

# DSM Advisory Group Meeting



October 26, 2017



# Agenda

- Summary of September 26 meeting
- Tenets of DSM-EE filing
- Proposed plan programs
- Cost effectiveness
- Bill impacts
- Timeline

# September 26 meeting summary

- Companies' programs achieved excellent results over time
- Studies show declining energy efficiency potential and savings
- Avoided costs of energy and capacity are significantly lower since prior filing in 2014
- Low load growth and rapid adoption of efficient technology seen throughout the U.S.

# Tenets of Filing

- No need for capacity in next 30 years means \$0/kW-year avoided cost of capacity
- System lambda/marginal cost of generation has decreased by over 30% from 2014 to < \$0.03/kWh today
- Proposing reasonable demand side management programs consistent with KRS 278.285

# Summary of proposed DSM-EE portfolio

## Continuing programs in 2019

- WeCare
- Residential Demand Conservation (DLC)
- Large Nonresidential Demand Conservation
- Nonresidential Rebates
- School Energy Managers Program (SEMP)
- AMS Opt-in
- Program Development & Administration (PD&A)

## Discontinued programs in 2019

- Home Energy Rebates (HER)
- Fridge & Freezer Recycling (FFR)
- Home Energy Analysis (HEA)
- Smart Energy Profile (SEP)
- Customer Education & Public Information (CEPI)

# Industrial summary

- Industrial customers to be included in proposed DSM-EE Plan filing
- Certain industrial customers will be eligible to opt-out of program participation based on specific criteria
  - Meter defined on bill as an industrial customer
  - Billed on an energy intensive tariff
    - Retail Transmission Service (RTS)
    - Fluctuating Load Service (FLS)
    - Time-of-Day Primary (TODP)
  - Implemented cost-effective energy efficiency measures

# Nonresidential Rebates

- Inclusion of industrial customers
  - Energy intensive customers expected to opt-out
- Incentives based on \$0.03 per kWh saved (one year)
  - Previously \$100 per kW saved
  - Aligns with avoided energy costs

# WeCare

- Revised incentive structure

Tier	Annual Energy Consumption	Allowable Measure Cost: Current	Allowable Measure Cost: Proposed
A	Up to 11,499 kWh	\$350	\$1,500 average per single family dwelling
B	11,500 to 16,000 kWh	\$1,000	
C	Greater than 16,000 kWh	\$2,100	\$750 average per multifamily unit

- Goal of 15% energy savings, realized at different costs based on home's specific needs
- Master-metered (commercial rates) multi-family buildings can qualify based on government subsidies
  - (e.g. Section 8, Low Income Housing Tax Credits Program, Affordable Housing Trust Fund, Home Investment Partnerships Program, etc.)
- 80/20% split target for single family/multi-family



# Demand Conservation: Residential and Nonresidential

Programs continuing in maintenance mode

- No additional purchases of devices
- Redeploy any removed devices based up request
- Minimal promotion for program participation
- Reduced incentives for residential and nonresidential

# Other programs included

- SEMP
  - Energy manager funding for FY 2019 and 2020 as stipulated in KPSC order in 2016 rate case
- AMS Opt-in
  - Continuation of current program

# Proposed 2018 budget 30% lower

- Residential Audit: continue audits at \$25/customer; no incentive for audits scheduled after Q1
- Demand Conservation
  - Residential incentive reduced from \$5/month to \$3/month
  - Large commercial incentive reduced from \$25/kW to \$15/kW
- Home Energy Rebates: no applications accepted after Q1
- Smart Energy Profile: sunset at the end of Q1
- Commercial Rebates: Incentive based on \$0.03/kWh
- WeCare, FFR, CEPI, SEMP, AMS Opt-in, PD&A: no change

# Portfolio of DSM-EE programs struggles with cost-effectiveness based on California Test ratios

Program*	TRC	PCT	RIM	PAC
Nonresidential Rebates	1.08	2.26	0.48	3.62
PD&A	0.00	0.00	0.00	0.00
<b>Total Energy Efficiency and PD&amp;A</b>	<b>1.01</b>	<b>2.06</b>	<b>0.46</b>	<b>2.92</b>
Residential Demand Conservation	0.00	NA	0.00	0.00
Nonresidential Demand Conservation	0.01	1.61	0.01	0.01
WeCare	0.44	NA	0.19	0.44
KSBA/SEMP	0.30	NA	0.18	0.30
AMS Opt-in	0.00	NA	0.00	0.00
<b>Total Portfolio</b>	<b>0.59</b>	<b>3.10</b>	<b>0.31</b>	<b>0.84</b>

\*California Test ratios (benefit/cost) use avoided costs of \$0/kW-year and \$0.03/kWh. Results are preliminary.

# Billing impacts of reduced DSM

- Residential bills to decrease ~\$15-\$30 per year in 2018 compared to 2017
- Residential bills to decrease ~\$30-\$45 per year in 2019 compared to 2017

# Timeline for upcoming filings

	2017				2018					2019
Filings	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May-Dec	Jan
<b>2018 Tariff Filing</b>			File		Effect. 1/1					
<b>2017 Balancing Adjustment Tariff Filing</b>						File		Effect. 4/1		
<b>2019 DSM-EE Plan Filing</b>				File						Effect. 1/1
<b>DSM Advisory Group Meetings</b>	Cover history	DSM-EE Plan								

# Appendix

# Opt-out Current Kentucky State Law: KRS 278.285

- (3) The commission shall assign the cost of demand-side management programs only to the class or classes of customers which benefit from the programs. The commission shall allow individual **industrial customers** with **energy intensive processes** to implement **cost-effective energy efficiency measures** in lieu of measures approved as part of the utility's demand-side management programs if the alternative measures by these customers are not subsidized by other customer classes. Such individual industrial customers shall not be assigned the cost of demand-side management programs.

*Emphasis added*



# Tariffs for non-residential consumption

- Specific tariffs
  - GS: 12 month average monthly demand <50 kW (secondary)
  - PS: 12 month average monthly demand 50 – 250 kW (secondary)  
0 – 250 kW (primary)
  - TOD Secondary: 12 month average monthly demand 250 kW – 5,000 kW
  - TOD Primary: 12 month average monthly minimum demand > 250 kVA
  - RTS: Transmission service, 12 month average monthly minimum demand > 250 kVA
  - FLS: fluctuating with monthly demand > 20 MVA

# Implementing Cost Effective Energy Efficiency Measures

- Any industrial customer that wants to opt-out of DSM and meets both the industrial and energy intensive definitions would provide a letter to LG&E or KU on their company letter head or fill out a form online that would include the following:
  - Account number with meter or copy of the bill stating that the energy used through this meter is for the purposes of converting raw or unfinished materials into another form or product or extracting raw materials from the earth.
  - Positively state that they invested in energy efficiency measures with details about what was completed.

# Implementing Cost Effective Energy Efficiency Measures

- Request that their meter or account be excluded from DSM charges
- With Company receipt of letter or form and validation of appropriate rate for “energy intensive”, an industrial customer would be excluded from DSM charges until the same industrial customer elects to participate at some point in the future.