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,

[Signature]
David Smart
General Counsel

Enclosures

Cc: Parties of Record
COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2009 INTEGRATED RESOURCE PLAN OF EAST
KENTUCKY POWER COOPERATIVE, INC.

CASE NO. 2009-00106

RESPONSES TO COMMISSION STAFF'S SUPPLEMENTAL DATA REQUEST
TO EAST KENTUCKY POWER COOPERATIVE, INC.
DATED AUGUST 21, 2009
COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2009 INTEGRATED RESOURCE PLAN OF EAST
KENTUCKY POWER COOPERATIVE, INC.  ) CASE NO.

CERTIFICATE

STATE OF KENTUCKY  )
COUNTY OF CLARK  )

George S. Carruba, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff Supplemental Data Request in the above-referenced case dated August 21, 2009, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Subscribed and sworn before me on this 3rd day of September, 2009.

Notary Public

My Commission expires: December 8, 2009
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2009 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.) CASE NO. 2009-00106

CERTIFICATE

STATE OF KENTUCKY )
COUNTY OF CLARK )

Paul A. Dolloff, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff Supplemental Data Request in the above-referenced case dated August 21, 2009, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

[Signature]

Subscribed and sworn before me on this 2nd day of September, 2009.

[Signature]
Notary Public

My Commission expires: December 8, 2009
COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2009 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC. ) CASE NO. 2009-00106

CERTIFICATE

STATE OF RHODE ISLAND )
COUNTY OF PROVIDENCE )

John F. Farley, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff Supplemental Data Request in the above-referenced case dated August 21, 2009, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Subscribed and sworn before me on this 27th day of August, 2009.

Notary Public

My Commission expires:
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2009 INTEGRATED RESOURCE PLAN OF EAST
KENTUCKY POWER COOPERATIVE, INC.

CASE NO. 2009-00106

CERTIFICATE

STATE OF KENTUCKY
COUNTY OF CLARK

James C. Lamb, Jr., being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff Supplemental Data Request in the above-referenced case dated August 21, 2009, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

[Signature]

Subscribed and sworn before me on this ___ day of September, 2009.

[Notary Seal]

My Commission expires: December 8, 2009
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2009 INTEGRATED RESOURCE PLAN OF EAST
KENTUCKY POWER COOPERATIVE, INC.

) CASE NO. 2009-00106

CERTIFICATE

STATE OF KENTUCKY )
)
COUNTY OF CLARK )

Julia J. Tucker, being duly sworn, states that she has supervised the
preparation of the responses of East Kentucky Power Cooperative, Inc. to the
Public Service Commission Staff Supplemental Data Request in the above-
referred case dated August 21, 2009, and that the matters and things set forth
therein are true and accurate to the best of her knowledge, information and belief,
formed after reasonable inquiry.

Subscribed and sworn before me on this 1st day of September, 2009.

Request 1. Refer EKPC’s Response to item 1 of the Commission Staff’s Second Data Request ("Staff’s Second Request").

Request 1a. For the January 2008 and January 2009 peaks, provide the date, time, and the reported temperature at which each peak occurred.

Response 1a. The January 2008 peak occurred on the 25th at 8 a.m. The dry bulb temperature was 7 degrees Fahrenheit. The January 2009 peak occurred on the 16th at 8 a.m. The dry bulb temperature was -2 degrees Fahrenheit.

Request 1b. For the January 2009 peak, identify the supply-side resources relied upon by EKPC to meet the peak of 3,152 MW. Identify specific units and purchases, including the MW provided.

Response 1b. The following table represents the average generation for the peak hour by generator and/or purchase (MWh). Most EKPC generators are capable of following load instantaneously, so the output generation varies continuously throughout the hour. EKPC, like other generating companies, must carry operating reserves on its instantaneous basis. Therefore,
the sum of the average hourly generation, purchases and inadvertent power flow will approximately reflect the system load but will not necessarily exactly match it.

