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October 2, 2009

Mr. Jeffrey Derouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40602-0615

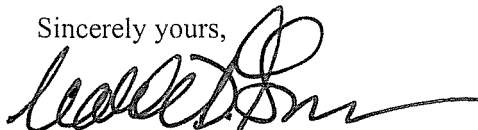
Re: East Kentucky Power Cooperative, Inc.  
2009 Integrated Resource Plan  
PSC Case No. 2009-00106

Dear Mr. Derouen:

Enclosed please find herewith an original and ten (10) copies each of East Kentucky Power Cooperative, Inc.'s Response to Comments on 2009 IRP from Sierra Club, Kentucky Environmental Foundation and Kentuckians for the Commonwealth; and, Motion to Strike Environmental Groups' Supplemental Comments on 2009 IRP. By copy of this letter, all parties listed on the Certificate of Service have been served. Please return file stamped copies of these two to me in the enclosed self-addressed, stamped envelope.

Please file these documents of record.

Sincerely yours,



Mark David Goss

Enclosures

cc: Hon. Dennis G. Howard, II  
Hon. Lawrence W. Cook  
Hon. Robert Ukeiley  
Hon. Michael L. Kurtz  
Hon. Richard Raff  
Ann Wood

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

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OCT 02 2009

In the Matter of:

A REVIEW PURSUANT TO 807 KAR 5:098 OF )  
THE 2009 INTEGRATED RESOURCE PLAN FOR ) CASE NO.  
EAST KENTUCKY POWER COOPERATIVE, INC. ) 2009-00106

PUBLIC SERVICE  
COMMISSION

**EAST KENTUCKY POWER COOPERATIVE, INC.'S RESPONSE  
TO COMMENTS ON 2009 IRP FROM SIERRA CLUB,  
KENTUCKY ENVIRONMENTAL FOUNDATION AND  
KENTUCKIANS FOR THE COMMONWEALTH**

Comes East Kentucky Power Cooperative, Inc. ("EKPC"), by counsel, and responds to the comments on its 2009 Integrated Resource Plan ("IRP") from Sierra Club, Kentucky Environmental Foundation and Kentuckians for the Commonwealth ("Environmental Groups").

**I. INTRODUCTION**

The ultimate purpose for filing a triennial IRP is contained in the preamble to the Commission's regulation governing IRPs.<sup>1</sup> It is so that the Commission may:

" . . . review . . . load forecasts and resource plans . . . to meet future demand with an adequate and reliable supply of electricity at the lowest possible cost for all customers . . . and satisfy all related state and federal laws and regulations."<sup>2</sup>

Section 1 of the Regulation states in general terms what each IRP must contain:

"The plan shall include historical and projected demand, resource and financial data, and other operating performance and system information, and shall discuss the facts, assumptions, and conclusions, upon which the plan is based and the actions it proposes."<sup>3</sup>

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<sup>1</sup> 807 KAR 5:058.

<sup>2</sup> Id., Preamble.

<sup>3</sup> 807 KAR 5:058 Section 1(2).

The rest of this lengthy regulation articulates, in great detail, the specific substantive information which the IRP document must contain. The three principal categories of information which must be addressed are: Load Forecasts,<sup>4</sup> Resource Assessment and Acquisition Plan,<sup>5</sup> and Financial Information.<sup>6</sup>

There is a procedure for review of the IRP<sup>7</sup> which provides for intervention by interested parties, discovery, comments and a report by the Commission summarizing its review of the IRP and offering suggestions and recommendations to the utility for subsequent IRP filings.<sup>8</sup>

In conformity with this regulatory review procedure, the Commission, on July 2, 2009, entered a Procedural Order.<sup>9</sup> Included in this Order was a provision for any party to file written comments. The rationale, both in the regulation and the Order, for allowing intervenor comments is to aid the Commission Staff in formulating suggestions and recommendations to EKPC for subsequent IRP filings.

Under the regulatory scheme, EKPC must respond to the Commission Staff's comments and recommendations in its 2012 IRP filing.<sup>10</sup> Therefore, insofar as the Commission Staff relies upon Intervenors' comments in arriving at its own suggestions and recommendations to EKPC, those comments should be both relevant and factual. Otherwise, they are of no benefit to the

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<sup>4</sup> Id., Section 7.

<sup>5</sup> Id., Section 8.

<sup>6</sup> Id., Section 9.

<sup>7</sup> Id., Section 11.

<sup>8</sup> Id.

<sup>9</sup> Order of Commission, July 2, 2009.

<sup>10</sup> 807 KAR 5:058 Section 11(4).

process and, indeed, could cause an unreasonable burden to EKPC if it is required to respond to items having little or no relevancy to its 2012 IRP.

