EAST KENTUCKY POWER COOPERATIVE

RECEIVED
SEP 04 2009
PUBLIC SERVICE COMMISSION

September 4, 2009

Via Hand-Delivery

Mr. Jeff Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

Re: PSC Case No. 2009-00106

Dear Mr. Derouen:

Please find enclosed for filing with the Commission in the above-referenced case an original and ten copies of the responses of East Kentucky Power Cooperative, Inc. ("EKPC") to the Supplemental Data Request of Commission Staff and the Second Set of Data Requests of the Sierra Club, Kentucky Environmental Foundation and Kentuckians for the Commonwealth (collectively, "Environmental Groups" pursuant to the August 19 Order), both dated August 21, 2009.

Very truly yours,

David Smart
General Counsel

Enclosures

Cc: Parties of Record

4775 Lexington Road 40391
P.O. Box 707, Winchester,
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

A Touchstone Energy Cooperative

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SEP 04 2009
PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

A REVIEW PURSUANT TO 807 K.A.R. 5:058	)	
OF THE 2009 INTEGRATED RESOURCE PLAN	)	**CASE NO. 2009-00106**
OF EAST KENTUCKY POWER	)	
COOPERATIVE, INC.	)	

RESPONSES TO THE SECOND SET OF DATA REQUESTS FROM THE SIERRA CLUB, KENTUCKY ENVIRONMENTAL FOUNDATION AND KENTUCKIANS FOR THE COMMONWEALTH (COLLECTIVELY "ENVIRONMENTAL GROUPS" PURSUANT TO AUGUST 19 ORDER) TO EAST KENTUCKY POWER COOPERATIVE, INC.
DATED AUGUST 21, 2009

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 78
RESPONSIBLE PERSON: James C. Lamb, Jr.
COMPANY: East Kentucky Power Cooperative, Inc.

Request 78. Reference Kentucky Power's 2009 Integrated Resource Plan in which it states that "the residential customer growth has essentially ceased." See http://psc.ky.gov/pscscf/2009%20cases/2009-00339/20090818 AEP App Vol A.PDF at page 1-13. Please provide a detailed explanation of why East Kentucky Power Cooperative's (EKPC) load forecast predicts significantly more residential customer growth than Kentucky Powers?

Response 78. While EKPC can speak for its integrated resource plan, it did not prepare Kentucky Power's integrated resource plan – for that reason, comparison of the two plans is beyond EKPC's ability. EKPC addressed generally its load growth relative to other utilities in response to Request 1 of the AG's initial data request.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 79
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 79. Please explain whether EKPC uses the Statistically Adjusted End-use model to forecast residential and commercial energy.

Response 79. EKPC uses the statistically adjusted end-use (SAE) model approach for residential energy only. The diversity of the small commercial class customers, which includes cable repeaters, mom and pop grocery stores, and office buildings, does not lend itself to the SAE approach.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 80
RESPONSIBLE PERSON: **John F. Farley**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 80. Reference your response to Request 28a,[1] please explain how the load impacts of all the existing DSM programs were embedded in the load forecast.

Response 80. First, most of these existing programs have been in the field for at least fifteen years, and, in some cases, over 20 years. In other words, they have been in the field longer than the savings lives for most of the measures. So you start to lose the savings from measures that were installed years back. So, while the program gains the savings from new participants in future years, it also loses savings from participants in early years. These programs reach a "steady" state, where the aggregate savings attributable to the program do not change very much from year to year.

Second, though, the load forecast uses historic load data to establish trends in the average use per customer. The year by year DSM program savings contribute to the overall trend in average use. Once programs have been in the field for several years, the load forecast model will account for its continued contribution to reductions in average use according to the historic trend that program has evidenced. So, unless a program is in its first few

[1] All references to "Request" without an additional descriptor are to KFTC, KEF and Sierra Club's data requests.

years of existence, as long as the future participation is not expected to vary significantly from historic participation, the forecast period incremental savings are captured by the load forecast models.

Third, however, there are also programs where EKPC's plans project a significant increase in future participation in contrast to the historic participation levels. The programs will see changes in their design in order to achieve the higher projected levels of savings. For these programs, EKPC has established a counterpart program under the New Program category in order to capture the savings over and above what is already embedded in the load forecast. The New program does contribute incremental DSM savings that are not accounted for in the load forecast.

The following table shows the existing programs that have a counterpart new program:

Existing Program	New Program
Air Source Heat Pump	Replace Furnace with Heat Pump
Tune-Up	Home Performance with Energy Star
Button-Up	Home Performance with Energy Star
Touchstone Energy Home	Enhanced TSE Home
Compact Fluorescent Lighting	Residential Efficient Lighting

In the end, the work involves giving careful consideration to each existing program, and going ahead with establishing a counterpart under the new program category if it clear that future participation and/or savings are expected to be significantly different from what is captured in the load forecast already.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 81
RESPONSIBLE PERSON: John F. Farley
COMPANY: East Kentucky Power Cooperative, Inc.

Request 81. Reference your response to Request 28a, please explain why there is no incremental load impacts projected.

Response 81. By incremental load impacts, EKPC means incremental with respect to the load forecast.

The forecast period impacts from existing DSM programs are not explicitly modeled. By saying they are embedded in the load forecast, EKPC means that the load forecast methodology itself captures these impacts.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 82
RESPONSIBLE PERSON: Jerry B. Purvis
COMPANY: East Kentucky Power Cooperative, Inc.

Request 82. Reference your response to Request 32. Please provide any data, reports, analysis or vendor information that establishes that SCRs and/or low NOx burners reduce N_2O emissions. If no such information actual exists, please so state.

Response 82. Oxides of nitrogen, or nitrous oxides, consist of the following compounds: nitric oxide (NO), nitrogen dioxide (NO_2), nitrogen monoxide (also known as nitrous oxide, N_2O), and nitrogen pentoxide (N_2O_5). A description of the SCR's reduction of nitrous oxides, provided by Alstom, is included on pages 2 through 8 of this response.

SCR - Features

> Selective Catalytic Reduction of Nox Process

This technology for post-combustion NOx control converts flue gas NOx to nitrogen and water through a catalytically promoted reaction with a reducing agent such as ammonia To ensure that the required level of NOx reduction is realized while maintaining a low level of ammonia slip, the flue gas stream is conditioned upstream of the reactor to achieve a homogeneous distribution of all reactants

> Proprietary injection and mixing systems

Alstom's expert knowledge in fluid dynamics has led to the development of proprietary injection and mixing systems that create optimum solutions for site-specific conditions that produce the desired chemical reactions within the context of reduced ducting and simplified layouts

> Catalysts

Today, Alstom's SCR solutions include a choice of catalyst types that are tailored to the application. These catalyst types include Honeycomb catalysts and Plate-type catalysts. Catalysts are manufactured in a number of different channel diameters (pitch) The choice of pitch is optimized after the study of the flue gas composition and the allowable pressure drop across the SCR reactor

> Optimal SCR Placement in the Process Chain

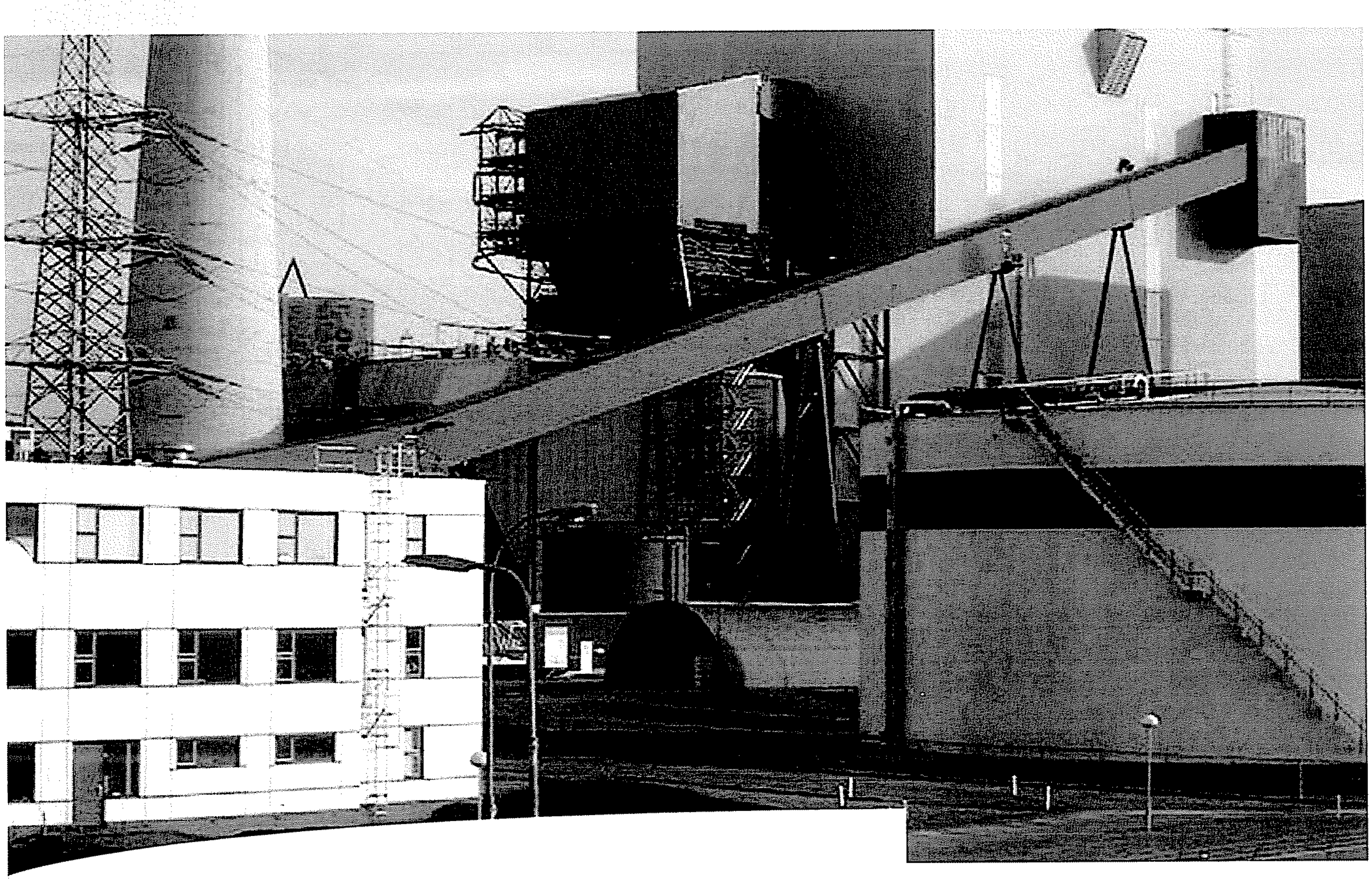
Site-specific flue gas properties and the space available for the installation of the system typically require advanced fluid dynamics design in combination with physical and CFD model studies Thanks to Alstom's extensive experience and strong expertise in fluid dynamics, our customers benefit from highly integrated and optimized SCR solutions

> Two main configurations for SCR solutions

- High Dust SCR, typically for power plants and combined heat and power applications
- Tail-end SCR, more compact designs for waste incineration or glass furnaces