<table>
<thead>
<tr>
<th>Unit / Purchase</th>
<th>MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale 1</td>
<td>21</td>
</tr>
<tr>
<td>Dale 2</td>
<td>22</td>
</tr>
<tr>
<td>Dale 3</td>
<td>71</td>
</tr>
<tr>
<td>Dale 4</td>
<td>67</td>
</tr>
<tr>
<td>Cooper 1</td>
<td>100</td>
</tr>
<tr>
<td>Cooper 2</td>
<td>176</td>
</tr>
<tr>
<td>Spurlock 1</td>
<td>283</td>
</tr>
<tr>
<td>Spurlock 2</td>
<td>456</td>
</tr>
<tr>
<td>Spurlock 3</td>
<td>268</td>
</tr>
<tr>
<td>Spurlock 4</td>
<td>121</td>
</tr>
<tr>
<td>Smith CT 1</td>
<td>45</td>
</tr>
<tr>
<td>Smith CT 2</td>
<td>0</td>
</tr>
<tr>
<td>Smith CT 3</td>
<td>23</td>
</tr>
<tr>
<td>Smith CT 4</td>
<td>99</td>
</tr>
<tr>
<td>Smith CT 5</td>
<td>0</td>
</tr>
<tr>
<td>Smith CT 6</td>
<td>93</td>
</tr>
<tr>
<td>Smith CT 7</td>
<td>89</td>
</tr>
<tr>
<td>Landfill Gas</td>
<td>11</td>
</tr>
<tr>
<td>SEPA - Cumberland</td>
<td>70</td>
</tr>
<tr>
<td>SEPA – Laurel Dam</td>
<td>70</td>
</tr>
<tr>
<td>SEPA – KY Munis</td>
<td>42</td>
</tr>
<tr>
<td>Cargill</td>
<td>100</td>
</tr>
<tr>
<td>Ameren</td>
<td>50</td>
</tr>
<tr>
<td>Dynegy/Bluegrass</td>
<td>155</td>
</tr>
<tr>
<td>TVA (Swap)</td>
<td>48</td>
</tr>
<tr>
<td>NCEMC</td>
<td>50</td>
</tr>
<tr>
<td>Duke Energy Ohio</td>
<td>32</td>
</tr>
<tr>
<td>PJM Market (hourly)</td>
<td>190</td>
</tr>
<tr>
<td>PJM Market (day ahead)</td>
<td>225</td>
</tr>
<tr>
<td>TVA (day ahead)</td>
<td>150</td>
</tr>
<tr>
<td>Inadvertent</td>
<td>(33)</td>
</tr>
<tr>
<td>Reserves</td>
<td>92</td>
</tr>
</tbody>
</table>

**Request 1c.** Provide the amount of EKPC’s summer peak to date for 2009.
**Response 1c.** EKPC’s 2009 summer peak of 2176 MW occurred on August 10th at 5 p.m. The dry bulb temperature was 90 degrees Fahrenheit.
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 2
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 2. Refer to page 5-11 of the IRP, the “Normal Weather Inputs” in the Load Forecast Technical Appendix, and the response to item 3 of Staff’s Second Request.

Request 2a. Page 5-11 of the IRP indicates that seven different weather stations are used in determining normal weather for EKPC’s system; however, only six cities, Jackson, Louisville, Covington, Bowling Green, Huntington, and Lexington, are included in the “Normal Weather Inputs” spreadsheet. Explain the discrepancy.

Response 2a. The seventh weather station is Somerset. This station is used for normal weather for 1 member system, South Kentucky RECC. The omission from the ‘Normal Weather Inputs’ spreadsheet was an oversight. The data is on the attached CD.

Request 2b. The “Normal Weather Inputs” spreadsheet, in addition to data for each of the six cities, includes data for “Lexington Mild” and “Lexington Extreme.” Explain what these represent and how this data is used in the determination of normal weather for EKPC’s system.

Response 2b. Based on historical heating and cooling degree day data, alternate weather projections were developed based upon the 90th and 10th percentile to reflect
extreme and mild weather, respectively. The resulting forecasts reflect cases assuming base case HDD ± 12% and CDD ± 20%. These are what the ‘Lexington Extreme’ and ‘Lexington Mild’ refer to. The resulting data series are used for the scenario development of the high and low load forecasts. Individual member system modeling employs the weather station most appropriate for the geographical location of the system. Modeling for the EKPC system as a whole uses the Lexington Weather Station which is the most explanatory station of the seven.
EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2009-00106

SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09

REQUEST 3

RESPONSIBLE PERSON: Julia J. Tucker

COMPANY: East Kentucky Power Cooperative, Inc.

