

	2013 Plan	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<u>OPEX 2012 MTP to 2013 Target</u>					
Prior Plan	233,968	256,097	268,444	253,839	253,651
Changes:					
ECR 2005 & 2006 Plan Shift	7,176	7,742	7,906	8,074	8,246
Plant Closure to CAPEX				(15,416)	(1,169)
Earlier Plant Retirements			(11,100)		
Remove Bluegrass CT OPEX	(7,260)	(3,082)	(3,216)	(3,994)	(4,074)
IT O&M Commitment Transfer	(72)	(72)	(72)	(72)	(72)
Current Plan	<u>233,812</u>	<u>260,685</u>	<u>261,962</u>	<u>242,431</u>	<u>256,582</u>
<hr/>					
	2013 Plan	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<u>GMEXP 2012 MTP to 2013 Target</u>					
Prior Plan	83,299	106,908	167,186	201,041	205,242
Changes:					
ECR 2005 & 2006 Plan Shift	(7,176)	(7,742)	(7,906)	(8,074)	(8,246)
Earlier Plant Retirements			(5,861)		
Current Plan	<u>76,123</u>	<u>99,166</u>	<u>153,419</u>	<u>192,967</u>	<u>196,996</u>



# Financial Performance

## 2011-2017 OPEX and Other Expenses (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Company Labor	89,628	87,994	96,563	101,336	106,766	101,522	100,255
Resident Contractors	20,296	23,213	24,692	25,715	22,194	20,352	20,793
Maintenance	53,410	56,011	58,878	61,255	70,664	62,434	64,479
Outages	31,183	42,971	24,285	39,541	33,533	28,908	32,036
Operations	20,660	24,351	25,396	26,439	22,617	22,420	22,862
Subtotal OPEX/Other expense	215,178	234,540	229,813	254,286	255,773	235,636	240,426
Gross Margin Expenses *	49,606	56,617	72,081	83,594	105,866	135,468	140,225
* (see next slide for detail)							
Total Income Statement items	264,783	291,157	301,894	337,880	361,639	371,104	380,651



# Financial Performance

## 2011-2017 Margin Expenses / Cost of Sales (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Gross Margin Elements</b>							
<u>ECR</u>							
Labor	-	1,600	-	-	-	-	-
Resident Contractors	568	612	2,730	5,694	5,836	6,756	6,929
Environmental Maint & Ops	17	5,304	670	1,201	4,946	7,293	7,444
ECR Activated Carbon	1,474	2,320	-	4,339	25,185	46,945	47,887
ECR Landfill Operations	-	-	3,565	7,396	7,544	10,309	10,541
ECR Mercury Monitors Operations	46	-	-	-	-	-	-
ECR Nox Emission Allowances	-	2	-	-	-	-	-
ECR Nox Reduction Reagent	166	1,285	1,258	1,177	1,195	1,249	1,320
ECR Other Waste Disposal	-	203	1,150	1,150	1,150	1,150	1,150
ECR Scrubber Reactant Ex	8,000	6,780	-	-	-	-	-
ECR SO2 Emission Allowances	-	60	-	-	-	-	-
ECR Sorbent Reactant - Reagent Only	12,260	12,010	15,183	15,169	21,537	26,714	28,735
Total ECR	<u>22,531</u>	<u>30,176</u>	<u>24,556</u>	<u>36,127</u>	<u>67,393</u>	<u>100,415</u>	<u>104,005</u>
<u>Non-ECR</u>							
Resident Contractors	318	591	500	517	527	538	548
Activated Carbon	87	24	3,558	3,401	4,211	4,075	4,613
Emissions	-	-	-	-	-	-	-
Other Waste Disposal	3,247	2,771	2,799	2,897	1,696	1,331	1,367
Mercury Monitors Operations	-	-	174	179	183	186	190
NOx Emission Allowances	84	12	70	71	30	0	0
NOx Reduction Reagent	7,930	7,903	9,874	9,166	9,195	9,394	9,487
Scrubber Reactant Ex	15,300	14,966	29,806	30,514	21,738	18,665	19,032
SO2 Emission Allowances	109	69	31	31	32	32	33
Sorbent Injection Operation	-	10	-	-	-	-	-
Sorbent Reactant - Reagent Only	-	96	713	692	861	830	950
Total Non-ECR	<u>27,075</u>	<u>26,442</u>	<u>47,525</u>	<u>47,467</u>	<u>38,473</u>	<u>35,052</u>	<u>36,220</u>
<b>Total Gross Margin</b>	<u>49,606</u>	<u>56,617</u>	<u>72,081</u>	<u>83,594</u>	<u>105,866</u>	<u>135,468</u>	<u>140,225</u>



# 2013-2017 OPEX/Other Expense Reconciliation (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Prior Plan	233,968	256,097	268,444	253,839	253,651
Target Adjustments:					
Retired ECR 2005 and 2006 Plans (Now an OPEX Expense)	7,176	7,742	7,906	8,074	8,246
Early Plant Retirement for GR and CR	-	-	(11,100)	-	-
Plant Closure Expense moved to COR (CR, GR & TY)	-	-	-	(15,416)	(1,169)
Purchase of Bluegrass CTs withdrawn	(7,260)	(3,082)	(3,216)	(3,994)	(4,074)
IT O&M Commitment Transfer	(72)	(72)	(72)	(72)	(72)
Adjusted Prior Plan	<u>233,812</u>	<u>260,685</u>	<u>261,962</u>	<u>242,431</u>	<u>256,582</u>
Drivers:					
CR7 in service 6 months earlier & Reduced ongoing maintenance	-	-		(6,960)	(7,046)
Outage schedule scope and timing updates	(1,488)	(3,414)	(1,033)	1,458	(4,451)
Stranded Labor after plant closures	-	-	2,653	4,105	-
Labor	(78)	(7)	2,532	3,396	3,415
Maint & Ops Reductions for Recovery Effort	(4,912)	(5,857)	(8,823)	(7,933)	(4,855)
Other Small Various Puts and Takes	2,479	2,880	(1,519)	(861)	(3,219)
Current Plan	<u>229,813</u>	<u>254,286</u>	<u>255,773</u>	<u>235,636</u>	<u>240,426</u>
Plan To Plan Variance	<u><b>4,000</b></u>	<u><b>6,399</b></u>	<u><b>6,190</b></u>	<u><b>6,795</b></u>	<u><b>16,156</b></u>



## 2013-2017 Margin/Cost of Sales Reconciliation (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<u>ECR Prior Plan</u>	52,474	75,336	133,643	182,683	188,550
Target Adjustments:					
ECR 2005 & 2006 Plan Shift (moved to NonECR)	(15,965)	(15,584)	(15,697)	(16,662)	(15,649)
ECR 2005 & 2006 Plan Shift (moved to OPEX)	(7,176)	(7,742)	(7,906)	(8,074)	(8,246)
Adjusted ECR Prior Plan	<u>29,333</u>	<u>52,010</u>	<u>110,039</u>	<u>157,947</u>	<u>164,655</u>
Drivers:					
CR7 will not need an SCR	-	-	-	(2,411)	(2,459)
Lower price of Activated Carbon (Net of other changes)	(3,781)	(9,708)	(33,192)	(49,378)	(50,362)
Lower SAM Mitigation (Sorbent Reagent Hyd Lime over Trona)	(2,215)	(7,842)	(9,087)	(6,591)	(6,820)
Change in service dates of new landfills	(2,057)	(858)	(875)	1,721	1,782
Other Small Various Puts and Takes	3,276	2,526	507	(873)	(2,790)
ECR Current Plan	<u>24,556</u>	<u>36,127</u>	<u>67,393</u>	<u>100,415</u>	<u>104,005</u>
	-	-	-	-	-
<u>Non-ECR Prior Plan</u>	30,824	31,572	33,544	18,358	16,692
Target Adjustments:					
ECR 2005 & 2006 Plan Shift (moved from ECR)	15,965	15,584	15,697	16,662	15,649
Earlier Plant Retirements	-	-	(8,581)	-	-
Adjusted Non-ECR Prior Plan	<u>46,790</u>	<u>47,156</u>	<u>40,660</u>	<u>35,021</u>	<u>32,341</u>
Drivers:					
CR Scrubber Reactant update with Generation	3,701	2,938	-	-	-
Other Small Various Puts and Takes	(2,965)	(2,626)	(2,187)	32	3,879
Non-ECR Current Plan	<u>47,525</u>	<u>47,467</u>	<u>38,473</u>	<u>35,052</u>	<u>36,220</u>
	-	-	-	-	-
<b>Grand Total Gross Margin Expense</b>	<u><b>72,081</b></u>	<u><b>83,594</b></u>	<u><b>105,866</b></u>	<u><b>135,468</b></u>	<u><b>140,225</b></u>



# Power Generation RAC Summary

(\$000)

		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
1	Required	24,092	11,414	23,073	9,446	4,772
2	Not Required but high risk in next 0-3 years	47,542	56,429	48,468	34,368	115,117
	Project is not required but is recommended due to:					
3A	Prudent Utility Practice.	5,818	13,518	16,060	21,967	43,886
3B	Economic benefit.	612	1,425	418	476	333
3C	New Generation.	-	-	-	-	-
3D	Not Required Improvements to Existing Assets	4,596	2,623	10,974	6,805	8,414
3E	Regulatory considerations.	767	250	3,250	100	-
3F	Acquisition of tools / equipment / vehicles.	874	525	980	969	2,728
3G	Acquisition of Land / buildings / structures.	456	-	425	-	-
3H	Community relations benefit.	214	208	216	224	-
	Mechanism Investments					
4A	ECR	280	8,676	2,400	777	9,245
4B	DSM	-	-	-	-	-
4C	Gas tracker	-	-	-	-	-
	Total RAC Summary	<u>85,251</u>	<u>95,068</u>	<u>106,263</u>	<u>75,131</u>	<u>184,496</u>



# 2012-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

	2012	2013	2014	2015	2016	2017
<u>Required &amp; Continuing Projects &gt; \$2.5m</u>						
121594 GH4 SCR CATALYST ADDITION	850	2,303	-	-	-	-
124288 BR3 Generator Rewind 11-12	9,375	-	-	-	-	-
132804 MC3 BURNERS 2013	1,228	3,740	-	-	-	-
132921 MC3 Reheater	1,373	4,627	-	-	-	-
133466 GH1 SCR L3 Rplcmt	-	976	2,267	-	-	-
133468 GH3 SCR L1 Repl	-	-	-	1,033	2,440	-
133470 GH4 SCR L1 Repl	-	-	-	1,033	2,440	-
137594 GR Plant Closure	-	-	-	5,000	-	-
137600 CR Plant Closure	-	-	-	8,600	-	-
Other Required	28,759	12,446	9,112	7,407	4,566	4,772
Total Required & Continuing	<u>41,585</u>	<u>24,092</u>	<u>11,379</u>	<u>23,073</u>	<u>9,446</u>	<u>4,772</u>
<u>System Stability &amp; Performance &gt; \$6.0m</u>						
123907 BRCT9 C Inspection 11	1,455	6,715	-	-	-	-
123910 BRCT10 C Inspection 12	-	-	1,527	6,900	-	-
127642 MC4 Burners	-	1,700	5,800	-	-	-
131974 GH 3 Burner Repl	-	-	-	-	1,740	6,645
131975 GH4 Burner Repl	-	300	4,292	3,000	-	-
131995 TC Generator Rewind	-	-	-	-	-	6,953
131997 TC2 ID Fan Rotor Ovhl	-	-	-	-	3,100	-
132924 MC4 Reheater	-	1,600	6,900	-	-	-
133102 GS GE 345kV Spr LGE	-	-	-	1,350	3,150	-
134372 GS PE PR BS - LGE	-	1,000	-	6,100	-	10,000
134373 GS PE BR BS - LGE	-	-	-	-	-	7,500
134374 GS PE TC BS - LGE	-	-	-	-	-	11,400
135234 CR CCGT HGPI	-	-	-	-	-	11,535
Other Stability & Performance	8,962	36,227	37,899	31,118	26,378	61,084
Total Stability & Performance	<u>10,417</u>	<u>47,542</u>	<u>56,419</u>	<u>48,468</u>	<u>34,368</u>	<u>115,117</u>



## 2012-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<u>Prudent Utility Practice &gt; \$3.0m</u>						
131201 GH1 4 KV Breaker Upgrade	-	-	-	-	116	-
131955 BR2 Gen Rewind	-	-	-	-	5,250	10,500
132960 MC1 DCS Hardware	-	-	-	-	1,000	5,000
132961 MC2 DCS 2018	-	-	-	-	-	1,000
133102 GS GE 345kV Spr LGE	-	-	-	1,350	3,150	-
134234 MC4 Generator Stator Bar	-	-	8,000	-	-	-
136097 DX Dam Leakage Rem Phase II	99	-	-	-	-	7,691
137241 GH3 Upper Econ Repl 2018	-	-	-	-	-	1,000
137473 GH3 Finishing SH Repl 2018	-	-	-	-	-	1,424
Other Prudent Utility Practice	1,888	5,818	5,518	14,710	12,451	17,271
Total Prudent Utility Practice	<u>1,988</u>	<u>5,818</u>	<u>13,518</u>	<u>16,060</u>	<u>21,967</u>	<u>43,886</u>
Economic Benefit & Enhancement	35	612	1,425	418	1,103	333
<u>Environmental Mechanism (ECR)</u>						
133939 BR3 SCR Catalyst	-	-	852	2,300	-	-
135281 GH3 PJFF BC 2017	-	-	-	-	-	2,704
135283 GH4 PJFF BC 2017	-	-	-	-	-	2,704
136640 GS RD Hg Contrl LGE	-	-	4,000	-	-	-
Other Environmental Mechanism	413	280	3,823	100	777	3,837
Total Environmental Mechanism	<u>413</u>	<u>280</u>	<u>8,676</u>	<u>2,400</u>	<u>777</u>	<u>9,245</u>



# 2012-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<u>All Other Projects &gt; \$1.0m</u>						
123837 MC2 FGD Refurbishment	3,524	-	-	-	-	-
124607 GH2 ECONOMIZER REPL	2,008	-	-	-	-	-
134293 OF Trash Rakes	-	-	-	-	-	2,000
136480 GS GE PdM Budget LGE	-	200	200	200	200	200
137336 GH 657 Scraper Repl	-	-	-	-	-	1,900
137597 TY Plant Closure	-	-	-	3,000	-	-
138357 BRCT GT24 Fuel Flexibility KU	-	2,500	-	-	-	-
131638LGE TC CT INSTALL 345KV CI	-	-	-	1,888	-	-
Other	<u>23,353</u>	<u>4,207</u>	<u>3,451</u>	<u>10,758</u>	<u>7,271</u>	<u>7,042</u>
Total All Other	<u>28,883</u>	<u>6,907</u>	<u>3,651</u>	<u>15,846</u>	<u>7,471</u>	<u>11,142</u>
Total Capital	<u>83,320</u>	<u>85,251</u>	<u>95,068</u>	<u>106,263</u>	<u>75,131</u>	<u>184,496</u>





# Capital Reconciliation (w COR) –Accrual Basis (\$000)

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	2013 <u>Budget</u>	2014 <u>Plan</u>	2015 <u>Plan</u>	2016 <u>Plan</u>	2017 <u>Plan</u>
Prior Plan	95,133	106,293	155,545	104,676	292,103
<b>Changes + \$3.5m</b>					
123906 BRCT6 C Inspection 13	-	-	-	-	28,009
123910 BRCT10 C Inspection 12	-	(4)	3,619	-	-
126591 TC CT HGPI LGE#5	-	4,246	-	-	-
126592 TC CT HGPI Spare Parts LGE	4,252	-	-	-	-
126647 GS-LGE-CEMS Shltr Rplt	-	2,700	8,250	-	-
127590 MC4 Condenser	500	4,000	-	-	-
131956 BRCT 11N2s C Insp & Parts	-	-	-	2,500	10,300
131986 GH3 Turb Eff Upgr	-	-	700	6,000	8,500
131987 MC Coal Barge Unloading System	-	-	-	-	14,000
131991 TC1 Major Boiler Component Repl	-	-	-	-	3,863
131992 TC1 SDRS Rebuild	-	-	-	-	43,673
131993 TC! ESP Rebuild 2017	-	-	-	-	14,436
131994 TC1 Bot Ash Drag Chain	-	-	-	-	3,637
131996 TC1 Turbine Dense Pack	-	-	-	-	13,086
132000 TC CT HGP Insp #1	-	-	-	-	(5,064)
132001 TC CT HGP Insp #2	-	-	-	-	(5,064)
132970 MC4 Turbine Dense Pack	-	-	-	1,000	6,500
134372 GS PE PR BS - LGE	(1,000)	12,200	18,500	-	(10,000)
135234 CR CCGT HGPI	-	-	-	-	(11,535)
135368 BG Ongoing Capital	1,098	815	9,083	110	113
135369 BG Purchase	-	-	-	-	-
136097 DX Dam Leakage Rem Phase II	7,105	-	-	-	(7,691)
136640 GS RD Hg Contrl LGE	-	(4,000)	-	-	-
136649 MC4 Final SH Pendants	(1,400)	(2,600)	-	-	-
137024 GH 138kv Switchgear Upgrade	-	-	(500)	(3,500)	(1,525)
137594 GR Plant Closure	-	-	(5,000)	-	-
137600 CR Plant Closure	-	-	(8,600)	-	-
126593LGE TC CT HGPI # 6	(3,875)	-	-	-	-
All Other Changes	(16,561)	(28,582)	(75,334)	(35,656)	(212,845)
Current Plan	<u>85,251</u>	<u>95,068</u>	<u>106,263</u>	<u>75,131</u>	<u>184,496</u>



# 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Mill Creek	215	222	223	223	223	223	223
Trimble County/CTs	139	157	162	167	167	169	166
Cane Run/Ohio Falls	124	123	126	125	45	45	45
Ghent	202	210	222	228	239	241	238
Brown/Dix/Tyrone	151	154	155	160	160	160	160
Green River	48	41	41	41	2	2	2
Generation Services	48	54	59	63	65	67	71
Other Generation Support	44	46	49	49	49	49	49
Stranded Employees					47	47	0
<b>TOTAL</b>	<u>971</u>	<u>1,007</u>	<u>1,037</u>	<u>1,056</u>	<u>997</u>	<u>1,003</u>	<u>954</u>
From 2012 MTP		<u>1,023</u>	<u>1,045</u>	<u>1,059</u>			
Variance to 2012 MTP		<u>-16</u>	<u>-8</u>	<u>-3</u>			
Co-Ops/Interns Included above			15	15	15	15	15
Regular Full Time Employees w/o Co-Ops/Interns			<u>1,022</u>	<u>1,041</u>	<u>982</u>	<u>988</u>	<u>939</u>
MC - 4 incremental Station Helper Positions			4	4	4	4	4
Energy Services Work Force Planning			<u>1,026</u>	<u>1,045</u>	<u>986</u>	<u>992</u>	<u>943</u>



# Operational Performance

## Key Performance Indicators

KPI	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Generation (Twh) <sup>1</sup>	34.5	39.1	35.1	35.1	35.0	35.0	35.0
EAF (Steam)	84.0%	86.2%	85.7%	86.3%	89.3%	86.4%	87.8%
EFOR (Steam)	6.1%	5.6%	5.0%	5.0%	5.0%	5.0%	5.0%
Controllable Cost (\$M) <sup>2</sup>	\$ 310.91	\$ 291.16	\$304.32	\$342.24	\$365.41	\$373.01	\$392.18
Controllable Cost/mwh <sup>2</sup>	\$ 9.01	\$ 7.45	\$ 8.66	\$ 9.75	\$ 10.45	\$ 10.65	\$ 11.22
Recordable Injuries <sup>3</sup>	1.59	1.36	1.80	1.80	1.80	1.80	1.80
Lost Workday Case Rate <sup>4</sup>	0.34	1.57	0.40	0.40	0.40	0.40	0.40

<sup>1</sup> Steam Generation includes 75% of Trimble County 1 and 2.

<sup>2</sup> Controllable Costs include Utility O&M, Other Cost of Sales, and Below-the-Line expenses.

<sup>3</sup> The 2012 forecast for RIIR is the July YTD value, hearing tests currently underway.

<sup>4</sup> The 2012 forecast for Lost Workday Case Rate is the July YTD value.

\*\* 2012 Forecast is from the 7&5 forecast.

*Red items still subject to change  
before final version complete*



# Plan Risks

- *Any subsequent changes to approved or proposed environmental regulations will impact the investment, construction and implementation of new systems in this plan*
- *Generation dispatch for the plan years is based on current view of regulations and assumptions on pricing for gas supply and allowances which is subject to significant changes to unit cost profiles and maintenance schedules if changes occur*
- *Integration of the major investment in new environmental compliance systems is tied to an extremely aggressive schedule that may impact normal operations of existing plants and could require changes to the outage planning schedule for tie in processes*
- *Availability of equipment and construction resources for major environmental compliance investment across the industry could lead to higher prices and impacts to planned schedule of completion*
- *Expansion of generating capacity and other generation changes consistent with approved integrated resource plan must be balanced with efforts to address transmission system load requirements*
- *Reductions in this plan compared to the previous year's level could result in financial risk in the event of major equipment failure or unplanned events*



# Appendix



# 2013 Plan Updated Historical Turbine Outage Schedule

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	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22						
GH1	█			█						█							█																		█			
GH2						█									█							█							█									
GH3					█								█								█																	
GH4			█																█																█			
BR1	█									█								█																	█			
BR2			█								█									█																		
BR3		█						█									█																					
GR3			█										█																									
GR4					█	█								█																								
TY3						█																																
CR4						█									█									█														
CR5				█								█								█																		
CR6					█							█									█																	
MC1	█					█								█											█													█
MC2					█								█																									█
MC3					█									█									█															
MC4	█							█									█																					█
TC1						█						█																										
TC2																																						
Overhauls	4	1	2	3	5	6	2	0	1	1	3	4	4	3	3	1	2	2	2	2	1	2	4	1	3	1	0	2	2	3	1	3	2					

Historical  
 Most Recent  
 2013 Bus Plan    VG - Valves and Generator

# Year over Year Walk Forward OPEX and Other Expense

<b>2011 Actual</b>	<b>215,178</b>	<b>2014 Plan</b>	<b>254,286</b>
Headcount Change	3,129	Headcount Change	(10,026)
Wage & Merit Increase	2,563	Wage & Merit Increase	3,110
Outages work scope changes	11,788	Outages work scope changes	(6,008)
Maintenance	2,601	Maintenance	(591)
		Inventory Write off - CR & GR	10,000
Other Puts and Takes	<u>(719)</u>	Other Puts and Takes	<u>1,487</u>
<b>2012 Forecast</b>	<b>234,540</b>	<b>2015 Plan</b>	<b>255,773</b>
Headcount Change	2,544	Headcount Change	615
Wage & Merit Increase	2,813	Wage & Merit Increase	2,957
Outages work scope changes	(18,687)	Outages work scope changes	(4,625)
Maintenance	2,866	Maintenance	4,467
		Inventory Write off - CR & GR	(10,000)
Other Puts and Takes	<u>5,737</u>	CR & GR Unit retirements in 2015	(12,697)
		Other Puts and Takes	<u>(853)</u>
<b>2013 Budget</b>	<b>229,813</b>	<b>2016 Plan</b>	<b>235,636</b>
Headcount Change	1,755	Headcount Change	(5,112)
Wage & Merit Increase	2,952	Wage & Merit Increase	2,920
Outages work scope changes	15,257	Outages work scope changes	3,129
Maintenance	2,377	Maintenance	2,046
		Other Puts and Takes	<u>1,808</u>
Other Puts and Takes	<u>2,133</u>		
<b>2014 Plan</b>	<b>254,286</b>	<b>2017 Plan</b>	<b>240,426</b>



# 2011-2017 Headcount progression

<b>2011 Actual</b>	<b>971</b>	<b>2014 Plan</b>	<b>1,056</b>
Trimble County 2 Support	18	Workers displaced or moved to other	
Ghent Maintenance & Operations	8	LOBs after CR & GR retirement	(72)
Staff positions to support generating plants	10	Support for Fabric Filters	6
	-	Incremental increase for aging work force	5
		Performance and Electrical Engineers to support generating plants	2
<b>2012 Forecast</b>	<b>1,007</b>	<b>2015 Plan</b>	<b>997</b>
Compliance Requirements	2	Maintenance and Planner hired in anticipation of retirements in 2017	4
Trimble County 2 Support	5	Staff positions to support generating plants	2
General & Administrative Support	3		
Satisfy operation & compliance of relays at generating stations	2		
New requirements Coal Combustion Products	5		
Incremental increase for aging work force	5		
Staff positions to support generating plants & field	8		
<b>2013 Budget</b>	<b>1,037</b>	<b>2016 Plan</b>	<b>1,003</b>
Operators	12	Satisfy operation & compliance of relays at generating stations	2
Incremental increase for aging work force	3	Workers displaced to other LOBs after CR & GR retirement	(47)
Research Support	1	Permanent Retirements (replacements hired last year)	(6)
Lab Analysis	2	Performance and Mechanical Engineers to support generating	2
Staff positions to support generating plants	2		
Retirement not replaced	(1)	<b>2017 Plan</b>	<b>954</b>
<b>2014 Plan</b>	<b>1,056</b>		





## Other Balance Sheet Costs (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Stores Expense							
Labor <sup>1</sup>	2,727	2,780	2,530	2,586	2,664	2,744	2,826
Non labor <sup>2</sup>	943	246	252	258	263	268	274
Total	<u>3,670</u>	<u>3,026</u>	<u>2,782</u>	<u>2,844</u>	<u>2,927</u>	<u>3,012</u>	<u>3,100</u>
Local Engineering							
Labor	589	216	80	62	64	66	68
Non labor	213	145	118	81	82	84	86
Total	<u>802</u>	<u>361</u>	<u>198</u>	<u>143</u>	<u>146</u>	<u>150</u>	<u>154</u>
Other Balance Sheet							
Labor							
Non labor							
Total	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Other Costs	<u>4,472</u>	<u>3,387</u>	<u>2,979</u>	<u>2,987</u>	<u>3,074</u>	<u>3,162</u>	<u>3,254</u>

Note 1: 2015-2017 manually escalated 3%. PowerPlant does not escalate.

Note 2: 2015-2017 manually escalated 2%. PowerPlant does not escalate.





**PPL companies**

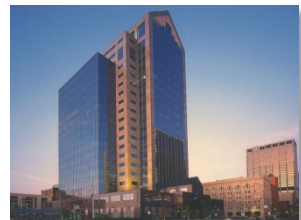
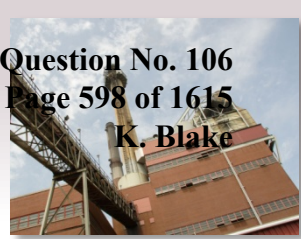
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# Transmission

# 2013 Business Plan

*September 19, 2012*

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# Plan Highlights

- **The 2013-2017 Transmission Business Plan is designed to meet the overall goals of safety, regulatory compliance, system reliability, and financial/budget performance.**
- **Plan challenges and considerations:**
  - *Increasing scrutiny and on-going development of federal regulatory policies (FERC, NERC, SERC) continue to impact the transmission business planning, operations, and human resources.*
  - *The plan reflects the transmission organization challenges of meeting escalating regulatory compliance requirements and associated Lines and Substation system reliability projects while maintaining high levels of system performance and customer satisfaction.*
- **To meet these challenges, the plan includes:**
  - *Work force planning changes and associated headcount.*
  - *Capital funding to address Louisville area study projects , Cane Run CCGT, line rating verifications, retirement of Green River units 3 and 4, as well as CIP security requirements.*
  - *O&M funding increases over the 2012-2016 MTP primarily to address compliance and vegetation clearance needs.*
- **The plan includes resources to continue to deploy “Smart Grid” technologies for substation protection and control systems and “system hardening” through static wire replacement.**
- **The Plan includes continuing to verify all lines ratings for the Bulk Electric System (100kV lines and above) as recommended by NERC in 2010. Verification of all facility ratings based on actual field conditions will be complete by the end of 2014.**



# Major Assumptions

## 1. Regulatory

- 1.1 The current regulatory environment, which includes continual escalating scrutiny and oversight in FERC, NERC, SERC policy and requirements will continue. FERC has directed NERC to change the definition of the bulk electric system to include all facilities 100kV and above, as well as blackstart resources in the Transmission Operator (TO) restoration plan.
  - 1.1.1 Vegetation Management is not expected to be included in this definition change.
- 1.2 Maintaining current compliance levels will require increased training and additional personnel (1 person hired in 2012) to assist in the training effort (PER-005 requirements add a significant burden in documentation, evaluation, and simulation).
- 1.3 As “smart” technologies are developed and deployed, CIP standards implications (currently 100kV and above) must be a consideration, because they will be networked to gain full functionality and fall within CIP scope.
- 1.4 Cyber Security:
  - 1.4.1 FERC Issued Order 761, April 19, 2012, approving the NERC CIP Version 4 standards. CIP Version 4 implements 17 criteria for identifying critical assets (known as Brightline Criteria) and compliance with V4 will be required starting in April 1, 2014.
  - 1.4.2 Secure networks to the substations (pre-cursor to smart grid) as well as increased physical security would be required for implementation of the full capability and efficiencies of new substation relaying and metering equipment, network capability and associated increased cyber security.
  - 1.4.3 CIP version 5 could be implemented as early as July 2015.
  - 1.4.4 The 2013 BP includes \$3.6m for NERC Cyber Security driven by new CIP standards (2013-2017), including a test environment in preparation of Version 5.



# Major Assumptions

## 1. Regulatory (cont.)

- 1.5 Vegetation management standard will continue to focus on 200 kV and above. If a 100kV vegetation threshold is adopted, it is estimated to cost an incremental \$30.0m to achieve compliance and \$7.5m annually to remain compliant.
- 1.6 Beginning 2013, KYPSC regulations include additional wood pole and steel tower inspections. The cost is estimated to be \$350k. / year.
- 1.7 The cost to comply with the NERC Line Rating Recommendation (R-2010-10-07-01) from October 2010 has had a significant impact on capital spending in 2012-2014. All work must be completed by the end of 2014. The updated capital estimate of \$47.5m is \$12m lower than the 2012 Plan.
  - 1.7.1 All lines over 100kV will be surveyed and upgraded if necessary to meet the listed line rating, 33% of all lines will be completed by the end of 2012 (on target).
  - 1.7.2 Ongoing surveying of these lines is expected to cost \$1.8m annually (O&M) beginning in 2015. All lines, 100kV and above, must be verified every 5 years. No change from the 2012 MTP.
  - 1.7.3 The Plan includes implementing a ten year 69kV line verification program at an annual capital cost of \$3m.
- 1.8 FERC and the industry are still evaluating Order 754, regarding the requirements in the transmission planning reliability standards and whether or not they adequately address the analysis and discovery of a protection system failure in order to develop plans to meet the performance requirements for the Bulk Electric System. This could potentially impact Transmission Planning (TPL) standards TPL-001, 002, 003, and 004.



# Major Assumptions

## 1. Regulatory (cont.)

- 1.9 The industry is still interpreting Order 1000, which would require transmission providers to participate in a regional planning process that satisfies Order 890 principles and produces a regional transmission plan. The planning process must consider transmission needs driven by public policy requirements and include cost allocation methodologies. It is too early to know what impact this Order will have on the Transmission organization during the BP period. The BP includes \$375k annually for estimated costs associated with Order 1000 compliance.
- 1.10 The plan does not include costs to comply with CIP version 5 or future CIP versions if those versions bring the current serial communication to substation RTUs into scope. This is still being debated but indications are that the current intent of regulators is to include this in scope.

## 2. Expansion Plan

- 2.1 Reliability projects in the Business Plan are based on the annual transmission expansion plan (2011 TEP).
- 2.2 A combined cycle generating unit (CR7) will be installed by May 1, 2015 at Cane Run (replacing the current coal generation). It is assumed that \$46.1m is needed to upgrade transmission facilities for this unit (see slide 26). The new Cane Run injects about 100 MW more than existing generation.
- 2.2.1 The \$46.1m is comprised of \$32.0m for projects originally identified for the CR7, \$9.9m is an estimate for work that was expected to be completed along with the Bluegrass CT purchase in the 2012 Plan, and \$4.2m is for transformer replacements beyond the 2013 Business Plan.
- 2.2.3 Relocation of the existing line at Cane Run is included in the budget for the combined cycle (Project Engineering budget ).



# Major Assumptions

## 2. Expansion Plan cont.

2.3 Green River plant will be retired April 16, 2015.

2.3.1 Capital of \$17m is included in the 2013 BP for Transmission upgrades needed at the Matanzas substation, for system reliability, due to the loss of the Green River generation.

2.4 A Combined Cycle unit will be installed by June 1, 2018 at the location of existing Brown Generation site.

2.4.1 This is a placeholder location, as a final site will not be known for some time. It is assumed that \$35m is needed to upgrade transmission facilities for this new unit.

2.5 A combined cycle unit will be installed in-service in 2022 (unknown site).

2.5.1 Capital of \$80m is estimated as a placeholder and included in the 2013 LTP for Transmission upgrades associated with a new combined cycle unit.

2.6 The plan does not assume any cost for changes to FERC Transmission Planning (TPL) standards.

2.7 The plan does not include a capital forecast for long-term transmission service across our system. There are currently no long term transmission service requests that are expected to require material capital.

2.8 The Plan does not include any projects that could come from FERC 890 required Economic Planning Studies.

2.9 *No significant economic development projects requiring transmission system upgrades.*

2.10 The Plan does not anticipate a renewable standard in Kentucky.





# Major Assumptions

## 3. Asset Management

- 3.1 Phase II of the Cascade asset management software will be implemented during 2012 and Phase III during 2013. LOAD (Facility Rating Program) was implemented in July 2012.
  - 3.1.1 Cascade Phase III is relying on implementation of an EMS PI system planned for 2013. Schedules are interdependent.
- 3.2 The Plan includes the creation of a critical spare inventory of transformers, that is continually replenished - see attached table in the appendix for planned purchases of spare transformers.
  - 3.2.1 FERC/NERC have increased the emphasis on utilities' inventory of spare transformers in assessing the transmission system's readiness for High Impact Low Frequency (HILF) events, such as Geomagnetic Disturbances, Physical Attack, and Cyber Attack.
  - 3.2.2 LG&E/KU will continue to participate in the Edison Electric Institutes' (EEI) Spare Transformer Equipment Program (STEP) at the 345/138kV voltage class. Participation requires replacement transformer purchases within 18 months of a spare being put into service.
- 3.3 The Static wire upgrade program will continue for equipment that is over 50 years old.
- 3.4 The Plan includes the continuation of a Breaker Replacement program that was started in 2012.
- 3.5 The Control House Replacement program will continue with a goal of replacing 2 control houses per year. (see schedule on slide 30)



# Major Assumptions

## 4. ITO & RC

- 4.1 Effective September 1, 2012, TranServ became the ITO service provider to LG&E/KU.
- 4.2 TVA will be retained as the Reliability Coordinator (RC) consistent with the 2012 MTP.
- 4.3 KU will reimburse KMPA, Hoosier, and OMU for their MISO drive-out charges through 2013, no reimbursements are assumed after 2013.
  - 4.3.1 The Plan assumes a filing with FERC regarding MISO exit obligations will occur in 2013. Expenses will be higher than the current plan if unsuccessful (estimated at \$25.4 over the 2014-2017 Business Plan years).

## 5 Headcount

- 5.1 Distribution SCADA Operations continue to be evaluated whether they belong in Transmission, but for planning purposes are expected to remain a function in Transmission in the near term.
- 5.2 Anticipated approval of PRC-005 Version 2 will require additional monitoring of relays, carriers, and fiber within the Transmission department and result in a 50% increase to current resource workload. Approval could occur by March 31, 2013 with compliance required by April 2015.
- 5.3 Additional work associated with EMS CIP compliance could result in augmenting staff with contract labor where possible.

# Major Assumptions

## 6 Operational and Other

- 6.1 Customer sensitivity and awareness to reliability and power quality will continue to elevate.
- 6.2 No Federal or State mandated Smart Grid initiatives beyond our current asset renewals.
- 6.3 Material lead times continue to lengthen construction lead times.
  - 6.3.1 Estimates – LiDAR (4 weeks on site) / (4 weeks process data)
  - 6.3.2 Steel Poles – 40 weeks or more
  - 6.3.3 Transformers – 45 weeks
  - 6.3.4 Breakers – 16 weeks
- 6.4 The ability to obtain outages for capital projects will continue to be difficult, but is currently manageable.
- 6.5 The Plan does assume “finite” or “reasonable” lead times on all ROW land acquisitions.
- 6.6 The TCC EMS Switchover is nearing completion (expected 1st quarter of 2013). This was a recommendation made by KEMA following their review of August 2010 events and the revised EOP 008-1 standard and has resulted in two major changes:
  - 6.7.1 Enable switching of all RTU's to either EMS system as appropriate, EOP-008-1 requires full functionality of the backup control center effective July 1, 2013.
  - 6.7.2 Move the EMS System from Dix Dam to the BOC Data Center in Louisville



# Major Assumptions

## 6 Operational and Other (cont.)

6.8 Engineering of a new backup control center has begun with completion expected in May 2014. Benefits include:

6.8.1 Provides an alternate control center within reasonable distances to Simpsonville Control Center

6.8.2 Addresses facility deficiencies identified at Dix Control Center in the KEMA report.

6.8.3 Vacating the Dix Dam facility will require significant man hours to comply with CIP 007 R7 for disposal and redeployment. The physical security perimeter (PSP) must remain intact at Dix Dam until all CCA equipment located there has followed and evidenced the disposal and redeployment processes.

## 7 Annual Escalation Rates

7.1 Internal labor: 3.0%.

7.2 Contract labor: 3.0%



# Financial Performance

## 2011-2017 OPEX and Other Expenses (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Labor	7,888	8,602	9,057	9,519	9,805	10,099	10,401
Burdens	2,224	2,455	2,524	2,646	2,725	2,806	2,890
Right of Way	5,085	4,606	4,936	5,539	6,150	6,773	7,409
Aerial and Ground Inspections	856	1,144	1,506	1,536	1,566	1,598	1,630
Storms	350	343	31	31	32	33	33
NERC Lidar Testing	-	-	-	-	1,200	1,224	1,248
Nonlabor Alloc from Distribution	2,778	2,648	2,867	2,873	2,930	2,989	3,049
EKPC Amortization	499	504	504	84	-	-	-
Other Non-labor	6,235	7,324	8,387	8,783	9,167	9,347	9,507
KMPA (moved to COS in 2012)	4,709	-	-	-	-	-	-
Subtotal OPEX/Other expense	<u>30,624</u>	<u>27,626</u>	<u>29,812</u>	<u>31,011</u>	<u>33,575</u>	<u>34,869</u>	<u>36,168</u>
Gross Margin Expenses *	13,253	15,667	16,703	10,521	10,471	10,825	11,419
* (see Margin slide for detail)							
Total Income Statement items	<u>43,877</u>	<u>43,293</u>	<u>46,515</u>	<u>41,532</u>	<u>44,046</u>	<u>45,694</u>	<u>47,587</u>



## 2013-2017 OPEX/Other Expense Reconciliation (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	32,084	32,113	32,870	33,290	34,081
Drivers:					
JAD Coal	(500)	(250)	(250)	-	-
FERC Order 1000	375	383	390	398	406
KSPC Ground Line Reg	350	357	364	371	379
Incremental ROW	500	1,000	1,500	2,000	2,500
NERC Lidar Testing	-	(1,800)	(600)	(600)	(600)
KMPA Remapped to COS	(3,029)	-	-	-	-
Target Adjust - O&M Letters	(133)	(133)	(133)	(133)	(133)
Target Adjust - 34.5 KV	(153)	(157)	(161)	(165)	(169)
D.Boone and Norfolk Easement	100	102	104	106	108
Change in Labor	(260)	(921)	(642)	(654)	(666)
EPRI	141	155	157	161	163
Other	337	163	(24)	95	99
Current Plan	<u>29,812</u>	<u>31,011</u>	<u>33,575</u>	<u>34,869</u>	<u>36,168</u>



# Financial Performance

## 2011-2017 Margin Expenses / Cost of Sales (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Margin Expenses							
<b><u>Mechanism Recoverable</u></b>							
xxx							
xxx							
Total	-	-	-	-	-	-	-
<b><u>All Other</u></b>							
TVA - Reliability	1,703	1,952	2,173	2,243	2,288	2,334	2,380
SPP/Transerv - ITO	8,069	6,681	2,791	2,931	2,990	3,049	3,110
RTO Admin Fees	366	252	732	750	693	703	753
Hoosier - Depancaking	-	-	202	-	-	-	-
OMU - Depancaking	-	-	1,804	-	-	-	-
KMPA - Depancaking	-	2,520	4,842	-	-	-	-
EKPC - NITS	1,920	1,893	1,932	1,948	1,987	2,027	2,067
Intercompany Transmission Exp	1,035	1,577	1,643	1,978	1,927	2,107	2,431
3rd Party Transmission Exp	160	802	584	671	586	605	676
Total	13,253	15,677	16,703	10,521	10,471	10,825	11,419
Total Margin/Cost of Sales	13,253	15,677	16,703	10,521	10,471	10,825	11,419



## 2013-2017 Margin/Cost of Sales Reconciliation (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
<u>Mechanism recoverable</u>					
Prior Plan					
Drivers					
Current Plan					
<u>Other</u>					
Prior Plan	8,684	10,143	10,346	10,553	12,885
<u>Drivers</u>					
KMPA Payments remapped to COS	3,029	-	-	-	-
TVA - Reliability	123	126	129	131	134
3rd Party Transmission	35	(402)	(508)	(511)	(1,327)
RTO Expenses	475	270	203	204	(234)
NL Intercompany Transmission	787	619	541	693	210
EKPC Perm for Serving KU Customers	(151)	(135)	(137)	(140)	(143)
FERC Order 620 & 726	(100)	(100)	(102)	(104)	(106)
Depancaking Exp. (previously netted against revenue)	3,820	-	-	-	-
Other	1	-	(1)	(2)	(1)
Current Plan	<u>16,703</u>	<u>10,521</u>	<u>10,471</u>	<u>10,824</u>	<u>11,418</u>

•Assumes depancaking expenses are eliminated beginning in 2014





# 2011-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Expansion Plan</b>							
Cane Run CCGT - Transmission	-	1,338	20,378	12,255	3,940	4,000	-
2018 CCGT - Transmission	-	-	-	-	10,488	11,833	12,333
Green River Retirement	5	9,985	5,967	-	-	-	-
<b>Ongoing Capital</b>							
Smart Grid Enabling (Control House Upgrades)	217	(0)	1,500	2,245	3,015	2,550	1,550
Parameter/Thermal Upgrades	8,167	4,082	1,099	500	888	5,300	21,538
Pole Replacements	9,298	9,178	4,721	2,969	6,400	7,800	12,050
Breakers	6,029	8,107	4,483	2,160	2,025	2,325	2,675
Static Replacements	502	3,010	-	550	1,027	2,200	2,500
Transformer Replacements	1,823	1,001	5,539	-	-	-	4,000
Line Relocations	495	780	3,744	275	870	957	1,000
New Facilities	532	1,309	1,538	501	933	1,026	1,100
Storms	1,548	2,216	500	768	806	886	960
Distribution Taps	659	1,186	5,120	2,299	6,167	4,424	4,934
<b>Hardware/Software</b>	3,718	3,384	2,589	715	1,948	248	550
<b>Special Projects</b>							
Line Clearance NERC Alert	3,949	13,700	13,406	16,427	-	-	-
Cyber Security (CIP)	63	703	1,038	2,311	83	100	101
Spare Transformers	3,321	2,289	3,067	1,855	4,950	-	1,550
Louisville Area Upgrade	2,130	6,679	16,348	9,775	6,464	-	-
KMPA	3,438	1,282	-	-	800	2,100	2,100
EMS Switchover	2,278	1,987	66	-	-	-	-
Back-up Control Center	-	601	7,768	3,632	-	-	-
<b>Other</b>	10,364	7,722	8,602	8,403	7,815	10,339	8,401
<b>Total Capital</b>	<u>58,535</u>	<u>80,539</u>	<u>107,472</u>	<u>67,640</u>	<u>58,619</u>	<u>56,088</u>	<u>77,342</u>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Prior Plan	106,558	88,306	73,918	65,150	94,184
Changes:					
Bluegrass Transmission	(4,830)	(10,920)	(10,920)	(10,920)	(10,920)
Cane Run CCGT - Transmi	13,423	901	(6,451)	4,000	-
2018 CCGT - Transmissior	-	-	10,488	11,833	12,333
Green River Retirement	2,267	-	-	-	-
Line Clearance NERC Aler	(3,606)	1,463	(2,724)	-	-
69kV Line Ratings	3,000	3,000	3,000	3,672	4,000
Louisville Area Upgrade	(3,521)	7,134	6,464	-	-
Parameter/Thermal Upgrad	365	(3,300)	(10,428)	(2,600)	(13,462)
Transformers	2,433	(4,344)	350	(2,700)	1,145
Pole Replacements	(993)	(816)	(236)	1,362	12,050
Smart Grid Enabling (Conti	(2,000)	(2,356)	(335)	250	(7,250)
Distribution Taps	(5,285)	(9,918)	5,726	294	1,004
Cyber Security (CIP)	(1,031)	2,214	(14)	3	101
Breakers	(402)	(1,425)	(570)	180	2,675
Back-Up Control Center	3,768	3,632	-	-	-
LTP Base Project (zeroed	280	-	(3,000)	(12,000)	(30,894)
Other	(2,954)	(5,930)	(6,649)	(2,437)	12,376
Current Plan	<u>107,472</u>	<u>67,640</u>	<u>58,619</u>	<u>56,088</u>	<u>77,342</u>

# Financial Performance

## 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
VP Transmission	2	1	1	1	1	1	1
Reliability & Compliance	3	5	4	4	4	4	4
Director Operations	2	3	3	3	3	3	3
System Operations	30	28	29	30	30	30	30
Balancing Authority	11	11	11	11	11	11	11
Energy Management System	12	13	14	14	14	14	14
Lines Construction	28	29	29	29	29	29	29
Substation Construction	9	12	11	11	11	11	11
Substation Protection	15	17	20	20	20	20	20
Director Strategy & Planning	2	2	2	2	2	2	2
Strategy & Planning	12	13	13	13	13	13	13
Reliab Performance & Standarc	5	5	6	6	6	6	6
Policy and Tariffs	3	3	3	3	3	3	3
Co-Ops/Interns/Temp	4	4	4	4	4	4	4
<b>TOTAL</b>	<b>138</b>	<b>146</b>	<b>150</b>	<b>151</b>	<b>151</b>	<b>151</b>	<b>151</b>
From 2012 Business Plan		147	148	149			
Variance to 2012 Business Plan		-1	2	2			
<u>Plan over Plan increases (decreases)</u>							
Budget Analyst		-1	-1	-1	Moved to Finance & Budgeting, ES		
Coop/Intern/Temporary		-1			Geswein hired on Part-time		
Subs Construction - Manager		1	1	1	New manager hire		
Subs Protection - Engineer backfill		-1			1st Quarter 2013 hire		
Strategy & Planning - Planning Engineer		1	1	1	New Plan addition, hiring in 2012		
Rel. Perf & Standards - Eng/Analyst			1	1	New Plan addition, hiring in 2013		
Total		-1	2	2			



# Operational Performance

## Key Performance Indicators

<u>KPI</u>	<u>2011 Year End</u>	<u>2012 Forecast</u>	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Recordable Injury Incident Rate - Employees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recordable Injury Incident Rate - Contractors	2.4	1.8	2.7	2.7	2.7	2.7	2.7
SAIDI (minutes)	17.6	13.6	12.7	12.4	12.0	11.7	11.5

*The 2012 RIIR forecast is assumes no additional injuries in 2012.*

*SAIDI minutes are based on a 5 year average, with reductions assumed due to increased vegetation management spending.*



# Plan Risks

- *Newly proposed TPL Reliability Standard may require additional headcount and capital expenditures.*
- *Order 1000 compliance filings are due February 2013 (Regional) and April 2013 (Inter-regional). Unknown capital and O&M costs could result above the O&M estimate included in the Plan.*
- *New TEP will be based on updated information for generation which has changed significantly from the current TEP. New reliability projects may surface.*
- *If future generation assumptions change, major impacts to transmission plans would be expected.*
- *New transmission service requests and generator interconnects will impact the plan.*
- *NERC reliability standards will continue to drive Transmission through stricter interpretation of existing standards and the addition of new standards, penalty and fine assessment, and increasing audit scrutiny (SERC audits for both CIP and Reliability Standards scheduled in 2012).*
- *ITO Analysis of system requirements needed for network integration of CR7 could impact capital.*
- *Cyber Security will be an expanding area of compliance standards and scrutiny.*
- *The increasing development of federal regulatory policies (FERC, NERC, SERC) will further impact human resources and the challenges to remain compliant.*
- *System protection asset replacement (Remote Terminal Unit's (RTU), relays, station control houses).*
- *Key Asset failure – transformer/breakers.*
- *Knowledge transfer and retention as employees retire.*
- *Federal and State policy driving Smart Grid initiatives.*
- *KYPSC mandated system hardening investment.*



# Appendix



# Year over Year Walk Forward OPEX and Other Expense

2011 Actual (KMPA removed, with adjusted burdens)	30,624
KMPA moved to Cost of Sales	(4,907)
Labor and Burdens	1,109
Other	800
2012 FC (adjusted without KMPA)	27,626
2012 ITO transition expenses	(500)
Ground Line Inspection Regulation	350
FERC Order 1000	375
Vegetation Management	500
Lines Easement D.Boone & Norfolk So.	100
Labor and Burdens	524
Lower Storms Expenses	(312)
NERC Fees \$230, Switch Maintenance \$300, Substations Non-labor \$275	805
Other	344
2013 Budget	29,812
Vegetation Management	500
Change in O&M Labor (mostly EMS capital vs. O&M split)	583
Other Miscellaneous	116
2014 Plan	31,011
Vegetation Management	500
Back-up Control Center (7 mo)	235
NERC Lidar Testing	1,200
Change in O&M Labor	365
Other Miscellaneous	349
2015 Plan	33,660
Vegetation Management	500
Back-up Control Center (5 mo)	170
Change in O&M Labor	375
Other Miscellaneous	252
2016 Plan	34,957
Vegetation Management	500
Change in O&M Labor	387
Other Miscellaneous	414
2017 Plan	36,258



## 2011-2017 Headcount progression

2011 Headcount		138
CIP/Compliance		7
Other		1
2012 Headcount FC		146
CIP/Compliance		3
Other		1
2013 Headcount Budget		150
compliance		1
2014 Headcount Plan		151
2015 Headcount Plan		151
2016 Headcount Plan		151
2017 Headcount Plan		151
		151



## Other Balance Sheet Costs (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Stores Expense							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Local Engineering							
Labor	5,107	4,617	4,978	4,680	4,820	4,965	5,114
Non labor	1,097	619	-	-	-	-	-
Total	6,204	5,236	4,978	4,680	4,820	4,965	5,114
Other Balance Sheet							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
<b>Total Other Costs</b>	<b>6,204</b>	<b>5,236</b>	<b>4,978</b>	<b>4,680</b>	<b>4,820</b>	<b>4,965</b>	<b>5,114</b>

# Louisville Area Upgrades

	Pre 2012 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan	Total
<b>1) Middletown 345kV Breakers</b>	2,132	572	-	-	-	-	-	2,704
<b>2) Build a new 345kV line connecting Paddy's West and DEM's Speed 345kV stations:</b>								
345kV Paddy's West to Speed Line	-	14	2,260	5,876	2,015	-	-	10,165
Duke Clifty Substation Work	-	-	-	-	-	-	-	-
Paddy's West Substation	-	279	5,953	1,711	3,309	-	-	11,252
<b>Total</b>	-	293	8,213	7,587	5,324	-	-	21,416
<b>3) Add a 4th Transformer to the Middletown Substation</b>								
Middletown 4th Transformer	-	4,027	5,072	2,189	1,140	-	-	12,427
Middletown Line Tap	-	815	1,739	-	-	-	-	2,554
Rebuild the Middletown Control House	-	973	1,324	-	-	-	-	2,297
<b>Total</b>	-	5,815	8,135	2,189	1,140	-	-	17,278
<b>4) Other Planning Projects</b>								
Watterson-Jeffersontown 138kV CTs	-	-	-	-	-	-	-	-
	2,132	6,679	16,348	9,775	6,464	-	-	41,399

Transmission reliability criteria has identified a significant need for upgrades within the Louisville Metro area (including system expansion in southern Indiana). Previous mitigation was to shed load to prevent cascading outages. The FERC has emphasized through various documentation against load shedding as a means of mitigation.



# Cane Run 7 Transmission Upgrades

\$'000	2012	2013	2014	2015	2016	2017	2018+	Total
	Forecast	Budget	Plan	Plan	Plan	Plan		
1) Middletown to Watterson 138kV Line Upgrade	-	-	-	-	-	-	-	-
2) Reterminate 138kV Line (6 circuits)	-	1,191	1,192	-	-	-	-	2,384
3) 345kV Interconnect	-	4,121	4,122	-	-	-	-	8,244
4) Breaker Connections at CR Switching Station	-	2,314	2,314	-	-	-	-	4,628
5) Replace CT 138/69kV at CR Switching Station	-	-	-	36	-	-	-	36
6) Replace 69kV Terminal Equip at CR Switching Station	-	-	-	182	-	-	-	182
7) Replace Bus at Watterson Substation	-	-	122	-	-	-	-	122
8) Replace 69kV Terminal Equip at CR Switching Station #2	-	-	-	222	-	-	-	222
9) Replace Switches at Middletown Sub	-	-	70	-	-	-	-	70
10) 4 Breaker Replacements	400	400	-	-	-	-	-	800
11) 345kV Transformer	938	3,072	-	-	-	-	-	4,009
12) Switchyard Construction (Generation Costs)	-	9,279	-	-	-	-	-	9,279
13) Yard/Breaker	-	-	2,029	-	-	-	-	2,029
14) Work moving from Bluegrass	-	-	2,405	3,500	4,000	-	-	9,905
15) Replace CR Switching Station 138/69kV Transformer #1	-	-	-	-	-	-	2,121	2,121
16) Replace CR Switching Station 138/69kV Transformer #2	-	-	-	-	-	-	2,062	2,062
	1,338	20,378	12,255	3,940	4,000	-	4,183	46,094

These costs represent the Transmission Upgrades that will accompany the combined cycle generating unit to be installed by May 1, 2015. The relocation of the existing line is included in the Project Engineering budget along with the costs of constructing the combined cycle unit.



## NERC Alert Line Ratings Cost by Voltage

\$'000

	Pre 2012	2012	2013	2014	2015	2016	2017	
	Actual	Forecast	Budget	Plan	Plan	Plan	Plan	Total
138kV	513	8,441	9,089	10,632	-	-	-	28,676
161kV	2,509	4,300	4,317	5,795	-	-	-	16,921
345kV	926	959	-	-	-	-	-	1,885
<b>Total</b>	<b>3,949</b>	<b>13,700</b>	<b>13,406</b>	<b>16,427</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47,482</b>

The total estimated cost of the NERC Alert line rating projects is \$12 million lower than the 2012 Plan.



PPL companies

# Sensitivities

\$ millions	Favorable / (Unfavorable)				
	2013	2014	2015	2016	2017
Gross Margin					
MISO Exit Expenses		(\$7.1)	(\$6.2)	(\$6.1)	(\$6.0)
Capital					
Cyber Security (CIP)		(\$6.0)			
Graphic Information System (GIS)		(\$5.0)			
Lexington Underground		(\$10.0)	(\$10.0)	(\$5.0)	

Other sensitivities not currently quantified include the elimination of analog communication circuits and the location of the 2018 Combined Cycle unit.



# Spare Transformer Inventory

Size of Transformer	In Service	Current # of Spares	2013 BP Additions					Assumed		Actual Failures		
			2012	2013	2014	2015	2016	2017	Failures	Inven.	2007-'12	2003-'12
138/69/34.5kV 1	1	0		1					-1	0	1	1
138/69kV; <93MVA 2	20	2								2	0	0
138/69kV; >93 MVA	55	1	1	1		1		1	-3	2	4	6
161/69kV	25	1			1				-1	1	1	1
161/138kV	5	0		1					0	1	1	1
345/138kV	18	0							0	0	1	1
345/161kV 3	3	0	1			1			0	2	0	0
500/161kV4	1	0							0	0	0	0
500/345kV4	1	0							0	0	0	0
Capital Cost, \$ millions			2.3	3.1	1.9	5	0	1.6				
Rebuilds/Upgrades in the Plan, \$ millions								1.5				

## Notes:

1. The existing Tip Top transformer (mfd. 1978) will be used as a 138/69 kV 50 MVA system spare after its replacement is installed.
2. The two current 138/69 kV <93 MVA spare transformers are early 1950's vintage transformers (33.3 MVA and 65 MVA). This is well past the industry-accepted 45 year asset life of transmission power transformers.
3. 345/161 kV transformers in the plan are are dual winding transformers that could also be used to replace a 345/138 kV transformer.



# Control House Replacements

(\$000)

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
<b>KU Park</b>	# & Yr Installed		1										1
	\$ millions		\$1.5										\$1.5
<b>Ghent 345</b>	# & Yr Installed					1							1
	\$ millions			\$0.2	\$2.0	\$0.3	\$0.1						\$2.6
<b>Tyrone</b>	# & Yr Installed				1								1
	\$ millions			\$1.0	\$0.5								\$1.5
<b>Arnold</b>	# & Yr Installed				1								1
	\$ millions			\$1.0	\$0.5								\$1.5
<b>Middletown</b>	# & Yr Installed		1										1
	\$ millions	\$1.0	\$1.3										\$2.4
<b>Matanzas</b>	# & Yr Installed		1										1
	\$ millions	\$0.3	\$0.8										\$1.1
<b>New Albany</b>	# & Yr Installed		1										1
	\$ millions		\$0.8										\$0.8
<b>LG&amp;E</b>	# & Yr Installed				1	1	1	1	1	1	1	1	8
	\$ millions				\$1.0	\$0.8	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$5.0
<b>KU</b>	# & Yr Installed				1	1	1	1	1	1	1	1	8
	\$ millions				\$1.8	\$1.5	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$9.2
<b>Total</b>	# & Yr Installed	0	4	0	4	3	2	2	2	2	2	2	23
	\$ millions	\$1.3	\$4.4	\$2.2	\$5.8	\$2.6	\$1.6	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$25.4

*On average, over the next ten years, installing 2 Control Houses per year at a cost of \$1.1 million per Control House*





**PPL companies**

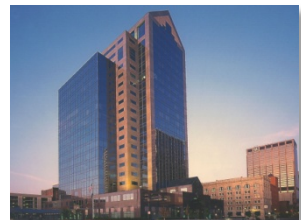
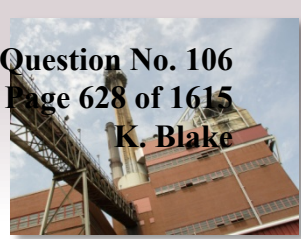
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# Energy Delivery

## 2013 Business Plan

*September 25, 2012*

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- Plan Highlights
- Major Assumptions
- Financial Performance
  - *Operating Expense*
  - *Cost of Sales / Gross Margin*
  - *Capital*
  - *Headcount*
  - *Key Performance Indicators*
- Plan Risks
- Appendix

# Plan Highlights

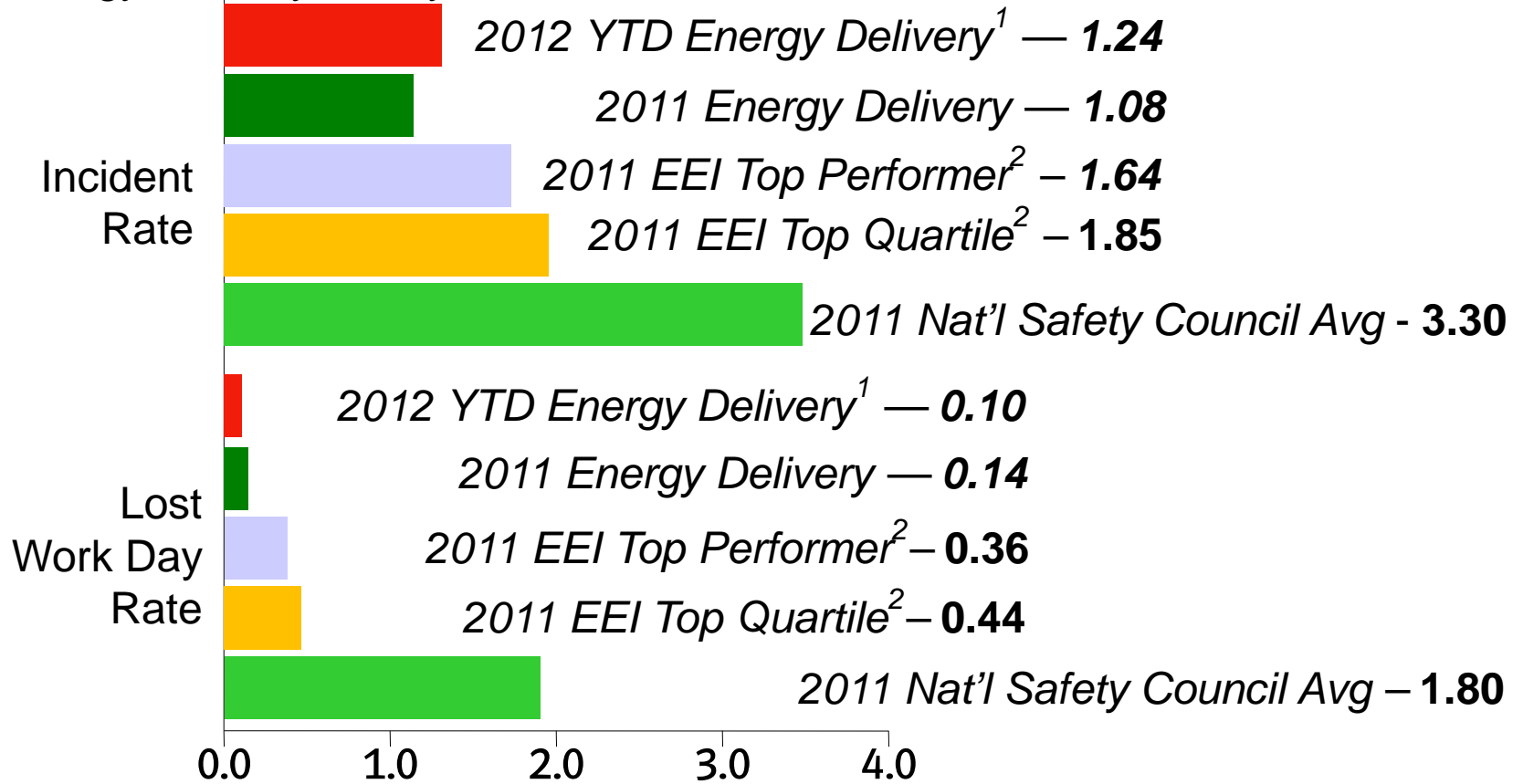
Customer satisfaction is a core value at LG&E and KU. Energy Delivery strives to provide safe, reliable, and low cost service to our customers, enhancing the quality of life in the areas we serve. We are committed to enhancing our relationship with our customers by delivering positive experiences that create value and build trust.

- Funding levels within the proposed plan are established with the following priorities in mind:
  - Employee and public safety including compliance with industry regulatory requirements
  - Performance in customer facing areas
  - Gas and electric system service reliability
  - Asset replacement to address aging infrastructure
  - System capacity to meet forecasted customer demand
  - Technology to enhance customer experience
- Significant increases in capital investments beginning in 2013 for gas riser and service line ownership (subject to PSC approval)



# Plan Highlights

## Energy Delivery Safety Performance



<sup>1</sup>As of August 2012

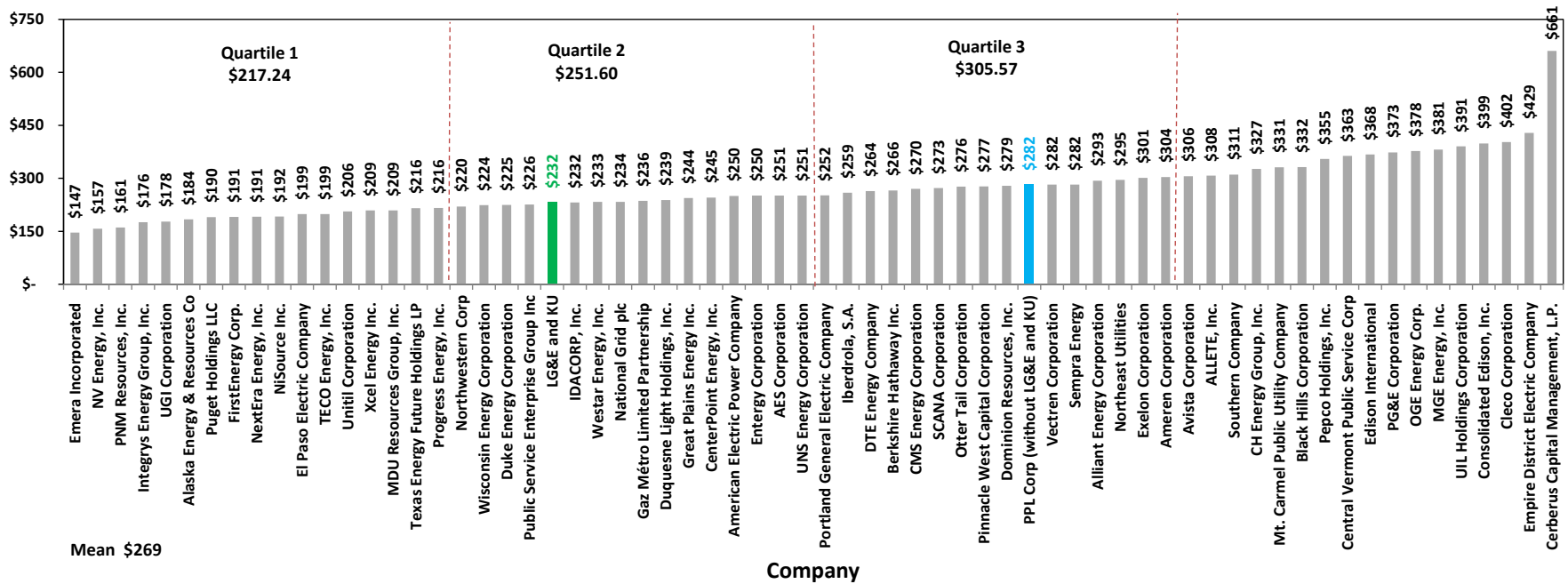
<sup>2</sup>EEI combination electric/gas w/no nuclear plants companies



# Plan Highlights

## Total DO Electric Cash Cost per Customer Performance

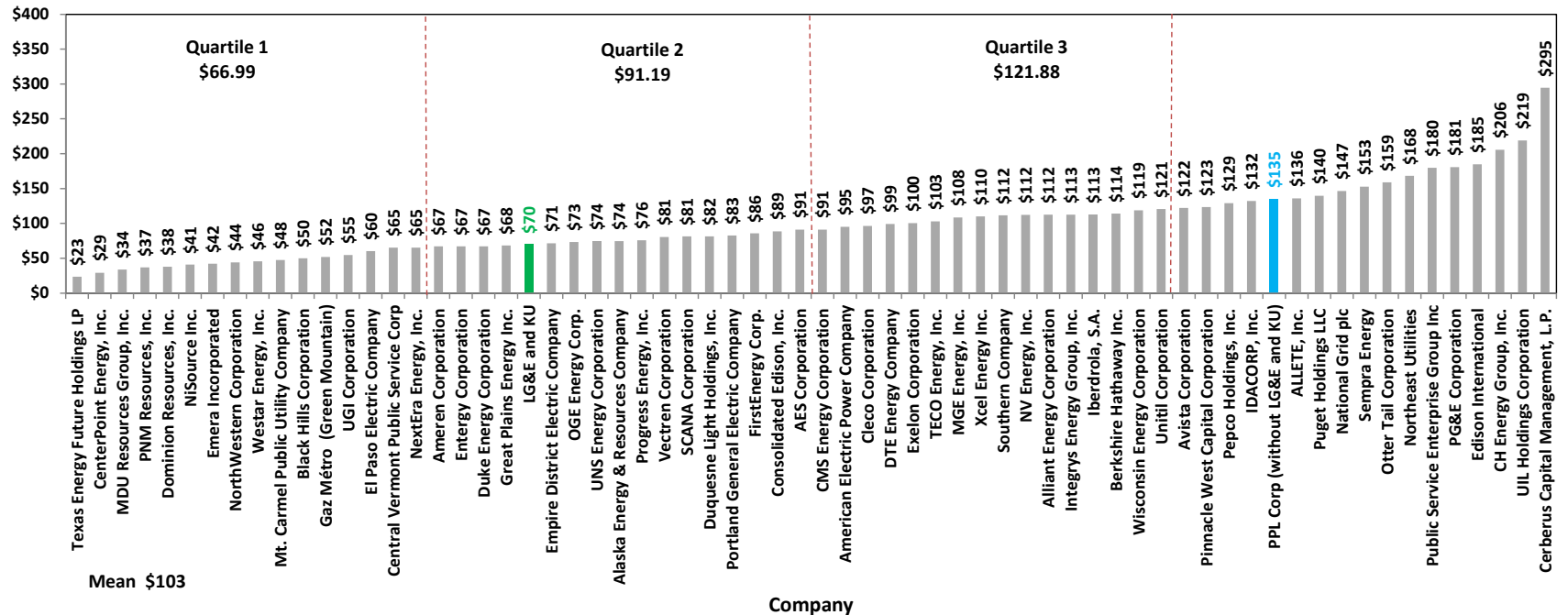
Overall Electric Distribution Expenditures per Customer  
FERC Utility Cost Benchmarking – 2011 Data  
(Electric Only)



# Plan Highlights

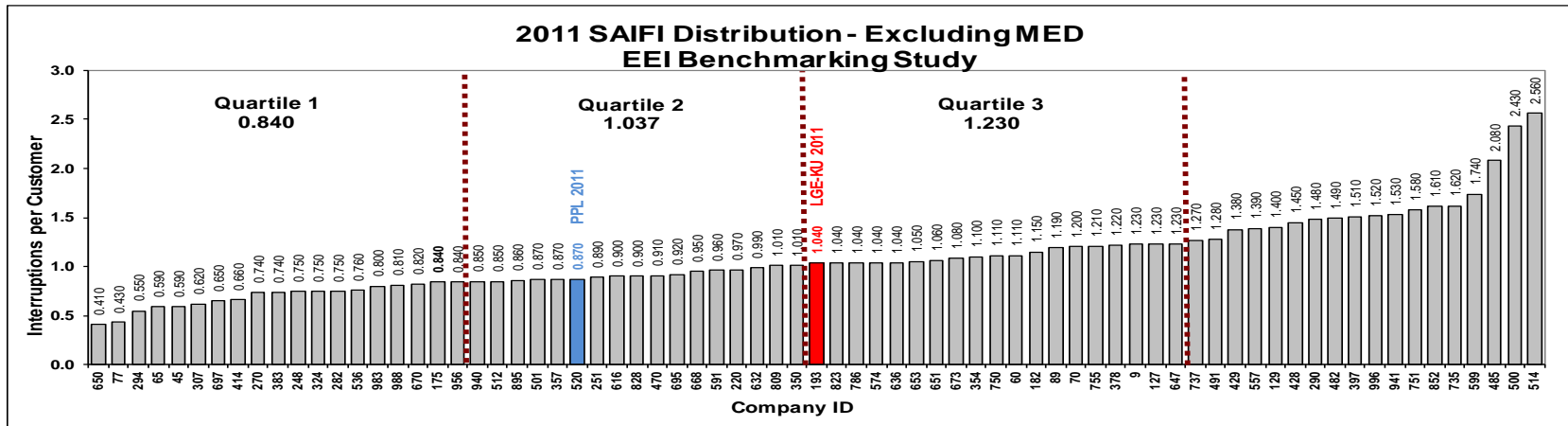
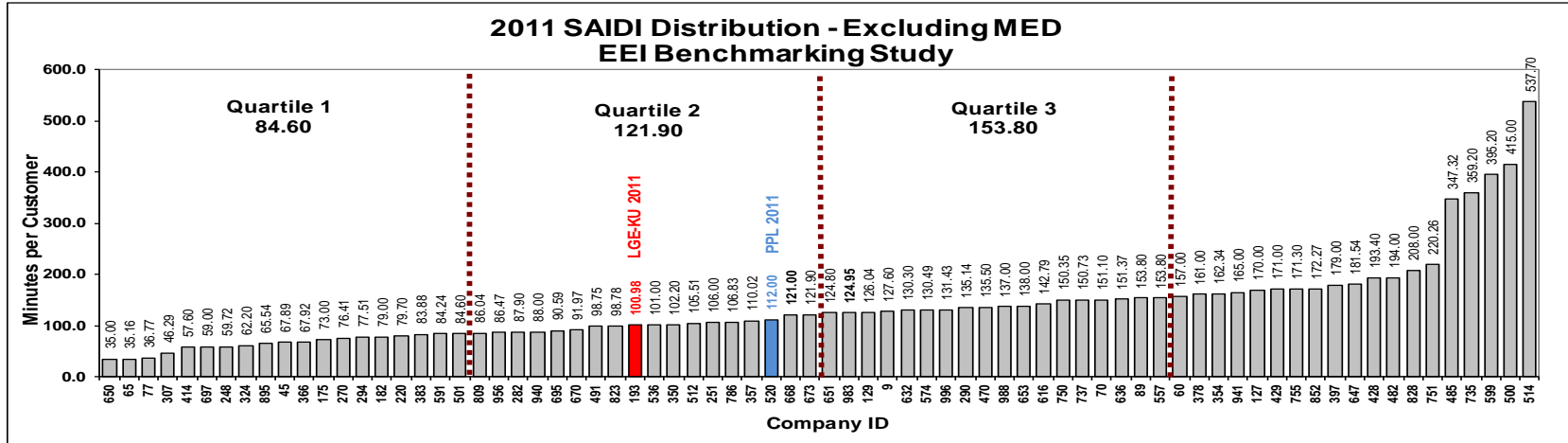
## Total Retail Electric O&M Cost per Customer Performance

Overall Retail Electric O&M Expenditures per Customer  
FERC Utility Cost Benchmarking - 2011 Data  
(Electric Only)



# Plan Highlights

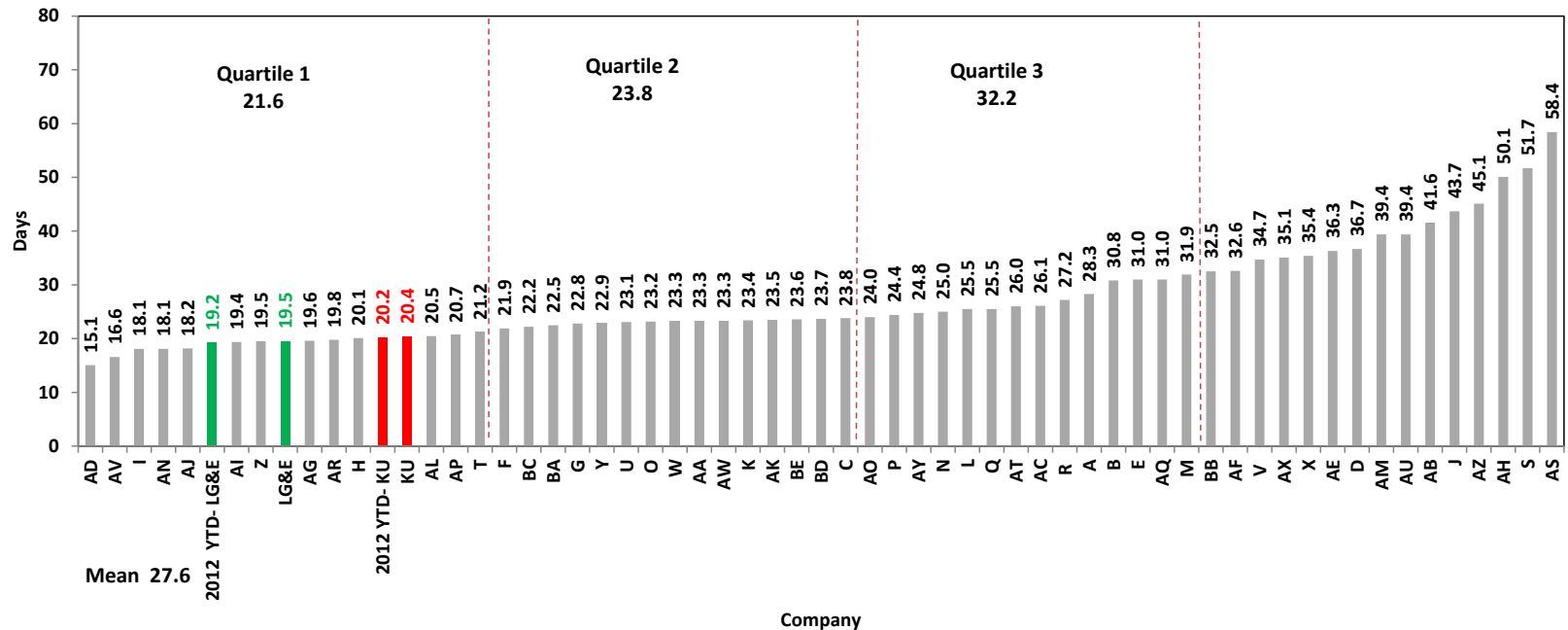
## Reliability Performance



# Plan Highlights

## Estimated Number of Days of Revenue Outstanding (ENDRO)

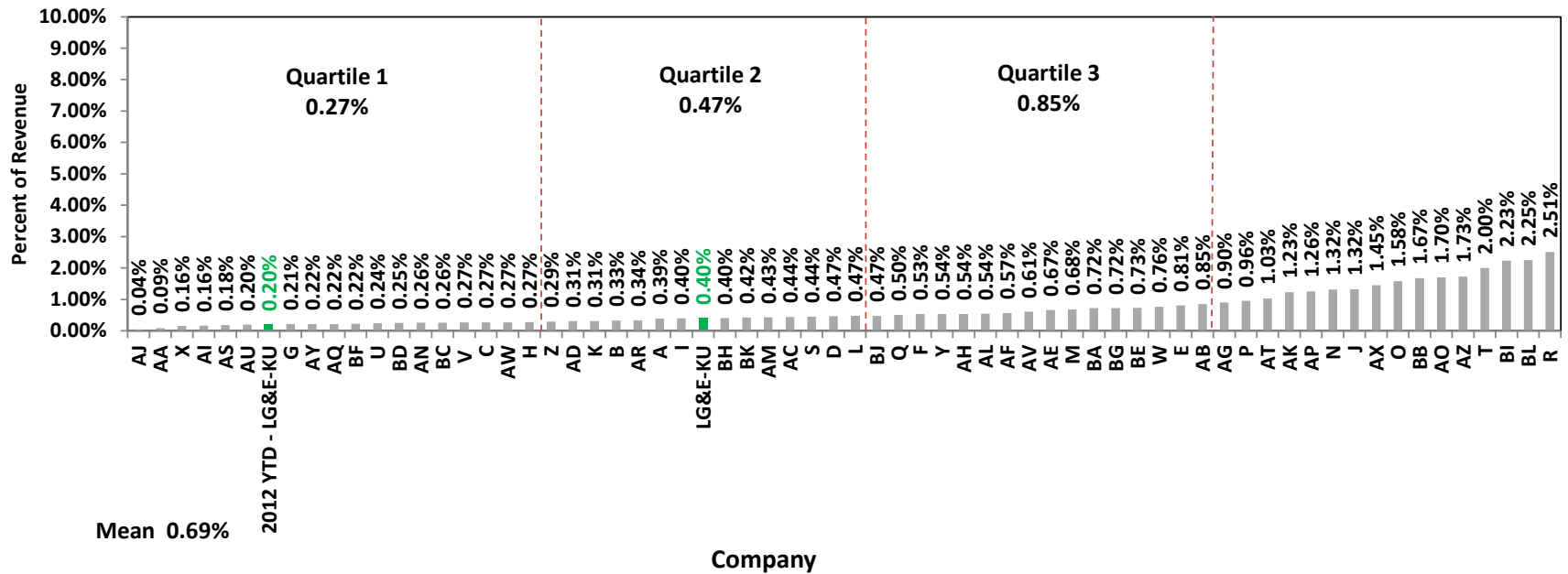
ENDRO  
AGA EEI DataSource - 2011 Data



# Plan Highlights

## Net Write-Offs as a Percent of Revenues to Ultimate Customers

Net Write-offs Percent of Revenue  
AGA EEI DataSource - 2011 Data



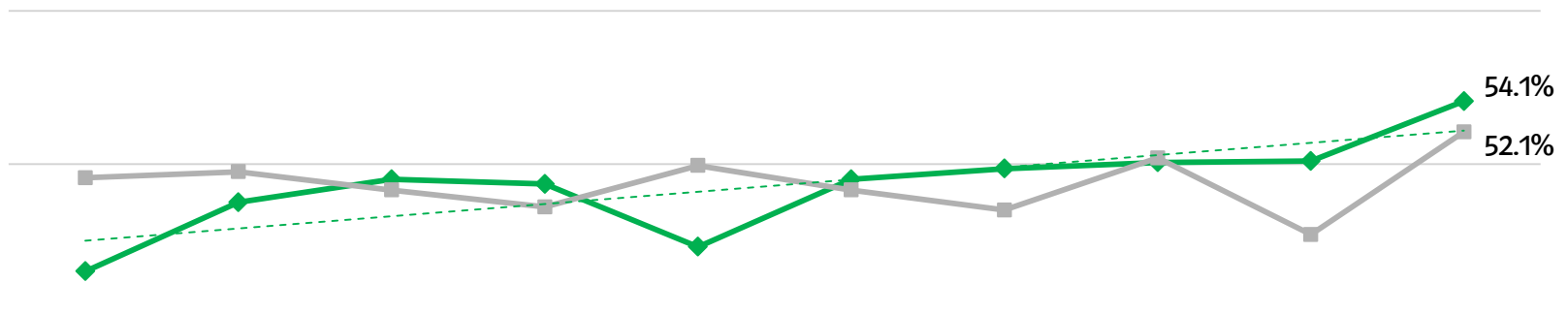


# Plan Highlights

## Residential Customers – Satisfaction Survey

Measured as “Top Two Box” (score of 9 or 10 on 10-point scale)

—◆— LG&E/KU    —■— Peer Group    - - - Linear (LG&E/KU)



Customers are asked: *“On a scale of 1 to 10 where 10 means ‘**completely satisfied**’ and 1 means ‘not satisfied at all,’ overall how satisfied are you with the service provided by [LG&E] [KU]?”*

Q1 2010    Q2 2010    Q3 2010    Q4 2010    Q1 2011    Q2 2011    Q3 2011    Q4 2011    Q1 2012    Q2 2012



PPL companies

# Plan Highlights

- Safety and Wellness
  - *Maintain industry leading performance*
  - *Maintain our partnership with Energy Services to build on safety synergies*
  - *Continue commitment to workforce and public safety*
  - *Continue to focus on motor vehicle safety*
  - *Continue sharing safety best practices throughout the industry*
  - *Certify 100+ Crane operators to comply with the OSHA Crane standard to meet the 2014 deadline; The initial rigging and signaling requirement have been completed.*
  - *Support the Edumedics hypertension program*
  - *Support wellness through employee initiatives and communications on fitness, nutrition and highlighting “Wellness Warriors”*



# Plan Highlights

- Customer Experience
  - Continue efforts on the “Customer Experience” strategy/initiative
  - Continue tracking new Customer Satisfaction Index in parallel to Top Two Box score on Company’s satisfaction study (“RCCS”)
  - Continue investments in enhanced customer contact channels and the migration to a Corporate “Unified Communications” platform
  - Enhance our “Customer Advocacy” role through partnerships with customer focus groups
  - Continue commitment to corporate citizenship and community involvement
  - Continue to deliver the current portfolio of customer energy efficiency programs, including customer education on the need for energy efficiency
  - Advance our understanding of customer behavior while gaining insight into customer needs



# Plan Highlights

- Reliability and Infrastructure
  - *Continue investments in electric and gas system infrastructure to meet projected demand and regulatory requirements*
  - *Invest in electric and gas infrastructure replacement to address the aging system and improve system performance*
  - *Continue investments in both infrastructure and technology to improve electric system reliability and storm restoration processes*
  - *Invest in additional gas compression, equipment upgrades, pipelines and new gas wells to improve overall reliability, mitigate risk and maintain storage field deliverability*



# Plan Highlights

- OPEX
  - *On target in 2012 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2012-2017 is 2.7%.*
  - *Major Initiatives:*
    - Customer Experience Strategy
    - Reliability - Hazard Tree Program
    - Industry Regulatory Compliance
  - *Major Financial Risks:*
    - Storm Restoration
    - Customer Hardship and Uncollectible Accounts
    - Industry Regulatory Uncertainty

# Plan Highlights

- Capital

- *On target in 2012 to achieve 7&5 approved forecast.*

- *Compounded Annual Growth Rate (CAGR) from 2012-2017 is 5.9%.*

- *Major Customer Initiatives:*

- Energy Efficiency Programs and Services
- Reliability / Asset Replacement
- Pole Inspection and Treatment Program
- Substation Enhancements
- Mobile Technology / Work Management Replacement
- Gas Leak Mitigation
- Customer Gas Service Ownership and Service Riser Replacement Programs
- Magnolia Gas Compressor Addition
- Gas Compressor Station and System Enhancements
- Gas Transmission/Distribution Integrity Management Programs
- Vehicle Purchases (starting in 2015)



# Major Assumptions

- Customer expectations regarding levels of service and availability of information will continue to increase.
- Energy Efficiency projects and education will continue to be an area of focus.
- Incremental headcount will be mostly offset by existing contractors as critical skill sets are returned in-house.
- Gas Line Tracker will be approved by the KPSC to include:
  - *Gas Service Riser Replacement Program over 5 years.*
  - *New Gas Services to the Meter.*
  - *Replacement of Services and Ownership as needed.*
  - *Leak Mitigation Program Costs.*



# Major Assumptions

- New Business:
  - *Assumes moderate volume and inflationary increases through the planning period.*
  - *Funding included for known major customer expansions/additions.*
  - *Includes 25% increases starting in 2016 for pole and padmount transformers, driven by DOE proposed revision of efficiency standards.*
- Continued focus on reliability initiatives.
- Storm budgets are based on 5 year average.
- New gas safety regulatory requirements will require gas transmission pipeline testing.





# Financial Performance

## 2011-2017 OPEX and Other Expenses (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>OPEX/Other Expenses</b>							
<b>Labor</b>	70,769	73,799	77,980	80,943	83,316	85,870	88,516
<b>Non Labor</b>							
Vegetation Management	19,836	21,753	22,879	23,340	23,807	24,283	24,768
Bad Debt	10,275	9,500	9,422	10,110	10,996	11,901	12,377
Storm Restoration <sup>1</sup>	13,146	4,861	4,141	3,718	3,792	3,868	3,945
Contributions	1,556	1,633	1,509	1,667	1,701	1,735	1,769
Outside Services	41,750	42,082	44,828	46,223	47,003	45,909	44,849
Other Non Labor	32,046	35,036	37,137	38,187	39,226	39,757	39,711
<b>Total Non Labor</b>	<b>118,609</b>	<b>114,865</b>	<b>119,916</b>	<b>123,245</b>	<b>126,525</b>	<b>127,453</b>	<b>127,419</b>
<b>Subtotal OPEX/Other expense</b>	<b>189,378</b>	<b>188,664</b>	<b>197,896</b>	<b>204,188</b>	<b>209,841</b>	<b>213,323</b>	<b>215,935</b>
Gross Margin Expenses *	27,516	30,737	38,983	40,443	39,106	40,263	41,807
<b>Total Income Statement items</b>	<b>216,894</b>	<b>219,401</b>	<b>236,879</b>	<b>244,631</b>	<b>248,947</b>	<b>253,586</b>	<b>257,742</b>

<sup>1</sup> Total Storm Restoration including labor is \$17.8M (new burdens) for 2011, \$6.9M for 2012, \$6.5M for 2013 and 2014, \$6.7M for 2015, \$6.8M for 2016, and \$7M for 2017.

\* (see Margin slide for detail)



## 2013-2017 OPEX/Other Expense Reconciliation (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Prior Plan</b>	<b>203,102</b>	<b>208,326</b>	<b>213,220</b>	<b>214,738</b>	<b>218,377</b>
<b>Drivers:</b>					
Gas Tracker to COS	1,318	1,362	1,396	1,431	1,466
Vegetation Management	(1,239)	(1,250)	(1,275)	(1,301)	(1,327)
GC&S - MAOP Pressure Testing	1,168			(1,213)	
Storm Restoration - To 5 yr. average	400	400	408	416	424
WFP Incremental Impact <sup>1</sup>	682	820	723	607	623
Gas Distribution	(473)	(496)	(506)	(516)	(526)
Energy Efficiency VA Program	561	584	599	614	630
Bad Debt Expense	2,578	2,360	1,713	1,051	823
Metering Contract	(344)	(172)	(175)	(179)	(183)
Other (Increases)/Decreases	555	530	496	505	512
<b>Total Drivers (Increases)/Decreases</b>	<b>5,206</b>	<b>4,138</b>	<b>3,379</b>	<b>1,415</b>	<b>2,442</b>
<b>Current Plan</b>	<b>197,896</b>	<b>204,188</b>	<b>209,841</b>	<b>213,323</b>	<b>215,935</b>

**Note 1:** Includes transfer of 13 Meter Readers from Green River - (\$252K) in 2015, (\$388K) in 2016, and (\$397K) in 2017.



# Financial Performance

## 2011-2017 Margin Expenses / Cost of Sales (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Margin Expenses							
<b>Mechanism Recoverable</b>							
Retail - DSM	24,657	27,180	32,076	35,366	34,245	35,629	37,411
Distribution - Gas Tracker	-	-	4,147	2,156	1,882	1,595	1,296
Distribution - Fuel Gas	2,859	3,557	2,760	2,921	2,979	3,039	3,100
<b>Total Margin/Cost of Sales</b>	<b>27,516</b>	<b>30,737</b>	<b>38,983</b>	<b>40,443</b>	<b>39,106</b>	<b>40,263</b>	<b>41,807</b>

Note: The DSM amounts are consistent with the 2011 DSM filing (approved by the PSC in November 2011).



## 2013-2017 Margin/Cost of Sales Reconciliation (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<u>Mechanism recoverable</u>					
<b>Prior Plan</b>	<b>36,468</b>	<b>39,846</b>	<b>38,211</b>	<b>39,554</b>	<b>41,293</b>
<b>Drivers</b>					
Fuel Gas Price	997	921	940	958	977
Gas Tracker <sup>1</sup>	(4,147)	(2,156)	(1,882)	(1,595)	(1,296)
Change in DSM	635	638	47	(72)	(195)
<b>Total Drivers (Increases)/Decreases</b>	<b>(2,515)</b>	<b>(597)</b>	<b>(895)</b>	<b>(709)</b>	<b>(514)</b>
<b>Current Plan</b>	<b>38,983</b>	<b>40,443</b>	<b>39,106</b>	<b>40,263</b>	<b>41,807</b>

<sup>1</sup> Gas Tracker was included in OPEX in the 2012 MTP.



# 2011-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Distribution</b>							
New Business	59,483	57,171	60,707	60,936	65,317	69,694	73,003
Enhance the Network	45,910	50,922	61,174	56,880	64,574	61,776	65,607
Maintain the Network	62,108	80,774	86,649	87,725	101,423	100,282	108,232
Repair the Network	13,773	11,141	11,174	11,413	11,765	12,083	12,408
Miscellaneous	7,744	6,833	8,813	4,523	14,952	8,453	17,030
<b>Total Distribution</b>	<b>189,018</b>	<b>206,841</b>	<b>228,517</b>	<b>221,477</b>	<b>258,031</b>	<b>252,288</b>	<b>276,280</b>
<b>Metering</b>	4,735	4,758	4,634	5,577	5,348	5,020	5,145
<b>Subtotal - Distribution/Metering</b>	<b>193,753</b>	<b>211,599</b>	<b>233,151</b>	<b>227,054</b>	<b>263,379</b>	<b>257,308</b>	<b>281,425</b>
<b>Retail</b>	822	2,530	6,640	8,344	9,096	6,785	4,417
<b>Operating Services</b>	7,925	4,613	1,906	5,280	4,486	4,611	5,238
<b>Total Capital and COR</b>	<b>202,500</b>	<b>218,742</b>	<b>241,697</b>	<b>240,678</b>	<b>276,961</b>	<b>268,704</b>	<b>291,080</b>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Prior Plan</b>	<b>268,521</b>	<b>253,587</b>	<b>297,317</b>	<b>281,723</b>	<b>295,201</b>
<b>Changes:</b>					
Gas Tracker (Gas Leak Mitigation and Risers)	6,623	521	813	1,057	2,629
DSM - Energy Efficiency	2,336	1,799	2,037	1,424	1,992
New Business (Excl. Gas Risers)	(854)	3,587	2,072	1,010	1,183
Major Gas System Enhancements	-	1,200	1,800	-	(1,500)
Electric System Enhancements/Reliability	18,458	8,509	11,668	17,114	10,502
Gas Control and Storage	196	(3,343)	5,913	(3,080)	(6,644)
Maintain - 34kv (Transfer from Transmission)	(217)	(223)	(229)	(235)	(242)
Repair/Replace and Sys Enhance Blankets	(3,915)	(3,842)	(5,843)	(5,998)	(6,158)
IT	(6)	(434)	1,872	1,628	2,259
Vehicle Purchases	4,040	5,000	-	-	-
All Other	163	135	253	99	100
<b>Total Changes (Increases)/Decreases</b>	<b>26,824</b>	<b>12,909</b>	<b>20,356</b>	<b>13,019</b>	<b>4,121</b>
<b>Current Plan</b>	<b>241,697</b>	<b>240,678</b>	<b>276,961</b>	<b>268,704</b>	<b>291,080</b>

# Financial Performance

## 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Distribution	885	916	934	947	960	963	966
Retail	424	480	483	483	483	483	484
Metering	128	133	136	135	150	150	150
Operating Services	30	33	35	35	35	35	35
<b>TOTAL</b>	<u>1,467</u>	<u>1,562</u>	<u>1,588</u>	<u>1,600</u>	<u>1,628</u>	<u>1,631</u>	<u>1,635</u>
From 2012 Business Plan		<u>1,582</u>	<u>1,605</u>	<u>1,614</u>			
Variance to 2012 Business Plan		<u>20</u>	<u>17</u>	<u>14</u>			
<u>Plan over Plan (Increases)/Decreases</u>							
Distribution		9	3	-4			
Retail		6	6	6			
Metering		6	11	15			
Operating Services		<u>-1</u>	<u>-3</u>	<u>-3</u>			
Variance to 2012 Business Plan		<u>20</u>	<u>17</u>	<u>14</u>			



# Operational Performance

## Key Performance Indicators

<b>KPI</b>	<b>2011 Year End</b>	<b>2012 Forecast</b>	<b>2013 Budget</b>	<b>2014 Plan</b>	<b>2015 Plan</b>	<b>2016 Plan</b>	<b>2017 Plan</b>
<b>Safety</b>	1.08	1.80	1.80	1.80	1.80	1.80	1.80
<b>SAIFI</b>	1.04	1.04	1.03	1.01	1.01	1.00	1.00
<b>SAIDI</b>	100.98	99.64	98.00	96.00	96.00	95.00	95.00
<b>Overall Customer Satisfaction (points)</b>	12.00	18.00	18.00	18.00	18.00	18.00	18.00
<b>Overall Customer Experience</b>	NA	9.00	8.50	8.50	8.50	8.50	8.50
<b>Cash Cost Per Customer - Dist Electric</b>	231.55	246.52	266.66	260.09	286.80	280.20	323.78
<b>O&amp;M Cost Per Customer - Retail Electric</b>	69.63	75.79	79.35	83.34	83.87	86.56	89.27





# Plan Risks

- Increased Capital and O&M Costs due to Industry Regulatory Actions
- Additional Mitigation from Gas Transmission Line Inspections
- Customer Hardship and Uncollectible Accounts
- Economic Development and the Pace of the Economic Recovery
- Storm Restoration
- Future Energy Efficiency Regulatory Approvals
- Material and Equipment Price Increases
- Fuel Prices



# Appendix



# Year over Year Walk Forward OPEX and Other Expense

<b>2011 Actual</b>	<b>189,378</b>
Labor/WFP Increases	5,615
Bad Debt	(775)
Vegetation Management	1,917
Storm Restoration (L and NL)	(10,870)
Non-Labor (Inc. 2% Inf.)	1,960
Other Non-labor - Adj. In 2011	1,439
	<hr/>
<b>2012 FC</b>	<b>188,664</b>
Labor/WFP Increases	3,861
Bad Debt	(78)
Vegetation Management	1,126
Storm Restoration (L and NL)	(400)
Non-Labor (Inc. 2% Inf.)	891
MAOP Pressure Testing	3,832
	<hr/>
<b>2013 Budget</b>	<b>197,896</b>
Labor/WFP Increases	2,540
Bad Debt	688
Vegetation Management	461
Non-Labor (Inc. 2% Inf.)	1,416
MAOP Pressure Testing	1,187
	<hr/>
<b>2014 Plan</b>	<b>204,188</b>

<b>2014 Plan</b>	<b>204,188</b>
Labor/WFP Increases	2,247
Bad Debt	886
Vegetation Management	467
Storm Restoration (L and NL)	200
Non-Labor (Inc. 2% Inf.)	1,853
	<hr/>
<b>2015 Plan</b>	<b>209,841</b>
Labor/WFP Increases	2,530
Bad Debt	905
Vegetation Management	476
Storm Restoration (L and NL)	100
Non-Labor (Inc. 2% Inf.)	1,758
MAOP Pressure Testing	(2,287)
	<hr/>
<b>2016 Plan</b>	<b>213,323</b>
Labor/WFP Increases	2,523
Bad Debt	476
Vegetation Management	485
Storm Restoration (L and NL)	200
Non-Labor (Inc. 2% Inf.)	1,641
MAOP Pressure Testing	(2,713)
	<hr/>
<b>2017 Plan</b>	<b>215,935</b>

(Decreases)/Increases



# 2011-2017 Headcount progression

<b>2011 Headcount</b>	<b>1,467</b>
Support Functions (Asset Management, Safety, Security and Retail Strategy)	4
Electric Operations	16
Billing Integrity	6
Field Services & Meter Assets	6
Customer Service & Marketing	64
All Other Increases / (Decreases)	(1)
<b>2012 Headcount FC</b>	<b>1,562</b>
Support Functions (Asset Management, Safety, Security and Retail Strategy)	5
Electric Operations	9
Gas Control, and Storage	5
Field Services & Meter Assets	3
All Other Increases / (Decreases)	4
<b>2013 Headcount Budget</b>	<b>1,588</b>
Support Functions (Asset Management, Safety, Security and Retail Strategy)	2
Electric Operations	11
All Other Increases / (Decreases)	(1)
<b>2014 Headcount Plan</b>	<b>1,600</b>
Support Functions (Asset Management, Safety, Security and Retail Strategy)	2
Electric Operations	11
Meter Readers (transfers from Green River)	13
All Other Increases / (Decreases)	2
<b>2015 Headcount Plan</b>	<b>1,628</b>
Support Functions (Asset Management, Safety, Security and Retail Strategy)	3
<b>2016 Headcount Plan</b>	<b>1,631</b>
Support Functions (Asset Management, Safety, Security and Retail Strategy)	3
All Other Increases / (Decreases)	1
<b>2017 Headcount Plan</b>	<b>1,635</b>



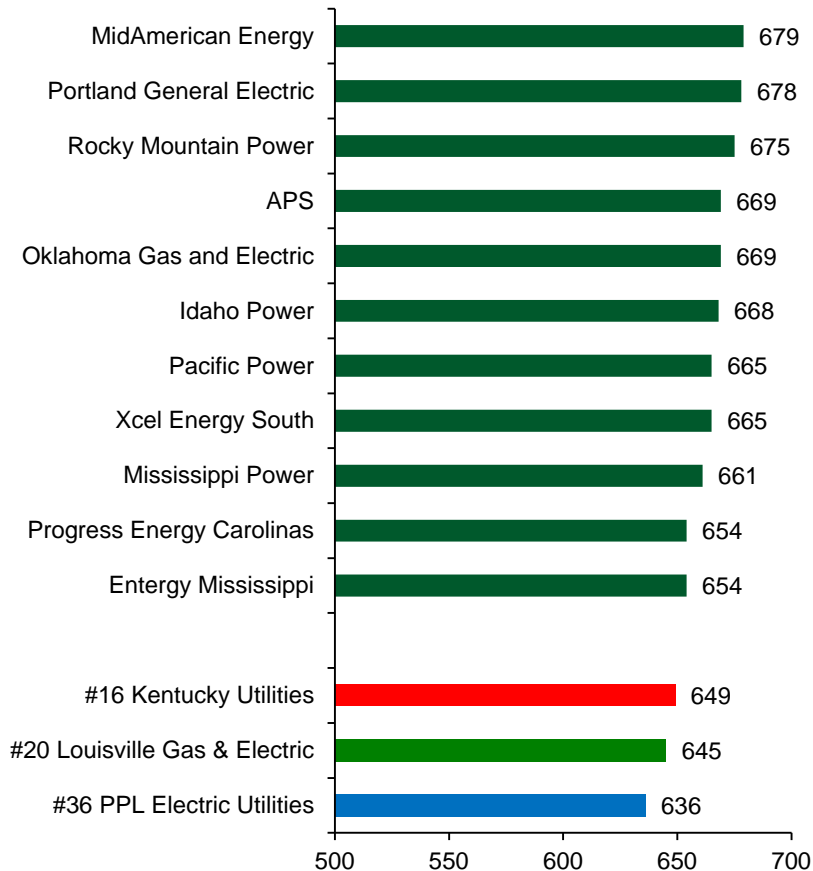
## Other Balance Sheet Costs (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Local Engineering							
Labor	16,353	15,769	17,113	17,062	17,573	18,101	18,643
Non labor	3,712	3,362	3,265	3,045	3,107	3,169	3,232
<b>Total</b>	<b>20,065</b>	<b>19,131</b>	<b>20,378</b>	<b>20,107</b>	<b>20,680</b>	<b>21,270</b>	<b>21,875</b>
Transportation	21,819	21,597	22,742	23,208	23,676	24,154	24,641
Operating Services Clearing (Non Labor)	3,220	3,371	3,456	3,531	3,601	3,674	3,746
Preliminary Engineering - Gas Riser Sampling	-	350	-	-	-	-	-
<b>Total Other Costs</b>	<b>45,104</b>	<b>44,449</b>	<b>46,576</b>	<b>46,846</b>	<b>47,957</b>	<b>49,098</b>	<b>50,262</b>

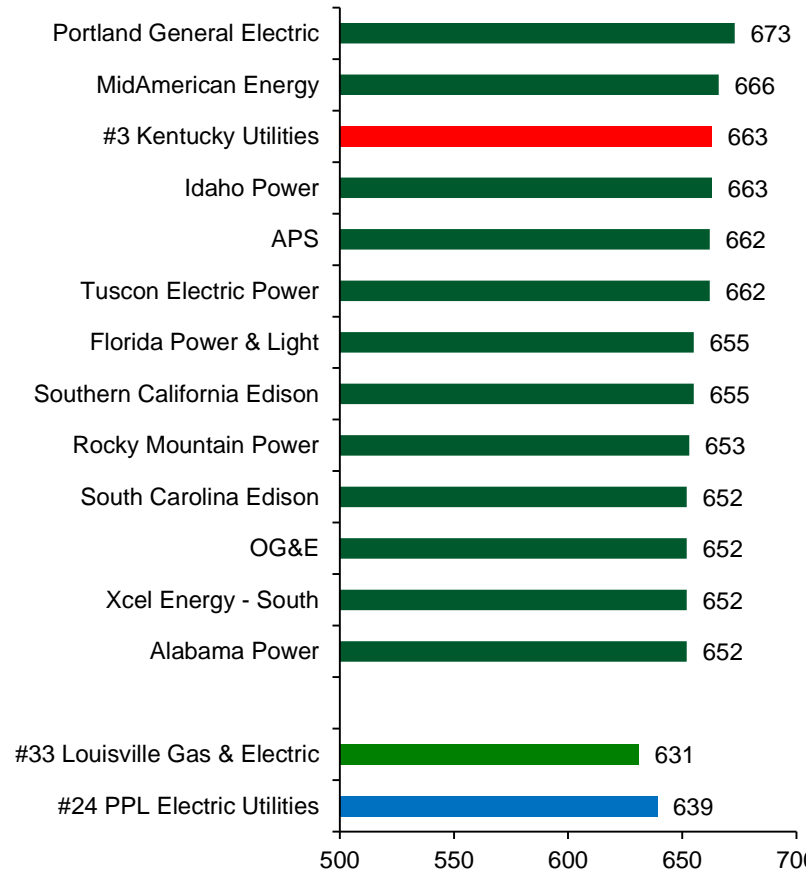
# Additional Plan Highlights

## J.D. Power & Associates Electric Residential Study – IOUs Rankings

2011



2012



PPL companies

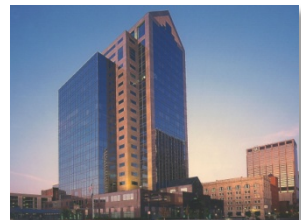
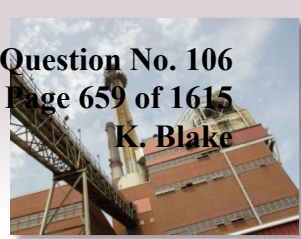


**PPL companies**

# General Counsel

# 2013 Business Plan

*September 25, 2012*



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- Major Assumptions
- Financial Performance
  - *Operating Expense*
  - *Capital*
  - *Headcount*
- Plan Risks
- Appendix



# Major Assumptions

- **Legal**

- *No contingent budgets have been proposed*
- *Hourly rates of outside providers will not materially increase*
- *No significant developments in existing litigation matters or new material litigation claims arise*

- **Corporate Communications**

- *Maintaining positive brand image in light of increased outside pressures and rising costs will require additional education and communication measures with key stakeholders.*
- *The large number of construction projects will require increased communications.*
- *Will need to advance website to meet the changing communications needs.*
- *Energy Efficiency programs will continue to grow and will require support through targeted advertising/marketing programs.*

# Major Assumptions

- **Corporate Responsibility**

- *Nonprofit organizations will continue to experience financial challenges.*
- *Anticipate greater scrutiny of our community activities and heightened expectations for our role as a funding partner.*
- *Increased criticism from environmental groups and other stakeholders will require strategic donations and new partnerships.*
- *Shifting demographics in the workforce will require the development of new employee engagement programs.*

- **Compliance**

- *No material change in current role.*
- *No new enforcement issues which are significant.*



# Major Assumptions

- **External Affairs**

- *Increased legislative and regulatory activity by local, state and federal governmental entities affecting the company's activities in the operational, regulatory and environmental areas.*
- *Pressure by local, state and federal governmental entities upon the company to use its monopolistic status to enhance governmental revenue.*
- *Public comparison of:*
  - *Political contributions between PPL and LG&E/KU*
  - *Levels of engagement and contributions with and to advocacy groups*
  - *PPL and LG&E/KU legislative and regulatory positions on various issues*
  - *DSM activities and level of revenue*



# Major Assumptions

- **State Regulation & Rates**

- *Filing of two base rate cases for LG&E and KU in KY*
- *Filing of three base rate cases for KU/ODP in VA*
- *Revise the formula rates for FERC wholesale municipal and OATT customers*
- *Number of CPCN proceedings for generation and transmission facilities*
- *Significant ECR filings related to proposed environmental regulations*
- *Possible smart-grid and smart-meter projects*
- *Possible Federal climate change and renewable legislation passed*
- *Possible state reporting goals for energy efficiency*
- *Increase in energy efficiency programs*
- *KPSC Management Audit of Company functions*
- *Filing of Integrated Resource Plans with KPSC and VSCC*



# Major Assumptions

- **Federal Regulation & Policy**

- *Uncertain and disproportionate implementation of regional transmission planning and cost allocation rules.*
- *Expanded FERC authority over transmission siting and certificate authority, expansion of the definition of Bulk Electric System, and increased pressure on traditional federal state relationship.*

- **Environmental**

- *Coal fired utilities will face tighter limits resulting in increased regulatory and PR burden.*
- *New environmental regulations will require added controls, compliance monitoring and reporting.*
- *Increased volume and complexity of environmental issues will require additional internal and external resources.*
- *Analysis of environmental risk will require more robust comprehensive environmental audits/assessments*



# Financial Performance

## 2011-2017 OPEX and Other Expenses General Counsel (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Labor	9,884	10,757	11,010	11,331	11,671	12,021	12,382
Outside Counsel	6,287	7,256	10,070	10,545	10,756	10,971	11,191
Other Outside Services	2,488	2,923	3,707	3,620	3,892	3,766	4,041
Fees, Permits & Licenses	2,360	3,408	3,022	3,172	3,235	3,300	3,366
Dues & Subscriptions	2,186	2,578	2,629	2,780	2,915	2,973	3,033
Donations	1,680	1,757	1,920	1,958	1,998	2,037	2,078
Advertising	1,545	1,335	1,586	1,618	1,650	1,683	1,717
Rate Case Amortization	1,905	1,243	1,903	1,553	2,448	1,608	2,555
Training Travel & Meals	1,045	844	901	919	937	956	975
Other Non Labor	1,114	803	863	876	894	912	930
Total Income Statement items	<u>30,494</u>	<u>32,906</u>	<u>37,611</u>	<u>38,372</u>	<u>40,396</u>	<u>40,228</u>	<u>42,267</u>



# Financial Performance

## 2011-2017 OPEX and Other Expenses General Counsel by dept (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
General Counsel	2,594	1,991	1,603	1,642	1,759	1,798	1,838
Communication	5,088	4,968	5,575	5,701	5,832	5,966	6,103
Compliance	700	950	970	994	1,022	1,051	1,080
Corp Responsibility	1,596	1,619	1,691	1,730	1,770	1,812	1,854
Environmental	5,458	7,583	8,002	8,414	8,604	8,798	8,996
External Affairs	739	742	765	785	805	827	849
Legal	9,782	11,319	14,217	14,799	15,124	15,456	15,798
Regulatory (State and Federal)	4,537	3,734	4,788	4,307	5,480	4,520	5,749
Total Income Statement items	<u>30,494</u>	<u>32,906</u>	<u>37,611</u>	<u>38,372</u>	<u>40,396</u>	<u>40,228</u>	<u>42,267</u>



## 2013-2017 OPEX/Other Expense Reconciliation General Counsel (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	38,744	39,279	41,383	41,388	43,721
Drivers:					
Labor Savings	(425)	(446)	(460)	(473)	(488)
Outside Counsel Savings	(500)	(500)	(484)	(470)	(453)
Donations	(544)	(554)	(563)	(575)	(805)
Advertising	306	312	318	325	331
Environmental third party	(8)	178	182	185	189
Other Non Labor Changes	38	103	20	(152)	(228)
Current Plan	<u>37,611</u>	<u>38,372</u>	<u>40,396</u>	<u>40,228</u>	<u>42,267</u>





## 2011-2017 Capital Breakdown (w COR) – Accrual Basis General Counsel (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Corporate Communications							
Corporate Website*	-	-	1,000	-	-	-	-
Total Capital and Cost of Removal	<u>-</u>	<u>-</u>	<u>1,000</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

\* Joint effort between Corporate Communications and Retail - not included in 2012 Business Plan



# Financial Performance

## 2011-2017 Headcount

### General Counsel

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
General Counsel	2	2	2	2	2	2	2
Communication	16	17	17	17	17	17	17
Compliance	7	7	7	7	7	7	7
Corp Responsibility	5	6	6	6	6	6	6
Environmental	17	19	21	20	20	20	20
External Affairs	3	3	3	3	3	3	3
Legal	24	25	25	25	25	25	25
Regulatory (State and Federal)	17	18	18	18	18	18	18
<b>TOTAL</b>	<b>91</b>	<b>97</b>	<b>99</b>	<b>98</b>	<b>98</b>	<b>98</b>	<b>98</b>
From 2012 Business Plan		97	98	98			
Variance to 2012 Business Plan		0	1	0			
<u>Plan over Plan increases (decreases)</u>							
New Environmental Position			1				
		0	1	0			



# Plan Risks

- **Legal**

- *New environmental regulations will continue to require extraordinary legal review and input.*
- *The Company becomes embroiled in a significant legal dispute.*

- **Corporate Communications**

- *Given increased ECR, pending rate cases, and pending EPA regulations, customer bills will continue to increase, potentially resulting in lower customer satisfaction levels.*
- *With growing concern regarding the environment, the public will expect a strong partnership between energy producers and energy consumers to provide additional energy efficiency programs and address and resolve environmental quality issues.*



# Plan Risks

- **Corporate Responsibility**

- *Growing public cynicism may mean public dissatisfaction with our CR efforts.*
- *Environmental groups will likely increase their activities and scrutiny requiring more community outreach.*
- *There will be closer scrutiny from regulators and public officials requiring the development of new response strategies.*

- **Compliance**

- *NERC Reliability Standards, including the Cyber Security Standards, are likely to be revised and affect resources.*
- *PPL expectations regarding compliance programs, investigations, and reporting may affect responsibilities and roles of the Compliance Department.*
- *Extraordinary workload anticipated due to efforts to address open enforcement matters.*



# Plan Risks

- **External Affairs**

- *Previously unseen upward pressure on customers electric rates due to increased capital expenditures for pollution control and base load generation construction. Environmental, energy efficiency, and renewable portfolio standards legislation and Federal EPA regulations place substantial compliance costs on the company and its customers.*
- *Local, State and Federal Budget shortfalls result in increased efforts to raise revenue through surcharges on the customer electric bill and increased corporate fees and taxes.*
- *Asset ownership by outside-of-the-state entity.*
- *Political environment at the federal and state level becomes increasingly more challenging*



# Plan Risks

- **State Regulation & Rates**

- *Growing rate base and operating expenses, coupled with regulatory lag could make target returns difficult to achieve.*
- *Commission and intervenor sensitivity to rising costs could result in punitive actions beyond law and precedent – prudence could be challenged more often particularly where actual costs exceed estimates.*
- *Changes to and uncertainty in Environmental regulations could put significant pressure on Environmental Cost Recovery mechanism.*
- *Failure to get timely regulatory approvals for generation and transmission investment could put reliability, customer service and utility economics at risk.*
- *Legal challenges to KPSC's authority to develop rate mechanisms could have broad reaching impacts to existing and potential recovery mechanisms.*
- *Legislation that changes the regulatory structure.*
- *Increased scope and diversity of intervenors in proceedings.*



# Plan Risks

- **Environmental**

- *Sharp increase in new environmental regulations and regulatory initiatives requiring additional EA staff and training.*
- *Significant increase in the number of environmental permits and permit conditions required for daily company operations which necessitate outside contractors for specialized modeling, monitoring and testing.*
- *Increased annual operation fees for Title V air permits, STAR permits, KPDES water permits, KY River Authority and special waste landfills.*
- *Increased costs for disposal of hazardous wastes, PCB wastes and spill clean-up materials.*

# Plan Risks

- **Federal Regulation & Policy**

- *Further loss of control over transmission planning and construction decisions*
- *Greater socialization of transmission costs across the entire region*
- *Increased pressure between state and federal regulators with respect to cost recovery*
- *Volatile and deteriorating regulatory climate in EPA*



# Appendix



# Year over Year Walk Forward OPEX and Other Expense General Counsel

2011 Actual	30,494
Labor Increases	873
Environmental Title V Fees	1,050
Outside Counsel Expenses	969
Other Non Labor Items	182
Rate Case Amortization	<u>(662)</u>
2012 FC	32,906
Outside Counsel Expenses	2,814
Outside Services - Environmental Compliance	498
Labor Increases	253
Outside Services - Virginia Rate Case	200
Rate Case Amortization	660
Other Non Labor Items	<u>280</u>
2013 Budget	37,611
Outside Counsel Expenses	475
Labor Increases	321
Other Non Labor Items	315
Rate Case Amortization	<u>(350)</u>
2014 Plan	38,372
Rate Case Amortization	895
Labor Increases	340
Outside Counsel Expenses	211
Outside Services - Virginia Rate Case	200
Other Non Labor Items	<u>378</u>
2015 Plan	40,396
Labor Increases	350
Other Non Labor Items	107
Outside Counsel Expenses	215
Rate Case Amortization	<u>(840)</u>
2016 Plan	40,228
Rate Case Amortization	947
Labor Increases	361
Outside Counsel Expenses	220
Other Non Labor Items	311
Outside Services - Virginia Rate Case	<u>200</u>
2017 Plan	<u>42,267</u>



# Headcount Progression General Counsel

2011 Headcount	91
New Position for Environmental Auditor	1
Environmental Auditor Position Filled	1
Open Corporate Responsibility Position	(1)
Open Attorney Position (year end hire date)	1
New Position - Communications Marketing Specialist (year end )	1
New Position - State Reg & Rates Regulatory Analyst (year end)	1
Open Corporate Responsibility Position (year end)	1
New Position - Corporate Responsibility Specialist (year end)	1
2012 Headcount FC	<u>97</u>
New Position for Environmental Analyst	1
Environmental Intern added	1
2013 Headcount Budget	<u>99</u>
Environmental Intern assignment ends	(1)
2014-2017 Headcount Plan	<u>98</u>

## Other Balance Sheet Costs General Counsel (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Regulatory Assets							
Non Labor	264	3,500	-	4,980	-	3,580	1,400
Total	<u>264</u>	<u>3,500</u>	<u>-</u>	<u>4,980</u>	<u>-</u>	<u>3,580</u>	<u>1,400</u>
WKE							
Labor	100	-	-	-	-	-	-
Non labor	3,176	910	972	-	-	-	-
Total	<u>3,276</u>	<u>910</u>	<u>972</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
 Total Other Costs	 <u>3,540</u>	 <u>4,410</u>	 <u>972</u>	 <u>4,980</u>	 <u>-</u>	 <u>3,580</u>	 <u>1,400</u>



PPL companies

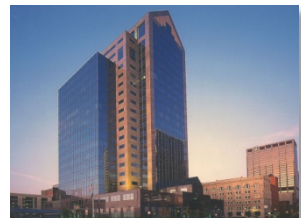
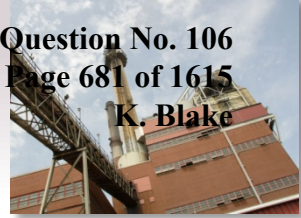
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# Information Technology

## 2013 Business Plan

*September 25, 2012*

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# Plan Highlights

- The 2013 Information Technology O&M budget submitted for the 2013 Business Plan is \$49.1 million. The current business plan is \$0.9 million unfavorable to the 2012 Business Plan for 2013, due to O&M Commitment Letters transferred from other lines of business.
- The 2013 IT Capital budget is \$26 million and is \$4.1 million favorable to the 2013 budget submitted for the 2012 BP as a result of the 10% reductions.



# Major Assumptions

- **Business reliance on Technology**
  - *Encompasses employees as well as customer demand; little tolerance for system outages*
- **Regulatory**
  - *Expanded regulatory requirements will increase spending on CIP*
- **Cyber Security Threats**
  - *Daily increase in threats and their level of sophistication will continue to require new methods and technologies to minimize the threats*
- **Customer Care**
  - *Increased efforts to meet customer demand through numerous enhancements.*
  - *Rate cases frequency will create additional system changes*
- **Business Applications**
  - *LOB business applications (Storms Replacement, Mobile Workforce Management, etc.)*
- **New Technologies**
  - *Continued effort to leverage the most productive technologies, oftentimes relatively recent technologies which will require continued spend*
- **Operations and Infrastructure**
  - *Continued efforts to refresh as well as enhance our network infrastructure and storage*





# Financial Performance

## 2011-2017 OPEX and Other Expenses Information Technology (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Labor	20,759	22,409	25,219	26,991	28,290	29,362	30,269
Software/Hardware Maint.	11,262	12,835	14,522	15,017	15,317	15,623	15,936
Outside Services	3,743	3,575	3,764	3,516	3,586	3,658	3,731
Training, Travel & Meals	708	917	1,129	1,152	1,175	1,198	1,222
Dues & Subscriptions	148	301	115	118	120	122	125
Other Non Labor	3,665	4,442	4,357	4,316	3,875	4,065	4,581
Total Income Statement items	<u>40,286</u>	<u>44,479</u>	<u>49,107</u>	<u>51,110</u>	<u>52,363</u>	<u>54,029</u>	<u>55,864</u>



## 2013-2017 OPEX/Other Expense Reconciliation IT Organization (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	48,233	50,236	51,489	53,155	54,989
Drivers:					
IT Commitment Letters	874	874	874	874	874
IT Labor	(9)	(7)	493	716	780
Other IT	9	7	(493)	(716)	(779)
Current Plan	<u>49,107</u>	<u>51,110</u>	<u>52,363</u>	<u>54,029</u>	<u>55,864</u>



## 2011-2017 Capital Breakdown (w COR) – Accrual Basis IT Organization (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
CCS			7,031	2,500	4,000	6,907	3,900
Cisco UC&C		2,000	3,382	750			
SouthEast KY Microwave				1,000	2,000	500	
ERP					750	7,250	2,500
Desktop Operations	3,239	3,038	2,739	2,804	2,551	2,554	2,720
Replace Sonet Nodes						1,500	4,000
West KY Sonet Microwave	2,008	3,021	1,845				
Other	16,187	18,230	10,982	18,226	14,777	10,936	11,842
<b>Total Capital and Cost of Removal</b>	<u>21,434</u>	<u>26,289</u>	<u>25,979</u>	<u>25,280</u>	<u>24,078</u>	<u>29,647</u>	<u>24,962</u>



# Capital Reconciliation (w COR) – Accrual Basis IT Organization (\$000)

	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Prior Plan	30,116	28,839	40,254	39,696	41,235
Changes:					
CCS Upgrade	(707)		4,000	6,907	3,900
Desktop Operations	2	(165)	(1,873)	(2,216)	(4,654)
ERP	(250)	(750)	(13,500)	(6,750)	(13,500)
Replace Sonet Nodes				1,500	4,000
Wide Area Network SE			2,000	500	
Mobile Radio Replace.		(1,016)	2,000		
LTP Hardware		(850)	(6,088)	(6,334)	2,522
LTP Software			(4,801)	(5,055)	(8,541)
Other	(3,182)	(778)	2,086	1,399	
Current Plan	<u>25,979</u>	<u>25,280</u>	<u>24,078</u>	<u>29,647</u>	<u>24,962</u>

# IT Financial Performance

## 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
IT Bus Apps	76	81	84	85	86	86	86
IT Infrastructure	95	103	109	113	116	117	117
IT Client Services	68	77	81	83	84	85	84
IT Security	13	13	14	14	14	14	14
IT VP	2	2	2	2	2	2	2
<b>TOTAL</b>	<b>254</b>	<b>276</b>	<b>290</b>	<b>297</b>	<b>302</b>	<b>304</b>	<b>303</b>
From 2012 MTP		278	287	288			
Variance to prior plan		-2	3	9			

### Differences

CCS positions	-2	1					
BI addition			1	1			
GIS analyst				1			
CIP compliance			1	3			
Security				2			
Analyst for Finance/Supply Chain				1			
Telecom project manager				1			



# Plan Risks

- Information Technology
  - CIP version 4 and version 5 compliance
  - Potential reduction in system availability due to declining service level agreements with vendors based on our current versions
  - Introduction of unified communication and collaboration technologies could pose change management challenges
  - Acquiring skilled IT resources will continue to be a challenge for us and the rest of the industry

# Appendix



# 2011-2017 Year over Year Walk Forward OPEX and Other Expense Information Technology

2011 Actual	40,286
Labor	1,650
IT Software/Hardware Maint.	1,538
Telecom	306
Other Nonlabor	700
2012 FC	44,480
Labor	2,811
IT Software/Hardware Maint.	1,687
Other Nonlabor	130
2013 Budget	49,108
Labor	1,772
Other Nonlabor	230
2014 Plan	51,110
Labor	1,299
Other Nonlabor	(6)
2015 Plan	52,403
Labor	1,072
Other Nonlabor	254
2016 Plan	53,729
Labor	907
Other Nonlabor	453
2017 Plan	55,089





# Headcount Progression Information Technology

2011 Headcount	254
IT Bus Apps	2
IT Infrastructure	4
IT Client Services	7
To be filled	9
2012 Headcount FC	276
Mobile Support	1
Telecom (CIP)	2
BI Support	2
CCS Programmers/Analysts	2
Network System Engineers	1
Network System Engineer Unified Communications	1
IPM, Web apps support (Shared Services)	1
IT Change Manager (PMO Group)	1
IT security	2
Distibution Operations Support	1
2013 Headcount Budget	290
Modules for Fin/Supply Chain	1
Distibution Operations Support	1
BI Support	1
Telecom	4
2014 Headcount Plan	297
Telecom (CIP)	1
Telecom Unified Communications	1
Network Systems Engineer	1
BI Support	2
2015 Headcount Plan	302
BI Support	1
DBA	1
2016 Headcount Plan	304
Offset for SOA via attrition	-1
2017 Headcount Plan	303





**PPL companies**

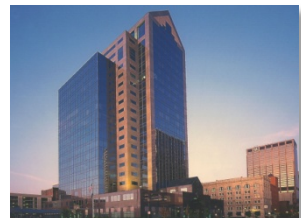
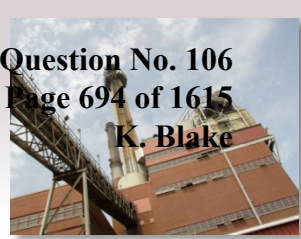
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# Human Resources

# 2013 Business Plan

*September 25, 2012*

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  - *Operating Expense*
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# Major Assumptions

- *Current and potential Federal legislative initiatives may significantly affect the existing landscape and costs associated with virtually every aspect of the workforce (benefits, compensation, union relations, safety, etc.).*
- *Wellness must continue to evolve as a means of containing healthcare costs.*
- *The pace and complexity of regulatory compliance will continue to escalate.*
- *Competition for talent will require more non-traditional sourcing.*
- *Headcount will remain flat at 35 employees throughout the plan period*
- *Capital spend same as 2012 Business Plan – primarily tied to PeopleSoft upgrades/enhancements*



# Financial Performance

## 2011-2017 OPEX and Other Expenses Human Resources (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses *							
Labor	3,677	3,811	3,825	3,950	4,069	4,191	4,317
Outside Services	435	641	868	950	969	988	1,008
Employee Services Awards	207	310	360	435	444	453	462
Training Travel & Meals	133	244	299	365	372	379	387
Donations	24	67	104	106	108	110	112
Other Non Labor	227	378	476	282	287	292	295
Total Income Statement items	<u>4,703</u>	<u>5,452</u>	<u>5,933</u>	<u>6,088</u>	<u>6,248</u>	<u>6,413</u>	<u>6,580</u>

\* Agrees with 2012 Business Plan



## 2011-2017 Capital Breakdown (w COR) – Accrual Basis Human Resources (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
PeopleSoft Upgrades	307	930	-	-	400	575	-
Peoplesoft Enhancements	-	-	225	225	225	225	225
Total Capital and Cost of Removal	<u>307</u>	<u>930</u>	<u>225</u>	<u>225</u>	<u>625</u>	<u>800</u>	<u>225</u>



# Plan Risks

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- *Economic pressures and impact on Human Resource management*
- *Effects of possible Federal legislation relating to benefits, compensation, labor, safety, and taxation*

# Appendix





2011-2017 Attachment to Response to AG-1 Question No. 106  
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# Year over Year Walk Forward OPEX and Other Expense Human Resources

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2011 Actual	4,703
Outside Services	206
Employee Service Awards	103
Labor Increases	134
Other Non Labor Items	<u>306</u>
2012 FC	5,452
Outside Services	227
Employee Service Awards	50
Labor Increases	14
Other Non Labor Items	<u>199</u>
2013 Budget	5,942
Labor Increases	125
Employee Service Awards	75
Other Non Labor Items	<u>(44)</u>
2014 Plan	6,098
Labor Increases	119
Other Non Labor Items	<u>42</u>
2015 Plan	6,259
Labor Increases	122
Other Non Labor Items	<u>44</u>
2016 Plan	6,425
Labor Increases	126
Other Non Labor Items	<u>44</u>
2017 Plan	<u>6,595</u>



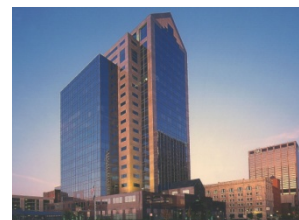
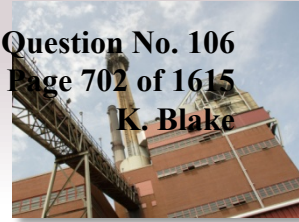


PPL companies

# Supply Chain

## 2013 Business Plan

*September 25, 2012*



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# Major Assumptions

- Progression of new sourcing leaders and internal allocation of resources will offset key 2013 retirement
- Agreed upon direction of the Supply Chain Centers of Excellence (COE) will not change from current plan
- Select IT projects will result in efficiency improvements



# Financial Performance

## 2011-2017 OPEX and Other Expenses Supply Chain (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Labor	2,847	3,064	3,109	3,136	3,230	3,327	3,427
Outside Services	53	31	30	31	32	32	33
Training Travel & Meals	102	113	130	133	135	138	141
Donations	21	26	26	27	27	28	28
Other Non Labor	122	196	202	205	209	213	217
Total Income Statement items	<u>3,146</u>	<u>3,430</u>	<u>3,498</u>	<u>3,532</u>	<u>3,634</u>	<u>3,739</u>	<u>3,847</u>



## 2013-2017 OPEX/Other Expense Reconciliation Supply Chain (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	3,562	3,639	3,744	3,852	3,963
Drivers:					
Labor	<u>(64)</u>	<u>(107)</u>	<u>(110)</u>	<u>(113)</u>	<u>(116)</u>
Current Plan	<u><u>3,498</u></u>	<u><u>3,532</u></u>	<u><u>3,634</u></u>	<u><u>3,739</u></u>	<u><u>3,847</u></u>



# 2011-2017 Capital Breakdown (w COR) – Accrual Basis Supply Chain(\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Storeroom Building	204	200	-	-	120	-	-
Pole Racks	104	-	200	230	60	30	-
Other	384	124	185	210	125	300	330
Total Capital and Cost of Removal	<u>692</u>	<u>324</u>	<u>385</u>	<u>440</u>	<u>305</u>	<u>330</u>	<u>330</u>



# Financial Performance

## 2011-2017 Headcount

### Supply Chain

<u>Department</u>	<u>2011 Year End</u>	<u>2012 Forecast</u>	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Supply Chain	49	49	49	49	49	49	49
From 2012 Business Plan		<u>48</u>	<u>48</u>	<u>48</u>			
Variance to 2012 Business Plan		<u>1</u>	<u>1</u>	<u>1</u>			
<u>Plan over Plan increases (decreases)</u>							
Supply Chain Intern Added		1	1	1			





# Plan Risks

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- Supply Chain
  - Incremental PPL Initiatives
  - Overall group demographics in key functions; Succession Planning Below Manager Level
  - Incremental work outside of the existing Procurement Plans could require temporary sourcing resources

# Appendix



2011-2017 Attachment to Response to AG-1 Question No. 106  
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# Year over Year Walk Forward OPEX and Other Expense Supply Chain

2011 Actual	3,147
Labor Increases	217
Other Non Labor Items	66
2012 FC	<u>3,430</u>
Labor Increases	45
Other Non Labor Items	23
2013 Budget	<u>3,498</u>
Labor Increases	27
Other Non Labor Items	7
2014 Plan	<u>3,532</u>
Labor Increases	94
Other Non Labor Items	8
2015 Plan	<u>3,634</u>
Labor Increases	97
Other Non Labor Items	8
2016 Plan	<u>3,739</u>
Labor Increases	100
Other Non Labor Items	8
2017 Plan	<u>3,847</u>

# Headcount Progression Supply Chain

2011 Headcount	49
2012 Headcount FC	<u>49</u>
Position Absorbed with Retirement	(1)
Intern Added	<u>1</u>
2013-2017 Headcount Budget	49

## Other Balance Sheet Costs Supply Chain (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
Stores Expense							
Labor	1,373	1,472	1,359	1,422	1,465	1,509	1,554
Non labor	643	464	675	695	709	723	737
Total	<u>2,016</u>	<u>1,936</u>	<u>2,034</u>	<u>2,117</u>	<u>2,173</u>	<u>2,232</u>	<u>2,291</u>

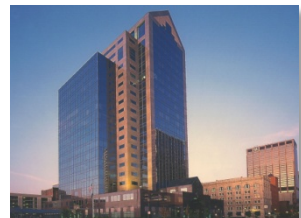
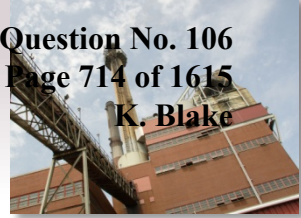


PPL companies

# CFO Organization

# 2013 Business Plan

9-25-2012



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# Plan Highlights

- Operating expenses in all MTP years are below the 2012 plan
- Technology initiatives include Oracle R12, Hyperion, PeopleSoft Time and Labor, Wall Street Suites, PowerPlant - Property Tax and Capital Lease modules
- CFO budget is primarily labor costs (~70% of total annual budget)
- Audit, bank and insurance fees comprise approximately 25% of total annual costs



# Major Assumptions

- Headcount remains flat throughout the plan period with 3% wage inflation.
- Non-labor expenditure types were escalated by 2% for 2015 - 2017.
- In 2013, labor and burdens are reduced by \$538k due to labor being charged to the Oracle project.
- \$210k increase in audit fees for 2013 due to the pre- or post-implementation review of Oracle R-12 (\$150k) and Hyperion (\$60k).



# Operating Costs

## 2011-2017 OPEX and Other Expenses (\$000)

Item	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
OPEX/Other Expenses							
Labor	11,427	11,322	11,269	12,110	12,474	12,848	13,233
Audit Fees	1,285	1,614	1,950	1,825	1,861	1,899	1,937
Bank Fees	1,177	1,174	1,425	1,468	1,497	1,527	1,557
Insurance Mgmt Fee	626	971	1,049	1,079	1,100	1,122	1,145
Training, Travel and Meals	273	293	431	445	454	463	472
Other Outside Services	688	646	267	123	125	128	130
Other	490	480	533	506	518	529	542
Subtotal OPEX/Other expense	<u>15,966</u>	<u>16,500</u>	<u>16,924</u>	<u>17,556</u>	<u>18,029</u>	<u>18,516</u>	<u>19,016</u>



## 2013-2017 OPEX/Other Expense Reconciliation (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	17,126	17,618	18,091	18,578	19,078
Drivers:					
Labor and Burdens	(661)	(178)	(183)	(189)	(195)
Audit Fees	210	-	-	-	-
Bank Service Fees	149	166	169	173	176
Other	100	(50)	(48)	(46)	(43)
Current Plan	<u>16,924</u>	<u>17,556</u>	<u>18,029</u>	<u>18,516</u>	<u>19,016</u>



## 2011-2017 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2011 Actual	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
<b>Other</b>							
Oracle Upgrade	-	2,778	4,612	-	-	-	-
Peoplsoft Time and Labor	-	451	800	-	-	-	-
Wallstreet Suite	-	194	346	-	-	-	-
Powerplant Property Tax	-	-	220	-	-	-	-
Powerplant Memory	33	-	40	-	-	-	-
Powerplant Lease	-	-	72	-	-	-	-
Powerplant Budget	187	148	-	-	-	-	-
UI Planner	392	13					
Other	-	10	10	500	500	750	500
<b>Total Capital and Cost of Removal</b>	<b>612</b>	<b>3,594</b>	<b>6,100</b>	<b>500</b>	<b>500</b>	<b>750</b>	<b>500</b>



# Capital Reconciliation (w COR) –Accrual Basis (\$000)

	<u>2013 Budget</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>	<u>2017 Plan</u>
Prior Plan	8,448	500	500	500	500
Changes:					
Oracle R12	(2,888)	-	-	-	-
Peoplesoft Time	700	-	-	-	-
Powerplant Projects	(160)	-	-	-	-
Current Plan	<u>6,100</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>

# Headcount

## 2011-2017 Headcount

Department	2011 Year End	2012 Forecast	2013 Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan
CFO	2	2	2	2	2	2	2
CONTROLLER	52	50	51	51	51	51	51
AUDIT	10	14	14	14	14	14	14
TREASURER	19	19	19	19	19	19	19
TAX	15	16	16	16	16	16	16
FIN. PLAN AND CONTL	26	26	25	25	25	25	25
<b>TOTAL</b>	<u>124</u>	<u>127</u>	<u>127</u>	<u>127</u>	<u>127</u>	<u>127</u>	<u>127</u>
From 2012 Business Plan		<u>131</u>	<u>131</u>	<u>131</u>			
Variance to 2012 Business Plan		<u>-4</u>	<u>-4</u>	<u>-4</u>			

Plan over Plan increases (decreases)

Elimination of Corp Planning and Development Dept. (-2 positions)

Position removed from Finance and Budgeting Corporate (Financial Planning and Controlling)

Position removed from Financial Accounting and Analysis (Controller)



# Plan Risks

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- Cost and schedule for capital projects
- Limited resources available for special projects

# Appendix

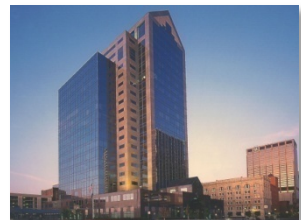
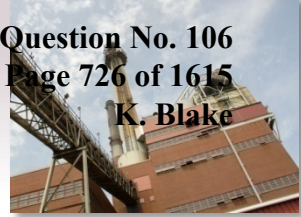




## Year over Year Walk Forward OPEX and Other Expense

<b>2011 Actual</b>	15,966
Oracle Assessment Fees	491
Contractors in 2011 to supplement work force	(496)
Audit Fees	330
Insurance Fees	335
Labor charged to Oracle project	(280)
Other	154
<b>2012 FC</b>	16,500
Labor charged to Oracle project	(538)
Labor and burden increases	359
Labor vacancies in 2011	232
No Oracle Assessment Fees	(491)
Audit Fees	336
Bank Fees	251
Training, Travel and Meals	138
Contractors backfilling during Oracle R12 project	138
Other	(1)
<b>2013 Budget</b>	16,924
Labor and burdens increases	287
Return of Oracle labor to O&M	554
Audit Fees (net)	(125)
Contractors - Oracle project will be over	(138)
Other	54
<b>2014 Plan</b>	17,556
Labor and burdens increases	363
Other non-labor items	110
<b>2015 Plan</b>	18,029
Labor and burdens increases	374
Other non-labor items	112
<b>2016 Plan</b>	18,515
Labor and burdens increases	385
Other non-labor items	115
<b>2017 Plan</b>	19,015





**PPL companies**

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**Corporate**

**2013 Business Plan**

*September 25, 2012*

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# Corporate Expense Assumptions

- *Pension based on actuarial calculations – discount rate continues to be depressed in 2013*
- *For 2013, medical expense based on experience and national average increases of 7.5% annually for 2014 and beyond*
- *Continued savings from employee spousal surcharge for medical*
- *Property taxes for terminated 2005-2006 ECR plans rolled into normal operating taxes from cost of sales*
- *Allocation of PPL expenses consistent with the 2012 business plan*
- *Property insurance increases driven by recent appraisals and continued growth of assets*
- *Assumed amortization of regulatory assets will continue through plan periods based on rate case activity*
- *Assumed inventory write offs at Cane Run and Green River due to plant retirement will be moved to regulatory asset and amortized over five years*



# Corporate Expense Details

<u>(\$Millions)</u>	<u>2011 Act</u>	<u>2012FC</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<i>Pension/Post Retirement</i>	47	40	43	35	28	24	22
<i>Medical/Dental</i>	22	25	27	29	31	34	36
<i>Payroll taxes</i>	16	17	18	19	20	20	21
<i>401k Drop In</i>	8	10	10	11	11	12	12
<i>Other Benefits</i>	5	6	7	7	7	7	7
<i>Property and Other Taxes</i>	39	43	48	51	54	56	58
<i>PPL Management Fee</i>	15	13	13	13	13	13	14
<i>Incentive Compensation</i>	12	15	13	13	11	17	14
<i>Insurance Expense</i>	9	10	13	14	15	17	18
<i>Amortization of Storm expense</i>	(1)	14	15	15	15	15	14
<i>IMEA/IMPA billings</i>	(11)	(11)	(11)	(12)	(12)	(13)	(14)
<i>Other</i>	4	2	(2)	2	(5)	(11)	(3)
<b>Totals</b>	<b>165</b>	<b>185</b>	<b>194</b>	<b>198</b>	<b>189</b>	<b>192</b>	<b>200</b>

# Corporate Expense Details – Plan over Plan

<u>(\$Millions)</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<b>2012 Business Plan</b>	<b>182</b>	<b>184</b>	<b>178</b>	<b>177</b>
<b>Pension</b>	<b>(6)</b>	<b>(6)</b>	<b>(6)</b>	<b>(6)</b>
<b>June Forecast - Q2 Planning Guidance</b>	<b>176</b>	<b>178</b>	<b>172</b>	<b>171</b>
<i>PPL Stretch</i>	6	7	8	9
<i>Pension/post retirement</i>	5	1	(5)	(7)
<i>Property Insurance</i>	3	4	4	5
<i>ECR plan termination -prop tax</i>	2	2	2	2
<i>Property and Other Taxes</i>	2	1	2	4
<i>Medical savings (ESP)</i>	(4)	(4)	(6)	(7)
<i>Plant retirements</i>	-	-	10	13
<i>Other</i>	4	9	2	2
<b>Current Plan</b>	<b>194</b>	<b>198</b>	<b>189</b>	<b>192</b>

**2013 Plan Assumptions**

- Rate Case authorized in KY and VA
  - File in KY every two years with rate relief effective January 2013, January 2015 and January 2017.
  - File in VA every two years with rate relief effective January 2014 and January 2016.
- ECR Future Filings.
  - July 1, 2013 (Brown 1,2 Fabric Filters and Mill Creek Landfill Expansion).
  - July 1, 2014 (CCP & Effluent Water).
- ECR 2005 and 2006 Compliance Plans terminated into base rates via the 2012 KY rate case.
- Maintain FERC formulary rates for KY municipals with rates reset each July 1
- Utility capitalization is comprised of 53% equity.
- Combined cycle plant of 640 MW commercial operation 5/1/2016 (\$559 million).
- Combined cycle plant of 640 MW commercial operation 6/1/2018 (\$692 million).
- Implementation of a gas leak mitigation cost recovery tracker in 2013 via the 2012 KY rate case.
- 5-year CAGR retail electric load growth of 0.9% (weather-normalized); retail gas load growth of 0.2% (weather-normalized).
- Short-term interest rates of LIBOR plus 20 bps.

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
3 - Month LIBOR	0.500%	1.000%	1.500%	2.000%	2.000%
10 Yr - Treasury	2.500%	2.750%	3.000%	3.250%	3.250%

- Newly issued long-term debt rates for Utilities of 4.65% - 5.0% (65 basis points for issuance costs included).
- Pension discount rates increasing from 4.25% - 4.96%.
- Dividend policy equal to 65% of net income for the Utilities plus net cash excess/ (needs) of LKE.
- CO<sub>2</sub> / Renewable Portfolio Standard (RPS) legislation not effective for the Plan.
- No significant “smart grid” deployment in the Plan.



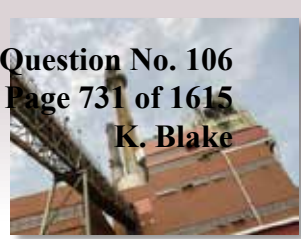
**PPL companies**

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# 2012 MTP Electric Sales Forecast

*June 24, 2011*

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# Key observations in 2011 – Industrials leading growth while commercials lag

- *Compared to the first five months of 2010, total industrial sales have increased 2.1% (77 GWh) in January – May 2011*
- *North American Stainless showing strong production through May 2011 – up 5.2% over 2010*
- *Lower volumes from major industrials Cemex, Toyota, and Carbide Industries*
- *Commercial sales have been slower to recover compared to Industrial sales*



# Optimism for local growth . . .

- *U.S. GDP is expected to grow by 2.7% in 2011 and 2.9% in 2012, versus 3.1% in 2012 in prior plan.*
- *In 2010, Kentucky Real Personal Income grew 1.5%, 0.5% higher than predicted by IHS Global Insight. Real Personal Income is expected to grow by another 2.8% in 2011.*
- *The number of 2012 Kentucky households estimated by Global Insight is 0.8% lower than last year's forecast. 2012 households are still expected to increase in comparison to the 2011 actual figure.*
- *Potential for future growth in Louisville—Downtown Development Corporation renovation projects and lending program.*
- *Discussion with Louisville small business owners reveal optimism about growth in the next two years.*



## ... but risks remain for state and national economy

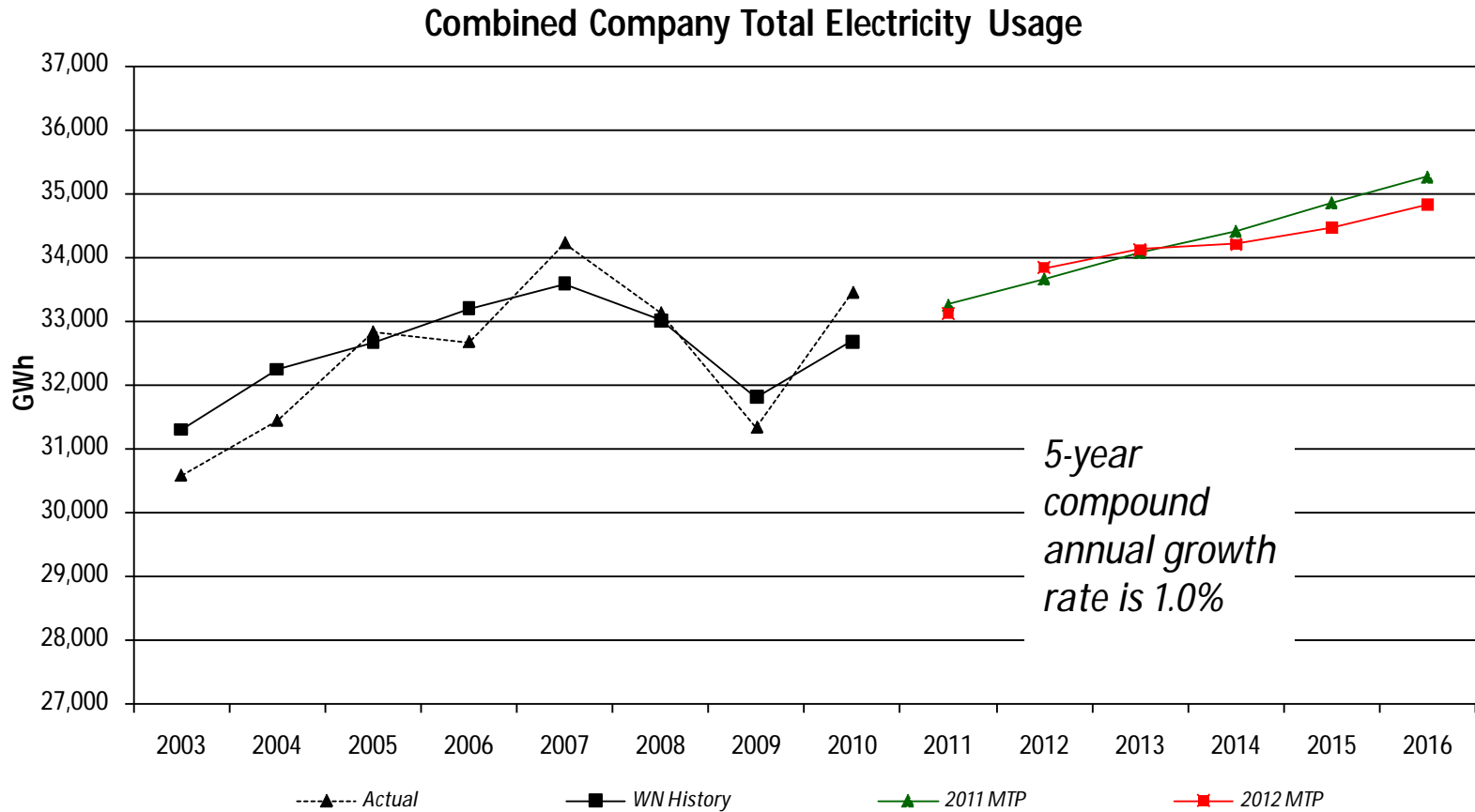
- *Federal Reserve announced on June 7<sup>th</sup> that the national economy was recovering more slowly than expected.*
- *Office space vacancy rate in the Louisville MSA is 15.2%. In good years, vacancy rate is half of that figure, even while construction creates new spaces.*
- *Expansion of new and current business is limited due to tight lending practices.*
- *Kentucky unemployment remains high at 10% but is expected to continue to drop over the remainder of 2011 and through 2012.*
- *Population expected to grow at 0.6-0.7% per year in Kentucky, less than the 1% historical growth over the last 20 years.*

# Balance of 2011 expected to be in line with 2011 MTP

Apr - Dec 2011				
Revenue Class	Forecast (GWh)	2011 MTP (GWh)	Variance (GWh)	Pct Var
<i>Residential</i>	7,635	7,744	(108)	-1.4%
<i>Commercial</i>	8,175	8,263	(88)	-1.1%
<i>Industrial</i>	7,119	6,927	192	2.8%
<i>Municipals/Lighting</i>	1,696	1,654	42	2.5%
<b>Total</b>	<b>24,625</b>	<b>24,588</b>	<b>37</b>	<b>0.1%</b>

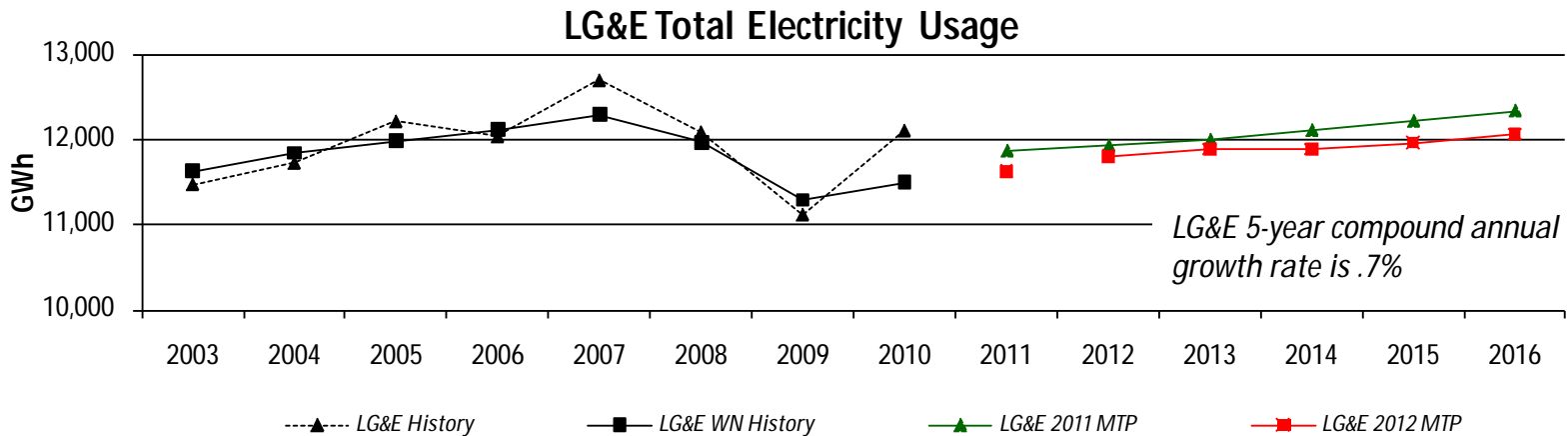
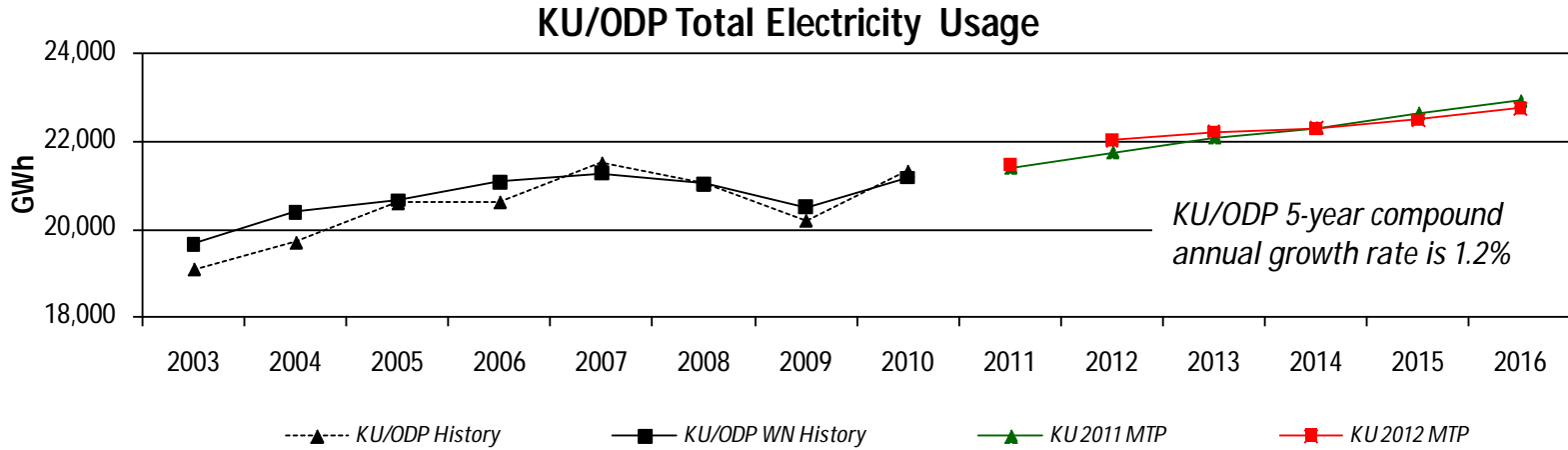
Apr - Dec 2011				
Company	Forecast (GWh)	2011 MTP (GWh)	Variance (GWh)	Pct Var
<i>KU/ODP</i>	15,811	15,599	212	1.4%
<i>LG&amp;E</i>	8,814	8,989	(175)	-2.0%
<b>Total</b>	<b>24,625</b>	<b>24,588</b>	<b>37</b>	<b>0.1%</b>

# 2012 MTP: Combined company energy sales are largely consistent with 2011 MTP



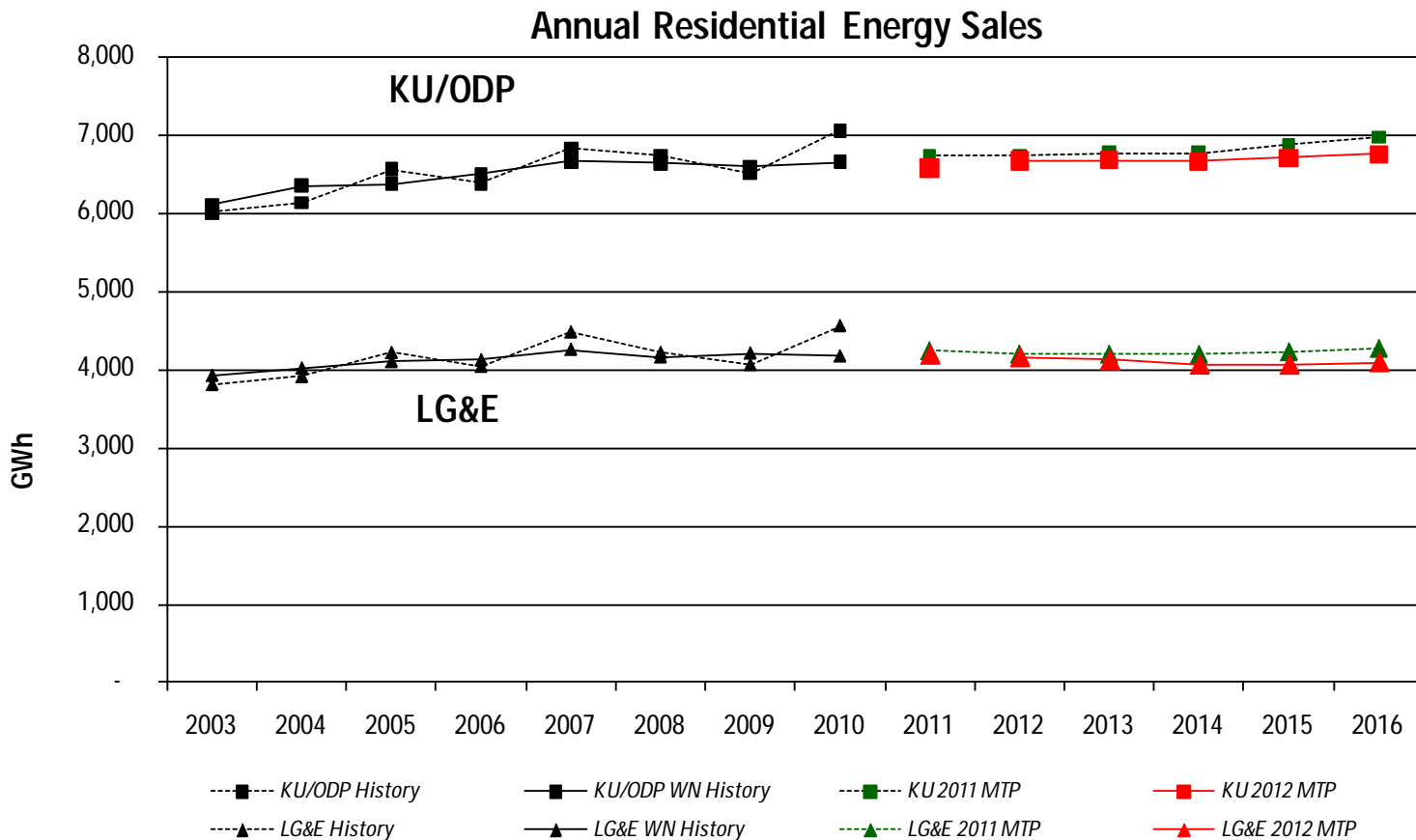
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# Total sales by utility largely consistent with 2011 MTP



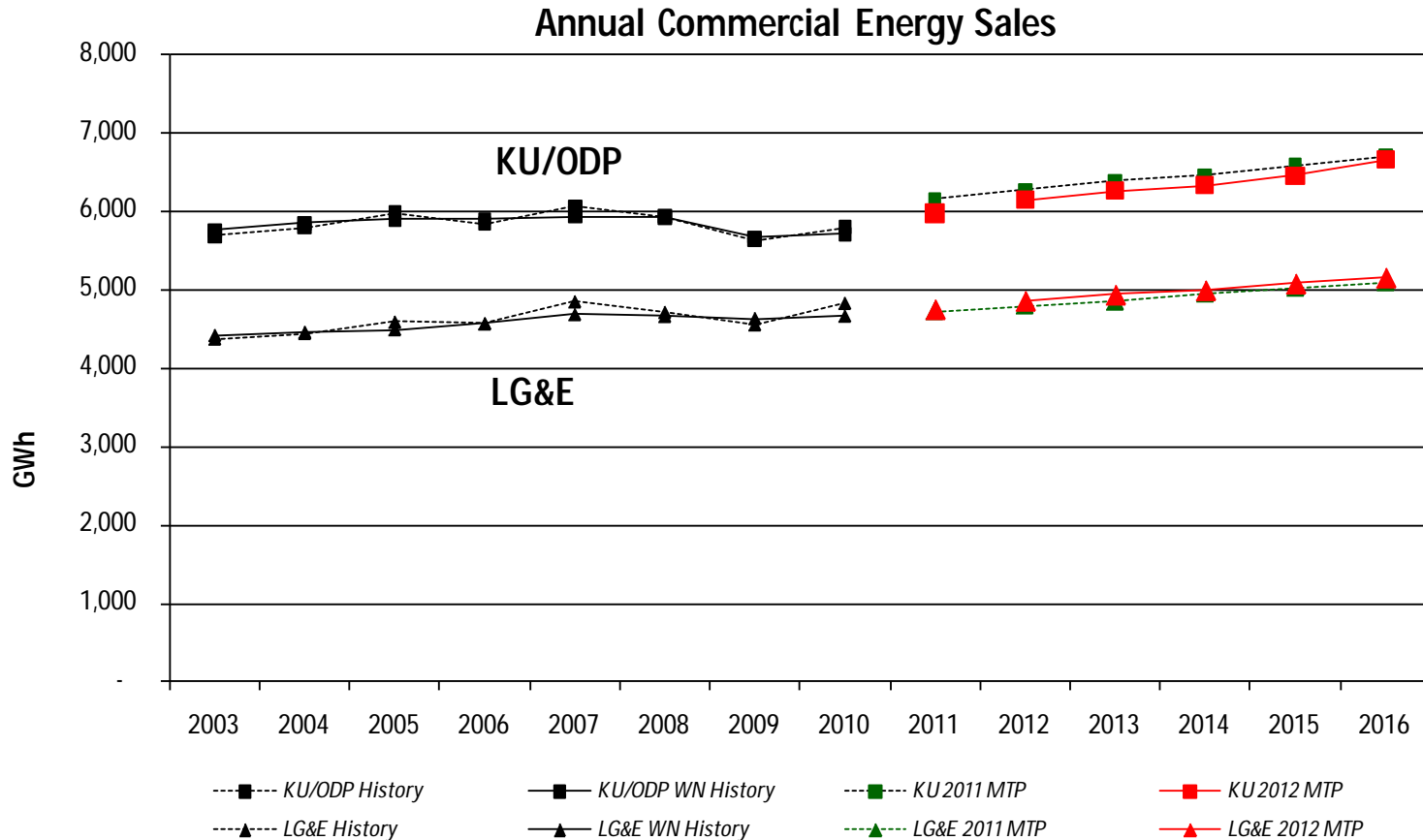
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# Slower customer growth driving residential sales below 2011 MTP



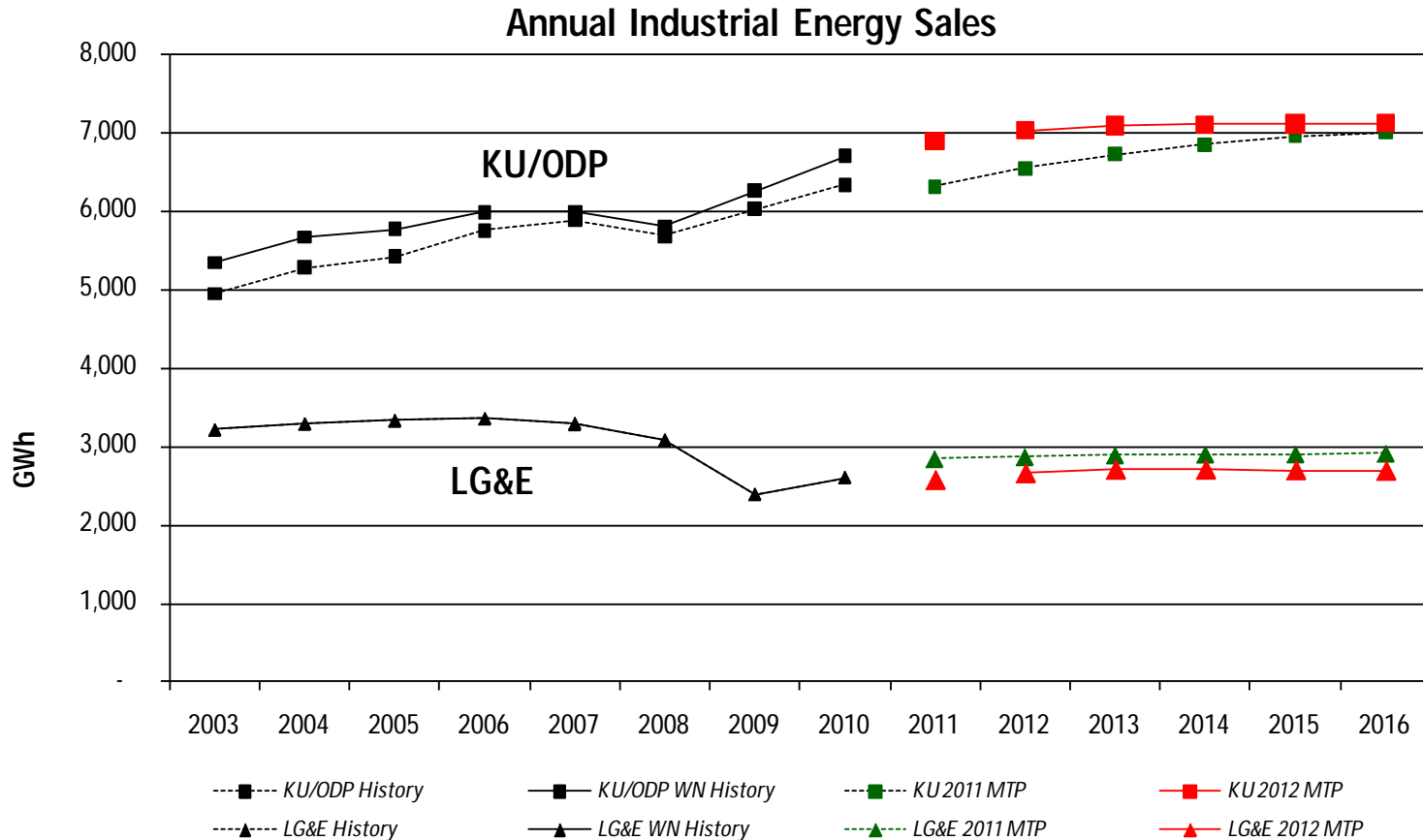
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# KU small commercial sales expected to have slower growth rate



\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

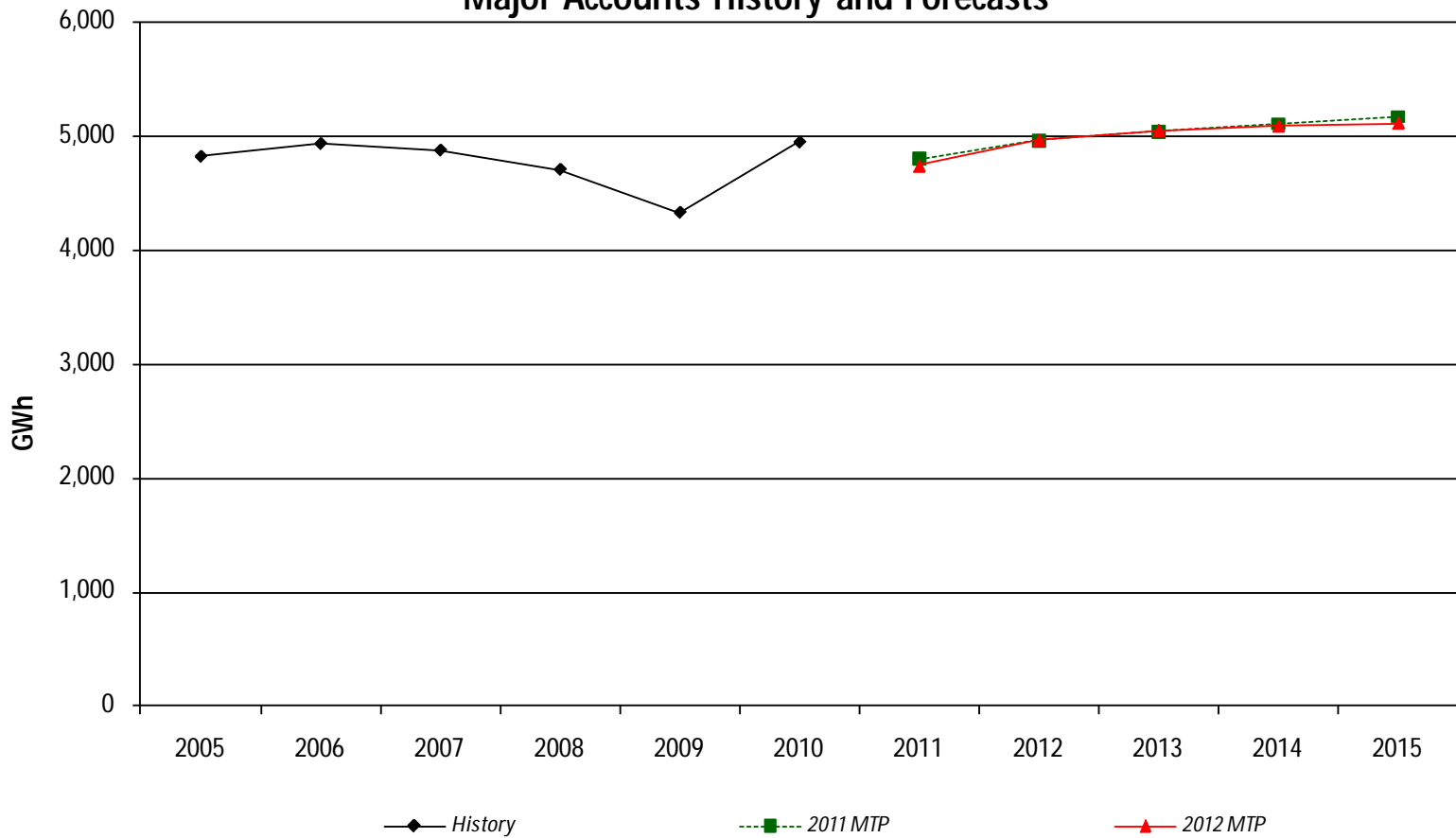
# Industrial Sales: NAS and non-major accounts drive KU growth; Carbide driving LG&E sales lower



\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.