SCR = Selective Catalytic Reduction

SCR
SELECTIVE CATALYTIC REDUCTION OF NOx



POWER

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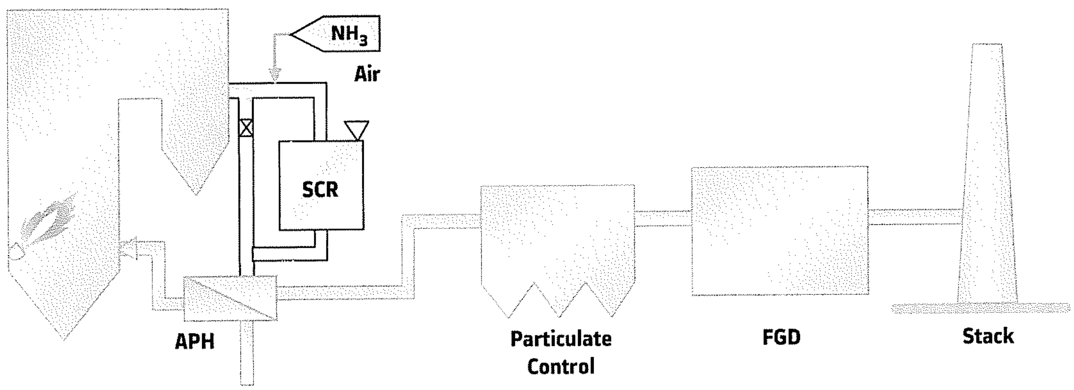
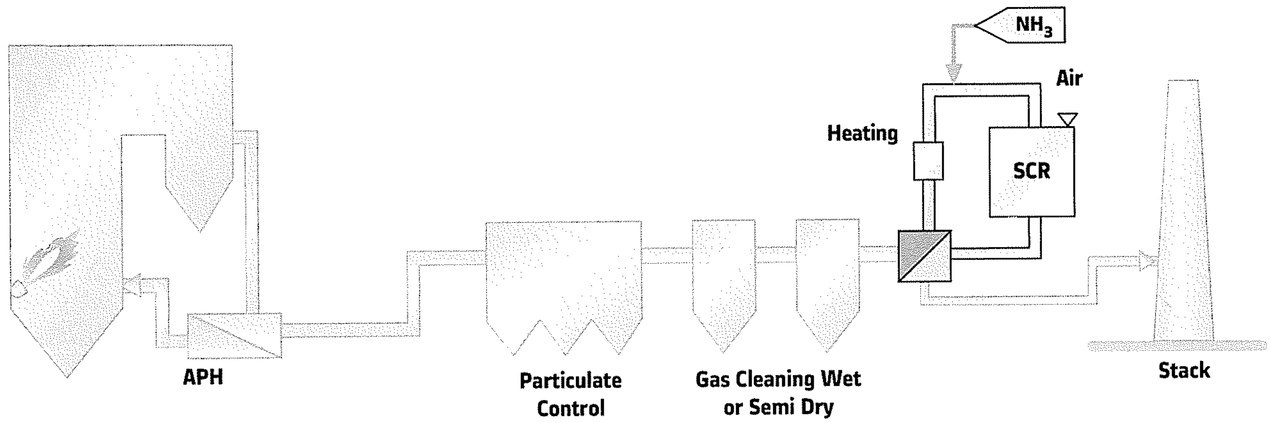
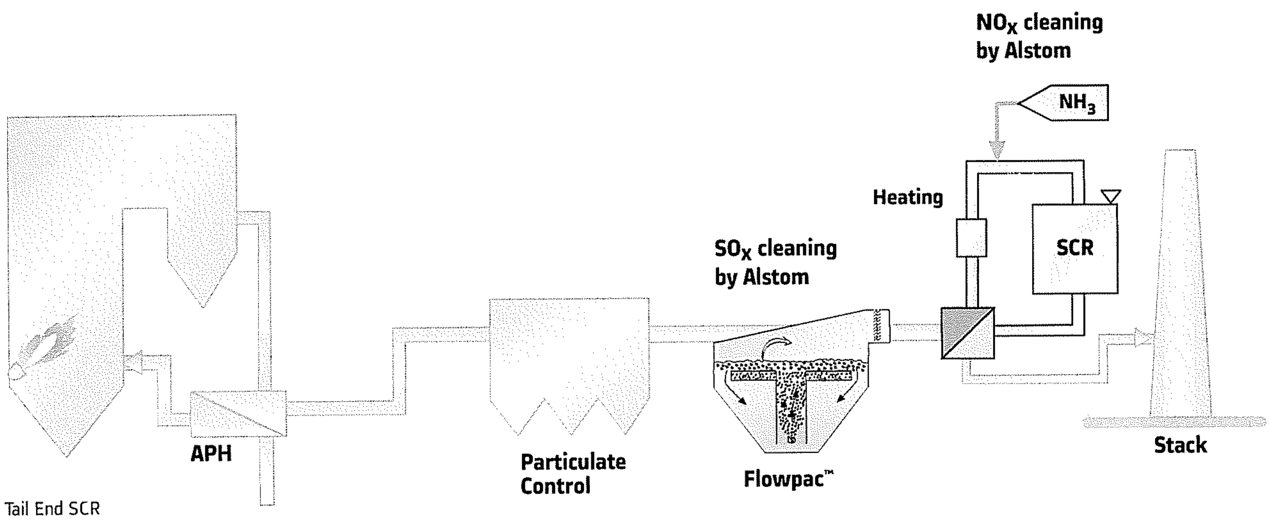
Common Arrangements for Alstom SCRs



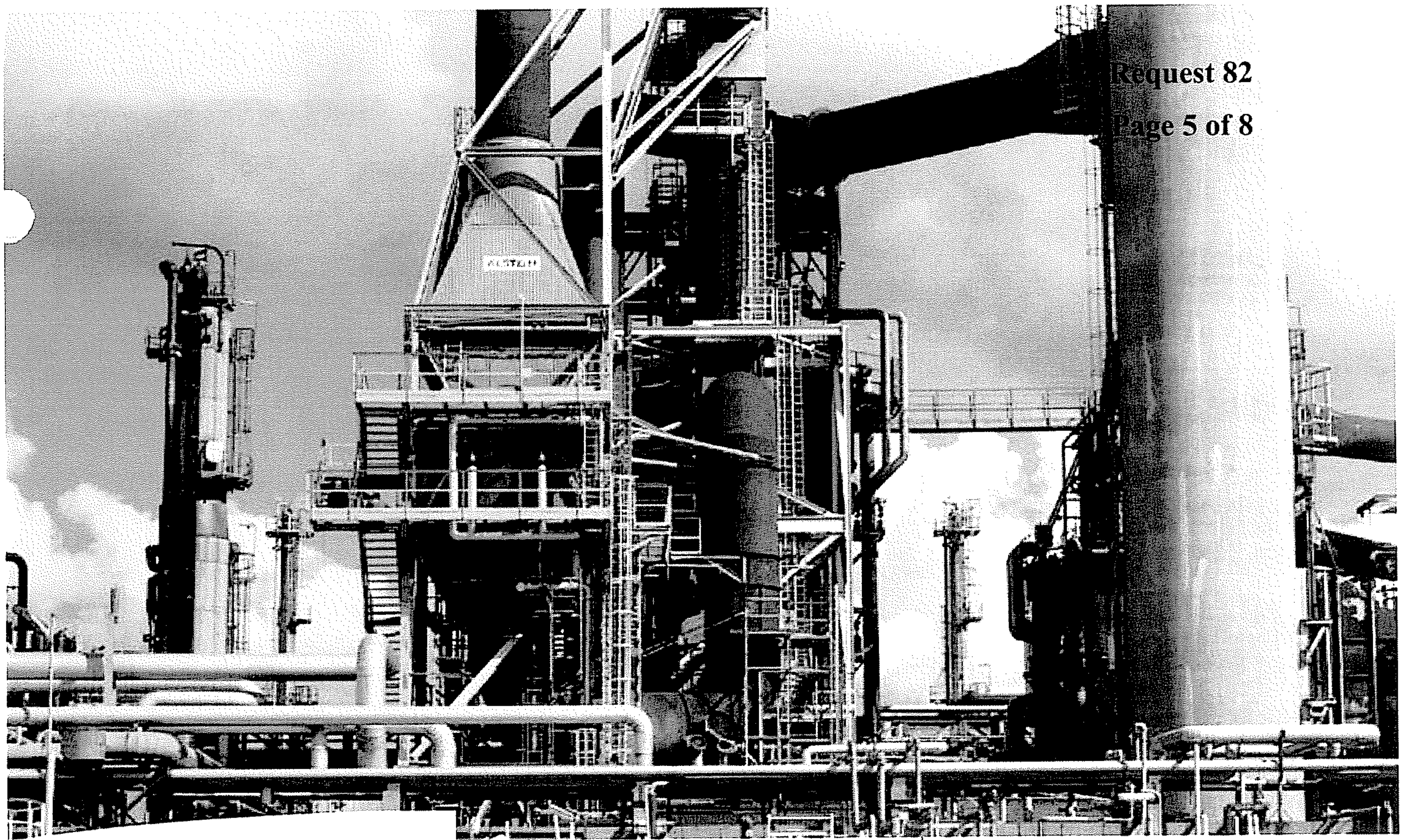
High Dust SCR



Low Dust SCR



Tail End SCR



Preem Raffinaderi AB
Guthenburg, Sweden

Alstom, the World's leading provider of SCR systems

With over 80 Selective Catalytic Reduction (SCR) systems (33,100 MW) installed world wide and some 20 years accumulated experience, Alstom is a leading provider of SCR solutions that meet our customer's most stringent NOx emission requirements NOx is formed in all combustion processes incorporating air through a reaction between nitrogen and oxygen at elevated temperatures Because NOx contributes to the formation of acid rain and photochemical oxidants, its emission levels have drawn the attention of regulatory authorities worldwide Consequently, in the past 20 years, the allowable level of NOx emissions from combustion processes has continually diminished

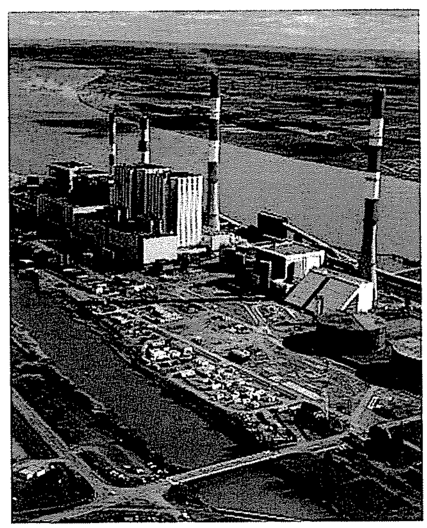
SCR Process

High NOx reduction rates and system reliability make Selective Catalytic Reduction the technology of choice for post-combustion NOx control

This technology converts flue gas NOx to nitrogen and water through a catalytically promoted reaction with a reducing agent such as ammonia

To ensure that the required level of NOx reduction is realized while maintaining a low level of ammonia slip, the flue gas stream is conditioned upstream of the reactor to achieve a homogeneous distribution of all reactants

Alstom's expert knowledge in fluid dynamics has led to the development of proprietary injection and mixing systems that create optimum solutions for site-specific conditions that produce the desired chemical reactions within the context of reduced ducting and simplified layouts



Catalyst Expertise

To provide catalyst that meets customer performance requirements, Alstom works with leading suppliers to develop the most economical solution for a range of conventional coal fired power boilers and new fuel combustion applications such as bio-fuel and waste incineration. These innovations are supported by experience gained from both pilot and full-scale applications.

Today, Alstom's SCR solutions include a choice of catalyst types that are tailored to the application. These catalyst types include:

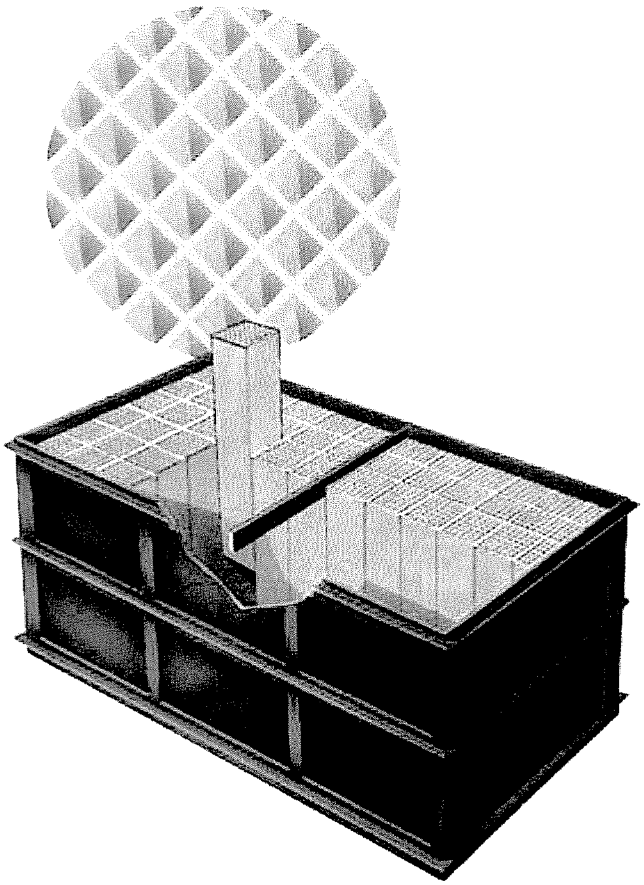
- Honeycomb catalysts
- Plate-type catalysts

Catalysts are manufactured in a number of different channel diameters (pitch). The choice of pitch is optimized after the study of the flue gas composition and the allowable pressure drop across the SCR reactor. The volume of the catalyst required depends on the specific catalyst's attributes: activity, pitch and depth; process operating conditions, flue gas volumetric flow rate and composition, presence of poisons; required level of NOx reduction and operating temperature.

Economical Catalyst Replacement

With exposure to flue gas, the catalyst deactivates over time and must be replaced. Catalyst replacement rates depend on several site-specific factors such as equipment type, fuel characterization, and plant operation.

Alstom's catalyst management system, based on gradual catalyst replacement, achieves a high level of performance at the lowest possible cost for our customers.