Request 3. Refer to EKPC’s Response to item 4 of Staff’s Second Request and Table 5.(4)-1 on page 5-16 of the IRP.

Request 3a. Identify the selling party and the specific MW levels of each seasonal power purchase contract needed to serve load prior to Spurlock 4 becoming operational.

Response 3a. Please see the table below.

<table>
<thead>
<tr>
<th>Company</th>
<th>MW</th>
<th>Purpose</th>
<th>Contract Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargill</td>
<td>100</td>
<td>Energy</td>
<td>Dec08</td>
</tr>
<tr>
<td>Dynegy/Bluegrass</td>
<td>160</td>
<td>Peaking</td>
<td>Dec08-Mar09</td>
</tr>
<tr>
<td>Cargill</td>
<td>100</td>
<td>Energy</td>
<td>Jan09</td>
</tr>
<tr>
<td>TVA (Swap)</td>
<td>50</td>
<td>Peaking</td>
<td>Dec08-Feb09</td>
</tr>
<tr>
<td>NCEMC</td>
<td>50</td>
<td>Energy</td>
<td>Jan09-Feb09</td>
</tr>
<tr>
<td>AEP</td>
<td>50</td>
<td>Energy</td>
<td>Jan09-Feb09</td>
</tr>
<tr>
<td>Ameren</td>
<td>50</td>
<td>Energy</td>
<td>Jan09</td>
</tr>
<tr>
<td>Cargill</td>
<td>100</td>
<td>Energy</td>
<td>Feb09</td>
</tr>
<tr>
<td>NCEMC</td>
<td>50</td>
<td>Energy</td>
<td>Mar09</td>
</tr>
</tbody>
</table>
Request 3b. Spurlock 4 is rated at 278 MW and became operational on April 1, 2009. In what year in the table is the addition of the unit reflected?

Response 3b. The referenced data in the table only shows what was existing as of January 1, 2009. No new additions after that date are reflected. The numbers decrease at various times because of contracted capacity expiring or because additional auxiliary loads are added to existing stations and, in effect, reduce the capacity of existing units.
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 4
RESPONSIBLE PERSON: James C. Lamb, Jr.
COMPANY: East Kentucky Power Cooperative, Inc.

Request 4. Refer to EKPC’s Response to item 6 of Staff’s Second Request. The average monthly price for natural gas purchases is provided for January 2008 through June 2009. Given the decline in natural gas prices in 2009, explain why May’s average price was $15.70 when April’s and June’s average prices were $4.15 and $6.98, respectively.

Response 4. As a result of higher cost of natural gas hedges, coupled with low natural gas usage on the combustion turbines, May’s average price increased substantially. Shown below is a breakdown of the May average price.

$/MMBtu

<table>
<thead>
<tr>
<th>Component</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Hedge</td>
<td>11.462</td>
</tr>
<tr>
<td>Spot Price</td>
<td>4.238</td>
</tr>
<tr>
<td>May Total</td>
<td>15.700</td>
</tr>
</tbody>
</table>
COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 5
RESPONSIBLE PERSON: James C. Lamb, Jr.
COMPANY: East Kentucky Power Cooperative, Inc.

Request 5. Refer to EKPC’s Response to item 7 of Staff’s Second Request. Provide the report identified in the footnote.

Response 5. The report is provided on the attached CD. Please note that EKPC and the Sierra Club met to discuss the findings in the report. During the meeting, EKPC called attention to an error of 199 MW in projected savings. An errata sheet was subsequently provided and is included on the attached CD.
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 6
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 6. Refer to EKPC’s Response to item 9 of Staff’s Second Request and page 7-17 of the IRP.