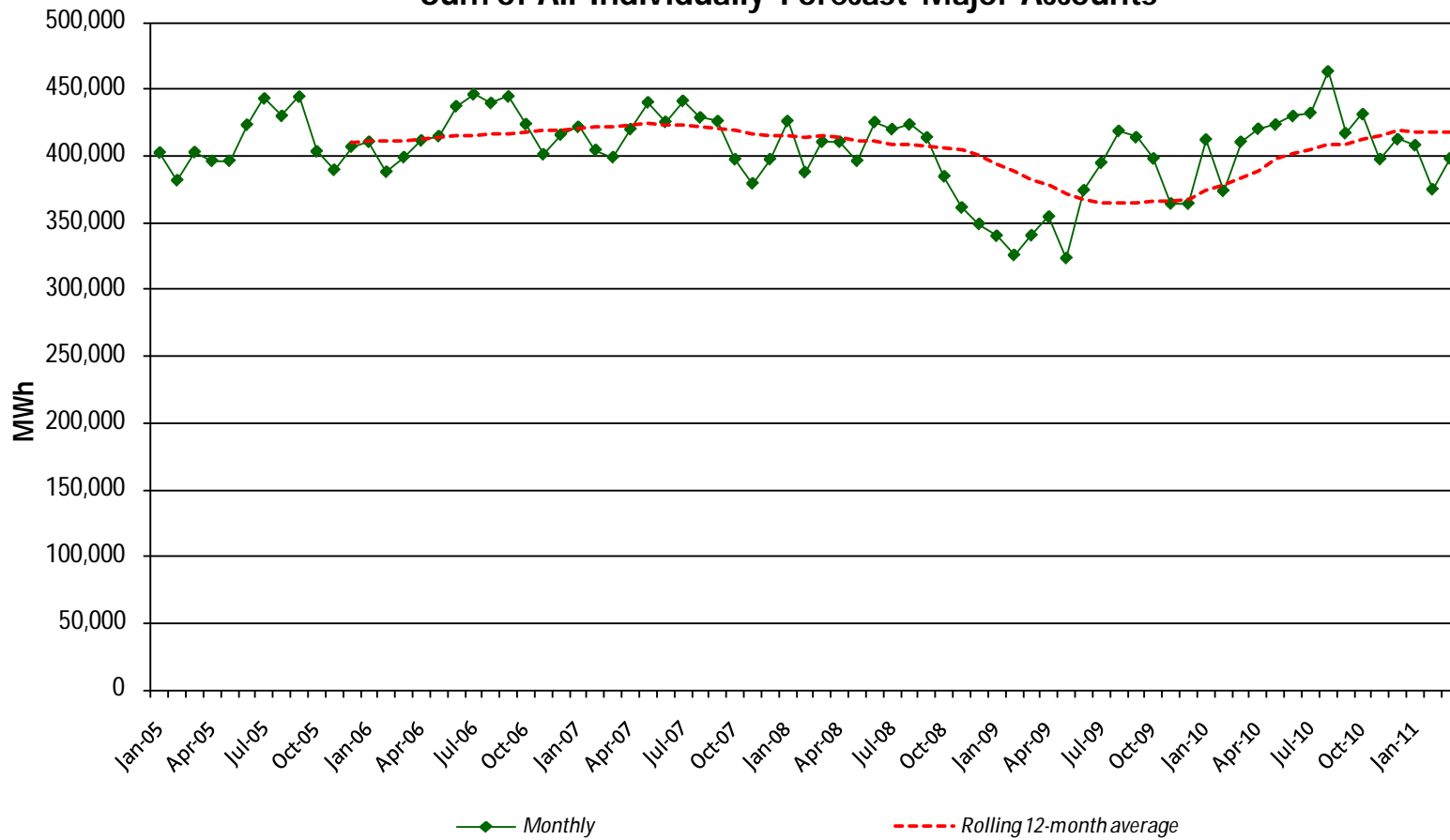
### Major Accounts History and Forecasts



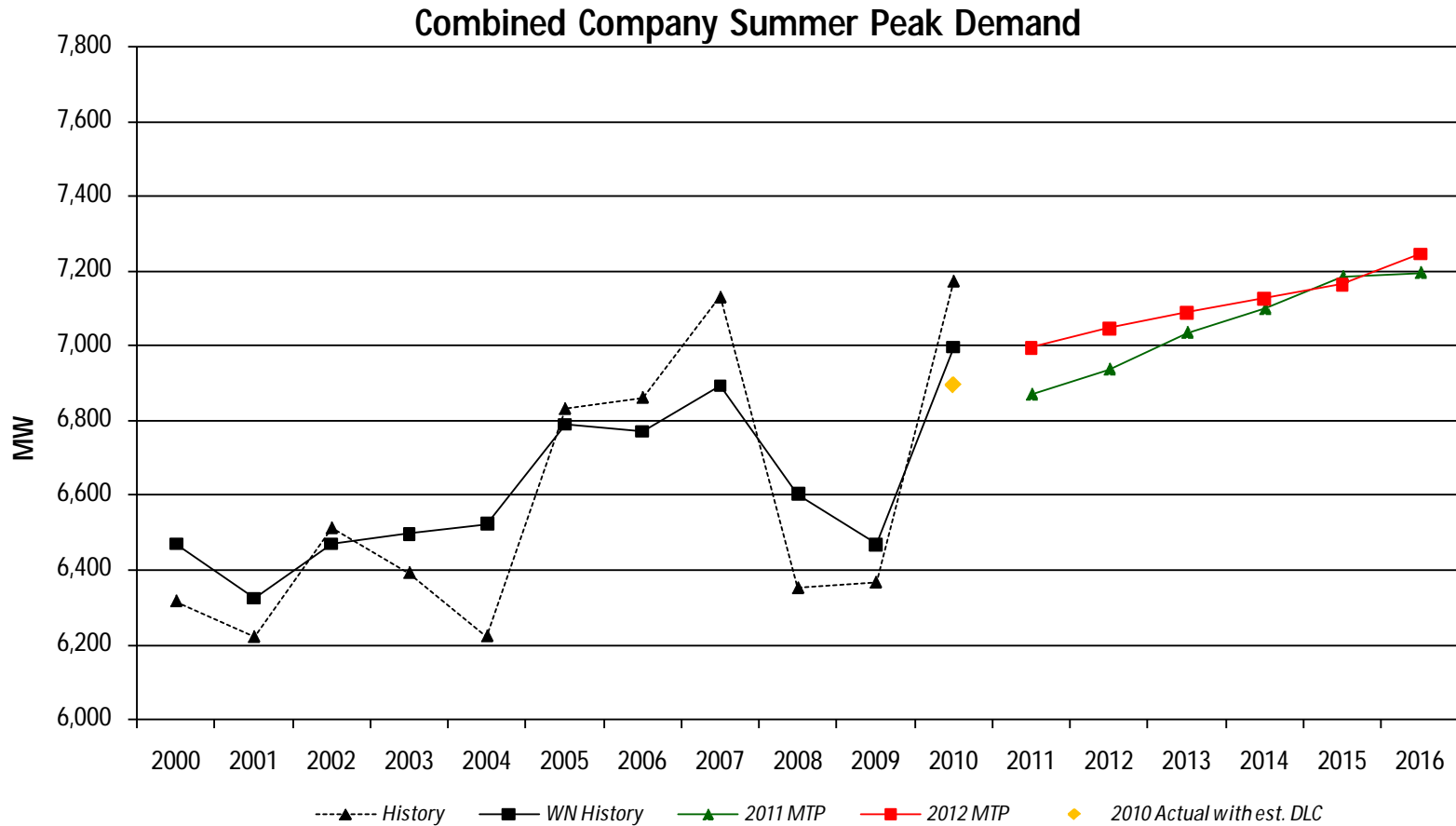
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# Major Accounts have leveled-off in recent months after strong growth in 2010

### Sum of All Individually Forecast Major Accounts



# Combined Company Peak Demand is flatter than previous forecasts, but starts at a higher level



\* In 2012 MTP uncurtailed forecast, 2011 value is a weather-normalized 3+9 forecast.

# Appendix

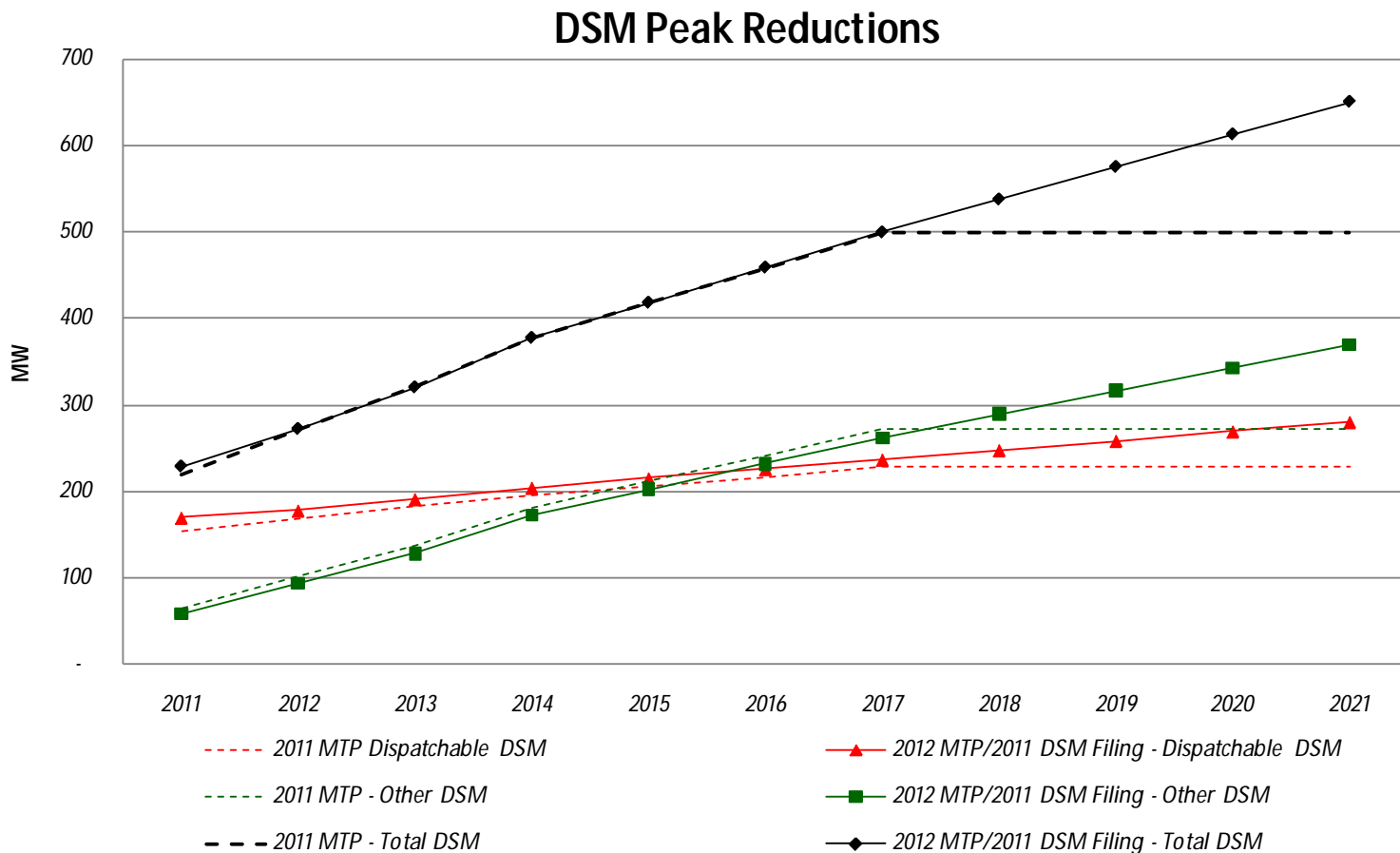
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## Notable Changes in Major Account Forecasts for 2012

- *The 2012 MTP is more optimistic for NAS and Dow Corning, but less optimistic for Fort Knox and Carbide*
- *The majority of major accounts have remained relatively flat from the 2011 MTP*
- *The 2012 MTP assumes a 50% probability of Carbide returning to a lower load of 27 MW*
- *Usage at the recently opened HR Center at Fort Knox has been below original expectations*
- *The 2012 MTP adds Corning (100+ GWh annual load) to the individually forecasted major accounts*

Biggest Movers (GWh)	2011 MTP	2012 MTP	Delta
NAS	1,003	1,221	218
Dow Corning	189	240	51
Fort Knox	292	253	-38
Carbide	303	81	-222

# DSM assumptions for 2012 MTP consistent with 2011 DSM filing

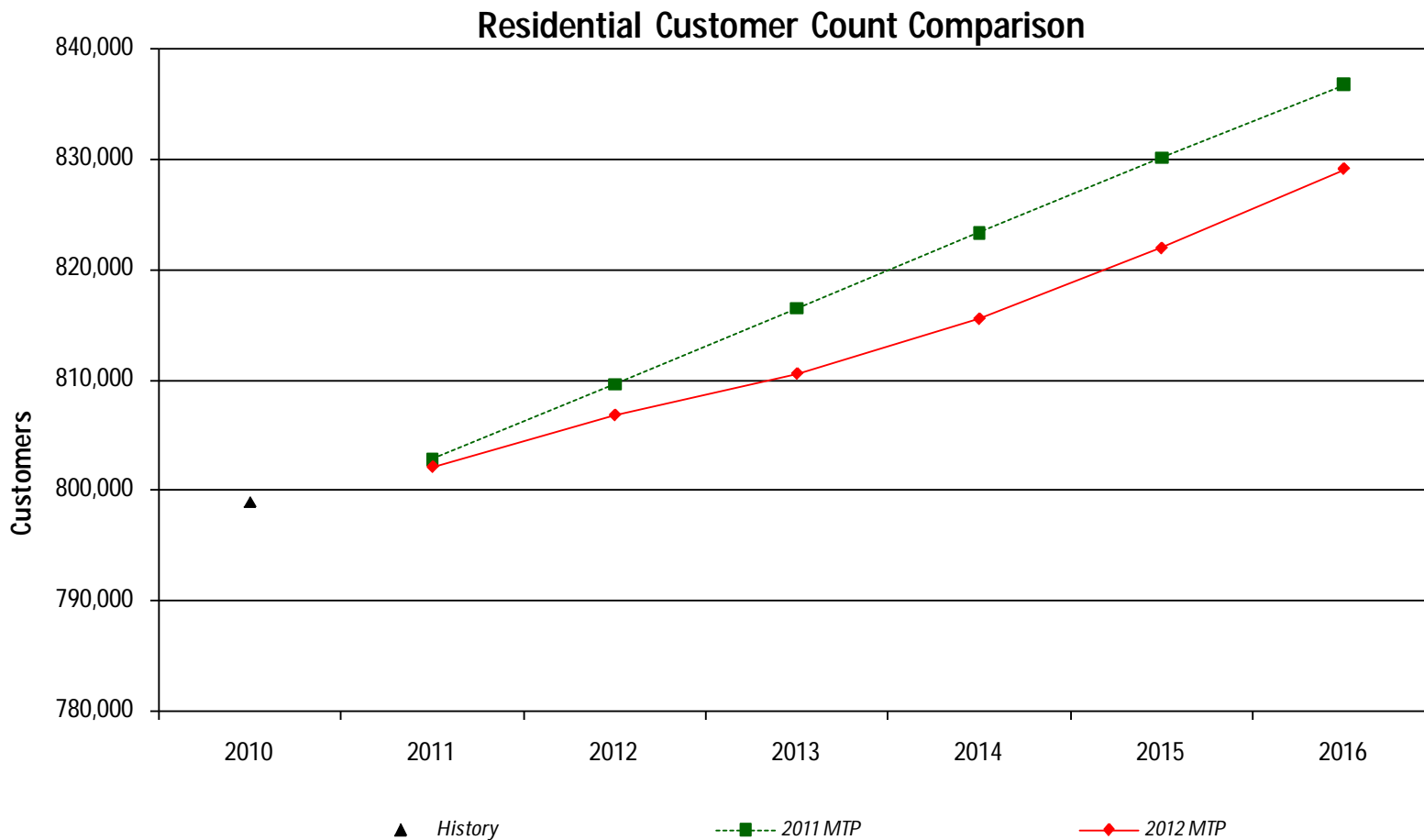


# Contract Count by Rate

Company	Rate	Current Contract Count	Estimated 2012 Contract Count	
KU/ODP	AES	628	633	
	FWP	11	11	
	Total GS	85,652	86,338	
	IST	1	1	
	LTODP	50	50	
	PSP	364	364	
	PSS	6,258	6,258	
	Total RS	446,525	450,837	
	RTS	45	45	
	SS	169	169	
	TN-RS	5	5	
	TODP	80	81	
	TODS	105	108	
	WPS	12	12	
			<hr/> 540,340	<hr/> 545,349
LGE	CSP	57	57	
	CSS	2,671	2,671	
	CTODP	26	28	
	CTODS	93	96	
	Total GS	43,873	44,221	
	IPP	30	30	
	IPS	313	313	
	ITODP	54	55	
	ITODS	29	30	
	LE	114	116	
	Total RS	352,532	356,027	
	RTS	11	11	
	TE	889	889	
			<hr/> 400,691	<hr/> 404,544

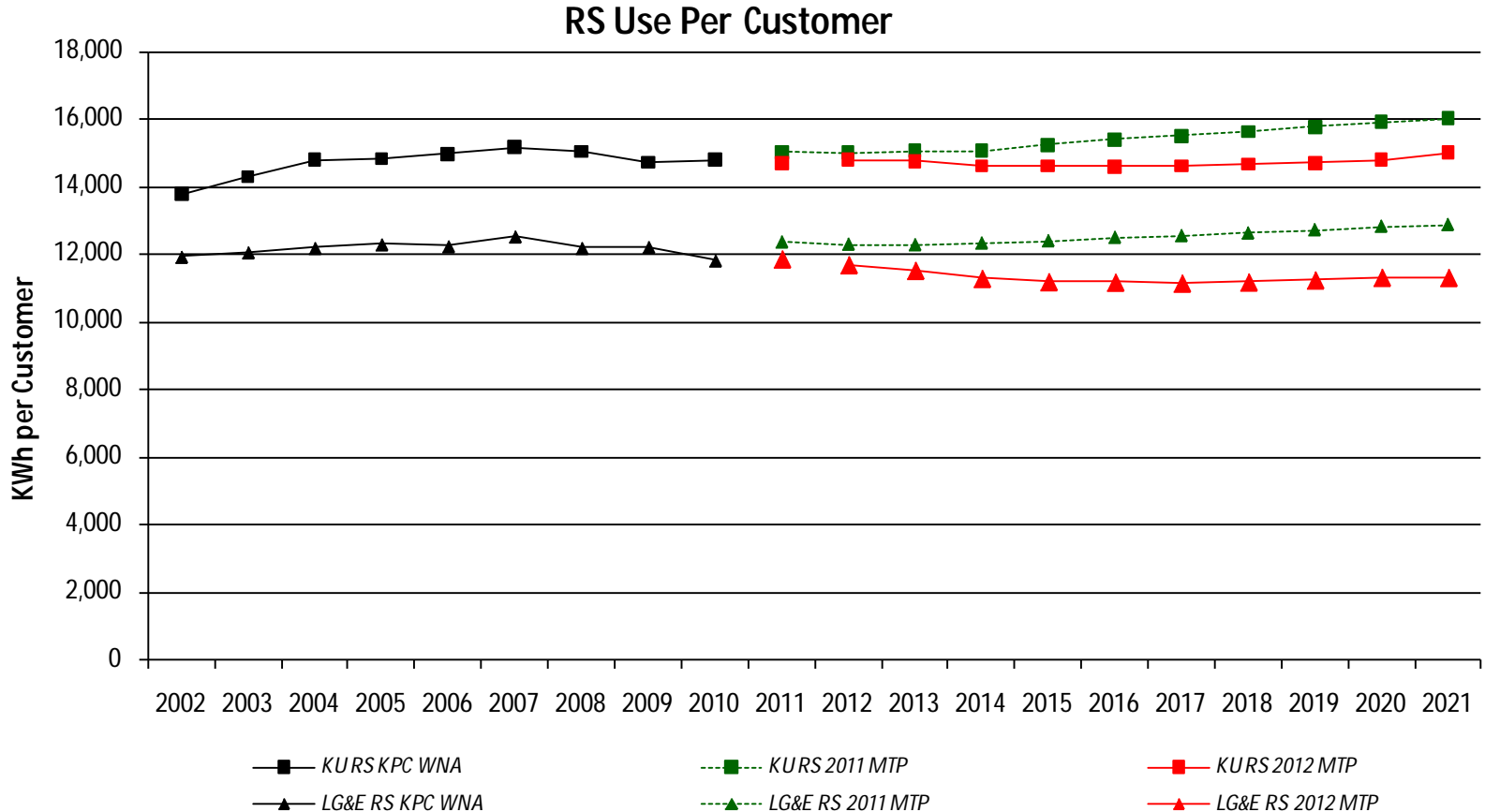


# Residential customer growth expected to be slower than 2011 MTP





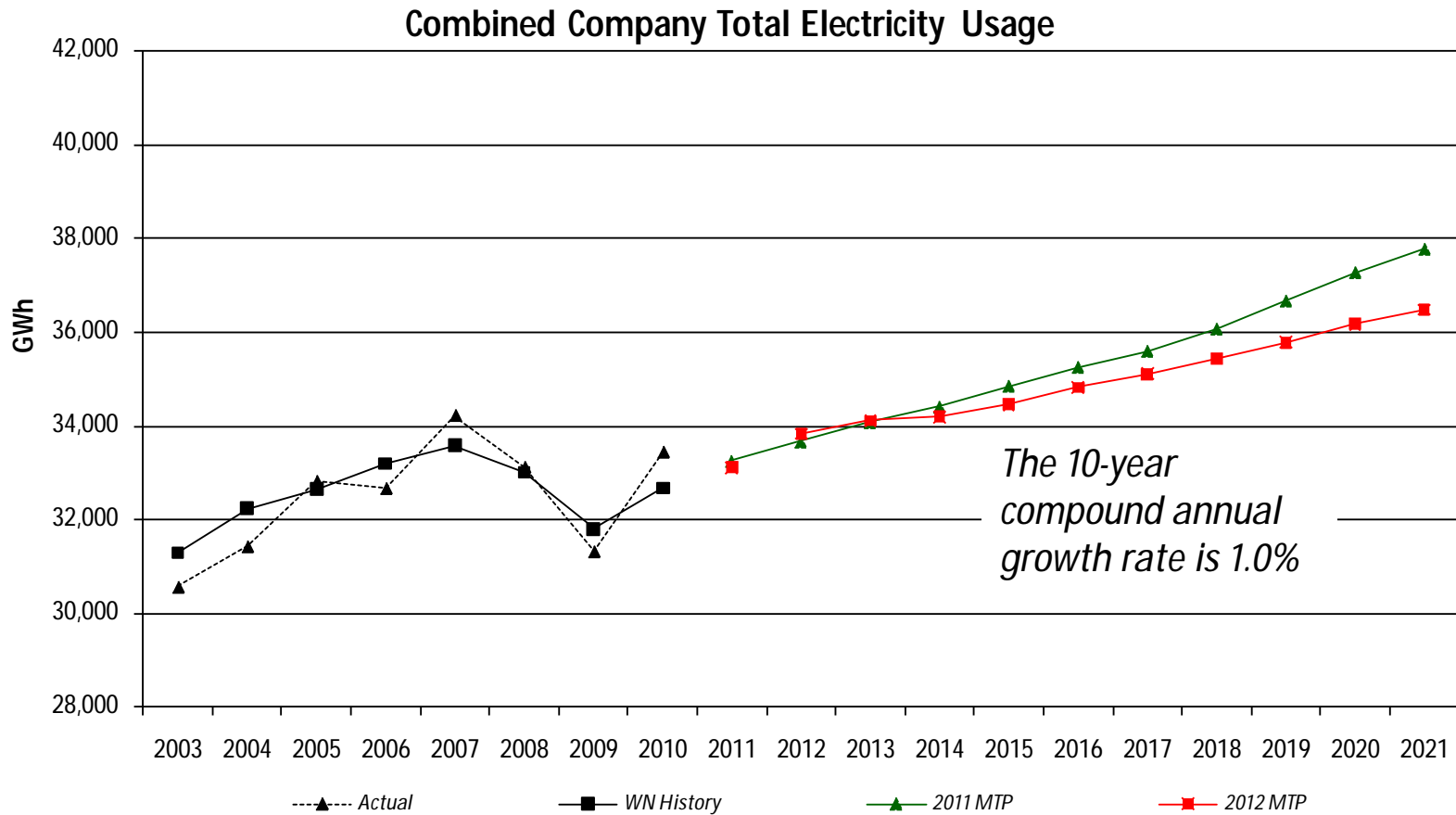
# Residential Use-Per-Customer expected to be lower than in 2011 MTP



# Residential rates increase significantly

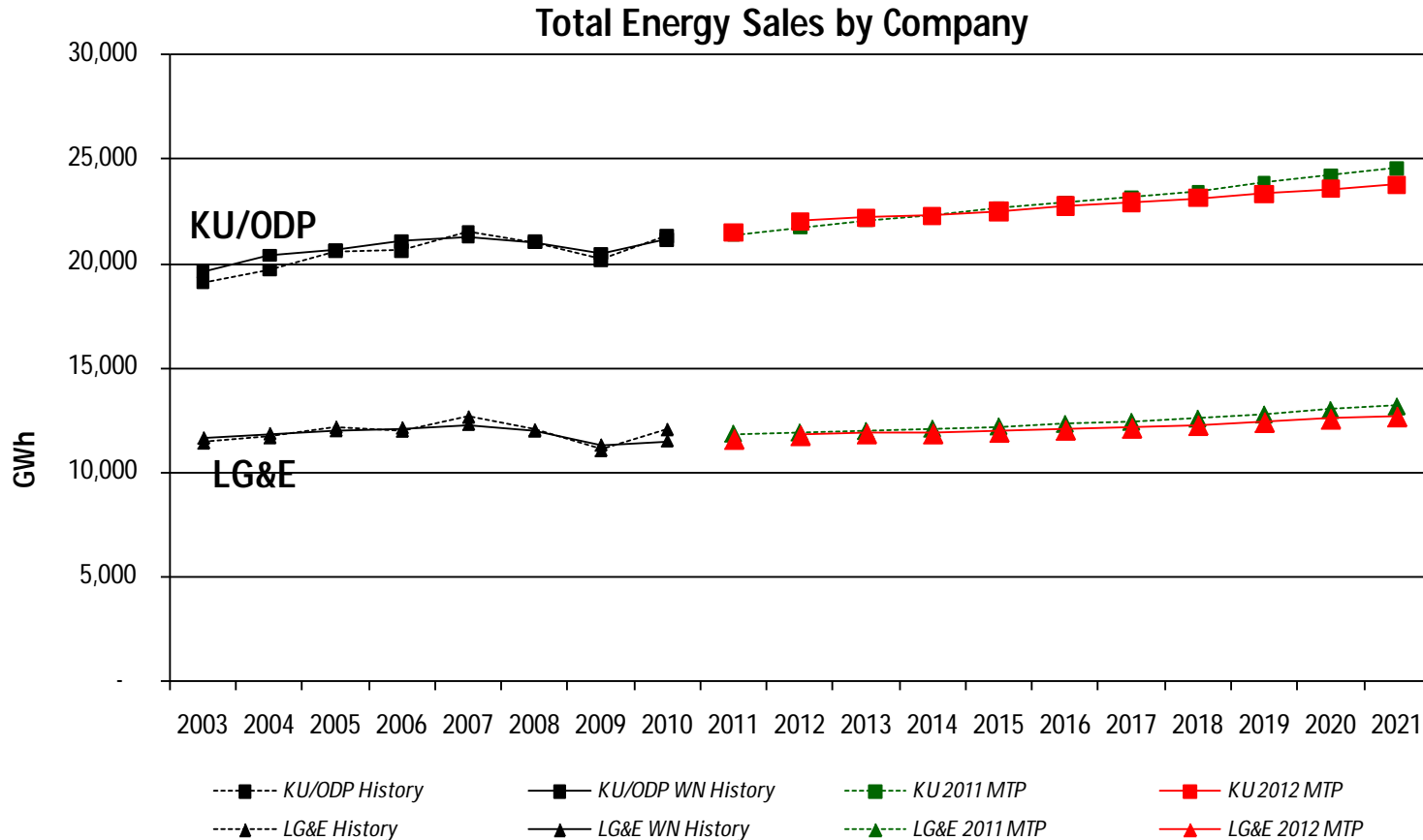


# Combined Company expected growth rate is 1% through 2021



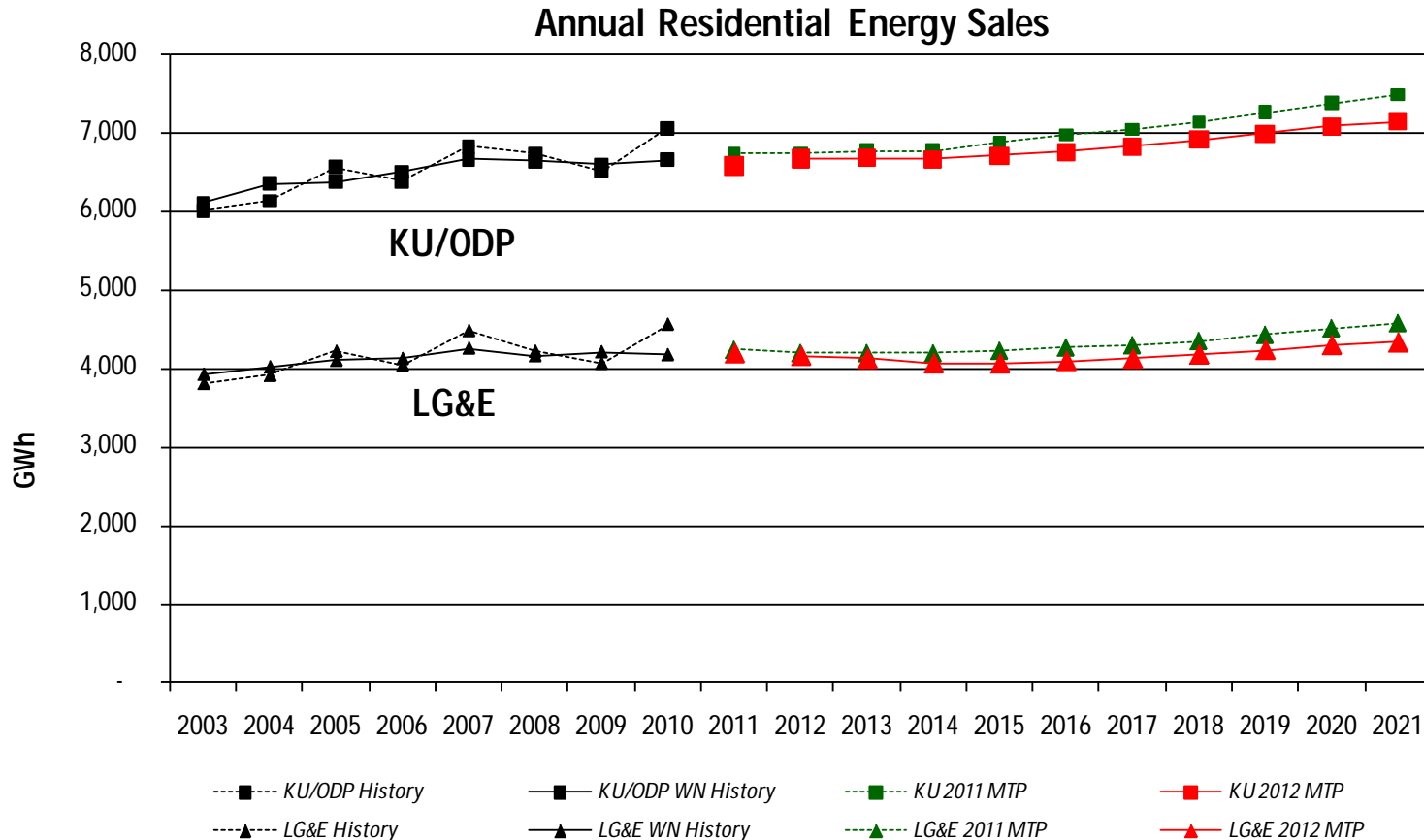
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# Long-term growth slightly lower than 2011 MTP



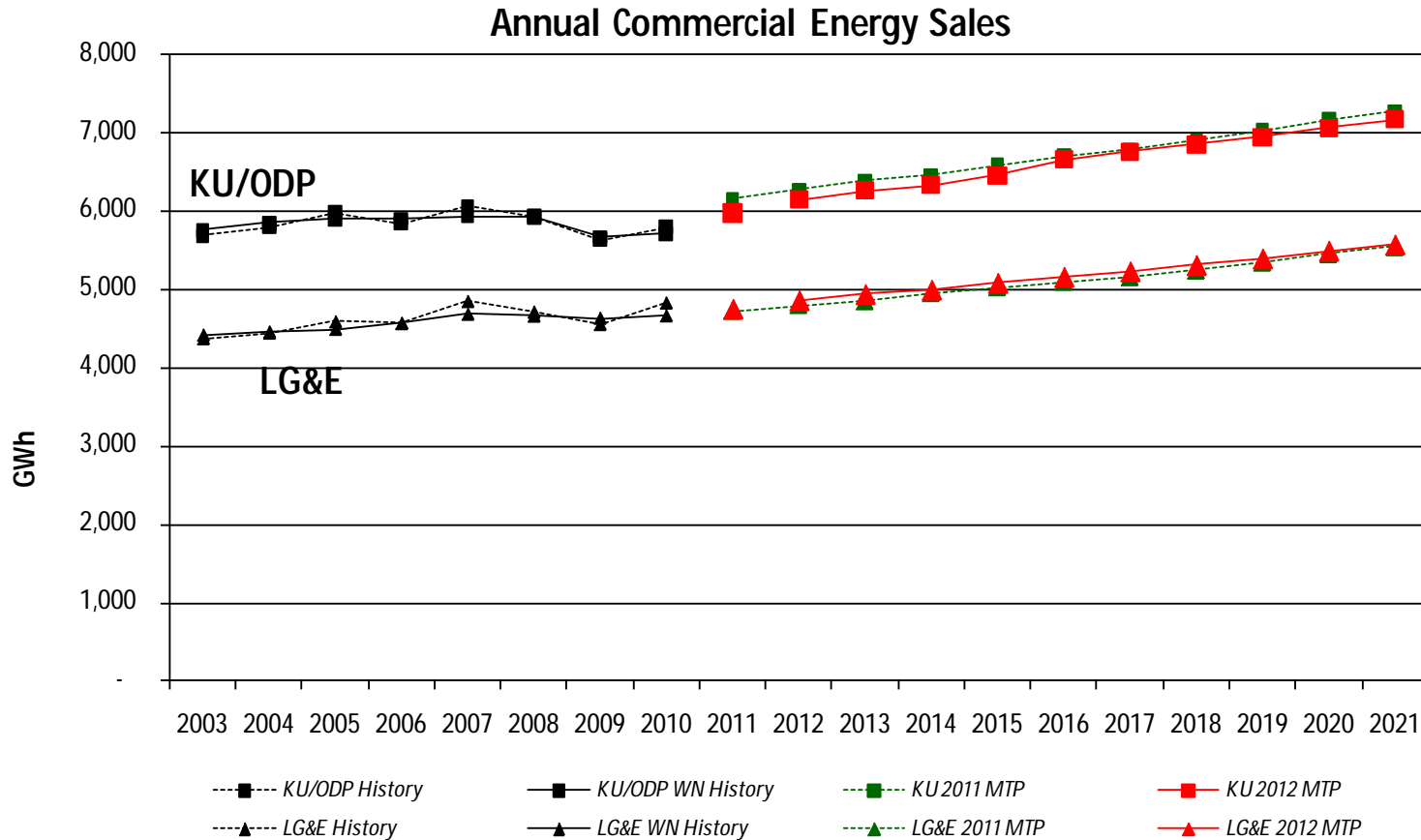
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# Residential growth flatter in 2012 MTP



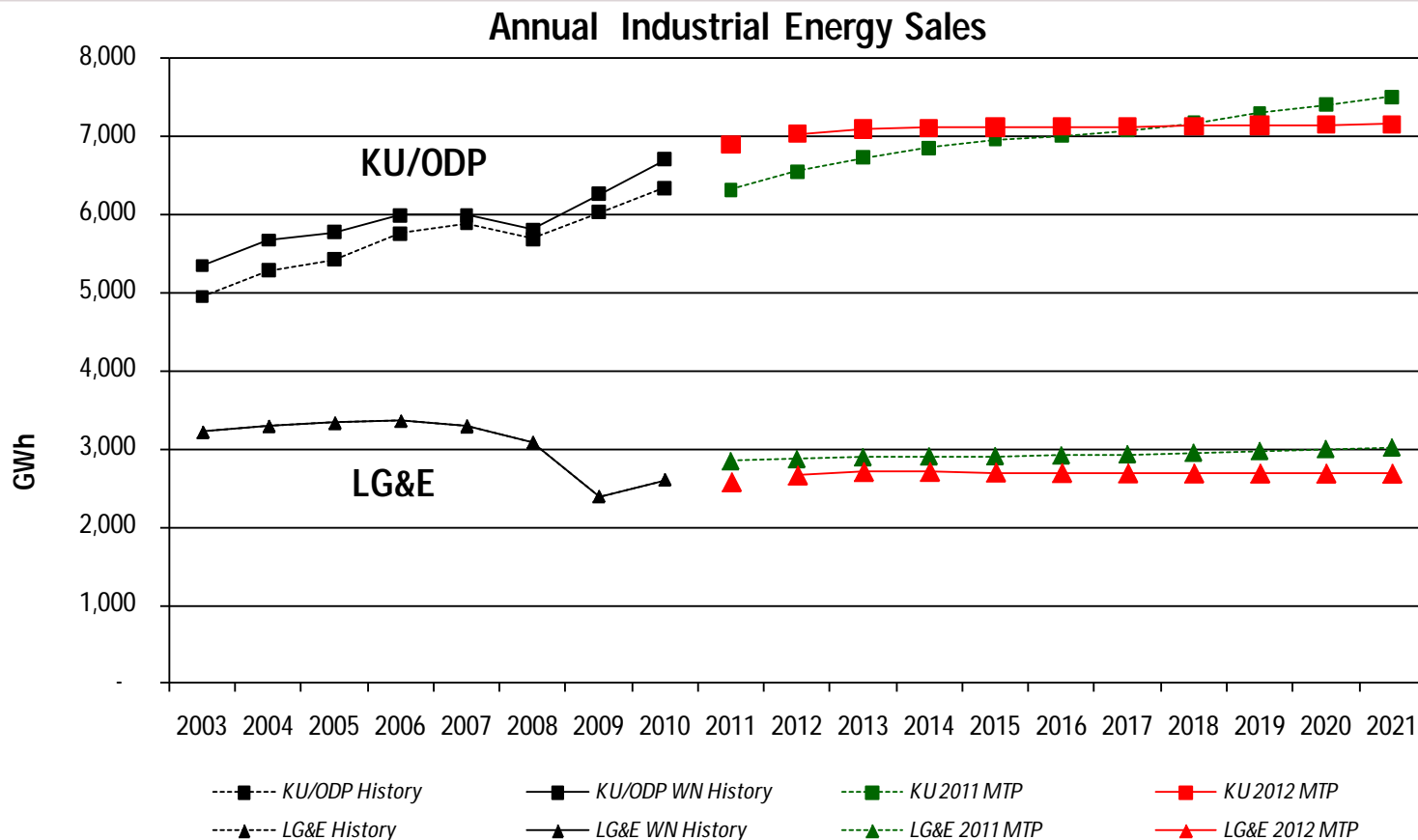
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# KU Commercial sales start from lower level



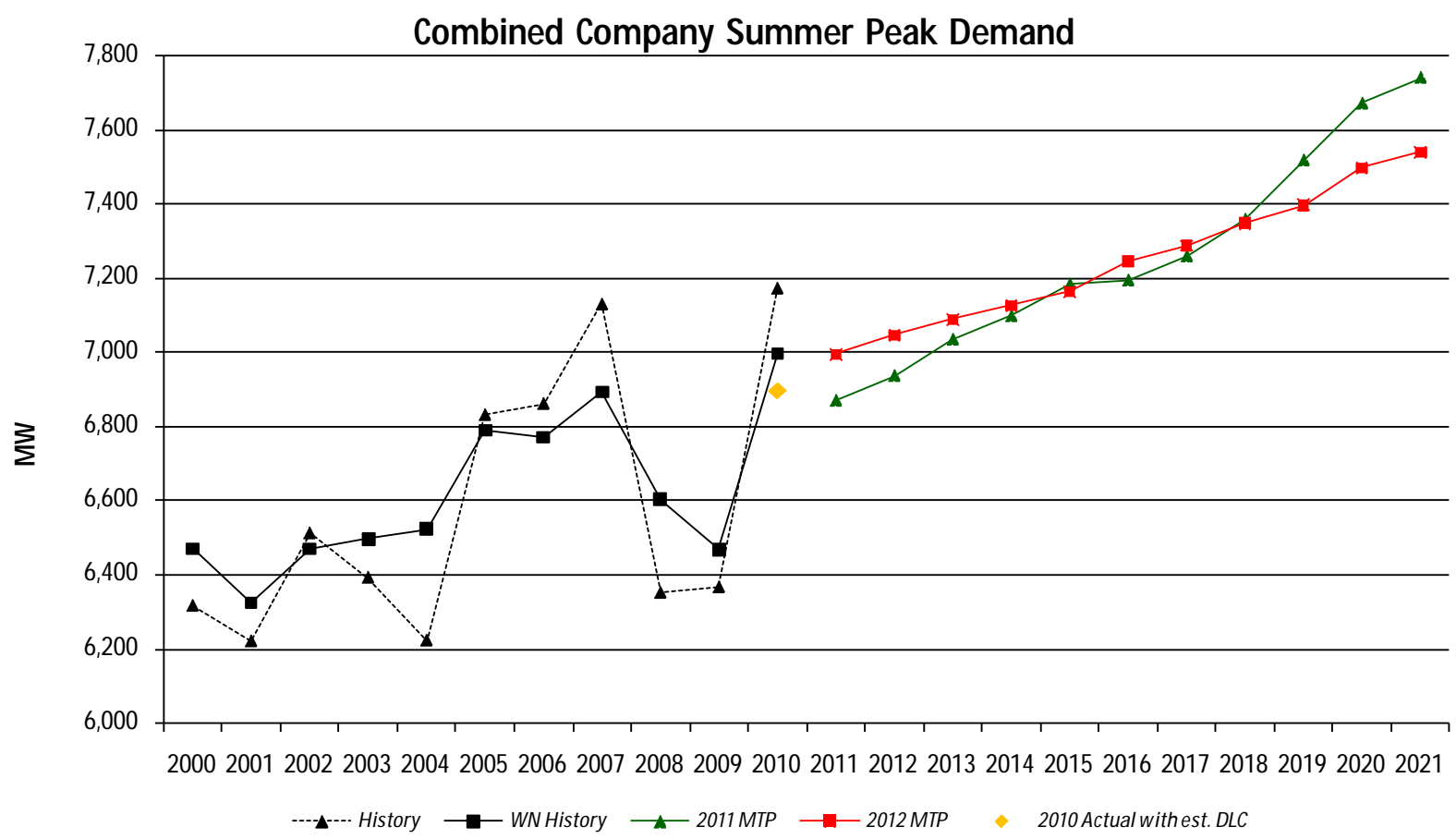
\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

# KU Industrials flatten after 2014; NAS is near term driver of growth compared to 2011 MTP



\* In 2012 MTP forecast, 2011 value is a weather-normalized 3+9 forecast.

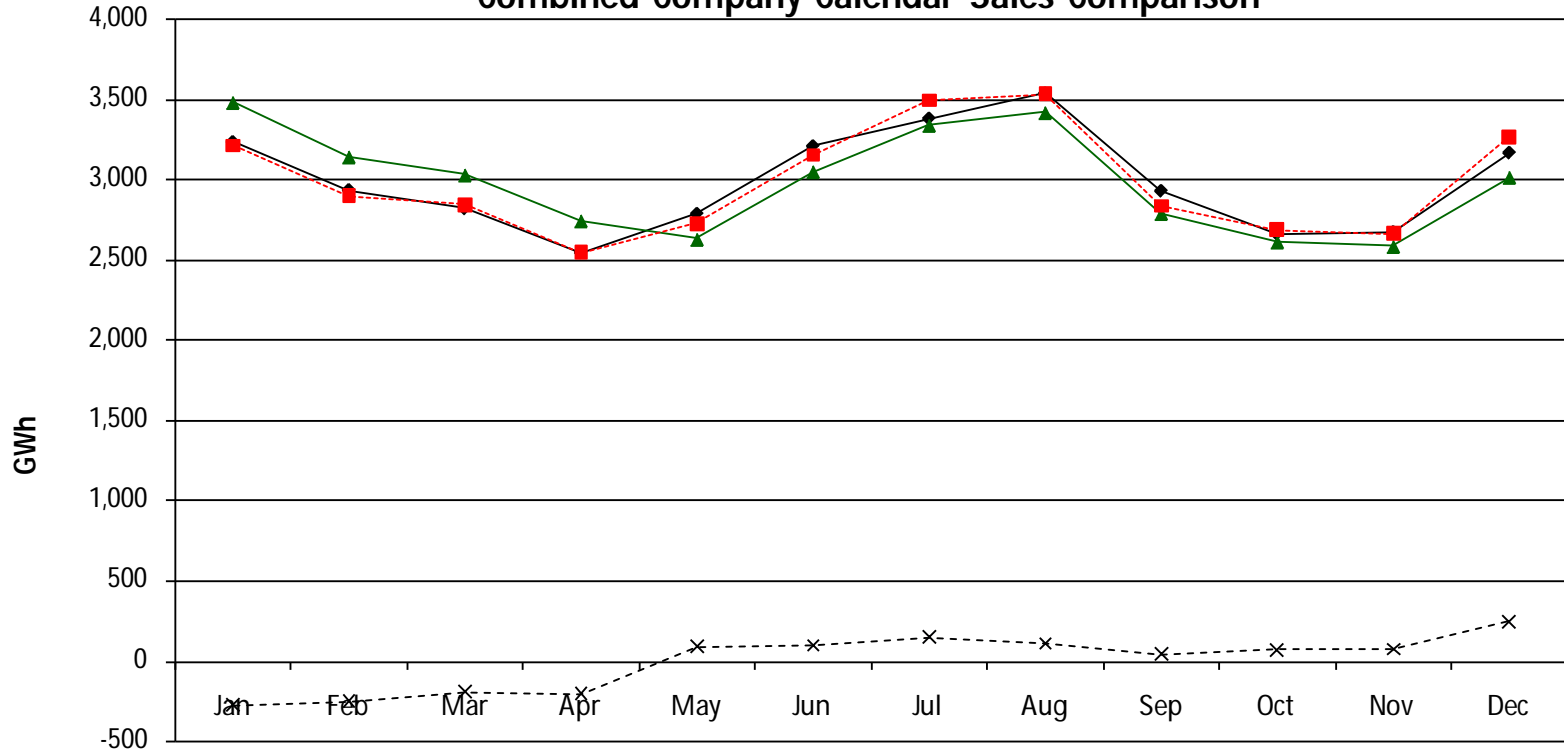
# Longer-term peak demand forecast reflects additional DSM after 2017





# 2012 calendar energy allocation consistent with 10-year historical results

### Combined Company Calendar Sales Comparison



- ◆ 10-year Combined Company WN Actual Allocations, (using 2012 energy total)
- ▲ 2011 MTP Allocations, (using 2012 energy total)
- 2012 MTP
- × Change Between 2011 and 2012 Allocation



# State predictions for 2012 stronger in 2011 Q2 than those made in 2010 Q2

## Year-over-Year Change to Economic Inputs

	Employment, Total Nonfarm		Households, Total		Population		Real Gross State Product (GSP)		Real Per Capita Personal Income		Real Personal Income	
	% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:		% Change in 2012 Estimate:	
	1.00%		-0.80%		0.20%		1.50%		1.90%		2.10%	
	2010 Prediction	2011 Prediction	2010 Prediction	2011 Prediction	2010 Prediction	2011 Prediction	2010 Prediction	2011 Prediction	2010 Prediction	2011 Prediction	2010 Prediction	2011 Prediction
2010 Q2	1,758	1,772	1,721	1,722	4,340	4,346	139,629	141,285	29	30	126,194	130,015
2011 Q2	1,777	1,799	1,745	1,732	4,366	4,373	142,783	144,279	30	31	129,736	133,694
2012 Q2	1,815	1,833	1,762	1,748	4,392	4,402	146,713	148,891	30	31	133,573	136,425
2013 Q2	1,844	1,862	1,780	1,764	4,418	4,432	150,488	152,710	31	32	136,779	139,702
2014 Q2	1,864	1,894	1,791	1,782	4,444	4,464	153,972	157,149	32	32	141,806	144,436
2015 Q2	1,881	1,921	1,815	1,801	4,470	4,497	157,799	161,513	33	33	146,558	149,382
2016 Q2	1,901	1,947	1,833	1,820	4,496	4,529	161,904	165,617	34	34	151,737	154,332

\*All Estimates are expressed in thousands except for Real Personal Income and Real GSP which are expressed in terms of Millions 2005 USD

# U.S. GDP outlook decreased since 2010

Prediction of Real GDP Growth (%)					
	2010	2011	2012	2013	2014
2010 Q2	3.46	2.88	3.07	2.67	2.76
2010 Q3	2.81	2.36	2.93	2.87	3.22
2010 Q4	2.74	2.25	2.88	2.71	3.10
2011 Q1	2.86	3.21	2.90	3.05	3.33
2011 Q2	2.85	2.70	2.92	2.76	3.33

Source: IHS Global Insight



PPL companies

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# 2012 MTP Gas Volume Forecast

*June 24, 2011*

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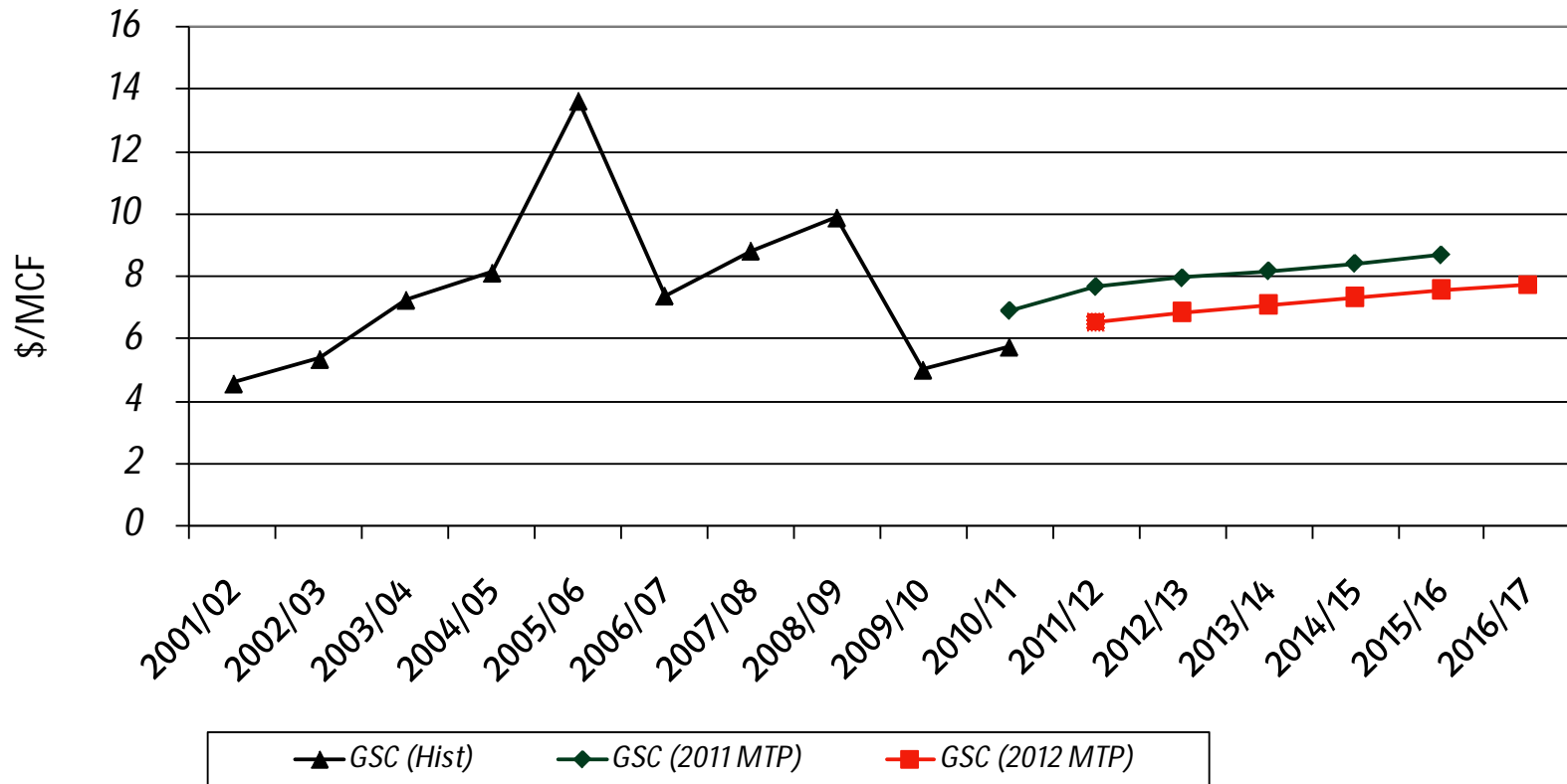
# Key Forecast & Macroeconomic Assumptions

- *Gas Supply Cost (GSC): Gas supply cost is expected to increase by approximately 12.1 % from the winter of 2010/11 to the winter of 2011/12. However, GSC is 15.6% below the 2011 MTP forecast.*
- *Economy: Industrial production recovered quickly in 2010, but the first quarter of 2011 showed limited improvement. Commercial recovery continues to struggle in the LG&E/KU service territory. State unemployment has remained stagnant above 10% since mid-2010.*
- *Housing: The Kentucky housing market stabilized in 2010 and experienced limited growth. 8.2% growth in housing starts is predicted for 2011 which would mean a total of 7,635 new projects. 13,117 total new projects are predicted for 2012.*
- *Major Accounts: Lubrizol, General Electric, and Maker's Mark are driving the increase in the transportation forecast with higher expected usage.*
- *Appliance Efficiencies: On a national level, space and water heating efficiency gains coupled with improving thermal shell integrity have lowered residential use per customer. Similar expectations for commercial class.*



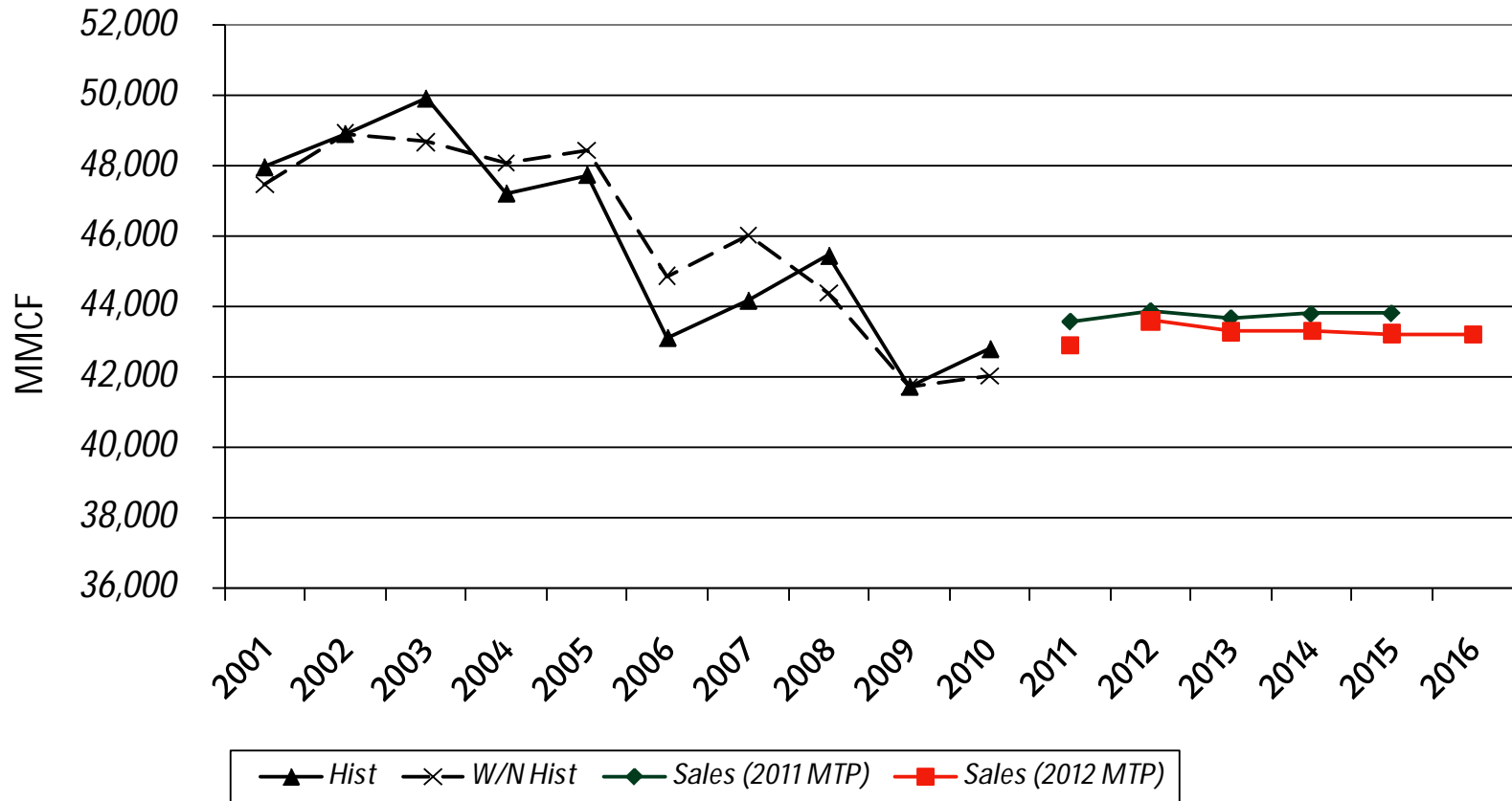
# Gas supply cost for the winter 2011/12 is expected to be 15.6% below the 2011 MTP

Average Gas Supply Cost - Winter Months  
(November - February)



# Compared to the 2011 MTP forecast, the 2012 MTP forecast is 0.6% lower in 2012

Annual Gas Volumes (excluding gas used for LG&E generation)

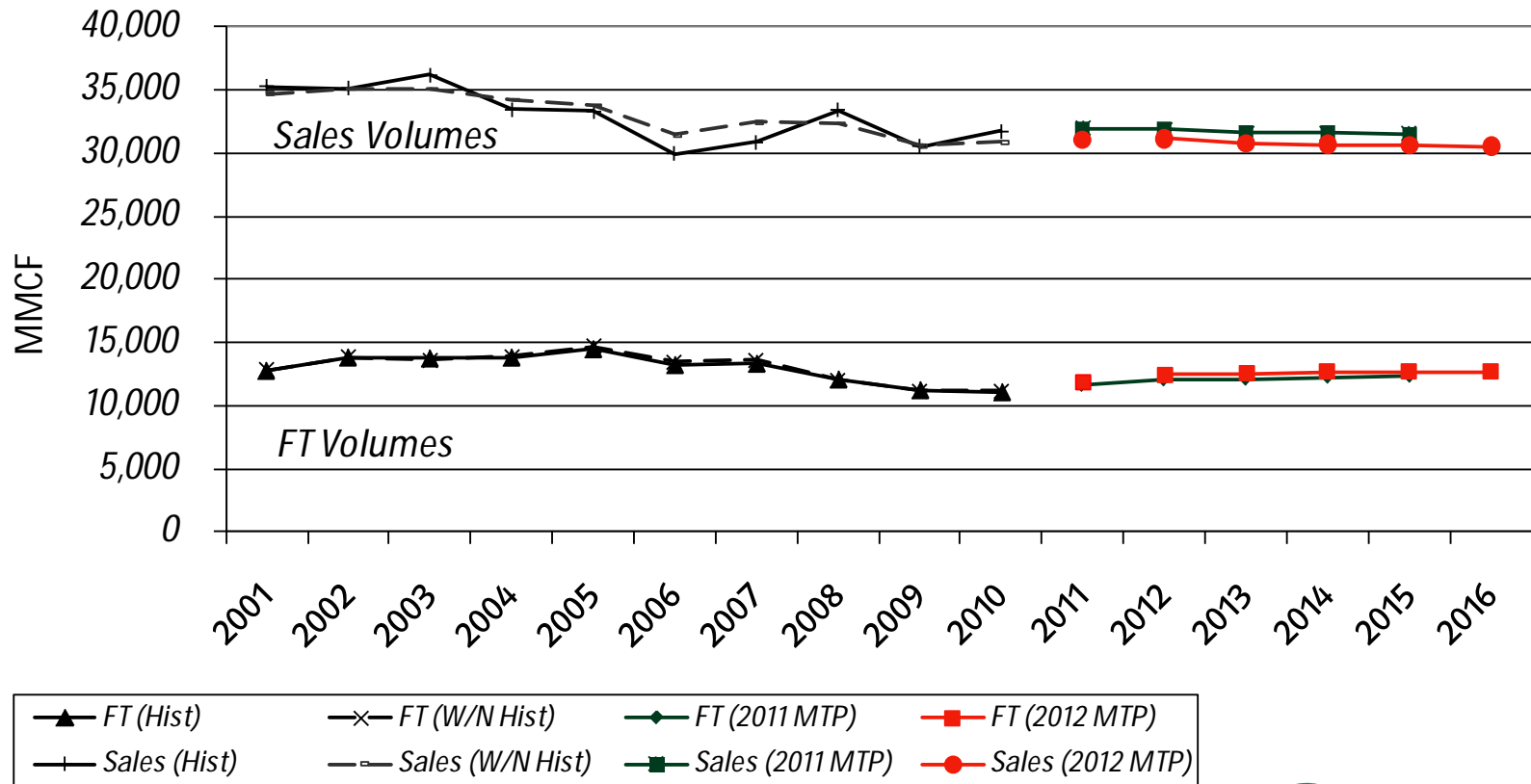


2011 value for the 2012 MTP includes 2 months or w/n Actuals



# Sales volumes decrease slightly compared to last year's forecast, Transportation increases

## Annual Sales & Firm Transportation (FT) Volumes (excluding gas used for LG&E generation)



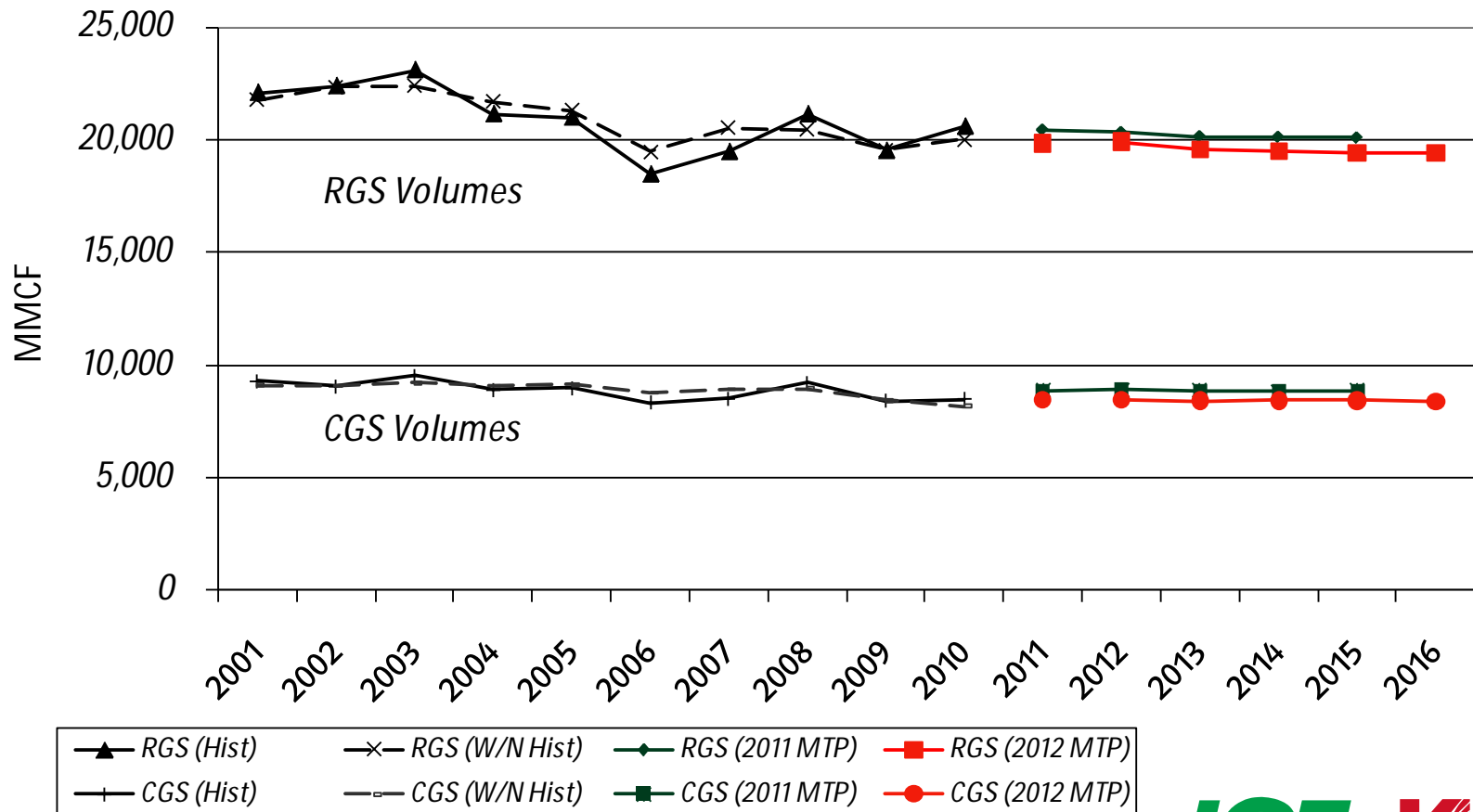
2011 value for the 2012 MTP includes 2 months or w/n Actuals





# RGS and CGS annual volumes both slightly lower than 2011 MTP

## Annual RGS & CGS Sales Volumes

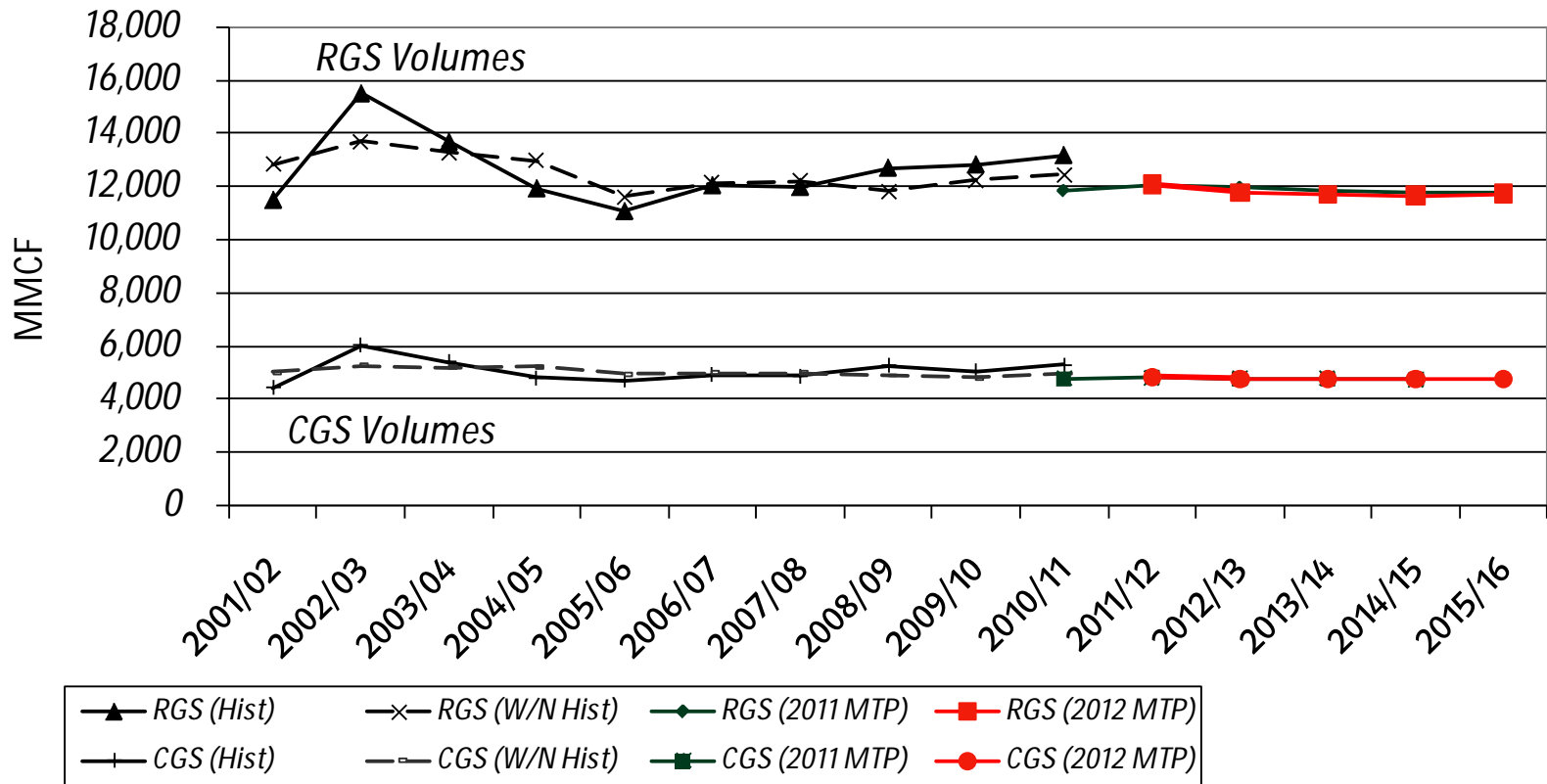


2011 value for the 2012 MTP includes 2 months or w/n Actuals



# Compared to the 2011 MTP, RGS volumes are slightly higher for the winter of 2011/12

## Winter RGS & CGS Sales Volumes (November - February)

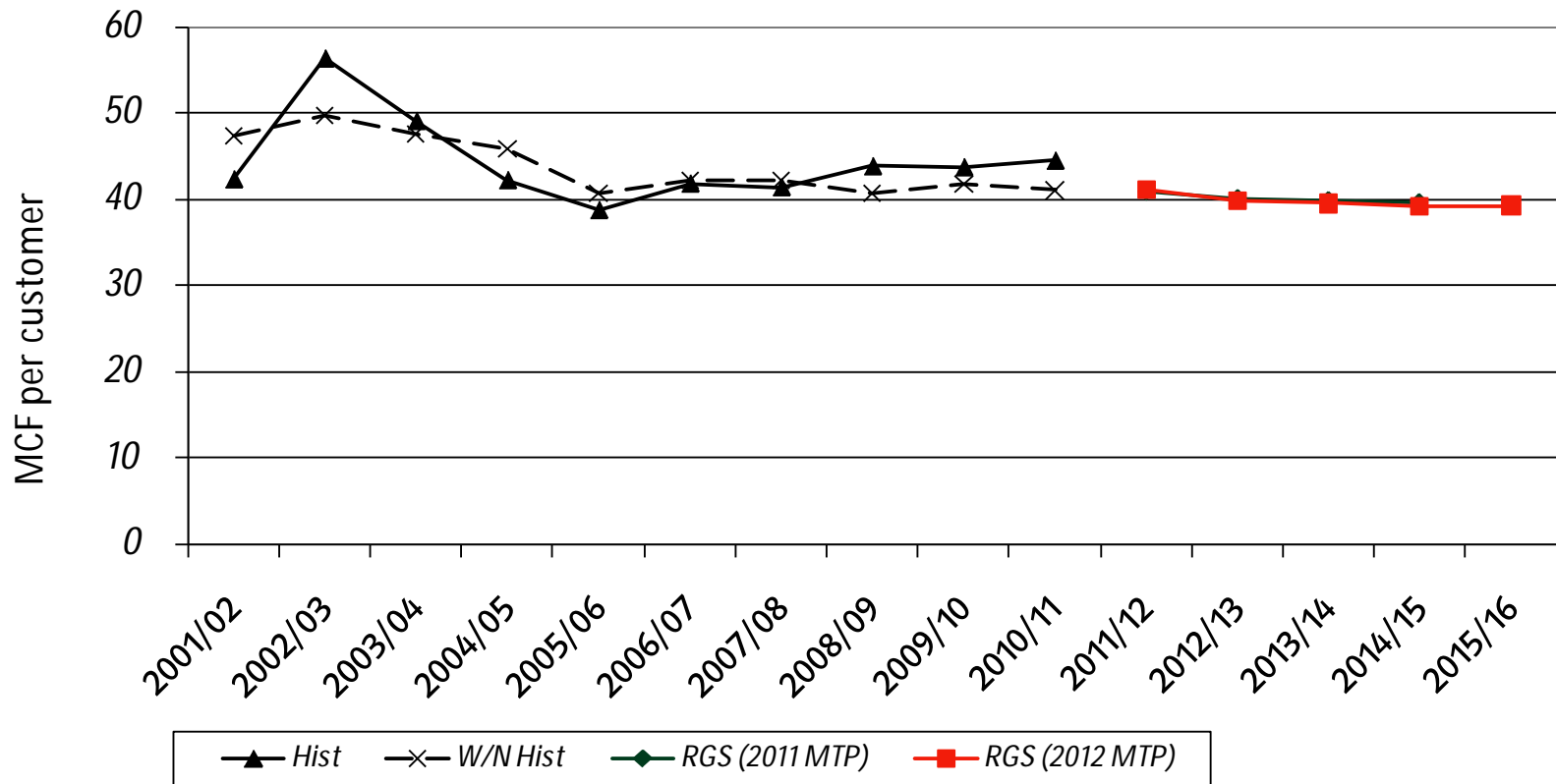


2011 value for the 2012 MTP includes 2 months or w/n Actuals



# Residential use-per-customer forecast consistent with 2011 MTP

## Winter Residential (RGS) Use-per-Customer (November - February)



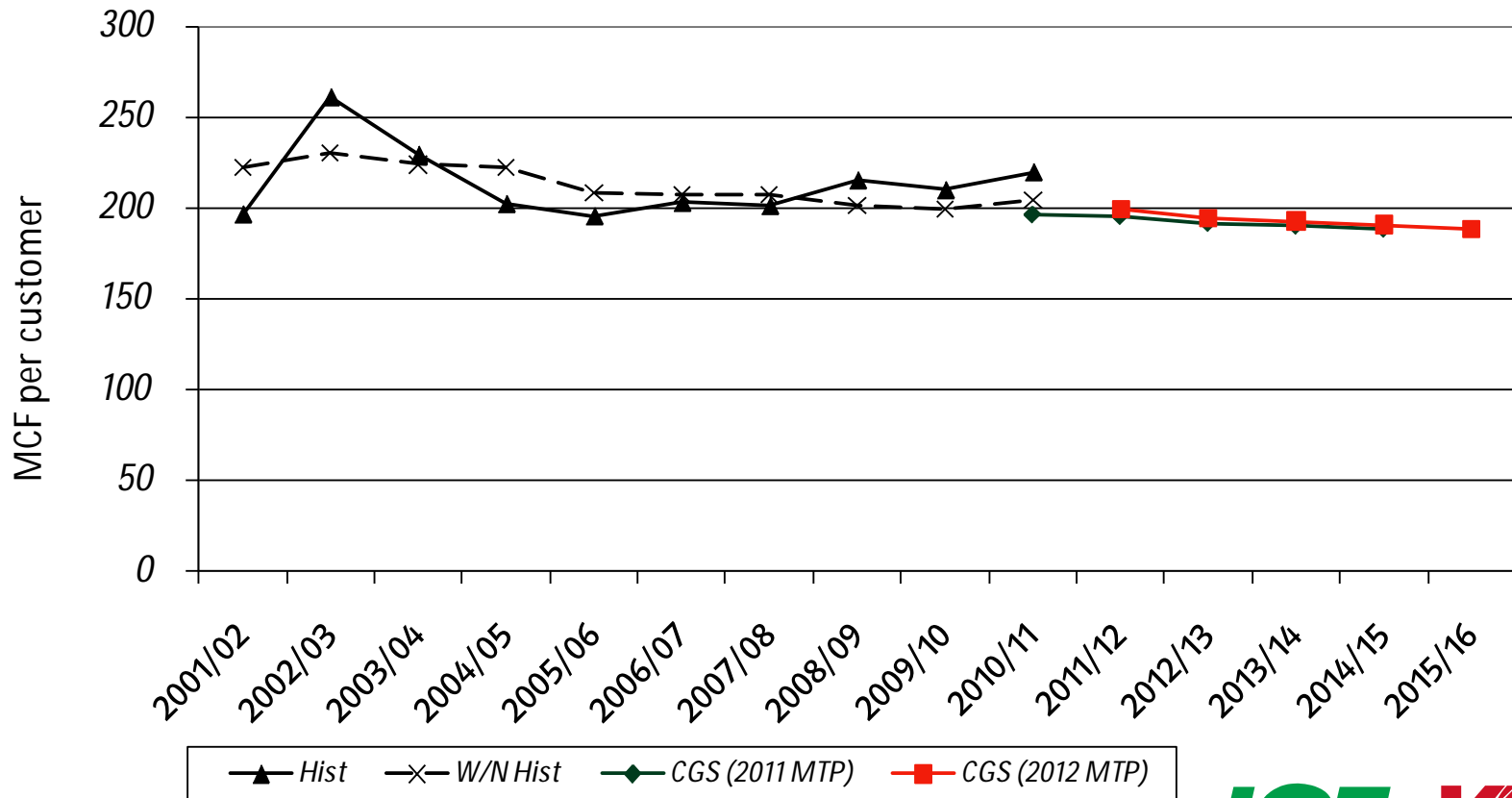
# Residential Gas Sales Forecasts

- *The Gas Supply Cost (GSC) is 15.6% below that used in the 2011 MTP forecast, which results in the 2012 MTP forecast being slightly higher than the 2011 MTP forecast. Throughout the 2012 MTP forecast horizon, the GSC increases at about the same rate as that used in the 2011 MTP.*
- *However, efficiency gains coupled with a declining share of natural gas heating result in a lower forecast.*
  - *The continuation of the Stimulus package in 2010 resulted in an increase in the purchase of more energy efficient appliances, so that the appliance stock is slightly more efficient than that used in the 2011 MTP forecast.*
  - *The 2010 Residential Saturation Survey indicates that the share of natural gas heating has declined in the LG&E service territory.*
  - *Smaller homes in new construction relative to the past few years coupled with increased vacancy rates in single family homes (due to foreclosure) resulted in an increase in occupancy rates for apartments, many of which have electric heating.*



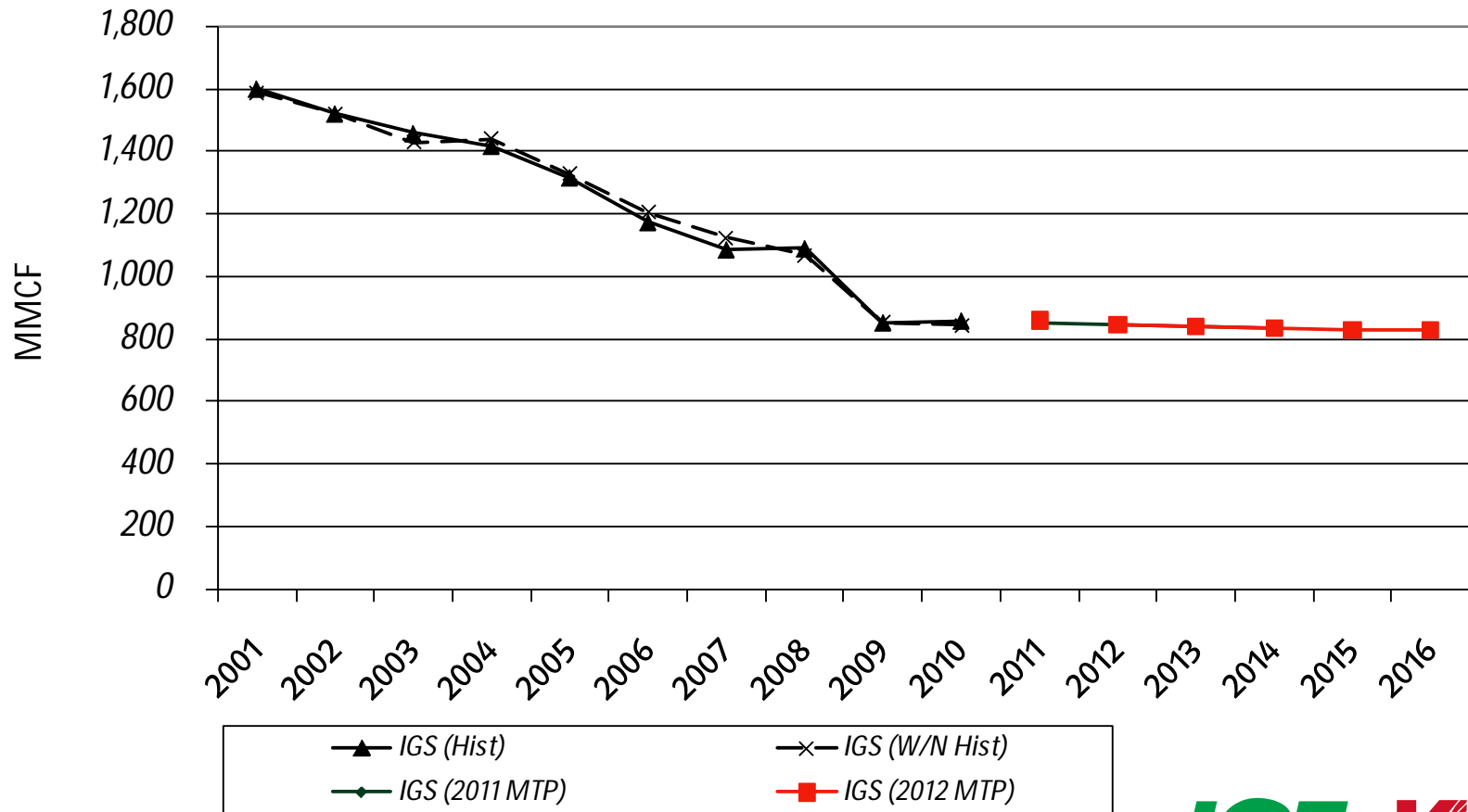
# CGS use-per-customer continues to show a declining trend over the next five years

## Winter Commercial (CGS) Use-per-Customer (November - February)



# Flat IGS sales volumes predicted over next 5 years

## Annual IGS Sales Volumes

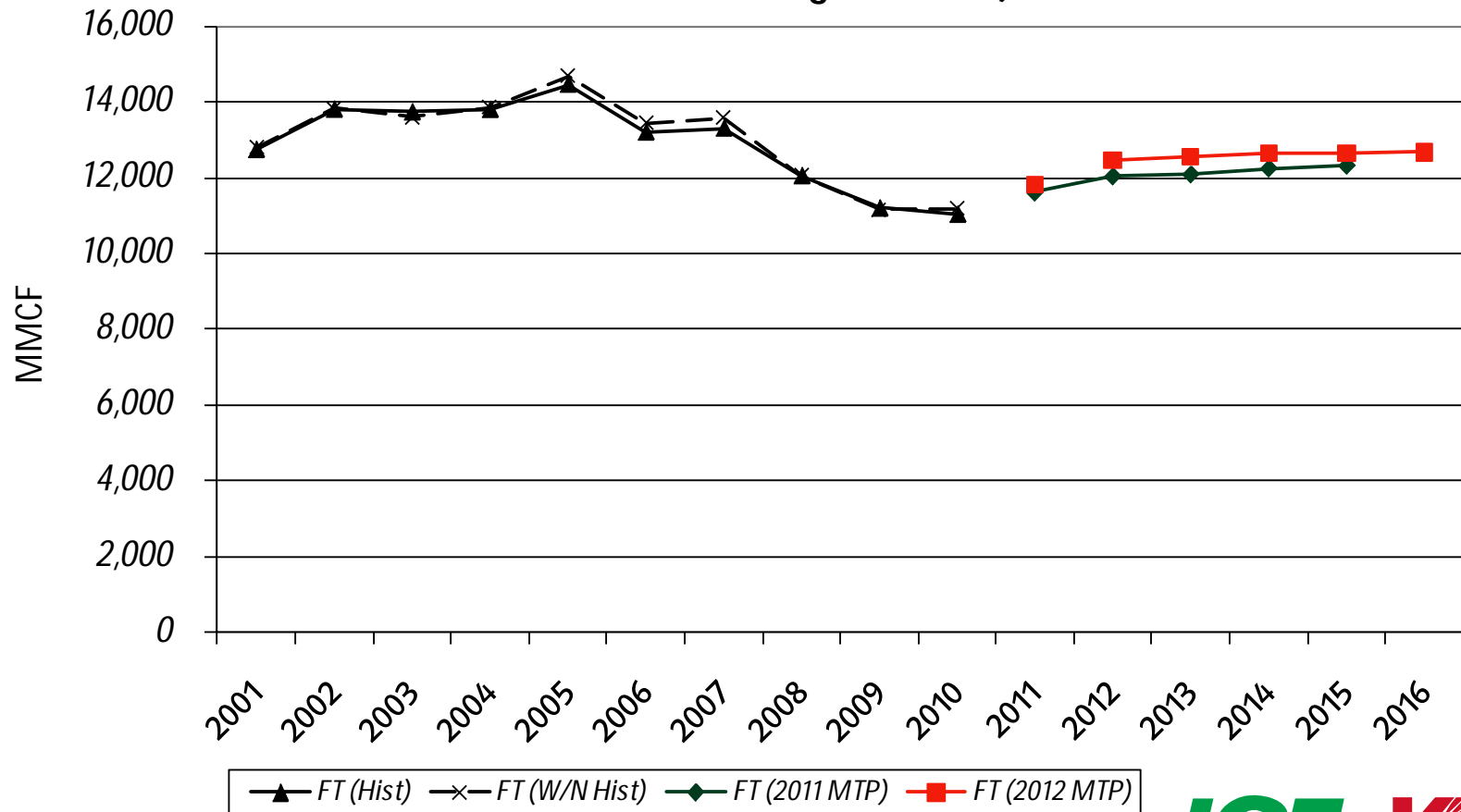


2011 value for the 2012 MTP includes 2 months or w/n Actuals



# Firm Transportation (FT) volumes showing slow-growth trend over next five years

Annual Firm Transportation (FT) Volumes (excluding gas used for LG&E generation)

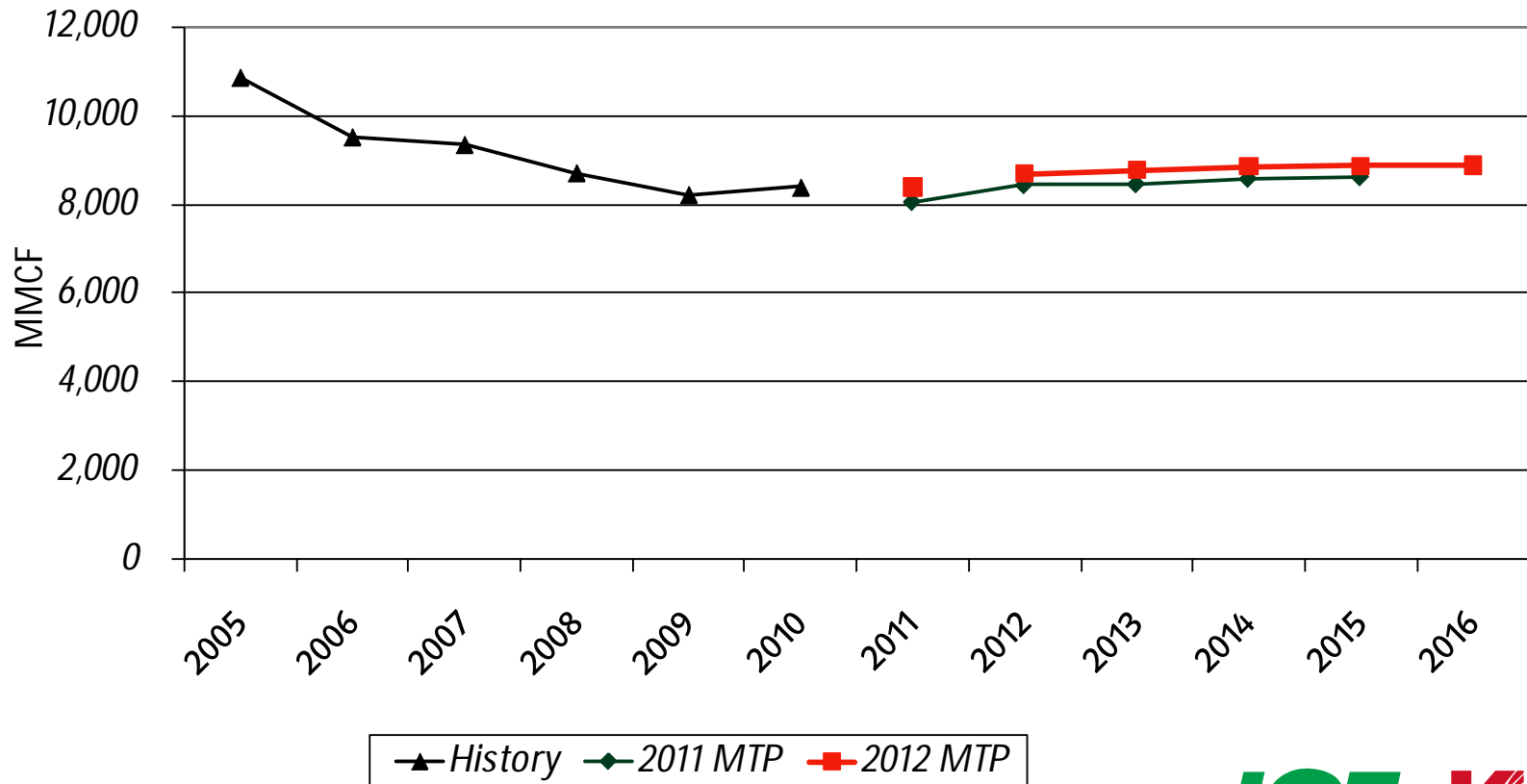


2011 value for the 2012 MTP includes 2 months or w/n Actuals



# Major Accounts usage has stabilized and growth is expected in 2011-2012

### Major Accounts



2011 value for the 2012 MTP includes 2 months of win Actuals





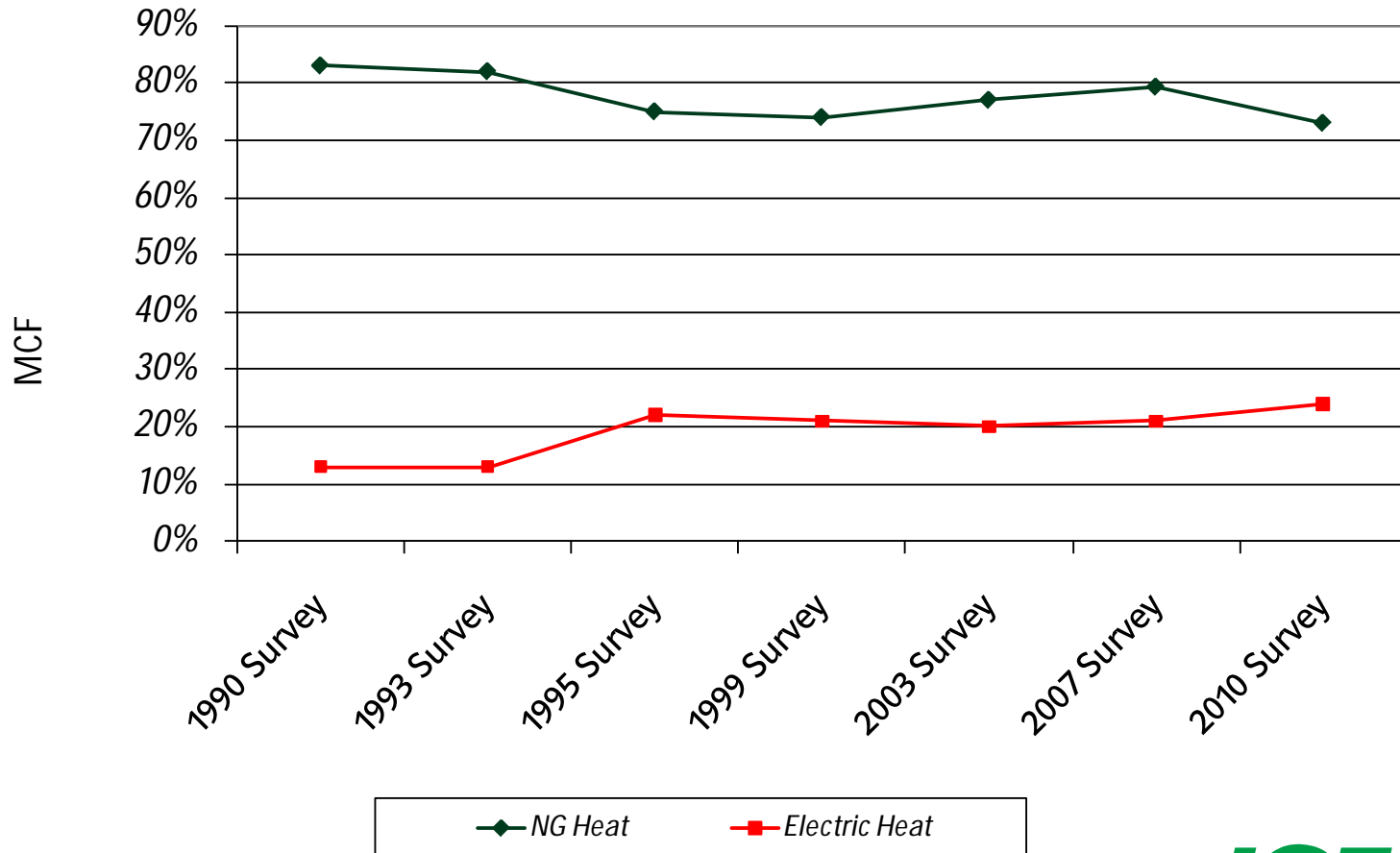
# Significant Changes to Major Accounts Forecasts

	2011 MTP	2012 MTP
Lubrizol	<ul style="list-style-type: none"> <li>•Lower historical usage</li> <li>•Still burning some coal in production</li> </ul>	<ul style="list-style-type: none"> <li>•No longer burning coal, relying on gas</li> <li>•Acquired by Berkshire Hathaway</li> </ul>
GE	<ul style="list-style-type: none"> <li>•Direct heat furnaces were not planned</li> <li>•Products were on the horizon, but plans were not yet solidified</li> </ul>	<ul style="list-style-type: none"> <li>•Higher expected growth due to new product lines and re-engineering</li> <li>•Installed gas-intensive direct heat furnaces in buildings in Appliance Park</li> </ul>
Maker's Mark	<ul style="list-style-type: none"> <li>•30% chance of closure built-in to forecast</li> <li>•Used 2007 gas usage as a base case</li> <li>•A cut back in production was expected after summer shutdown</li> </ul>	<ul style="list-style-type: none"> <li>•No longer a chance of closure</li> <li>•Expanding in July 2012 by replacing a boiler with a larger one and adding a mirror image mash tub, increasing overall load by roughly 50%</li> </ul>
Fort Knox	<ul style="list-style-type: none"> <li>•Planning to install a pressure release valve in order to tap more on site gas</li> <li>•Expected 5,000 MCF was bottom for each summer month and higher winter usage</li> </ul>	<ul style="list-style-type: none"> <li>•More gas production than expected</li> <li>•Much lower summer usage and lower winter usage observed despite heating the HR Center</li> </ul>



# LG&E survey indicates declining share of natural gas heating

## Electric and Natural Gas Heating Shares





PPL companies

# 2012 MTP Generation & OSS Forecast – CSAPR Stay & January OSS Update

*Generation Planning & Analysis  
January 23, 2012*



## Background – Challenges for CSAPR SO<sub>2</sub> Compliance

- *July-Approved MTP*
  - *No Green River transmission constraint*
  - *Low Green River capacity factors (<10%)*
- *September Update*
  - *Included Green River transmission constraint*
  - *Displaced significant energy at Mill Creek and Cane Run with gas generation and power purchases*
  - *Native load production costs increased by ~\$20M annually in 2012-14*
- *October Update*
  - *Higher SO<sub>2</sub> removal rates for existing FGDs*
  - *Lower sulfur content for Green River and Cane Run coal*



## Revised plan to reflect stay of CSAPR

---

- *January Update Assumptions*
  - *CSAPR timeline delayed by 1 year: begins 1/1/2013*
  - *Emission compliance plan:*
    - *2012: CAIR*
    - *2013+: CSAPR physical compliance*
  - *SO<sub>2</sub> removal rates consistent with 2011*
  - *Removed lower sulfur content coal at Green River and Cane Run*
  - *Updated market electricity and gas prices (1/3/12 quote date instead of 6/17/11)*

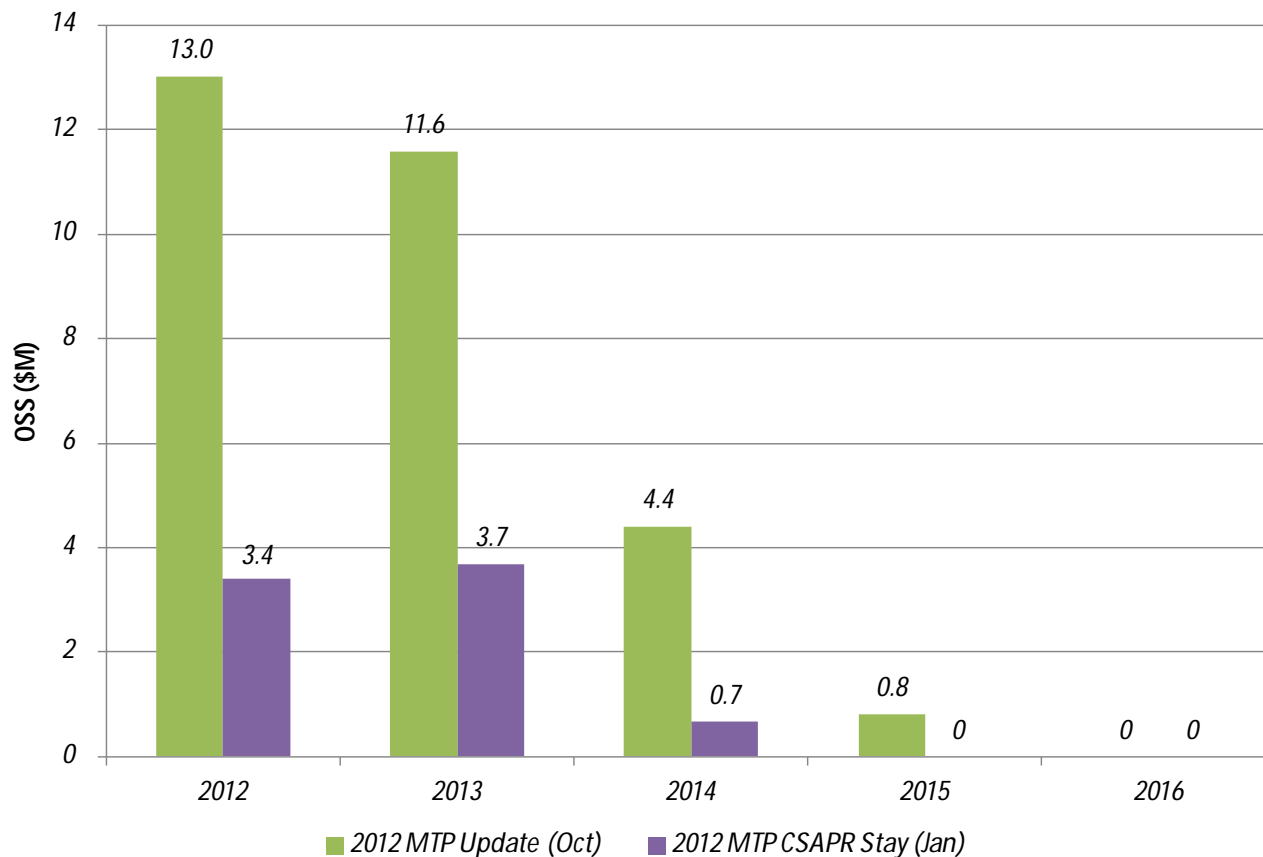
# CSAPR stay reduces production costs compared to all prior 2012 MTP results

## Difference in Native Load Production Costs from July-Vintage 2012 MTP (\$M)

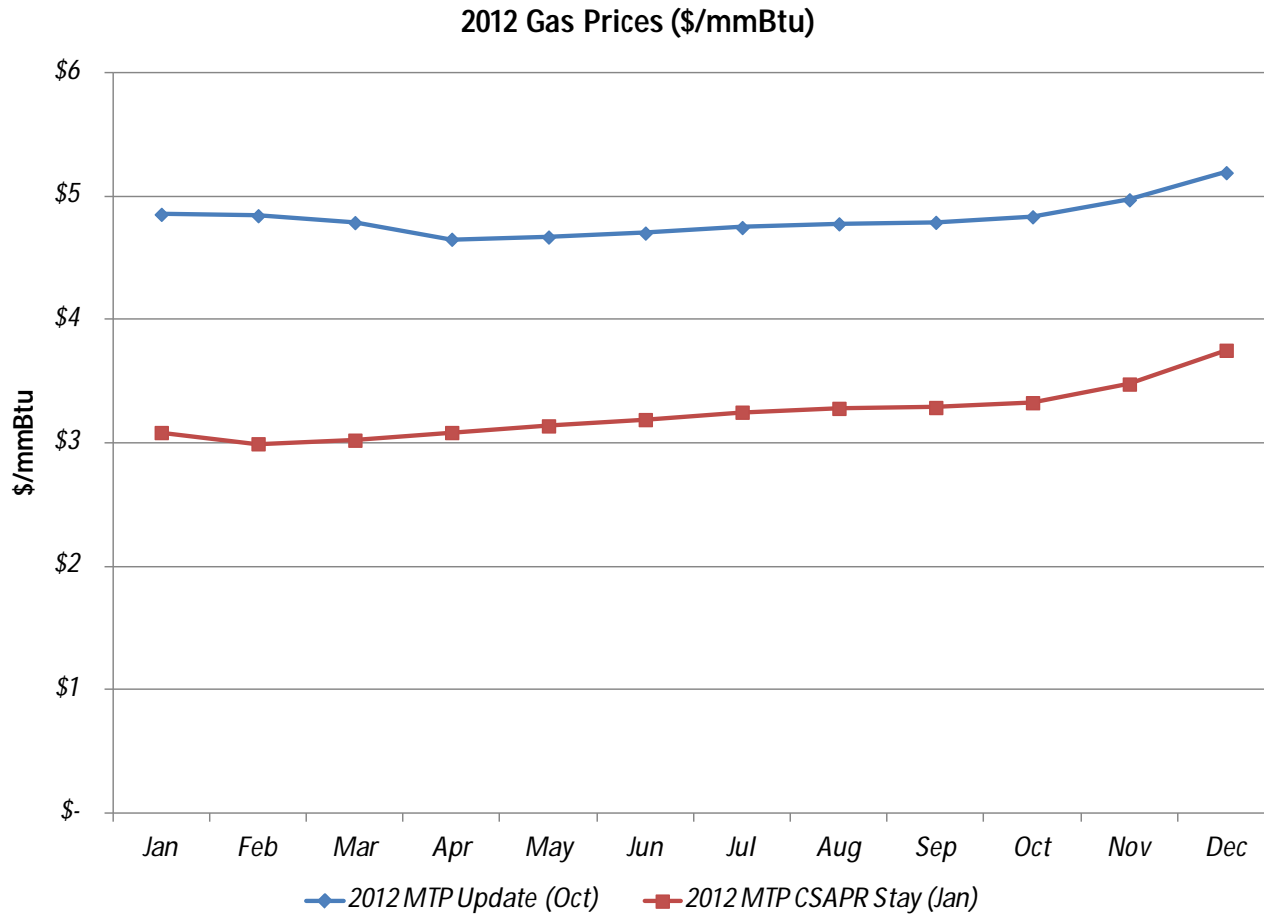
<i>Favorable/(Unfavorable)</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
<i>2012 MTP Update (Sep)</i>	<i>(18)</i>	<i>(20)</i>	<i>(19)</i>	<i>(14)</i>
<i>2012 MTP Update (Oct)</i>	<i>(7)</i>	<i>(12)</i>	<i>(6)</i>	<i>(5)</i>
<i>2012 MTP CSAPR Stay (Jan)</i>	<i>14</i>	<i>9</i>	<i>21</i>	<i>17</i>

# OSS contribution significantly reduced due to lower electricity prices

### 2012 MTP OSS Contribution Comparison

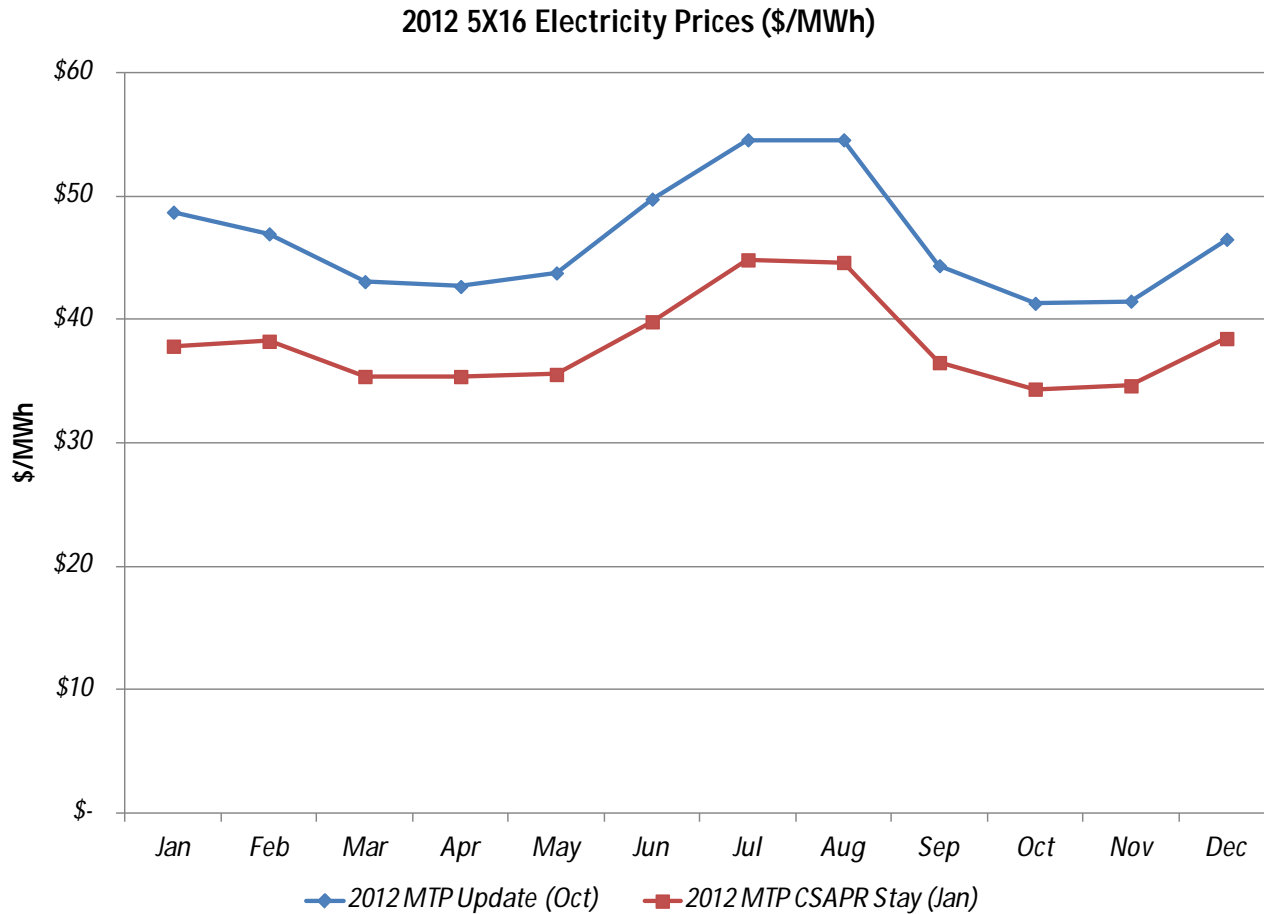


# 2012 gas prices decreased by ~33% since June 2011





# 2012 5X16 electricity prices decreased by ~18% since June 2011



# Appendix



# Changes to Sulfur Content and SO<sub>2</sub> Removal Rate Assumptions

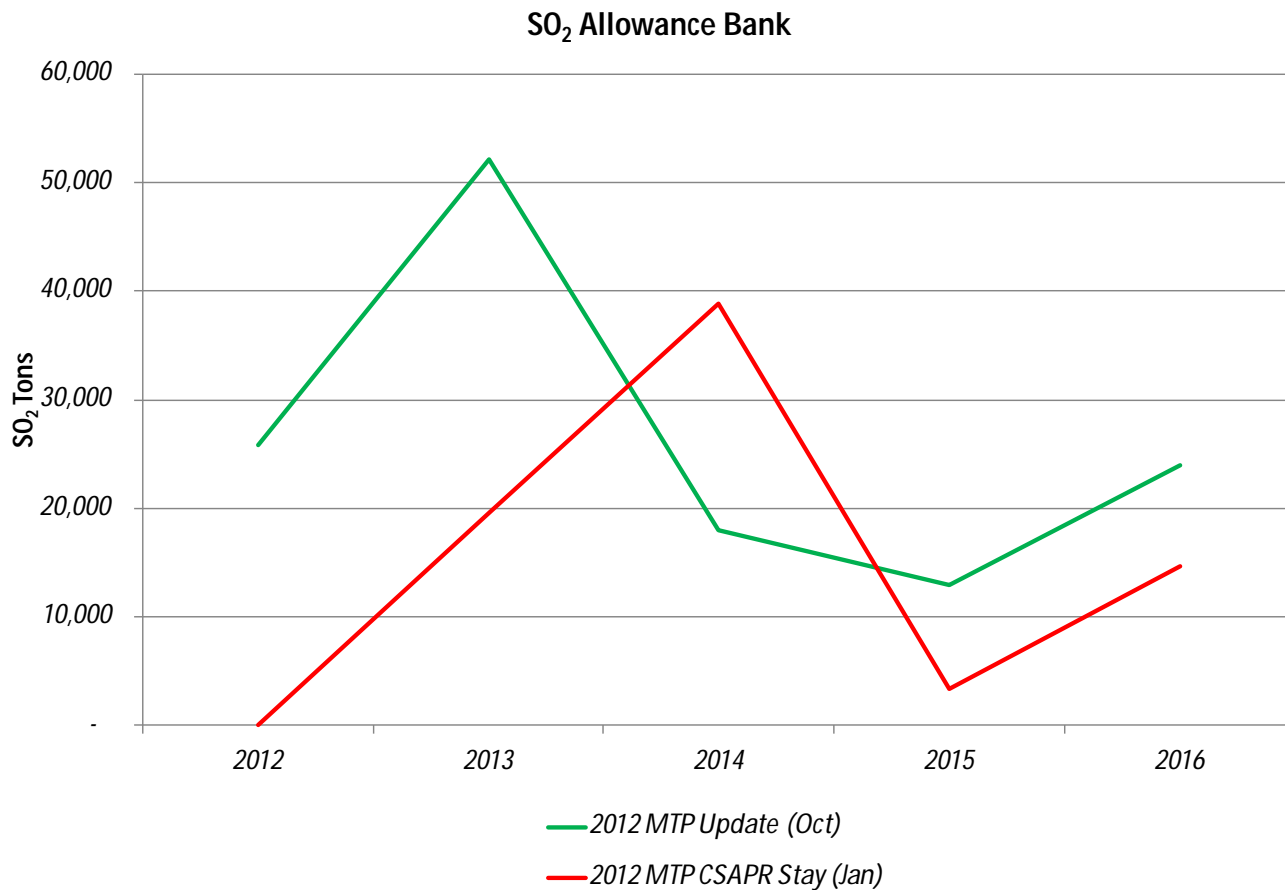
## *2012 Sulfur Content Changes*

- *Cane Run:*
  - *From 5.5# Sulfur to 6.0# Sulfur*
- *Green River:*
  - *From 4.0# Sulfur to 4.5# Sulfur*

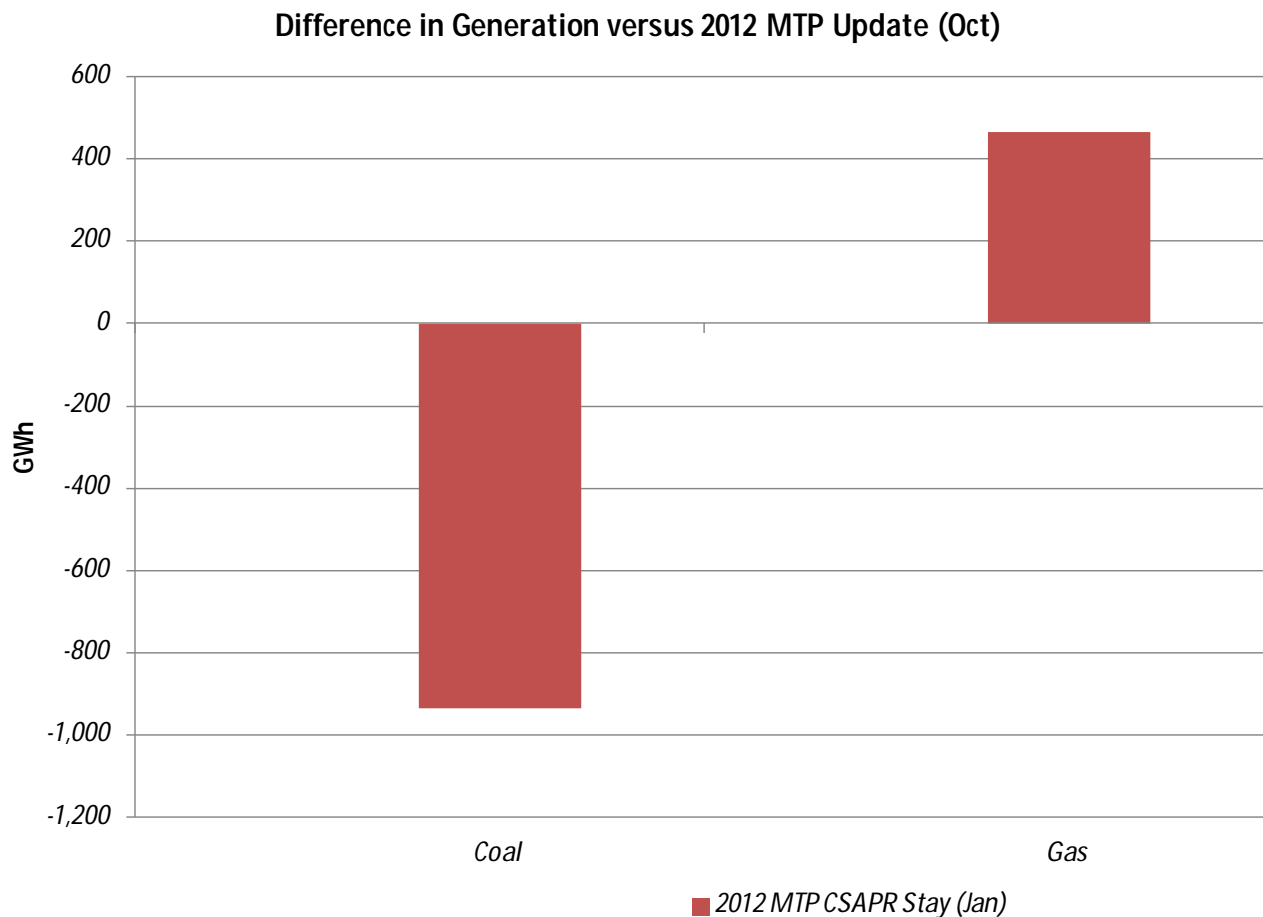
## *SO<sub>2</sub> Removal Rate Changes*

- *Brown:*
  - *All units from 98.5% to 98%*
- *Ghent:*
  - *GH1 from 99% to 98%*
  - *GH2 from 95% to 92%*
  - *GH4 from 99% to 98%*
- *Cane Run:*
  - *CR4 from 92% to 90%*
  - *CR5 from 92% to 90%*
  - *CR6 from 86% to 85%*
- *Trimble County:*
  - *TC2 from 99% to 98%*

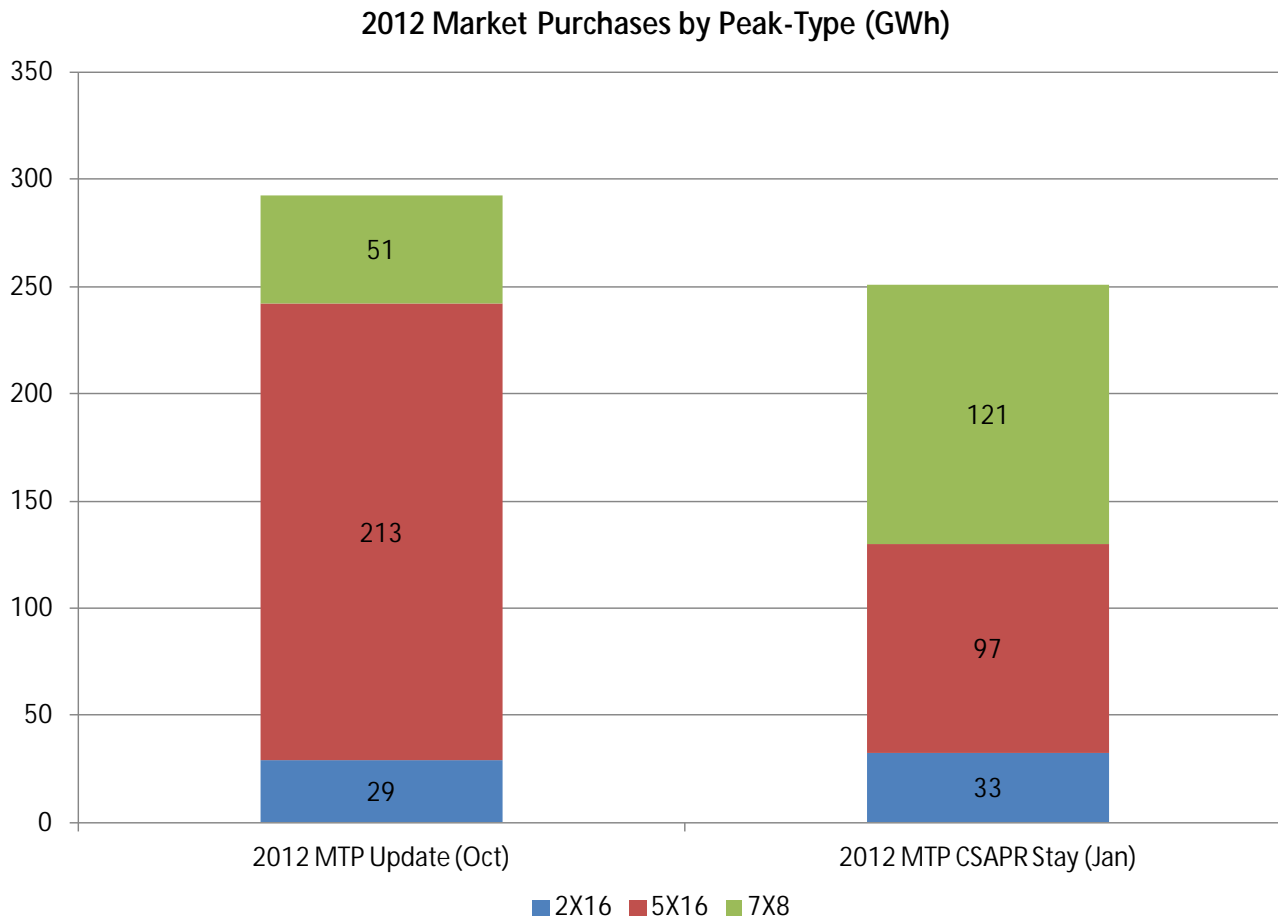
# CSAPR stay requires less SO<sub>2</sub> banking (assuming Phase 2 begins in 2015)



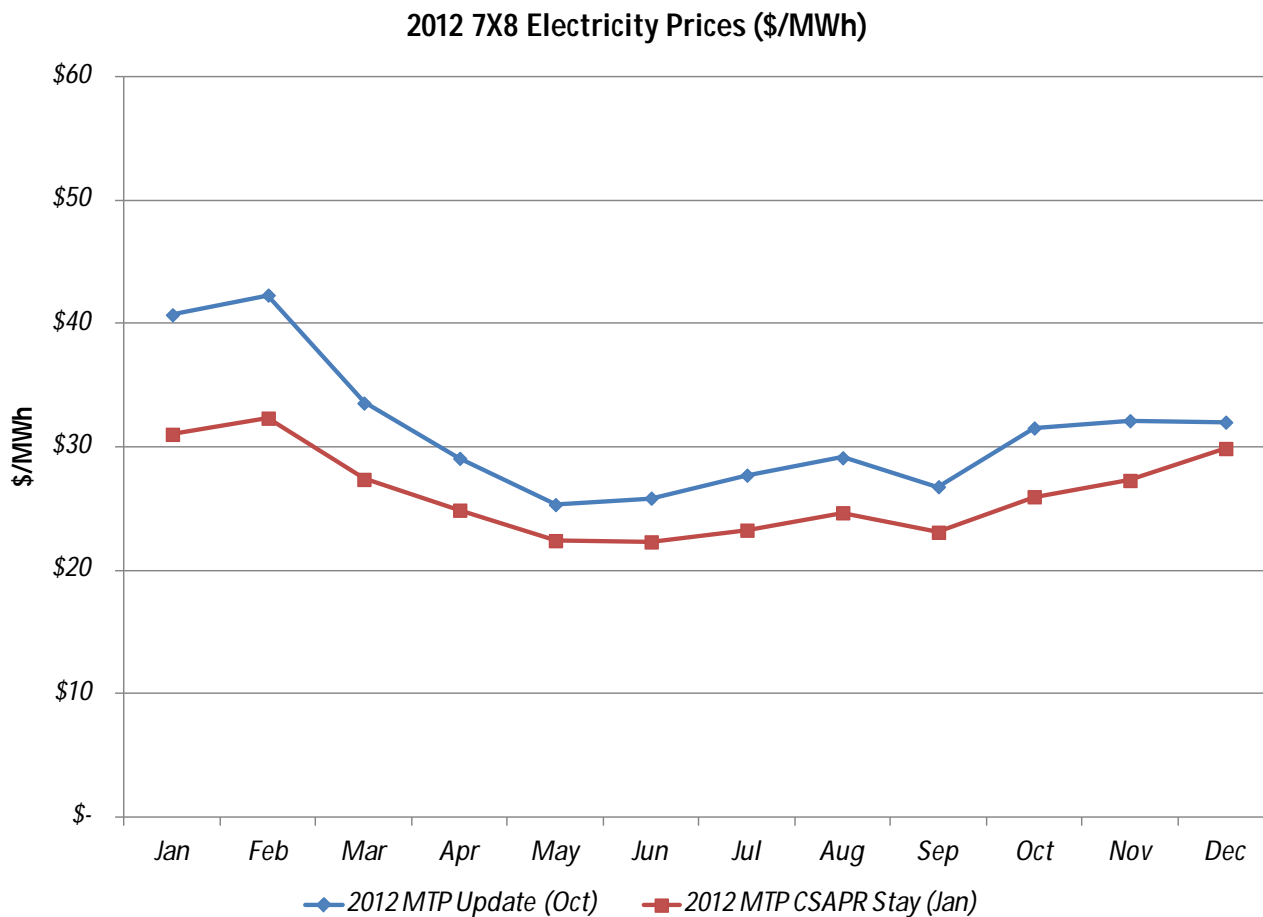
# Decrease in OSS volume and changes to maintenance schedule reduce coal generation; gas generation increases due to lower gas prices



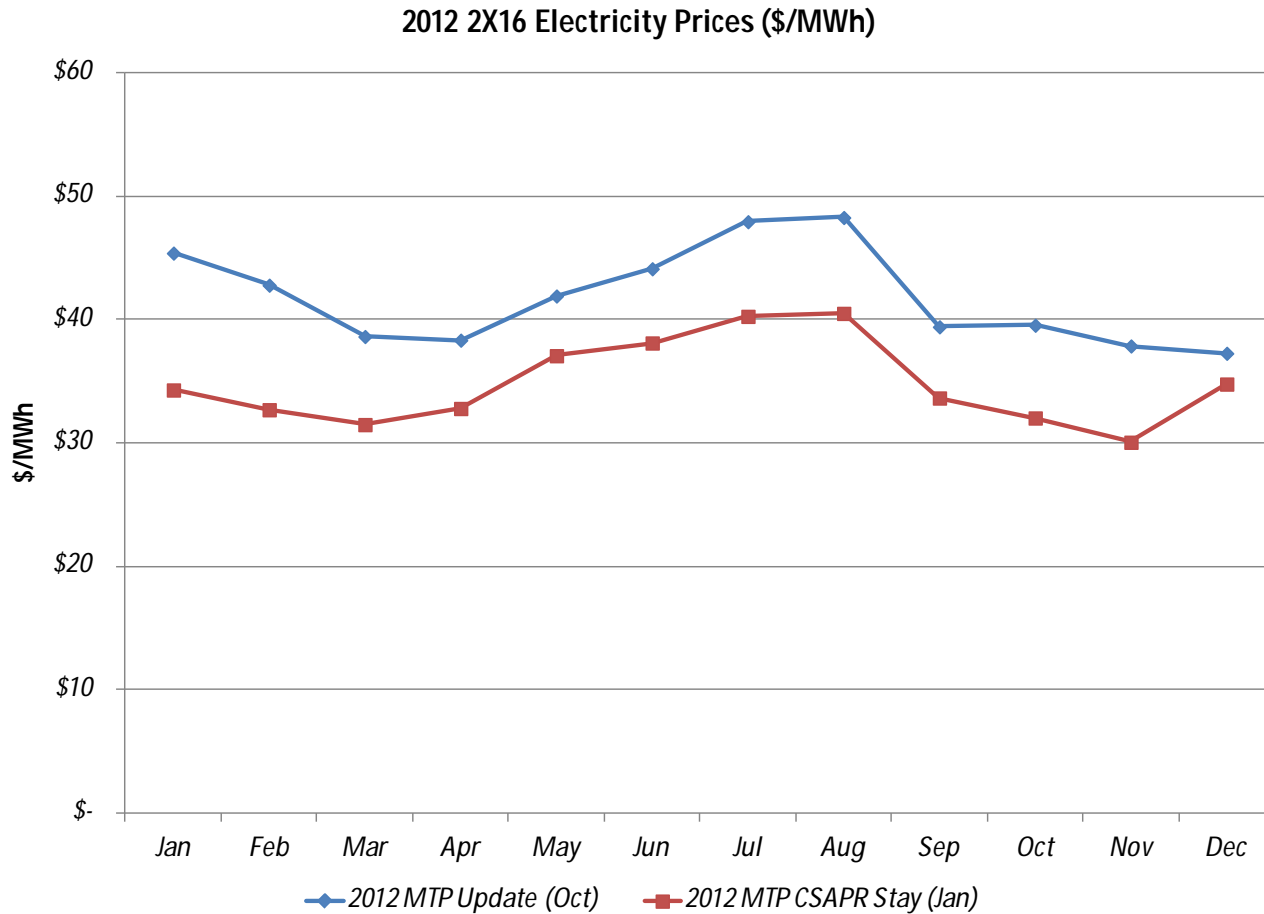
# CSAPR delay and lower CT fuel cost reduce total market purchases



# 2012 7X8 electricity prices decreased by ~16% since June 2011



# 2012 2X16 electricity prices decreased by ~17% since June 2011





# CT generation forecast increases due to lower gas prices

CT Generation (GWh)

	<u>ACTUAL</u>				<u>2012 MTP CSAPR Stay (Jan)</u>				
	2008	2009	2010	2011	2012	2013	2014	2015	2016
BR5	2	2	8	4	8	3	3	1	1
BR6	22	37	48	28	60	20	15	8	8
BR7	33	27	47	34	61	28	29	12	13
BR8, 11	7	12	17	6	14	4	5	2	3
BR9, 10	5	4	10	6	9	3	2	2	2
PR13	4	1	15	31	20	3	13	24	16
TC5-10	376	195	682	376	1,049	607	689	626	423
BG1-3	-	-	-	-	-	77	84	90	82
	449	278	826	485	1,220	744	840	764	547

2012 MTP Update (Oct)

756	588	755	795	572
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CT Starts (# starts)

	<u>ACTUAL</u>				<u>2012 MTP CSAPR Stay (Jan)</u>				
	2008	2009	2010	2011	2012	2013	2014	2015	2016
BR5	9	18	22	15	34	16	17	8	8
BR6	46	61	59	56	53	27	24	13	13
BR7	39	39	80	54	62	39	47	19	23
BR8, 11	44	63	60	35	66	27	27	16	17
BR9, 10	30	31	55	38	48	21	14	13	14
PR13	17	2	18	49	47	10	20	49	50
TC5-10	501	292	779	504	852	648	700	708	454
BG1-3	-	-	-	-	-	84	90	107	117
	686	506	1,073	751	1,164	871	940	933	697

2012 MTP Update (Oct)

1,017	824	996	987	731
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# CT Gen/Start and Run Hours/Start

CT Generation (GWh)/Start

	<u>ACTUAL</u>				<u>2012 MTP CSAPR Stay (Jan)</u>				
	2008	2009	2010	2011	2012	2013	2014	2015	2016
BR5	0.3	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.2
BR6	0.5	0.6	0.8	0.5	1.1	0.7	0.6	0.6	0.6
BR7	0.8	0.7	0.6	0.6	1.0	0.7	0.6	0.6	0.6
BR8, 11	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.2
BR9, 10	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
PR13	0.2	0.6	0.8	0.6	0.4	0.3	0.6	0.5	0.3
TC5-10	0.8	0.7	0.9	0.7	1.2	0.9	1.0	0.9	0.9
BG1-3	-	-	-	-	-	0.9	0.9	0.8	0.7
	<b>0.7</b>	<b>0.6</b>	<b>0.8</b>	<b>0.6</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>

2012 MTP Update (Oct)

<b>0.7</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>
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CT Run Hours/Start

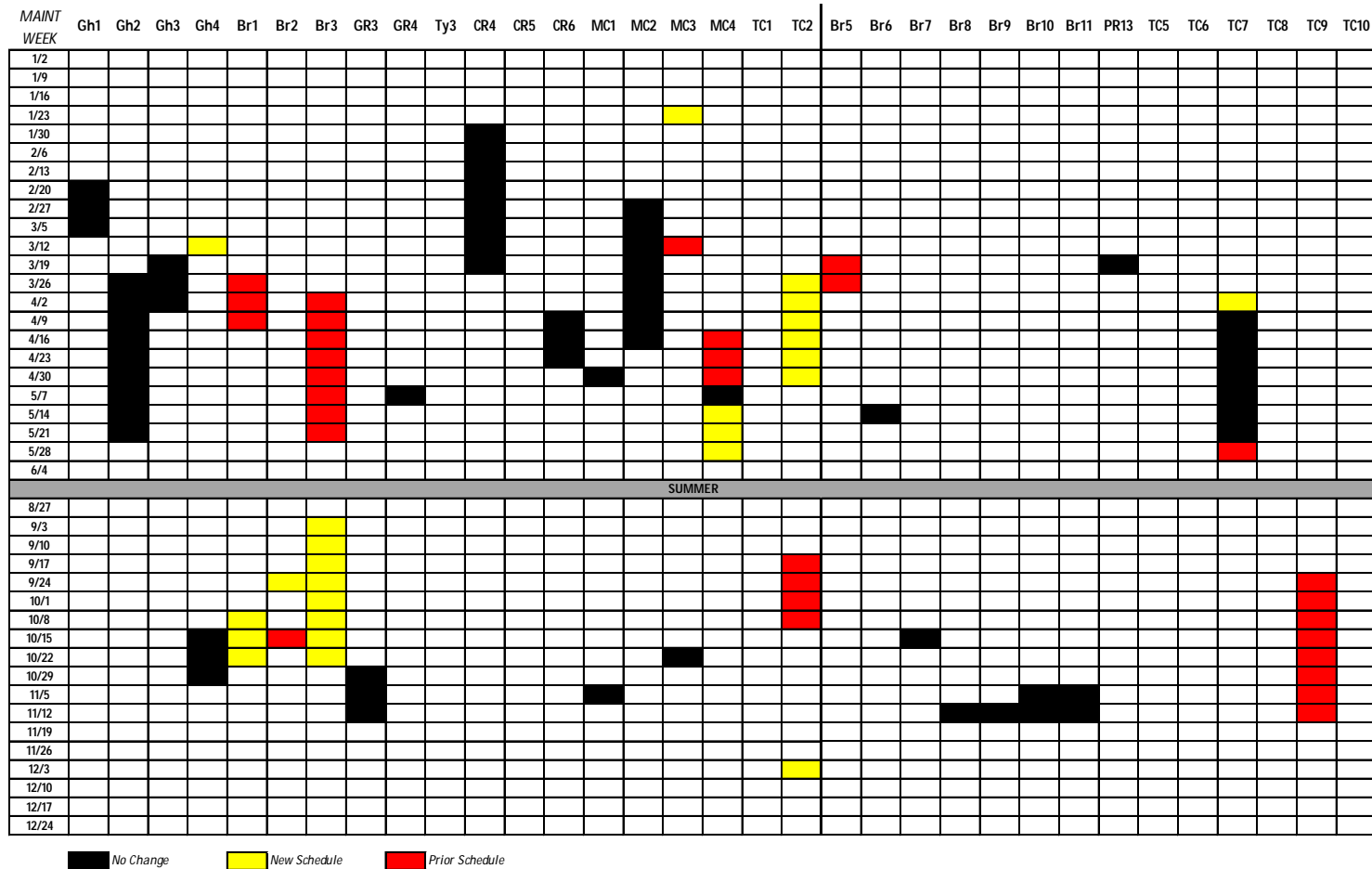
	<u>ACTUAL</u>				<u>2012 MTP CSAPR Stay (Jan)</u>				
	2008	2009	2010	2011	2012	2013	2014	2015	2016
BR5	4.8	3.8	6.1	5.6	3.4	2.7	2.9	2.2	2.8
BR6	5.6	8.3	9.5	7.6	8.4	6.2	5.5	5.5	5.5
BR7	8.0	6.9	8.1	6.4	7.4	6.2	5.4	5.3	5.0
BR8, 11	3.0	3.5	4.8	4.0	3.9	2.8	3.3	3.0	3.2
BR9, 10	3.4	2.8	3.8	4.1	3.3	2.6	2.8	2.8	2.4
PR13	3.0	4.7	5.9	5.4	5.2	3.5	7.2	5.1	3.8
TC5-10	6.4	5.8	7.8	7.3	7.9	6.8	7.4	6.9	7.5
BG1-3	-	-	-	-	-	7.7	7.8	7.0	5.9
	<b>6.0</b>	<b>5.6</b>	<b>7.4</b>	<b>6.8</b>	<b>7.3</b>	<b>6.5</b>	<b>7.1</b>	<b>6.6</b>	<b>6.6</b>

2012 MTP Update (Oct)

<b>6.4</b>	<b>6.3</b>	<b>6.5</b>	<b>6.7</b>	<b>6.5</b>
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# 2012 Maintenance Schedule Changes





**PPL companies**

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# Project Engineering

## 2012 – 2016 MTP

*October 13, 2011*

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# Plan Highlights

- Key Items
- Project Engineering's plan contains a decrease of \$650M from 2012 to 2016 over the prior plan. This is driven in large part by scope reductions on the Environmental Air Projects (i.e. elimination of SCRs) and shifting the majority of the CCR Ruling projects out of the MTP period.
- While establishing the 2012 MTP, Project Engineering undertook an effort to shift project contingency to the later years of projects in an effort to more accurately cash flow large projects and the contingency associated with those projects.
- Black & Veatch completed a Level I engineering study on the Environmental Air Projects. This study was the basis for the ECR filing and the 2012 MTP.



# Major Assumptions

## 1. Regulatory

- 1.1 The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.
- 1.2 Target Reserve Margin of 16%, within a range of 15%-17%.
  - 2011 MTP was 14% within a range of 13% - 15%.
  - No reserve margin purchases are planned.
- 1.3 Reserve sharing remains under the TVA/EKPC Reserve Sharing Agreement (~ 240 MW).
- 1.4 LG&E and KU remain committed to burning higher sulfur fuels.

## 2. Proposed or Expected New Environmental Regulations for Air and Water

- 2.1 Final Cross State Air Pollution Rules (CSAPR) were issued in July 2011, with Phase I starting 1/1/2012 and Phase 2 starting 1/1/2014.
  - CSAPR replaces CATR (Clean Air Transport Rule).
  - Have eliminated the one year of delay assumed in the 2011 MTP.
  - The allocations are subject to state approval but the state generally goes along with the EPA recommendation.
  - The new allocations are more generous on NO<sub>x</sub> but more restrictive on SO<sub>2</sub> than had been expected.
  - Existing allowance banks for SO<sub>2</sub> and NO<sub>x</sub> cannot be used to meet CSAPR.
  - Although CSAPR became final in July 2011, uncertainty remains regarding the outlook for the allowance market. The generation forecast utilizes an outlook for allowance prices from a 7/11/2011 PIRA report to achieve physical compliance.



# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

- 2.2 Hazardous Air Pollutants (HAPS) Maximum Available Control Technology (MACT) proposed rules were issued in March 2011. Final rules expected in November 2011, plus “automatic” one-year delay, plus a three-year implementation period results in a January 1, 2016 effective date.
- Have eliminated the “second” year of delay assumed in the 2011 MTP.
  - Impacts will be a compressed construction schedule, in particular at Mill Creek.
- 2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> and SO<sub>2</sub>. Based on these new standards, compliance requirements must be in place for NO<sub>x</sub> in November 2016 and SO<sub>2</sub> in June 2017. These are expected to impact the Jefferson County generating units.
- 2.4 Cane Run Coal will be retired January 1, 2016.
- Combined cycle replacement available on that date.
  - This aligns to the IRP.
- 2.5 Tyrone Coal will be retired January 1, 2016.
- This aligns to the IRP
  - Sensitivity to January 1, 2015 should 1-year “automatic” delay not apply to facilities being retired.
- 2.6 Green River Coal will be retired January 1, 2016.
- Based on no viable options or flexibility, Green River retirement is moved from June 1, 2019 in the 2011 MTP to January 1, 2016.
  - This aligns to the IRP.
  - Sensitivity to January 1, 2015 should 1-year “automatic” delay not apply to facilities being retired.
  - A Transmission Capital project is slated to be completed by early 2013 which will provide greater flexibility around running the Green River units.
  - Starting in 2012, Green River will only run significantly less than historical averages due to SO<sub>2</sub> constraints under CSAPR (see 2.1), prior to the 1/1/16 retirement.





# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.7 GHG tailoring rule requirements began January 2011.

- GHG BACT will be required for permit renewals, though not yet defined.
- The EPA is expected to issue GHG New Source Performance Standards (NSPS) for new and existing units during 2011.

### 2.8 The 2011 ECR compliance plan and CCN are expected to be approved December 16 and will include the following air quality controls:

- A new Mill Creek 4 FGD (Nov. 2014). A refurbished unit 4 FGD is then switched to unit 3 (Nov. 2015).
- A new Mill Creek 1 and 2 (combined) FGD (April/May 2015).
- Fabric Filters on Ghent 1-4, Mill Creek 1-4, Brown 1-3, and Trimble County 1.
  - 2014 in-service: Br. 1, Br. 2, Gh4, MC4
  - 2015 in-service: Br. 3, Gh1, Gh2, Gh3, MC1, MC2, MC3, TC1
- An SCR upgrade on Mill Creek 4.
- SCR turn-down capability on all existing SCR's except TC1 and TC2.
  - 2013 in-service: MC3
  - 2014 in-service: Gh3, Gh4, MC4
  - 2015 in-service: Gh1
- Note : The additional SCR's that were in the 2011 MTP have been taken out.

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.9 Significant O&M and cost of sales (\$120M per year) will be incurred as remaining units are operational for CSAPR and HAPS MACT Compliance (per B&V study - 2016 full year).

- Costs will begin ramping up in 2014 as units are completed.

2.10 316(b) proposed regulations have been issued and are expected to be final in July 2012.

- There is no mandate for cooling towers at the current time (Mill Creek 1 is a sensitivity in 2017).
- Current estimate to comply is \$3M each for Mill Creek, Trimble County, Ghent, and Brown ( ½ in 2015, ½ in 2016).

2.11 Effluent water guideline draft proposal is expected July, 2012, with the final rule issued January 31, 2014.

- Ultimate implementation timing as well as scope are uncertain at this time.
- A placeholder per station is included (\$60M Ghent, \$60M Mill Creek, \$40M Brown, \$20M Trimble County, \$10M Cane Run, and \$10M Green River).
- The dollars are split ½ in 2017 and ½ in 2018, however, they could vary by facility based on permit renewal dates.



# Major Assumptions

## **3. Expansion/Capacity**

- 3.1 Simple cycle capacity of 495MW is added on January 1, 2013 (Ownership is 69% LG&E, 31% KU).**
- 3.2 A combined cycle unit will be added January 1, 2016 at the Cane Run location.**
- 2 x 1, 640 MW Summer Net. (Ownership is 78% KU, 22% LG&E).
  - Replacing Cane Run Coal retired on that date.
  - CCN approval date of September, 2012.
  - Expense profile based on a Long-Term Services Agreement being in place.
- 3.3 A second combined cycle unit will be added June 1, 2021 at the Green River location.**
- 2 x 1, 640 MW Summer Net. (Company ownership is all KU).
  - Replacing Green River Coal retired January 1, 2016 (5.5 year gap in W. Kentucky Generation).
  - There will be no benefit from emissions offset, given the 5.5 year gap between coal retirement and combined cycle start-up.
  - Expense profile based on a Long-Term Services Agreement being in place.
- 3.4 The next generating unit (after the second combined cycle) will come on-line in 2028 (all spending outside of LTP). This date is highly in flux given how far out it is in the planning window.**
- 3.5 After running through 2010, Tyrone will be in reserve and then lay-up status for the full MTP period, and then retired on January 1, 2016.**
- 3.6 The six Ohio Falls units still to be rehabilitated will be staged one unit every 7-8 months between 2011 and 2014.**

# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.7 Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2014 and runs through 2018.

- Engineering to be done in 2012.
- Paddy's Run Site will be completed in 2015 to accommodate CR combined cycle.

3.8 Steam turbine efficiency upgrades (dense packs) are included for:

- Mill Creek 4 in 2018
- Ghent 4 in 2021
- Ghent 3 in 2018
- Ghent 2 in 2019
- Ghent 1 in 2022
- Heat rate benefits are factored in, but not any capacity changes.
- Presuming they can be done with no NSR impact.
- Boiler studies could also be required.

• Mill Creek 1 in 2021

• Mill Creek 2 in 2020

• Mill Creek 3 in 2019

• Trimble County 1 in 2017

3.9 Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.

- Group 3 consists of the older, smaller CT's.
- No Group 3 units are being retired in the plan.

3.10 Biomass co-firing projects for 2 units are a sensitivity, not included in the base MTP.

3.11 Landfill gas projects are a sensitivity, not included in the base MTP.

- No activity currently taking place.



# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.12 Wind power purchase agreements are not included in the base MTP.

3.13 A carbon capture and sequestration (CCS) demonstration facility for 100 MW is a sensitivity.

## 4. Coal Combustion Residuals (CCR's)

4.1 EPA issued two proposals for public input for coal combustion residuals (CCR's) in June 2010.

- Final rules are expected in late 2012 and once final rules are issued there will be a five-year implementation period with an additional two years to close existing ponds. Ponds are expected to be eliminated for ash storage.
- Expected timeframe of 2017-2019 on pond closures and 2016-2017 on construction of new process ponds.
- A stay due to litigation is probable.
- A designation of “Hazardous” vs. “Non-Hazardous” appears to be trending toward “Non-Hazardous”.
  - EPA’s decision has been delayed until December 2012 at the earliest.
- The designation will not change the capital plan but would reduce beneficial re-use opportunities for structural fill and gypsum for wallboard if declared “hazardous”.

4.2 Expanded TC Bottom Ash Pond and new TC Gypsum Pond will both be operational on December 15, 2011.

4.3 Trimble County Landfill Phase I construction will be substantially completed by 12/31/13 with significant O&M starting in 2014.

- Holcim off-takes are included, as well as the barge load-out facility.
- Holcim agreement and barge load out facility expected to be operational July 1, 2012.

4.4 Brown Ash Pond is being converted to a landfill. The 2011 ECR filing for the conversion will be approved in November 2011.

- In-service date of January 2014.



# Major Assumptions

## 4. Coal Combustion Residuals (CCR) (Cont.)

4.5 Ghent Landfill Phase 1 construction will be substantially completed by 6/30/13, with significant O&M starting in mid-2013.

4.6 The existing Cane Run Landfill will be modified by the end of 2012.

- Use of mechanically stabilized earth (MSE Walls) to utilize slope area.
- Permit efforts for a new landfill will continue as a contingency plan.

4.7 Extension of the Mill Creek Landfill will be in the back part of the LTP.

- Earliest timeframe it would need to be operational would be 2021.

4.8 All CCR Capital Projects use an annual escalation rate of 6.0%.

- Escalation rate is biased higher to reflect the petroleum impact on the liner material and fuel in the earth moving equipment.

## 5. Other Environmental (in addition to CATR, HAPS MACT, and CCR's) Resulting in Significant Capital Additions

5.1 The Brown 3 SCR will be in-service June 30, 2012.

- PSD permit was received in January, 2011.
- High sulfur fuel will be burned in all three units starting November 1, 2011 with temporary SO<sub>3</sub> mitigation systems in place.
- The permanent system for Unit 3 will go in-service with the SCR.
- Operating parameters under the consent decree will be very tight for Brown 3.



# Major Assumptions

## **5. Other Environmental (in addition to CATR, HAPS MACT, and CCR's) Resulting in Significant Capital Additions**

**(Cont.)**

### **5.2 FGD ductwork renovations at Mill Creek are as follows:**

- Unit 2 in 2012.
- Unit 1 will be part of new environmental air capital.
- Unit 4 will be part of new environmental air capital.
- Unit 3 has already been completed.

### **5.3 SO<sub>3</sub> mitigation on Mill Creek 3 and 4 will be rolled into the Mill Creek air work being done for HAPS MACT and NAAQs.**

### **5.4 Upgraded SO<sub>3</sub> Systems (including the Milling System) will be installed on the Ghent SCR Units (1,3,4) in 2011 and 2012, which will achieve a lower overall SO<sub>3</sub> emissions level.**

- A new permanent system will be installed on (non-SCR) Unit 2 by September, 2012.
- Boiler modifications to reduce exit gas temperatures will also likely be needed.
- Settlement with EPA is still a sensitivity.
- Sufficient capital is likely covered within the MTP, but any penalties or SEP projects are not factored in.



# Major Assumptions

## 6. Operational and Other

### 6.1 Annual escalation rates for internal labor, contract labor and materials are as follows:

- Internal labor: 3.0%.
- Contract/services labor: 3.0% for general, 3.5% for highly skilled (welders).
- Chemicals: 5.0% for specialty (GE Betz), 6.0% for commodity (Univar) 2012 – 2013, 7.0% 2014-1016.
- Fuels and additives 5.0%, copper 4.0%, plastic pipe 6.0%.
- Carbon steel plate 5.0%, fabricated steel 3.0%, Alloy steel 8.0%.
- All other materials: 5.2% composite rate.

### 6.2 By the end of 2012, planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years, with the following exceptions:

- Brown units 1 and 3 over-lap by 2 weeks every other year.
- Cane Run units are 3 week outages one year with no outage the next year, with this cycle repeating.
- Trimble County units are 4 week outages one year with no outage the next year, with this cycle repeating.



# Major Assumptions

## 6. Operational and Other (Cont.)

### 6.3 The next turbine overhaul by unit is as follows:

- 2012 : Ghent 2, Brown 3, Cane Run 4, Mill Creek 2.
- 2013 : Mill Creek 1.
- 2014 : Brown 1, Mill Creek 4, Ghent 4.
- 2015 : Ghent 1.
- 2016 : None scheduled (Brown 2 shifted to Spring, 2017).

### 6.4 Significant generator rewind/stator rewind dollars are included in the 2012-2016 timeframe.

- Brown 3 generator (stator and rotor) rewind in 2012.
- Brown 2 generator (stator and rotor) rewind in 2015/2016.
- Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.

### 6.5 Corrosion fatigue inspection schedule is as follows:

- 2012: Brown 3, Cane Run 4, Mill Creek 2
- 2013: Mill Creek 1, Mill Creek 3
- 2014: Ghent 4, Mill Creek 4
- 2015: Ghent 1
- 2016: None scheduled (Brown 2 shifted to Spring, 2017).
- Any repairs identified during the inspection are a sensitivity.

# Major Assumptions

## 6. Operational and Other (Cont.)

### 6.6 High Energy Piping (HEP) inspection schedule is as follows:

- 2012: Brown 1, Brown 3, Cane Run 4, Cane Run 6, Ghent 2, Green River 3, Trimble County 2
- 2013: Cane Run 5, Ghent 3, Green River 4, Mill Creek 1, Mill Creek 2, Mill Creek 3, Trimble County 1
- 2014: Brown 1, Brown 2, Ghent 4, Green River 3, Mill Creek 4, Trimble County 2
- 2015: Cane Run 5, Ghent 1, Green River 4, Mill Creek 2, Mill Creek 3
- 2016: Brown 3, Ghent 2, Mill Creek 1, Trimble County 2
- Any repairs identified during the inspection are a sensitivity.

### 6.7 The fuel procurement plan is pushing toward higher chlorine ILL. Basin fuels, which will drive burner modifications on at least two Mill Creek units and two Ghent units.

- Permit changes may also be needed.

### 6.8 Targets for percentage of fuel hedged in MTP are as follows:

- 95% - 100% year 1
- 90% - 100% year 2
- 40% - 90% year 3
- 30% - 70% year 4
- 20% - 50% year 5



# Major Assumptions

## 6. Operational and Other (Cont.)

### 6.9 Combustion turbine outages in the plan:

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense – approximately 15%) vs. new parts (capital – approximately 85%).
- Number of Trimble units undergoing the hot gas path inspection include one in 2010 (unit 6), two in 2011 (units 5 and 8), and one each in 2012 - 2014.
- Brown C inspections by unit are as follows:
  - ✓ Unit 9 in 2013
  - ✓ Unit 10 in 2015
  - ✓ Unit 11 in 2017
  - ✓ Unit 6 in 2017
  - ✓ Unit 7 in 2018
  - ✓ Unit 8 in 2020
  - ✓ Unit 5 in 2021

6.10 NERC Cyber Security Solution (all coal-fired stations plus Paddy's Run and Haefling) is included, along with Microsoft Upgrades for Ghent and Trimble County due to 2014 de-support of Windows XP.

6.11 The FutureGen expense is \$0.5M per year through the LTP period.

- This is a much different scope than FutureGen (Mattoon, IL).



# Major Assumptions

## 6. Operational and Other (Cont.)

6.12 Demolition (cost of removal) costs for Canal and Paddy's Run are as follows:

- 2012 \$4.0M
- 2013-2014 \$0.0M
- 2015 \$0.3M
- 2016 \$1.3M
- 2017 \$7.5M
- 2018 \$10M
- 2019 \$7.0M
- Order of events will be engineering for both sites (2012), Paddy's Run Stacks (2012), complete demolition of Paddy's (2015 - 2019), complete demolition of Canal (2017-2019).

6.13 Cost of removal reserves at 12/31/15 are:

- Tyrone \$5M
- Green River \$12M
- Cane Run \$35M

6.14 A MAXIMO Upgrade (tied to Oracle Upgrade) will take place in 2013 (likely starting second half of 2012).

6.15 The prosym run from October 7, 2011 is the official generation forecast for the 2012-2016 MTP.



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	\$182	\$171	\$288	\$288	\$288	\$296	\$303
Burdens	\$37	\$29	\$82	\$82	\$82	\$84	\$87
Non labor*	\$788	\$300	\$430	\$430	\$430	\$440	\$450
Subtotal OPEX/Other expense	\$1,007	\$500	\$800	\$800	\$800	\$820	\$840
Gross Margin Expenses - N/A							
Total Income Statement items	\$1,007	\$500	\$800	\$800	\$800	\$820	\$840

\* Non Labor actuals for 2010 included a write off of \$634k for pyrite dewatering equipment at Brown.



# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis

### (\$000)

	2012	2013	2014	2015	2016
Total Capital	\$688,114	\$1,057,323	\$1,090,261	\$822,356	\$103,574
Target	\$743,569	\$1,172,115	\$1,093,490	\$832,262	\$560,801
Variance To Target	<b>\$55,455</b>	<b>\$114,792</b>	<b>\$3,229</b>	<b>\$9,906</b>	<b>\$457,227</b>
Major Drivers of variance:					
Brown CCR	\$5,322	(\$7,436)	(\$900)	\$0	\$0
Cane Run CCR	(\$390)	(\$110)	\$400	\$500	(\$1,800)
Ghent CCR	\$11,800	(\$3,000)	(\$9,100)	\$100	\$65
TC CCR (Net)	(\$4,300)	\$9,210	(\$17,700)	(\$0)	(\$500)
MC CCR	(\$450)	(\$1,050)	\$11,000	(\$11,800)	(\$450)
TC2 (Net)	(\$11,170)	\$0	\$0	\$0	\$0
Brown FGD	(\$1,000)	\$0	\$0	\$0	\$0
Brown 3 SCR	\$3,025	(\$3,000)	\$0	\$0	\$0
MC Limestone Mill	(\$300)	\$0	\$0	\$0	\$0
Ohio Falls	\$2,600	\$774	(\$1,520)	(\$1,500)	\$0
NGCC - CR 7	\$5,900	\$9,000	\$14,500	(\$26,400)	\$0
NGCC - 2021	\$0	\$3,000	\$22,500	\$126,700	\$162,000
Paddy's Demolition	(\$1,250)	\$5,000	\$5,000	\$3,225	(\$1,250)
Canal Demolition	(\$275)	\$5,000	\$5,000	\$3,500	\$0
Env. Air - Brown	\$4,776	\$14,565	(\$11,142)	(\$8,129)	\$14,628
Env. Air - Ghent	\$8,859	\$16,809	(\$16,199)	\$6,921	\$62,768
Env. Air - Mill Creek	\$31,014	\$67,841	(\$3,541)	(\$92,437)	\$41,109
Env. Air - TC (Net)	\$0	\$2,368	\$3,835	(\$5,602)	\$2,527
Env Compl. - CCR Ruling	\$0	(\$2,834)	\$1,212	\$17,591	\$183,751
Env Compl. - Effluent Water 316a	\$0	\$0	\$0	\$0	\$0
Env Compl. - Water Intake 316b	\$0	\$0	\$0	(\$2,813)	(\$5,625)
Other	\$1,294	(\$1,345)	(\$116)	\$50	\$4
	<b>\$55,455</b>	<b>\$114,792</b>	<b>\$3,229</b>	<b>\$9,906</b>	<b>\$457,227</b>



# Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Director	1	1	1	1	1	1	1
Managers - Major Capital Projects	4	4	4	4	4	4	4
Procurement Manager	1	1	1	1	1	1	1
HR/IR Manager	1	1	1	1	1	1	1
Contract Administrator	1	3	4	4	4	4	4
Project Planning Coordinator	0	1	1	1	1	1	1
Engineers - Lead	4	4	4	4	4	4	4
Engineers - Chemical	0	0	1	1	1	1	1
Engineers - Civil	3	3	4	4	4	4	4
Engineers - Electrical	2	2	2	2	2	2	2
Engineers - Mechanical	2	2	3	3	3	3	3
Project Coordinators	16	15	20	20	20	20	20
Safety Specialists	3	3	4	4	4	4	4
Administrative Assistants	4	4	5	5	5	5	5
<b>FTE</b>	<u>42</u>	<u>44</u>	<u>55</u>	<u>55</u>	<u>55</u>	<u>55</u>	<u>55</u>
<b>Coop/Intern Students</b>	4	5	6	6	6	6	6
<b>Total</b>	<u>46</u>	<u>49</u>	<u>61</u>	<u>61</u>	<u>61</u>	<u>61</u>	<u>61</u>
From 2011 MTP		<u>49</u>	<u>49</u>	<u>49</u>			
Variance to 2011 MTP		<u>0</u>	<u>12</u>	<u>12</u>			
<b>PE Contracted Staff</b>	<b>10</b>	<b>12</b>	<b>17</b>	<b>18</b>	<b>17</b>	<b>11</b>	<b>11</b>
FTE 2012 MTP		44	55	55			
FTE 2011 MTP		<u>44</u>	<u>44</u>	<u>44</u>			
Variance to 2011 MTP		<u>0</u>	<u>11</u>	<u>11</u>			

•Major Developments/Changes – Headcount and Contracted Staff additions are necessary to implement unprecedented capital spend on Environmental Air Projects, CCR projects, and the NGCC plant.



# Plan Risks

- Cost estimates for the majority of the projects in the plan are based on conceptual and/or Level I Engineering.
- Project cash flows are based on projected regulatory approvals, aggressive procurement by Project Engineering, and having sufficient legal support. In addition, it is assumed consideration will be given to modifying authority limits and LKE approval processes.
- Costs could be impacted on the Environmental Air Projects due to potential increased market demand on labor and materials as utilities across the country are pressed to comply with regulations in the same time frame.



# Appendix



# 2012-2016 Capital Reconciliation (w COR) – Accrual Basis

(\$000)

	2012 Plan	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	\$688,114	\$1,057,323	\$1,090,261	\$822,356	\$103,574
Prior Plan	\$714,797	\$924,530	\$1,099,656	\$1,080,074	\$606,301
Variance	<b>\$26,683</b>	<b>(\$132,793)</b>	<b>\$9,395</b>	<b>\$257,718</b>	<b>\$502,727</b>
Variance Explanations:					
Brown CCR	\$5,322	(\$7,436)	(\$900)	\$0	\$0
Cane Run CCR	\$4,983	\$8,343	(\$4,400)	(\$4,600)	(\$1,800)
Ghent CCR	(\$21,622)	(\$22,230)	(\$12,478)	\$116	\$65
TC CCR (Net)	(\$3,200)	(\$77,800)	(\$37,400)	(\$400)	(\$450)
MC CCR	(\$200)	(\$200)	(\$200)	(\$12,000)	(\$500)
TC2 (Net)	(\$11,170)	\$0	\$0	\$0	\$0
Brown FGD	(\$1,000)	\$0	\$0	\$0	\$0
Brown 3 SCR	\$3,025	(\$3,000)	\$0	\$0	\$0
MC Limestone Mill	(\$300)	\$0	\$0	\$0	\$0
Ohio Falls	\$2,600	\$774	(\$1,520)	(\$1,500)	\$0
NGCC - CR 7	(\$26,700)	(\$42,700)	(\$7,800)	\$40,900	\$45,500
NGCC - 2021	\$0	\$3,000	\$4,000	\$4,000	\$162,000
Paddy's Demolition	(\$1,250)	\$5,000	\$5,000	\$3,225	(\$1,250)
Canal Demolition	(\$275)	\$5,000	\$5,000	\$3,500	\$0
Env. Air - Brown	\$14,790	\$2,612	(\$47,367)	\$10,419	\$14,628
Env. Air - Ghent	\$3,516	(\$32,764)	\$45,766	\$162,236	\$62,768
Env. Air - Mill Creek	\$41,756	\$39,795	(\$3,036)	(\$171,242)	\$41,109
Env. Air - TC (Net)	\$0	(\$6,230)	\$24,084	\$21,951	\$2,527
Env Compl. - CCR Ruling	\$17,507	(\$3,858)	\$41,747	\$206,739	\$183,754
Env Compl. - Effluent Water 316a	(\$500)	(\$1,000)	(\$1,000)	\$0	\$0
Env Compl. - Water Intake 316b	(\$500)	\$0	\$0	(\$5,625)	(\$5,625)
Other	(\$99)	(\$99)	(\$101)	(\$1)	\$1
Total Variance	<b>\$26,683</b>	<b>(\$132,793)</b>	<b>\$9,395</b>	<b>\$257,718</b>	<b>\$502,727</b>



## 2012-2016 Cost of Removal Comparison (\$000)

	2012 Plan	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	\$6,941	\$2,212	\$4,410	\$9,383	\$14,934
Prior Plan	\$15,674	\$10,981	\$18,388	\$218,970	\$204,417
Variance	<b>\$8,733</b>	<b>\$8,769</b>	<b>\$13,978</b>	<b>\$209,587</b>	<b>\$189,483</b>
Variance Explanations:					
Cane Run CCR	(\$350)	(\$350)	(\$350)	(\$350)	(\$350)
Ghent CCR	\$0	\$0	\$0	(\$700)	(\$800)
TC CCR (Net)	\$0	\$0	\$0	(\$400)	(\$450)
NGCC - CR7	(\$30)	\$0	\$0	\$0	\$0
Paddy's Demolition	(\$1,250)	\$5,000	\$5,000	\$3,225	(\$1,250)
Canal Demolition	(\$275)	\$5,000	\$5,000	\$3,500	\$0
Env. Air - Brown	\$0	(\$512)	(\$856)	(\$484)	\$0
Env. Air - Ghent	\$0	(\$369)	(\$655)	(\$220)	\$0
Env. Air - Mill Creek	\$0	\$0	\$5,839	\$12,444	(\$1,266)
Env. Air - TC (Net)	\$0	\$0	\$0	\$0	\$0
Env Compl. - CCR Ruling	\$10,638	\$0	\$0	\$192,572	\$193,599
Total Variance	<b>\$8,733</b>	<b>\$8,769</b>	<b>\$13,978</b>	<b>\$209,587</b>	<b>\$189,483</b>

# 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Expansion Plan</b>							
TC2 (Net)	\$16,254	\$4,250	\$11,170	\$0	\$0	\$0	\$0
Ohio Falls	\$15,611	\$20,400	\$24,300	\$21,000	\$20,100	\$2,000	\$0
NGCC 2016 - CR 7	\$246	\$3,000	\$36,700	\$162,700	\$222,800	\$139,100	\$14,500
<b>Expansion Plan Total</b>	<b>\$32,111</b>	<b>\$27,650</b>	<b>\$72,170</b>	<b>\$183,700</b>	<b>\$242,900</b>	<b>\$141,100</b>	<b>\$14,500</b>
<b>ECR</b>							
Brown CCR	\$8,150	\$11,700	\$21,400	\$31,500	\$900	\$0	\$0
Cane Run CCR	\$517	\$1,500	\$500	\$2,900	\$4,400	\$4,600	\$1,800
Ghent CCR	\$7,619	\$62,900	\$120,600	\$83,500	\$17,400	\$700	\$800
TC CCR (Net)	\$12,366	\$19,000	\$92,000	\$77,800	\$37,400	\$400	\$450
MC CCR	\$0	\$0	\$200	\$200	\$200	\$12,000	\$500
FGD Program (Brown & Ghent)	\$92,444	\$6,300	\$1,000	\$0	\$0	\$0	\$0
Brown 3 SCR	\$23,139	\$39,900	\$37,800	\$4,500	\$0	\$0	\$0
Env. Air - Studies	\$798	\$2,500	\$0	\$0	\$0	\$0	\$0
Env. Air - Brown	\$0	\$5,200	\$61,624	\$110,936	\$122,942	\$44,828	\$0
Env. Air - Ghent	\$452	\$8,800	\$88,059	\$181,542	\$247,299	\$161,879	\$4,283
Env. Air - Mill Creek	\$445	\$9,200	\$182,836	\$353,059	\$379,541	\$354,338	\$14,148
Env. Air - TC (Net)	\$0	\$0	\$0	\$21,132	\$34,065	\$62,702	\$5,854
Env Compl. - CCR Ruling	\$0	\$0	\$0	\$5,455	\$2,114	\$33,909	\$54,364
Env Compl. - Effluent Water 316a	\$0	\$0	\$500	\$1,000	\$1,000	\$0	\$0
Env Compl. - Water Intake 316b	\$0	\$0	\$500	\$0	\$0	\$5,625	\$5,625
<b>ECR Plan Total</b>	<b>\$145,930</b>	<b>\$167,000</b>	<b>\$607,019</b>	<b>\$873,523</b>	<b>\$847,261</b>	<b>\$680,981</b>	<b>\$87,824</b>
<b>Special Projects</b>							
Mill Creek Limestone Mill	\$3,358	\$5,500	\$4,800	\$0	\$0	\$0	\$0
Paddy's Demolition	\$0	\$0	\$2,500	\$0	\$0	\$275	\$1,250
Canal Demolition	\$0	\$0	\$1,525	\$0	\$0	\$0	\$0
Other	\$2,350	\$4,300	\$100	\$100	\$100	\$0	\$0
<b>Special Projects Plan Total</b>	<b>\$5,708</b>	<b>\$9,800</b>	<b>\$8,925</b>	<b>\$100</b>	<b>\$100</b>	<b>\$275</b>	<b>\$1,250</b>
<b>Total Capital</b>	<b>\$183,749</b>	<b>\$204,450</b>	<b>\$688,114</b>	<b>\$1,057,323</b>	<b>\$1,090,261</b>	<b>\$822,356</b>	<b>\$103,574</b>



# Capital Review - Brown CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Main Pond Phase I	\$38	\$73	\$73	\$35	\$35
Aux Pond/Main Pond Phase II	\$15	\$25	\$25	\$10	\$10
Landfill Phase I & Transport	\$69	\$57	\$59	(\$12)	(\$10)
Landfill Phase II	<u>\$33</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$33)</u>	<u>(\$33)</u>
<b>Total</b>	<b>\$154</b>	<b>\$155</b>	<b>\$157</b>	<b>\$1</b>	<b>\$2</b>

### MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
<b>2011 MTP</b>									
Main Pond Phase I	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
Aux Pond/Main Pond Phase II	\$1	\$8	\$0	\$0	\$0	\$0	\$0	\$0	\$10
Landfill Phase I & Transport	\$0	\$6	\$27	\$24	\$0	\$0	\$0	\$0	\$57
Landfill Phase II	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$33</u>	<u>\$33</u>
<b>Total 2011 MTP</b>	<b>\$57</b>	<b>\$14</b>	<b>\$27</b>	<b>\$24</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$33</b>	<b>\$155</b>
<b>2012 MTP</b>									
Main Pond Phase I	\$55	(\$16)	\$0	\$0	\$0	\$0	\$0	\$0	\$38
Aux Pond/Main Pond Phase II	\$2	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$15
Landfill Phase I & Transport	\$0	\$15	\$21	\$32	\$1	\$0	\$0	\$0	\$69
Landfill Phase II	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$33</u>	<u>\$33</u>
<b>Total 2012 MTP</b>	<b>\$56</b>	<b>\$12</b>	<b>\$21</b>	<b>\$32</b>	<b>\$1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$33</b>	<b>\$154</b>
<b>Variance to 2011 MTP</b>									
Main Pond Phase I	\$1	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$17
Aux Pond/Main Pond Phase II	(\$1)	(\$4)	\$0	\$0	\$0	\$0	\$0	\$0	(\$5)
Landfill Phase I & Transport	\$0	(\$9)	\$5	(\$7)	(\$1)	\$0	\$0	\$0	(\$12)
Landfill Phase II	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Total Variance to 2011 MTP</b>	<b>\$1</b>	<b>\$3</b>	<b>\$5</b>	<b>(\$7)</b>	<b>(\$1)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1</b>

### Key Messages

- The ECR Filing for Phase I of the Landfill (including the Transport scope) was made in June 2011.
- The \$16M credit in 2011 on the Main Pond Phase I represents transferring the costs of the starter dike materials to be used in the Aux Pond Phase II (\$4M) and the Landfill Phase I (\$12M). This also accounts for the \$12M variance between the Current Forecast of \$69M and the \$57M Current Authority on Phase I of the Landfill.



# Capital Review – Cane Run CCR

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Cane Run CCR	\$17	\$19	\$19	\$1	\$1

## MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
2011 MTP	\$2	\$3	\$5	\$11	\$0	\$0	\$0	\$1	\$22
2012 MTP	<u>\$2</u>	<u>\$2</u>	<u>\$1</u>	<u>\$3</u>	<u>\$4</u>	<u>\$5</u>	<u>\$2</u>	<u>\$0</u>	<u>\$17</u>
Variance to 2011 MTP	\$0	\$1	\$5	\$8	(\$4)	(\$5)	(\$2)	\$1	\$5

## Key Messages

- The 2011 plan was a new Landfill. Costs in the 2012 MTP are to construct a MSE Wall to raise the existing Landfill.



# Capital Review - Ghent CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Landfill Phase I/Fines & Transport	\$303	\$205	\$205	(\$99)	(\$99)
Landfill Phase II, III, Close & Cap	<u>\$132</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$132)</u>	<u>(\$132)</u>
Total	\$435	\$205	\$205	(\$230)	(\$230)

### MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
<b>2011 MTP</b>									
Landfill Phase I	\$25	\$12	\$10	\$9	\$5	\$1	\$1	\$1	\$63
Fines & Transport	\$7	\$90	\$89	\$52	\$0	\$0	\$0	\$0	\$238
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$127</u>	<u>\$128</u>
Total 2011 MTP	\$33	\$102	\$99	\$61	\$5	\$1	\$1	\$128	\$429
<b>2012 MTP</b>									
Landfill Phase I	\$15	\$17	\$18	\$11	\$11	\$1	\$1	\$1	\$75
Fines & Transport	\$2	\$46	\$102	\$73	\$6	\$0	\$0	\$0	\$229
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$132</u>	<u>\$132</u>
Total 2012 MTP	\$17	\$63	\$121	\$84	\$17	\$1	\$1	\$133	\$435
<b>Variance to 2011 MTP</b>									
Landfill Phase I	\$10	(\$5)	(\$8)	(\$2)	(\$6)	\$0	\$0	(\$0)	(\$11)
Fines & Transport	\$5	\$44	(\$13)	(\$20)	(\$6)	\$0	\$0	\$0	\$10
Landfill Phase II, III, Close & Cap	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$5)</u>	<u>(\$5)</u>
Total Variance to 2011 MTP	\$16	\$39	(\$22)	(\$22)	(\$13)	\$0	\$0	(\$5)	(\$6)

### Key Messages

- The increase over the ECR Filing is driven by the Transport System estimate being based on Level I Engineering rather than Preliminary Engineering.