In this case, EKPC has filed what it believes to be a comprehensive and well-reasoned IRP. It is a significant departure from, and bears little resemblance to, past EKPC IRPs. EKPC has endeavored (and it believes, succeeded) in providing the Commission Staff with a well-organized, transparent and factual IRP which includes models, methods, reasoned assumptions and supporting data that has been extensively tested and re-tested to ensure, to the extent possible, its accuracy and reliability.

In addition, EKPC has done a good job of addressing the recommendations of the Commission Staff in its 2006 IRP.<sup>11</sup>

Yet, the 19 pages of rambling comments from the Environmental Groups characterize EKPC's 2009 IRP, and EKPC itself, in a contrary and disagreeable way:

- “EKPC is a utility that has done, and continues to do very poor resource planning.”<sup>12</sup>
- “EKPC is on the verge of financial catastrophe . . .”<sup>13</sup>
- “[EKPC’s energy] forecast is unrealistic because it is based on outdated data.”<sup>14</sup>
- “. . . EKPC’s analysis of one of its largest users appears to be largely based on guess work.”<sup>15</sup>
- “One can speculate, although a decent IRP would not cause the reader to speculate . . .”<sup>16</sup>

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<sup>11</sup> EKPC 2009 IRP, pages 5-2 through 5-7.

<sup>12</sup> Environmental Groups’ Comments, at 2.

<sup>13</sup> Id.

<sup>14</sup> Id., at 7.

<sup>15</sup> Id., at 8.

<sup>16</sup> Id., at 9.

- “. . . EKPC uses absurd inputs into its model . . . ”<sup>17</sup>
- “EKPC . . . lacks some basic understanding of coal-fired power plants . . . ”<sup>18</sup>
- “EKPC . . . fails to realistically consider future environmental regulations.”<sup>19</sup>
- “[EKPC’s] 2009 IRP is unrealistic.”<sup>20</sup>

The Environmental Groups’ ramblings and criticisms are undeserved, counterproductive and just plain wrong. Moreover, their laundry list of complaints can serve no legitimate purpose other than to disparage EKPC and question its very ability to provide reliable, low cost power to its members, notwithstanding its proven track record of doing so for over 60 years.

Of greater importance to this case, however, is the failure of the Environmental Groups to provide any concrete recommendations to the Commission Staff which could assist them in developing their own recommendations to EKPC.<sup>21</sup>

EKPC is more than willing to accept criticism from any party, no matter how harsh, if it is made in good faith and is factual, supportable and meant to make it a better utility for its members. The Environmental Groups’ comments in this case meet none of these criteria and they cannot go unanswered.

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<sup>17</sup> Id.

<sup>18</sup> Id., at 12.

<sup>19</sup> Id.

<sup>20</sup> Id., at 19.

<sup>21</sup> The sole basis for the Commission allowing the Environmental Groups’ intervention in the first place was that they were likely to present issues or develop facts that would assist the staff in its review of EKPC’s IRP. Commission’s Order of July 13, 2009, at 9-10.; Commission’s Order on Rehearing of August 19, 2009, at 5.

For ease of reference, EKPC will respond to the Environmental Groups' comments according to the same outline contained in those comments.

## **II. ENVIRONMENTAL GROUPS' INTRODUCTION**

The Environmental Groups complain that EKPC has done and continues to do "very poor" resource planning. They assert that there is a fundamental change in U.S. electricity production toward the "Clean Energy Economy" and that EKPC's planning neither acknowledges nor adapts to this change. This "Clean Energy Economy's" chief attribute is the change from reliance on coal-fired generation to that of gas-fired generation. To hear the Environmental Groups tell it, EKPC is missing out on an excellent opportunity to get on the national bandwagon and switch from coal to natural gas and save its members loads of money in the future.

Central to this argument is the assumption that natural gas is now, and will continue to be, less costly per MWh than coal. Both history and future fuel cost prognostications are to the contrary, however.

For example, the NYMEX forward curve on September 24, 2009, reports the price of natural gas substantially higher than current spot prices. And, even at today's fuel prices, coal still enjoys a significant cost advantage on a \$ per MMBTU basis. An Energy Information Administration (EIA) report released on September 11, 2009, shows that in June 2009, the price of coal used for electric generation was \$2.26 per MMBTU, while the cost of natural gas for electric generation was \$5.15 per MMBTU.<sup>22</sup>

While it is true that the share of electric generation from natural gas has increased steadily from 13.2% of net generation in 1996 to 21.3% in 2008, during that same time period

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<sup>22</sup> EIA report: DOE/EIA-0226.

the price per MMBTU for natural gas grew by 249%, while the price per MMBTU for coal grew by only 38%.<sup>23</sup> Clearly, there are other factors at work besides the price of fuel which has accounted for the increased use of natural gas for electric generation.