Request 6a. The response refers to the residential class sample design using ratio-estimation which provides “at least ± 10% precision with 90% confidence (90/10) regardless of season” and the medium commercial class sample design being “created to provide 5% relative accuracy with 95% confidence.” Explain whether some percentage of “relative accuracy” has the same meaning as “at least ± ‘some percentage’ precision.”

Response 6a. The relative accuracy is defined as the state of conforming exactly to the true population value and precision is defined as a measure of the reliability of an estimate -- the variability of the sample estimate around the sample mean.

Request 6b. 178 is the number of residential load profile meters installed on the EKPC system. The residential class is the only class for which the response indicates less than 95 percent confidence. What number of load profile meters would need to be installed on the system to provide 95 percent confidence with “at least ± 10%” precision?
Response 6b. The number of residential load profile meters that would need to be installed on the system for a 95 percent confidence with at least a ± 10% precision would be approximately 300.

Request 6c. Explain why the response does not provide either an accuracy level-of-confidence percentage for the small commercial class. If such data for the small commercial class exists, provide the data.

Response 6c. The small commercial class accuracy level-of-confidence is the same as the residential class which is the ± 10% precision with 90 percent confidence level.

Request 6d. The response indicates there are 315 large power customers on the EKPC system and that they “are census metered to the best of our ability.” Explain, specifically, what is meant by census metered and why there are only 295 meters when there are 315 customers.

Response 6d. Census meter means that all customers in the large power class would be metered. EKPC is not always made aware of new loads or retired loads at or slightly above 350 kW on the member systems. EKPC tries to maintain up-to-date information.
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09

REQUEST 7
RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc.

Request 7. Refer to EKPC’s Response to item 12 of Staff’s Second Request. Provide the date EKPC became a member of the Cooperative Research Network and the amount of dues paid for all years prior to 2008, if applicable.

Response 7. EKPC is unable to determine the date that it became a member of the Cooperative Research Network (“CRN”). Shown below are the dues paid by EKPC to CRN from 1985 to 2007.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>$66,709</td>
<td>1997</td>
<td>$301,441</td>
</tr>
<tr>
<td>1986</td>
<td>143,728</td>
<td>1998</td>
<td>270,148</td>
</tr>
<tr>
<td>1987</td>
<td>216,693</td>
<td>1999</td>
<td>278,136</td>
</tr>
<tr>
<td>1988</td>
<td>206,998</td>
<td>2000</td>
<td>287,021</td>
</tr>
<tr>
<td>1989</td>
<td>216,494</td>
<td>2001</td>
<td>296,069</td>
</tr>
<tr>
<td>1990</td>
<td>234,878</td>
<td>2002</td>
<td>305,418</td>
</tr>
<tr>
<td>1991</td>
<td>249,937</td>
<td>2003</td>
<td>296,418</td>
</tr>
<tr>
<td>1992</td>
<td>259,935</td>
<td>2004</td>
<td>296,418</td>
</tr>
<tr>
<td>1993</td>
<td>287,087</td>
<td>2005</td>
<td>296,418</td>
</tr>
<tr>
<td>1994</td>
<td>287,087</td>
<td>2006</td>
<td>226,660</td>
</tr>
<tr>
<td>1995</td>
<td>287,087</td>
<td>2007</td>
<td>230,204</td>
</tr>
<tr>
<td>1996</td>
<td>287,087</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 8
RESPONSIBLE PERSON: George S. Carruba
COMPANY: East Kentucky Power Cooperative, Inc.

Request 8. Refer to EKPC’s Response to item 13 of Staff’s Second Request and page 8-5 of the IRP.

Request 8a. Provide the beginning and ending dates of the Southeast Electric Reliability Corporation’s (“SERC”) recent audit of EKPC’s compliance with the reliability standards of the North American Reliability Corporation (“NERC”).

Response 8a. The SERC auditors were on site at EKPC March 23 – 25, 2009.

Request 8b. The response indicates that EKPC has not received SERC’s final audit report on its compliance with NERC’s reliability standards. Explain how EKPC is aware of SERC’s findings regarding its compliance.

Response 8b. SERC’s auditors relayed their findings to EKPC on March 25, 2009, in an exit presentation made at the conclusion of the audit.