Honeycomb Catalysts

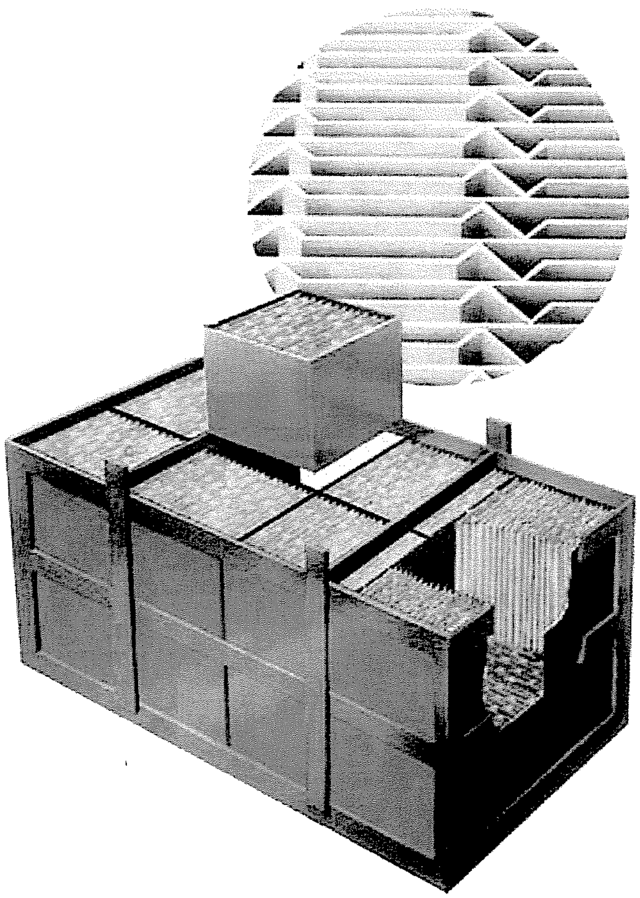


Plate-type Catalysts

Optimal SCR Placement in the Process Chain

Site-specific flue gas properties and the space available for the installation of the system typically require advanced fluid dynamics design in combination with physical and CFD model studies Thanks to Alstom's extensive experience and strong expertise in fluid dynamics, our customers benefit from highly integrated and optimized SCR solutions.

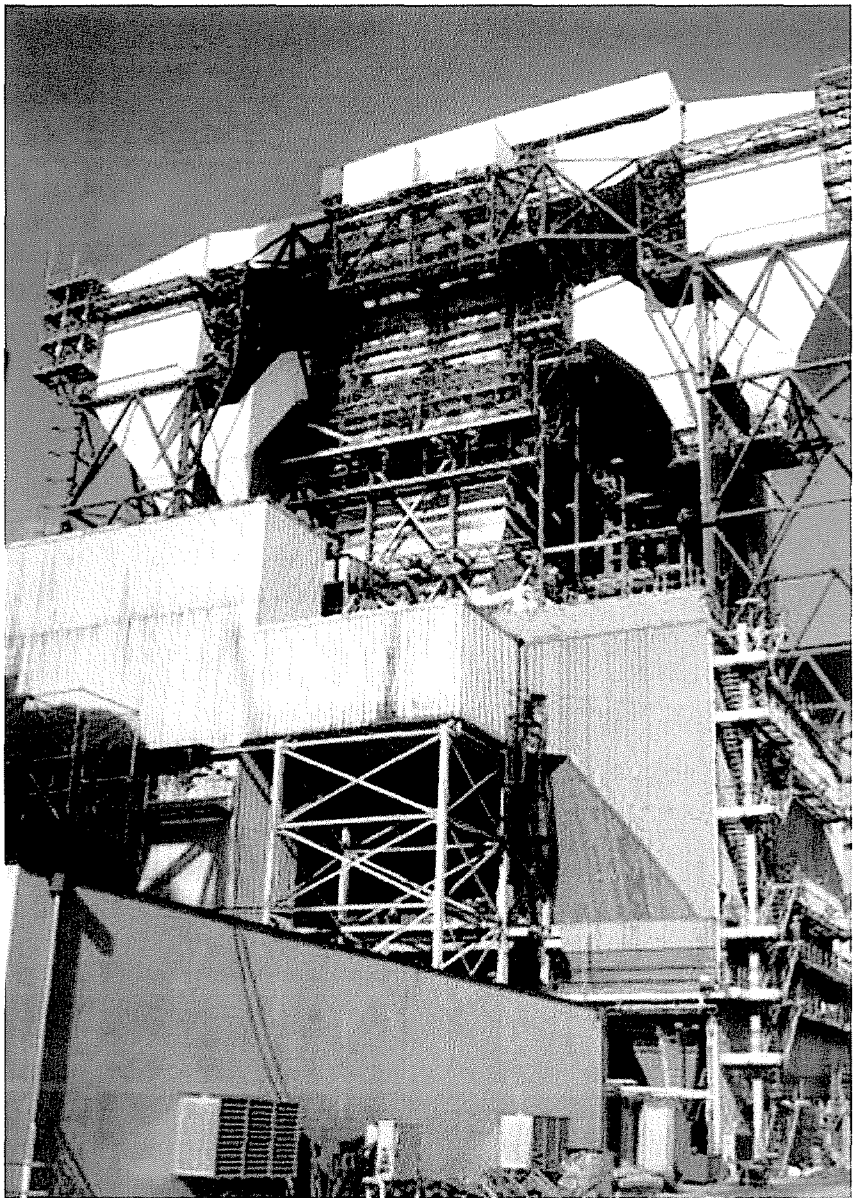
Alstom offers 2 main configurations for SCR solutions.

- High Dust SCR, typically for power plants and combined heat and power applications
- Tail-end SCR, more compact designs for waste incineration or glass furnaces

Experienced in Ammonia Supply

The SCR process uses ammonia or urea as the reducing agent.

Ammonia can be stored as an aqueous solution or as an anhydrous liquid under pressure Because of the potential risk of ammonia to human health, ammonia transportation, handling and storage must be executed with a primary emphasis on safety. This is accomplished through strict adherence to design best practices for the handling of this compound In addition, the installation of monitoring systems to detect transient ammonia releases within the storage area provides an ability to respond quickly in the event of a loss of containment



SCR Unit on 600 MW Coal Fired Boiler
Emile Huchet, Saint Avold, France

CONCLUSION
Alstom's broad range of experience, demonstrated in its commercial reference plants by a variety of SCR applications, ensures that we can meet our customers' high expectations for compliance, performance, reliability and operating costs.

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Alstom around the world:

Northern Europe
Drammensveien 165
02777 Oslo, Norway
Tel. +47 22 12 70 00

Southern Europe
Viale Edison, 50
I-20099 Sesto San Giovanni (MI)
Italy
Tel. +39 02 2434 81

North America
1409 Centerpoint Boulevard
Knoxville, TN
37932-1962 US
Tel. +1 865 693 7550

Latin America
Av. Embaixador Macedo Soares, 10.001
05307-200 São Paulo, Brasil
Tel. +55 11 3612 7600

China
5/F, Entrance C, Qian Kun Plaza
No. 6 West Street 6
San Li Tun, Chaoyang District
100027 Bejing, China
Tel. +86 (0) 8460 9000

India
Millenium City IT Park, Tower-II
10th & 11th Floor, Plot No. 62
Block-DN, Sector-V
Salt Lake City, Kolkata 700091
India
Tel. +91 33 4411 3000/ 3001/ 3003

Alstom Environmental Control Systems
3 Avenue André Malraux
92309 Levallois-Perret Cedex, France
Tel. +33 (0) 1 41 49 20 00
www.power.alstom.com

ALSTOM

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 83
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 83. Reference your response to Request 33. Please provide a yes or no answer as to whether, for each federal energy standard listed, your energy and demand projections take that specific federal energy standard into account. If the answer is yes, please provide the amount of energy and demand reduction, per customer, identifying the customer class and in the aggregate, per year, that your energy and demand projections assumed attributed to each federal energy standard.

Response 83. Table 1 provides a yes or no answer as to whether the energy standard is accounted for in the forecast.

Table 2 provides the amount of energy reduction per customer. All are in the residential class. Demand reductions are not available.

Table 3 provides the aggregate energy reduction. This is the saturation weighted kWh reductions. Demand reductions are not available.

Table 1: Federal Energy Standards of Interest to Environmental Groups

Product	Standard Accounted for?	Source of Savings	Class
Supermarket Refrigeration	No		
Commercial Ranges, Ovens, Microwave Ovens	No		
Linear Fluorescent Lamps & Incandescent Reflector Lamps	No		
Commercial HVAC Equipment	No		
Beverage Vending Machines	No		
Commercial Clothes Washers	No		
Small Electric Motors	No		
Residential Water Heaters, Pool Heaters, Direct Heaters	Yes, no no	EIA Data	Residential
Residential Refrigerators, Freezers	Yes, Yes	EIA Data	Residential
Clothes Dryers	Yes	EIA Data	Residential
Room Air Conditioners	Yes	EIA Data	Residential
Residential Air Conditioners and Heat Pumps	Yes, Yes	EIA Data	Residential
Fluorescent Lamp Ballasts	Yes	EIA Data	Residential
Battery Chargers and External Power Supplies	No		Residential
Residential Clothes Washers	Yes	EIA Data	Residential

Table 2: Energy Reduction Per Residential Customer Due to Efficiency Improvements

	Central AC	Heat Pump AC	Room AC	Water Heaters	Refrig-erators	Freezers	Clothes Washers	Clothes Dryers	Lighting
	kWH Reductions per Appliance								
2009	-10	-6	-6	-10	-11	-3	-1	-8	-1
2010	-9	-6	-6	-10	-11	-2	-1	-6	-1
2011	-8	-5	-6	-9	-10	-2	-1	-6	-1
2012	-8	-5	-5	-8	-9	-1	-1	-3	-1
2013	-8	-5	-5	-8	-8	-1	-1	-7	-1
2014	-7	-4	-5	-7	-7	-1	-1	-5	-1
2015	-6	-4	-5	-7	-6	0	-1	-5	-1
2016	-6	-3	-4	-6	-5	0	-1	-3	-1
2017	-5	-3	-4	-6	-5	0	-1	-7	-1
2018	-4	-2	-4	-6	-4	0	-1	-4	-1
2019	-4	-2	-4	-5	-3	0	-1	-3	-1
2020	-4	-2	-4	-5	-3	0	-1	0	-1
2021	-4	-2	-4	-5	-2	1	-1	-3	-1
2022	-3	-2	-4	-4	-2	1	-1	-1	-1
2023	-3	-1	-4	-4	-2	1	-1	0	-1
2024	-3	-1	-4	-4	-1	1	-1	2	-1
2025	-2	-1	-4	-3	-1	1	-1	-2	-1
2026	-2	0	-4	-3	0	1	-1	0	-1
2027	-1	0	-4	-3	0	1	-1	0	-1
2028	-1	0	-4	-3	0	1	-1	2	-1

Table 3: Residential Class Aggregate MWh Reductions Weighted by Appliance Saturation

	Central AC	Heat Pump AC	Room AC	Water Heaters	Refrig-erators	Freezers	Clothes Washers	Clothes Dryers	Lighting		Total Annual Reductions
	Total MWH Reductions										
2009	(1,802)	(984)	(600)	(4,353)	(6,576)	(885)	(453)	(3,761)	(399)		(19,815)
2010	(1,723)	(945)	(595)	(4,181)	(6,690)	(740)	(454)	(2,853)	(405)		(18,586)
2011	(1,627)	(885)	(555)	(3,918)	(6,091)	(567)	(454)	(2,598)	(411)		(17,107)
2012	(1,563)	(850)	(522)	(3,679)	(5,553)	(418)	(455)	(1,253)	(417)		(14,710)
2013	(1,526)	(858)	(491)	(3,503)	(4,976)	(321)	(455)	(3,166)	(424)		(15,720)
2014	(1,443)	(798)	(472)	(3,339)	(4,442)	(230)	(456)	(2,245)	(430)		(13,854)
2015	(1,299)	(697)	(439)	(3,180)	(3,938)	(142)	(456)	(2,283)	(436)		(12,872)
2016	(1,189)	(628)	(406)	(3,006)	(3,463)	(62)	(457)	(1,384)	(443)		(11,038)
2017	(1,120)	(592)	(387)	(2,830)	(2,999)	13	(457)	(3,387)	(449)		(12,209)
2018	(975)	(495)	(367)	(2,654)	(2,589)	78	(458)	(2,229)	(456)		(10,145)
2019	(922)	(464)	(370)	(2,479)	(2,196)	127	(458)	(1,682)	(462)		(8,907)
2020	(915)	(413)	(379)	(2,499)	(1,971)	178	(458)	(171)	(469)		(7,095)
2021	(853)	(387)	(381)	(2,325)	(1,725)	211	(458)	(1,802)	(476)		(8,197)
2022	(768)	(336)	(377)	(2,158)	(1,475)	241	(458)	(392)	(482)		(6,207)
2023	(698)	(287)	(373)	(1,993)	(1,203)	271	(458)	(217)	(489)		(5,446)
2024	(623)	(223)	(371)	(1,833)	(927)	304	(458)	872	(496)		(3,755)
2025	(524)	(143)	(365)	(1,845)	(628)	299	(458)	(1,176)	(503)		(5,343)
2026	(430)	(61)	(360)	(1,639)	(315)	294	(458)	83	(509)		(3,395)
2027	(337)	28	(356)	(1,635)	32	287	(458)	171	(516)		(2,784)
2028	(340)	20	(351)	(1,631)	138	277	(458)	1,261	(523)		(1,605)

As stated in the Response to Request 34 of the first data request, the appliance efficiency data used in the forecast is based upon the Energy Information Administration (EIA) projections which have been provided in the Load Forecast Technical Appendix. As stated in the load forecast report, which is also provided in the technical appendix, the Large Commercial Class is projected customer by customer. This approach is used due to the small number of customers, around 120, and the strong relationship the member systems have with these customers. In this case, the efficiency standards have only been incorporated if improvements are being implemented by the individual customer. In these cases, it would be a general reduction due to improvements. EKPC does not ask for the detail of the improvements individual companies are making; therefore, allocating the reductions specifically to one of the standards is not available. With respect to the small commercial class, as stated in the response to Request 79, the small commercial class is a very diverse class that represents only 15% of EKPC sales to members. The reason for the diversity is that commercial customers are not categorized by type—rather they are categorized by transformer size. Efficiency standards are not accounted for in the forecast until evident in the history or in feedback from the member systems with respect to expected lower load.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 84
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 84. Reference your response to Request 34. Please provide the EIA projects upon which you relied.