# Capital Review – Trimble County CCR

## Accrual Basis, \$Millions

### Authority/ECR Comparison

	Total Projection	Current Authority	ECR Filing	Variance to Authority	Variance to ECR Filing
BAP/GSP	\$30	\$30	\$25	\$0	(\$5)
Landfill Phase I/Fines & Transport	\$210	\$73	\$73	(\$137)	(\$137)
Landfill Phase II, III, & IV	\$186	\$0	\$0	(\$186)	(\$186)
Holcim	\$11	\$8	\$8	(\$3)	(\$3)
<b>Total</b>	<b>\$436</b>	<b>\$110</b>	<b>\$106</b>	<b>(\$326)</b>	<b>(\$331)</b>

### MTP Comparison

	Pre-2011	2011	2012	2013	2014	2015	2016	Post 2016	Total
<b>2011 MTP</b>									
BAP/GSP	\$25	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$26
Landfill Phase I	\$3	\$37	\$17	\$0	\$0	\$0	\$0	\$0	\$57
Fines & Transport	\$0	\$0	\$71	\$0	\$0	\$0	\$0	\$0	\$71
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$230	\$230
Holcim	\$1	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$8
<b>Total 2011 MTP</b>	<b>\$29</b>	<b>\$45</b>	<b>\$89</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$230</b>	<b>\$393</b>
<b>2012 MTP</b>									
BAP/GSP	\$21	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$30
Landfill Phase I	\$2	\$4	\$46	\$20	\$10	\$0	\$0	\$0	\$84
Fines & Transport	\$0	\$3	\$37	\$58	\$28	\$0	\$0	\$0	\$126
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$186	\$186
Holcim	\$1	\$2	\$8	\$0	\$0	\$0	\$0	\$0	\$11
<b>Total 2012 MTP</b>	<b>\$24</b>	<b>\$19</b>	<b>\$92</b>	<b>\$78</b>	<b>\$37</b>	<b>\$0</b>	<b>\$0</b>	<b>\$186</b>	<b>\$436</b>
<b>Variance to 2011 MTP</b>									
BAP/GSP	\$4	(\$8)	\$0	\$0	\$0	\$0	\$0	\$0	(\$3)
Landfill Phase I	\$1	\$32	(\$29)	(\$20)	(\$10)	(\$0)	(\$0)	\$0	(\$27)
Fines & Transport	(\$0)	(\$3)	\$34	(\$58)	(\$28)	\$0	\$0	\$0	(\$55)
Landfill Phase II, III, Close & Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44	\$44
Holcim	\$0	\$5	(\$8)	\$0	\$0	\$0	\$0	\$0	(\$3)
<b>Total Variance to 2011 MTP</b>	<b>\$5</b>	<b>\$26</b>	<b>(\$3)</b>	<b>(\$78)</b>	<b>(\$37)</b>	<b>(\$0)</b>	<b>(\$0)</b>	<b>\$44</b>	<b>(\$43)</b>

### Key Messages

- All numbers are net of IMPA/IMEA reimbursement.
- The 2012 MTP is based on the assumption the landfill and transport and treatment will be operational in late 2013.
- The increase over the ECR Filing is due refined engineering on the Transport System, however conceptual design will not be complete until late 2011.
- The 2012 MTP is based on 50% completion of the Landfill Detailed Design.





# Capital Review – Brown SCR

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Brown SCR	\$107	\$185	\$185	\$78	\$78

## MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
2011 MTP	\$25	\$53	\$41	\$2	\$0	\$0	\$0	\$0	\$120
2012 MTP	\$25	\$40	\$38	\$5	\$0	\$0	\$0	\$0	\$107
Variance to 2011 MTP	(\$0)	\$13	\$3	(\$3)	\$0	\$0	\$0	\$0	\$12

## Key Messages

- Variance to 2011 MTP is driven by reductions on Balance of Plant items and release of unused contingency.
- The SCR is projected to be operational June 30th, 2012.



# Capital Review – Mill Creek Limestone Mill

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Mill Creek Limestone Mill	\$14	\$16	\$2

### MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
2011 MTP	\$4	\$8	\$5	\$0	\$0	\$0	\$0	\$0	\$16
2012 MTP	\$4	\$6	\$5	\$0	\$0	\$0	\$0	\$0	\$14
Variance to 2011 MTP	\$0	\$2	(\$0)	\$0	\$0	\$0	\$0	\$0	\$2

### Key Messages

- Variance is the release of projected unused contingency.
- The Mill Creek Limestone Mill is planned to be operational in the second quarter 2012.



# Capital Review – Ohio Falls

## Accrual Basis, \$Millions Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Ohio Falls	\$131	\$130	(\$0)

## MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
2011 MTP	\$41	\$22	\$27	\$22	\$19	\$1	\$0	\$0	\$130
2012 MTP	<u>\$43</u>	<u>\$20</u>	<u>\$24</u>	<u>\$21</u>	<u>\$20</u>	<u>\$2</u>	<u>\$0</u>	<u>\$0</u>	<u>\$131</u>
Variance to 2011 MTP	(\$2)	\$1	\$3	\$1	(\$2)	(\$2)	\$0	\$0	(\$0)

## Key Messages

- Above figures include removal costs of \$7.7M.
- 74% of this project has been negotiated into a lump sum contract with Voith.



# Capital Review – NGCC 2016 Cane Run 7

## Accrual Basis, \$Millions Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
NGCC 2016 Cane Run 7	\$579	\$0	(\$579)

## MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
2011 MTP	\$1	\$3	\$10	\$120	\$215	\$180	\$60	\$0	\$589
2012 MTP*	<u>\$0</u>	<u>\$3</u>	<u>\$37</u>	<u>\$163</u>	<u>\$223</u>	<u>\$139</u>	<u>\$15</u>	<u>\$0</u>	<u>\$579</u>
Variance to 2011 MTP	\$1	\$0	(\$27)	(\$43)	(\$8)	\$41	\$46	\$0	\$10

\*CCN Approval is expected in September 2012. Below is a scenario illustrating the impact of a six month delay.

CCN Delay	<u>\$0</u>	<u>\$3</u>	<u>\$12</u>	<u>\$115</u>	<u>\$236</u>	<u>\$152</u>	<u>\$74</u>	<u>\$0</u>	<u>\$592</u>
Variance to 2012 MTP	\$0	\$0	\$25	\$48	(\$13)	(\$13)	(\$60)	\$0	(\$13)

## Key Messages

- The NGCC 2016 was modeled on a 2 x 1, 640MW (summer, net) and assumes a 4th quarter 2015 in-service date.
- The main driver for the variance to the 2011 MTP is HDR cost estimate refinement.
- The 2012 MTP includes electric transmission relocation costs, but does not include the interconnect cost of the NGCC to the transmission line. Gas transmission line costs are included in the 2012 MTP.



# Capital Review – Paddy’s Run & Canal Demolition

## Accrual Basis, \$Millions

### Authority Comparison

	<u>Total Projection</u>	<u>Current Authority</u>	<u>Variance</u>
Paddy's Run Demolition	\$15	\$0	(\$15)
Canal Demolition	\$15	\$0	(\$15)
Total	\$30	\$0	(\$30)

### MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
<b>2011 MTP</b>									
Paddy's Run Demolition	\$0	\$0	\$1	\$5	\$5	\$4	\$0	\$0	\$15
Canal Demolition	\$0	\$0	\$1	\$5	\$5	\$4	\$0	\$0	\$15
Total 2011 MTP	\$0	\$1	\$3	\$10	\$10	\$7	\$0	\$0	\$30
<b>2012 MTP</b>									
Paddy's Run Demolition	\$0	\$0	\$3	\$0	\$0	\$0	\$1	\$11	\$15
Canal Demolition	\$0	\$0	\$2	\$0	\$0	\$0	\$0	\$14	\$15
Total 2012 MTP	\$0	\$0	\$4	\$0	\$0	\$0	\$1	\$25	\$30
<b>Variance to 2011 MTP</b>									
Paddy's Run Demolition	\$0	\$0	(\$1)	\$5	\$5	\$3	(\$1)	(\$11)	\$0
Canal Demolition	\$0	\$0	(\$0)	\$5	\$5	\$4	\$0	(\$14)	\$0
Total Variance to 2011 MTP	\$0	\$1	(\$2)	\$10	\$10	\$7	(\$1)	(\$25)	\$0

### Key Messages

- The above amounts are based on estimates prepared by Cane Run.
- 2012 includes \$2.5M for the stack demolition on Paddy's Run and \$1.5M for engineering on Canal. The remaining amounts were shifted out to 2015 through 2019.



# Capital Review – Brown Air Compliance

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Requested Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Brown 1	\$110	\$110	\$109	\$0	(\$0)
Brown 2	\$118	\$118	\$118	\$0	(\$0)
Brown 3	<u>\$118</u>	<u>\$118</u>	<u>\$117</u>	<u>(\$0)</u>	<u>(\$1)</u>
Total	\$346	\$346	\$344	\$0	(\$2)

## MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
<b>2011 MTP</b>									
Brown 1	\$0	\$5	\$34	\$46	\$28	\$0	\$0	\$0	\$114
Brown 2	\$0	\$10	\$42	\$65	\$20	\$15	\$1	\$0	\$154
Brown 3	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$2</u>	<u>\$27</u>	<u>\$40</u>	<u>\$13</u>	<u>\$0</u>	<u>\$83</u>
Total 2011 MTP	\$0	\$15	\$76	\$114	\$76	\$55	\$15	\$0	\$351
<b>2012 MTP</b>									
Brown 1	\$0	\$3	\$29	\$41	\$37	\$0	\$0	\$0	\$110
Brown 2	\$0	\$3	\$31	\$44	\$40	\$0	\$0	\$0	\$118
Brown 3	<u>\$0</u>	<u>\$0</u>	<u>\$2</u>	<u>\$25</u>	<u>\$46</u>	<u>\$45</u>	<u>\$0</u>	<u>\$0</u>	<u>\$118</u>
Total 2012 MTP	\$0	\$5	\$62	\$111	\$123	\$45	\$0	\$0	\$346
<b>Variance to 2011 MTP</b>									
Brown 1	\$0	\$3	\$6	\$5	(\$9)	\$0	\$0	\$0	\$4
Brown 2	\$0	\$7	\$11	\$21	(\$20)	\$15	\$1	\$0	\$36
Brown 3	<u>\$0</u>	<u>\$0</u>	<u>(\$2)</u>	<u>(\$23)</u>	<u>(\$18)</u>	<u>(\$4)</u>	<u>\$13</u>	<u>\$0</u>	<u>(\$35)</u>
Total Variance to 2011 MTP	\$0	\$10	\$15	\$3	(\$47)	\$10	\$15	\$0	\$5

## Key Messages

- The ECR Filing excluded removal costs of \$2M.
- BR 1 includes a \$68M reduction due to removal of SCR from the prior plan and a \$64M increase on the Fabric Filter due to going from a combined 1 & 2 Fabric Filter, to separate Fabric Filters.
- BR 2 includes a \$105M reduction due to removal of SCR from the prior plan and a \$70M increase on the Fabric Filter due to going from a combined 1 & 2 Fabric Filter, to separate Fabric Filters.
- The estimate for the Brown 3 Fabric Filter increased \$35M based on refined engineering by B&V from Pre-Level I to Level I Engineering.



# Capital Review – Ghent Air Compliance

Accrual Basis, \$Millions									
Authority/ECR Comparison	Total		Requested		ECR		Variance to		Variance to
	Projection		Authority		Filing		Authority		ECR Filing
Ghent 1	\$164		\$164		\$164		\$0		(\$0)
Ghent 2	\$171		\$171		\$165		\$0		(\$6)
Ghent 3	\$184		\$184		\$198		\$0		\$14
Ghent 4	\$173		\$173		\$185		\$0		\$12
Total	\$692		\$692		\$712		\$0		\$19
<u>MTP Comparison</u>									
	Pre-2011	2011	2012	2013	2014	2015	2016	Post 2016	Total
<b>2011 MTP</b>									
Ghent 1	\$0	\$7	\$0	\$5	\$57	\$83	\$27	\$0	\$179
Ghent 2	\$0	\$20	\$76	\$111	\$121	\$76	\$23	\$0	\$428
Ghent 3	\$0	\$1	\$8	\$19	\$62	\$87	\$9	\$0	\$186
Ghent 4	\$0	\$1	\$8	\$14	\$53	\$78	\$8	\$0	\$161
Total 2011 MTP	\$1	\$28	\$92	\$149	\$293	\$324	\$67	\$0	\$954
<b>2012 MTP</b>									
Ghent 1	\$0	\$2	\$8	\$39	\$48	\$68	\$0	\$0	\$164
Ghent 2	\$0	\$4	\$5	\$29	\$43	\$86	\$4	\$0	\$171
Ghent 3	\$0	\$2	\$48	\$70	\$64	\$0	\$0	\$0	\$184
Ghent 4	\$0	\$1	\$28	\$43	\$92	\$8	\$0	\$0	\$173
Total 2012 MTP	\$0	\$9	\$88	\$182	\$247	\$162	\$4	\$0	\$692
<b>Variance to 2011 MTP</b>									
Ghent 1	\$0	\$6	(\$8)	(\$34)	\$8	\$15	\$27	\$0	\$15
Ghent 2	\$0	\$16	\$72	\$82	\$78	(\$10)	\$19	\$0	\$257
Ghent 3	\$0	(\$1)	(\$40)	(\$51)	(\$1)	\$87	\$9	\$0	\$3
Ghent 4	\$0	(\$1)	(\$20)	(\$30)	(\$39)	\$70	\$8	\$0	(\$12)
Total Variance to 2011 MTP	\$1	\$19	\$4	(\$33)	\$46	\$162	\$63	\$0	\$262

## Key Messages

- The variance to the ECR Filing is a result of the following: \$4M reduction on the Fabric Filters due to change in outage dates for each unit after the filing. \$16M reduction for the refinement of the Ghent SAM and SCR Turn-Down estimates. In addition the ECR filing did not contain removal costs of \$1M.
- The large reduction on Ghent 2 from the 2011 MTP to the 2012 MTP is driven by a \$263M decrease due to the removal of the SCR from the 2011 plan.
- SCR Turn-Downs were added to units 1, 3 & 4 in the 2012 Plan at a cost of approximately \$8M per unit.
- The Ghent estimates in the 2012 MTP are based on a Level 1 Engineering Study performed by Black & Veatch compared to a Pre-Level 1 study in the 2011 MTP.



# Capital Review – Mill Creek Air Compliance

Accrual Basis, \$Millions										
<u>Authority/ECR Comparison</u>	<u>Total Projection</u>		<u>Requested Authority</u>		<u>ECR Filing</u>		<u>Variance to Authority</u>		<u>Variance to ECR Filing</u>	
Mill Creek 1	\$334		\$334		\$331		\$0		(\$3)	
Mill Creek 2	\$331		\$331		\$328		\$0		(\$3)	
Mill Creek 3	\$235		\$235		\$223		\$0		(\$12)	
Mill Creek 4	\$393		\$393		\$386		\$0		(\$7)	
<b>Total</b>	<b>\$1,294</b>		<b>\$1,294</b>		<b>\$1,268</b>		<b>\$0</b>		<b>(\$25)</b>	
<u>MTP Comparison</u>										
	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>	
<b>2011 MTP</b>										
Mill Creek 1	\$0	\$0	\$10	\$51	\$121	\$47	\$52	\$3	\$283	
Mill Creek 2	\$0	\$13	\$62	\$135	\$48	\$50	\$3	\$0	\$310	
Mill Creek 3	\$0	\$0	\$2	\$38	\$116	\$86	\$0	\$0	\$242	
Mill Creek 4	\$0	\$36	\$151	\$169	\$92	\$0	\$0	\$0	\$449	
<b>Total 2011 MTP</b>	<b>\$0</b>	<b>\$49</b>	<b>\$225</b>	<b>\$393</b>	<b>\$377</b>	<b>\$183</b>	<b>\$55</b>	<b>\$3</b>	<b>\$1,285</b>	
<b>2012 MTP</b>										
Mill Creek 1	\$0	\$0	\$35	\$86	\$94	\$120	\$0	\$0	\$334	
Mill Creek 2	\$0	\$0	\$34	\$84	\$93	\$119	\$0	\$0	\$331	
Mill Creek 3	\$0	\$0	\$1	\$49	\$77	\$93	\$14	\$0	\$235	
Mill Creek 4	\$0	\$9	\$113	\$134	\$115	\$22	\$0	\$0	\$393	
<b>Total 2012 MTP</b>	<b>\$0</b>	<b>\$9</b>	<b>\$183</b>	<b>\$353</b>	<b>\$380</b>	<b>\$354</b>	<b>\$14</b>	<b>\$0</b>	<b>\$1,294</b>	
<b>Variance to 2011 MTP</b>										
Mill Creek 1	\$0	\$0	(\$25)	(\$35)	\$27	(\$73)	\$52	\$3	(\$51)	
Mill Creek 2	\$0	\$13	\$27	\$51	(\$46)	(\$69)	\$3	\$0	(\$21)	
Mill Creek 3	(\$0)	\$0	\$2	(\$11)	\$39	(\$7)	(\$14)	\$0	\$7	
Mill Creek 4	(\$0)	\$27	\$38	\$35	(\$23)	(\$22)	\$0	\$0	\$56	
<b>Total Variance to 2011 MTP</b>	<b>(\$0)</b>	<b>\$40</b>	<b>\$42</b>	<b>\$40</b>	<b>(\$3)</b>	<b>(\$171)</b>	<b>\$41</b>	<b>\$3</b>	<b>(\$9)</b>	

## Key Messages

- The variance to the ECR Filing is a result of the following: \$13M related to the MC 3 and 4 SAM Mitigation are not included in the ECR filing as it was part of an earlier filing. The ECR filing does not include removal costs of \$8M. The Current Projection includes a \$4M increase over the ECR filing due to moving the MC FGD outage to align with MC4's FGD outage.
- Reductions from the 2011 MTP include removal of the SCR's on MC 1 and 2. Increases include additions of the SCR Turn-Downs and SAM Mitigation on MC 3 & 4 which were not part of the Air Compliance Plan in 2011. Other significant increases are due to the addition of a Combined MC 1 & 2 FGD versus FGD upgrades on MC 1 and 2 in the 2011 plan.
- The Mill Creek estimates in the 2012 MTP are based on a Level 1 Engineering Study performed by Black & Veatch compared to a Pre-Level 1 study in the 2011 MTP. The exception is the MC 1 & 2 FGD which was based on the Brown FGD historical costs.





# Capital Review – Trimble 1 Air Compliance

## Accrual Basis, \$Millions Authority/ECR Comparison

	<u>Total Projection</u>	<u>Requested Authority</u>	<u>ECR Filing</u>	<u>Variance to Authority</u>	<u>Variance to ECR Filing</u>
Trimble 1	\$124	\$124	\$124	\$0	(\$0)

## MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
2011 MTP	\$0	\$0	\$0	\$15	\$58	\$85	\$8	\$0	\$166
2012 MTP	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$21</u>	<u>\$34</u>	<u>\$63</u>	<u>\$6</u>	<u>\$0</u>	<u>\$124</u>
Variance to 2011 MTP	\$0	\$0	\$0	(\$6)	\$24	\$22	\$3	\$0	\$42

## Key Messages

- The variance between the 2011 MTP and 2012 MTP is due to the 2011 MTP being Gross before partner reimbursement. The 2012 MTP is Net of IMEA/IMPA reimbursement.
- The 2012 MTP continues to be based on Pre-Level 1 Engineering. Black & Veatch is currently performing a Level I Engineering study similar to the studies completed for Brown, Ghent, and Mill Creek.



# Capital Review – Environmental Air MTP Variance Summary

Accrual Basis, \$Millions

## 2011 MTP to 2012 MTP Variance Breakdown by System

Project	2011 MTP	2012 MTP	Variance	2011 MTP to 2012 MTP Variance Breakdown by System						
				SCR	FF	FGD	SAM	SCR Turn- Down	Elec. Precip	Total Variance
Brown 1	\$114	\$110	\$4	\$68	(\$64)	\$0	\$0	\$0	\$0	\$4
Brown 2	\$154	\$118	\$36	\$105	(\$69)	\$0	\$0	\$0	\$0	\$36
Brown 3	\$83	\$118	(\$35)	\$0	(\$35)	\$0	\$0	\$0	\$0	(\$35)
Ghent 1	\$179	\$164	\$15	\$0	\$18	\$0	\$5	(\$9)	\$0	\$15
Ghent 2	\$428	\$171	\$257	\$263	(\$5)	\$0	(\$1)	\$0	\$0	\$257
Ghent 3	\$186	\$184	\$3	\$0	\$5	\$0	\$6	(\$8)	\$0	\$3
Ghent 4	\$161	\$173	(\$12)	\$0	(\$10)	\$0	\$6	(\$9)	\$0	(\$12)
Mill Creek 1	\$283	\$334	(\$51)	\$123	(\$44)	(\$130)	\$0	\$0	\$0	(\$51)
Mill Creek 2	\$310	\$331	(\$21)	\$118	(\$45)	(\$132)	\$0	\$0	\$38	(\$21)
Mill Creek 3	\$242	\$235	\$7	\$0	(\$8)	\$32	(\$10)	(\$8)	\$0	\$7
Mill Creek 4	\$449	\$393	\$56	\$0	\$8	\$65	(\$9)	(\$8)	\$0	\$56
Trimble County 1	<u>\$166</u>	<u>\$124</u>	<u>\$42</u>	<u>\$0</u>	<u>\$42</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$42</u>
<b>Total</b>	<b>\$2,756</b>	<b>\$2,455</b>	<b>\$300</b>	<b>\$677</b>	<b>(\$207)</b>	<b>(\$165)</b>	<b>(\$2)</b>	<b>(\$41)</b>	<b>\$38</b>	<b>\$300</b>



# Capital Review – Environmental Air Alternate Scenarios

## Accrual Basis, \$Millions MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Post <u>2016</u>	<u>Total</u>
2011 MTP	\$1	\$93	\$393	\$670	\$803	\$647	\$145	\$3	\$2,756
2012 MTP*	\$1	\$23	\$333	\$667	\$784	\$624	\$24	\$0	\$2,455
Variance to 2011 MTP	\$0	\$70	\$60	\$3	\$19	\$23	\$121	\$3	\$300
Alternate Scenario 1	\$1	\$8	\$228	\$764	\$857	\$627	\$24	\$0	\$2,509
Variance to 2012 MTP	\$0	\$15	\$105	(\$97)	(\$73)	(\$3)	\$0	\$0	(\$54)
Alternate Scenario 2	\$1	\$26	\$351	\$746	\$920	\$771	\$32	\$0	\$2,847
Variance to 2012 MTP	\$0	(\$2)	(\$19)	(\$80)	(\$136)	(\$147)	(\$8)	\$0	(\$392)

## Key Messages

- Alternate Scenario 1 illustrates the impact of a six month delay in regulatory approval.
- Alternate Scenario 2 illustrates the impacts from increased market demand on labor and material prices as utilities across the country compete for the same labor and materials. Alternate Scenario 2 uses a 10% escalation rate (instead of the 4% rate in the 2012 MTP) to show the potential impact of increased market demand.



# Capital Review – CCR Ruling

## Accrual Basis, \$Millions

There is no ECR Filing or Approved Authority Amount associated with the CCR Ruling Projects.

### MTP Comparison

	<u>Pre-2011</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Post 2016</u>	<u>Total</u>
<b>2011 MTP</b>									
Brown	\$0	\$0	\$1	\$0	\$1	\$0	\$0	\$0	\$2
Ghent	\$0	\$0	\$3	\$1	\$20	\$149	\$137	\$0	\$309
Green River	\$0	\$0	\$9	\$0	\$6	\$1	\$3	\$73	\$92
Pineville	\$0	\$1	\$2	\$0	\$0	\$0	\$0	\$0	\$3
Tyrone	\$0	\$0	\$0	\$0	\$0	\$5	\$8	\$12	\$25
Cane Run	\$0	\$0	\$0	\$0	\$2	\$0	\$14	\$60	\$76
Mill Creek	\$0	\$0	\$2	\$0	\$12	\$48	\$39	\$0	\$101
Trimble	<u>\$0</u>	<u>\$0</u>	<u>\$1</u>	<u>\$0</u>	<u>\$3</u>	<u>\$38</u>	<u>\$38</u>	<u>\$0</u>	<u>\$80</u>
<b>Total 2011 MTP</b>	<b>\$0</b>	<b>\$1</b>	<b>\$18</b>	<b>\$2</b>	<b>\$44</b>	<b>\$241</b>	<b>\$238</b>	<b>\$145</b>	<b>\$688</b>
<b>2012 MTP</b>									
Brown	\$0	\$0	\$0	\$0	\$1	\$0	\$1	\$1	\$3
Ghent	\$0	\$0	\$0	\$3	\$1	\$20	\$22	\$298	\$344
Green River	\$0	\$0	\$0	\$0	\$0	\$0	\$11	\$40	\$51
Pineville	\$0	\$0	\$0	\$0	\$0	\$0	\$4	\$3	\$6
Tyrone	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$3
Cane Run	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34	\$34
Mill Creek	\$0	\$0	\$0	\$2	\$0	\$12	\$15	\$82	\$111
Trimble	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$1</u>	<u>\$0</u>	<u>\$2</u>	<u>\$2</u>	<u>\$62</u>	<u>\$67</u>
<b>Total 2012 MTP</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5</b>	<b>\$2</b>	<b>\$34</b>	<b>\$54</b>	<b>\$523</b>	<b>\$619</b>
<b>Variance to 2011 MTP</b>									
Brown	\$0	\$0	\$1	\$0	(\$0)	\$0	(\$0)	(\$1)	(\$0)
Ghent	\$0	\$0	\$3	(\$2)	\$20	\$129	\$114	(\$298)	(\$35)
Green River	\$0	\$0	\$9	\$0	\$6	\$1	(\$8)	\$33	\$41
Pineville	\$0	\$1	\$2	\$0	\$0	\$0	(\$4)	(\$3)	(\$4)
Tyrone	\$0	\$0	\$0	\$0	\$0	\$5	\$8	\$9	\$22
Cane Run	\$0	\$0	\$0	\$0	\$2	\$0	\$14	\$26	\$42
Mill Creek	\$0	\$0	\$2	(\$1)	\$12	\$36	\$23	(\$82)	(\$10)
Trimble	<u>\$0</u>	<u>\$0</u>	<u>\$1</u>	<u>(\$1)</u>	<u>\$3</u>	<u>\$35</u>	<u>\$36</u>	<u>(\$62)</u>	<u>\$13</u>
<b>Total Variance to 2011 MTP</b>	<b>\$0</b>	<b>\$1</b>	<b>\$18</b>	<b>(\$4)</b>	<b>\$42</b>	<b>\$207</b>	<b>\$184</b>	<b>(\$378)</b>	<b>\$69</b>

### Key Messages

- Majority of projects were shifted to 2015 through 2019 in the 2012 plan due to timing and uncertainty of ruling. Costs in 2013 and 2014 in the 2012 MTP are mainly engineering and development of construction packages.
- Amounts for Trimble in the 2011 MTP were gross, Trimble amounts in the 2012 MTP are net of IMEA/IMPA partner reimbursement.
- Compliance Closure of Ponds is \$516M of the \$619M in the 2012 plan. There will be additional costs of \$815M associated with plant closures outside the LTP period.



# Contingency Analysis

2012 MTP/LTP Contingency Shift By Year											
\$ in Millions	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Before Contingency Shift	\$5,402.4	\$750.4	\$1,159.5	\$1,061.9	\$695.3	\$104.1	\$368.6	\$541.4	\$350.0	\$257.1	\$114.2
After Contingency Shift	\$5,402.4	\$688.1	\$1,057.3	\$1,090.3	\$822.5	\$103.6	\$347.4	\$566.6	\$338.8	\$243.8	\$144.0
Contingency Shift By Year	(\$0.0)	\$62.3	\$102.2	(\$28.4)	(\$127.2)	\$0.5	\$21.2	(\$25.2)	\$11.1	\$13.3	(\$29.8)

2012 MTP/LTP Contingency Amount By Project											
\$ in Millions	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Project</b>											
Brown CCR	\$5.4	\$0.3	\$3.4	\$0.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.9	\$0.0	\$0.0
Cane Run CCR	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ghent CCR	\$22.5	\$0.0	\$10.2	\$9.9	\$0.0	\$0.0	\$0.2	\$0.0	\$2.2	\$0.0	\$0.0
MC CCR	\$3.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.8	\$0.2
TC CCR (Net)	\$26.4	\$0.8	\$0.0	\$24.2	\$0.0	\$0.0	\$0.0	\$0.0	\$1.4	\$0.0	\$0.0
Brown SCR	\$3.5	\$2.0	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
MC Limestone Mill	\$2.8	\$2.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ohio Falls	\$6.0	\$0.0	\$0.0	\$5.7	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NGCC - 2016	\$41.0	\$0.0	\$0.0	\$0.0	\$39.5	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NGCC - 2021	\$54.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$54.8
Env. Air - Brown	\$30.9	\$0.0	\$0.0	\$20.2	\$10.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Env. Air - Ghent	\$87.3	\$0.9	\$0.7	\$42.4	\$42.0	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Env. Air - Mill Creek	\$116.7	\$0.4	\$0.7	\$31.5	\$82.0	\$2.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Env. Air - TC (Net)	\$11.3	\$0.0	\$0.0	\$0.0	\$10.2	\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Env. Compl. - CCR Ruling	\$56.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6	\$51.0	\$4.6	\$0.0	\$0.0
<b>Total Contingency</b>	<b>\$470.1</b>	<b>\$7.2</b>	<b>\$16.5</b>	<b>\$134.8</b>	<b>\$184.7</b>	<b>\$7.3</b>	<b>\$0.8</b>	<b>\$51.0</b>	<b>\$9.1</b>	<b>\$3.8</b>	<b>\$55.0</b>





PPL companies

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# Energy Marketing

## 2012 - 2016

*October 7, 2011*

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# Plan Highlights

## Key Objectives

- *Optimize the utilization of existing assets to provide reliable, low cost energy.*
- *Procure coal and gas necessary to cost-effectively operate generating plants.*
- *Provide high quality analysis to enhance decision-making.*
- *Develop and maintain infrastructure to support significant business information needs.*
- *Enhance processes required to meet reliability standards.*
- *Improve analysis capability and knowledge related to retail customer energy usage to support energy efficiency and other efforts.*





# Major Assumptions

- *Commodity prices as approved by RCG on 6-24-11.*
- *Generating units reach availability targets.*
- *Fuel suppliers meet contractual obligations.*
- *Off-system sales are charged an internal transmission tariff.*
- *OSS internal transmission expense is offset by revenue in Transmission line of business.*



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Opex Expenses							
Raw Labor	6,095	6,012	6,632	6,869	7,072	7,169	7,387
Burdens	2,069	2,109	1,888	1,955	2,019	2,196	2,262
Non labor Regulated Trading	238	367	362	382	391	399	407
Non labor Business Information	34	153	140	154	158	161	164
Non labor Director Energy PF&A	79	104	63	63	71	73	74
Non labor Generation Planning	318	233	309	316	324	331	337
Non labor Economic Analysis	352	386	316	324	332	339	346
Non labor Sales Analysis	149	148	102	105	107	109	112
Non labor Operations Analysis	1	12	14	15	15	15	16
Non labor VP Energy Marketing	29	57	57	58	60	61	62
Non labor Allocated Support	85	109	5	5	5	5	5
Non-labor Fuels	402	662	688	715	733	748	763
Non-labor Other	184	126	126	126	127	129	131
Total OPEX for EBIT	<u>10,035</u>	<u>10,478</u>	<u>10,702</u>	<u>11,087</u>	<u>11,414</u>	<u>11,735</u>	<u>12,066</u>



# Financial Performance

## 2010-2016 OSS Margin (\$000)

	2010	2011	7+5 2011	2011 MTP	2012 MTP				
	Actual	Budget	Forecast	2012	2012	2013	2014	2015	2016
OSS Margin	7,950	16,058	11,844	15,829	16,658	15,227	7,018	2,955	318
Transmission Exp (Internal)	1,757	3,722	4,408	3,609	3,634	3,647	2,611	2,131	2,032
<b>Total OSS Margin</b>	<b>6,193</b>	<b>12,336</b>	<b>7,436</b>	<b>12,220</b>	<b>13,024</b>	<b>11,580</b>	<b>4,407</b>	<b>824</b>	<b>(1,714)</b>

### Off-system Sales Volume-GWh

On-peak	299	526	635	566	453	467	212	113	98
Off-peak	117	551	352	395	357	328	161	82	51
Weekend	126	612	407	570	399	392	224	102	64

### Native Load Purchase Volume-GWh

On-peak	446	307	221	372	213	128	246	222	294
Off-peak	86	33	33	70	51	36	83	102	122
Weekend	109	36	34	52	29	29	48	59	76

•Purchase volume excludes OVEC



PPL companies

# Financial Performance

## 2010-2016 Margin Expenses / Cost of Sales (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Internal Transmission Exp (OSS)	1,783	3,722	3,634	3,647	2,611	2,664	2,717
RSG Expense (OSS)	395	2,063	1,678	1,589	836	852	870
Industrial Coal Sales (Fuels)	729	865	797	798	798	814	830
<b>Total Margin/Cost of Sales</b>	<b>2,907</b>	<b>6,650</b>	<b>6,109</b>	<b>6,034</b>	<b>4,245</b>	<b>4,330</b>	<b>4,417</b>



# Financial Performance

## 2012-2016 Target Comparison (\$000)

	2012	2013	2014	2015	2016
Total OPEX	10,702	11,087	11,414	11,735	12,066
Total Gross Margin Expense (if applicable)	6,109	6,034	4,245	4,330	4,417
Total	16,811	17,121	15,659	16,065	16,483
Total OPEX Target	11,584	11,992	12,385	12,810	13,251
Total Gross Margin Expense Target	6,394	6,823	6,959	7,099	7,241
Total Target	17,978	18,815	19,344	19,909	20,492
Variance to Target OPEX	882	905	971	1,075	1,185
Variance to Target Gross Margin Expense	285	789	2,714	2,769	2,824
	1,167	1,694	3,685	3,844	4,009
<u>Major Variance Contributors (Unfavorable):</u>					
Delayed hiring Gas Scheduler until 2013	135	-	-	-	-
Lower Allocated Officer Support	110	110	112	114	117
Eliminated 5 previously budgeted positions	585	603	621	639	658
Other	47	188	233	317	406
Transmission Expense for OSS	(24)	261	1,375	1,402	1,430
RGS Expense for OSS	238	456	1,250	1,275	1,300
Industrial Coal Sales (Fuels)	76	76	94	96	98
Total	1,167	1,694	3,685	3,844	4,009



# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	2012	2013	2014	2015	2016
Total Capital	250	250	250	250	250
Target	250	250	250	250	250
Variance To Target	-	-	-	-	-

Major Drivers of variance:



# Financial Performance

*Includes Co-ops*

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Regulated Trading	26	25	25	26	26	26	26
Business Information	4	4	4	4	4	4	4
Director Planning & Analysis	2	2	2	2	2	2	2
Economic Analysis	6	4	4	4	4	4	4
Sales Analysis	3	5	6	6	6	6	6
Operations Analysis	3	3	3	3	3	3	3
Generation Planning	7	8	8	8	8	8	8
VP Energy Marketing	2	2	2	2	2	2	2
Subtotal	53	53	54	55	55	55	55
Fuels Management	5	5	5	5	5	5	5
Fuels by Products	10	10	10	10	10	10	10
Fuels Risk Managemet	0	2	2	2	2	2	2
Subtotal	15	17	17	17	17	17	17
Co-ops	0	1	1	1	1	1	1
<b>TOTAL</b>	<b>68</b>	<b>70</b>	<b>72</b>	<b>73</b>	<b>73</b>	<b>73</b>	<b>73</b>
From 2011 MTP		77	77	77			
Variance to 2011 MTP		-7	-5	-4			
FTE 2012 MTP		70	71	72			
FTE 2011 MTP		77	77	77			
Variance to 2011 MTP		-7	-6	-5			



# Plan Risks

- *Higher than forecast native load due to weather cannibalizes off-system sales.*
- *Higher than planned generating outages.*
- *Additional dispatch changes to meet CSAPR emissions limits reduce generation available for off-system sales.*
- *Availability of transmission capacity to make sales.*
- *Long-term ability of certain municipal customers to pay wholesale power bill.*



# Appendix



## 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	10,702	11,087	11,414	11,735	12,066
Prior Plan	15,368	15,730	16,223	16,764	17,323
Variance	<u>4,666</u>	<u>4,643</u>	<u>4,809</u>	<u>5,029</u>	<u>5,257</u>
<u>Variance Explanations</u>					
Burden Adjustment	3,785	3,739	3,870	3,986	4,106
Allocated Officer Support	110	110	112	117	117
Delay Gas Scheduler Position	135	-	-	-	-
Eliminate 5 Positions	585	603	621	639	658
Other	51	191	206	287	376
Total Variance	<u>4,666</u>	<u>4,643</u>	<u>4,809</u>	<u>5,029</u>	<u>5,257</u>



## 2012-2016 Margin/Cost of Sales Reconciliation (\$000)

	<u>2012 Budget</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>
Current Plan	6,109	6,034	4,245	4,330	4,417
Prior Plan	<u>6,399</u>	<u>6,827</u>	<u>6,964</u>	<u>7,103</u>	<u>7,245</u>
Variance	<u><u>290</u></u>	<u><u>793</u></u>	<u><u>2,719</u></u>	<u><u>2,773</u></u>	<u><u>2,828</u></u>
<u>Variance Explanations</u>					
Lower RSG for OSS	238	456	1,250	1,275	1,300
Lower XM Exp for OSS	(24)	261	1,375	1,402	1,430
Lower ICS Expenses	76	76	94	96	98
Total Variance	<u><u>290</u></u>	<u><u>793</u></u>	<u><u>2,719</u></u>	<u><u>2,773</u></u>	<u><u>2,828</u></u>



## 2012-2016 Capital Reconciliation (w COR) –Accrual Basis (\$000)

	2012	2013	2014	2015	2016
Total Capital	250	250	250	250	250
Target	250	250	250	250	250
Variance To Target	-	-	-	-	-
<u>Variance Explanations</u>					
No Variances					
Total Variance	-	-	-	-	-



## 2012-2016 Cost of Removal Comparison (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	-	-	-	-	-
Prior Plan	-	-	-	-	-
Variance	-	-	-	-	-

### Variance Explanations

List major items that are driving plan over plan variances

Total Variance	-	-	-	-	-
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## 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Expansion Plan</b>	-	-	-	-	-	-	-
<b>ECR</b>	-	-	-	-	-	-	-
<b>Ongoing Capital</b>	-	-	-	-	-	-	-
<b>Special Projects</b>							
PowerSimm	356						
TEE Software	54						
Miscellaneous Projects		210	250	250	250	250	250
<b>Total Capital (107001)</b>	<b>410</b>	<b>210</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>



## 2010-2016 Other Balance Sheet Costs (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Stores Expense							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Local Engineering							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Other Balance Sheet							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
 Total Other Costs	 -	 -	 -	 -	 -	 -	 -





**PPL companies**

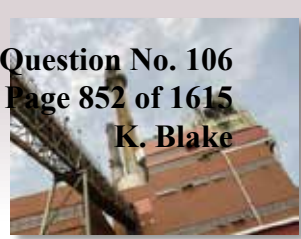
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# Power Generation

2012 - 2016

*October 14, 2011*

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# Plan Highlights Included in MTP/LTP

- ***Expansion of generation capacity to include proposed Bluegrass CT site and construction of Cane Run Unit 7 CCGT***
- ***Planned retirements of coal generating units at Cane Run, Green River and Tyrone stations***
- ***Major investment and integration of environmental compliance control equipment***
- ***Landfill conversion from wet to dry at Ghent, Brown and Trimble stations***
- ***Generation dispatch in compliance with CSAPR forcing significant change in previously planned dispatch order***
- ***Increased resource needs to meet and maintain compliance with incremental regulatory requirements***
- ***Trimble County Unit 2 resolution of existing issues and warranty claims***
- ***Turbine / Generator efficiency modifications (Dense Packs) under evaluation and included in investment plan***
- ***Funding to address scopes of work related to retirement and demolition of Paddy's and Canal facilities***



# Major Assumptions

## 1. Regulatory

1.1 *The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.*

1.2 *Target Reserve Margin of 16%, within a range of 15%-17%.*

- *2011 MTP was 14% within a range of 13% - 15%.*
- *No reserve margin purchases are planned.*

1.3 *Reserve sharing remains under the TVA/EKPC Reserve Sharing Agreement (~ 240 MW).*

1.4 *LG&E and KU remain committed to burning higher sulfur fuels.*

## 2. Proposed or Expected New Environmental Regulations for Air and Water

2.1 *Final Cross State Air Pollution Rules (CSAPR) were issued in July 2011, with Phase I starting 1/1/2012 and Phase 2 starting 1/1/2014.*

- *CSAPR replaces CATR (Clean Air Transport Rule).*
- *Have eliminated the one year of delay assumed in the 2011 MTP.*
- *The allocations are subject to state approval but the state generally goes along with the EPA recommendation.*
- *The new allocations are more generous on NO<sub>x</sub> but move restrictive on SO<sub>2</sub> than had been expected.*

# Major Assumptions

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

- Existing allowance banks for SO<sub>2</sub> and NO<sub>x</sub> cannot be used to meet CSAPR.
- Although CSAPR became final in July 2011, uncertainty remains regarding the outlook for the allowance market. The generation forecast utilizes an outlook for allowance prices from a 7/11/2011 PIRA report to achieve physical compliance.

2.2 Hazardous Air Pollutants (HAPS) Maximum Available Control Technology (MACT) proposed rules were issued in March 2011. Final rules expected in November 2011, plus “automatic” one-year delay, plus a three-year implementation period results in a January 1, 2016 effective date.

- Have eliminated the “second” year of delay assumed in the 2011 MTP.
- Impacts will be a compressed construction schedule, in particular at Mill Creek.

2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> and SO<sub>2</sub>. Based on these new standards, compliance requirements must be in place for NO<sub>x</sub> in November 2016 and SO<sub>2</sub> in June 2017. These are expected to impact the Jefferson County generating units.

2.4 Cane Run Coal will be retired January 1, 2016.

- Combined cycle replacement available on that date.
- This aligns to the IRP.

# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

### **2.5 Tyrone Coal will be retired January 1, 2016.**

- ***This aligns to the IRP.***
- ***Sensitivity to January 1, 2015 should 1-year “automatic” delay not apply to facilities being retired.***

### **2.6 Green River Coal will be retired January 1, 2016.**

- ***Based on no viable options or flexibility, Green River retirement is moved from June 1, 2019 in the 2011 MTP to January 1, 2016.***
- ***This aligns to the IRP.***
- ***Sensitivity to January 1, 2015 should 1-year “automatic” delay not apply to facilities being retired.***
- ***A Transmission Capital project is slated to be completed by early 2013 which will provide greater flexibility around running the Green River units.***
- ***Starting in 2012, Green River will run significantly less than historical averages due to SO<sub>2</sub> constraints under CSAPR (see 2.1), prior to the 1/1/16 retirement.***

### **2.7 GHG tailoring rule requirements began January 2011.**

- ***GHG BACT will be required for permit renewals, though not yet defined.***
- ***The EPA is expected to issue GHG New Source Performance Standards (NSPS) for new and existing units during 2011.***

# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

**2.8 The 2011 ECR compliance plan and CCN are expected to be approved December 16 and will include the following air quality controls:**

- **A new Mill Creek 4 FGD (Nov. 2014). A refurbished unit 4 FGD is then switched to unit 3 (Nov. 2015).**
- **A new Mill Creek 1 and 2 (combined) FGD (April/May 2015).**
- **Fabric Filters on Ghent 1-4, Mill Creek 1-4, Brown 1-3, and Trimble County 1.**
  - **2014 in-service: Br. 1, Br. 2, Gh4, MC4**
  - **2015 in-service: Br. 3, Gh1, Gh2, Gh3, MC1, MC2, MC3, TC1**
- **An SCR upgrade on Mill Creek 4.**
- **SCR turn-down capability on all existing SCR's except TC1 and TC2.**
  - **2013 in-service: MC3**
  - **2014 in-service: Gh3, Gh4, MC4**
  - **2015 in-service: Gh1**
- **Note : The additional SCR's that were in the 2011 MTP have been taken out.**

**2.9 Significant O&M and cost of sales (\$120M per year) will be incurred as remaining units are operational for CSAPR and HAPS MACT Compliance (per B&V study - 2016 full year).**

- **Costs will begin ramping up in 2014 as units are completed.**

# Major Assumptions

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

**2.10 316(b) proposed regulations have been issued and are expected to be final in July 2012.**

- ***There is no mandate for cooling towers at the current time (Mill Creek 1 is a sensitivity in 2017).***
- ***Current estimate to comply is \$3M each for Mill Creek, Trimble County, Ghent, and Brown ( ½ in 2015, ½ in 2016).***

**2.11 Effluent water guideline draft proposal is expected July, 2012, with the final rule issued January 31, 2014.**

- ***Ultimate implementation timing as well as scope are uncertain at this time.***
- ***A placeholder per station is included (\$60M Ghent, \$60M Mill Creek, \$40M Brown, \$20M Trimble County, \$10M Cane Run, and \$10M Green River).***
- ***The dollars are split ½ in 2017 and ½ in 2018, however, they could vary by facility based on permit renewal dates.***

## **3. Expansion/Capacity**

**3.1 Simple cycle capacity of 495MW is added on January 1, 2013 (Ownership is 69% LG&E, 31% KU).**

# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.2 *A combined cycle unit will be added January 1, 2016 at the Cane Run location.*

- *2 x 1, 640 MW Summer Net (Ownership is 78% KU, 22% LG&E).*
- *Replacing Cane Run Coal retired on that date.*
- *CCN approval date of September, 2012.*
- *Expense profile based on a Long-Term Services Agreement being in place.*

3.3 *A second combined cycle unit will be added June 1, 2021 at the Green River location.*

- *2 x 1, 640 MW Summer Net. (Company ownership is all KU).*
- *Replacing Green River Coal retired January 1, 2016 (5.5 year gap in W. Kentucky Generation).*
- *There will be no benefit from emissions offset, given the 5.5 year gap between coal retirement and combined cycle start-up.*
- *Expense profile based on a Long-Term Services Agreement being in place.*
- *There will be transmission issues between the coal retirement date and the combined cycle in-service date until the new 345kv line in the MTP/LTP is completed.*

3.4 *The next generating unit (after the second combined cycle) will come on-line in 2028 (all spending outside of LTP). This date is highly in flux given how far out it is in the planning window.*

3.5 *After running through 2010, Tyrone will be in reserve and then lay-up status for the full MTP period, and then retired on January 1, 2016.*

3.6 *The six Ohio Falls units still to be rehabilitated will be staged one unit every 7-8 months between 2011 and 2014.*



# Major Assumptions

## 3. Expansion/Capacity (Cont.)

3.7 **Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2014 and runs through 2018.**

- **Engineering to be done in 2012.**
- **Paddy's Run site will be completed in 2015 to accommodate CR combined cycle.**

3.8 **Steam turbine efficiency upgrades (dense packs) are included for:**

- **Mill Creek 4 in 2018**
  - **Ghent 4 in 2021**
  - **Ghent 3 in 2018**
  - **Ghent 2 in 2019**
  - **Ghent 1 in 2022**
  - **Heat rate benefits are factored in, but not any capacity changes.**
  - **Presuming they can be done with no NSR impact.**
  - **Boiler studies could also be required.**
- **Mill Creek 1 in 2021**
  - **Mill Creek 2 in 2020**
  - **Mill Creek 3 in 2019**
  - **Trimble County 1 in 2017**

3.9 **Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.**

- **Group 3 consists of the older, smaller CT's.**
- **No Group 3 units are being retired in the plan.**

3.10 **Biomass co-firing projects for 2 units are a sensitivity, not included in the base MTP.**

3.11 **Landfill gas projects are a sensitivity, not included in the base MTP.**

- **No activity currently taking place.**

# Major Assumptions

## **3. Expansion/Capacity (Cont.)**

**3.12** *Wind power purchase agreements are not included in the base MTP.*

**3.13** *A carbon capture and sequestration (CCS) demonstration facility for 100 MW is a sensitivity.*

## **4. Coal Combustion Residuals (CCR's)**

**4.1** *EPA issued two proposals for public input for coal combustion residuals (CCR's) in June 2010.*

- Final rules are expected in late 2012 and once final rules are issued there will be a five-year implementation period with an additional two years to close existing ponds. Ponds are expected to be eliminated for ash storage.
- Expected timeframe of 2017-2019 on pond closures and 2016-2017 on construction of new process ponds.
- A stay due to litigation is probable.
- A designation of “Hazardous” vs. “Non-Hazardous” appears to be trending toward “Non-Hazardous”.
  - *EPA's decision has been delayed until December 2012 at the earliest.*
- *The designation will not change the capital plan but would reduce beneficial re-use opportunities for structural fill and gypsum for wallboard if declared “hazardous”.*

**4.2** *Expanded TC Bottom Ash Pond and new TC Gypsum Pond will both be operational on December 15, 2011.*

# Major Assumptions

## **4. Coal Combustion Residuals (CCR) (Cont.)**

**4.3 Trimble County Landfill Phase I construction will be substantially completed by 12/31/13 with significant O&M starting in 2014.**

- **Holcim off-takes are included, as well as the barge load-out facility.**
- **Holcim agreement and barge load out facility expected to be operational July 1, 2012.**

**4.4 Brown Ash Pond is being converted to a landfill. The 2011 ECR filing for the conversion will be approved in December 2011.**

- **In-service date of January 2014.**

**4.5 Ghent Landfill Phase 1 construction will be substantially completed by 6/30/13, with significant O&M starting in mid-2013.**

**4.6 The existing Cane Run Landfill will be modified by the end of 2012.**

- **Use of mechanically stabilized earth (MSE Walls) to utilize slope area.**
- **Permit efforts for a new landfill will continue as a contingency plan.**

**4.7 Extension of the Mill Creek Landfill will be in the back part of the LTP.**

- **Earliest timeframe it would need to be operational would be 2021.**

**4.8 All CCR Capital Projects use an annual escalation rate of 6.0%.**

- **Escalation rate is biased higher to reflect the petroleum impact on the liner material and fuel in the earth moving equipment.**

# Major Assumptions

## **5. Other Environmental (in addition to CATR, HAPS MACT, and CCR's) Resulting in Significant Capital Additions**

### **5.1 The Brown 3 SCR will be in-service June 30, 2012.**

- *PSD permit was received in January, 2011.*
- *High sulfur fuel will be burned in all three units starting November 1, 2011 with temporary SO<sub>3</sub> mitigation systems in place.*
- *The permanent system for Unit 3 will go in-service with the SCR.*
- *Operating parameters under the consent decree will be very tight for Brown 3.*

### **5.2 FGD ductwork renovations at Mill Creek are as follows:**

- *Unit 2 in 2012.*
- *Unit 1 will be part of new environmental air capital.*
- *Unit 4 will be part of new environmental air capital.*
- *Unit 3 has already been completed.*

# Major Assumptions

## 5. Other Environmental (in addition to CATR, HAPS MACT, and CCR's) Resulting in Significant Capital Additions

5.3 *SO<sub>3</sub> mitigation on Mill Creek 3 and 4 will be rolled into the Mill Creek air work being done for HAPS MACT and NAAQs.*

5.4 *Upgraded SO<sub>3</sub> Systems (including the Milling System) will be installed on the Ghent SCR Units (1,3,4) in 2011 and 2012, which will achieve a lower overall SO<sub>3</sub> emissions level.*

- *A new permanent system will be installed on (non-SCR) Unit 2 by September 2012.*
- *Boiler modifications to reduce exit gas temperatures will also likely be needed.*
- *Settlement with EPA is still a sensitivity.*
  - *Sufficient capital is likely covered within the MTP, but any penalties or SEP projects are not factored in.*

## 6. Operational and Other

6.1 *Annual escalation rates for internal labor, contract labor and materials are as follows:*

- *Internal labor: 3.0%.*
- *Contract/services labor: 3.0% for general, 3.5% for highly skilled (welders).*
- *Chemicals: 5.0% for specialty (GE Betz), 6.0% for commodity (Univar) 2012 – 2013, 7.0% 2014-2016.*
- *Fuels and additives 5.0%, copper 4.0%, plastic pipe 6.0%.*
- *Carbon steel plate 5.0%, fabricated steel 3.0%, Alloy steel 8.0%.*
- *All other materials: 5.2% composite rate.*

# Major Assumptions

## **6. Operational and Other (Cont.)**

**6.2** *By the end of 2012, planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years, with the following exceptions:*

- *Brown units 1 and 3 over-lap by 2 weeks every other year.*
- *Cane Run units are 3 week outages one year with no outage the next year, with this cycle repeating.*
- *Trimble County units are 4 week outages one year with no outage the next year, with this cycle repeating.*

**6.3** *The next turbine overhauls by unit is as follows:*

- *2012 : Ghent 2, Brown 3, Cane Run 4, Mill Creek 2.*
- *2013 : Mill Creek 1.*
- *2014 : Brown 1, Mill Creek 4, Ghent 4.*
- *2015 : Ghent 1.*
- *2016 : None scheduled (Brown 2 shifted to Spring, 2017).*

**6.4** *Significant generator rewind/stator rewind dollars are included in the 2012-2016 timeframe.*

- *Brown 3 generator (stator and rotor) rewind in 2012.*
- *Brown 2 generator (stator and rotor) rewind in 2017 (some dollars also in 2016).*
- *Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.*

# Major Assumptions

## **6. Operational and Other (Cont.)**

### **6.5 Corrosion fatigue inspection schedule is as follows:**

- **2012: Brown 3, Cane Run 4, Mill Creek 2**
- **2013: Mill Creek 1, Mill Creek 3**
- **2014: Ghent 4, Mill Creek 4**
- **2015: Ghent 1**
- **2016: None scheduled (Brown 2 shifted to Spring, 2017).**
- **Any repairs identified during the inspection are a sensitivity.**

### **6.6 High Energy Piping (HEP) inspection schedule is as follows:**

- **2012: Brown 1, Brown 3, Cane Run 4, Cane Run 6, Ghent 2, Green River 3, Trimble County 2**
- **2013: Cane Run 5, Ghent 3, Green River 4, Mill Creek 1, Mill Creek 2, Mill Creek 3, Trimble County 1**
- **2014: Brown 1, Brown 2, Ghent 4, Green River 3, Mill Creek 4, Trimble County 2**
- **2015: Cane Run 5, Ghent 1, Green River 4, Mill Creek 2, Mill Creek 3**
- **2016: Brown 3, Ghent 2, Mill Creek 1, Trimble County 2**
- **Any repairs identified during the inspection are a sensitivity.**

# Major Assumptions

## **6. Operational and Other (Cont.)**

**6.7 The fuel procurement plan is pushing toward higher chlorine ILL. Basin fuels, which will drive burner modifications on at least two Mill Creek units and two Ghent units.**

- **Permit changes may also be needed.**

**6.8 Targets for percentage of fuel hedged in MTP are as follows:**

- **95% - 100% year 1**
- **90% - 100% year 2**
- **40% - 90% year 3**
- **30% - 70% year 4**
- **20% - 50% year 5**

**6.9 Combustion turbine outages in the plan:**

- **Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense – approximately 15%) vs. new parts (capital – approximately 85%).**
- **Number of Trimble units undergoing the hot gas path inspection include one in 2010 (unit 6), two in 2011 (units 5 and 8), and one each in 2012 - 2014.**
- **Brown C inspections by unit are as follows:**

✓	<b>Unit 9 in 2013</b>	<b>Unit 10 in 2015</b>	<b>Unit 11 in 2017</b>
✓	<b>Unit 6 in 2017</b>	<b>Unit 7 in 2018</b>	<b>Unit 8 in 2020</b>
✓	<b>Unit 5 in 2021</b>		



# Major Assumptions

## **6. Operational and Other (Cont.)**

**6.10 NERC Cyber Security Solution (all coal-fired stations plus Paddy's Run and Haefling) is included, along with Microsoft Upgrades for Ghent and Trimble County due to 2014 de-support of Windows XP.**

**6.11 The FutureGen expense is \$0.5M per year through the LTP period.**

- *This is a much different scope than FutureGen (Mattoon, IL).*

**6.12 Demolition (cost of removal) costs for Canal and Paddy's Run are as follows:**

- 2012            \$4.0M
- 2013-2014    \$0.0M
- 2015            \$0.3M
- 2016            \$1.3M
- 2017            \$7.5M
- 2018            \$10.0M
- 2019            \$7.0M
- *Order of events will be engineering for both sites (2012), Paddy's Run Stacks (2012), complete demolition of Paddy's (2015 - 2019), complete demolition of Canal (2017 - 2019).*

**6.13 Cost of removal reserves at 12/31/2015 are:**

- Tyrone \$5M, Green River \$12M, Cane Run \$35M

**6.14 A MAXIMO Upgrade (tied to Oracle Upgrade) will take place in 2013 (likely starting second half of 2012).**

**6.15 The PROSYM run from October 7, 2011 is the official generation forecast for the 2012-2016 MTP.**

# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	64,410	72,221	73,881	77,972	81,875	84,404	73,367
Burdens <sup>1</sup>	17,325	15,847	17,552	18,669	19,469	20,053	20,654
Resident Contractors	20,027	21,087	23,395	24,611	25,879	26,397	26,925
Maintenance	57,592	54,459	55,457	60,344	58,300	69,568	71,319
Outages	30,122	33,287	45,095	25,773	42,731	39,561	32,544
Operations	19,666	23,075	25,054	26,600	27,619	28,233	28,797
Subtotal OPEX/Other expense	<u>209,144</u>	<u>219,976</u>	<u>240,435</u>	<u>233,968</u>	<u>255,873</u>	<u>268,216</u>	<u>253,606</u>
Gross Margin Expenses *	40,577	53,039	67,631	83,299	106,908	167,186	201,041
* (see next slide for detail)							
Total Income Statement items	<u>249,721</u>	<u>273,016</u>	<u>308,066</u>	<u>317,267</u>	<u>362,781</u>	<u>435,402</u>	<u>454,647</u>

Note 1: Burdens for 2010 and 2011 have been adjusted down to be consistent with new allocation methodology for MTP years.



# Financial Performance

## 2010-2016 Margin Expenses / Cost of Sales (\$'000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Gross Margin Elements</b>							
<u>ECR</u>							
	<small>Note</small>						
Labor	-	-	875	922	949	978	1,007
Resident Contractors	-	-	912	3,893	7,106	7,248	7,393
Environmental Maint & Ops	-	955	4,265	6,706	8,131	13,575	18,379
ECR Activated Carbon	-	-	3,232	3,781	14,048	49,656	85,529
ECR Landfill Operations	-	-	-	5,622	8,254	8,419	8,587
ECR Nox Emission Allowances	-	-	1	-	-	-	-
ECR Nox Reduction Reagent	-	-	1,518	2,422	2,310	2,356	4,814
ECR Other Waste Disposal	-	255	1,150	1,150	1,150	1,173	1,196
ECR Scrubber Reactant Ex	-	-	9,727	10,581	10,377	10,894	11,679
ECR SO2 Emission Allowances	-	-	7	-	-	-	-
ECR Sorbent Reactant - Reagent Only	-	-	15,430	17,398	23,012	39,344	44,099
<b>Total ECR</b>	<b>-</b>	<b>1,210</b>	<b>37,118</b>	<b>52,474</b>	<b>75,336</b>	<b>133,643</b>	<b>182,683</b>
<u>Non-ECR</u>							
Resident Contractors	1,054	1,082	960	950	646	659	672
Environmental Maint & Ops	131	-	-	-	-	-	-
Activated Carbon	-	2,802	1,077	1,260	1,235	1,259	1,284
Emissions	467	-	-	-	-	-	-
Other Waste Disposal	2,006	2,777	2,557	2,631	2,726	2,692	2,745
NOx Emission Allowances	-	84	70	70	71	73	74
NOx Reduction Reagent	6,022	7,561	7,977	8,286	7,779	8,164	8,625
Scrubber Reactant Ex	20,875	23,104	16,227	16,575	18,018	19,509	3,747
SO2 Emission Allowances	-	60	39	31	31	32	(42)
Sorbent Reactant - Reagent Only	10,022	14,359	1,605	1,020	1,066	1,157	1,252
<b>Total Non-ECR</b>	<b>40,577</b>	<b>51,829</b>	<b>30,513</b>	<b>30,824</b>	<b>31,572</b>	<b>33,544</b>	<b>18,358</b>
<b>Total Gross Margin</b>	<b>40,577</b>	<b>53,039</b>	<b>67,631</b>	<b>83,299</b>	<b>106,908</b>	<b>167,186</b>	<b>201,041</b>

Note 1: Gross Margin reflects 2012 and beyond shift of ECR related OPEX for Labor, Resident Contractors, Maintenance and Other Operations to the Margin accounts. Costs managed on ECR versus non-ECR basis.



# Financial Performance

## 2012-2016 Target Comparison (\$000)

	2012	2013	2014	2015	2016
Total OPEX/Other Expense	240,435	233,968	255,873	268,216	253,606
Total Gross Margin	67,631	83,299	106,908	167,186	201,041
Total	<u>308,066</u>	<u>317,267</u>	<u>362,781</u>	<u>435,402</u>	<u>454,647</u>
Total OPEX/Other Expense Target	243,610	233,808	236,519	377,680	394,144
Total Gross Margin Target	71,273	84,755	177,622	110,360	112,846
Total Target	<u>314,883</u>	<u>318,563</u>	<u>414,141</u>	<u>488,039</u>	<u>506,989</u>
Variance to Target	<u>6,817</u>	<u>1,296</u>	<u>51,360</u>	<u>52,637</u>	<u>52,342</u>
Major Variance Contributors:					
Bluegrass CT Expansion	(1,454)	(7,260)	(3,082)	(3,216)	(3,994)
Scrubber reactant reductions across the plants	-	-	-	-	-
Revised timing in Env/HAPs Expenses	(104)	(3,534)	64,719	67,802	56,960
Ghent Outage scope changes from prior plant	(575)	(675)	(10,056)	(10,872)	(5,832)
Labor increase based on workforce planning	825	(20)	(1,008)	(635)	(233)
Revised Ghent SO3 Usgage Projections	2,319	2,626	2,838	2,895	2,953
Fleet wide various reductions during MTP process	3,500	3,500	3,500	3,500	3,500
Outage reductions at Cane Run Station	-	3,193	1,529	1,560	1,591
Post 2011 MTP submission FP reductions to LTP	-	-	(5,000)	(5,000)	(5,000)
Reductions in Brown Landfill cost projection	-	-	1,500	1,500	1,500
Inventory write-off and plant closure estimates	-	-	-	(10,000)	(15,546)
TC2 PJFF Bag & Cage Replacement to Capital	-	-	-	5,971	-
Timing of GR Steam out (2019 to 2016)	-	-	-	-	11,851
Other Puts and Takes	2,305	3,466	(3,579)	(868)	4,592
	<u>6,817</u>	<u>1,296</u>	<u>51,360</u>	<u>52,637</u>	<u>52,342</u>



# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis

(\$000)

	2012	2013	2014	2015	2016
Total Capital	198,188	95,133	106,293	155,545	104,676
Target	204,965	123,093	128,725	117,517	108,426
Variance To Target	<b>6,777</b>	<b>27,960</b>	<b>22,432</b>	<b>(38,028)</b>	<b>3,750</b>
Major Drivers of variance:					
BG Ongoing Capital	(1,669)	(1,098)	(815)	(9,083)	(110)
BR1 Cooling Tower Rebuild	-	-	(3,518)	-	-
BR1 Gen Rotor Rewind 08	-	-	(2,553)	-	-
BR3 SCR Catalyst	-	(851)	(2,300)	-	-
BRCT10 C Inspection 12	-	1,523	8,990	(10,519)	-
CR SPP Dewatering	-	3,000	6,843	-	-
CR Continuing Operations	-	5,000	4,888	4,888	4,888
DX Dam Leakage Remediation	5,000	(7,105)	-	-	-
GH4 Turb Eff Upgr	-	-	5,000	9,500	-
GH1 SCR L3 Rplcmt	-	(974)	(2,261)	-	-
GH1 ESP HOT ROOF REPL	-	-	-	(2,661)	-
GH3 Condensate Polisher	-	-	(723)	(2,552)	-
GS-LGE-CEMS Shltr Rplt	2,425	5,125	-	(5,550)	-
GS GE 345kV Spr LGE	-	-	(1,350)	(3,150)	-
GS PE PR BS - LGE	-	12,200	12,400	(24,600)	-
GS PE BR BS - LGE	-	-	7,200	14,500	-
GS PE TC BS - LGE	-	-	-	11,000	22,100
MC2 FGD Refurbishment	(4,846)	-	-	-	-
MC4 Economizer	-	3,000	2,500	-	-
MC3 BURNERS 2013	(1,000)	(4,300)	-	-	-
MC3 Burners	1,600	2,500	1,000	1,500	-
MC4 Cooling Tower Fill	-	-	(4,500)	-	-
MC1 Waterwall Weld Overlay	-	(2,500)	-	-	-
MC4 Turbine Dense Pack	-	-	-	-	(1,000)
MC4 Generator Stator Bar	-	-	-	-	(6,000)
MC4 Condenser	-	2,000	(2,000)	-	-
TC SDRS REACTANT TANK R	-	1,511	-	(2,250)	-
TC2 PUNCHLIST ITEMS	-	5,754	-	-	-
TC2 SCR Layer 1 Replacem	-	-	-	-	(3,030)
TC CT HGPI LGE#5	3,022	-	(4,246)	-	-
TC CT Spare Parts for HGP	-	2,015	-	(2,018)	-
Other Puts and Takes	2,245	1,159	(2,121)	(17,033)	(13,097)
Target Variance	<b>6,777</b>	<b>27,960</b>	<b>22,432</b>	<b>(38,028)</b>	<b>3,750</b>



# Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Mill Creek	215	221	222	226	226	227	227
Trimble County/CTs	135	150	157	162	166	167	168
Cane Run/Ohio Falls	127	126	126	126	126	126	87
Ghent	204	206	210	220	222	229	229
Brown/Dix/Tyrone	151	153	156	156	161	161	161
Green River	53	53	52	52	52	52	19
Generation Services	47	54	54	57	60	62	64
Other Generation Support	46	44	46	46	46	46	46
<b>TOTAL</b>	<b>978</b>	<b>1,007</b>	<b>1,023</b>	<b>1,045</b>	<b>1,059</b>	<b>1,070</b>	<b>1,001</b>
From 2011 MTP		1,015	1,022	1,040			
Variance to 2011 MTP		-8	1	5			
FTE 2012 MTP		1,006.5	1,022.5	1,044.5			
FTE 2011 MTP		1,015.0	1,021.5	1,039.5			
Variance to 2011 MTP		-8.5	1.0	5.0			
Co-Ops/Interns Included above			14	14	14	14	14
<b>Regular Full Time Employees w/o Co-Ops/Interns</b>			<b>1,009</b>	<b>1,031</b>	<b>1,045</b>	<b>1,056</b>	<b>987</b>
Fuels Analyst include in Other Gen WFP			1	1	1	1	1
Additional FTEs in Green River WFP			2	2	2	2	2
Brown First Round of MTP Givebacks				5			
Ghent difference				2	1		
<b>Energy Services Work Force Planning</b>			<b>1,012</b>	<b>1,041</b>	<b>1,049</b>	<b>1,059</b>	<b>990</b>



# Operational Performance

## Key Performance Indicators

KPI	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Generation (Twh) <sup>1</sup>	34.1	36.7	34.5	34.9	34.5	34.8	35.3
EAF (Steam)	85.5%	84.5%	85.7%	88.9%	86.2%	86.8%	88.6%
EFOR (Steam)	5.5%	5.8%	4.6%	4.5%	4.5%	4.5%	4.5%
Controllable Cost (\$M) <sup>2</sup>	\$ 303.69	\$ 318.61	\$ 308.07	\$ 317.27	\$ 362.78	\$ 435.40	\$ 454.65
Controllable Cost/mwh <sup>2</sup>	\$ 8.91	\$ 8.68	\$ 8.94	\$ 9.10	\$ 10.52	\$ 12.52	\$ 12.87
Recordable Injuries <sup>3</sup>	1.82	1.74	1.80	1.77	1.76	1.76	1.76
Lost Workday Case Rate <sup>4</sup>	0.23	0.58	0.40	0.40	0.40	0.40	0.40

<sup>1</sup> Steam Generation includes 75% of Trimble County 1 and 2.

<sup>2</sup> Controllable Costs include Utility O&M, Other Cost of Sales, Fuel Handling, and Below-the-Line expenses.

<sup>3</sup> The 2011 forecast for RIIR is the July YTD value, hearing tests currently underway.

<sup>4</sup> The 2011 forecast for Lost Workday Case Rate is the July YTD value.

\*\* 2011 Forecast is from the 7&5 forecast.



# Plan Risks

- ***Any subsequent changes to approved or proposed environmental regulations will impact the investment, construction and implementation of new systems in this plan***
- ***Generation dispatch for the plan years is based on current view of regulations and assumptions on allowance prices which is subject to significant changes to unit cost profiles and maintenance schedules if changes occur***
- ***Integration of the major investment in new environmental compliance systems is tied to an extremely aggressive schedule that may impact normal operations of existing plants and could require changes to the outage planning schedule for tie in processes***
- ***Availability of equipment and construction resources for major environmental compliance investment across the industry could lead to higher prices and impacts to planned schedule of completion***
- ***Expansion of generating capacity and other generation changes consistent with approved integrated resource plan must be balanced with efforts to address transmission system load requirements***
- ***Ghent EPA settlement fines and penalties could be assessed (possible 2012 impact of \$1M)***





# Appendix



## 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	240,435	233,968	255,873	268,216	253,606
Prior Plan (adjusted for Accounting change of Burden	241,493	238,722	323,477	377,957	394,429
Variance	1,058	4,754	67,604	109,742	140,823
<u>Variance Elements Explanations</u>					
Labor and Burdens	430	(179)	(705)	(298)	13,785
Resident Contractors	20	1,590	1,291	1,317	1,343
Maintenance	5,510	6,007	7,665	18,982	(2,116)
Move MC2 and CR4 from 2011 to 2012	(10,170)	-	-	-	-
Move MC1 from 2012 to 2013	3,950	(4,750)	-	-	-
Ghent Outage Work Scope changes	(575)	(675)	(10,056)	(10,872)	(5,832)
Other Net Outages	1,367	6,286	(1,807)	(458)	2,082
Operations	2,554	4,172	4,606	5,004	5,103
Purchase of Bluegrass Utility	(1,454)	(7,260)	(3,082)	(3,216)	(3,994)
Financial Planning Reductions	-	-	(5,000)	(5,100)	(5,202)
Environmental Operations in LTP	-	-	70,411	112,284	130,614
Obsolete Inventory (CR and GR)	-	-	-	(10,000)	-
Plant Closure (CR, GR, and TY)	-	-	-	-	(15,456)
Cane Run CT OPEX	-	-	-	-	(24,902)
Green River & Cane Run Steam Out	-	-	-	-	43,735
Other Puts and Takes	(575)	(437)	4,281	2,099	1,662
	1,058	4,754	67,604	109,742	140,823



## 2012-2016 Margin/Cost of Sales Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	67,631	83,299	106,908	167,186	201,041
Prior Plan	65,771	74,680	90,934	110,360	112,846
Variance	(1,860)	(8,619)	(15,973)	(56,827)	(88,196)
<b>Gross Margin Elements</b>					
Labor	(875)	(922)	(949)	(978)	(1,007)
Resident Contractors	(1,189)	(3,002)	(5,874)	(5,991)	(6,111)
Enviromental Maint & Ops	(4,265)	(6,706)	(8,131)	(13,575)	(28,304)
Activated Carbon	3,004	3,586	3,708	3,783	3,858
ECR Activated Carbon	(3,232)	(3,781)	(14,048)	(49,656)	(85,529)
ECR Landfill Operations	-	(5,622)	(8,254)	(8,419)	(8,587)
ECR Nox Emission Allowances	(1)	-	-	-	-
ECR Nox Reduction Reagent	(1,518)	(2,422)	(2,310)	(2,356)	(4,814)
ECR Other Waste Disposal	0	3,198	3,285	3,351	3,418
ECR Scrubber Reactant Ex	(9,727)	(10,581)	(10,377)	(10,894)	(11,679)
ECR SO2 Emission Allowances	(7)	-	-	-	-
ECR Sorbent Reactant - Reagent Only	(15,430)	(17,398)	(23,012)	(39,344)	(44,099)
Other Waste Disposal	(208)	(194)	437	534	545
NOx Emission Allowances	(67)	(69)	(71)	(73)	(74)
NOx Reduction Reagent	548	411	1,092	884	605
Scrubber Reactant Ex	7,919	9,312	22,575	39,503	66,649
SO2 Emission Allowances	75	69	(31)	(32)	42
Sorbent Injection Operation	(0)	(0)	24,701	25,195	25,699
Sorbent Reactant - Reagent Only	23,114	25,501	1,285	1,242	1,194
Total Variance	(1,860)	(8,619)	(15,973)	(56,827)	(88,196)



# 2012 MTP Updated Historical Turbine Outage Schedule

K. Blake

	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	20	21	
GH1	█			█						█							█						█									
GH2						█									█								█							█		
GH3					█								█								█											
GH4			█									█						█						█							█	
BR1	█									█							█								█						█	
BR2				█							█										█							█				
BR3		█						█							█																	
GR3			█										█																			
GR4					█	█							█		█																	
TY3					█								█																			
CR4						█								█									█									
CR5				█							█								█													
CR6					█								█								█											
MC1	█					█						VG			█									█							█	
MC2					█								█										█								█	
MC3					█									█								█									█	
MC4	█										█					█									█							
TC1						█														█												
TC2																																
Overhauls	4	1	2	3	5	6	2	0	1	1	3	4	4	3	3	1	2	2	2	2	1	2	4	1	3	1	0	2	2	3	1	3

Historical

Most Recent

2012 MTP/LTP VG - Valves and Generator



PPL companies

# Controllable Cost High Level Walk Forward for 2012-2014 MTP<sup>K. Blake</sup>

(\$000)

2011 Forecast	\$ 318,610
New Hires, Merit and other Raw Labor Changes	1,659
ONE TIME: Change in Burden Rates (to remove fixed components)	(43,889)
SO3 Sorbent Injection	2,676
ECR Related Labor, Resident Contr, Maint & Operations	4,975
Scrubber Reactant	2,850
Other Gross Margin expenses	4,090
Turbine Outages 2011 (Ghent 3 and Mill Creek3)	(13,367)
2012 (Ghent 2, Brown 3, Cane Run 4, and Mill Creek 2)	24,657
Other Outage Work	518
Maintenance	998
Operations & Other	1,980
All Other Items	(2,308)
2012 Budget	\$ 308,066

Note: Negative/parenthetical numbers are reductions in cost

Controllable Cost High Level Walk Forward for 2012-2014 MTP<sup>K. Blake</sup>

(\$000)

2012 Budget	\$ 308,066
New Hires, Merit and other Raw Labor Changes	4,559
Change in Burden Rates	1,117
SO3 Sorbent Injection	1,383
ECR Related Labor, Resident Contr, Maint & Operations	5,458
Gross Margin Landfill Operations	5,622
Other Gross Margin expenses	3,205
Turbine Outages 2012 (Ghent 2, Brown 3, Cane Run 4, and Mill Creek 2)	(24,657)
2013 (Mill Creek 1)	5,500
Other Outage Work	(165)
Bluegrass CT inspections	6,710
Maintenance	(1,824)
Operations & Other	1,546
All Other Items	(747)
2013 Plan	\$ 317,267

Note: Negative/parenthetical numbers are reductions in cost

Controllable Cost High Level Walk Forward for 2012-2014 MTP<sup>K. Blake</sup>

(\$000)

2013 Plan	\$	317,267
New Hires, Merit and other Raw Labor Changes		3,733
Change in Burden Rates		800
Activated Carbon		10,241
ECR Related Labor, Resident Contr, Maint & Operations		4,361
SO3 Sorbent Injection		5,660
Other Gross Margin expenses		3,347
Turbine Outages 2013 (Mill Creek 1)		(5,500)
2014 (Ghent 4, Brown 1, and Mill Creek 4)		18,885
Other Outage Work		3,573
Bluegrass CT Inspections in 2013		(6,710)
Increase in HEP and Corrosion Fatigue inspections		1,043
Maintenance		3,623
Operations & Other		974
	All Other Items	(1,484)
2014 Plan	\$	362,781

Note: Negative/parenthetical numbers are reductions in cost



PPL companies

## 2012-2016 Cost of Removal Comparison (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	7,504	4,299	6,262	13,423	12,518
Prior Plan	5,785	4,278	8,766	8,942	9,121
Variance	<u>(1,719)</u>	<u>(21)</u>	<u>2,504</u>	<u>(4,481)</u>	<u>(3,397)</u>
<u>Variance Explanations</u>					
CR SPP Dewatering	-	-	978	-	-
GH3 SCR CATALYST ADDITION	250	(351)	-	-	-
GH2 REHEAT PENDANT ASSY	387	-	-	-	-
GH1 SCR L2 Catalyst Repl/Regen	(359)	-	-	-	-
GH1 SCR L3 Rplcmt	-	-	(358)	-	-
GH3 SCR L1 Repl	-	-	-	-	(350)
GH4 SCR L1 Repl	-	-	-	-	(350)
GH1 SCR Catalyst L1 Repl	-	-	-	(350)	-
MC2 FGD Refurbishment	(2,000)	-	-	-	-
MC4 Economizer	-	-	1,100	-	-
MC1 ECONOMIZER	-	-	1,000	(1,000)	-
MC4 SCR Catalyst Layer 4	-	100	350	-	-
MC4 Cooling Tower Fill	-	-	(750)	-	-
MC1 Reheater	-	-	-	(400)	-
MC2 Reheater	-	-	-	(400)	-
MC3 Reheater	-	(500)	-	-	-
MC4 Reheater	-	-	(600)	-	-
MC4 Generator Stator Bar	-	-	-	-	(500)
Other LTP Generation Projects	-	-	3,788	-	-
Other Puts and Takes	2	730	(3,004)	(2,331)	(2,197)
Total Variance	<u>(1,719)</u>	<u>(21)</u>	<u>2,504</u>	<u>(4,481)</u>	<u>(3,397)</u>





# 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Expansion</b>							
BG Purchase	-	-	110,000	-	-	-	-
<b>ECR (&gt; \$1.0m)</b>							
BR3 PJFF BC 2018	-	-	-	-	-	-	-
BR3 PJFF BC 2021	-	-	-	-	-	-	-
CR Landfill Vertical Expansion	567	1,083	-	-	-	-	-
GH1 PJFF BC 2018	-	-	-	-	-	-	-
GH1 PJFF BC 2021	-	-	-	-	-	-	-
GH2 PJFF BC 2018	-	-	-	-	-	-	-
GH2 PJFF BC 2021	-	-	-	-	-	-	-
GH3 PJFF BC 2017	-	-	-	-	-	-	-
GH3 PJFF BC 2020	-	-	-	-	-	-	-
GH4 PJFF BC 2017	-	-	-	-	-	-	-
GH4 PJFF BC 2020	-	-	-	-	-	-	-
MC Landfill Expansion	833	812	150	150	2,000	150	150
MC GPP Upgrade	-	-	-	-	-	-	-
MC4 PJFF BC 2017	-	-	-	-	-	-	-
MC1 PJFF BC 2018	-	-	-	-	-	-	-
MC2 PJFF BC 2018	-	-	-	-	-	-	-
MC3 PJFF BC 2018	-	-	-	-	-	-	-
MC4 PJFF BC 2020	-	-	-	-	-	-	-
MC1 PJFF BC 2021	-	-	-	-	-	-	-
MC2 PJFF BC 2021	-	-	-	-	-	-	-
MC3 PJFF BC 2021	-	-	-	-	-	-	-
TC1 SDRS Rebuild	-	-	-	-	-	-	-
TC! ESP Rebuild 2017	-	-	-	-	-	-	-
TC2 SCR Layer 1 Replacement	-	-	-	-	-	-	3,030
TC2 PJFF Bags & Cages Repl	-	-	-	-	1,921	-	-



# 2010-2016 Capital Breakdown (w COR) – Accrual Basis

(\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Ongoing Capital (&gt; \$3.1m)</b>							
BG Ongoing Capital	-	-	1,669	1,098	815	9,083	110
BR2 Gen Rewind 15-16	-	-	-	-	-	-	5,250
BR1 Cooling Tower Rebuild	-	-	-	-	3,518	-	-
BRCT10 C Inspection 12	-	-	-	-	1,523	10,519	-
BRCT10 Parts Recond 12	-	-	-	-	-	-	1,324
BRCT 11N2s C Insp & Parts	-	-	-	-	-	-	2,500
CR SPP Dewatering	-	-	-	-	-	-	-
CR Continuing Operations	-	-	-	-	-	-	-
DX Dam Leakage Remediation	3,106	9,616	-	7,105	-	-	-
GH4 Bypass Econ Duct	-	-	-	-	-	-	-
GH3 Bypass Econ duct	-	-	-	-	-	-	-
GH4 Turb Eff Upgr	-	-	-	-	-	-	-
LGE-Gen Stator Bar Study	6,298	1,469	-	-	-	-	-
GS-LGE-CEMS Shltr Rplt	36	50	-	-	2,700	8,250	-
GS GE 345kV Spr LGE	-	-	-	-	1,350	3,150	-
GS PE PR BS - LGE	-	-	300	-	12,200	24,600	-
GS PE BR BS - LGE	-	-	300	-	-	-	-
GS PE TC BS - LGE	-	-	400	-	-	-	-
MC2 FGD Refurbishment	3,349	2,709	4,846	-	-	-	-
MC3 BURNERS 2013	-	-	1,000	4,300	-	-	-
MC4 Cooling Tower Fill	-	-	-	-	4,500	-	-
MC3 Reheater	-	-	1,000	4,000	-	-	-
MC4 Generator Stator Bar	-	-	-	-	-	-	6,000
Other LTP Generation Projects	-	244	-	-	-	35,045	39,389
TC2 PUNCHLIST ITEMS	-	-	-	-	-	-	-
TC CT HGPI LGE#5	-	-	-	-	4,246	-	-
TC CT HGP Insp #5	-	-	-	-	-	-	-
TC CT HGP Insp #6	-	-	-	-	-	-	-



# 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Special Projects (&gt; \$0.5m)</b>							
GH2 DCS Cyber Security	-	-	687	-	-	-	-
GH4 SH Spray Block Val Ret	-	-	-	-	-	-	-
GH1 DCS Cyber Security	-	-	687	-	-	-	-
GS-LGE-Cyber Security	982	942	2,007	-	-	-	-
MC Cyber Security Controls	-	-	500	500	-	-	-
TY Roof Repairs 16	-	-	-	-	-	-	604
Total Other Special Projects < \$1.0m	-	543	987	670	153	-	446
Total Special Projects	982	1,484	4,868	1,170	153	-	1,050
Summary Expansion Projects (above)	-	-	110,000	-	-	-	-
Summary ECR Projects (above)	1,400	1,895	150	150	3,921	150	3,180
Total ECR Projects < \$1.0m	696	0	604	-	681	1,237	877
Total Special Projects	2,096	1,895	754	150	4,602	1,387	4,057
Summary Ongoing Capital (above)	12,788	14,088	9,515	16,503	30,852	90,647	54,574
Total Ongoing Capital < \$8.0m	81,416	99,082	73,051	77,310	70,686	63,511	44,996
Total Ongoing Capital	94,205	113,170	82,566	93,813	101,538	154,158	99,570
Grand Total Capital	97,283	116,549	198,188	95,133	106,293	155,545	104,676



## 2010-2016 Other Balance Sheet Costs (\$000)

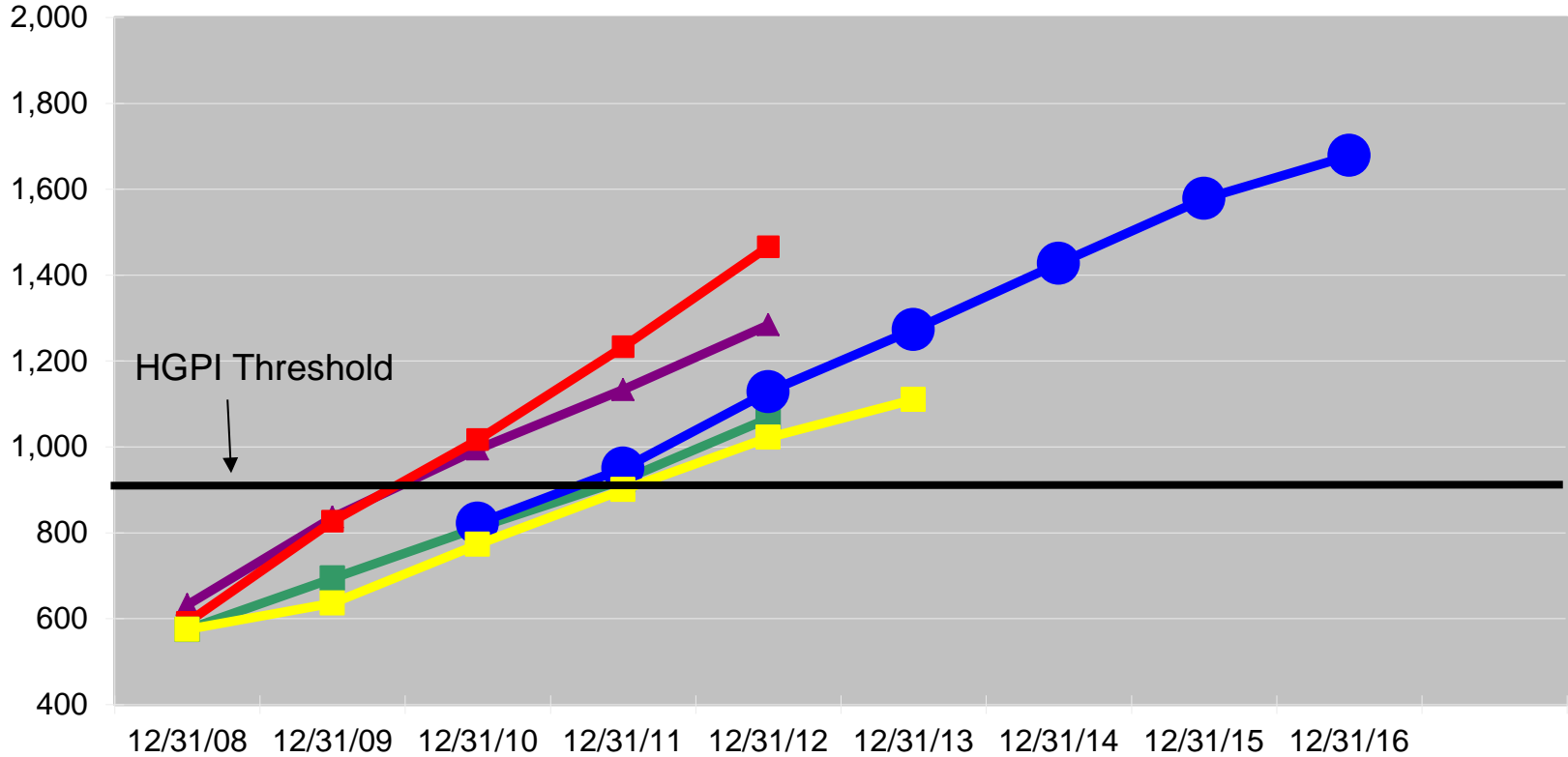
Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Stores Expense							
Labor	2,797	2,648	2,780	2,802	2,860	2,946	3,034
Non labor	925	240	246	252	258	263	268
<b>Total</b>	<b>3,722</b>	<b>2,888</b>	<b>3,026</b>	<b>3,054</b>	<b>3,118</b>	<b>3,209</b>	<b>3,303</b>
Local Engineering							
Labor	501	1,083	469	370	264	272	280
Non labor	292	155	153	118	81	82	84
<b>Total</b>	<b>794</b>	<b>1,239</b>	<b>622</b>	<b>487</b>	<b>345</b>	<b>354</b>	<b>364</b>
Other Balance Sheet							
Labor							
Non labor							
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Other Costs</b>	<b>4,515</b>	<b>4,126</b>	<b>3,648</b>	<b>3,542</b>	<b>3,463</b>	<b>3,563</b>	<b>3,667</b>



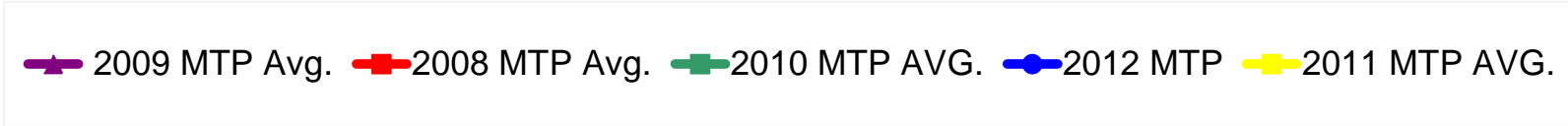
**Factored  
Starts  
Cumulative**

# Trimble County CT's Average Number of Cumulative Factored Starts per Unit

Trimble CT projected run-times for the 2012 MTP are slightly up from the 2011 MTP.  
K. Blake



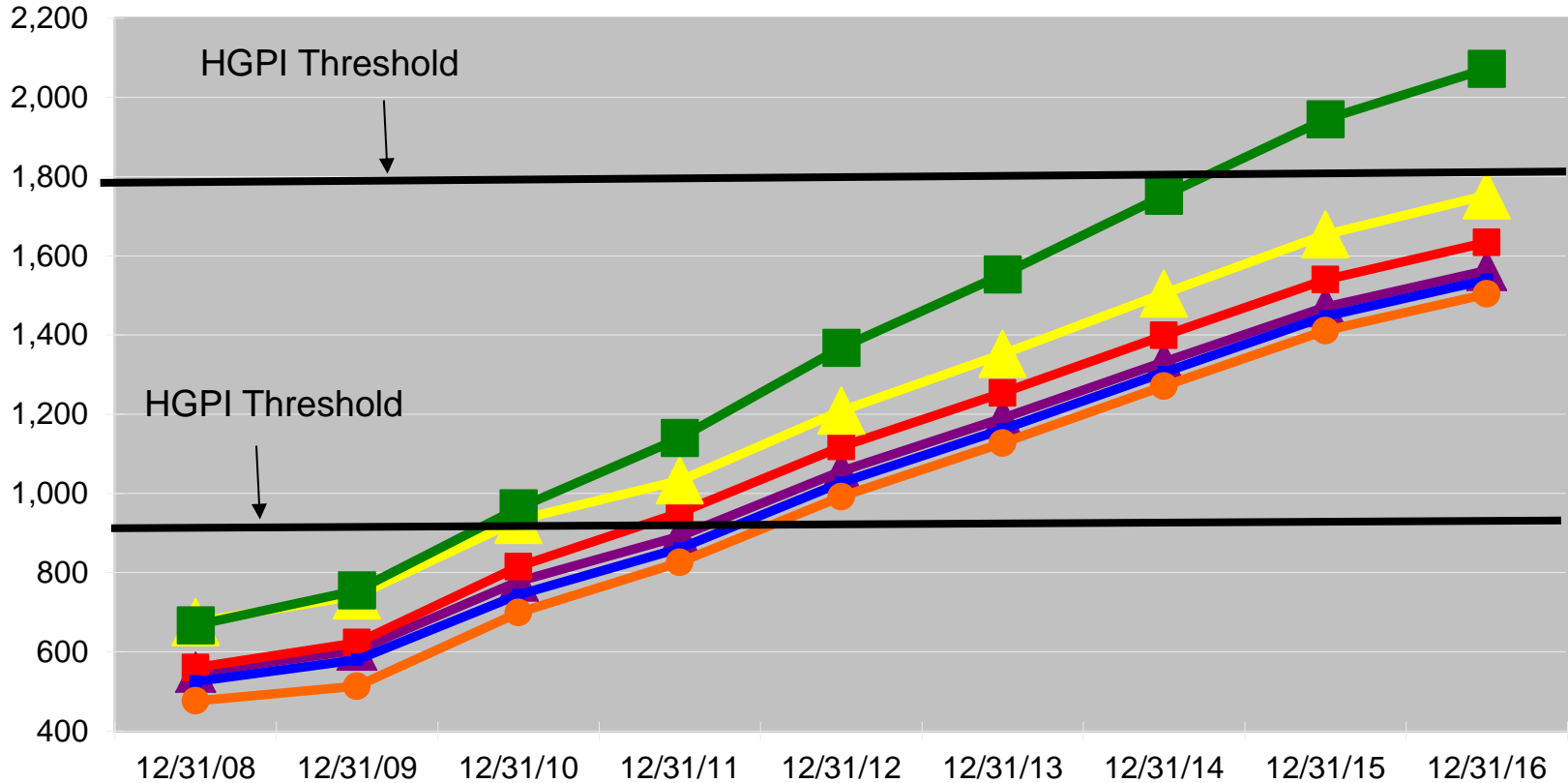
# of HGPI's Per year	'11 MTP	'12 MTP	'13 MTP	'14 MTP	'15 MTP	'16 MTP
'11 MTP	1	2	2	1	-	-
'12 MTP	1	2	1	1	1	-



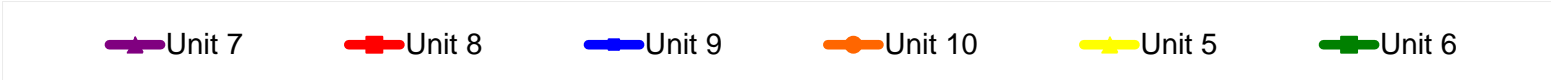
HGPI = Hot Gas Path Inspection.

**Factored  
Starts  
Cumulative**

# Trimble County CT's Cumulative Factored Starts per Unit



# of HGPI's Per year	-'11 MTP	1	2	2	1	
	-'12 MTP	1	2	1	1	1



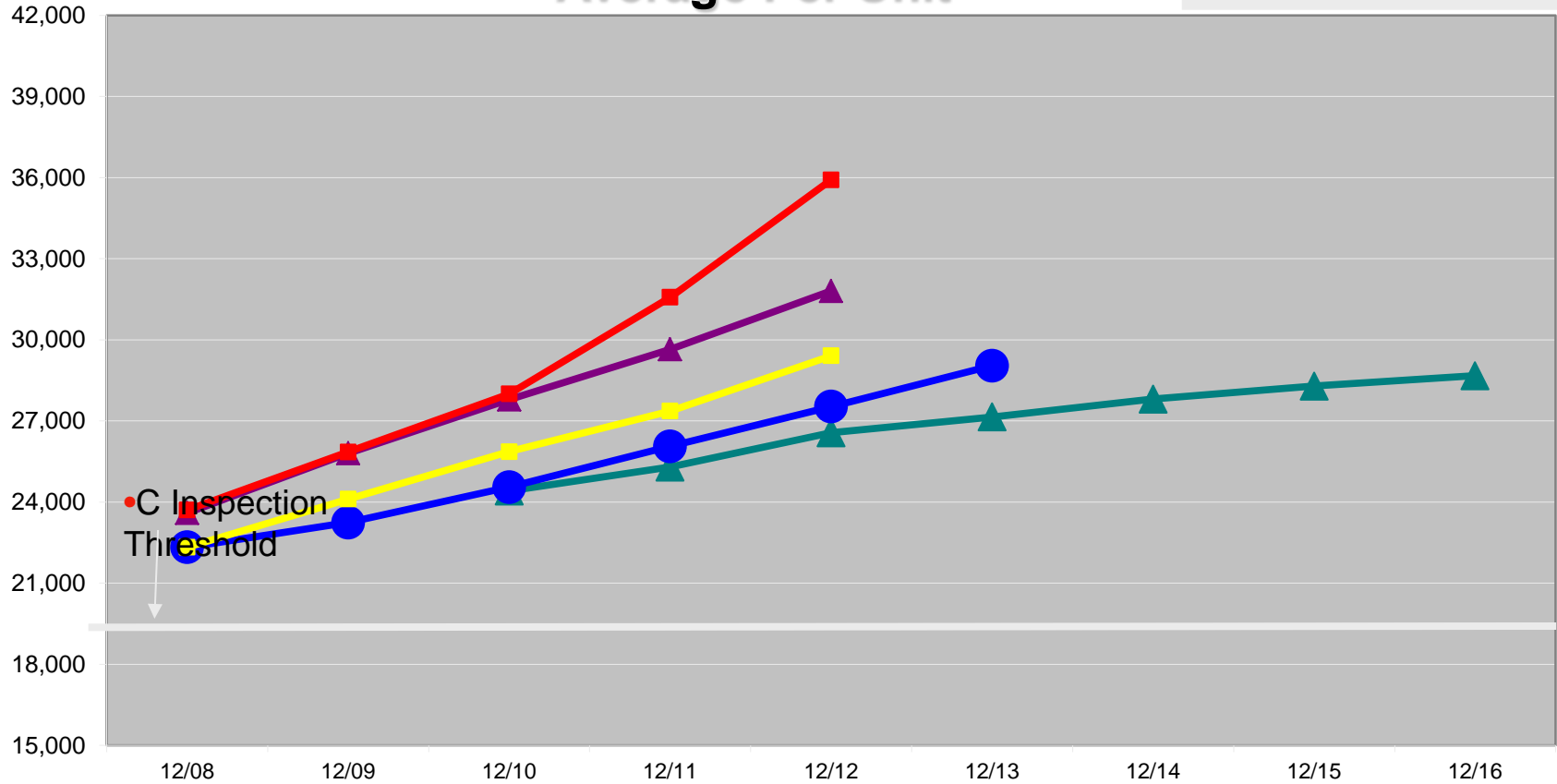
Note: This is based on an equal number of starts per CT during the MTP period, the plant can move starts from one CT to another at their discretion.



K. Blake  
Brown CT run-times  
continue trend of declining  
each MTP.

# Brown CT's Equivalent Operating Hours Average Per Unit

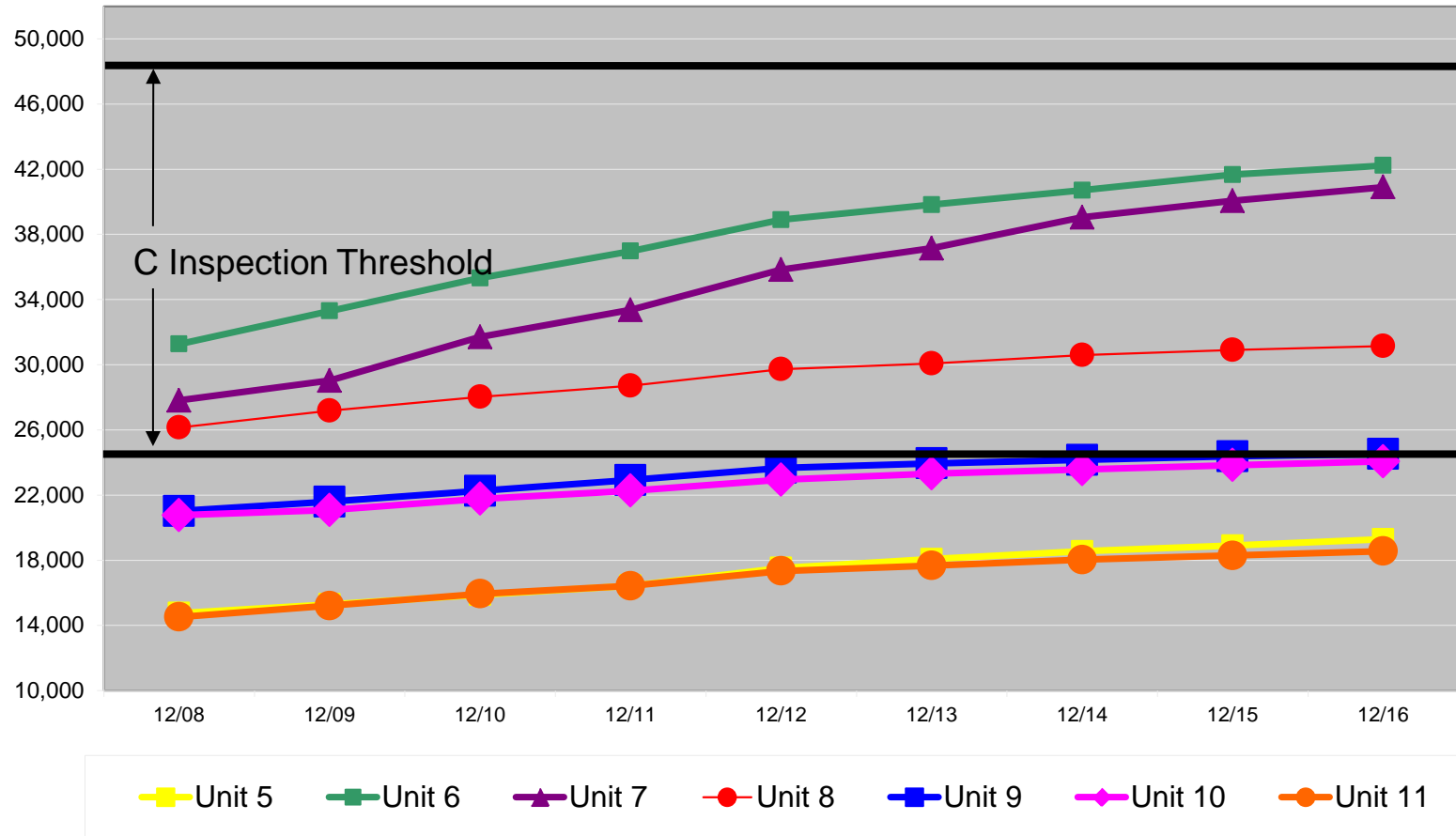
Cumulative EOH



▲ 2012 MTP Avg. ● 2011 MTP Avg. ■ 2010 MTP Avg. ▲ 2009 MTP Avg. ■ 2008 MTP Avg.

# Brown CT's Cumulative Equivalent Operating Hours (EOH) Per Unit

## Cumulative EOH



C inspections completed: Unit 6 (Fall 2007); Unit 7 (Fall 2008); Unit 8 (Spring 2005)  
 C inspections scheduled: Unit 9 2013; Unit 10 2014; Unit 11 2017;  
 Unit 6 2017; Unit 7 2018; Unit 8 2020; Unit 5 2021





PPL companies

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# Transmission

2012 - 2016

*October 7, 2011*

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# Plan Highlights

- The 2012-2016 Transmission Mid Term Plan is designed to meet the overall goals of safety, regulatory compliance, system reliability, and financial/budget performance.
- Plan challenges and considerations:
- Increasing scrutiny and on-going development of federal regulatory policies (FERC, NERC, SERC) continue to impact the transmission business planning, operations, and human resources.
- The plan reflects the transmission organization challenges of meeting escalating regulatory compliance requirements and associated Lines and Substation system reliability projects while maintaining high levels of system performance and customer satisfaction.
- To meet these challenges, the plan includes:
  - *Work force planning changes and associated headcount.*
  - *Capital funding to address Louisville area study projects , Cane Run CCGT, Bluegrass CTs, line rating verifications, retirement of Green River units 3 and 4, as well as CIP security requirements.*
  - *O&M funding increases over the 2011-2015 MTP primarily to address compliance needs and costs associated with avoiding the relocation of transmission lines to serve JAD Coal.*
- The plan includes resources to continue to deploy “Smart Grid” technologies to update substation protection and control systems and “system hardening” through static wire replacement.
- NERC has issued a recommendation (R-2010-10-07-01) that Transmission Owners and Operators review the current Facility Ratings Methodology for their solely and jointly owned transmission lines to verify that the methodology used to determine facility ratings is based on actual field conditions.



# Major Assumptions

## 1. Management Structure

- 1.1 Much work has been done in WFP/MTP cycles to evaluate new/changing business needs and staff the transmission organization accordingly. However, both the magnitude and scope of transmission issues continues to increase.
- 1.2 Compliance driven headcount increases drive changes from the prior plan (such as Critical Infrastructure Protection (CIP) and PER-005).
- 1.3 The current workforce planning assessment has looked at the changing environment and workloads under which the organization operates, and made recommendations for the functional/technical resources needed.
  - 1.3.1 KEMA review of August 18th and 19th 2010 EMS events.
  - 1.3.2 NERC CIP Version 4 Assessment, as well as adoption of NERC CIP-010, 011, expected to add over 8,000 labor hours annually for analysis of 150 Transmission substations.
  - 1.3.3 Anticipated approval of PRC-005 Version 2 will require additional monitoring of relays, carriers, and fiber within the Transmission department and result in a 50% increase to current resource workload.
  - 1.3.4 Employee Retention, particularly engineers whose transmission experience is in high demand throughout the industry.



# Major Assumptions

## 2. NERC Standards

- 2.1 The current regulatory environment, which includes continual escalating scrutiny and oversight in FERC, NERC, SERC policy and requirements will continue. FERC has directed NERC to change the definition of the bulk electric system to include all facilities 100kV and above, as well as everything in the blackstart cranking path. The current plan does not include capital or O&M dollars to meet additional requirements if adopted.
- 2.1.1 Vegetation Management is not expected to be included in this definition change.
- 2.2 Maintaining current compliance levels will require increased training and additional personnel to assist in the training effort (PER-005 requirements add a significant burden in documentation, evaluation, and simulation). Effective April 1, 2013, PER-005 will require additional headcount, 1 is currently budgeted in the 2012-2016 MTP.
- 2.2.1 Effective April 1, 2013: NERC prescribed enhanced Training of System Operators
- 2.3 As “smart” technologies are developed and deployed, CIP standards implications (currently 100kV and above) must be a consideration.
- 2.4 Cyber Security:
- 2.4.1 Version 3 of the Critical Infrastructure Protection (CIP) standards was adopted in October 2010.
- 2.4.2 Version 4 of the Critical Infrastructure Protection standards has been approved by the NERC Board of Trustees. This is still subject to influence by FERC, Congress, and the industry. FERC issued a Notice of Proposed Rulemaking (NOPR) Sep 15, 2011 proposing to approve the new CIP Version 4 but directing NERC to first make some improvements.
- 2.4.3 Secure networks to the substations (pre-cursor to smart grid) as well as increased physical security would be required for implementation of the full capability and efficiencies of new substation relaying and metering equipment, network capability and associated increased cyber security. A consultant will be hired to begin developing the detailed scope of what will be necessary.



# Major Assumptions

## 2. NERC Standards (cont.)

2.4.4 The 2012 MTP includes \$4.6M for NERC Cyber Security driven by new CIP standards (2011-2016).

2.5 Vegetation management standard will continue to focus on 200 kV and above. If a 100kV vegetation threshold is adopted, it is estimated to cost an incremental \$10.0 million to get compliant and \$2.5 million annually to remain compliant.

2.5.1 FAC-003-2 becomes effective in 2012, will require the use of vegetation LIDAR, the O&M impact of this is \$240k per year.

2.6 The cost to comply with the NERC Line Rating Recommendation (R-2010-10-07-01) from October 2010 is expected to have a significant impact on capital spending in 2012-2014. All work must be completed by the end of 2014.

2.6.1 All lines over 100kV will be surveyed and upgraded if necessary to meet the listed line rating.

2.6.2 Ongoing surveying of these lines is expected to cost \$1.8m annually (O&M) beginning in 2014. All lines, 100kV and above, must be verified every 5 years.

2.7 The industry is still interpreting Order 1000, which would require transmission providers to participate in a regional planning process that satisfies Order 890 principles and produces a regional transmission plan. The planning process must consider transmission needs driven by public policy requirements and include cost allocation methodologies. It is too early to know what impact this Order will have on the Transmission organization during the MTP period. The MTP does not currently include any assumptions or costs regarding Order 1000.



# Major Assumptions

## 3. Expansion Plan

- 3.1 The current transmission expansion plan (TEP) is based on the 2010 MTP load forecast (potential updates could occur on the earlier years of the plan, based on the 2011 MTP load forecast) and considers reliability requirements only.**
- 3.1.1 Transmission reliability criteria has identified a significant need for upgrades within the Louisville Metro area (including system expansion in southern Indiana). Previous mitigation was to shed load to prevent cascading outages. The FERC has emphasized through various documentation against load shedding as a means of mitigation. Construction is expected to be complete by December 2014.**
- 3.2 The Generation base case has the potential to change the TEP that will be developed for next year.**
- 3.3 A combined cycle generating unit will be installed by Jan 1, 2016 at Cane Run (replacing the current coal generation). It is assumed that \$28.7m is needed to upgrade transmission facilities for this unit.**
- 3.3.1 Relocation of the existing line at Cane Run is included in the budget for the combined cycle (Project Engineering budget ).**
- 3.4 Green River coal will be retired January 1, 2016. A combined cycle unit will be installed June 1, 2021 at Green River.**
- 3.4.1 Capital of \$17m is included in the 2012 MTP for Transmission upgrades needed at the Matanzas substation due to the loss of the Green River generation.**
- 3.4.2 Capital of \$80m is included in the 2012 LTP for Transmission upgrades associated with the new combined cycle unit to be constructed at Green River.**



# Major Assumptions

## 3. Expansion Plan cont.

- 3.5 The number of mitigation plans required as a part of the TEP does not grow over the MTP period.
- 3.6 The purchase of the Bluegrass Facility would require transmission upgrades before firm transmission service can be reserved. The 2012 MTP includes \$48.5m in capital additions.
- 3.7 The current plan does not include capital for long-term transmission across our system. We do not currently have any requests.
- 3.8 Inter-connect Transmission Service activity is driven by:
  - 3.8.1 Network Inter-connect Transmission Service (NITS; KMPA, Meredith and Polo Club substation, no new NITS customers)
  - 3.8.2 Transmission to Transmission new connections
- 3.9 The Plan does not include any projects that could come from FERC required Economic Planning Studies (originating from the Stakeholder Planning Committee, the Eastern Interconnect Planning Collaborative, or the Southeast Inter-regional Participation Process). Any projects that are identified would be network upgrades and may not be reimbursable.
- 3.10 No significant economic development projects requiring transmission system upgrades.
- 3.11 No major projects assumed for integration of renewable energy in the LG&E/KU portfolio.





# Major Assumptions

## 4. Asset Management

- 4.1 The Cascade asset management software will be in use in October 2011. LOAD (Facility Rating Program) will be in use in December 2011.
- 4.2 The Plan includes the creation of a critical spare inventory of transformers, that is continually replenished - see attached table in the appendix for planned purchases of spare transformers.
  - 4.2.1 FERC/NERC have increased the emphasis on utilities' inventory of spare transformers in assessing the transmission system's readiness for High Impact Low Frequency (HILF) events, such as Geometric Disturbances, Physical Attack, and Cyber Attack.
  - 4.2.2 LG&E/KU will continue to participate in the Edison Electric Institutes' (EEI) Spare Transformer Equipment Program (STEP) at the 345/138kV voltage class. Participation requires replacement transformer purchases within 18 months of a spare being put into service.
- 4.3 The Static wire upgrade program will continue for equipment that is over 50 years old.

## 5. ITO & RC

- 5.1 The original contract with SPP was extended 24 months through August 2012 at a cost of \$8.5M in 2011 and \$5.7M in 2012.
- 5.2 LG&E/KU has filed with FERC August 30, 2011, of its intent to switch service providers after the expiration of the current contract with SPP to TranServ.
- 5.3 TVA will be retained as the Reliability Coordinator (RC) with the cost increasing \$0.3M annually over the 2011 MTP.
- 5.4 KU will reimburse KMPA for their MISO drive-out charges (\$2.5M higher than offsetting revenues in 2012).
- 5.5 A filing with FERC regarding MISO exit obligations will occur in 2013.
- 5.6 LG&E/KU Filed for OATT recovery of our ITO and RC costs in February 2011 and took effect in April 2011.



# Major Assumptions

## 6 Headcount

- 6.1 Movement of Distribution SCADA Operations to Distribution will not impact Transmission headcount but will allow more focus on transmission activities, enhance required levels of situational awareness on transmission operations, and accommodate cross-training between LGE/KU operations as best practices are adopted and procedures are brought together.

## 7 Operational and Other

- 7.1 Transmission revenues will increase associated with OMU firm Point to Point contracts.
- 7.2 Transmission revenues will increase from all other customers due to Grahamville to DOE Upgrades to serve KMPA.
- 7.3 Customer sensitivity and awareness to reliability and power quality will continue to elevate.
- 7.4 No Federal or State mandated Smart Grid initiatives beyond our current asset renewals.
- 7.5 The Plan includes \$2M to settle with JAD Coal over the proposed relocation of the 500kV transmission line that serves their mining operations.

## 8 Annual Escalation Rates

- 8.1 Internal labor: 3.0%.
- 8.2 Contract labor: 3.0%
- 8.3 Fuels and Additives 5.0%.
- 8.4 Copper 4.0%.
- 8.5 Fabricated steel 3.0%.



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Opex Expenses							
Raw Labor	6,288	8,133	8,784	9,033	10,134	10,329	10,599
Burdens	2,072	2,420	2,470	2,544	2,852	2,895	2,982
Non labor							
Right of Way	4,242	4,460	4,316	4,430	4,546	4,637	4,731
Inspections	1,134	1,129	1,144	1,173	1,202	1,225	1,248
JAD Coal- Mineral Rights	-	-	1,000	500	250	250	-
NERC LIDAR Testing	-	-	-	-	1,800	1,836	1,873
KMPA Payments	5,440	5,502	2,637	3,029	-	-	-
EKPC Amortization Exp	504	504	504	504	84	-	-
Other Nonlabor	9,161	8,805	11,036	10,871	11,245	11,698	11,857
Subtotal OPEX for EBIT	28,841	30,953	31,891	32,084	32,113	32,870	33,290
Gross Margin Expenses *	11,794	18,161	13,010	8,684	10,143	10,346	10,553
* (see next slide for detail)							
Total Items for Income Statement	40,635	49,114	44,901	40,768	42,256	43,216	43,843



# Financial Performance

## 2010-2016 Margin Expenses / Cost of Sales (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Margin Expenses</b>							
EKPC NITS Costs	1,801	2,004	2,083	2,083	2,083	2,125	2,167
Intercompany Transmission - NL	1,823	1,242	1,123	855	1,359	1,386	1,414
Intercompany Transmission - MUNI	-	4,249	-	-	-	-	-
SPP / TRANSERV - ITO	4,883	8,298	6,681	2,891	3,031	3,092	3,153
TVA - Reliability Coordination	1,665	1,630	1,952	2,050	2,117	2,159	2,203
RTO Costs	189	336	321	257	480	490	499
3rd Party Transmission	1,213	402	850	548	1,073	1,094	1,116
Payments to IMEA/IMPA	220	-	-	-	-	-	-
Total Margin Expense with Intercompany	<u>11,794</u>	<u>18,161</u>	<u>13,010</u>	<u>8,684</u>	<u>10,143</u>	<u>10,346</u>	<u>10,553</u>
Total Margin Expense excl. Intercompany	<u>9,751</u>	<u>12,670</u>	<u>11,887</u>	<u>7,829</u>	<u>8,784</u>	<u>8,960</u>	<u>9,139</u>

Excludes Off-System Sales related expenses



PPL companies

# Financial Performance

## 2012-2016 OPEX Target Comparison (\$000)

	2012	2013	2014	2015	2016
Total OPEX	31,891	32,084	32,113	32,870	33,290
Total OPEX Target	32,238	33,080	33,543	32,017	32,930
Variance to Target	347	996	1,430	(853)	(360)

### Major Variance Contributors, Fav/(Unfav):

Lower CIP Labor than Target Relief	1,453	1,349	1,239	1,276	1,314
Higher Labor to Capital & LOC	1,166	1,331	1,371	1,412	1,455
NERC LIDAR testing	-	-	(1,800)	(1,845)	(1,891)
JAD Coal - Mineral Rights	(1,000)	(500)	(250)	(250)	-
Lines Veg Mgmt LIDAR Testing	(240)	(246)	(252)	(258)	(265)
Lines Tower Painting	(225)	(225)	-	-	-
Transmission VP / Director	(150)	(154)	(158)	(162)	(166)
2011 MTP Cost Reductions (Director Dept)	-	-	(650)	(650)	(650)
Allocated Nonlabor Officer Support	176	216	221	225	230
System Operations Nonlabor	(83)	(235)	(245)	(250)	(256)
Reliability Outside Services	(120)	(123)	-	-	-
KMPA Payments	(331)	(742)	2,328	-	-
EMS Software Maintenance	(250)	(254)	(260)	(267)	(274)
Other	(49)	579	(114)	(84)	143
Total Variance	347	996	1,430	(853)	(360)



## 2012-2016 Cost of Sales Target Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	13,010	8,684	10,143	10,346	10,553
Cost of Sales Target	18,572	12,438	12,059	12,300	12,546
Variance	<u>5,562</u>	<u>3,754</u>	<u>1,916</u>	<u>1,954</u>	<u>1,993</u>

### Fav/(Unfav) Variance Explanations

TVA RC Expenses	(240)	(253)	(284)	(290)	(295)
ITO Expenses	(414)	(2,276)	(3,031)	(3,091)	(3,153)
3rd Party Transmission	553	536	34	34	35
RTO Expenses	361	265	53	54	55
NL Interco Transmission	569	510	27	27	28
Other	-	2	48	49	50
Eliminate MUNI Intercompany	<u>4,733</u>	<u>4,970</u>	<u>5,069</u>	<u>5,170</u>	<u>5,274</u>
Total Variance	<u>5,562</u>	<u>3,754</u>	<u>1,916</u>	<u>1,954</u>	<u>1,993</u>



# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis

(\$000)

	2012	2013	2014	2015	2016
Current Plan	83,914	106,558	88,306	73,918	65,150
Target	51,247	67,797	58,008	53,108	76,223
Variance to Target	(32,666)	(38,761)	(30,298)	(20,810)	11,072
<u>Fav/(Unfav) Variance Explanations</u>					
Cane Run CCGT - Transmission	-	(6,954)	(11,354)	(10,391)	-
Green River Retirement	(13,335)	(3,700)	-	-	23,415
Blue Grass CTs - Transmission	-	(4,830)	(10,920)	(10,920)	(10,920)
Line Clearance NERC Alert	(20,358)	(17,012)	(14,963)	(2,724)	-
Louisville Area Upgrade	(30)	(16,876)	(2,641)	-	-
Parameter/Thermal Upgrades	(101)	11,018	2,700	(7,016)	(3,800)
Transformers	(2,197)	1,817	(4,700)	(4,600)	(1,200)
Pole Replacements	3,419	3,421	(3,785)	(6,636)	(6,438)
Smart Grid Enabling (Control House Upgrades)	3,312	1,810	4,199	5,450	6,500
Distribution Taps	(1,946)	(9,905)	(12,217)	(441)	(4,130)
Cyber Security (CIP)	2,636	1,029	903	403	403
Breakers	(522)	(660)	(3,752)	(2,595)	(2,145)
EMS Switchover	(2,319)	(69)	-	-	-
Back-Up Control Center	(1,000)	(4,000)	-	-	-
Other	(225)	6,150	26,232	18,660	9,388
Total	(32,666)	(38,761)	(30,298)	(20,810)	11,072



# Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
VP/Director/Support	2	4	4	4	4	4	4
System Operations	32	32	33	33	34	34	34
Energy Management System	8	13	15	15	15	15	15
Strategy & Planning	12	12	12	12	12	12	12
Reliab Strategy&Planning	0	5	5	5	5	5	5
Substations	23	15	19	21	21	21	21
Lines	28	37	39	39	39	39	39
Reliability & Compliance	3	3	3	3	3	3	3
Balancing Authority	6	10	9	9	9	9	9
Policy and Tariffs	3	3	3	3	3	3	3
Interns/Temporary Employees	1	5	5	4	4	4	4
<b>TOTAL</b>	<b>118</b>	<b>139</b>	<b>147</b>	<b>148</b>	<b>149</b>	<b>149</b>	<b>149</b>
From 2011 MTP		128	132	132			
<i>2012 MTP Changes from Year to Year</i>							
VP/Director		2					
EMS - CIP		4					
EMS - KEMA Recommendation			1				
System Ops Early Hires for Retirements		3					
System Ops - Standards		2	1	1	1		
System Ops - PER-005 Training			1				
Substations - Cascade/Field Insp./Other		3	3				
Substations - CIP			2	2			
Other (including interns)		7		-2			





# Operational Performance

## Key Performance Indicators

KPI	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Recordable Injury Incident Rate - Employees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recordable Injury Incident Rate - Contractors	2.7	2.0	2.7	2.7	2.7	2.7	2.7
SAIDI (minutes)	13.3	16.2	7.0	7.0	7.0	7.0	7.0

Lightning strikes, relay failures, and vegetation have contributed to the 2010 and 2011 SAIDI

Various capital projects are included in the Plan to help improve SAIDI, these include:

- Static replacement program
- Breakers replacements/upgrades
- Fiber replacements



# Plan Risks

- *NERC reliability standards will continue to drive Transmission through stricter interpretation of existing standards and the addition of new standards, penalty and fine assessment, and increasing audit scrutiny (SERC audits for both CIP and Reliability Standards scheduled in 2012).*
- *Cyber Security will be an expanding area of compliance standards and scrutiny.*
- *The increasing development of federal regulatory policies (FERC, NERC, SERC) will further impact human resources and the challenges to remain compliant.*
- *System protection asset replacement (Remote Terminal Unit's (RTU), relays, station control houses).*
- *Key Asset failure – transformer/breakers.*
- *Network Interconnect Transmission Service Requests (ie.KMPA, OMU, Cash Creek) impacts.*
- *Knowledge transfer and retention as employees retire.*
- *Federal and State policy driving Smart Grid initiatives.*
- *KYPSC mandated system hardening investment.*



# Appendix



# Spare Transformer Inventory

Size of Transformer	Number In Service	Current # of Spares	2012 MTP Additions					Assumed Failures	Desired Inventory	Actual Failures		
			2011	2012	2013	2014	2015			2016	2006-'11	2001-'11
138/69kV; <93MVA <sup>1</sup>	16	2							2	0	0	
138/69kV; >92 MVA	58	1		1	1	1	1	1	(3)	3	4	6
161/69kV	24	2						1	(1)	2	1	1
161/138kV	5	0			1				0	1	1	1
345/138kV	16	0							0	0	1	1
345/161kV <sup>2</sup>	3	0		1			1		0	2	0	0
500/161kV	1	0			1				0	1	0	0
500/345kV	1	0					1		0	1	0	0
Capital Cost, \$millions			\$1.7	\$1.0	\$5.2	\$6.2	\$4.6	\$2.7				

## Notes:

- The two current 138/69 kV spare transformers are smaller MVA, 1950's vintage transformers (33.3 MVA and 65 MVA), 58 of the 74 138/69kV Transformers are 93 MVA or larger.
- Both 345/161kV transformers in the plan are are dual winding transformers that could also be used to replace a 345/138kV transformer.

## Designated Transformer Purchases:

- A 138/69kV transformer is planned for 2013 at the Adams substation.
- A fourth 345kV transformer is planned for the Middletown substation



## 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	31,891	32,084	32,113	32,870	33,290
Prior Plan	34,052	34,397	34,919	33,432	34,387
Variance to Prior Plan	<u>2,161</u>	<u>2,313</u>	<u>2,806</u>	<u>562</u>	<u>1,097</u>
<u>Major Variance Contributors Fav/(Unfav):</u>					
Raw Labor	285	414	(356)	(208)	(124)
Burdens	4,904	4,930	4,885	5,112	5,305
JAD Coal Mineral Rights	(1,000)	(500)	(250)	(250)	-
NERC LIDAR Testing	-	-	(1,800)	(1,845)	(1,891)
Lines Veg. Management - LIDAR	(240)	(246)	(252)	(258)	(265)
Lines Tower Painting	(225)	(225)	-	-	-
EMS Software Maintenance	(250)	(254)	(260)	(267)	(274)
Reliability Outside Services	(120)	(123)	-	-	-
Allocated Nonlabor from Distribution	(795)	(1,014)	(879)	(896)	(914)
System Ops Nonlabor	(83)	(235)	(245)	(250)	(256)
Allocated Officer and Budget Support	176	216	221	225	230
KMPA Payments	(331)	(742)	2,328	-	-
Transmission VP/ Director Nonlabor	(150)	(154)	(158)	(162)	(166)
2011 MTP Reductions (Made in Director Dept)	-	-	(650)	(650)	(650)
Other	(10)	246	222	11	101
Total Variance	<u>2,161</u>	<u>2,313</u>	<u>2,806</u>	<u>562</u>	<u>1,097</u>



## 2012-2016 Margin/Cost of Sales Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	13,010	8,684	10,143	10,346	10,553
Prior Plan	18,572	12,438	12,059	12,300	12,546
Variance	<u>5,562</u>	<u>3,754</u>	<u>1,916</u>	<u>1,954</u>	<u>1,993</u>

### Fav/(Unfav) Variance Explanations

TVA RC Expenses	(240)	(253)	(284)	(290)	(295)
ITO Expenses	(414)	(2,276)	(3,031)	(3,091)	(3,153)
3rd Party Transmission	553	536	34	34	35
RTO Expenses	361	265	53	54	55
NL Interco Transmission	569	510	27	27	28
Other	-	2	48	49	50
Eliminate MUNI Intercompany	<u>4,733</u>	<u>4,970</u>	<u>5,069</u>	<u>5,170</u>	<u>5,274</u>
Total Variance	<u>5,562</u>	<u>3,754</u>	<u>1,916</u>	<u>1,954</u>	<u>1,993</u>



## 2012-2016 Cost of Removal Comparison (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	3,213	3,729	1,633	2,381	3,336
Prior Plan	3,693	4,371	4,500	4,500	4,500
Variance	480	642	2,867	2,119	1,164
<u>Fav/(Unfav) Variance Explanations</u>					
Line Clearance NERC Alert	(798)	(817)	(475)	(61)	-
Parameter/Thermal Upgrades	(54)	578	-	-	-
Pole Replacements	950	760	-	-	-
Other	382	122	3,342	2,180	1,164
Total	480	642	2,867	2,119	1,164

*Note: The Prior Plan did not include extensive detail by project beyond 2013.*

# 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Expansion Plan</b>							
Blue Grass CTs - Transmission	-	-	-	4,830	10,920	10,920	10,920
Cane Run CCGT - Transmission	-	-	-	6,954	11,354	10,391	-
Green River Retirement	-	-	13,335	3,700	-	-	-
<b>Ongoing Capital</b>							
Smart Grid Enabling (Control House Upgrades)	986	201	1,250	3,501	4,601	3,350	2,300
Parameter/Thermal Upgrades	4,941	9,446	4,010	483	3,300	10,816	7,600
Pole Replacements	9,711	4,692	3,678	5,073	3,785	6,636	6,438
Breakers	6,365	4,928	4,608	6,954	3,752	2,595	2,145
Terminal Upgrades	1,858	818	1,045	2,630	1,110	1,380	3,380
Static Replacements	1,177	713	1,499	1,606	1,800	2,000	2,200
Transformer Replacements	3,622	3,004	3,491	972	-	-	-
Line Relocations	449	859	1,567	1,172	629	870	957
New Facilities	423	461	562	968	575	1,795	1,026
Storms	904	1,896	609	644	782	806	886
Distribution Taps	400	1,265	1,946	10,405	12,217	441	4,130
<b>Special Projects</b>							
TC2 and Work Around	15,628	(397)	-	-	-	-	-
Line Clearance NERC Alert	-	4,337	20,358	17,012	14,963	2,724	-
Cyber Security (CIP)	-	754	1,463	2,069	97	97	97
Spare Transformers	-	1,669	954	5,200	6,200	4,600	2,700
Louisville Area Upgrade	-	4,822	10,026	19,870	2,641	-	-
KMPA	1,918	4,085	600	-	1,846	1,633	1,633
Work Management Systems	2,571	1,972	500	500	-	-	-
EMS Switchover	-	2,812	2,319	69	-	-	-
Back-up Control Center	-	-	1,000	4,000	-	-	-
Replace Video Wall at Control Center	-	-	-	-	-	1,500	-
<b>Other</b>	10,473	8,847	9,093	7,946	7,735	11,363	18,738
<b>Total Capital</b>	61,426	57,185	83,914	106,558	88,306	73,918	65,150





# Louisville Area Infrastructure Upgrades (\$000)

	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan	Total
<b>1) Middletown 345kV Breakers</b>	-	2,939	-	-	-	-	-	2,939
<b>2) Build a new 345kV line connecting Paddys West and DEM's Speed 345kV stations:</b>								
345kV Paddy's West to Speed Line	-	1,004	-	11,172	-	-	-	12,176
Duke Clifty Substation Work	-	-	-	-	-	-	-	-
Paddy's West Substation	-	878	3,505	-	-	-	-	4,384
<b>Total</b>	-	1,882	3,505	11,172	-	-	-	16,560
<b>3) Add a 4th Transformer to the Middletown Substation</b>								
Middletown 4th Transformer	-	-	5,014	4,845	2,641	-	-	12,500
Middletown Line Tap	-	-	-	2,530	-	-	-	2,530
Rebuild the Middletown Control House	-	-	1,006	1,322	-	-	-	2,328
<b>Total</b>	-	-	6,020	8,698	2,641	-	-	17,359
<b>4) Other Planning Projects</b>								
Watterson-Jeffersontown 138kV CTs	-	-	500	-	-	-	-	500
	-	4,822	10,026	19,870	2,641	-	-	37,358

*Transmission reliability criteria has identified a significant need for upgrades within the Louisville Metro area (including system expansion in southern Indiana). Previous mitigation was to shed load to prevent cascading outages. The FERC has emphasized through various documentation against load shedding as a means of mitigation.*



## Cane Run CCGT - Transmission (\$000)

	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan	Total
Middletown to Watterson 138kV Line Upgrade	-	-	295	-	-	-	295
Reconductor Paddy's West to Paddy's Run 138kV Line	-	-	1,000	4,360	4,360	-	9,720
Reterminate Existing Line into new NGCC station	-	-	3,124	3,124	3,124	-	9,371
Breaker Connections at Cane Run Switching Station	-	-	1,336	1,336	1,328	-	4,000
Replace CT 138/69kV at Cane Run Switching Station	-	-	-	-	36	-	36
Replace 69kV Terminal Equipment at Cane Run Switching Station	-	-	-	-	182	-	182
Replace Bus at Watterson Substation	-	-	-	128	-	-	128
Replace Cane Run Switching Station 138/69kV Transformer #1	-	-	-	1,140	1,139	-	2,280
Replace Cane Run Switching Station 138/69kV Transformer #2	-	-	1,200	1,194	-	-	2,393
Replace 69kV Terminal Equipment at Cane Run Switching Station #2	-	-	-	-	222	-	222
Replace Switches at Middletown Sub	-	-	-	73	-	-	73
	-	-	6,954	11,354	10,391	-	28,700

*These costs represent the Transmission Upgrades that will accompany the combined cycle generating unit to be installed by January 1, 2016. The relocation of the existing line is included in the Project Engineering budget along with the costs of constructing the combined cycle unit.*

## Green River Retirement - Transmission (\$000)

	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan	Total
Matanzas Sub Upgrades	-	10,500	3,700	-	-	-	14,200
Matanzas Line Upgrades	-	2,835	-	-	-	-	2,835
<b>Total</b>	-	13,335	3,700	-	-	-	17,035

*These costs represent the Transmission upgrades associated with the January 1, 2016 retirement of the Green River coal units.*

*There is an additional \$80M included in the 2012 LTP for Transmission Upgrades associated with the new combined cycle unit to be constructed.*

## Bluegrass CTs - Transmission (\$000)

	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan	Beyond 2016 Plan	Total
Blue Grass CTs - Transmission	-	-	4,830	10,920	10,920	10,920	10,920	48,510

*These costs represent the transmission upgrades that would be necessary to reserve Transmission service from the Bluegrass Facility for all three units.*



## Sensitivities (\$millions)

	Favorable / (Unfavorable)				
	2012	2013	2014	2015	2016
Capital					
NERC Line Rating Work	\$5.0	\$5.0	\$5.0		
Cyber Security (CIP)	(\$1.5)	(\$5.0)	(\$5.0)	(\$1.0)	(\$1.0)
Paddy's West - <i>Line clearance on Duke's section of the project.</i>		(\$3.0)			
Cane Run / Bluegrass CT's		\$2.7	\$3.2	\$10.7	\$10.6
Green River Retirement	(\$13.5)	\$2.2	\$14.6	\$13.7	\$0.0
Pole Inspections - <i>Pending Regulatory Requirement</i>		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)
	(\$15.0)	(\$3.7)	\$12.3	\$22.9	\$9.1



## 2010-2016 Other Balance Sheet Costs (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Stores Expense							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
Local Engineering							
Labor	4,625	3,013	3,143	3,332	4,076	4,158	4,241
Non labor	880	-	-	-	-	-	-
Total	5,505	3,013	3,143	3,332	4,076	4,158	4,241
Other Balance Sheet							
Labor	-	-	-	-	-	-	-
Non labor	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-
<b>Total Other Costs</b>	<b>5,505</b>	<b>3,013</b>	<b>3,143</b>	<b>3,332</b>	<b>4,076</b>	<b>4,158</b>	<b>4,241</b>





**PPL companies**

# Energy Delivery

2012 - 2016

*October 14, 2011*



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- Plan Highlights
- Major Assumptions
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# Plan Highlights

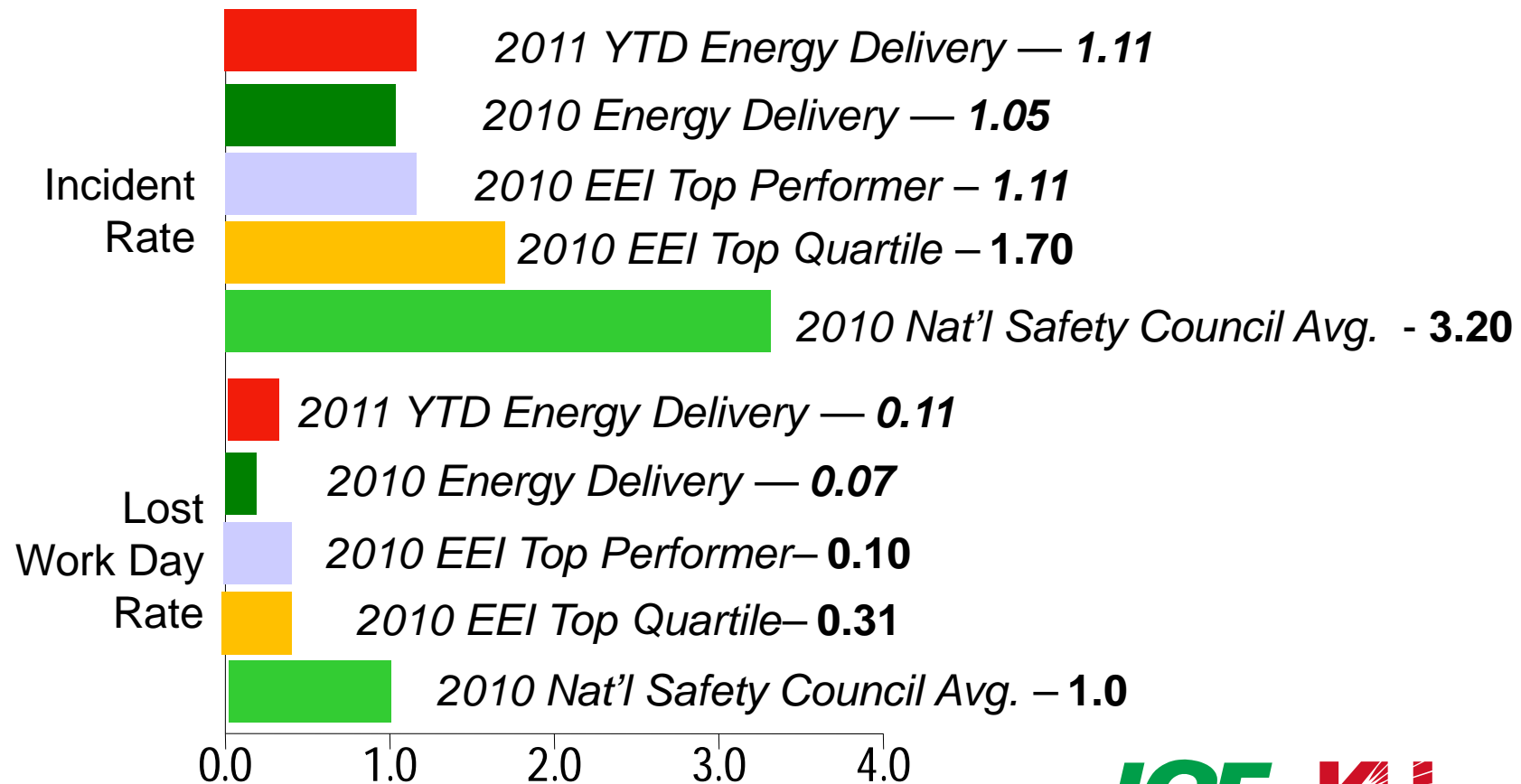
Customer satisfaction is a core value at LG&E and KU. Energy Delivery strives to provide safe, reliable, and low cost service to our customers, enhancing the quality of life in the areas we serve. We are committed to enhancing our relationship with our customers by delivering positive experiences that create value and build trust.

- Funding levels within the proposed plan are established with the following priorities in mind:
  - Employee and public safety including compliance with industry regulatory requirements
  - Performance improvement in all customer facing areas
  - Improvement in gas and electric service reliability
  - Asset replacement to address aging infrastructure
  - Increased system capacity to meet forecasted customer demand
- Significant increases in OPEX are proposed to:
  - improve responsiveness to customer needs, in particular in the contact centers and billing
  - ensure compliance with anticipated regulations related to pipeline integrity
- Proposed capital investments are higher than previous plan to manage challenges in these areas:
  - Reliability of the electric and gas systems
  - Asset replacement programs



# Plan Highlights

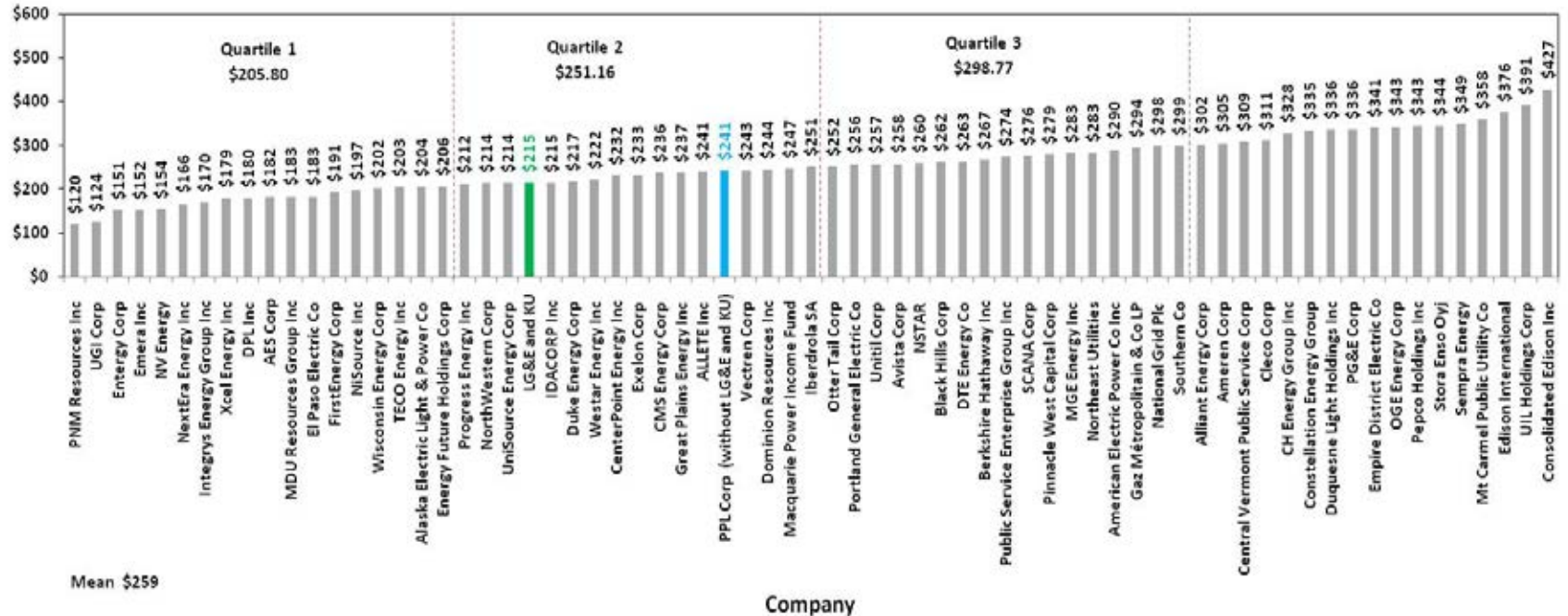
## Energy Delivery Safety Performance Data – EEI Data



# Plan Highlights

## Total DO Electric Cash Cost per Customer Performance

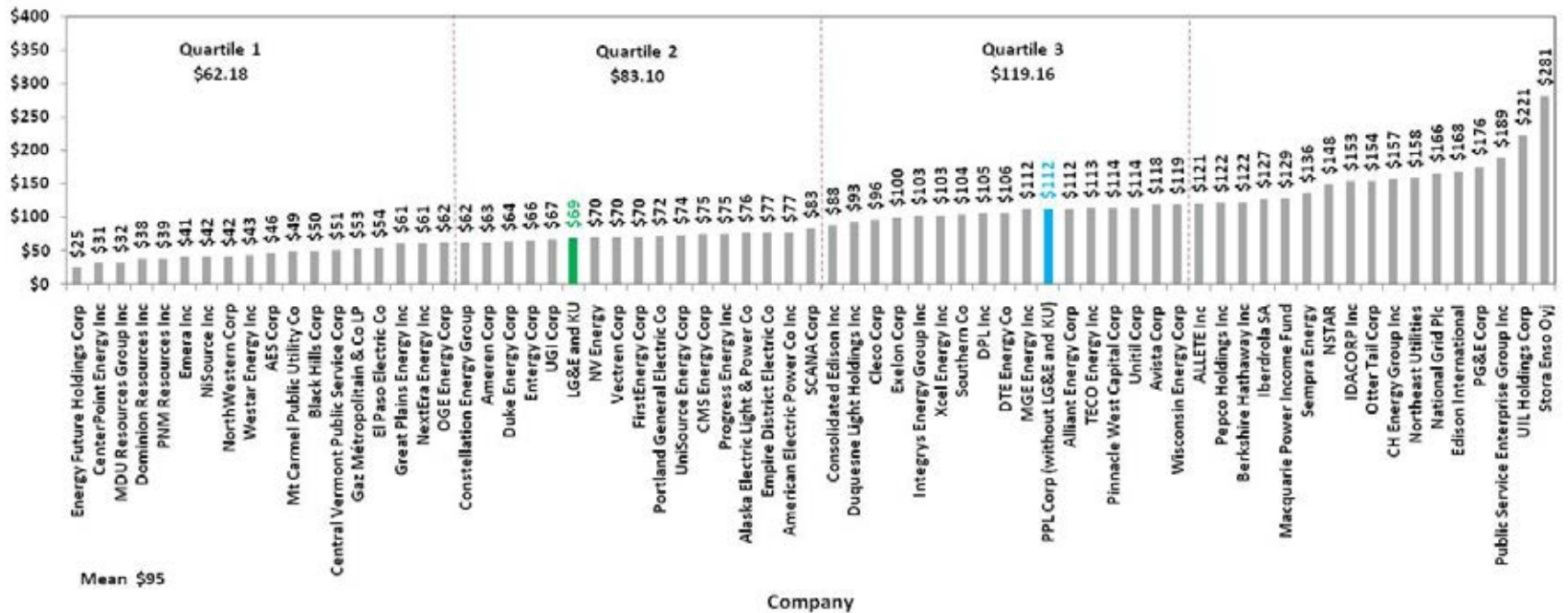
Overall Electric Distribution Expenditures per Customer  
 FERC Utility Cost Benchmarking – 2010 Data  
 (Electric Only)



# Plan Highlights

## Total Retail Electric O&M Cost per Customer Performance

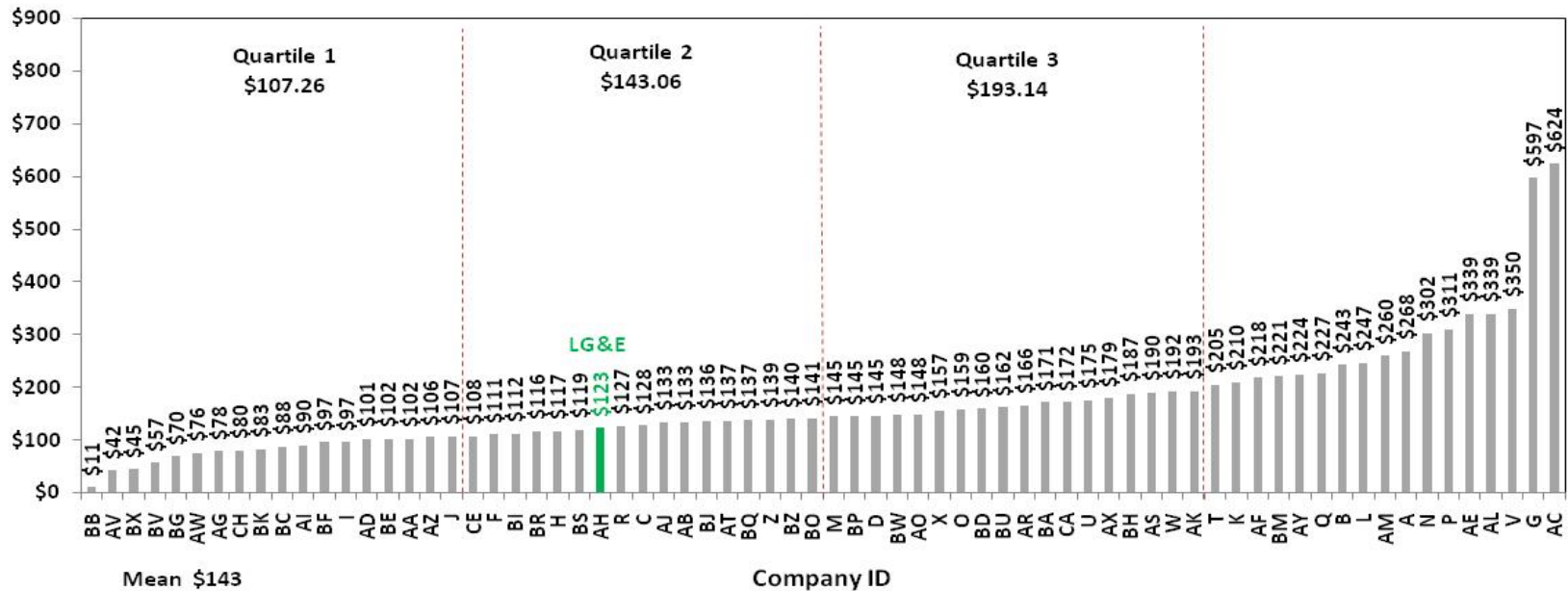
Overall Retail Electric O&M Expenditures per Customer  
FERC Utility Cost Benchmarking - 2010 Data  
(Electric Only)



# Plan Highlights

## Total DO Gas Cash Cost per Customer Performance

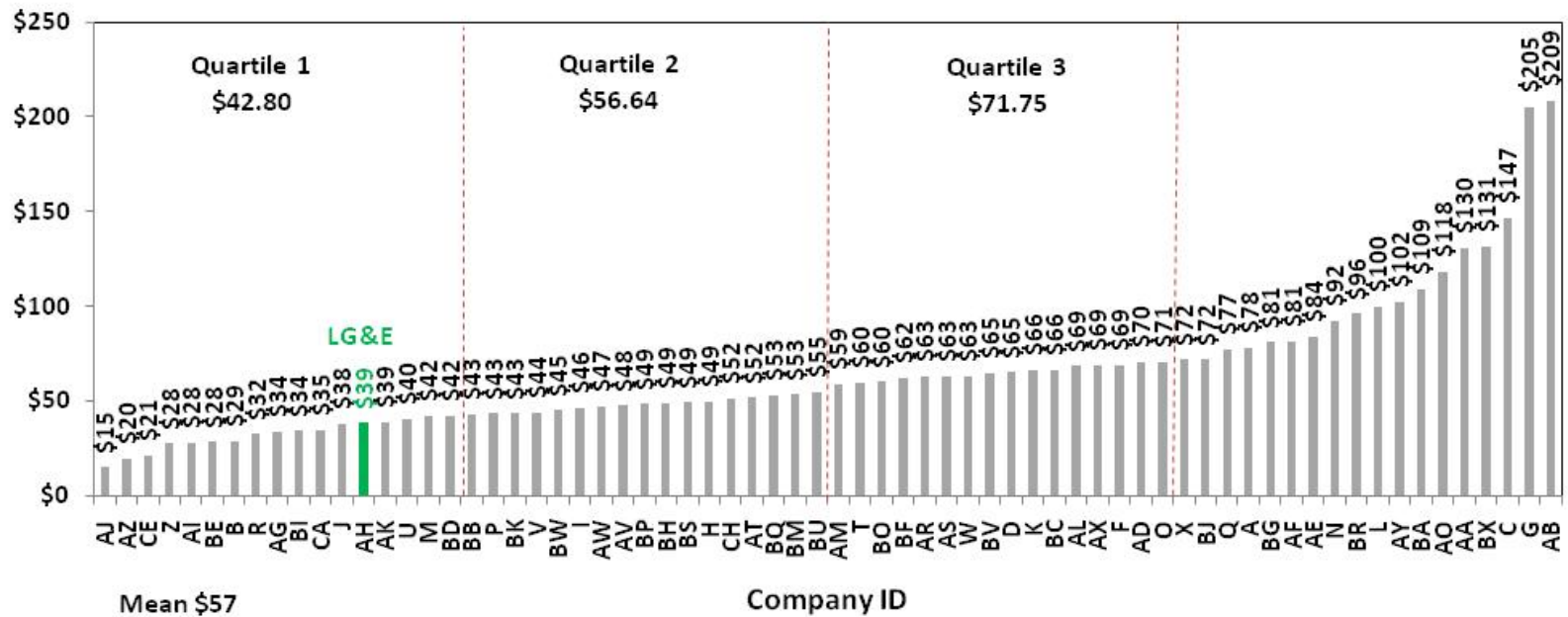
Overall Gas Distribution Expenditures per Customer  
 American Gas Association - 2010 Data  
 (Gas Only)



# Plan Highlights

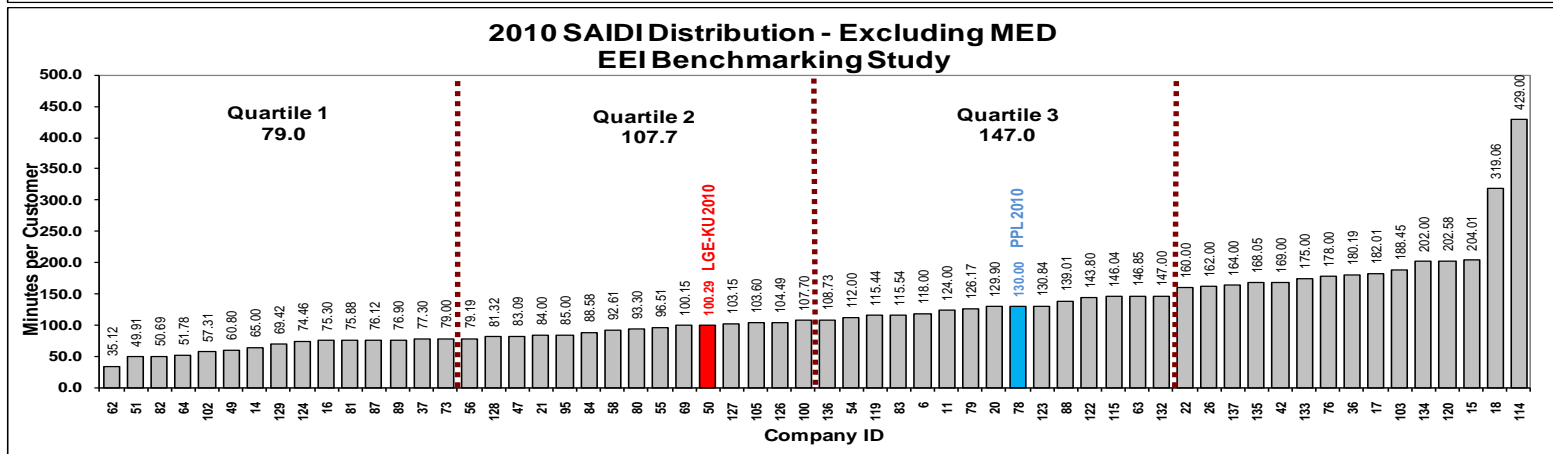
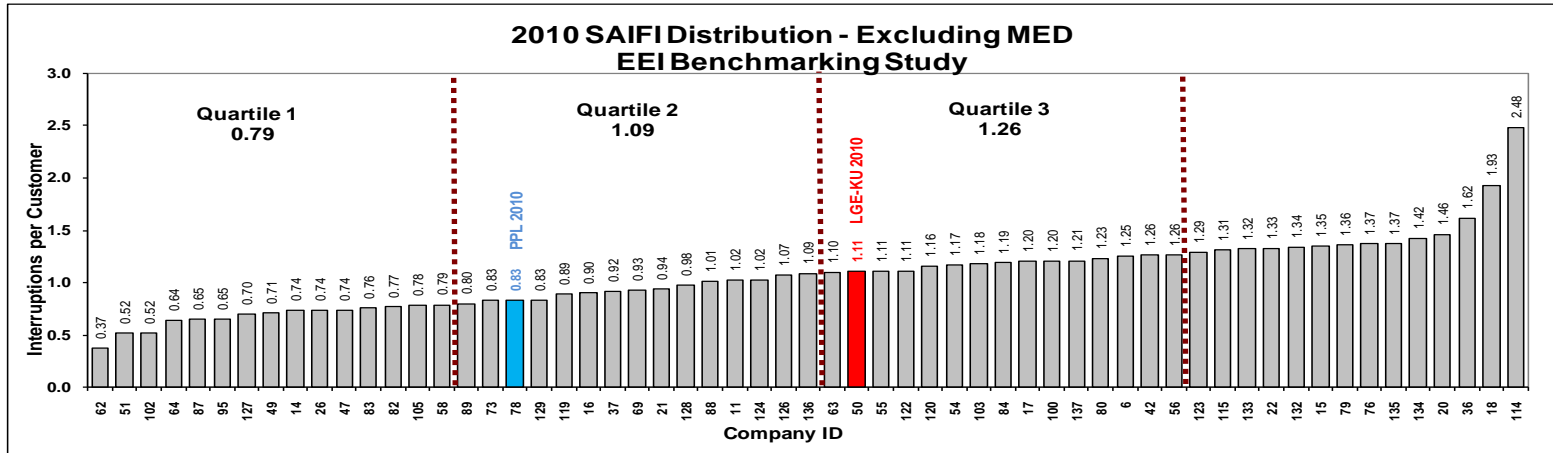
## Total Retail Gas O&M Cost per Customer Performance

Overall Retail Gas O&M Expenditures per Customer  
 American Gas Association - 2010 Data  
 (Gas Only)



# Plan Highlights

## Reliability Performance

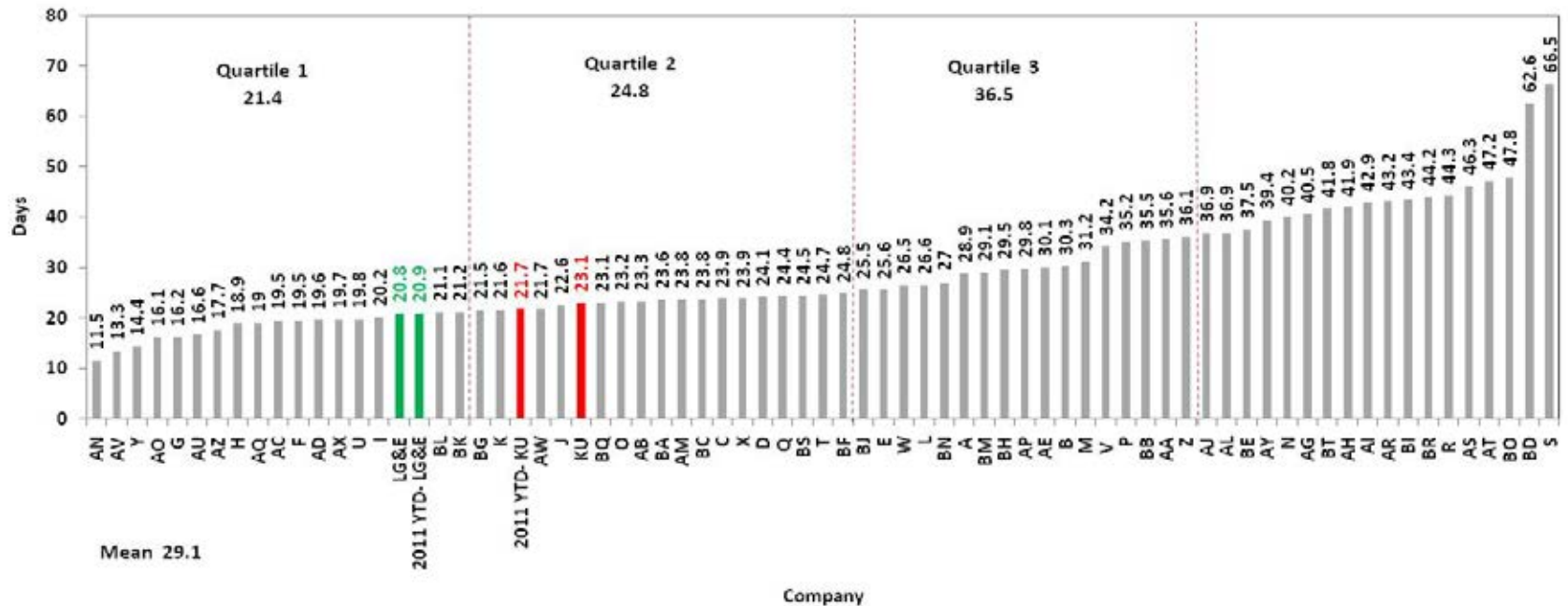




# Plan Highlights

## Estimated Number of Days of Revenue Outstanding (ENDRO)

ENDRO  
AGA EEI DataSource - 2010 Data

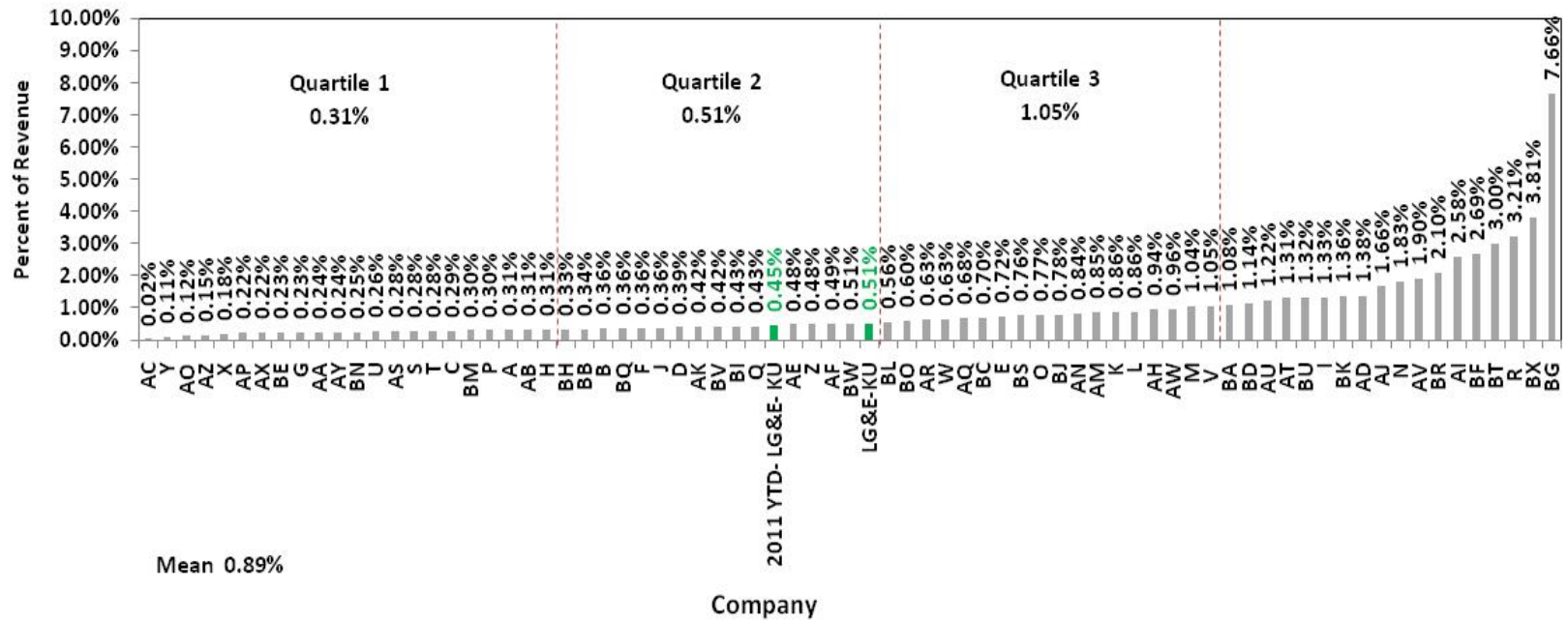




# Plan Highlights

## Net Write-Offs as a Percent of Revenues to Ultimate Customers

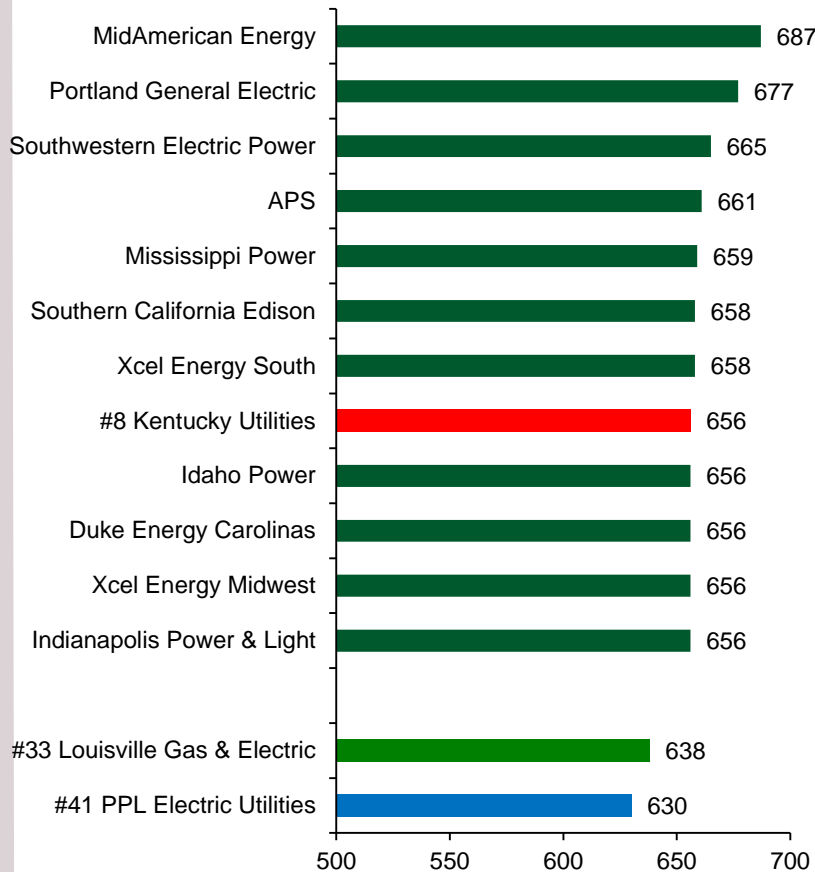
Net Write-offs Percent of Revenue  
AGA EEI DataSource - 2010 Data



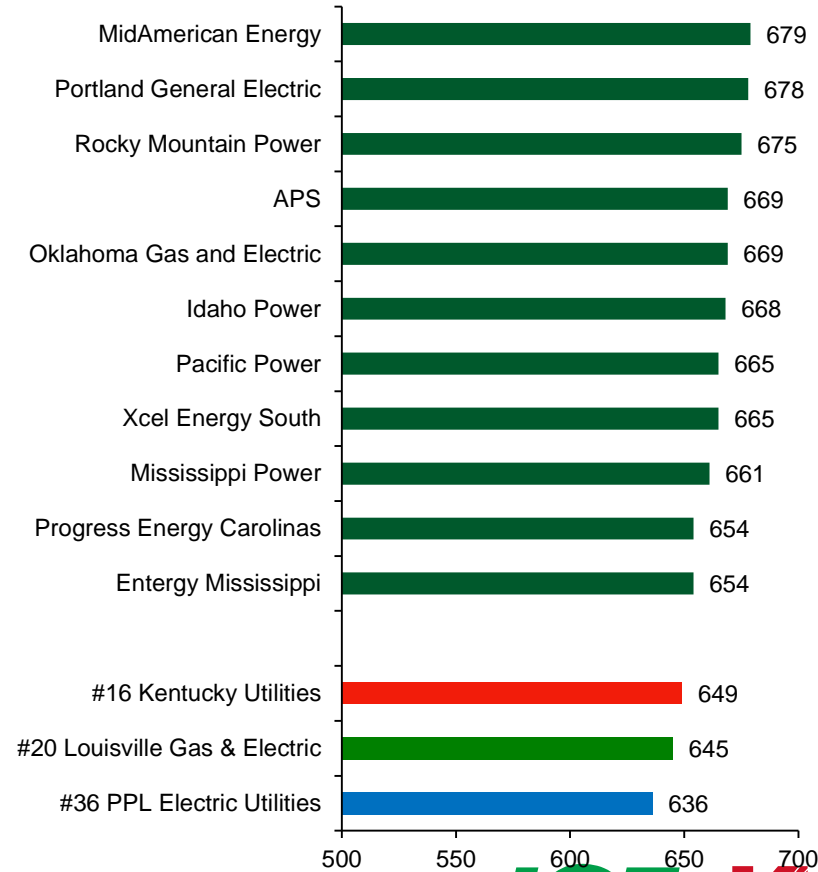
# Plan Highlights

## J.D. Power & Associates Electric Residential Study – IOUs Rankings

2010



2011



PPL companies

# Plan Highlights

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- Safety
  - *Continue to partner with Energy Services to build on safety synergies*
  - *Continue commitment to workforce and public safety*
  - *Continue to focus on motor vehicle safety and ensuring DOT compliance*
  - *Sharing safety best practices throughout the industry*
  - *Have won 12 international, national and state awards as well as other recognition*



# Plan Highlights

- Customer Experience

- *Advance the “Customer Experience” strategy/initiative*
- *Continue investments in enhanced customer contact channels and the migration to a Corporate “Unified Communications” platform*
- *Continue progress on enhancements to Customer Care System functionality*
- *Enhance our “Customer Advocacy” role through partnerships with customer focus groups*
- *Continue commitment to corporate citizenship and community involvement*
- *Create tariffs and regulations that competitively position the company and respect the overall impact on customers*
- *Continue to expand the portfolio of customer energy efficiency programs, including customer education on the need for energy efficiency*
- *Advance our understanding of customer behavior while gaining insight into customer needs*
- *Develop and pilot an overall Customer Experience index*



# Plan Highlights

- Reliability
  - *Continue investments in electric and gas system infrastructure to meet projected demand and regulatory requirements*
  - *Invest in electric and gas infrastructure replacement to address the aging system and improve system performance*
  - *Increase investments in both infrastructure and technology to improve electric system reliability and storm restoration processes*
  - *Invest in additional gas compression, equipment upgrades, pipelines and new gas wells to improve overall reliability, mitigate risk and maintain storage field deliverability*



# Plan Highlights

- OPEX
  - *On target in 2011 to achieve 7&5 approved forecast.*
  - *Compounded Annual Growth Rate (CAGR) from 2011-2016 is 3.4%.*
  - *Major Initiatives:*
    - Customer Experience Strategy
    - Reliability - Hazard Tree Program
    - Industry Regulatory Compliance
  - *Major Financial Risks:*
    - Storm Restoration
    - Customer Hardship and Uncollectible Accounts (uncertainty with LIHEAP)
    - Industry Regulatory Compliance



# Plan Highlights

- Capital

- *On target in 2011 to achieve 7&5 approved forecast.*

- *Compounded Annual Growth Rate (CAGR) from 2011-2016 is 6.5%.*

- *Major Customer Initiatives:*

- Energy Efficiency Programs and Services
- Circuit Hardening / Reliability / Asset Replacement
- Pole Inspection and Treatment Program
- Distribution Automation
- Substation Enhancements
- Mobile Technology / Work Management Replacement
- Gas Leak Mitigation
- Gas Service Riser and Service Line Ownership and Replacement
- Magnolia Gas Compressor Addition
- Gas Compressor Station and System Enhancements
- Pipeline Integrity
- Vehicle Purchases
- Smart Grid Pilot



# Major Assumptions

- Energy Delivery improves our position in the residential J.D. Power and RCCS surveys with a continued focus on the Customer Experience.
- Customer expectations regarding levels of service and availability of information will continue to increase.
- Energy Efficiency projects and education will increase and continue to be an area of focus.
- New Business activity is flat 2011 compared to 2010. Moderate volume and inflationary increases assumed through the planning period.
- Circuit hardening and reliability initiatives have increased investments.
- Storm budgets are based on 5 year average.
- The plan includes no significant changes to industry regulation.
- Gas service riser and service line ownership and replacement program will be implemented.





# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>OPEX/Other Expenses</b>							
Labor - Raw	51,789	54,125	61,308	64,856	67,391	69,415	71,499
Labor - Burdens	14,644	14,421	15,628	16,527	16,823	17,328	17,847
<b>Total Labor</b>	<b>66,433</b>	<b>68,546</b>	<b>76,936</b>	<b>81,383</b>	<b>84,214</b>	<b>86,743</b>	<b>89,346</b>
<b>Non Labor</b>							
Vegetation Management	16,595	20,334	22,307	21,611	22,056	22,441	22,889
Bad Debt	12,877	11,622	11,500	12,000	12,470	12,709	12,952
Storm Restoration <sup>1</sup>	2,234	5,609	5,012	4,658	4,318	4,404	4,492
Contributions	1,007	1,244	1,263	1,597	1,629	1,662	1,695
Outside Services	38,880	41,229	42,020	45,339	46,440	47,203	45,563
Other Non Labor	33,319	33,485	34,372	36,514	37,199	38,058	37,801
<b>Total Non Labor</b>	<b>104,912</b>	<b>113,523</b>	<b>116,474</b>	<b>121,719</b>	<b>124,112</b>	<b>126,477</b>	<b>125,392</b>
<b>Subtotal OPEX/Other expense</b>	<b>171,345</b>	<b>182,069</b>	<b>193,410</b>	<b>203,102</b>	<b>208,326</b>	<b>213,220</b>	<b>214,738</b>
Gross Margin Expenses *	27,714	32,219	30,737	36,468	39,846	38,211	39,554
<b>Total Income Statement items</b>	<b>199,059</b>	<b>214,288</b>	<b>224,147</b>	<b>239,570</b>	<b>248,172</b>	<b>251,431</b>	<b>254,292</b>

<sup>1</sup>Total Storm Restoration including labor is \$4.2M for 2010, \$8.7M for 2011, \$6.9M for 2012-2014, \$7.1M for 2015, and \$7.2M for 2016.

\* (see next slide for detail)



PPL companies

# Financial Performance

## 2010-2016 Margin Expenses / Cost of Sales (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Retail - DSM	23,793	28,800	27,180	32,711	36,004	34,292	35,557
Distribution - Fuel Gas	3,921	3,419	3,557	3,757	3,842	3,919	3,997
<b>Total Margin/Cost of Sales</b>	<b>27,714</b>	<b>32,219</b>	<b>30,737</b>	<b>36,468</b>	<b>39,846</b>	<b>38,211</b>	<b>39,554</b>

Note: DSM numbers are consistent with the 2011 DSM filing and are contingent upon PSC approval.



# Financial Performance

## 2012-2016 Target Comparison (\$000)

	2012	2013	2014	2015	2016
Total OPEX/Other Expense	193,410	203,102	208,326	213,220	214,738
Total Gross Margin (if applicable)	30,737	36,468	39,846	38,211	39,554
<b>Total</b>	<b>224,147</b>	<b>239,570</b>	<b>248,172</b>	<b>251,431</b>	<b>254,292</b>
Total OPEX/Other Expense Target	195,776	204,754	210,339	215,932	221,690
Total Gross Margin Target (if applicable)	43,761	45,464	47,870	48,187	49,418
<b>Total Target</b>	<b>239,537</b>	<b>250,218</b>	<b>258,209</b>	<b>264,119</b>	<b>271,108</b>
<b>Variance to Target</b>	<b>15,390</b>	<b>10,648</b>	<b>10,037</b>	<b>12,688</b>	<b>16,816</b>
<b>Major Variance Contributors:</b>					
Bad Debt	1,000	1,000	1,030	1,061	1,093
Gas Distribution Operator Qualifications	1,282	1,318	1,362	1,396	1,431
Gas Distribution - Gas Risers/Service Line Ownership	-	(1,215)	(1,251)	(1,289)	(1,327)
OPEX - Various Savings	84	549	872	1,544	5,755
<b>Subtotal OPEX Variance</b>	<b>2,366</b>	<b>1,652</b>	<b>2,013</b>	<b>2,712</b>	<b>6,952</b>
Cost of Sales - Retail DSM	13,629	9,622	8,671	10,636	10,536
Cost of Sales - Fuel Gas	(605)	(626)	(647)	(660)	(672)
<b>Subtotal Cost of Sales Variance</b>	<b>13,024</b>	<b>8,996</b>	<b>8,024</b>	<b>9,976</b>	<b>9,864</b>
<b>Total Variance Contributors</b>	<b>15,390</b>	<b>10,648</b>	<b>10,037</b>	<b>12,688</b>	<b>16,816</b>



# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	2012	2013	2014	2015	2016
Total Capital	220,685	268,521	253,587	297,317	281,723
Target	233,009	246,295	240,556	247,081	237,809
<b>Variance To Target</b>	<b>12,324</b>	<b>(22,226)</b>	<b>(13,031)</b>	<b>(50,236)</b>	<b>(43,914)</b>
<b>Major Drivers of Variance:</b>					
Gas Service Risers/Service Line Ownership	-	(30,722)	(31,645)	(32,595)	(33,573)
Pole Inspection Program	(2,345)	(2,451)	(2,566)	(2,691)	(2,821)
Gas Leak Mitigation	746	(356)	(86)	(295)	(25,127)
New Business (Excl. Gas Risers)	4,599	9,200	7,220	7,235	6,965
Major Gas System Enhancements	-	-	-	(12,500)	-
GC&S and Other Gas System Enhancements	(1,820)	(1,046)	(669)	(7,908)	(1,476)
Electric System Enhancements	5,843	4,594	18,827	11,311	15,224
Repair/Maintenance Cost	(3,355)	(2,092)	(3,392)	(1,532)	(3,029)
DSM - Energy Efficiency	9,174	477	(7,667)	(8,708)	(5,681)
IT	500	(3,150)	4,100	(4,875)	3,300
Vehicle Purchases	(960)	3,000	3,000	3,000	3,000
All Other	(58)	320	(153)	(678)	(696)
<b>Total Major Drivers of Variance</b>	<b>12,324</b>	<b>(22,226)</b>	<b>(13,031)</b>	<b>(50,236)</b>	<b>(43,914)</b>



# Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Distribution</b>							
Support Groups	33	38	40	41	41	41	41
Asset Management	65	66	67	71	71	71	71
Distribution Operations	667	678	689	694	700	699	699
Gas Control and Storage	116	118	121	123	123	123	123
Gas Planning and Supply	5	5	5	5	5	5	5
Transportation	3	3	3	3	3	3	3
<b>Total Distribution</b>	<b>889</b>	<b>908</b>	<b>925</b>	<b>937</b>	<b>943</b>	<b>942</b>	<b>942</b>
<b>Retail and Metering</b>							
Retail Executive and Support	2	2	2	2	2	2	2
Customer Service and Marketing	261	326	372	372	372	372	372
Revenue Processes & Metering	203	212	225	233	236	236	236
Energy Efficiency	21	25	26	29	29	29	29
<b>Total Retail and Metering</b>	<b>487</b>	<b>565</b>	<b>625</b>	<b>636</b>	<b>639</b>	<b>639</b>	<b>639</b>
<b>Operating Services</b>							
Director and Support	2	2	2	2	2	2	2
Contract Management	2	2	2	2	2	2	2
Facility Services	15	15	15	15	15	15	15
Administration Services	4	5	7	7	7	7	7
Real Estate and Right of Way	7	6	6	6	6	6	6
<b>Total Operating Services</b>	<b>30</b>	<b>30</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>
<b>TOTAL</b>	<b>1,406</b>	<b>1,503</b>	<b>1,582</b>	<b>1,605</b>	<b>1,614</b>	<b>1,613</b>	<b>1,613</b>
From 2011 MTP		1,487	1,503	1,508			
<b>Variance to 2011 MTP</b>		<b>(16)</b>	<b>(79)</b>	<b>(97)</b>			
FTE 2012 MTP		1,503	1,582	1,605			
FTE 2011 MTP		1,487	1,503	1,508			
<b>Variance to 2011 MTP</b>		<b>(16)</b>	<b>(79)</b>	<b>(97)</b>			

• Significant increases are due to the Retail Action Plan and contractor rebalancing efforts.



# Operational Performance

## Key Performance Indicators

KPI	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Safety	1.05	1.40	1.85	1.80	1.80	1.80	1.80
SAIFI	1.11	1.08	1.03	1.03	1.01	1.01	1.01
SAIDI	100.29	103.00	98.00	98.00	96.00	96.00	96.00
Overall Customer Satisfaction (points)	9	9	18	18	18	18	18
Overall Customer Experience	NA	NA	8.5	8.5	8.5	8.5	8.5
Cash Cost Per Customer - Distribution Electric	214.69	226.85	252.92	280.25	267.47	291.46	287.27
Cash Cost Per Customer - Distribution Gas	123.11	152.44	153.89	265.88	271.96	271.14	280.38
O&M Cost Per Customer - Retail Electric	69.05	74.88	75.23	81.28	85.02	84.18	85.87
O&M Cost Per Customer - Retail Gas	38.52	32.24	40.55	44.88	46.39	45.79	46.82



# Plan Risks

- Increased capital and O&M costs due to likely industry regulatory actions
- Additional Mitigation from Gas Transmission Line Inspections
- Customer Hardship and Uncollectible Accounts (uncertainty with LIHEAP)
- Economic Development and the Pace of the Economic Recovery
- Storm Restoration
- Energy Efficiency Regulatory Approvals
- Material and Equipment Price Increases
- Fuel Prices



# Appendix





## 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	193,410	203,102	208,326	213,220	214,738
Prior Plan (Orig Target)	221,850	228,778	235,007	241,517	248,220
<b>Variance</b>	<b>28,440</b>	<b>25,676</b>	<b>26,681</b>	<b>28,297</b>	<b>33,482</b>
<b><u>Variance Explanations</u></b>					
Change in Burden Methodology	35,353	34,608	35,411	36,474	37,568
IT Adjustment - Ongoing OM	1,025	1,025	1,025	1,045	1,066
Retail Action Plan (Includes Metering)	(5,270)	(5,695)	(5,838)	(6,013)	(6,194)
Gas Regulatory - Pressure Tests	(350)	(5,000)	(5,000)	(5,000)	(1,500)
Gas Dist - Gas Risers/Service Line Ownership	-	(1,215)	(1,251)	(1,289)	(1,327)
Storm Restoration to 5 year average	(1,800)	(1,800)	(1,800)	(1,800)	(1,800)
Retail - Energy Efficiency VA Program	(540)	(561)	(584)	(599)	(614)
Retail - Outside Services Reductions	239	790	837	854	871
Retail - Labor increases over 2011 MTP	-	(380)	(282)	(290)	(299)
WFP Impact over 2011 MTP	(336)	(583)	(678)	(698)	(719)
Incremental Target Addition in 2010 Plan	-	4,000	4,080	4,162	4,245
Bad Debt	(200)	-	(230)	(224)	(218)
Various Reductions Taken	319	487	991	1,675	2,403
<b>Total Variance</b>	<b>28,440</b>	<b>25,676</b>	<b>26,681</b>	<b>28,297</b>	<b>33,482</b>



## 2012-2016 Margin/Cost of Sales Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	30,737	36,468	39,846	38,211	39,554
Prior Plan (Orig Target)	43,776	45,481	47,886	48,204	49,436
<b>Variance</b>	<b>13,039</b>	<b>9,013</b>	<b>8,040</b>	<b>9,993</b>	<b>9,882</b>
<b><u>Variance Explanations</u></b>					
Change in Burden Methodology	15	17	16	17	18
Fuel Gas	(605)	(626)	(647)	(660)	(672)
Retail - DSM	13,629	9,622	8,671	10,636	10,536
<b>Total Variance</b>	<b>13,039</b>	<b>9,013</b>	<b>8,040</b>	<b>9,993</b>	<b>9,882</b>



## 2012-2016 Cost of Removal Comparison (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	9,914	11,613	10,078	13,120	13,021
Prior Plan	10,997	10,699	10,915	11,177	11,445
<b>Variance</b>	<b>1,083</b>	<b>(914)</b>	<b>837</b>	<b>(1,943)</b>	<b>(1,576)</b>

### Variance Explanations

New Business	(333)	(229)	-	(50)	(115)
Gas Main Replacements	(754)	(815)	(850)	(914)	-
Reliability and Sys Enhancements	293	(731)	364	(1,365)	(1,290)
Pole Inspection and Treatment	547	534	672	575	480
Gas Control and Storage	140	(816)	(323)	(968)	(1,077)
System Restoration (Non Weather)	675	666	690	156	98
Repair 3rd Party Damages	596	595	625	623	575
Repair/Replace Defective Equip.	71	72	179	-	(247)
Operating Services	(152)	(190)	(520)	-	-
<b>Total Variance</b>	<b>1,083</b>	<b>(914)</b>	<b>837</b>	<b>(1,943)</b>	<b>(1,576)</b>



# 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Distribution</b>							
New Business	55,095	59,443	57,882	59,010	63,639	66,472	69,716
Enhance the Network	63,260	51,632	53,609	79,885	66,030	77,906	77,685
Maintain the Network	52,645	59,550	76,271	89,426	82,642	103,565	94,581
Repair the Network	11,876	12,284	10,715	10,878	11,046	11,348	11,657
Miscellaneous	7,259	9,089	8,740	13,006	8,571	17,170	11,071
<b>Total Distribution</b>	<b>190,135</b>	<b>191,998</b>	<b>207,217</b>	<b>252,205</b>	<b>231,928</b>	<b>276,461</b>	<b>264,710</b>
<b>Retail</b>	3,527	1,315	4,583	8,881	11,004	10,480	7,059
<b>Metering</b>	5,063	4,606	4,769	4,974	4,815	5,390	4,818
<b>Operating Services</b>	5,668	7,578	4,116	2,461	5,840	4,986	5,136
<b>Total Capital</b>	<b>204,393</b>	<b>205,497</b>	<b>220,685</b>	<b>268,521</b>	<b>253,587</b>	<b>297,317</b>	<b>281,723</b>



## 2010-2016 Other Balance Sheet Costs (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Local Engineering							
Labor	15,383	17,965	15,769	16,342	16,840	17,422	17,945
Non labor	3,254	3,939	3,362	3,272	3,080	3,066	3,128
<b>Total</b>	<b>18,637</b>	<b>21,904</b>	<b>19,131</b>	<b>19,614</b>	<b>19,920</b>	<b>20,488</b>	<b>21,073</b>
Transportation	19,812	19,994	21,597	21,980	22,418	22,866	23,324
Operating Services Clearing (Non Labor)	2,955	3,317	3,389	3,455	3,531	3,602	3,674
Preliminary Engineering - Gas Riser Sampling	350	-	-	-	-	-	-
<b>Total Other Costs</b>	<b>41,754</b>	<b>45,215</b>	<b>44,117</b>	<b>45,049</b>	<b>45,869</b>	<b>46,956</b>	<b>48,071</b>





**PPL companies**

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# General Counsel Organization

2012 - 2016

*September 29, 2011*

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# Plan Highlights

- The 2011 OPEX forecast for the General Counsel and Human Resources Organization is \$3.6 million favorable to the 2011 Budget. The variance is attributable to favorable Outside Counsel spending, Other Outside Services spending, and a reduction in Donations, partially offset by increased Environmental fees.
- General Counsel and Human Resources are \$835K favorable to target for the 2012 MTP primarily due to the lower amortization of rate case expenses and lower Outside Counsel fees, partially offset by increased Environmental fees.





# Major Assumptions

- **Legal/EVP**

- *No contingent budgets have been proposed*
- *Hourly rates of outside providers will not materially increase*
- *No new material litigation claims arise*

- **Corporate Communications**

- *Will take advantage of non-traditional tools to gain positive rebranding recognition.*
- *Energy Efficiency programs will continue to grow and will require support through targeted advertising/marketing programs.*
- *Will continue to manage all marketing and advertising within Communications and transfer of (2) FTE's from within Retail Marketing/Research to assist with new mediums of communications.*



# Major Assumptions

- **Corporate Responsibility**

- *Nonprofit organizations will continue to experience financial challenges.*
- *Anticipate greater scrutiny of our community activities and heightened expectations for our role as a funding partner.*
- *Maintaining status in corporate citizenship will require us to develop additional CR programs – particularly programs of interest to our rural customers.*
- *Must be prepared to engage in community activities which portray us as an environmentally responsible corporate citizen.*

- **Compliance**

- *Addition of Manager, CIP Program position within the Department*
- *No material change in role*



# Major Assumptions

- **External Affairs**
  - *Increased legislative and regulatory activity by local, state and federal governmental entities affecting the company's activities in the operational, regulatory and environmental areas.*
  - *Pressure by local, state and federal governmental entities upon the company to use its monopolistic status to enhance governmental revenue.*
  - *Public comparison of:*
    - **Political contributions between PPL and LG&E/KU**
    - **Levels of engagement and contributions with and to advocacy groups**
    - **PPL and LG&E/KU legislative and regulatory positions on various issues**
    - **DSM activities and level of revenue**



# Major Assumptions

- **State Regulation & Rates**

- *Filing of three base rate cases for LG&E and KU in KY*
- *Filing of two base rate cases for KU/ODP in VA*
- *Number of CPCN proceedings for generation and transmission facilities*
- *Significant ECR filings related to proposed environmental regulations*
- *Possible smart-meter pilot rollout and Responsive Pricing Program*
- *Possible Federal climate change and renewable legislation passed*
- *Increase in energy efficiency programs*
- *KPSC Management Audit of Company functions*
- *Filing of Integrated Resource Plans with KPSC and VSCC*



# Major Assumptions

- **Federal Regulation & Policy**

- *Uncertain and disproportionate implementation of regional transmission planning and cost allocation rules.*
- *Expanded FERC authority over transmission siting and certificate authority, expansion of the definition of Bulk Electric System, and increased pressure on traditional federal state relationship.*

- **Environmental**

- *Coal fired utilities will face tighter limits resulting in increased regulatory and PR burden.*
- *New environmental regulations will require added controls and compliance monitoring.*
- *Increased volume and complexity of environmental issues will require additional internal and external resources.*
- *Analysis of environmental risk will require more robust comprehensive environmental audits/assessments.*



# Major Assumptions

- **Human Resources**

- *Current and potential Federal legislative initiatives may significantly affect the existing landscape and costs associated with virtually every aspect of the workforce (benefits, compensation, union relations, safety, etc.).*
- *Employee and retiree healthcare costs will continue to rise.*
- *Wellness must continue to evolve as a means of containing healthcare costs.*
- *Economic challenges, especially inflation, could affect wage and benefit offerings.*
- *The impact of demographic and generational shifts present an immediate challenge.*
- *Stakeholders will increasingly look for transparency in business practices.*
- *The pace and complexity of regulatory compliance will continue to escalate.*
- *The unions will continue to work to increase their membership.*
- *Competition for talent will require more non-traditional sourcing.*



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	9,878	10,726	11,527	11,926	12,277	12,646	13,025
Burdens	3,274	3,238	3,523	3,641	3,757	3,870	3,986
Outside Counsel	7,872	7,116	11,588	12,391	12,927	13,185	13,449
Other Outside Services	3,086	3,549	5,224	5,355	5,089	5,191	5,295
Donations	2,312	2,492	2,875	2,932	2,991	3,050	3,111
Dues & Subscriptions	2,245	2,532	2,692	2,840	3,001	3,061	3,122
Fees, Permits & Licenses	3,191	2,895	3,410	3,011	3,112	3,174	3,238
Rate Case Amortization	1,254	1,901	1,338	1,909	1,556	2,812	1,947
Other Non Labor	3,415	3,782	4,341	4,412	4,500	4,591	4,681
Subtotal OPEX/Other expense	36,528	38,231	46,518	48,417	49,210	51,580	51,854
WKE (Discontinued Operations)	1,040	2,265	910				



# Financial Performance

## 2012-2016 Target Comparison (\$000)

	2012	2013	2014	2015	2016
Total OPEX/Other Expense	46,518	48,417	49,210	51,580	51,854
Total Gross Margin (if applicable)	-	-	-	-	-
Total	<u>46,518</u>	<u>48,417</u>	<u>49,210</u>	<u>51,580</u>	<u>51,854</u>
Total OPEX/Other Expense Target	47,353	49,062	49,884	51,310	51,934
Total Gross Margin Target (if applicable)	-	-	-	-	-
Total Target	<u>47,353</u>	<u>49,062</u>	<u>49,884</u>	<u>51,310</u>	<u>51,934</u>
Variance to Target	<u>835</u>	<u>645</u>	<u>674</u>	<u>(270)</u>	<u>80</u>
Major Variance Contributors:					
Rate Case Amortization	698	515	548	(519)	(304)
Outside Counsel Fees lower than prior MTP	1,972	1,128	407	415	423
Higher Environmental Fees	(907)	(458)	(501)	(511)	(522)
Other Outside Services	(949)	(644)	156	180	89
Other Misc Expenses	21	104	64	165	394
Net Variance To Target	<u>835</u>	<u>645</u>	<u>674</u>	<u>(270)</u>	<u>80</u>





# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total Capital	675	225	225	625	800
Target	500	225	225	625	725
Variance To Target	<u><u>(175)</u></u>	<u><u>-</u></u>	<u><u>-</u></u>	<u><u>-</u></u>	<u><u>(75)</u></u>

Major Drivers of variance:

Higher projected expenses in 2012 and 2016 for the PeopleSoft upgrades



# Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Legal	23	25	25	25	25	25	25
EVP	2	2	2	2	2	2	2
Communications	16	16	17	17	17	17	17
Corporate Responsibility	4	5	6	6	6	6	6
Compliance	6	7	7	7	7	7	7
External Affairs	3	3	3	3	3	3	3
State Regulation & Rates	14	14	15	15	15	15	15
Federal Regulation & Policy	3	3	3	3	3	3	3
Environmental Affairs	13	18	19	20	20	20	20
Human Resources	33	34	35	35	35	35	35
<b>TOTAL</b>	<b>117</b>	<b>127</b>	<b>132</b>	<b>133</b>	<b>133</b>	<b>133</b>	<b>133</b>
From 2011 MTP		125	125	125			
Variance to 2011 MTP		2	7	8			
FTE 2012 MTP		125.5	130.5	131.5			
FTE 2011 MTP		123.0	124.0	124.0			
Variance to 2011 MTP		2.5	6.5	7.5			

- The 2011 Forecast includes two new positions that transferred from ES to GC for Environmental Compliance.
- The 2012 MTP includes four positions total that transferred from ES to GC for Environmental Compliance. In addition, there is one new Corporate Responsibility position to be added, one new Manager CIP in Compliance, and one additional analyst position in State Reg & Rates.
- The 2013 MTP includes the addition of one new Environmental position.



# Plan Risks

- **Legal/EVP**

- *New environmental regulations will require extraordinary legal review and input.*
- *The Company becomes embroiled in a significant legal dispute.*
- *Political environment in Kentucky is shifting as costs increase.*

- **Corporate Communications**

- *Given increased ECR, pending rate cases, possible coal price increases and pending EPA regulations, customer bills will continue to increase, potentially resulting in lower customer satisfaction levels.*
- *With growing concern regarding the environment, the public will expect a strong partnership between energy producers and energy consumers to provide additional energy efficiency programs and address and resolve environmental quality issues.*



# Plan Risks

- **Corporate Responsibility**

- *Growing public cynicism may mean public dissatisfaction with our CR efforts.*
- *Environmental groups will likely increase their activities and scrutiny requiring more community outreach.*
- *There will be closer scrutiny from regulators and public officials requiring the development of new response strategies.*

- **Compliance**

- *NERC Reliability Standards, including the Cyber Security Standards, are at particular risk of expansion.*
- *PPL expectations regarding compliance programs may affect responsibilities and roles of the Compliance Department.*
- *Extraordinary workload anticipated due to efforts to address CIP gap analysis, including pending self-reports with SERC.*



# Plan Risks

- **External Affairs**

- *Previously unseen upward pressure on customers electric rates due to increased capital expenditures for pollution control and base load generation construction. Environmental, energy efficiency, and renewable portfolio standards legislation and Federal EPA regulations place substantial compliance costs on the company and its customers.*
- *Local, State and Federal Budget shortfalls result in increased efforts to raise revenue through surcharges on the customer electric bill and increased corporate fees and taxes.*
- *Asset ownership by outside-of-the-state entity.*
- *Amount of revenue raised by the Political Action Committee needs to increase in order for the company to maintain credibility and move to the next level of public policy influence.*



# Plan Risks

- **State Regulation & Rates**

- *Growing rate base and operating expenses, coupled with regulatory lag and change of control stay-out provision, could make target returns difficult to achieve.*
- *Commission and intervenor sensitivity to rising costs could result in punitive actions beyond law and precedent – prudence could be challenged more often particularly where actual costs exceed estimates.*
- *Changes to and uncertainty in Environmental regulations could put significant pressure on Environmental Cost Recovery mechanism.*
- *Failure to get timely regulatory approvals for generation and transmission investment could put reliability, customer service and utility economics at risk.*
- *Legal challenges to KPSC’s authority to develop rate mechanisms could have broad reaching impacts to existing and potential recovery mechanisms.*
- *Legislation that changes the regulatory structure.*
- *Increased scope and diversity of intervenors in proceedings.*



# Plan Risks

- **Environmental**

- *Sharp increase in new environmental regulations and regulatory initiatives requiring additional EA staff and training.*
- *Significant increase in the number of environmental permits and permit conditions required for daily company operations which necessitate outside contractors for specialized modeling, monitoring and testing.*
- *Increased annual operation fees for Title V air permits, STAR permits, KPDES water permits, KY River Authority and special waste landfills.*
- *Increased costs for disposal of hazardous wastes, PCB wastes and spill clean-up materials.*

# Plan Risks

- **Federal Regulation & Policy**

- *Further loss of control over transmission planning and construction decisions*
- *Greater socialization of transmission costs across the entire region*
- *Increased pressure between state and federal regulators with respect to cost recovery*
- *Volatile and deteriorating regulatory climate in EPA*

- **Human Resources**

- *Economic pressures and impact on Human Resource management*
- *Effects of possible Federal legislation relating to benefits, compensation, labor, safety, and taxation*
- *Ensuring appropriate monitoring, compliance, reporting and disclosure*
- *Maintaining key recruiting relationships during restricted hiring phase*





# Appendix



# 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	46,518	48,417	49,210	51,580	51,854
Prior Plan	51,977	53,454	54,472	56,036	56,802
Variance	<u>5,459</u>	<u>5,037</u>	<u>5,262</u>	<u>4,456</u>	<u>4,948</u>
<u>Variance Explanations</u>					
Change in Burden Methodology	5,872	5,808	6,011	6,192	6,377
Other Labor, Manager CIP	(183)	(188)	(194)	(199)	(205)
Outside Counsel Spending	1,972	1,128	407	415	423
Other OS	(810)	(505)	297	320	345
Rate Case Amortization	698	515	548	(519)	(304)
Additional Env. Compliance Group	(1,071)	(1,234)	(1,236)	(1,273)	(1,311)
Increased Environmental Fees	(907)	(458)	(501)	(511)	(522)
Other NL	(112)	(29)	(70)	31	145
Total Variance	<u>5,459</u>	<u>5,037</u>	<u>5,262</u>	<u>4,456</u>	<u>4,948</u>



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) LEGAL/EVP

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	2,635	2,843	2,880	2,957	3,046	3,137	3,232
Burdens	865	880	830	852	880	907	934
Outside Counsel	7,872	7,116	11,588	12,391	12,927	13,185	13,449
Other Outside Services	932	485	1,427	1,456	1,485	1,515	1,545
Donations	243	270	260	265	271	276	281
Dues & Subscriptions	1,286	1,362	1,417	1,453	1,491	1,521	1,551
Fees, Permits & Licenses	21	16	20	20	21	21	21
Other Non Labor	917	765	790	806	820	837	855
Subtotal OPEX/Other expense	14,770	13,738	19,212	20,200	20,941	21,399	21,868



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) COMMUNICATIONS

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	1,130	1,172	1,273	1,310	1,345	1,386	1,427
Burdens	385	344	362	373	384	396	407
Other Outside Services	912	905	923	941	960	979	999
Donations	1,379	1,378	1,644	1,677	1,710	1,745	1,780
Dues & Subscriptions	15	17	18	18	18	19	19
Advertising	1,119	1,034	1,255	1,280	1,306	1,332	1,358
Other Non Labor	227	167	170	174	178	180	185
Subtotal OPEX/Other expense	<u>5,167</u>	<u>5,017</u>	<u>5,645</u>	<u>5,773</u>	<u>5,901</u>	<u>6,037</u>	<u>6,175</u>



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) CORPORATE RESPONSIBILITY

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	291	352	430	441	452	466	480
Burdens	97	104	122	126	129	133	137
Other Outside Services	110	106	108	111	113	115	117
Donations	608	750	765	780	796	812	828
Dues & Subscriptions	12	7	8	8	8	8	8
Fees, Permits & Licenses	27	-	-	-	-	-	-
Other Non Labor	286	237	242	246	252	257	262
Subtotal OPEX/Other expense	1,430	1,556	1,675	1,712	1,750	1,791	1,832



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) COMPLIANCE

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	466	490	595	610	626	645	664
Burdens	152	144	172	177	182	187	193
Other Outside Services	5	47	37	38	39	39	40
Dues & Subscriptions	8	34	35	35	36	37	38
Other Non Labor	56	97	121	123	126	129	131
Subtotal OPEX/Other expense	686	812	960	983	1,009	1,037	1,066



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) EXTERNAL AFFAIRS

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	373	368	374	384	395	407	419
Burdens	127	118	106	109	113	116	120
Other Outside Services	110	118	121	123	125	128	131
Donations	13	16	17	17	17	18	18
Dues & Subscriptions	12	16	17	17	17	18	18
Other Non Labor	88	118	117	120	124	125	127
Subtotal OPEX/Other expense	<u>723</u>	<u>754</u>	<u>752</u>	<u>770</u>	<u>791</u>	<u>812</u>	<u>833</u>



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) STATE REGULATION & RATES

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	1,065	1,189	1,271	1,272	1,310	1,350	1,390
Burdens	354	348	362	362	374	385	397
Other Outside Services	70	493	203	407	211	215	219
Donations	15	5	15	15	15	16	16
Dues & Subscriptions	31	32	32	33	33	34	35
Rate Case Amortization	1,254	1,901	1,338	1,909	1,556	2,812	1,947
Other Non Labor	104	121	123	126	130	132	134
Subtotal OPEX/Other expense	<u>2,895</u>	<u>4,089</u>	<u>3,344</u>	<u>4,124</u>	<u>3,629</u>	<u>4,944</u>	<u>4,138</u>





# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) FEDERAL REGULATION & POLICY

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	373	325	405	414	423	436	449
Burdens	126	126	115	118	121	125	128
Other Outside Services	6	16	17	17	17	18	18
Donations	-	3	3	3	3	3	3
Dues & Subscriptions	9	7	7	7	7	7	7
Other Non Labor	99	92	93	95	98	99	102
Subtotal OPEX/Other expense	612	569	640	654	669	688	707



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) ENVIRONMENTAL

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	950	1,256	1,504	1,664	1,718	1,770	1,823
Burdens	322	371	428	473	491	505	521
Other Outside Services	222	763	1,500	1,356	1,214	1,238	1,263
Donations	16	20	20	20	21	21	22
Dues & Subscriptions	841	995	1,096	1,205	1,325	1,351	1,378
Fees, Permits & Licenses	3,142	2,877	3,388	2,989	3,089	3,151	3,214
Other Non Labor	103	309	305	311	317	324	329
Subtotal OPEX/Other expense	5,595	6,591	8,241	8,018	8,175	8,360	8,550



# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000) HUMAN RESOURCES

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Raw Labor	2,596	2,733	2,795	2,874	2,960	3,049	3,140
Burdens and Other Labor	845	803	1,025	1,051	1,083	1,115	1,149
Other Outside Services	718	615	889	906	925	943	962
Donations	39	49	151	154	157	160	164
Dues & Subscriptions	32	61	63	64	66	67	68
Fees, Permits & Licenses	1	2	2	2	2	2	2
Other Non Labor	418	843	1,124	1,132	1,153	1,177	1,200
Subtotal OPEX/Other expense	4,649	5,106	6,049	6,183	6,346	6,513	6,685



# 2010-2016 Regulatory Assets (\$000)

2012-2016 MTP

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>LG&amp;E</b>							
Gen Mgmt Audit LGE - Electric	-	96	-	-	434	-	-
Gen Mgmt Audit LGE - Gas	-	73	-	-	266	-	-
LG&E Rate Case - Electric	780	-	928	-	938	-	950
LG&E Rate Case - Gas	451	-	440	-	449	-	460
<b>Total LG&amp;E</b>	<u>1,232</u>	<u>168</u>	<u>1,368</u>	<u>-</u>	<u>2,087</u>	<u>-</u>	<u>1,410</u>
<b>KU</b>							
Gen Mgmt Audit KU - Electric	-	114	-	-	700	-	-
KU Rate Case - Electric	1,922	-	2,132	-	2,150	-	2,200
<b>Total KU</b>	<u>1,922</u>	<u>114</u>	<u>2,132</u>	<u>-</u>	<u>2,850</u>	<u>-</u>	<u>2,200</u>
<b>Total Regulatory Asset Costs</b>	<u>3,154</u>	<u>283</u>	<u>3,500</u>	<u>-</u>	<u>4,937</u>	<u>-</u>	<u>3,610</u>





**PPL companies**

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# IT Organization 2012 - 2016

*September 29, 2011*

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# IT Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Labor	15,400	16,333	18,374	20,339	21,704	22,355	23,026
Burdens	5,109	4,924	5,277	5,903	6,327	6,517	6,713
Outside Services	2,703	2,500	2,558	3,311	3,012	2,133	2,187
Computer/Office Supplies	564	575	587	598	611	623	636
Training, Travel & Meals	1,035	1,056	935	915	1,052	1,073	1,451
Telecom/Leased Lines	2,810	2,894	2,792	2,857	2,921	2,921	2,921
License & Maintenance Fees	11,363	11,438	13,691	14,376	15,094	16,648	17,480
Other	520	484	585	771	779	428	19
O&M Implications from Cap Projects			923	788	405	490	467
Subtotal OPEX/Other expense	<u>39,504</u>	<u>40,204</u>	<u>45,722</u>	<u>49,858</u>	<u>51,905</u>	<u>53,188</u>	<u>54,900</u>



# IT Financial Performance

## 2012-2016 Target Comparison (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total OPEX/Other Expense	45,722	49,858	51,905	53,187	54,899
Total OPEX/Other Expense Target	<u>47,322</u>	<u>49,858</u>	<u>51,905</u>	<u>53,187</u>	<u>54,899</u>
Variance to Target	<u>(1,600)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>



# IT Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total Capital	25,496	32,770	31,392	39,464	42,906
Target	25,496	32,770	30,392	37,764	42,806
Variance To Target	<u>-</u>	<u>-</u>	<u>(1,000)</u>	<u>(1,700)</u>	<u>(100)</u>
Prior Plan	25,496	33,020	31,142	59,014	81,806

### Major Drivers:

Decreased Budget for ERP: 250K, \$750K, \$21.25M, \$39M for 2013-2016 respectively.

Mobile Radio System Console (\$3M) 2014-2015 and SE KY MW Buildout (\$5M) 2014-2016 requested by LOB





# IT Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
IT Bus Apps	93	80	83	84	85	85	85
IT Infrastructure	95	97	103	108	109	109	109
IT Client Services	50	70	74	77	76	76	76
IT Security	8	16	16	16	16	16	16
IT VP	2	2	2	2	2	2	2
<b>TOTAL</b>	<b>248</b>	<b>265</b>	<b>278</b>	<b>287</b>	<b>288</b>	<b>288</b>	<b>288</b>
FTE		262.5	274.5	275.0			
From 2011 MTP		265	276	283			

• *Major Developments/Changes*



# IT 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	<u>2012 Budget</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>
Current Plan	45,722	49,858	51,905	53,187	54,899
Prior Plan	<u>56,050</u>	<u>58,778</u>	<u>61,172</u>	<u>72,843</u>	<u>80,551</u>
Variance	<u><u>(10,328)</u></u>	<u><u>(8,920)</u></u>	<u><u>(9,267)</u></u>	<u><u>(19,656)</u></u>	<u><u>(25,652)</u></u>
<u>Variance Explanations</u>					
Burden Adj to Corporate	(9,730)	(9,924)	(10,271)	(10,579)	(10,896)
O&M Commitment Letters	967	967	967	987	1,006
ERP Adjustment				(10,100)	(15,800)
First round cuts	(1,600)				
Other	<u>35</u>	<u>37</u>	<u>37</u>	<u>36</u>	<u>38</u>
Total Variance	<u><u>(10,328)</u></u>	<u><u>(8,920)</u></u>	<u><u>(9,267)</u></u>	<u><u>(19,656)</u></u>	<u><u>(25,652)</u></u>



# IT 2012-2016 Capital Reconciliation (w COR) –Accrual Basis K. Blake

## (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	25,496	32,770	31,392	39,464	42,906
Prior Plan	25,496	33,020	31,142	59,014	81,806
Variance	-	250	(250)	19,550	38,900
<u>Variance Explanations</u>					
Reduced ERP Project		250	750	21,250	39,000
Mobile Radio Console & SE KY MW BO			(1,000)	(1,700)	(100)
Total Variance	-	250	(250)	19,550	38,900



# IT 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Ongoing Capital</b>							
Telecom/Data Networks	4,990	5,097	3,731	5,716	11,518	8,066	4,515
Infrastructure	10,868	3,900	4,775	1,719	7,845	6,500	6,630
Client Services	790	862	640	728	848	865	882
Desktop Operations	4,305	2,853	3,769	4,433	3,851	3,928	4,007
Security	863	1,222	1,131	427	830	855	872
<b>Special Projects</b>							
<i>W KY Sonet Microwave Buildout</i>			3,021	1,845			
Voice Over IP Campus Upgrade			2,512	3,500			
CRM/ECC Enhancement (CCS)	7,674	4,985	3,800	12,200	5,000	5,000	10,000
CIP Compliance		1,000	1,067	1,200	1,200		
VDI		1,700	1,050	1,002	300		
ERP						14,250	16,000
<b>Total Capital (107001)</b>	<b>29,490</b>	<b>21,619</b>	<b>25,496</b>	<b>32,770</b>	<b>31,392</b>	<b>39,464</b>	<b>42,906</b>





**PPL companies**

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# CFO Organization 2012 - 2016

*September 29, 2011*

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- Plan Highlights
- Major Assumptions
- Financial Performance
  - *Operating Expense*
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  - *Plan Risks*
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# Plan Highlights

- Key Items
  - *Operating expenses in all MTP years are slightly below targets.*
  - *Capital is above Prior Plan levels, but is in line with RAC approved targets.*
  - *NERC Critical Infrastructure Protection (CIP)*
  - *CCS Investment*
  - *Voice Over IP Upgrade*
  - *VDI Infrastructure*
  - *ERP Analysis and Implementation lowered to \$46.25M in the LTP for 2013-2017*



# Major Assumptions

- *Plan assumes full employment (currently 20 open positions)*
- *Oracle Upgrade moved to start in 2012. Bulk of spending 2013.*
- *Headcount is consistent with the Workforce Plan.*
  - Finance and SC has no change from prior plan in 2012
  - IT increased by 2 from prior plan in 2012
- *Regulatory requirements for NERC CIP will continue to expand in scope and necessitate further IT investment.*
- *Ongoing investment in CCS is required for system sustainability and application enhancements.*





# Major Assumptions

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- *Hardware and software pricing grows by 5% each year throughout the term of the MTP.*
- *IT Security continues to be a major concern and will require ongoing investment to protect us from cyber threats and data exposure risks.*

# Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Labor	25,699	27,755	31,065	32,661	34,371	35,402	36,464
Burdens	8,680	8,311	9,034	9,472	9,980	10,280	10,588
Telecom/Leased Lines	2,810	2,894	2,792	2,857	2,921	2,921	2,921
IT Software License & MTCE Fees	11,363	11,438	13,691	14,376	15,094	16,648	17,480
Audit Fees	1,854	1,526	1,660	1,740	1,825	1,862	1,899
Bank Fees	1,227	1,539	1,251	1,276	1,302	1,328	1,355
Insurance Mgmt Fee	993	703	1,013	1,043	1,075	1,097	1,118
Training, Travel, Meals	1,437	1,646	1,635	1,613	1,757	1,792	2,185
Outside Services	3,588	3,003	3,170	3,589	3,296	2,422	2,483
Other	2,033	2,042	2,444	2,351	2,391	2,070	1,695
O&M Implications from Cap Projects			923	788	405	490	467
Subtotal OPEX/Other expense	59,684	60,857	68,678	71,766	74,417	76,312	78,655



# Financial Performance

## 2012-2016 Target Comparison (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total OPEX/Other Expense	68,678	71,766	74,417	76,312	78,655
Total OPEX/Other Expense Target	<u>69,312</u>	<u>72,451</u>	<u>75,229</u>	<u>77,282</u>	<u>79,819</u>
Variance to Target	<u>634</u>	<u>685</u>	<u>812</u>	<u>970</u>	<u>1,164</u>
Major Variance Contributors:					
Audit Fees	256	272	227	232	236
Bank Fees	170	208	248	274	328
Labor	151	232	326	401	480
Insurance	75	83	74	75	77
Training	(74)	(67)	(57)	(58)	(59)
Other	<u>56</u>	<u>(43)</u>	<u>(6)</u>	<u>46</u>	<u>102</u>
Total Variance Contributors	<u>634</u>	<u>685</u>	<u>812</u>	<u>970</u>	<u>1,164</u>



# Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	2012	2013	2014	2015	2016
Total Capital	28,328	41,467	32,418	40,664	44,006
Target	33,106	35,550	31,892	39,314	44,406
Variance To Target	<b>4,778</b>	<b>(5,917)</b>	<b>(526)</b>	<b>(1,350)</b>	<b>400</b>

Major Drivers of variance:

Oracle Upgrade - Increased by \$1.2M in total. \$4.5M was moved from 2012 to 2013.

Wallstreet Suite -\$194 for 2012 and \$346 2013 for a total of \$540K



# Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
CFO	2	2	2	2	2	2	2
IT CIO	2	2	2	2	2	2	2
AUDIT SERVICES	13	12	12	12	12	12	12
TREASURER	15	19	19	19	19	19	19
CONTROLLER	56	56	56	56	56	56	56
TAX & PAYROLL	16	16	16	16	16	16	16
PLANNING & DEV	25	26	26	26	26	26	26
SUPPLY CHAIN	48	48	48	48	48	48	48
IT BUS APPS	93	80	83	84	85	85	85
IT INFRASTRUCTURE	95	97	103	108	109	109	109
IT CLIENT SERVICES	50	70	74	77	76	76	76
IT SECURITY	8	16	16	16	16	16	16
<b>TOTAL</b>	<b>423</b>	<b>444</b>	<b>457</b>	<b>466</b>	<b>467</b>	<b>467</b>	<b>467</b>
From 2011 MTP		443	455	463			
Variance to 2011 MTP		-1	-2	-3			
FTE 2012 MTP		438.5	450.5	451.0			
FTE 2011 MTP		439.0	446.5	454.5			
Variance to 2011 MTP		0.5	-4.0	3.5			



# Plan Risks

- *SEC Reporting requirements*
- *New accounting pronouncements*
- *US GAAP/IFRS Convergence*
- *NERC CIP Program compliance requirements are still developing.*
- *Storage requirements – projected increase in storage demand (PPL, NERC CIP).*
- *PPL Initiatives*



# Appendix



## 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	<u>2012 Budget</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>
Current Plan	68,678	71,766	74,417	76,312	78,655
Prior Plan	<u>86,022</u>	<u>89,296</u>	<u>92,636</u>	<u>105,270</u>	<u>114,000</u>
Variance	<u><u>17,344</u></u>	<u><u>17,530</u></u>	<u><u>18,219</u></u>	<u><u>28,958</u></u>	<u><u>35,345</u></u>
<u>Variance Explanations</u>					
New Burden Methodology	15,924	16,062	16,624	17,122	17,636
O&M Commitment Letters	(967)	(967)	(967)	(987)	(1,006)
ERP Adjustment	-	-	-	10,100	15,800
Bank Fees	1,920	1,958	1,997	2,024	2,078
Audit Fees	256	272	227	232	236
Labor	151	232	326	401	480
Other	56	(31)	8	61	117
Total Variance	<u><u>17,340</u></u>	<u><u>17,526</u></u>	<u><u>18,215</u></u>	<u><u>28,953</u></u>	<u><u>35,341</u></u>





## 2012-2016 Capital Reconciliation (w COR) –Accrual Basis (\$000)

	<u>2012 Budget</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>
Current Plan	28,328	41,467	32,418	40,664	44,006
Prior Plan	33,106	35,800	32,642	60,564	90,606
Variance	<u>4,778</u>	<u>(5,667)</u>	<u>224</u>	<u>19,900</u>	<u>46,600</u>
<u>Variance Explanations</u>					
Reduced ERP Project	-	250	750	21,250	39,000
Mobile Radio Console	-	-	(1,000)	(1,700)	(100)
Oracle Upgrade	4,500	(5,725)	-	-	-
Wallstreet Suite	(194)	(346)	-	-	-
ERP moved to IT	-	-	-	-	7,200
Other	472	154	474	350	500
Total Variance	<u>4,778</u>	<u>(5,667)</u>	<u>224</u>	<u>19,900</u>	<u>46,600</u>



# 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Ongoing Capital</b>							
Telecom/Data Networks	4,990	5,097	3,731	5,716	11,518	8,066	4,515
Infrastructure	10,868	3,900	4,775	1,719	7,845	6,500	6,630
Client Services	790	862	640	728	848	865	882
Desktop Operations	4,305	2,853	3,769	4,433	3,851	3,928	4,007
Security	863	1,222	1,131	427	830	855	872
Other CFO Projects	1,229	988	1,024	705	1,026	1,200	1,100
<b>Special Projects</b>							
<i>W KY Sonet Microwave Buildout</i>			3,021	1,845			
Voice Over IP Campus Upgrade			2,512	3,500			
CRM/ECC Enhancement (CCS)	7,674	4,985	3,800	12,200	5,000	5,000	10,000
CIP Compliance		1,000	1,067	1,200	1,200		
VDI		1,700	1,050	1,002	300		
ERP						14,250	16,000
Oracle Upgrade	26		1,500	7,500			
Powerplant	586	206	308	492			
<b>Total Capital (107001)</b>	<b>31,331</b>	<b>22,813</b>	<b>28,328</b>	<b>41,467</b>	<b>32,418</b>	<b>40,664</b>	<b>44,006</b>



## 2010-2016 Other Balance Sheet Costs (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Stores Expense							
Labor	1,359	1,457	1,472	1,476	1,459	1,503	1,548
Non labor	115	558	464	473	482	492	501
Total	<u>1,474</u>	<u>2,015</u>	<u>1,936</u>	<u>1,949</u>	<u>1,941</u>	<u>1,994</u>	<u>2,049</u>



# Finance and SC Organization



# Finance and SC Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Labor	10,299	11,422	11,971	12,322	12,667	13,047	13,438
Burdens	3,571	3,387	3,477	3,569	3,653	3,763	3,875
Audit Fees	1,854	1,526	1,660	1,740	1,825	1,862	1,899
Bank Fees	1,227	1,539	1,251	1,276	1,302	1,328	1,355
Insurance Mgmt Fee	993	703	1,013	1,043	1,075	1,097	1,118
Training, Travel, Meals	402	590	700	698	705	719	733
OS/Consulting	885	503	312	278	284	290	295
Other	949	983	972	982	1,001	1,019	1,043
Subtotal OPEX/Other expense	20,180	20,653	21,356	21,908	22,512	23,125	23,756



# Finance and SC Financial Performance

## 2012-2016 Target Comparison (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total OPEX/Other Expense	21,356	21,908	22,512	23,125	23,756
Total OPEX/Other Expense Target	<u>21,990</u>	<u>22,593</u>	<u>23,324</u>	<u>24,095</u>	<u>24,920</u>
Variance to Target	<u>634</u>	<u>685</u>	<u>812</u>	<u>970</u>	<u>1,164</u>
Major Variance Contributors:					
Audit Fees	256	272	227	232	236
Bank Fees	170	208	248	274	328
Labor	151	232	326	401	480
Insurance	75	83	74	75	77
Training	(74)	(67)	(57)	(58)	(59)
Other	<u>56</u>	<u>(43)</u>	<u>(6)</u>	<u>46</u>	<u>102</u>
Total Variance Contributors	<u>634</u>	<u>685</u>	<u>812</u>	<u>970</u>	<u>1,164</u>



# Finance and SC Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	2012	2013	2014	2015	2016
Total Capital	2,832	8,697	1,026	1,200	1,100
Target	7,610	2,780	1,500	1,550	1,600
Variance To Target	<b>4,778</b>	<b>(5,917)</b>	<b>474</b>	<b>350</b>	<b>500</b>

### Major Drivers of variance:

Oracle Upgrade - 2012 to 2013

Wall Street Suite - 2012 to 2013



# Finance and SC Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
CFO	2	2	2	2	2	2	2
AUDIT SERVICES	13	12	12	12	12	12	12
TREASURER	15	19	19	19	19	19	19
CONTROLLER	56	56	56	56	56	56	56
TAX & PAYROLL	16	16	16	16	16	16	16
PLANNING & DEV	25	26	26	26	26	26	26
SUPPLY CHAIN	48	48	48	48	48	48	48
<b>TOTAL</b>	<b>175</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>	<b>179</b>
From 2011 MTP		178	179	180			
Variance to 2011 MTP		-1	0	1			
FTE 2012 MTP		176	176	176			
FTE 2011 MTP		174	175	176			
Variance to 2011 MTP		-2	-1	0			





# Finance and SC 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	2012 <u>Budget</u>	2013 <u>Plan</u>	2014 <u>Plan</u>	2015 <u>Plan</u>	2016 <u>Plan</u>
Current Plan	21,356	21,908	22,512	23,125	23,756
Prior Plan	<u>29,972</u>	<u>30,518</u>	<u>31,464</u>	<u>32,427</u>	<u>33,449</u>
Variance	<u><u>8,616</u></u>	<u><u>8,610</u></u>	<u><u>8,952</u></u>	<u><u>9,302</u></u>	<u><u>9,693</u></u>
<u>Variance Explanations</u>					
New Burden Methodology	6,194	6,138	6,353	6,543	6,740
Bank Fees	1,920	1,958	1,997	2,024	2,078
Audit Fees	256	272	227	232	236
Labor	151	232	326	401	480
Other	<u>95</u>	<u>10</u>	<u>49</u>	<u>102</u>	<u>159</u>
Total Variance	<u><u>8,616</u></u>	<u><u>8,610</u></u>	<u><u>8,952</u></u>	<u><u>9,302</u></u>	<u><u>9,693</u></u>



Basis  
(\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	2,832	8,697	1,026	1,200	1,100
Prior Plan	7,610	2,780	1,500	1,550	8,800
Variance	<u>4,778</u>	<u>(5,917)</u>	<u>474</u>	<u>350</u>	<u>7,700</u>
<u>Variance Explanations</u>					
Oracle Upgrade	4,500	(5,725)	-	-	-
Wallstreet Suite	(194)	(346)	-	-	-
ERP moved to IT	-	-	-	-	7,200
Other	472	154	474	350	500
Total Variance	<u>4,778</u>	<u>(5,917)</u>	<u>474</u>	<u>350</u>	<u>7,700</u>

Basis  
(\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Ongoing Capital</b>							
Peoplesoft Time			400	100			
WallStreet Suite			194	346			
UI Planner			100				
Supply Chain	898	458	320	249	526	200	
Other CFO Projects	331	530	10	10	500	1000	1100
<b>Special Projects</b>							
Oracle Upgrade	26		1,500	7500			
PowerPlant Upgrade	586	206	308	492			
Total Capital (107001)	<u>1,841</u>	<u>1,194</u>	<u>2,832</u>	<u>8,697</u>	<u>1,026</u>	<u>1,200</u>	<u>1,100</u>



# Finance and SC 2010-2016 Other Balance Sheet Costs (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Stores Expense							
Labor	1,359	1,457	1,472	1,476	1,459	1,503	1,548
Non labor	115	558	464	473	482	492	501
Total	<u>1,474</u>	<u>2,015</u>	<u>1,936</u>	<u>1,949</u>	<u>1,941</u>	<u>1,994</u>	<u>2,049</u>



# IT Organization

# IT Financial Performance

## 2010-2016 Operating and Other Expenses (\$000)

Item	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
OPEX/Other Expenses							
Labor	15,400	16,333	19,094	20,339	21,704	22,355	23,026
Burdens	5,109	4,924	5,557	5,903	6,327	6,517	6,713
Outside Services	2,703	2,500	2,858	3,311	3,012	2,133	2,187
Computer/Office Supplies	564	575	587	598	611	623	636
Training, Travel & Meals	1,035	1,056	935	915	1,052	1,073	1,451
Telecom/Leased Lines	2,810	2,894	2,792	2,857	2,921	2,921	2,921
License & Maintenance Fees	11,363	11,438	13,691	14,376	15,094	16,648	17,480
Other	520	484	885	771	779	428	19
O&M Implications from Cap Projects			923	788	405	490	467
Subtotal OPEX/Other expense	<u>39,504</u>	<u>40,204</u>	<u>47,322</u>	<u>49,858</u>	<u>51,905</u>	<u>53,188</u>	<u>54,900</u>



# IT Financial Performance

## 2012-2016 Target Comparison (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total OPEX/Other Expense	47,322	49,858	51,905	53,187	54,899
Total OPEX/Other Expense Target	<u>47,322</u>	<u>49,858</u>	<u>51,905</u>	<u>53,187</u>	<u>54,899</u>
Variance to Target	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>



# IT Financial Performance

## 2012-2016 Capital Comparison – Accrual Basis (\$000)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total Capital	25,496	32,770	31,392	39,464	42,906
Target	25,496	32,770	30,392	37,764	42,806
Variance To Target	<u>-</u>	<u>-</u>	<u>(1,000)</u>	<u>(1,700)</u>	<u>(100)</u>
Prior Plan	25,496	33,020	31,142	59,014	81,806

### Major Drivers:

Decreased Budget for ERP: 250K, \$750K, \$21.25M, \$39M for 2013-2016 respectively.

Mobile Radio System Console (\$3M) 2014-2015 and SE KY MW Buildout (\$5M) 2014-2016 requested by LOB





# IT Financial Performance

## 2010-2016 Headcount

Department	2010 Year End	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
IT Bus Apps	93	80	83	84	85	85	85
IT Infrastructure	95	97	103	108	109	109	109
IT Client Services	50	70	74	77	76	76	76
IT Security	8	16	16	16	16	16	16
IT VP	2	2	2	2	2	2	2
<b>TOTAL</b>	<b>248</b>	<b>265</b>	<b>278</b>	<b>287</b>	<b>288</b>	<b>288</b>	<b>288</b>
FTE		262.5	274.5	275.0			
From 2011 MTP		265	276	283			

• *Major Developments/Changes*



# IT 2012-2016 OPEX/Other Expense Reconciliation (\$000)

	<u>2012 Budget</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>	<u>2016 Plan</u>
Current Plan	47,322	49,858	51,905	53,187	54,899
Prior Plan	<u>56,050</u>	<u>58,778</u>	<u>61,172</u>	<u>72,843</u>	<u>80,551</u>
Variance	<u><u>(8,728)</u></u>	<u><u>(8,920)</u></u>	<u><u>(9,267)</u></u>	<u><u>(19,656)</u></u>	<u><u>(25,652)</u></u>
<u>Variance Explanations</u>					
Burden Adj to Corporate	(9,730)	(9,924)	(10,271)	(10,579)	(10,896)
O&M Commitment Letters	967	967	967	987	1,006
ERP Adjustment				(10,100)	(15,800)
Other	<u>39</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>42</u>
Total Variance	<u>(8,724)</u>	<u>(8,916)</u>	<u>(9,263)</u>	<u>(19,651)</u>	<u>(25,648)</u>



# IT 2012-2016 Capital Reconciliation (w COR) –Accrual Basis K. Blake

## (\$000)

	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
Current Plan	25,496	32,770	31,392	39,464	42,906
Prior Plan	25,496	33,020	31,142	59,014	81,806
Variance	-	250	(250)	19,550	38,900
<u>Variance Explanations</u>					
Reduced ERP Project		250	750	21,250	39,000
Mobile Radio Console & SE KY MW BO			(1,000)	(1,700)	(100)
Total Variance	-	250	(250)	19,550	38,900



# IT 2010-2016 Capital Breakdown (w COR) – Accrual Basis (\$000)

Project	2010 Actual	2011 Forecast	2012 Budget	2013 Plan	2014 Plan	2015 Plan	2016 Plan
<b>Ongoing Capital</b>							
Telecom/Data Networks	4,990	5,097	3,731	5,716	11,518	8,066	4,515
Infrastructure	10,868	3,900	4,775	1,719	7,845	6,500	6,630
Client Services	790	862	640	728	848	865	882
Desktop Operations	4,305	2,853	3,769	4,433	3,851	3,928	4,007
Security	863	1,222	1,131	427	830	855	872
<b>Special Projects</b>							
<i>W KY Sonet Microwave Buildout</i>			3,021	1,845			
Voice Over IP Campus Upgrade			2,512	3,500			
CRM/ECC Enhancement (CCS)	7,674	4,985	3,800	12,200	5,000	5,000	10,000
CIP Compliance		1,000	1,067	1,200	1,200		
VDI		1,700	1,050	1,002	300		
ERP						14,250	16,000
<b>Total Capital (107001)</b>	<b>29,490</b>	<b>21,619</b>	<b>25,496</b>	<b>32,770</b>	<b>31,392</b>	<b>39,464</b>	<b>42,906</b>



**2012 Plan Assumptions**

- 2011 ECR Plan approved December 2011 with a 10.25% ROE
- KY base rate relief assumed at earliest possible date under acquisition Order (1/1/2013) Thereafter, file in KY every two years with rate relief effective Q4 2014 and Q4 2016
- File in VA every two years with rate relief effective Q1 2014 and Q1 2016
- Maintain FERC formulary rates for KY municipals with rates reset each July 1 using currently authorized ROE
- Implementation of a gas leak mitigation cost recovery tracker in 2013 (filed with upcoming KPSC rate case).
- Retail electric load growth of 1.4% per year; retail gas load growth of 0.3% per year
- Short-term interest rates of LIBOR plus 20 bps

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
3 - Month LIBOR	0.25%	0.50%	1.25%	2.00%	2.50%
10 Yr - Treasury	2.50%	2.90%	3.25%	3.40%	3.50%

- Newly issued long-term debt rates for Utilities of 150 bps above 10-year Treasuries (4.4% - 4.9%)
- Bluegrass simple cycle plant of 495 MW (acquired mid-2012, operational 1/1/2013) for \$110 million
- Combined cycle plants of 640 MW commercial operation 1/1/2016 (\$576 million)
- Cane Run, Tyrone and Green River book values remain in rate base and recovered through future depreciation rates
- Dividend policy equal to 65% of net income for the Utilities plus net cash excess (needs) of LKE.
- CO<sub>2</sub> / RPS legislation not effective for the Plan
- No significant "smart grid" deployment in the Plan



## *2011 MTP Electric Sales Forecast*

*Sales Analysis & Forecasting*

*June 18, 2010*

## *Key observations from recent trends – Industrial sales rebound*

- *Through April 2010, Combined Company weather-normalized sales are 4.5% above budget.*
- *Compared to the first four months of 2009, total industrial sales have increased by 12% (300 GWh) in January – April 2010.*
- *18 of the 26 individually forecasted Major Accounts had a positive year-over-year growth in first Quarter 2010.*

## *2011 MTP Forecast Summary*

### *Energy*

- *Compared to the 2010 MTP forecast for 2011, the 2011 MTP forecast of total electric sales is 2.8% higher in 2011.*
- *Industrial (+6%) and Commercial (+3%) sales explain the majority of the increase relative to the 2010 MTP in 2011.*
- *Major Accounts are up 6% in 2011 compared to the 2010 MTP forecast for individually-forecasted accounts.*

### *Peak Demand*

- *The 2011 MTP forecast of peak demand is consistent with the 2010 MTP.*



## ***Key Macroeconomic Assumptions***

- *Economy: Global Insight expects growth in 2010 Industrial Production of 5.8% compared to 0.8% this time last year. Total industrial production growth gradually declines to 3.1% annual growth in 2015.*
- *GI expects real GDP to climb 3.5% in 2010 after declining 2.4% in 2009. Consumer spending is not expected to lead recovery.*
- *Energy Efficiency\* (beyond what was in the 2010 MTP):*
  - *Revised estimates of appliance standards (Lighting, Furnaces, AC, Heat Pumps, Dishwashers)*
  - *Improved thermal shell integrity (ARRA weatherization provisions)*
- *Impact of company sponsored energy efficiency programs revised from approximately 430 MW to 340 MW in 2015.*

\* *Outside of KU/LG&E sponsored programs*

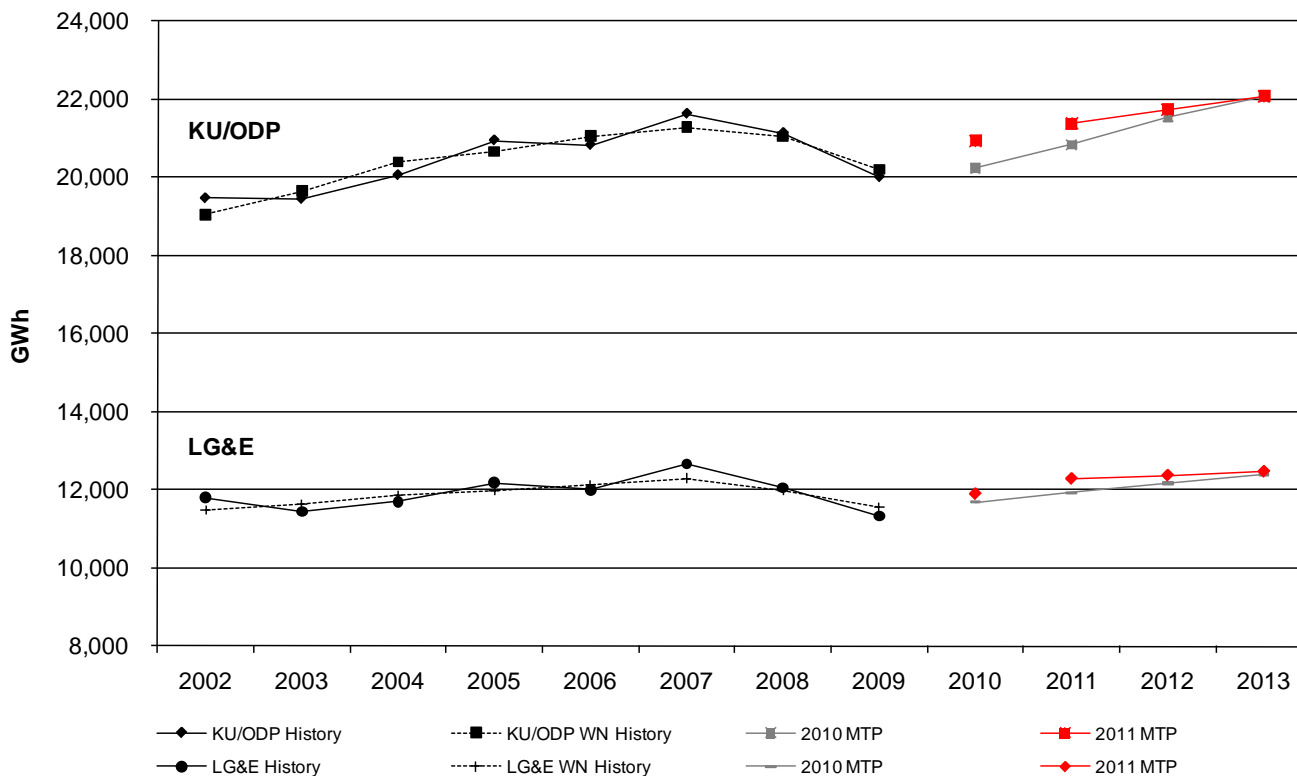
*Electricity sales are expected to be 3.8% (893 GWh) above the 2010 MTP for the balance of 2010 (April – December)*

<b>Apr-Dec 2010</b>				
<b>Company</b>	<b>Forecast (GWh)</b>	<b>2010 MTP (GWh)</b>	<b>Variance (GWh)</b>	<b>Pct Var</b>
<i>Residential</i>	7,702	7,755	-53	-0.7%
<i>Commercial</i>	8,170	7,946	224	2.8%
<i>Industrial</i>	7,012	6,333	679	10.7%
<i>Municipals/Lighting</i>	1,649	1,606	43	2.7%
<b>Total</b>	<b>24,533</b>	<b>23,640</b>	<b>893</b>	<b>3.8%</b>

<b>Apr-Dec 2010</b>				
<b>Company</b>	<b>Forecast (GWh)</b>	<b>2010 MTP (GWh)</b>	<b>Variance (GWh)</b>	<b>Pct Var</b>
<i>KU/ODP</i>	15,387	14,792	595	4.0%
<i>LG&amp;E</i>	9,146	8,848	298	3.4%
<b>Total</b>	<b>24,533</b>	<b>23,640</b>	<b>893</b>	<b>3.8%</b>

*Compared to the 2010 MTP, total energy sales are 2.8% higher for 2011*

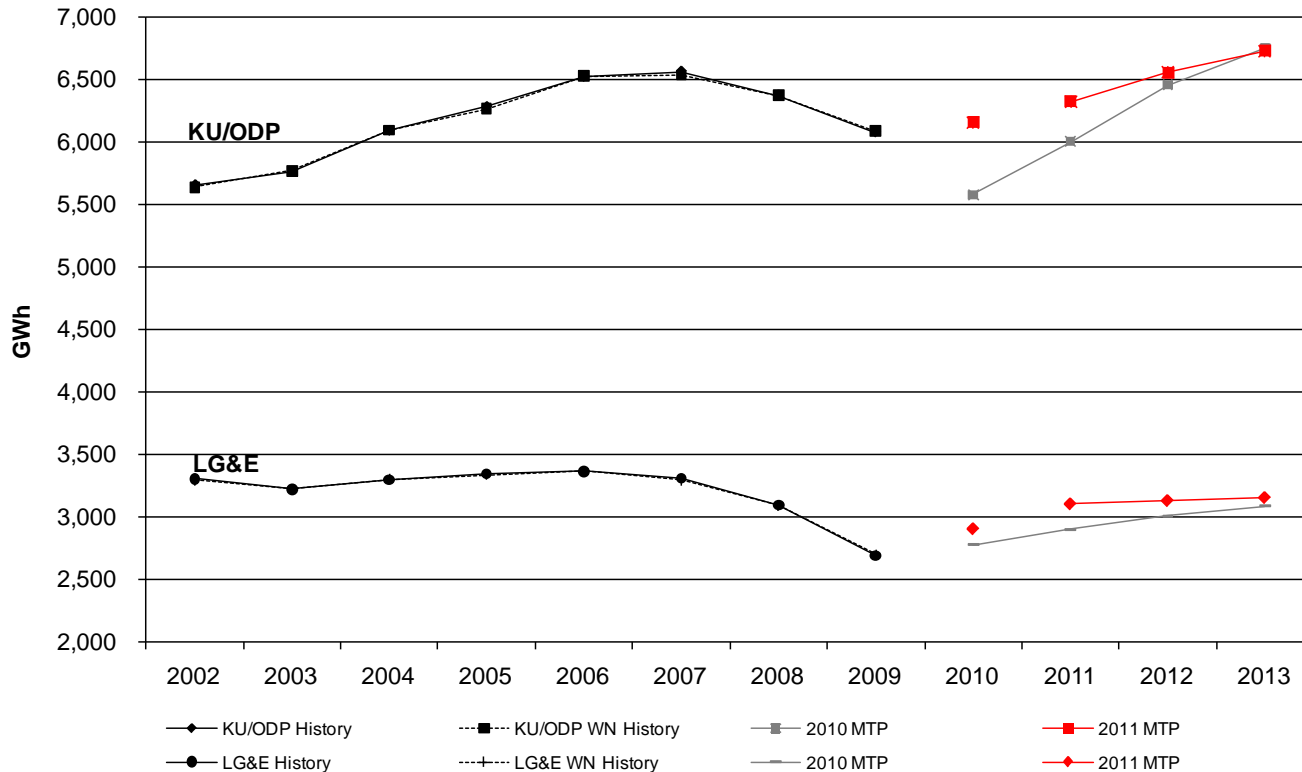
**Total Energy Sales by Company**



\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.

*Compared to the 2010 MTP, Industrial sales are 6% higher for 2011*

**Annual Industrial Energy Sales**



*\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.*

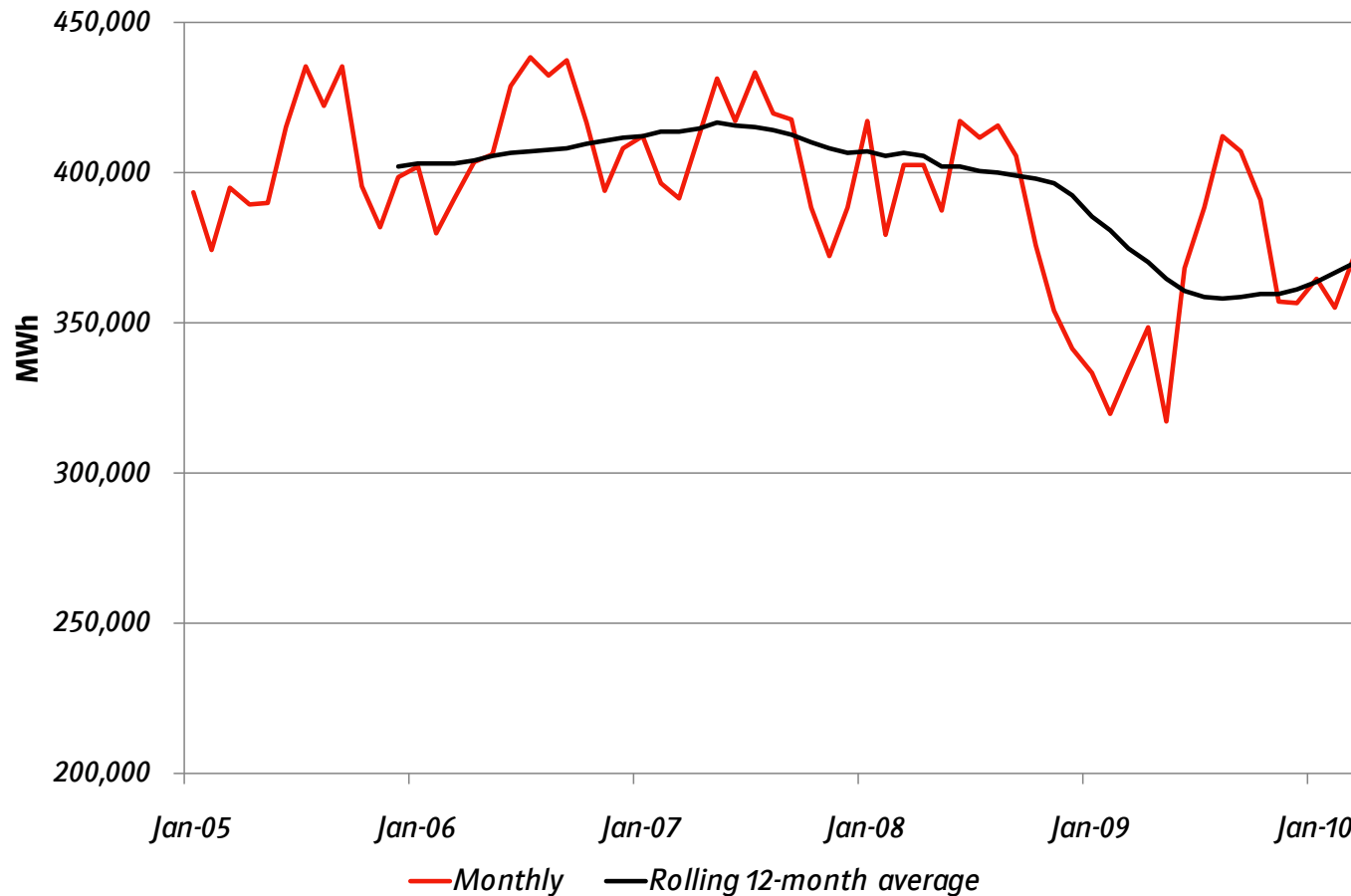
## Notable Changes in Major Account Forecasts for 2011

- *2011 MTP is more optimistic for NAS, Fort Knox, Ford LAP, and others.*
- *Among several major accounts, recoveries have accelerated ahead of 2010 MTP expectations.*
- *UPS growth prospects dampened.*

<b>Biggest Movers (GWh)</b>	<b>2010 MTP</b>	<b>2011 MTP</b>	<b>Delta</b>
<i>NAS</i>	<i>832</i>	<i>975</i>	<i>143</i>
<i>Fort Knox</i>	<i>229</i>	<i>292</i>	<i>63</i>
<i>Ford LAP</i>	<i>23</i>	<i>65</i>	<i>42</i>
<i>DuPont</i>	<i>73</i>	<i>95</i>	<i>22</i>
<i>UPS</i>	<i>187</i>	<i>147</i>	<i>-44</i>

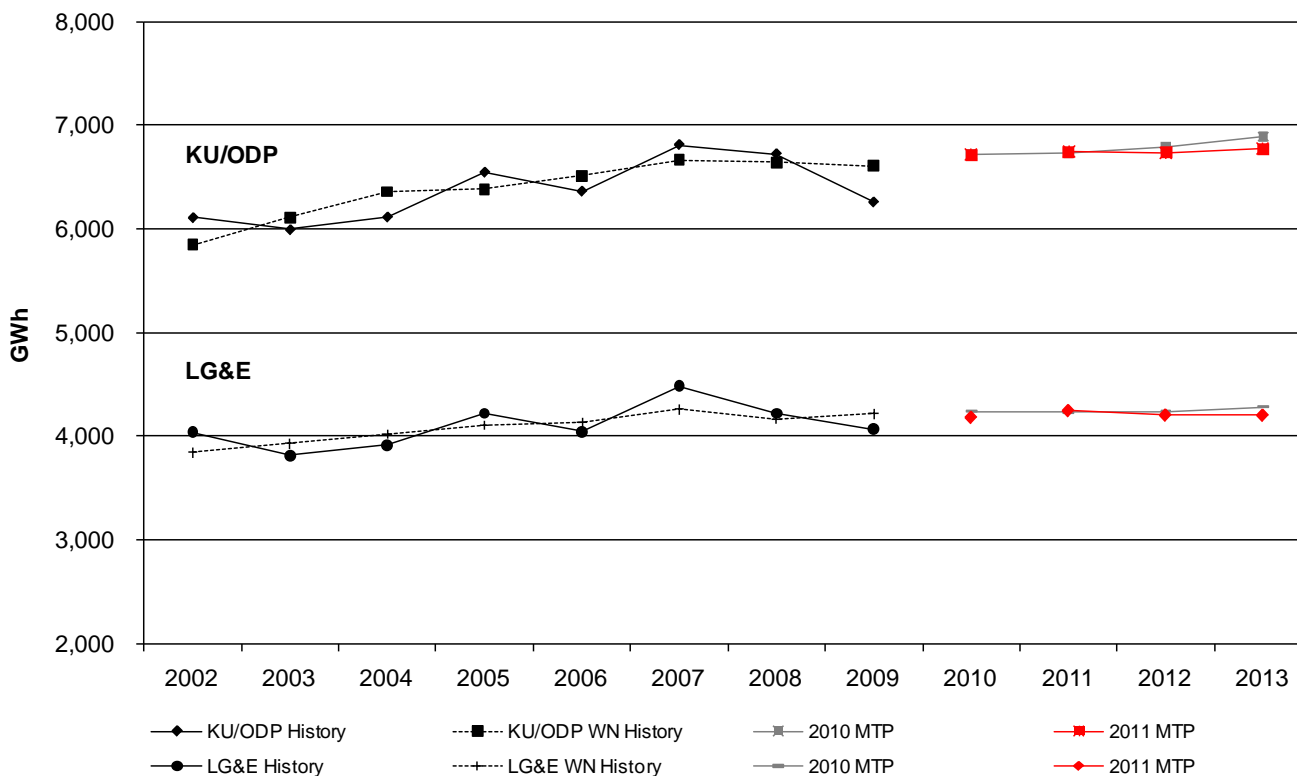
*Consumption by major accounts is up 10.5% for Q1 2010 vs. Q1 2009 but still below 2008 levels*

**Sum of All Individually Forecast Major Accounts**



*Compared to the 2010 MTP, Residential sales are 0.2% higher in 2011 and 1.7% lower in 2013*

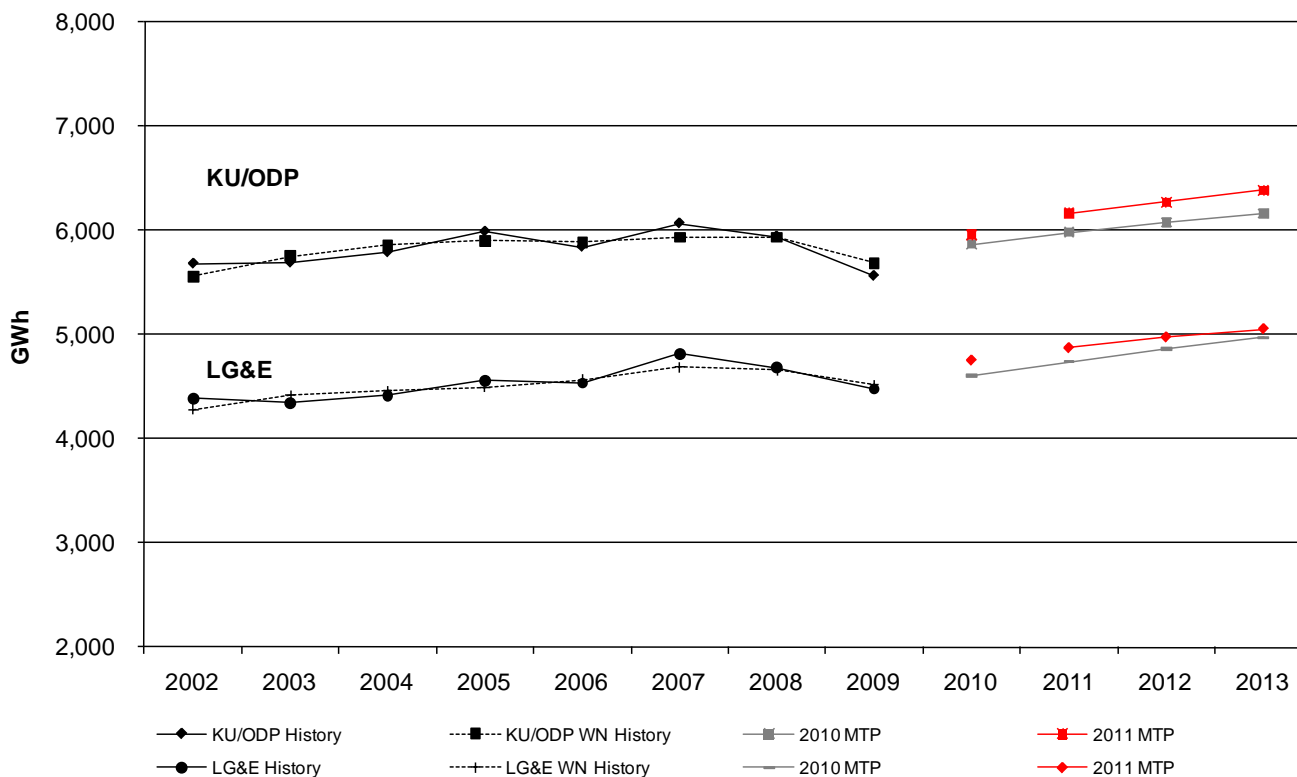
**Annual Residential Energy Sales**



*\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.*

*Compared to the 2010 MTP, Commercial sales are 3% higher in 2011, driven by changes in DSM*

**Annual Commercial Energy Sales**

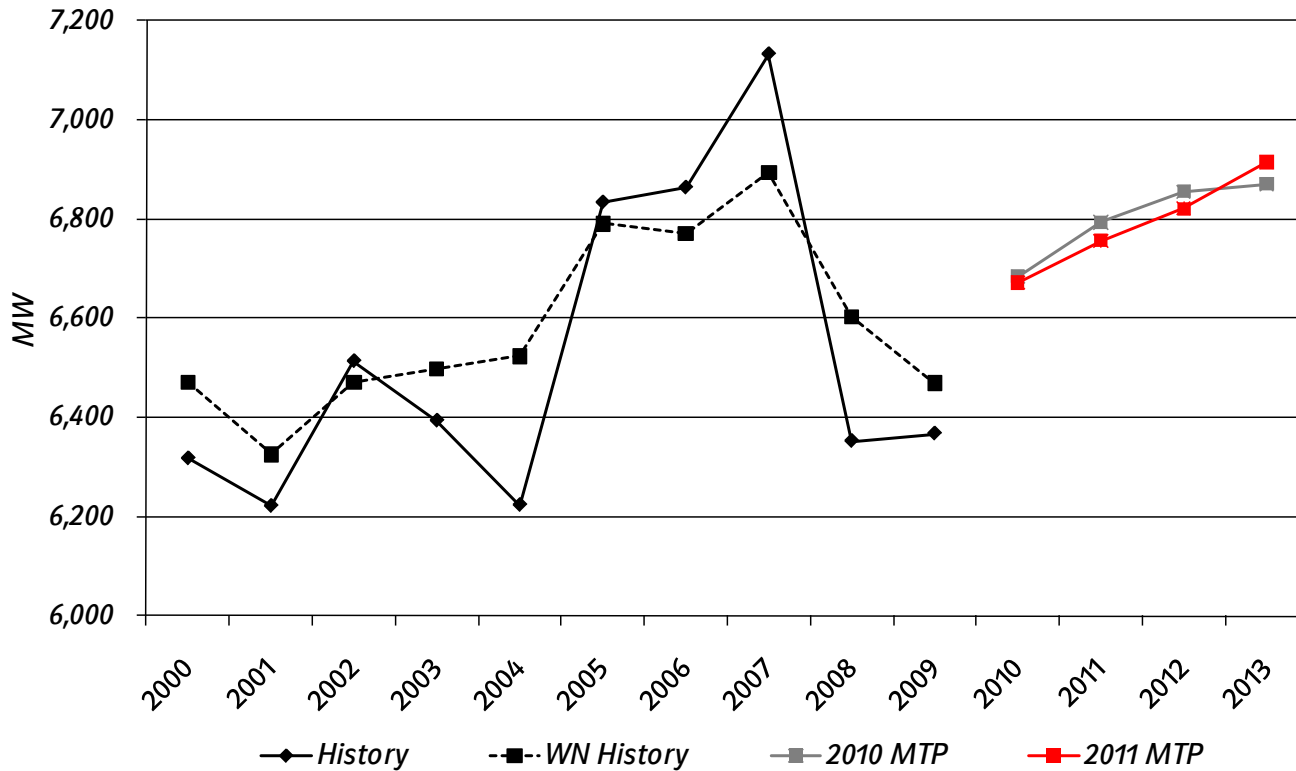


\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.



*Compared to 2010 MTP, peak demand is 44 MW higher by 2013*

*Combined Company Summer Peak Demand*



## *Key forecast risks are related to economic and energy conservation trends*

### *Upside Opportunity*

- *Unanticipated economic development*
- *Economy: Industrial sales would require another 450 GWh (1% of total sales, 5% of industrial sales) in 2011 to reach the all-time high in 2006.*
- *Global Insight's Optimistic scenario has a probability of 20%.*

### *Downside Risk*

- *Economy: Industrial sales would have to be 650 GWh (2% of total sales, 7% of industrial sales) lower in 2011 to reach the level of 2009. Problems in European economies could stall global recovery.*
- *Global Insight's Pessimistic scenario has a probability of 15%.*
- *Energy Conservation: Given rising energy prices, consumers may take additional measures to conserve energy.*

## *Appendix*

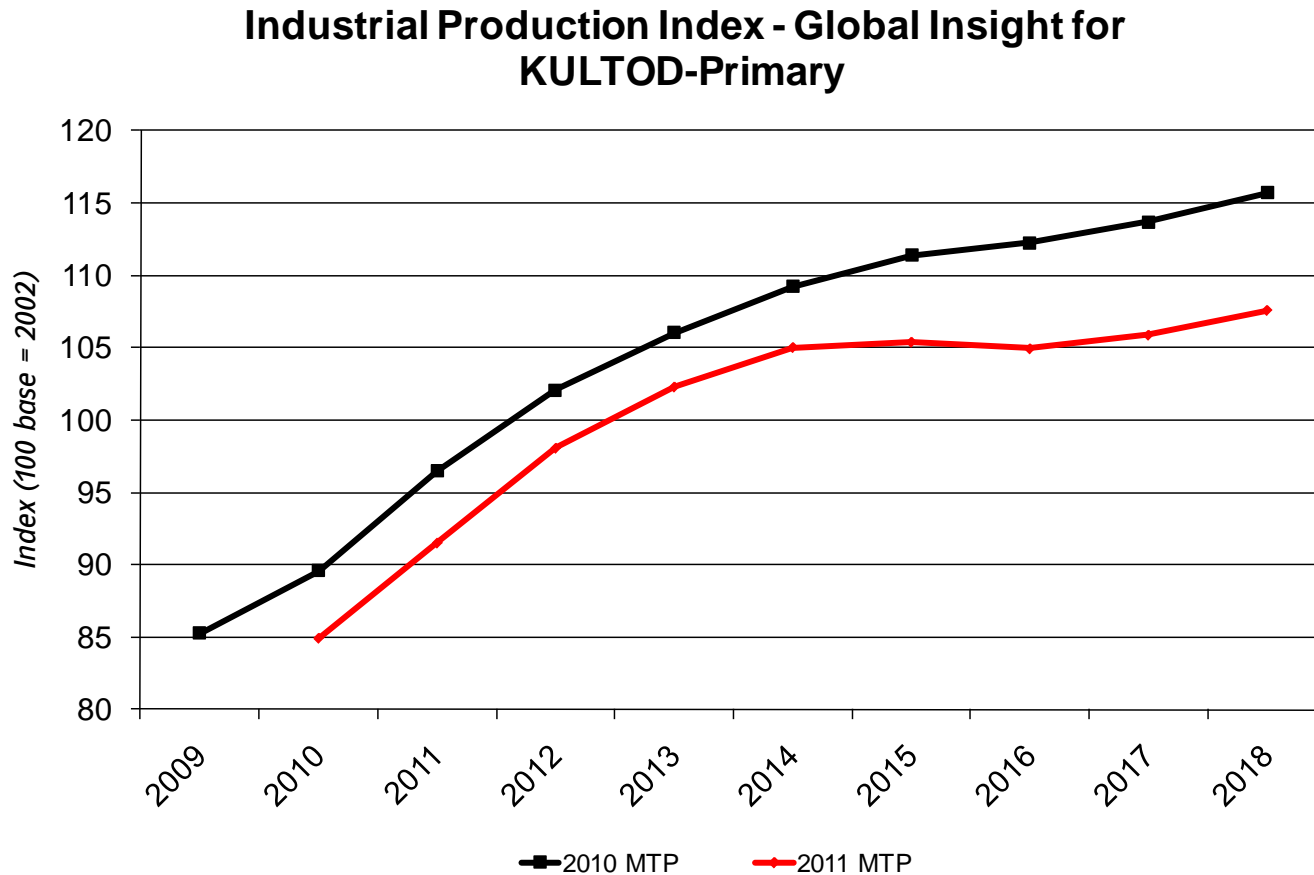
## *Global Insight Assumptions*

- *Oil price is assumed to average \$78/barrel in 2010 and climb to \$89/barrel by 2012.*
- *The Fed has kept its federal funds target in the range of 0.0-0.25% since December 2008. GI does not expect changes until November 2010 (similar to 2010 MTP timeframe when expected to tighten in 4<sup>th</sup> Q 2010).*
- *20% probability given to GI's optimistic scenario (V-shaped recovery) and 15% probability given to GI's pessimistic scenario (double-dip recession). 20% probability was given to both scenarios during the 2010 MTP.*

## *Global Insight Conclusions*

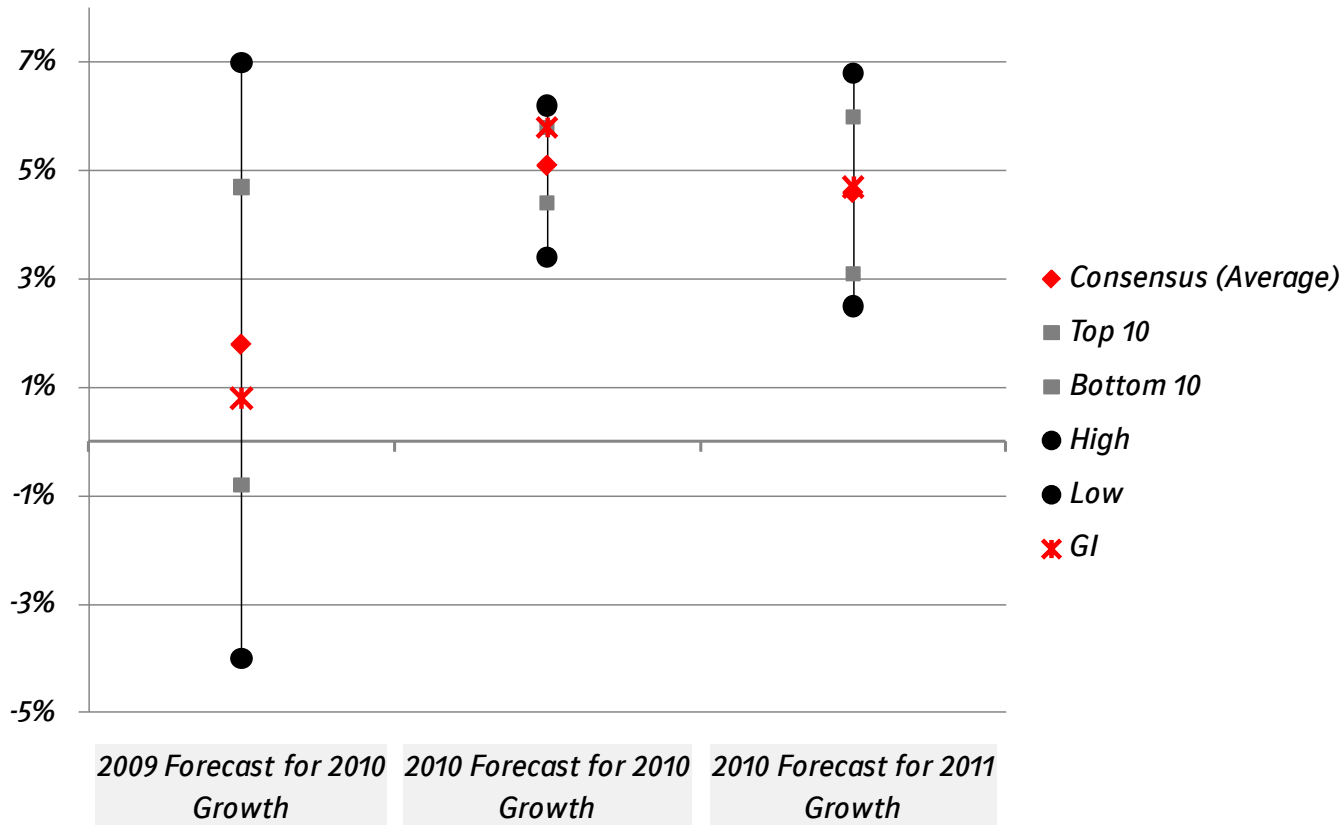
- *Exports and business equipment and software spending will be most important supports for growth in 2010. Though consumer spending is improving, it cannot lead strongly as in previous recoveries.*
- *Inflation rate is low. It remains a risk, but not an imminent threat (core inflation is weakening, wage inflation is low, and the fall in the euro diminishes the threat further). Core CPI should hold at or below 1.5% throughout 2010.*
- *Employment is turning, and recovery is broadening from only manufacturing to now include the service sector. The unemployment rate will come down slowly; expect an average jobless rate of 9.6% in 2010. Unemployment rate in April 2010 was 9.9% in U.S. and 10.6% in Kentucky.*
- *European situation could pose risk to global recovery*

## *Global Insight lowers their IPI projection*



# The range of economist projections for IP have narrowed since 2009

**Blue Chip Consensus Comparison to Global Insight for Total Industrial Production Growth Forecast**



## *Key Improvements in 2011 MTP Forecast*

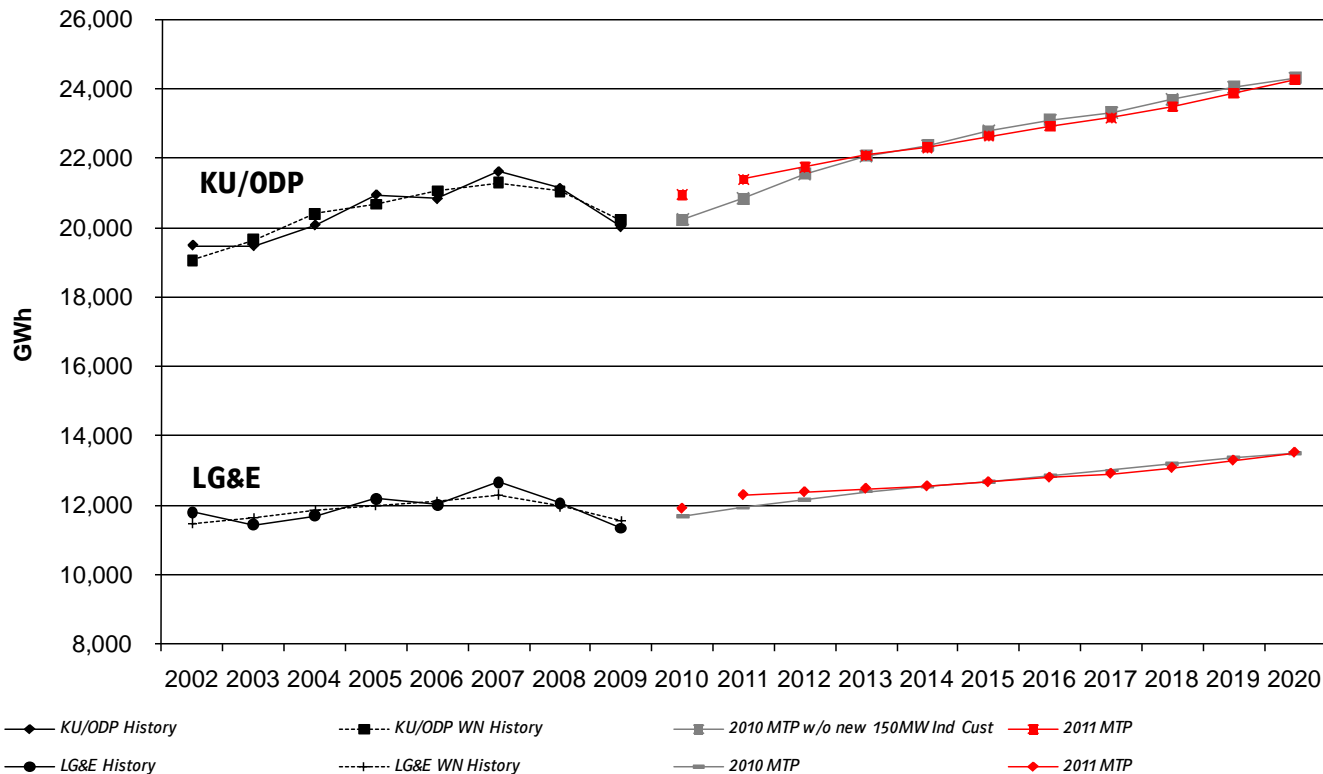
### *Commercial Forecasts*

- *Implemented a Statistically-Adjusted End-use (SAE) model, which is widely used. The SAE model is similar to what has been used to forecast residential sales for many years. The SAE model provides the means to forecast based upon electricity prices and explicitly capture the impact of increasing energy efficiency standards.*



# Growth rate of total energy sales consistent with 2010 MTP after 2015

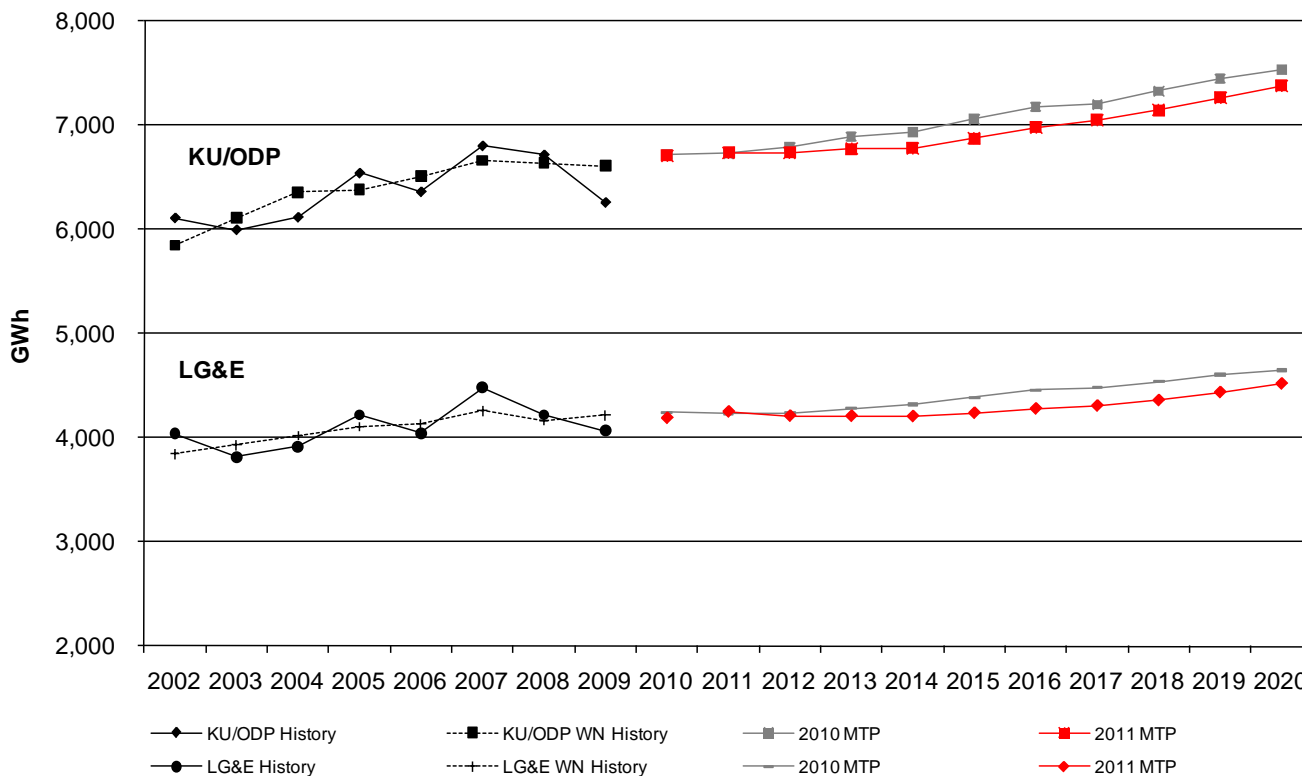
## Total Energy Sales by Company



\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.

*Compared to the 2010 MTP, Residential sales are expected to be 2% lower by 2020*

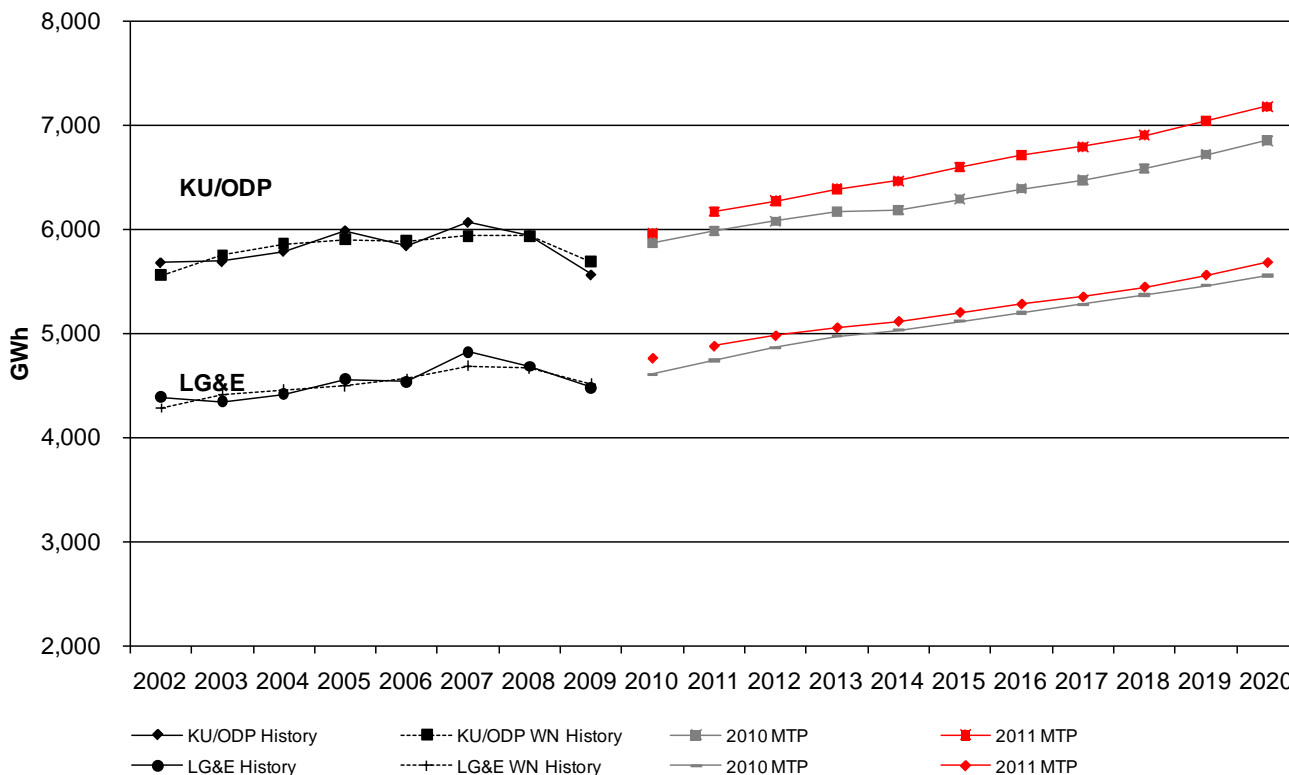
**Annual Residential Energy Sales**



\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.

# Commercial sales are expected to be higher than in the 2010 MTP, driven by changes in DSM

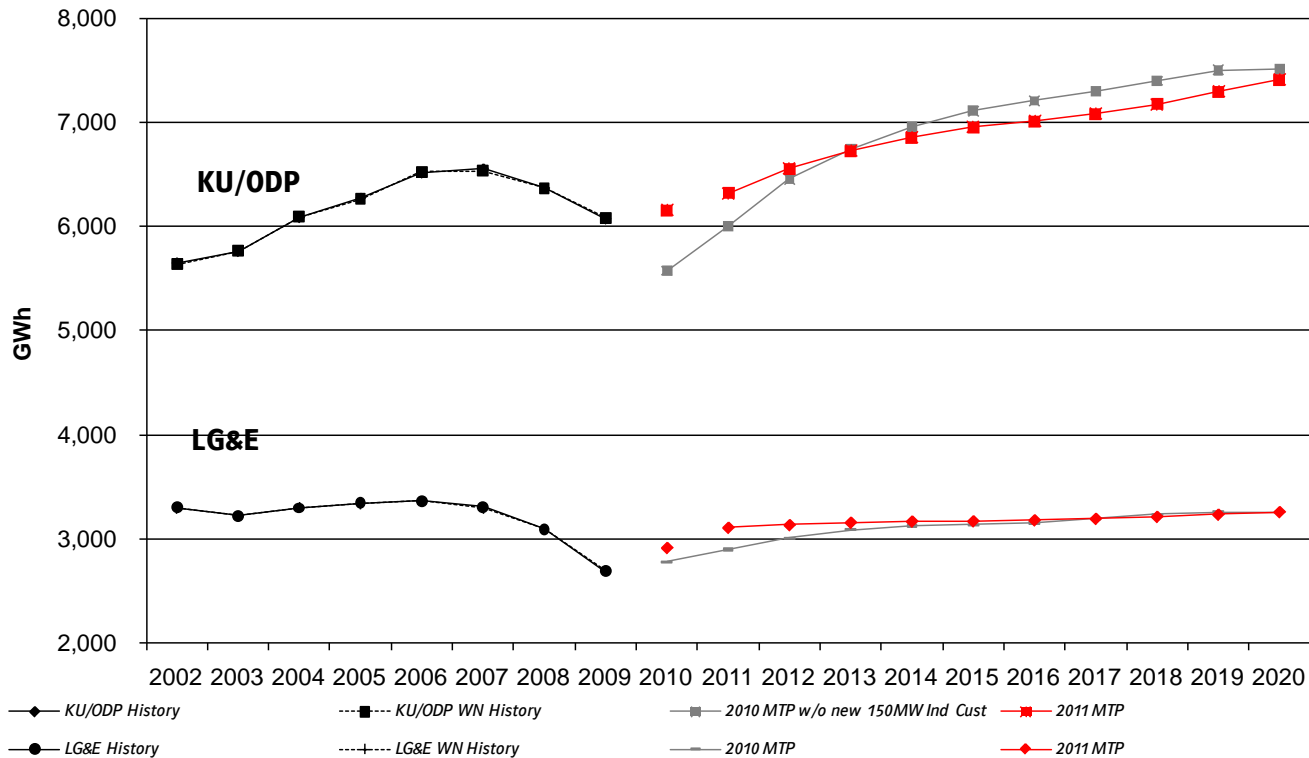
## Annual Commercial Energy Sales



\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.

# Industrial sales beyond 2013 are expected to exceed previous high (2006)

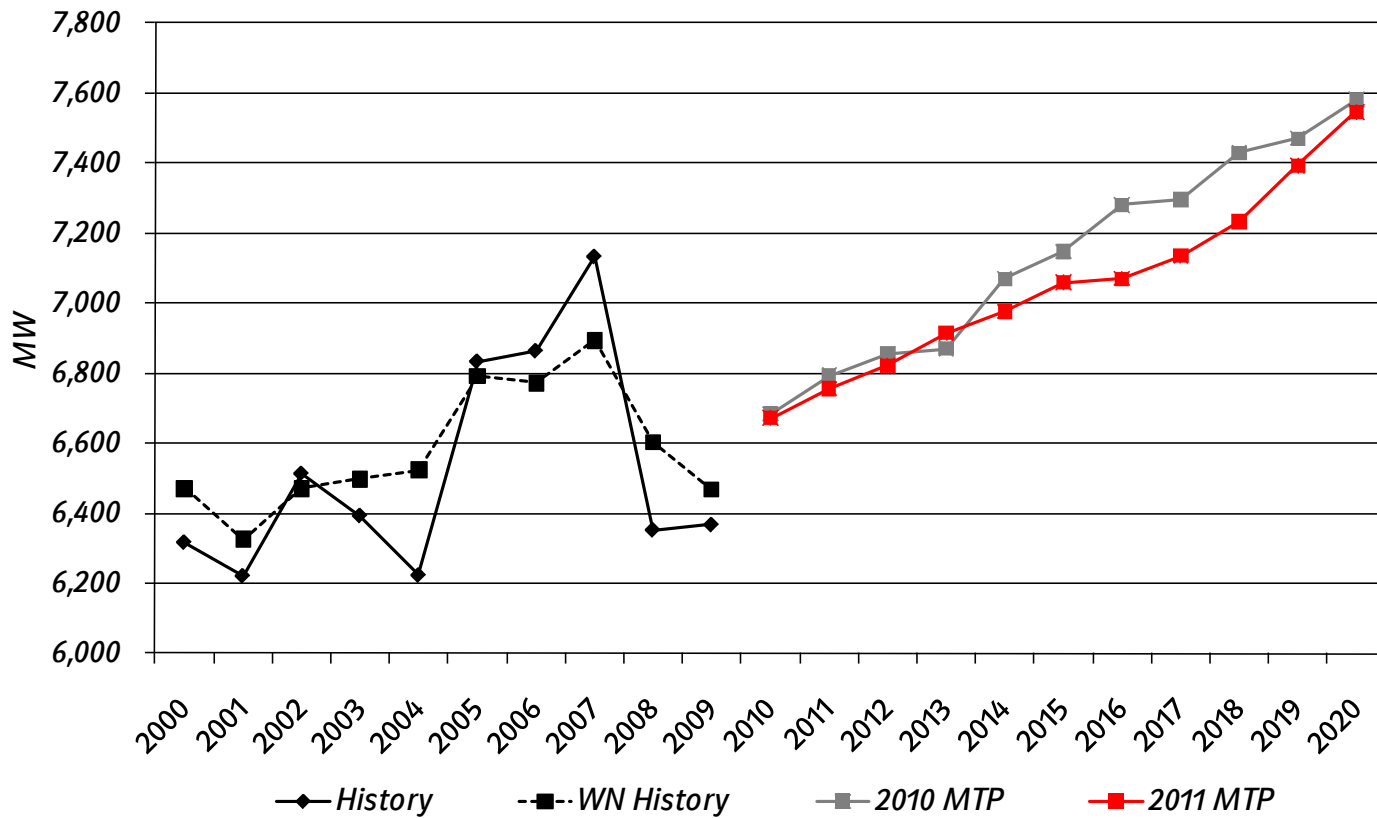
## Annual Industrial Energy Sales



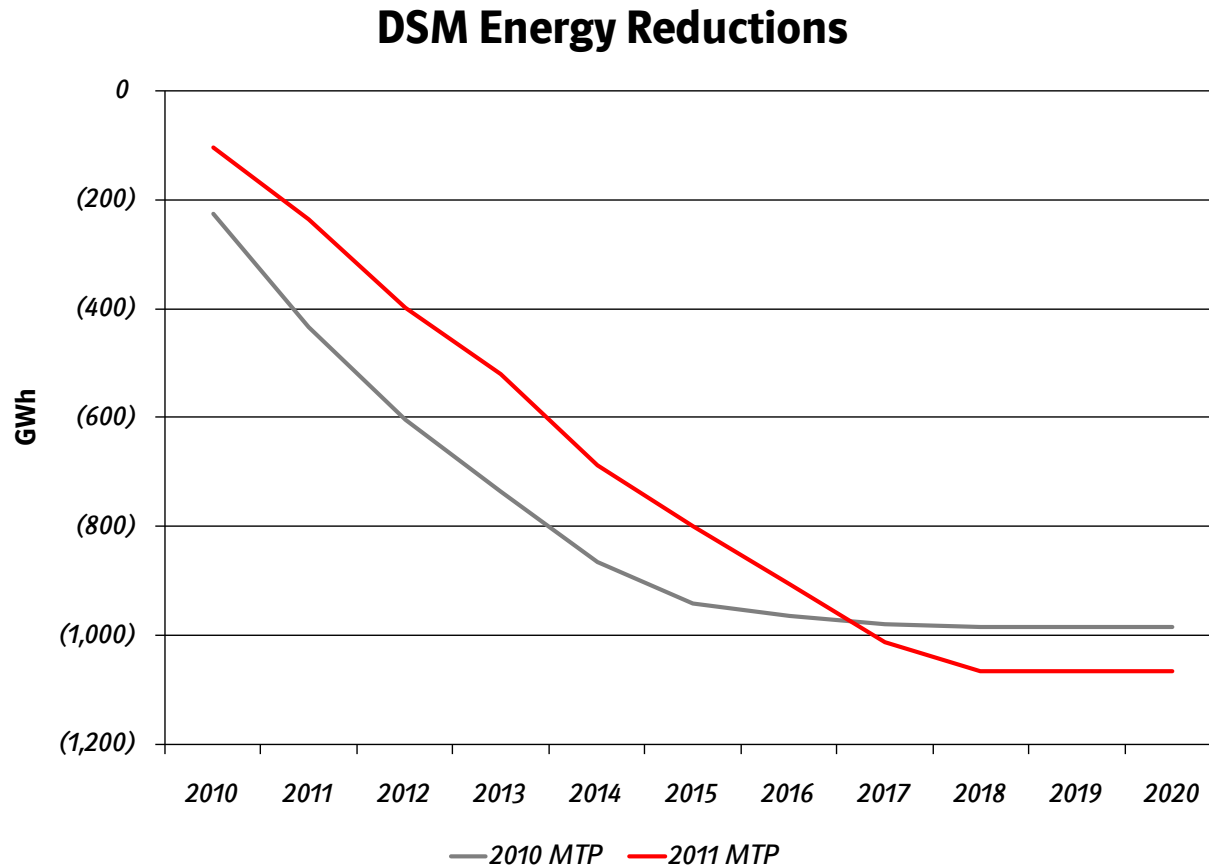
\* In 2011 MTP forecast, 2010 value is a weather-normalized 3+9 forecast.

# Summer peak demand reaches 2010 MTP level by 2020

## Combined Company Summer Peak Demand

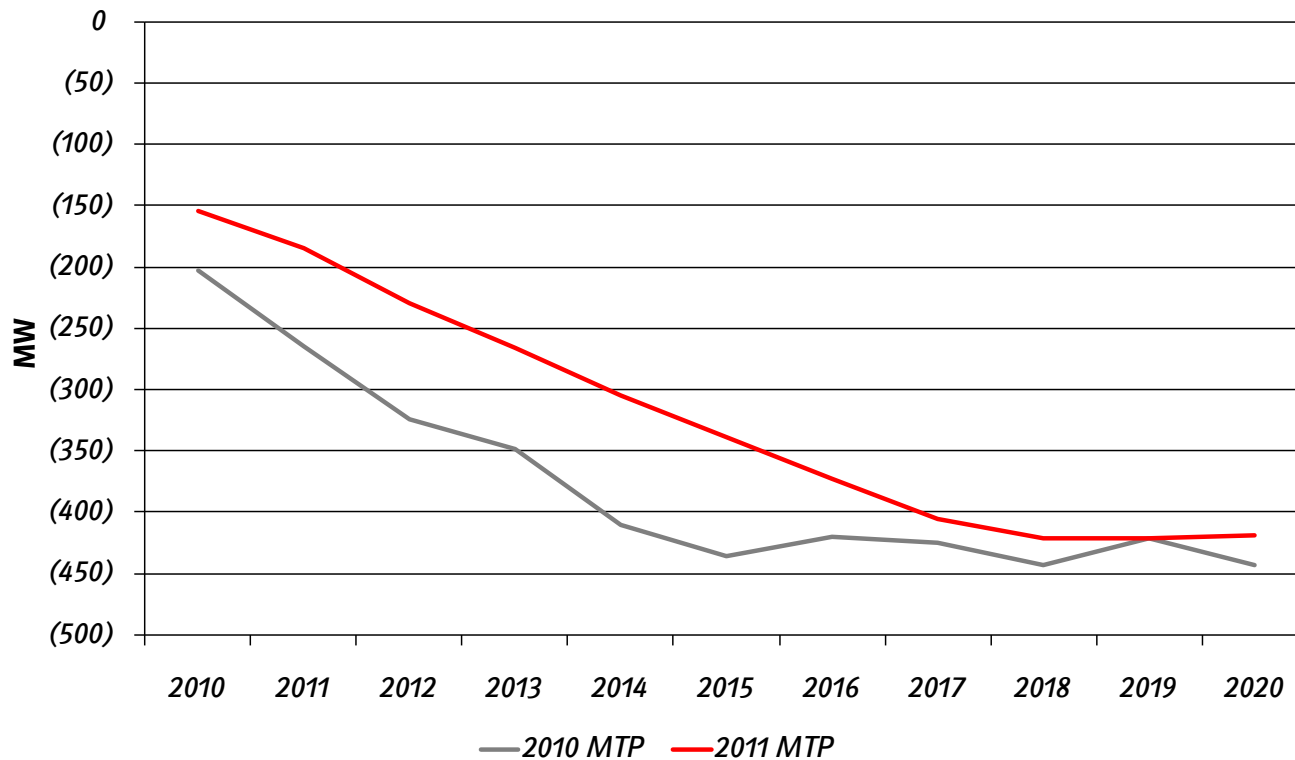


# Savings from DSM reduced from 2010 MTP through 2016

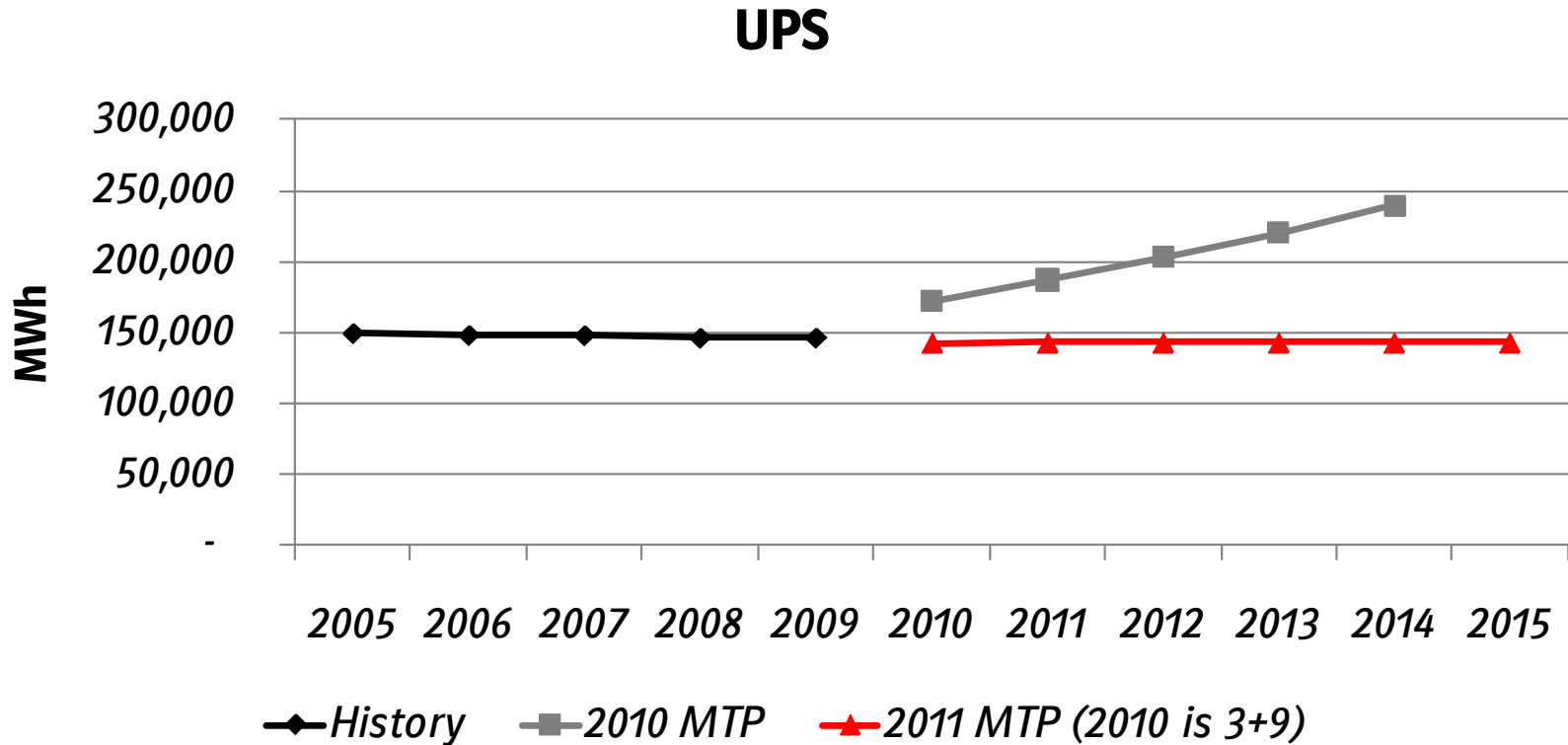


## Peak reductions from DSM reduced from 2010 MTP

### DSM Coincident Summer Peak Reductions



## UPS expecting electric usage to remain flat

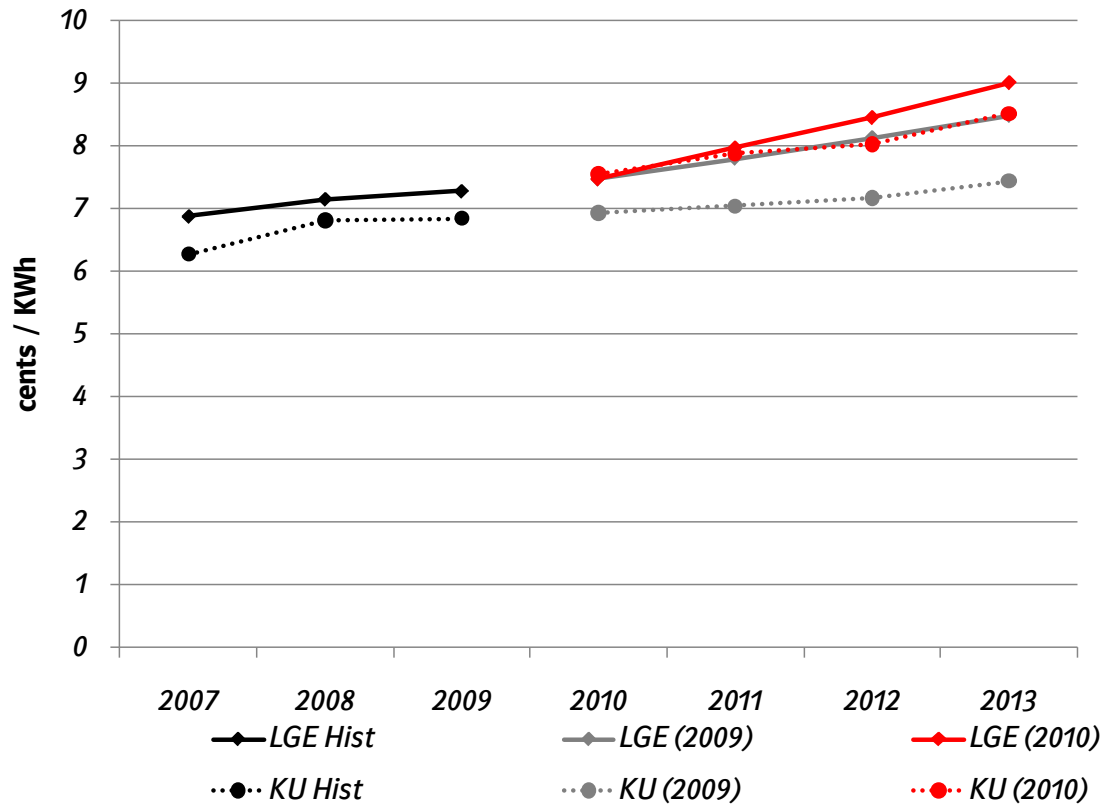


- Aggressive growth anticipated in 2010 MTP forecast is now unlikely.
- Growth prospects dampened.



# *KU and LG&E residential rates are higher throughout the MTP*

## Average Residential Annual Rates





## *2011 MTP Gas Volume Forecast*

*Sales Analysis & Forecasting*

*June 11, 2010*

## *Key Observations from Recent Trends*

- Y WN total gas volumes (excluding gas used for LG&E generation) for the last eight months are within 1% of the 2010 MTP forecast.*
- Y Key driver: Firm Transportation volumes have exceeded the 2010 MTP forecast over the last eight months by 4%.*
- Y Of the twenty-six individually forecasted Major Accounts, nineteen had a positive year-over-year growth in January – April 2010 (6.3% increase in aggregate)*

## Forecast Summary

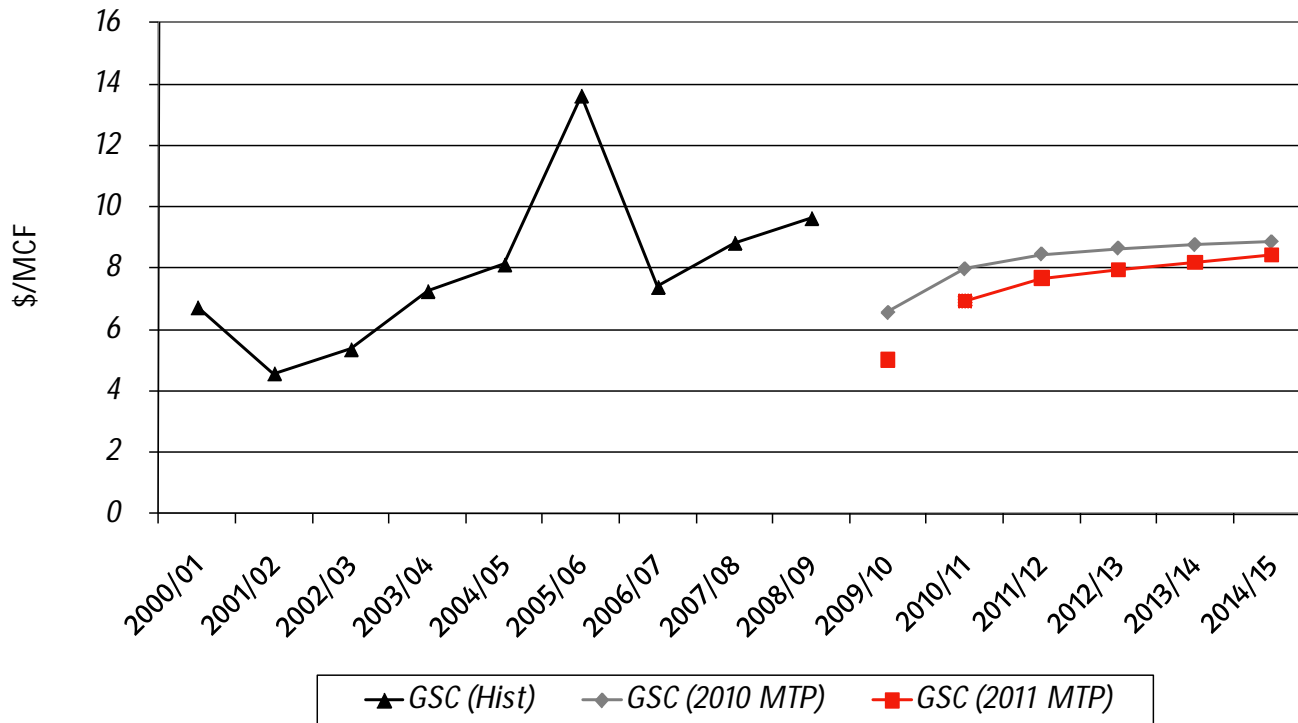
- Y Compared to the 2010 MTP forecast for 2011, the 2011 MTP forecast of total gas volume (excluding gas used for LG&E generation) is 4% higher in 2011.
- Y Firm transportation is up 7.5% in 2011 compared to the 2010 MTP forecast.
- Y 50% of the increase in FT volumes (2011-2014) compared to the 2010 MTP is from Ford. 2010 MTP included a 30% probability that Ford LAP would shut down.
- Y Forecast of sales and firm transportation is expected to remain relatively flat through 2015.

## Key Forecast & Macroeconomic Assumptions

- Y *Economy: Global Insight expects growth in 2010 Industrial Production of 5.8% compared to 0.8% this time last year. Total industrial production growth gradually declines to 3.1% growth in 2015.*
- Y *Oil price is assumed to average \$78/barrel in 2010 and climb to \$89/barrel by 2012.*
- Y *According to Global Insight, the Louisville MSA housing market begins to recover in 2010. Growth in RGS customers continues, but at a slower rate than forecast in the 2010 MTP.*
- Y *Appliance Efficiencies: No notable changes in gas heating and water heater appliance efficiency assumptions from 2010 MTP.*
- Y *Gas Supply Cost (GSC): Gas supply cost in the 2011 MTP is expected to be approximately 13% lower in the winter of 2010/11 compared to the 2010 MTP.*

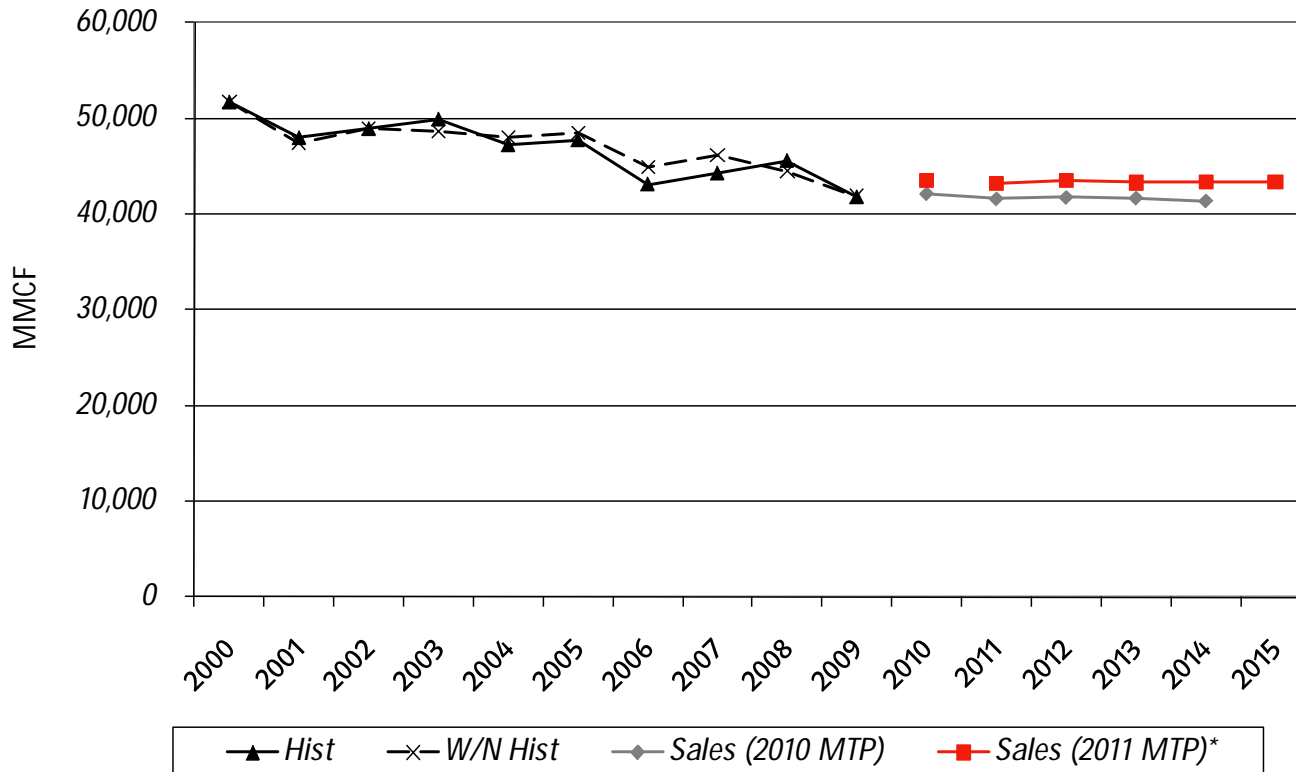
*Gas supply cost for the winter 2010/11 is expected to be 13% below the 2010 MTP and remain below throughout the forecast period*

**Average Gas Supply Cost - Winter Months  
(November - February)**



*Compared to the 2010 MTP forecast, the 2011 MTP forecast is 4% higher in 2011*

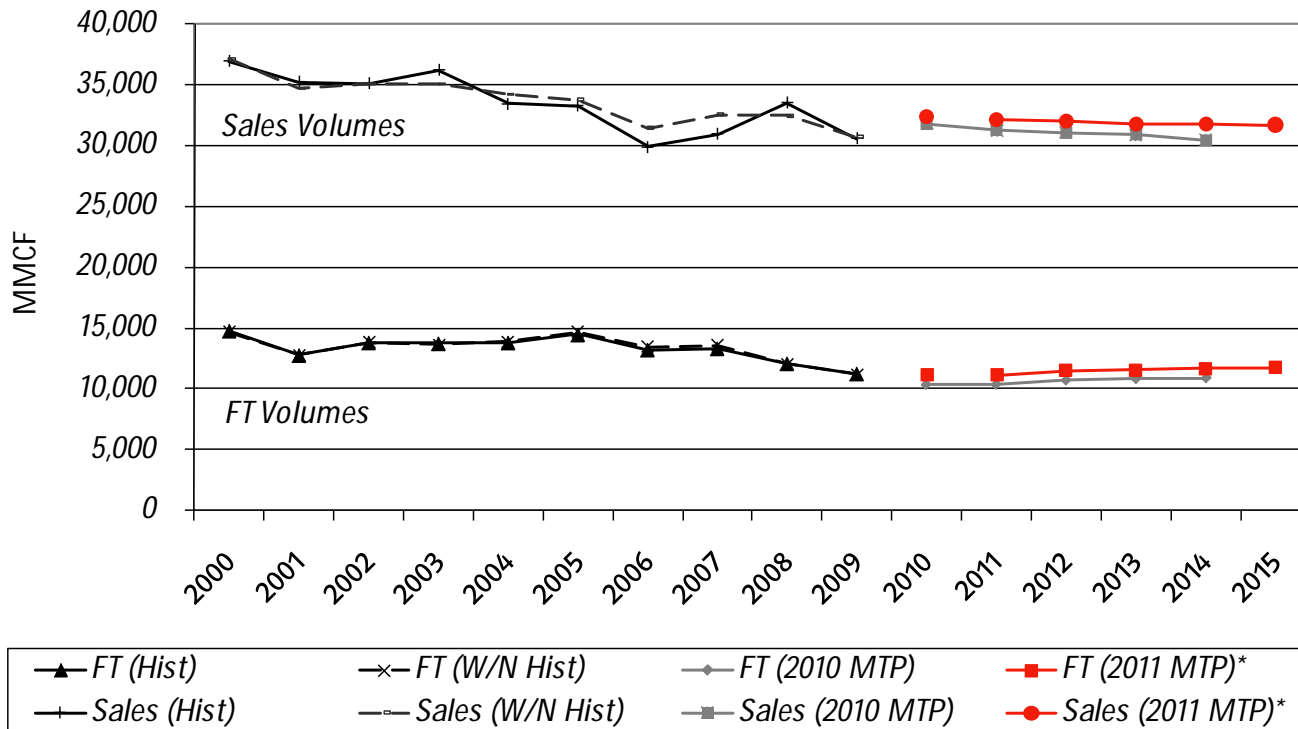
**Annual Gas Volumes (excluding gas used for LG&E generation)**



*\*In 2011 MTP forecast, 2010 value is a weather-normalized 2+10 forecast.*

## Both Sales and Transportation volumes show a slight increase over last year's forecast

**Annual Sales & Firm Transportation (FT) Volumes**  
(excluding gas used for LG&E generation)

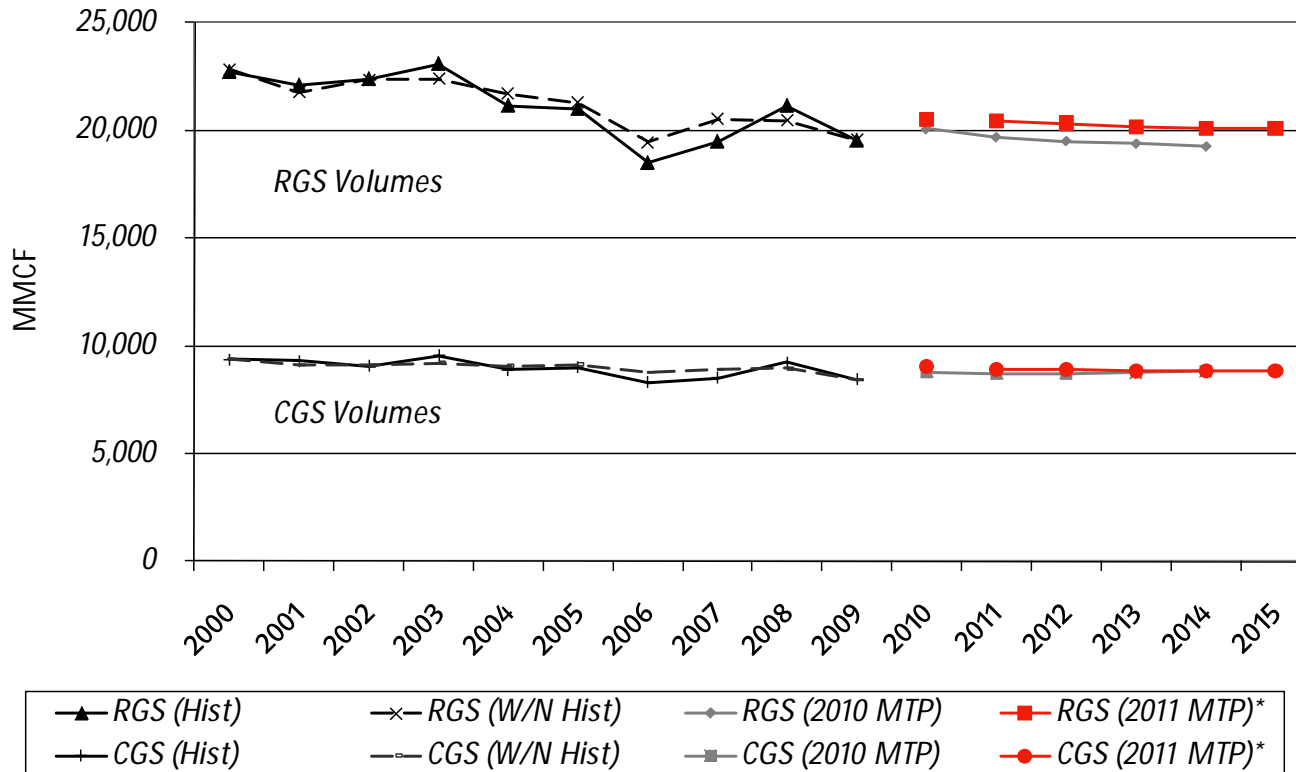


\*In 2011MTP forecast, 2010 value is a weather-normalized 2+10 forecast.



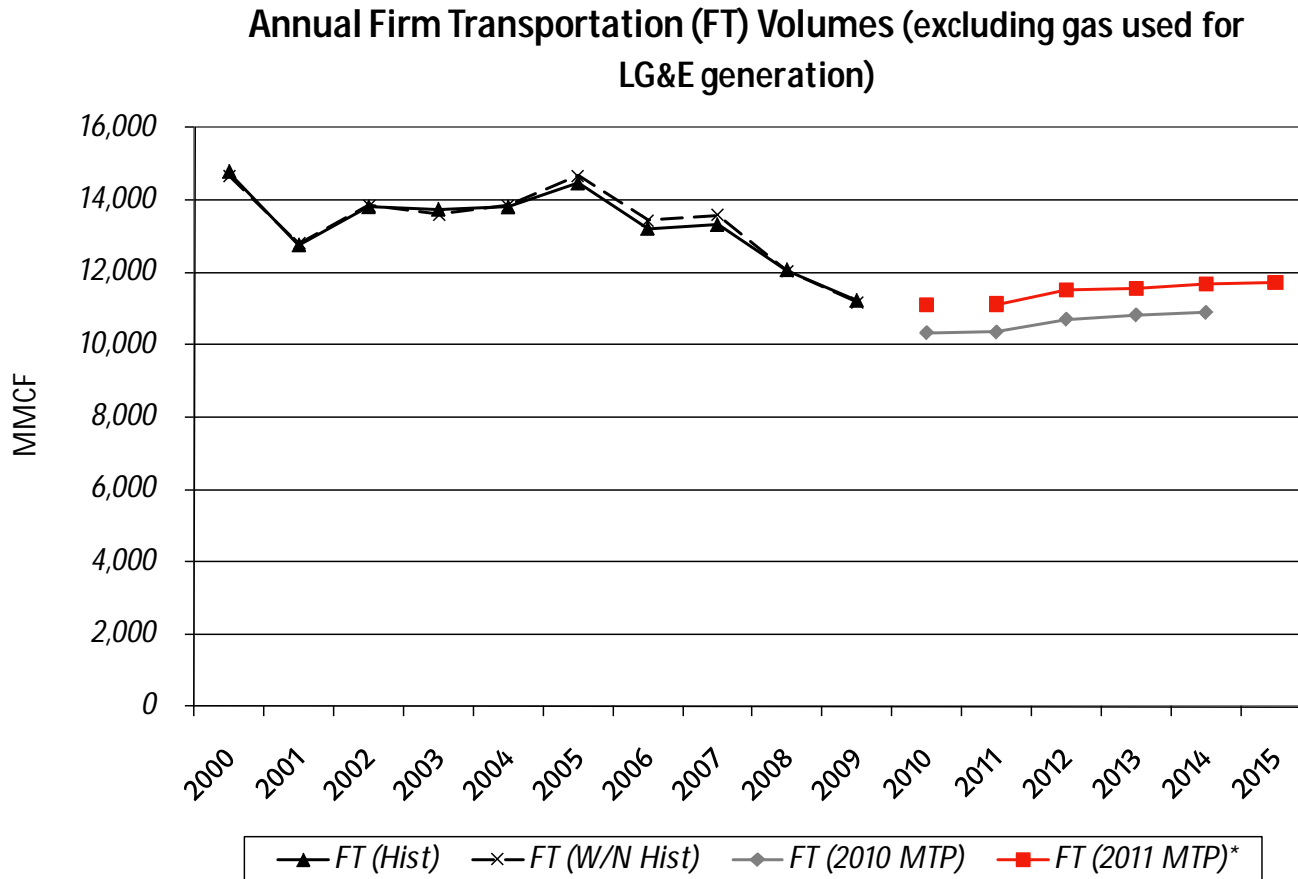
# RGS flat for 2011 with a continuing decline; CGS remains flat

Annual RGS & CGS Sales Volumes



\*In 2011 MTP forecast, 2010 value is a weather-normalized 2+10 forecast.

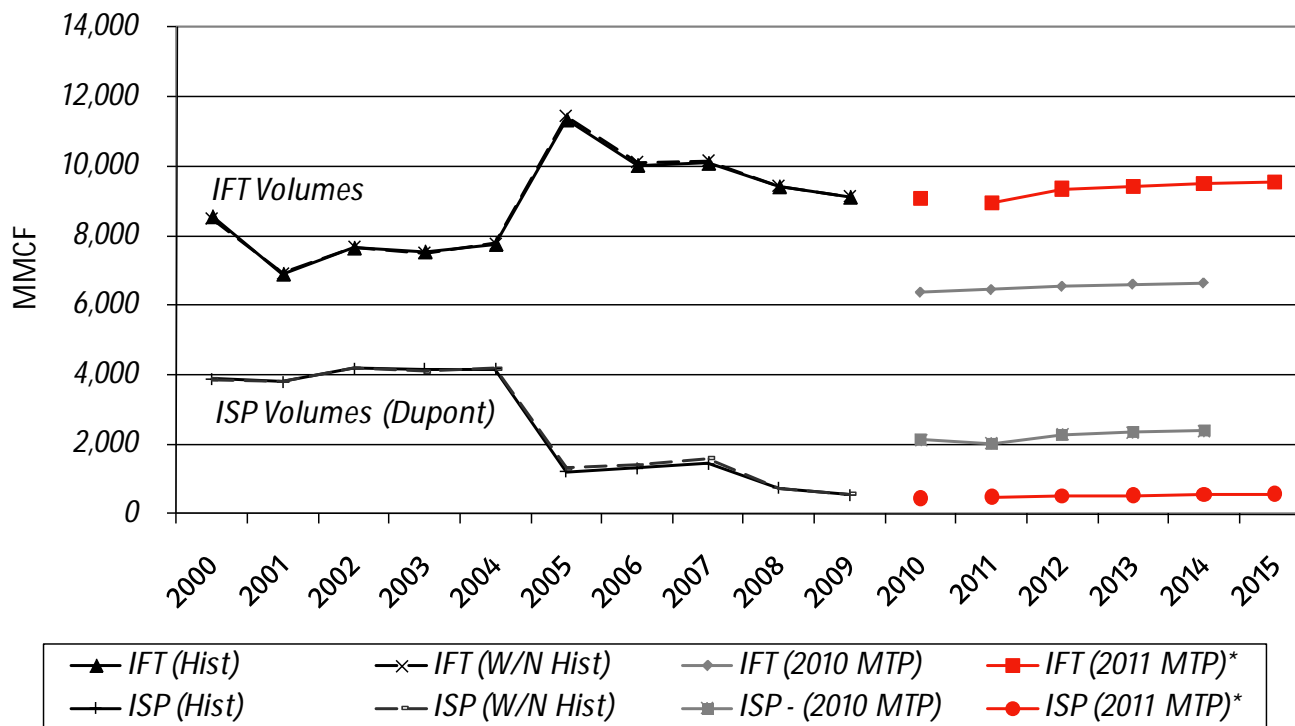
*Firm Transportation (FT) volumes are 7.5% higher in 2011 and 6.8% higher in 2013*



*\*In 2011 MTP forecast, 2010 value is a weather-normalized 2+10 forecast.*

*Ford was on a special contract and is now on the IFT rate\*\**

Annual Industrial Firm Transportation (IFT) & Industrial Special Contract (ISP) Volumes

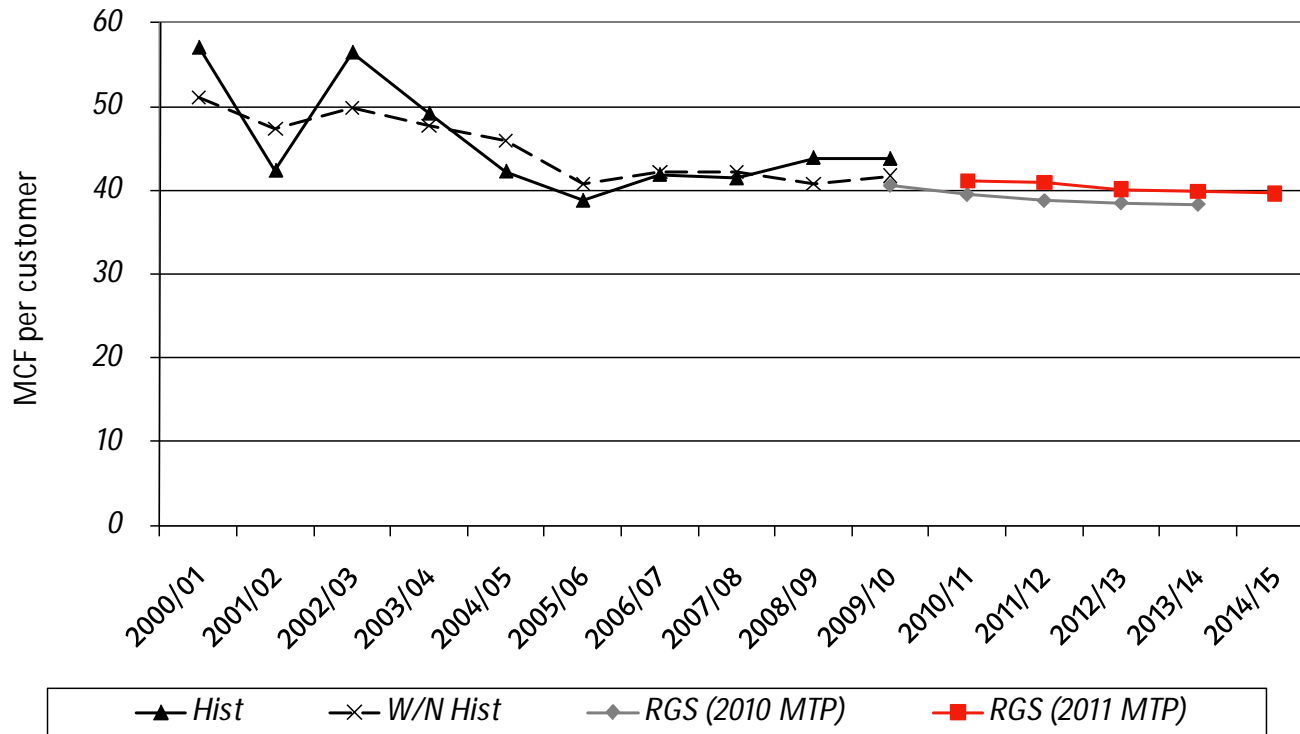


\*In 2011 MTP forecast, 2010 value is a weather-normalized 2+10 forecast.

\*\* Historical data (2005-2009) adjusted with Ford in IFT instead of ISP

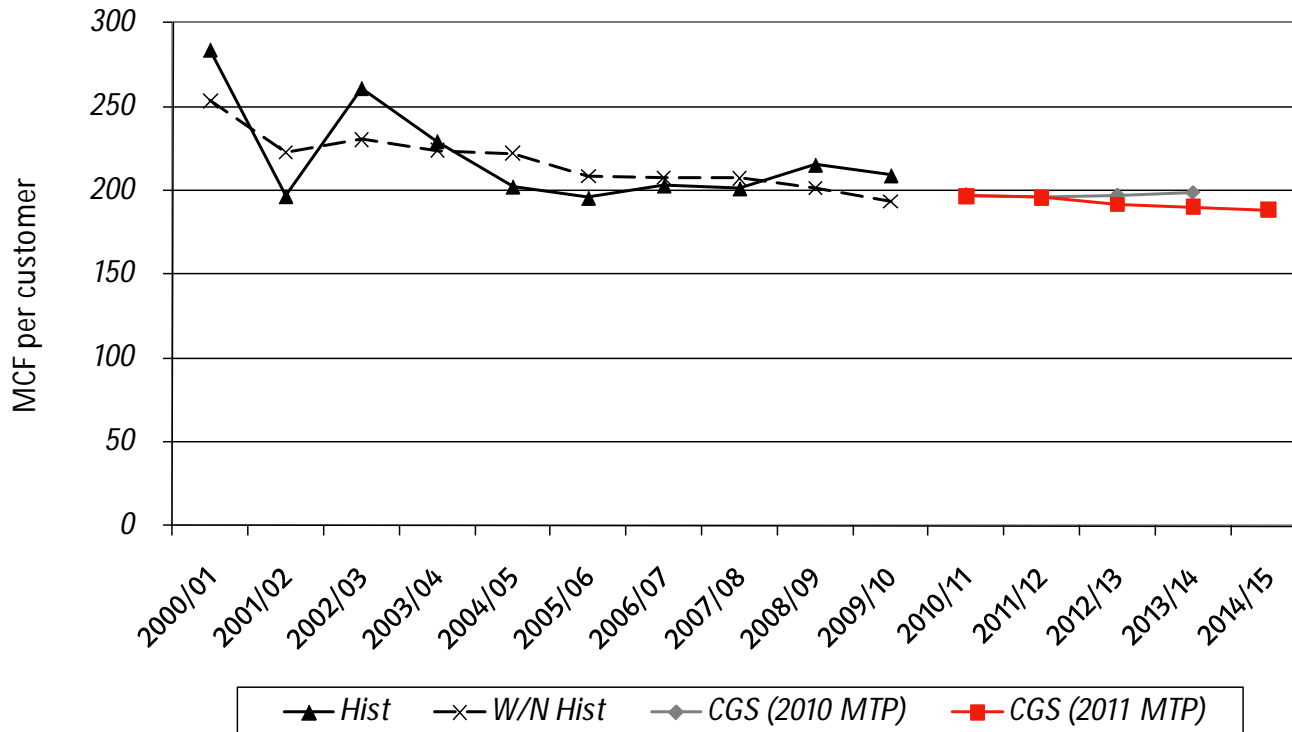
*Compared to the 2010 MTP, Residential use-per-customer forecast is slightly higher for 2010/2011*

**Winter Residential (RGS) Use-per-Customer  
(November - February)**



# CGS use-per-customer forecast is mostly unchanged for 2011

Winter Commercial (CGS) Use-per-Customer  
(November - February)

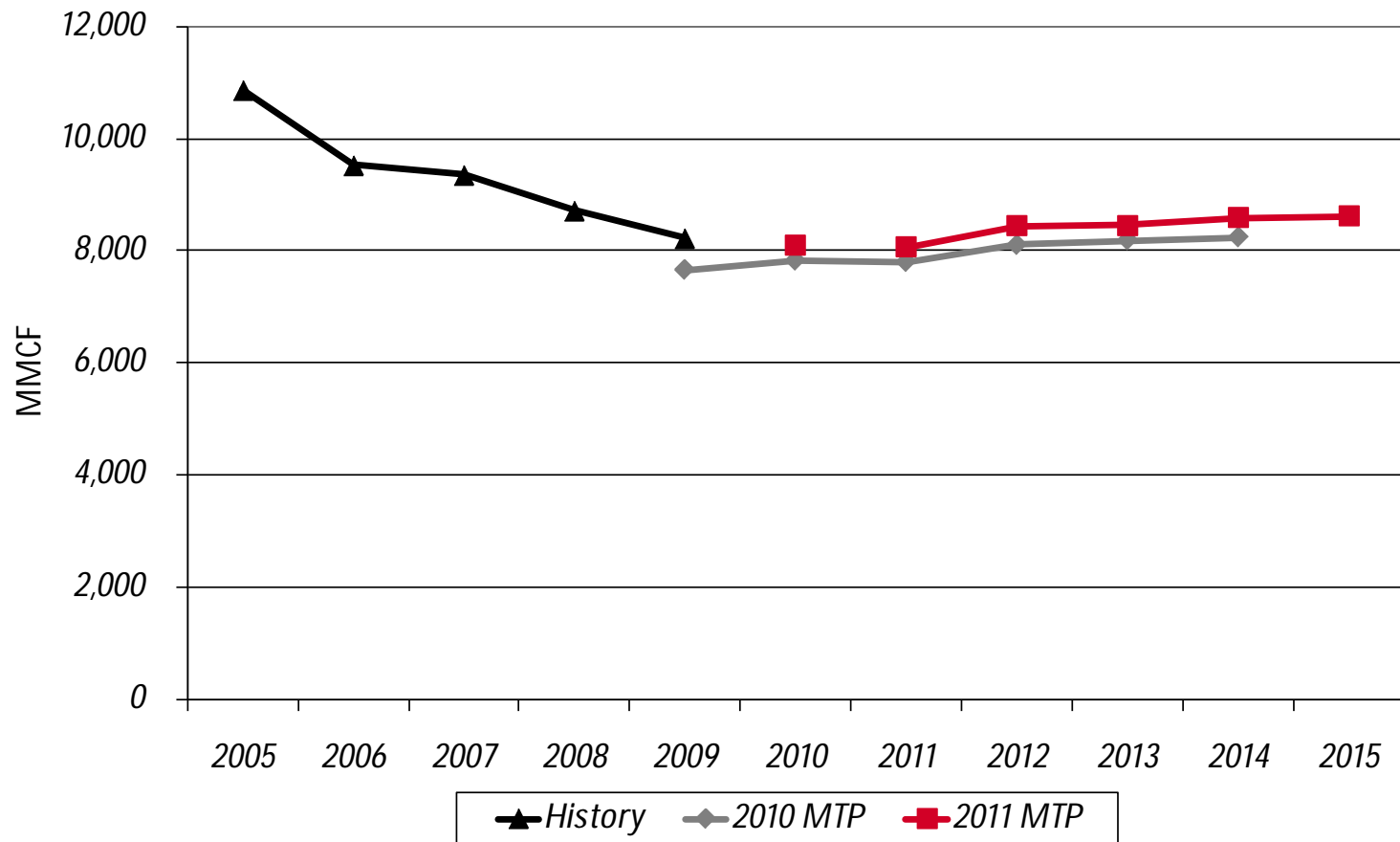


## Significant Changes to Major Account Forecasts

	2010 MTP	2011 MTP
Ford LAP	<ul style="list-style-type: none"> <li>•30% chance of closure.</li> <li>•Negative net growth outlook for 2010-2014.</li> </ul>	<ul style="list-style-type: none"> <li>•0% chance of closure.</li> <li>•Positive growth expectations (2012-2015)</li> </ul>
Rohm & Haas	<ul style="list-style-type: none"> <li>•Anticipated a 38.5% drop in gas load.</li> <li>•Actual drop was about 14%.</li> </ul>	<ul style="list-style-type: none"> <li>•Adjusting forecast down based on shutdown possibility and uncertainty of relationship with ASRC.</li> <li>•Forecasting a 20% drop from 2009 actual</li> </ul>
ASRC	<ul style="list-style-type: none"> <li>•Expected a 90 day shutdown in 2009 resulting in a 25% drop in usage-didn't occur</li> <li>•Experienced very high coal prices. Burned almost exclusively gas in 2009 due to fire damage to coal system and high coal prices.</li> </ul>	<ul style="list-style-type: none"> <li>•Assuming they will return to 2008 levels.</li> <li>•Negotiated a reasonably priced 1 year coal contract, which is assumed to be extended.</li> <li>•Assuming a 10% probability of a shutdown</li> </ul>
Fort Knox	<ul style="list-style-type: none"> <li>•Began producing gas on site</li> <li>•Continued replacing old gas heated housing units with new units using other heat sources</li> </ul>	<ul style="list-style-type: none"> <li>•Planning to install a pressure release valve in order to tap more on site gas</li> <li>•Will use gas to heat new HR Center for only 2 years, then switching to geothermal</li> </ul>

# Major Accounts have been declining since 2004

Major Accounts History and Forecast





*2011 MTP:*

*KU/LG&E Generation and Off-System Sales*

*Energy Planning, Analysis, & Forecasting*

*RCG Meeting*

*July 23, 2010*



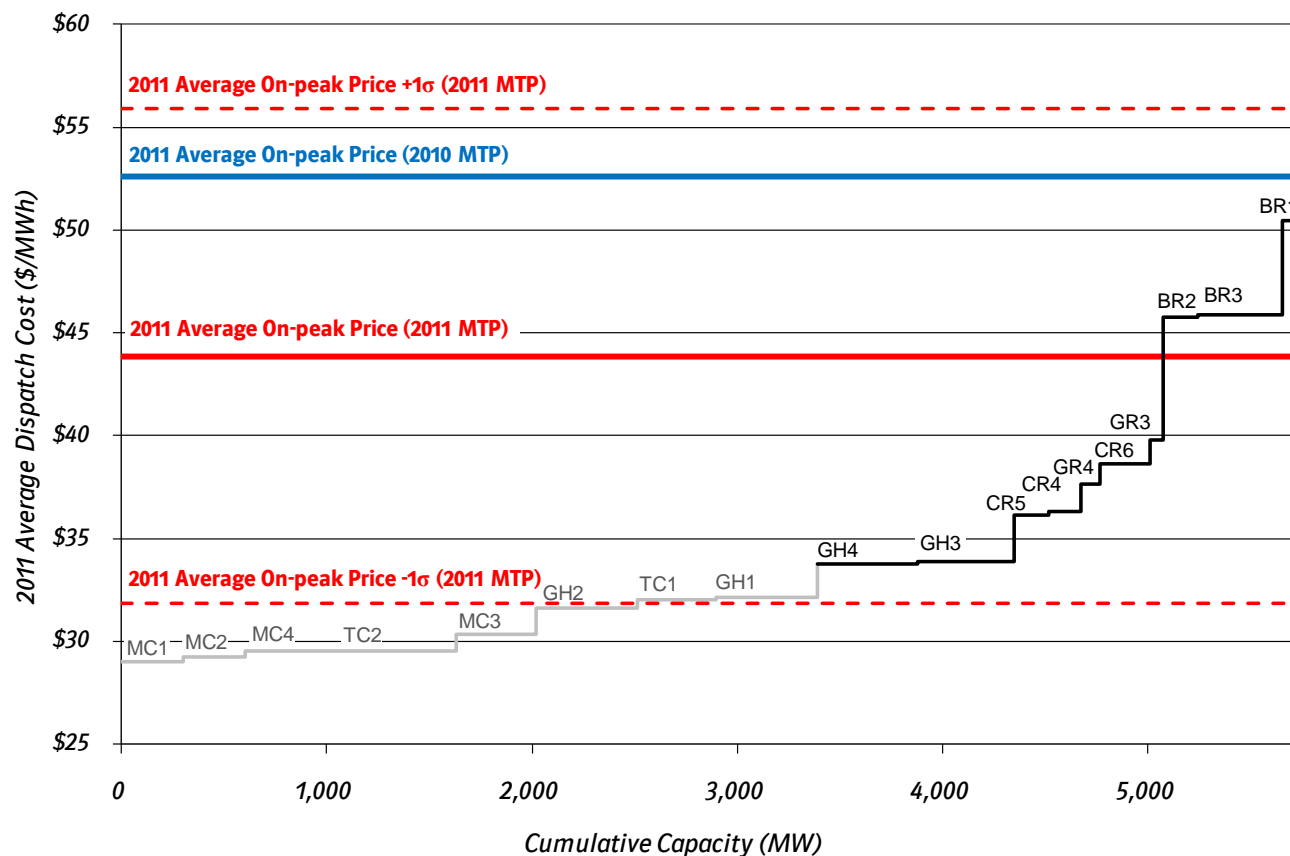
*Due primarily to decrease in electricity prices, 2011 MTP OSS contribution is 50-55% below 2010 MTP levels*

<b>OSS Contribution (\$M)</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
2010 MTP*	28	24	28
2011 MTP	12	12	13

\*Excluding \$5M stretch in 2011 & 2012

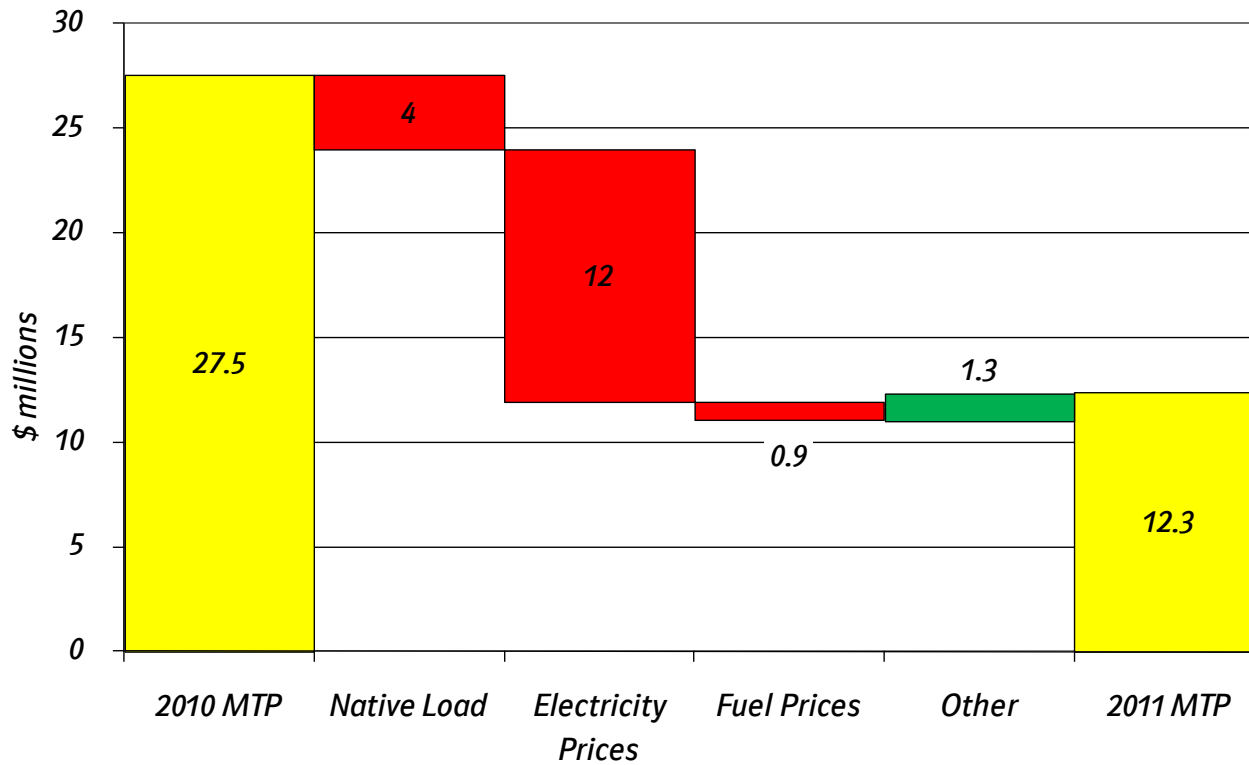
<b>Variance Contributors (\$M)</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Electricity Prices	-12	-14	-18
Native Load	-4	+1	+1

## Price reduction has greatest impact on margin of units from which most OSS are made

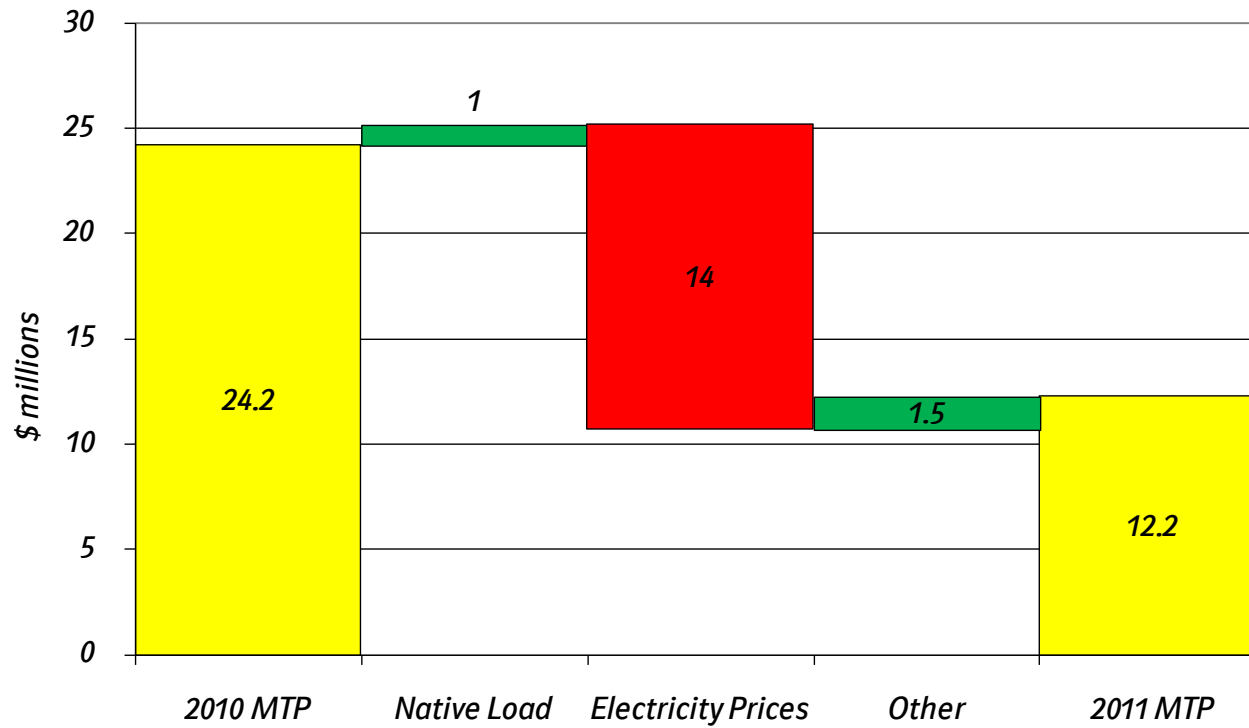


- Over 80% of on-peak OSS come from units shown in black
- Average dispatch cost includes fuel, consumables, emissions, and other sales costs (XM, RTO, etc.)