The Environmental Groups have opined that a resource strategy that chooses coal instead of natural gas and renewables represents “poor planning”. By implication, the Environmental Groups’ preferred strategy would be to de-emphasize coal in favor of natural gas and renewables. Which strategy is the best one for EKPC and its customers going forward? Clearly, no one can predict with any significant degree of accuracy what future fuel prices, economic conditions, or changes in the law and regulation will be. While the future is unknown, the past is not. An examination and review of past supply planning choices is helpful to the debate.

EIA tracks electricity prices by state. A comparison of the five states having the most expensive electricity rates with the five states having the least expensive rates is valuable. The tables below provide the respective fuel mix for each of these ten states:<sup>24</sup>

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<sup>23</sup> Id.

<sup>24</sup> Energy Information Administration, Form EIA-923, “Power Plant Operations Report”.

**Table 5. Electric Power Industry Generation by Primary Energy Source, 2007 (Megawatthours)**

2007		Lowest Five States.....				
Energy Source	Idaho	Wyoming	West Virginia	Kentucky	Nebraska	
Retail Price of Electricity	5.07	5.29	5.34	5.84	6.28	
	<b>Percentage Share</b>					
<b>Total Electric Industry</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
Coal	0.7	94.5	97.8	93.1	60.5	
Petroleum	*	0.1	0.2	2.9	0.1	
Natural Gas	14.4	1.3	0.4	1.8	3.4	
Other Gases <sup>1</sup>	-	0.7	0.1	*	-	
Nuclear	-	-	-	-	34.0	
Hydroelectric	78.6	1.6	1.3	1.7	1.1	
Other Renewables <sup>2</sup>	5.7	1.7	0.2	0.5	0.9	
Pumped Storage	-	-	-	-	-	
Other <sup>3</sup>	0.6	0.2	*	*	-	

**Table 5. Electric Power Industry Generation by Primary Energy Source, 2007 (Megawatthours)**

2007		Highest Five States				
Energy Source	Maine	Mass.	New York	Conn.	Hawaii	
Retail Price of Electricity	14.59	15.16	15.22	16.45	21.29	
<b>Total Electric Industry</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
Coal	2.3	25.5	14.7	11.3	13.7	
Petroleum	5.1	6.5	5.6	4.0	77.3	
Natural Gas	41.4	52.9	31.3	29.9	-	
Other Gases <sup>1</sup>	-	-	-	*	0.4	
Nuclear	-	10.9	29.1	49.4	-	
Hydroelectric	23.2	1.7	17.3	1.1	0.8	
Other Renewables <sup>2</sup>	26.1	2.6	1.9	2.2	6.5	
Pumped Storage	-	-1.8	-0.5	*	-	
Other <sup>3</sup>	2.0	1.6	0.6	2.2	1.3	

The highest price state is Hawaii. Petroleum makes up 77% of its fuel for electric generation. The lowest price state is Idaho. It is blessed with abundant hydroelectric resources totaling 79%.

The next four lowest price states are Wyoming (5.29 cents), West Virginia (5.34 cents), Kentucky (5.84 cents), and Nebraska (6.28 cents). Not surprisingly, all four of these states rely very heavily on coal for their electric generation.



The story is very different for the remaining four highest price states: Connecticut (16.45 cents), New York (15.22 cents), Massachusetts (15.16 cents) and Maine (14.59 cents). These states have very little coal-fired electric generation and rely much more on nuclear, natural gas and renewables.

The Environmental Groups steadfastly refuse to acknowledge a basic fact of electric generation in the United States: coal-fired generation has proven to be much cheaper than either natural gas-fired or renewable electricity. EKPC is unapologetic in its commitment to provide reasonably priced, reliable and environmentally responsible power for its members.

Yet, EKPC's IRP modeling includes and considers combined cycle gas generation as a potential supply side resource.<sup>25</sup> In addition, capital cost assumptions used in evaluating a combined cycle gas unit are provided by EKPC.<sup>26</sup> However, given EKPC's load profile and associated costs, it is clear that a combined cycle gas unit is not an optimal resource for EKPC at this time.