Response 84. As stated in the response to Request 34, the EIA projections are in the Load Forecast portion of the technical appendix. See files in the 'LF-Appendix A-Appliance Saturations and Efficiencies\' directory. There are 2 files for each member system: one with 'ResSatTrendCalc##.xls' names that has the EIA efficiency projections for each appliance and a file for each member system with 'COOPNAMEResindices.xls' with individual member system's appliance saturation projections. In addition, EFG prepares a brief executive summary which is only available to members. This executive summary is included on pages 2 through 11 of this response.

2007 Residential Statistically Adjusted End-use (SAE) Spreadsheets

The 2007 SAE update is based on the Energy Information Agency (EIA) 2007 Annual Energy Outlook. The 2007 residential SAE spreadsheets include the following:

1. Updated equipment efficiency trends.
2. Updated equipment and appliance saturation trends.
3. Updated structural indices.
4. Updated annual heating, cooling, water heating and Non-HVAC indices.
5. Updated regional sales forecasts.

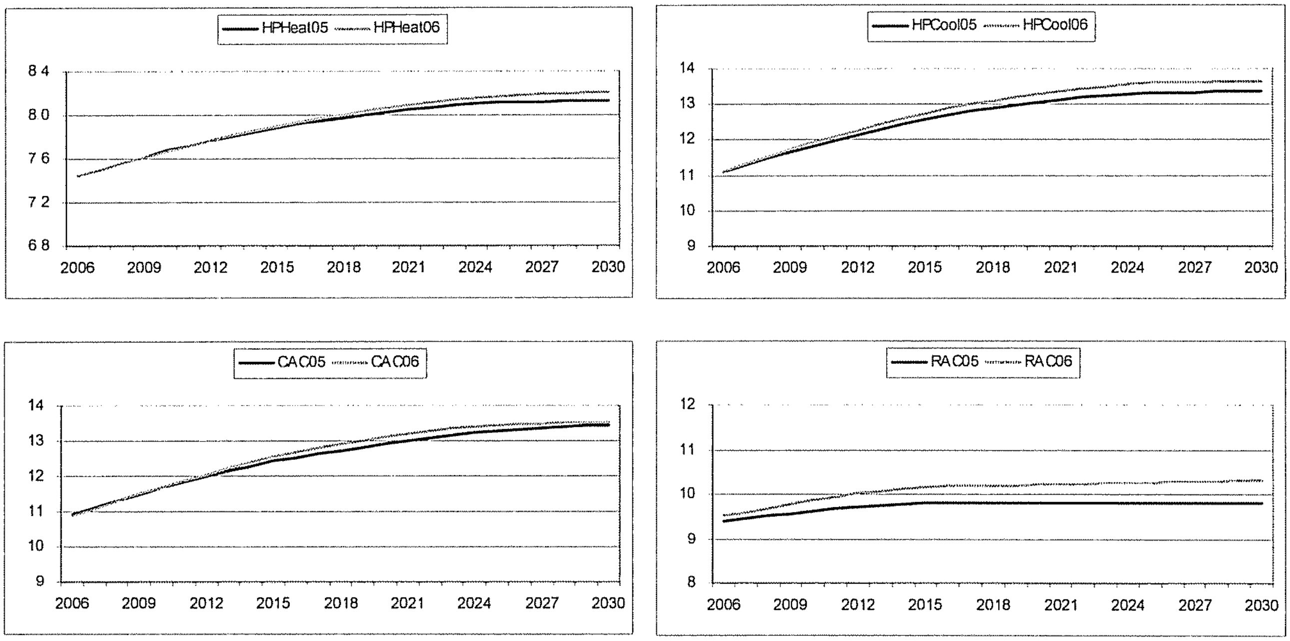
In addition to the above updates and additions, historical share and efficiency data has been smoothed out to eliminate any dramatic shifts from history to forecast.

1.1 Equipment Efficiency Trends

Equipment efficiencies for heating and cooling equipment and for select appliances (refrigerators and freezers) are obtained from Energy Information Administration. As can be seen from Figure 1-1 below, efficiencies for heat pumps, room air conditioners and central air conditioning systems are expected to increase at a somewhat higher rate than in the 2006 forecast. Standards have their largest impact during the first ten years of the forecast, followed by a decreasing rate of efficiency improvement.

Efficiency trends of the remaining appliances (cooking, clothes washers and dryers, and miscellaneous appliances) are captured by projected appliance average annual energy use or unit energy consumption (UEC). Annual UECs are calculated from the 2007 AEO database by dividing annual end-use consumption by the appliance stock, and smoothing out the year-to-year variations when necessary. Using changes in UECs as a proxy for efficiency improvements allows us to reflect regional differences in appliance stock age distribution and the long-term price impact on efficiency choices.

Figure 1-1: Heating and Cooling Efficiency Projections



1.2 Equipment Saturation Trends

Overall, cooling and miscellaneous equipment saturation projections have not changed much from 2006 as is evident from Figure 2-1 depicting saturation projections for select appliances for New England census region. 2007 projections reflect declining growth in central air conditioning as well as somewhat faster growth in electric water heating and dryer saturation projections. Overall, there is little change from 2006.

Situation is somewhat different when we look at saturation projections for heating equipment and, particularly, at electric furnaces (see Figure 2-2 below). While there is almost no change in electric furnace saturation for New England, furnace saturation projections have been adjusted downward for East South Central, West North Central and Pacific regions. This change is due to the revisited EIA electric furnace unit forecast methodology. These results are in line with our expectations for the selected regions as consumers generally tend to favor natural gas for heating. Additionally, census data reported a substantial increase in heat pump saturation, particularly in new construction, accounting for some of the decrease in resistance heating (see Figure 2-3 below).

Figure 2-1: Select Equipment Saturation Projections (New England)

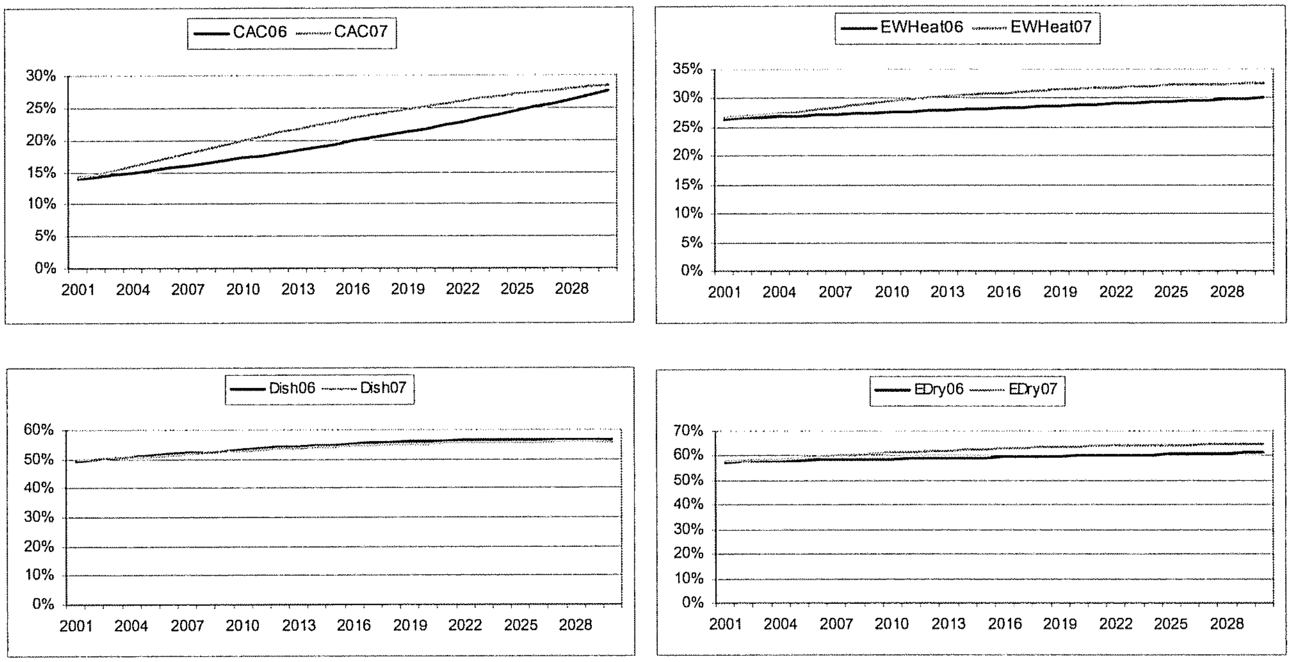


Figure 2-2: Electric Furnace Saturation Projections in Select Regions

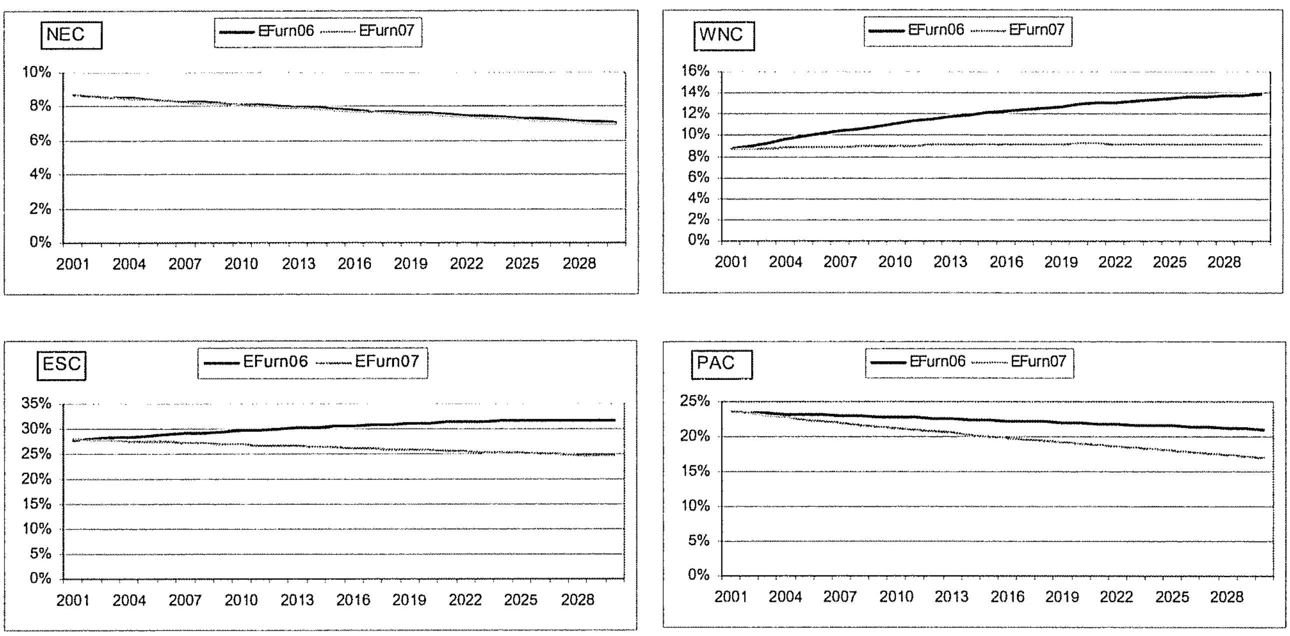
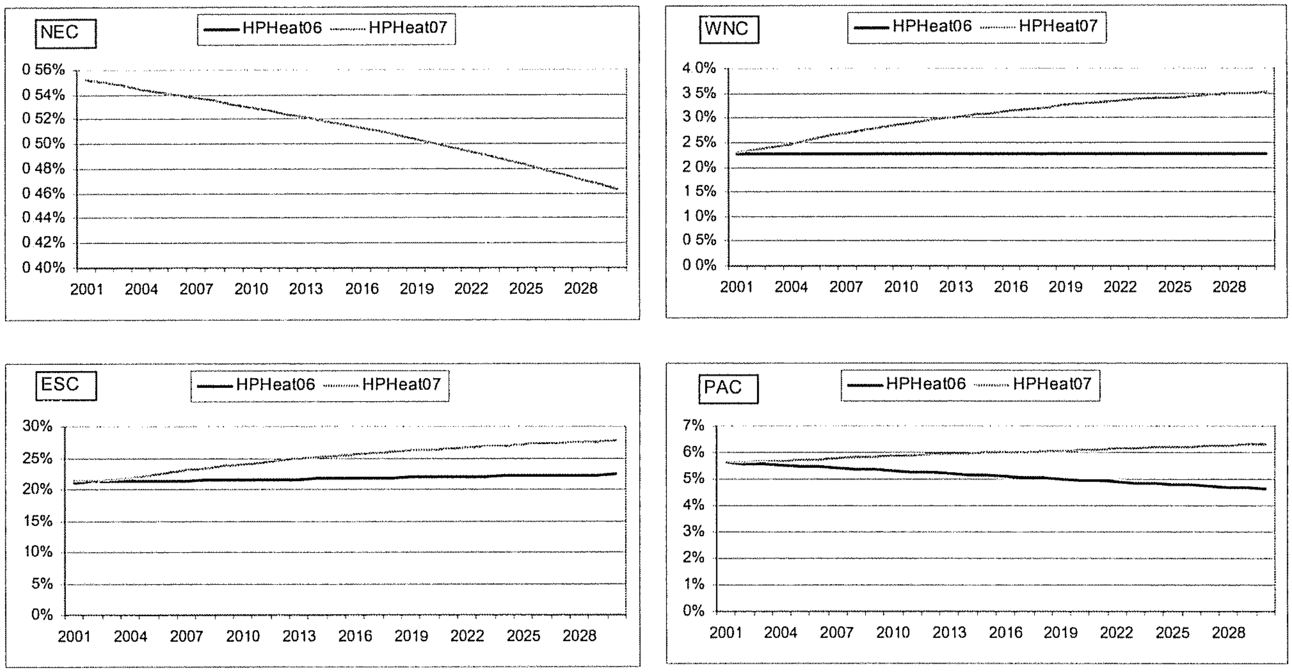