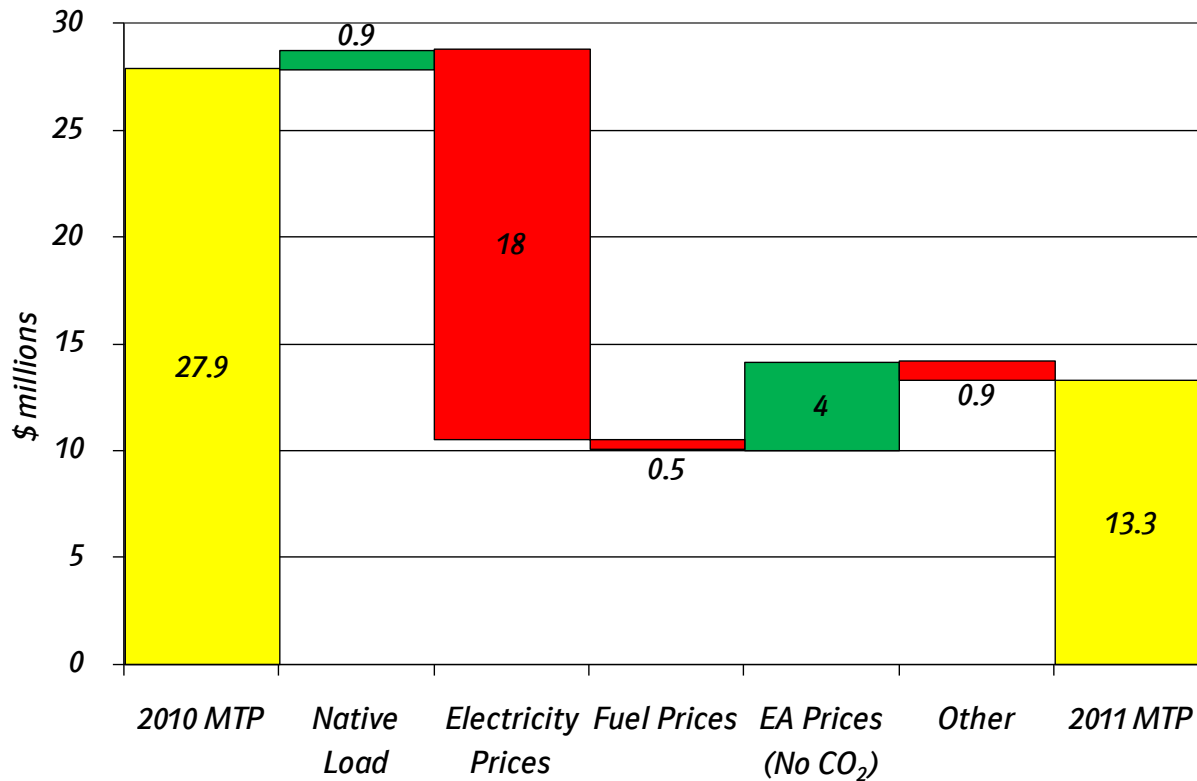
*2011 OSS contribution reduced by 55% due primarily to lower electricity prices and higher native load*



*2012 OSS contribution is 50% lower compared to 2010 MTP due primarily to lower electricity prices*



*2013 OSS contribution is 50% lower compared to 2010 MTP despite favorable impact of eliminating CO<sub>2</sub> cost*



*EFOR continues to decrease through MTP period, but at a slower rate compared to 2010 MTP*

(%)	2011 MTP			2010 MTP			2011 MTP - 2010 MTP		
	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Brown 1	5.0	5.0	5.0	3.5	6.0	6.0	1.5	-1.0	-1.0
Brown 2	5.0	5.0	5.0	3.5	5.0	5.0	1.5	0.0	0.0
Brown 3	5.0	5.0	5.0	5.0	4.0	4.0	0.0	1.0	1.0
Ghent 1	4.4	4.4	4.4	3.5	3.5	3.5	0.9	0.9	0.9
Ghent 2	4.4	4.4	4.4	3.5	3.5	3.5	0.9	0.9	0.9
Ghent 3	4.4	4.4	4.4	4.3	3.5	3.5	0.1	0.9	0.9
Ghent 4	4.4	4.4	4.4	4.0	3.5	3.5	0.4	0.9	0.9
Green River 3	6.4	6.4	6.4	6.4	6.4	6.4	0.0	0.0	0.0
Green River 4	6.4	6.4	6.4	6.4	6.4	6.4	0.0	0.0	0.0
Tyrone 3	6.4	6.4	6.4	6.4	6.4	6.4	0.0	0.0	0.0
Cane Run 4	5.0	5.3	5.6	4.8	4.8	4.8	0.2	0.5	0.8
Cane Run 5	5.0	5.3	5.6	4.8	4.8	4.8	0.2	0.5	0.8
Cane Run 6	5.0	5.3	5.6	5.0	5.0	5.0	0.0	0.3	0.6
Mill Creek 1	4.4	4.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Mill Creek 2	4.4	4.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Mill Creek 3	4.4	4.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Mill Creek 4	4.4	4.4	4.4	4.4	4.4	4.4	0.0	0.0	0.0
Trimble County 1	3.5	3.5	3.5	3.3	3.3	3.3	0.2	0.2	0.2
Trimble County 2	6.0	4.5	3.8	5.0	3.3	3.3	1.0	1.2	0.5
<b>Total EFOR</b>	<b>4.6</b>	<b>4.5</b>	<b>4.4</b>	<b>4.3</b>	<b>4.0</b>	<b>4.0</b>	<b>0.3</b>	<b>0.5</b>	<b>0.4</b>
Total MOR	2.4	2.4	2.4	2.4	2.4	2.4	0.0	0.0	0.0
Total EUOR	7.0	6.9	6.8	6.7	6.4	6.4	0.3	0.5	0.4

## MW-Weeks Maintenance Comparison

	2011 MTP			2010 MTP			2011 MTP - 2010 MTP		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Brown 1	239	346	134	221	319	124	18	27	10
Brown 2	714	213	547	701	207	537	13	6	10
Brown 3	1,340	3,338	517	1,374	3,475	534	(34)	(137)	(17)
Ghent 1	1,118	1,613	633	1,074	1,541	613	43	71	21
Ghent 2	629	4,513	629	632	4,533	627	(2)	(20)	3
Ghent 3	4,454	1,590	1,530	4,247	1,535	1,542	206	55	(12)
Ghent 4	626	1,590	626	611	1,519	589	15	72	37
Green River 3	89	569	89	89	572	85	-	(4)	4
Green River 4	392	117	759	392	118	759	-	(1)	-
Tyrone 3*	-	-	-	586	89	236	(586)	(89)	(236)
Cane Run 4	1,281	-	508	1,281	-	508	-	-	-
Cane Run 5	550	-	550	550	-	550	-	-	-
Cane Run 6	-	784	-	-	1,978	-	-	(1,194)	-
Mill Creek 1	389	2,497	389	389	2,497	389	-	-	-
Mill Creek 2	2,481	383	1,287	2,479	383	1,282	2	-	5
Mill Creek 3	3,229	506	1,671	3,032	478	1,649	197	28	22
Mill Creek 4	605	2,002	605	603	2,049	603	2	(47)	2
Trimble County 1**	3,213	-	2,191	2,191	-	2,191	1,022	-	-
Trimble County 2**	3,136	3,121	-	1,686	3,152	-	1,450	(30)	-
<b>Totals</b>	<b>24,485</b>	<b>23,181</b>	<b>12,667</b>	<b>22,138</b>	<b>24,445</b>	<b>12,818</b>	<b>2,347</b>	<b>(1,264)</b>	<b>(151)</b>

\* Inactive Reserve (2011 MTP)

\*\* 100% Trimble County Units

## *OSS contribution is sensitive to potential changes in price and unit availability*

- *Historical electricity price volatility suggests*
  - *<1% chance of returning to 2010 MTP electricity price levels in 2011*
  - *15% chance of achieving additional \$5M in OSS contribution in 2011*
- *Moving electricity price blend from 70% PJM / 30% MISO to 100% PJM increases OSS contribution by \$2M/year*
- *EFOR: 2011 MTP forced outage targets are lower than recent history*

<b>Sensitivities - OSS Contribution (\$M)</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
2011 MTP	12.3	12.2	13.3
2011 MTP with 2010 MTP Target EFOR	13.5	12.4	14.0
2011 MTP with 2007-2009 Average EFOR	10.8	9.8	11.6



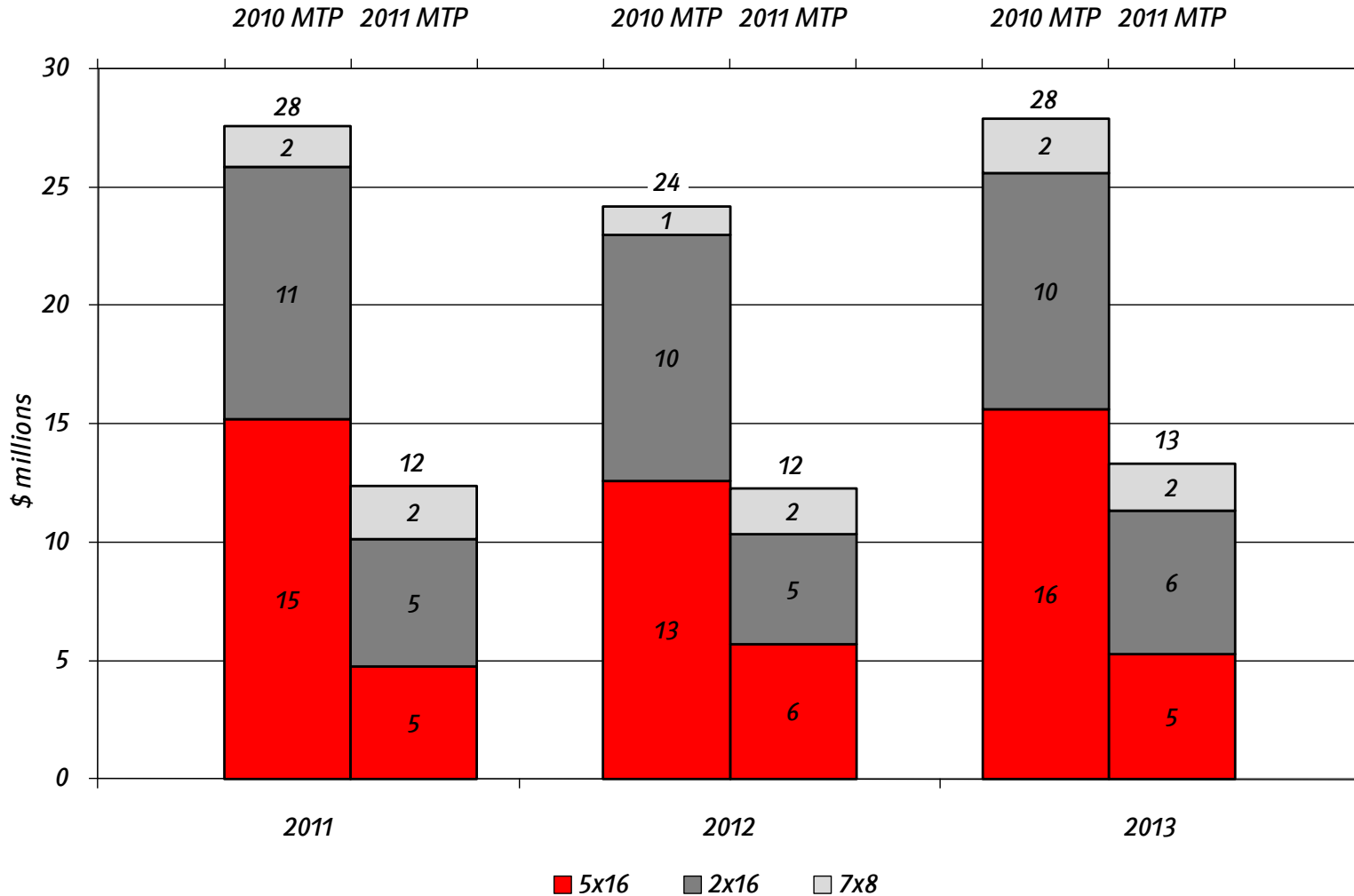
## **Appendix**

### **Assumptions and Prices**

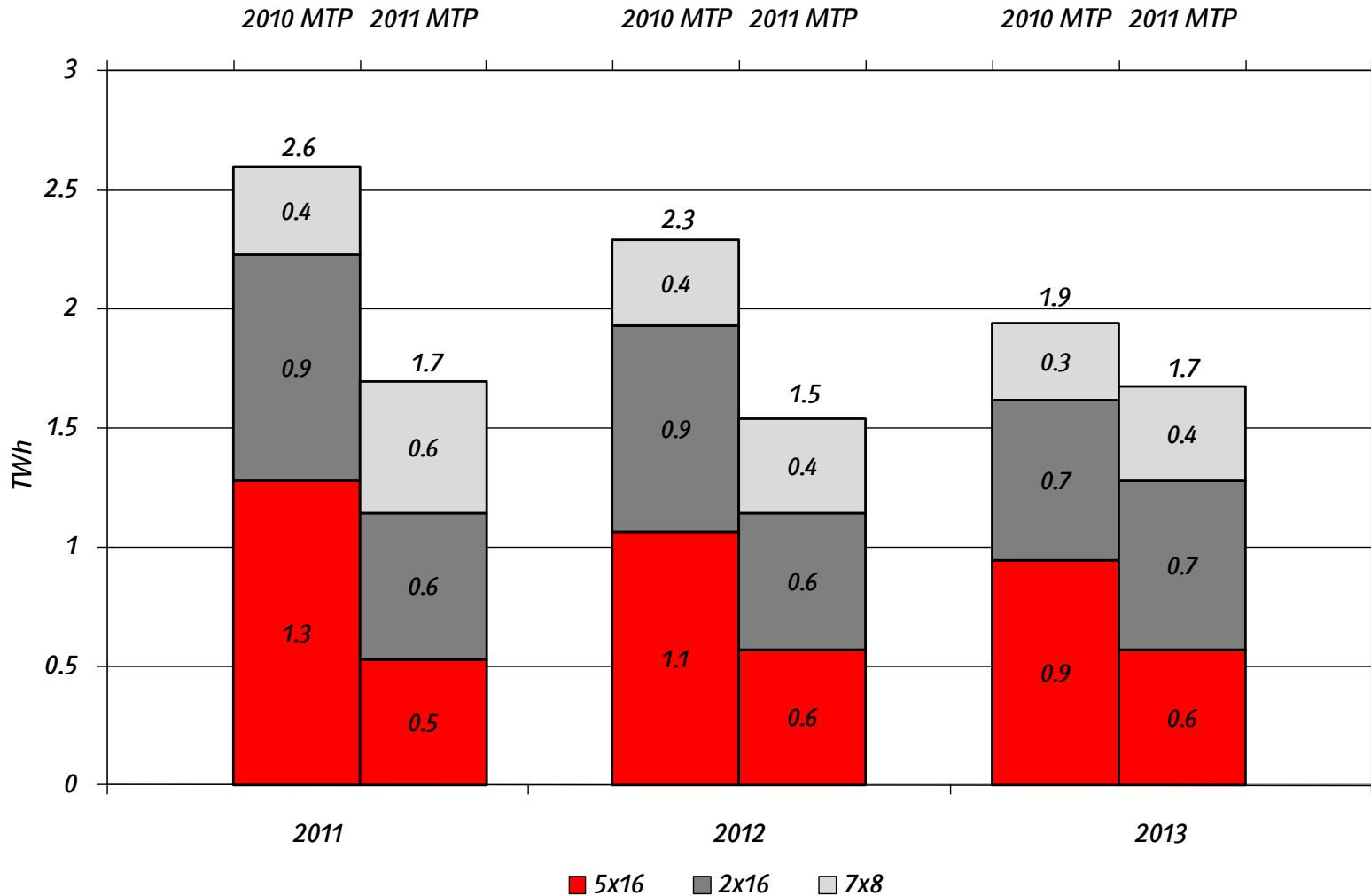
## *Appendix Index*

<i>OSS Contribution Comparison</i>	<i>12</i>
<i>OSS Volume Comp.</i>	<i>13</i>
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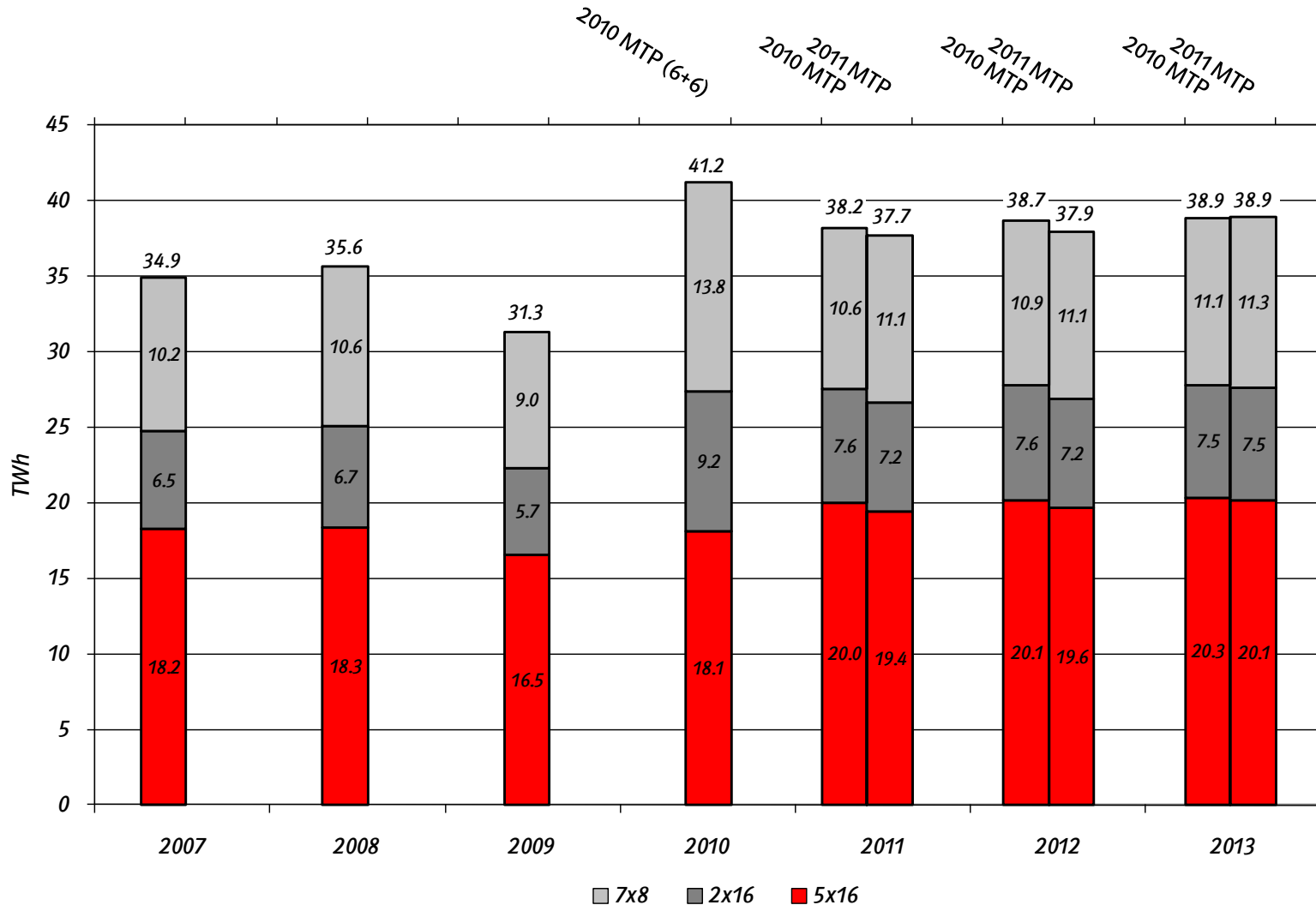
## *OSS contribution reduction occurs in peaks and weekends*



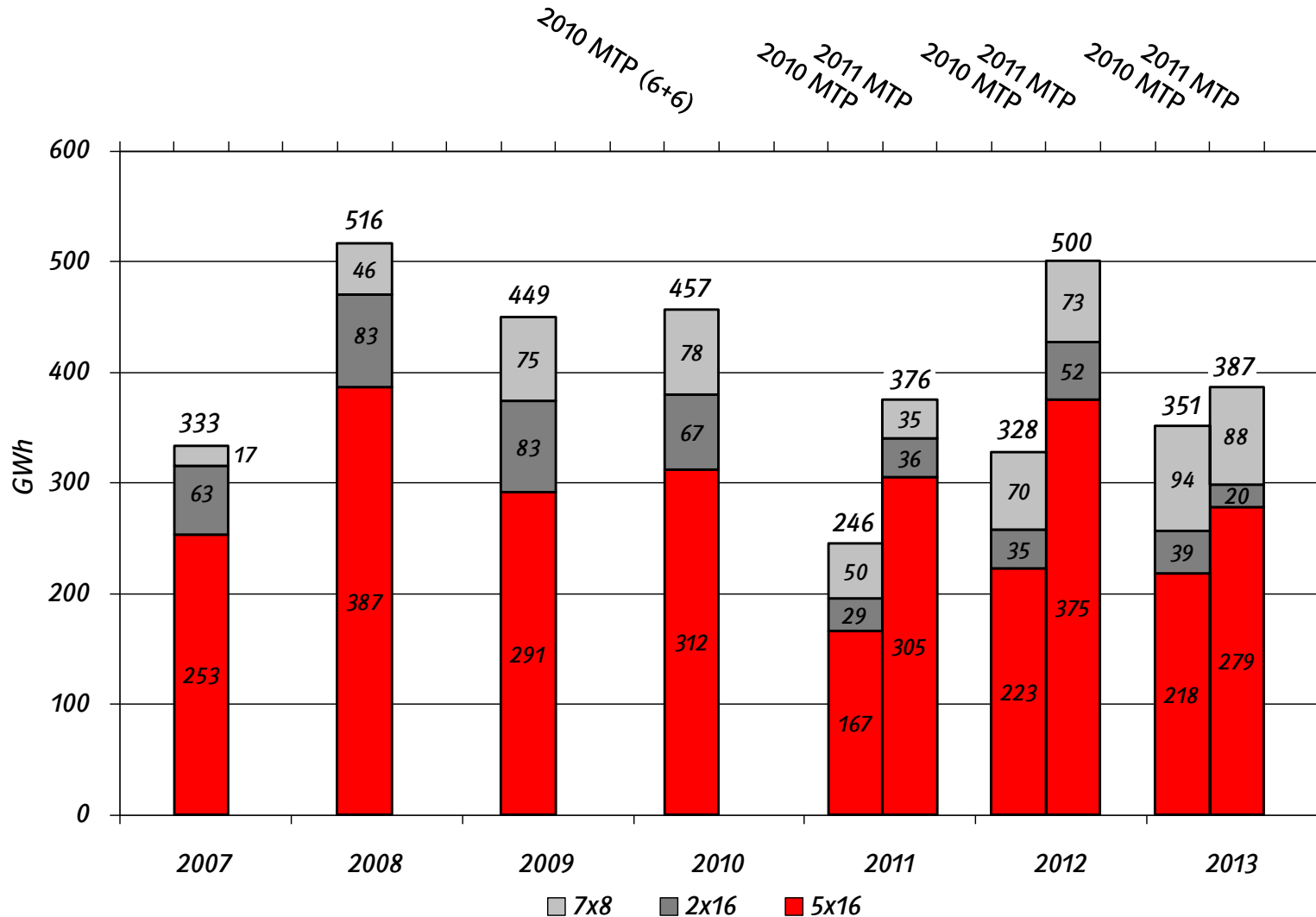
## Compared to 2010 MTP, OSS volumes are lower



# Compared to 2010 MTP, coal generation is mostly unchanged



## Lower market prices result in increased purchases



## Assumptions

- *Emissions Controls*
  - *Brown 3 SCR operational 5/28/2012*
- *CT Availability*
  - *Trimble County CTs are available all months*
  - *Brown CTs are available all months*
  - *Paddy's Run 13*
    - Available Spring-Summer-Fall 2011+*
    - Unavailable in winter due to gas pressure issues*
- *Operating Reserve*
  - *Starting 1/1/2011: 212 MW contingency (100% spinning), 75 MW regulating, 75 MW NAS*
  - *Starting 4/1/2011: 212 MW contingency (112 MW spinning and 100 MW supplemental), 75 MW regulating, 75 MW NAS*

## *Assumptions*

- *Market Volumes*
  - *Hourly Sales – Unconstrained*
  - *Hourly Purchases (same as 2010 MTP)*
    - 5x16 limited to 400 MW*
    - 2x16 limited to 450 MW*
    - 7x8 limited to 200 MW*
- *Market Electricity Prices*
  - *May 28, 2010 trading date*
  - *Based on 70/30 blend of PJM/MISO in 5x16 and 2x16; 90/10 blend in 7x8*
  - *Hourly pricing shaped to correspond with historical load shape*



## *Assumptions*

- *Trimble County 2 in-service October 2010*
- *Tyrone 3 on inactive reserve*
- *No CO<sub>2</sub> emissions allowance pricing*
- *No OSS from CTs*
- *Include RSG, ECR, XM, and losses in OSS dispatch*
- *Variable O&M not included in dispatch or OSS margin*
- *Forecasted LG&E gas contract price included for MC and CR gas*
- *TC Backup to IMEA/IMPA during forced outages (128 MW for TC1; none for TC2)*

## *Steam Unit EFOR Assumptions*

- *TC2: EFOR for 2011 is adjusted to reflect delay in commissioning date; time to reach steady-state EFOR increased by one year*
- *TC1: EFOR remains flat, albeit at a slightly higher level (3.5% vs. 3.3%)*
- *Mill Creek/Green River: EFOR is unchanged from 2010 MTP*
- *Ghent: EFOR at Ghent is aligned with Mill Creek*
- *Cane Run/Brown: 2011 EFOR target is 5.0%; since 2000, lowest 3-year average EFOR was 5.1% at Brown (2006-08) and 5.2% at Cane Run (2003-05)*
- *No change from 2010 MTP to maintenance outage rate (MOR) targets*

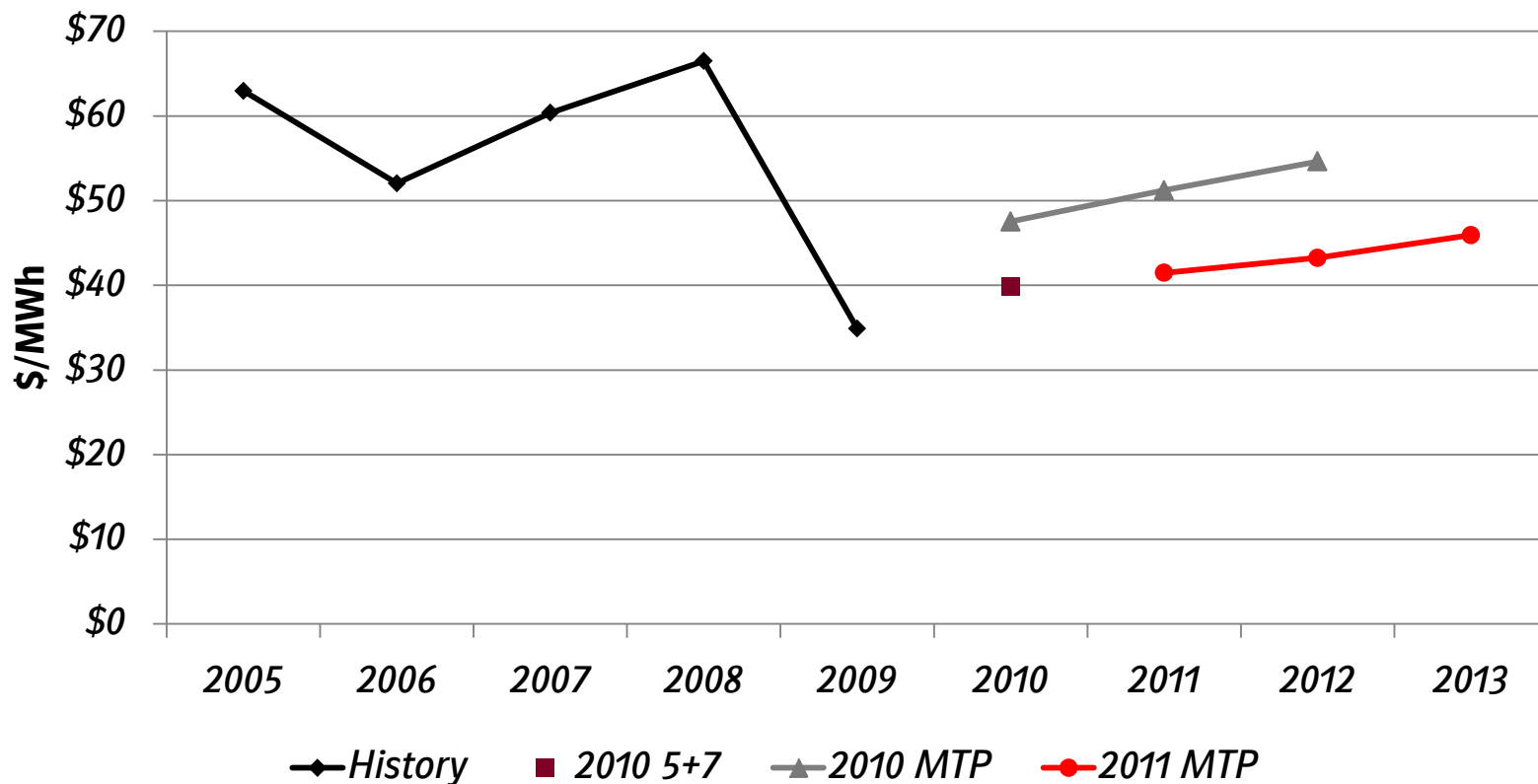
## *Contingency Reserves*

- *Joined reserve sharing group with TVA and EKPC in 1/2010*
- *Current KU/LG&E allocation is 212 MW*
- *MTP Assumptions*
  - *2011 MTP: 212 MW contingency reserves (100% spinning until 4/2011, and 112 MW spinning / 100 MW supplemental thereafter)*
  - *2010 MTP: 199 MW contingency reserves (99 MW spinning / 100 MW supplemental)*

## Blended Electricity Prices

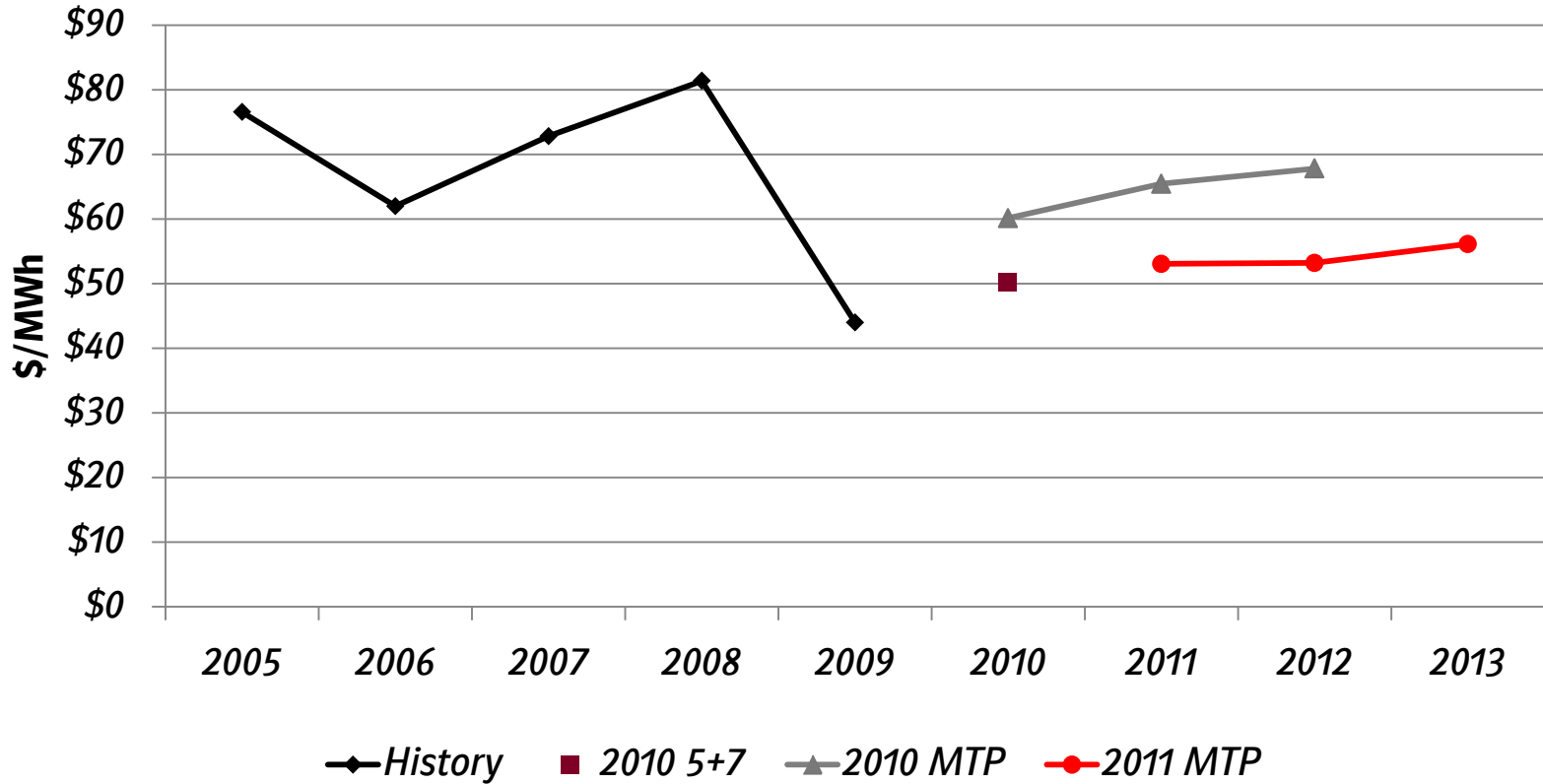
<b>2011 Electricity Prices</b>	<b>5x16</b>	<b>7x8</b>	<b>2x16</b>
<b>2011 MTP</b>			
<i>Prices (\$/MWh)</i>	44	28	39
<i>PJM/MISO Blend</i>	70/30	90/10	70/30
<b>2010 MTP</b>			
<i>Prices (\$/MWh)</i>	53	30	45
<i>PJM/MISO Blend</i>	50/50	75/25	67/33

## Wholesale Electricity: CIN Hub Peak (5x16)



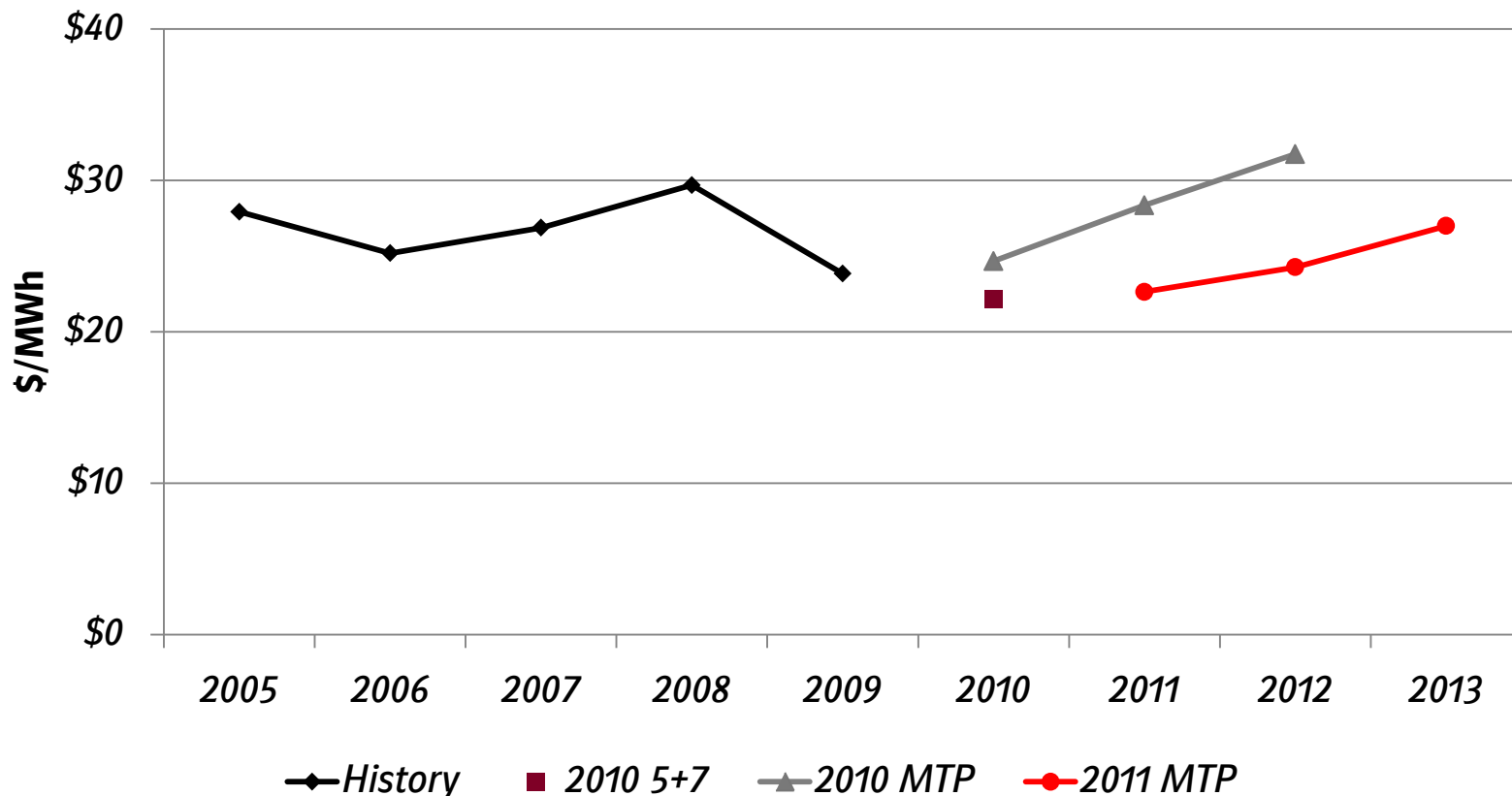
- Market view in 2011-13 MTP represented by ICE forward prices as on May 28, 2010.

## Wholesale Electricity: PJM-W Peak (5x16)



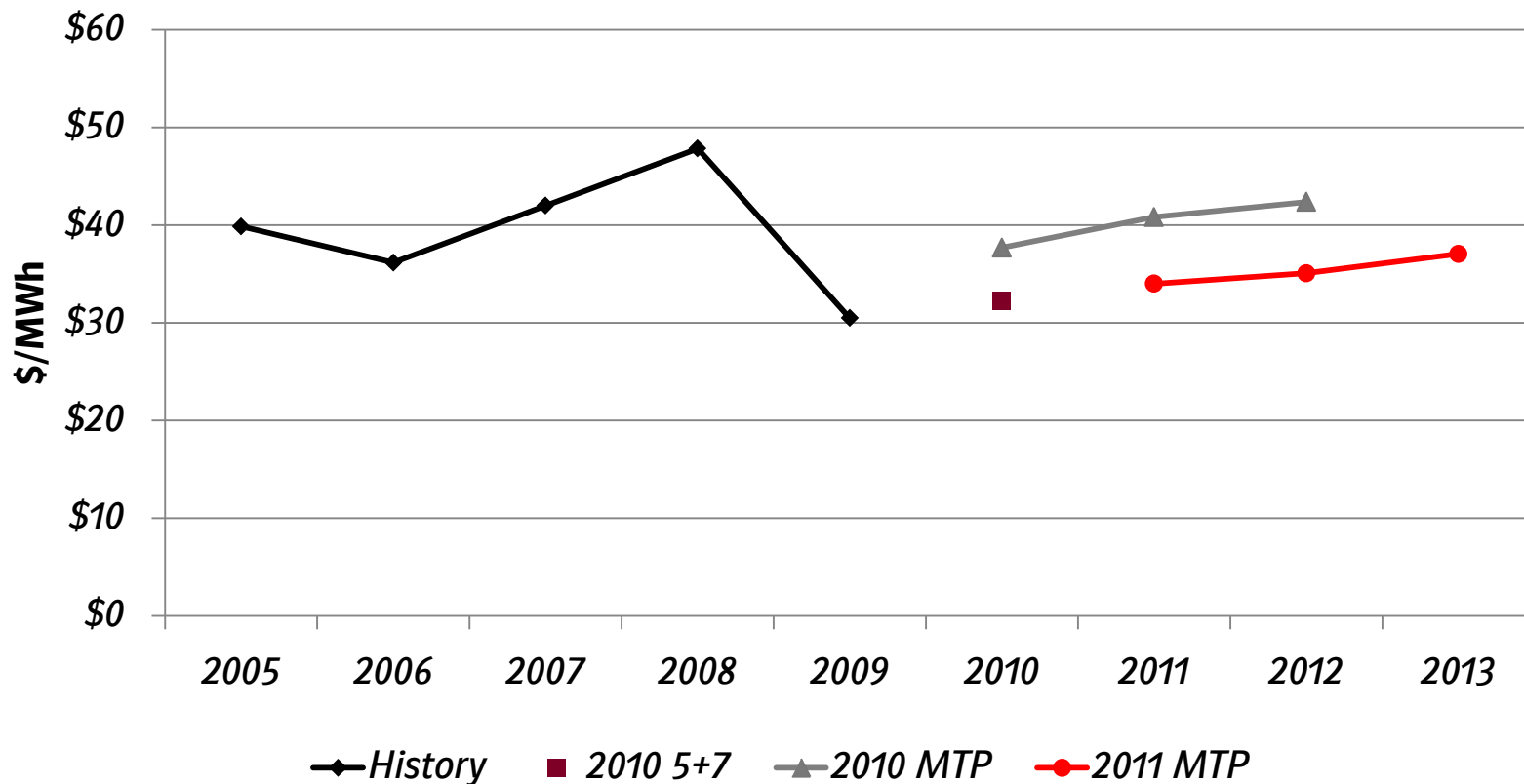
- Market view in 2011-13 MTP represented by ICE forward prices as on May 28, 2010.

## Wholesale Electricity: CIN Hub Offpeak (7x8)



- 2011-13 MTP pricing for off-peak 7x8 based on ICE forward off-peak 'wrap' prices as on May 28, 2010 and historic ratio of 7x8 to 'wrap'.

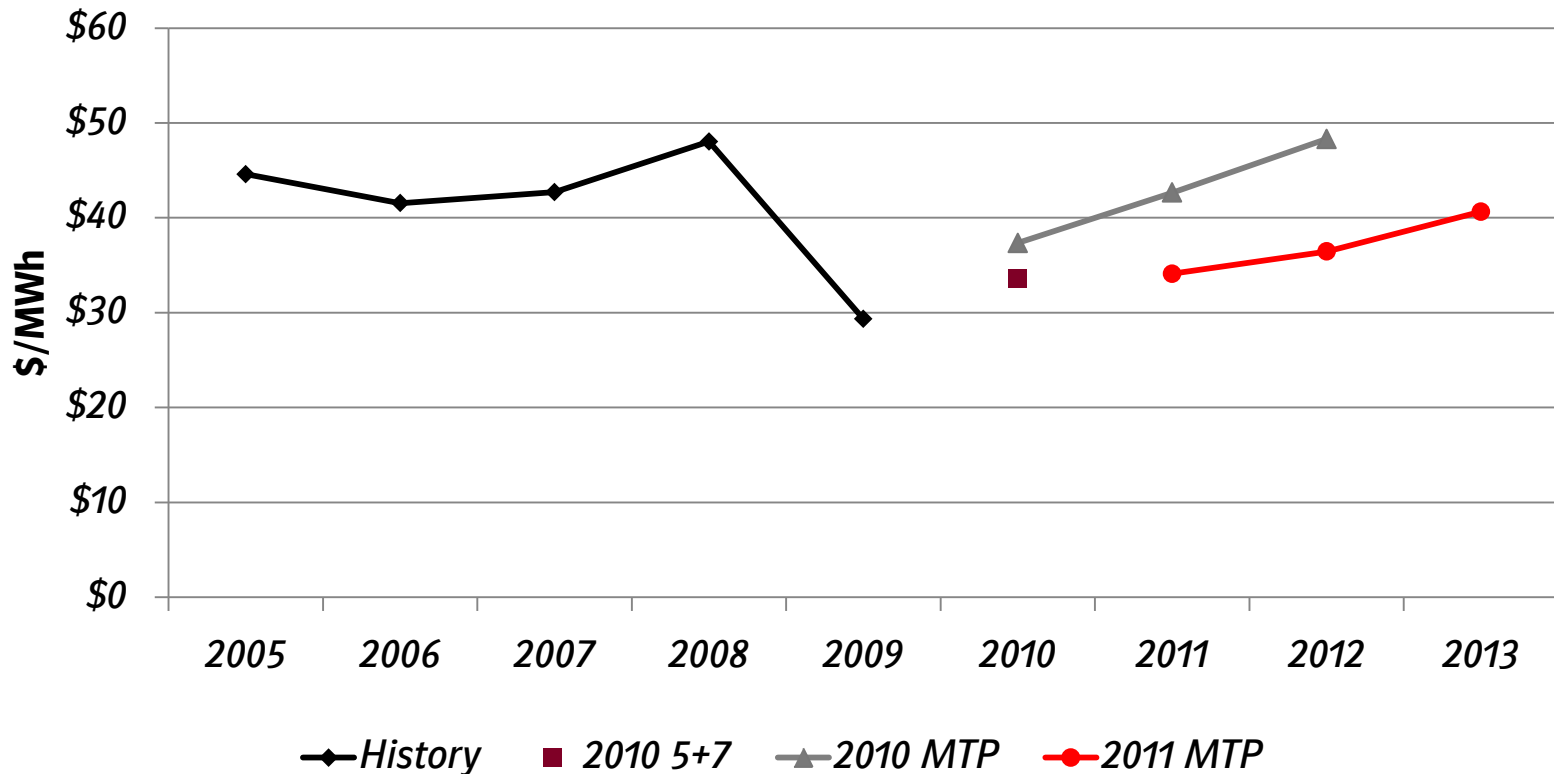
## Wholesale Electricity: PJM-W Offpeak (7x8)



- 2011-13 MTP pricing for off-peak 7x8 based on ICE forward off-peak 'wrap' prices as on May 28, 2010 and historic ratio of 7x8 to 'wrap'.

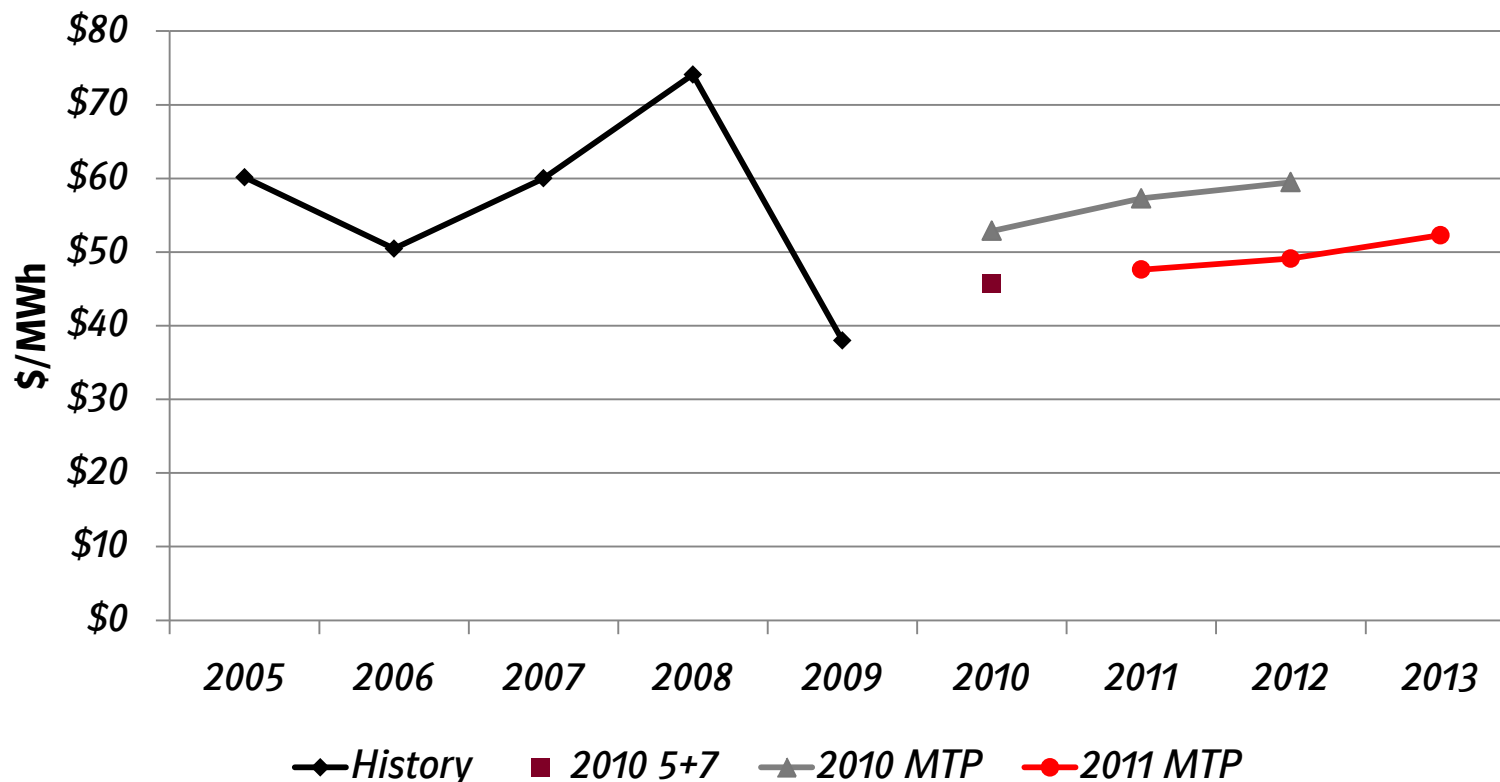


## Wholesale Electricity: CIN Hub Weekend (2x16)



- 2011-13 MTP pricing for weekend 2x16 based on ICE forward off-peak 'wrap' prices as on May 28, 2010 and historic ratio of 2x16 to 'wrap'.

## Wholesale Electricity: PJM-W Weekend (2x16)



- 2011-13 MTP pricing for weekend 2x16 based on ICE forward off-peak 'wrap' prices as on May 28, 2010 and historic ratio of 2x16 to 'wrap'.

## *OSS Contribution Sensitivity to Electricity Prices*

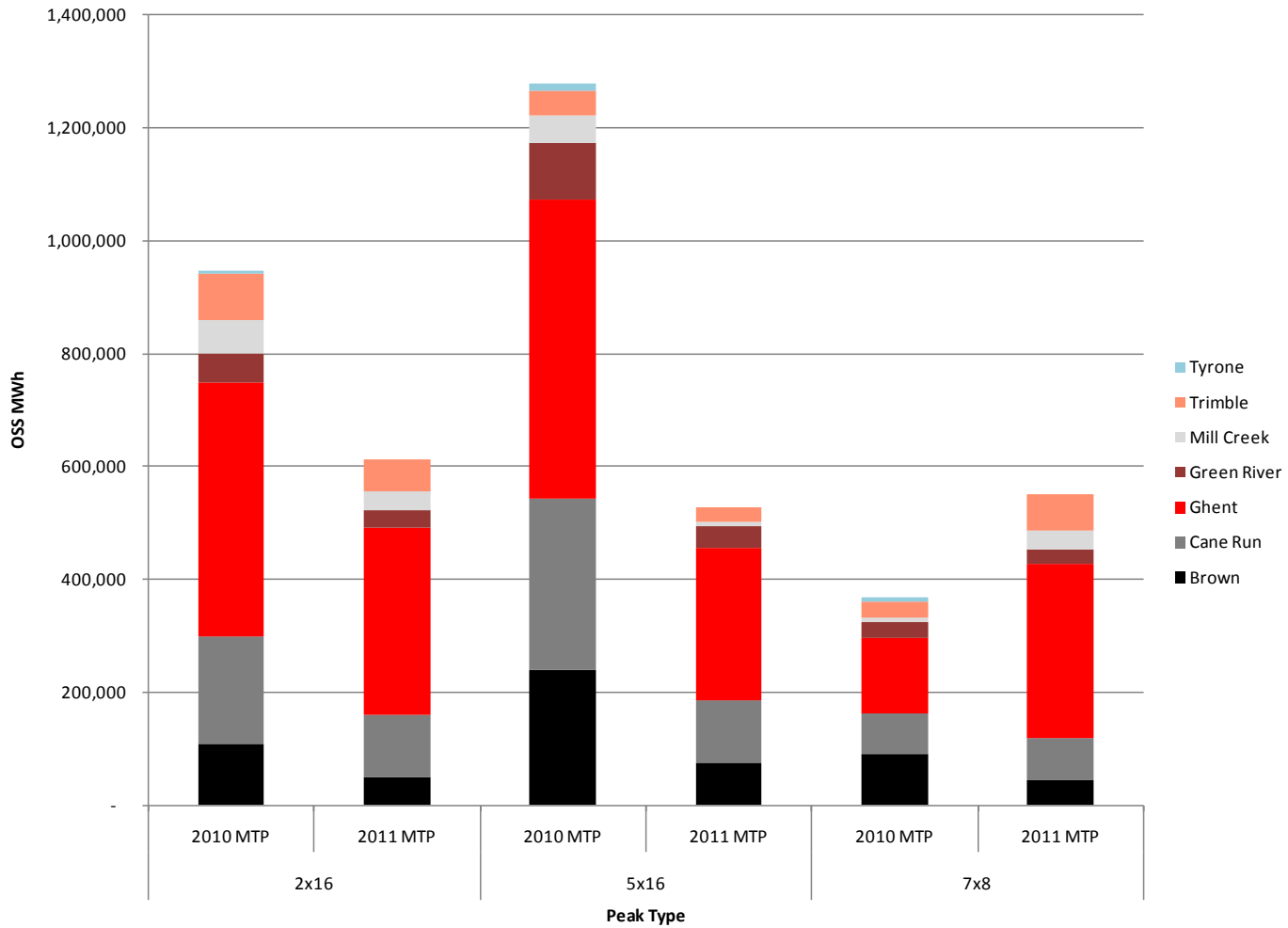
<b>Sensitivities - OSS Contribution (\$M)*</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
+20% Market Prices	32.7	31.6	36.8
-20% Market Prices	1.5	1.2	1.3

*\*Values in table represent total OSS contribution*

## Generation Comparison

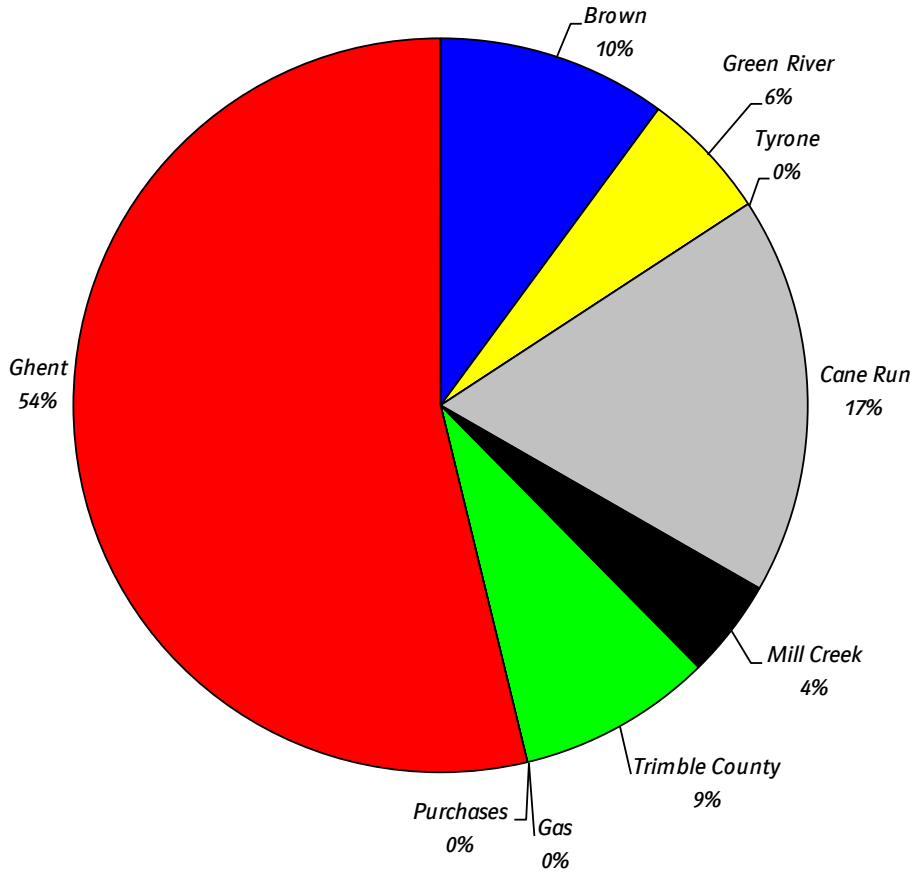
GWh	2011 MTP			2010 MTP			2011 MTP - 2010 MTP		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Brown	2,524	2,548	2,755	2,943	3,097	3,308	(419)	(550)	(552)
Ghent	12,921	12,976	13,432	12,532	12,662	12,879	389	314	552
Green River	790	873	877	757	847	678	33	27	199
Tyrone	-	-	-	154	205	173	(154)	(205)	(173)
Cane Run	2,542	2,354	2,437	2,912	2,743	2,812	(370)	(389)	(375)
Mill Creek	10,225	9,779	9,670	9,622	9,500	9,258	603	279	412
Trimble County 1	3,470	4,014	3,669	3,673	4,049	3,674	(204)	(35)	(5)
Trimble County 2	5,214	5,372	6,075	5,564	5,584	6,088	(350)	(211)	(13)
Brown CTs	108	115	118	92	96	89	15	18	29
Trimble County CTs	353	348	288	286	305	275	67	43	13
Paddy's Run 13	60	107	70	8	6	11	51	100	59
Other CTs	0.1	0.2	0.3	-	0.2	0.4	0.1	0.0	(0.1)
Dix Dam/Ohio Falls	307	307	319	329	358	384	(23)	(51)	(65)
OVEC Purchase	788	878	763	706	901	1,171	82	(23)	(407)
Total	39,301	39,670	40,474	39,580	40,354	40,800	(279)	(684)	(327)

# 2011 OSS Volume by Station

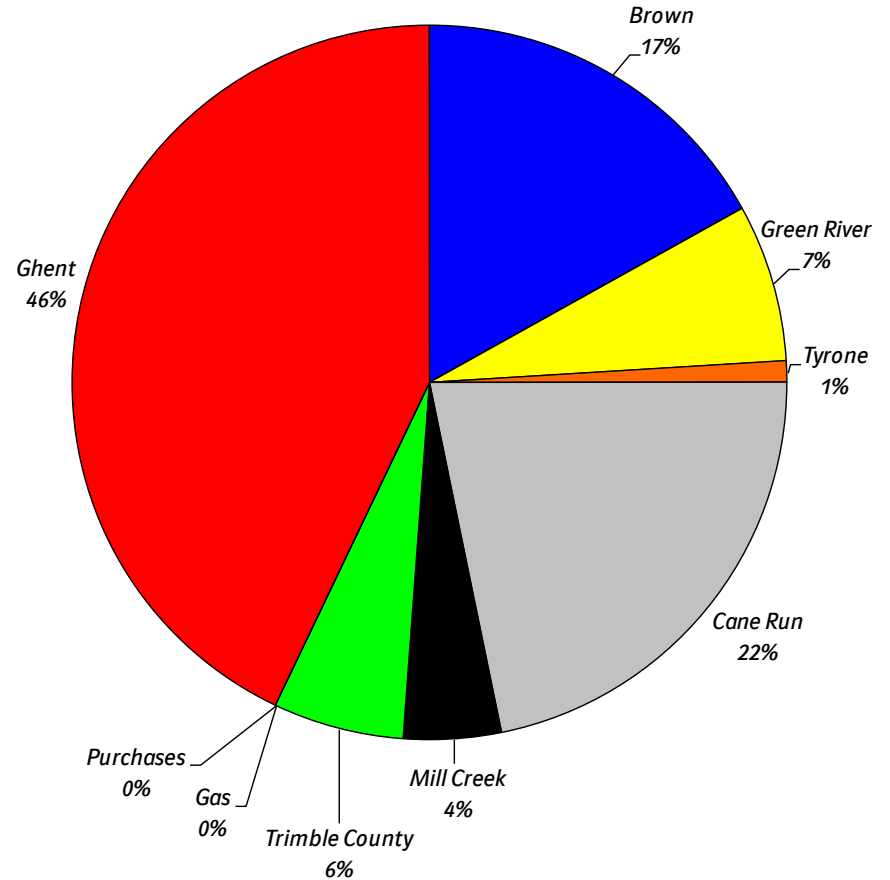


# Allocation of OSS by Station

2011 MTP for 2011



2010 MTP for 2011



## Fuel Cost Comparison Annual Averages

Fuel Expense (¢/mmBTU)					Delta	
		2010 Forecast (6+6)	2011 MTP 2011	2010 MTP 2011	2011 MTP 2011 - 2010 MTP 2011	% Change
<b>COAL</b>	<i>BR</i>	336	335	324	11	3%
	<i>GH</i>	225	218	214	3	1%
	<i>GR</i>	259	258	261	(3)	-1%
	<i>CR</i>	203	218	214	5	2%
	<i>MC</i>	181	190	189	1	0%
	<i>TC</i>	212	216	209	7	3%
	<i>TC PRB</i>	205	248	285	(37)	-13%
<b>GAS</b>	<i>Gas</i>		592	763	(171)	-22%
	<i>Gas Haef</i>		667	838	(171)	-20%
<b>OIL</b>	<i>Oil</i>	1609	1697	1780	(83)	-5%

# Weekly Maintenance Comparison - 2011

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/3																			
1/10																			
1/17																			
1/24																			
1/31																			
2/7																			
2/14																			
2/21	486																		
2/28	486																		563
3/7																			563
3/14			485																563
3/21			485																563
3/28			485																
4/4			454		97		420												
4/11			454		97		420												
4/18			454				420												
4/25			454					95											
5/2			454					95					168						
5/9			454					95					168						477
5/16								95					168						
5/23		490																	
5/30																			
Summer Season																			
9/5																			
9/12																			
9/19																			
9/26											155								301
10/3							165				155								299
10/10							165				155								386
10/17							495				155								386
10/24							165				155								386
10/31											155								386
11/7											155								386
11/14											155								386
11/21																			
11/28																			
12/5																			
12/12																			
12/19																			
12/26																			

Removed from 2010 MTP

Added to 2011 MTP

### Unchanged



# Weekly Maintenance Comparison - 2012

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/2																			
1/9																			
1/16																			
1/23																			
1/30																			
2/6																			
2/13		480																	
2/20		480																	
2/27		480														397			
3/5		480																	571
3/12		480																	571
3/19		480																	571
3/26		480			98														571
4/2		490	454		97		414												
4/9		490	454		97		414						240						
4/16			454				414						240				477		
4/23							414						240				477		
4/30	493						414										477		
5/7	493						414										477		
5/14	493						414												
5/21							414	95											
5/28																			
Summer Season																			
9/3																			
9/10																			
9/17																			
9/24								68						303					
10/1								71						303					
10/8								71						303					
10/15				495		165		71						303					
10/22				495				71						303					
10/29				495				71						303					
11/5								71						303					
11/12								71						303					
11/19																			
11/26																			
12/3																			
12/10																			
12/17																			
12/24																			

Removed from 2010 MTP

Added to 2011 MTP

### Unchanged

# Weekly Maintenance Comparison - 2013

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/7																			
1/14																			
1/21																			
1/28																			
2/4																			
2/11																			
2/18																			
2/25																			
3/4																			
3/11												168							
3/18												168					397		
3/25												168					397		
4/1																			
4/8									95									391	
4/15									95										
4/22									95										
4/29									95										
5/6									95										
5/13									95										
5/20									95										
5/27																			
Summer Season																			
9/2																			
9/9																			
9/16																			
9/23																			
9/30																			
10/7																			
10/14																			
10/21																			
10/28																			
11/4																			
11/11																			
11/18																			
11/25																			
12/2																			
12/9																			
12/16																			
12/23																			
12/30																			

Removed from 2010 MTP

Added to 2011 MTP

### Unchanged

# CT Operation Comparison to Actual (for plant maintenance planning)

CT Generation (GWh)

	<u>ACTUAL</u>			<u>6+6</u> <u>FORECAST</u>	<u>2011 MTP</u>		
	2007	2008	2009	2010	2011	2012	2013
BR5	20	2	2	8	3	3	6
BR6	89	22	37	71	68	63	55
BR7	52	33	27	55	24	37	40
BR8	20	7	8	13	4	4	5
BR9	11	3	2	7	4	3	4
BR10	5	2	2	5	2	2	4
BR11	4	1	5	6	2	2	4
PR13	71	4	1	14	60	107	70
TC5	93	74	43	96	96	94	71
TC6	84	70	28	82	69	81	63
TC7	113	59	39	76	67	65	52
TC8	150	63	33	64	50	42	42
TC9	148	58	30	74	41	40	33
TC10	131	51	21	59	31	25	28
	<b>991</b>	<b>449</b>	<b>278</b>	<b>630</b>	<b>521</b>	<b>569</b>	<b>477</b>

<u>2010 MTP</u>			
<b>588</b>	<b>387</b>	<b>408</b>	<b>375</b>

CT Starts (# starts)

	<u>ACTUAL</u>			<u>6+6</u> <u>FORECAST</u>	<u>2011 MTP</u>		
	2007	2008	2009	2010	2011	2012	2013
BR5	44	9	18	37	11	9	21
BR6	93	46	61	90	158	126	110
BR7	61	39	39	90	69	106	94
BR8	62	32	40	48	22	12	23
BR9	37	18	21	31	13	13	20
BR10	28	12	10	28	13	15	14
BR11	22	12	23	27	11	8	16
PR13	56	17	2	12	54	94	63
TC5	119	88	63	143	172	156	115
TC6	98	116	47	126	109	129	90
TC7	123	74	53	124	120	110	84
TC8	179	83	49	110	92	77	62
TC9	168	68	44	99	78	84	49
TC10	140	72	36	80	62	54	42
	<b>1,230</b>	<b>686</b>	<b>506</b>	<b>1,045</b>	<b>984</b>	<b>993</b>	<b>803</b>

<u>2010 MTP</u>			
<b>942</b>	<b>688</b>	<b>753</b>	<b>593</b>



Project Engineering

2011-2015 MTP

October 13, 2010

- **Plan Highlights**
- **Major Assumptions**
- **Financial Performance**
  - **Operating Expense**
  - **Target Reconciliation**
  - **Headcount**
  - **Plan Risks**
- **Appendix**

## Key Items

- **Project Engineering's plan contains an increase of \$2.9B from 2011 to 2015 over the prior plan due to addition of projects relating to environmental air regulations and coal combustion products.**
- **Combined Cycle GT is accelerated from a 2017 commercial operation to a January 1, 2016 commercial operation.**
- **The Cane Run Landfill is reduced in scope to account for CCGT being implemented no later than January 2017 (one-year float).**
- **Compared to the prior plan, existing Project Engineering projects have been reduced \$65M overall from 2011 to 2015.**
- **Impacts of the updated 2010 forecast are not included in this presentation, nor in the current 2011 MTP.**

## 1. Regulatory

- 1.1 The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.
- 1.2 Target Reserve Margin of 14%, within a range of 13%-15%.
  - No reserve margin purchases are planned.
- 1.3 Reserve sharing remains under the TVA/EKPC Reserve Sharing Agreement (~ 230 MW).
- 1.4 E.ON U.S. remains committed to burning higher sulfur fuels.

## 2. Proposed or Expected New Environmental Regulations for Air and Water

**NOTE:** Under the “Delayed EPA Response” scenario, the assumptions in section 2 are based on a one-year delays for the new Clean Air Transport Rule (CATR) and a one-year delay (in addition to the one-year “automatic” extension) for Hazardous Air Pollutants (HAPS).

- 2.1 Proposed New Clean Air Transport Rules (CATR) were issued in June, 2010, with Phase I starting in 1/1/2012 and Phase 2 starting in 1/1/2014.
  - Internal assumption: final implementation dates of 1/1/2013 and 1/1/2015 respectively, based on possible changes in final rules and a stay due to litigation ( a one-year delay in each phase).
  - Under these rules the existing allowance banks for SO<sub>2</sub> and NO<sub>x</sub> cannot be used.
- 2.2 Hazardous Air Pollutants (HAPS) Maximum Available Control Technology (MACT) proposed rules expected in March, 2011, final rules December 2011, plus “automatic” one-year delay, plus three-year implementation period results in December 2015 effective date.
  - Internal assumption: one year additional delay in developing final rules results in an end of 2016 (January 1, 2017) effective date.

## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> in late 2016 and SO<sub>2</sub> in June, 2017.

2.4 Cane Run Coal will be retired January 2016.

2.5 Tyrone Coal will be retired January 1, 2016.

2.6 Green River Coal will be retired June 2019.

- Presumes certain controls are in place or emissions are reduced prior to 2020.

2.7 GHG NSR requirement will begin January 2011.

- GHG BACT will be required, though not yet defined.



## 2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)

### 2.8 Engineering studies completed in 2011 and 2012 include:

- Combined cycle installations at alternative sites.
- On existing coal-fired fleet:
  - ✓ Additional SCR's.
  - ✓ Activated Carbon Injection.
  - ✓ FGD Renovations.
  - ✓ Precipitator upgrades.
  - ✓ Fabric Filters.
- Dense packs on larger units.

### 2.9 Effluent water guidelines draft regulations are expected in late 2011, with final regulations in place by 2012-2013.

- Ultimate implementation timing as well as scope are uncertain at this time.

**3. Expansion/Capacity**

**3.1 A combined cycle unit will be added January 1, 2016 at the Cane Run location.**

- Replacing Cane Run Coal.
- Company split is 53% KU, 47% LG&E.

**3.2 A second combined cycle unit will be added June 1, 2019 at the Green River location.**

- Replacing Green River Coal.
- Company split is 53% KU, 47% LG&E.
- Adding CT's instead of the second combined cycle is still being considered.

**3.3 After running Summer of 2010, Tyrone will be in lay-up status for the full MTP period, and then retired on January 1, 2016.**

**3.4 TC2 will be in commercial operation November 2010. Initial reliability expected to be lower than normal for the first year which has been reflected in the EFOR system target.**

- TC2 meets all permit requirements and no additional controls are needed.

**3.5 The six Ohio Falls units still to be rehabilitated will be staged one unit every 7-8 months between 2011 and 2014.**

**3.6 Landfill gas projects are a sensitivity, not included in the base MTP.**

**3.7. Steam efficiency upgrades (dense packs) are included for:**

- . Ghent 4 in 2015
- . Ghent 3 in 2017
- . Ghent 2 in 2019
- . Ghent 1 in 2020
- . Mill Creek 1 in 2020
- . Mill Creek 2 in 2019
- . Mill Creek 3 in 2019
- . Trimble County 1 in 2017
- . Brown 3 in 2012 was pulled by the RAC but could be reinstated in a later forecast if funds become available.

### 3. Expansion/Capacity (Cont.)

- 3.8 Biomass co-firing projects for 2 coal-fired units is a sensitivity, not included in the base MTP.
- 3.9 Wind power purchase agreements are not included in the base MTP.
- 3.10 Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2013.
- 3.11 Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.
- Group 3 consists of the older, smaller CT's.
  - No Group 3 units are being retired in the plan.
- 3.12 A carbon capture and sequestration (CCS) demonstration facility for 100 MW is listed as a sensitivity.

### 4. Coal Combustion By-Products (CCP)

- 4.1 The EPA issued proposed rules for coal combustion residuals (CCR's) in June 2010.
- Final rules are expected January 1, 2012, with a five-year implementation period.
  - ✓ A stay due to litigation is probable.
  - A designation of "Hazardous" vs. "Non-Hazardous" is considered too close to call at this point.
  - The designation will not materially change the capital plan but would reduce beneficial re-use opportunities for structural fill if declared "hazardous".
- 4.2 Trimble County Bottom Ash Pond extension will be operational in 2010. Trimble County Gypsum Pond will be operational to take gypsum late 2010.

#### 4. Coal Combustion By-Products (CCP) (Cont.)

4.3 Trimble County Landfill Phase I will be substantially completed by 2014, with significant O&M starting in 2013.

- Holcim off-takes are included, as well as the barge load-out facility.
- Holcim agreement and barge load out facility are delayed one year compared to the 2010 MTP.

4.4 Brown Ash Pond is being converted to a landfill.

- In-service date of January 2014.

4.5 Ghent landfill Phase 1 will be completed by 2014, with significant O&M starting in 2014.

- Ghent Trans Ash contract for gypsum has been removed from the plan.
- ✓ Should a more favorable than expected EPA ruling occur, this will be re-visited.

4.6 Cane Run Landfill Phase 1 will be completed in 2012 with significant O&M starting in 2012.

- This will be the only phase completed prior to retirement of the Cane Run coal generation.

4.7 Extension of Mill Creek landfill will be considered in light of the proposed CCR rules.

4.8 All CCP Capital Projects use an annual escalation rate of 6.0%.

- Escalation rate is biased higher to reflect petroleum impact on the liner material and fuel used by the earth moving equipment.

- 5. **Other Environmental (in addition to CATR HAPS and CCP's) Resulting in Significant Capital Additions**
  - 5.1 **Double liners are included in the cost estimates for Ghent, Trimble, and Cane Run landfills.**
    - The double liner adds about \$5M per phase per site to the total cost.
  - 5.2 **The Brown 3 SCR will be in-service in the third quarter of 2012.**
    - Presuming PSD permit is issued prior to January, 2011.
    - Low sulfur coal will be required until the SO<sub>3</sub> system is in place (Third Qtr. 2011).
    - Operating parameters under the consent decree will be very tight for Brown 3.
  - 5.3 **The Brown FGD went in-service for Unit 3 in May 2010 and Units 1 & 2 are planned for November 2010. (Reliability impacts are expected from fuel switching and new equipment quality and have been reflected in the EFOR targets).**
    - Due to supplies of lower sulfur coal remaining, the impacts of burning higher sulfur coal won't be known until 2012.
  - 5.4 **FGD ductwork renovations at Mill Creek are as follows:**
    - Unit 2 in 2011.
    - Unit 1 will be part of new environmental capital.
    - Unit 4 will be part of new environmental capital.
    - Unit 3 has already been completed.
    - ✓ Timing and ultimate scope will be impacted by proposed new air regulations.
  - 5.5 **SO<sub>3</sub> mitigation on Mill Creek 3 and 4 will be operational by year-end 2011.**
    - ✓ Timing and ultimate scope could be impacted by proposed new air regulations.
  - 5.6 **SO<sub>3</sub> mitigation on Ghent 2 will be operational by September, 2011.**
    - ✓ Replacement SO<sub>3</sub> Systems will be installed on the remaining Ghent Units in 2011 and 2012 which will achieve a lower overall SO<sub>3</sub> emissions level.
      - Dependent on settlement with EPA.

## 6. Operational and Other

### 6.1 Annual escalation rates for internal labor , contract labor and materials are as follows (Annual unless noted otherwise):

- **Internal labor: 3.5%.**
- **Contract/services labor: 3.0% for general, 4.0% for highly skilled (welders).**
- **Chemicals: 6.0% for specialty (GE Betz), 8.0% for commodity (Univar).**
- **Fuels and additives 5.0%, copper 6.0%, plastic pipe 6.0%.**
- **Carbon steel plate 6.0%, fabricated steel 3.0% 2011, 5.0% 2012, and 5.5% 2013; Alloy steel 2.0% 2011, 3.0% 2012 and 2013.**
  - ✓ **Carbon steel plate is a sensitivity, as double-digit increases are currently being experienced due to the Asian demand for scrap.**
- **All other materials: 5.0% composite rate for 2011, 5.5% composite rate for 2012 and 2013.**

### 6.2 By the end of 2012, planned outages on coal-fired units are all on a 24-month cycle, with 1-week pit stop outages in alternate years.

## 6. Operational and Other (Cont.)

### 6.3 Combustion turbine outages in the plan:

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense) vs. new parts (capital).
- Number of Trimble units undergoing the hot gas path inspection include one in 2010, two in 2011, two in 2012, and the final one in 2013.
- Paddy's Run 13 major outage is scheduled for 2011, though driven by current conditions of the unit, not increased run-times.
- Brown CT inspections include:
  - ✓ Unit 9 in 2013
  - ✓ Unit 10 in 2014
  - ✓ Unit 11 in 2016
  - ✓ Unit 6 in 2017
  - ✓ Unit 7 in 2018
  - ✓ Unit 5 in 2020

**6. Operational and Other (Cont.)**

6.4 Significant generator rewind/stator rewind dollars are included in the 2011-2016 timeframe.

- Brown 3 generator (stator and rotor) rewind in 2012.
- Brown 2 generator (stator and rotor) rewind in 2015/2016.
- Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.

6.5 Corrosion fatigue inspection dollars are included for Mill Creek 1 & 2, Brown 3, Ghent 2 and Cane Run 4.

- Any repairs identified during the inspection are a sensitivity.

6.6 High energy piping inspection dollars are included for Mill Creek 1-4, Trimble County 1, Cane Run 4 & 5, Ghent 2 & 3, Brown 1-3, and Green River 3.

- Any repairs identified during the inspection are a sensitivity.

6.7 \$6M capital for NERC Cyber Security resolution (all coal-fired stations plus Paddy’s Run and Haefling).

6.8 The FutureGen expense is \$0.5M per year through the LTP period.

- This is a much different scope than FutureGen (Mattoon, IL) however.

6.9 Demolition (cost of removal) costs for Canal and Paddy’s Run.

\$0.5M Engineering in 2011

\$2.5M 2012; \$10.0M 2013

\$17.0M 2014 - 2015

6.10 Significant O&M and cost of sales (\$190M per year) start once all units have been completed for CATR and HAPS per B&V study.

- Costs will begin ramping up in 2014 as units are completed.



## 2009-2015 Operating Expenses (\$000)

This page intentionally left blank. The minimal Operating Expense amounts for Project Engineering are included in Generation Operating Expense in the Generation Presentation.

## 2011-2015 Capital Comparison – Cash Basis (\$000)

	2011	2012	2013	2014	2015
Total Capital	\$359,072	\$679,846	\$897,087	\$1,105,038	\$890,216
Target	\$275,796	\$240,535	\$284,764	\$279,605	\$254,042
Variance To Target	<b>(\$83,276)</b>	<b>(\$439,311)</b>	<b>(\$612,323)</b>	<b>(\$825,433)</b>	<b>(\$636,174)</b>
TC2 (Net)	(\$1,125)	\$0	\$0	\$0	\$0
TC2 Spares (Net)	(\$3,500)	\$0	\$0	\$0	\$0
Brown FGD	\$42,021	\$0	\$0	\$0	\$0
Ghent FGD	\$1,400	\$0	\$0	\$0	\$0
Brown 3 SCR	\$12,009	\$25,671	\$3,000	\$0	\$0
Brown CCP	(\$3,160)	(\$17,668)	(\$19,332)	\$4,260	\$6,944
Cane Run CCP	\$4,971	(\$258)	(\$9,299)	\$590	\$5,914
Ghent CCP	(\$34,147)	(\$18,131)	(\$52,223)	\$5,693	(\$384)
Trimble County CCP (Net)	(\$12,161)	(\$52,966)	\$0	\$0	\$0
SAM Mitigation MC 3 & 4	(\$4,105)	\$0	\$0	\$0	\$0
Mill Creek Limestone Mill	(\$2,992)	\$2,375	\$0	\$0	\$0
Ohio Falls	(\$1,578)	(\$1,883)	\$656	(\$6,944)	(\$1,000)
CCGT 2016 Cane Run	\$8,042	(\$1,587)	\$114,167	\$12,917	\$32,083
CCGT 2019 Green River	\$0	\$0	(\$2,750)	(\$3,917)	(\$4,000)
Envrionmental Compliance - Air	(\$87,881)	(\$367,647)	(\$645,679)	(\$795,867)	(\$638,083)
Envrionmental Compliance - CCP	(\$1,070)	(\$6,582)	(\$1,860)	(\$41,747)	(\$37,963)
Black Start	\$0	(\$635)	\$997	(\$418)	\$315
Total Variance	<b>(\$83,276)</b>	<b>(\$439,311)</b>	<b>(\$612,323)</b>	<b>(\$825,433)</b>	<b>(\$636,174)</b>

## 2011-2015 Cost of Removal/ARO Comparison (\$000)

	2011	2012	2013	2014	2015
Total Cost of Removal	\$2,050	\$13,174	\$981	\$8,388	\$211,971
Target	\$4,272	\$4,048	\$4,048	\$2,024	\$0
Variance to Target	\$2,222	(\$9,126)	\$3,067	(\$6,364)	(\$211,971)

Variance Explanations

Brown 3 SCR	(\$887)	(\$628)	\$0	\$0	\$0
Ohio Falls	\$3,345	\$2,140	\$3,067	\$11	\$0
Environmental Compl. Air - Mill Creek 3	\$0	\$0	\$0	(\$6,375)	(\$19,125)
Environmental Compl. CCP - Ghent	\$0	\$0	\$0	\$0	(\$125,320)
Environmental Compl. CCP - Green River	\$0	(\$8,868)	\$0	\$0	\$0
Environmental Compl. CCP - Pineville	\$0	(\$1,770)	\$0	\$0	\$0
Environmental Compl. CCP - Cane Run	(\$236)	\$0	\$0	\$0	\$0
Environmental Compl. CCP - Mill Creek	\$0	\$0	\$0	\$0	(\$32,116)
Environmental Compl. CCP - Trimble	\$0	\$0	\$0	\$0	(\$35,409)
Total Variance	\$2,222	(\$9,126)	\$3,067	(\$6,364)	(\$211,971)

## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Director	1	1	1	1	1	1	1
Managers - Major Capital Projects	3	3	3	3	3	3	3
Procurement Manager	1	1	1	1	1	1	1
HR/IR Manager	1	1	1	1	1	1	1
Contract Administrator	1	1	3	3	3	3	3
Engineers - Lead	4	4	4	4	4	4	4
Engineers - Chemical	1	1	1	1	1	1	1
Engineers - Civil	3	3	3	3	3	3	3
Engineers - Electrical	2	2	2	2	2	2	2
Engineers - Mechanical	2	2	2	2	2	2	2
Project Coordinators	16	16	16	16	16	16	16
Safety Specialists	3	3	3	3	3	3	3
Project Manager Admin Assistants	2	2	2	2	2	2	2
Staff Admin Assistants	2	2	2	2	2	2	2
Coop/Intern Student	6	5	5	5	5	5	5
<b>TOTAL</b>	<u>48</u>	<u>47</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>
From 2010 MTP		<u>47</u>	<u>47</u>	<u>47</u>			
Project Engineering Contracted Staff	16	11	11	11	11	11	11
Safety IR Target			1.5	1.5	1.5	1.50	1.50

**Note - FTE number shown above for the 2011 MTP period does not account for the incremental FTE needed for the environmental air compliance projects.**

## Risks and Sensitivities

### Capital

- MC SO3 projects have been put off indefinitely as a result of BART being delayed due to the vacated CAIR ruling. There is no obligation to move forward until the new requirements are approved by the EPA.
- The estimated amounts for Environmental Compliance Air and CCR Ruling projects do not meet the criteria for Level I engineering accuracy.
- Amounts for Environmental Compliance Air and CCR Ruling projects are at risk until final regulations are made public.
- The Environmental Air Compliance and CCR Ruling projects are based on a one-year delay scenario for CATR and HAPs MACT.
- There are no dollars included for new Environmental Regulations relating to water.
- Landfill Gas, Bio Mass and the 100 MW Carbon Capture Sequestration are included as sensitivities and not in the main plan.

# Appendix

# 2009-2015 Capital Breakdown (w/o COR) – Cash Basis (\$000)

Project	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Expansion Plan</b>							
TC2 (Net)	\$125,176	\$32,002	\$788	\$0	\$0	\$0	\$0
Ohio Falls	\$822	\$7,310	\$20,572	\$24,572	\$21,220	\$17,882	\$1,000
CCGT 2016 Cane Run	\$0	\$1,103	\$2,854	\$9,417	\$110,833	\$207,083	\$182,917
CCGT 2019 Green River	\$0	\$0	\$0	\$0	\$2,750	\$3,917	\$4,000
<b>Expansion Plan Total</b>	<b>\$125,998</b>	<b>\$40,415</b>	<b>\$24,214</b>	<b>\$33,989</b>	<b>\$134,804</b>	<b>\$228,882</b>	<b>\$187,917</b>
<b>ECR</b>							
TC2 (Net)	\$45,791	\$9,555	\$338	\$0	\$0	\$0	\$0
Brown FGD	\$141,095	\$80,223	\$6,066	\$0	\$0	\$0	\$0
Ghent FGD	\$66,721	\$25,412	\$1,300	\$0	\$0	\$0	\$0
Brown 3 SCR	\$476	\$20,603	\$50,017	\$43,865	\$2,000	\$0	\$0
Brown CCP	\$7,065	\$10,350	\$13,329	\$26,561	\$24,197	\$1,203	\$0
Cane Run CCP	\$897	\$1,115	\$2,447	\$5,335	\$11,518	\$0	\$0
Ghent CCP	\$5,143	\$19,798	\$103,161	\$99,124	\$65,780	\$5,115	\$1,021
Trimble County CCP (Net)	\$7,409	\$18,735	\$44,359	\$90,642	\$0	\$0	\$0
SAM Mitigation MC 3 & 4	\$0	\$2,100	\$13,900	\$0	\$0	\$0	\$0
Environmental Compliance Air	\$0	\$1,650	\$87,881	\$367,647	\$645,679	\$795,867	\$638,083
Environmental Compliance CCP	\$0	\$0	\$1,070	\$6,582	\$1,860	\$41,747	\$37,963
Other Project Engineering Projects	\$3,837	\$0	\$0	\$0	\$0	\$0	\$0
<b>ECR Plan Total</b>	<b>\$278,434</b>	<b>\$189,542</b>	<b>\$323,866</b>	<b>\$639,757</b>	<b>\$751,033</b>	<b>\$843,933</b>	<b>\$677,067</b>
<b>Special Projects</b>							
TC2 Spares (Net)	\$163	\$7,476	\$3,500	\$0	\$0	\$0	\$0
Mill Creek Limestone Mill	\$308	\$3,083	\$7,492	\$5,125	\$0	\$0	\$0
Black Start	\$0	\$0	\$0	\$975	\$11,251	\$32,223	\$25,232
<b>Special Projects Total</b>	<b>\$472</b>	<b>\$10,559</b>	<b>\$10,992</b>	<b>\$6,100</b>	<b>\$11,251</b>	<b>\$32,223</b>	<b>\$25,232</b>
<b>Total Capital (107001)</b>	<b>\$404,905</b>	<b>\$240,515</b>	<b>\$359,072</b>	<b>\$679,845</b>	<b>\$897,087</b>	<b>\$1,105,038</b>	<b>\$890,216</b>

## Capital Review - Environmental Compliance - Air

Investment Cash (w/COR), \$Millions

### Sanction Comparison

- No sanction to date other than initial \$2M for engineering studies.

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Post 2015</u>	<u>Total</u>
2010 MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2011 MTP Environmental Compliance - Air</b>									
Env. Compliance - Air - BR 1 - SCR/FF/SAM Mit.	\$0	\$0	\$5	\$32	\$45	\$32	\$0	\$0	\$114
Env. Compliance - Air - BR 2 - SCR/FF/SAM Mit.	\$0	\$0	\$9	\$39	\$63	\$24	\$15	\$3	\$154
Env. Compliance - Air - BR 3 - FF	\$0	\$0	\$0	\$0	\$2	\$25	\$39	\$17	\$83
Env. Compliance - Air - GH 1 - FF	\$0	\$0	\$0	\$0	\$4	\$52	\$81	\$34	\$171
Env. Compliance - Air - GH 2 - SCR/FF	\$0	\$0	\$11	\$71	\$108	\$120	\$80	\$30	\$420
Env. Compliance - Air - GH 3 - FF	\$0	\$0	\$0	\$0	\$18	\$59	\$85	\$16	\$178
Env. Compliance - Air - GH 4 - FF	\$0	\$0	\$0	\$0	\$12	\$50	\$76	\$14	\$152
Env. Compliance - Air - GH 1 - 4 SAM Mitigation	\$0	\$1	\$16	\$15	\$0	\$0	\$0	\$0	\$33
Env. Compliance - Air - MC 1 - UFGD/SCR/FF/SAM Mit.	\$0	\$0	\$0	\$9	\$47	\$115	\$53	\$59	\$283
Env. Compliance - Air - MC 2 - UFGD/SCR/FF/SAM Mit.	\$0	\$0	\$12	\$57	\$129	\$55	\$50	\$7	\$310
Env. Compliance - Air - MC 3 - UFGD 4/FF	\$0	\$0	\$0	\$2	\$35	\$110	\$95	\$0	\$242
Env. Compliance - Air - MC 4 - FGD/FF	\$0	\$0	\$33	\$142	\$167	\$106	\$0	\$0	\$449
Env. Compliance - Air - TC 1 - FF	\$0	\$0	\$0.0	\$0	\$14	\$55	\$82	\$15	\$166
Env. Compliance - Air - Studies	\$0	\$1	\$1	\$0	\$0	\$0	\$0	\$0	\$2
<b>Total</b>	<b>\$0</b>	<b>\$2</b>	<b>\$88</b>	<b>\$368</b>	<b>\$646</b>	<b>\$802</b>	<b>\$657</b>	<b>\$195</b>	<b>\$2,758</b>
Variance to 2010 MTP	\$0	(\$2)	(\$88)	(\$368)	(\$646)	(\$802)	(\$657)	(\$195)	(\$2,758)

### Key Messages

- Estimates shown above do not meet Level 1 engineering quality.
- Amounts in plan assume CATR by January 2015 (1 year delay), NAAQS by January 2016 and HAPs by January 2017 (1 year delay).
- Mill Creek numbers based on assumptions that MC 1 & 2 can be refurbished to achieve 96% SO<sub>2</sub> removal efficiency and MC 3 re-ducted to existing MC 4 FGD which can be refurbished to achieve 98% SO<sub>2</sub> removal efficiency.
- Includes \$25M for removal of MC 3 FGD.



## Capital Review - Environmental Compliance - CCP Ruling

Investment Cash (w/COR), \$Millions

### Sanction Comparison

- No sanction to date.

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Post 2015</u>	<u>Total</u>
2010 MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2011 MTP Environmental Compliance - CCP</b>									
Environmental Compliance - CCP - Brown	\$0	\$0	\$0	\$1	\$0	\$1	\$0	\$0	\$2
Environmental Compliance - CCP - Ghent	\$0	\$0	\$0	\$3	\$1	\$19	\$142	\$144	\$309
Environmental Compliance - CCP - Green River	\$0	\$0	\$0	\$9	\$0	\$5	\$1	\$76	\$92
Environmental Compliance - CCP - Pineville	\$0	\$0	\$1	\$2	\$0	\$0	\$0	\$0	\$3
Environmental Compliance - CCP - Tyrone	\$0	\$0	\$0	\$0	\$0	\$0	\$4	\$20	\$25
Environmental Compliance - CCP - Cane Run	\$0	\$0	\$0	\$0	\$0	\$2	\$1	\$73	\$76
Environmental Compliance - CCP - Mill Creek	\$0	\$0	\$0	\$2	\$1	\$11	\$46	\$41	\$101
Environmental Compliance - CCP - Trimble	\$0	\$0	\$0	\$1	\$0	\$3	\$36	\$39	\$80
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1</b>	<b>\$17</b>	<b>\$2</b>	<b>\$42</b>	<b>\$231</b>	<b>\$395</b>	<b>\$688</b>
Variance to 2010 MTP	\$0	\$0	(\$1)	(\$17)	(\$2)	(\$42)	(\$231)	(\$395)	(\$688)

### Key Messages

- Estimates shown above do not meet Level 1 engineering quality.
- Includes \$481M for ARO/Removal for closure and capping of ponds.
- Post 2015 costs associated with plant closures are not included.

## Capital Review - CCGT 2016 Cane Run

Investment Cash (w/COR), \$Millions

### Sanction Comparison

- No sanction to date other than initial \$4M, for up-front engineering.

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Post 2015</u>	<u>Total</u>
2010 MTP	\$3	\$2	\$11	\$8	\$207	\$220	\$215	\$152	\$818
2011 MTP	<u>\$0</u>	<u>\$1</u>	<u>\$3</u>	<u>\$9</u>	<u>\$111</u>	<u>\$207</u>	<u>\$183</u>	<u>\$75</u>	<u>\$589</u>
Variance to 2010 MTP	\$3	\$1	\$8	(\$2)	\$96	\$13	\$33	\$77	\$229

### Key Messages

- The CCGT 2016 modeled on a 640MW (summer, net) compared to a 2017 533MW (summer, net) in the 2010 MTP.
- Cash flows built to reflect a 1/1/16 commercial operation date.

## Capital Review - Brown CCP

Investment Cash (w/COR), \$Millions

### Sanction Comparison

Total <u>Projection</u>	Sanction	Variance <u>to Sanction</u>
\$155	\$98	(\$57)

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	Post <u>2015</u>	<u>Total</u>
2010 MTP (Pond - Phase I - IV)	\$48	\$30	\$10	\$9	\$5	\$5	\$7	\$90	\$204
<b>2011 MTP</b>									
Landfill	\$47	\$10	\$13	\$27	\$24	\$1	\$0	\$32	\$155
Pond - Phase I - IV	\$47	\$19	\$8	\$4	\$6	\$4	\$9	\$179	\$276
<b>Variance - Landfill to 2010 MTP</b>	\$1	\$19	(\$3)	(\$18)	(\$19)	\$4	\$7	\$58	\$49
<b>Variance - Pond to 2010 MTP</b>	\$1	\$11	\$2	\$5	(\$1)	\$2	(\$2)	(\$88)	(\$72)
<b>Variance - Pond to Landfill</b>	\$0	\$9	(\$5)	(\$22)	(\$18)	\$2	\$9	\$146	\$121

### Key Messages

- The 2011 MTP has been changed to reflect the Brown Ash Pond being converted to a landfill.
- The sanction only covers Phases I & II of the ash pond. Phases III & IV have not yet been sanctioned. Under the pond option an additional \$178M would have been necessary versus \$57M with the decided landfill option.
- ECR implications of converting to a landfill are currently under review.

## Capital Review - Cane Run CCP

### Investment Cash (w/COR), \$Millions Sanction Comparison

	<u>Total Projection</u>	<u>Sanction</u>	<u>Variance to Sanction</u>
Phase I	\$22	\$19	(\$3)

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Post 2015</u>	<u>Total</u>
2010 MTP	\$2	\$1	\$7	\$5	\$2	\$1	\$6	\$29	\$54
2011 MTP	\$1	\$1	\$2	\$5	\$12	\$0	\$0	\$1	\$22
Variance to 2010 MTP	\$1	\$0	\$5	(\$0)	(\$9)	\$1	\$6	\$28	\$31

### Key Messages

- The 2010 Plan included four phases. The 2011 plan only includes one phase due to decision to build a CCGT at Cane Run. This results in an overall reduction as later phases will not be necessary.
- Increase on Phase I is driven by transmission line relocation costs higher than estimated.
- Amount post 2015 is for closure once the CCGT is in service.

## Capital Review - Ghent CCP Phase I, Gypsum Fines & Transport

### Investment Cash (w/COR), \$Millions Sanction Comparison

<u>Total</u>	<u>Variance</u>
<u>Projection</u>	<u>to Sanction</u>
\$302	(\$97)
\$205	

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Post</u>	<u>Total</u>
<b>Phase I</b>								<b>2015</b>	
2010 MTP	\$5	\$11	\$4	\$12	\$18	\$11	\$1	\$1	\$64
2011 MTP	<u>\$6</u>	<u>\$18</u>	<u>\$13</u>	<u>\$10</u>	<u>\$9</u>	<u>\$5</u>	<u>\$1</u>	<u>\$2</u>	<u>\$63</u>
Variance to 2010 MTP	(\$1)	(\$7)	(\$9)	\$2	\$10	\$6	\$0	(\$0)	\$1
 								<b>Post</b>	
<b>Gypsum Fines &amp; Transport</b>								<b>2015</b>	
2010 MTP	\$0	\$6	\$65	\$69	\$0	\$0	\$0	\$0	\$140
2011 MTP	<u>\$0</u>	<u>\$2</u>	<u>\$90</u>	<u>\$89</u>	<u>\$57</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$238</u>
Variance to 2010 MTP	\$0	\$4	(\$25)	(\$20)	(\$57)	\$0	\$0	\$0	(\$98)
 								<b>Post</b>	
<b>Total</b>								<b>2015</b>	
2010 MTP	\$5	\$17	\$69	\$81	\$18	\$11	\$1	\$1	\$205
2011 MTP	<u>\$6</u>	<u>\$20</u>	<u>\$103</u>	<u>\$99</u>	<u>\$66</u>	<u>\$5</u>	<u>\$1</u>	<u>\$2</u>	<u>\$302</u>
Variance to 2010 MTP	(\$1)	(\$2)	(\$34)	(\$18)	(\$47)	\$6	\$0	(\$0)	(\$97)

### Key Messages

- Increase is a result of more refined engineering on the Gypsum Fines & Transport System.
- In service date is 2014, but capital spend will continue through 2017.

## Capital Review - Trimble County CCP BAP/GSP, Phase I Landfill, Transport & Holcim Barge Loading

Investment Cash (w/COR), \$Millions

### Sanction Comparison

	<u>Total Projection</u>	<u>Sanction</u>	<u>Variance to Sanction</u>
BAP/GSP	\$26	\$25	(\$1)
Phase I Landfill/Transport	\$129	\$73	(\$56)
Holcim Barge Loading	\$8	\$8	\$0

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>
BAP/GSP					
2010 MTP	\$8	\$17	\$0	\$0	\$25
2011 MTP	<u>\$9</u>	<u>\$15</u>	<u>\$2</u>	<u>\$0</u>	<u>\$26</u>
Variance to 2010 MTP	(\$1)	\$2	(\$2)	\$0	(\$1)
Phase I Landfill					
2010 MTP	\$2	\$0	\$32	\$7	\$42
2011 MTP	<u>\$0</u>	<u>\$3</u>	<u>\$35</u>	<u>\$19</u>	<u>\$57</u>
Variance to 2010 MTP	\$2	(\$2)	(\$3)	(\$12)	(\$15)
Transport					
2010 MTP	\$0	\$0	\$0	\$31	\$31
2011 MTP	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$71</u>	<u>\$71</u>
Variance to 2010 MTP	\$0	\$0	\$0	(\$41)	(\$41)
Holcim Barge Loading					
2010 MTP	\$1	\$7	\$0	\$0	\$8
2011 MTP	<u>\$0</u>	<u>\$1</u>	<u>\$7</u>	<u>\$0</u>	<u>\$8</u>
Variance to 2010 MTP	\$1	\$6	(\$7)	\$0	\$0
Total					
2010 MTP	\$11	\$25	\$32	\$38	\$106
2011 MTP	<u>\$9</u>	<u>\$19</u>	<u>\$44</u>	<u>\$91</u>	<u>\$163</u>
Variance to 2010 MTP	\$2	\$6	(\$12)	(\$53)	(\$57)

### Key Messages

- All numbers are net IMPA/IMEA.
- Cost increases driven primarily by refinement of Transport System scope.

## Capital Review - Brown 3 SCR

Investment Cash (w/COR), \$Millions

### Sanction Comparison

<u>Total Projection</u>	<u>Sanction</u>	<u>Variance to Sanction</u>
\$119	\$185	\$66

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Total</u>
2010 MTP	\$3	\$22	\$62	\$70	\$11	\$168
2011 MTP	<u>\$1</u>	<u>\$21</u>	<u>\$51</u>	<u>\$44</u>	<u>\$2</u>	<u>\$119</u>
Variance to 2010 MTP	\$2	\$1	\$11	\$25	\$9	\$48

### Key Messages

- Variance driven by EPC and Technology Contracts being less than originally estimated. Original estimate was developed during a period of high inflation.

## Capital Review - Ohio Falls

### Investment Cash (w/COR), \$Millions Sanction Comparison

<u>Total Projection</u>	<u>Sanction</u>	<u>Variance to Sanction</u>
\$130	\$130	\$0

### MTP Comparison

	<u>Pre-2010</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
2010 MTP	\$32	\$3	\$24	\$26	\$26	\$15	\$0	\$125
2011 MTP	<u>\$32</u>	<u>\$7</u>	<u>\$21</u>	<u>\$26</u>	<u>\$22</u>	<u>\$20</u>	<u>\$1</u>	<u>\$130</u>
Variance to 2010 MTP	\$0	(\$5)	\$2	(\$1)	\$4	(\$5)	(\$1)	(\$5)

### Key Messages

- Above figures include removal cost of \$7.7M.
- 74% of this project has been negotiated into a lump sum contract with Voith.





*Energy Marketing*

*2011-2015 MTP*

*Revised December, 2010*

- **Plan Highlights** p. 3
- **Major Assumptions** p. 4
- **Financial Performance**
  - **Operating Expense** p. 5
  - **OSS Margin** p. 6
  - **Target Reconciliation** p. 7
  - **Capital** p. 8
  - **Headcount** p. 9
  - **Plan Risks** p. 10
- **Appendix**

## Key Objectives

- Optimize the utilization of existing assets to provide reliable, low cost energy.
- Procure coal and gas necessary to cost-effectively operate generating plants.
- Provide high quality analysis to enhance decision-making.
- Develop and maintain infrastructure to support significant business information needs.
- Enhance processes required to meet reliability standards.
- Improve analysis capability and knowledge related to retail customer energy usage to support energy efficiency efforts.

- Commodity prices as approved by RCG on 6-11-10.
- Generating units reach availability targets.
- Fuel suppliers meet contractual obligations.
- Off-system sales are charged an internal transmission tariff.
- OSS internal transmission expense is offset by revenue in Transmission line of business.

## 2009-2015 Operating Expenses (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor	4,522	5,166	5,601	5,941	6,136	6,351	6,573
Burdens	3,822	4,484	4,705	4,762	4,802	4,970	5,144
Non labor Regulated Trading	247	398	367	360	371	437	445
Non labor Business Information	51	193	173	153	158	212	216
Non labor Director Energy PF&A	29	114	106	69	72	124	127
Non labor Generation Planning	55	300	233	239	246	282	287
Non labor Economic Analysis	205	441	387	377	387	415	423
Non labor Sales Analysis	70	214	153	132	137	185	189
Non labor Operations Analysis	2	13	12	12	12	12	13
Non labor VP Energy Marketing	20	66	57	46	47	(277)	(276)
Non labor Allocated Support	40	66	109	111	117	119	122
Non labor Non-reg Trading	-	18	-	-	-	-	-
Total OPEX for EBIT	<u>9,063</u>	<u>11,473</u>	<u>11,903</u>	<u>12,202</u>	<u>12,485</u>	<u>12,830</u>	<u>13,263</u>

## 2009-2015 OSS Margin (\$000)

	2009 Actual	2010 Budget	7+5 2010 Forecast	2010 MTP 2011	2011 MTP				
					2011	2012	2013	2014	2015
OSS Margin	17,229	15,577	8,984	32,400	16,058	15,829	17,185	9,022	6,825
Transmission Expense (Internal)	2,582	3,127	2,618	4,876	3,722	3,609	3,908	2,620	2,355
Stretch	-	3,000		5,000	-	-	-	-	-
<b>Total OSS Margin</b>	<b>14,647</b>	<b>15,450</b>	<b>6,366</b>	<b>32,524</b>	<b>12,336</b>	<b>12,220</b>	<b>13,277</b>	<b>6,402</b>	<b>4,470</b>

### 2010 MTP

Modeled OSS Margin for 2010 and 2011  
Stretch  
MTP Margin

Modeled OSS Margin for 2010 and 2011	27,524	24,171
Stretch	5,000	5,000
<b>MTP Margin</b>	<b>32,524</b>	<b>29,171</b>

### Generation Volume GWh

On-peak	462	658	773	1,277	526	566	531	340	298
Off-peak	123	77	201	370	551	395	387	180	154
Weekend	173	645	332	946	612	570	695	305	200

## 2011-2015 Target Comparison (\$000)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total OPEX	11,903	12,202	12,485	12,830	13,263
Total Gross Margin (if applicable)	-	-	-	-	-
Total	<u>11,903</u>	<u>12,202</u>	<u>12,485</u>	<u>12,830</u>	<u>13,263</u>
Total OPEX Target	11,979	12,302	13,497	13,899	14,341
Total Gross Margin Target	-	-	-	-	-
Total Target	<u>11,979</u>	<u>12,302</u>	<u>13,497</u>	<u>13,899</u>	<u>14,341</u>
Variance to Target	<u>76</u>	<u>100</u>	<u>1,012</u>	<u>1,069</u>	<u>1,078</u>
<u>Major Variance Contributors (Unfavorable):</u>					
License Fees (Aurora & PowerSimm)	(240)	(246)	(251)	(256)	(261)
Outside Services	(75)	46	48	50	52
Labor	391	284	294	304	315
Other	-	16	8	2	(4)
Adjustment for MRMD changes in 2010 LTP	-	-	913	969	976
Total	<u>76</u>	<u>100</u>	<u>1,012</u>	<u>1,069</u>	<u>1,078</u>

## 2011-2015 Capital Comparison – Cash Basis (\$000)

	2011	2012	2013	2014	2015
Total Capital	250	250	250	250	250
Target	250	250	250	250	250
Variance To Target	-	-	-	-	-
<u>Variance Explanations</u>					
No Variances					
Total Variance	-	-	-	-	-



## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Regulated Trading	26	27	27	27	27	27	27
Non-regulated Trading	6	0	0	0	0	0	0
Operations Analysis	3	4	4	4	4	4	4
Economic Analysis	5	6	6	6	6	6	6
Sales Analysis	5	7	7	7	7	7	7
Generation Planning	7	8	9	9	9	9	9
Director Planning & Analysis	2	2	2	2	2	2	2
Business Information	4	4	4	4	4	4	4
VP Energy Marketing	2	2	3	3	3	3	3
SVP on Assignment	1	1	0	0	0	0	0
<b>Total Energy Marketing</b>	<b>61</b>	<b>61</b>	<b>62</b>	<b>62</b>	<b>62</b>	<b>62</b>	<b>62</b>
Corporate Fuels	15	15	15	15	15	15	15
<b>TOTAL</b>	<b>76</b>	<b>76</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>77</b>
From 2010 MTP		83	76	76			

Major Developments/Changes

- Non-regulated Trading group was moved to Transmission and became the Balancing Authority Department.

- Natural gas prices weaken causing wholesale electricity prices to decline.
- Higher than forecast native load due to either weather or economic growth cannibalizes off-system sales.
- Higher than planned generating outages.
- Delay in TC2 commercial operations.
- Availability of transmission capacity to make sales.



*Regulated Generation / Power Production*

*2011-2015 MTP*

*Revised December 2010*

- **Key Initiatives**
- **Major Assumptions**
- **Financial Performance**
  - **Operating Expense (O&M, BTL & Outside Services for FH & OCOS)**
  - **Cost of Sales / Gross Margin**
  - **Target Reconciliation**
  - **Headcount**
  - **Risks & Sensitivities**
  - **Operational Performance**
  - **Initiatives**
  - **Key Performance Indicators**
- **Appendix**

Area of Focus	Activities
<p align="center"><b>Safety</b></p>	<ul style="list-style-type: none"> <li>• Further advancement of the safety culture for employees and contractors building on the exceptional performance to date.</li> <li>• Relentless repetition of safety related expectations with 'Focus on Fundamentals'.</li> <li>• Further incorporation of Wellness initiatives into Safety processes.</li> </ul>
<p><b>Workforce Development</b></p>	<ul style="list-style-type: none"> <li>• Continue focus on addressing the aging workforce issues while working within existing approved staffing levels.</li> <li>• Focus on the development of the next generation of leadership by providing training and assignment opportunities to enhance leadership skills.</li> <li>• Expanded engagement of Front Line Leaders in planning and cost monitoring.</li> <li>• Enhance Operator Training Program to support Workforce Planning objectives.</li> <li>• Continue targeted training of maintenance personnel based on needs assessment.</li> </ul>
<p><b>Process Improvement and Standardization</b></p>	<ul style="list-style-type: none"> <li>• Standardization of major plant processes with consistent application of best practices, work rules and policies across the fleet.</li> <li>• Continue the utilization of plant performance metrics with focus on cost identification and controls.</li> <li>• Further the development of a consistent planning and cost accounting structure across all plants.</li> <li>• Enhance communication and management of interfaces between plants and all support groups by focus on end result processes.</li> </ul>

Area of Focus	Activities
<p><b>Reliability</b></p>	<ul style="list-style-type: none"> <li>• Increase the level of granularity within the Maintenance Planning Process.</li> <li>• Refine and Optimize the utilization of Predictive Maintenance Programs and associated metrics.</li> <li>• Increased emphasis on unit inspection process and protocols.</li> <li>• Finite development of boiler condition monitoring to determine short and long term investment requirements in order to reduce BTF related outages.</li> <li>• Complete the implementation of generating unit monitoring and diagnostics program using services and software provided by Black &amp; Veatch.</li> <li>• Utilization of System Audits to determine short and long term investment requirements.</li> <li>• Continue implementation of DCS control system Alarm Management Program.</li> </ul>
<p><b>Environmental</b></p>	<ul style="list-style-type: none"> <li>• Active engagement with regulation/permit development and aggressively pursue appropriate permit limits.</li> <li>• Clear and concise articulation of permit requirements and process responsibilities between plants and respective support organizations.</li> <li>• Continually monitor pending and potential regulations for business impact.</li> </ul>

Area of Focus	Activities
<p><b>NERC Reliability Standards</b></p>	<ul style="list-style-type: none"> <li>• Proactive engagement in new standard development and existing standard revisions.</li> <li>• Enhance compliance monitoring and metrics for applicable standards.</li> <li>• Aggressive promotion of a Compliance Culture.</li> </ul>
<p><b>Other Regulatory</b></p>	<ul style="list-style-type: none"> <li>• Actively support recovery of appropriate environmental costs through defined regulatory processes.</li> </ul>

## 1. Regulatory

- 1.1 The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.
- 1.2 Target Reserve Margin of 14%, within a range of 13%-15%.
  - No reserve margin purchases are planned.
- 1.3 Reserve sharing remains under the TVA/EKPC Reserve Sharing Agreement (~ 230 MW).
- 1.4 E.ON U.S. remains committed to burning higher sulfur fuels.

## 2. Proposed or Expected New Environmental Regulations for Air and Water

**NOTE:** Under the “Delayed EPA Response” scenario, the assumptions in section 2 are based on a one-year delay for the new Clean Air Transport Rule (CATR) and a two-year delay for Hazardous Air Pollutants (HAPS).

- 2.1 Proposed New Clean Air Transport Rules (CATR) were issued in June, 2010, with Phase I starting in 1/1/2012 and Phase 2 starting in 1/1/2014.
  - Internal assumption: final implementation dates of 1/1/2013 and 1/1/2015 respectively, based on possible changes in final rules and a stay due to litigation (a one-year delay in each phase).
  - Under these rules the existing allowance banks for SO<sub>2</sub> and NO<sub>x</sub> cannot be used.
- 2.2 Hazardous Air Pollutants (HAPS) Maximum Available Control Technology (MACT) proposed rules expected in March 2011, final rules December 2011, plus “automatic” one-year delay, plus three-year implementation period results in December 2015 effective date.
  - Internal assumption: one year additional delay in developing final rules results in an end of 2016 (January 1, 2017) effective date.



## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

- 2.3 The final National Ambient Air Quality Standards (NAAQS) rules have been issued, with one hour standards in place for NO<sub>x</sub> in late 2016, and SO<sub>2</sub> in June 2017.**
- 2.4 Cane Run Coal will be retired January 1, 2016.**
- 2.5 Tyrone Coal will be retired January 1, 2016.**
- 2.6 Green River Coal will be retired June 1, 2019.**
- Presuming certain controls are in place or emissions are reduced prior to 2020.
  - Combined cycle replacement available on that date.
- 2.7 GHG NSR requirement will begin January 2011.**
- GHG BACT will be required, though not yet defined.

## **2. Proposed or Expected New Environmental Regulations for Air and Water (Cont.)**

### **2.8 Engineering studies taking place in late 2010 and 2011 include:**

- Combined cycle installations at alternative sites
- Additional SCR's
- Activated Carbon Injection
- FGD Renovations
- Precipitator upgrades
- Fabric Filters
- Dense packs on larger units

### **2.9 Effluent water guidelines draft regulations are expected in late 2011, with final regulations in place by 2012-2013.**

- Ultimate implementation timing as well as scope are uncertain at this time.

### 3. Expansion/Capacity

3.1 A combined cycle unit will be added January 1, 2016 at the Cane Run location.

- Replacing Cane Run Coal (Company split is 53% KU, 47% LG&E)

3.2 A second combined cycle unit will be added June 1, 2019 at the Green River location.

- Replacing Green River Coal (Company split is 53% KU, 47% LG&E)
- Adding CT's instead of the second combined cycle is still being considered.

3.3 After running through 2010, Tyrone will be in lay-up status for the full MTP period, and then retired on January 1, 2016.

3.4 TC2 will be in commercial operations in the 4<sup>th</sup> Quarter of 2010. Initial reliability expected to be lower than normal for the first year which has been reflected in the EFOR system target.

- TC2 meets all permit requirements and no additional controls are needed.

3.5 The six Ohio Falls units still to be rehabilitated will be staged one unit every 7-8 months between 2011 and 2014.

3.6 Landfill gas projects are a sensitivity, not included in the base MTP.

3.7. Steam efficiency upgrades (dense packs) are included for:

- Ghent 4 in 2015
- Ghent 3 in 2017
- Ghent 2 in 2019
- Ghent 1 in 2020
- Brown 3 in 2012 was pulled by the RAC but could be reinstated in a later forecast if funds become available.
- Mill Creek 1 in 2020
- Mill Creek 2 in 2019
- Mill Creek 3 in 2019
- Trimble County 1 in 2017

### **3. Expansion/Capacity (Cont.)**

- 3.8 Biomass co-firing projects for 2 units are a sensitivity, not included in the base MTP.**
- 3.9 Wind power purchase agreements are not included in the base MTP.**
- 3.10 Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2013.**
- 3.11 Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.**
- Group 3 consists of the older, smaller CT's.**
  - No Group 3 units are being retired in the plan.**
- 3.12 A carbon capture and sequestration (CCS) demonstration facility for 100 MW is listed as a sensitivity.**

### **4. Coal Combustion By-Products (CCP)**

- 4.1 The EPA issued proposed rules for coal combustion residuals (CCR's) in June 2010.**
- Final rules are expected January 1, 2012, with a five-year implementation period.**
  - A stay due to litigation is probable.**
  - A designation of "Hazardous" vs. "Non-Hazardous" is considered too close to call at this point.**
  - The designation will not change the capital plan but would reduce beneficial re-use opportunities for structural fill if declared "hazardous".**
- 4.2 Trimble County Bottom Ash Pond extension will be operational in early 2011. Trimble County Gypsum Pond will be operational by late 2010.**

#### **4. Coal Combustion By-Products (CCP) (Cont.)**

**4.3 Trimble County Landfill Phase I will be substantially completed by 2014, with significant O&M starting in 2013.**

- Holcim off-takes are included, as well as the barge load-out facility.
- Holcim agreement and barge load out facility are delayed one year compared to the 2010 MTP.

**4.4 Brown Ash Pond is being converted to a landfill.**

- In-service date of January 2014.

**4.5 Ghent landfill Phase 1 will be completed by 2014, with significant O&M starting in 2014.**

- Ghent Trans Ash contract for gypsum has been removed from the plan.
- Should a more favorable than expected EPA ruling occur, this will be re-visited.

**4.6 Cane Run Landfill Phase 1 will be completed in 2012 with significant O&M starting in 2012.**

- This will be the only phase completed prior to retirement.

**4.7 Extension of Mill Creek landfill will be considered in light of the proposed CCR rules.**

**4.8 All CCP Capital Projects use an annual escalation rate of 6.0%.**

- Escalation rate is biased higher to reflect the petroleum impact on the liner material and fuel in the earth moving equipment.

- 5. Other Environmental (in addition to CATR HAPS and CCP's) Resulting in Significant Capital Additions**
- 5.1 Double liners are included in the cost estimates for Ghent, Trimble, and Cane Run landfills.**
- The double liner adds about \$5M per phase per site to the total cost.
- 5.2 The Brown 3 SCR will be in-service in the third quarter of 2012.**
- Presuming PSD permit is issued prior to January, 2011.
  - Low sulfur coal will be required until the SO<sub>3</sub> system is in place (Third Qtr. 2011).
  - Operating parameters under the consent decree will be very tight for Brown 3.
- 5.3 The Brown FGD went in-service for Unit 3 in May 2010 and Units 1 & 2 are planned for November 2010. (Reliability impacts are expected from fuel switching and new equipment quality and have been reflected in the EFOR targets).**
- Due to supplies of lower sulfur coal remaining, the impacts of burning higher sulfur coal won't be known until 2012.
- 5.4 FGD ductwork renovations at Mill Creek are as follows:**
- Unit 2 in 2011.
  - Unit 1 will be part of new environmental capital.
  - Unit 4 will be part of new environmental capital.
  - Unit 3 has already been completed.
  - ✓ Timing and ultimate scope will be impacted by proposed new air regulations.
- 5.5 SO<sub>3</sub> mitigation on Mill Creek 3 and 4 will be operational by year-end 2011.**
- ✓ Timing and ultimate scope could be impacted by proposed new air regulations.
- 5.6 SO<sub>3</sub> mitigation on Ghent 2 will be operational by September, 2011.**
- Upgraded SO<sub>3</sub> Systems will be installed on the remaining Ghent Units in 2011 and 2012 which will achieve a lower overall SO<sub>3</sub> emissions level.
  - Dependent on settlement with EPA.

**6. Operational and Other**

**6.1 Annual escalation rates for internal labor, contract labor and materials are as follows (Annual unless noted otherwise):**

- **Internal labor: 3.5%.**
- **Contract/services labor: 3.0% for general, 4.0% for highly skilled (welders).**
- **Chemicals: 6.0% for specialty (GE Betz), 8.0% for commodity (Univar).**
- **Fuels and additives 5.0%, copper 6.0%, plastic pipe 6.0%.**
- **Carbon steel plate 6.0%, fabricated steel 3.0% 2011, 5.0% 2012, and 5.5% 2013; Alloy steel 2.0% 2011, 3.0% 2012 and 2013.**
- **Carbon steel plate is a sensitivity, as double-digit increases are currently being experienced due to the Asian demand for scrap.**
- **All other materials: 5.0% composite rate for 2011, 5.5% composite rate for 2012 and 2013.**

**6.2 By the end of 2012, planned outages on coal-fired units are all on a 24-month cycle, with 1-week pit stop outages in alternate years.**

## 6. Operational and Other (Cont.)

### 6.3 Combustion turbine outages in the plan:

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense) vs. new parts (capital).
- Number of Trimble units undergoing the hot gas path inspection include one in 2010, two in 2011, two in 2012, and the final one in 2013.
- Paddy's Run 13 major outage is scheduled for fourth quarter 2010 and first quarter 2011, though driven by current conditions of the unit, not increased run-times.
- Brown C inspections include:
  - ✓ Unit 9 in 2013
  - ✓ Unit 10 in 2014
  - ✓ Unit 11 in 2016
  - ✓ Unit 6 in 2017
  - ✓ Unit 7 in 2018
  - ✓ Unit 5 in 2020



**6. Operational and Other (Cont.)****6.4 Significant generator rewind/stator rewind dollars are included in the 2011-2016 timeframe.**

- Brown 3 generator (stator and rotor) rewind in 2012.
- Brown 2 generator (stator and rotor) rewind in 2015/2016.
- Spare stator bars ordered and received for Ghent 2-4, Mill Creek 1-4, and TC 1 between 2010 – 2016.

**6.5 Corrosion fatigue inspection dollars are included for Mill Creek 1 & 2, Brown 3, Ghent 2 and Cane Run 4.**

- Any repairs identified during the inspection are a sensitivity.

**6.6 High energy piping inspection dollars are included for Mill Creek 1-4, Trimble County 1, Cane Run 4 & 5, Ghent 2 & 3, Brown 1-3, and Green River 3.**

- Any repairs identified during the inspection are a sensitivity.

**6.7 \$6M capital for NERC Cyber Security resolution (all coal-fired stations plus Paddy's Run and Haefling).****6.8 The FutureGen expense is \$0.5M per year through the LTP period.**

- This is a much different scope than FutureGen (Mattoon, IL).

**6.9 Demolition (cost of removal) costs for Canal and Paddy's Run.**

\$0.5M Engineering 2011  
\$2.5M 2012; \$10.0M 2013  
\$17.0M 2014- 2015

**6.10 Significant O&M and cost of sales (\$177M per year) start once all units have been completed for CATR and HAPS per B&V study.**

- Costs will begin ramping up in 2014 as units are completed.

## 2009-2015 OPERATING EXPENSES (\$000)

Item	2009 Actuals	2010 Forecast*	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor	62,056	66,281	71,778	75,544	79,295	82,070	84,942
Burdens	59,768	61,041	63,600	64,228	64,178	66,424	68,749
Non labor (Outages)	29,385	31,516	43,322	41,805	27,712	31,457	35,803
Non labor (Resident Contrs.)	8,968	21,752	22,919	23,699	27,242	27,787	28,342
Non labor (Non-outage maint.)	52,912	52,169	54,864	57,725	58,762	62,065	69,396
Non labor O/S FH and OCOS	8,149	6,035	6,526	7,100	11,627	15,859	12,097
Non labor (Operations)	22,079	22,667	21,794	22,938	23,544	23,580	24,159
Non labor (FutureGen)	65	0	500	500	500	500	500
New Environmental	-	-	-	-	-	70,411	112,284
Subtotal OPEX for EBIT	<u>243,382</u>	<u>261,461</u>	<u>285,302</u>	<u>293,539</u>	<u>292,860</u>	<u>380,154</u>	<u>436,272</u>
Gross Margin Expenses (see next slide for detail)	33,742	42,535	58,012	63,756	69,555	85,134	104,443
Total Items for EBIT	<u>277,124</u>	<u>303,996</u>	<u>343,314</u>	<u>357,295</u>	<u>362,415</u>	<u>465,288</u>	<u>540,715</u>

\*Note: 2010 Forecast does not include Cost of Removal as part of OPEX although it has been for 2010 CORE reporting.

## 2009-2015 Margin Expenses / Cost of Sales (\$000)

Item	2009 Actuals	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Margin Expenses (list major items)							
Fuel Handling	1,173	1,999	2,574	2,613	3,212	3,276	3,341
Scrubber Reactant	20,308	21,732	23,455	24,227	25,971	27,001	27,540
Emission Allowances - SO2	1,039	-	186	114	100	102	105
Emission Allowances - NOx	40	455	7	3	1	1	1
SCR Ammonia	4,321	5,964	7,598	8,525	8,697	8,871	9,049
SO3 Mitigation	6,908	11,555	20,773	24,719	26,522	27,052	27,593
Activated Carbon	-	962	3,789	4,081	4,846	4,943	5,042
Other Waste Disposal	(46)	(132)	(371)	(526)	206	210	215
New Environmental	-	-	-	-	-	13,678	31,558
<b>Total Items for EBIT</b>	<b>33,742</b>	<b>42,535</b>	<b>58,012</b>	<b>63,756</b>	<b>69,555</b>	<b>85,134</b>	<b>104,443</b>

## 2011-2015 Plan to Target Comparison (\$000)

	2011	2012	2013	2014	2015
Total OPEX	285,302	293,539	292,860	380,173	436,290
Total Gross Margin Expense	58,012	63,756	69,555	85,134	104,443
Total Combined EBIT Expense	<u>343,314</u>	<u>357,295</u>	<u>362,415</u>	<u>465,307</u>	<u>540,733</u>
Total OPEX Target	307,447	302,316	314,358	316,876	345,457
Total Gross Margin Target	52,261	58,203	128,327	201,060	289,492
Total Target	<u>359,708</u>	<u>360,519</u>	<u>442,685</u>	<u>517,936</u>	<u>634,949</u>
Total Variance To Target	<u>16,394</u>	<u>3,224</u>	<u>80,270</u>	<u>52,630</u>	<u>94,216</u>
Major Variance Contributors:					
FutureGen project major scope change	4,500	4,500	4,500	4,500	4,500
SO3 Mitigation Increase (Usage based)	(9,209)	(8,082)	(9,552)	(9,743)	(9,938)
SCR Ammonia Costs Increase	(763)	(1,511)	(1,541)	(1,572)	(1,603)
Scrubber Reactant Cost Lower	3,793	3,547	3,615	3,681	3,761
Tyrone Layup Continued	5,900	6,700	6,700	6,834	6,971
Outage Scopes & Timing Shifts 2010-2015	4,700	(2,582)	900	(3,191)	(1,596)
Contract labor for GH SO3 systems	(1,100)	(1,122)	(1,144)	(1,167)	(1,191)
Ash Pond & Handling System Maintenance	(1,592)	(1,792)	(1,828)	(1,864)	(1,902)
Removal of Carbon Allowances from Previous	-	-	73,837	145,481	231,549
CR FGD Savings Not Obtained (Capital Stop)	-	-	(8,000)	(8,240)	(8,487)
Delayed timing of GH Landfill Maintenance	-	-	10,503	9,474	8,469
New Environmental Systems (HAPS, CATR)	-	-	-	(84,089)	(143,843)
LTP Top Side Adjustments Late Last Year	-	-	-	(10,000)	10,000
All Other Smaller Maintenance & Other	10,165	3,566	2,280	2,526	(2,475)
	<u>16,394</u>	<u>3,224</u>	<u>80,270</u>	<u>52,630</u>	<u>94,216</u>

## 2011-2015 Capital Comparison – GAAP Cash (\$000)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total Capital	116,125	92,573	108,515	86,304	82,747
Target	128,894	139,626	200,510	110,174	93,463
Variance To Target	<u><b>12,769</b></u>	<u><b>47,053</b></u>	<u><b>91,995</b></u>	<u><b>23,870</b></u>	<u><b>10,716</b></u>
<u>Variance Explanations</u>					
Cane Run FGD Rehab Cancelled	4,000	20,000	30,600	10,000	-
Dix Dam Remediation Timing Change	(10,800)	(4,100)	26,600	-	-
MC1, MC2, MC4 FGD Scope Changes	10,900	17,400	8,750	9,000	-
CR Boiler, Economizer & Other Reduced	4,472	4,966	-	-	9,000
Stator Bar Project Timing Change	194	5,040	2,964	982	722
GH Turbine Effic. Upgrades Delayed	-	-	4,000	4,000	(2,500)
TC FW Pump System Upgrade Delayed	-	-	6,375	-	-
MC Coal Barge Unloader to 2017	-	-	11,000	-	-
CR Continuing Ops Capital Added	-	-	(5,000)	(5,000)	(5,000)
TC1 SCR Economizer Bypass Delayed	-	-	4,500	-	-
MC Gypsum Proc. Plant Delayed	-	-	300	(2,700)	-
BR2 Gen Rewind Pushed to 2016	-	-	-	5,000	4,750
All other smaller projects	4,003	3,747	1,906	2,588	3,744
Total Variance	<u><b>12,769</b></u>	<u><b>47,053</b></u>	<u><b>91,995</b></u>	<u><b>23,870</b></u>	<u><b>10,716</b></u>

## 2011-2015 Cost of Removal Comparison (\$000)

	2011	2012	2013	2014	2015
Total Removal Costs	10,051	8,285	14,285	18,766	15,942
Target	10,756	10,430	16,995	9,766	8,942
Variance To Target	<b>705</b>	<b>2,145</b>	<b>2,710</b>	<b>(9,000)</b>	<b>(7,000)</b>
<u>Variance Explanations</u>					
Canal and PR Demolition	(500)	(2,500)	(5,000)	(10,000)	(7,000)
CR FGD Rehab Cancelled	1,500	2,000	3,400	1,000	0
MC2 FGD Outlet Duct	(2,000)	0	0	0	0
PR13 Shift to Investment	1,500	0	0	0	0
MC1 FGD Refurbishment	0	1,700	0	0	0
All other smaller projects	205	945	4,310	0	0
Total Variance	<b>705</b>	<b>2,145</b>	<b>2,710</b>	<b>(9,000)</b>	<b>(7,000)</b>

## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Mill Creek	212	220	221	221	225	225	225
Trimble County	127	141	147	150	154	154	154
Cane Run	123	127	127	127	127	127	127
Ghent	196	204	206	206	214	214	214
Brown w/CTs	127	139	139	139	139	139	139
Green River	55	55	55	55	55	55	55
Tyrone	24	11	11	11	11	11	11
<b>Total Steam</b>	<b>864</b>	<b>897</b>	<b>906</b>	<b>909</b>	<b>925</b>	<b>925</b>	<b>925</b>
Ohio Falls	3	3	3	3	3	3	3
Dix Dam	2	2	2	2	2	2	2
<b>Total Hydro</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>Total Stations</b>	<b>869</b>	<b>902</b>	<b>911</b>	<b>914</b>	<b>930</b>	<b>930</b>	<b>930</b>
<b>Generation Services</b>	<b>44</b>	<b>53</b>	<b>56</b>	<b>60</b>	<b>62</b>	<b>62</b>	<b>62</b>
<b>Project Engineering</b>	<b>49</b>	<b>47</b>	<b>49</b>	<b>49</b>	<b>49</b>	<b>49</b>	<b>49</b>
<b>Other Generation</b>	<b>45</b>	<b>47</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>
<b>TOTAL</b>	<b>1,007</b>	<b>1,049</b>	<b>1,064</b>	<b>1,071</b>	<b>1,089</b>	<b>1,089</b>	<b>1,089</b>
From 2010 MTP		1,055	1,071	1,082			
Change from Previous MTP		6	7	11			

# 2009-2015 Other Costs (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan
Stores Expense					
Labor	2,640	2,813	2,802	3,001	3,002
Non labor	834	895	240	246	252
Total	<u>3,474</u>	<u>3,708</u>	<u>3,042</u>	<u>3,247</u>	<u>3,254</u>
Local Engineering					
Labor	489	462	1,135	1,232	1,274
Non labor	156	404	153	158	163
Total	<u>645</u>	<u>866</u>	<u>1,288</u>	<u>1,390</u>	<u>1,437</u>
Total Other Costs	<u><u>4,119</u></u>	<u><u>4,574</u></u>	<u><u>4,330</u></u>	<u><u>4,637</u></u>	<u><u>4,691</u></u>

Note 1: These costs are included as part of the burden calculations for warehouse issues and Capital charges.



- **Commercial operation and integration of TC2.**
- **Any “green development” projects that materialize would be incremental to the MTP/LTP (currently shown as sensitivities).**
- **Inspection results of Dix Dam may reveal maintenance requirements sooner than the timeframe included in the MTP/LTP.**
- **Timing and requirements for pending environmental regulations could accelerate future environmental investments into the planning window (i.e. Mercury, wet ESPs).**
- **Corrosion fatigue repairs are not in the MTP (only the inspection amounts).**
- **Natural gas prices in the \$2.00 range could result in CT dispatch over coal, some units bringing forward the hot gas path and “C” inspections.**
- **Any significant impacts at Ghent resulting from the NOV/NSR, beyond the planned additional SO3 mitigation equipment installation and increased reagent feed rates.**

## Key Performance Indicators

KPI	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Generation (Twh) <sup>1</sup>	31.7	35.3	36.3	36.4	37.2	36.4	36.8
EAF (Steam)	83.7%	86.2%	85.7%	86.3%	89.3%	86.4%	87.8%
EFOR (Steam)	6.2%	5.6%	4.7%	4.5%	4.5%	4.5%	4.5%
Controllable Cost (\$M) <sup>2</sup>	\$ 277.12	\$ 304.00	\$ 343.31	\$ 357.30	\$ 362.42	\$ 465.31	\$ 540.74
Controllable Cost/mwh <sup>2</sup>	\$ 8.75	\$ 8.62	\$ 9.45	\$ 9.80	\$ 9.74	\$ 12.78	\$ 14.70
Recordable Injuries <sup>3</sup>	1.25	1.60	1.90	1.85	1.80	1.80	1.80
Lost Workday Case Rate <sup>4</sup>	0.21	0.00	0.40	0.40	0.40	0.40	0.40

<sup>1</sup> Steam Generation includes 75% of Trimble County 1 and 2.

<sup>2</sup> Controllable Costs include Utility O&M, Other Cost of Sales, Fuel Handling, and Below -the-Line expenses.

<sup>3</sup> The 2010 forecast for RIIR is the July YTD value, hearing tests currently underway.

<sup>4</sup> The 2010 forecast for Lost Workday Case Rate is the July YTD value.

\*\* 2010 Forecast is from the 7&5 forecast.

# Appendix







2011- 2015 Maintenance Schedule																																																										
2011	First year of schedule shown																																																									
	Week of:																																																									
	Week #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52					
<b>Steam Units</b>																																																										
<b>Mill Creek 2</b>	2011																																																									
	2012																																																									
	2013																																																									
	2014																																																									
	2015																																																									
<b>Mill Creek 3</b>	2011																																																									
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<b>Mill Creek 4</b>	2011																																																									
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<b>Trimble Co 1</b>	2011																																																									
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	2015																																																									
<b>Trimble Co 2</b>	2011																																																									
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<b>Combustion Turbines</b>																																																										
<b>Brown 5</b>	2011																																																									
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	2014																																																									
	2015																																																									
<b>Brown 6</b>	2011																																																									
	2012																																																									
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U.S.

# Maintenance Schedules

## 2011 - 2015 Maintenance Schedule

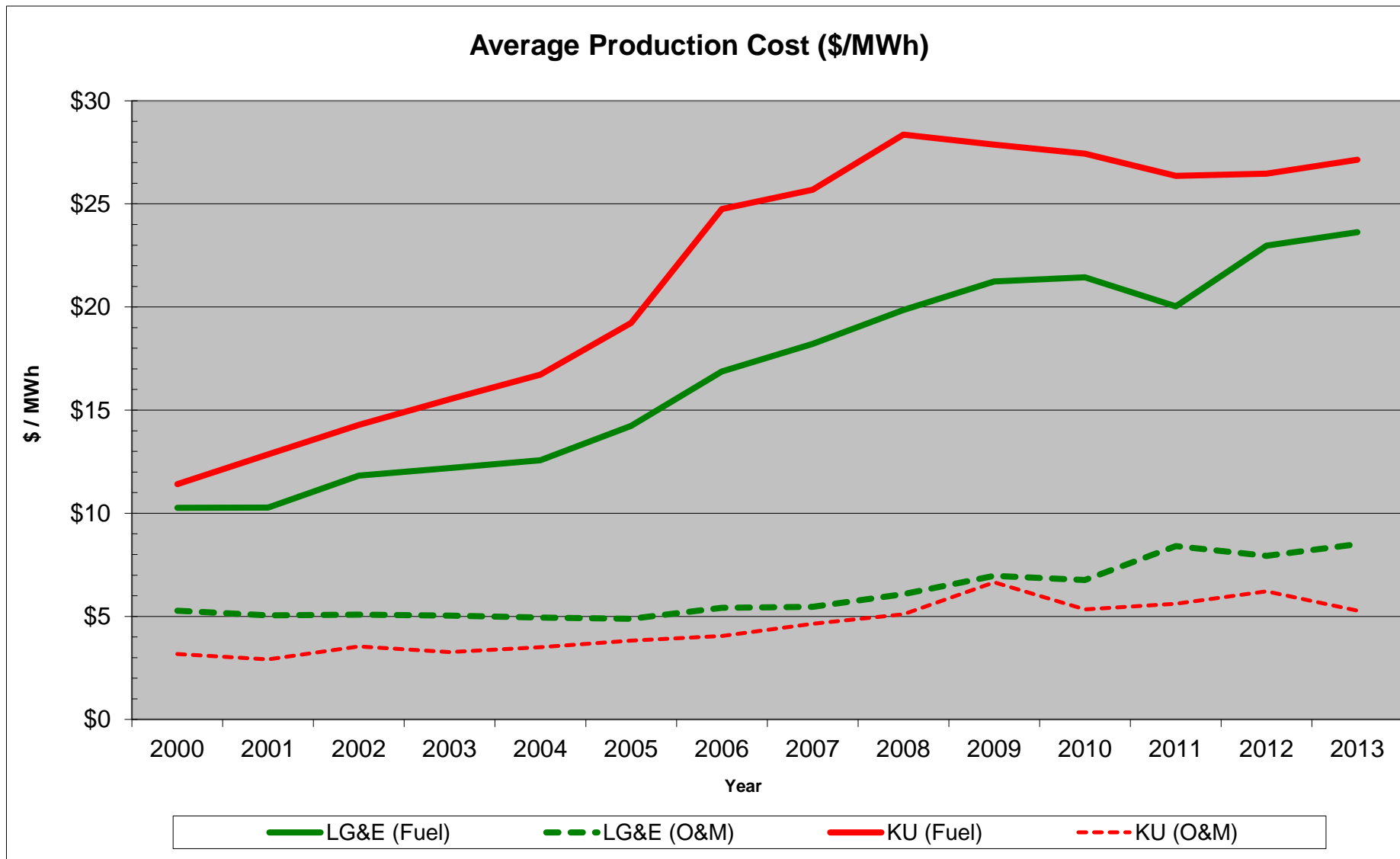
2011	First year of schedule shown																																																														
	Week #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52										
<b>Steam Units</b>																																																															
<b>Trimble Co 7</b>	2011																																																														
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<b>Trimble Co 8</b>	2011																																																														
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<b>Trimble Co 9</b>	2011																																																														
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<b>Trimble Co 10</b>	2011																																																														
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<b>Paddy's Run 13</b>	2011																																																														
	2012																																																														
	2013																																																														
	2014																																																														
	2015																																																														



## 2011-2015 Turbine Overhaul Schedule

	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	
GH1	█			█						█							█													
GH2						█									█													█		
GH3					█								█									█					█			
GH4			█									█						█						█						
BR1	█									█							█													
BR2				█							█									█						█				
BR3		█							█						█								█					█		
GR3			█									█																█		
GR4					█	█							█		█															
TY3					█	█							█																	
CR4					█	█							█		█															
CR5				█							█								█						█					
CR6					█							█								█										
MC1	█					█						VG		█																
MC2					█								█															█		
MC3					█								█															█		
MC4	█						█									█														
TC1					█						█									█							█			
TC2																														
Overhauls	4	1	2	3	5	6	2	0	1	1	3	4	4	3	3	1	2	2	2	2	1	4	4	1	3	2	1	3	2	5

Historical  
 Most Recent  
 2011 MTP/LTP VG - Valves and Generator



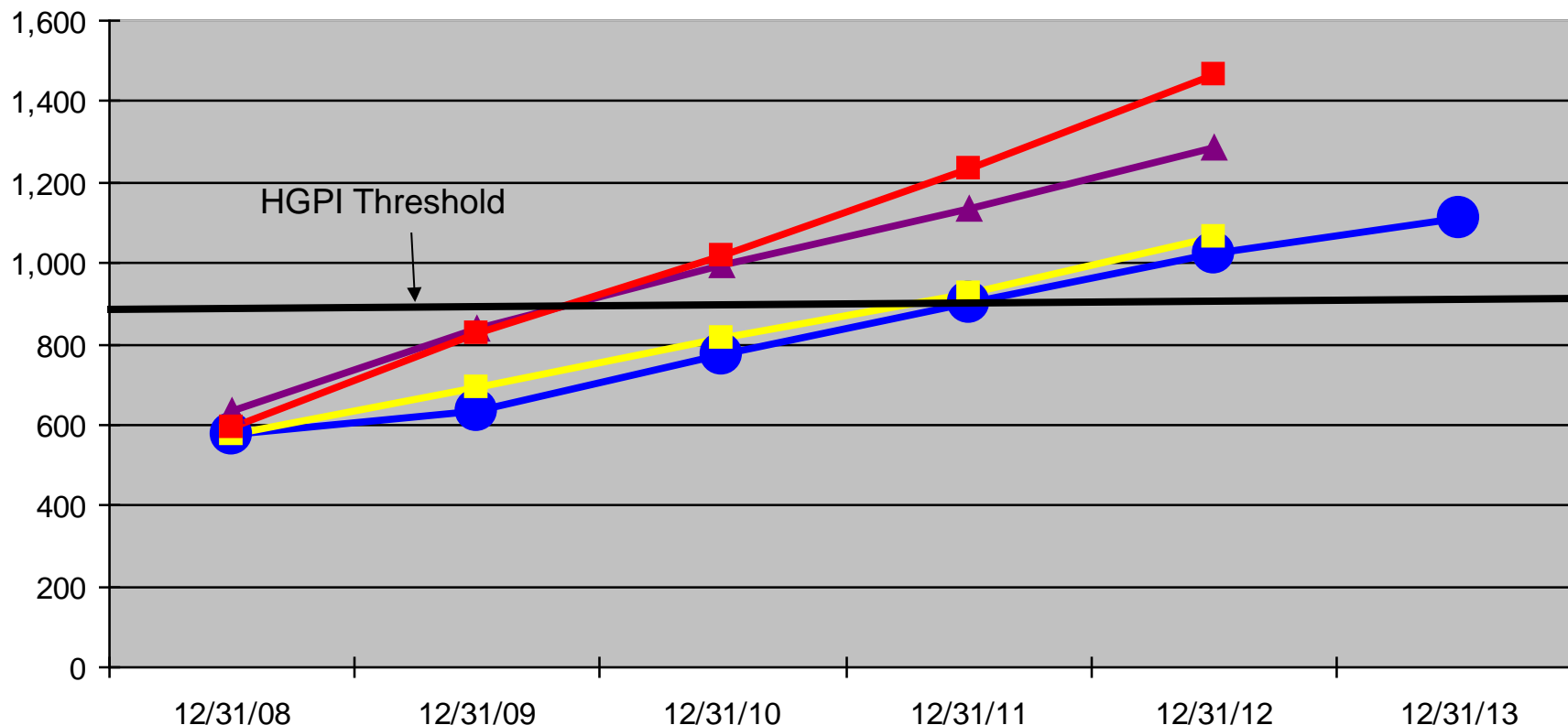
## 2010-2015 Capital (Cash Basis) \$000

<u>Project Description</u>	<u>2010 Forecast</u>	<u>2011 Budget</u>	<u>2012 Plan</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>
<b>ECR APPROVED PLAN:</b>						
CR Landfill Vertical Expansion	396	600	390	410	0	0
GH3 Absorber Agitator Blades	238	0	0	0	0	0
GH4 Absorber Agitator Blades	238	0	0	0	0	0
<b>ECR PROPOSED PLAN:</b>						
GH Gypsum Stack Drain Layer W	0	567	0	0	0	0
GH Gypsum Stack Drain South	0	0	535	0	0	0
MC GPP Upgrade	0	0	0	0	2,700	2,700
<b>ONGOING CAPITAL ITEMS:</b>						
LGE-Gen Stator Bar Study	6,712	1,162	0	898	1,575	1,628
MC2 FGD Refurbishment	2,800	6,250	0	0	0	0
DX Dam Leakage Remediation	2,413	5,950	1,000	0	0	0
MC3 Burners	300	1,400	1,600	2,300	1,000	1,400
GS KU CEMS Shelter Repl	42	276	970	2,050	1,080	1,080
GS-LGE-CEMS Shltr Rpl	28	414	1,455	3,075	1,620	1,620
Dix Dam Leakage Remediation 11	0	5,950	4,000	0	0	0
BR3 Generator Rewind 11-12	0	5,843	9,720	0	0	0
GH2 ECONOMIZER REPL	0	2,980	2,850	0	0	0
KU-Gen Stator Bar Study	0	1,155	0	1,346	2,363	2,442
BRCT9 C Inspection 11	0	0	1,451	9,787	0	0
CR Continuing Operations	0	0	0	5,000	4,888	4,888
CR SPP Dewatering	0	0	0	3,000	5,865	0
MC4 Burners	0	0	0	2,000	6,300	0
BRCT10 C Inspection 12	0	0	0	1,523	10,513	0
PPD Reg Gen LTP Capital LGE	0	0	0	0	12,957	15,203
PPD Reg Gen LTP Capital KU	0	0	0	0	9,716	11,400
GH4 Turb Eff Upgr	0	0	0	0	5,000	9,500
GH4 Bypass Econ Duct	0	0	0	0	4,000	12,000
GH4 Burner Repl	0	0	0	0	1,285	6,060
BR2 Gen Rewind 15-16	0	0	0	0	0	5,250
All other less than \$5M each	81,413	83,560	68,602	77,126	15,442	7,576
<b>Total Capital 2010 - 2015</b>	<b>94,580</b>	<b>116,107</b>	<b>92,573</b>	<b>108,515</b>	<b>86,304</b>	<b>82,747</b>

## Trimble County CT's Average Number of Cumulative Factored Starts per Unit

Trimble CT projected run-times for 2011 MTP have stayed flat with 2010 MTP

**Factored  
 Starts  
 Cumulative**



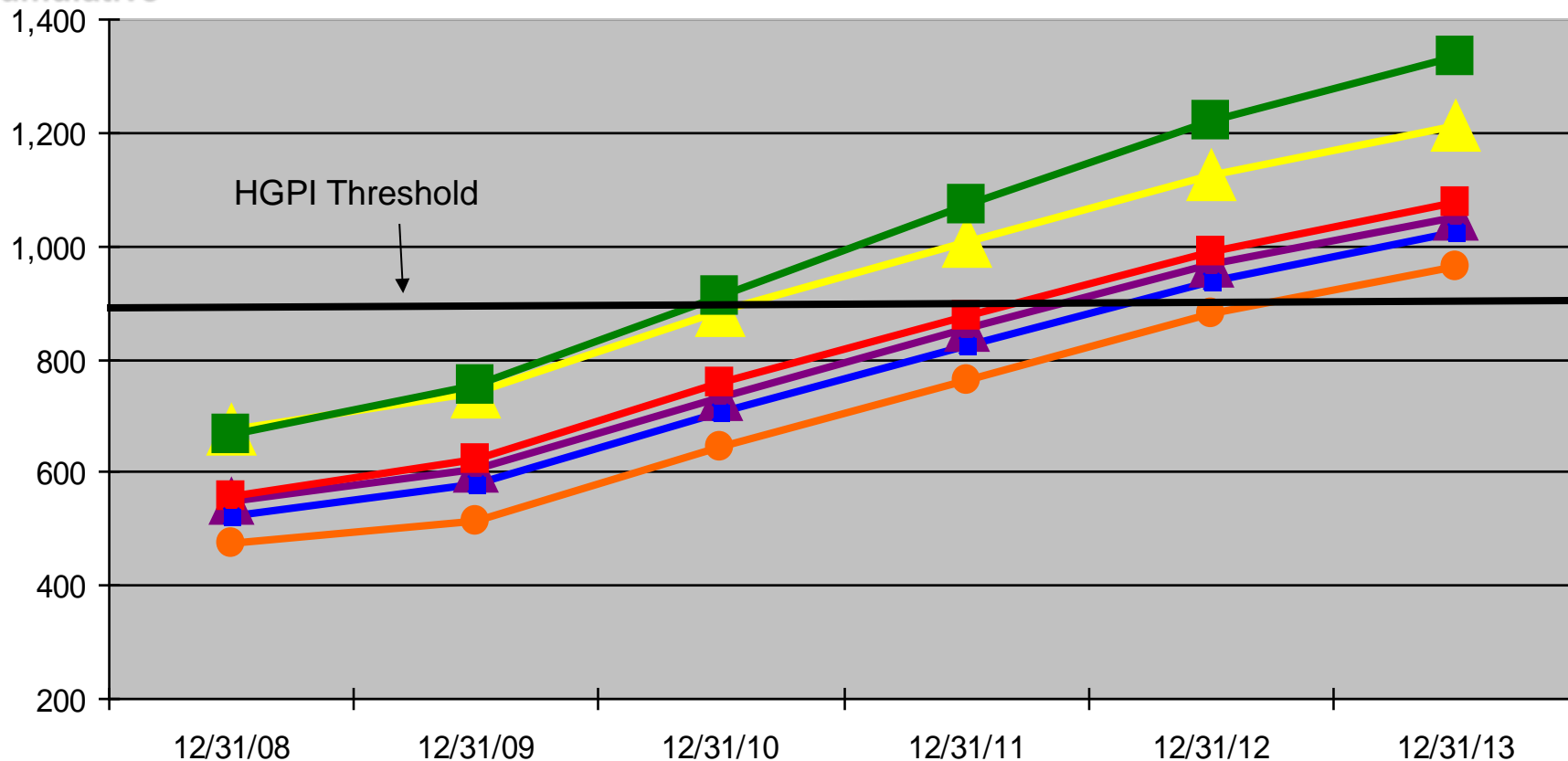
# of HGPI's Per year	'10 MTP	'11 MTP
12/31/08	1	1
12/31/09	2	2
12/31/10	2	2
12/31/11	2	2
12/31/12	1	1
12/31/13	1	1



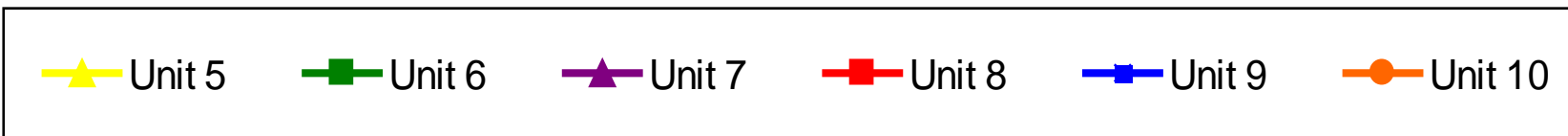
**HGPI = Hot Gas Path Inspection.**

## Trimble County CT's Cumulative Factored Starts per Unit

**Factored  
 Starts  
 Cumulative**



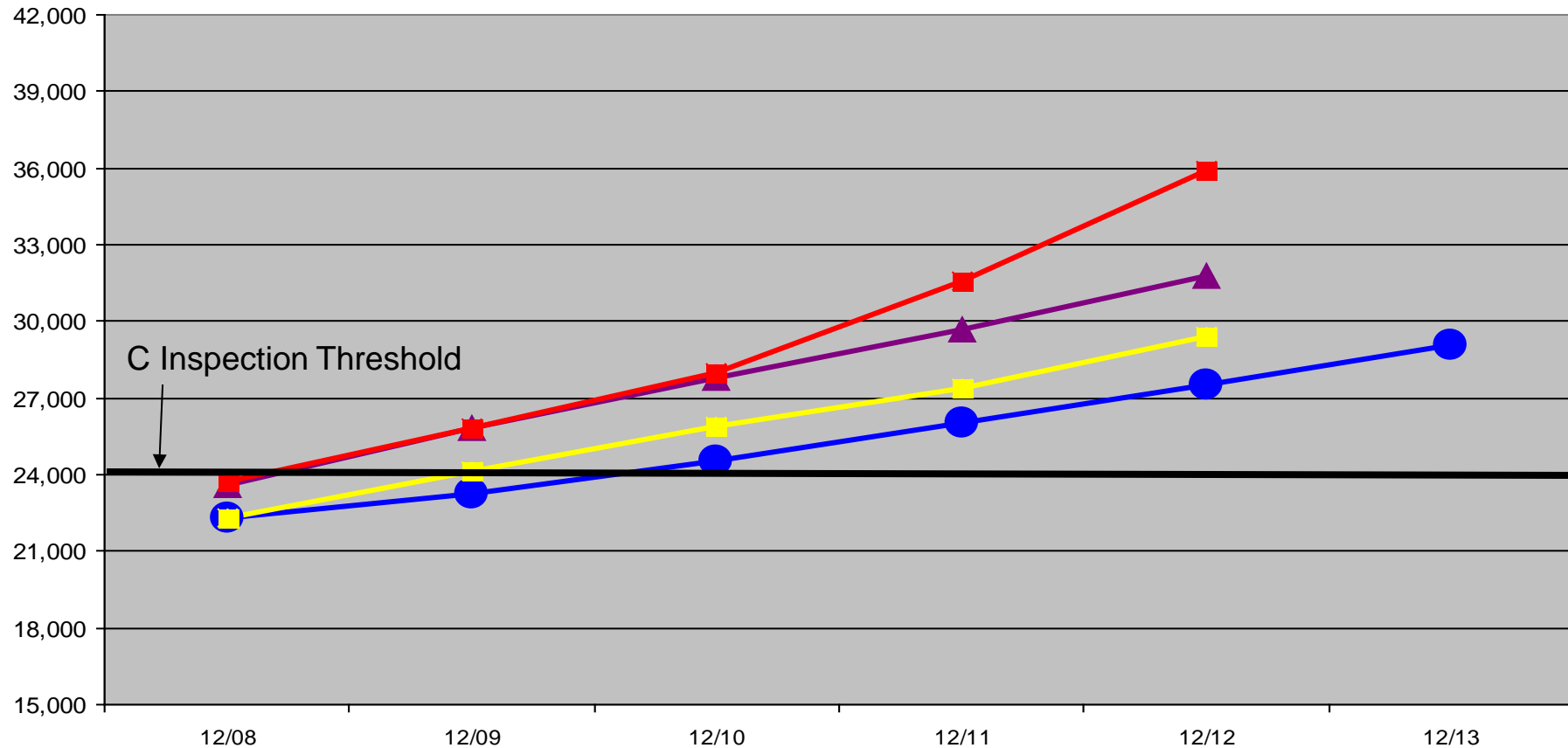
# of HGPI's Per year	-'10 MTP	1	2	2	1
	-'11 MTP	1	2	2	1



**Cumulative EOH  
 Average  
 Per Unit**

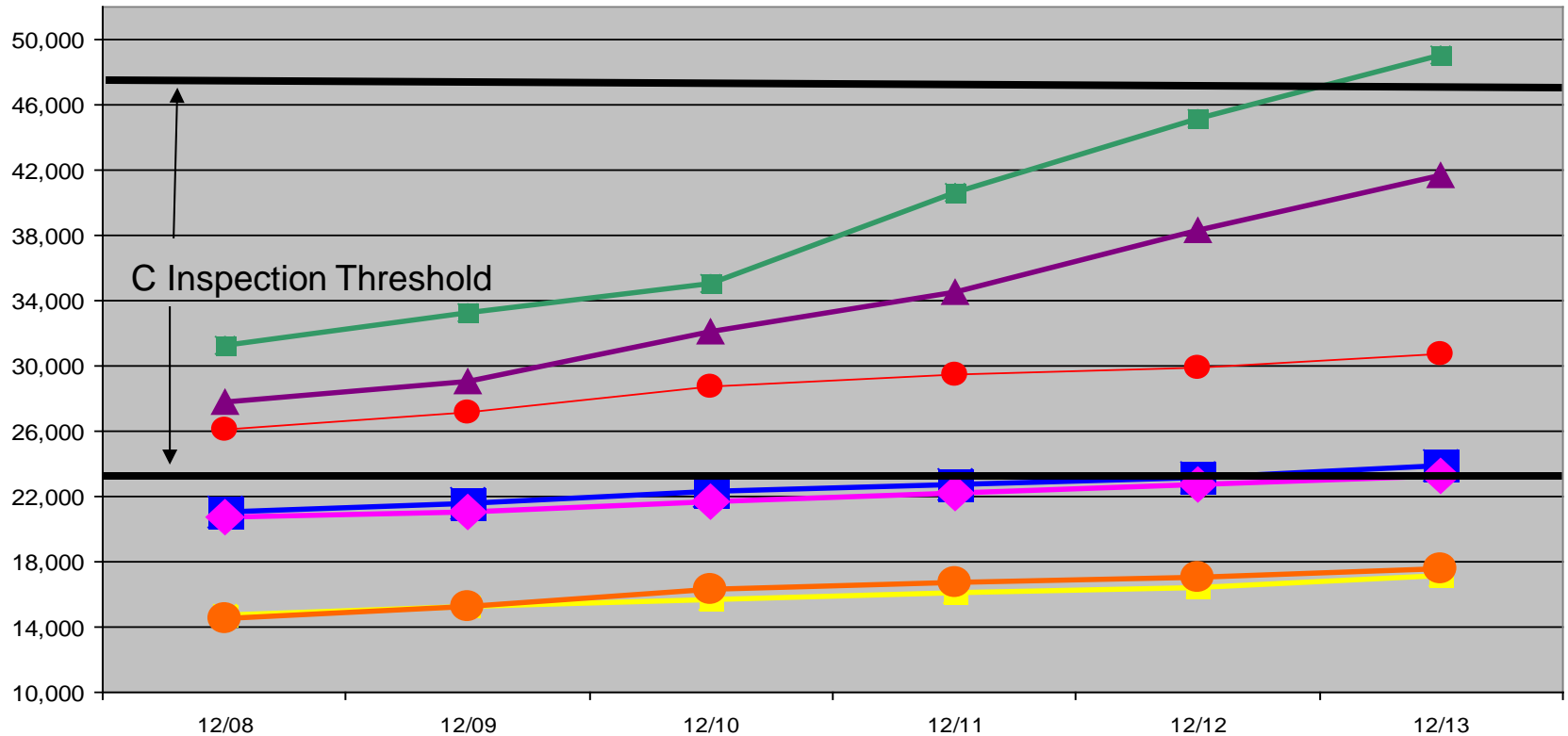
**Brown CT's  
 Equivalent Operating Hours  
 Average Per Unit**

Brown CT run-times continue trend of slight declines each MTP.



## Brown CT's Cumulative Equivalent Operating Hours Average Per Unit

Cumulative EOH



■ Unit 5   
 ■ Unit 6   
 ▲ Unit 7   
 ● Unit 8   
 ■ Unit 9   
 ◆ Unit 10   
 ● Unit 11

**C inspections completed:** Unit 6 (Fall 2007); Unit 7 (Fall 2008); Unit 8 (Spring 2005)  
**C inspections scheduled:** Unit 9 2013; Unit 10 2014; Unit 11 2016;  
 Unit 6 2017; Unit 7 2018; Unit 5 2020.



*Transmission*

*2011-2015 MTP*

*Revised December 2010*



- **Plan Highlights** p. 3
- **Major Assumptions** p. 4-10
- **Financial Performance**
  - **Operating Expense** p. 11
  - **Cost of Sales / Gross Margin** p. 12
  - **Target Reconciliation** p. 13-14
  - **Capital** p. 15
  - **Headcount** p. 16
  - **Key Performance Indicators** p. 17
  - **Plan Risks** p. 18
  - **Plan Sensitivities** p. 19
- **Appendix** p. 20-25

- **The 2011-13 Transmission Mid Term Plan is designed to meet the overall goals of safety, regulatory compliance, system reliability, and financial/budget performance.**
- **Plan challenges and considerations:**
- **Increasing scrutiny and on-going development of federal regulatory policies (FERC, NERC, SERC) continue to impact the transmission business planning, operations, and human resources.**
- **The plan reflects the transmission organization challenges of meeting escalating regulatory compliance requirements and associated Lines and Substation system reliability projects while maintaining high levels of system performance and customer satisfaction.**
- **To meet these challenges, the plan includes:**
  - Work force planning Sr. Management Structural changes and associated headcount.
  - Capital funding to address Louisville area study projects and CIP security requirements.
  - O&M funding increases by 14% U.S. GAAP over the 2010-2012 MTP.
- **The plan includes resources to continue to deploy “Smart Grid” technologies to update substation protection and control systems and “system hardening” through static wire replacement.**
- **NERC has issued a recommendation (R-2010-10-07-01) that Transmission Owners and Operators review the current Facility Ratings Methodology for their solely and jointly owned transmission lines to verify that the methodology used to determine facility ratings is based on actual field conditions. Costs to meet this recommendation are not included in the 2011-2015 MTP.**

## **1. Management Structure**

- 1.1 Much work has been done in WFP/MTP cycles to evaluate new/changing business needs and staff the transmission organization accordingly. However, both the magnitude and scope of transmission issues continues to increase.**
- 1.2 Within the current staffing model, most broad, strategic, and visionary leadership/direction is from a dedicated transmission resource provided by a single position (i.e., Director Transmission). Subsequently, all high impact operational and regulatory issues (tariff, compliance, policy), in addition to MTP, HR issues, etc., flow through the current Director Transmission point of contact. This in turn limits the ability to “shape and influence” the organization, and results in a more “reactive” organization. From standpoints of efficiencies/effectiveness as well as succession planning, there is a business need for additional Sr. Management transmission positions dedicated to strategic and visionary leadership.**
- 1.3 The current workforce planning assessment has looked at the changing environment and workloads under which the organization operates, and make recommendations for the functional/technical resources needed. Some of the drivers of recommendations include:
  - 1.3.1 Bringing ITO function into the Transmission organization**
  - 1.3.2 Ramping up to provide Balancing Authority functions previously provided by Regulated Generation Dispatch**
  - 1.3.3 Ongoing Construction Activities / Dedicated Project Management Oversight**
  - 1.3.4 Employee Retention. Particularly engineers whose transmission experience is in high demand throughout the industry.****

## Management Structure cont.

- 1.4 Add dedicated position of VP Transmission (Visionary Leadership).
  - 1.4.1 Provide broad, strategic, visionary leadership and decision making authority for transmission policy development, planning, optimization, capacity needs, and compliance. Directly responsible for driving strategies and processes to ensure transmission activities are designed, executed, and accomplished in a compliant, safe, cost-effective manner. Identify and develop future leaders of the organization.
- 1.5 Divide current Director Transmission role into two Director level positions (Visionary Leadership).
  - 1.5.1 Director Operations: Responsible for strategic direction and oversight of operational activities, including safety, system operations centers, maintenance, construction, protection, engineering, project management, and technical support. Proposed direct manager reports:
    - 1.5.1.1 Manager – Transmission Lines
    - 1.5.1.2 Manager – Protection & Substations
    - 1.5.1.3 Manager – System Control Center
  - 1.5.2 Director Strategy & Planning: Responsible for strategic direction and oversight of corporate policies, regulations, legal, asset management, system planning, budget and financial activities, OATT, ITO, and tariffs. Proposed direct manager reports:
    - 1.5.2.1 Manager – Balancing Authority / ITO
    - 1.5.2.2 Manager – Planning
    - 1.5.2.3 Manager – Policies & Tariffs

## **2. NERC Standards**

- 2.1 The current regulatory environment, which includes continual escalating scrutiny and oversight in FERC, NERC, SERC policy and requirements will continue. FERC is meeting strong resistance in its effort to change the definition of the bulk electric system to include all facilities 100kV and above. The current plan does not include capital or O&M dollars to meet additional requirements if adopted.**
- 2.2 Maintaining current compliance levels will require increased training and potentially additional personnel to assist in the training effort (PER-005 requirements add a significant burden in documentation, evaluation, and simulation).**
  - 2.2.1 The potential additional personnel are not in the 2011 MTP.**
- 2.3 As “smart” technologies are developed and deployed, CIP standards implications (currently 100kV and above) must be a consideration.**
- 2.4 Cyber Security:**
  - 2.4.1 Version 3 of the Critical Infrastructure Protection (CIP) standards is anticipated to be adopted in the fall of 2010.**
  - 2.4.2 Version 4 of the Critical Infrastructure Protection standards is being written and is subject to influence by FERC, Congress, and the industry.**
  - 2.4.3 Secure networks to the substations (pre-cursor to smart grid) as well as increased physical security would be required for implementation of the full capability and efficiencies of new substation relaying and metering equipment, network capability and associated increased cyber security.**
  - 2.4.4 The 2011 MTP includes \$10.4 million for NERC Cyber Security; the plan does not include any incremental headcount to meet the additional expected needs for Cyber Security compliance. \$7m of the \$10.4m based on new CIP standard.**
- 2.5 Vegetation management standard will continue to focus on 200 kV and above. If a 100kV threshold is adopted, it is estimated to cost an incremental \$10.0 million to get compliant and \$2.5 million annually to remain compliant.**

### **3. Expansion Plan**

- 3.1 The current transmission expansion plan (TEP) approved in the spring of 2010 is based on the 2010 MTP load forecast and considers reliability requirements only.**
  - 3.1.1 Transmission reliability criteria has identified a significant need for upgrades within the Louisville Metro area (including system expansion in southern Indiana). Previous mitigation was to shed load to prevent cascading outages. The FERC has emphasized through various documentation against load shedding as a means of mitigation.**
- 3.2 The Generation base case has the potential to change the TEP that will be developed for next year.**
- 3.3 A combined cycle generating unit will be installed by Jan 1, 2017 at Cane Run. No incremental transmission facilities or cost are assumed in the MTP for this unit.**
- 3.4 The number of mitigation plans required as a part of the TEP does not grow over the MTP period.**
- 3.5 The transmission expansion plan does not contain any provisions for the utilization of the Bluegrass Facility by any other companies (BREC and EKPC both have Point to Point requests in for these units).**

**3. Expansion Plan cont.****3.6 Inter-connect Transmission Service activity is driven by:**

- 3.7.1 Network Inter-connect Transmission Service (NITS; KMPA, Meredith and Polo Club substation, no new NITS customers)**
- 3.7.2 Generator Inter-connections (Estill County, EKPC); which are reimbursable as costs are incurred)**
- 3.7.3 Transmission to Transmission new connections**

**3.7 The Plan does not include any projects that could come from FERC required Economic Planning Studies (originating from the Stakeholder Planning Committee, the Eastern Interconnect Planning Collaborative, or the Southeast Inter-regional Participation Process). Any projects that are identified should be reimbursable.**

**3.8 No significant economic development projects requiring transmission system upgrades**

**3.9 No major projects assumed for integration of renewable energy in the LG&E/KU portfolio.**

**4. Asset Management**

- 4.1 The Cascade asset management software will be in use by July 2011.**
- 4.2 The critical spare inventory of transformers is continually replenished.**
- 4.3 The Static wire upgrade program will continue for equipment that is over 50 years old.**
- 4.4 A Transmission Geographic Information System (GIS) has been added to the MTP and will be implemented over a four year period.**

**5. ITO & RC**

- 5.1 The original contract with SPP was extended 24 months through August 2012 at a cost of \$8.5M in 2011 and \$5.7M in 2012.**
- 5.2 E.ON U.S. will file and FERC will approve an “in-house” ITO construct by September 2012. This will require a headcount increase of four over the current approved staff.**
- 5.3 TVA will be retained as the Reliability Coordinator (RC) with the cost remaining relatively flat.**
- 5.4 KU will reimburse KMPA for their MISO drive-out charges (\$6.8m in 2011 incremental to the 2010 MTP and \$1.9m incremental to the prior plan in 2012).**
- 5.5 A filing with FERC regarding MISO exit obligations will occur in 2011.**



**6 Headcount**

**6.1 Movement of Distribution SCADA Operations to Distribution will not impact Transmission headcount but will allow more focus on transmission activities, enhance required levels of situational awareness on transmission operations, and accommodate cross-training between LGE/KU operations as best practices are adopted and procedures are brought together.**

**7 Operational and Other**

**7.1 Transmission revenues will increase associated with OMU contracts.**

**7.2 Transmission revenues will increase from all other customers due to KMPA.**

**7.3 Customer sensitivity and awareness to reliability and power quality will continue to elevate.**

**7.4 No Federal or State mandated Smart Grid initiatives beyond our current asset renewals.**

**8 Annual Escalation Rates**

**8.1 Internal labor: 3.5%.**

**8.2 Contract labor: 3.0%**

**8.3 Fuels and Additives 5.0%.**

**8.4 Copper 6.0%.**

**8.5 Fabricated steel 3.0% 2011, 5.0% 2012, and 5.5% 2013.**

## 2009-2015 Operating Expenses (\$000's)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Opex Expenses</b>							
Raw Labor	5,743	6,963	8,039	9,069	9,448	9,779	10,121
Burdens	5,022	6,209	7,008	7,375	7,475	7,736	8,006
Subtotal	10,765	13,172	15,047	16,444	16,923	17,515	18,127
Storms	158						
Total Labor	10,923	13,172	15,047	16,444	16,923	17,515	18,127
<b>Non labor</b>							
Right of Way	4,208	4,211	4,316	4,424	4,534	4,625	4,718
Inspections	917	1,104	1,132	1,160	1,189	1,213	1,237
Substation Maintenance	2,851	3,219	3,456	3,646	3,716	4,020	4,101
Other Nonlabor	4,084	4,757	4,663	5,568	5,245	5,133	5,249
Subtotal	12,060	13,291	13,567	14,798	14,684	14,991	15,305
Storms	892	-	-	-	-	-	-
Total Non-labor	12,952	13,291	13,567	14,798	14,684	14,991	15,305
Subtotal OPEX for EBIT	23,875	26,463	28,614	31,242	31,607	32,506	33,432
Gross Margin Expenses *	16,097	23,757	29,955	23,264	15,670	14,754	12,152
* (see next slide for detail)							
Total Items for EBIT	39,972	50,220	58,569	54,506	47,277	47,260	45,584

## 2009-2015 Margin Expenses / Cost of Sales (\$000's)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Margin Expenses</b>							
EKPC NITS Costs	1,806	1,906	2,083	2,083	2,083	2,124	2,167
Intercompany Transmission - NL	1,286	1,409	1,396	1,692	1,365	1,420	1,449
Intercompany Transmission - MUNI	2,397	3,595	4,249	4,733	4,970	5,069	5,171
SPP - ITO	3,341	5,436	8,600	6,267	615	-	-
SPP Settlement	2,270	-	-	-	-	-	-
TVA - Reliability Coordination	1,536	1,665	1,630	1,712	1,797	1,832	1,870
TVA A/R Writeoff	317	-	-	-	-	-	-
RTO Costs	74	482	540	682	523	533	544
3rd Party Transmisson	926	856	1,084	1,403	1,085	1,106	1,128
Additional KMPA Costs	-	4,650	7,603	2,305	2,286	2,328	-
MISO Exit Fee Amortization	2,710	3,006	2,266	1,883	442	258	(177)
EKPC Reg. Asset Amortization	416	499	504	504	504	84	-
EKPC Reg. Asset Credit	(2,493)	-	-	-	-	-	-
Other - NL (prior period MISO RSG Adj.)	1,291	-	-	-	-	-	-
Payments to IMEA/IMPA	220	253	-	-	-	-	-
Total Margin Expense with Intercompany	<u>16,097</u>	<u>23,757</u>	<u>29,955</u>	<u>23,264</u>	<u>15,670</u>	<u>14,754</u>	<u>12,152</u>
Total Margin Expense excluding Intercompany	<u>12,414</u>	<u>18,753</u>	<u>24,310</u>	<u>16,839</u>	<u>9,335</u>	<u>8,265</u>	<u>5,532</u>

## 2011-2015 Target Comparison - OPEX (\$000)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total OPEX	28,614	31,242	31,607	32,506	33,432
Total OPEX Target	<u>26,145</u>	<u>26,808</u>	<u>28,203</u>	<u>28,938</u>	<u>29,731</u>
Variance to Target	<u>(2,469)</u>	<u>(4,434)</u>	<u>(3,404)</u>	<u>(3,568)</u>	<u>(3,701)</u>
 <u>Major Variance Contributors:</u>					
Labor	(1,206)	(2,201)	(1,534)	(1,588)	(1,643)
SERC Audit Prep Expenses	(250)	(256)	(263)	(269)	(276)
EPRI - Lines Underground	-	(195)	(200)	(205)	(210)
EPRI - Substations Smart Grid Research	-	(308)	(315)	(323)	(331)
Incremental Non-labor Balancing Authority	(100)	(103)	(105)	(108)	(110)
Incremental Non-labor Executive Management	(150)	(154)	(158)	(162)	(166)
Transerv for ITO consulting	(260)	(500)	(513)	(525)	(538)
Outside Legal Expenses (not in Legal budget)	-	(500)	-	-	-
Software Subscriptions - Strategy & Planning	(100)	(102)	(104)	(106)	(108)
Webdata Software	(100)	(102)	(104)	(106)	(108)
Additional Dispatcher Training	(50)	(51)	(52)	(53)	(54)
Additional Strategy & Planning Outside Services	(50)	(51)	(52)	(53)	(54)
Other	(203)	88	(5)	(71)	(102)
Total Variance	<u>(2,469)</u>	<u>(4,434)</u>	<u>(3,404)</u>	<u>(3,568)</u>	<u>(3,701)</u>

## 2011-2015 Target Comparison – Gross Margin (\$000)

	2011	2012	2013	2014	2015
Total NL Gross Margin Expenses	29,955	23,264	15,670	14,754	12,152
less: Intercompany Gross Margin Expense	5,645	6,425	6,335	6,489	6,620
Net External Gross Margin Expenses	24,310	16,839	9,335	8,265	5,532
External Gross Margin Expenses Target	11,266	11,589	10,493	10,703	10,917
Fav (Unfav) Variance to Target	<u>(13,044)</u>	<u>(5,250)</u>	<u>1,158</u>	<u>2,438</u>	<u>5,385</u>

Major Variance Contributors:

Incremental KMPA Additional MISO Exit Costs	(7,603)	(2,305)	(2,286)	(2,329)	-
Higher SPP ITO Costs	(4,300)	(1,967)	3,771	4,474	4,563
Higher MISO Exit Fee Amortization	(646)	(582)	(442)	(258)	177
Incremental EKPC Reg. Asset Amortization	(504)	(504)	(504)	(84)	-
3rd Party Transmission Expense	(147)	(152)	191	206	207
RTO Expenses	37	102	277	286	291
Other	119	158	151	143	147
Total Variance	<u>(13,044)</u>	<u>(5,250)</u>	<u>1,158</u>	<u>2,438</u>	<u>5,385</u>

## 2011-2015 Capital Comparison – Cash Basis (\$000)

	2011	2012	2013	2014	2015
Total Capital	44,603	47,078	62,837	52,777	49,015
Target	32,600	27,781	48,339	47,514	51,808
Variance To Target	<b>(12,003)</b>	<b>(19,297)</b>	<b>(14,498)</b>	<b>(5,263)</b>	<b>2,793</b>

Variance Explanations:

Louisville Upgrade	(3,458)	(9,341)	(4,396)	(355)	
Smart Grid Enabling (Control House Upgrades)	(2,216)	(3,929)	(5,547)	(8,474)	(8,467)
Cyber Security (CIP)	(2,079)	(2,756)	(2,879)	(1,000)	(500)
Spare Transformers (TPL Standard)			(7,333)	(667)	
Transmission Geographic Info Sys.		(1,000)	(3,000)	(1,700)	
Gorge-Dorchester 69kV Rebuild			(2,500)	(3,400)	
KY Dam-South Paducah 69kV			(2,900)	(3,000)	
KMPA	(2,771)	411	305	(1,120)	(1,120)
Combined Cycle CT			20,000	20,000	20,000
Other	(1,479)	(2,682)	(6,248)	(5,547)	(7,120)
Total Variance	<b>(12,003)</b>	<b>(19,297)</b>	<b>(14,498)</b>	<b>(5,263)</b>	<b>2,793</b>

## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
VP/Director/Support	2	2	6	6	6	6	6
System Operations	31	32	32	32	32	32	32
Energy Management System	8	8	8	8	8	8	8
Strategy & Planning	16	15	15	15	15	15	15
Substations	22	25	25	25	25	25	25
Lines	27	28	30	30	30	30	30
Reliability & Compliance	3	3	3	3	3	3	3
Balancing Authority	0	6	6	10	10	10	10
Policy and Tariffs	0	3	3	3	3	3	3
<b>TOTAL</b>	<b>109</b>	<b>122</b>	<b>128</b>	<b>132</b>	<b>132</b>	<b>132</b>	<b>132</b>
From 2010 MTP		115	115	115			

### Major Developments/Changes:

- Addition of a VP over the Transmission Line of Business , a second Director, and accompanying administrative personnel in 2011.
- Creation of a Balancing Authority Department, that will handle ITO duties at the completion of the SPP contract in 2012.
- Creation of a Policy and Tariffs Department by moving that function out of Strategy and Planning and hiring a manager.