Request 8c. When is the final report expected to be issued?
Response 8c. On August 10, 2009, EKPC received a copy of SERC’s confidential, non-public, EKPC audit report. SERC has indicated that the final, public report should be posted by NERC on its website within two to three weeks. To access this report, go to www.nerc.com, then click on Compliance, Regional Programs, Regional Audit Reports.
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 9
RESPONSIBLE PERSON: John F. Farley
COMPANY: East Kentucky Power Cooperative, Inc.

Request 9. Refer to EKPC’s Responses to items 18 and 19 of Staff’s Second Request. Provide a detailed description of the demand-side management (“DSM”) experience of John F. Farley.

Response 9. John Farley has over 25 years of experience in the field of demand-side management. His entire professional career has been dedicated to demand-side management and retail energy programs. He has completed demand-side management projects to benefit customers in over 30 states and several foreign countries.

His core expertise is in the planning, cost-effectiveness, high level design, and evaluation of utility DSM programs. His career has included senior technical, executive, and sales positions with leading firms and organizations. His service in the DSM profession has included working for government agencies, utilities, energy services companies, private consulting firms, and end users.

Since 2001, John has been the president of John Farley Consulting, an independent energy consulting firm specializing in the retail energy business. His practice focuses on demand-side management, utility rates, energy efficiency, performance contracting, cost-
effectiveness, and measurement & verification. His project work during this time has included:

- Preparing DSM resource portfolios for Integrated Resource Plans of EKPC.
- Conducting cost-effectiveness studies of DSM measures and programs.
- Consulting on the design and evaluation of a direct load control (DLC) pilot program for residential air conditioners and electric water heaters.
- Serving as technical advisor to municipalities in their review of energy services performance contracts for their schools and other public buildings.
- Consulting for a non-profit energy consortium of large commercial and industrial customers, working to lower the cost of energy while preserving environmental quality and adequate supply.
- Representing the needs of large energy users on public boards that decide how programs will be designed and how money will be allocated for DSM and renewable programs.
- Participating in a unique collaborative with government, utility, customer, and environmental groups to design and evaluate DSM programs in a retail choice state.
- Completing a study of DSM best practices, interviewing experts in 15 key states.
- Designing the marketing plan for the launch of a new retail renewable electricity product in New England that has since enjoyed great success.
- Designing a unique monitoring and verification plan for a mass market demand response program where the capacity was offered into the retail-time (5 minute interval) emergency capacity market of the regional RTO.
- Designing a new meter data management, profiling, forecasting, and settlement system for a major international distribution utility.
- Providing expert testimony for landmark legislation in Rhode Island that changed the regulatory model to a least cost procurement mandate. This added DSM,
distributed generation, and demand response resources to the procurement mix of the utility. It also set up a new natural gas DSM program in the state.

From 1996 through 2000, John worked as a senior executive for EPS Solutions, a software and consulting services company that provided know-how and technology to utilities and energy services companies in the areas of DSM, rates, and integrated resource planning. EPS Solutions developed and maintained the EPRI DSManager software package under contract to EPRI. Mr. Farley managed an information service for EPRI that distributed end use metering information products to utilities around the country for use in planning and evaluating DSM programs. He developed standard information products and led multi-client studies to develop and apply end use information for utility DSM activities.

From 1993 to 1996, Mr. Farley worked at TASC/LODESTAR, where his duties included building and managing an information service with EPRI for utilities across North America to provide high quality end use data for DSM planning, cost-effectiveness, and impact evaluation. While there he completed groundbreaking statistical work in data transferability of electricity end use loads.

From 1986 to 1993, Mr. Farley worked as a senior analyst at the Commonwealth Electric Company, now NSTAR. There he led a team of staff in conducting the DSM impact and process evaluations, performing the DSM planning for the Integrated Resource Management requirements, and conducting detailed cost-effectiveness studies for energy conservation programs. Mr. Farley designed the methods to integrated DSM resources into the resource planning process, and in the process he introduced the use of the Total Resource Cost test in Massachusetts for evaluating the cost-effectiveness of DSM programs. While there he also prepared technical and market potential studies for DSM resources.
Mr. Farley began his professional career as a technical advisor to the Rhode Island Governor’s Energy Office from 1983 to 1985. He managed project areas including commercial energy auditing, renewable energy, and other energy efficiency initiatives. He provided direct services to homeowners and businesses concerning energy efficiency and renewable energy. He also revived several education and training programs, including the certification of solar installers, boiler efficiency workshops, and consumer protection clinics. Notably, he also designed and gained DOE approval for the only non-proprietary energy audit package approved for use in the Federal Commercial and Apartment Conservation Service (CACS).