Figure 2-3: Heat Pump Saturation Projections in Select Regions



1.3 Structural Indices

Structural index is one of the key components of annual heating and cooling annual indices. Interacted with equipment efficiency and saturation projections it allows us to incorporate housing totals and average square footage in the analysis of household energy utilization.

$$HeatIndex_y = StructuralIndex_y \times \sum_{Type} Weight^{Type} \times \frac{\left(Sat_y^{Type} \big/ Eff_y^{Type} \right)}{\left(Sat_{01}^{Type} \big/ Eff_{01}^{Type} \right)} \tag{1}$$

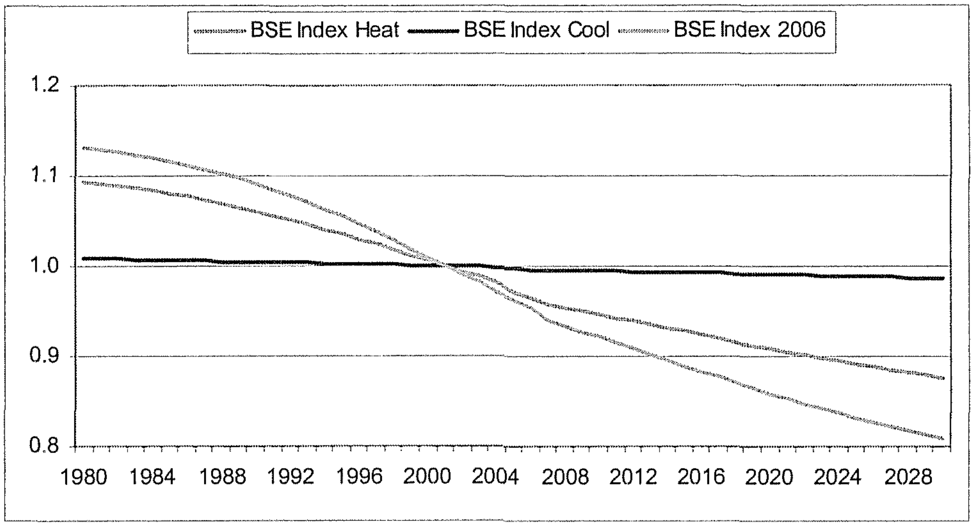
Structural index is calculated as follows:

$$StructuralIndex_y = \frac{BuildingShellEfficiencyIndex_y \times SurfaceArea_y}{BuildingShellEfficiencyIndex_{01} \times SurfaceArea_{01}} \tag{2}$$

Surface area variable captures changes in housing totals and square footage for a particular census region. Interacted with surface area is building shell efficiency index obtained from the EIA, representing change in electric load, based on the differences in physical size and shell attributes[1]. This year we expanded on the definition of building shell efficiency by introducing separate cooling and heating building shell efficiency indices into calculation of a structural index. Cooling structural index was then incorporated into annual indices for central and room air conditioning, and heat pump cooling. Structural index for heating was similarly incorporated into heat pump heating and electric furnace indices.

Figure 3-1 below shows 2006 building shell efficiency index with separate heating and cooling indices that were incorporated this year.

Figure 3-1: Building Shell Efficiency Index 2006-2007



In 2007, building shell efficiency index is broken down into heating cooling components. Both heating and cooling indices project decreases in energy utilization reflecting efficiency gains over the forecast period with heating efficiency having the biggest impact. Accounting for little to no change in surface area projections (see Figure 3-2), we can see the impact on the structural index for the Pacific census region in Figure 3-3.

[1] For example, a value of .99 would signify load 1 percent lower than in the base year 2001 stock after accounting for physical size differences and efficiency gains.

Figure 3-2: Surface Area for Average House 2006-2007 (PAC)

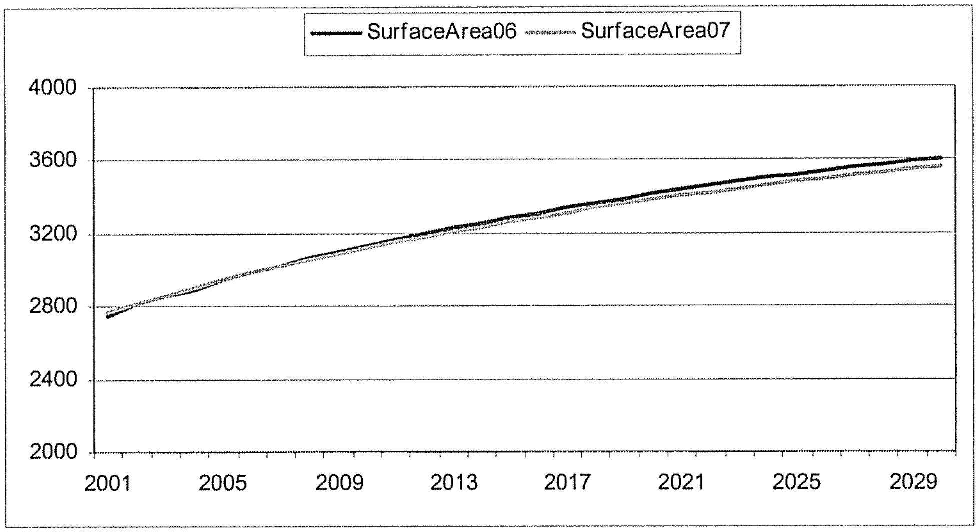
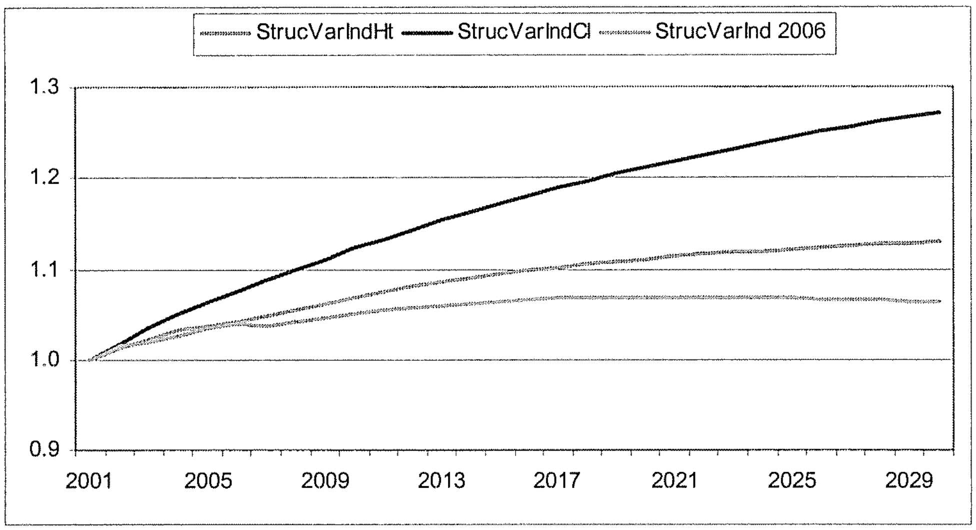


Figure 3-3: Structural Index 2006-2007 (PAC)



1.4 Annual Indices

Figures 4-1 through 4-4 compare 2006 and 2007 forecasts for major indices for select census regions. Cooling, water heating and other trends changed little from last year's forecast; small changes in levels reflect downward adjustments to fit the most recent data. Heating indices, especially for East South Central and West North Central regions, are flat or declining reflecting the change in electric furnace saturations in these regions.

Total indices for the four regions shown in Figure 4-5 also reflect changes in heating saturations in East South Central and West North Central regions. Otherwise, the total indices changed little from 2006.