## Key Performance Indicators

<b>KPI</b>	<b>2009 Year End</b>	<b>2010 Forecast</b>	<b>2011 Budget</b>	<b>2012 Plan</b>	<b>2013 Plan</b>	<b>2014 Plan</b>	<b>2015 Plan</b>
Recordable Injury Incident Rate - Employees	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recordable Injury Incident Rate - Contractors	2.10	2.06	3.00	3.00	3.00	3.00	3.00
SAIDI (minutes)	11.40	13.10	7.00	7.00	7.00	7.00	7.00

Lightning strikes, switch failures, vegetation, and 3<sup>rd</sup> Party Incidents have contributed to the 2010 SAIDI

Various capital projects are included in the Plan to help improve SAIDI, these include:

- Static replacement program
- Breakers replacements/upgrades
- Fiber replacements



- NERC reliability standards will continue to drive Transmission through stricter interpretation of existing standards and the addition of new standards, penalty and fine assessment, and increasing audit scrutiny.
- Cyber Security will be an expanding area of compliance standards and scrutiny.
- The increasing development of federal regulatory policies (FERC, NERC, SERC) will further strain human resources and the ability to remain compliant.
- System protection asset replacement (Remote Terminal Unit's (RTU), relays, station control houses).
- Key Asset failure – transformer/breakers.
- Network Interconnect Transmission Service Requests (ie.KMPA, OMU, Cash Creek) impacts.
- Knowledge transfer and retention as employees retire.
- Federal and State mandatory Smart Grid initiatives.
- KYPSC mandated system hardening investment.

**\$ thousands**

	<u>2011</u>	<u>2012</u>	<u>2013</u>
Network Interconnection Transmission Service (NITS)	1,000	1,000	
Cash Creek IPP Transmission Service	10,000	15,000	15,000
West Irvine-Transformer, etc. Upgrades	4,000	1,000	3,000
Louisville Upgrades (Duke Funding Lines Portion)		4,500	
Paris-Millersburg (potential challenge over prior rights)		1,500	

# Appendix

# 2009-2015 Capital Breakdown (w/o COR) – Cash Basis (\$000)

Project	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Transmission Expansion Plan</b>							
Louisville Infrastructure Upgrade		900	3,458	9,341	4,396	355	
Brown North-Tyrone Line		76	2,786				
Clinton Transformer			562	1,562	125		
Schrewsbury-Ohio Co. 138kV Reconductor				1,083	1,179	2,238	
Middletown-Finchville Reconductor/Riser							3,750
<b>Ongoing Capital</b>							
West Cliff Rebuild		400	1,320				
Gorge-Dorchester 69kV Rebuild					2,500	3,400	
Lexington Plant-Pisgah 69kV Reconductor				1,650	200		
KY Dam-South Paducah 69kV					2,900	3,000	
Ghent Replace 345kV Breakers		675	920	809	882		
Smart Grid Enabling (Control House Upgrades)	704	744	2,216	4,623	5,853	8,786	8,786
Spare Transformers (TPL Standard)					7,333	667	
<b>Special Projects</b>							
TC2	29,579	14034	180				
TC2 Work Around	1,655	3868	(345)				
KMPA	2,599	2,074	3,341	629	8	1,433	1,433
Cyber Security (CIP)		-	2,476	3,156	2,879	1,144	583
Cascade Work Management System		2,398	527	506	500		
Transmission Graphical Information System				1,000	3,000	1,700	
Other Capital	34,140	38,258	27,162	22,719	31,082	30,054	34,463
<b>Total Capital (107001)</b>	<b>68,677</b>	<b>63,427</b>	<b>44,603</b>	<b>47,078</b>	<b>62,837</b>	<b>52,777</b>	<b>49,015</b>

# 2011-2015 Cost of Removal Comparison (\$000)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total Cost of Removal	4,267	3,693	4,371	4,500	4,500
Target	4,168	3,890	5,305	4,047	4,128
Variance to Target	<u>(99)</u>	<u>197</u>	<u>934</u>	<u>(453)</u>	<u>(372)</u>
<u>Variance Explanations</u>					
Various projects	(99)	197	(403)	(453)	(372)
TC2 - Removal of Work Around Lines			1,337		
Total Variance	<u>(99)</u>	<u>197</u>	<u>934</u>	<u>(453)</u>	<u>(372)</u>

THIS SLIDE USED FOR SUMMARY ONLY

# 2009-2015 Other Costs (\$000)

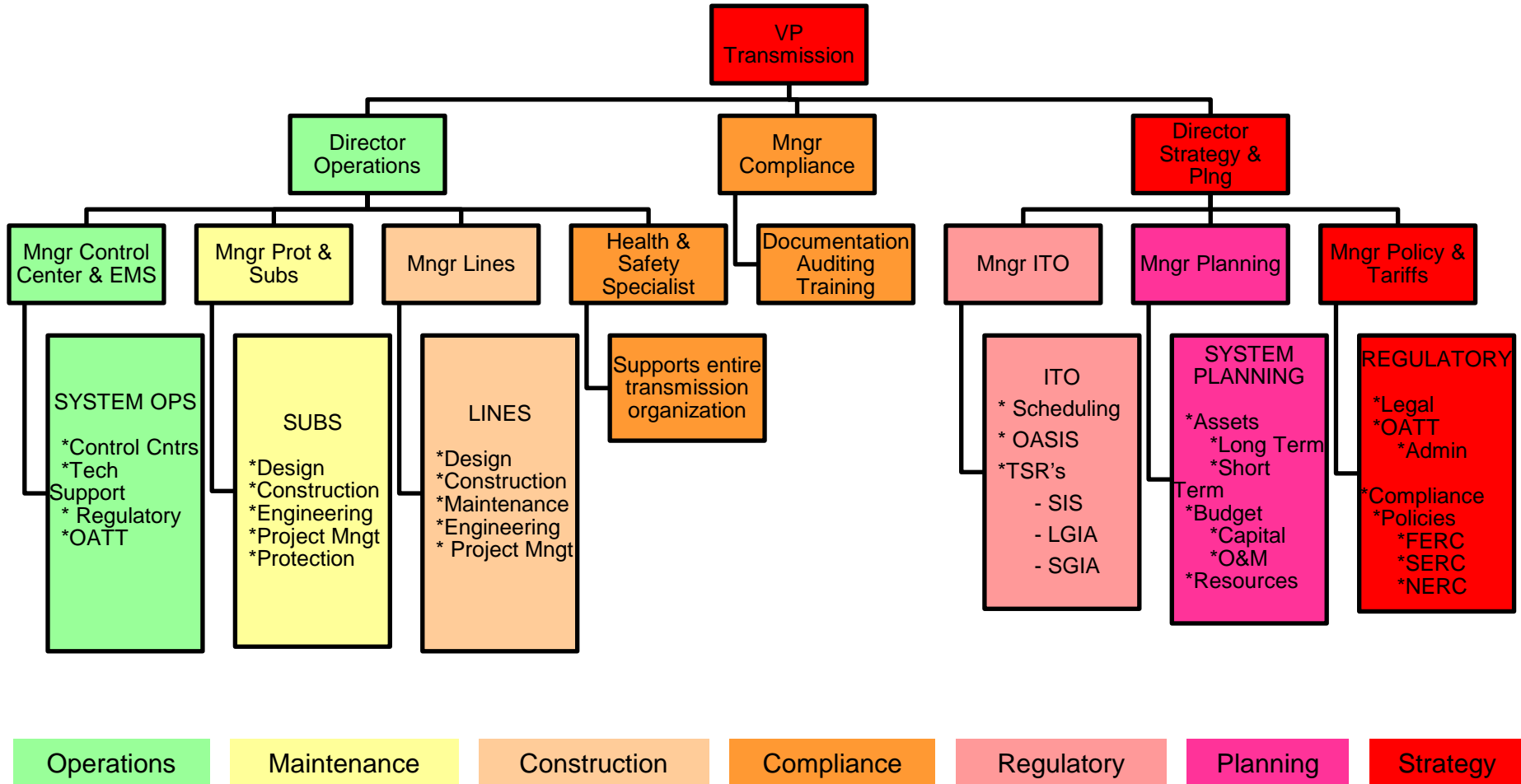
Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan
Stores Expense					
Labor	-	-	-	-	-
Non labor	-	-	-	-	-
Total	-	-	-	-	-
Local Engineering					
Labor	3,735	4,836	2,954	3,145	3,104
Non labor	897	817	-	-	-
Total	4,632	5,653	2,954	3,145	3,104
Other Balance Sheet					
Labor	-	-	-	-	-
Non labor	-	-	-	-	-
Total	-	-	-	-	-
 Total Other Costs	 <u>4,632</u>	 <u>5,653</u>	 <u>2,954</u>	 <u>3,145</u>	 <u>3,104</u>

# Louisville Infrastructure Upgrade Investment Cash Basis (\$000)

Item	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan	Project Total
Transmission Line Upgrades		1,000	3,800				4,800
Paddy's West		458	2,333	209			3,000
Middletown 4th Transformer				1,833	167		2,000
Watterson-Jeffersontown			458	42			500
Northside Reactor				229	21		250
Bluelick Breaker Upgrades				1,833	167		2,000
Duke Clifty Work			2,750	250			3,000
Middletown 345kV Breakers	900	2,000					2,900
<b>Total Other Costs</b>	<u>900</u>	<u>3,458</u>	<u>9,341</u>	<u>4,396</u>	<u>355</u>	<u>-</u>	<u>18,450</u>

Transmission reliability criteria has identified a significant need for upgrades within the Louisville Metro area (including system expansion in southern Indiana). Previous mitigation was to shed load to prevent cascading outages. The FERC has emphasized through various documentation against load shedding as a means of mitigation.

The 2011 MTP assumes that Duke Energy will complete the 345kv circuit addition from Duke's Speed Substation to the interconnect point with LGE as well as upgrades at the Speed Substation. This work is included as a sensitivity of \$4.5m in 2012.







*Energy Delivery*

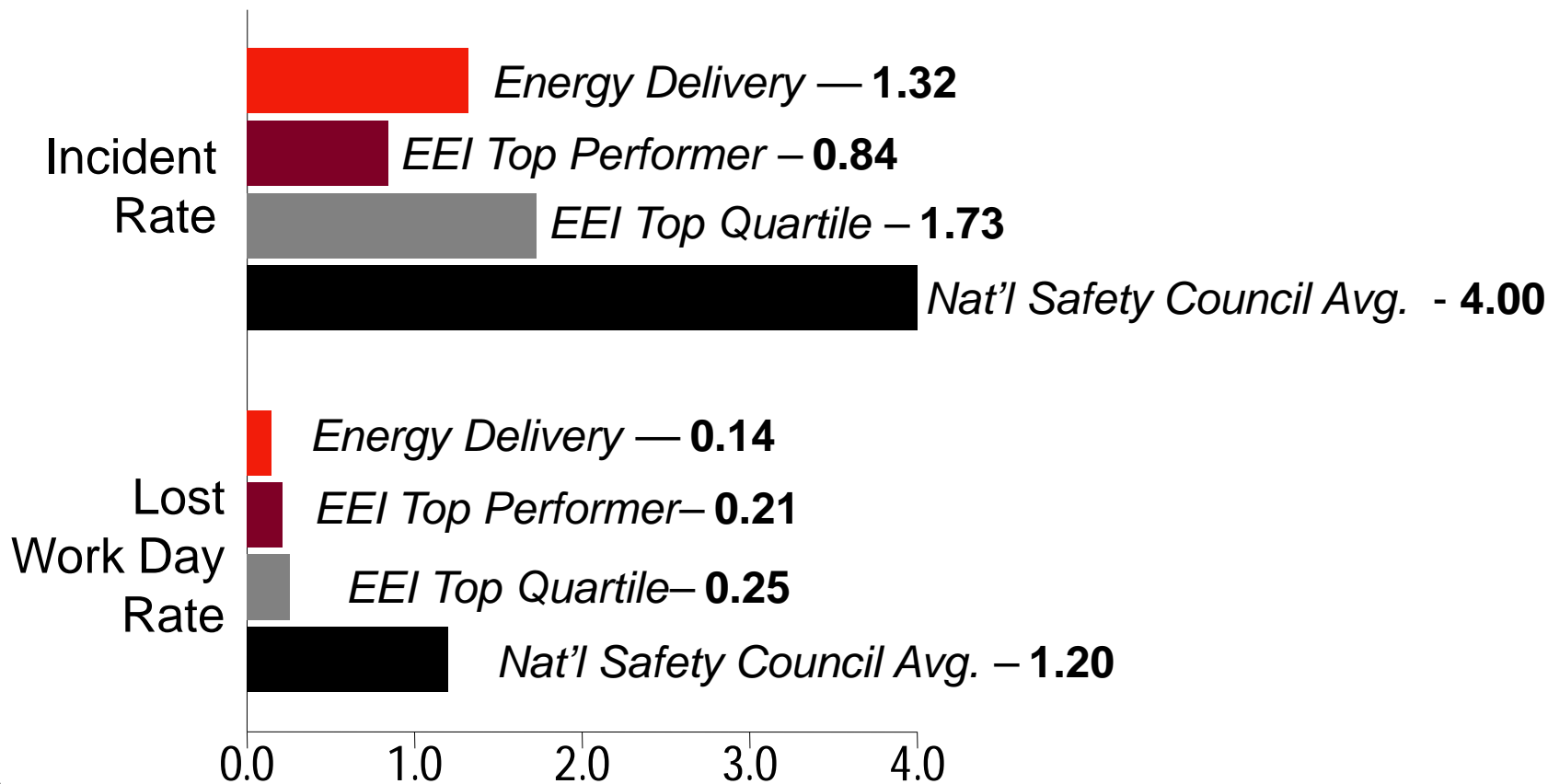
*2011-2015 MTP*

*October 14, 2010*

- **Plan Highlights** **3-10**
- **Major Assumptions** **11**
- **Financial Performance**
  - **Operating Expense** **12**
  - **Target Reconciliation** **13-14**
  - **Headcount** **15**
  - **Key Performance Indicators** **16**
  - **Plan Risks** **17**
- **Appendix** **18-21**

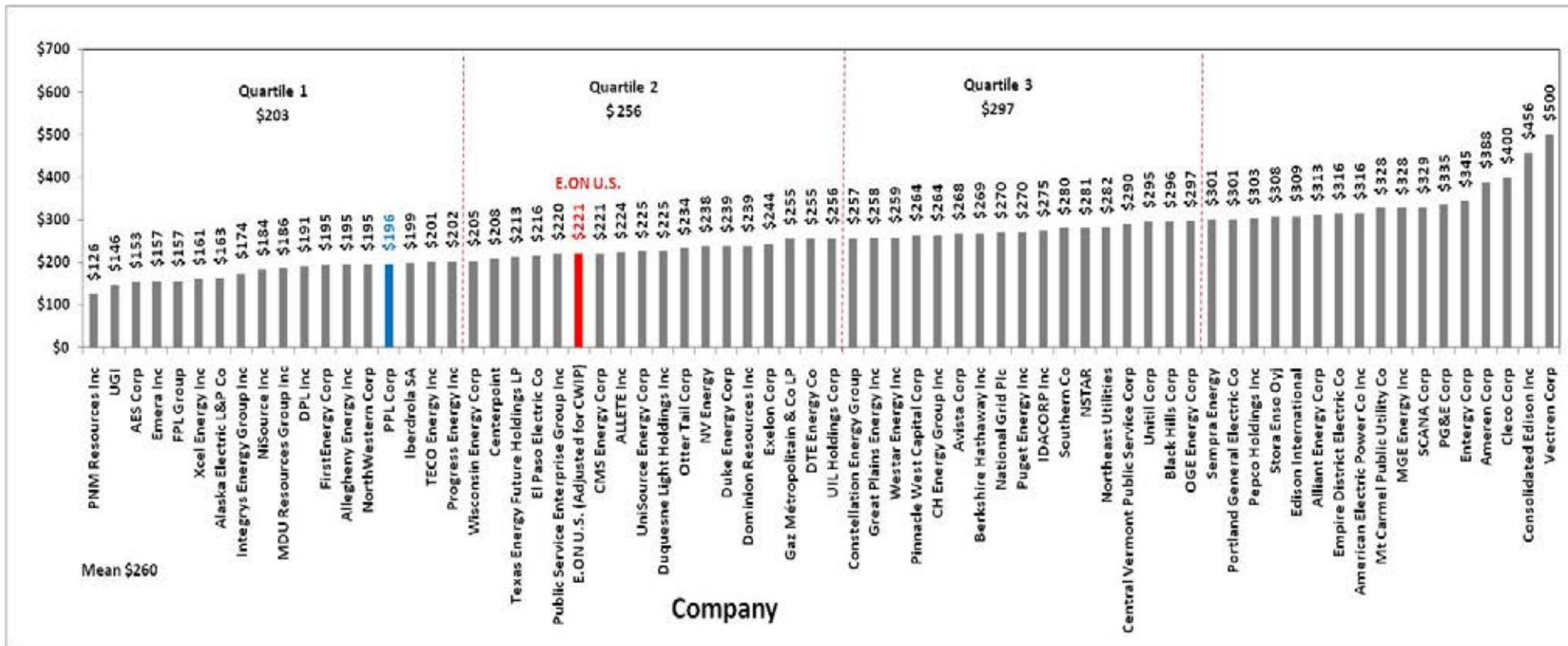
Energy Delivery provides safe, reliable, and high quality service to our customers. The objective of the attached plan is to maintain or enhance the customer experience over the long term.

## Energy Delivery Safety Performance – EEI 2009 Data



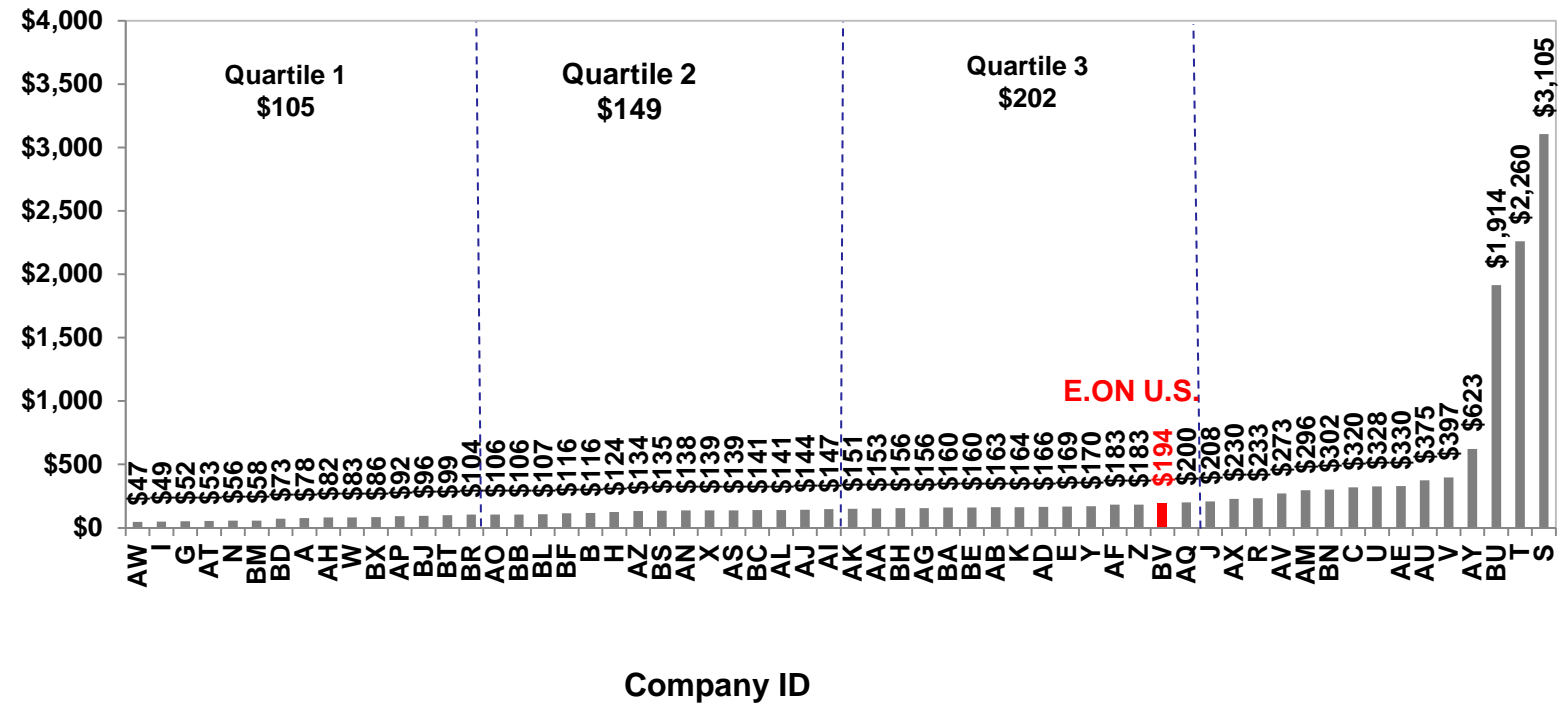
## Total Electric Cost per Customer Performance

Overall Electric Distribution Expenditures Per Customer  
 FERC Utility Cost Benchmarking - 2009 Data  
 (Electric Only)

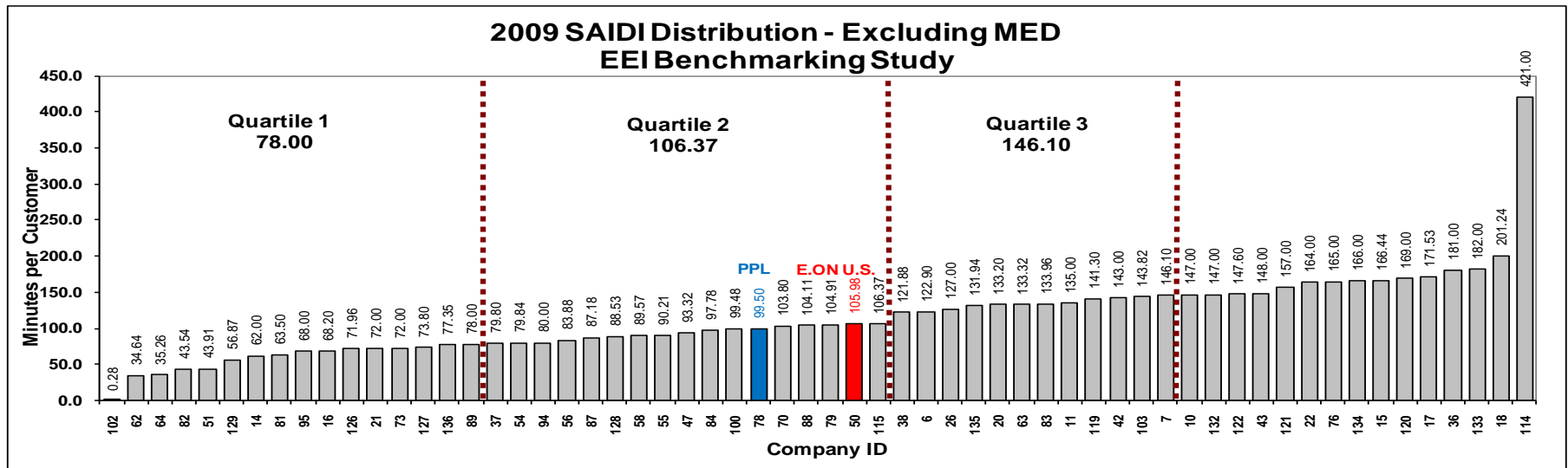
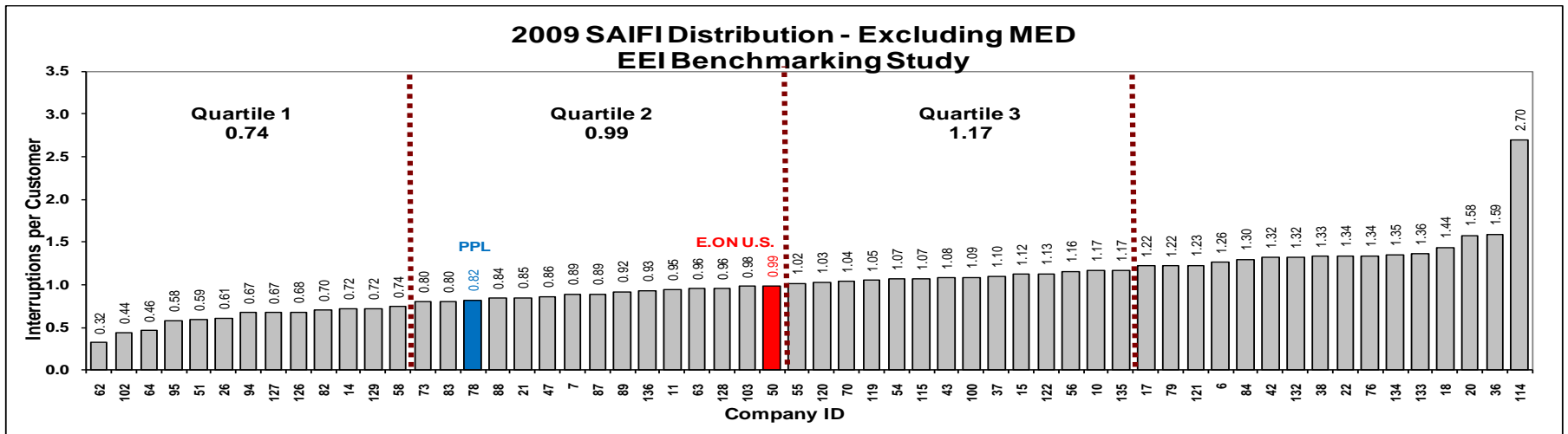


## Total Gas Cost per Customer Performance

Overall Gas Distribution Expenditures Per Customer  
 American Gas Association - 2009 Data  
 (Gas Only)



## Reliability Performance



- **Safety**
  - Continue to partner with Energy Services to build on safety synergies
  - Continue commitment to workforce and public safety
  - Continue to focus on motor vehicle safety and ensuring DOT compliance
  - Sharing safety best practices throughout the industry
  - Have won 12 international, national and state awards as well as other recognition
- **Customer Experience**
  - Expand our relationships with customers by delivering positive customer experiences that create value and build trust
  - Continue commitment to corporate citizenship and community involvement
  - Align the organization, operations and processes of the business around the needs of customers
  - Create collaborative relationships that promote employee engagement
  - Develop strategies, process models and information technology to design, manage and optimize the end-to-end customer experience process
  - Build metrics to comprehensively manage customers' end-to-end experience with the company
  - Continue being effective stewards of financial, administrative and organizational resources
  - Create tariffs and regulations that competitively position the company and respect the overall impact on customers
  - Grow revenues through the connection of new customers, economic development, products and services

- **Customer Experience (continued)**
  - Continue progress on enhancements to Customer Care System functionality
  - Gain customer acceptance and use of new Interactive Voice Response system and customer self-service on-line functionality
  - Continue emphasis on enhanced customer communication systems and processes
  - Continue to expand the portfolio of customer energy efficiency programs, including customer education on the need for energy efficiency
  
- **Reliability**
  - Continue investments in electric and gas system infrastructure to meet demand, meet regulatory requirements and improve system performance
  - Increase investments to improve electric system reliability and implement an enhanced hazard tree removal plan to improve storm performance
  - Invest in additional gas compression, equipment upgrades and new wells to improve reliability, mitigate risk and maintain storage field deliverability



- **OPEX**

- On target in 2010 to achieve 7&5 approved forecast of \$238.6M, which is \$1.5M lower than original budget.
- Over target in 5-year plan period -

	2011	2012	2013	2014	2015
Total Rate Case Settlement Items	(5,180)	(5,180)	(5,180)	(5,284)	(5,390)
Bad Debt	(5,000)	(5,000)	(5,000)	(5,100)	(5,202)
Other Incremental Items / Savings	2,636	(238)	911	316	115
Fuel Gas Savings	1,008	1,392	1,296	1,322	1,348
<b>Total Energy Delivery excluding DSM</b>	<b>(6,536)</b>	<b>(9,026)</b>	<b>(7,973)</b>	<b>(8,746)</b>	<b>(9,129)</b>
Energy Efficiency - DSM Programs	3,910	(5,935)	(7,879)	(12,835)	(12,128)

- **Compounded Annual Growth Rate (CAGR) from 2010-2013 is 4.8%.**
- **Major Financial Risks:**
  - **Storm Restoration**
  - **Bad Debt**

- **Capital**
  - **On target in 2010 to achieve 7&5 approved forecast of \$191.7M, which is \$5.2M lower than original budget.**
  - **Compounded Annual Growth Rate (CAGR) from 2010 to 2013 is 7.1% (Investment Only).**
  - **New business is expected to have moderate volume increases in the plan period.**
  - **Major Initiatives:**
    - **Pole Inspection and Treatment Program**
    - **Gas Leak Mitigation**
    - **Circuit Hardening / Reliability**
    - **Underground Service Pilot**
    - **Mobile Technology**
    - **Substation Enhancements**
    - **Gas Compressor Station Enhancements**
    - **Pipeline Integrity**
    - **Magnolia Gas Compressor Addition**
    - **Smart Grid Pilot Expansion**
    - **Energy Education Center**
    - **Distribution Automation**

- **Energy Delivery maintains our position in the residential J.D. Power and RCCS surveys with a renewed focus on the Customer Experience.**
- **Customer expectations regarding levels of service and availability of information will continue to increase.**
- **Energy Efficiency projects and education will increase and continue to be an area of focus. Smart Grid pilot expansion and Energy Education Center filing will be approved.**
- **Circuit hardening and reliability initiatives have increased focus.**
- **Economic conditions will not adversely impact Bad Debt.**
- **Storm budgets are based on historical trends.**
- **New Business activity will bottom out in 2010 with moderate volume and inflationary increases through the planning period.**
- **No significant changes to regulation that will affect plans.**

## 2009-2015 Operating Expenses (\$000)

**ENERGY DELIVERY**

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Opex Expenses</b>							
Raw Labor	48,695	51,735	55,885	58,033	61,179	63,550	65,773
Labor Burdens	47,405	48,859	50,181	50,307	50,482	51,972	53,790
<b>Subtotal</b>	<b>96,100</b>	<b>100,594</b>	<b>106,066</b>	<b>108,340</b>	<b>111,661</b>	<b>115,522</b>	<b>119,563</b>
Ice Storm/Mountain Snow Storm	11,276	57	-	-	-	-	-
DSM	1,683	1,691	3,547	4,116	4,396	4,639	4,665
<b>Total Labor</b>	<b>109,059</b>	<b>102,342</b>	<b>109,613</b>	<b>112,456</b>	<b>116,057</b>	<b>120,161</b>	<b>124,228</b>
<b>Non Labor</b>							
Vegetation Management	15,020	16,698	22,027	22,266	22,603	23,055	23,516
Bad Debt	8,562	12,000	11,300	11,300	12,000	12,240	12,485
Storm Restoration <sup>1</sup>	3,029	2,120	1,614	1,989	1,814	1,888	1,964
Fuel Gas and Gas Losses	5,414	4,337	4,064	4,309	4,566	4,657	4,750
Contributions	669	630	1,238	1,261	1,595	1,627	1,659
Outside Services	37,753	40,637	39,265	41,605	43,465	44,364	45,282
Other Non Labor	27,594	31,561	32,167	33,602	34,066	34,718	35,423
<b>Subtotal</b>	<b>98,041</b>	<b>107,983</b>	<b>111,675</b>	<b>116,332</b>	<b>120,109</b>	<b>122,549</b>	<b>125,079</b>
Ice Storm/Mountain Snow Storm	103,364	180	-	-	-	-	-
DSM	20,914	27,932	29,847	36,693	37,937	40,036	40,263
<b>Total Non Labor</b>	<b>222,319</b>	<b>136,095</b>	<b>141,522</b>	<b>153,025</b>	<b>158,046</b>	<b>162,585</b>	<b>165,342</b>
<b>Subtotal OPEX for EBIT<sup>2</sup></b>	<b>331,378</b>	<b>238,437</b>	<b>251,135</b>	<b>265,481</b>	<b>274,103</b>	<b>282,746</b>	<b>289,570</b>
Gross Margin Expenses	32	126	137	141	145	148	151
<b>Total Items for EBIT</b>	<b>331,410</b>	<b>238,563</b>	<b>251,272</b>	<b>265,622</b>	<b>274,248</b>	<b>282,894</b>	<b>289,721</b>

<sup>1</sup> Total Storm Restoration including labor is \$4.6M for 2011 and \$5.1M for years 2012-2013.

<sup>2</sup> Actuals for 2009 exclude WKE expenses of \$144K.

## 2011-2015 Target Comparison (\$000)

### ENERGY DELIVERY

	2011	2012	2013	2014	2015
Total OPEX	251,135	265,481	274,103	282,746	289,570
Total Gross Margin (if applicable)	137	141	145	148	151
<b>Total</b>	<b>251,272</b>	<b>265,622</b>	<b>274,248</b>	<b>282,894</b>	<b>289,721</b>
Total OPEX Target	248,516	250,527	258,258	261,171	268,318
Total Gross Margin Target	130	134	138	142	146
<b>Total Target</b>	<b>248,646</b>	<b>250,661</b>	<b>258,396</b>	<b>261,313</b>	<b>268,464</b>
<b>Variance to Target</b>	<b>(2,626)</b>	<b>(14,961)</b>	<b>(15,852)</b>	<b>(21,581)</b>	<b>(21,257)</b>
<b>Major Variance Contributors:</b>					
Rate Case - Hazardous Tree Removal	(4,000)	(4,000)	(4,000)	(4,080)	(4,162)
Rate Case - Contributions	(695)	(695)	(695)	(709)	(723)
Rate Case - Meter Reading 5 to 3 Days	(485)	(485)	(485)	(495)	(505)
Bad Debt	(5,000)	(5,000)	(5,000)	(5,100)	(5,202)
Regulatory - Gas Control and Storage	(1,861)	(1,028)	(1,095)	(1,117)	(1,139)
ED IT - Ongoing OPEX For Capital IT Additions	(386)	(885)	(1,349)	(1,378)	(1,408)
Storm Restoration	1,891	1,399	1,555	1,548	1,541
IT Street Light / Pole Audit	850	500	500	500	500
Workforce Planning - Headcount Increases	(66)	(730)	(386)	(400)	(413)
Fuel Gas Savings	1,008	1,392	1,296	1,322	1,348
Various Reductions	2,208	506	1,686	1,163	1,034
<b>Subtotal</b>	<b>(6,536)</b>	<b>(9,026)</b>	<b>(7,973)</b>	<b>(8,746)</b>	<b>(9,129)</b>
Energy Efficiency - DSM Programs	3,910	(5,935)	(7,879)	(12,835)	(12,128)
<b>Total Variance Contributors</b>	<b>(2,626)</b>	<b>(14,961)</b>	<b>(15,852)</b>	<b>(21,581)</b>	<b>(21,257)</b>

## 2011-2015 Capital Comparison – Cash Basis (\$000)

### ENERGY DELIVERY

	2011	2012	2013	2014	2015
Total Capital	199,160	221,412	235,295	229,641	235,906
Target	204,783	229,094	242,032	240,830	216,629
<b>Variance To Target</b>	<b>5,623</b>	<b>7,682</b>	<b>6,737</b>	<b>11,189</b>	<b>(19,277)</b>
<b>Major Variance Contributors:</b>					
New Business	9,114	11,546	15,130	13,279	10,451
Reliability/Circuit Hardening	(4,125)	(4,600)	(11,390)	(11,593)	(13,871)
Gas Main Replacements	515	8,461	4,837	3,472	(22,858)
System Enhancements	3,408	575	(7,279)	942	1,591
System Enhancements - Distribution Automation	(800)	-	(5,000)	(10,000)	(10,000)
Repair/Replace Defective Equipment and Restoration	1,611	1,998	(884)	(149)	-
Gas Service Line Ownership Program	-	-	6,400	6,554	6,711
GC&S - Inline Regulatory Inspections	(4,551)	-	(4,500)	(1,500)	(1,500)
GC&S - Compressor Addition	-	(4,000)	-	-	-
GC&S - Various (2012 Contains Shifts from 2011)	(361)	(5,962)	(1,430)	3,540	2,813
Op Services - Auburndale Expansion	-	-	3,371	-	-
Op Services - Facility Improvements	-	-	1,629	(560)	(114)
Energy Efficiency Education Center	(2,000)	(8,000)	(3,000)	-	-
Energy Efficiency - Automated Metering Infrastructure	4,747	8,118	8,571	10,000	10,000
Other	(535)	46	(18)	(2,796)	(2,500)
Accrual Variance	(1,400)	(500)	300	-	-
<b>Total Variance Contributors</b>	<b>5,623</b>	<b>7,682</b>	<b>6,737</b>	<b>11,189</b>	<b>(19,277)</b>

## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Distribution</b>							
Support Groups	28	28	28	28	29	29	29
Asset Management	55	59	63	66	68	68	68
Distribution Operations	672	686	711	721	723	723	722
Gas Control and Storage	113	118	125	124	124	124	124
Gas Planning and Supply	5	5	5	5	5	5	5
<b>Total Distribution</b>	<b>873</b>	<b>896</b>	<b>932</b>	<b>944</b>	<b>949</b>	<b>949</b>	<b>948</b>
<b>Retail and Metering</b>							
Retail Executive and Support	2	2	2	2	2	2	2
Customer Service and Marketing	267	282	282	282	282	282	282
Revenue Processes & Metering	203	210	201	202	202	202	202
Energy Efficiency	18	21	34	37	37	37	37
Transportation	3	3	3	3	3	3	3
<b>Total Retail and Metering</b>	<b>493</b>	<b>518</b>	<b>522</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>526</b>
<b>Operating Services</b>							
Director and Support	2	2	2	2	2	2	2
Contact Management	2	2	2	2	2	2	2
Facility Services	15	15	15	15	15	15	15
Administration Services	4	5	5	5	5	5	5
Real Estate Right of Way	8	7	9	9	9	9	9
<b>Total Operating Services</b>	<b>31</b>	<b>31</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>33</b>
<b>TOTAL</b>	<b>1,397</b>	<b>1,445</b>	<b>1,487</b>	<b>1,503</b>	<b>1,508</b>	<b>1,508</b>	<b>1,507</b>
<b>2010 MTP</b>		<b>1,482</b>	<b>1,474</b>	<b>1,484</b>			

## Key Performance Indicators

KPI	<u>2009 Year End</u>	<u>2010 Forecast</u>	<u>2011 Budget</u>	<u>2012 Plan</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>
Safety (Energy Delivery)	1.32	1.95	1.90	1.85	1.80	1.80	1.80
Overall Customer Satisfaction (points)	9	9	12	15	18	18	18
SAIFI	0.99	0.99	0.93	0.88	0.83	0.80	0.77
SAIDI	105.98	97.26	93.00	88.00	83.00	80.00	77.00

NOTE: Overall Customer Satisfaction 18 points = 100% payout



- **Increased Regulation & Legislative Action**
  - **Regulatory Pressure to Assume Ownership of Customer Gas Services**
  - **Green House Gas Regulation**
  - **On Bill Financing**
  - **Low Income Regulation**
  - **Customer Service PSC Audit**
- **Bad Debt**
- **Economic Development and the Pace of the Economic Recovery**
- **Storm Restoration**
- **Pole Inspection and Treatment Program Reject Rate**
- **Additional Mitigation from Gas Transmission Line Inspections**
- **Energy Efficiency and Smart Grid Regulatory Approvals**
- **Material and Equipment Price Increases**
- **Fuel Prices**

# Appendix

# 2009-2015 Capital Breakdown (w/o COR) – Cash Basis (\$000)

Project	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Distribution</b>							
New Business	53,768	52,682	57,712	60,499	64,986	67,636	70,373
Enhance the Network	28,800	64,782	57,111	59,722	81,192	81,145	85,250
Maintain the Network	37,183	45,125	53,503	63,251	51,088	42,837	44,214
Repair the Network	29,322	9,060	8,154	8,210	8,311	8,336	9,079
Miscellaneous	3,409	7,604	8,760	7,980	13,156	15,535	15,912
<b>Total Distribution</b>	<b>152,482</b>	<b>179,253</b>	<b>185,240</b>	<b>199,662</b>	<b>218,733</b>	<b>215,489</b>	<b>224,828</b>
<b>Retail</b>	686	2,160	4,853	13,787	9,189	3,416	1,722
<b>Metering</b>	4,524	5,384	4,905	4,719	5,303	4,896	5,242
<b>Operating Services</b>	2,210	5,289	2,862	3,844	2,370	5,840	4,114
<b>Accrual</b>	(9,700)	(420)	1,300	(600)	(300)	-	-
<b>Total Capital (107001) Cash</b>	<b>150,202</b>	<b>191,666</b>	<b>199,160</b>	<b>221,412</b>	<b>235,295</b>	<b>229,641</b>	<b>235,906</b>

# 2011-2015 Cost of Removal Comparison (\$000)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Total Cost of Removal	10,156	10,997	10,699	10,915	11,177
Target	5,500	5,775	5,914	6,056	6,201
<b>Variance to Target</b>	<b><u>(4,656)</u></b>	<b><u>(5,222)</u></b>	<b><u>(4,785)</u></b>	<b><u>(4,859)</u></b>	<b><u>(4,976)</u></b>
<b>Variance Explanations</b>					
Reliability/Circuit Hardening	(375)	(400)	(410)	(420)	(430)
Gas Main Replacements	(515)	(530)	(540)	(550)	(565)
System Enhancements	(360)	(382)	(390)	(420)	(430)
Repair/Replace Defective Equipment	(3,018)	(3,368)	(3,078)	(3,169)	(3,241)
Gas Control and Storage	(250)	(270)	(276)	(300)	(310)
Operating Services	(138)	(272)	(91)	-	-
<b>Total Variance</b>	<b><u>(4,656)</u></b>	<b><u>(5,222)</u></b>	<b><u>(4,785)</u></b>	<b><u>(4,859)</u></b>	<b><u>(4,976)</u></b>

# 2009-2013 Other Costs (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan
Local Engineering					
Labor	13,375	15,359	17,380	17,598	18,417
Non Labor	2,186	2,832	3,928	3,184	3,160
<b>Total</b>	<b>15,561</b>	<b>18,191</b>	<b>21,308</b>	<b>20,782</b>	<b>21,577</b>
Transportation	17,294	19,351	20,319	21,334	22,401
Operating Services Clearing (Non Labor)	3,107	3,239	3,317	3,396	3,464
<b>Total Other Costs</b>	<b>35,962</b>	<b>40,781</b>	<b>44,944</b>	<b>45,512</b>	<b>47,442</b>



*General Counsel Organization*

*2011-2015 MTP*

*October 13, 2010*

- **Major Assumptions**
- **Financial Performance**
  - **Operating Expense**
  - **Target Comparison**
  - **Headcount**
  - **Plan Risks**
- **Appendix**
  - **Sensitivities**
  - **O&M Reconciliation**
  - **Regulatory Asset**

- **Legal/EVP**
  - **No contingent budgets have been proposed**
  - **Hourly rates of outside providers will not materially increase**
  - **No new material litigation claims arise**
  
- **Corporate Communications**
  - **We must take advantage of non-traditional tools to gain positive rebranding recognition**
  - **Energy Efficiency programs will continue to grow. We will need to support these projects, in the most cost-effective manner through targeted advertising/marketing programs.**
  - **As new mediums become available to our customers and employees we will not only monitor and use the most effective tools, but we will need to potentially increase our staff to support any significant actions**



- **Corporate Responsibility**
  - **Nonprofit organizations will request and anticipate greater support from us given the status of the economy. We must be proactive and appropriately responsive.**
  - **Our interest in improving our customer satisfaction scores will mean enhancing our presence in rural areas. Thus, we should be prepared to support more activities in our rural service territory.**
  - **Environmental issues will continue to be important to our customers and the communities in which we operate. We must be prepared to engage in community activities which portray us as an environmentally responsible corporate citizen.**
  
- **Compliance**
  - **No change in headcount**
  - **No material change in role**

- **Environmental**
  - **Coal fired utilities will continue to face increasing scrutiny from the government, special interest groups and the media on multiple environmental fronts resulting in increased regulatory burden and difficulty in obtaining necessary and timely permits for existing and new facilities**
  - **Increased volume and complexity of environmental issues will require additional internal and external resources**
  - **Analysis of environmental risk will require more robust comprehensive environmental audits/assessments**
- **External Affairs**
  - **Increased restrictions by local, state and federal governmental entities upon company's activities in the operational, regulatory and environmental areas**
  - **Pressure by local, state and federal governmental entities upon the company to use its monopolistic status to enhance governmental revenue**
- **Federal Regulatory & Policy**
  - **Increasing regulatory pressure to regionalize transmission planning and cost-allocation, thereby eliminating unique regional or individual competitive advantages**
  - **Enforcement of mandatory performance standards to become more stringent and onerous**

- **State Regulation & Rates**
  - **Five separate rate case filings during MTP**
  - **Filing of two base rate cases for LG&E and KU in KY**
  - **Filing of three base rate cases for KU/ODP in VA**
  - **Number of CPCN proceedings for generation and transmission facilities**
  - **Significant ECR filings related to proposed environmental regulations**
  - **Increase in smart-meter rollout and Responsive Pricing Program**
  - **Possible Federal climate change and renewable legislation passed**
  - **Increase in energy efficiency programs**
  - **KPSC Management Audit of Customer Service functions**
  - **Filing of Integrated Resource Plans with KPSC and VSCC**

- **Human Resources**
  - **Current and potential Federal legislative initiatives may significantly affect the existing landscape and costs associated with virtually every aspect of the workforce (benefits, compensation, union relations, safety, etc.)**
  - **Employee and retiree healthcare costs will continue to rise**
  - **Economic challenges, especially inflation, could affect wage and benefits offerings**
  - **The impact of demographic and generational shifts presents an immediate challenge**
  - **Stakeholders will increasingly look for transparency in business practices**
  - **The pace and complexity of regulatory compliance will continue to escalate**
  - **The unions will continue to work to increase their membership**
  - **Competition for talent will require more non-traditional sourcing**

## 2009-2015 Operating Expenses (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor	9,581	10,327	10,937	11,351	11,744	12,155	12,580
Burdens	8,087	9,040	9,137	9,323	9,417	9,747	10,088
Outside Counsel	6,129	8,913	10,419	13,121	13,072	13,333	13,600
Other Legal Outside Services	488	420	430	439	447	456	465
Other Outside Services	3,153	3,579	3,862	3,613	3,885	3,963	4,042
Donations	1,413	3,122	3,022	3,082	3,144	3,207	3,271
Dues	1,939	2,283	2,547	2,677	2,817	2,873	2,931
Fees, Permits & Licenses	2,330	2,407	2,337	2,509	2,559	2,611	2,663
Rate Case Amortization	-	1,262	1,901	2,036	2,424	2,104	2,293
Other Non Labor	3,683	2,983	3,794	3,826	3,943	4,022	4,103
<b>Total OPEX for EBIT</b>	<b>36,803</b>	<b>44,335</b>	<b>48,385</b>	<b>51,977</b>	<b>53,454</b>	<b>54,472</b>	<b>56,036</b>

## 2011-2015 Target Comparison (\$000)

	2011	2012	2013	2014	2015
Total OPEX	48,385	51,977	53,454	54,472	56,036
Total Gross Margin (if applicable)	-	-	-	-	-
Total	<u>48,385</u>	<u>51,977</u>	<u>53,454</u>	<u>54,472</u>	<u>56,036</u>
Total OPEX Target	50,418	51,977	53,454	54,122	55,492
Total Gross Margin Target	-	-	-	-	-
Total Target	<u>50,418</u>	<u>51,977</u>	<u>53,454</u>	<u>54,122</u>	<u>55,492</u>
Variance to Target	<u>2,034</u>	<u>-</u>	<u>-</u>	<u>(350)</u>	<u>(544)</u>
Major Variance Contributors:					
Rate Case Amortization Calculation	-	-	-	(345)	(539)
Budget Reductions	<u>2,034</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Variance	<u>2,034</u>	<u>-</u>	<u>-</u>	<u>(345)</u>	<u>(539)</u>

## 2011-2015 Capital Comparison – Cash Basis (\$000)

	2011	2012	2013	2014	2015
Total Capital	600	500	225	225	625
Target	500	550	225	225	625
Variance To Target	<u>(100)</u>	<u>50</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Variance Explanations</u>					
Increased Estimate of PeopleSoft Upgrade for 2011	(100)	-	-	-	-
Decreased Estimate of PeopleSoft Upgrade for 2012	-	50	-	-	-
Total Variance	<u>(100)</u>	<u>50</u>	<u>-</u>	<u>-</u>	<u>-</u>

## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Legal/EVP	26	26	26	26	26	26	26
Corporate Communications	16	16	17	17	17	17	17
Corporate Responsibility	4	4	5	5	5	5	5
Compliance	6	6	6	6	6	6	6
Environmental	12.5	13.5	14.5	15	15	15	15
External Affairs	3	3	3	3	3	3	3
Federal Regulatory & Policy	3	3	3	3	3	3	3
State Regulation & Rates	12.5	13.5	14	14	14	14	14
Human Resources	32.5	33.5	34.5	34.5	34.5	34.5	34.5
<b>TOTAL</b>	<u>116</u>	<u>119</u>	<u>123</u>	<u>124</u>	<u>124</u>	<u>124</u>	<u>124</u>
From 2010 MTP		<u>121</u>	<u>126</u>	<u>126</u>			

•Major Developments/Changes

Corporate Communications will increase by one position

Corporate Responsibility will increase by one position

Environmental will increase by one position in 2011 and a PT position will transition to FT in 2012

State Regulation & Rates PT position will transition to FT in 2011

HR will increase by one FT admin position in Organizational Development



- **Legal/EVP**
  - New environmental regulations require extraordinary legal review and input
  - The Company becomes embroiled in a significant legal dispute
- **Corporate Communications**
  - Given increased ECR, pending rate cases, possible coal price increases and pending EPA regulations, customer bills will continue to increase resulting in lower customer satisfaction levels
  - With growing concern regarding the environment, the public will expect a strong partnership between energy producers, energy consumers to provide additional energy efficiency programs and address and resolve environmental quality issues
- **Corporate Responsibility**
  - Notwithstanding our best efforts, the public may not be satisfied with our community investment and community involvement efforts
  - Stakeholder groups are becoming more assertive and are examining our activities more closely
  - The election cycle may produce challenges in our relationships with elected officials

- **Compliance**
  - **Federal energy regulation continues to grow, and regulator expectations continue to be clarified, in ways that require enhanced compliance efforts**
  - **NERC Reliability Standards, including the Cyber Security Standards, are very likely to be expanded**
  - **Additional compliance efforts could be required in response to pending self reports with SERC**
  
- **Environmental**
  - **Sharp increase in new regulatory initiatives requiring additional outside training of EA staff**
  - **Significant increase in the number of environmental permits required for daily company operations which necessitate outside contractors for specialized modeling, monitoring and testing**
  - **Increased costs for disposal of hazardous wastes, PCB wastes and spill clean-up materials**
  - **Increased annual operation fees for Title V air permits, KPDES water permits, KY River Authority and special waste landfills**

- **External Affairs**
  - Intense pressure on electric rates due to increased capital expenditures for pollution control and base load generation construction. Greenhouse gas legislation and Federal EPA regulations place substantial environmental compliance costs on the company and its customers.
  - Local, State and Federal Budget shortfalls result in increased efforts to raise revenue through surcharges on the customer electric bill and increased corporate fees and taxes
  - Asset ownership by outside-of-the-state entity
  - Amount of revenue raised by the Political Action Committee must increase in order for the company to maintain credibility and move to the next level of public policy shaping
- **Federal Regulatory & Policy**
  - Loss of autonomy over transmission planning and construction
  - Imposition of a federal renewable energy standard and the imposition of a socialized approach to cost-allocation for new construction of required transmission assets
  - Higher probability of being subjected to enforcement proceedings involving repeat violations resulting in substantially higher fines and more onerous penalties
  - Gridlock in 112th Congress on energy related legislation
  - Continued divergence in enforcement philosophies between FERC and NERC

- **State Regulation & Rates**
  - Growing rate base and operating expenses, coupled with regulatory lag and change of control stay out provision, could make target returns difficult to achieve
  - Commission and intervenor sensitivity to rising costs could result in punitive actions beyond what reason would dictate – prudence could be challenged more often particularly where actual costs exceed estimates
  - Changes to and uncertainty in Environmental regulations could put significant pressure on Environmental Cost Recovery mechanism
  - Failure to get timely regulatory approvals for generation and transmission investment could put reliability, customer service and utility economics at risk
  - Legal challenges to KPSC’s authority to develop rate mechanisms could have broad reaching impacts to existing and potential recovery mechanisms
- **Human Resources**
  - Economic pressures and impact on human resource management
  - Effects of possible Federal legislation relating to benefits, compensation, labor, safety, and taxation
  - Ensuring appropriate monitoring, compliance, reporting and disclosure
  - Maintaining key recruiting relationships during restricted hiring phase

# Appendix

## Key sensitivities – assumptions and costs not included in the MTP to cover transition costs

- **Legal/EVP**
  - The PPL transaction will not materially alter our legal spending
- **Corporate Communications**
  - As we transition to a new parent company, our interaction and strategic position within the new group must be managed
- **Corporate Responsibility**
  - Given the PPL merger, it's likely customers and other stakeholders will scrutinize the company's community involvement efforts more closely based upon their interest in the company maintaining at least the same level of community involvement. We must plan our community activities accordingly.
- **External Affairs**
  - Comparison of:
    - Political contributions between PPL and LG&E/KU
    - Levels of engagement and contributions with and to advocacy groups
    - PPL and LG&E/KU legislative and regulatory positions on various issues
    - DSM activities and level of revenue
- **Federal Regulatory & Policy**
  - Potential policy differences on transmission, integration of renewable energy resources, and demand response

# 2010-2015 O&M (\$000) – General Counsel Org Summary

<u>Department</u>	<u>2010 Forecast</u>	<u>2011 Budget</u>	<u>2012 Plan</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>
Legal/EVP	17,366	19,330	22,253	22,416	22,950	23,497
Corporate Communications	5,929	6,142	6,282	6,414	6,578	6,745
Corporate Responsibility	1,517	1,775	1,816	1,855	1,903	1,952
Compliance	997	1,014	1,040	1,052	1,086	1,122
Environmental	5,946	6,239	6,648	6,876	7,050	7,229
External Affairs	917	934	957	977	1,007	1,038
Federal Regulatory & Policy	820	834	856	876	905	935
State Regulation & Rates	2,415	2,833	2,564	2,824	2,915	3,007
Rate Case Amortization	1,262	1,901	2,036	2,424	2,104	2,293
Human Resources	7,165	7,383	7,525	7,738	7,974	8,217
<b>Total</b>	<b><u>44,335</u></b>	<b><u>48,385</u></b>	<b><u>51,977</u></b>	<b><u>53,454</u></b>	<b><u>54,472</u></b>	<b><u>56,036</u></b>

## 2009-2015 Operating Expenses (\$000) – Legal/EVP

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	4,545	5,322	5,433	5,584	5,725	5,926	6,132
Outside Counsel	6,129	8,913	10,419	13,121	13,072	13,333	13,600
Other Legal Outside Services	488	420	430	439	447	456	465
Other Outside Services	864	461	485	494	505	515	525
Donations	260	315	270	275	281	287	292
Dues	1,113	1,218	1,428	1,457	1,486	1,515	1,546
Fees, Permits & Licenses	19	15	16	16	17	17	17
Other Non Labor	794	702	849	867	883	901	919
<b>Total OPEX for EBIT</b>	<b>14,212</b>	<b>17,366</b>	<b>19,330</b>	<b>22,253</b>	<b>22,416</b>	<b>22,950</b>	<b>23,497</b>



## 2010-2015 Headcount Reconciliation – Legal/EVP

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	26	26	26	26	26
Prior Plan	26	26	26	26	26
Variance	-	-	-	-	-
<u>Variance Explanations</u>					
	-	-	-	-	-
Total Variance	-	-	-	-	-

## 2009-2015 Operating Expenses (\$000) – Corporate Communications

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	1,961	2,075	2,211	2,272	2,324	2,405	2,490
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	846	887	905	923	942	960	980
Donations	736	1,970	1,808	1,844	1,881	1,919	1,957
Dues	1	17	16	17	17	17	18
Fees, Permits & Licenses	-	-	-	-	-	-	-
Other Non Labor	1,684	981	1,202	1,226	1,251	1,276	1,302
<b>Total OPEX for EBIT</b>	<b>5,229</b>	<b>5,929</b>	<b>6,142</b>	<b>6,282</b>	<b>6,414</b>	<b>6,578</b>	<b>6,745</b>

## 2010-2015 Headcount Reconciliation – Corporate Communications

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	17	17	17	17	17
Prior Plan	16	17	17	17	17
Variance	<u>(1)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Variance Explanations</u>					
New Marketing Communications Specialist Position 2011	(1)	-	-	-	-
Total Variance	<u>(1)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

## 2009-2015 Operating Expenses (\$000) – Corporate Responsibility

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	537	573	675	693	710	735	761
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	146	103	106	109	111	113	115
Donations	355	767	750	765	780	796	812
Dues	11	7	7	7	7	7	8
Fees, Permits & Licenses	4	-	-	-	-	-	-
Other Non Labor	278	68	237	242	247	252	257
<b>Total OPEX for EBIT</b>	<b>1,331</b>	<b>1,517</b>	<b>1,775</b>	<b>1,816</b>	<b>1,855</b>	<b>1,903</b>	<b>1,952</b>

## 2010-2015 Headcount Reconciliation – Corporate Responsibility

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	5	5	5	5	5
Prior Plan	4	5	5	5	5
Variance	<u>(1)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Variance Explanations</u>					
New Community Relations Specialist Position in 2011	(1)	-	-	-	-
Total Variance	<u>(1)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

## 2009-2015 Operating Expenses (\$000) – Compliance

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	806	812	830	853	862	892	923
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	20	60	52	53	54	55	56
Donations	-	-	-	-	-	-	-
Dues	2	20	30	31	31	32	32
Fees, Permits & Licenses	-	-	-	-	-	-	-
Other Non Labor	66	105	102	104	106	108	110
<b>Total OPEX for EBIT</b>	<b>894</b>	<b>997</b>	<b>1,014</b>	<b>1,040</b>	<b>1,052</b>	<b>1,086</b>	<b>1,122</b>

# 2010-2015 Headcount Reconciliation – Compliance

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	6	6	6	6	6
Prior Plan	6	6	6	6	6
Variance	-	-	-	-	-
<u>Variance Explanations</u>					
	-	-	-	-	-
Total Variance	-	-	-	-	-

## 2009-2015 Operating Expenses (\$000) – Environmental

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	1,842	1,944	2,235	2,360	2,415	2,500	2,587
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	255	560	550	561	572	584	595
Donations	14	20	20	20	21	21	22
Dues	772	909	987	1,086	1,195	1,219	1,243
Fees, Permits & Licenses	2,305	2,392	2,319	2,490	2,541	2,591	2,643
Other Non Labor	83	122	128	130	133	135	138
<b>Total OPEX for EBIT</b>	<b>5,271</b>	<b>5,946</b>	<b>6,239</b>	<b>6,648</b>	<b>6,876</b>	<b>7,050</b>	<b>7,229</b>



## 2010-2015 Headcount Reconciliation – Environmental

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	14.5	15.0	15	15	15
Prior Plan	13.5	14.5	15	15	15
Variance	<u>(1.0)</u>	<u>(0.5)</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Variance Explanations</u>					
New Air Specialist Position for 2011	(1.0)		-	-	-
PT to become FT in 2012		(0.5)			
Total Variance	<u>(1.0)</u>	<u>(0.5)</u>	<u>-</u>	<u>-</u>	<u>-</u>

## 2009-2015 Operating Expenses (\$000) – External Affairs

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	645	654	665	683	698	722	748
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	110	116	118	121	123	126	128
Donations	7	16	16	17	17	17	18
Dues	10	16	14	15	15	15	15
Fees, Permits & Licenses	0	-	-	-	-	-	-
Other Non Labor	84	115	120	122	125	127	130
<b>Total OPEX for EBIT</b>	<b>856</b>	<b>917</b>	<b>934</b>	<b>957</b>	<b>977</b>	<b>1,007</b>	<b>1,038</b>

## 2010-2015 Headcount Reconciliation – External Affairs

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	3	3	3	3	3
Prior Plan	3	3	3	3	3
Variance	-	-	-	-	-
<u>Variance Explanations</u>					
	-	-	-	-	-
Total Variance	-	-	-	-	-

## 2009-2015 Operating Expenses (\$000) – Federal Regulatory & Policy

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	671	705	717	736	754	781	808
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	6	16	16	17	17	17	18
Donations	3	-	3	3	3	3	3
Dues	5	7	6	6	6	6	7
Fees, Permits & Licenses	0	-	-	-	-	-	-
Other Non Labor	111	92	92	94	96	98	99
<b>Total OPEX for EBIT</b>	<b>796</b>	<b>820</b>	<b>834</b>	<b>856</b>	<b>876</b>	<b>905</b>	<b>935</b>

# 2010-2015 Headcount Reconciliation – Federal Regulatory & Policy

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	3	3	3	3	3
Prior Plan	3	3	3	3	3
Variance	-	-	-	-	-
<u>Variance Explanations</u>					
	-	-	-	-	-
Total Variance	-	-	-	-	-

## 2009-2015 Operating Expenses (\$000) – State Regulation & Rates

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor & Burdens	1,842	2,069	2,156	2,200	2,253	2,332	2,413
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	345	200	519	203	407	415	423
Donations	10	-	5	5	5	6	6
Dues	4	31	-	-	-	-	-
Fees, Permits & Licenses	-	-	-	-	-	-	-
Rate Case Amortization	-	1,262	1,901	2,036	2,424	2,104	2,293
Other Non Labor	105	114	153	156	159	162	166
<b>Total OPEX for EBIT</b>	<b>2,306</b>	<b>3,677</b>	<b>4,734</b>	<b>4,600</b>	<b>5,248</b>	<b>5,019</b>	<b>5,300</b>

## 2010-2015 Headcount Reconciliation – State Regulation & Rates

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	14.0	14.0	14.0	14.0	14.0
Prior Plan	13.5	14.0	14.0	14.0	14.0
Variance	<u>(0.5)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Variance Explanations</u>					
PT position to become FT in 2011	(0.5)	-	-	-	-
Total Variance	<u>(0.5)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

## 2009-2015 Operating Expenses (\$000) – Human Resources

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Labor & Burdens	4,819	5,213	5,152	5,293	5,420	5,610	5,806
Outside Counsel	-	-	-	-	-	-	-
Other Outside Services	558	1,176	1,110	1,133	1,155	1,178	1,202
Donations	10	34	149	152	155	159	162
Dues	12	58	58	59	60	61	62
Fees, Permits & Licenses	2	-	2	2	2	2	2
Other Non Labor	506	683	912	886	945	964	983
<b>Total OPEX for EBIT</b>	<b>5,907</b>	<b>7,165</b>	<b>7,383</b>	<b>7,525</b>	<b>7,738</b>	<b>7,974</b>	<b>8,217</b>



# 2010-2015 Headcount Reconciliation – Human Resources

	2011 vs 2010	2012 vs 2011	2013 vs 2012	2014 vs 2013	2015 vs 2014
Current Plan	34.5	34.5	34.5	34.5	34.5
Prior Plan	33.0	34.5	34.5	34.5	34.5
Variance	<u>(1.5)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Variance Explanations</u>					
Admin Position Added	(1.0)	-	-	-	-
Director HR PT Position	(0.5)				
Total Variance	<u>(1.5)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

# 2009-2015 Regulatory Asset (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>LG&amp;E</b>							
Gen Mgmt Audit LGE - Electric	-	-	600	-	-	-	-
Gen Mgmt Audit LGE - Gas	-	-	200	-	-	-	-
LG&E Rate Case - Electric	88	832	-	1,030	-	1,030	-
LG&E Rate Case - Gas	37	487	-	485	-	485	-
<b>Total LG&amp;E</b>	125	1,319	800	1,515	-	1,515	-
<b>KU</b>							
Gen Mgmt Audit KU - Electric	-	-	600	-	-	-	-
KU Rate Case - Electric	138	1,917	-	2,415	-	2,415	-
<b>Total KU</b>	138	1,917	600	2,415	-	2,415	-
<b>Total Regulatory Asset Costs</b>	<b>263</b>	<b>3,236</b>	<b>1,400</b>	<b>3,930</b>	<b>-</b>	<b>3,930</b>	<b>-</b>



*Information Technology*

*2011-2015 MTP*

*January 4, 2011*

- **Plan Highlights**
- **Major Assumptions**
- **Financial Performance**
  - **Operating Expense**
  - **Target Comparison**
  - **Headcount**
  - **Plan Risks**
- **Appendix**
  - **Capital Plan Breakdown**

- **Operational**
  - **NERC Critical Infrastructure Protection (CIP)**
  - **Service Oriented Architecture (SOA)**
  - **CCS Investment**
  - **Multifunctional Devices**
  - **Enterprise Resource Planning (ERP) Analysis and Implementation remain in the LTP for 2013 – 2017**

- **Financial**

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Operating Expenses	40,299	48,008	53,074	56,146	58,876	61,272	72,944
Capital Expenses							
Captive:	14,303	18,862	12,361	20,475	19,570	23,892	16,764
Special Projects:							
NERC CIP		500	1,454	1,221	750	750	750
Multi Functional Devices		1,505	1,004	-	-	-	-
Implement SOA		-	1,500	-	-	-	-
SAP/CCS Related		4,752	4,800	3,800	12,200	5,000	5,000
ERP Analysis		-	-	-	500	1,500	500
ERP Implementation		-	-	-	-	-	36,000
Total IT Captive Capital	14,303	25,619	21,119	25,496	33,020	31,142	59,014
LOB Capital:			8,003	14,294	12,151	6,116	5,260

- **Regulatory requirements for NERC CIP will continue to expand in scope and necessitate further IT investment**
- **Ongoing investment in SAP is required for system sustainability and application enhancements**
- **Hardware and Software pricing will remain consistent throughout the term of the MTP**
- **No anticipated IT integration work related to the PPL transaction has been planned in the MTP**
- **Headcount budgeted is consistent with the Workforce Plan submitted**
- **Technology changes driven by our major software vendor, Oracle, necessitate an investment in a technology called Service Oriented Architecture (SOA). This will position us to make future software upgrades in a more efficient way.**
- **IT Security continues to be a major concern and will require ongoing investment to protect us from cyber threats and data exposure risks**

## 2009-2015 Operating Expenses (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Opex Expenses							
Raw Labor	14,183	15,773	17,376	18,488	19,792	20,485	21,201
Burdens	12,037	13,667	14,280	14,921	15,549	16,094	16,656
Non Labor							
Outside Services	3,168	2,276	1,791	2,311	1,995	2,345	2,392
Computer/Office Supplies	454	564	1,067	1,067	1,104	1,126	1,149
Travel/Transportation	387	610	620	632	645	657	671
Telecom/Leased Lines	2,134	2,810	2,447	2,496	2,546	2,597	2,649
License/Maintenance Fees	7,480	11,363	12,538	14,709	15,544	16,322	16,648
Dues and Subscriptions	32	47	41	42	43	44	45
Training	185	425	476	485	495	505	515
Other	238	473	489	499	509	522	535
ERP Project O&M							10,115
O&M Implications from Cap Projects				495	654	575	368
<b>Total OPEX for EBIT</b>	<b>40,299</b>	<b>48,008</b>	<b>51,126</b>	<b>56,146</b>	<b>58,876</b>	<b>61,272</b>	<b>72,944</b>

\*Note: CCS project Operating Expenses in the amount of \$4,234K were incurred in 2009 but not listed above

## 2011-2015 Target Comparison (\$000)

	2011	2012	2013	2014	2015
Total OPEX	51,126	56,146	58,876	61,272	72,944
Total Gross Margin (if applicable)					
Total	<u>51,126</u>	<u>56,146</u>	<u>58,876</u>	<u>61,272</u>	<u>72,944</u>
Total OPEX Target	51,126	56,146	58,224	59,939	72,231
Total Gross Margin Target					
Total Target	<u>51,126</u>	<u>56,146</u>	<u>58,224</u>	<u>59,939</u>	<u>72,231</u>
Variance to Target	<u>-</u>	<u>(0)</u>	<u>(652)</u>	<u>(1,333)</u>	<u>(713)</u>
Major Variance Contributors:					
Additional Headcount			(652)	(675)	(698)
Additional Maintenance Contracts			(177)	(186)	(195)
O&M Implications from Capital Projects			(154)	(211)	(134)
Other	192		331	(261)	315
Total Variance	<u>192</u>	<u>-</u>	<u>(652)</u>	<u>(1,333)</u>	<u>(713)</u>



## 2011-2015 Capital Comparison (\$000)

	2011	2012	2013	2014	2015
Total Capital	21,119	25,496	33,020	31,142	59,014
Target	18,062	26,244	31,624	24,415	57,793
Variance To Target	<b>(3,057)</b>	<b>748</b>	<b>(1,396)</b>	<b>(6,727)</b>	<b>(1,221)</b>

## 2011-2015 Capital Comparison (\$000) –(Continued)

	2011	2012	2013	2014	2015
<u>Variance Explanations</u>					
NERC CIP	(1,454)	(1,221)	(750)	(750)	(750)
Multi Functional Devices	(1,004)				
Implement SOA	(1,500)				
Replace UPS Switchboard		480	(480)		
Data Networks					(570)
Mid Level Storage Refresh	46	56	(10)	(405)	
SAN Switch Refresh	400	693		(1,325)	
Systems Monitoring & Mgmt				(130)	(65)
Exchange Renewal				(48)	
RISS Storage Upgrade				(62)	
Unified Communications	205	(150)	(750)	(550)	
Mobile Radio Console Replace**				(1,000)	
Replace Fiber Reach Nodes	1,005	502	1,000	(2,507)	
DNX Replacement***				500	1,000
CERUS III****		300			
Project Mirror		500			
Project Mirror - DB Technologies	(101)				
Mechanical Switchboard Redundancy			(100)		
Data Base Tools & Equipment			(75)	(75)	(75)
IP Management			(100)		
Evaluate Tools and Utilities		(125)	(75)	(75)	(125)
Server Hardware Refresh				(160)	397
PIX Firewall Replacement				300	(300)
Sharepoint Upgrade					(50)
Identity Management				(150)	(250)
Next Gen Development Tools & Framework					(300)
Other	92	47	(56)	(290)	(133)
Accrual Adjustment	(1,151)	(334)	(334)		
Total Variance	<u>(3,462) *</u>	<u>748</u>	<u>(1,396)</u>	<u>(6,727)</u>	<u>(1,221)</u>

\*Additional Funding Approved by RAC

\*\* Mobile Radio Console Replace is a two year project originally budgeted in 2015 and 2016 for the 2010 MTP but has now been moved to 2014 and 2015 for the 2011 MTP

\*\*\*DNX Replacement is a two year project originally budgeted in 2014 and 2015 for the 2010 MTP but has now moved to 2015 and 2016 for the 2011 MTP

\*\*\*\*CERUS III moved \$300K from 2012 into 2010

## 2009-2015 Headcount (FTE)

Department	2009 Year End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
IT Service Delivery	94.5	95.5	97.5	97.5	97.5	97.5	97.5
IT Operations	96	95	101	106	111	111	111
IT Strategy & Client Svcs	41	53	53	54	56	56	56
IT VP (including IT Security)	8	9	9	9	9	9	9
Interns/Coops	2.5	2.5	4.5	5	5	5	5
<b>SUBTOTAL</b>	<b>242</b>	<b>255</b>	<b>265</b>	<b>271.5</b>	<b>278.5</b>	<b>278.5</b>	<b>278.5</b>
Vacancies*	9						
<b>TOTAL</b>	<b>251.0</b>	<b>255.0</b>	<b>265.0</b>	<b>271.5</b>	<b>278.5</b>	<b>278.5</b>	<b>278.5</b>
From 2010 MTP		255	255	255			

\* Positions budgeted but unfilled as of 12/31/2009

- FTEs at risk to Capital**

	Raw Dollars to Capital (\$000s)					FTE				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
ITSD	1,315	1,361	1,409	1,458	1,509	18.0	18.0	18.0	18.0	18.0
ITO	1,303	1,348	1,396	1,444	1,495	17.5	17.5	17.5	17.5	17.5
ITSCS	240	249	257	266	276	3.0	3.0	3.0	3.0	3.0
ITVP	5	5	5	5	5	-	-	-	-	-
	<u>2,863</u>	<u>2,963</u>	<u>3,067</u>	<u>3,174</u>	<u>3,285</u>	<u>38.5</u>	<u>38.5</u>	<u>38.5</u>	<u>38.5</u>	<u>38.5</u>

- NERC CIP Program compliance requirements are still developing; IT's compliance could be compromised if incremental funds are not approved**
- Storage requirements – projected increase in storage demand (eDiscovery, NERC CIP)**
- Loss of SAP trained resources could result in reduced support and increase costs**

# Appendix

# 2009-2015 Capital Breakdown (w/o COR) –(\$000)

<u>Project</u>	<u>2009 Actual</u>	<u>2010 Forecast</u>	<u>2011 Budget</u>	<u>2012 Plan</u>	<u>2013 Plan</u>	<u>2014 Plan</u>	<u>2015 Plan</u>
<b>INFORMATION TECHNOLOGY</b>							
Service Delivery	106	309	218	468	293	318	218
Telecom	5,921	5,093	4,439	7,404	8,306	9,751	6,795
Computing Architecture	3,638	3,485	1,778	2,041	3,497	4,933	955
Data Networks	1,011	2,141	1,236	2,176	1,375	1,925	1,580
Operations/Capacity Mgmt	906	3,139	795	1,975	1,720	2,145	853
Project Management Office	42	15	15	400	35	200	-
New Technology	44	306	350	540	790	540	840
Security	304	845	765	908	700	755	900
Client Support Services	164	644	100	200	150	215	200
Desktop Operations	2,167	2,886	3,071	4,364	2,704	3,110	4,424
<b>Special Projects</b>							
NERC CIP		500	1,454	1,221	750	750	750
Multi Functional Devices		1,505	1,004	-	-	-	-
Implement SOA		-	1,500	-	-	-	-
SAP/CCS Related		4,752	4,800	3,800	12,200	5,000	5,000
ERP Analysis		-	-	-	500	1,500	500
ERP Implementation		-	-	-	-	-	36,000
<b>Total Capital (107001)</b>	<b>14,303</b>	<b>25,619</b>	<b>21,524</b>	<b>25,496</b>	<b>33,020</b>	<b>31,142</b>	<b>59,014</b>



*CFO ORGANIZATION*

*2011-2015 MTP*

*January 14, 2011*

- **Highlights & Assumptions**
- **Financial Performance**
  - **Target Comparison**
  - **Operating Expenses**
  - **Capital**
  - **Headcount**
  - **Plan Risks**



## Highlights

- **Operating expenses in all MTP years are consistent with targets.**
- **Capital is slightly above Prior Plan levels, but is in line with RAC approved targets.**

## Plan Assumptions

- **Plan assumes full employment (currently 3 open FTE positions)**
- **Depreciation study is included in 2012**
- **Higher bank fees due to refinancing debt**
- **General ledger upgrade / reimplementation in 2012 & 2013**

## 2011-2015 Target Comparison (\$000)

Item	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
<b>Operating Expenses</b>					
Total OPEX	28,577	29,972	30,518	31,455	32,416
Total OPEX Target	29,252	29,984	30,562	31,468	32,416
Variance to Target	<u>675</u>	<u>11</u>	<u>44</u>	<u>13</u>	<u>-</u>
<b>Stores Expense</b>					
Labor	1,457	1,581	1,683	1,742	1,803
Non-Labor	<u>558</u>	<u>497</u>	<u>466</u>	<u>473</u>	<u>479</u>
Total Other Costs	2,015	2,079	2,149	2,215	2,283
Target	2,022	2,079	2,149	2,215	2,283
Variance to Target	<u>8</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

## 2009-2015 Operating Expenses (\$000)

Item	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Operating Expenses							
Raw Labor	10,554	10,743	11,608	12,110	12,543	12,982	13,437
Burdens	8,295	9,183	9,375	9,558	9,666	10,004	10,354
Bank, Audit & Risk Mgmt Fees	4,103	4,078	5,716	6,175	6,373	6,500	6,617
Other Non-Labor	1,337	1,708	1,878	2,130	1,936	1,968	2,008
<b>Total OPEX for EBIT</b>	<b>24,290</b>	<b>25,712</b>	<b>28,577</b>	<b>29,972</b>	<b>30,518</b>	<b>31,455</b>	<b>32,416</b>

## 2009-2015 Capital Breakdown (w/o CoR) – Cash Basis (\$000)

Project	2009 Actual	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
Oracle Software & Hardware	250	634	20	6,000	1,775	-	-
PowerPlant	198	1,096	40	640	160	820	180
Other Software Initiatives	138	-	673	610	585	605	1,345
Storeroom Requirements	27	428	360	360	260	75	25
Other Projects	2	3	-	-	-	-	-
<b>Total Capital (107001)</b>	<b>615</b>	<b>2,161</b>	<b>1,093</b>	<b>7,610</b>	<b>2,780</b>	<b>1,500</b>	<b>1,550</b>
Prior Year Plan			425	7,465	2,711	962	988
Variance to Prior Year Plan			<b>(668)</b>	<b>(145)</b>	<b>(69)</b>	<b>(538)</b>	<b>(562)</b>

## 2009-2015 Headcount (FTE)

Item	2009 Year-End	2010 Forecast	2011 Budget	2012 Plan	2013 Plan	2014 Plan	2015 Plan
CFO	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Audit Services	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Treasurer	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Controller	53.5	55.5	55.5	55.5	55.5	55.5	55.5
Corporate Tax & Payroll	16.0	15.5	15.5	15.5	15.5	15.5	15.5
Planning & Development	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Supply Chain	48.0	48.0	49.0	50.0	51.0	51.0	51.0
<b>TOTAL</b>	<b>171.5</b>	<b>173.0</b>	<b>174.0</b>	<b>175.0</b>	<b>176.0</b>	<b>176.0</b>	<b>176.0</b>
From 2010 MTP		172.5	172.5	172.5	172.5	172.5	172.5

### Target Variances

- Incremental Stores positions (replacing contractors) : +1.0 (2011, 2012, 2013)

- **SEC Reporting requirements**
- **Internal controls – SOX compliance**
- **New accounting pronouncements**
- **US GAAP/IFRS Convergence**
- **Changing technology**
- **Federal and State government budget deficits**
- **PPL Initiatives**

**2011 Plan Assumptions**

- Some economic recovery assumed in Plan with load CAGR of 1.4% for Plan
- CO<sub>2</sub> / RPS legislation not effective for Plan
- TC2 in-service in January 2011
- Total capital expenditures including cost of removal of \$6.4 billion, with \$3.3 billion being ECR recoverable
- No significant “smart grid” deployment in Plan
- \$875 million of unsecured debt refinanced at 3.5% in 2010 for the holding company
- \$2.1 billion of Utility Fidelity debt refinanced in 2010 with First Mortgage Bonds at 4.25% for the utilities
- Newly issued debt rates for Utilities and holding company of 6% and 6.25%, respectively
- Seven rate case decisions from three jurisdictions assumed in MTP – 2 at the KPSC, 3 at the VSCC and 5 annual rate adjustments by FERC.
- ECR Plan filings in Q1 2011 and Q1 2012



# *2010 MTP Electric Sales & Peak Demand Forecast*

*Sales Analysis & Forecasting  
June 19, 2009*



## *Key Observations from Recent Sales Trends – Industrial Sales Have Been Hardest Hit by the Recession*

- Y Compared to the first four months of 2008, total industrial sales have declined by 21% (645 GWh) in January - April 2009.*
- Y Of the thirty industrial major accounts, only four had positive year-over-year growth in January – April 2009.*
- Y The reduction in industrial peak demands has not been as significant as the reduction in industrial energy consumption.*
- Y Residential customers have demonstrated a tendency to conserve energy only when weather conditions make it convenient to do so.*

## *Forecast Summary – 2010 Energy and Peak Demand Below Reforecast*

### *Energy*

- Y For the balance of 2009 (May – December), sales are expected to be 817 GWh (-3.8%) below the 2009 Reforecast and 1,895 GWh (-8.3%) below the 2009 MTP.*
- Y Compared to the Reforecast, the 2010 MTP forecast is 2.1% lower (-672 GWh) for 2010 and 0.9% lower (293 GWh) for 2012.*
- Y Industrial sales explain the majority of these differences.*

### *Peak Demand*

- Y Compared to the Reforecast, the 2010 MTP forecast is 0.8% lower (52 MW) for 2010 and 1.1% higher (73 MW) for 2012.*
- Y Growth in peak demand throughout the MTP period is offset by increasing industrial load factors.*
- Y By 2012, energy efficiency programs reduce peak demand by 325 MW. 217 MW is dispatchable.*

## Key Forecast & Macroeconomic Assumptions

- Y *Economy: According to Global Insight, industrial production begins to recover in Q1 2010 but is not expected to return to pre-recession trends until 2015-16 (see slide 16 in the Appendix). Global Insight makes no assumptions regarding carbon legislation.*
- Y *Kentucky housing market has begun to stabilize. Growth in RS customers is expected to remain slow through 2010 before returning to near historical levels.*
- Y *Appliance Efficiencies: No notable changes in appliance efficiency assumptions from 2009 MTP.*
- Y *Energy Efficiency: Impact of energy efficiency programs has been revised to exclude efficiency gains from a smart meter/grid deployment. Assumptions from the 2009 MTP regarding EISA remain reasonable (see slide 22 in Appendix).*
- Y *Electricity Prices: Growth in real electricity prices is higher in the 2010 MTP. Real electricity prices are expected to grow by approximately 4% per year through 2012 (see slide 20 in the Appendix).*

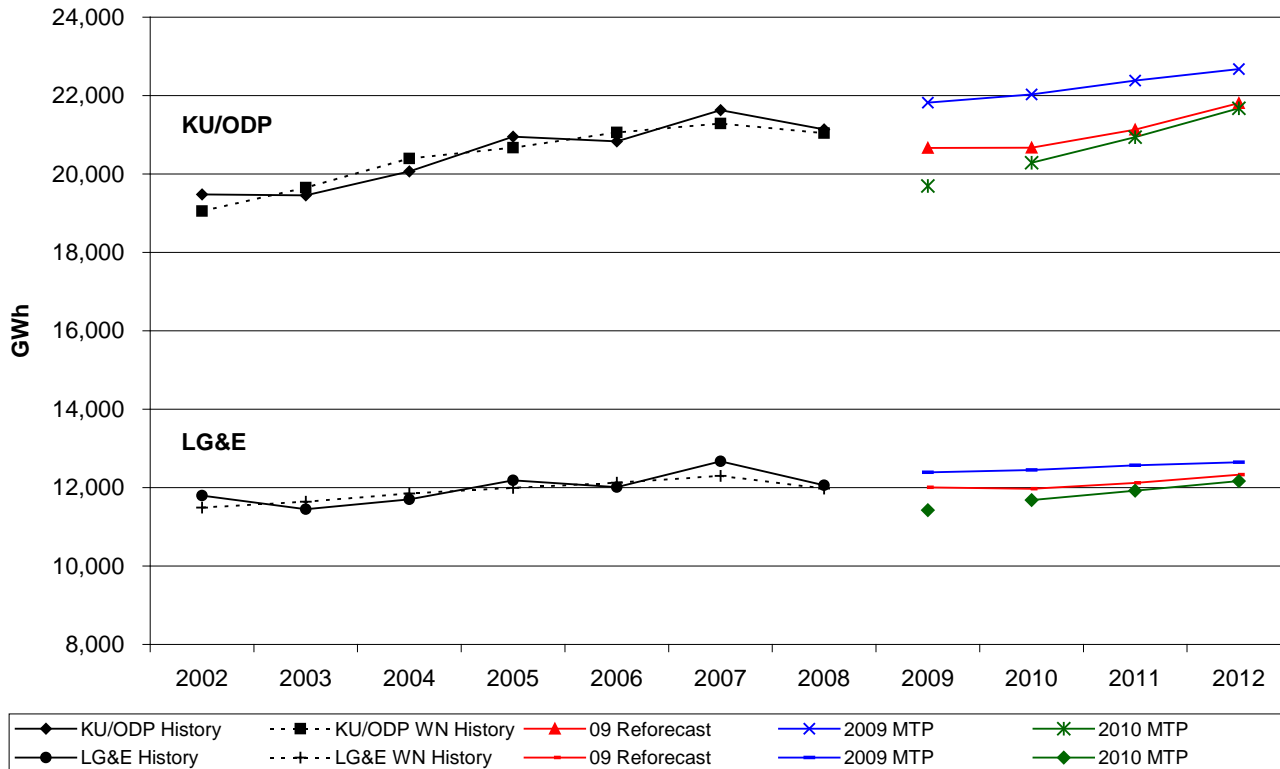
*Electricity sales are expected to be 3.8% below (-817 GWh) 2009 Reforecasted levels for the balance of 2009 (May-Dec)*

Forecast Class	2010 MTP (GWh)	2009 MTP (GWh)	2010 MTP		Reforecast (GWh)	2010 MTP	
			Var to 2009 MTP (GWh)	Pct Var		Var to Reforecast	Pct Var
Residential	6,906	7,008	-102	-1.5%	6,871	35	0.5%
Commercial	7,042	7,473	-431	-5.8%	7,210	-168	-2.3%
Industrial	5,485	6,710	-1,225	-18.3%	6,175	-689	-11.2%
Municipals/Lighting	1,435	1,572	-137	-8.7%	1,429	6	0.4%
<b>Total</b>	<b>20,869</b>	<b>22,764</b>	<b>-1,895</b>	<b>-8.3%</b>	<b>21,686</b>	<b>-817</b>	<b>-3.8%</b>

Company	2010 MTP (GWh)	2009 MTP (GWh)	2010 MTP		Reforecast (GWh)	2010 MTP	
			Var to 2009 MTP (GWh)	Pct Var		Var to Reforecast	Pct Var
KU/ODP	12,992	14,281	-1,289	-9.0%	13,478	-486	-3.6%
LG&E	7,877	8,483	-606	-7.1%	8,208	-331	-4.0%
<b>Total</b>	<b>20,869</b>	<b>22,764</b>	<b>-1,895</b>	<b>-8.3%</b>	<b>21,686</b>	<b>-817</b>	<b>-3.8%</b>

*Compared to the Reforecast, the 2010 MTP forecast is 2.1% lower (-672 GWh) for 2010 and 0.9% lower (-293 GWh) for 2012*

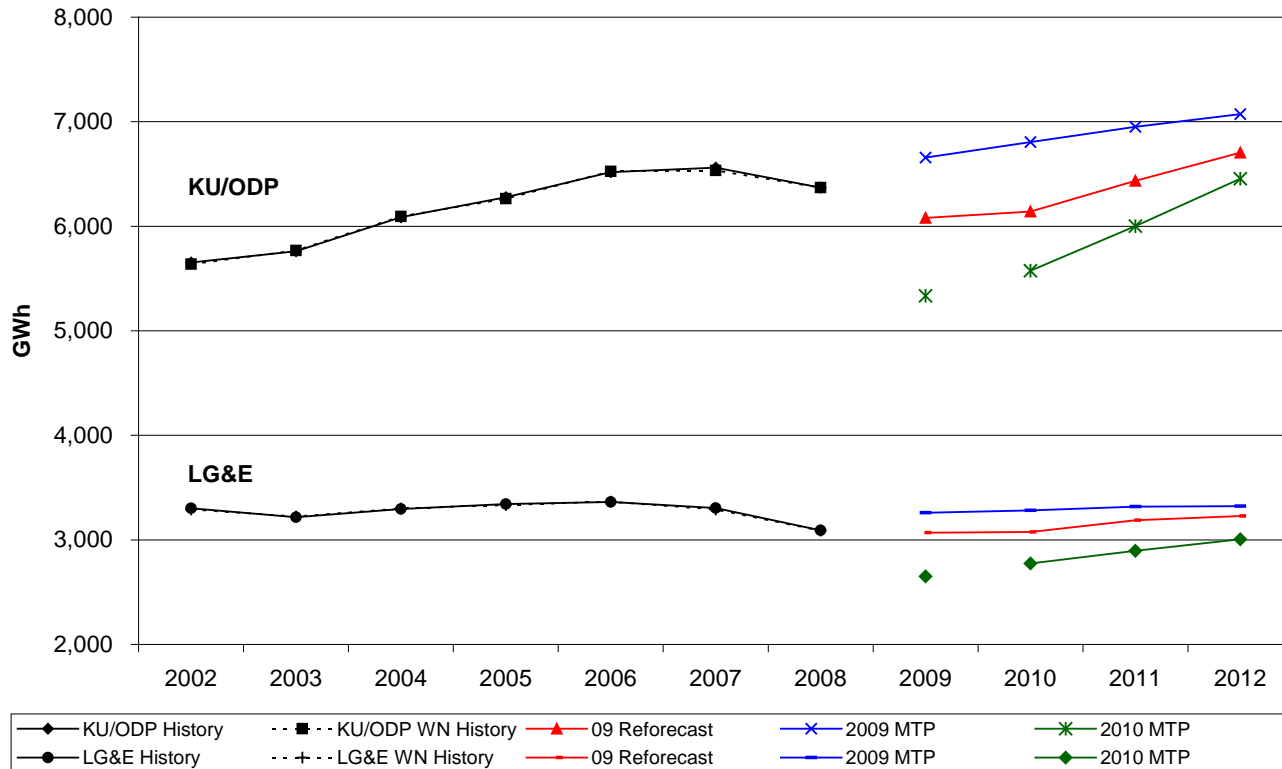
**Combined Company Energy Sales**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*

*Compared to the Reforecast, industrial sales are 9.4% lower (-865 GWh) for 2010 and 4.8% lower (-473 GWh) for 2012*

**Annual Industrial Energy Sales**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*

## Notable Changes in Major Account Forecasts for 2010

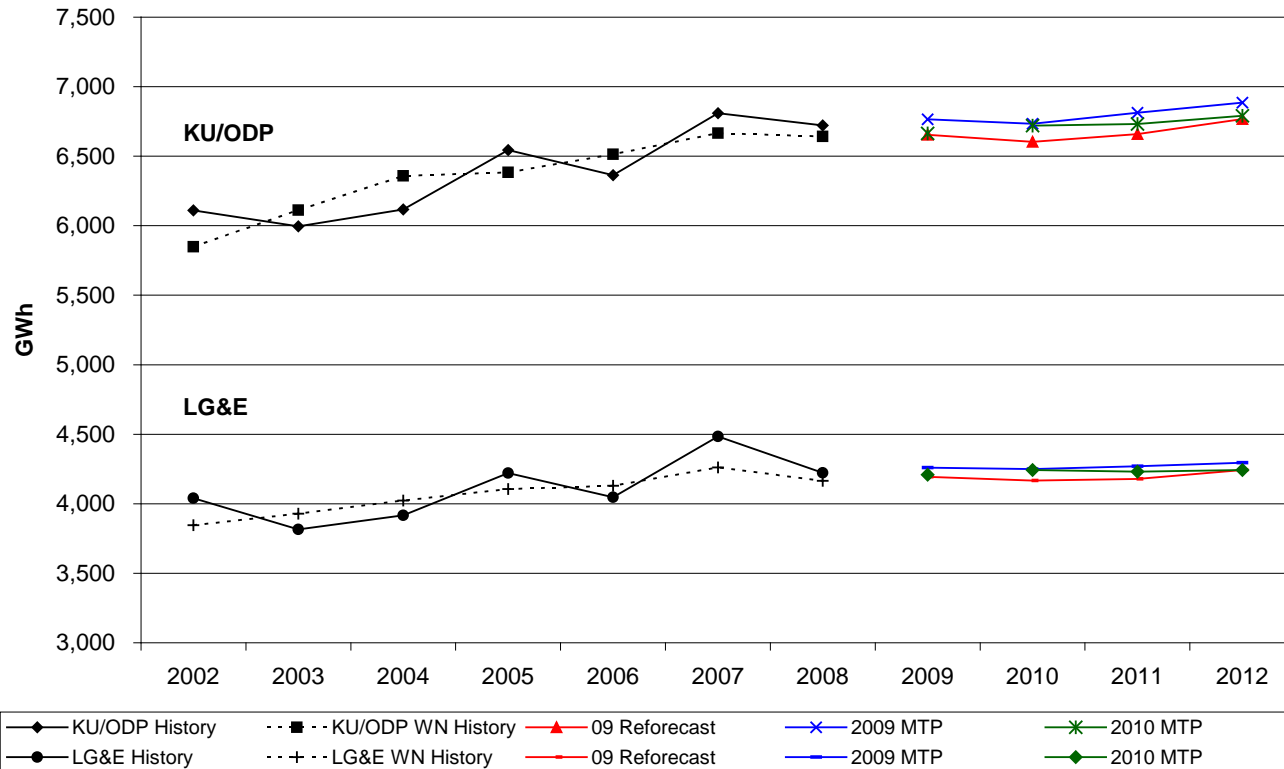
- Y In the Reforecast, notable reductions were made to the forecasts for NAS, DuPont, Ford KTP, Ford LAP, Toyota, Corning, and GE.
- Y Consumption by NAS, Toyota, and Ford KTP turned out to be much lower than expected and WestVaco, Oxy Vinyls, CMC/CLA, and Kosmos all took turns for the worse beginning in January.

### Notable Differences between the 2010 MTP and the Reforecast for 2010 (GWh)

Major Account	2010		2010 MTP less Reforecast	2011	2012	Growth through MTP Period
	2009 Reforecast	2010 MTP		2010 MTP	2010 MTP	
Oxy Vinyls	169	86	(83)	86	86	0
NAS	773	720	(53)	832	970	251
Ford-LAP	70	60	(10)	23	63	3
CMWA	72	47	(26)	55	64	18
Ford-KTP	220	197	(23)	200	201	4
WestVaco	416	398	(18)	402	406	8
Rohm & Haas	35	76	41	76	76	0

*Compared to the Reforecast, residential sales are 1.8% higher (194 GWh) for 2010 and 0.2% higher (23 GWh) in 2012*

**Annual Residential Energy Sales**

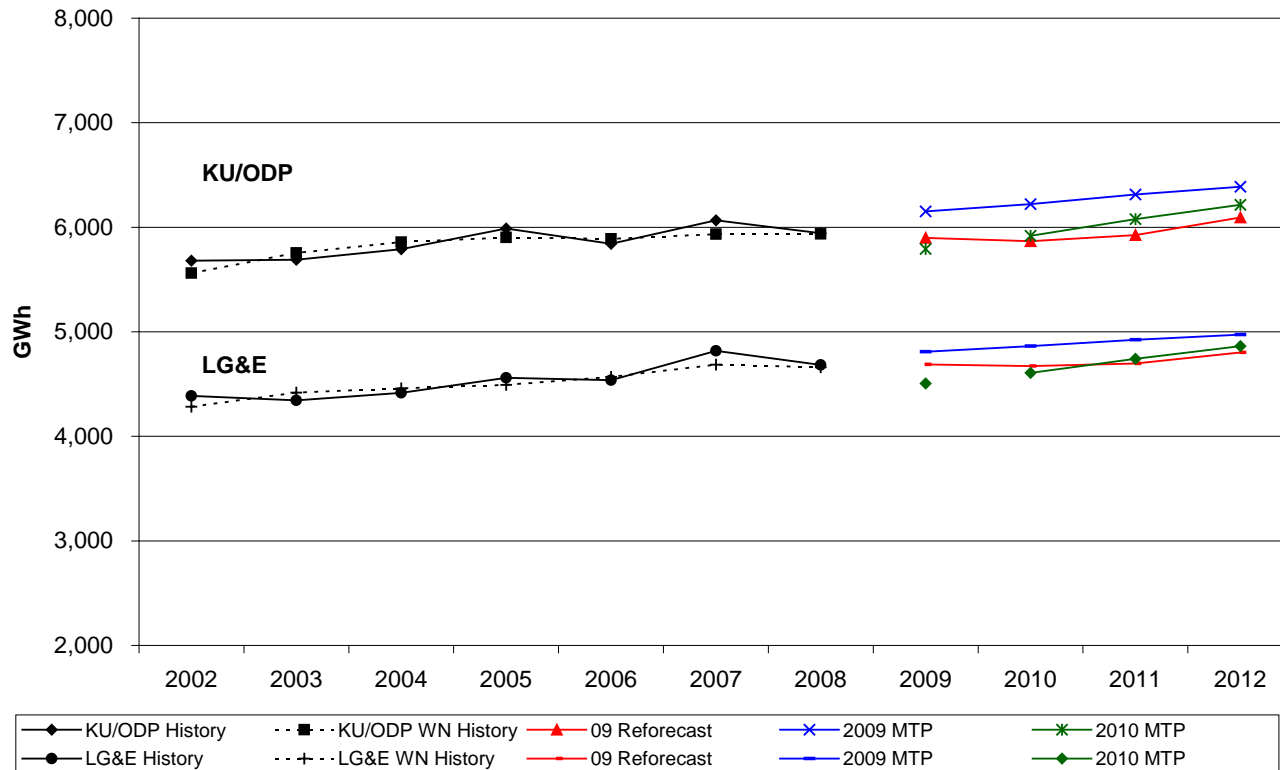


*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*



*Compared to the Reforecast, commercial sales are 0.1% lower (-13 GWh) in 2010 and 1.7% higher in 2012*

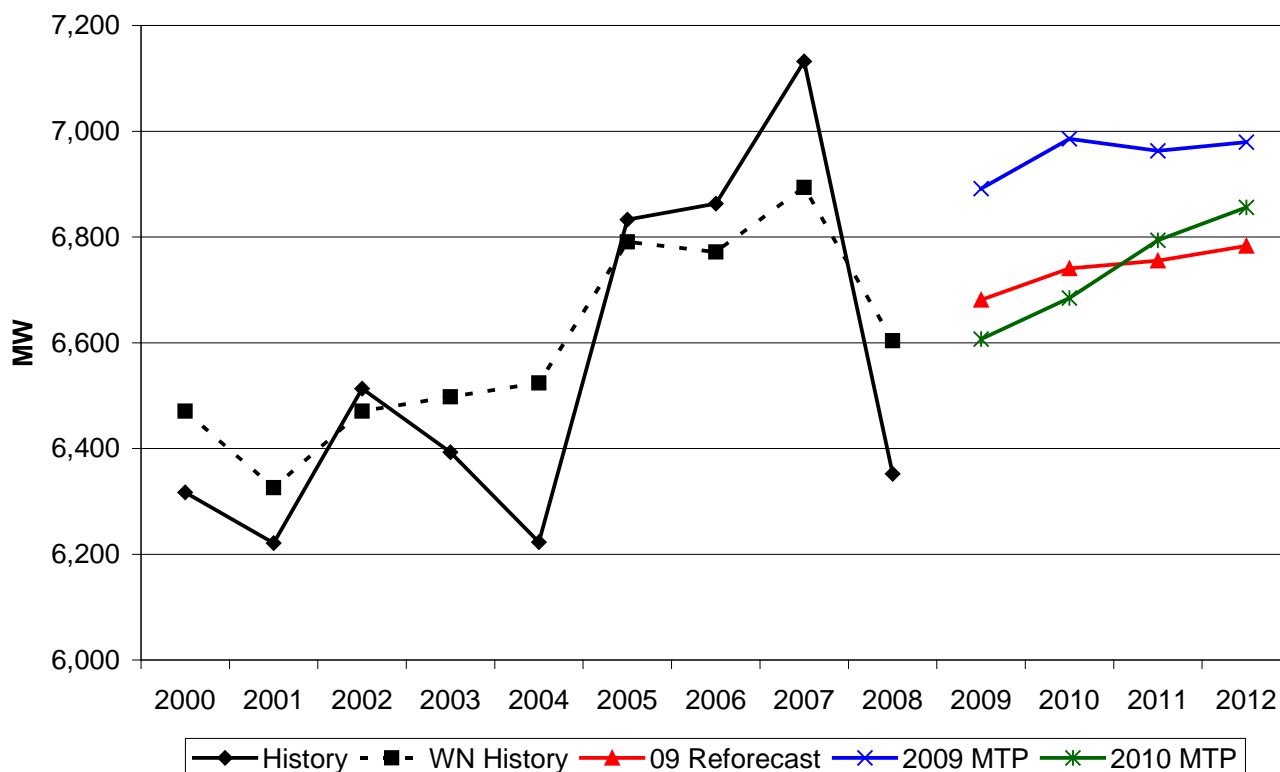
**Annual Commercial Energy Sales**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*

*Compared to the Reforecast, the 2010 MTP forecast of peak demand is 0.8% (-52 MW) lower in 2010 and 1.1% (73 MW) higher in 2012*

**Combined Company Peak Demand**



## *Key forecast risks are related to economic and energy conservation trends*

### *Upside Risk*

*Y Unanticipated economic development*

*Y Economy: Based on 2006 sales levels (and after adjusting for 'permanent' sales declines), the industrial class has the potential to recover 1,300 GWh from forecasted levels for 2010 (4% of total sales).*

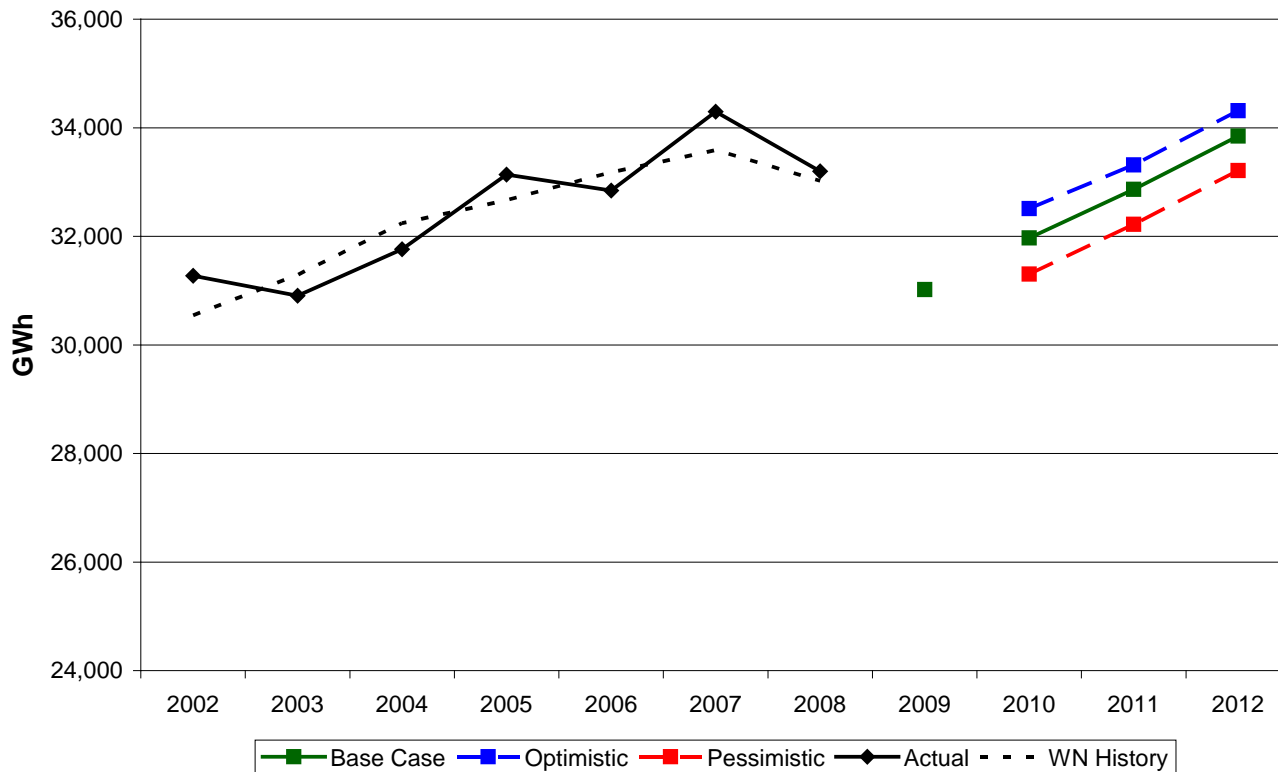
### *Downside Risk*

*Y Economy: Based on Global Insight's 'pessimistic' forecast of industrial production, there's a 20% chance that sales will be 660 GWh lower in 2010.*

*Y Energy Conservation: Given rising energy prices, consumers may take additional measures to conserve energy.*

*According to Global Insight's alternative forecasts of industrial production, there is more downside risk than upside risk throughout the MTP period*

**Optimistic and Pessimistic Economic Scenarios**



# *Appendix*

## *Key Improvements in 2010 MTP Forecast*

### *Industrial Forecasts*

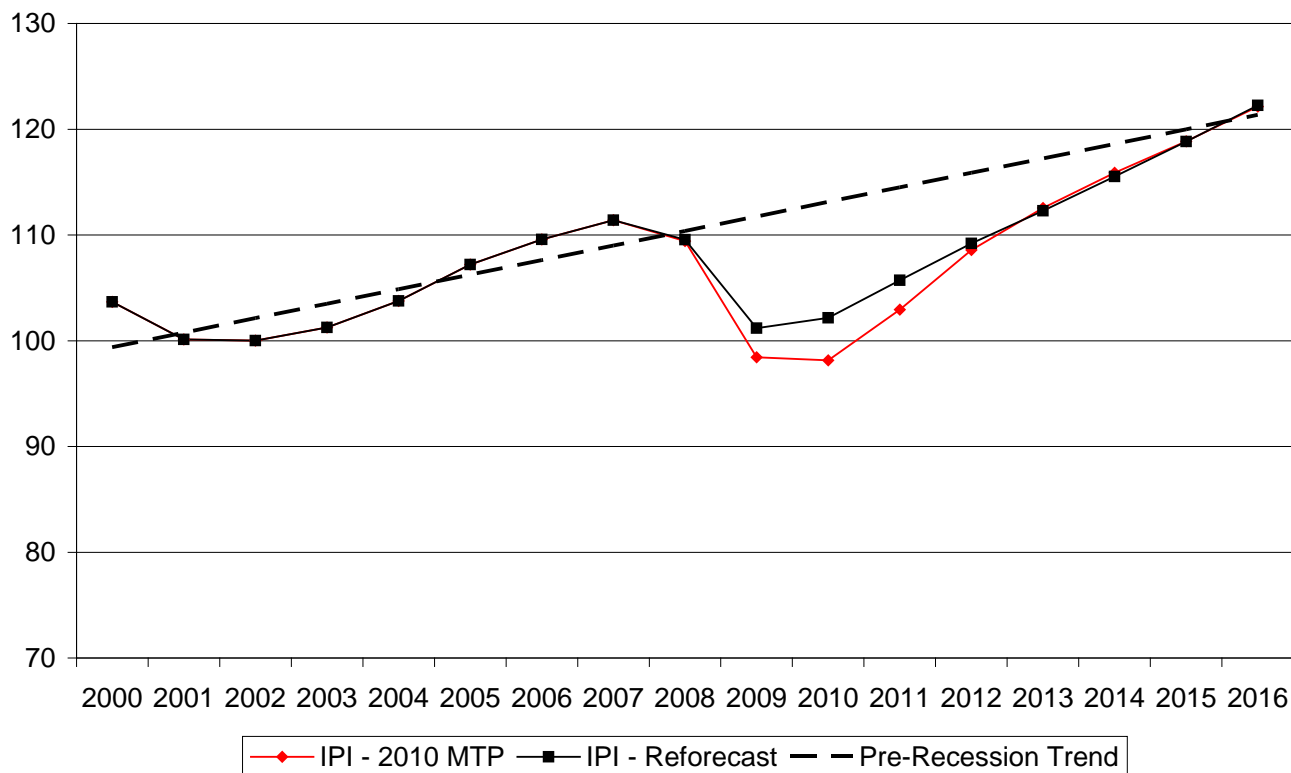
*Y To improve several of the industrial forecast models, sales in each industrial forecast class were segmented by industry sector. Then, each class's forecast was developed as a function of an industry-weighted forecast of industrial production. The statistical significance of these series in the forecast model increased the level of confidence in the forecast results.*

### *Peak Demand Forecasts*

*Y Given the observed differences in industrial load factors and the need to model class-specific energy efficiency impacts, the 2010 MTP hourly demand forecast was developed as the sum of multiple class demand forecasts.*

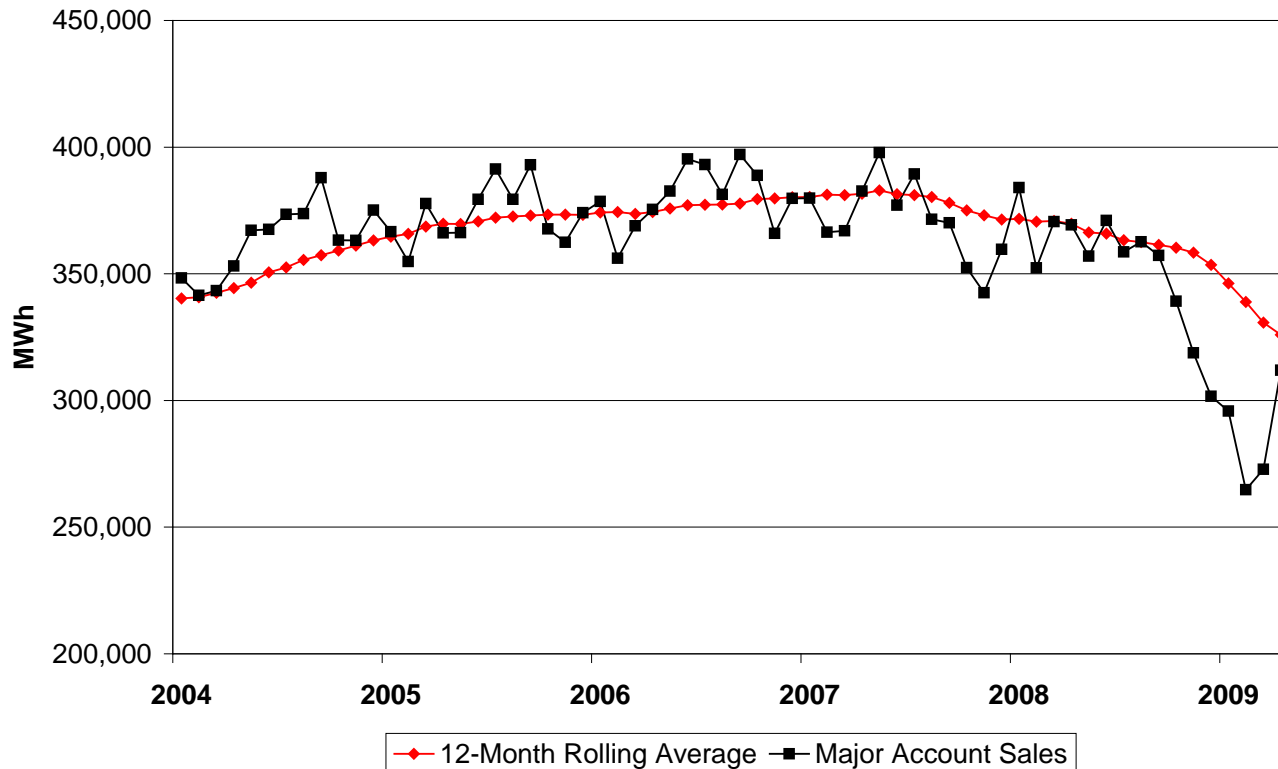
*According to Global Insight, industrial production begins to recover in Q1 2010 but is not expected to return to pre-recession trends until 2015-16*

**Total Industrial Production Index**



*Consumption by Industrial major accounts has declined by approximately 18% since September 2008*

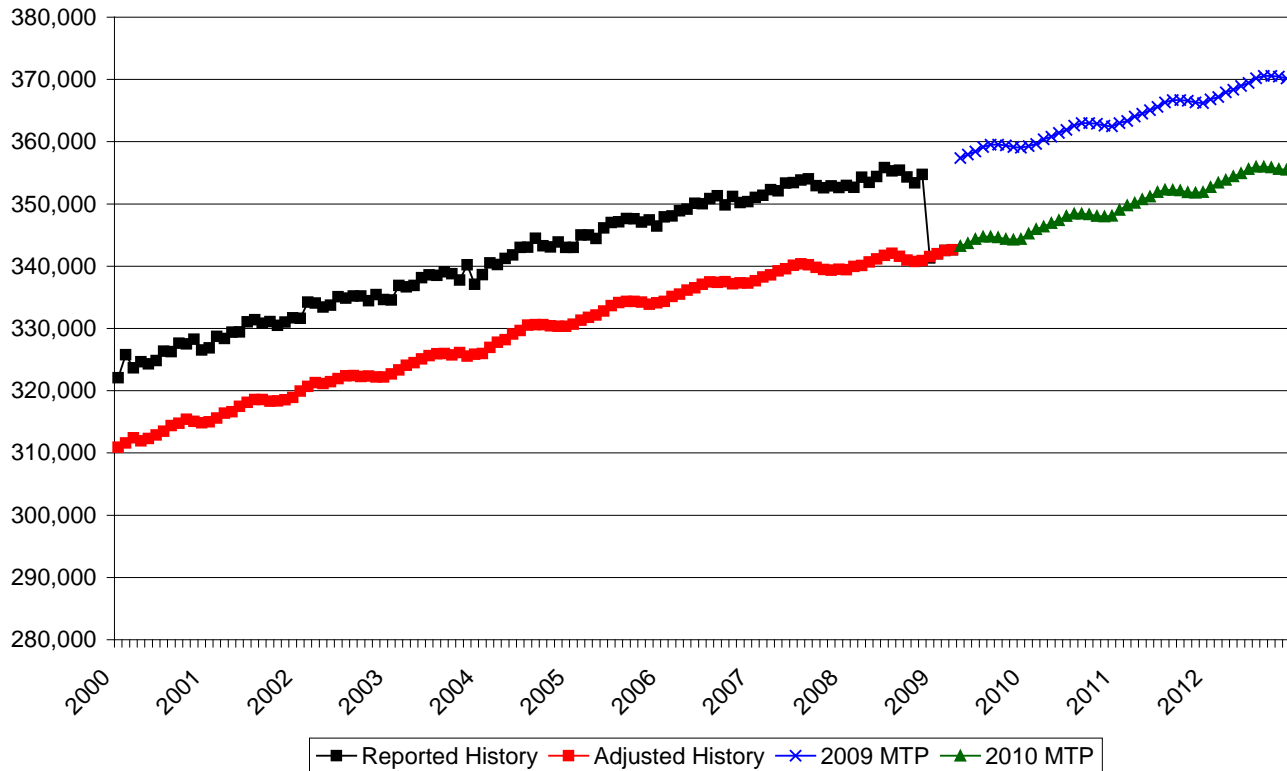
**Industrial Major Account Sales**





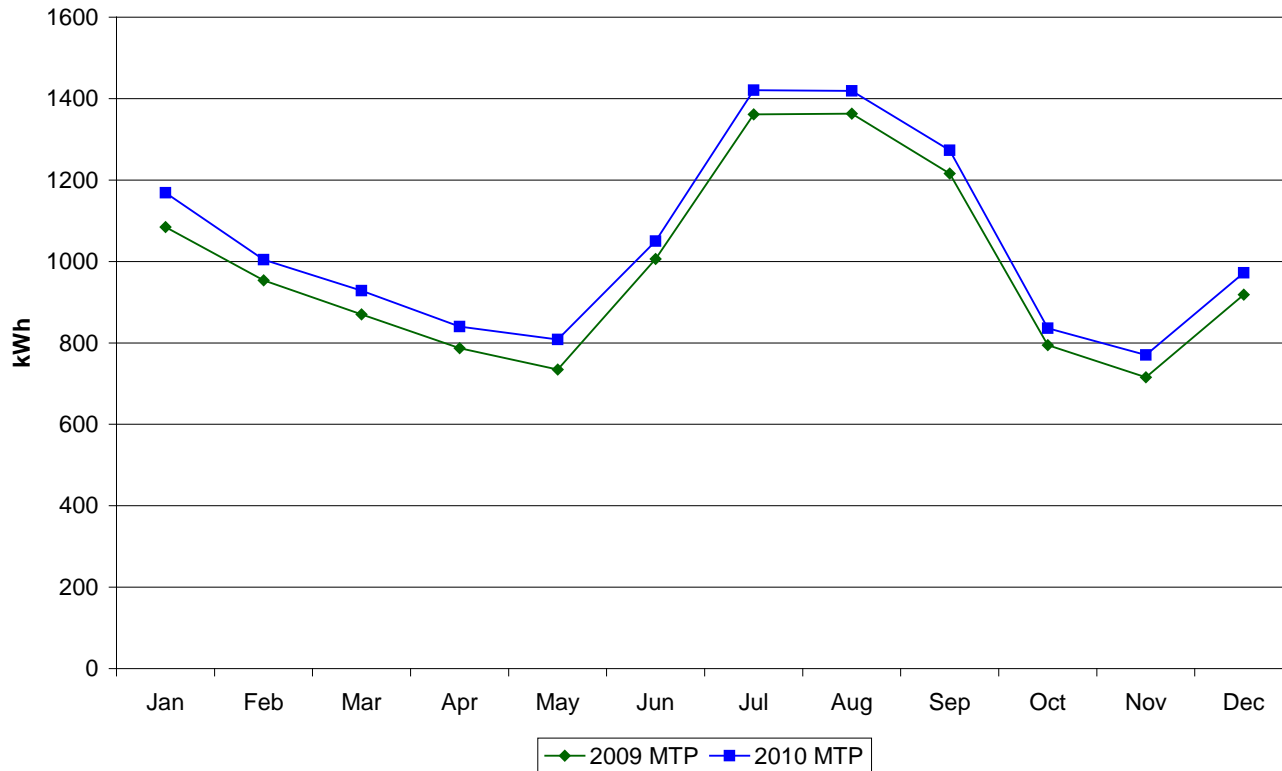
*LG&E historical RS customer series was adjusted down to reflect a methodological change for counting customers*

**LG&E Residential Customers**



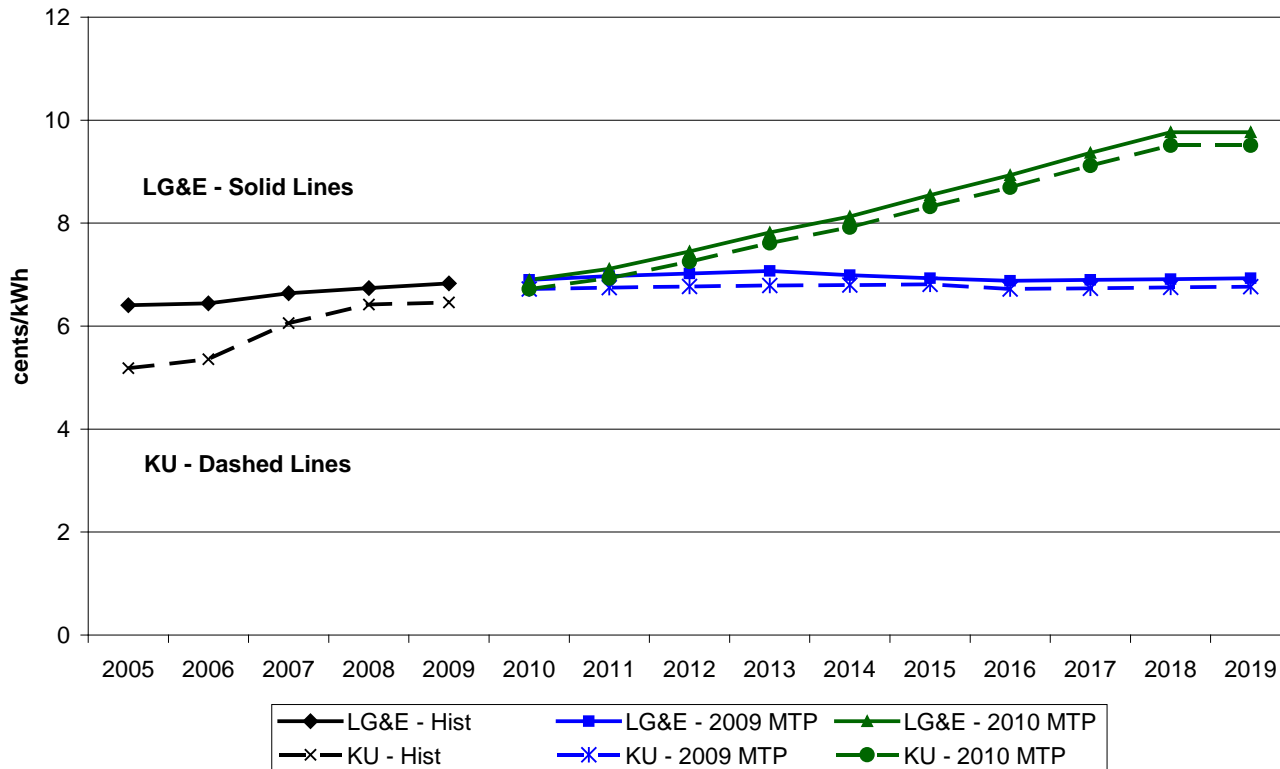
*The decrease in LG&E RS customers resulted in a corresponding increase in LG&E RS use-per-customer*

**LG&E Average Residential Monthly Usage for 2010**



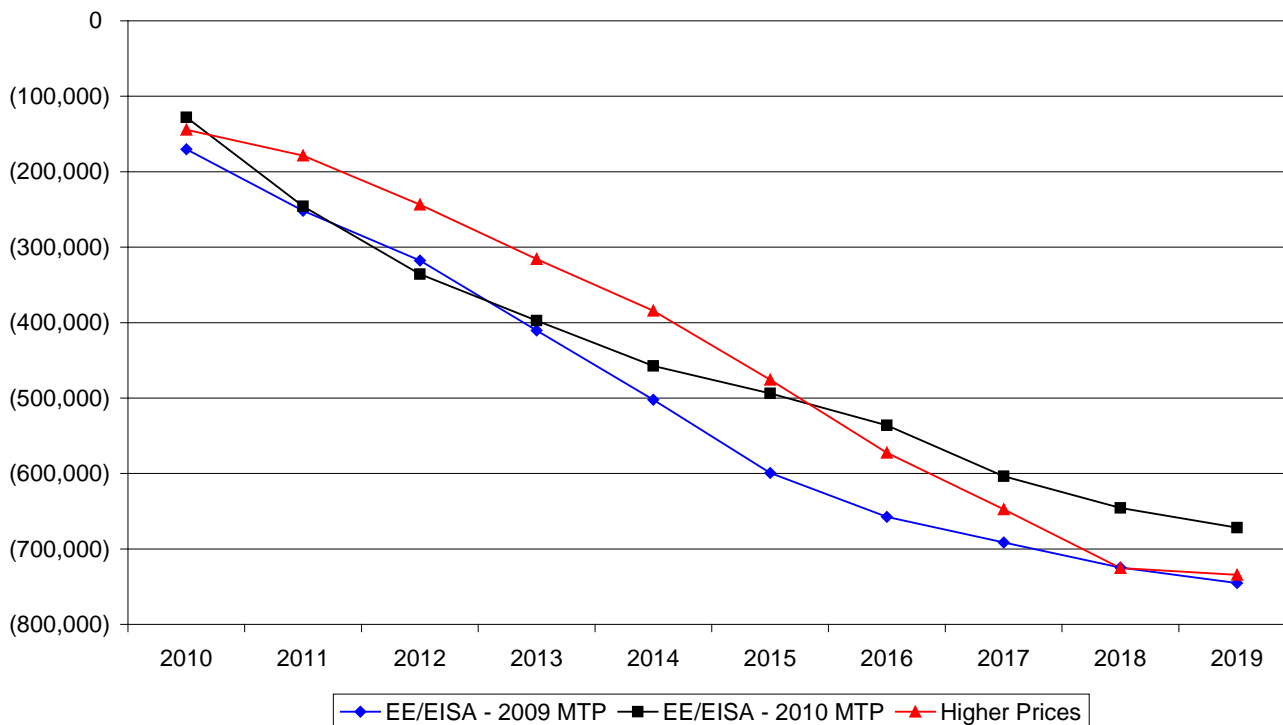
*Residential electricity prices are expected to increase by an average of 4% per year throughout the forecast period*

**Real Residential Electricity Prices**



# *Impact of energy efficiency programs and EISA on residential sales is greater than the impact of higher prices*

**Impact of Higher Prices Compared to Impact of Energy Efficiency and EISA - Residential Sales**

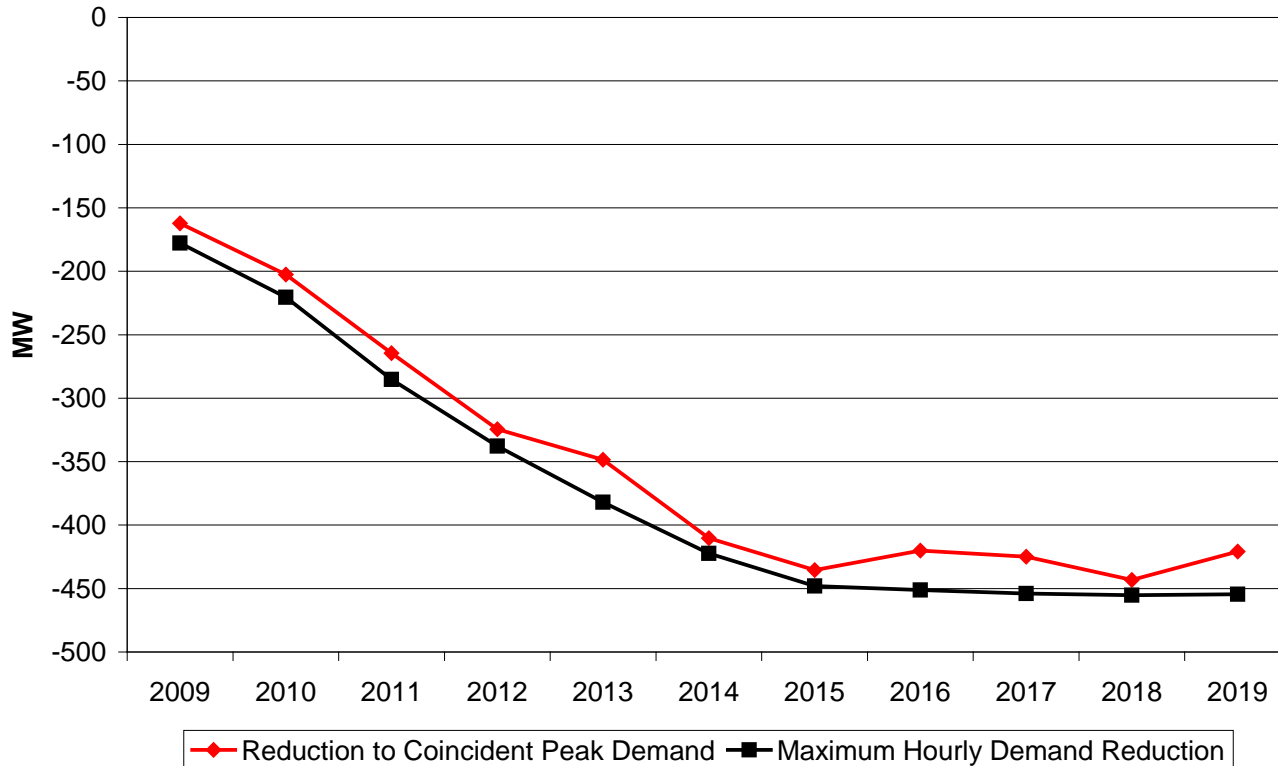


## *Impact of Energy Independence & Security Act*

- Y As a result of the EISA, incandescent light bulbs (as we currently know them) will begin to be phased out in 2012.*
- Y In the 2009 MTP, the adoption of CFLs and other energy efficiency measures was assumed to begin increasing in 2008/09 as a result of the company's energy efficiency programs.*
- Y As a result of the company's high efficiency lighting program, the EISA was not expected to have an incremental impact on energy consumption until after 2014.*
- Y The combined impact of the company's high efficiency lighting program and the EISA was assumed to be 700 GWh in 2018.*
- Y Because the rollout of the company's high efficiency lighting program appears to be on schedule, no changes were made to these assumptions for the 2010 MTP.*

*Energy efficiency programs reduce peak demand by approximately 430 MW in 2015*

**Impact of Energy Efficiency on Peak Demand**



## *Global Insight Assumptions*

- Y Stimulus package has a face value of \$787 billion over 10 years; \$561 billion will be injected into the economy over the first two calendar years; beyond 2010 expect a gradual increase in income taxes*
- Y Oil prices average \$46/barrel for 2009 (slight increase from previous forecast) and rise to \$90/barrel by 2014*
- Y Federal Funds rate is held between 0.0-0.25% through 2009 and begins to tighten in 4<sup>th</sup> quarter 2010*
- Y The dollar has bounced, and foreign economies are also in recession; European recessions will last longer than the U.S. and China because of the large stimulus packages of the U.S. and China; thus, recovery in the U.S. will not be export-led*

## *Global Insight Conclusions*

- Y The recession remains severe but the bottom is in sight; expectation is that GDP will bottom out in the second half of 2009. Despite improvements in consumer spending and the housing markets, recovery is expected to be slow.*
- Y Expect real GDP to decline sharply at least through mid-2009 with a decline of 6.1% in 1<sup>st</sup> Quarter 2009 (compared to 5.1% from Blue Chip)*
- Y The economy contracts 3.1% in 2009 (improved from 3.7%)*
- Y The unemployment rate reaches 10% by end of 2009 (10.1% in Kentucky), peaking at 10.3% in 1<sup>st</sup> half of 2010 (9.4% annual average from Blue Chip)*
- Y The deflation threat has receded, but expect CPI inflation to be negative by mid-2009; inflation is not a danger now, but could develop*

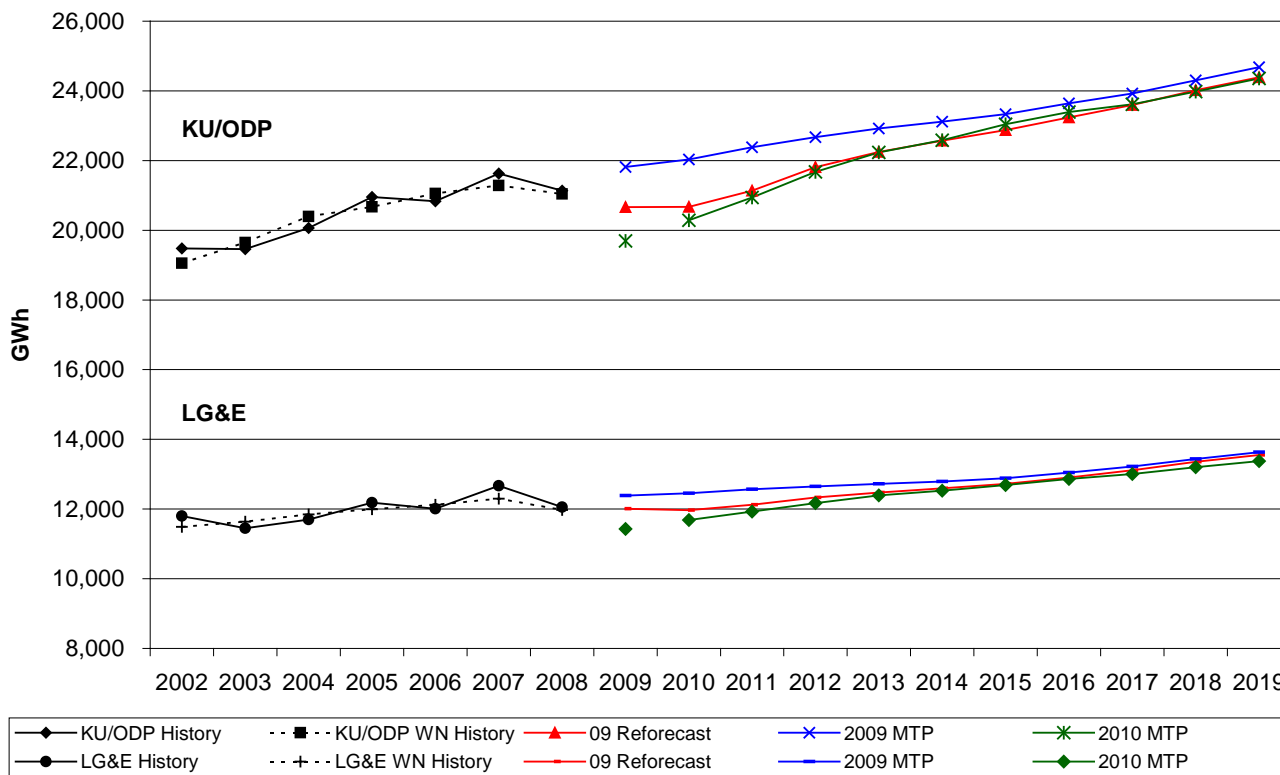


## *Key Inputs to Timing of Forecast Recovery*

- Y Industrial production begins to recover in Q1 2010 but is not expected to return to pre-recession trends until 2015-16*
- Y Housing market beginning to stabilize as is consumer spending*
- Y Inventories fell in 4<sup>th</sup> Quarter 2008, but must fall further because they are still too high relative to sales; excesses are being addressed*
- Y Unemployment is not expected to peak until 2010 – Expected to reach 11.1% in Kentucky in 2010*
- Y With the possibility of the pessimistic scenario (20% probability), the economy could emerge from this recession weaker without a big rebound*
- Y With a strong dollar and the main trading partners of the U.S. expected to emerge from this recession later, exports do not come back quickly*
- Y Credit conditions are easing only slowly and it remains premature to assume that the financial system has been “fixed”*

*Longer-term variances to the 2009 MTP forecast are explained by industrial and residential sales*

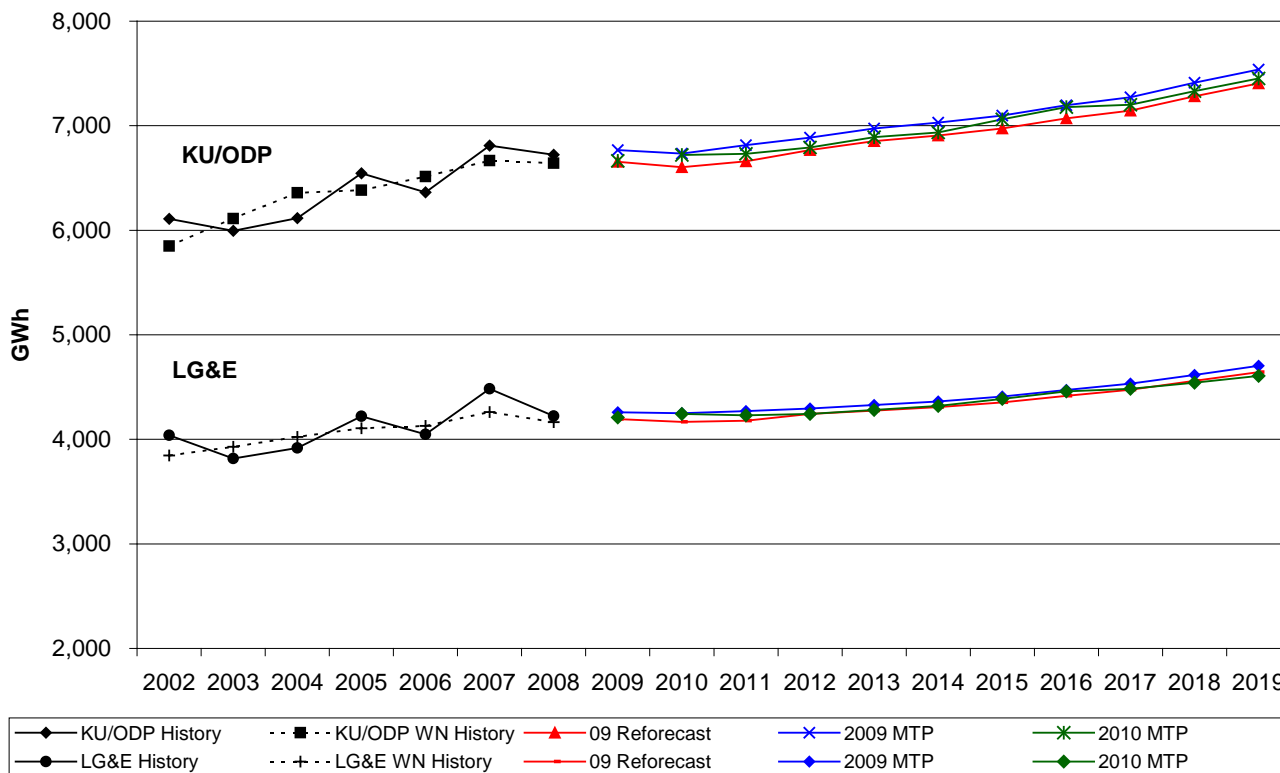
**Combined Company Energy Sales**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*

# Longer-term residential sales variances to the 2009 MTP is explained by a recession-induced lag in RS customers

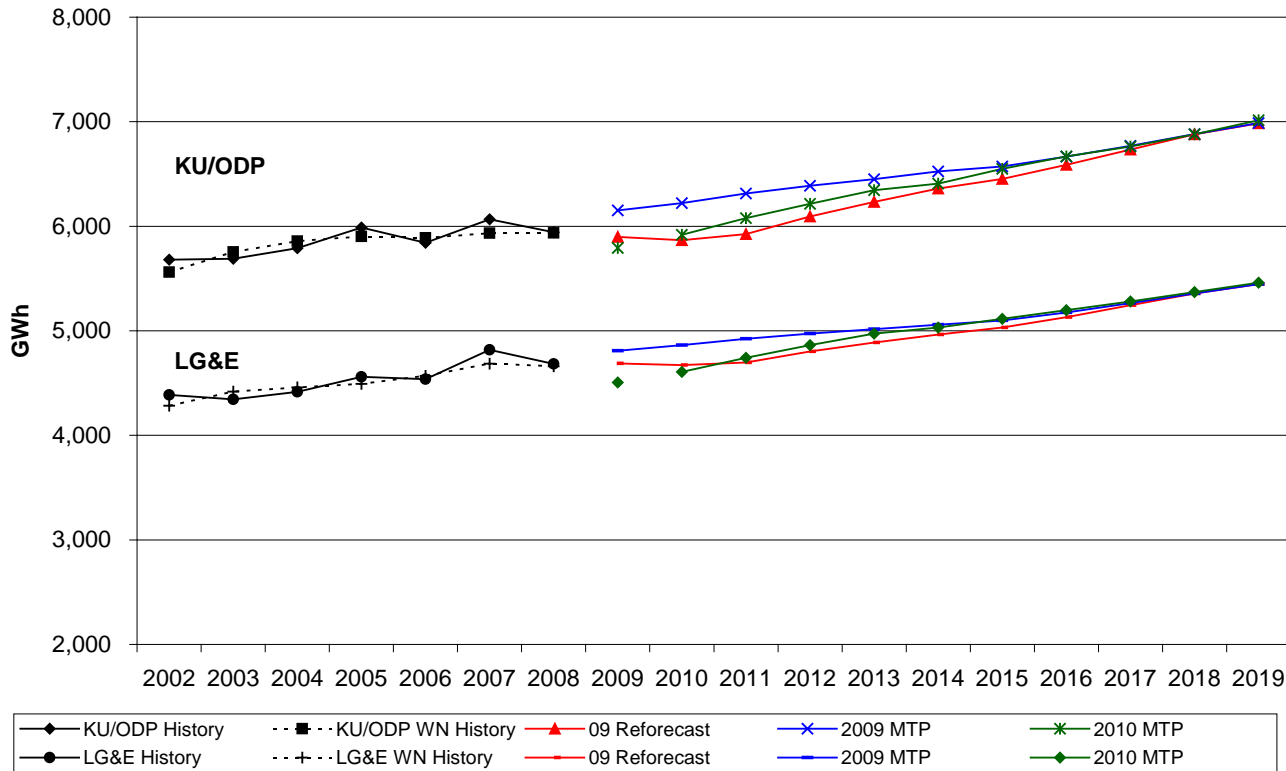
## Annual Residential Energy Sales



\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.

# Commercial sales return to 2009 MTP levels by 2015

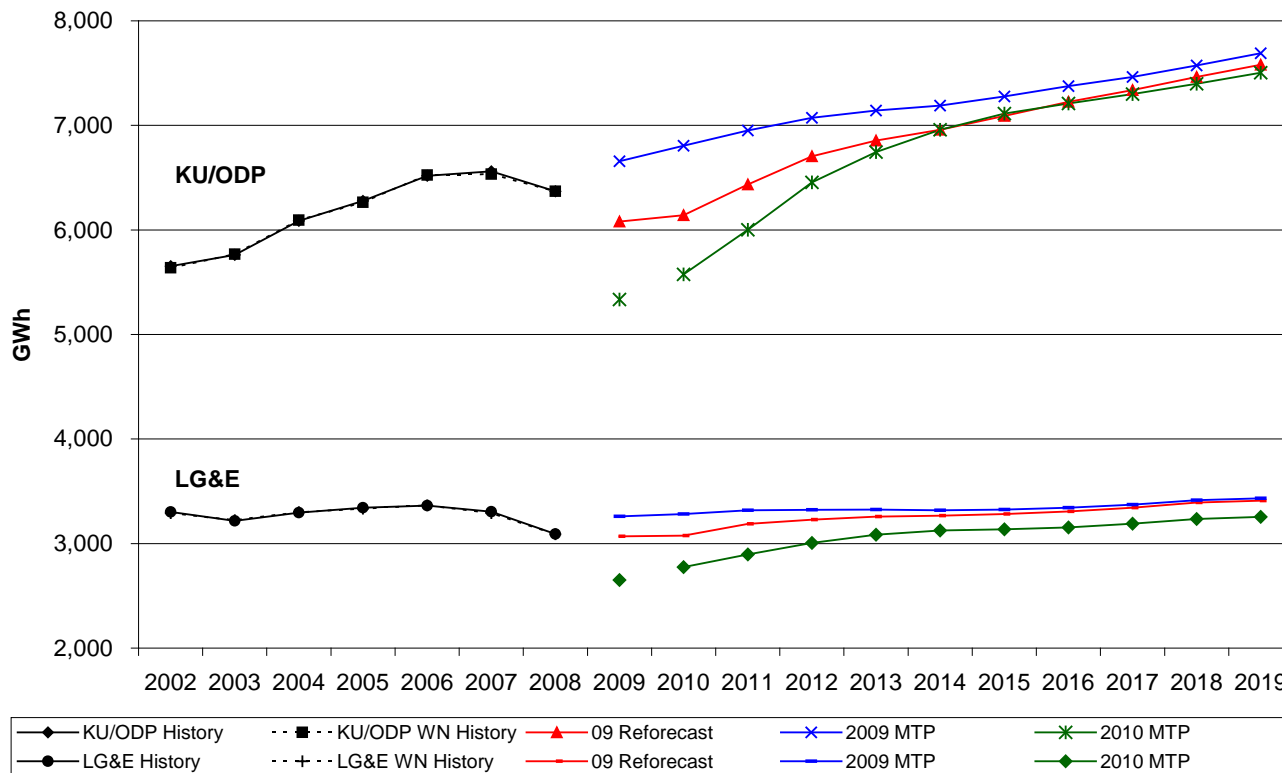
## Annual Commercial Energy Sales



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*

*Longer-term industrial sales variances to the 2009 MTP are explained by mine power customers for KU and major accounts for LG&E*

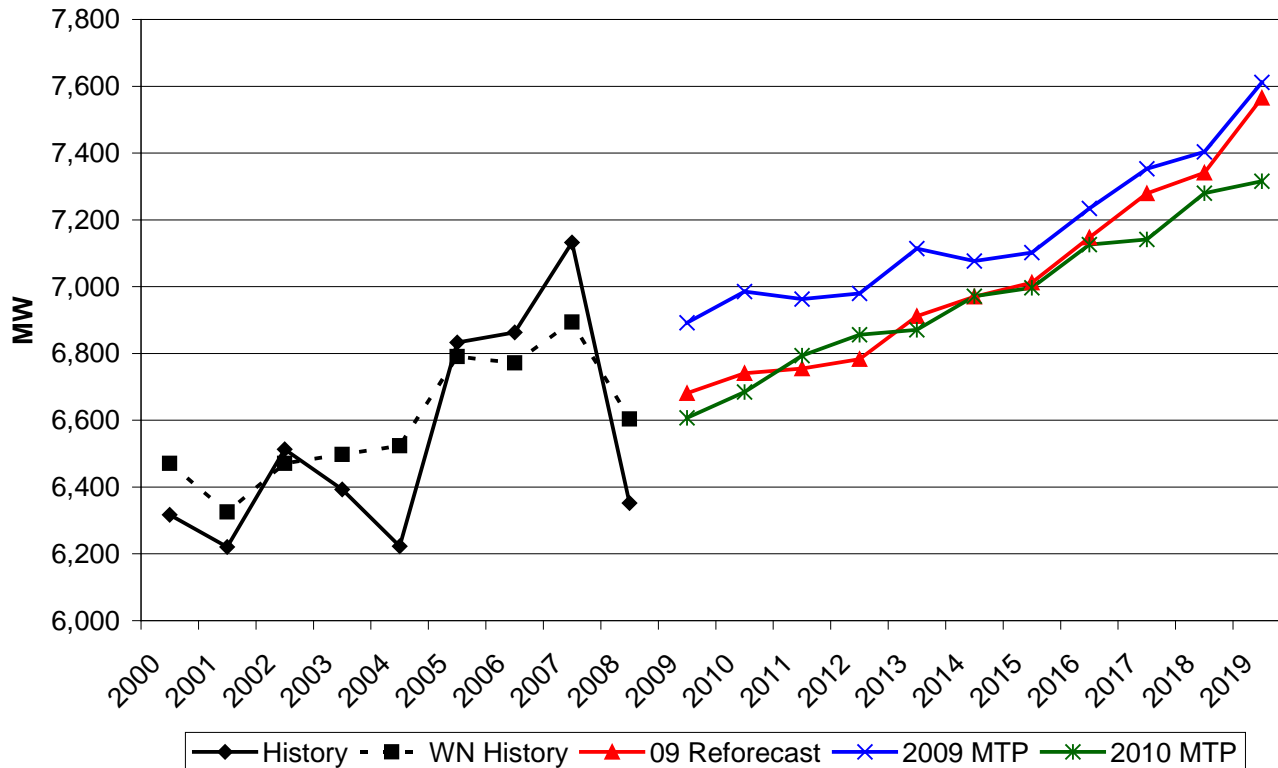
**Annual Industrial Energy Sales**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 3+9 forecast.*

*Growth in peak demand throughout the LTP period is offset by increasing industrial load factors*

**Combined Company Peak Demand**





## *2010 MTP Gas Volume Forecast*

*Sales Analysis & Forecasting*

*June 19, 2009*

## *Key Observations from Recent Trends – Transportation Volumes Have Been Hardest Hit by the Recession*

- *Compared to the first four months of 2008, non-utility\* transportation volumes have declined by 21% (1.1 BCF) in January – April 2009.*
- *Of the twenty-five industrial major accounts, only one had positive year-over-year growth in January – April 2009.*
- *Combination of low natural gas prices and emission cost concerns have prompted some customers to fuel boilers with natural gas instead of coal.*
- *Residential customers have demonstrated a tendency to conserve gas only when weather conditions make it convenient to do so.*

*\*For the purposes of this presentation, 'utility' volumes consist of volumes consumed by the electric utility via the 'Electric Generation Special Contract.'*



## Forecast Summary

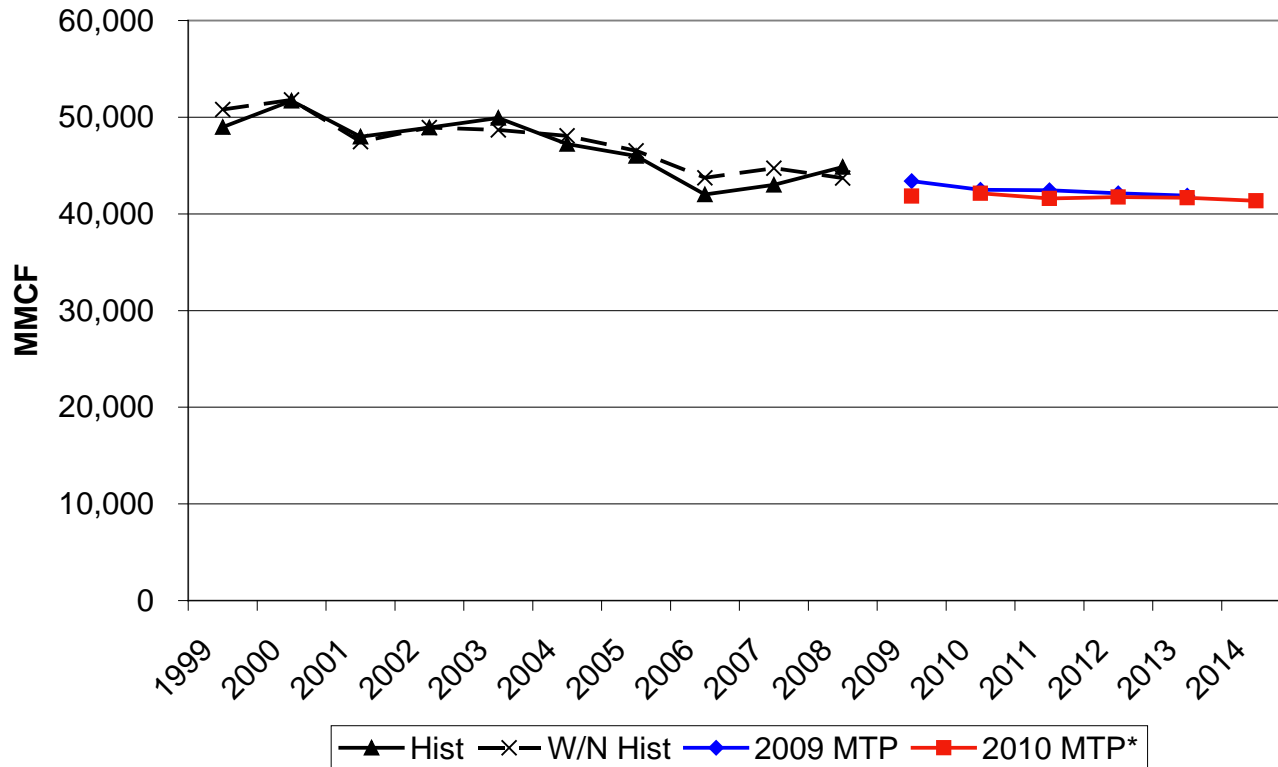
- *Compared to the 2009 MTP forecast, the 2010 MTP forecast of total non-utility gas volumes is 0.8% lower in 2010 and 1.0% lower in 2012.*
- *Forecast of non-utility gas sales volumes is mostly unchanged; non-utility gas sales volumes continue to decrease by approximately 1% per year with increasing heating appliance efficiencies.*
- *Decline in total non-utility volumes is explained by a decrease in firm transportation volumes. Firm transportation volumes are 8.6% lower in 2010 and 5.1% lower in 2012.*
- *After declining by 7.5% in 2008, non-utility transportation volumes are forecast to decline by 10.2% in 2009 and then begin recovering slowly through the MTP period.*

## *Key Forecast & Macroeconomic Assumptions*

- *Economy: According to Global Insight, industrial production begins to recover in Q1 2010 but is not expected to return to pre-recession trends until 2015-16 (see slide 12 in the Appendix). Global Insight makes no assumptions regarding carbon legislation.*
- *Kentucky housing market has begun to stabilize. Growth in RGS customers remains slow through 2010 before rebounding somewhat in 2011 and returning to near-historical levels thereafter.*
- *Appliance Efficiencies: No notable changes in appliance efficiency assumptions from 2009 MTP. Non-utility gas sales volumes continue to decrease by approximately 1% per year with increasing heating appliance efficiencies.*
- *Gas Supply Cost (GSC): Gas supply cost is expected to decrease by approximately 39% from the winter of 2008/09 to the winter of 2009/10 (see slide 13 in Appendix).*

*Compared to the 2009 MTP forecast, the 2010 MTP forecast is 0.8% lower in 2010 and 1.0% lower in 2012*

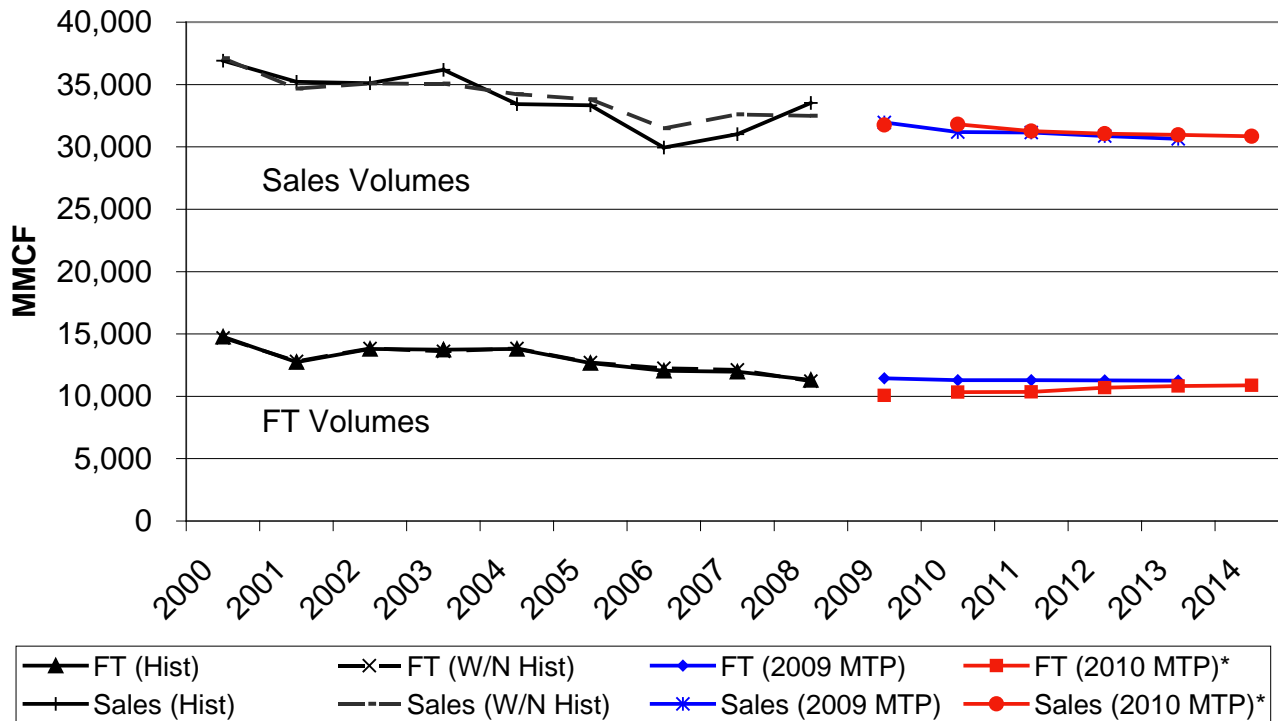
**Annual Non-Utility Gas Volumes**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 2+10 forecast.*

# Decrease in transportation volumes explains majority of overall forecast decline

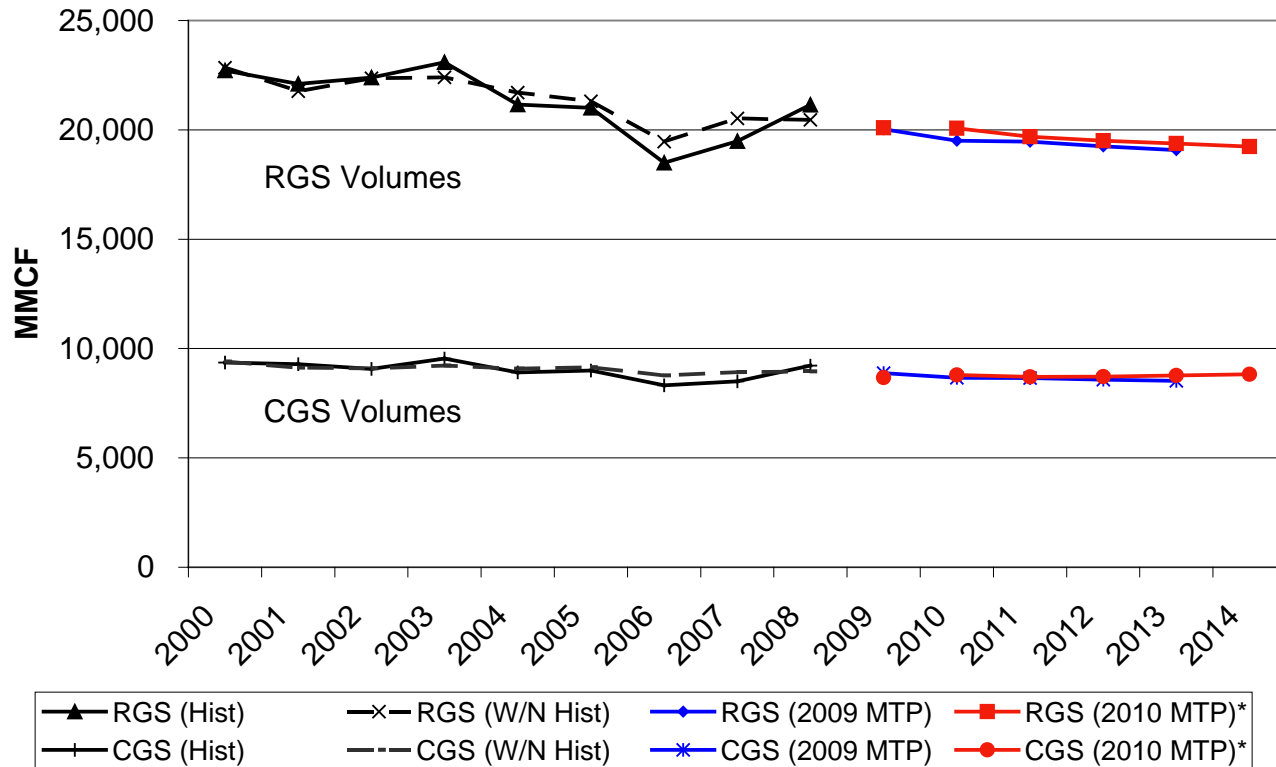
### Annual Non-Utility Sales & Firm Transportation (FT) Volumes



\*In 2010 MTP forecast, 2009 value is a weather-normalized 2+10 forecast.

# RGS and CGS volume forecasts are mostly unchanged

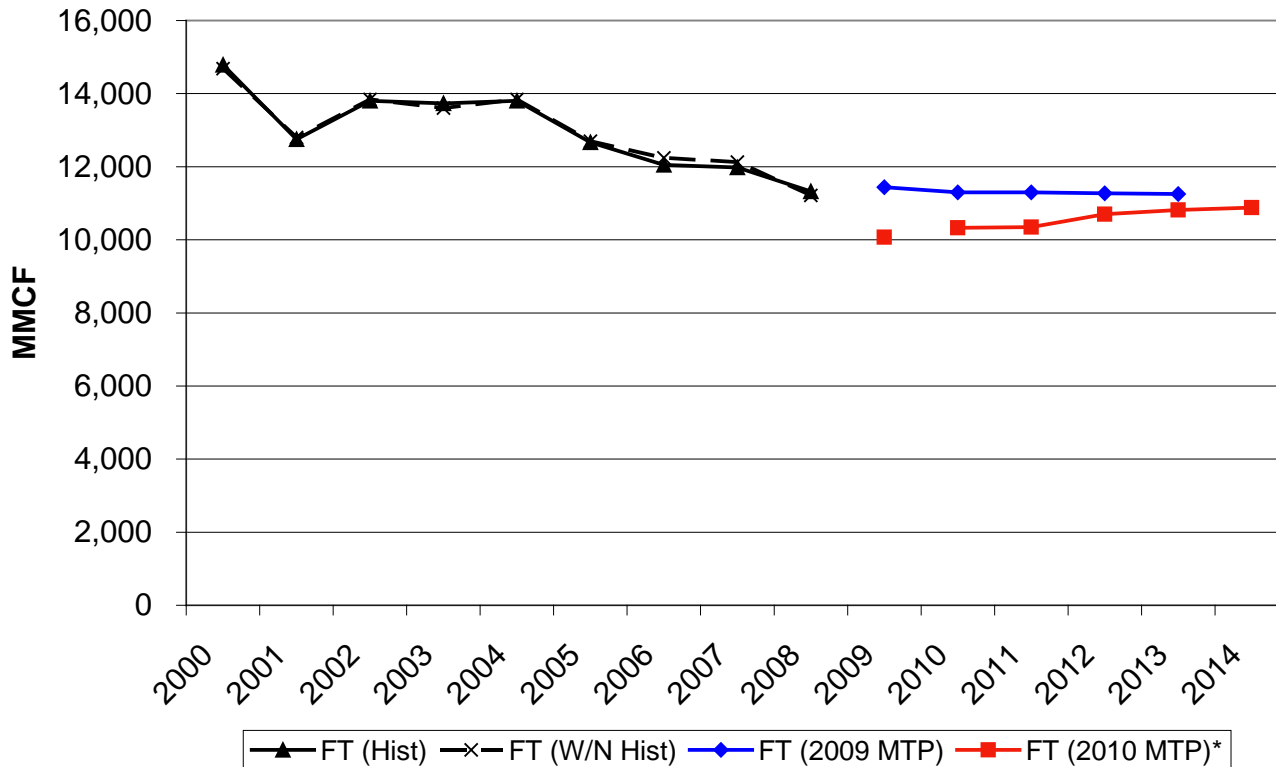
**Annual RGS & CGS Sales Volumes**



\*In 2010 MTP forecast, 2009 value is a weather-normalized 2+10 forecast.

***Non-utility Firm Transportation (FT) volumes are 8.6% lower in 2010 and 5.1% lower in 2012***

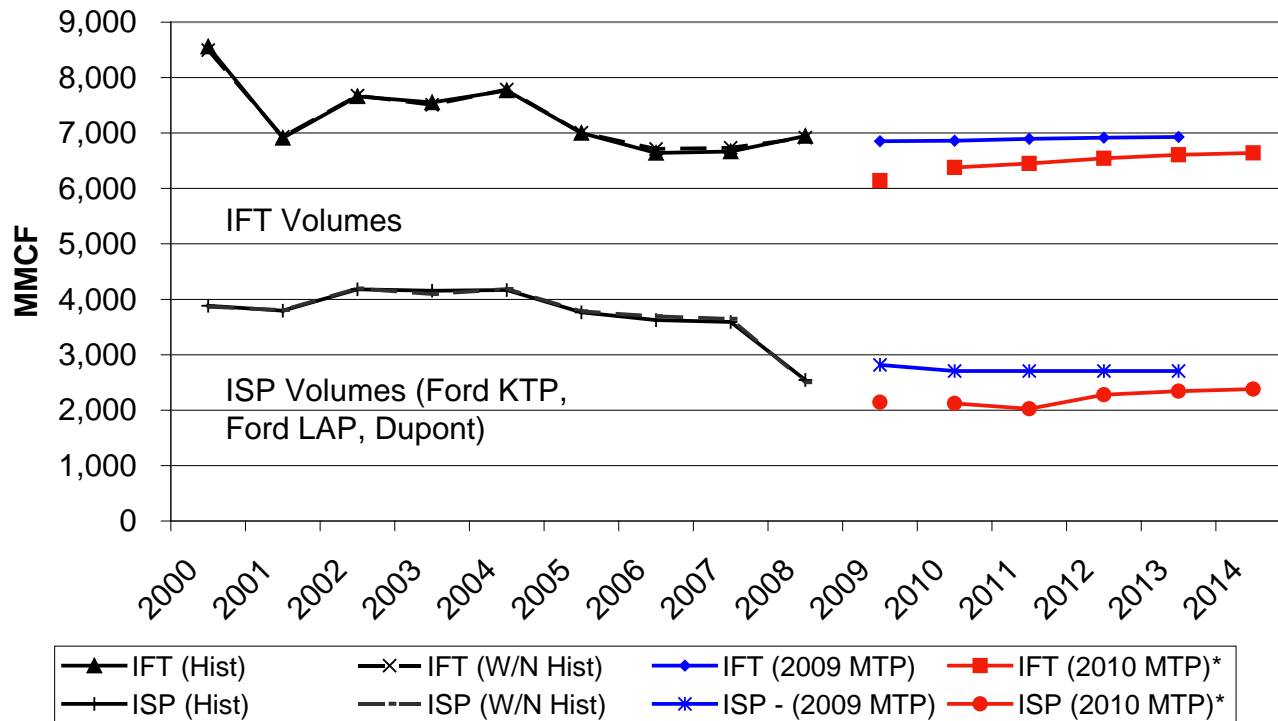
**Annual Non-Utility Firm Transportation (FT) Volumes**



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 2+10 forecast.*

# Decrease in transportation volumes is explained primarily by industrial FT and industrial special contract (ISP) classes

**Annual Industrial Firm Transportation (IFT) & Industrial Special Contract (ISP) Volumes**



\*In 2010 MTP forecast, 2009 value is a weather-normalized 2+10 forecast.