Mr. Farley has a Bachelor of Science degree in Physics/System Science with highest honors from Providence College (1982).
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 10
RESPONSIBLE PERSON: John F. Farley
COMPANY: East Kentucky Power Cooperative, Inc.

Request 10. Refer to EKPC’s Response to item 20 of Staff’s Second Request, which indicates that the participant levels and load impacts of existing DSM programs are fixed for the forecast period because “the impacts of these programs are embedded in the load forecast.” 807 KAR 5:058, Section 7(3), states that “[f]orecasts shall not include load impacts of additional, future demand-side programs. . . .” It also states that “[f]orecasts shall include the utility’s estimates of existing and continuing demand-side programs. . . .”

Request 10a. Explain whether EKPC’s Response means that EKPC’s estimates of its existing and continuing DSM programs include no growth (or decline) in participation levels and load impacts beyond 2009.

Response 10a. EKPC does expect that there will be new participants in many of the existing DSM programs listed in the 2009 IRP. Those new participants will experience energy and peak demand savings. However, those impacts are not included as incremental DSM savings in the IRP resource plan, because those savings are already accounted for in the load forecast.
At this point, it is useful to make some observations about these programs, observations that will lead to a couple of distinctions.

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 does 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 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 our 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:

<table>
<thead>
<tr>
<th>Existing Program</th>
<th>New Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Source Heat Pump</td>
<td>Replace Furnace with Heat Pump</td>
</tr>
<tr>
<td>Tune-Up</td>
<td>Home Performance with Energy Star</td>
</tr>
<tr>
<td>Button-Up</td>
<td>Home Performance with Energy Star</td>
</tr>
<tr>
<td>Touchstone Energy Home</td>
<td>Enhanced TSE Home</td>
</tr>
<tr>
<td>Compact Fluorescent Lighting</td>
<td>Residential Efficient Lighting</td>
</tr>
</tbody>
</table>

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 is clear that future participation and/or savings are expected to be significantly different from what is captured in the load forecast already.

**Request 10b.** If the response to part a. of this request is affirmative, given that the number of participants and load impacts of its existing DSM programs have tended to change from year to year, explain in detail why it is reasonable to not reflect similar changes in the estimates that the regulation requires be included in the load forecast.

**Response 10b.** The forecast period impacts from existing DSM programs are not explicitly modeled. By saying they are embedded in the load forecast, we mean that the load forecast methodology itself captures these impacts.
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 11
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

Request 11. Refer to EKPC’s Response to item 13 of the First Request of the Sierra Club, Kentucky Environmental Foundation, and Kentuckians for the Commonwealth (the “Environmental Groups”). Provide an update of the response which shows energy sales and peak demand for July 2009 and, as they become available, monthly updates for the subsequent months in 2009.

Response 11. July 2009 total requirements were 1,106,127 MWh and the peak was 1,969 MW. August 2009 unadjusted peak demand was 2,176 MW. Energy is not available at this time.
PSC Request 12
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EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2009-00106
SUPPLEMENTAL DATA REQUEST RESPONSE

COMMISSION STAFF’S SUPPLEMENTAL DATA REQUEST DATED 08/21/09
REQUEST 12
RESPONSIBLE PERSON: Julia J. Tucker
COMPANY: East Kentucky Power Cooperative, Inc.

**Request 12.** Refer to EKPC’s Response to item 46 of the First Request of the Environmental Groups. Provide the anticipated completion date of the fuel study that EKPC commissioned Liberty Green Renewables to conduct.

**Response 12.** Phase I of a three phase study has been completed and EKPC is currently reviewing and evaluating. No time line has been set for the final phases of the analysis.