Figure 4-1: New England 2006-2007

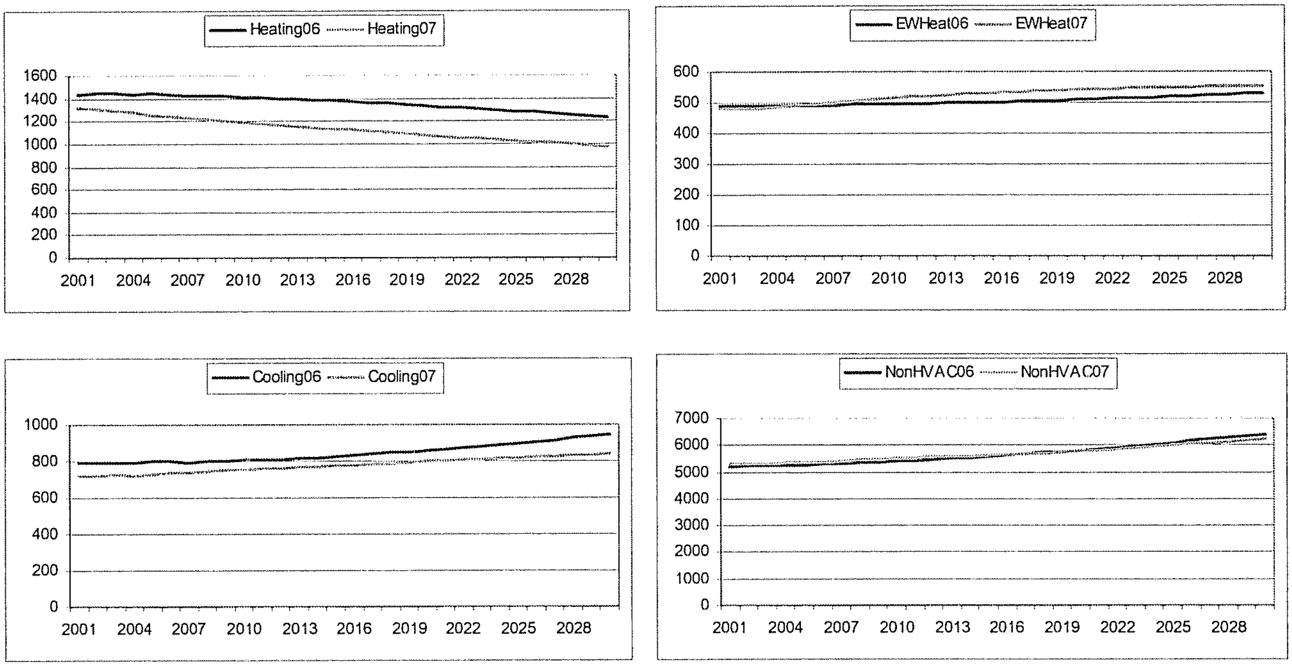


Figure 4-2: East South Central 2006-2007

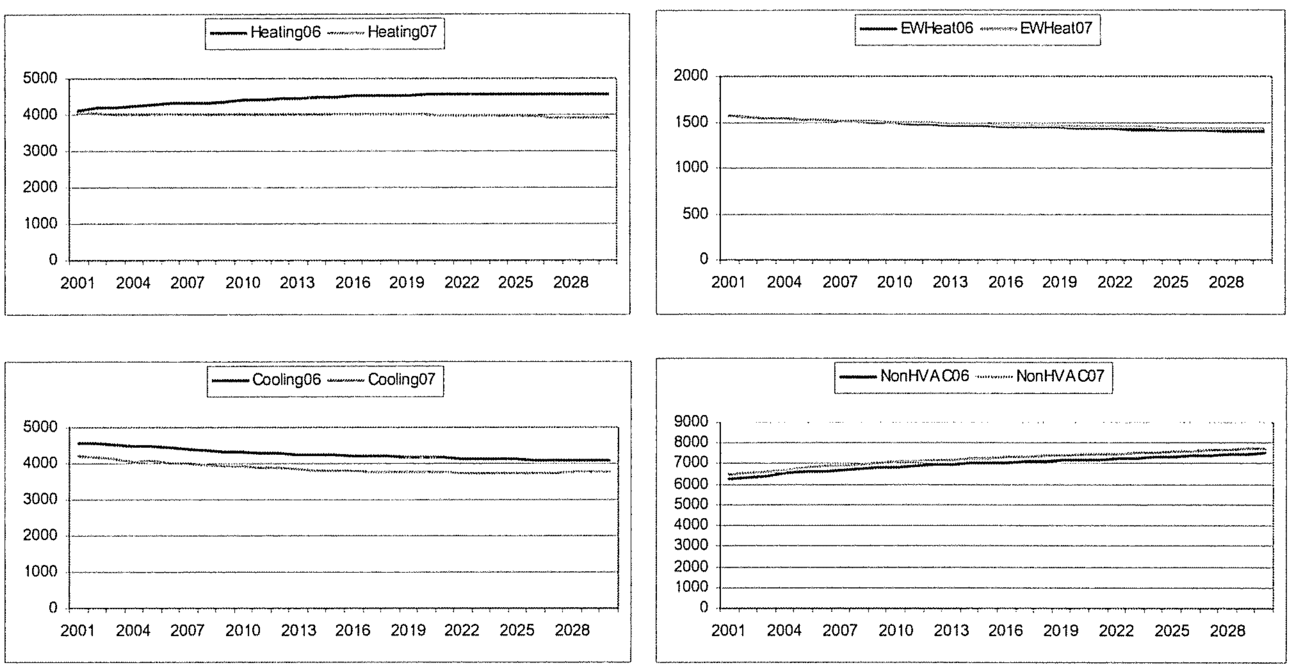


Figure 4-3: West North Central 2006-2007

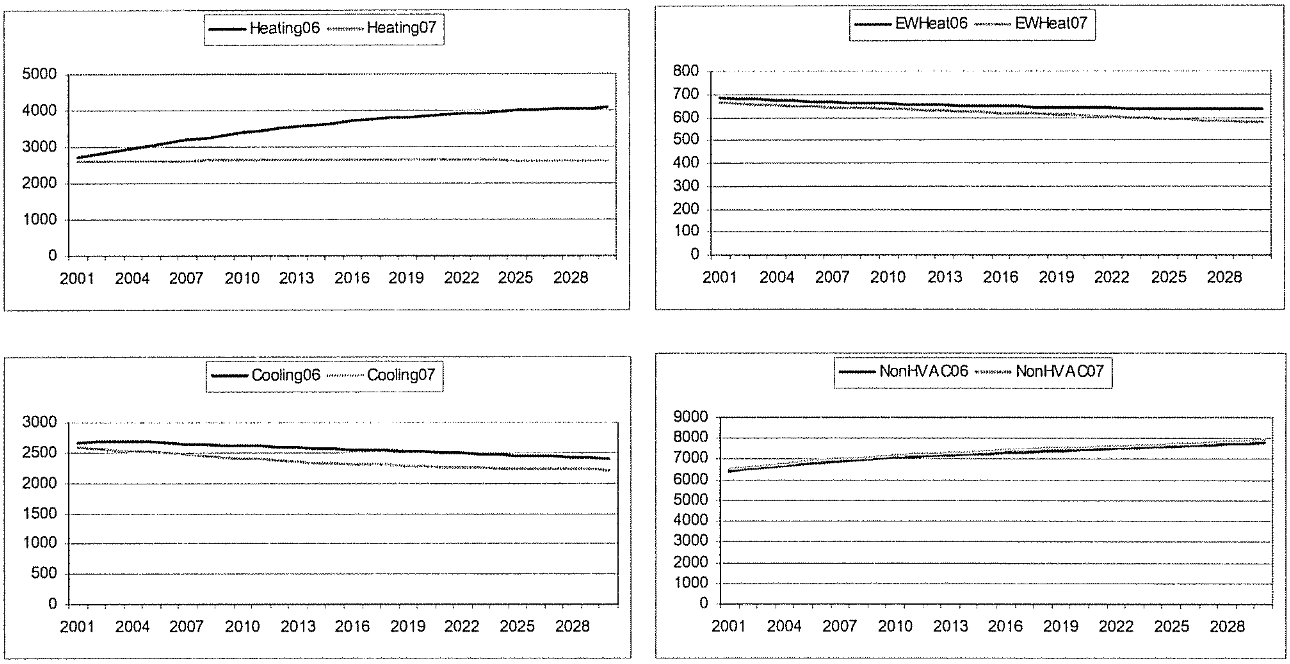


Figure 4-4: Pacific 2006-2007

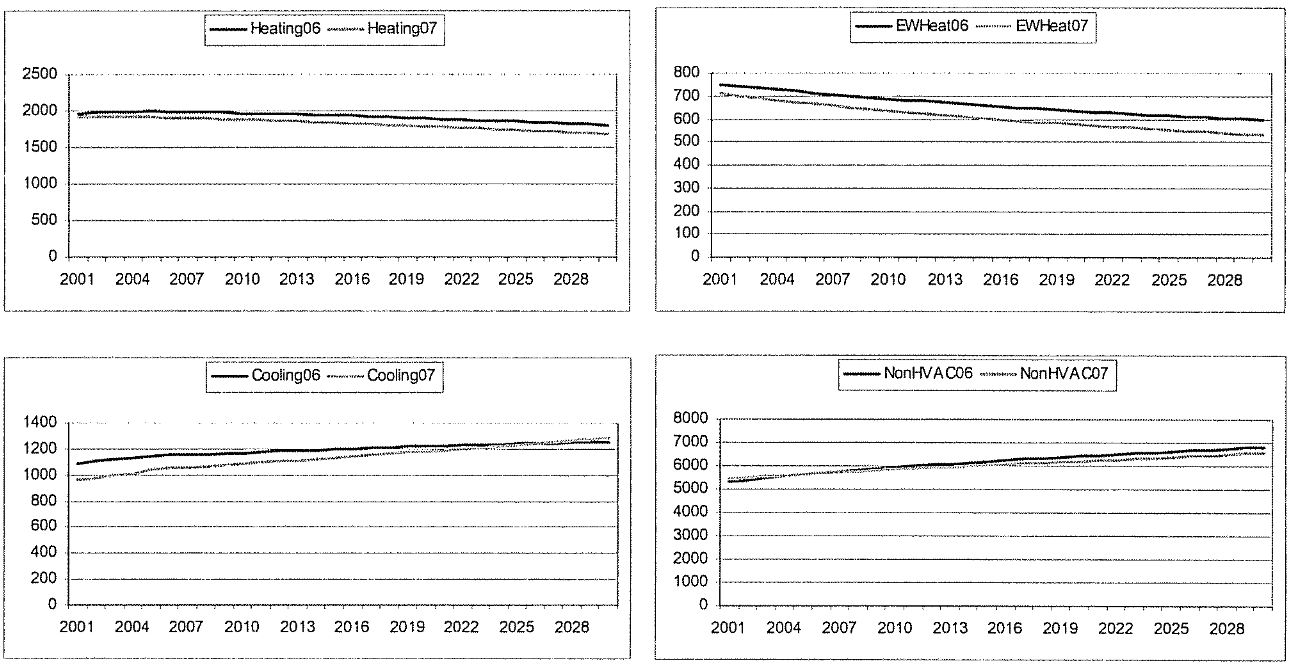
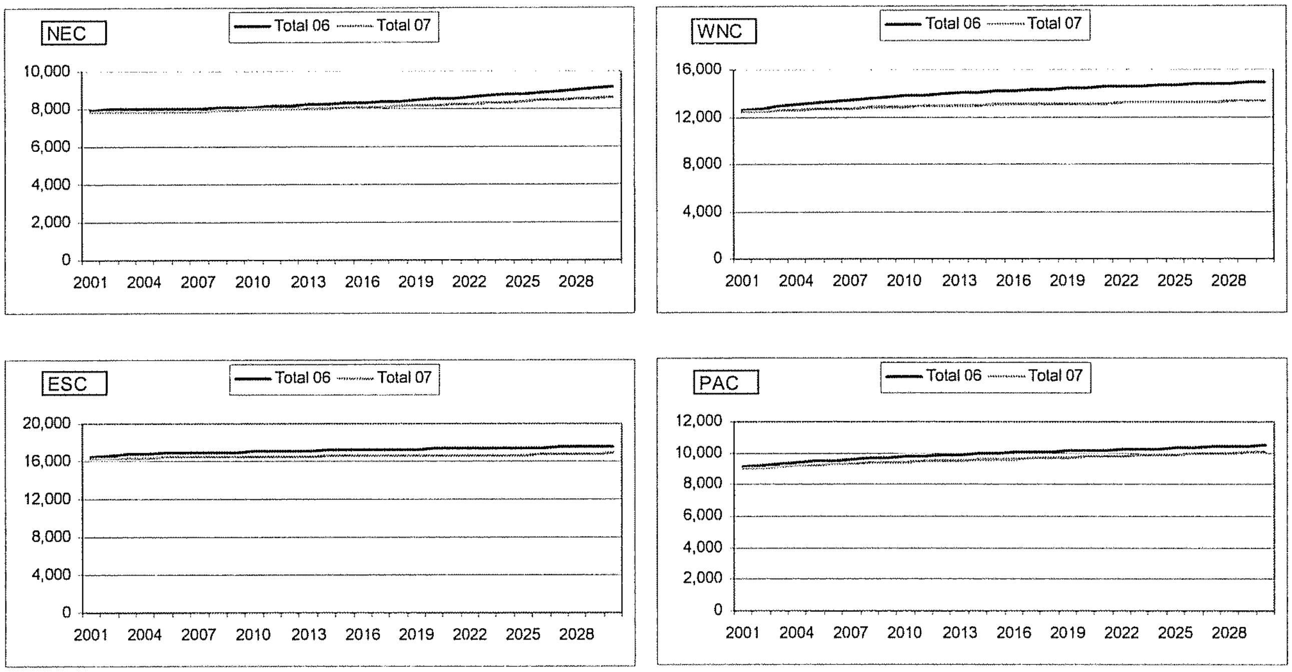


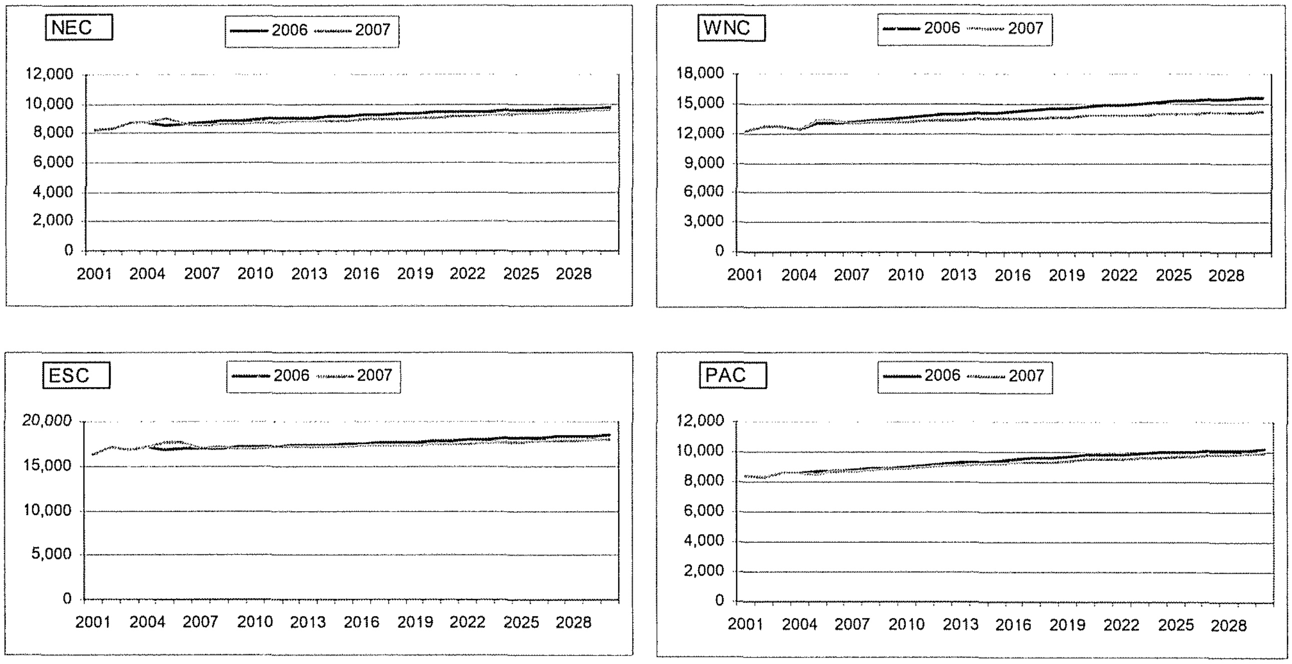
Figure 4-5: Total Regional Indices 2006-2007



1.5 Regional Sales Forecast

In addition to the aforementioned changes and additions to the SAE spreadsheets, regional sales data has been updated and ran through the forecast models with only minor changes made to incorporate the new data. You can see forecast results for some of the census regions in Figure 5-1 below. Impact of increasing equipment efficiencies has brought the forecasts down somewhat from the previous year. In addition, the impact of flat to decreasing electric furnace saturation is most noticeable in case of West North Central region.