## ***Major Account Summary***

### ***Permanent Decliners***

- *Rohm & Haas and DuPont explain majority of long-term 'permanent' difference between 2009 and 2010 MTP forecasts.*

### ***Gainers***

- *American Synthetic and Oxy Vinyls/Zeon have been impacted by the recession but are expected to consume more gas over the forecast period due to decision to burn natural gas instead of coal in boilers.*

### ***Other Notable Accounts***

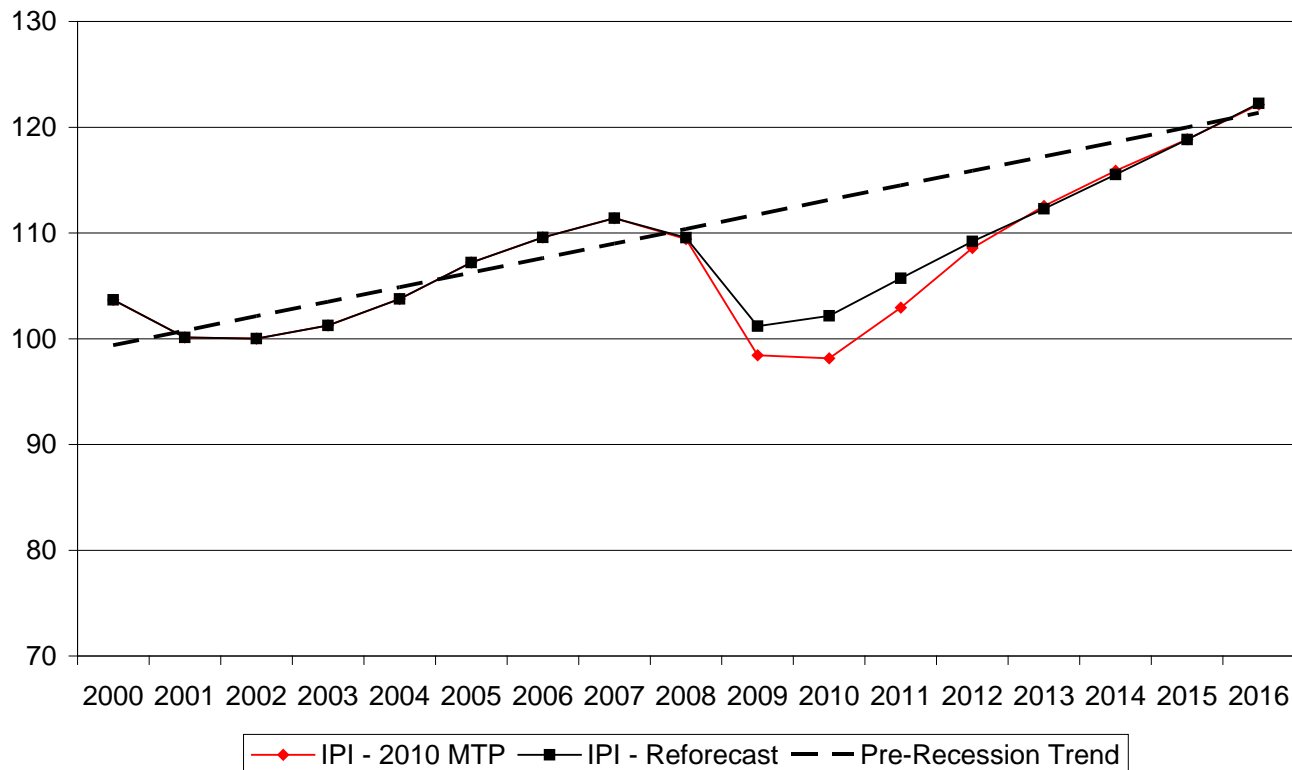
- *Ford KTP is forecast to recover (with the economy) to slightly higher than previously forecasted levels with the addition of the Expedition and Navigator lines.*
- *Ford LAP is forecast to begin a retooling process late next year and then recover (with the economy) to previously forecasted levels by 2013.*
- *Fort Knox will be heating its new HR facility with natural gas instead of geothermal (as previously forecasted). Total volumes are expected to remain at 2007/08 levels as a result.*



# Appendix

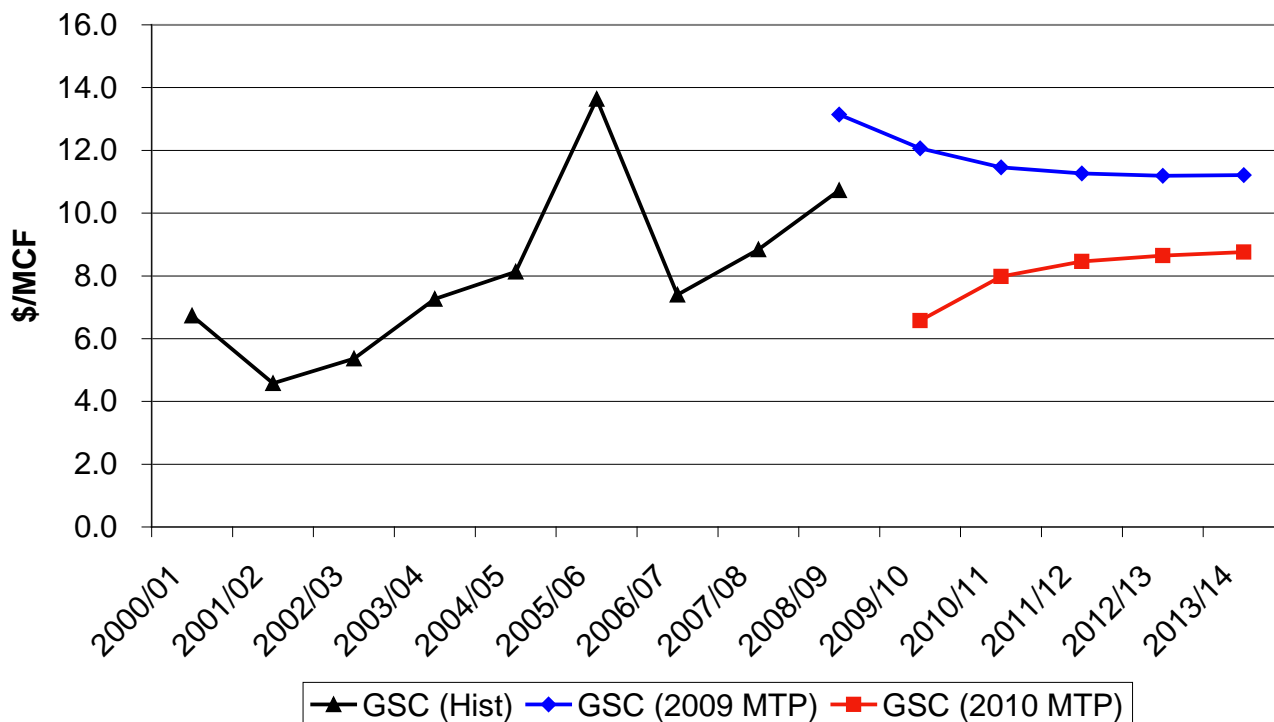
*According to Global Insight, industrial production begins to recover in Q1 2010 but is not expected to return to pre-recession trends until 2015-16*

**Total Industrial Production Index**



*Gas supply cost is expected to decrease by approximately 39% from the winter of 2008/09 to the winter of 2009/10*

**Average Gas Supply Cost - Winter Months**  
(November - February)



## *Global Insight Assumptions*

- *Stimulus package has a face value of \$787 billion over 10 years; \$561 billion will be injected into the economy over the first two calendar years; beyond 2010 expect a gradual increase in income taxes*
- *Oil prices average \$46/barrel for 2009 (slight increase from previous forecast) and rise to \$90/barrel by 2014*
- *Federal Funds rate is held between 0.0-0.25% through 2009 and begins to tighten in 4<sup>th</sup> quarter 2010*
- *The dollar has bounced, and foreign economies are also in recession; European recessions will last longer than the U.S. and China because of the large stimulus packages of the U.S. and China; thus, recovery in the U.S. will not be export-led*

## *Global Insight Conclusions*

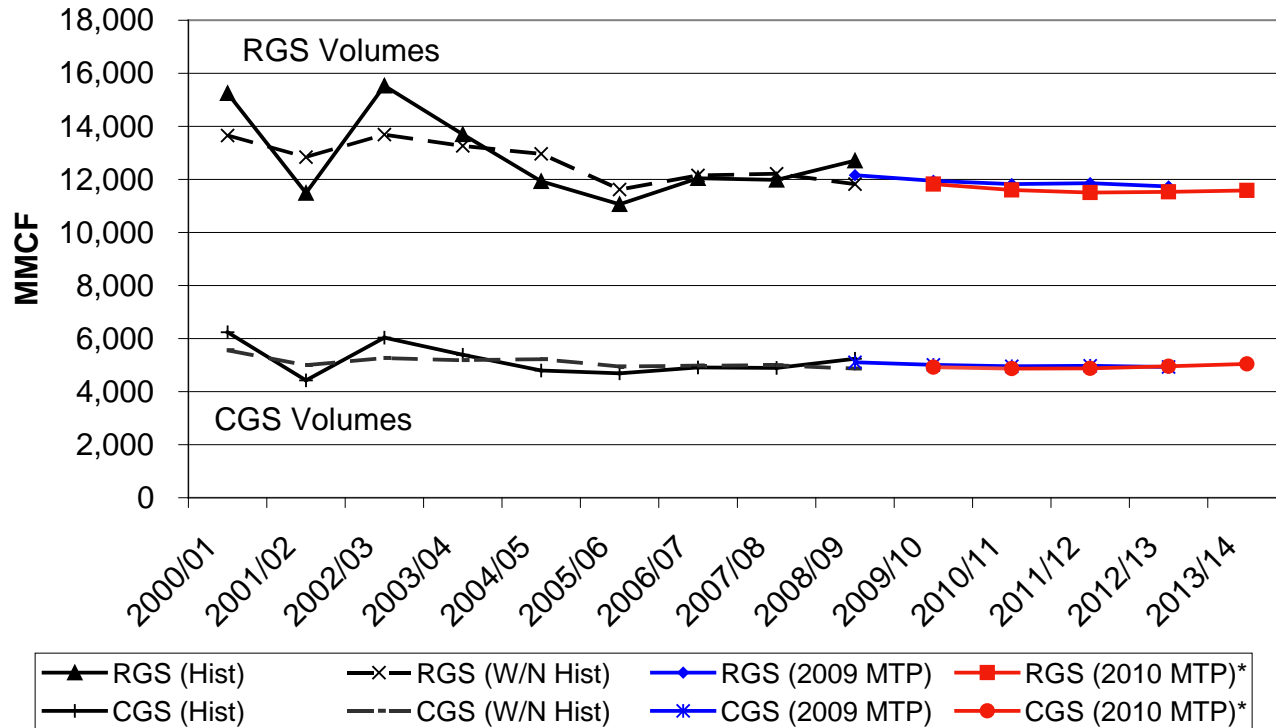
- *The recession remains severe but the bottom is in sight; expectation is that GDP will bottom out in the second half of 2009. Despite improvements in consumer spending and the housing markets, recovery is expected to be slow.*
- *Expect real GDP to decline sharply at least through mid-2009 with a decline of 6.1% in 1<sup>st</sup> Quarter 2009 (compared to 5.1% from Blue Chip)*
- *The economy contracts 3.1% in 2009 (improved from 3.7%)*
- *The unemployment rate reaches 10% by end of 2009 (10.1% in Kentucky), peaking at 10.3% in 1<sup>st</sup> half of 2010 (9.4% annual average from Blue Chip)*
- *The deflation threat has receded, but expect CPI inflation to be negative by mid-2009; inflation is not a danger now, but could develop*

## *Key Inputs to Timing of Forecast Recovery*

- *Industrial production begins to recover in Q1 2010 but is not expected to return to pre-recession trends until 2015-16*
- *Housing market beginning to stabilize as is consumer spending*
- *Inventories fell in 4<sup>th</sup> Quarter 2008, but must fall further because they are still too high relative to sales; excesses are being addressed*
- *Unemployment is not expected to peak until 2010 – Expected to reach 11.1% in Kentucky in 2010*
- *With the possibility of the pessimistic scenario (20% probability), the economy could emerge from this recession weaker without a big rebound*
- *With a strong dollar and the main trading partners of the U.S. expected to emerge from this recession later, exports do not come back quickly*
- *Credit conditions are easing only slowly and it remains premature to assume that the financial system has been "fixed"*

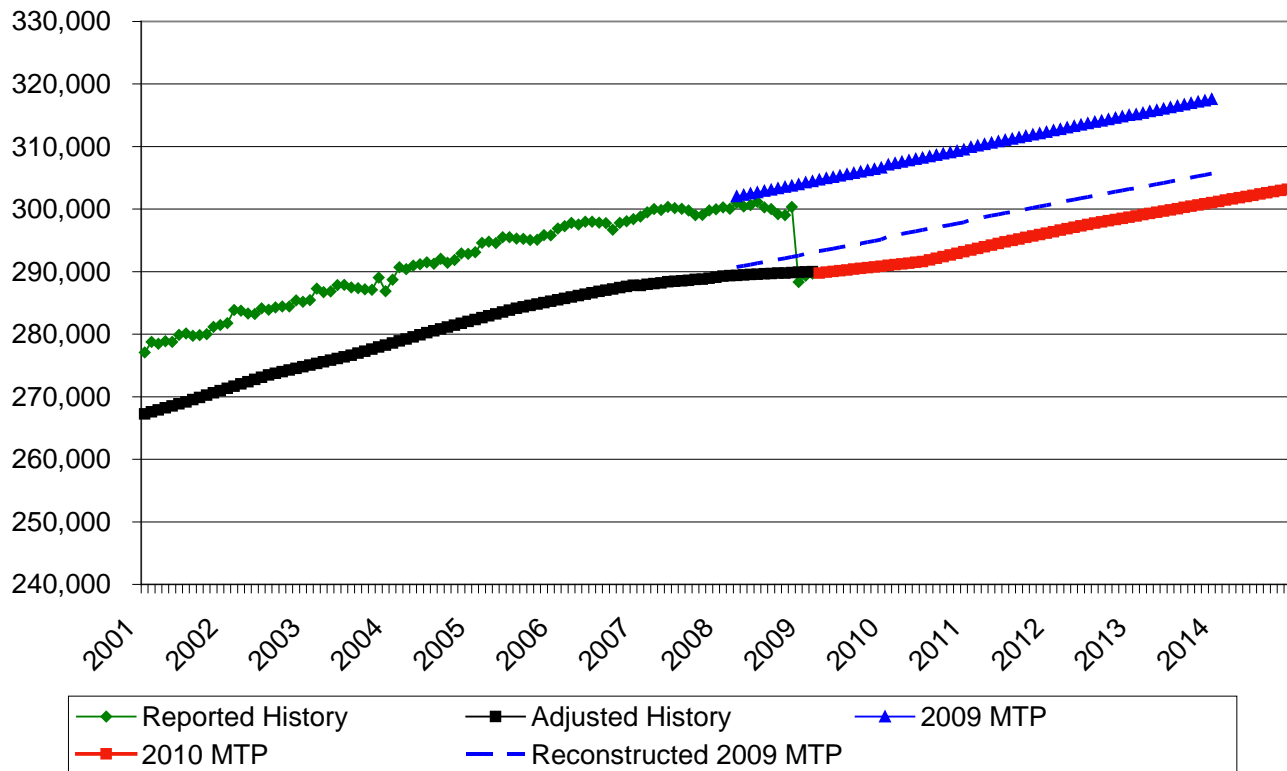
*Compared to the 2009 MTP, RGS volumes are 1.0% lower for the winter of 2009/10*

**Winter RGS & CGS Sales Volumes  
(November - February)**



*Growth in RGS customers remains low through 2010 before rebounding somewhat in 2011 and returning to near-historic levels thereafter*

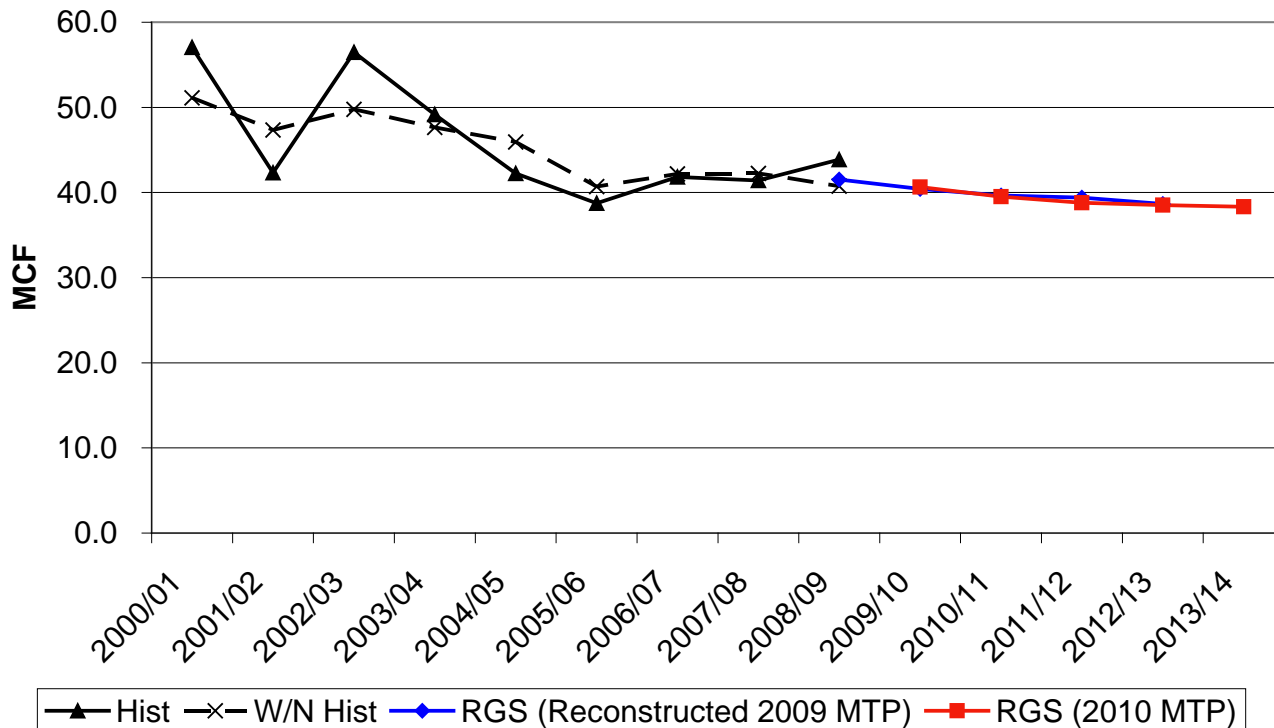
**RGS Customers**





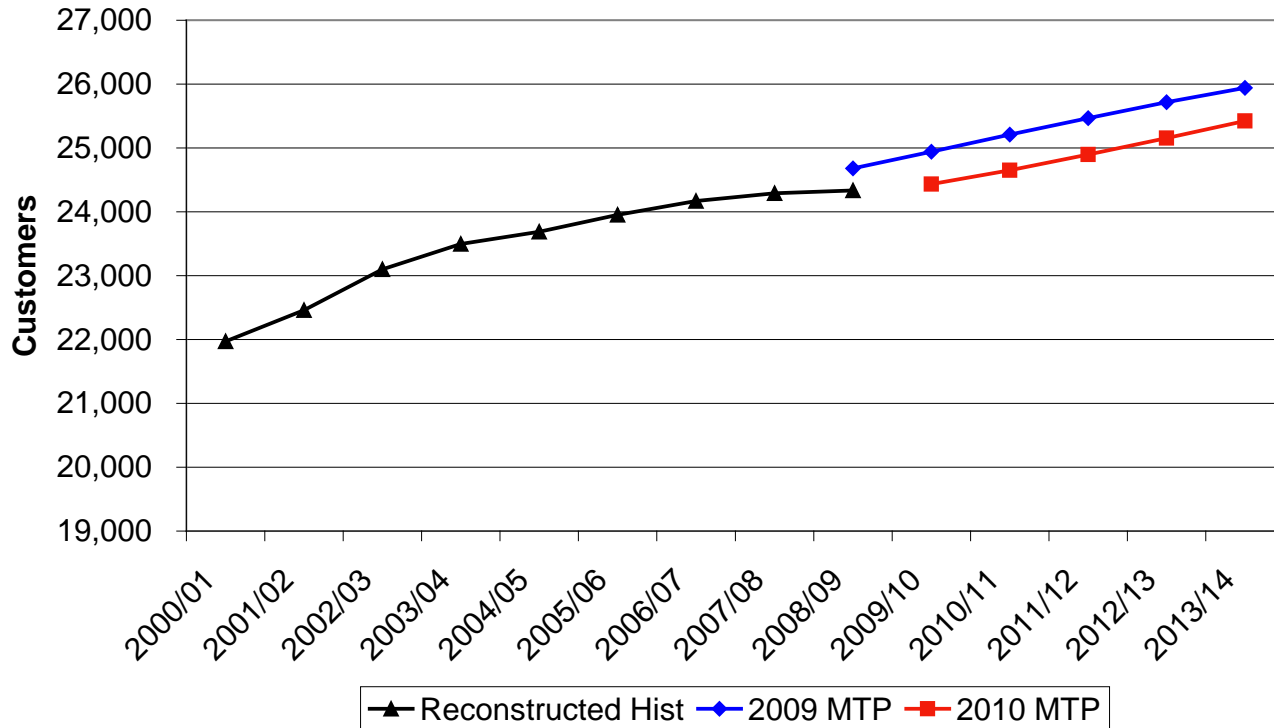
*After adjusting the 2009 MTP forecast for the change in customers, the 2010 MTP forecast of RGS use-per-customer is mostly unchanged*

**Winter Residential (RGS) Use-per-Customer  
(November - February)**



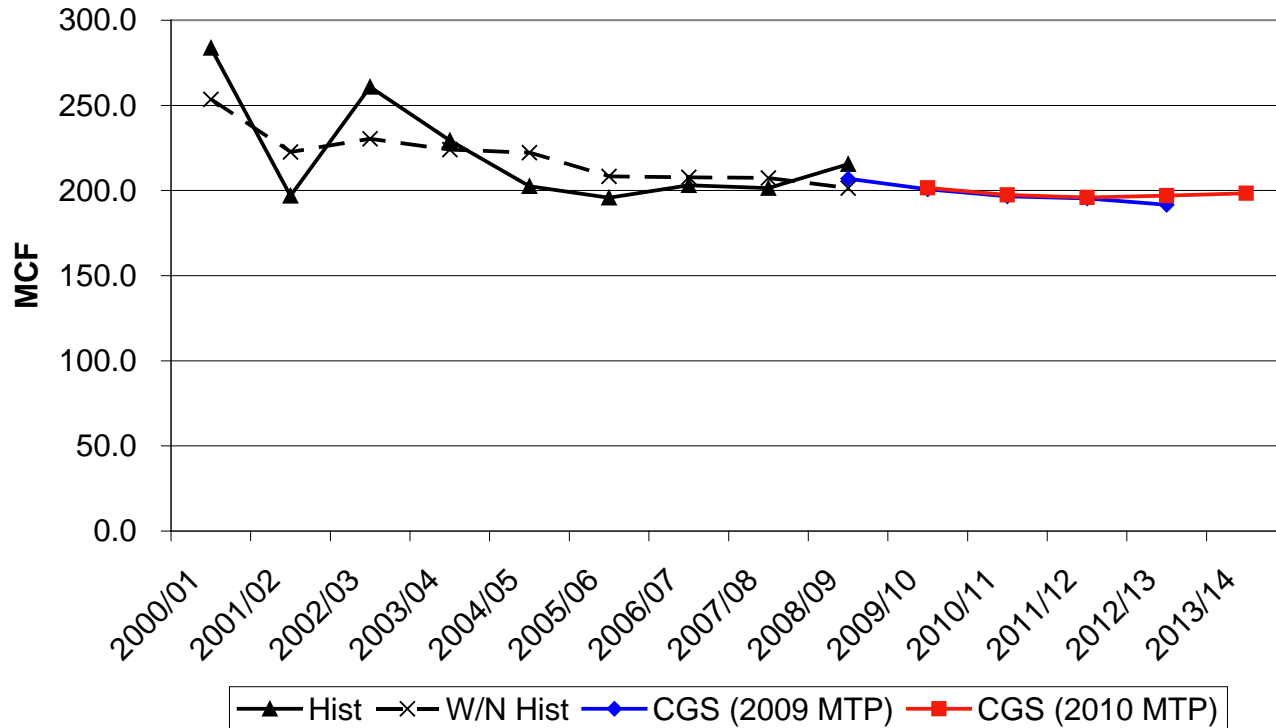
# Growth in CGS customers is consistent with growth in RGS customers

**Average CGS Customers**  
(November - February)



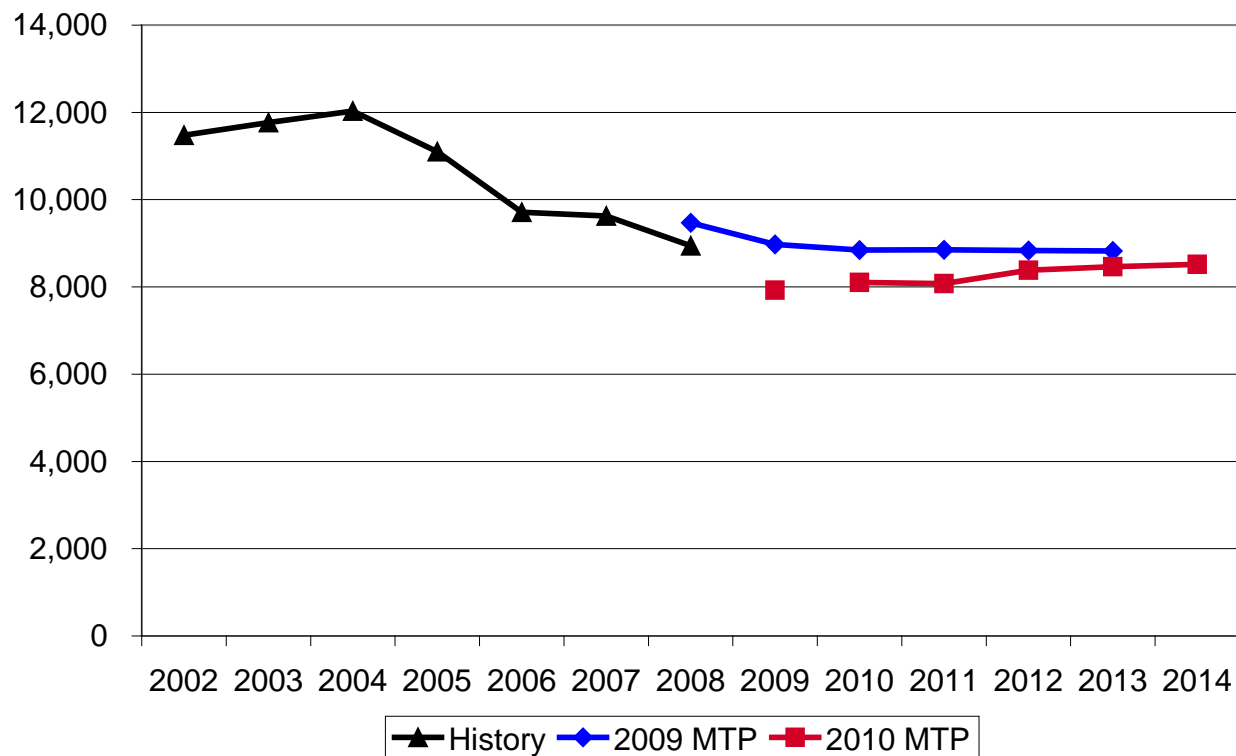
# CGS use-per-customer forecast is mostly unchanged

**Winter Commercial (CGS) Use-per-Customer**  
(November - February)



## Major accounts have been hard hit by the recession

Major Accounts History and Forecast



*\*In 2010 MTP forecast, 2009 value is a weather-normalized 2+10 forecast.*



*2010 MTP:*

*KU/LG&E Generation and Off-System Sales*

*Energy Planning, Analysis & Forecasting*

*RCG Presentation*

*July 22, 2009*

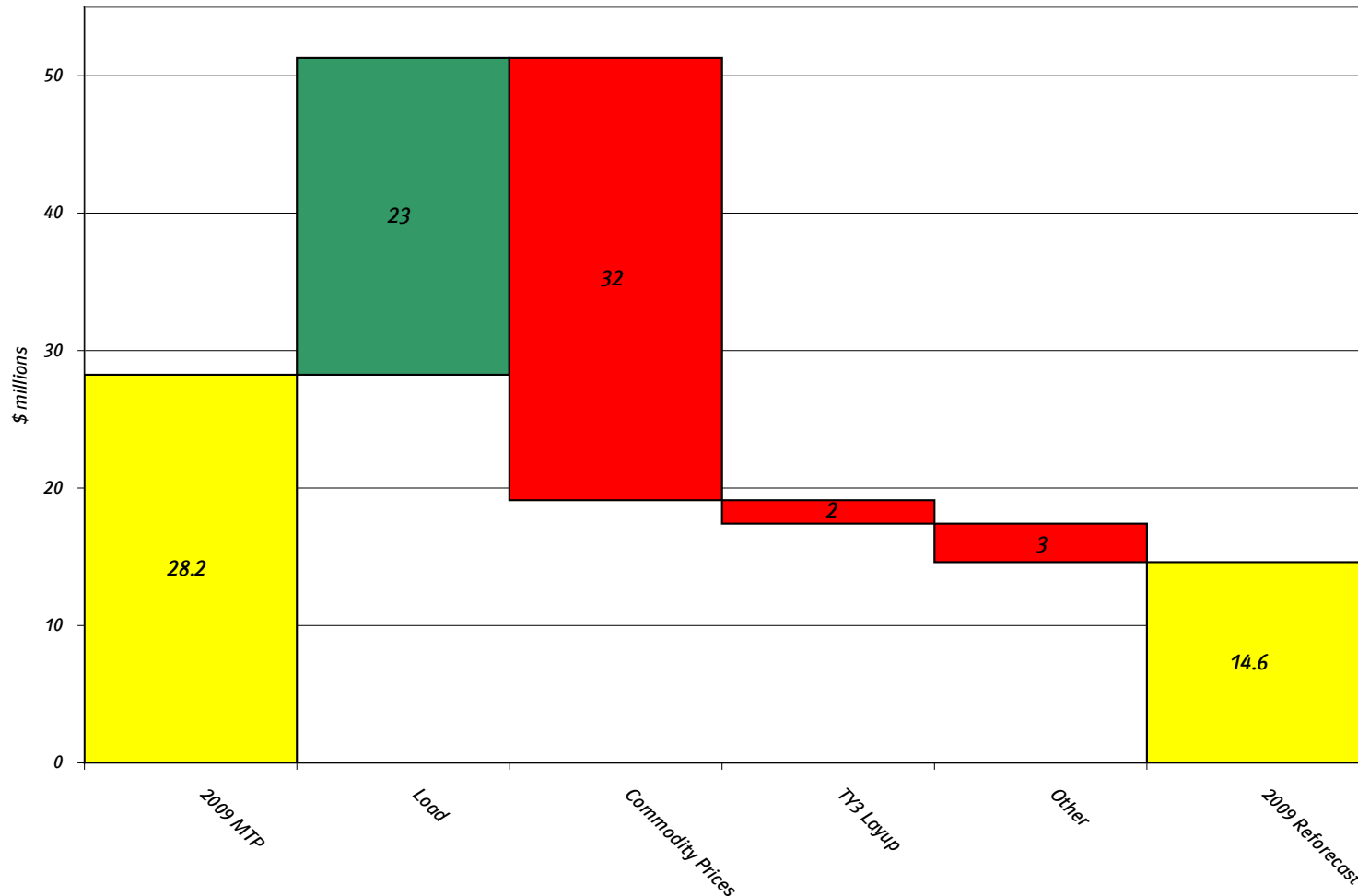
*Further decline in electricity prices reduces 2010 OSS contribution below 2009 Reforecast level*

<b>OSS Contribution (\$M)</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
2009 MTP	28	41	34
2009 Reforecast	15	23	21
2010 MTP	12	27	23

## *Major Assumptions Changes from 2009 MTP*

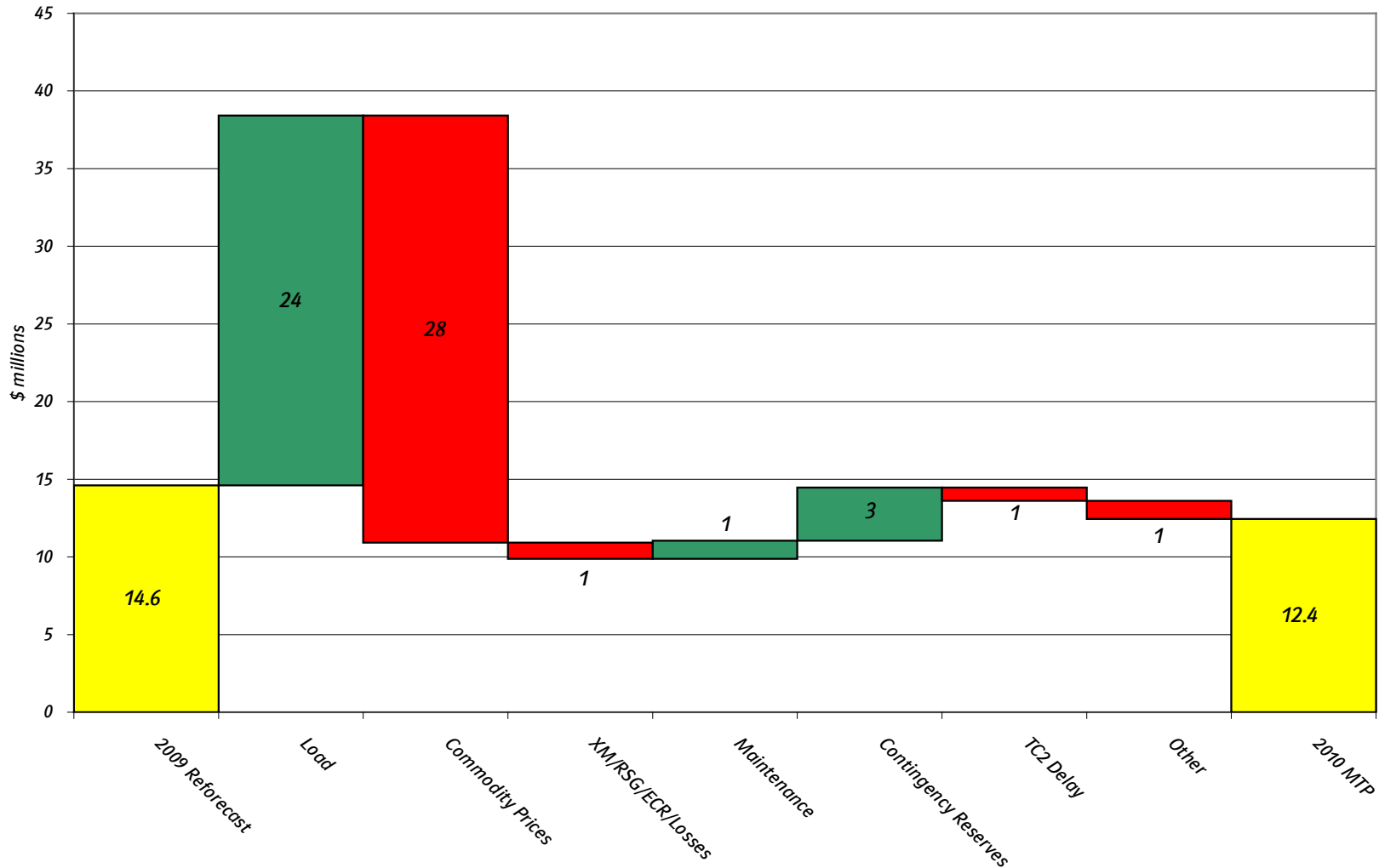
- *199 MW contingency reserves (40% spinning and 60% supplemental) compared to 208 MW (100% spinning) in 2009 MTP*
- *Market electricity prices – blended MISO and PJM to match anticipated interface for OSS*
- *Trimble County 2 in-service date delayed one month to July 1, 2010*
- *Removed CO<sub>2</sub> cost from 2012*
- *Layup Tyrone 3 in 2010*
- *Include ECR and losses in OSS dispatch decision*

*2009 Reforecast resulted in OSS Contribution for 2010 at one half of the 2009 MTP level*

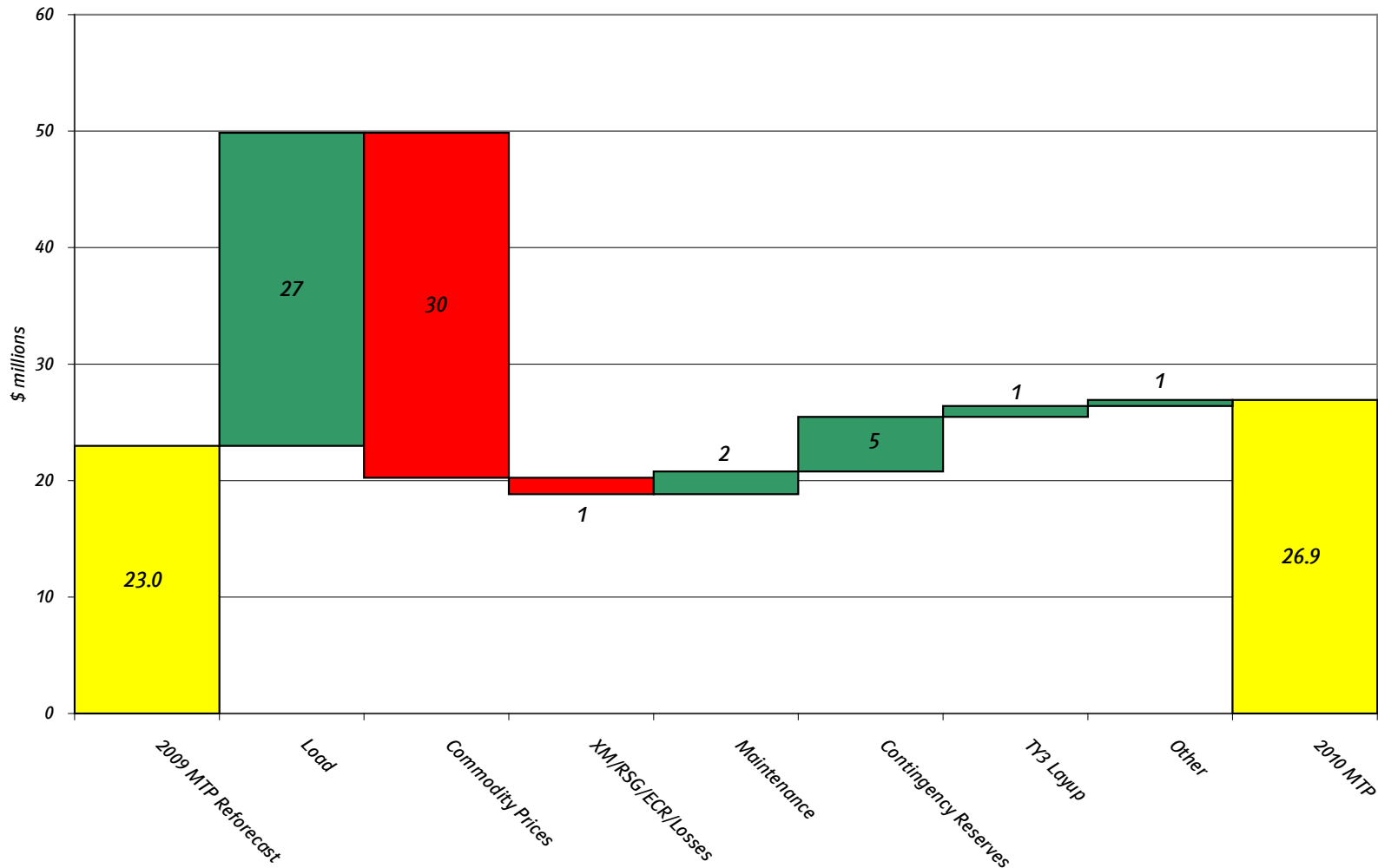




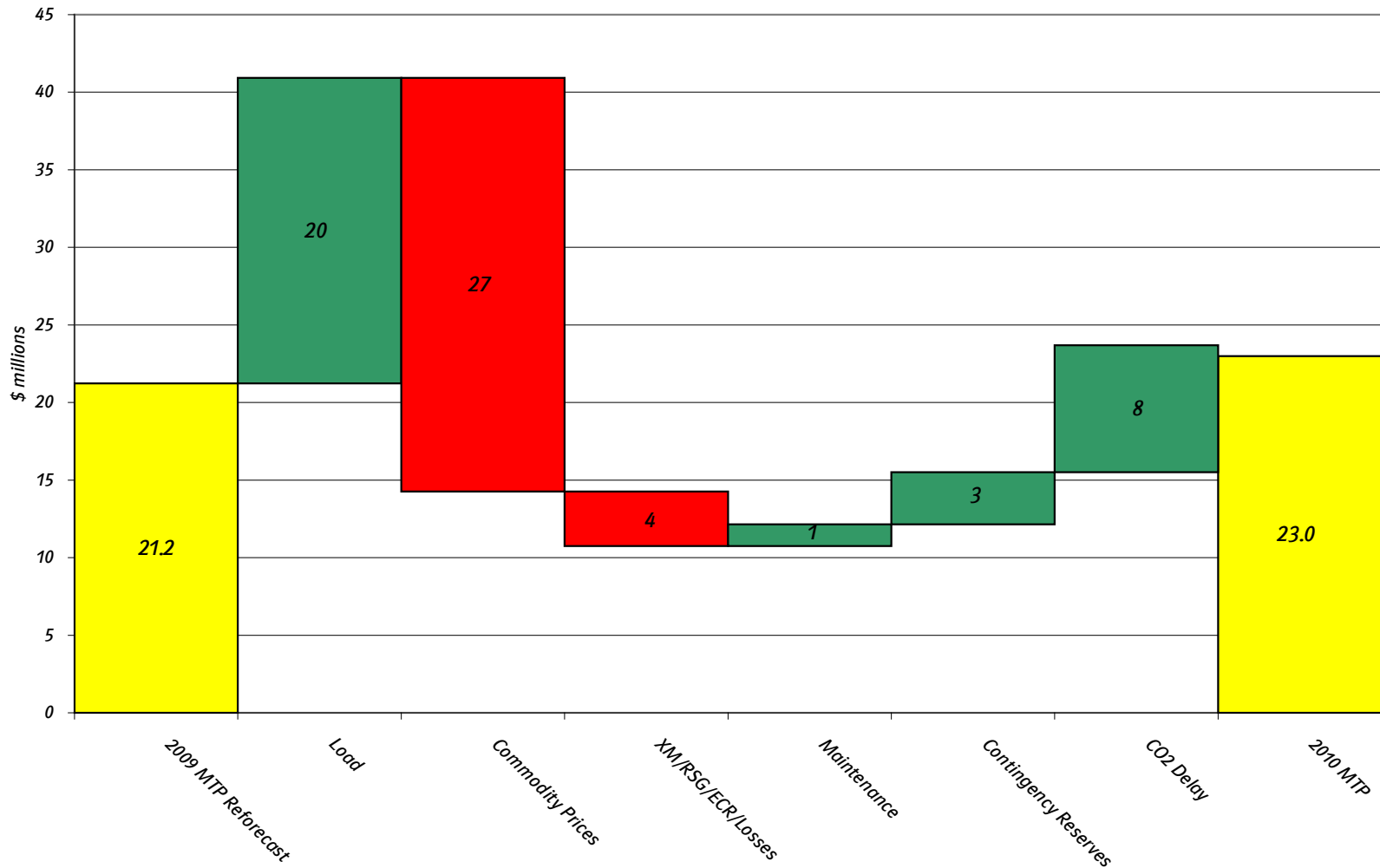
## 2010 MTP assumption for reduced spinning reserves supports 2010 OSS contribution



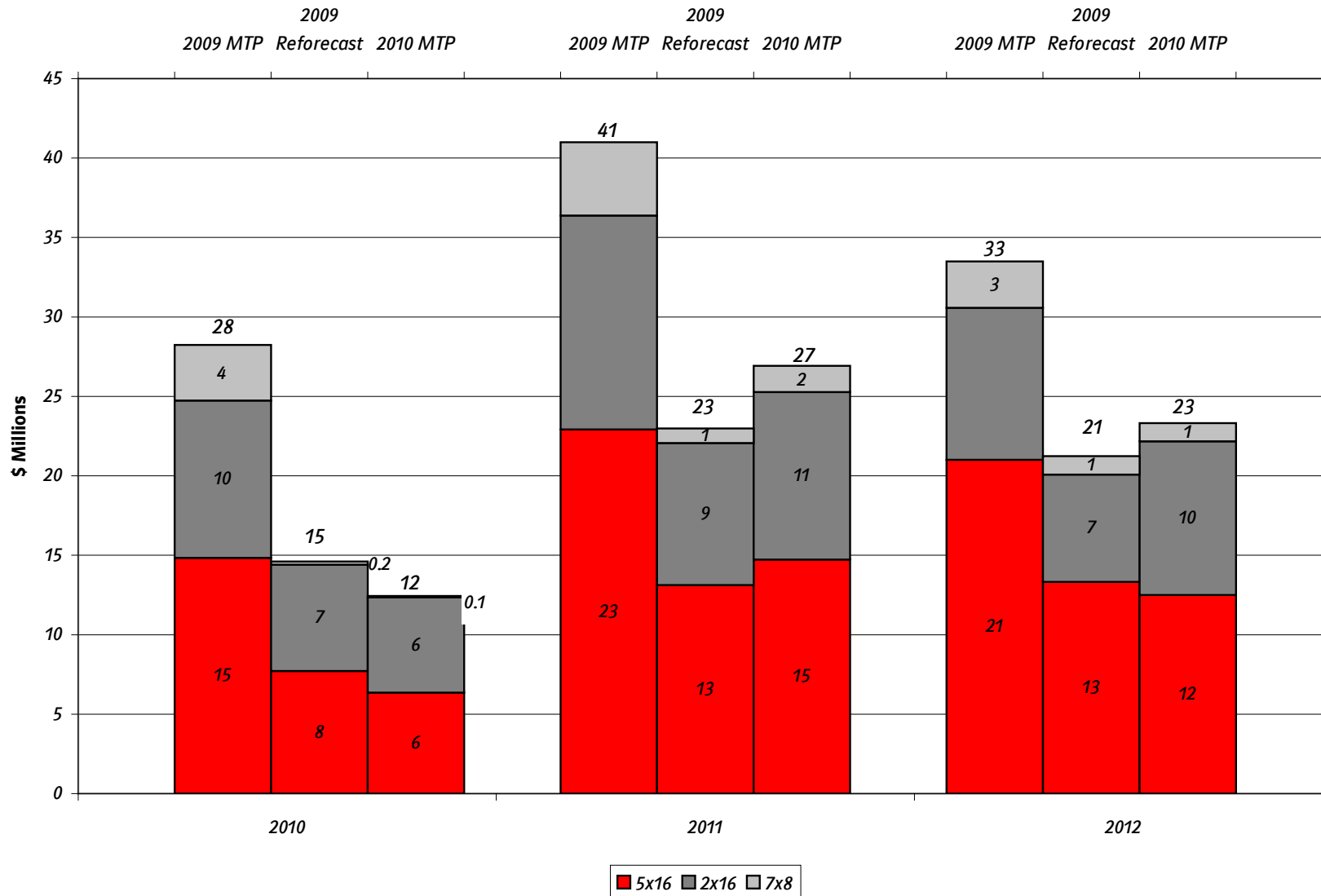
## 2011 OSS contribution is over 15% higher than the 2009 Reforecast level



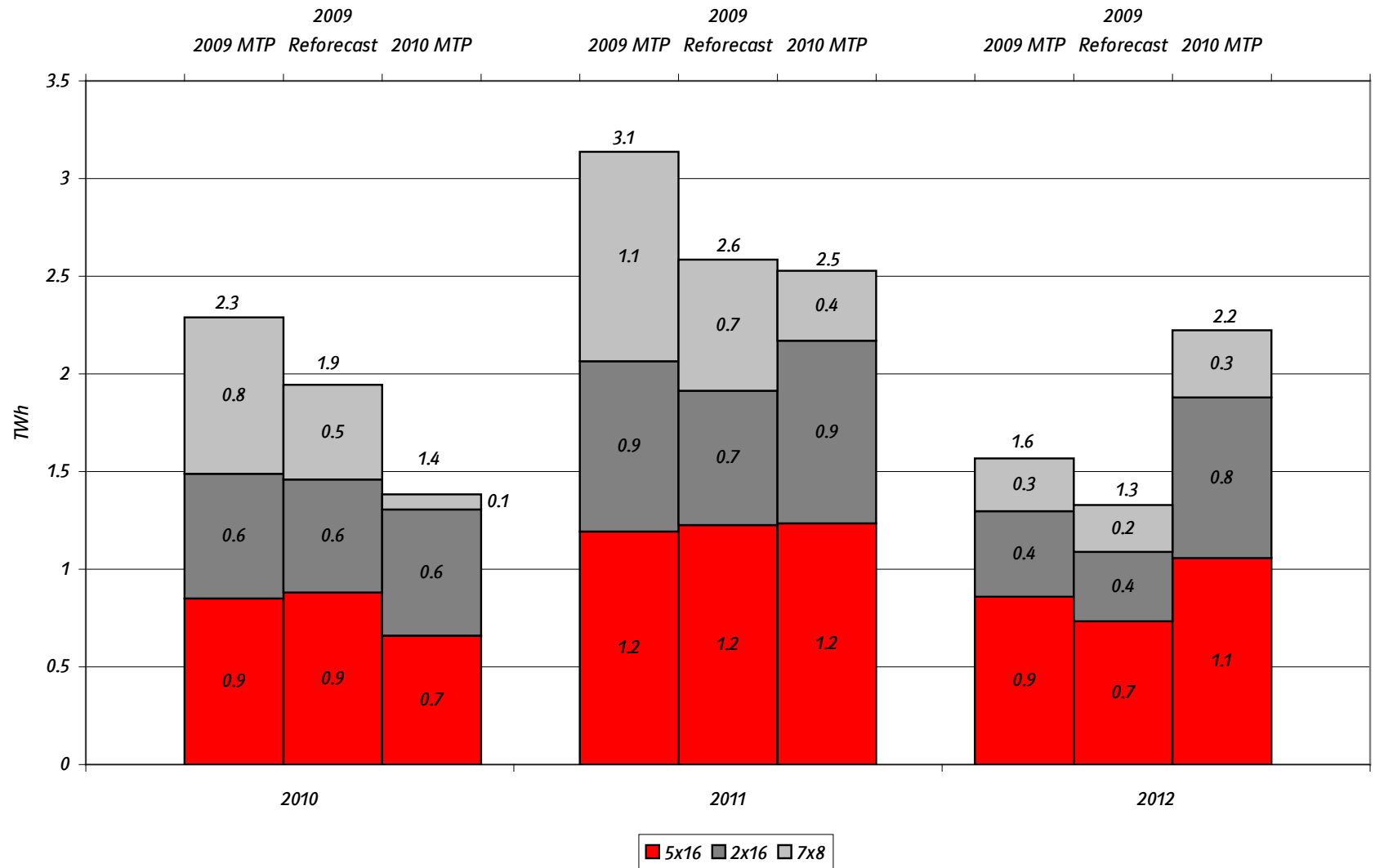
## 2012 OSS contribution favorably impacted by elimination of CO<sub>2</sub> cost in 2012



# OSS Contribution Comparison



# OSS Volume Comparison



## Target Outage Rates

### 6.8% steam Unplanned Unavailability ("UU") target for 2010

%	2009 Reforecast			2010 MTP		
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
<i>Brown 1</i>	4.3	6.7	5.7	6.5	6.5	8.9
<i>Brown 2</i>	4.1	5.6	4.6	6.5	6.5	7.9
<i>Brown 3</i>	6.5	5.5	5.5	7.0	7.0	6.1
<i>Ghent 1</i>	4.6	4.6	4.6	5.6	5.6	5.6
<i>Ghent 2</i>	5.3	5.3	5.3	7.0	5.6	5.6
<i>Ghent 3</i>	6.5	6.0	6.0	8.0	6.3	5.6
<i>Ghent 4</i>	4.6	4.1	4.1	7.0	6.1	5.6
<i>Green River 3</i>	7.4	7.4	7.4	9.2	9.2	9.2
<i>Green River 4</i>	8.3	8.3	8.3	9.2	9.2	9.2
<i>Tyrone 3</i>	8.4	8.4	8.4	9.2	9.2	9.2
<i>Cane Run 4</i>	7.6	7.6	7.6	7.7	7.7	7.7
<i>Cane Run 5</i>	7.3	7.3	7.3	7.7	7.7	7.7
<i>Cane Run 6</i>	8.0	8.0	8.0	7.1	7.0	7.1
<i>Mill Creek 1</i>	6.7	6.7	6.6	6.5	6.5	6.5
<i>Mill Creek 2</i>	7.0	7.1	7.1	6.5	6.5	6.5
<i>Mill Creek 3</i>	7.1	7.9	7.9	6.5	6.5	6.5
<i>Mill Creek 4</i>	7.3	7.3	7.3	6.5	6.5	6.5
<i>Trimble County 1</i>	5.0	5.0	5.0	4.6	4.6	4.6
<i>Trimble County 2</i>	8.6	6.7	5.1	9.6	9.6	7.7
<i>Total EFOR</i>	4.4	4.2	4.0	4.7	4.6	4.2
<i>Total MOR</i>	2.1	2.1	2.2	2.3	2.4	2.4
<i>Total UU</i>	6.3	6.2	6.0	6.8	6.7	6.4

# Coal Generation Comparison

2009 2009

MTP Ref

(6+6)(6+6)

2009 2009 2010

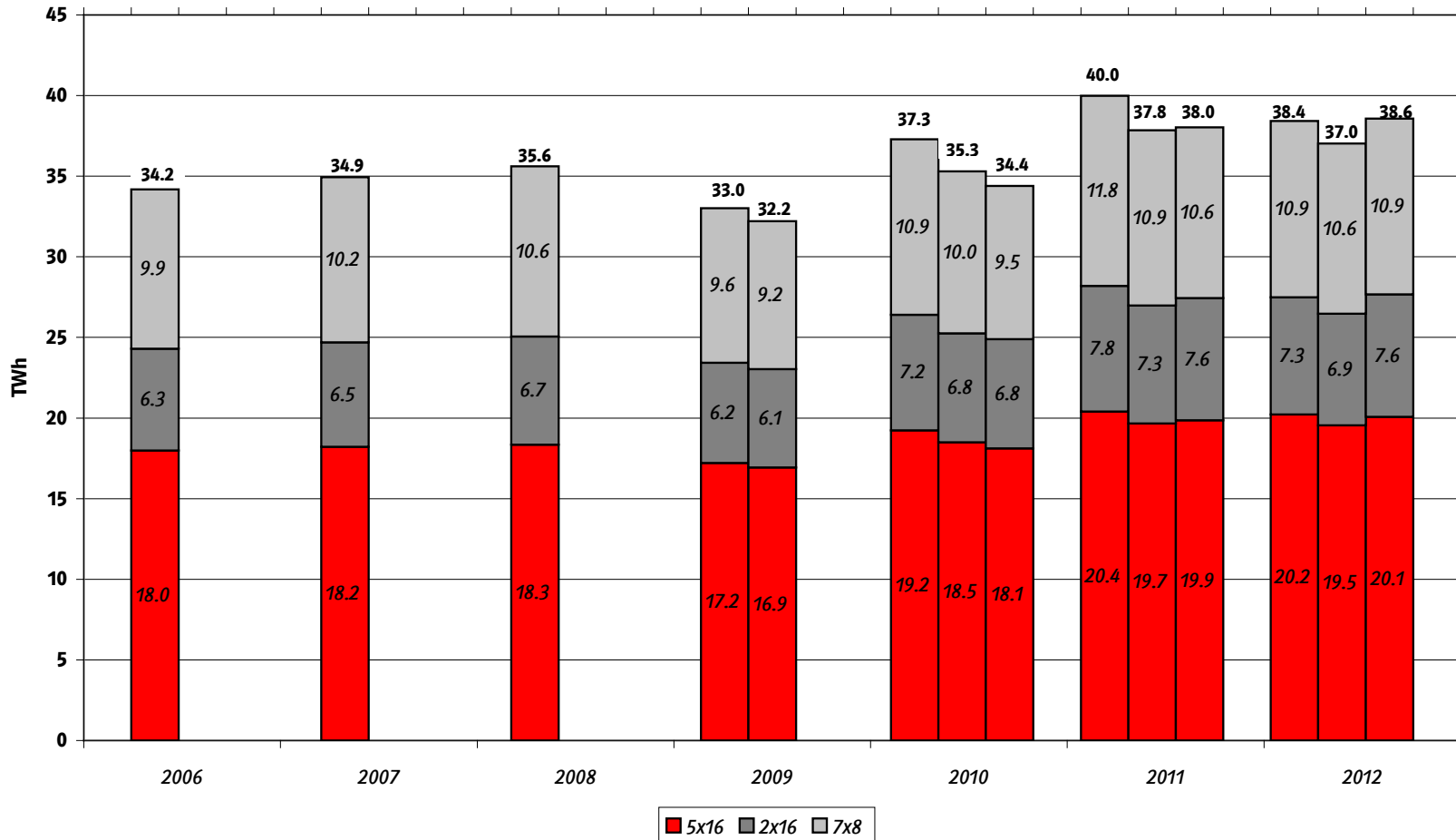
MTP Ref MTP

2009 2009 2010

MTP Ref MTP

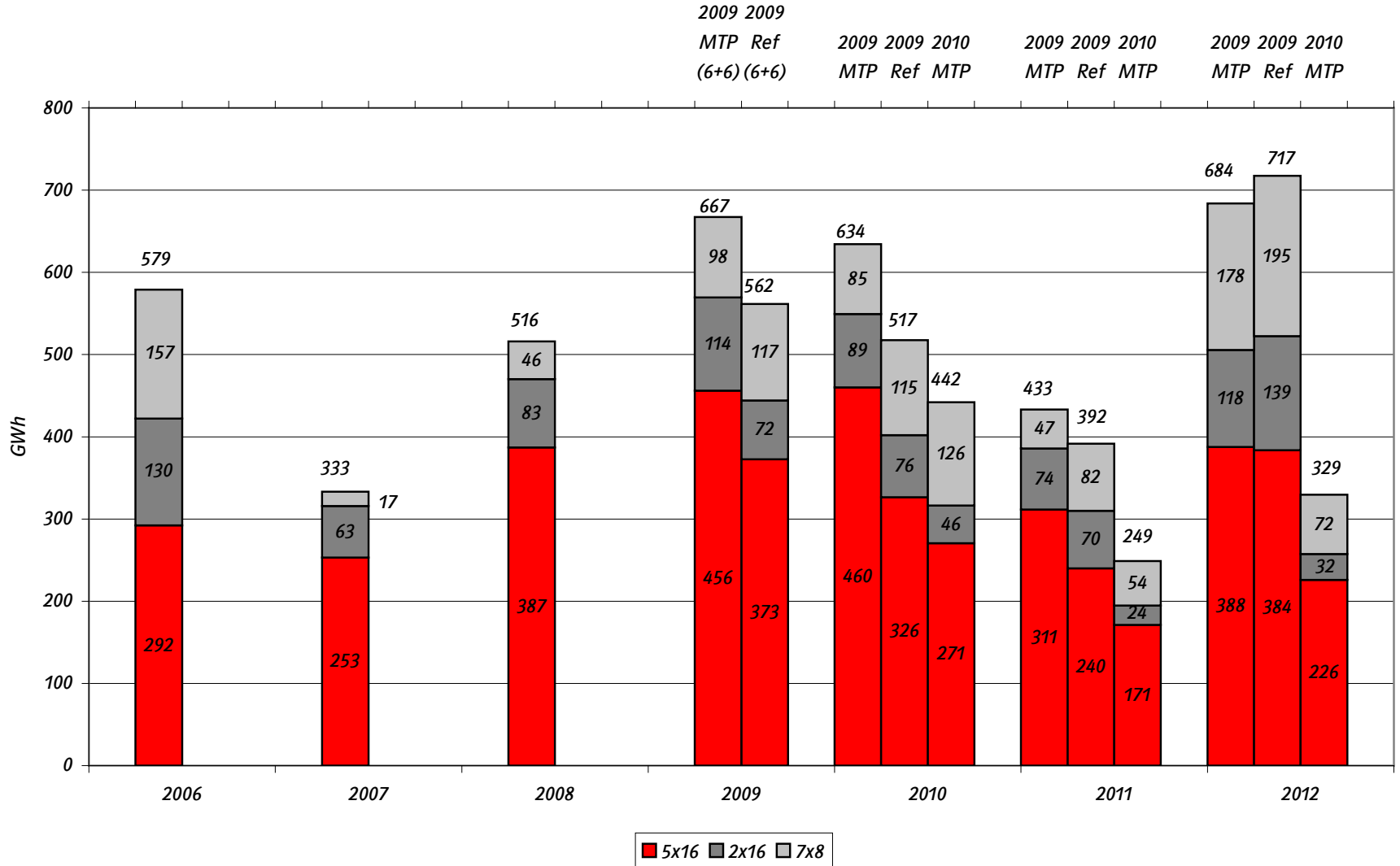
2009 2009 2010

MTP Ref MTP



Includes 100% Trimble Co 1 & 2

# Market Purchases Comparison





## 2010 MTP OSS Contribution Sensitivities to Base Case

<b>OSS Contribution (\$M)</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
2010 MTP	12.4	26.9	23.3
<b>Sensitivities - OSS Contribution (\$M)</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
TC2 Delay to 8/1/2010	11.5	26.9	23.3
Low Economic Growth*	6.6	26.1	21.6

\*Corresponds to "Pessimistic" Load Forecast presented on June 19, 2009

## **Appendix 1**

### **Assumptions and Prices**

## Assumptions

- *Emissions Controls*
  - *Brown 3 scrubbed May 2010; Brown 1-2 scrubbed November 2010*
  - *Brown 3 SCR operational 10/1/2012*
  - *Annual NO<sub>x</sub> season 2010+*
  
- *CT Availability*
  - *Trimble County CTs are available all months*
  - *Brown CTs are available all months*
  - *Paddy's Run 13*
    - Available April-October 2010-2011; available all months 2012+*
    - Dispatched last of large CTs in 2010 due to hot blade issue*
  
- *Operating Reserve*
  - *Starting 1/1/2010: 199 MW contingency (40% spinning and 60% supplemental), 75 MW regulating, 75 MW NAS*

## *Assumptions*

- *Market Volumes*
  - *Unconstrained hourly OSS*
  - *Hourly Purchases*
    - 5x16 limited to 400 MW*
    - 2x16 limited to 450 MW*
    - 7x8 limited to 200 MW*
- *Market Prices*
  - *May 29, 2009 trading date*
  - *Blended MISO/PJM with historical allocation*
  - *Hourly pricing shaped to correspond with historical load shape*
- *TC Backup to IMEA/IMPA during forced outages (128 MW for TC1; none for TC2)*

## *Assumptions*

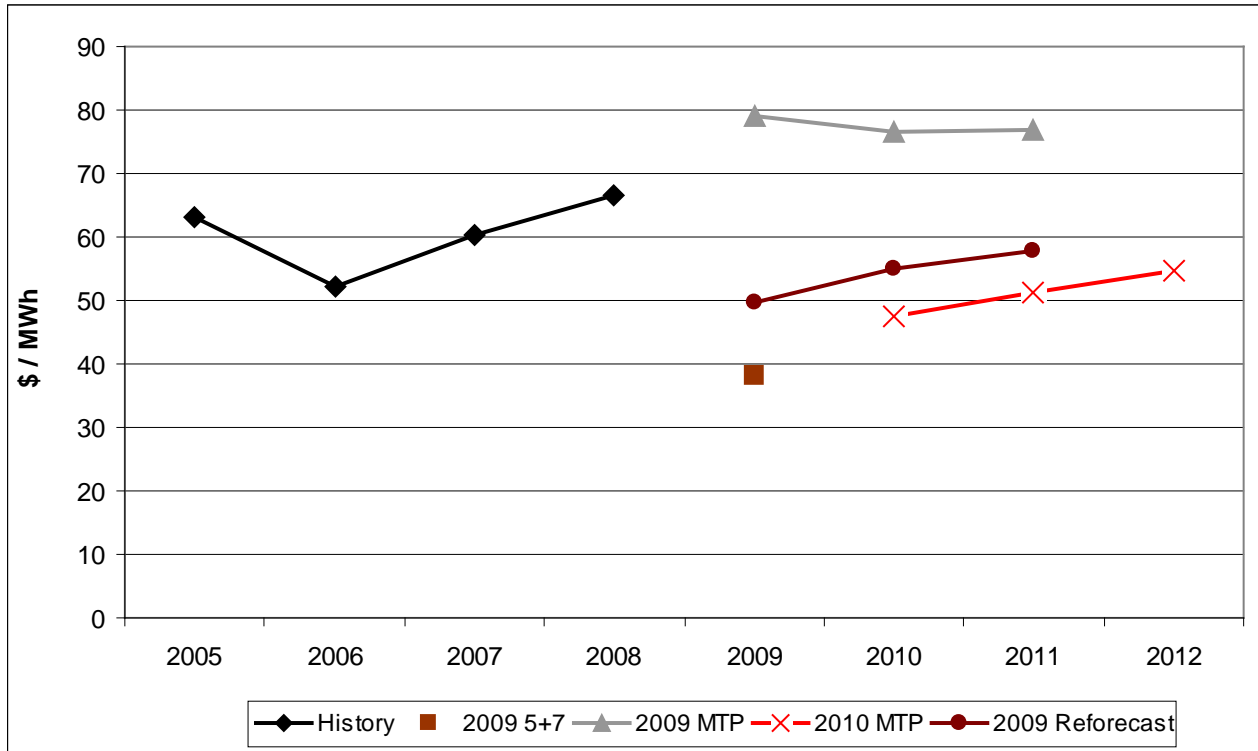
- *Trimble County 2 in-service date delayed to July 1, 2010*
- *2009 LTP Climate Concerns*
  - *No CO<sub>2</sub> effects in 2010-2012*
- *Layup Tyrone 3 in 2010 only*
- *No OSS from CTs*
- *Include RSG, ECR, XM, and losses in OSS dispatch*
- *Variable O&M not included in dispatch or OSS margin*
- *Forecasted LG&E gas contract price included for MC and CR gas*

## Contingency Reserves

- *Midwest Contingency Reserve Sharing Group (MCRSG) ends 12/31/09*
  - *Current E.ON U.S. allocation is 152 MW; carried as 100% spinning reserves*
- *2010 MTP assumes alternate group developed with TVA and EKPC*
  - *E.ON U.S. allocation is expected to be 199 MW, with 40% spinning and 60% supplemental\* (compared to 2009 Reforecast assumption of 208 MW, with 100% spinning)*
- *A group with only EKPC and E.ON U.S. would result in an E.ON U.S. allocation of 455 MW*

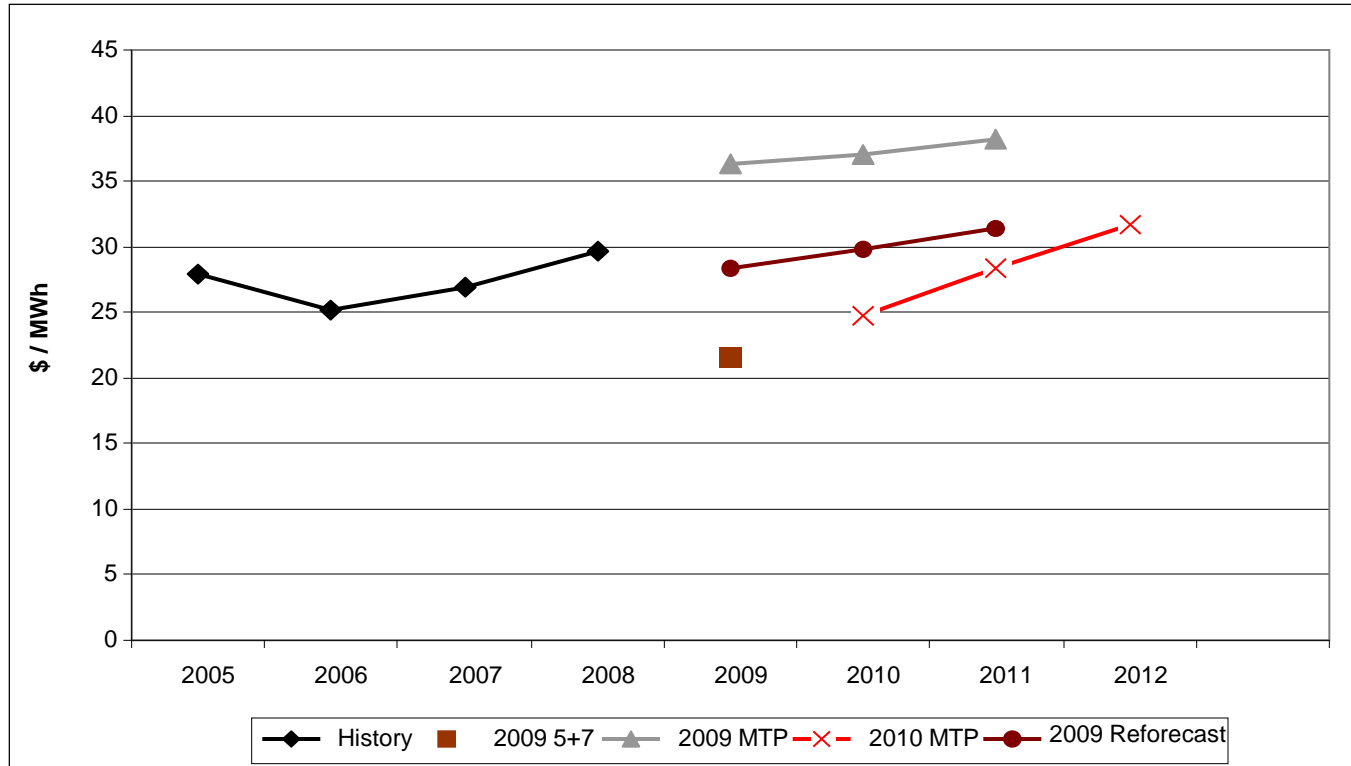
\* Currently modeled as 99 MW spinning and 100 MW supplemental

## Electricity Price: CIN.Hub Peak (5x16) (\$/MWh)



- 2010-12 MTP pricing for on-peak based on ICE forward prices (monthly through 2012) as on May 29, 2009.

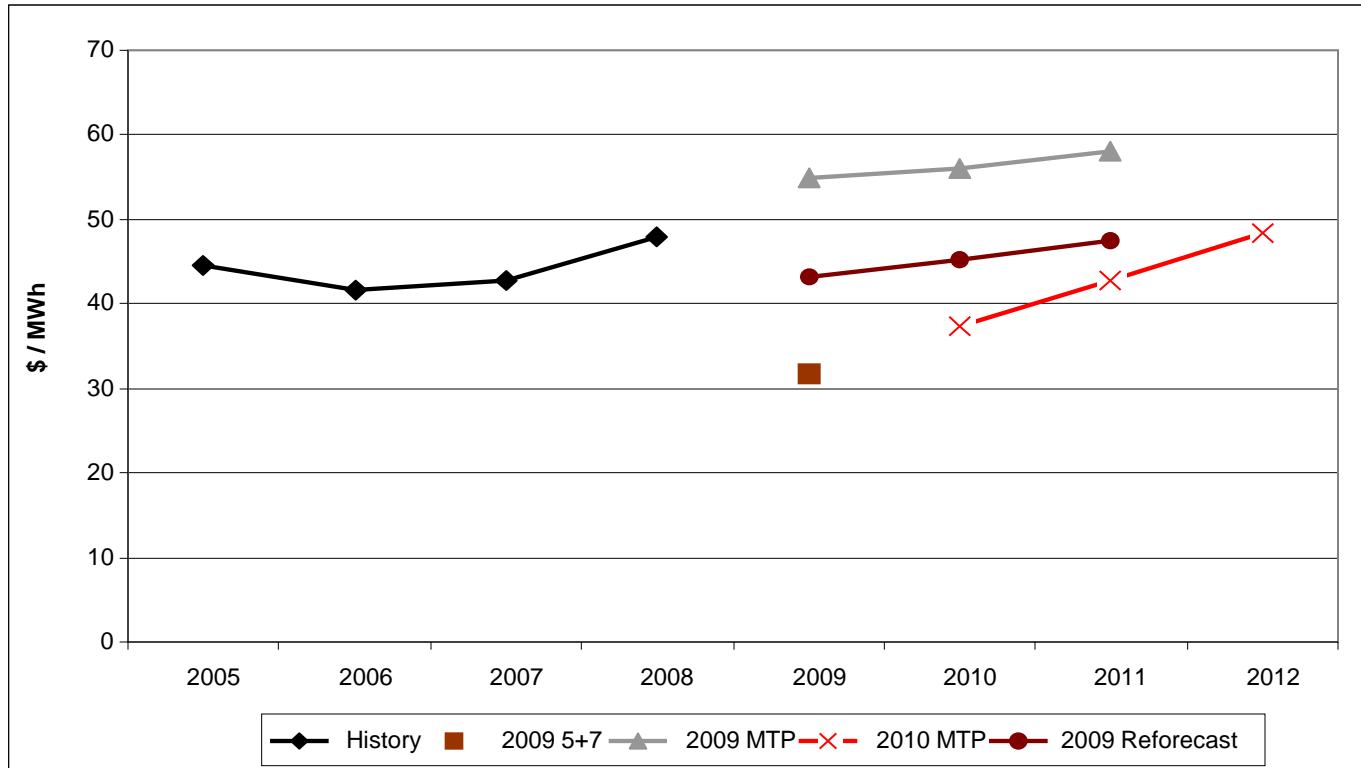
## Electricity Price: CIN.Hub Off-Peak (7x8) (\$/MWh)



- 2010-12 MTP pricing for off-peak based on ICE forward off-peak 'wrap' prices as on May 29, 2009 and historic ratio of 7x8 to 'wrap'.



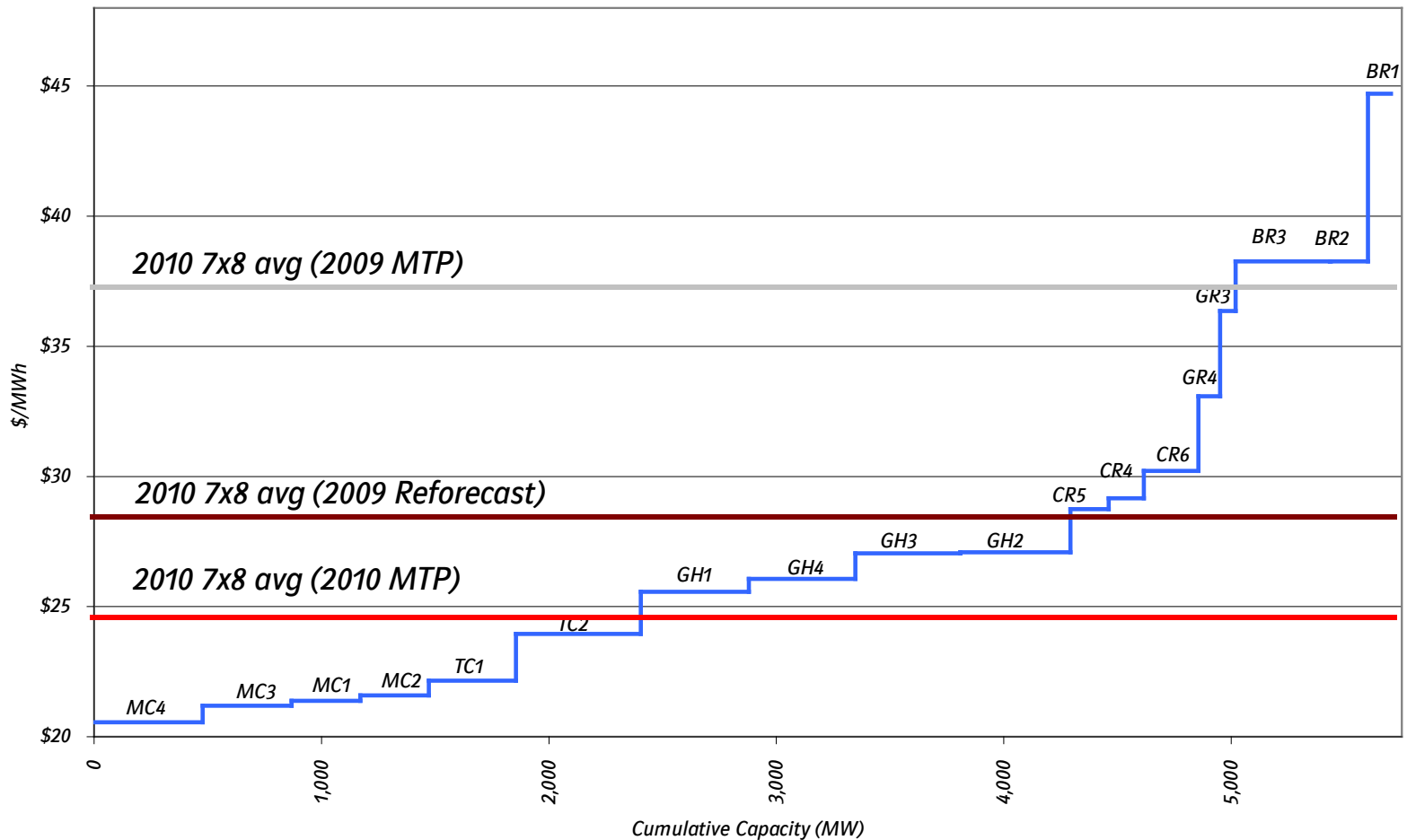
## Electricity Price: CIN.Hub Weekend (2x16) (\$/MWh)



- 2010-12 MTP pricing for weekends based on ICE forward off-peak 'wrap' prices as on May 29, 2009 and historic ratio of 2x16 to 'wrap'.

# Off-peak prices have fallen significantly

Average Unit Cost for 2010



## **Appendix 2**

### **Generation and Maintenance Comparison: 2010 MTP to 2009 Reforecast**

# Generation Comparison

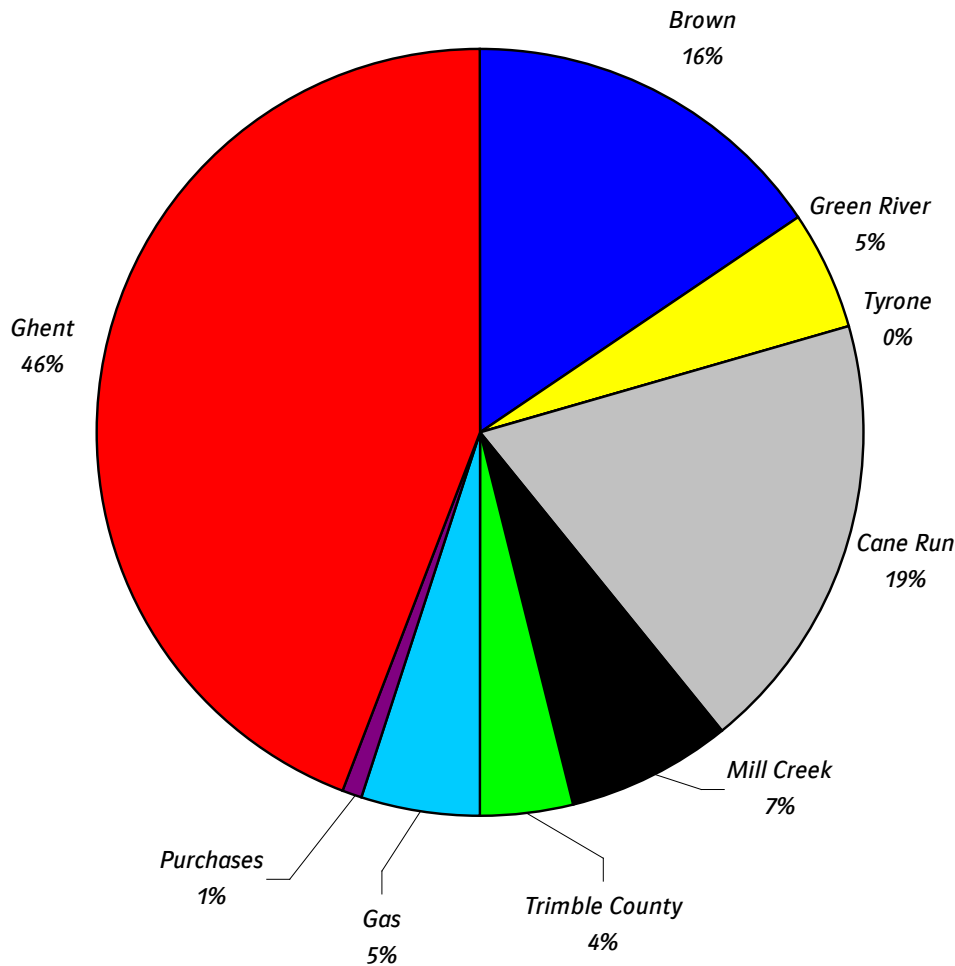
Generation (GWh)

GWh	2009 Reforecast			2010 MTP			Delta 2010 MTP - 2009 Reforecast		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Brown 1	274	283	289	297	332	375	24	49	86
Brown 2	704	762	859	770	714	839	66	(48)	(20)
Brown 3	1,682	2,192	2,368	1,607	1,902	1,886	(74)	(289)	(483)
Ghent 1	3,448	3,405	3,433	3,181	3,332	3,361	(267)	(73)	(72)
Ghent 2	2,890	2,992	2,423	2,870	3,100	2,756	(20)	108	333
Ghent 3	2,983	3,330	3,262	3,267	2,800	3,236	284	(530)	(26)
Ghent 4	3,294	3,351	3,275	2,525	3,280	3,313	(768)	(71)	38
Green River 3	274	215	161	258	303	287	(15)	89	126
Green River 4	506	410	223	472	452	565	(35)	42	342
Tyrone 3	-	-	136	-	150	205	-	150	69
Cane Run 4	758	618	687	820	739	879	62	121	192
Cane Run 5	749	639	600	956	951	958	206	313	358
Cane Run 6	1,187	1,003	972	1,109	1,227	913	(79)	223	(59)
Mill Creek 1	1,755	2,008	1,722	1,915	2,048	1,724	160	40	2
Mill Creek 2	1,968	1,702	1,793	2,026	1,755	2,007	58	53	214
Mill Creek 3	2,823	2,401	2,582	2,823	2,423	2,723	0	22	141.6
Mill Creek 4	3,220	3,400	3,018	3,239	3,423	3,082	19	23	65
Trimble County 1*	4,034	3,647	3,944	3,987	3,681	4,051	(46)	34	107
Trimble County 2*	2,749	5,489	5,285	2,273	5,410	5,412	(475)	(79)	127
Brown CTs	136	121	135	125	105	102	(10)	(16)	(32)
Trimble County CTs	405	318	376	393	297	298	(12)	(21)	(78)
Paddy's Run CTs	14	14	21	7	10	12	(8)	(4)	(10)
Other CTs	0.3	0.1	-	0.2	-	0.1	(0.0)	(0.1)	0.1
Dix Dam/Ohio Falls	357	383	409	292	329	358	(65)	(54)	(50)
OMU Purchase	530	-	-	456	-	-	(74)	-	-
OVEC Purchase	1,125	1,137	1,236	794	709	906	(331)	(428)	(329)
<b>Totals</b>	<b>37,866</b>	<b>39,822</b>	<b>39,209</b>	<b>36,463</b>	<b>39,475</b>	<b>40,250</b>	<b>(1,402)</b>	<b>(347)</b>	<b>1,041</b>

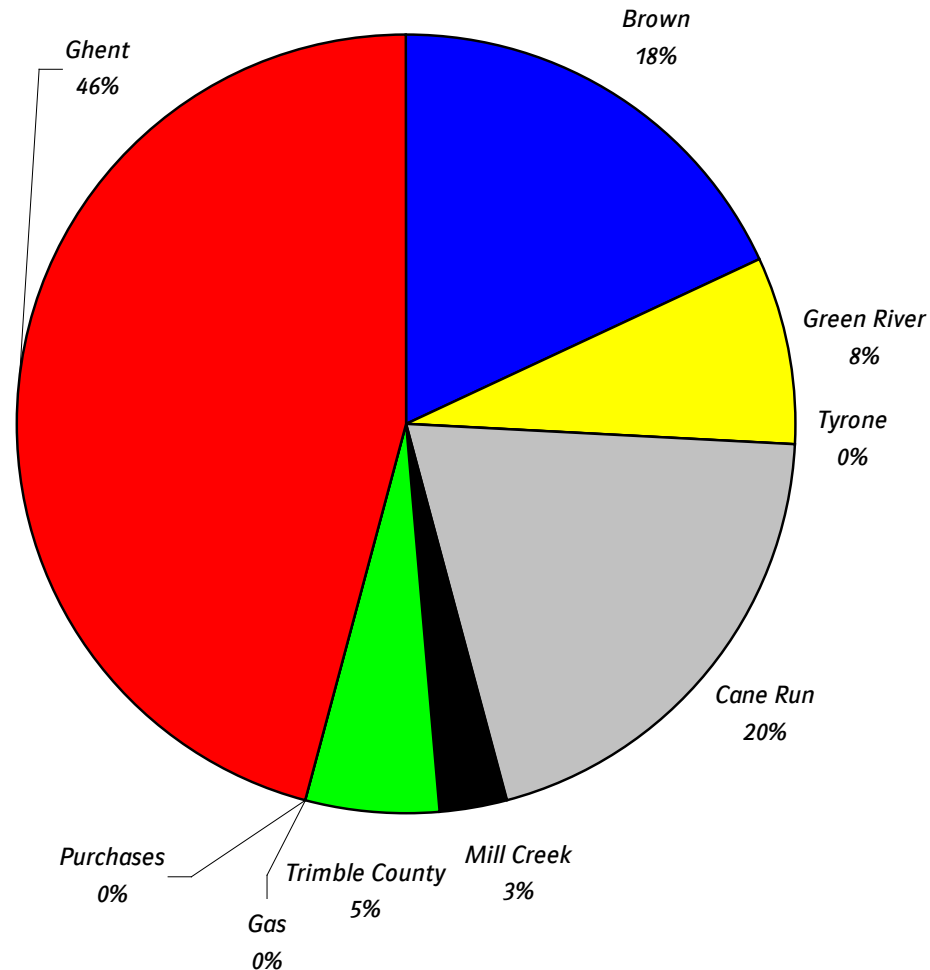
\* 100% Trimble County Units

# Generation Volume to OSS

*2009 Reforecast for 2010*



*2010 MTP for 2010*



## Fuel Cost Comparison Annual Averages

Fuel Expense (cents/mmBTU)					Delta	
		2009 Forecast (5+7)	2009 Ref 2010	2010 MTP 2010	'10 MTP 2010 - '09 Ref 2010	% Change from '09 Ref 2010
<b>COAL</b>	<i>BR HS</i>		321.3	290.7	(30.6)	-10%
	<i>BR LS</i>	317.9	347.2	334.9	(12.3)	-4%
	<i>GH HS</i>	236.7	229.3	219.3	(10.0)	-4%
	<i>GH LS</i>	252.8				
	<i>GR</i>	260.4	251.4	253.1	1.7	1%
	<i>TY</i>	303.8	311.6	311.9	0.2	0%
	<i>CR</i>	178.5	215.2	201.6	(13.6)	-6%
	<i>MC</i>	178.1	186.2	175.9	(10.3)	-6%
	<i>TC</i>	198.3	208.1	195.2	(12.9)	-6%
	<i>TC PRB</i>		318.8	263.9	(54.9)	-17%
	<i>Smith Coal</i>		116.7	236.1	119.4	102%
<b>GAS</b>	<i>Gas</i>		785.0	675.2	(109.8)	-14%
	<i>Gas Haef</i>		860.0	750.2	(109.8)	-13%
<b>OIL</b>	<i>Oil</i>	1298.7	2647.4	1701.8	(945.5)	-36%

## MW-Weeks Maintenance Comparison

	2009 Reforecast			2010 MTP			Delta 2010 MTP - 2009 Reforecast		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Brown 1	623	309	309	626	221	319	3	(88)	10
Brown 2	531	528	522	541	701	207	9	173	(314)
Brown 3	3,917	1,376	3,469	3,866	1,373	3,474	(51)	(3)	5
Ghent 1	1,515	2,031	1,511	2,503	1,075	1,541	988	(956)	30
Ghent 2	2,031	1,507	4,322	1,124	632	4,534	(906)	(874)	211
Ghent 3	4,445	1,573	1,569	604	4,247	1,536	(3,841)	2,674	(32)
Ghent 4	1,843	1,646	1,565	5,789	611	1,519	3,946	(1,035)	(47)
Green River 3	228	228	569	297	89	572	69	(139)	4
Green River 4	312	300	796	117	392	118	(194)	91	(678)
Tyrone 3	0*	0*	229	0*	586	90	-	586	(139)
Cane Run 4	552	1,281	507	508	1,281	-	(44)	-	(507)
Cane Run 5	550	550	549	-	550	-	(550)	(0)	(549)
Cane Run 6	786	786	784	1,983	-	1,978	1,197	(786)	1,193
Mill Creek 1	2,504	389	1,291	1,295	389	2,497	(1,209)	-	1,205
Mill Creek 2	513	2,479	384	513	2,479	384	0	-	-
Mill Creek 3	499	3,239	498	504	3,031	477	5	(208)	(21)
Mill Creek 4	2,045	605	2,033	2,070	602	2,048	25	(2)	15
Trimble County 1**	-	2,185	-	-	2,191	-	-	6	-
Trimble County 2**	3,157	1,690	3,159	3,164	1,685	3,151	7	(5)	(9)
<b>Totals</b>	<b>26,051</b>	<b>22,700</b>	<b>24,065</b>	<b>25,504</b>	<b>22,134</b>	<b>24,442</b>	<b>(547)</b>	<b>(566)</b>	<b>377</b>

\* Inactive Reserve

\*\* 100% Trimble County Units

# Weekly Maintenance Comparison 2010

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	SM1	SM2	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2	
1/4																						
1/11																						
1/18																						
1/25																						
2/1																						
2/8																						
2/15																						
2/22																						492
3/1																						492
3/8																						492
3/15	462														240							492
3/22	462							433							240							492
3/29	462							433					263		240							492
4/5	478							429							240							492
4/12	478							429							240							492
4/19								429							240							492
4/26								429							240							492
5/3								415							240							492
5/10		469						415		0					240							492
5/17		469						415							240							492
5/24									95						240							492
5/31															240							492
Summer Season																						
9/6																						
9/13				468																		
9/20				468																		
9/27				468																		
10/4				481				71					155									
10/11				481	102			71					155									
10/18				481	102			71					155									
10/25				481	102			71														
11/1				481	102																	
11/8				481	102																	571
11/15				481	102																	571
11/22				481																		571
11/29				481		169										303						571
12/6						169										303						571
12/13			482			169										303						571
12/20																303						571
12/27																303						571

2009 Reforecast Schedule

2010 MTP Schedule




# Weekly Maintenance Comparison

2011

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/3																			
1/10																			
1/17																			
1/24																			
1/31																			
2/7																			
2/14																			
2/21		462																	
2/28		462																	
3/7										71								397	
3/14				482						71								357	
3/21				482						71								357	
3/28				482	98		424			71								357	
4/4				462	97		420			71								371	
4/11				462			420		95	71								371	
4/18				462					95	71			168					371	
4/25				462					95	71			168						
5/2				462					95				168					477	
5/9				462															
5/16																			
5/23		469																	
5/30																			
Summer Season																			
9/5																			
9/12																			
9/19																			
9/26											155								
10/3											155								
10/10				481				71			155								
10/17											155								571
10/24							165				155				299				571
10/31							165				155			303	299				
11/7							165				155				299				386
11/14							165				155				299				386
11/21															299				386
11/28															299				386
12/5															299				
12/12															299				
12/19																			
12/26																			

 2009 Reforecast Schedule

 2010 MTP Schedule

# Weekly Maintenance Comparison

2012

	GH1	GH2	GH3	GH4	BR1	BR2	BR3	GR3	GR4	TY3	CR4	CR5	CR6	MC1	MC2	MC3	MC4	TC1	TC2
1/2																			
1/9																			
1/16																			
1/23																			
1/30																			
2/6	462																		
2/13	462																		
2/20	462												240						
2/27													240						
3/5													240						
3/12			482										240				492		
3/19			482										240					492	
3/26	451		482										240					492	
4/2	469								95				240					477	
4/9	469												240						
4/16	469									71									
4/23	469															371			
4/30	469																		
5/7	469																		
5/14	469																		
5/21	469																		
5/28																			
Summer Season																			
9/3																			
9/10																			
9/17			468																
9/24			468		163									303					
10/1			481											303					
10/8				98										303					
10/15				98			418	71						303					571
10/22				98			418	71						303					571
10/29							418	71						303					571
11/5							418	71						303					571
11/12							418	71						303					
11/19							418	71											
11/26							418	71							299				
12/3							418	71											
12/10																			
12/17																			
12/24																			

2009 Reforecast Schedule

2010 MTP Schedule

# CT Operation Comparison to Actual (for plant maint. planning)

CT Generation (GWh)

	ACTUAL			6+6 FORECAST	2010 MTP		
	2006	2007	2008	2009	2010	2011	2012
BR5	31	20	2	12	7	7	6
BR6	98	89	22	43	22	23	15
BR7	99	52	33	44	60	50	65
BR8	46	20	7	14	12	7	4
BR9	27	11	3	10	9	7	5
BR10	21	5	2	11	5	4	3
BR11	13	4	1	11	10	7	5
PR13	88	71	4	8	7	10	12
TC5	12	93	74	85	86	66	72
TC6	24	84	70	72	80	62	48
TC7	51	113	59	66	76	38	57
TC8	77	150	63	57	60	54	43
TC9	60	148	58	46	55	38	40
TC10	71	131	51	44	36	38	39
<b>TOTAL</b>	<b>717</b>	<b>991</b>	<b>449</b>	<b>522</b>	<b>525</b>	<b>412</b>	<b>412</b>

2009 Reforecast			
816	556	453	532

CT Starts (# starts)

	ACTUAL			6+6 FORECAST	2010 MTP		
	2006	2007	2008	2009	2010	2011	2012
BR5	34	44	9	23	21	17	27
BR6	89	93	46	82	44	44	30
BR7	91	61	39	90	126	96	121
BR8	99	62	32	57	41	23	17
BR9	70	37	18	44	22	31	19
BR10	49	28	12	40	16	15	11
BR11	35	22	12	36	33	27	15
PR13	68	56	17	16	8	15	16
TC5	12	119	88	73	124	88	102
TC6	31	98	116	89	102	90	80
TC7	65	123	74	109	115	62	90
TC8	82	179	83	87	91	71	75
TC9	62	168	68	75	80	56	67
TC10	78	140	72	78	56	50	59
<b>TOTAL</b>	<b>865</b>	<b>1,230</b>	<b>686</b>	<b>899</b>	<b>880</b>	<b>683</b>	<b>731</b>

2009 Reforecast			
1,218	983	898	1,051



*Project Engineering  
2010-2012 MTP*

*October 9, 2009*

*Financial Performance*

ÿ *Capital*

ÿ *Risks and Sensitivities*

ÿ *Headcount and Safety*

ÿ *Highlight Major Projects*

*Appendix*

ÿ *Major Assumptions*

ÿ *2010 – 2019 MTP/LTP IFRS – Cash (Excel attachment)*

## 2008-2012 Project Engineering Capital (Excluding COR) (\$000)

Project	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<b>Expansion Plan</b>							
TC 2 (Net)	\$155,140	\$113,045	\$161,733	\$109,557	\$15,262	\$0	\$0
Combined Cycle CT 2017	\$428	\$7,500	\$479	\$300	\$2,500	\$11,000	\$8,000
<b>Expansion Plan Total</b>	<b>\$155,568</b>	<b>\$120,545</b>	<b>\$162,212</b>	<b>\$109,857</b>	<b>\$17,762</b>	<b>\$11,000</b>	<b>\$8,000</b>
<b>ECR</b>							
TC 2 (Net)	\$115,010	\$19,133	\$19,133	\$44,679	\$2,739	\$0	\$0
Brown FGD	\$132,050	\$159,653	\$165,153	\$155,901	\$97,660	\$29,781	\$0
Ghent FGD	\$140,990	\$69,434	\$90,934	\$53,230	\$20,000	\$0	\$0
Brown 3 SCR	\$1,010	\$0	\$0	\$3,470	\$30,736	\$58,149	\$69,207
Brown CCP	\$10,802	\$6,723	\$11,723	\$6,635	\$28,360	\$10,220	\$8,776
Cane Run CCP	\$349	\$1,441	\$1,441	\$1,400	\$1,440	\$7,801	\$5,005
Ghent CCP	\$744	\$1,580	\$1,580	\$3,849	\$42,156	\$59,007	\$72,092
Trimble County CCP (Net)	\$1,050	\$6,000	\$6,000	\$12,900	\$20,600	\$34,047	\$36,090
SO3 Sorbent Injection - MC3	\$0	\$0	\$0	\$0	\$2,200	\$4,200	\$0
SO3 Sorbent Injection - MC4	\$0	\$0	\$0	\$0	\$1,400	\$5,000	\$0
Other Project Engineering Projects	\$6,862	\$3,201	\$3,201	\$2,813	\$0	\$0	\$0
<b>ECR Total</b>	<b>\$408,867</b>	<b>\$267,165</b>	<b>\$299,165</b>	<b>\$284,877</b>	<b>\$247,291</b>	<b>\$208,205</b>	<b>\$191,170</b>
<b>Special Projects</b>							
TC 2 Spares (Net)	\$80	\$11,123	\$11,123	\$11,123	\$0	\$0	\$0
Black Start	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Ohio Falls	\$4,000	\$1,799	\$1,799	\$1,006	\$2,796	\$20,827	\$21,876
<b>Special Projects Total</b>	<b>\$4,080</b>	<b>\$12,922</b>	<b>\$12,922</b>	<b>\$12,129</b>	<b>\$2,796</b>	<b>\$20,827</b>	<b>\$22,876</b>
<b>Total Capital (107001) - US GAAP</b>	<b>\$568,515</b>	<b>\$400,633</b>	<b>\$474,300</b>	<b>\$406,863</b>	<b>\$267,849</b>	<b>\$240,032</b>	<b>\$222,046</b>
IFRS Adjustments (Including Cash Adj)	\$495	(\$4,760)	(\$4,760)	\$22,214	\$4,673	\$31,915	\$10,960
<b>Total IFRS (Cash)</b>	<b>\$569,010</b>	<b>\$395,873</b>	<b>\$469,540</b>	<b>\$429,078</b>	<b>\$272,522</b>	<b>\$271,947</b>	<b>\$233,006</b>

## 2009-2012 Capital Reconciliation – IFRS Cash Basis (\$000)

	2009 <i>Forecast</i>	2010 <i>Budget</i>	2011 <i>Plan</i>	2012 <i>Plan</i>
Current Plan	\$429,078	\$272,522	\$271,947	\$233,006
Contingency Plan	\$469,540			
Prior Plan		\$235,821	\$242,129	\$346,266
Variance	<u>\$40,463</u>	<u>(\$36,701)</u>	<u>(\$29,819)</u>	<u>\$113,259</u>
<i>Variance Explanations</i>				
TC 2 (Net)	\$7,760	(\$24,666)	\$597	\$0
TC 2 Spares (Net)	\$8,370	(\$8,370)	\$0	\$0
Brown FGD	\$327	\$91	(\$37,784)	\$0
Ghent FGD	\$24,571	(\$6,592)	(\$2,700)	\$0
Brown 3 SCR	(\$1,959)	(\$3,525)	\$21,691	\$876
Brown CCP	\$4,927	(\$3,953)	\$920	\$663
Cane Run CCP	(\$279)	\$1,918	(\$2,278)	\$3,947
Ghent CCP	(\$2,235)	\$5,056	(\$572)	(\$4,252)
Trimble County CCP (Net)	(\$3,245)	(\$7,747)	(\$5,821)	\$5,510
SO3 Sorbent Injection - MC3	\$0	(\$1,833)	\$1,704	\$117
SO3 Sorbent Injection - MC4	\$0	(\$1,167)	\$1,037	\$117
Ohio Falls	\$2,554	\$10,281	(\$2,980)	(\$4,998)
Combined Cycle CT 2017	(\$264)	\$3,806	(\$3,633)	\$111,033
Combined Cycle CT 2022	\$0	\$0	\$0	\$1,247
Black Start	\$0	\$0	\$0	(\$1,000)
Other Project Engineering Projects	(\$65)	\$0	\$0	\$0
Total Variance	<u>\$40,463</u>	<u>(\$36,701)</u>	<u>(\$29,819)</u>	<u>\$113,259</u>

## 2009-2012 Project Engineering Capital Sensitivities (\$000)

<u>Project</u>	<u>2009 Forecast</u>	<u>2010 Budget</u>	<u>2011 Plan</u>	<u>2012 Plan</u>
<b>Sensitivities</b>				
<i>Renewables - Bio Mass (Co-firing 500 MW Nominal)</i>	\$200	\$13,000	\$40,000	\$37,000
<i>Renewables - Landfill Gas</i>	\$200	\$19,000	\$32,000	\$0
<i>Ghent 2 SCR</i>	\$0	\$0	\$0	\$15,437
<i>Cooling Tower - Cane Run</i>	\$0	\$0	\$0	\$122
<i>Cooling Tower - Mill Creek</i>	\$0	\$0	\$0	\$122
<b>Total Capital Sensitivities (107001) - US GAAP</b>	\$400	\$32,000	\$72,000	\$52,680
<i>IFRS Adjustments (Including Cash Adj)</i>	(\$33)	(\$2,633)	(\$667)	(\$1,057)
<b>Total IFRS (Cash) Sensitivities</b>	<u>\$367</u>	<u>\$29,367</u>	<u>\$71,333</u>	<u>\$51,623</u>

- *Bio Mass cash flow is very preliminary and shown for a 2011 and 2013 implementation.*



## 2008-2012 Project Engineering Other Costs (\$000)

<u>Project</u>	<u>2008 Actual</u>	<u>2009 Budget</u>	<u>2009 Contingency Plan</u>	<u>2009 Forecast</u>	<u>2010 Budget</u>	<u>2011 Plan</u>	<u>2012 Plan</u>
<b>Other Balance Sheet</b>							
<i>Mercury Compliance Strategy Development</i>	\$0	\$500	\$500	\$300	\$700	\$0	\$0
<b>Other Balance Sheet Total - US GAAP</b>	\$0	\$500	\$500	\$300	\$700	\$0	\$0
<i>IFRS Adjustments (Including Cash Adj)</i>	\$0	(\$42)	(\$42)	(\$25)	\$25	\$0	\$0
<b>Other Balance Sheet Total IFRS (Cash)</b>	\$0	\$458	\$458	\$275	\$725	\$0	\$0

## *Risks and Sensitivities*

### *Capital*

- *TC2 contains no dollars for contingency issues such as extended start-up and commissioning time, increased fuel & consumables cost or future Bechtel claims.*
- *All CCP projects are cash flowed in agreement with the ECR filing and based on expected duration of permitting. Any extension of time necessary to get permits has the potential to significantly impact the cash flows of the affected projects.*
- *Timing and investments for pending environmental regulations, for issues such as controls for Mercury or PM2.5 air emissions, are not included in this plan (i.e. WESPs).*

## 2008-2012 Headcount (FTE) & Safety

Project Engineering - Position	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
Director	1	1	1	1	1	1	1
Managers - Major Capital Projects	3	4	4	3	3	3	3
Procurement Manager	1	1	1	1	1	1	1
HR/IR Manager	1	1	1	1	1	1	1
Contract Administrator	1	1	1	1	1	1	1
Engineers - Lead	4	4	4	4	4	4	4
Engineers - Chemical	1	1	1	1	1	1	1
Engineers - Civil	3	3	3	3	3	3	3
Engineers - Electrical	2	2	2	2	2	2	2
Engineers - Mechanical	2	2	2	2	2	2	2
Project Coordinators	16	16	16	16	16	16	16
Safety Specialists	3	3	3	3	3	3	3
Project Manager Admin Assistants	2	2	2	2	2	2	2
Staff Admin Assistants	2	2	2	2	2	2	2
Coop/Intern Student	5	4	4	6	5	5	5
<b>Total</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>48</b>	<b>47</b>	<b>47</b>	<b>47</b>
<i>Project Engineering Contracted Staff</i>	<i>16</i>	<i>16</i>	<i>16</i>	<i>16</i>	<i>10</i>	<i>1</i>	<i>0</i>
Safety IR Target					1.50	1.50	1.50

- PE's Headcount remains consistent through the 2010 MTP even though large projects such as TC2 and the FGDs will be completed during this period. This is due to reducing the number of contracted staff from the current 16 to 7 by the end of 2010 (2010 average is 10), to 1 by the end of 2011 and to zero in 2012.
- Brown FGD site team to stay on the Brown SCR through 2012.
- TC 2 and Ghent FGD teams to manage new CCP Projects at Ghent, Trimble and Cane Run, as well as the Ohio Falls rehabilitation project which was not in Project Engineering's 2009 MTP.

## 2009-2012 Headcount Changes

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget /Plan	47	47	47
Prior Year	48	47	47
Variance	<u>(1)</u>	<u>0</u>	<u>0</u>
<i>Variance Explanations</i>			
Coop/Intern Student	(1)		
Total Variance	<u>(1)</u>	<u>0</u>	<u>0</u>

**Capital Review - Trimble County 2 (Generation Scope Only)**

**Project Engineering  
2010-2012 MTP**

IFRS (Excluding Cap. Interest), \$Millions

Sanction Comparison

	<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
Sanction Comparison - Gross	\$1,146	\$1,056	(\$90)
Sanction Comparison - Net	\$867	\$800	(\$67)

MTP Comparison - Net

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>
2009 MTP Before Fuel & Power Credit	\$715	\$98	\$42	\$1	\$0	\$855
2009 MTP Commission & Start Up Consumables	\$0	\$23	\$53	\$0	\$0	\$76
2009 MTP Power Credit	<u>\$0</u>	<u>\$0</u>	<u>(\$78)</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$78)</u>
2009 MTP Total	\$715	\$120	\$17	\$1	\$0	\$853
2009 MTP Target	\$669	\$169	\$14	\$1	\$0	\$853
2010 MTP Before Fuel & Power Credit	\$664	\$159	\$43	\$0	\$0	\$866
2010 MTP Commission & Start Up Consumables	\$0	\$2	\$33	\$0	\$0	\$35
2010 MTP Power Credit	<u>\$0</u>	<u>\$0</u>	<u>(\$34)</u>	<u>\$0</u>	<u>\$0</u>	<u>(\$34)</u>
2010 MTP Total	\$664	\$161	\$42	\$0	\$0	\$867
Variance to 2009 MTP	\$51	(\$41)	(\$25)	\$1	\$0	(\$14)
Variance to 2009 MTP Target	\$5	\$8	(\$28)	\$1	\$0	(\$14)

Key Messages

- Current expected PRB cost is \$11M net.
- Numbers are net IMPA/IMEA.

**Capital Review - Trimble County 2 (Generation Scope Only)**

**Project Engineering  
2010-2012 MTP**

**IFRS (Excluding Cap. Interest), \$Millions**

Key Drivers to Sanction - Net	Pre-2009	2009	2010	Total
Hexavalent Chromium - Change in Law	\$0	\$4	\$0	\$4
Bechtel Labor Settlement	\$0	\$10	\$18	\$28
Bechtel Misc Change Orders	\$2	\$5	\$0	\$8
PRB	\$0	\$11	\$0	\$11
Fuel Blend	\$0	\$14	\$0	\$14
Property Tax	\$1	\$1	\$0	\$2
Increase/Decrease in AFUDC	\$1	(\$1)	(\$0)	(\$0)
<b>Total w/out Fuel and Power credit</b>	<b>\$4</b>	<b>\$44</b>	<b>\$18</b>	<b>\$66</b>
Fuel Costs	\$0	\$2	\$33	\$35
Power Credit	\$0	\$0	(\$34)	(\$34)
<b>Total Fuel and Power Credit</b>	<b>\$0</b>	<b>\$2</b>	<b>(\$1)</b>	<b>\$1</b>
<b>Grand total with Fuel and Power Credit</b>	<b>\$4</b>	<b>\$47</b>	<b>\$16</b>	<b>\$67</b>

**Capital Review - KU FGD's**

**Project Engineering  
2010-2012 MTP**

IFRS (Excluding Cap. Interest), \$Millions  
Sanction Comparison

<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
\$1,178	\$1,182	\$4

MTP Comparison

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>
2009 MTP	\$826	\$233	\$113	\$10	\$0	\$1,182
2009 MTP Target	\$775	\$235	\$137	\$35	\$0	\$1,182
2010 MTP	<u>\$773</u>	<u>\$235</u>	<u>\$119</u>	<u>\$51</u>	<u>\$0</u>	<u>\$1,178</u>
Variance to 2009 MTP	\$54	(\$2)	(\$7)	(\$40)	\$0	\$4
Variance to 2009 MTP Target	\$3	(\$0)	\$17	(\$16)	\$0	\$4

Key Messages

- Variance to sanction is due to removal of AFUDC from the forecast.

## Capital Review - Brown 3 SCR

## Project Engineering 2010-2012 MTP

IFRS (Excluding Cap. Interest), \$Millions

### Sanction Comparison

<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
\$168	\$185	\$18

### MTP Comparison

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$2	\$0	\$18	\$84	\$70	\$11	\$185
2009 MTP Target	\$2	\$2	\$16	\$84	\$70	\$11	\$185
2010 MTP	\$1	\$2	\$22	\$62	\$70	\$11	\$168
Variance to 2009 MTP	\$1	(\$2)	(\$4)	\$22	\$1	\$0	\$18
Variance to 2009 MTP Target	\$1	\$0	(\$6)	\$22	\$1	\$0	\$18

### Key Messages

- Variance to sanction is due to removal of AFUDC from the forecast and a \$15M reduction in 2012 due to anticipated responses to the EPC request for quotations.



## Capital Review - Brown Ash Pond Phase I, II & III

## Project Engineering 2010-2012 MTP

### IFRS (Excluding Cap. Interest), \$Millions Sanction Comparison

	<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
Phase I	\$69	\$73	\$4
Phase II	\$25	\$25	\$0

- Currently there is no sanction for Phase III.

### MTP Comparison

Phase I	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$43	\$8	\$18	\$1	\$0	\$0	\$69
2009 MTP Target	\$38	\$8	\$23	\$1	\$0	\$0	\$69
2010 MTP	\$40	\$8	\$22	\$0	\$0	\$0	\$69
Variance to 2009 MTP	\$3	(\$0)	(\$4)	\$1	\$0	\$0	\$0
Variance to 2009 MTP Target	(\$2)	\$0	\$1	\$1	\$0	\$0	\$0

Phase II	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$0	\$0	\$8	\$11	\$10	\$22	\$49
2010 MTP	\$0	\$0	\$8	\$10	\$7	\$0	\$25
Variance	\$0	\$0	(\$0)	\$0	\$3	\$22	\$25

Phase III	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$0	\$0	\$0	\$0	\$0	\$104	\$104
2010 MTP	\$0	\$0	\$0	\$0	\$2	\$108	\$110
Variance	\$0	\$0	\$0	\$0	(\$2)	(\$4)	(\$6)

Total	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$43	\$8	\$26	\$11	\$10	\$125	\$222
2009 MTP Target	\$38	\$8	\$31	\$11	\$10	\$125	\$222
2010 MTP	\$40	\$8	\$30	\$10	\$9	\$108	\$204
Variance to 2009 MTP	\$3	(\$0)	(\$4)	\$1	\$1	\$18	\$18
Variance to 2009 MTP Target	(\$2)	\$0	\$1	\$1	\$1	\$18	\$18

### Key Messages

- Elevation 928 was included in Phase II of the 2009 MTP, it is included in Phase III of the 2010 MTP.
- Phase II cash flows agree to 2009 ECR filing.

## Capital Review - Cane Run CCP Phase I

## Project Engineering 2010-2012 MTP

IFRS (Excluding Cap. Interest), \$Millions  
Sanction Comparison

<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
\$19	\$19	\$0

### MTP Comparison

<u>Phase I</u>	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$0	\$1	\$3	\$5	\$9	\$0	\$19
2010 MTP	\$0	\$2	\$1	\$7	\$5	\$3	\$19
Variance	\$0	(\$0)	\$2	(\$2)	\$4	(\$3)	\$0

### Key Messages

- In service date is 2012, but capital spend will continue through 2014.
- Cash flows agree to 2009 ECR filing in total.

## Capital Review - Ghent CCP Phase I

## Project Engineering 2010-2012 MTP

IFRS (Excluding Cap. Interest), \$Millions  
Sanction Comparison

<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
\$205	\$205	\$0

### MTP Comparison

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
<b>Phase I</b>							
2009 MTP	\$1	\$2	\$22	\$68	\$77	\$28	\$198
2009 MTP Target	\$1	\$4	\$20	\$68	\$77	\$28	\$198
2010 MTP	\$1	\$4	\$17	\$69	\$81	\$32	\$205
Variance to 2009 MTP	\$0	(\$2)	\$5	(\$1)	(\$4)	(\$5)	(\$6)
Variance to 2009 MTP Target	\$0	(\$0)	\$3	(\$1)	(\$4)	(\$5)	(\$6)

### Key Messages

- Values shown above are based on Scenario 37 (landfill).
- In service date is 2014, but capital spend will continue through 2017.
- Cash flows agree to 2009 ECR filing.
- The Ghent Gypsum fines project scope has been incorporated into the overall Ghent CCP project.

## Capital Review - Trimble County CCP BAP/GSP, Phase I Landfill & Holcim Barge Loading

IFRS (Excluding Cap. Interest), \$Millions

### Sanction Comparison

	<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
BAP/GSP	\$25	\$25	\$0

### MTP Comparison

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
BAP/GSP							
2009 MTP	\$2	\$4	\$11	\$0	\$0	\$0	\$18
2009 MTP Target	\$2	\$7	\$11	\$0	\$0	\$0	\$21
2010 MTP	\$0	\$8	\$17	\$0	\$0	\$0	\$25
Variance to 2009 MTP	\$2	(\$3)	(\$6)	\$0	\$0	\$0	(\$7)
Variance to 2009 MTP Target	\$2	(\$0)	(\$6)	\$0	\$0	\$0	(\$4)

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
Phase I Landfill							
2009 MTP	\$0	\$2	\$6	\$27	\$43	\$24	\$101
2009 MTP Target	\$0	\$1	\$4	\$27	\$43	\$24	\$98
2010 MTP	\$1	\$1	\$0	\$32	\$38	\$0	\$73
Variance to 2009 MTP	(\$1)	\$1	\$5	(\$6)	\$6	\$24	\$29
Variance to 2009 MTP Target	(\$1)	\$0	\$3	(\$6)	\$6	\$24	\$26

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
Holcim Barge Loading							
2009 MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010 MTP	\$0	\$1	\$7	\$0	\$0	\$0	\$8
Variance	\$0	(\$1)	(\$7)	\$0	\$0	\$0	(\$8)

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
Total							
2009 MTP	\$2	\$6	\$17	\$27	\$43	\$24	\$119
2009 MTP Target	\$2	\$8	\$15	\$27	\$43	\$24	\$119
2010 MTP	\$2	\$9	\$25	\$32	\$38	\$0	\$106
Variance to 2009 MTP	\$0	(\$3)	(\$8)	(\$6)	\$6	\$24	\$13
Variance to 2009 MTP Target	\$0	(\$1)	(\$10)	(\$6)	\$6	\$24	\$13

### Key Messages

- All numbers are net IMPA/IMEA.

October 6, 2009 BAP/GSP and Landfill Phase I cash flows agree to 2009 ECR filing in total.

## Capital Review - Ohio Falls

## Project Engineering 2010-2012 MTP

IFRS (Excluding Cap. Interest), \$Millions  
Sanction Comparison

<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
\$109	\$76	(\$33)

### MTP Comparison

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$28	\$4	\$13	\$16	\$17	\$16	\$94
2009 MTP Target	\$28	\$2	\$14	\$16	\$17	\$16	\$93
2010 MTP	<u>\$29</u>	<u>\$1</u>	<u>\$3</u>	<u>\$19</u>	<u>\$22</u>	<u>\$35</u>	<u>\$109</u>
Variance to 2009 MTP	(\$2)	\$3	\$10	(\$3)	(\$5)	(\$18)	(\$15)
Variance to 2009 MTP Target	(\$2)	\$1	\$11	(\$3)	(\$5)	(\$18)	(\$16)

### Key Messages

- Above figures do not include removal cost of \$1.8M Pre-2009, \$6.7M 2010-2012 and \$7.7M post 2012.
- Cash flows are based on station provided estimates.
- 2010 MTP reflects upgrades to two units per year in 2011, 2012 and 2013 compared to the 2009 MTP of one unit per year.

## Capital Review - Combined Cycle CT 2017

## Project Engineering 2010-2012 MTP

### IFRS (Excluding Cap. Interest), \$Millions Sanction Comparison

- No sanction to date other than initial \$4M, for up-front engineering.

### MTP Comparison

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Post 2012</u>	<u>Total</u>
2009 MTP	\$3	\$7	\$6	\$7	\$119	\$672	\$814
2009 MTP Target	\$3	\$0	\$7	\$13	\$119	\$672	\$814
2010 MTP	<u>\$3</u>	<u>\$0</u>	<u>\$2</u>	<u>\$11</u>	<u>\$8</u>	<u>\$795</u>	<u>\$818</u>
Variance to 2009 MTP	\$0	\$7	\$4	(\$4)	\$111	(\$123)	(\$5)
Variance to 2009 MTP Target	\$0	(\$0)	\$5	\$2	\$111	(\$123)	(\$5)

### Key Messages

- The Combined Cycle CT 2017 was modeled on a 533MW (summer, net) plant.
- The 2010 MTP assumes a 2011 land purchase whereas the 2009 MTP assumed a land purchase in 2010.
- The date for a CCN filing will have to be re-visited for a 2017 in-service.

# Appendix

## *Major Assumptions (PE Related Assumptions in Bold)*

### 1. Regulatory

- 1.1 The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.
- 1.2 Target Reserve Margin of 14%, within a range of 12%-14%.
  - No reserve margin purchases are planned.
- 1.3 Reserve sharing is modeled under the TVA/EKPC ALTERNATIVE (~ 200 MW).

### 2. Expansion/Capacity

- 2.1 Tyrone will be back in active status at 10/1/2011.
- 2.2 **TC2 will be in commercial operations June 30, 2010 (the contract effective date is June 15<sup>th</sup>). Initial reliability expected to be lower than normal for the first year which has been reflected in the EFOR system target.**
- 2.3 OMU has provided termination notice (effective May 2010), therefore that supply is removed after May 2010.
- 2.4 **The six Ohio Falls units still to be rehabilitated will be staged two units per year 2011-2013.**
- 2.5 **A combined cycle unit (533 Mw Net) will be installed in 2017.**
- 2.6 **Landfill gas projects are a sensitivity, not included in the base MTP.**
- 2.7 **Biomass co-firing projects for 2 units are a sensitivity, not included in the base MTP.**
- 2.8 Wind power purchase agreements are not included in the base MTP.



## *Major Assumptions (PE Related Assumptions in Bold)*

### 2. Expansion/Capacity (Continued)

- 2.9 **Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2013.**
- 2.10 **Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.**
- **No units are being retired in the plan.**
- 2.11 **Ghent 4 ID fan replacement takes place in the Fall, 2010.**

### 3.1 Coal Combustion By-Products (CCP)

- 3.1 **The 2009 ECR Filing will be approved by the KSPC along with the CCN filing for the Landfills and the Brown 3 SCR by the end of 2009.**
- 3.2 **Trimble County Bottom Ash Pond extension will be substantially completed by Spring, 2010. Trimble County Gypsum Pond will be completed by late 2010.**
- 3.3 **Trimble County Landfill Phase I will be substantially completed by 2014, with significant O&M starting in 2013.**
- **Holcim off-takes are included, as well as the barge load-out facility.**
- 3.4 **Brown Ash Pond Phase 2 will be completed by late 2012.**
- 3.5 **Ghent landfill Phase 1 will be completed by 2014, with significant O&M starting in 2013.**
- **Ghent Trans Ash contract will remove 1.5 million tons of gypsum between 2010 and 2011 (hauling costs included in 2010 MTP).**
- 3.6 **Cane Run Landfill Phase 1 will be completed in 2012 with significant O&M starting in 2012.**
- 3.7 **All CCP Capital Projects use an annual escalation rate of 6.0%.**
- 3.8 **Source for Ghent, Trimble, and Cane Run Landfill Capital and O&M is the "RS Means 2008 Heavy Construction Cost Data."**

## *Major Assumptions (PE Related Assumptions in Bold)*

### **4. Environmental (other than CCP)**

4.1 CAIR compliance will stay in effect.

4.2 Mercury MACT regulations are expected in 2010, with compliance in 2015.

- No mercury specific capital is in the MTP or LTP, only technology studies are included.

4.3 The Brown 3 SCR will be in-service in the fourth quarter of 2012.

- Operating parameters under the consent decree will be very tight for Brown 3.

4.4 The Ghent 2 SCR that was in the 2009 LTP has been removed (shown as sensitivity). Based on forward NO<sub>x</sub> prices, it is not currently economical to build that SCR during the MTP/LTP period.

4.5 The Brown FGD will go in-service for Unit 3 in May 2010 and Units 1 & 2 in November 2010. (Reliability impacts are expected from fuel switching and new equipment quality and have been reflected in the EFOR targets).

4.6 FGD renovations at Cane Run and Mill Creek.

- Cane Run FGD structural evaluation is complete.
- The detailed engineering study for Cane Run FGD life extension is scheduled to be completed by November of this year.
- Mill Creek detailed condition studies are complete, with preliminary designs, constructability study, and price estimates finished.
- Significant capital dollars will be required but appears favorable compared to new build of Wet FGD.

## Major Assumptions (PE Related Assumptions in Bold)

### 4. Environmental (Continued)

4.7 CO<sub>2</sub> emissions are regulated beginning in 2013, ramping up through 2015.

- Production model pricing based on “climate concerns scenario”.
- Carbon price per metric short ton: \$4.87 in 2013, \$9.74 in 2014, and \$14.61 in 2015.
- \$1.0 million for RFP work related to renewable sources is included as expense in 2010 (in the development budget).
- No funds for carbon offsets are included.

4.8 **SO<sub>3</sub> mitigation is in place on all SCR units except Mill Creek 3 and 4, which are scheduled for commercial operation by summer 2011.**

- **The Brown 3 SCR project includes SO<sub>3</sub> mitigation.**

4.9 Neither the STAR program in Jefferson County nor the state air toxics program are expected to have an impact on facility emissions controls.

4.10 The regional Haze Rule (BART) modeling completed in 2007 revealed impacts on national park visibility.

- The state has agreed to SO<sub>3</sub> mitigation for Mill Creek 3 and 4, and Region IV is also expected to approve this as well.
- The wet ESP from the 2008 LTP was removed due to no current regulatory requirement. It is a sensitivity.

4.11 **No significant impacts from Clean Water Act 316(a) are in the base MTP; however, cooling towers for Cane Run 4-6 and Mill Creek 1 are a sensitivity in the 2013/2014 timeframe.**

## Major Assumptions (PE Related Assumptions in Bold)

### 5. Operational and Other

5.1 Annual escalation rates for non-employee labor are as follows:

- Contract/services labor: 2.5% for general, 5.0% for highly skilled (welders).
- Chemicals: 6.0% for specialty (GE Betz), 8.0% for commodity (Univar).
- Fuels and additives 2.0%, copper 2.5%, boiler tubing 5.0%.
- Steel 5.0% for light, heavy, and non-fabricated, 4.0% for fabricated.

5.2 By the end of the MTP period, planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years.

5.3 Due to increased starts and run-times, the CT service cycles are beginning to require significant investments in the current plan.

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense) vs. new parts (capital).
- Number of Trimble units undergoing the hot gas path inspection include one in 2010, two in 2011, two in 2012, and the final one in 2013.
- Paddy's Run 13 major outage is scheduled for 2011, though driven by current conditions of the unit, not increased run-times.

5.4 Significant generator rewind/stator rewind dollars are included in the 2011-2016 timeframe.

- Brown 3 generator rewind in 2012, spare stator bars ordered and received for all Ghent and Mill Creek units, and TC 1 between 2011 - 2016.

5.5 Significant corrosion fatigue inspection dollars are included in the 2010 MTP (Mill Creek 1 & 2, Green River 3, Brown 1 & 3, Ghent 2 and Cane Run 4 & 6).

- Any needed repairs are not included.

5.6 The plan includes \$2M capital for NERC Cyber Security resolution (four plants, \$0.5M each).

5.7 The FutureGen expense is \$5M each year.



*Energy Marketing*

*2010-2012 MTP*

*October, 2009*

*Executive Summary*

- *Key Objectives* *p. 3*
- *Strategy* *p. 4*
- *Key Issues* *p. 5*

*Financial Performance*

- ÿ *OSS Margin* *p. 6*
- ÿ *OSS Revenues and Volumes* *p. 7*
- ÿ *O&M Reconciliation* *p. 8*
- ÿ *O&M* *p. 9*
- ÿ *Capital* *p. 10*
- ÿ *Headcount* *p. 11*
- Appendix* *p. 12-18*

## *Key Objectives*

- Optimize the utilization of existing assets to provide reliable, low cost energy.*
- Procure coal and gas necessary to cost-effectively operate generating plants.*
- Provide high quality analysis to enhance decision-making.*
- Develop and maintain infrastructure to support significant business information needs.*
- Enhance processes required to meet reliability standards.*
- Improve analysis capability & knowledge related to retail customer energy usage to support energy efficiency efforts.*

## Strategy

- *Utilize financial and physical trading instruments to manage risk and meet financial targets.*
- *Maintain focus on changing rules and regulations to ensure reliable supply and optimal financial performance with dynamic market rule changes.*
- *Maintain a diversified portfolio of coal supply.*
- *Pursue opportunities to improve operational and analytical performance.*
- *Provide information and analysis to improve decision quality within Energy Services and E.ON U.S.*



## *Key Issues*

- Developing trading “tools” to enable the hedging of off-peak, weekend and excess CT energy.*
- Managing uncertainty of commodity prices, native load and generation unit performance.*
- Uncertainty of future emissions regulations.*
- Recruiting quality people to fill open positions.*

## 2008-2012 OSS Margin (\$000)

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Volumes (GWh)</i>	3,142	1,482	1,482	662	1,380	2,593	2,284
<i>Achieved Price 5x 16</i>	\$ 51.13	\$ 67.40	\$ 67.40	\$ 39.96	\$ 45.06	\$ 47.39	\$ 49.34
<i>Achieved Price (Around the Clock)</i>	\$ 46.62	\$ 49.67	\$ 49.67	\$ 38.41	\$ 43.60	\$ 45.71	\$ 47.75
<i>Revenue External</i>	\$ 146,466	\$ 73,611	\$ 73,611	\$ 25,428	\$ 60,173	\$ 118,521	\$ 109,053
<i>Net Hedging</i>	\$ 3,744	\$ -	\$ -	\$ 10,456	\$ -	\$ -	\$ -
<i>less Cost of Generation</i>	\$ 90,159	\$ 44,008	\$ 44,008	\$ 17,826	\$ 36,225	\$ 68,050	\$ 63,256
<i>less Other (ECR, Transmission ...)</i>	\$ 15,511	\$ 10,175	\$ 10,175	\$ 2,847	\$ 11,498	\$ 22,947	\$ 21,626
<i>plus Corporate Adjustment</i>	\$ -	\$ -	\$ -	\$ -	\$ 3,000	\$ 5,000	\$ 5,000
<i>OSS Margin</i>	<u>\$ 44,540</u>	<u>\$ 19,428</u>	<u>\$ 19,428</u>	<u>\$ 15,211</u>	<u>\$ 15,450</u>	<u>\$ 32,524</u>	<u>\$ 29,171</u>
<i>EEl Earnings</i>	\$ 29,549	\$ 28,078	\$ 28,078	\$ 434	\$ 4,557	\$ 6,052	\$ 10,517

## 2008-2012 OSS Revenues and Volumes (\$000)

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Volumes (GWh)</i>							
5x 16	1,531	460	460	332	658	1,277	1,061
7x 8	931	580	580	133	77	370	359
2x 16	680	442	442	197	645	946	864
Total	3,142	1,482	1,482	662	1,380	2,593	2,284
<i>Achieved Price (\$/MWh)</i>							
5x 16	\$ 51.13	\$ 67.40	\$ 67.40	\$ 39.96	\$ 45.06	\$ 47.39	\$ 49.34
7x 8	\$ 38.99	\$ 37.72	\$ 37.72	\$ 35.26	\$ 41.90	\$ 40.10	\$ 40.71
2x 16	\$ 46.91	\$ 46.91	\$ 46.91	\$ 37.93	\$ 42.32	\$ 45.64	\$ 48.71
ATC	\$ 46.62	\$ 49.67	\$ 49.67	\$ 38.41	\$ 43.60	\$ 45.71	\$ 47.75
<i>Revenues (\$000's)</i>							
5x 16	\$ 78,279	\$ 31,002	\$ 31,002	\$ 13,266	\$ 29,651	\$ 60,511	\$ 52,355
7x 8	\$ 36,301	\$ 21,876	\$ 21,876	\$ 4,690	\$ 3,226	\$ 14,837	\$ 14,614
2x 16	\$ 31,897	\$ 20,733	\$ 20,733	\$ 7,472	\$ 27,296	\$ 43,173	\$ 42,084
	\$ 146,477	\$ 73,611	\$ 73,611	\$ 25,428	\$ 60,173	\$ 118,521	\$ 109,053
Swap Margin (\$000's)	\$ 3,744	\$ -	\$ -	\$ 10,456	\$ -	\$ -	\$ -

## 2008-2012 O&M (\$000)

<i>Energy Marketing</i>	<i>2008</i>	<i>2009</i>	<i>2009</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
<i>Actual</i>	<i>Budget</i>	<i>Contingency Plan</i>	<i>Forecast</i>	<i>Budget</i>	<i>Plan</i>	<i>Plan</i>	<i>Plan</i>
<i>Opex Expenses</i>							
<i>Raw Labor</i>	4,400	5,656	5,061	4,605	5,447	5,916	6,123
<i>Burdens</i>	3,364	4,327	4,545	4,071	4,773	5,184	5,365
<i>Dues &amp; Subscriptions</i>	289	393	393	393	454	465	476
<i>Outside Services</i>	129	578	228	183	385	394	403
<i>Education &amp; Training</i>	80	184	84	50	120	105	107
<i>Travel &amp; Meals</i>	125	507	207	120	200	204	210
<i>Other Non-labor</i>	160	126	78	88	99	102	106
<i>Cost Reduction</i>	-	(500)	-	-	-	-	-
<i>Cost Recovery from BREC</i>	-	-	-	-	-	-	-
<i>Total Items Affecting US GAAP EBIT</i>	<u>8,547</u>	<u>11,271</u>	<u>10,596</u>	<u>9,510</u>	<u>11,478</u>	<u>12,370</u>	<u>12,790</u>
<i>Total IFRS Adjustments</i>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<i>Total Items Affecting IFRS EBIT</i>	<u><u>8,547</u></u>	<u><u>11,271</u></u>	<u><u>10,596</u></u>	<u><u>9,510</u></u>	<u><u>11,478</u></u>	<u><u>12,370</u></u>	<u><u>12,790</u></u>

## 2009-2012 O&M Reconciliation - IFRS (\$000)

Energy Marketing	2010 MTP		
<b>2010 MTP vs. 2010 TARGET</b>	<u>2010</u>	<u>2011</u>	<u>2012</u>
2010 MTP	11,478	12,370	12,790
2010 Target	11,108	13,037	13,463
Fav (Unfav) Variance	<u>(370)</u>	<u>667</u>	<u>673</u>
5 headcount open in '09 for savings. Staggered hiring in '10.	(337)	(715)	(740)
Gen Planning 6% Loc Eng in 2011('09 MTP) to 0% in 2011 ('10 MTP).	-	(87)	(90)
Other	(33)	(31)	3
Remove 2009 Corporate Savings target from 2011 and 2012		1,500	1,500
	<u>(370)</u>	<u>667</u>	<u>673</u>

## 2008-2012 Capital (Excluding COR) (\$000)

<i>Project</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>Expansion Plan</b>	-	-	-	-	-	-	-
<b>ECR</b>	-	-	-	-	-	-	-
<b>Ongoing Capital</b>	-	-	-	-	-	-	-
<b>Special Projects</b>							
<i>Process Improvements</i>	-	150	150	150	250	250	250
<i>Budgetworx</i>	185	150	150	150			
<b>Total Capital (107001)</b>	<u>185</u>	<u>300</u>	<u>300</u>	<u>300</u>	<u>250</u>	<u>250</u>	<u>250</u>
<i>IFRS Adjustments</i>	-	-	-	-	-	-	-
<b>Total IFRS</b>	<u>185</u>	<u>300</u>	<u>300</u>	<u>300</u>	<u>250</u>	<u>250</u>	<u>250</u>

## 2008-2012 Headcount (FTE)

<i>Department</i>	<i>2008 Year End</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>SVP on Assignment *</i>	1	1	1	1	1	-	-
<i>Executive Management</i>	2	2	2	2	2	2	2
<i>Regulated Trading</i>	25	27	27	27	27	27	27
<i>Non-regulated Trading</i>	7	6	6	6	6	-	-
<i>Energy Planning &amp; Analysis</i>	22	29	23	23	28	28	28
<i>Business Information</i>	4	4	4	4	4	4	4
<i>Energy Marketing</i>	61	69	63	63	68	61	61
<i>Fuels</i>	16	15	15	15	15	15	15
<i>Energy Marketing &amp; Fuels</i>	77	84	78	78	83	76	76

\*Moved to Other Generation in 2011.

# Appendix



## 2008-2012 OSS Margin (\$000)

	2008 Actual	2009 Budget	7+5 2009 Forecast	2009 MTP 2010	2010 MTP		
					2010	2011	2012
OSS Margin	51,483	22,989	18,746	33,339	15,577	32,400	28,550
Transmission Expense (Internal)	6,943	3,561	3,535	5,096	3,127	4,876	4,379
Stretch	-	-		5,000	3,000	5,000	5,000
Total OSS Margin	<u>44,540</u>	<u>19,428</u>	<u>15,211</u>	<u>33,243</u>	<u>15,450</u>	<u>32,524</u>	<u>29,171</u>

### 2009 MTP

Modeled OSS Margin for 2010 and 2011	28,243	40,992
Stretch	5,000	5,000
MTP Margin	<u>33,243</u>	<u>45,992</u>

### Generation Volume GWh

On-peak	1,531	460	332	850	658	1,277	1,061
Off-peak	931	580	133	801	77	370	359
Weekend	680	442	197	638	645	946	864

## 2009-2012 O&M Reconciliation - IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	11,478	12,370	12,790
Prior Year	9,510	11,478	12,370
Variance	<u>1,968</u>	<u>892</u>	<u>420</u>

Note: 2009 = 2009 7+5 Forecast

### Variance Explanations

Labor - Hiring for positions open during 2009	1,527	378	-
Higher outside services spending in 2010	202		
Higher dues, training and travel in 2010	211		
Other Non-labor	28		
Merit Increase		357	388
Non-labor inflation increase		157	32
Total Variance	<u>1,968</u>	<u>892</u>	<u>420</u>

## 2008-2012 O&M (\$000)

<u>Line of Business</u>	<u>2008 Actual</u>	<u>2009 Budget</u>	<u>2009 Contingency Plan</u>	<u>2009 Forecast</u>	<u>2010 Budget</u>	<u>2011 Plan</u>	<u>2012 Plan</u>
Energy Marketing	8,547	11,271	10,596	9,510	11,478	12,370	12,790
Total Items Affecting US GAAP EBIT	<u>8,547</u>	<u>11,271</u>	<u>10,596</u>	<u>9,510</u>	<u>11,478</u>	<u>12,370</u>	<u>12,790</u>
Total IFRS Adjustments	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total Items Affecting IFRS EBIT	<u><u>8,547</u></u>	<u><u>11,271</u></u>	<u><u>10,596</u></u>	<u><u>9,510</u></u>	<u><u>11,478</u></u>	<u><u>12,370</u></u>	<u><u>12,790</u></u>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

Note: Detail Non opps 2008 & 2009 for storm cost (IFRS)

*2009-2012 Capital Reconciliation –IFRS Cash Basis (\$000)*

	<i>2010</i>	<i>2011</i>	<i>2012</i>
	<i>Budget</i>	<i>Plan</i>	<i>Plan</i>
	<hr/>	<hr/>	<hr/>
<i>Current Plan</i>	250	250	250
<i>Prior Plan</i>	250	250	250
<i>Variance</i>	-	-	-
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
 <i><u>Variance Explanations</u></i>			
<i>No changes</i>			
 <i>Total Variance</i>	 -	 -	 -
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

## 2009-2012 Headcount Changes

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	83	76	76
Prior Year	78	83	76
Variance	<u>5</u>	<u>(7)</u>	<u>-</u>
 <u>Variance Explanations</u>			
Fill Positions held open to reach '09 savings	5		
SVP returning from assignment to Other Gen.		(1)	
Non-reg Traders - end of Dispatch Agreement		(6)	
Total Variance	<u>5</u>	<u>(7)</u>	<u>-</u>

*2009-2012 O&M Reconciliation - IFRS (\$000)*

Corporate Fuels

2010 MTP

**2010 MTP vs. 2010 TARGET**

2010 MTP

2010 Target

Fav (Unfav) Variance

2010

3,185

3,185

-

2011

3,282

3,282

-

2012

3,392

3,392

-



*Regulated Generation / Power Production*

*2010-2012 MTP*

*October 2009*

- **Key Initiatives**
- **Major Assumptions**
- **Financial Performance**
  - **Operating Expense (O&M, BTL & Outside Services for FH & OCOS)**
  - **Cost of Sales / Gross Margin**
  - **Target Reconciliation**
  - **Headcount**
  - **Risks & Sensitivities**
  - **Operational Performance**
  - **Initiatives**
  - **Key Performance Indicators**
- **Appendix**



Area of Focus	Activities
<p><b>Safety</b></p>	<ul style="list-style-type: none"> <li>• Further advancement of the safety culture for employees and contractors building on the exceptional performance to date.</li> <li>• Relentless repetition of safety related expectations with ‘Focus on Fundamentals’.</li> <li>• Further incorporation of Wellness initiatives into Safety processes.</li> </ul>
<p><b>Workforce Development</b></p>	<ul style="list-style-type: none"> <li>• Continued focus on addressing the aging workforce issues while working within existing approved staffing levels.</li> <li>• Focus on the development of the next generation of leadership by providing training and assignment opportunities to enhance leadership skills.</li> <li>• Expanded engagement of Front Line Leaders in planning and cost monitoring.</li> <li>• Targeted training of maintenance personnel based on needs assessment.</li> </ul>
<p><b>Process Improvement and Standardization</b></p>	<ul style="list-style-type: none"> <li>• Standardization of major plant processes with consistent application of best practices, work rules and policies across the fleet.</li> <li>• Expand the utilization of plant performance metrics with focus on cost identification and controls.</li> <li>• Revamp planning format and cost accounting structure consistently across all plants.</li> <li>• Enhance communication and management of interfaces between plants and all support groups by focus on end result processes.</li> </ul>

Area of Focus	Activities
<p><b>Reliability</b></p>	<ul style="list-style-type: none"> <li>• Increased level of granularity in Outage Planning Process.</li> <li>• Expanded utilization of Predictive Maintenance Programs.</li> <li>• Increased emphasis on unit inspection process and protocols.</li> <li>• Finite development of boiler condition monitoring to determine short and long term investment requirements in order to reduce BTF related outages.</li> <li>• Implementation of efficiency monitoring programs with potential utilization of 3<sup>rd</sup> party engineering expertise.</li> <li>• Utilization of System Audits to determine short and long term investment requirements.</li> </ul>
<p><b>Environmental</b></p>	<ul style="list-style-type: none"> <li>• Active engagement with regulation/permit development and aggressively pursue appropriate permit limits.</li> <li>• Clear and concise articulation of permit requirements and process responsibilities between plants and respective support organizations.</li> <li>• Continually monitor pending and potential regulations for business impact.</li> </ul>

Area of Focus	Activities
<p><b>NERC Reliability Standards</b></p>	<ul style="list-style-type: none"> <li>• Proactive engagement in new standard development and existing standard revisions.</li> <li>• Enhanced compliance monitoring and metrics for applicable standards.</li> <li>• Aggressive promotion of a Compliance Culture.</li> </ul>
<p><b>Other Regulatory</b></p>	<ul style="list-style-type: none"> <li>• Actively support recovery of appropriate environmental costs through defined regulatory processes.</li> </ul>

## 1. Regulatory

- 1.1 The State of Kentucky remains regulated throughout the plan period and the Environmental Cost Recovery (ECR) and Fuel Adjustment Clause (FAC) remain in place.
- 1.2 Target Reserve Margin of 14%, within a range of 12%-14%.
  - No reserve margin purchases are planned.
- 1.3 Reserve sharing is modeled under the TVA/EKPC ALTERNATIVE (~ 200 MW).

## 2. Expansion/Capacity

- 2.1 Tyrone will be back in active status at 10/1/2011. Based on economic assumptions and budget planning needs, Tyrone 3 was moved out by nine months.
- 2.2 TC2 will be in commercial operations June 30, 2010 (the contract effective date is June 15<sup>th</sup>). Initial reliability expected to be lower than normal for the first year which has been reflected in the EFOR system target.
- 2.3 OMU has provided termination notice (effective May 2010), therefore that supply is removed after May 2010.
- 2.4 The six Ohio Falls units still to be rehabilitated will be staged two units per year 2011-2013.
- 2.5 A combined cycle unit (533 Mw Net) will be installed in 2017.
- 2.6 Landfill gas projects are a sensitivity, not included in the base MTP.
- 2.7 Biomass co-firing projects for 2 units are a sensitivity, not included in the base MTP.
- 2.8 Wind power purchase agreements are not included in the base MTP.

## 2. Expansion/Capacity (Continued)

- 2.9 Black start supply side capacity additions will balance any additional Group 3 retirements. Capital spending starts in 2013.
- 2.10 Group 3 retirements will be considered based on a Retire vs. Repair cost analysis if there is a failure.
- No units are being retired in the plan.
- 2.11 Ghent 4 ID fan replacement takes place in the Fall, 2010.

## 3. Coal Combustion By-Products (CCP)

- 3.1 The 2009 ECR Filing will be approved by the KSPC along with the CCN filing for the Landfills and the Brown 3 SCR by the end of 2009.
- 3.2 Trimble County Bottom Ash Pond extension will be substantially completed by Spring, 2010. Trimble County Gypsum Pond will be completed by late 2010.
- 3.3 Trimble County Landfill Phase I will be substantially completed by 2014, with significant O&M starting in 2013.
- Holcim off-takes are included, as well as the barge load-out facility.
- 3.4 Brown Ash Pond Phase 2 will be completed by late 2012.
- 3.5 Ghent landfill Phase 1 will be completed by 2014, with significant O&M starting in 2013.
- Ghent Trans Ash contract will remove 1.5 million tons of gypsum between 2010 and 2011 (hauling costs included in 2010 MTP).
- 3.6 Cane Run Landfill Phase 1 will be completed in 2012 with significant O&M starting in 2012.
- 3.7 All CCP Capital Projects use an annual escalation rate of 6.0%.
- 3.8 Source for Ghent, Trimble, and Cane Run Landfill Capital and O&M is the "RS Means 2008 Heavy Construction Cost Data."

## 4. Environmental (other than CCP)

4.1 CAIR compliance will stay in effect.

4.2 Mercury MACT regulations are expected in 2010, with compliance in 2015.

- No mercury specific capital is in the MTP or LTP, only technology studies are included.

4.3 The Brown 3 SCR will be in-service in the fourth quarter of 2012.

- Operating parameters under the consent decree will be very tight for Brown 3.

4.4 The Ghent 2 SCR that was in the 2009 LTP has been removed (shown as sensitivity). Based on forward NO<sub>x</sub> prices, it is not currently economical to build that SCR during the MTP/LTP period.

4.5 The Brown FGD will go in-service for Unit 3 in May 2010 and Units 1 & 2 in November 2010. (Reliability impacts are expected from fuel switching and new equipment quality and have been reflected in the EFOR targets).

4.6 FGD renovations at Cane Run and Mill Creek.

- Cane Run FGD structural evaluation is complete.
- The detailed engineering study for Cane Run FGD life extension is scheduled to be completed by November of this year.
- Mill Creek detailed condition studies are complete, with preliminary designs, constructability study, and price estimates finished.
- Significant capital dollars will be required but appears favorable compared to new build of Wet FGD.

## 4. Environmental (Continued)

### 4.7 CO<sub>2</sub> emissions are regulated beginning in 2013, ramping up through 2015.

- Production model pricing based on “climate concerns scenario”.
- Carbon price per metric short ton: \$4.87 in 2013, \$9.74 in 2014, and \$14.61 in 2015.
- \$1.0 million for RFP work related to renewable sources is included as expense in 2010 (in the development budget).
- No funds for carbon offsets are included.

### 4.8 SO<sub>3</sub> mitigation is in place on all SCR units except Mill Creek 3 and 4, which are scheduled for commercial operation by summer 2011.

- The Brown 3 SCR project includes SO<sub>3</sub> mitigation.

### 4.9 Neither the STAR program in Jefferson County nor the state air toxics program are expected to have an impact on facility emissions controls.

### 4.10 The regional Haze Rule (BART) modeling completed in 2007 revealed impacts on national park visibility.

- The state has agreed to SO<sub>3</sub> mitigation for Mill Creek 3 and 4, and Region IV is also expected to approve this as well.
- The wet ESP from the 2008 LTP was removed due to no current regulatory requirement. It is a sensitivity.

### 4.11 No significant impacts from Clean Water Act 316(a) are in the base MTP; however, cooling towers for Cane Run 4-6 and Mill Creek 1 are a sensitivity in the 2013/2014 timeframe.

## 5. Operational and Other

### 5.1 Annual escalation rates for non-employee labor are as follows:

- Contract/services labor: 2.5% for general, 5.0% for highly skilled (welders).
- Chemicals: 6.0% for specialty (GE Betz), 8.0% for commodity (Univar).
- Fuels and additives 2.0%, copper 2.5%, boiler tubing 5.0%.
- Steel 5.0% for light, heavy, and non-fabricated, 4.0% for fabricated.

### 5.2 By the end of the MTP period, planned outages on coal-fired units are on a 24-month cycle, with 1-week pit stop outages in alternate years.

### 5.3 Due to increased starts and run-times, the CT service cycles are beginning to require significant investments in the current plan.

- Dollars are split between O&M and capital based on the estimated scope of work that is reconditioning (expense) vs. new parts (capital).
- Number of Trimble units undergoing the hot gas path inspection include one in 2010, two in 2011, two in 2012, and the final one in 2013.
- Paddy's Run 13 major outage is scheduled for 2011, though driven by current conditions of the unit, not increased run-times.

### 5.4 Significant generator rewind/stator rewind dollars are included in the 2011-2016 timeframe.

- Brown 3 generator rewind in 2012, spare stator bars ordered and received for all Ghent and Mill Creek units, and TC 1 between 2011 - 2016.

### 5.5 Significant corrosion fatigue inspection dollars are included in the 2010 MTP (Mill Creek 1 & 2, Green River 3, Brown 1 & 3, Ghent 2 and Cane Run 4 & 6).

- Any needed repairs are not included.

### 5.6 The plan includes \$2M capital for NERC Cyber Security resolution (four plants, \$0.5M each).

### 5.7 The FutureGen expense is \$5M each year.

### 5.8 No demolition cost are included in the 2010 MTP for retired assets such as Paddy's Run coal-fired plant.



## 2008-2012 OPERATING EXPENSES (\$000)

Item	2008 Actual	2009 Budget	2009 Cont. Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
Opex Expenses							
Raw Labor	59,426	66,068	64,121	63,924	66,723	72,536	76,089
Burdens	43,325	48,202	64,407	62,410	64,465	70,357	73,669
Non labor (Outages)	24,994	33,966	29,897	31,351	30,495	51,417	42,317
Non labor (Non-outage maintenance)	55,913	47,121	46,721	55,189	62,959	66,118	68,335
Non labor O/S FH and OCOS	10,127	12,519	12,519	10,158	15,363	16,526	15,447
Non labor (Operations)	23,782	28,018	28,014	23,782	29,977	32,921	31,357
Non labor (FutureGen)	-	2,000	0	200	5,000	5,000	5,000
Subtotal OPEX for US GAAP EBIT	<u>217,568</u>	<u>237,894</u>	<u>245,679</u>	<u>247,014</u>	<u>274,982</u>	<u>314,875</u>	<u>312,213</u>
Total IFRS Adjustments (COR)	3,880	5,558	5,558	4,810	3,739	15,026	14,474
Total Items for IFRS EBIT	<u>221,448</u>	<u>243,451</u>	<u>251,237</u>	<u>251,824</u>	<u>278,721</u>	<u>329,901</u>	<u>326,687</u>
Gross Margin Expenses *	29,159	39,250	39,250	37,136	41,779	51,535	57,462
* (see next slide for detail)							
Total Items for IFRS EBIT	<u>250,607</u>	<u>282,701</u>	<u>290,487</u>	<u>288,960</u>	<u>320,500</u>	<u>381,436</u>	<u>384,150</u>

2009 Contingency Plan includes \$10.5M in plan reductions plus \$18.3M increase in burden costs driven by pension estimates.

2009 Forecast include \$17M in approved burden increases for pension and other areas.

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2008-2012 Margin Expenses / Cost of Sales (\$000)

Item	2008 Actual	2009 Budget *	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
Margin Expenses (list major items)						
Fuel Handling	1,645	1,633	1,451	1,606	1,708	1,759
Scrubber Reactant	20,411	26,173	22,273	24,035	27,170	27,693
Emission Allowances - SO2	429	2,191	1,309	16	7	3
Emission Allowances - NOx	-	482	44	285	216	125
SCR Ammonia	4,274	4,109	4,619	5,947	6,835	6,827
SO3 Mitigation	2,518	4,111	7,905	7,686	11,565	16,823
Activated Carbon	-	-	-	2,296	4,115	4,302
Other Waste Disposal	(119)	551	(465)	(91)	(81)	(70)
<b>Total Items for US GAAP EBIT</b>	<b>29,159</b>	<b>39,250</b>	<b>37,136</b>	<b>41,779</b>	<b>51,535</b>	<b>57,462</b>
<b>Total IFRS Adjustments EBIT</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Items for IFRS EBIT</b>	<b>29,159</b>	<b>39,250</b>	<b>37,136</b>	<b>41,779</b>	<b>51,535</b>	<b>57,462</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

\* No 2009 Contingency Plan for Cost of Sales due to the recoverability through rate mechanisms.

## 2010-2012 Combined Cost Reconciliation - IFRS (\$000)

	<u>2010</u>	<u>2011</u>	<u>2012</u>
OPEX Target from FP	274,124	316,211	314,034
Gross Margin Target from FP *	45,408	55,125	58,468
TC CT HGPI Transfer	(5,683)	(14,597)	(6,686)
Transfer Proj Dev from MRMD	1,344	1,381	1,419
Cost of Removal Target (for IFRS)	7,786	13,898	14,107
Final Target By Year	<u>322,979</u>	<u>372,018</u>	<u>381,342</u>
MTP OPEX & GM Combined Costs	<u>320,500</u>	<u>381,436</u>	<u>384,150</u>
Total Variance To Target	<u>2,479</u>	<u>(9,418)</u>	<u>(2,808)</u>

\*Note: Target from Prosym model does not include FH nonlabor & emission costs - \$1.9M/yr

## 2010-2012 Target Variance Reduction - IFRS (\$000)

	<u>2010</u>	<u>2011</u>	<u>2012</u>
Total OPEX Variance To FP Target	(1,150)	(13,008)	(3,813)
Total Gross Margin to FP Target	3,629	3,590	1,005
Total Variance To Adjusted Target	<u>2,479</u>	<u>(9,418)</u>	<u>(2,808)</u>

Major Variance Contributors:

ECR Beneficial Reuse Opportunity at Ghent	3,939	4,030	1,270
Wind Energy RFP Expenses	<u>1,000</u>	<u>675</u>	<u>695</u>
	<u>4,939</u>	<u>4,705</u>	<u>1,965</u>

Net Variance To Target	<u>7,418</u>	<u>(4,713)</u>	<u>(843)</u>
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Possible Efforts to Meet Target in 2011:  
 (Full risks & impact have not been quantified):

	<u>2010</u>	<u>2011</u>	<u>2012</u>
Reduction of plant based discretionary spend		3,000	
Continuation of TY3 Layup (Additonal 3 months in 2011) plus BR Contractor reduction due to TY employee shift		1,700	850

Note: Tyrone 3 layup has been extended through 9/30/2011. Production Model runs of these layup scenarios by Gen Planning indicated a likely increase in full year costs (purchased power) of \$0.2M in 2011 and \$0.6M in 2012 as projected in model.

## 2010-2012 Capital Comparison - IFRS (\$000)

<u>Plant Location</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Mill Creek	20,008	39,730	36,632
Trimble County	6,006	10,500	6,587
Cane Run	9,805	13,833	29,786
Ghent	14,079	13,877	22,186
Brown	6,913	10,996	23,165
Green River	1,159	326	917
Tyrone	137	1,399	1,448
<b>Total Steam</b>	<b>58,072</b>	<b>90,661</b>	<b>120,722</b>
Trimble CT	5,866	14,699	6,911
Louisville CT	1,496	11,222	-
Brown CT	1,447	3,463	3,193
<b>Total CT</b>	<b>8,809</b>	<b>29,384</b>	<b>10,104</b>
Ohio Falls	184	102	386
Dix	350	8,197	5,874
<b>Total Hydro</b>	<b>534</b>	<b>8,299</b>	<b>6,260</b>
Generation Services	3,210	5,694	11,404
Other Generation	-	-	-
<b>Total Support</b>	<b>3,210</b>	<b>5,694</b>	<b>11,404</b>
<b>Total Reg Gen Capital</b>	<b>70,660</b>	<b>134,038</b>	<b>148,490</b>
Targets (from FP)	77,703	136,930	150,982
<b>Variance To Targets</b>	<b>7,043</b>	<b>2,892</b>	<b>2,492</b>

## 2008-2012 Headcount (FTE)

Department	2008 Year End	2009 Budget	2009 Cont. Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
Mill Creek	217	220	216	216	220	221	221
Trimble County	94	96	90	90	89	89	98
Trimble County - TC2	31	40	40	40	47	50	50
Cane Run	124	131	123	123	132	136	137
Ghent	173	180	173	172	172	172	172
Ghent - FGD	21	30	30	30	32	32	32
Brown w/CTs	125	127	124	124	124	126	126
Brown FGD	6	14	7	7	9	14	14
Green River	56	60	55	55	55	55	55
Tyrone	24	24	24	24	24	24	24
<b>Total Steam</b>	<b>871</b>	<b>922</b>	<b>882</b>	<b>881</b>	<b>904</b>	<b>919</b>	<b>929</b>
Ohio Falls	4	4	4	4	3	3	3
Dix Dam	2	2	2	2	2	2	2
<b>Total Hydro</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>Total Stations</b>	<b>877</b>	<b>928</b>	<b>888</b>	<b>887</b>	<b>909</b>	<b>924</b>	<b>934</b>
<b>Generation Services</b>	<b>45</b>	<b>54</b>	<b>42</b>	<b>42</b>	<b>54</b>	<b>54</b>	<b>55</b>
<b>Project Engineering</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>48</b>	<b>47</b>	<b>47</b>	<b>47</b>
<b>Other Generation</b>	<b>37</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>46</b>	<b>46</b>
<b>TOTAL</b>	<b>1,006</b>	<b>1,074</b>	<b>1,022</b>	<b>1,022</b>	<b>1,055</b>	<b>1,071</b>	<b>1,082</b>
From 2009 MTP		1,074		1,074	1,095	1,114	

- **Commercial operation date for TC2 by June 30, 2010.**
- **Any “green development” projects that materialize would be incremental to the MTP/LTP (currently shown as sensitivities).**
- **Inspection results of Dix Dam may reveal maintenance requirements sooner than the timeframe included in the LTP.**
- **Timing and requirements for pending environmental regulations could accelerate future environmental investments into the planning window (i.e. Mercury, wet ESP’s).**
- **Corrosion fatigue repairs are not in the MTP (only the inspection amounts).**
- **Natural gas prices in the \$2.00 range could result in CT dispatch over coal, some units bringing forward the hot gas path and “C” inspections.**
- **Any significant impacts at Ghent resulting from the NOV/NSR are not factored in (additional controls or fuel limitations).**
- **Additional NERC/SERC Standards that would require further investment in Cyber-Security at multiple generating facilities.**

Event/Action	Risks	Mitigation Steps
<p><b>Ohio Falls Rehab</b></p> <ul style="list-style-type: none"> <li>- Delayed to 2014 for final completion</li> </ul>	<ul style="list-style-type: none"> <li>• Unfavorable FERC response</li> <li>• Continued cost escalations</li> </ul>	<ul style="list-style-type: none"> <li>• Project Engineering engaged to manage balance of project</li> <li>• Evaluate contracting strategy for packaging remaining work to achieve more favorable pricing</li> </ul>
<p><b>Generator stator leaks have been occurring across the GE fleet (industry-wide)</b></p> <ul style="list-style-type: none"> <li>- Mill Creek 1-4</li> <li>- Ghent 2-4</li> <li>- Trimble County 1</li> </ul>	<ul style="list-style-type: none"> <li>• Long lead-time on forced outages</li> </ul>	<ul style="list-style-type: none"> <li>• Stator leak monitoring systems for early leak detection have been installed.</li> <li>• Stator bar purchases starting in 2011</li> <li>• Back-up multiple units where possible</li> </ul>
<p><b>Outage cycles for Ghent, Cane Run, and Brown extended to 24 months</b></p>	<ul style="list-style-type: none"> <li>• Higher EFOR during the transition period; additional costs</li> </ul>	<p>See backup slides</p>



Event/Action	Risks	Mitigation Steps
<p><b>Cane Run 6 Precip replacement</b></p> <p>— Delayed from 2012 to 2017</p>	<ul style="list-style-type: none"> <li>• Derates/Outages from higher opacity</li> <li>• Higher O&amp;M costs for repairs during outages</li> </ul>	<ul style="list-style-type: none"> <li>• Patch (additional O&amp;M) during outages</li> <li>• Add particulate monitor</li> <li>• Periodic internal inspections</li> </ul>
<p><b>Paddy's Run 13 repairs</b></p> <p>— Delayed to 2011 (No change from 2009 MTP)</p>	<ul style="list-style-type: none"> <li>• Limited run-times</li> <li>• Complete unit failure</li> <li>• Long-lead time outage</li> <li>• Transmission constraints in the S.W. Louisville area</li> <li>• Exacerbated by potential retirement of two Duke Units at Gallagher</li> </ul>	<ul style="list-style-type: none"> <li>• Limit run times to low voltage conditions.</li> <li>• Engage Transmission on alternatives to mitigate low voltage conditions in that area</li> <li>• Consider other replace vs. repair options</li> </ul>
<p><b>Dix Dam Maintenance</b></p>	<ul style="list-style-type: none"> <li>• Leakage rates may require maintenance sooner than contemplated in the LTP</li> </ul>	<ul style="list-style-type: none"> <li>• Manage external special interest groups</li> <li>• Perform a thorough inspection to determine leakage rate/location in order to determine schedule and scope of dam repairs</li> </ul>

Event/Action	Risks	Mitigation Steps
<b>NERC CIP Standards</b>	<ul style="list-style-type: none"> <li>• <b>Cyber security requirements may be expanded to include Ghent, Mill Creek, Trimble County, and Brown Stations</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>\$2M capital included in 2010 (in addition to \$0.5M at Cane Run in 2009)</b></li> </ul>

## Key Performance Indicators

<u>KPI</u>	<u>2008 Year End</u>	<u>2009 Budget</u>	<u>2009 Forecast<sup>5</sup></u>	<u>2010 Budget</u>	<u>2011 Plan</u>	<u>2012 Plan</u>
Generation (Twh) <sup>1</sup>	35.4	33.0	31.4	34.9	38.5	39.1
EAF (Steam)	86.1%	83.7%	83.0%	84.8%	87.9%	86.9%
EFOR (Steam)	4.0%	4.6%	5.8%	4.7%	4.6%	4.2%
UU - Unplanned Unavailability	9.63%	6.00%	7.85%	7.49%	6.96%	6.65%
Controllable Cost (\$M) <sup>2</sup>	\$ 250.61	\$ 282.70	\$ 288.96	\$ 320.50	\$ 381.44	\$ 384.15
Controllable Cost/mwh <sup>2</sup>	\$ 7.08	\$ 8.57	\$ 9.20	\$ 9.18	\$ 9.91	\$ 9.82
Recordable Injuries <sup>3</sup>	2.92	2.00	0.46	1.72	1.72	1.72
Lost Workday Case Rate <sup>4</sup>	0.28	0.40	0.00	0.40	0.40	0.40

<sup>1</sup> Steam Generation includes 75% of Trimble County 1 and 2

<sup>2</sup> Controllable Costs include Utility O&M, Other Cost of Sales, COR, Fuel Handling, and Below -the-Line expenses.

<sup>3</sup> The 2009 forecast for RIR is the July YTD value, hearing tests currently underway.

<sup>4</sup> The 2009 forecast for Lost Workday Case Rate is the July YTD value.

<sup>5</sup> 2009 Forecast is from the 7&5 forecast.

# Appendix

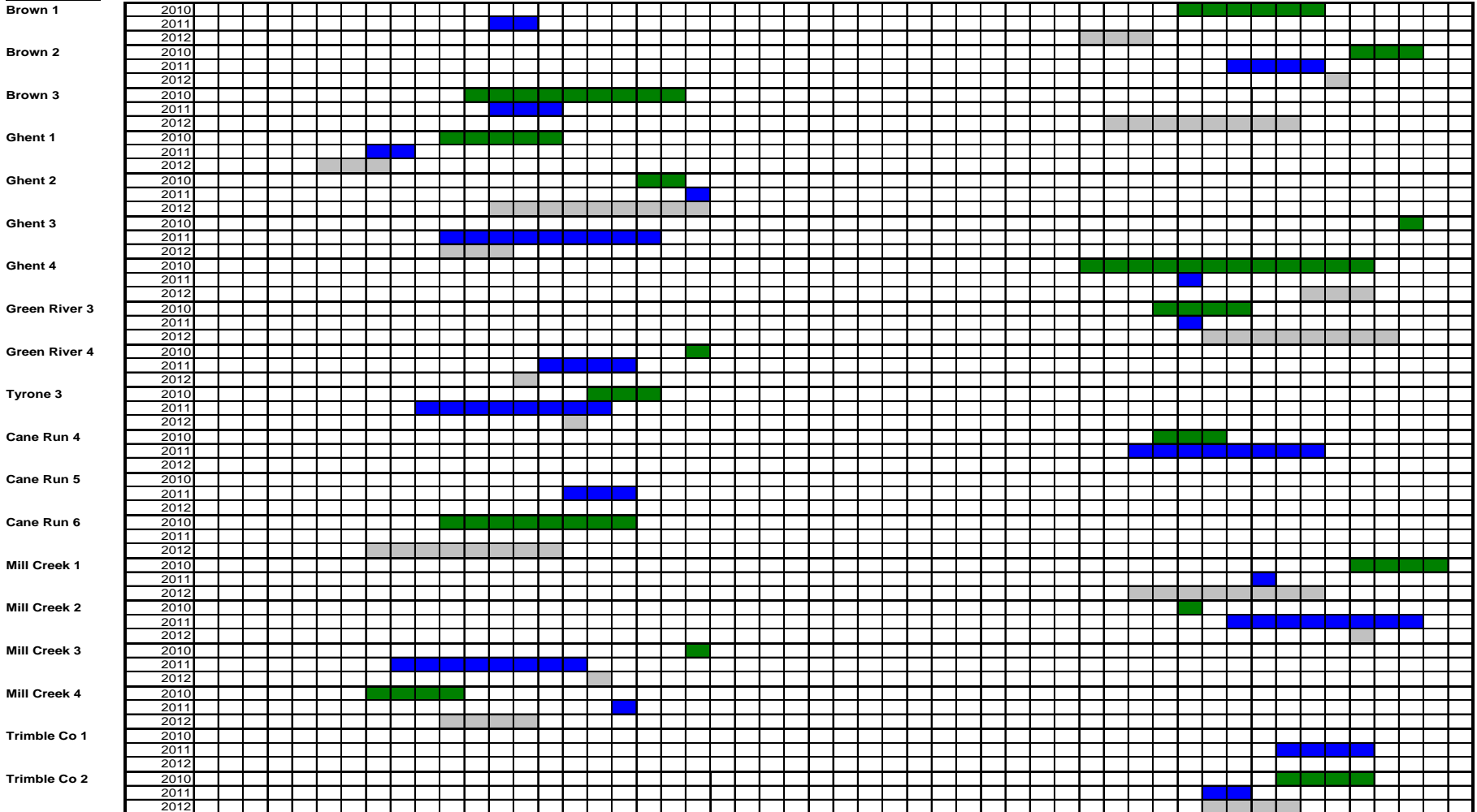
## 2010 - 2012 Maintenance Schedule

2010  
 First year of schedule shown

Week of: 1/5 1/12 1/19 1/26 2/2 2/9 2/16 2/23 3/2 3/9 3/16 3/23 3/30 4/6 4/13 4/20 4/27 5/4 5/11 5/18 5/25 6/1 6/8 6/15 6/22 6/29 7/6 7/13 7/20 7/27 8/3 8/10 8/17 8/24 8/31 9/7 9/14 9/21 9/28 10/5 10/12 10/19 10/26 11/2 11/9 11/16 11/23 11/30 12/7 12/14 12/21 12/28

Week # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

### Steam Units





## 2010-2012 Turbine Overhaul Schedule

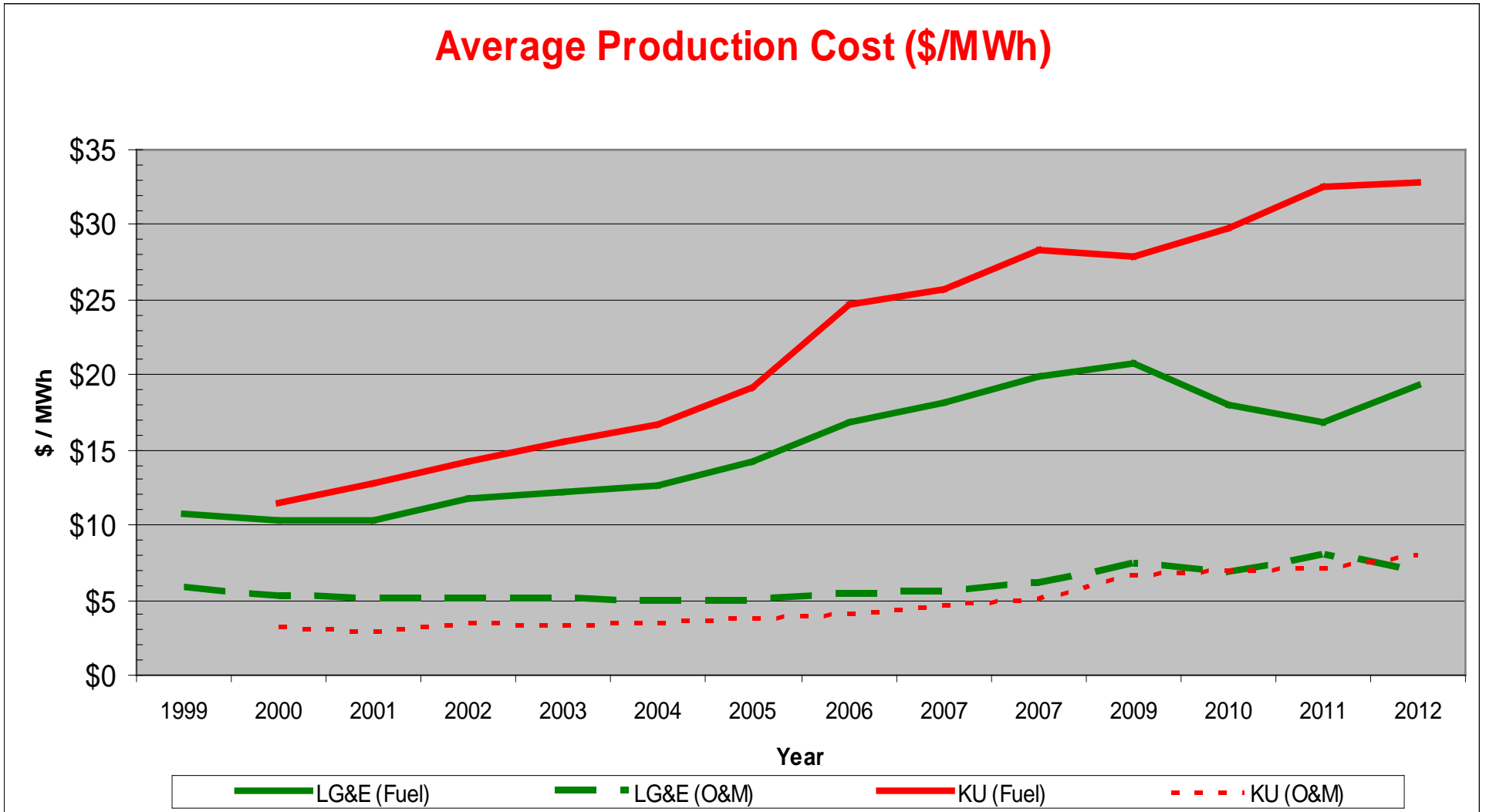
	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	
MC1	Historical				Historical	Historical						VG		T													
MC2					Historical								2010 MTP/LTP									2010 MTP/LTP					
MC3					Historical									2010 MTP/LTP								2010 MTP/LTP					
MC4	Historical						Historical									2010 MTP/LTP								2010 MTP/LTP			
GH1	Historical			Historical							2010 MTP/LTP						2010 MTP/LTP							2010 MTP/LTP			
GH2						Historical								2010 MTP/LTP									2010 MTP/LTP				
GH3					Historical								2010 MTP/LTP										2010 MTP/LTP				
GH4			Historical										2010 MTP/LTP						2010 MTP/LTP	2010 MTP/LTP					2010 MTP/LTP		
TC1						Historical						2010 MTP/LTP										2010 MTP/LTP					
CR4						Historical								2010 MTP/LTP									2010 MTP/LTP				
CR5				Historical								2010 MTP/LTP											2010 MTP/LTP				
CR6					Historical								2010 MTP/LTP										2010 MTP/LTP				
BR1	Historical										2010 MTP/LTP							2010 MTP/LTP						2010 MTP/LTP			
BR2				Historical								2010 MTP/LTP											2010 MTP/LTP				
BR3		Historical					Historical								2010 MTP/LTP								2010 MTP/LTP				
GR3			Historical										2010 MTP/LTP										2010 MTP/LTP				
GR4*					Historical	Historical								2010 MTP/LTP		2010 MTP/LTP								2010 MTP/LTP			
TY3						Historical								2010 MTP/LTP									2010 MTP/LTP				
Overhauls	4	1	2	3	5	6	2	0	1	1	3	4	4	3	3	1	2	2	2	2	1	5	4	1	3	2	1

Historical

Most Recent 2010 MTP/LTP VG - Valves and Generator

2010 MTP/LTP T - Turbine only

## Average Production Cost (\$/MWh)





## 2008-2012 Capital (Excluding COR) \$000

Project	2008 Actual	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
ECR projects						
BR2 PRECIP PLT REPL 08	271	1,465	1,085	-	-	-
GH1 SCR CATALYST ADDITION 10				1,046	2,088	-
GH3 SCR CATALYST ADDITION				-	194	1,940
GH4 SCR CATALYST ADDITION				-	987	2,496
CR Landfill Vertical Expansion	895	550	550	650	325	163
MC Landfill Expansion	5	3,000	2,959	270	812	399
MC3 SCR Catalyst				656	1,808	-
MC4 SCR Catalyst 2010				1,864	-	-
TC1 Catalyst Layer Install				474	652	-
CR FGD Rehabilitation				500	4,000	20,000
Other ECR Projects		906	1,479			
Sub-total, ECR Projects	<u>1,171</u>	<u>5,921</u>	<u>6,073</u>	<u>5,460</u>	<u>10,866</u>	<u>24,998</u>

On Going Projects Continued on next slide.