Figure 5-1: Regional Energy Forecasts 2006-2007



EAST KENTUCKY POWER COOPERATIVE, INC.
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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 85
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 85. Reference your response to Request 35. Note that there are two parts to that question but you only provided a response to one part. Please explain the basis for assuming that sales to Gallatin Steel will not decrease during the period covered by the 2009 IRP.

Response 85. EKPC uses 2 methods in order to make projections of Gallatin Steel usage, and then integrates them into a forecast. First, historical annual usage is examined and trended. Second, EKPC makes a qualitative determination as to the relative competitiveness of Gallatin Steel to other steel mills. EKPC takes information from both of these approaches and makes a long term forecast of energy consumption. EKPC's forecast that Gallatin Steel will not increase its energy use is based on the methodology described above.

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REQUEST 86
RESPONSIBLE PERSON: **Julia J. Tucker**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 86. Reference your response to Request 37. Please explain the basis for excluding solar PV and solar hot water as a resource in your 2009 IRP. If the basis is supported by any data, please provide the data.

Response 86. Solar PV and solar hot water for residential customers were both evaluated as DSM resources at the Qualitative Screening level.

The following table provides the scores that each received on the Qualitative Screening:

DSM Measure	Customer Acceptance	Measure Applicability	Savings Potential	Cost Effectiveness	Total Score
Solar water heater	**2.2**	**3.2**	**2.8**	**2.2**	**10.3**
Photovoltaics (customer sited)	**2.7**	**2.7**	**2.8**	**1.8**	**10.0**

Data were consulted to evaluate the likely cost-effectiveness of solar water heating and photo-voltaic systems in the residential class. This included prior cost-effectiveness analysis on solar water heaters, and a large body of literature that shows that solar domestic hot water has better economics than does PV.

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REQUEST 87
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 87. Reference Table 8.(4)(a)-1. Please categorize the capacity needs identified in this table by base load, intermediary load and peaking.

Response 87. EKPC does not classify the Capacity Needs by base load, intermediate and peaking from the referenced table. The detailed RTSim model analysis helps identify how much each potential resource will run. The optimization model will then compare all alternatives and their total costs, fixed plus variable, and determine which type of resource most economically serves the needs. Table 8.(4)(a)-2 reflects the results of that analysis and shows how much is expected to be served by base, intermediate and peaking.

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REQUEST 88
RESPONSIBLE PERSON: James C. Lamb, Jr.
COMPANY: East Kentucky Power Cooperative, Inc.

Request 88. Reference your response to Request 44d-j. Please specifically identify the results of your attempt to simulate what might happen with environmental regulations. Please specifically identify what costs, in dollars, were added to all of the uncommitted generating capacity identified in Table 8.(4)(a)-2.

Response 88. The following emission costs were added to the dispatch costs based on the emission rates of each modeled unit. No additional environmental regulations or caps were specifically modeled.

CO2	Dollars per Ton				
	Lower	Low	Probable	High	Higher
2015	$ 11	$14	$ 17	$23	$ 28
2016	$ 12	$15	$ 18	$25	$ 31
2017	$ 12	$16	$ 20	$27	$ 34
2018	$ 13	$17	$ 21	$29	$ 37
2019	$ 14	$18	$ 22	$31	$ 40
2020	$ 14	$19	$ 24	$34	$ 44
2021	$ 15	$20	$ 26	$37	$ 48
2022	$ 15	$21	$ 27	$40	$ 52
2023	$ 16	$23	$ 29	$43	$ 57
2024	$ 17	$24	$ 31	$46	$ 62
2025	$ 17	$25	$ 33	$50	$ 67
2026	$ 18	$27	$ 36	$53	$ 71
2027	$ 19	$29	$ 38	$54	$ 70
2028	$ 20	$30	$ 41	$56	$ 70

Seasonal Ozone		Dollars per Ton			
	Lower	Low	Probable	High	Higher
2009	$ 450	$ 510	$ 600	$ 690	$ 780
2010	$ 464	$ 525	$ 618	$ 711	$ 803
2011	$ 477	$ 541	$ 637	$ 732	$ 828
2012	$ 492	$ 557	$ 656	$ 754	$ 852
2013	$ 506	$ 574	$ 675	$ 777	$ 878
2014	$ 522	$ 591	$ 696	$ 800	$ 904
2015	$ 537	$ 609	$ 716	$ 824	$ 931
2016	$ 553	$ 627	$ 738	$ 849	$ 959
2017	$ 570	$ 646	$ 760	$ 874	$ 988
2018	$ 587	$ 665	$ 783	$ 900	$ 1,018
2019	$ 605	$ 685	$ 806	$ 927	$ 1,048
2020	$ 623	$ 706	$ 831	$ 955	$ 1,080
2021	$ 642	$ 727	$ 855	$ 984	$ 112
2022	$ 661	$ 749	$ 881	$ 1,013	$ 1,145
2023	$ 681	$ 771	$ 908	$ 1,044	$ 1,180
2024	$ 701	$ 795	$ 935	$ 1,075	$ 1,215
2025	$ 722	$ 818	$ 963	$ 1,107	$ 1,252
2026	$ 744	$ 843	$ 992	$ 1,140	$ 1,289
2027	$ 766	$ 868	$ 1,021	$ 1,175	$ 1,328
2028	$ 789	$ 894	$ 1,052	$ 1,210	$ 1,368

Annual Nox		Dollars per Ton			
	Lower	Low	Probable	High	Higher
2009	$ 750	$ 850	$ 1,000	$ 1,150	$ 1,300
2010	$ 773	$ 876	$ 1,030	$ 1,185	$ 1,339
2011	$ 796	$ 902	$ 1,061	$ 1,220	$ 1,379
2012	$ 820	$ 929	$ 1,093	$ 1,257	$ 1,421
2013	$ 844	$ 957	$ 1,126	$ 1,294	$ 1,463
2014	$ 869	$ 985	$ 1,159	$ 1,333	$ 1,507
2015	$ 896	$1,015	$ 1,194	$ 1,373	$ 1,552
2016	$ 922	$1,045	$ 1,230	$ 1,414	$ 1,599
2017	$ 950	$1,077	$ 1,267	$ 1,457	$ 1,647
2018	$ 979	$1,109	$ 1,305	$ 1,500	$ 1,696
2019	$ 1,008	$1,142	$ 1,344	$ 1,546	$ 1,747
2020	$ 1,038	$1,177	$ 1,384	$ 1,592	$ 1,800
2021	$ 1,069	$1,212	$ 1,426	$ 1,640	$ 1,853
2022	$ 1,101	$1,248	$ 1,469	$ 1,689	$ 1,909

2023	$ 1,134	$1,286	$ 1,513	$ 1,739	$ 1,966
2024	$ 1,168	$1,324	$ 1,558	$ 1,792	$ 2,025
2025	$ 1,204	$1,364	$ 1,605	$ 1,845	$ 2,086
2026	$ 1,240	$1,405	$ 1,653	$ 1,901	$ 2,149
2027	$ 1,277	$1,447	$ 1,702	$ 1,958	$ 2,213
2028	$ 1,315	$1,490	$ 1,754	$ 2,017	$ 2,280

SO2		Dollars per Ton			
	Lower	Low	Probable	High	Higher
2009	$ 81	$ 108	$ 135	$ 162	$ 203
2010	$ 83	$ 111	$ 139	$ 167	$ 209
2011	$ 86	$ 115	$ 143	$ 172	$ 215
2012	$ 89	$ 118	$ 148	$ 177	$ 221
2013	$ 91	$ 122	$ 152	$ 182	$ 228
2014	$ 94	$ 125	$ 157	$ 188	$ 235
2015	$ 97	$ 129	$ 161	$ 193	$ 242
2016	$ 100	$ 133	$ 166	$ 199	$ 249
2017	$ 103	$ 137	$ 171	$ 205	$ 257
2018	$ 106	$ 141	$ 176	$ 211	$ 264
2019	$ 109	$ 145	$ 181	$ 218	$ 272
2020	$ 112	$ 149	$ 187	$ 224	$ 280
2021	$ 115	$ 54	$ 192	$ 231	$ 289
2022	$ 119	$ 159	$ 198	$ 238	$ 297
2023	$ 123	$ 163	$ 204	$ 245	$ 306
2024	$ 126	$ 68	$ 210	$ 252	$ 315
2025	$ 130	$ 173	$ 217	$ 260	$ 325
2026	$ 134	$ 179	$ 223	$ 268	$ 335
2027	$ 138	$ 184	$ 230	$ 276	$ 345
2028	$ 142	$ 189	$ 237	$ 284	$ 355

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REQUEST 89
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 89. Reference your response to Request 50. Please explain why a 1.5% increase in customers does not equate to a 1.5% increase in population growth.

Response 89. EKPC's forecast of 1.5% increase in customers has to do with 2 factors, neither of which is population. The first factor is the rate of household formation – historically within EKPC's service area, the growth of housing stock has occurred at a rate higher than the rate of population growth. The second factor has to do with market share. EKPC member cooperatives are increasing their market share of total household formation, due to the fact that service areas are fixed. As residential household development continues to grow, an increasingly larger share is occurring outside IOU and municipal boundaries, and within member cooperative service areas. These 2 factors, (a) growth in housing stock, and (b) increasing market share, are key drivers in EKPC's long-term forecast of customer growth.

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09

REQUEST 90

RESPONSIBLE PERSON: **Darrin W. Adams**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 90. Reference your response to Request 53. Please state the demand and energy saving, in MW and MWh, that the 2009 IRP attributed to reduced losses from distribution transformers.

Response 90. No explicit MW or MWh savings was attributed to reduced losses from distribution transformers. Projected losses on the distribution and transmission systems are based primarily on historical trends for losses. Any specific initiatives planned by EKPC member systems that will impact distribution losses are incorporated into the forecasting process, and would therefore impact the demand and energy projections.

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REQUEST 91
RESPONSIBLE PERSON: **Julia J. Tucker**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 91. Reference your response to Request 54. Please identify who the seasonal power purchase contracts that will expire with and state whether there is an option to renew those contracts in future seasons.

Response 91. The seasonal power purchase contracts, as referenced in EKPC's response to Request 54, are listed below.

Company	MW
Dynegy	160
Cargill	100
TVA (Swap)	50
North Carolina EMC	50
AEP	50
Ameren	50

None of the contracts had an option to renew.

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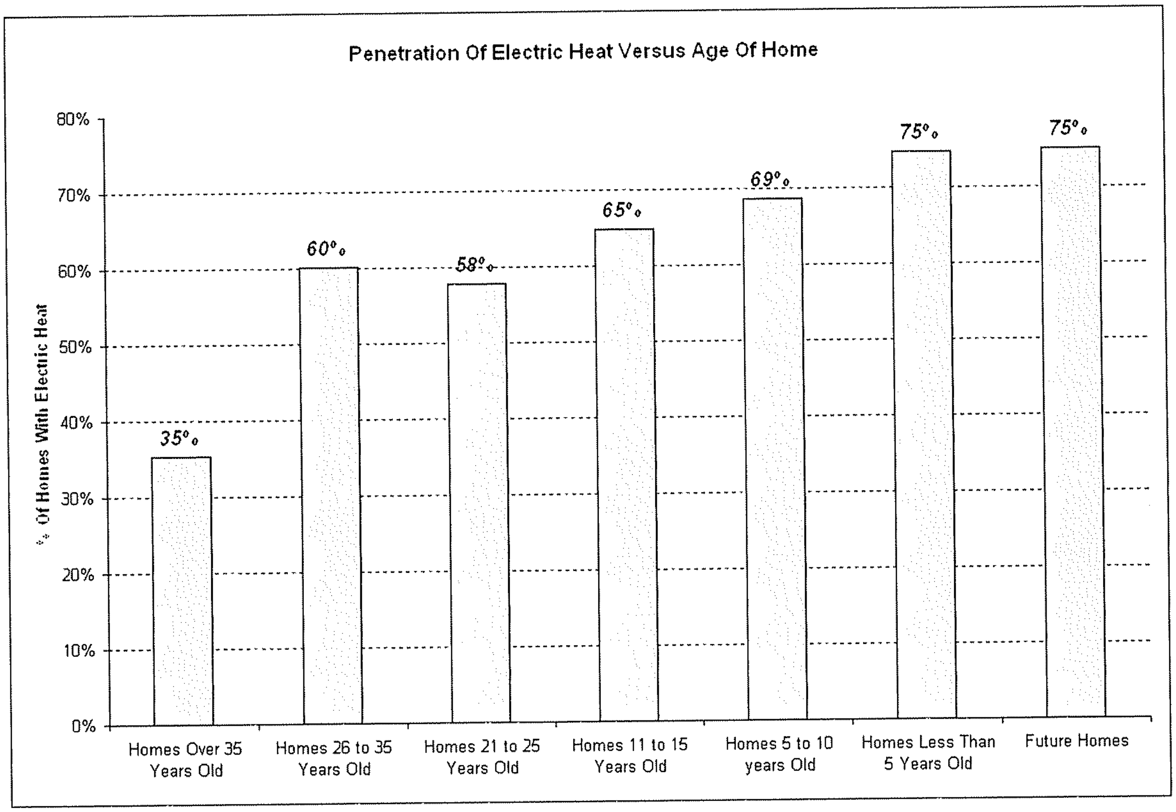
ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 92
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 92. Reference your response to Request 59. Please explain that basis for assuming an increase in homes using electric heat from the current level of 58% to the assumed level of 75%.

Response 92. Please note that EKPC did not assume that 75% of homes will have electric heat. EKPC assumed that future homes would have the same electric heat penetration as new homes. As the graph on page 2 reports, 75% of new homes have electric heat. Although the trend line is increasing, EKPC decided to take a conservative approach relative to the electric heat penetration of future homes, and held the penetration rate constant for future homes.


Penetration Of Electric Heat Versus Age Of Home
% Of Homes With Electric Heat
80%
70%
60%
50%
40%
30%
20%
10%
0%
35%
60%
58%
65%
69%
75%
75%
Homes Over 35 Years Old
Homes 26 to 35 Years Old
Homes 21 to 25 Years Old
Homes 11 to 15 Years Old
Homes 5 to 10 years Old
Homes Less Than 5 Years Old
Future Homes

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 93
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 93. Reference your response to Request 59. Please provide energy and demand projections if you assume that 58% of new homes have electric heat.

Response 93. The energy and demand deltas by year are shown on page 2 of this response. The information in this table reflects the assumption of changes from 75% of new households installing electric heat (source: EKPC 2007 Appliance Saturation Survey), with 50% of these being heat pumps and 25% being room heat, to 58% of new homes installing heat with all 58% being heat pumps.

	Annual MWh Delta	Winter Peak MW Delta
2009	-33,093	-15
2010	-50,399	-23
2011	-68,244	-31
2012	-86,637	-39
2013	-105,569	-47
2014	-125,064	-56
2015	-145,154	-65
2016	-165,835	-74
2017	-187,089	-84
2018	-208,891	-94
2019	-231,263	-104
2020	-254,235	-114
2021	-277,820	-125
2022	-302,020	-136
2023	-326,801	-147
2024	-352,198	-158
2025	-378,201	-170
2026	-404,843	-182
2027	-432,087	-194
2028	-459,854	-206

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09

REQUEST 94

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 94. Please state whether EKPC is a member of a regional transmission organization (RTO) and if so which one.

Response 94. EKPC is not a member of an RTO.

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 95
RESPONSIBLE PERSON: **Julia J. Tucker**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 95. Please state the lowest annual heat rate determined for the LMS 100 combustion turbines for any scenario you ran.

Response 95. The lowest annual average heat rate for the LMS100 combustion turbine units was 9,747 Btu/kWh.

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09

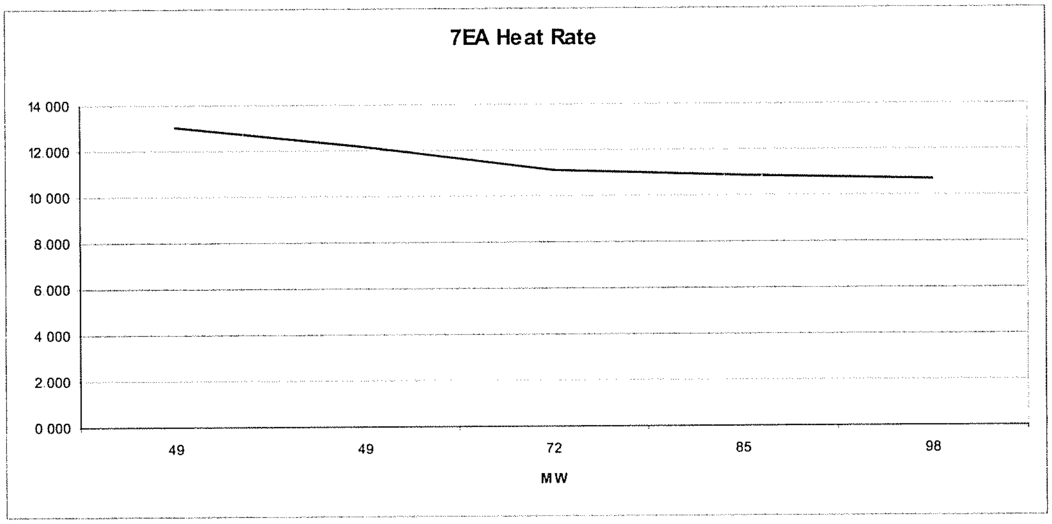
REQUEST 96

RESPONSIBLE PERSON: **Julia J. Tucker**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 96. Reference your response to Request 72 and IRP 2009 page 8-118. If the 2009 IRP does not assume that future combustion turbines will have a heat rate of over 12,000 Btu/kWh, please explain why the heat rate listed for Future CT1 and Future CT2 on page 8-118 is at over 12,000 Btu/kWh. If there is an error on page 8-118, please explain how the resource plan changes when you correct this error. If there is not an error on page 8-118, please provide a complete response to Request 72.

Response 96. The GE 7EA and LMS 100 combustion turbines have an expected heat rate curve based on operating the unit at different output levels. The heat rate that is normally quoted in documentation is the expected heat rate with the unit operating at full load under ideal conditions; this is called the full load heat rate. The average heat rates for the GE 7EA combustion turbines reported in EKPC's 2009 IRP are based on the following heat rate curve.


7EA Heat Rate
14 000
12 000
10 000
8 000
6 000
4 000
2 000
0 000
49
49
72
85
98
MW

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 97
RESPONSIBLE PERSON: **Julia J. Tucker**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 97. Reference your response to Request 73. Please explain what changes you have made to your prediction of future generation needs in light of your correction.

Response 97. No change will be made as a result of the correction. The correct data was used for modeling. The mistake was in the table created for the sole purpose of this report.

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ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 98
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 98. Reference your response to Staff Request 6. The Energy Information Agency reported that in May 2009 the average price paid by power generators for natural gas was $4.46. See http://tonto.eia.doe.gov/ftproot/electricity/epm/02260908.pdf at 67. You report that you paid $15.70. Please explain why you paid over three times the national average in May 2009 for natural gas. Also, please explain if the May 2009 price that you paid for natural gas is used in any other resource planning done by EKPC.

Response 98. EKPC's response to Request 6 and the report referenced in this request are not comparable. The EIA report referenced here reports the average spot price paid for natural gas. EKPC's response to Request 6 reflects its hedged price of natural gas, not the spot price paid. In order to mitigate fuel volatility, EKPC hedges its natural gas price via the use of MYMEX natural gas forward markets.

The hedged price is made up of 2 components. The first component is the price paid for spot gas purchases. In May 2009, EKPC paid $4.238 per MMBtu for spot natural gas. (It is this number that is comparable to the EIA report). The second component related to cost of natural gas is the financial hedges in place. In May 2009, the hedge cost was $11.462 per MMBtu. Total cost, computed by the price of spot gas and the cost of hedging was $15.70 per MMBtu.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 99
RESPONSIBLE PERSON: **Julia J. Tucker**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 99. Reference your response to Staff Request 15 and Request 44d-j. Please explain why in response to Staff Request 15 you state that no new legislation or environmental rules were assumed in the 2009 IRP but in response to Request 44d-j, you state that scenario were modeled attempting to simulate what might happen with environmental regulation. Please also provide what these simulations assumed in terms of environmental simulation. Please explain whether this simulation assumed that the replacement rules for CAIR and CAMR will not be cap and trade programs.

Response 99. Please see Response 88. No other environmental regulations were modeled.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 100
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 100. Reference your response to Staff Request 15, second to last paragraph. Please state what the price of wind was in the renewable analysis was that lead to the conclusion that it was not an economic choice for EKPC members. Please include what the price is for, e.g. just for energy, for capacity, for renewable energy credits etc.

Response 100. EKPC is not at liberty to report specific pricing proposals received from bidders in its RFP process.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 101
RESPONSIBLE PERSON: **John F. Farley**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 101. Reference your response to Staff Request 17. Please provide the basis for each score any data, e.g. focus group results, surveys, assumed prices, that was used in creating the score.

Response 101. Each individual relied on his or her working knowledge and work experience in assigning scores to each criterion for each DSM measure. EKPC conducts regular member end use surveys of the residential class, and those data informed the scores, particularly the measure applicability and savings potential criteria. The work involved in preparing for the DSM portion of the 2009 IRP involved a review of other utility DSM programs and resource portfolios. Team members have conducted focus groups related to new product acceptance. High level summaries of avoided costs, along with retail and wholesale rate levels, were factors that were used to evaluate likely cost-effectiveness. Team members also used their knowledge of tax credits available to guide evaluations of customer acceptance. Also, team members were guided by information gained from energy audits and field inspections when evaluating measure applicability and savings potential. Team members also relied on prior analysis done with REM/Rate and DSManager to guide judgments concerning customer acceptance, savings potential and cost-effectiveness.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 102
RESPONSIBLE PERSON: **John F. Farley**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 102. Reference your response to Staff Request 18c. Please explain what experience, if any, the people listed have with:

a) Passive Solar
b) Solar Hot Water
c) Tax Equity Financing

Response 102. a) **Passive Solar:** Mr. Farley wrote his college thesis on the subject of passive solar, and early in his career, promoted passive solar design in his work with the Rhode Island Energy Office.

b) **Solar Hot Water**: Mr. Farley ran workshops on solar hot water when he worked at the Rhode Island Energy Office. His work focused on the technical and financial aspects of solar domestic hot water, including estimates of energy savings and the payback to the customer. Most recently, he worked with Mr. Hohman to conduct a cost-effectiveness analysis for East Kentucky Power.

Mr. Hohman installed a solar water heating system in his home in September 2007. The system was designed for a family of 3-4 and cost approximately $5,000. Mr. Hohman financed the system through MACED with a 6% loan for a period of 6 years. The system costs $60 per month and yields a savings of approximately $20 per month in electric charges. Mr. Hohman estimates a payback in excess of 10 years.

c) **Tax Equity Financing:** Mr. Lamb has experience related to capital financing, including debt financing with RUS.

Mr. Farley has served on review boards for renewable energy where project developers have included tax equity financing as one of their strategies for raising capital. He is also currently a member of the DSM Collaborative in Rhode Island where he is championing the use of innovative financing to expand the adoption of energy efficiency among the customer base without creating excessive rate impacts. There are several concepts being considered, and several being tested. These concepts include third party guaranteed savings, low interest loans, on-bill financing, special mortgages, and the use of municipal tax liens.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2009-00106

SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09

REQUEST 103

RESPONSIBLE PERSON: James C. Lamb, Jr.

COMPANY: East Kentucky Power Cooperative, Inc.

Request 103. Please provide all documents referenced or reviewed in responding to these requests.

Response 103. All relevant documents referenced or reviewed in responding to these data requests have been provided.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SECOND DATA REQUEST RESPONSE

ENVIRONMENTAL GROUPS' SECOND DATA REQUEST DATED 08/21/09
REQUEST 104
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 104. Please identify all people involved in answering these requests.

Response 104. The person responsible for answering each data request is noted on each response.