## 2008-2012 Capital (Excluding COR) \$000 Continued

Project	2008 Actual	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
On-Going						
BR Lightning Strike Prev Syst 12	-	-	-	-	-	1,307
BR Locomotive Repl 12	-	-	-	-	1,620	-
BR SEP OIL SEPARATORS 05	-	-	-	-	-	-
BR1 CONTROLS UPGR 06-07	31	-	-	-	-	-
BR1 COOLING TWR RBLD 07	-	-	-	-	-	-
BR1 RH Intermediate Banks Repl 12	-	-	-	-	-	1,400
BR1 Turb Cntrl Repl 10	-	1,920	-	1,930	-	-
BR2 Controls Repl 10-11	-	879	-	471	2,719	-
BR2 E Heater Repl 10-11	-	-	-	64	1,040	-
BR2 RH INLET & OUTLET HDR 07-09	2,898	2,041	1,233	-	-	-
BR3 Generator Rewind 11-12	-	-	-	-	5,843	9,720
BR3 Primary SH Repl 11-12	-	-	-	-	1,050	2,645
BRCT 11N2 Controls Upgr 11-12	-	-	-	-	1,796	937
BRCT 11N2 SFC Addition 10	-	-	-	-	-	-
BRCT10 C Inspection 12-13	-	-	-	-	-	-
BRCT9 C Inspection 11-12	-	-	-	-	-	1,451
CR4 Superheater Repl	-	-	-	2,038	2,148	-
CR5 4KV Switchgear Upgrade	1,060	1,360	695	-	-	-
CR5 Primary RH Partial Repl	-	-	-	-	-	1,162
CR5 SH Pendant Repl	1,314	-	-	-	-	-
CR6 Burner Corner Repl	-	1,099	950	400	-	-
CR6 Precipitator Rebuild	-	-	-	-	-	-
CR6 Reheat Pendant Repl	472	2,068	1,113	968	-	-
CR6 SH Pendant/Platen Repl	-	-	-	-	1,834	1,804
CR6 SPP Upgrade	(133)	-	-	-	-	-
CT6 A/B CONVERSION 07	61	-	-	-	-	-
DX1 OVERHAUL 11-12	-	-	-	-	1,621	3,317
DX2 JOHNSON VLV REFURB 10	-	-	-	-	1,337	-
DX2 Overhaul 10	-	-	-	-	4,780	-
DX3 OVERHAUL 08-09	1,399	3,600	2,712	-	-	-
GH 3 Absorber Agitator Blades	-	-	-	1,100	-	-

## 2008-2012 Capital (Excluding COR) \$000 Continued

Project	2008 Actual	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
On-Going						
GH Scraper	-	-	-	-	-	-
GH SPCC COMPLIANCE MOD	1,208	1,103	1,103	-	-	-
GH1 Air Heater Basket Repl	-	-	-	-	250	2,850
GH1 CONDENSER RETUBE	-	2,000	2,000	979	-	-
GH1 CONTROLS MODERNIZATION	581					
GH1 GENERATOR REFURB 06	(10)					
GH1 SCR CATALYST ADDITION 06	-					
GH1 SCR CATALYST ADDITION 10	-	-	-	1,046	2,088	-
GH1 SCR WEATHER PROOFING	-	-	-	-	-	-
GH2 CONTROLS MODERNIZATION	1,686	1,969	1,969	-	-	-
GH2 CT CELL REBUILD 08	3,511					
GH2 ECONOMIZER REPL	-	-	-	-	2,980	2,850
GH2 REHEAT PENDANT ASSY	-	-	-	-	2,219	2,581
GH2 SH Platen Replacement	-	-	-	-	1,237	2,031
GH3 CONTROLS MODERNIZATION	(0)					
GH3 ECONOMIZER REPL	-	1,000	1,000	1,010	1,456	-
GH3 SCR CATALYST ADDITION	1,142	-	-	-	194	1,940
GH4 CONTROLS MODERNIZATION	2,437	-	-	-	-	-
GH4 ECONOMIZER REPL	1,967	-	-	-	-	-
GH4 SCR CATALYST ADDITION	-	-	-	-	987	2,496
GS CEMS Shelter Replacement	-	-	-	200	690	4,844
GS Cyber Security 1500MW Limit	-	-	-	2,000	-	-
KU BRCT7 A/B Conversion 08	6,392	-	-	-	-	-
LGE - CEMS Mercury Monitoring	1,726	-	-	-	-	-
LGE BRCT6 A/B Conv 07	45	-	-	-	-	-
LGE BRCT7 A/B Conversion 08	3,871	-	-	-	-	-
LGE-Gen Stator Bar Study (123599)	-	-	-	-	2,510	5,040
MC Boiler Water Make-Up System	2,045	-	-	-	-	-
MC Horizontal Limestone Mill	87	1,500	290	3,700	4,500	7,500
MC Limestone Excavator	-	-	-	-	2,400	-
MC1 Boiler Lower Sidewall Tubing	-	-	-	1,100	-	-
MC1 FGD Refurbishment	-	-	-	-	1,100	14,200

## 2008-2012 Capital (Excluding COR) \$000 Continued

Project	2008 Actual	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
On-Going						
MC1 Final Superheater (DMWs)	-	-	-	-	-	1,400
MC1 Partial Radiant Reheater	-	-	-	-	-	1,074
MC1 RH Replacement	2,166	-	-	-	-	-
MC1 Waterwall Weld Overlay	2,093	-	-	-	-	-
MC2 Boiler Lower Sidewall Tubing	-	-	-	-	1,100	-
MC2 Condenser Tubing	-	-	-	-	1,800	-
MC2 FGD Refurbishment	-	500	500	500	20,250	-
MC2 Waterwall Weld Overlay	-	2,700	4,200	-	-	-
MC3 Cooling Tower Fill	0	-	-	-	-	-
MC3 EHC Upgrade	-	-	-	600	1,300	-
MC3 Final Superheat Tubing	30	-	-	-	-	-
MC3 Intermediate SH - 2007	-	-	-	-	-	-
MC3 SCR Catalyst	-	-	-	656	1,808	-
MC3 SCR Catalyst (ECR)	-	-	-	-	-	-
MC3 Turbine L-0 Buckets	-	-	-	-	-	-
MC4 Boiler Tubing	-	-	-	-	-	-
MC4 EHC Upgrade	-	-	-	-	-	-
MC4 Intermediate SH - 2008	1,716	-	-	-	-	-
MC4 SCR Catalyst 2010	-	-	753	1,864	-	-
MC4 SCR Catalyst and Ductwork Modifi	-	-	-	-	1,000	1,475
OHIO FALLS REDEVELOPMENT 2004	4,000	1,641	627	-	-	-
PR Compressor Upgrade KU	-	-	-	226	1,410	-
PR Compressor Upgrade LGE	-	-	-	255	1,590	-
PR13 Guide Vane Repl	3,922	-	-	-	-	-
PR13 Turbine Blade and Vane Repl KU	-	-	-	470	3,525	-
PR13 Turbine Blade and Vane Repl LGE	-	-	-	530	3,975	-
TC Controls Upgrade 2006	838	3,653	3,653	221	-	-
TC CT HGP Inspection	-	-	618	8,033	12,247	8,348
TC ID FAN VFD REPLACEMENT	994	1,394	1,394	-	-	-
TC Install Transformer 6 in Switching St:	-	-	-	-	-	1,954

## 2008-2012 Capital (Excluding COR) \$000 Continued

Project	2008 Actual	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
On-Going						
TC PRECIP REBUILD 5TH FLD	-	-	-	-	2,128	-
TC PURCHASE LARGE DOZER #1	1,411	-	-	-	-	-
TC PURCHASE LARGE DOZER 2	-	-	-	-	1,680	-
TC RECYC PUMP PIPING ELBOW	-	-	-	-	1,504	-
TC RELINE FGD MODULE FL	-	-	-	-	-	-
TC REPLACE W BOILER SLP TUBE	-	1,927	2,157	-	-	-
TC2 SCR Third Layer Catalyst and Insta	-	-	-	-	-	2,546
TY3 Retube Main Condenser 12	-	-	-	-	-	731
Other On-Going Projects < \$1.0m	24,110	21,037	20,707	25,006	30,610	26,973
Sub-total, On-Going Projects	<u>75,071</u>	<u>53,391</u>	<u>47,673</u>	<u>55,367</u>	<u>134,325</u>	<u>114,576</u>
Grand Total Capital	<u>76,242</u>	<u>59,312</u>	<u>53,746</u>	<u>60,827</u>	<u>145,191</u>	<u>139,574</u>

## 2009-2012 Capital Reconciliation IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	70,625	134,038	148,490
Prior Year	<u>46,812</u>	<u>70,625</u>	<u>134,038</u>
Variance	<u>(23,813)</u>	<u>(63,413)</u>	<u>(14,452)</u>
<u>Variance Explanations</u>			
TC CT HGP Inspections	(5,065)	(8,914)	(523)
MC Horizontal Limestone Mill	(3,410)	(800)	(3,000)
MC2 Waterw all Weld Overlay	(2,760)	3,480	-
MC, GH & TC SCR Catalyst	(4,558)	(3,077)	(4,292)
CR4 Superheater Replacement	(2,038)	(110)	2,148
CR FGD Rehabilitation	(250)	(3,500)	(16,000)
MC2 FGD Refurbishment	(800)	(16,050)	13,250
DX Overhauls & Dam Work	(350)	(7,847)	2,323
Gen Svcs Stator Bar Program	-	(2,510)	(2,530)
BR2 Controls Replacement	(471)	(2,034)	2,291
MC Limestone Excavator	-	(2,400)	2,400
GH2 Reheat Pendant Assembly	-	(2,219)	(362)
Paddy's 13 Major Work	(1,207)	(9,726)	11,222
GH1 Air Heater Basket Repl.	-	(250)	(2,600)
BR3 Generator Rew ind	-	(1,397)	(12,769)
All other smaller projects	<u>(2,904)</u>	<u>(6,059)</u>	<u>(6,010)</u>
Total Variance	<u>(23,813)</u>	<u>(63,413)</u>	<u>(14,452)</u>

## 2009-2012 OPEX Reconciliation IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	278,721	329,950	326,687
Prior Year	<u>251,825</u>	<u>278,721</u>	<u>329,950</u>
Variance	<u>(26,896)</u>	<u>(51,229)</u>	<u>3,263</u>
<u>Variance Explanations</u>			
Wage & Headcount Increases	(4,866)	(11,050)	(7,521)
TC2 Incremental Nonlabor	(3,303)	(1,612)	1,480
FutureGen Participation	(4,936)	-	-
Beneficial Reuse	(3,939)	(91)	2,760
Outage Timing (Net)	(2,097)	(20,922)	9,100
FGD Maintenance Higher	(1,040)	(321)	(27)
Corrosion Fatigue Program	(1,348)	(27)	(27)
Non-outage NL inflationary increases	(1,541)	(1,787)	(1,870)
SO3 Mitigation contract support	(803)	(28)	(29)
Project Development New Programs	(1,265)	284	(63)
Cost of Removal Expenses	912	(11,287)	552
All other smaller items	<u>(2,671)</u>	<u>(4,388)</u>	<u>(1,091)</u>
Total Variance	<u>(26,896)</u>	<u>(51,229)</u>	<u>3,263</u>

## 2009-2012 Cost of Sales Reconciliation IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	41,779	51,486	57,462
Prior Year	<u>37,136</u>	<u>41,779</u>	<u>51,486</u>
Variance	<u>(4,643)</u>	<u>(9,707)</u>	<u>(5,976)</u>
<u>Variance Explanations</u>			
Scrubber Reactant	(1,762)	(3,135)	(523)
Emissions	1,052	78	95
Waste Disposal	(374)	(10)	(11)
Ammonia	(1,328)	(888)	(179)
SO3 Sorbent Injection	219	(3,879)	(5,072)
Activated Carbon	(2,296)	(1,819)	(187)
Nonlabor Fuel Handling	<u>(154)</u>	<u>(53)</u>	<u>(99)</u>
Total Variance	<u>(4,643)</u>	<u>(9,707)</u>	<u>(5,976)</u>



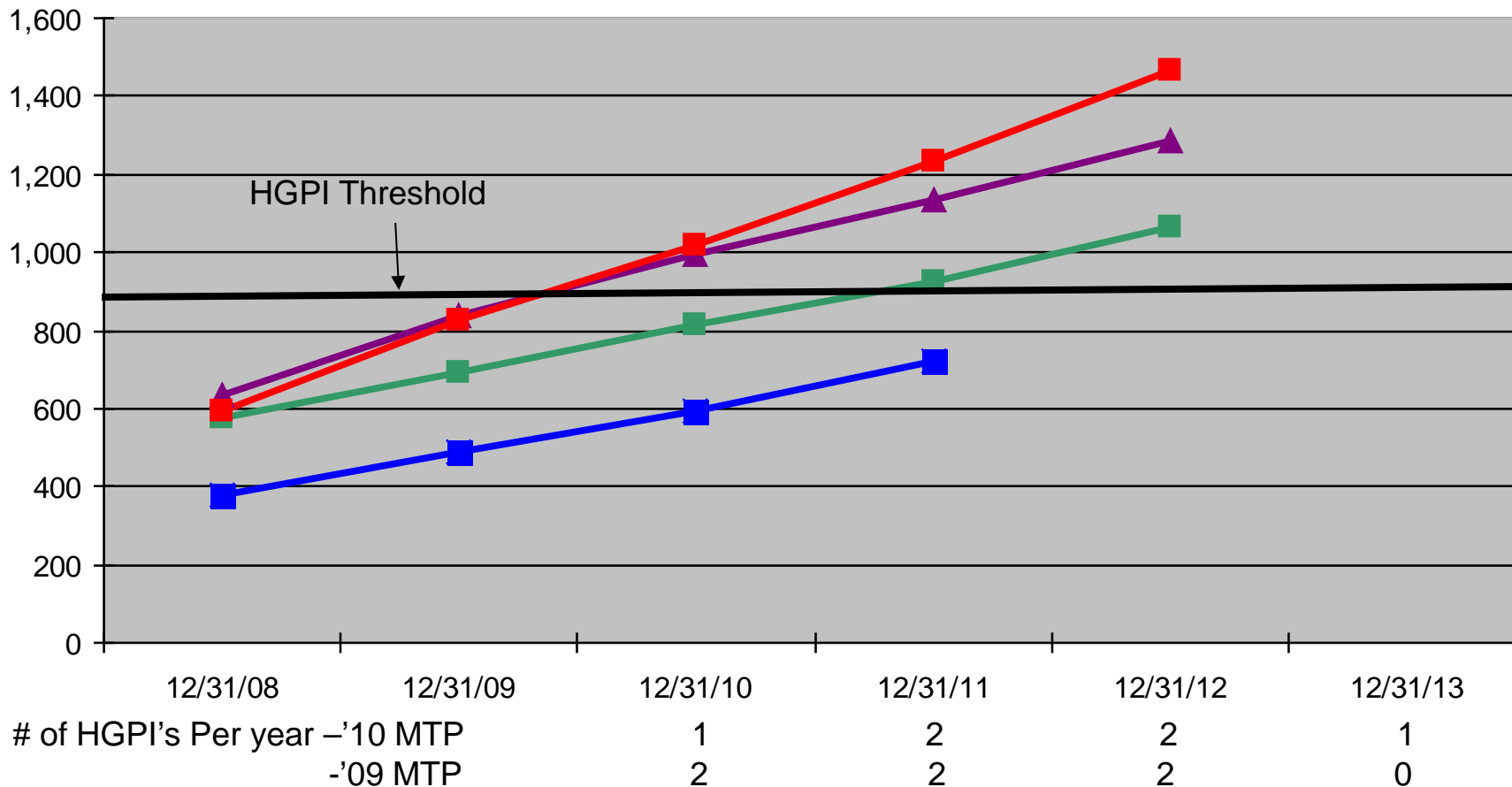
## 2009-2012 Headcount Changes

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
12/31 Prior Year	1,022	1,056	1,072
12/31 Current Year	<u>1,056</u>	<u>1,072</u>	<u>1,083</u>
Variance	<u><u>34</u></u>	<u><u>16</u></u>	<u><u>11</u></u>
<u>Additions</u>			
Mill Creek	4	1	
Trimble County	6	3	9
Cane Run	8	4	1
Ghent	2		
Brown	2	7	
Green River			
Generation Services	12		1
Other Generation Support	<u>          </u>	<u>1</u>	<u>          </u>
Total Variance	<u><u>34</u></u>	<u><u>16</u></u>	<u><u>11</u></u>

## Trimble County CT's Average Number of Cumulative Factored Starts per Unit

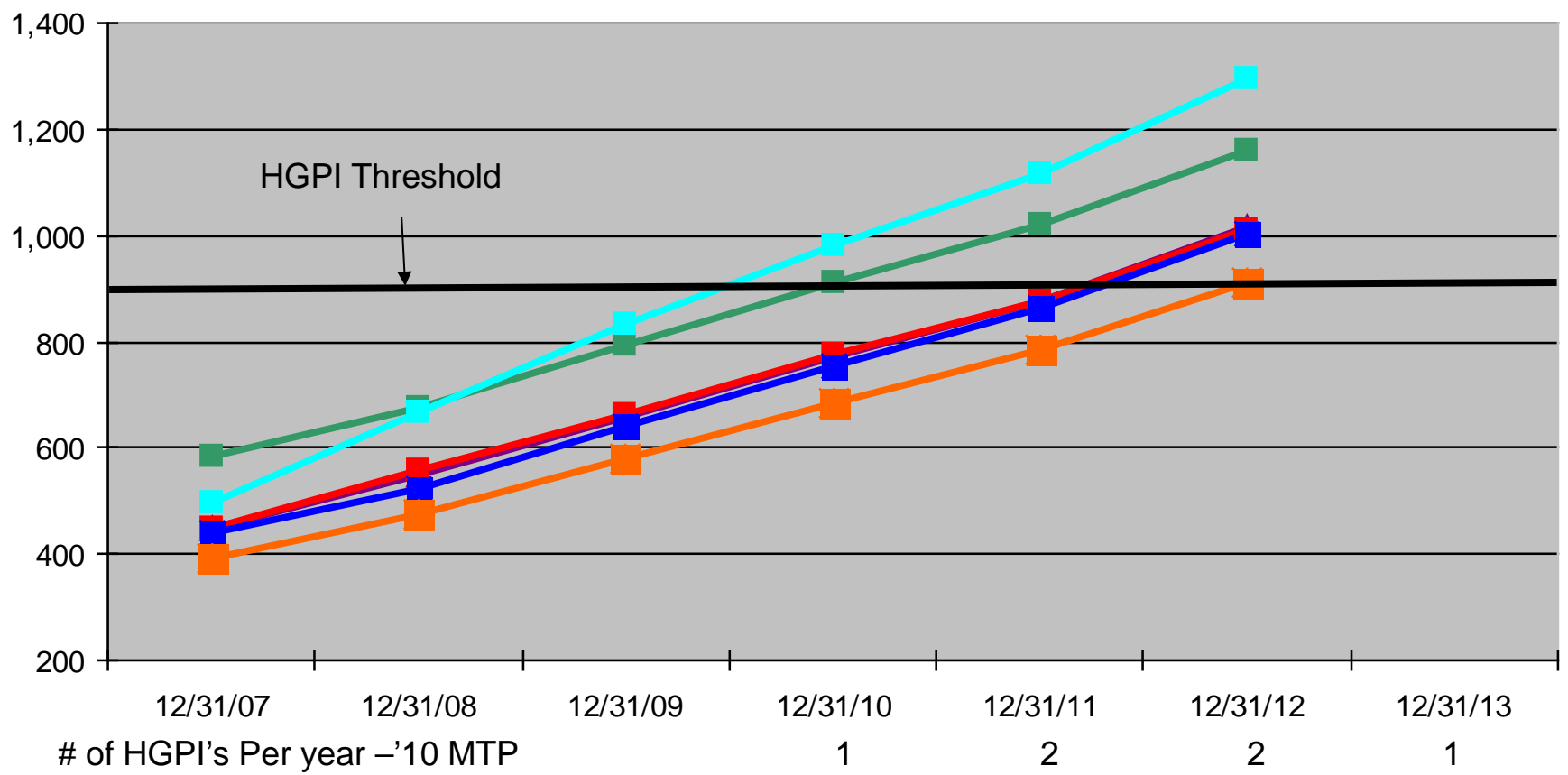
Trimble CT run-times have declined, net change of 1 less HGPI in 2010.

**Factored  
 Starts  
 Cumulative**

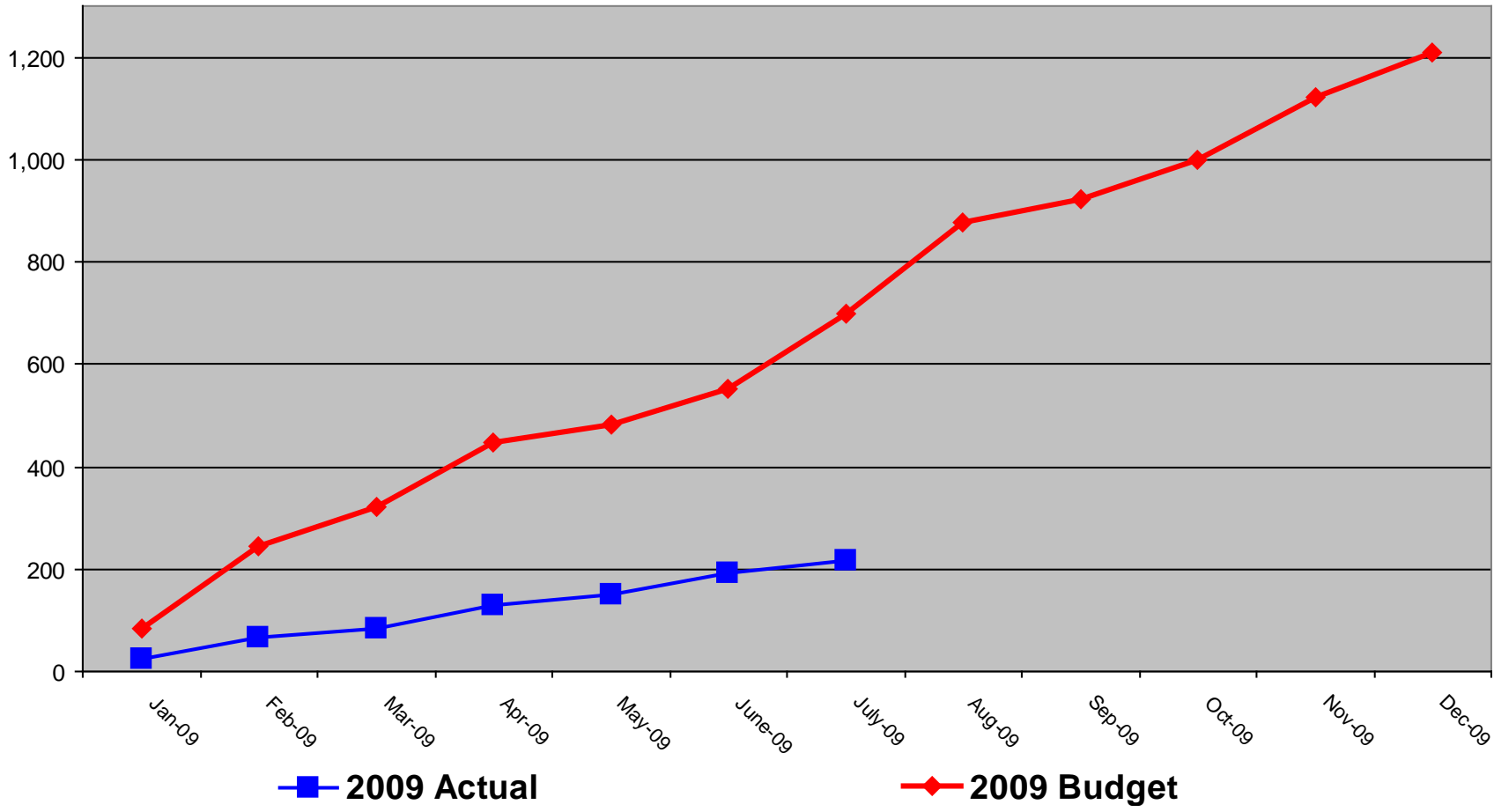


## Trimble County CT's Cumulative Factored Starts per Unit

**Factored  
 Starts  
 Cumulative**



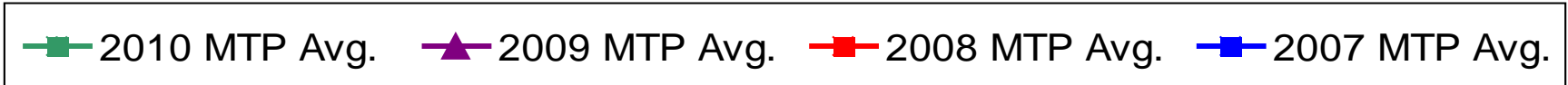
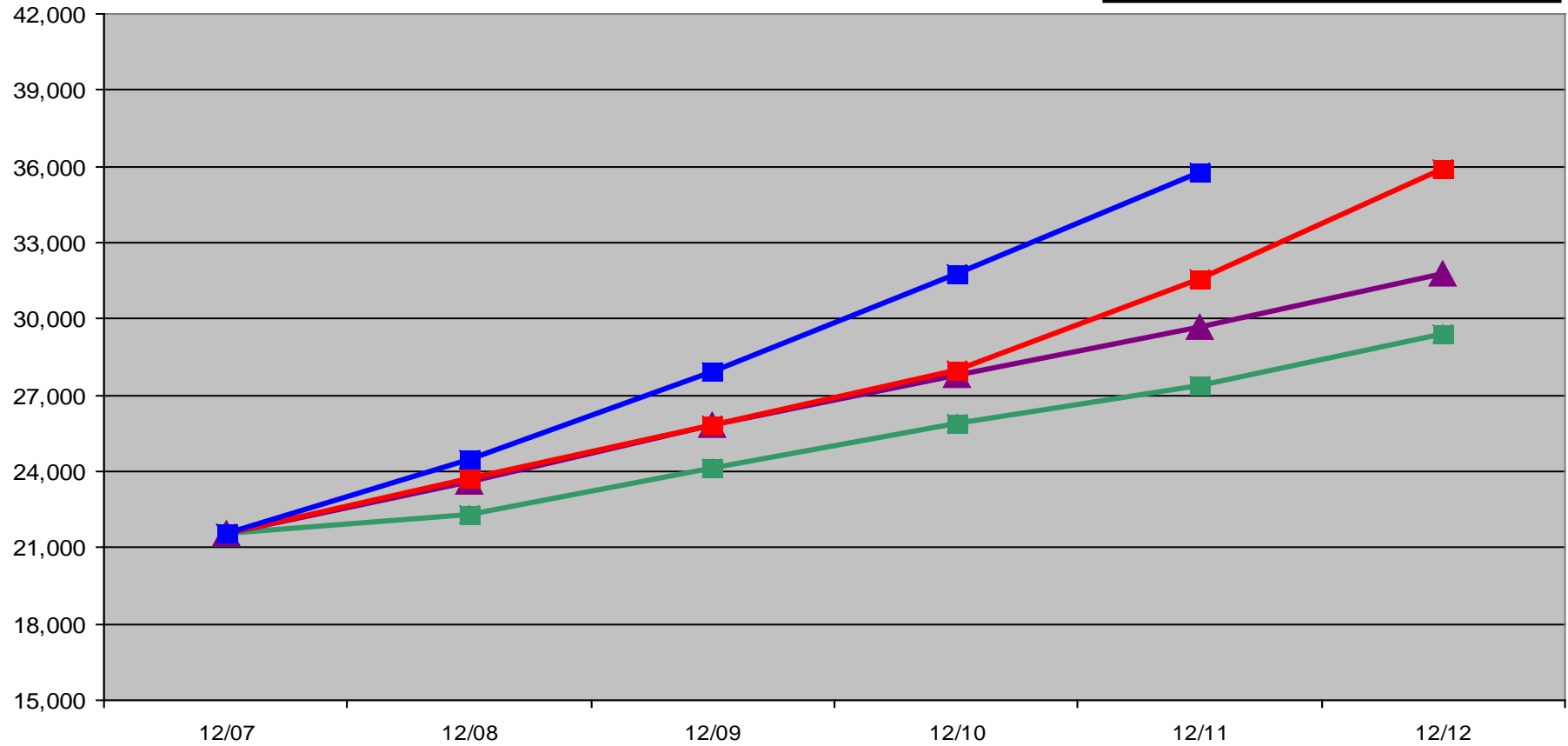
### Trimble County CT's Cumulative (YTD) Factored Starts 2009 Actual vs. Budget



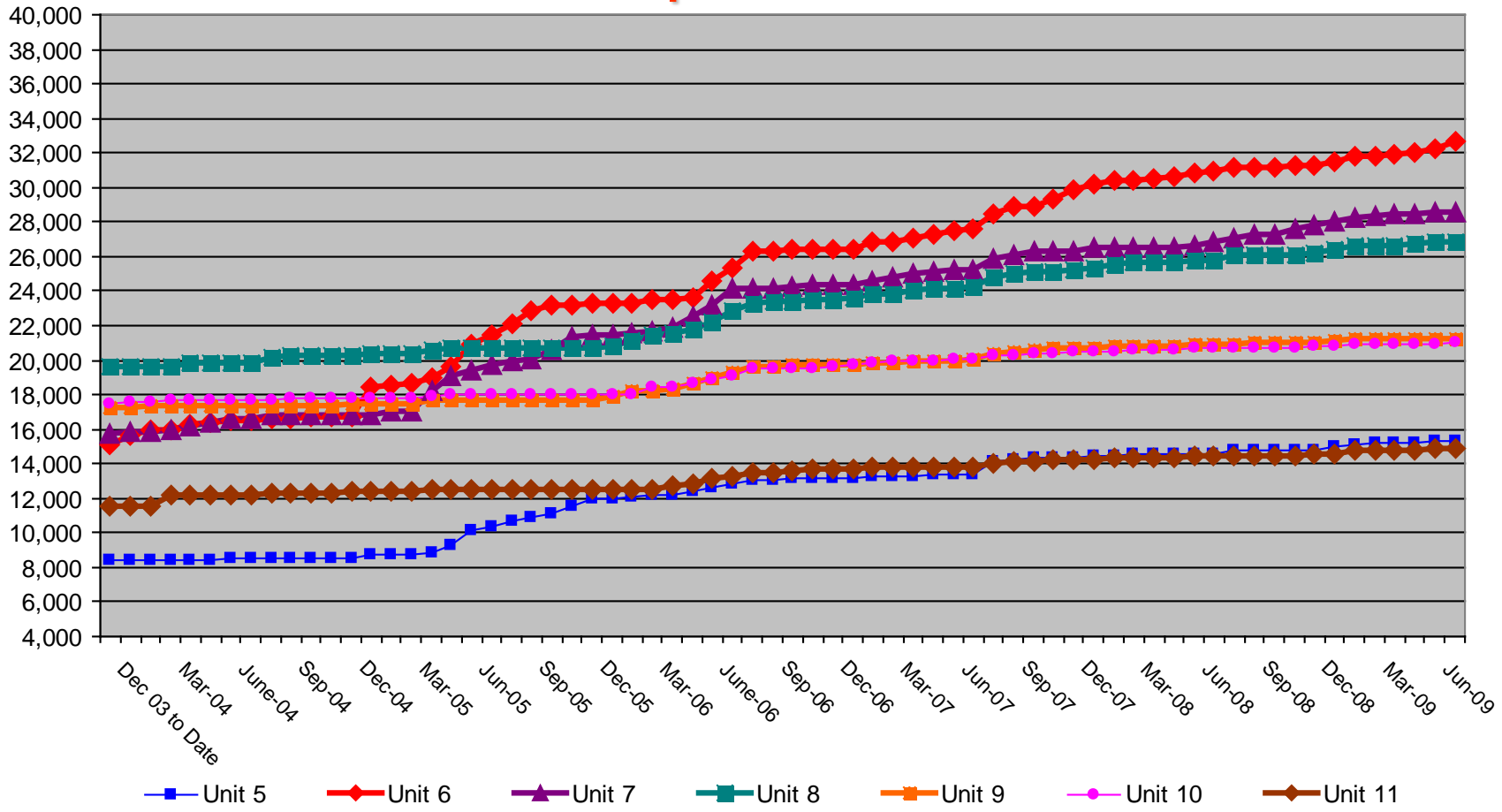
## Brown CT's Equivalent Operating Hours Average Per Unit

Brown CT run-times continue trend of declining each MTP.

EOH



## Brown CT Equivalent Operating Hours (EOH) Inception To-Date





**Transmission  
2010-2012 MTP**

**October 9, 2009**

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## Executive Summary

The 2010-12 Transmission Mid Term Plan is designed to meet the overall goals of safety, regulatory compliance, system reliability, and financial/budget performance.

### Plan challenges and considerations:

- NERC Mandatory Reliability Standards will continue to impact the transmission business and resources as new standards emerge and requirements increase.
- Cyber security (Critical Infrastructure Protection or CIP) will continue to be a national concern and focus requiring more resources focused on protecting cyber assets and standards compliance.
- Significant weather events have impacted system assets and performance requiring upgrades to equipment in substations and lines.
- Interconnection activity has been increasing (KMPA, OMU, EKPC, TVA) impacting both capital and human resources.
- The plan addresses the transition from SPP to a new ITO or FERC approved construct.
- The plan reflects the transmission organizations continuing challenges of meeting a rigorous major project and reliability construction schedule while maintaining system performance and regulatory compliance.
- The plan includes resources to maintain compliance, safe and reliable system operations, limited "Smart Grid" technology deployment, engineering capability, and meet customer demands.

- Safety – maintain focus and enhance overall safety performance.
- System Reliability and Power Quality – continue focus on system performance, power quality, and customer needs (NAS, Corning, Ford, UPS).
- Regulatory compliance – maintain and enhance regulatory compliance culture.
- Finance and budget – achieve business goals within financial and budgetary targets while maintaining focus on the commercial process and enhanced shareholder value.
- Strategic Planning – the transmission organization will transition to a new ITO partner or FERC approved ITO/RC construct during the planning period. Focus on the annual Transmission Expansion Plan as the basis for Capital investment.
- Employee Development – focus development in leadership, engineering, project management, and system operations.

# Major Assumptions

## 1. NERC Standards

- 1.1 No significant changes in FERC, NERC, SERC, OSHA, or NESC policy and requirements.
- 1.2 Maintaining current compliance levels will require increased training and potentially personnel to assist in the training effort (PER-005 requirements add a significant burden in documentation, evaluation, and simulation).
- 1.3 As “smart” technologies are developed and deployed, CIP standards implications must be a consideration.
- 1.4 Cyber Security:
  - Version 2 of the CIP standards was recently adopted by NERC and there is a newer version that is still being drafted and is subject to influence by FERC, congress, and the industry.
  - CIP2-9 requires a secure network to the substations (pre-cursor to smart grid).
- 1.5 Movement of Distribution SCADA Operations to Distribution will not impact Transmission headcount but will allow additional time for required Compliance activities and training.
- 1.6 Vegetation management standard will continue to focus on 200 KV and above. It is estimated to cost an incremental \$2.5 million if a 100 KV threshold is adopted.

**2. Expansion Plan**

- 2.1 The transmission expansion plan (TEP) is based on the 2009 MTP load forecast and considers reliability requirements only.**
- 2.2 Facilities ratings verification will not yield significant additional capital projects.**
- 2.3 *The number of mitigation plans required as a part of the TEP does not grow over the MTP.***
- 2.4 The overall peak load growth and Central KY regional peak exceed energy projections which further exacerbates ability to move excess generation from LG&E to KU.**
- 2.5 A combined cycle unit from the generation expansion plan will be installed in 2017. No spending prior to 2013.**
- 2.6 The transmission expansion plan does not contain any provisions for the utilization of the Bluegrass Facility by any other companies.**
- 2.7 No significant additional system loads.**
- 2.8 No significant Network Inter-connect Transmission Service (NITS) activity.**
- 2.9 No significant economic development projects requiring transmission system upgrades – ie. NATTBATT.**

**3. Asset Management**

- 3.1 Asset Management system in place by the end of 2011.**
- 3.2 Continue to purchase transformers to maintain/replenish critical spare inventory.**
- 3.3 Static wire upgrade program (equipment >50 years old) to take place over the next 10 years.**
- 3.4 Other Asset Management initiatives: Breaker Replacement program for underrated breakers, Ground grid repairs, surge arrester replacements, battery replacements, instrument transformer replacements.**

**4. ITO & RC**

- 4.1 FERC will approve a new ITO/RC business partner or construct.**
- 4.2 Assume current ITO construct costs will increase by \$1m over the original contract cost annually.**
- 4.3 Assume RC (TVA) costs remain flat relatively flat.**
- 4.4 Plan allows for re-integrating some ITO functions internally (with FERC approval) and retaining an external Transmission monitor (will require incremental headcount). Will require incremental headcount, shifting non labor dollars currently in the plan to labor.**

**5. Headcount**

- 5.1 No incremental headcount above the previously adopted Workforce planning recommendations.**
- 5.2 Potential ITO changes, additional compliance training requirements, and additional reliability standards adoption/implementation will increase demands on current headcount and may require increased headcount to address these needs.**

## **6 Operational and Other**

**6.1 Transmission revenues will increase associated with OMU contracts.**

**6.2 Transmission revenues will increase from all customers due to KMPA.**

**6.3 Customer sensitivity and awareness to reliability and power quality will continue to elevate.**

**6.4 No Federal or State mandated Smart Grid initiatives.**

**6.5 No major project assumed for integration of renewable energy at this time.**

## **7 Non Labor Escalation Rates**

- Fuels and Additives 2.0%**
- Copper 2.5%**
- Fabricated Steel 4.0%**

	2010 MTP			2009 MTP		Fav(Unfav)	
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2010</u>	<u>2011</u>
Margin							
OATT & Grandfathered Rev.	6,428	8,113	8,984	4,583	4,736	1,845	3,377
Cost of Sales	10,824	9,646	10,287	10,736	10,098	(88)	452
Net Margin (excludes Interco)	<u>(4,396)</u>	<u>(1,533)</u>	<u>(1,303)</u>	<u>(6,153)</u>	<u>(5,362)</u>	<u>1,757</u>	<u>3,829</u>
O&M							
Labor - Direct	11,246	11,646	12,075	9,568	9,898	(1,678)	(1,748)
Labor - Distribution/Sys Lab.	2,658	2,751	2,847	2,617	2,709	(41)	(42)
Non-labor	12,269	12,572	12,880	13,856	14,199	1,587	1,627
Total O&M	<u>26,172</u>	<u>26,968</u>	<u>27,802</u>	<u>26,041</u>	<u>26,806</u>	<u>(131)</u>	<u>(162)</u>
Cost of Removal	4,994	4,168	3,890	7,059	6,200	2,065	2,032



## 2008-2012 O&M (\$000)

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Opex Expenses</i>							
<i>Raw Labor</i>	5,332	6,586	6,640	6,533	7,410	7,673	7,553
<i>Burdens</i>	3,916	5,180	5,738	5,852	6,493	6,724	7,369
<i>Non labor</i>							
<i>Storms</i>	-	-	-	1,083	-	-	-
<i>Right of Way</i>	3,560	4,211	4,205	4,211	4,211	4,316	4,424
<i>Inspections</i>	587	1,104	1,097	1,104	1,104	1,132	1,160
<i>Other Non-labor</i>	7,444	7,706	8,126	7,509	6,954	7,123	7,296
<i>Total Items Affecting US GAAP EBIT</i>	<u>20,839</u>	<u>24,787</u>	<u>25,806</u>	<u>26,292</u>	<u>26,172</u>	<u>26,968</u>	<u>27,802</u>
<i>Non-Operating Adjustment</i>				(1,083)			
<i>Cost of Removal</i>	5,206	4,672	3,353	7,981	4,994	4,168	3,890
<i>Cost of Removal - Non-Operating Adj.</i>	-	-	-	(5,509)	-	-	-
<i>Total IFRS Adjustments</i>	<u>5,206</u>	<u>4,672</u>	<u>3,353</u>	<u>1,389</u>	<u>4,994</u>	<u>4,168</u>	<u>3,890</u>
<i>Total Items Affecting IFRS EBIT</i>	<u><u>26,045</u></u>	<u><u>29,459</u></u>	<u><u>29,159</u></u>	<u><u>27,681</u></u>	<u><u>31,166</u></u>	<u><u>31,136</u></u>	<u><u>31,692</u></u>



## O&M and Cost of Removal

	2010 Plan	2011 Plan	2012 Plan
Budget/Plan	31,166	31,136	31,692
Target	33,107	33,326	34,380
Variance	<u>1,941</u>	<u>2,190</u>	<u>2,688</u>
<u>Variance Explanations</u>			
Labor	(1,718)	(1,790)	(1,853)
Outside Services	1,426	1,461	1,498
Relocation	381	391	401
Substation Tools & Safety Signage	(123)	(126)	(129)
Travel / Training	(108)	(110)	(113)
Other Non-labor	18	32	(35)
Remove Corp Savings from '11 & '12	-	300	300
Cost of Removal	<u>2,065</u>	<u>2,032</u>	<u>2,619</u>
Total Variance	<u><u>1,941</u></u>	<u><u>2,190</u></u>	<u><u>2,688</u></u>

The 2010 MTP is designed sustain the compliance levels that were addressed in the 2009 MTP, through the duration of the plan.

## Capital Plan

- The Capital Plan includes funding for Major projects, Compliance, and Ongoing system needs.
- TC2 funding to complete project in 2010.
- Temporary work around for Mill Creek to Hardin County energized in 2010.
- Funding to address compliance and reliability in substations and lines projects.
  - Planning Projects
  - Breaker Replacements
  - Transformer Purchases
  - Control House upgrades
  - Interconnect projects (KMPA, TVA, EKPC, Duke, E.ON U.S. Distribution, etc.)

## 2008-2012 Capital (Excluding COR) (\$000)

Project	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<b>Generation Expansion Plan</b>							
TC2	26,336	22,850	22,850	28,634	4,162	-	-
<b>Ongoing Capital</b>							
Base Capital	28,078	28,238	25,438	26,128	44,168	31,484	27,230
<b>Special Projects</b>							
TC2 Work Around				3,900	4,403		
KMPA Projects	-	-	-	2,776	1,657	500	1,000
Ice Storm				12,569			
Total Capital (107001)	54,414	51,088	48,288	74,007	54,390	31,984	28,230
IFRS Adjustments (Including Cash Adj)	4,522	(1,474)	(1,474)	3,876	1,369	1,218	104
Total IFRS	58,936	49,614	46,814	77,883	55,759	33,202	28,334

## Capital Review - Trimble County 2, Transmission

US GAAP, \$Millions

### Sanction Comparison

	<u>Total Projection</u>	<u>Total Sanction</u>	<u>Variance to Sanction</u>
Sanction Comparison - Net	\$93.8	\$85.7	(\$8.1)

### MTP Comparison - Net

	<u>Pre-2009</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Total</u>
2010 MTP	\$60.7	\$29.0	\$4.2	\$0.0	\$0.0	\$93.8
2009 MTP	\$57.9	\$22.9	\$0.0	\$10.8	\$0.0	\$91.6
Variance from 2009 MTP	(\$2.7)	(\$6.2)	(\$4.2)	\$10.8	\$0.0	(\$2.2)
<i>Cause of Variance from Prior Plan</i>						
Mill Creek - Hardin County (line)	\$1.1	(\$2.9)	(\$3.1)	\$0.0	\$0.0	(\$4.9)
Trimble County - PSI (line)	(\$5.3)	\$1.5	\$0.0	\$0.0	\$0.0	(\$3.8)
Higby Mill - West Lexington (line and sub)	\$0.4	(\$1.0)	(\$1.1)	\$0.0	\$0.0	(\$1.6)
East Frankfort - West Frankfort (line and sub)	\$1.2	(\$2.7)	\$0.0	\$8.0	\$0.0	\$6.5
Ghent - Owen County (line)	(\$0.0)	(\$1.1)	\$0.0	\$2.8	\$0.0	\$1.6
Other	(\$0.2)	\$0.1	\$0.0	\$0.0	\$0.0	(\$0.1)
Total	(\$2.7)	(\$6.2)	(\$4.2)	\$10.8	\$0.0	(\$2.2)

### Key Message

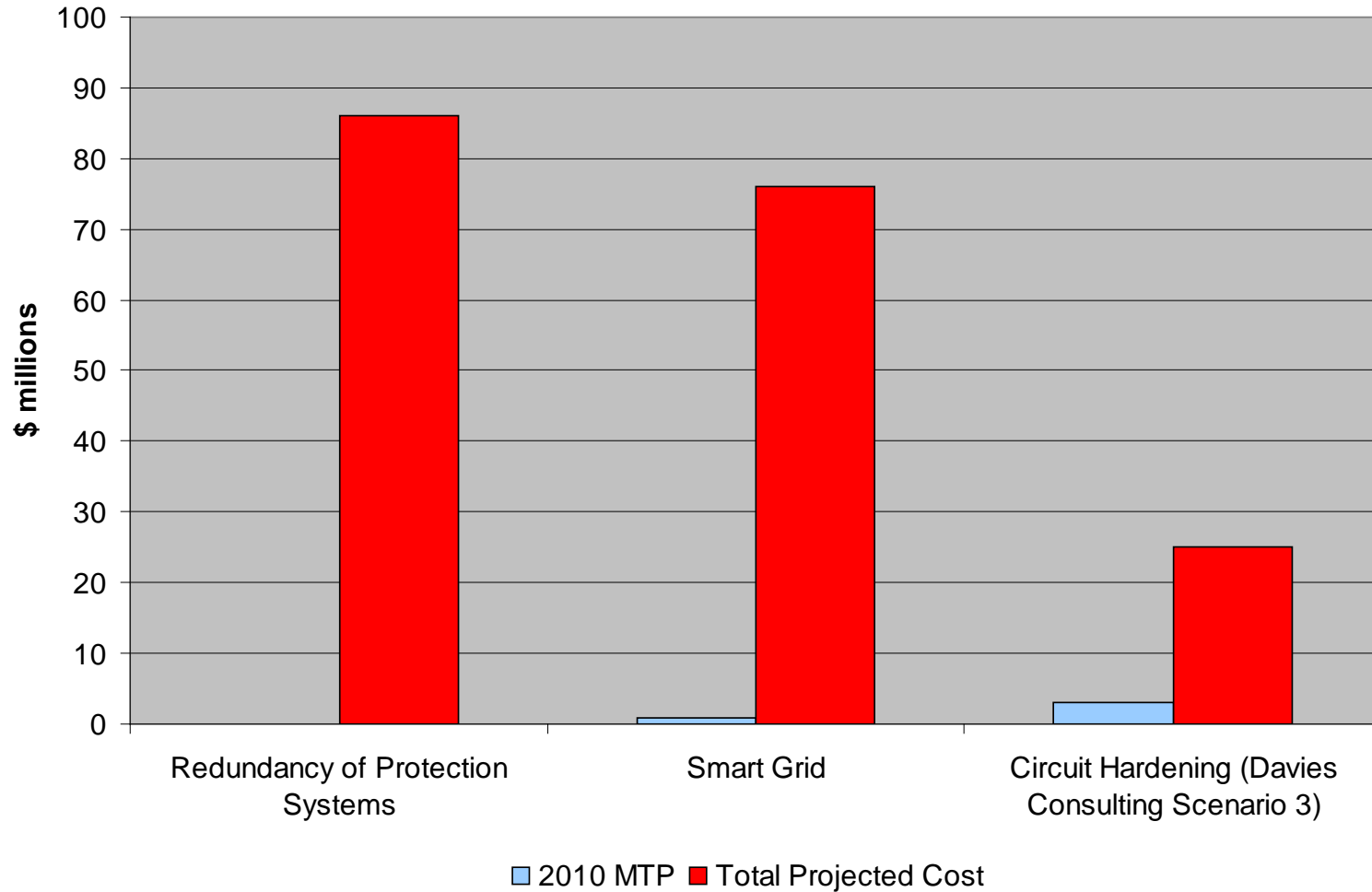
- Mill Creek – Hardin County higher due to additional substation work, higher underground costs, and IN Bats mitigation.
- River Crossing is \$3.8m higher than the prior plan.
- Higby Mill – West Lexington higher due to addition of the SE Transformer project and the need for a new section of Bus
- 2011 Lines from the 2009 MTP not required, partially offset by higher East Frankfort to Tyrone line to be completed in 2009 and higher communication costs.

## Risks and Sensitivities

- NERC reliability standards will continue to drive Transmission through stricter interpretation of existing standards and the addition of new standards, penalty and fine assessment, and increasing audit scrutiny.
- Cyber Security will be an expanding area of compliance standards and scrutiny.
- Growth in the underrated breaker replacement backlog associated with major projects completion (TC2, KMPA, etc.).
- System protection asset replacement (Remote Terminal Unit's (RTU), relays, station control houses).
- ITO/RC construct revisited by FERC potentially requiring more oversight and cost.
- Unverified system ratings – lines and equipment (NERC – Transmission planning standards).
- Key Asset failure – transformer/breakers.
- Network Interconnect Transmission Service Requests (ie.KMPA, OMU, Cash Creek) impacts.
- Knowledge transfer and retention as employees retire.
- Federal and State mandatory Smart Grid initiatives.
- KYPSC mandated system hardening investment.

\$ millions

	2010 Budget	2011 Plan	2012 Plan
Redundancy of Protection Systems (proposed NERC standard - 100kV and above ~ \$86M total)	9	15	15
Smart Grid - \$76M total over 10 years	1	5	8
Additional DFR requirements	5	5	5
Circuit Hardening (see 4 scenarios below)	-	-	-
> report generated by Davies Consulting	-	-	-
Transmission Scenario 1 - \$42M total of which 5%, 20% and 30% assumed in '10, '11, and '12	2	8	13
Transmission Scenario 2 - \$31M total of which 5%, 20% and 30% assumed in '10, '11, and '12	2	6	9
Transmission Scenario 3 - \$25M total of which 5%, 20% and 30% assumed in '10, '11, and '12	1	5	7
Transmission Scenario 4 - \$12M total of which 5%, 20% and 30% assumed in '10, '11, and '12	1	3	4
Transformer Purchases (proposed NERC standard relating to timeframe for failure replacements)	3	2	0
Network Inter-connection Transmismission Service (NITS)	1	3	5
Cash Creek IPP Transmission Service (completion est. by 2014, total project \$100M, reimbursable)	10	15	15
West Irvine-Transformer, etc. Upgrades	(0)	0	(0)
Estill County Partners	-	-	(1)



## 2008-2012 Headcount (FTE)

<i>Department</i>	<i>2008 Year End</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Director Transmission</i>	2	2	2	2	2	2	2
<i>Transmission Lines</i>	27	29	28	28	29	29	29
<i>Substations &amp; Protection</i>	20	23	22	22	23	23	23
<i>Systems Control / EMS</i>	37	40	39	39	40	40	40
<i>Strategy and Planning</i>	12	17	15	15	17	17	17
<i>Reliability</i>	3	4	4	4	4	4	4
<i>Total</i>	101	115	110	110	115	115	115

Notes:

- (1) Combined premerger KU/LGE transmission staffing was at 97 (RFT) employees in 1997/1998.
- (2) By year-end 2001, transmission staffing had dropped to 77 (RFT) due to merger (1998), One Utility (2000) and WTSP (2001).
- (3) Staffing reduction of 20 (RFT) employees between 1998 and 2001 included a net reduction of 8 experienced engineers.



## Initiatives

- Continue development of Compliance culture, documentation, and process improvement.
- Continue integration of KU and LG&E transmission system management and processes.
- Asset management tool implementation.
- 10 Year static wire upgrade program.
- Capital Project Management committee and processes.
- Combined E.D. and E.S. reliability team.
- Align accounting and financial reporting and analysis by management and organizational structure.

## Long-Term Considerations

- Develop and coordinate internal resources to participate in regulatory process and committees (FERC, NERC, SERC).
- Focus on renewable and smart grid technologies for Transmission role definition and commercial opportunities.
- Enhance relationships and policy development effectiveness with state and federal legislative and regulatory agencies.
- Develop a strategic plan focused on business value optimization.
- Explore alternatives to current ITO/RC structure.

## Key Performance Indicators

KPI	2008 Year End	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Recordable Injuries Employee</i>	0.00	2.00	2.00	2.00	2.00	2.00
<i>Recordable Injuries Contractor</i>	6.00	3.00	6.00	3.00	3.00	3.00
<i>SAIDI</i>	6.90	7.00	10.40	7.00	7.00	7.00

Transmission Recordable Injury targets are combined with the Energy Services overall target for RIIR. The figures above are the actual injury targets for Transmission.

SAIDI overage for 2009 can be attributed to two outages:

February – pole failure in Shelbyville 0.8 minutes

April – static failure in Louisville at Clifton Substation >2 minutes

Various capital projects are included in the Plan to help improve SAIDI, these include:

- Static Replacement Program
- Danville Breakers
- Fiber replacements
- High side breaker projects

- Key Issues
- Post Audit
- Substation Capital
- Ongoing NERC Compliance
- Expansion Plan
- Reliability
- Network Inter-connection Transmission Service - NITS
- Other Costs
- O&M Detail
- Cost of Sales
- Integrated Utility System Operation
- ITO
- Smart Grid
- Circuit hardening

- Regulatory Oversight and Compliance
- System Reliability and Power Quality
- Major Capital Projects
- ITO/RC construct and cost
- Workforce planning
- Employee training and development (minimal experience in key areas)

- Continues to be labor intensive
- Have implemented processes to continually assess our compliance status, including:
  - weekly status reviews.
  - additional documentation.
  - evidence collection.
- Documentation software implementation will continue into 2010.
- Ensuring non-audited standards are in being met.
- System impacts due to KMPA, OMU, and ITO changes force us to review compliance.
- Current functions performed by Generation dispatch will move to Transmission.
- Protection system compliance activities are continuing to drive capital and O&M needs:
  - Capital – proposed redundancy standard (sensitivity), relay replacement program, carrier replacement program (both driven by NERC system protection standards).
  - O&M – extensive time required for testing. Requires cooperation and support from telecom and distribution resources.

- **Interconnection Activity:**

- EKPC – West Garrard, Central Hardin
- TVA – Meredith
- KMPA – North Princeton, Paducah Primary, Coleman Road

- **Control House Replacement Program**

- Updating aging equipment with modern controls technology. Improves reliability of the system and provides better operational information, Compliance and SAIDI implications.

- **New maintenance initiatives to strategically replace equipment**

- Batteries, Instrument Transformers, Surge Arrestors

- **Ice Storm Lessons Learned**

- Improve station service supply, harden communications circuits

- **PER-005 Task Based System Personnel Training**
- Timing: adopted NERC Board of Trustees, awaiting FERC approval, effective +2 yrs
- Content: define, train, verify Electric System Coordinator capability, document, simulator training
- Risk: Violation Risk Factor (VRF) Medium-High
- Issues/Resources: personnel time, trainers, engineering, documentation
- **NERC Project 2009-07 Protection System Enhancements**
- Timing: in development, possible implement by 2011, effective +2-3 yrs after
- Content: Proposed relay and carrier redundancy requirements
- Risk: VRF High
- Issues/Resources: capital to update & duplicate protection equipment
- **FAC-003 Vegetation Management (Facilities Design, Connections, & Maintenance)**
- Timing: FAC-003-2 will be issued for comments in Sept 2009
- Content: More stringent right of way clearing requirements
- Risk: VRF High
- Issues / Resources: increased ROW clearing O&M costs



## 2009-2012 Headcount Changes

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	115	115	115
<i>Prior Year</i>	110	115	115
<i>Variance</i>	<u>(5)</u>	<u>-</u>	<u>-</u>
<u><i>Variance Explanations</i></u>			
<i>Project Coordinator (Lines)</i>	(1)		
<i>Co-op Student Engineer</i>	(4)		
<i>Total Variance</i>	<u>(5)</u>	<u>-</u>	<u>-</u>

- The 2009 Contingency plan reduced headcount by 5 from the budget.
- The 2010 MTP is consistent with the Workforce Plan adopted in the 2009 MTP.

## 2009-2012 Capital Reconciliation –IFRS Cash Basis (\$000)

	2010 <i>Budget</i>	2011 <i>Plan</i>	2012 <i>Plan</i>
<i>Current Plan</i>	55,759	33,202	28,334
<i>Prior Plan</i>	39,144	45,502	25,162
<i>Variance</i>	<u>(16,615)</u>	<u>12,300</u>	<u>(3,172)</u>
 <u><i>Variance Explanations</i></u>			
<i>List major items that are driving plan over plan variances</i>			
<i>Trimble 2 Trans. Projects</i>	(4,589)	10,800	
<i>TC2 Workaround</i>	(5,361)	-	
<i>KMPA</i>	(1,696)	(540)	
<i>Static Replacements</i>	(1,000)	(1,100)	
<i>Middletown-Collins 138kV Line</i>	(1,684)	-	
<i>Campbellsville-Greensburg</i>	3,200	-	
<i>Brown North- Tyrone</i>	1,780	1,445	
<i>Skylight-Penal Farm 69kV</i>	2,200	2,565	
<i>Bardstown-Transformer Upgrade</i>	(1,500)	-	
<i>West Cliff Rebuild</i>	(1,733)	(267)	
<i>Bardstown-Transformer Upgrade</i>	(1,500)	-	
<i>Cynthiana Switch - Brkr Conversion</i>	(1,000)	-	
<i>Work Management/FRP software</i>	(2,433)	(567)	
<i>Other</i>	(1,299)	(36)	(3,172)
<i>Total Variance</i>	<u>(16,615)</u>	<u>12,300</u>	<u>(3,172)</u>

# Expansion Plan

- The Transmission Expansion Plan (TEP) identifies the need for and timing of reliability projects.
- TEP is developed in compliance with the NERC Transmission Planning Standards and the E.ON U.S. Transmission Planning Guidelines
- Major changes from the prior transmission expansion plan include:
  - Use of the 2009 MTP load forecast – Current expansion planning is based on a load forecast delivered in 12/2008, which has since been revised downward.
  - The 2010 summer forecast being used is 4.7% lower than the previous one (7,193 MW down to 6,854 MW), and this trend continues throughout the planning horizon. This has a significant impact on the timing of projects – and they are not always delayed.
  - A proposed 610 MW generator at Green River expected in 2014 has been removed from the planning models.

- A project to convert the East Frankfort/West Frankfort 69 kV line to 138 kV is no longer needed. This project was originally identified in MISO's Trimble County Unit 2 study.
- A second 345/138 kV transformer scheduled for Hardin County is no longer needed in the planning horizon.
- A project to install three breakers at Scott County has been initiated. This was initiated in part by a significant load addition to the Lemons Mill distribution substation.

IFRS, \$000s	2010 MTP			2009 MTP			Variance	
	2010	2011	2012	2009	2010	2011	2010	2011
<b>Transmission Expansion Plan (Excl. TC2)</b>	6,743	6,089	1,950	-	3,000	4,225	(6,743)	(3,089)
<b>Variance</b>								
Bardstown Ind Tap-Bardstown Ind 69kv recon.	-	2,295	-	-	-	-	-	(2,295)
MT 138kV Collins termination	50	-	-	-	-	-	(50)	-
Bardstown-Transformer Upgrade	1,500	-	-	-	-	-	(1,500)	-
Higby Mill 138/69 112 MVA	1,573	97	-	-	-	-	(1,573)	(97)
West Irvine-Transformer, etc. Upgrades	-	-	-	-	-	-	-	-
Brown North- Tyrone	1,220	2,780	-	-	3,000	4,225	(1,220)	220
Cynthiana Switch - Breaker Conversion	1,000	-	-	-	-	-	(1,000)	-
KY State Hosp-Danville East - Thermal Upgrade	600	-	-	-	-	-	(600)	-
3 mi 161kv W.Irvine-Lake Reba Tap/Delvinta	-	-	-	-	-	-	-	-
Planning Projects	-	917	1,950	-	-	-	-	(917)
Higby Mill Breaker Replacement	800	-	-	-	-	-	(800)	-
Other								
<b>Totals</b>	<b>6,743</b>	<b>6,089</b>	<b>1,950</b>	<b>-</b>	<b>3,000</b>	<b>4,225</b>	<b>(6,743)</b>	<b>(3,089)</b>

IFRS, \$000s	2010 MTP			2009 MTP			Variance	
	2010	2011	2012	2009	2010	2011	2010	2011
<b>Reliability</b>	9,437	8,781	7,475		2,971	2,502	6,466	6,279
<b>Variance</b>								
West Cliff Rebuild	1,733	267	-	-	-	-	1,733	267
Static Replacement	1,000	1,100	1,210	-	-	-	1,000	1,100
Breakers Replacements	1,481	1,657	1,747	868	1,551	1,659	(70)	(2)
Station Service Transformers	624	720	720	-	-	-	624	720
High Side Breaker Additions	-	933	1,000	-	-	-	-	933
Oxmoor Underground 6650 & 6653	58	-	650	-	-	-	58	-
Millersburg Control Hse Repl	-	-	691	-	-	-	-	-
Dist Eastwood West Tap	285	-	-	-	-	-	285	-
Danville Breakers - adding bkrs to distribution stations	-	600	-	-	-	-	-	600
Distribution Reliability - Beattyville, Mt Vernon	-	-	-	-	-	-	-	-
Surge Arrestors-KU	373	211	200	-	-	-	373	211
Other	3,883	3,293	1,257	-	-	-	3,883	3,293
<b>Totals</b>	<b>9,437</b>	<b>8,781</b>	<b>7,475</b>	<b>868</b>	<b>1,551</b>	<b>1,659</b>	<b>7,886</b>	<b>7,122</b>

IFRS, \$000s	2010 MTP			2009 MTP			Variance	
	2010	2011	2012	2009	2010	2011	2010	2011
<b>NITS</b>	3,715	1,995	3,463		1,000	1,000	(3,715)	(995)
Polo Club Substation	-	458	1,423	-	-	-	-	(458)
Old Henry	740	-	-	-	-	-	(740)	-
NITS 10	1,000	-	-	-	-	-	(1,000)	-
NITS 11	-	1,000	-	-	-	-	-	(1,000)
NITS 12	-	-	1,000	-	-	-	-	-
KMPA Substation Projects	1,696	540	1,040	-	-	-	(1,696)	(540)
Other	279	(3)	-	-	1,000	1,000	(279)	1,003
<b>Totals</b>	<b>3,715</b>	<b>1,995</b>	<b>3,463</b>	<b>-</b>	<b>1,000</b>	<b>1,000</b>	<b>(3,715)</b>	<b>(995)</b>

## 2008-2012 Other Costs (\$000)

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Stores Expense</i>						
<i>Labor</i>	-	-	-	-	-	-
<i>Non labor</i>	-	-	-	-	-	-
<i>Total</i>	-	-	-	-	-	-
<i>Local Engineering</i>						
<i>Labor</i>	2,859	2,056	2,056	2,514	2,602	2,693
<i>Non labor</i>	629	-	-	-	-	-
<i>Total</i>	3,488	2,056	2,056	2,514	2,602	2,693
<i>Other Balance Sheet</i>						
<i>Labor</i>	-	-	-	-	-	-
<i>Non labor</i>	-	-	-	-	-	-
<i>Total</i>	-	-	-	-	-	-
<i>Total Other Costs</i>	<u>3,488</u>	<u>2,056</u>	<u>2,056</u>	<u>2,514</u>	<u>2,602</u>	<u>2,693</u>



## 2009-2012 O&M Reconciliation - IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	31,166	31,136	31,692
<i>Prior Year</i>	34,273	31,166	31,136
<i>Variance</i>	<u>3,107</u>	<u>30</u>	<u>(556)</u>
<u><i>Variance Explanations</i></u>			
<i>Cost of Removal (excl Storms)</i>	(2,022)	326	278
<i>Major Storm Costs</i>	6,592		
<i>Other</i>	(1,463)	(296)	(834)
<i>Total Variance</i>	<u>3,107</u>	<u>30</u>	<u>(556)</u>

O&M	2010 MTP			2009 MTP		Fav(Unfav)	
	2010	2011	2012	2010	2011	2010	2011
Direct Raw Labor	5,944	6,154	6,380	5,352	5,539	(592)	(615)
Direct Burdens	5,209	5,393	5,592	4,093	4,237	(1,116)	(1,156)
Distribution / System Lab Labor	1,466	1,519	1,572	1,533	1,587	67	68
Distribution / System Lab Burdens	1,284	1,331	1,378	1,172	1,213	(112)	(118)
<b>Total Labor</b>	<b>13,903</b>	<b>14,397</b>	<b>14,922</b>	<b>12,150</b>	<b>12,576</b>	<b>(1,753)</b>	<b>(1,821)</b>
Vegetation Management	3,961	4,060	4,162	4,060	4,162	99	101
Indiana Bat Mitigation	250	256	263	769	788	519	532
Routine Maintenance	672	689	706	689	706	17	17
Pole Inspections	1,104	1,132	1,160	1,132	1,160	28	29
Lines G&A Nonlabor	91	93	96	93	96	2	2
<b>Subtotal Lines</b>	<b>6,078</b>	<b>6,230</b>	<b>6,386</b>	<b>6,743</b>	<b>6,912</b>	<b>665</b>	<b>682</b>
Substation Maintenance	2,397	2,455	2,515	2,308	2,372	(89)	(83)
Contract Inspections	-	-	-	246	252	246	252
Relocation	-	-	-	123	126	123	126
Outside Engineering & Compliance	148	152	155	127	130	(21)	(21)
Protection System Maintenance	60	62	63	369	378	309	317
Breaker Transformer Testing	36	37	38	197	202	161	165
Telecommunications Protection Testing	288	295	303	295	303	7	7
Substations Other G&A Nonlabor	252	258	265	195	200	(57)	(59)
<b>Subtotal Substations</b>	<b>3,181</b>	<b>3,259</b>	<b>3,339</b>	<b>3,860</b>	<b>3,962</b>	<b>679</b>	<b>704</b>
System Controls	703	720	738	1,059	1,085	356	365
EMS	431	442	454	427	438	(4)	(4)
Strategy & Planning and Reliability	232	240	245	214	219	(18)	(21)
<b>Subtotal</b>	<b>1,366</b>	<b>1,402</b>	<b>1,437</b>	<b>1,700</b>	<b>1,743</b>	<b>334</b>	<b>341</b>
NERC/FERC Fees	1,250	1,281	1,313	1,281	1,313	31	32
Director Nonlabor G&A	153	157	161	125	128	(28)	(29)
SVP, VP Nonlabor, Budgeting G&A	241	242	244	181	181	(60)	(61)
Stretch Gap	-	-	-	-	-	-	-
<b>Total O&amp;M</b>	<b>26,172</b>	<b>26,968</b>	<b>27,802</b>	<b>26,041</b>	<b>26,815</b>	<b>(131)</b>	<b>(153)</b>

	2010 MTP			2009 MTP		Fav(Unfav)	
	2010	2011	2012	2010	2011	2010	2011
<b>O&amp;M</b>							
Raw Labor	7,410	7,673	7,553	6,905	7,144	(505)	(529)
Burdens	6,493	6,724	7,369	5,280	5,463	(1,213)	(1,261)
<b><u>Non-labor</u></b>							
Lines	6,038	6,189	6,344	6,743	6,911	705	722
Substations	1,347	1,382	1,415	1,960	2,009	613	627
Sys Control, EMS	1,134	1,162	1,192	1,481	1,518	347	356
Strategy & Planning	94	97	100	22	23	(72)	(74)
Reliability	138	143	146	214	219	76	76
NERC/FERC Fees	1,281	1,313	1,346	1,281	1,313	-	-
Alloc from Distribution	1,871	1,918	1,966	1,870	1,917	(1)	(1)
G&A Support	366	367	371	285	298	(81)	(69)
<b>Total O&amp;M</b>	<b>26,172</b>	<b>26,968</b>	<b>27,802</b>	<b>26,041</b>	<b>26,815</b>	<b>(131)</b>	<b>(153)</b>
Cost of Removal	4,994	4,168	3,890	7,059	6,200	2,065	2,032
<b>Total IFRS O&amp;M</b>	<b>31,166</b>	<b>31,136</b>	<b>31,692</b>	<b>33,100</b>	<b>33,015</b>	<b>1,934</b>	<b>1,879</b>

## Cost of Sales

- OATT revenue increased from the 2009 MTP due to
  - The Trimble County to Speed 345 kV completed in 2009
  - The expected execution of the OMU NITSA for Service in May 2010.
  - The attachment of OMU facilities revenue requirement of approximately \$800k to the Attachment O rate.
- Amounts exclude the monthly amortization of the EKPC Settlement regulatory asset, and the monthly amortization of the MISO Exit fee.

## 2009-2012 Cost of Sales Reconciliation - IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	10,824	9,646	10,287
<i>Prior Year</i>	10,223	10,824	9,646
<i>Variance</i>	<u>(601)</u>	<u>1,178</u>	<u>(641)</u>
 <i>Prior Year is 2009 7+5 Forecast</i>			
 <u><i>Variance Explanations</i></u>			
<i>Increase in SPP ITO</i>	(960)	-	(314)
<i>Decrease 3rd Party Trans Exp</i>	128	702	
<i>Payments to IMEA/IMPA</i>	-	250	-
<i>RTO Admin Costs on Purchases</i>	31	377	(207)
<i>Other</i>	200	(151)	(120)
<i>Total Variance</i>	<u>(601)</u>	<u>1,178</u>	<u>(641)</u>

	2010 MTP			2009 MTP		Fav(Unfav)	
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2009</u>	<u>2010</u>
<b><u>Cost of Sales</u></b>							
EKPC NITS Costs	2,016	2,083	2,117	2,016	2,083	-	-
Intercompany Transmission - Native Load	1,409	952	1,165	2,802	2,039	1,393	1,087
Intercompany Transmission - MUNI	3,695	4,249	4,733	-	-	(3,695)	(4,249)
SPP - ITO	4,300	4,300	4,300	4,300	4,300	-	-
TVA - Reliability Coordination Agreement	1,665	1,749	1,835	1,665	1,749	-	-
RTO Costs	954	577	784	1,148	784	194	207
3rd Party Transmission Expense	1,639	937	1,251	1,357	932	(282)	(5)
Payment to IMEA/IMPA	250	-	-	250	250	-	250
<b>Total</b>	<b>15,928</b>	<b>14,847</b>	<b>16,185</b>	<b>13,538</b>	<b>12,137</b>	<b>(2,390)</b>	<b>(2,710)</b>
<b>Total excluding Intercompany</b>	<b>10,824</b>	<b>9,646</b>	<b>10,287</b>	<b>10,736</b>	<b>10,098</b>	<b>(88)</b>	<b>452</b>

Excludes Off-System Sales related expenses

# Revenue and Cost of Sales (\$000)

	2008	2009	2009	2010 MTP			2009 MTP		Var. '10 MTP vs. '09 MTP	
	Actual	Budget	7+5 F'cst	2010	2011	2012	2010	2011	2010	2011
<b>Revenues:</b>										
Grandfathered - NL	483	483	522	345	240	240	498	506	(153)	(266)
Intercompany Transmission - OSS	6,943	3,560	3,930	3,127	4,876	4,379	5,096	6,644	(1,969)	(1,768)
Intercompany Transmission - NL	1,886	3,817	2,714	1,409	952	1,165	2,802	2,039	(1,393)	(1,087)
Intercompany Transmission - MUNI	0	0	626	3,695	4,249	4,733	0	0	3,695	4,249
OATT - NL	3,261	3,924	3,396	6,083	7,872	8,744	4,085	4,230	1,998	3,642
From Other MISO members - NL	202	0	243	0	0	0	0	0	0	0
RSG for Off-System	0	0	(542)	0	0	0	0	0	0	0
<b>Total Revenues</b>	<b>12,775</b>	<b>11,784</b>	<b>10,889</b>	<b>14,659</b>	<b>18,189</b>	<b>19,261</b>	<b>12,481</b>	<b>13,419</b>	<b>2,178</b>	<b>4,770</b>
<b>Cost of Sales:</b>										
Interco Transmission Expense - OSS	6,943	3,560	3,930	3,127	4,876	4,379	5,096	6,644	1,969	1,768
Intercompany Transmission Expense - NL	1,886	3,818	2,695	1,409	952	1,165	2,802	2,039	1,393	1,087
Intercompany Transmission Expense - MUNI	0	0	626	3,695	4,249	4,733	0	0	(3,695)	(4,249)
3rd Party Transmission Expense - NL	2,186	1,905	1,737	1,639	937	1,251	1,357	932	(282)	(5)
EKPC NITS Costs	1,863	1,949	1,978	2,016	2,083	2,117	2,016	2,083	0	0
Payments to IMEA/IMPA (TC TLR's)	220	250	280	250	0	0	250	250	0	250
SPP - ITO Expense	3,292	3,340	4,340	4,300	4,300	4,300	4,300	4,300	0	0
TVA - Reliability Coordination Agreement	1,511	1,586	1,873	1,665	1,749	1,835	1,665	1,749	0	0
RTO Costs - NL	325	1,614	985	954	577	784	1,148	784	194	207
Other	68	0	(294)	0	0	0	0	0	0	0
RTO Costs - OSS	4,898	1,498	1,203	3,316	5,995	5,107	2,312	3,169	(1,004)	(2,826)
3rd Party Transmission Expense - OSS	303	0	(570)	0	0	0	0	0	0	0
Other - OSS	107	0	(1,217)	0	0	0	0	0	0	0
<b>Total Cost of Sales</b>	<b>23,602</b>	<b>19,520</b>	<b>17,566</b>	<b>22,371</b>	<b>25,718</b>	<b>25,671</b>	<b>20,946</b>	<b>21,950</b>	<b>(1,425)</b>	<b>(3,768)</b>
<b>Total Gross Margin</b>	<b>(10,827)</b>	<b>(7,736)</b>	<b>(6,677)</b>	<b>(7,712)</b>	<b>(7,529)</b>	<b>(6,410)</b>	<b>(8,465)</b>	<b>(8,531)</b>	<b>753</b>	<b>1,002</b>

The actual SPP settlement in 2009 is \$2.3m. The 7+5 includes \$1.0m

FERC Annual Revenue Requirement is \$71.8M in 2008



*Energy Delivery  
2010-2012 MTP*

*October 9, 2009*

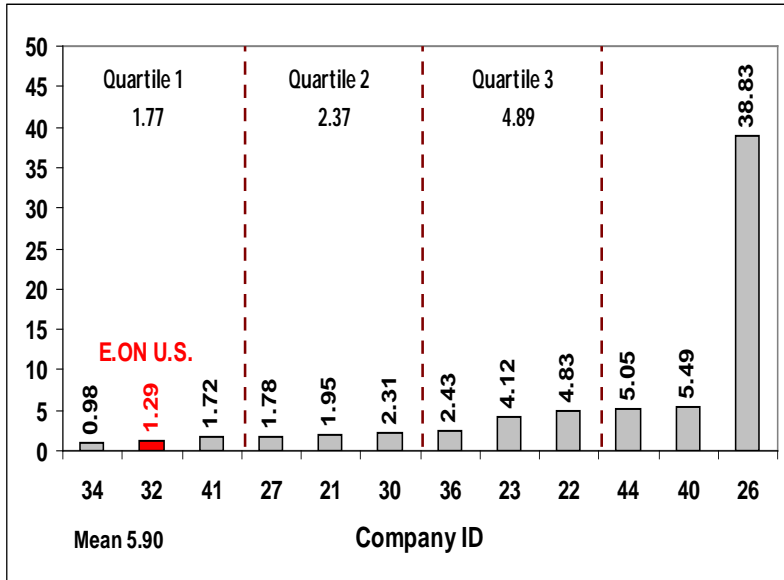


<i>Executive Summary</i>	3-8
<i>Financial Performance</i>	
$\ddot{Y}$ <i>O&amp;M</i>	9-10
$\ddot{Y}$ <i>Cost of Sales</i>	11
$\ddot{Y}$ <i>Capital</i>	12
$\ddot{Y}$ <i>Headcount Update</i>	13
$\ddot{Y}$ <i>Risks &amp; Sensitivities</i>	14-15
<i>Operational Performance</i>	
$\ddot{Y}$ <i>Initiatives</i>	16
$\ddot{Y}$ <i>Key Performance Indicators</i>	17

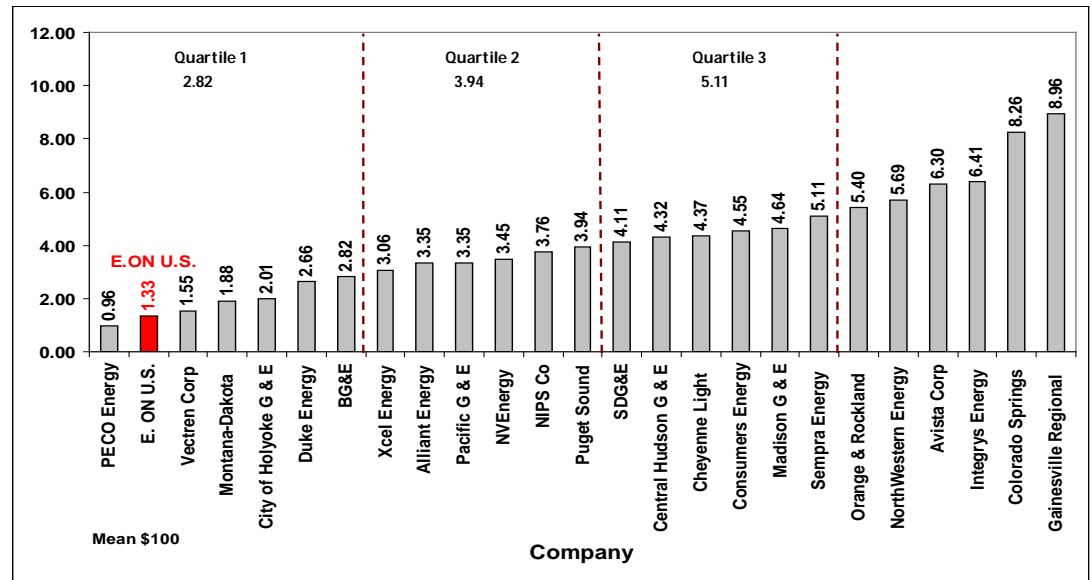
*Energy Delivery provides safe, reliable, and high quality service to our customers. The objective of the attached plan is to maintain or enhance service levels to our customers over the long term.*

## Safety Performance

Recordable Incident Rate Distribution Organization  
First Quartile Benchmarking – 2008 Data  
(Electric Only)

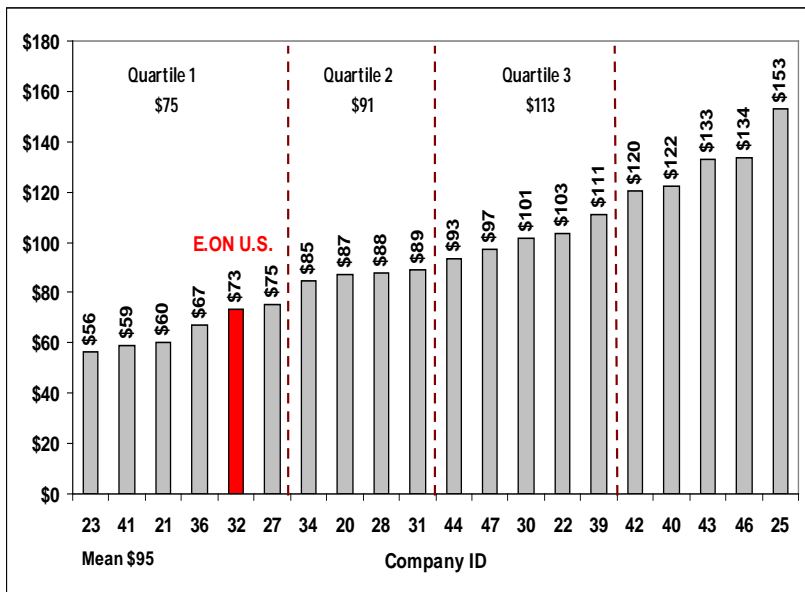


Recordable Incident Rate Combination Companies  
Natural Gas Industry Annual Safety Performance Report  
American Gas Association - 2008 Data

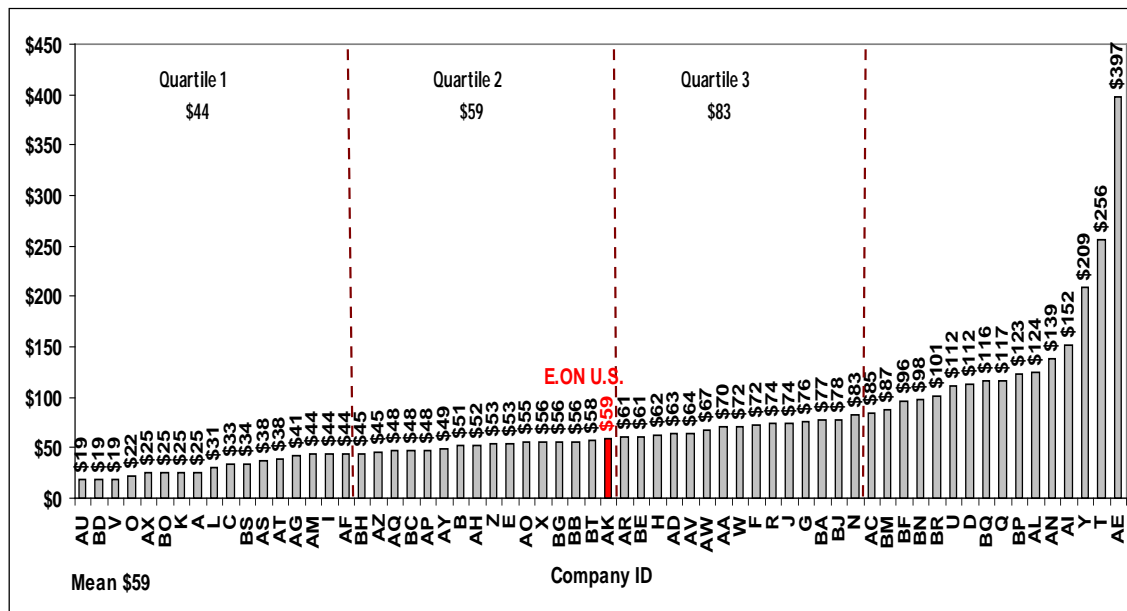


## O&M Cost per Customer Performance

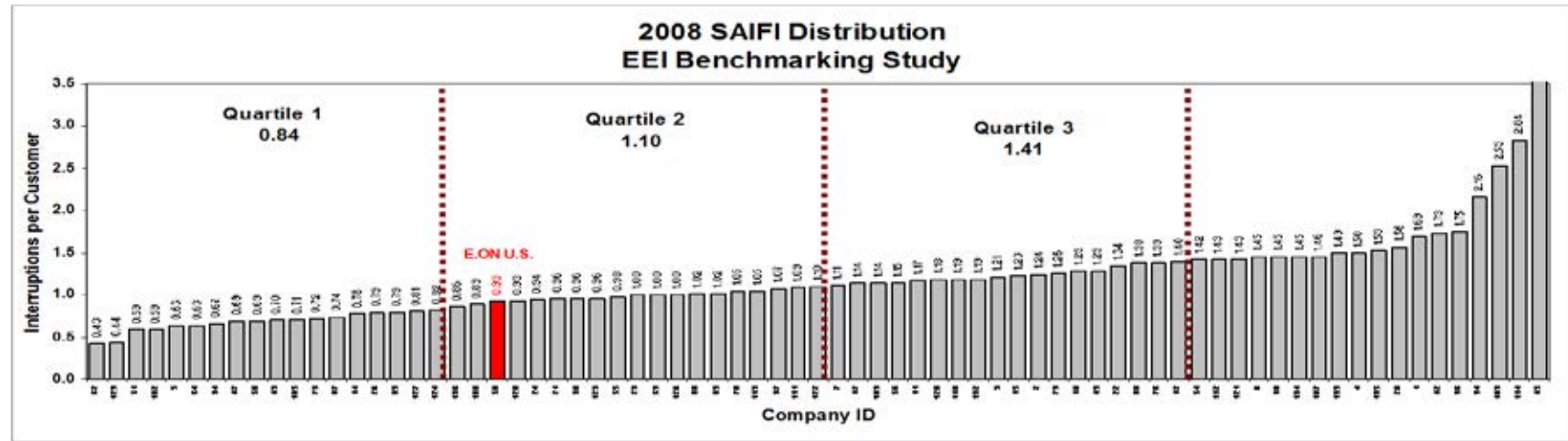
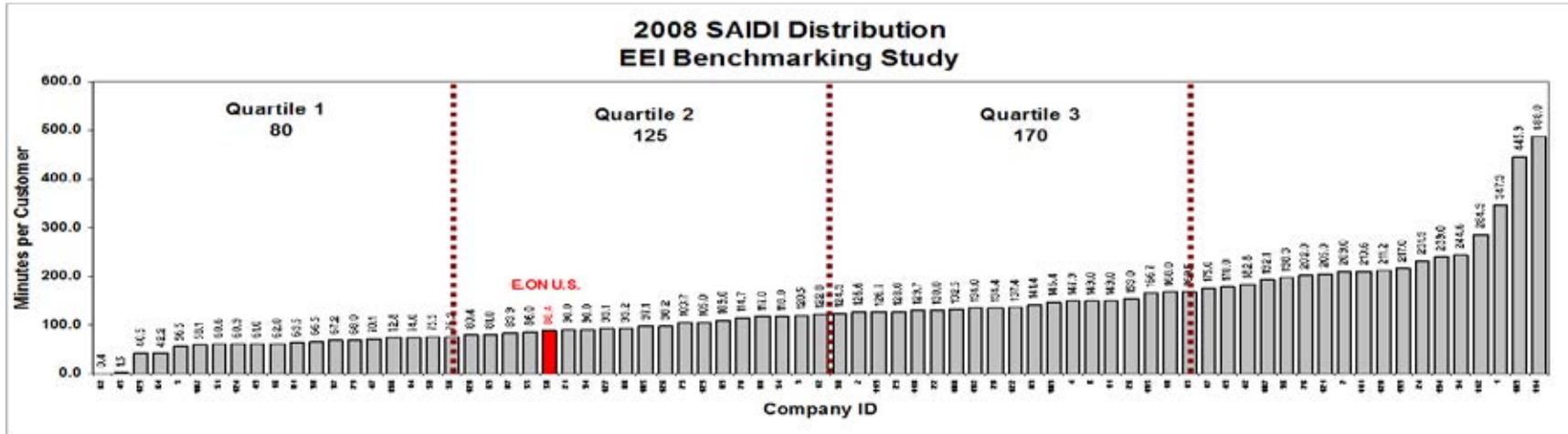
Overall Distribution Expenditures Per Distribution Customer  
 First Quartile Benchmarking – 2008 Data  
 (Electric Only)



Overall Gas Distribution Expenditures Per Customer  
 American Gas Association  
 2008 Data  
 (Gas Only)



## Reliability Performance



ÿ *Safety*

ÿ *Continue partnership with Energy Services and the “Bridge to Safety Excellence”*

ÿ *Continue focus on motor vehicle safety*

ÿ *Continue with national and international sharing of safety best practices and information*

ÿ *Have won 8 international, national and state awards to date*

ÿ *Maintain or enhance customer satisfaction in the current challenging environment*

ÿ *Continue progress on CCS performance*

ÿ *Increased investment in electric and gas infrastructure*

ÿ *Implementation of outage communication strategy*

ÿ *Continue to expand the portfolio of customer energy efficiency programs, including customer education on the need for energy efficiency*

ÿ *O&M*

ÿ *2009 forecast of \$224.1M is \$26M higher than the 2009 Contingency Plan:*

- DSM transfer from corporate                      \$22M*
- Winter storm costs                                      \$ 4M*

ÿ *Achieved O&M target in the 3-year MTP period.*

ÿ *Through the MTP, year over year increases are due primarily to labor/wage increases, additional DSM costs, storms, tree trimming, and bad debt expense.*

ÿ *Compounded Annual Growth Rate (CAGR) from 2009 to 2012 is 5.4%.*

ÿ *Major Risks:*

- Storm restoration*
- Bad debt*

Y CAPEX

Y *2009 forecast of \$166.7M is \$1M lower than the 2009 Contingency Plan.*

Y *Compounded Annual Growth Rate (CAGR) from 2009 to 2012 is 11.2%.*

Y *New business is expected to recover in the plan period.*

Y *Major Initiatives:*

- Pole Inspection & Treatment Program*
- Gas Leak Mitigation*
- Mobile Technology for Outage Communication Strategy*
- Continued Substation Enhancements*
- Muldraugh Gas Compressor Addition*
- West Call Center*
- Smart Metering - Advanced Metering Infrastructure Pilot*

## 2008-2012 O&M (\$000)

### ENERGY DELIVERY

Line of Business	2008 Actual	2009 Budget	2009		2010 Budget	2011 Plan	2012 Plan
			Contingency Plan	2009 Forecast			
<i>Distribution</i>	134,215	102,011	201,392	218,513	111,600	119,675	123,525
<i>Retail</i>	39,608	40,882	43,287	65,870	80,745	84,437	83,385
<i>Metering</i>	22,532	25,754	27,833	26,798	27,998	28,408	29,086
<i>Operating Services</i>	15,585	17,204	17,347	18,136	19,617	20,299	20,766
<b>Total Items Affecting US GAAP EBIT</b>	<b>211,940</b>	<b>185,851</b>	<b>289,859</b>	<b>329,317</b>	<b>239,960</b>	<b>252,819</b>	<b>256,762</b>
<i>Distribution - Non-Operating Adj.</i>	(39,520)	-	(99,314)	(115,045)	-	-	-
<i>Cost of Removal</i>	7,286	5,500	7,807	9,784	5,500	5,500	5,775
<b>Total IFRS Adjustments</b>	<b>(32,234)</b>	<b>5,500</b>	<b>(91,507)</b>	<b>(105,261)</b>	<b>5,500</b>	<b>5,500</b>	<b>5,775</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>179,706</b>	<b>191,351</b>	<b>198,352</b>	<b>224,056</b>	<b>245,460</b>	<b>258,319</b>	<b>262,537</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

CAGR from 2009 - 2012 is 5.4%.

Variance 2008 Actuals to 2009 Forecast - Major drivers are DSM (not included in ED in 2008) and burden increases.



## 2008-2012 O&M (\$000)

### ENERGY DELIVERY

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<b>OPEX Expenses</b>							
Raw Labor	45,080	51,531	51,234	54,604	53,518	57,504	60,478
Labor Burdens	33,208	38,146	51,257	46,416	52,226	56,668	59,427
<b>Subtotal</b>	<b>78,288</b>	<b>89,677</b>	<b>102,491</b>	<b>101,020</b>	<b>105,744</b>	<b>114,172</b>	<b>119,905</b>
Ice/Ike Storm Expenses	8,577	-	9,476	9,781	-	-	-
<b>Total Labor</b>	<b>86,865</b>	<b>89,677</b>	<b>111,967</b>	<b>110,801</b>	<b>105,744</b>	<b>114,172</b>	<b>119,905</b>
<b>Non Labor:</b>							
Vegetation Management	14,783	15,541	15,541	14,941	15,600	18,022	19,068
Bad Debt	6,700	5,200	5,200	5,786	5,200	6,300	6,300
Outside Services	38,380	37,196	33,630	52,586	73,263	78,837	75,162
Other Non labor	36,227	38,237	36,330	44,741	40,153	35,488	36,327
<b>Subtotal</b>	<b>96,090</b>	<b>96,174</b>	<b>90,701</b>	<b>118,054</b>	<b>134,216</b>	<b>138,647</b>	<b>136,857</b>
Ice/Ike Storm Expenses	28,985	-	87,191	100,462	-	-	-
<b>Total Non Labor</b>	<b>125,075</b>	<b>96,174</b>	<b>177,892</b>	<b>218,516</b>	<b>134,216</b>	<b>138,647</b>	<b>136,857</b>
<b>Total Items Affecting US GAAP EBIT</b>	<b>211,940</b>	<b>185,851</b>	<b>289,859</b>	<b>329,317</b>	<b>239,960</b>	<b>252,819</b>	<b>256,762</b>
Distribution - Non-Operating Adj.	(39,520)	-	(99,314)	(115,045)	-	-	-
Ice/Ike Storm - Cost of Removal	1,958	-	2,647	4,802	-	-	-
Other Cost of Removal	5,328	5,500	5,160	4,982	5,500	5,500	5,775
<b>Total IFRS Adjustments</b>	<b>(32,234)</b>	<b>5,500</b>	<b>(91,507)</b>	<b>(105,261)</b>	<b>5,500</b>	<b>5,500</b>	<b>5,775</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>179,706</b>	<b>191,351</b>	<b>198,352</b>	<b>224,056</b>	<b>245,460</b>	<b>258,319</b>	<b>262,537</b>

## 2008-2012 Cost of Sales (\$000)

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget *</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Margin Expenses</i>						
<i>Gas Supply</i>	31	122	122	126	130	134
<i>Total Items Affecting US GAAP EBIT</i>	<u>31</u>	<u>122</u>	<u>122</u>	<u>126</u>	<u>130</u>	<u>134</u>
<i>Total IFRS Adjustments EBIT</i>						
<i>Total Items Affecting IFRS EBIT</i>	<u><u>31</u></u>	<u><u>122</u></u>	<u><u>122</u></u>	<u><u>126</u></u>	<u><u>130</u></u>	<u><u>134</u></u>

*Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.*

*\* No 2009 Contingency Plan for Cost of Sales due to the recoverability through rate mechanisms.*

## 2008-2012 Capital (Excluding COR) (\$000)

### ENERGY DELIVERY

<i>Project</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>Distribution</b>							
New Business	59,470	66,876	60,034	55,157	59,964	67,757	72,874
Enhance the Network	38,384	43,772	34,072	33,858	56,379	54,983	63,139
Maintain the Network	36,153	37,878	38,978	38,563	51,175	49,988	54,861
Repair the Network	16,397	6,869	21,235	26,034	8,361	8,519	8,775
Miscellaneous	3,112	3,701	4,008	4,189	7,257	8,710	8,305
<b>Total Distribution</b>	<b>153,516</b>	<b>159,096</b>	<b>158,327</b>	<b>157,801</b>	<b>183,136</b>	<b>189,957</b>	<b>207,954</b>
<b>Retail</b>	951	869	1,020	1,026	4,475	935	805
<b>Metering</b>	4,575	5,544	4,667	4,692	6,201	10,991	17,319
<b>Operating Services</b>	1,608	2,834	2,225	2,386	3,495	3,000	4,116
<b>Total Capital (107001)</b>	<b>160,650</b>	<b>168,343</b>	<b>166,239</b>	<b>165,905</b>	<b>197,307</b>	<b>204,883</b>	<b>230,194</b>
Cost of Removal	7,286	5,500	7,807	9,784	5,500	5,500	5,775
<b>Total (US-GAAP)</b>	<b>167,936</b>	<b>173,843</b>	<b>174,046</b>	<b>175,689</b>	<b>202,807</b>	<b>210,383</b>	<b>235,969</b>
Less Cost of Removal	(7,286)	(5,500)	(7,807)	(9,784)	(5,500)	(5,500)	(5,775)
Less Cash Adjustment - Accruals	766	(34)	1,827	831	(500)	(100)	(1,100)
<b>Total (IFRS)</b>	<b>161,416</b>	<b>168,309</b>	<b>168,066</b>	<b>166,736</b>	<b>196,807</b>	<b>204,783</b>	<b>229,094</b>

CAGR from 2009 - 2012 is 11.2%.

## 2008-2012 Headcount (FTE)

<u>Department</u>	<u>2008 Year End</u>	<u>2009 Budget</u>	<u>2009 Contingency Plan</u>	<u>2009 Forecast</u>	<u>2010 Plan</u>	<u>2011 Plan</u>	<u>2012 Plan</u>
<i>Distribution</i>							
Support Groups	28	29	28	28	28	28	28
Asset Management	57	63	59	59	60	61	64
Distribution Operations	671	707	698	698	699	701	705
Gas Control and Storage	112	115	115	115	116	121	120
Gas Planning and Supply	5	5	5	5	5	5	5
<b>Total Distribution</b>	<b>873</b>	<b>919</b>	<b>905</b>	<b>905</b>	<b>908</b>	<b>916</b>	<b>922</b>
<i>Retail and Metering</i>							
Retail Executive and Support	2	2	2	2	2	2	2
Customer Service and Marketing	252	280	283	283	291	281	281
Revenue Processes & Metering	194	215	211	211	217	207	208
Energy Efficiency	11	18	18	20	30	33	36
Transportation	3	3	3	3	3	3	3
<b>Total Retail and Metering</b>	<b>462</b>	<b>518</b>	<b>517</b>	<b>519</b>	<b>543</b>	<b>526</b>	<b>530</b>
<i>Operating Services</i>							
Director and Support	2	2	2	2	2	2	2
Contact Management	2	2	2	2	2	2	2
Facility Services	14	14	15	15	15	15	15
Administration Services	4	5	4	4	4	4	4
Real Estate Right of Way	7	8	8	8	8	9	9
<b>Total Operating Services</b>	<b>29</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>32</b>	<b>32</b>
<b>Total Energy Delivery</b>	<b>1,364</b>	<b>1,468</b>	<b>1,453</b>	<b>1,455</b>	<b>1,482</b>	<b>1,474</b>	<b>1,484</b>

*Risks and Sensitivities (\$000)*

	<u>2010</u>	<u>2011</u>	<u>2012</u>
<u>OPEX</u>			
Reduction in Tree Trimming	1,500		
Repairs in Gas and Electric Operations	1,000	1,000	1,000
Bad Debt	2,500	1,900	1,900
Potential increases in Operating Services Contracts	1,400	1,400	1,400
<b>Total</b>	<b>6,400</b>	<b>4,300</b>	<b>4,300</b>
<u>CAPEX</u>			
Storm Restoration (to current 5 yr average)	400	400	400
Circuit Hardening	11,132	36,614	50,913
<b>Total</b>	<b>11,532</b>	<b>37,014</b>	<b>51,313</b>

## *Risks and Sensitivities*

- Y Customer Satisfaction*
- Y Material and Equipment Price Increases*
- Y Fuel Prices*
- Y Increased Regulation*
- Y Energy Efficiency Regulatory Approvals*
- Y Pace of the Economic Recovery*

## *Initiatives*

- ÿ *Safety – Destination Zero*
- ÿ *Outage Communication Strategies*
- ÿ *Circuit Hardening Evaluation*
- ÿ *Pole Inspection and Treatment Program*
- ÿ *Energy Efficiency Strategy*
- ÿ *Wellness Initiatives*
- ÿ *Employee Development*
- ÿ *CCS Implementation & Stabilization*
- ÿ *Business Continuity Planning*
- ÿ *Energy Star Partnership / Green Initiatives*
- ÿ *Smart Meter / Smart Grid*

## Key Performance Indicators

<u>KPI</u>	<u>2008 Year End</u>	<u>2009 Budget</u>	<u>2009 Forecast</u>	<u>2010 Budget</u>	<u>2011 Plan</u>	<u>2012 Plan</u>
<i>Safety (Energy Delivery)</i>	1.29	2.00	2.00	2.00	2.00	2.00
<i>SAIFI</i>	0.90	0.77	0.95	0.93	0.91	0.89
<i>SAIDI</i>	85.34	75.18	99.73	98.00	96.00	94.00
<i>Cash Cost per Customer (rolling 12 months)</i>	\$237	\$207	\$300	\$238	\$249	\$264



# Appendix

## 2008-2012 O&M (\$000)

### DISTRIBUTION OPERATIONS

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<b>Opex Expenses</b>							
Raw Labor	25,510	27,325	26,434	28,518	27,484	28,114	28,959
Burdens	18,406	19,792	27,867	23,246	26,771	32,012	32,971
<b>Subtotal</b>	<b>43,916</b>	<b>47,117</b>	<b>54,301</b>	<b>51,764</b>	<b>54,255</b>	<b>60,126</b>	<b>61,930</b>
Ice/Ike Storm Expenses	8,577	-	9,476	9,781	-	-	-
<b>Total Labor</b>	<b>52,493</b>	<b>47,117</b>	<b>63,777</b>	<b>61,545</b>	<b>54,255</b>	<b>60,126</b>	<b>61,930</b>
<b>Non labor:</b>							
Vegetation Management	14,783	15,541	15,541	14,941	15,600	18,022	19,068
Storm Restoration	653	3,700	5,100	5,100	6,500	6,500	6,500
Fuel Gas and Gas Losses	5,852	8,614	8,614	7,814	4,646	5,204	5,828
Outside Services	16,098	12,536	7,230	11,194	15,446	19,396	20,350
Other Non labor	15,351	14,503	13,939	17,457	15,153	10,427	9,849
<b>Subtotal</b>	<b>52,737</b>	<b>54,894</b>	<b>50,424</b>	<b>56,506</b>	<b>57,345</b>	<b>59,549</b>	<b>61,595</b>
Ice/Ike Storm Expenses	28,985	-	87,191	100,462	-	-	-
<b>Total Non Labor</b>	<b>81,722</b>	<b>54,894</b>	<b>137,615</b>	<b>156,968</b>	<b>57,345</b>	<b>59,549</b>	<b>61,595</b>
<b>Total Items Affecting US GAAP EBIT</b>	<b>134,215</b>	<b>102,011</b>	<b>201,392</b>	<b>218,513</b>	<b>111,600</b>	<b>119,675</b>	<b>123,525</b>
Distribution - Non-Operating Adj.	(39,520)	-	(99,314)	(115,045)	-	-	-
Ice/Ike Storm - Cost of Removal	1,958	-	2,647	4,802	-	-	-
Other Cost of Removal	5,328	5,500	5,160	4,982	5,500	5,500	5,775
<b>Total IFRS Adjustments</b>	<b>(32,234)</b>	<b>5,500</b>	<b>(91,507)</b>	<b>(105,261)</b>	<b>5,500</b>	<b>5,500</b>	<b>5,775</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>101,981</b>	<b>107,511</b>	<b>109,885</b>	<b>113,252</b>	<b>117,100</b>	<b>125,175</b>	<b>129,300</b>

In 2008 actual, \$950K of storm restoration is included in labor.

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2008-2012 O&M (\$000)

### RETAIL

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<b>Opex Expenses</b>							
Raw Labor	12,707	15,832	16,543	17,703	17,415	19,214	20,922
Burdens	9,627	11,974	14,986	14,861	16,419	16,225	17,656
<b>Total Labor</b>	<b>22,334</b>	<b>27,806</b>	<b>31,529</b>	<b>32,564</b>	<b>33,834</b>	<b>35,439</b>	<b>38,578</b>
<i>Non labor:</i>							
Bad Debt	6,700	5,200	5,200	5,786	5,200	6,300	6,300
Outside Services	6,981	4,944	4,944	20,236	34,283	34,936	30,701
Other Non labor	3,593	2,932	1,614	7,284	7,428	7,762	7,806
<b>Total Non labor</b>	<b>17,274</b>	<b>13,076</b>	<b>11,758</b>	<b>33,306</b>	<b>46,911</b>	<b>48,998</b>	<b>44,807</b>
<b>Total Items Affecting US GAAP EBIT</b>	<b>39,608</b>	<b>40,882</b>	<b>43,287</b>	<b>65,870</b>	<b>80,745</b>	<b>84,437</b>	<b>83,385</b>
<b>Total IFRS Adjustments</b>							
<b>Total Items Affecting IFRS EBIT</b>	<b>39,608</b>	<b>40,882</b>	<b>43,287</b>	<b>65,870</b>	<b>80,745</b>	<b>84,437</b>	<b>83,385</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2008-2012 O&M (\$000)

### METERING

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>Opex Expenses</b>							
<i>Raw Labor</i>	5,876	7,074	6,957	6,291	6,870	8,016	8,341
<i>Burdens</i>	4,434	5,382	7,254	7,162	7,461	6,538	6,823
<b>Total Labor</b>	<b>10,310</b>	<b>12,456</b>	<b>14,211</b>	<b>13,453</b>	<b>14,331</b>	<b>14,554</b>	<b>15,164</b>
<i>Non labor:</i>							
<i>Outside Services</i>	10,197	11,088	11,428	11,101	11,562	11,813	11,813
<i>Non labor</i>	2,025	2,210	2,194	2,244	2,105	2,041	2,109
<b>Total Non labor</b>	<b>12,222</b>	<b>13,298</b>	<b>13,622</b>	<b>13,345</b>	<b>13,667</b>	<b>13,854</b>	<b>13,922</b>
<b>Total Items Affecting US GAAP EBIT</b>	<b>22,532</b>	<b>25,754</b>	<b>27,833</b>	<b>26,798</b>	<b>27,998</b>	<b>28,408</b>	<b>29,086</b>
<b>Total IFRS Adjustments</b>							
<b>Total Items Affecting IFRS EBIT</b>	<b>22,532</b>	<b>25,754</b>	<b>27,833</b>	<b>26,798</b>	<b>27,998</b>	<b>28,408</b>	<b>29,086</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2008-2012 O&M (\$000)

### OPERATING SERVICES

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>Opex Expenses</b>							
Raw Labor	987	1,300	1,300	2,092	1,749	2,160	2,256
Burdens	741	998	1,150	1,147	1,575	1,893	1,977
<b>Total Labor</b>	<b>1,728</b>	<b>2,298</b>	<b>2,450</b>	<b>3,239</b>	<b>3,324</b>	<b>4,053</b>	<b>4,233</b>
<i>Non labor:</i>							
Outside Services	4,451	4,928	4,928	4,955	5,472	6,192	5,798
Other Non labor	9,406	9,978	9,969	9,942	10,821	10,054	10,735
<b>Total Non labor</b>	<b>13,857</b>	<b>14,906</b>	<b>14,897</b>	<b>14,897</b>	<b>16,293</b>	<b>16,246</b>	<b>16,533</b>
<b>Total Items Affecting US GAAP EBIT</b>	<b>15,585</b>	<b>17,204</b>	<b>17,347</b>	<b>18,136</b>	<b>19,617</b>	<b>20,299</b>	<b>20,766</b>
<b>Total IFRS Adjustments</b>							
<b>Total Items Affecting IFRS EBIT</b>	<b>15,585</b>	<b>17,204</b>	<b>17,347</b>	<b>18,136</b>	<b>19,617</b>	<b>20,299</b>	<b>20,766</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2009-2012 O&M Reconciliation - IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	245,460	258,319	262,537
<i>Prior Year</i>	224,056	245,460	258,319
<i>Variance</i>	<u>(21,404)</u>	<u>(12,859)</u>	<u>(4,218)</u>

### Variance Explanations

See next slide for details.

## 2009-2012 O&M Reconciliation - IFRS (\$000)

<u>Variance Explanations</u>	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Labor/Wage Increases	(4,724)	(8,428)	(5,733)
Vegetation Management	(659)	(2,422)	(1,046)
Storm Restoration	(1,400)	-	-
Street Light Audit	500	(850)	350
Pole Inspection Program	(500)	(200)	(300)
Gas Control and Storage (Non-Labor Only)	(2,391)	-	-
Fuel Gas	3,168	(558)	(624)
Cost of Removal	(518)	-	(275)
Bad Debt	586	(1,100)	-
DSM (Non-Labor Only)	(14,744)	(1,294)	2,431
Metering Non-Labor	(322)	(187)	(68)
Operating Services Non-Labor	(1,396)	320	(287)
Non-labor reductions to Meet Target	996	1,860	1,334
<b>Total Variance</b>	<b><u>(21,404)</u></b>	<b><u>(12,859)</u></b>	<b><u>(4,218)</u></b>

## 2009-2012 Cost of Sales Reconciliation - IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	126	130	134
<i>Prior Year</i>	122	126	130
<i>Variance</i>	<u>(4)</u>	<u>(4)</u>	<u>(4)</u>
 <u><i>Variance Explanations</i></u>			
<i>Inflation</i>	(4)	(4)	(4)
 <i>Total Variance</i>	 <u>(4)</u>	 <u>(4)</u>	 <u>(4)</u>



## 2009-2012 Capital Reconciliation –IFRS Cash Basis (\$000)

	2010 Budget	2011 Plan	2012 Plan
Current Plan	196,807	204,783	229,094
Prior Plan	184,273	208,252	233,925
Variance	<u>(12,534)</u>	<u>3,469</u>	<u>4,831</u>

### Variance Explanations

See next slide for details.

## *2009-2012 Capital Reconciliation -IFRS Cash Basis (\$000)*

	<b>2010 Budget</b>	<b>2011 Plan</b>	<b>2012 Plan</b>
<b><u>Variance Explanations</u></b>			
New Business	10,146	6,172	4,146
System Enhancements	(3,028)	(1,657)	6,210
Lg. Scale Main Repl. (Shift from 09)	(4,500)	-	-
Gas Control and Storage	(5,196)	661	(12,859)
Distribution IT	(2,938)	(2,825)	(1,600)
Purchase of Vehicles	(600)	-	8,000
Tools and Equipment	(1,437)	216	222
Repair/Replace and Trouble Orders	(3,130)	(2,183)	(485)
Transportation (Increase in 2009)	1,880	1,974	2,033
West Call Center	(2,265)	710	-
Retail IT	(950)	250	(145)
New Business Office	-	985	-
Smart Grid	-	3,500	(2,500)
Meter Purchases and IT Upgrades	(700)	700	330
Facility Improvements (Shift from 09)	(609)	-	-
Other	(127)	154	379
Cash Adjustment for Accruals	920	(5,188)	1,100
<b>Total Variance</b>	<b>(12,534)</b>	<b>3,469</b>	<b>4,831</b>

## 2009-2012 Headcount Changes

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	1,482	1,474	1,484
Prior Year	1,455	1,482	1,474
Variance	<u>27</u>	<u>(8)</u>	<u>10</u>
<u>Variance Explanations</u>			
IT	1	1	1
Asset Information			2
System Ops & Dispatch		1	
Substation Const. & Maint.	1	(1)	2
Transformer Services		1	
Louisville Gas Services		1	1
Pineville Operations			1
Magnolia Operations	1		
Gas Control		1	(1)
Gas Regulatory		4	
Residential Service Center	8	(8)	
Business Offices	(1)	(1)	
Business Service Center		(1)	
Mktg & Performance - Retail (DSM)	1		
Billing Integrity	3	(9)	
Field Services Operations	2	(1)	
Meter Assets	1		1
Energy Efficiency	10	3	3
Real Estate and Right of Way		1	
Total Variance	<u>27</u>	<u>(8)</u>	<u>10</u>

## 2008-2012 Other Costs (\$000)

Item	2008 Actual	2009 Budget	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Local Engineering</i>						
Labor	13,473	12,284	14,307	15,359	15,873	16,464
Non labor	4,535	4,095	4,095	2,832	2,927	3,036
<b>Total</b>	18,008	16,379	18,402	18,191	18,800	19,500
Transportation	17,704	19,539	18,154	19,351	20,319	21,334
 <i>Operating Services Clearing</i>						
Labor (1)	852	956	-	-	-	-
Non labor	2,968	3,061	3,061	3,239	3,317	3,396
<b>Total</b>	3,820	4,017	3,061	3,239	3,317	3,396
<b>Total Other Costs</b>	39,532	39,935	39,617	40,781	42,436	44,230

(1) Transferred to OPEX in 2009.

## Major Assumptions

- ÿ *No significant changes to regulation that will affect plans.*
- ÿ *Maintaining a top position in the residential J.D. Power survey and maintaining top ratings from business customers will continue to be corporate goals.*
- ÿ *Customer expectations regarding levels of service and availability of information will continue to increase.*
- ÿ *Energy Efficiency projects and education will increase and continue to be an area of focus.*
- ÿ *Storms will be at the current 5-year average in 2010 - 2012.*
- ÿ *Bad debt will be lower than expected 2009 levels.*
- ÿ *Fuel costs will continue to remain at current levels.*
- ÿ *New business activity will bottom out in 2009 with a slight rise in 2010 and expected return to more normal levels in 2012.*

## Major Assumptions

- ÿ *Public works spending will be maintained at historic levels, unaffected by stimulus funding.*
- ÿ *No significant economic development projects requiring distribution investment (beyond what is currently known) are included in the plan.*
- ÿ *Large Scale and Priority Main replacement costs will increase in downtown areas.*
- ÿ *Investment in IT to improve communications with customer will be a high priority.*
- ÿ *Pole Inspection and Treatment Program begins in 2010.*
- ÿ *Advanced Metering Infrastructure (Smart Metering) expanding as part of DSM Responsive Meter Pilot.*
- ÿ *New call center in the west is needed due to high turnover in the Louisville area.*
- ÿ *Circuit hardening investments are dependent on recovery and are not included in the plans.*



*General Counsel Organization  
2010-2012 MTP*

*October 9, 2009*

## **Table of Contents – General Counsel Organization Summary**

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- *Initiatives*



- *The 2009 OPEX forecast for General Counsel and Human Resource Organization is \$673K favorable to the 2009 Contingency Plan. The favorable variance is attributable to the labor charges to WKE, additional reductions in charitable contributions, and a headcount transfer out of GC.*
- *General Counsel and Human Resources are slightly favorable to target during the MTP period due to the lower amortization of rate case expenses associated with the 2008 and 2009 test year cases.*

## 2008-2012 O&M (\$000) – General Counsel Org Summary

<i>Line of Business</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Legal/EVP</i>	20,216	18,685	18,069	18,193	19,234	21,907	22,768
<i>Corporate Communications</i>	4,914	6,228	5,843	5,712	5,965	6,267	6,427
<i>Corporate Responsibility</i>	1,331	1,522	1,482	1,382	1,524	1,659	1,703
<i>Compliance</i>	827	1,103	1,100	1,100	1,052	1,090	1,125
<i>Environmental</i>	5,945	5,798	5,695	5,695	6,157	6,265	6,611
<i>External Affairs</i>	858	874	872	872	926	962	990
<i>Federal Regulation &amp; Policy</i>	636	663	916	916	828	859	887
<i>State Regulation &amp; Rates</i>	1,839	2,846	2,603	2,303	2,502	2,594	2,678
<i>Human Resources</i>	4,956	6,842	6,729	6,462	7,193	7,691	7,762
<i>EON Graduate</i>	378	672	411	411	198	608	626
<i>Rate Case Amortization*</i>	-	-	-	-	1,257	1,572	1,656
<i>Total Items Affecting US GAAP EBIT</i>	<u>41,900</u>	<u>45,233</u>	<u>43,718</u>	<u>43,045</u>	<u>46,836</u>	<u>51,473</u>	<u>53,233</u>
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	<u>41,900</u>	<u>45,233</u>	<u>43,718</u>	<u>43,045</u>	<u>46,836</u>	<u>51,473</u>	<u>53,233</u>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

\*Prior to 2010, amortizations were included in Corporate Cost Center.

## 2008-2012 O&M (\$000) – General Counsel Org Summary

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Labor Expenses</i>							
Raw Labor	8,972	10,574	10,318	9,878	10,585	11,297	11,688
Burdens	6,663	8,068	9,130	9,096	9,262	9,886	10,228
Other Labor Benefits	252	444	440	440	391	371	379
<i>Non Labor Expenses</i>							
Outside Services	14,792	14,289	13,515	13,515	14,662	14,492	15,054
Contributions/Sponsorships	1,655	3,277	3,063	2,863	3,129	3,207	3,251
Fees, Permits, & Licenses	2,719	2,270	2,270	2,270	2,407	2,339	2,494
Advertising	1,207	1,128	817	817	828	844	861
Operating G&A	5,640	5,183	4,166	4,166	4,315	7,465	7,622
Rate Case Amortization	-	-	-	-	1,257	1,572	1,656
<i>Total Items Affecting US GAAP EBIT</i>	41,900	45,233	43,718	43,045	46,836	51,473	53,233
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	41,900	45,233	43,718	43,045	46,836	51,473	53,233

*Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.*

## 2009-2012 O&M Reconciliation - IFRS (\$000) – General Counsel Org

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	46,836	51,473	53,233
<i>Prior Year</i>	43,718	46,836	51,473
<i>Variance</i>	<u>(3,118)</u>	<u>(4,637)</u>	<u>(1,760)</u>
 <i><u>Variance Explanations</u></i>			
<i>Labor</i>	(219)	(692)	(399)
<i>Burdens</i>	(133)	(624)	(342)
<i>Legal 3rd Party</i>	(1,599)	(105)	(594)
<i>Outside Services</i>	452	274	33
<i>Contributions/Sponsorships</i>	(66)	(78)	(44)
<i>Fees, Permits &amp; Licenses</i>	(137)	68	(155)
<i>Operating G&amp;A Expense</i>	(159)	(191)	(174)
<i>Rate Case Amortization</i>	(1,257)	(315)	(84)
<i>Contingency Relief</i>	-	(2,975)	-
<i>Total Variance</i>	<u>(3,118)</u>	<u>(4,637)</u>	<u>(1,760)</u>

## 2008-2012 Capital (\$000) – General Counsel Org Summary

<i>Project</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>Human Resources</b>							
<i>PeopleSoft 8.9 Enhancements</i>	-	150	150	70	150	150	150
<i>Performance Management Module</i>	-	-	-	470	-	-	-
<i>Career Website Technology</i>	-	-	-	-	450	-	-
<i>Upgrade to PeopleSoft 9.1</i>	-	-	-	-	-	350	400
<i>Total Capital (107001)</i>	-	150	150	540	600	500	550
<i>IFRS Adjustments (Including Cash Adj)</i>	-	-	-	-	-	-	-
<i>Total IFRS</i>	-	150	150	540	600	500	550

## 2008-2012 Headcount (FTE) – General Counsel Org Summary

<i>Department</i>	<i>2008 Year End</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Legal/EVP</i>	27.0	27.0	27.0	26.0	26.0	26.0	26.0
<i>Corporate Communications</i>	16.0	16.5	16.0	16.0	16.0	17.0	17.0
<i>Corporate Responsibility</i>	4.0	4.0	4.0	4.0	4.0	5.0	5.0
<i>Compliance</i>	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<i>Environmental</i>	12.5	13.5	12.5	12.5	13.5	13.5	13.5
<i>External Affairs</i>	3.0	3.0	3.0	3.0	3.0	3.0	3.0
<i>Federal Regulation &amp; Policy</i>	3.0	3.0	3.0	3.0	3.0	3.0	3.0
<i>State Regulation &amp; Rates</i>	12.5	14.5	12.5	12.5	13.5	13.5	13.5
<i>Human Resources</i>	34.5	34.5	33.0	33.0	33.0	33.0	33.0
<i>EON Graduate</i>	4.0	7.0	3.0	3.0	3.0	6.0	6.0
<b>Total Headcount</b>	<b>122.5</b>	<b>129.0</b>	<b>120.0</b>	<b>119.0</b>	<b>121.0</b>	<b>126.0</b>	<b>126.0</b>

Full time person = 1 FTE; part time count as .5 FTE

## ***Risks and Sensitivities – OPEX***

### **Legal/EVP**

- ***Environmental legislation, regulation and litigation could lead to significant unbudgeted activity***
- ***Asbestos litigation costs could increase significantly if indirect contact cases are adversely decided***
- ***ITO Exit's PSC and FERC proceedings to terminate ITO agreement with SPP and enter into new contract with new ITO or an independent monitor become prolonged***
- ***No contingency for unbudgeted matters has been made***

## ***Risks and Sensitivities – OPEX Continued***

### **Communications**

- ***Given increased ECR, pending rate cases, possible coal price increases and pending federal carbon legislation, customer bills will continue to increase resulting in lower customer satisfaction levels***
- ***With growing concern regarding the environment, the public will expect a strong partnership between energy producers, energy consumers to provide energy efficiency programs and address and resolve environmental quality issues***
- ***Energy companies are likely to face increased legislative and regulatory scrutiny in the near-term, given rising prices and reliability concerns***
- ***Potential employee/retiree morale dip due to WKE Unwind and price increases and uncertainty related to our status with E.ON***



## ***Risks and Sensitivities – OPEX Continued***

### ***Corporate Responsibility & Community Affairs***

- Increased demand for community investment in non-profits given status of the economy and decreased government funding***
- Need for increased dialogue with community stakeholder groups and elected officials resulting from heightened political focus on environmental issues and company's planned infrastructure hardening***
- Challenge to continue employee interest in group-wide environmental programs***
- Need to maintain supportive relationships and continuous dialogue with all elected officials during upcoming gubernatorial election cycle***
- Continual need to enhance company's profile as CR leader in climate of increased corporate criticism and distrust***
- Need to promote CR awareness and help actualize CR principles among employees during time of significant business activity and fiscal challenge***
- Necessity to identify adequate resources in order to fully integrate CR principles into the company's business processes***

## ***Risks and Sensitivities – OPEX Continued***

### **Compliance**

- ***Changes in FERC/NERC Requirements***
  - ***Federal energy regulation continues to grow, and regulator expectations continue to be clarified, in ways that require enhanced compliance efforts***
  - ***NERC Reliability Standards, including the Cyber Security Standards, are very likely to be expanded***
  - ***Although not anticipated currently, certain changes may require expansion of Compliance Department's supporting role***

## ***Risks and Sensitivities – OPEX Continued***

### ***Environmental***

- ***Sharp increase in new regulatory initiatives requiring additional outside training of EA staff***
- ***Significant increase in the number of environmental permits required for daily company operations which necessitate outside contractors for specialized modeling, monitoring and testing***
- ***Increased costs for disposal of hazardous wastes, PCB wastes and spill clean-up materials***
- ***Increased annual operation fees for Title V air permits, KPDES water permits, KY River Authority and special waste landfills***

## ***Risks and Sensitivities – OPEX Continued***

### **External Affairs**

- ***Intense pressure on electric rates due to increased capital expenditures for pollution control and base load generation construction. Greenhouse gas legislation places substantial environmental compliance costs on the company and its customers.***
- ***Local, State and Federal Budget shortfalls result in increased efforts to levy taxes upon the company***
- ***Foreign ownership***
- ***Amount of revenue raised by the Political Action Committee must increase in order for the company to maintain credibility and move to the next level of public policy shaping***

## ***Risks and Sensitivities – OPEX Continued***

### **Federal Regulation & Policy**

- ***Increased operating expenses due to expanded regulation at the federal level and/or compliance related activities***
- ***Regulatory activities relating to implementing renewable portfolio standards regulation, smart-grid, demand response, and climate change imperatives***
- ***Potential for assertion of FERC jurisdiction over the licensing of Dix Dam under the Federal Power Act***
- ***Abandonment of Independent Transmission Operator with implementation of a self-administered transmission services monitor***
- ***Unplanned addition of new headcount due to increased regulatory jurisdiction and pursuit of strategic objectives from FERC and Congress***

## ***Risks and Sensitivities – OPEX Continued***

### **State Regulation & Rates**

- ***Growing rate base and operating expenses, coupled with regulatory lag, could make target returns difficult to achieve***
- ***Commission and intervenor sensitivity to rising costs could result in punitive actions beyond what reason would dictate – prudence could be challenged more often particularly where actual costs exceed estimates***
- ***Personnel changes among Commission staff and intervenors, as well as company staff, could also present a challenge to proceedings before the Commission***
- ***Outstanding legal challenge to KPSC's authority to develop rate mechanisms could have broad reaching impacts to existing recovery mechanisms***
- ***Failure to get timely regulatory approvals for generation and transmission investment could put reliability, customer service and utility economics at risk***
- ***Initiation of management audit during rate case would strain resources***

## *Risks and Sensitivities – OPEX Continued*

### *Human Resources*

- *Economic pressures and impact on human resource management*
- *Effects of possible Federal legislation relating to benefits, compensation, labor, safety, and taxation*
- *Ensuring appropriate monitoring, compliance, reporting and disclosure*
- *Maintaining key recruiting relationships during restricted hiring phase*

## ***Initiatives – General Counsel Org Summary***

### **Legal/EVP**

- *Plan to implement new matter management/e-billing system to enhance outside counsel management*
- *Implement follow-up items from outside counsel summit*



## ***Initiatives – General Counsel Org Summary***

### **Communications**

***Provide proactive/positive external messages to U.S. media, customers and other stakeholders concerning company initiatives; be proactive/reactive in addressing issues to reduce company risk. Critical company initiatives during this budget period requiring external communications support include:***

- Enhanced environmental profile – carbon strategy and new energy efficiency programs***
- Increases in commodity prices***
- Ongoing regulatory matters – including future rate cases***

***Communicate/educate E.ON U.S. employees about strategy, mission, vision, corporate identity and key company/industry initiatives, news and information. Critical company initiatives during this budget period requiring internal communications support include:***

- Enhanced environmental profile and new customer tools***
- Changes to benefits/health care offerings; H1N1 flu***
- ePerformance – new online performance management system***

## ***Initiatives – General Counsel Org Summary***

### ***Corporate Responsibility & Community Affairs***

- ***Provision of ongoing administrative support – PO1 Campaign***
- ***Administrative support/management of E.ON U.S. Foundation***
- ***Management of community investment team and general grant process***
- ***Management of “Plant for the Planet” tree planting grant program***
- ***Member of E.ON Group-wide CR volunteer and data collection work-groups***
- ***Environmental Champions initiative***
- ***Enhanced community investment tracking***
- ***Energy for Children program management***
- ***Stakeholder engagement and ongoing community group relations***
- ***Lead partner - statewide CR professionals organization***
- ***JCPS environmental magnet school taskforce***
- ***Public safety program – public appearances and internet tools***

## ***Initiatives – General Counsel Org Summary***

### **Compliance**

- ***Further Enhancement of FERC and NERC Compliance Programs***
  - ***Developing FERC compliance programs for electric and gas businesses to pursue changing industry norms***
  - ***Sustaining efforts with newly implemented NERC compliance program***
- ***Revision of Records Retention Program and Related Education Effort***
  - ***Existing policy has been updated***
  - ***Substantial education efforts Company-wide will follow***

## ***Initiatives – General Counsel Org Summary***

### **Environmental**

- ***Enhance communication between the Environmental Affairs, Compliance/Systems Lab and Operations teams***
- ***Enhance our environmental risk assessment in order to anticipate, identify, and mitigate risks. Increase number of pro-active/preventative audits/assessments***
- ***To maximum extent possible, shape the structure of environmental regulatory programs to maintain maximum flexibility for LOB operations and minimize overall cost impact***
- ***Inform, educate and assist LOBs in preparing for anticipated changes in environmental policies, rules and regulations***
- ***Work cooperatively with environmental regulators to achieve optimal permit conditions***
- ***Environmental staff development in order to maintain support for internal customer needs and minimize overall corporate risk and liability***

## ***Initiatives – General Counsel Org Summary***

### **External Affairs**

- ***Enhance partnerships with relevant company departments to facilitate refinement of company position on federal legislative and regulatory matters, CO2, Tax, Transmission and Energy Efficiency***
- ***Continue to publish the "Legislative Update" which provides real-time information on state legislative activities***
- ***Manage relationship with the Governor's Office of Energy Policy, Kentucky General Assembly, state regulatory agencies and industry groups in order to ensure the company's views are reflected in the State's Energy Policy***
- ***Maximize alliances with community leadership and seek partnership opportunities***
- ***Educate and build awareness of E.ON, its outstanding records, and its plans for the future***

## ***Initiatives – General Counsel Org Summary***

### ***Federal Regulation & Policy***

- ***Ongoing support for climate change related activities in the Congress***
- ***Identifying and obtaining regulatory approvals for an alternative to the Independent System Operator model***
- ***Continued coordination of NERC/SERC reliability standards development and implementation***
- ***Continuing support for compliance related activities involving reliability standards, OATT administration, and overall FPA requirements***
- ***Ongoing relationship building and positioning with regulators and key stakeholders in support of Company's strategic objectives***

## ***Initiatives – General Counsel Org Summary***

### ***State Regulation & Rates***

- *Base rate cases – strategy, planning, communication, execution*
- *Continue efforts regarding optimization of existing cost recovery mechanisms – ECR, FAC, GSC, and others*
- *Continue coordination of state regulatory calendar and strategies – improve on documentation for the latter – maintain emphasis on interaction between proceedings and consistency of positions*
- *Implement regulatory plan for IRP and CPCNs for related construction activity.*
- *Prepare for KPSC general management audit*
- *Assist in ensuring approval of new energy efficiency programs.*
- *Expand on education efforts and continue relationship building with new KPSC and intervenor staff*

## ***Initiatives – Human Resources***

### **Safety**

- ***Ensure safety excellence as an uncompromised core expectation for all employees and business partners***
- ***Promote safety expectations, procedures and actions that meet or exceed regulatory requirements***
- ***Drive improvements in safety performance by benchmarking practices against the top U.S. utility performers***

### **Employee Wellness**

- ***Promote a workplace culture supportive of good health practices and healthy lifestyle choices by our employees, retirees and their family members through management support, educational initiatives and targeted interventions***
- ***Evaluate wellness and health management strategies and design initiatives that address the major cost drivers in our benefit plans***



## ***Initiatives – Human Resources***

### ***Quality and Composition of the Workplace***

- ***Continue development of programs to attract, enhance and retain a high quality, inclusive, workforce while addressing the key challenges of:***
  - ***an aging workforce***
  - ***achieving proper balance between employees and contingent workers***
  - ***increasing diversity of candidate and employee pools***
  - ***providing competitive compensation and benefits***
  - ***managing generational differences***

## ***Initiatives – Human Resources***

### ***Leadership Development***

- ***Continually identify talent and potential within the organization through the Succession Planning processes***
- ***Continue emphasis on the Company's vision, mission, values and behaviors and incorporate them into our daily work practices***
- ***Emphasize development of new leaders to ensure appropriate competencies are developed***
- ***Support development of managers in areas of business knowledge, competencies and networking across the lines of business***

## ***Initiatives – Human Resources***

### ***Labor Relations***

- *Maintain an environment at non-union sites that preserves that status*
- *Continue to build cooperative relationships between management and established unions that encourage win-win solutions to support success and future growth of the business*
- *Effectively manage the labor community's agenda to exclusively utilize unionized workers on E.ON U.S. capital projects*

### ***Employee Benefits***

- *Control escalation and volatility of benefits costs while maintaining competitive policies, programs and plans*
- *Continue to educate employees regarding the value of their total rewards package; and, how they can personally impact benefits costs*
- *Study and, as appropriate, adopt changes related to a "consumer-driven" healthcare option along with taking steps toward minimizing network restrictions for medical plans*

## ***Initiatives – Human Resources***

### ***Business Practices and Processes***

- ***Build and maintain HR processes consistent with the reporting, disclosure and auditing requirements of applicable laws, including the EU-8 Act***
- ***Communicate to reinforce the company's culture of integrity and compliance***
- ***Develop and maintain HR policies and practices that support a positive, inclusive and productive work environment***
- ***Develop key performance measures to ensure strategic business partner alignment with our management team***

# Appendix

## 2008-2012 O&M (\$000) – Legal/EVP

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	2,346	2,892	2,892	2,750	2,902	3,017	3,122
Burdens	1,759	2,206	2,206	2,523	2,537	2,637	2,728
<b>Non Labor</b>							
Legal 3rd Party	11,383	10,097	9,564	9,564	10,663	10,768	11,362
Outside Services	1,543	912	861	1,162	881	898	926
Contributions/Sponsorships	303	327	327	327	315	337	343
Dues & Subscriptions	1,046	1,209	1,209	1,209	1,136	1,159	1,182
Operating G&A Expense	1,836	1,042	659	658	800	3,091	3,105
<b>Total Items Affecting US GAAP EBIT</b>	<b>20,216</b>	<b>18,685</b>	<b>17,718</b>	<b>18,193</b>	<b>19,234</b>	<b>21,907</b>	<b>22,768</b>
<b>Total IFRS Adjustments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>20,216</b>	<b>18,685</b>	<b>17,718</b>	<b>18,193</b>	<b>19,234</b>	<b>21,907</b>	<b>22,768</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2009-2012 O&M Reconciliation - IFRS (\$000) – Legal/EVP

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	19,234	21,907	22,768
<i>Prior Year</i>	18,685	19,234	21,907
<i>Variance</i>	<u>(549)</u>	<u>(2,673)</u>	<u>(861)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	(10)	(115)	(105)
<i>Burdens</i>	(331)	(100)	(91)
<i>Legal 3rd Party</i>	(566)	(105)	(594)
<i>Outside Services</i>	31	(17)	(28)
<i>Contributions/Sponsorships</i>	12	(22)	(6)
<i>Dues &amp; Subscriptions</i>	73	(23)	(23)
<i>Operating G&amp;A Expense</i>	242	(16)	(14)
<i>Contingency Relief</i>	-	(2,275)	-
<i>Total Variance</i>	<u>(549)</u>	<u>(2,673)</u>	<u>(861)</u>

**2009-2012 Headcount Changes – Legal/EVP**

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	26.0	26.0	26.0
<i>Prior Year</i>	27.0	26.0	26.0
<i>Variance</i>	<u>1.0</u>	<u>-</u>	<u>-</u>
 <i><u>Variance Explanations</u></i>			
<i>One Headcount Transferred to CFO</i>	1.0	-	-
<i>Total Variance</i>	<u>1.0</u>	<u>-</u>	<u>-</u>



## 2008-2012 O&M (\$000) - Communications

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	1,024	1,089	1,089	1,059	1,120	1,240	1,283
Burdens	777	831	831	962	979	1,084	1,121
Other Labor Benefits	-	-	-	-	12	12	13
<b>Non Labor</b>							
Outside Services	798	870	870	870	887	905	923
Brand Sponsorships	34	1,020	951	851	969	988	1,008
Sports Sponsorships	782	1,050	981	981	1,001	1,021	1,041
Advertising	1,206	1,113	802	802	818	834	851
Operating G&A Expense	293	255	187	187	179	183	187
<b>Total Items Affecting US GAAP EBIT</b>	<b>4,914</b>	<b>6,228</b>	<b>5,711</b>	<b>5,712</b>	<b>5,965</b>	<b>6,267</b>	<b>6,427</b>
<b>Total IFRS Adjustments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>4,914</b>	<b>6,228</b>	<b>5,711</b>	<b>5,712</b>	<b>5,965</b>	<b>6,267</b>	<b>6,427</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2009-2012 O&M Reconciliation - IFRS (\$000) - Communications

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	5,965	6,267	6,427
<i>Prior Year</i>	6,228	5,965	6,267
<i>Variance</i>	<u>263</u>	<u>(302)</u>	<u>(160)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	(43)	(43)	(44)
<i>Burdens</i>	(148)	(39)	(37)
<i>Additional FTE added 2010</i>	-	(143)	-
<i>Outside Services</i>	(17)	(18)	(18)
<i>Brand Sponsorship</i>	51	(19)	(20)
<i>Sports Sponsorship</i>	49	(20)	(20)
<i>Advertising</i>	295	(16)	(17)
<i>Operating G&amp;A Expense</i>	76	(4)	(4)
<i>Total Variance</i>	<u>263</u>	<u>(302)</u>	<u>(160)</u>

## 2009-2012 Headcount Changes - Communications

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	16.0	17.0	17.0
<i>Prior Year</i>	16.5	16.0	17.0
<i>Variance</i>	<u>0.5</u>	<u>(1.0)</u>	<u>-</u>
<u><i>Variance Explanations</i></u>			
<i>One PT Position not filled in 2009</i>	0.5	-	-
<i>Additional FTE added 2011</i>	-	(1.0)	-
<i>Total Variance</i>	<u>0.5</u>	<u>(1.0)</u>	<u>-</u>

## 2008-2012 O&M (\$000) – Corporate Responsibility

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	241	299	299	299	310	370	383
Burdens	184	227	228	264	270	323	334
<b>Non Labor</b>							
Outside Services	149	101	101	101	103	106	108
Contributions/Sponsorships	524	821	745	645	766	782	798
Operating G&A Expense	233	74	73	73	75	78	80
<i>Total Items Affecting US GAAP EBIT</i>	1,331	1,522	1,446	1,382	1,524	1,659	1,703
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	1,331	1,522	1,446	1,382	1,524	1,659	1,703

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2009-2012 O&M Reconciliation (\$000) – Corporate Responsibility

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	1,524	1,659	1,703
<i>Prior Year</i>	1,522	1,524	1,659
<i>Variance</i>	<u>(2)</u>	<u>(135)</u>	<u>(44)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	(11)	(11)	(13)
<i>Burdens</i>	(43)	(11)	(11)
<i>Additional FTE added in 2010</i>	-	(91)	-
<i>Contributions/Sponsorships</i>	55	(16)	(16)
<i>Operating G&amp;A Expense</i>	(3)	(6)	(4)
<i>Total Variance</i>	<u>(2)</u>	<u>(135)</u>	<u>(44)</u>

## 2009-2012 Headcount Changes – Corporate Responsibility

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	4.0	5.0	5.0
<i>Prior Year</i>	4.0	4.0	5.0
<i>Variance</i>	<u>-</u>	<u>(1.0)</u>	<u>-</u>
 <u><i>Variance Explanations</i></u>			
<i>One additional FTE in 2011</i>	-	(1.0)	-
<i>Total Variance</i>	<u>-</u>	<u>(1.0)</u>	<u>-</u>

## 2008-2012 O&M (\$000) - Compliance

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Opex Expenses</i>							
<i>Raw Labor</i>	391	477	477	477	464	482	499
<i>Burdens</i>	300	364	364	422	403	420	434
<i>Other Labor Benefits</i>	4	5	5	-	-	-	-
<b>Non Labor</b>							
<i>Outside Services</i>	37	87	59	59	60	61	62
<i>Operating G&amp;A Expense</i>	95	170	142	142	125	127	130
<i>Total Items Affecting US GAAP EBIT</i>	827	1,103	1,047	1,100	1,052	1,090	1,125
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	827	1,103	1,047	1,100	1,052	1,090	1,125

*Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.*

## 2009-2012 O&M Reconciliation - IFRS (\$000) - Compliance

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	1,052	1,090	1,125
<i>Prior Year</i>	1,103	1,052	1,090
<i>Variance</i>	<u>51</u>	<u>(38)</u>	<u>(35)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	18	(18)	(17)
<i>Burdens</i>	(39)	(17)	(14)
<i>Operating G&amp;A Expense</i>	72	(3)	(4)
<i>Total Variance</i>	<u>51</u>	<u>(38)</u>	<u>(35)</u>



## 2009-2012 Headcount Changes - Compliance

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	6.0	6.0	6.0
<i>Prior Year</i>	6.0	6.0	6.0
<i>Variance</i>	-	-	-
 <u><i>Variance Explanations</i></u>	 -	 -	 -
 <i>Total Variance</i>	 -	 -	 -

## 2008-2012 O&M (\$000) - Environmental

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	1,022	1,115	1,041	1,041	1,149	1,188	1,229
Burdens	777	852	795	922	1,006	1,040	1,076
<b>Non Labor</b>							
Outside Services	284	566	531	531	560	571	583
Contributions/Sponsorships	11	20	20	20	20	20	21
Fees, Permits & Licenses	2,688	2,254	2,254	2,254	2,392	2,323	2,478
Operating G&A	1,163	991	927	927	1,030	1,123	1,224
<i>Total Items Affecting US GAAP EBIT</i>	5,945	5,798	5,568	5,695	6,157	6,265	6,611
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	5,945	5,798	5,568	5,695	6,157	6,265	6,611

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2009-2012 O&M Reconciliation - IFRS (\$000) - Environmental

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	6,157	6,265	6,611
<i>Prior Year</i>	5,798	6,157	6,265
<i>Variance</i>	<u>(359)</u>	<u>(108)</u>	<u>(346)</u>
 <u><i>Variance Explanations</i></u>			
<i>Raw Labor</i>	(34)	(39)	(41)
<i>Burdens</i>	(154)	(34)	(36)
<i>Title V Fees</i>	(138)	69	(155)
<i>EPRI Dues</i>	(82)	(90)	(99)
<i>Operating G&amp;A</i>	49	(14)	(15)
<i>Total Variance</i>	<u>(359)</u>	<u>(108)</u>	<u>(346)</u>

**2009-2012 Headcount Changes - Environmental**

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	13.5	13.5	13.5
<i>Prior Year</i>	13.5	13.5	13.5
<i>Variance</i>	-	-	-
 <u><i>Variance Explanations</i></u>  			
<i>Total Variance</i>	-	-	-

## 2008-2012 O&M (\$000) – External Affairs

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Opex Expenses</i>							
<i>Raw Labor</i>	349	348	348	348	354	370	382
<i>Burdens</i>	266	265	265	306	308	322	332
<b>Non Labor</b>							
<i>Outside Services</i>	110	116	116	116	116	118	121
<i>Operating G&amp;A</i>	133	145	101	102	148	152	155
<i>Total Items Affecting US GAAP EBIT</i>	<u>858</u>	<u>874</u>	<u>830</u>	<u>872</u>	<u>926</u>	<u>962</u>	<u>990</u>
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	<u><u>858</u></u>	<u><u>874</u></u>	<u><u>830</u></u>	<u><u>872</u></u>	<u><u>926</u></u>	<u><u>962</u></u>	<u><u>990</u></u>

*Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.*

## 2009-2012 O&M Reconciliation - IFRS (\$000) – External Affairs

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	926	962	990
<i>Prior Year</i>	874	926	962
<i>Variance</i>	<u>(52)</u>	<u>(36)</u>	<u>(28)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	(6)	(16)	(12)
<i>Burdens</i>	(43)	(14)	(10)
<i>Operating G&amp;A Expense</i>	(3)	(6)	(6)
<i>Total Variance</i>	<u>(52)</u>	<u>(36)</u>	<u>(28)</u>

## 2009-2012 Headcount Changes – External Affairs

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	3.0	3.0	3.0
<i>Prior Year</i>	3.0	3.0	3.0
<i>Variance</i>	<u>-</u>	<u>-</u>	<u>-</u>
 <u><i>Variance Explanations</i></u>  			
<i>Total Variance</i>	<u>-</u>	<u>-</u>	<u>-</u>

## 2008-2012 O&M (\$000) – Federal Regulation & Policy

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	285	303	303	430	380	395	409
Burdens	218	231	231	377	333	346	358
<b>Non Labor</b>							
Outside Services	6	21	16	16	16	16	17
Operating G&A	127	108	93	93	99	102	103
<i>Total Items Affecting US GAAP EBIT</i>	636	663	643	916	828	859	887
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	636	663	643	916	828	859	887

*Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.*



## 2009-2012 O&M Reconciliation - IFRS (\$000) – Federal Reg

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	828	859	887
<i>Prior Year</i>	663	828	859
<i>Variance</i>	<u>(165)</u>	<u>(31)</u>	<u>(28)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	(77)	(15)	(14)
<i>Burdens</i>	(102)	(13)	(12)
<i>Operating G&amp;A Expense</i>	14	(3)	(2)
<i>Total Variance</i>	<u>(165)</u>	<u>(31)</u>	<u>(28)</u>

## 2009-2012 Headcount Changes – Federal Regulation & Policy

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	3.0	3.0	3.0
<i>Prior Year</i>	3.0	3.0	3.0
<i>Variance</i>	-	-	-
 <u><i>Variance Explanations</i></u>  			
<i>Total Variance</i>	-	-	-

## 2008-2012 O&M (\$000) – State Regulation & Rates

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	955	1,142	1,034	1,034	1,143	1,188	1,229
Burdens	723	872	790	914	999	1,039	1,075
Other Labor Benefits	-	-	-	-	10	10	10
<b>Non Labor</b>							
Outside Services	43	580	509	209	200	204	208
Operating G&A Expense	118	252	146	146	150	153	156
Rate Case Amortization*	-	-	-	-	1,257	1,572	1,656
<b>Total Items Affecting US GAAP EBIT</b>	<b>1,839</b>	<b>2,846</b>	<b>2,479</b>	<b>2,303</b>	<b>3,759</b>	<b>4,166</b>	<b>4,334</b>
<b>Total IFRS Adjustments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>1,839</b>	<b>2,846</b>	<b>2,479</b>	<b>2,303</b>	<b>3,759</b>	<b>4,166</b>	<b>4,334</b>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

\*Prior to 2010, amortizations were included were included in Corporate Cost Center.

## 2009-2012 O&M Reconciliation - IFRS (\$000) – State Reg & Rates

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	3,759	4,166	4,334
<i>Prior Year</i>	2,846	3,759	4,166
<i>Variance</i>	<u>(913)</u>	<u>(407)</u>	<u>(168)</u>
 <u><i>Variance Explanations</i></u>			
<i>Labor</i>	(1)	(45)	(41)
<i>Burdens</i>	(127)	(40)	(36)
<i>Other Labor Benefits</i>	(10)	-	-
<i>Outside Services</i>	380	(4)	(4)
<i>Operating G&amp;A Expense</i>	102	(3)	(3)
<i>Rate Case Amortization</i>	(1,257)	(315)	(84)
<i>Total Variance</i>	<u>(913)</u>	<u>(407)</u>	<u>(168)</u>

## 2009-2012 Headcount Changes – State Regulation & Rates

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	13.5	13.5	13.5
<i>Prior Year</i>	14.5	13.5	13.5
<i>Variance</i>	<u>1.0</u>	<u>-</u>	<u>-</u>
 <u><i>Variance Explanations</i></u>			
<i>Additional FTE position not filled in 2009</i>	1.0	-	-
<i>Total Variance</i>	<u>1.0</u>	<u>-</u>	<u>-</u>

## 2008-2012 O&M (\$000) – Human Resources

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	2,204	2,598	2,537	2,270	2,668	2,774	2,870
Burdens	1,532	1,983	1,935	2,254	2,342	2,435	2,520
Other Labor Benefits	236	439	439	439	369	349	356
<b>Non Labor</b>							
Outside Services	413	938	903	886	1,176	845	744
Sponsorships/Contributions	48	34	34	34	34	35	15
Operating G&A Expense	523	850	579	579	604	1,253	1,257
<i>Total Items Affecting US GAAP EBIT</i>	4,956	6,842	6,427	6,462	7,193	7,691	7,762
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	4,956	6,842	6,427	6,462	7,193	7,691	7,762

*Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.*

## 2009-2012 O&M Reconciliation - IFRS (\$000) – Human Resources

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	7,193	7,691	7,762
<i>Prior Year</i>	6,842	7,193	7,691
<i>Variance</i>	<u>(351)</u>	<u>(498)</u>	<u>(71)</u>
 <u><i>Variance Explanations</i></u>			
<i>Raw Labor</i>	(70)	(106)	(96)
<i>Burdens</i>	(359)	(93)	(85)
<i>Other Labor Benefits</i>	70	20	(7)
<i>Outside Services</i>	(238)	331	101
<i>Operating G&amp;A Expense</i>	246	50	16
<i>Contingency Relief</i>	-	(700)	-
<i>Total Variance</i>	<u>(351)</u>	<u>(498)</u>	<u>(71)</u>

## 2008-2012 Capital (\$000) – Human Resources

<i>Project</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>Human Resources</b>							
<i>PeopleSoft 8.9 Enhancements</i>	-	150	150	70	150	150	150
<i>Career Website Technology</i>	-	-	-	-	450	-	-
<i>Upgrade to PeopleSoft 9.1</i>	-	-	-	-	-	350	400
<i>Performance Management Module</i>	-	-	-	470	-	-	-
<i>Total Capital (107001)</i>	-	150	150	540	600	500	550
<i>IFRS Adjustments (Including Cash Adj)</i>							
<i>Total IFRS</i>							



## 2009-2012 Capital Reconciliation (\$000) – Human Resources

	<i>2010</i> <i>Budget</i>	<i>2011</i> <i>Plan</i>	<i>2012</i> <i>Plan</i>
<i>Current Plan</i>	<i>600</i>	<i>500</i>	<i>550</i>
<i>Prior Plan</i>	<i>540</i>	<i>600</i>	<i>500</i>
<i>Variance</i>	<i>(60)</i>	<i>100</i>	<i>(50)</i>
 <i><u>Variance Explanations</u></i>			
<i>PeopleSoft 8.9 Enhancements</i>	<i>(80)</i>	<i>-</i>	<i>-</i>
<i>Performance Management Module</i>	<i>470</i>	<i>-</i>	<i>-</i>
<i>Career Website Technology</i>	<i>(450)</i>	<i>450</i>	<i>-</i>
<i>Upgrade to PeopleSoft 9.1</i>	<i>-</i>	<i>(350)</i>	<i>(50)</i>
<i>Total Variance</i>	<i>(60)</i>	<i>100</i>	<i>(50)</i>

## 2009-2012 Headcount Changes – Human Resources

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	33.0	33.0	33.0
<i>Prior Year</i>	34.5	33.0	33.0
<i>Variance</i>	<u>1.5</u>	<u>-</u>	<u>-</u>
 <u><i>Variance Explanations</i></u>			
<i>Eliminated additional staffing position</i>	1.0	-	-
<i>Eliminated PT position</i>	0.5	-	-
<i>Total Variance</i>	<u>1.5</u>	<u>-</u>	<u>-</u>

## 2008-2012 O&M (\$000) – EON Graduate

Item	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<i>Opex Expenses</i>							
Raw Labor	168	311	171	171	96	274	283
Burdens	134	238	132	154	85	240	248
Operating G&A	76	123	86	86	17	94	95
<i>Total Items Affecting US GAAP EBIT</i>	378	672	389	411	198	608	626
<i>Total IFRS Adjustments</i>	-	-	-	-	-	-	-
<i>Total Items Affecting IFRS EBIT</i>	378	672	389	411	198	608	626

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2009-2012 O&M Reconciliation - IFRS (\$000) – EON Graduate

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	198	608	626
<i>Prior Year</i>	672	198	608
<i>Variance</i>	<u>474</u>	<u>(410)</u>	<u>(18)</u>
 <u><i>Variance Explanations</i></u>			
<i>Postponed hiring of 4 additional FTE's</i>	368	-	-
<i>3 Additional FTE's</i>	-	(333)	(17)
<i>Operating G&amp;A Expense</i>	106	(77)	(1)
 <i>Total Variance</i>	 <u>474</u>	 <u>(410)</u>	 <u>(18)</u>

**2009-2012 Headcount Changes – EON Graduate**

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
<i>Budget/Plan</i>	3	6	6
<i>Prior Year</i>	7	3	6
<i>Variance</i>	<u>4</u>	<u>(3)</u>	<u>-</u>
 <b><u>Variance Explanations</u></b>			
<i>Grads not hired in June 2009</i>	4	-	-
<i>Grads to be hired in June 2010</i>	-	(3)	-
<i>Total Variance</i>	<u>4</u>	<u>(3)</u>	<u>-</u>

## 2008-2012 Regulatory Asset (\$000) – General Counsel

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<b>LG&amp;E</b>						
<i>Gen Mgmt Audit LGE - Elec</i>	-	101	-	-	600	-
<i>Gen Mgmt Audit LGE - Gas</i>	-	83	-	-	200	-
<i>LGE Rate Case - Elec</i>	684	447	447	983	-	1,023
<i>LGE Rate Case - Gas</i>	228	221	221	336	-	351
<b>Total LG&amp;E</b>	<u>912</u>	<u>852</u>	<u>668</u>	<u>1,319</u>	<u>800</u>	<u>1,374</u>
<b>KU</b>						
<i>Gen Mgmt Audit KU - Elec</i>	-	157	-	-	600	-
<i>KU VA State Rate Case</i>	-	1,658	1,158	-	500	-
<i>KU KY State Rate Case</i>	1,298	1,077	1,077	1,917	-	2,002
<b>Total KU</b>	<u>1,298</u>	<u>2,892</u>	<u>2,235</u>	<u>1,917</u>	<u>1,100</u>	<u>2,002</u>
<b>Total Regulatory Asset</b>	<u><u>2,210</u></u>	<u><u>3,744</u></u>	<u><u>2,903</u></u>	<u><u>3,236</u></u>	<u><u>1,900</u></u>	<u><u>3,376</u></u>

## *Major Assumptions*

### *Legal/EVP*

- *No significant unbudgeted litigation matters arise*
- *Internal resources are leveraged through new electronic discovery software*
- *No unanticipated WKE post-closing issues arise*

### *Communications*

- *While sponsorship investments are being reduced, we must take advantage of non-traditional tools to gain positive brand recognition*
- *Energy Efficiency programs will continue to grow. We will need to support these projects, in the most cost-effective manner through targeted advertising programs.*
- *As new mediums become available to our customers and employees we will not only monitor and use the most effective tools, but we will need to potentially increase our staff to support any significant actions*

## *Major Assumptions*

### *Corporate Responsibility & Community Affairs*

- *Plan assumes the addition of one new FTE by 1st Quarter of 2011*
- *Plan assumes Corporate Center's continued support of Energy for Children Program through \$25,000 discount of O&M expenses*
- *Continued implementation of Environmental Champions program assumed*
- *Corporate Center has adopted a Group-wide CR strategic plan requiring all CR departments to focus on Energy for Children, as well as activities related to climate Change, access to energy, and next generation energy issues going forward. This mandate means new group-wide CR programs will be required.*



## *Major Assumptions*

### *Compliance*

- *No Significant Need to Procure Software or Incur Other External Cost*
  - *More industry peers are procuring some form of software to facilitate compliance tracking and oversight; currently we rely on readily available MicroSoft tools, such as Access and Excel*
  - *Participation in Compliance and Ethics Leadership Council has been shelved due to budget constraints*

## *Major Assumptions*

### *Environmental*

- Coal fired utilities will continue to face increasing scrutiny from the government, special interest groups and the media on multiple environmental fronts resulting in increased regulatory burden and difficulty in obtaining necessary and timely permits for existing and new facilities*
- Increased volume and complexity of environmental issues will require additional internal and external resources*
- Analysis of environmental risk will require more robust comprehensive environmental audits/assessments*

### *External Affairs*

- Increased restriction by local, state and federal governmental entities upon company's activities in the regulatory and environmental areas*
- Pressure by local, state and federal governmental entities upon the company to use its monopolistic status to enhance governmental revenue*

## *Major Assumptions*

### *Federal Regulation & Policy*

- *FERC to emphasize greater reliance on conservation, efficiency and demand response pricing*
- *Increased socialization of transmission costs in the name of reliability and integration of renewables*
- *Imposition of carbon restrictions, renewable energy standards, efficiency standards, and regional or super-regional transmission planning requirements*
- *Reliability and cyber-security concerns will justify further erosion of exclusive state jurisdiction, e.g., planning, siting, permitting, cost allocation, etc.*
- *Democrats to maintain majority on FERC*

## *Major Assumptions*

### *State Regulation & Rates*

- *Three separate rate case filings during MTP:*
  - *Filing of two base rate cases for LG&E and KU in KY*
  - *Filing of one base rate case for KU/ODP in VA*
- *Implementation of ECR Plan filed in 2009*
- *Renewable Wind PPA order issued in 2009*
- *Number of CPCN proceedings for transmission facilities*
- *Increase in smart-meter rollout and Responsive Pricing Program*
- *Possible Federal climate change and renewable portfolio legislation passed during MTP*
- *Increase in energy efficiency programs as stated in 2008 IRP*
- *Potential rate impact with KPSC Storm Investigation*
- *Possible KPSC General Management Audit during MTP*

## *Major Assumptions*

### *Human Resources*

- *Current and potential Federal legislative initiatives may significantly affect the existing landscape and costs associated with virtually every aspect of the workforce (benefits, compensation, union relations, safety, etc.)*
- *Employee and retiree healthcare costs will continue to rise*
- *Macro-economic challenges, especially inflation, could affect wage and benefits offerings*
- *The impact of demographic and generational shifts presents an immediate challenge*
- *Stakeholders will increasingly look for transparency in business practices*
- *The pace and complexity of regulatory compliance will continue to escalate*
- *The unions will continue to work to increase their membership*
- *Competition for talent will require more non-traditional sourcing*



*Information Technology  
2010-2012 MTP*

*October 9, 2009*

*Executive Summary*

*Financial Performance*

ÿ *O&M*

ÿ *Capital*

ÿ *Headcount Update*

ÿ *Risks & Sensitivities*

*Operational Performance*

ÿ *Initiatives*

## Operational

- Y *NERC Critical Infrastructure Protection (CIP) – funding needed \$1.3M – covered \$484K within IT*
- Y *WKE Transition Services Support*
- Y *Project Mirror*
- Y *CCS Investment – Rate Case, CRM Upgrade, Patches and Releases*
- Y *Network Expansion/Upgrades through 2012*

## Financial Highlights

Key Figures (\$000s)	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
Operating Expenses	37,472	45,021	45,347	44,261	49,913	53,623	56,800
GAP/Stretch					(816)		
Capital Expenses							
Captive:	15,844	17,541	14,741	14,741	18,797	14,739	22,127
Rate Case/CRM Upgrd/Patches:					5,152	4,779	373
CCS Hardware Rotation:					-	-	3,400
LOB Capital:		3,835		2,852	5,231	11,785	26,245



## 2008-2012 O&M (\$000)

<i>Item</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Opex Expenses</i>							
<i>Raw Labor</i>	11,234	15,974	15,287	14,631	17,057	17,784	19,012
<i>Burdens</i>	8,411	12,011	13,644	13,141	14,938	15,578	16,656
<i>Non labor:</i>							
<i>Outside Services</i>	4,994	2,108	1,883	2,629	1,283	1,607	1,639
<i>Computer/Office Supplies</i>	681	469	391	356	1,178	1,202	1,226
<i>Travel/Transportation</i>	535	693	493	471	609	621	633
<i>Telecommunications/ Leased Line</i>	2,350	2,959	2,959	2,454	2,809	2,865	2,922
<i>License / Maintenance Fees</i>	8,669	10,370	10,218	10,139	11,364	12,316	13,074
<i>Dues &amp; Subscriptions</i>	137	47	47	47	47	48	49
<i>Training</i>	303	419	219	226	425	433	442
<i>Other</i>	157	365	207	167	205	1,170	1,148
<i>O&amp;M Mitigation</i>	-	(393)	0	0	(816)	-	-
<i>Total Items Affecting US GAAP EBIT</i>	<u>37,472</u>	<u>45,021</u>	<u>45,347</u>	<u>44,261</u>	<u>49,097</u>	<u>53,623</u>	<u>56,800</u>
<i>Total IFRS Adjustments</i>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<i>Total Items Affecting IFRS EBIT</i>	<u><u>37,472</u></u>	<u><u>45,021</u></u>	<u><u>45,347</u></u>	<u><u>44,261</u></u>	<u><u>49,097</u></u>	<u><u>53,623</u></u>	<u><u>56,800</u></u>

Above EBIT excludes allocated actual and forecasted charges for labor and non labor to WKE Disco Ops.

## 2008-2012 Capital (Excluding COR) (\$000)

Project	2008 Actual	2009 Budget	2009 Contingency Plan	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
<b>INFORMATION TECHNOLOGY</b>							
Service Delivery	694	259	259	259	391	264	443
Desktop Operations	1,567	2,632	2,207	2,207	2,528	2,914	4,140
Operations/Capacity Mgmt	140	386	356	356	726	902	2,105
Telecommunications	5,133	7,635	6,910	6,910	4,568	5,942	8,244
Computing Architecture	1,784	2,377	1,895	1,895	2,065	1,507	2,221
Project Mirror	-	2,100	1,600	1,600	1,416	600	500
Data Networks	1,000	1,225	1,000	1,000	1,853	1,180	2,466
New Technology	212	110	94	94	326	490	540
Security	376	567	420	420	632	865	908
Client Support Services	0	0	0	0	697	75	75
Program Management Office	0	0	0	0	100	-	-
Data Center initiatives	4938	250	0	0	2,748	-	485
NERC CIP	0	0	0	0	750	-	-
SAP Enh/Upgrade/Rate Case	0	0	0	0	5,152	4,779	3,773
<b>Total Capital (107001)</b>	<b>15,844</b>	<b>17,541</b>	<b>14,741</b>	<b>14,741</b>	<b>23,949</b>	<b>19,518</b>	<b>25,900</b>

## 2008-2012 Headcount (FTE)

<i>Department</i>	<i>2008 Year End</i>	<i>2009 Budget</i>	<i>2009 Contingency Plan</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>IT Service Delivery</i>	55.0	98.0	94.0	92.5	96.5	96.5	96.5
<i>IT Operations</i>	81.0	87.0	86.0	86.0	90.0	90.0	90.0
<i>IT Strategy &amp; Client Svcs</i>	47.0	50.0	47.0	50.0	54.0	54.0	54.0
<i>IT SVP</i>	10.0	14.0	13.0	11.0	12.0	12.0	12.0
<i>Interns/Coops</i>	2.0	1.5	2.0	3.0	2.5	2.5	2.5
<b>TOTAL</b>	<b>195.0</b>	<b>250.5</b>	<b>242.0</b>	<b>242.5</b>	<b>255.0</b>	<b>255.0</b>	<b>255.0</b>

## Risks and Sensitivities

- NERC CIP Program compliance requirements are still developing; IT's compliance could be compromised if incremental funds are not approved
- FTEs at risk to Capital

	Raw Labor Dollars to Capital (\$000s)			FTE		
	2010	2011	2012	2010	2011	2012
ITSD	1377	1212	728	18	15	9
ITO	830	858	886	11	11	11
ITS&CS	192	200	207	2.5	2.5	2.5
ITSVP	19	20	20	0	0	0
	<u>2418</u>	<u>2290</u>	<u>1841</u>	<u>31.5</u>	<u>28.5</u>	<u>22.5</u>

- Storage requirements – projected increase in storage demand (eDiscovery, NERC CIP)
- Loss of SAP trained resources could result in reduced support and increased costs.
- Remote Access Infrastructure limitation of 500+ users could impact ability to work from off-site locations during a pandemic occurrence or other serious situation that would prevent access to work locations.

## *Initiatives*

- *NERC CIP program*
- *Network Expansion/Upgrade*
- *IT Asset Management*
- *IT Security – Data Protection*
- *Windows 7*
- *Smart Grid – IT Resources involved*

# Appendix

## 2009-2012 O&M Reconciliation - IFRS (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	49,097	53,623	56,800
Prior Year	<u>44,261</u>	<u>49,097</u>	<u>53,623</u>
Variance	<u>(4,836)</u>	<u>(4,526)</u>	<u>(3,177)</u>
 <u>Variance Explanations</u>			
Annual Salary Increases	(591)	(597)	(622)
Unfilled Positions	383		
New NERC CIP Positions	(641)		
New Positions	(243)		
Other Labor	(1,334)	(130)	(606)
Burden Adjustment	(1,797)	(640)	(1,078)
Outside Services	1,346	(300)	
License/Maintenance Exp - CCS	(1,938)		
License/Maintenance Exp - NERC CIP	(400)		
Licenses/Maintenance Exp-Other	(560)	(606)	(613)
Savings from Elimination of Mainframe	1,195		
Other - Relocation Expenses, Telecom, Travel	(1,072)	(1,091)	(113)
O&M Mitigation	816	(816)	-
O&M Implications for Capital Projects	-	(346)	(145)
Total Variance	<u>(4,836)</u>	<u>(4,526)</u>	<u>(3,177)</u>

## 2009-2012 Capital Reconciliation –IFRS Cash Basis (\$000)

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	23,949	19,518	25,900
Prior Year	14,741	23,949	19,518
Variance	<u>(9,208)</u>	<u>4,431</u>	<u>(6,382)</u>
<u>Variance Explanations</u>			
Service Delivery	(132)	127	(179)
Desktop Operations	(321)	(387)	(1,225)
Operations/Capacity Mgmt	(370)	(177)	(1,203)
Telecommunications	2,343	(1,374)	(2,303)
Computing Architecture	(170)	558	(714)
Project Mirror	184	816	100
Data Networks	(852)	673	(1,286)
New Technology	(232)	(164)	(50)
Security	(212)	(233)	(42)
Client Support Services	(697)	622	-
Program Management Office	(100)	100	-
Data Center initiatives	(2,748)	2,748	(485)
NERC CIP	(750)	750	-
SAP Enh/Upgrade/Rate Case	(5,152)	373	1,005
Total Variance	<u>(9,208)</u>	<u>4,431</u>	<u>(6,382)</u>



## 2009-2012 Headcount Changes

	<u>2010 vs 2009</u>	<u>2011 vs 2010</u>	<u>2012 vs 2011</u>
Budget/Plan	255.0	255.0	255.0
Prior Year	242.5	255.0	255.0
Variance	<u>(12.5)</u>	<u>-</u>	<u>-</u>
 <u>Variance Explanations</u>			
New Positions for NERC CIP	(7.0)		
Unfilled Positions	(6.0)		
Interns/Coops	0.5		
Total Variance	<u>(12.5)</u>	<u>-</u>	<u>-</u>

## *Major Assumptions*

- NERC CIP – investments expected to continue to expand significantly although scope is indeterminate at this time*
- All 2010-2012 MTP Capital projects will be approved*
- WKE transition support provided through 2010*



*CFO Organization  
2010-2012 MTP*

*October 9, 2009*

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- Y *The July forecast anticipates that 2009 results will be \$279k favorable to our target. Most of the variance is due to labor allocated to WKE, partially offset by higher contractor costs. All other costs are consistent with the targets.*
- Y *The capital forecast is expected to be \$250k favorable. Funds have been given back to the RAC. Work on the PowerPlan budgeting module will begin in the last quarter of 2009.*
- Y *Operating expenses in all MTP years are consistent with the MTP targets.*
- Y *Considerable capital spending is assumed in 2012 due to the planned reimplementation of Oracle. The capital plan was part of the RAC MTP review process and has been approved by the Investment Committee.*

## 2008-2012 O&M : (\$000)

Item	2008 Actual	2009 Budget	2009 Target	2009 Forecast	2010 Budget	2011 Plan	2012 Plan
Raw Labor	9,896	10,868	10,553	10,410	11,355	11,803	12,232
Burdens	7,184	8,015	9,038	8,862	9,529	9,908	10,266
Contractors & Consultants	351	244	105	175	122	208	410
Bank Fees	1,417	2,562	2,562	2,214	2,078	2,120	2,162
Audit Fees	1,411	1,451	1,451	1,799	1,814	1,927	2,022
Risk Management Fees	1,223	1,188	1,188	1,125	1,169	1,192	1,216
Education & Training	296	460	230	223	278	460	460
Other Non-Labor	1,346	1,780	1,216	1,255	1,327	2,385	2,163
<b>Total Items Affecting US GAAP EBIT</b>	<b>23,123</b>	<b>26,567</b>	<b>26,342</b>	<b>26,063</b>	<b>27,671</b>	<b>30,003</b>	<b>30,929</b>
<b>Total IFRS Adjustments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Items Affecting IFRS EBIT</b>	<b>23,123</b>	<b>26,567</b>	<b>26,342</b>	<b>26,063</b>	<b>27,671</b>	<b>30,003</b>	<b>30,929</b>
<b>Targets</b>					<b>27,711</b>	<b>30,003</b>	<b>30,929</b>

## 2008-2012 Capital : (Excluding COR) : (\$000)

<i>Project</i>	<i>2008 Actual</i>	<i>2009 Budget</i>	<i>2009 Target</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>Oracle Upgrade / Reimplementation</i>	10	-	-	-	-	-	6,000
<i>PowerPlan Implementations</i>	1,126	600	139	144	501	-	-
<i>PowerPlan Upgrades</i>	-	-	-	-	350	-	640
<i>PeopleSoft Time-Keeping System</i>	-	-	-	-	-	300	300
<i>Inventory Management</i>	-	-	-	-	-	-	250
<i>Services Management</i>	-	250	250	-	-	-	250
<i>Stellent Digital Imaging</i>	-	-	-	-	250	-	-
<i>Oracle Servers</i>	-	500	500	243	-	-	-
<i>Other Capital Projects</i>	480	-	-	252	370	125	25
<i>Total Capital (107001)</i>	<u>1,616</u>	<u>1,350</u>	<u>889</u>	<u>639</u>	<u>1,471</u>	<u>425</u>	<u>7,465</u>
<i>IFRS Adjustments (Including Cash Adj)</i>							
<i>Total IFRS</i>	<u><u>1,616</u></u>	<u><u>1,350</u></u>	<u><u>889</u></u>	<u><u>639</u></u>	<u><u>1,471</u></u>	<u><u>425</u></u>	<u><u>7,465</u></u>
<i>Targets</i>					1,079	272	6,250

## 2008-2012 Headcount : (FTE)

<i>Department</i>	<i>2008 Year-End</i>	<i>2009 Budget</i>	<i>2009 Target</i>	<i>2009 Forecast</i>	<i>2010 Budget</i>	<i>2011 Plan</i>	<i>2012 Plan</i>
<i>CFO</i>	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<i>Audit</i>	12.0	14.0	13.0	13.0	13.0	13.0	13.0
<i>Treasurer</i>	16.0	15.0	15.0	15.0	15.0	15.0	15.0
<i>Controller</i>	49.5	50.5	50.5	52.5	53.5	53.5	53.5
<i>Corporate Tax &amp; Payroll</i>	17.0	16.0	16.0	17.0	16.0	16.0	16.0
<i>Corporate Planning &amp; Development</i>	21.0	23.5	21.0	24.0 *	25.0	25.0	25.0
<i>Supply Chain</i>	47.0	49.0	48.0	48.0	48.0	48.0	48.0
<b><i>Total FTEs</i></b>	<b>164.5</b>	<b>170.0</b>	<b>165.5</b>	<b>171.5</b>	<b>172.5</b>	<b>172.5</b>	<b>172.5</b>

\* The three additional positions in the 2009 forecast compared to the target is due to the realignment of budget coordinators previously included in the General Counsel and IT organizations.



## *Risks and Sensitivities*

*Commodity & Labor Markets*

*WKE & Argentina*

*Credit Markets*

*Reporting Requirements*

*New Accounting Pronouncements*

*Changing Technology*

*US GAAP / IFRS Convergence*

*New Initiatives*

*Regulatory Issues*

*Depreciation Study*

## *Initiatives & Achievements*

*Internal Control Systems*

*PowerPlan Implementations*

*Rate Case Support*

*German FREP Audit*

*WKE Support*

*Long-Term Plan Modeling*

**2010 Plan Assumptions**

- Seven rate case decisions from three jurisdictions assumed in MTP – 2 at the KPSC, 2 at the VSCC and 3 annual rate adjustments by FERC.
- Storm cost regulatory assets recovered over 10 year period
- Some economic recovery assumed in 2nd half of MTP with load CAGR of 2.8% for MTP
- CO<sub>2</sub> / RPS legislation not effective for MTP
- TC2 in-service June 30, 2010
- FGDs in service as scheduled (Brown 3 in May 2010, Brown 1&2 in November 2010), Brown 3 SCR in Q4 2012
- Total capital expenditures of \$2b, with \$790m being ECR recoverable
- No significant “system hardening” or “smart grid” deployment in MTP
- Newly issued debt rates for Utilities and EON U.S. of 6% and 9%, respectively