In its comments, the Environmental Groups assert that EKPC's IRP "calls for simply continuing to build inefficient coal-fired power plants as far out as EKPC can see."<sup>27</sup> This statement is simply wrong. EKPC's base resource plan includes one CFB unit in 2023. EKPC's IRP uncommitted capacity additions for 2009 through 2023 include nearly 300 MW of natural gas-fired combustion turbines, a 30 MW biomass purchased power agreement ("PPA") and a 200 MW nuclear generator-based PPA.<sup>28</sup> With its planned demand side management programs, by the year 2018, EKPC expects to reduce winter capacity needs by 190 MW and summer

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<sup>25</sup> EKPC IRP, at 5-12.

<sup>26</sup> EKPC IRP, at 8-14.

<sup>27</sup> Environmental Groups' Comments, at 4.

<sup>28</sup> EKPC's 2009 IRP, at 6-4 and 8-49.

capacity needs by 245 MW.<sup>29</sup> For the Environmental Groups to say that EKPC's IRP calls for building only new coal plants to the exclusion of other types of non-coal fuel sources, is misleading and counterproductive to this proceeding.

### **III. FINANCIAL POSITION**

The Environmental Groups spend about three pages of their comments discussing EKPC's financial condition. They describe this condition as "poor"<sup>30</sup> and "bleak",<sup>31</sup> and assert that EKPC is "on the verge of financial catastrophe."<sup>32</sup>

Elsewhere, the Environmental Groups complain that EKPC's resource selection fails to consider the company's need to reduce debt,<sup>33</sup> and that purchase power agreements, DSM and more realistic load forecasting could help reduce EKPC's debt in the future.<sup>34</sup> EKPC has two responses: first, the Environmental Groups apparently did not read the IRP very closely because purchase power agreements and DSM, including load shifting, are specifically and explicitly included as supply side resources in the expansion plan;<sup>35</sup> second, the Environmental Groups suggest that EKPC should reduce its corporate debt. The IRP regulation addresses neither debt structure nor corporate financing. The regulation requires in its simplest terms that utilities, (a) prepare a least-cost power supply plan; and, (b) compute the cost of such a plan. EKPC's IRP complies with both of these requirements.

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<sup>29</sup> Id., at 5-8.

<sup>30</sup> Environmental Groups' Comments, at 4.

<sup>31</sup> Id.

<sup>32</sup> Id., at 2.

<sup>33</sup> Id., at 5.

<sup>34</sup> Id.

<sup>35</sup> EKPC's 2009 IRP, at 5-8 and 8-49.

The Environmental Groups have also compared year 2007 to year 2008 and noted minor variations in EKPC's financial results. Typically, as with most entities, EKPC's results do fluctuate from year to year and over time expenses increase and EKPC requires an adjustment to its revenue requirements.

If a comparison is made of the same metrics used by the Environmental Groups from year-end 2008 to year-to-date August 2009, TIER has increased from 1.25 to 1.52 and DSC has improved over 2008 from 1.04 to 1.25. Net margins improved from \$27,000,000 in 2008 to \$39,000,000 through August 2009. In effect, depending upon what time frame is used, it is easy to show either improvement or degradation of EKPC's results.

EKPC incurs debt in order to build generation to meet its members' load requirements and to construct new pollution control equipment necessary to meet increasingly stringent environmental regulations.

EKPC's financials are in fairly good shape. EKPC had two significant occurrences in 2004 and 2005 that temporarily put its financials in a very detrimental position.

The fact is that in 1983, EKPC's interest expense was \$75,000,000 as compared to \$110,000,000 for 2008, an increase of \$35,000,000 over 26 years or about 1.5% per year. In 1983, interest expense was \$19/MWh out of total cost to members of \$46/MWh or about 41% of the total. In 2008, interest expense was \$9/MWh out of EKPC's total cost to members of \$62/MWh or only 14% of the total. This is 50% per MWh less than 26 years earlier. From this perspective, it hardly seems like EKPC has done a poor job in managing its debt, especially since its imbedded cost of debt decreased from 8.2% in 1983 to 4.8% in 2008. In addition, over 70% of EKPC's long-term debt is at fixed rates that will not increase in the future.

#### **IV. ENERGY FORECAST**

The Environmental Groups claim that EKPC's energy forecast is flawed resulting in planning which adds supply side fossil fuel resources that are not needed and that, historically, EKPC has overestimated its energy needs.<sup>36</sup> And, they claim that the current IRP demonstrates this historical overestimation,<sup>37</sup> and that EKPC has conducted no load forecast since August 2008 and that this leads to unreliable resource planning.<sup>38</sup>

Finally, the Environmental Groups boldly state that “. . . EKPC's analysis of one of its largest users appears to be largely based on guess work”.<sup>39</sup> And, “EKPC should get some profession (sic) help to make these source of judgments in the future.”<sup>40</sup>

The Environmental Groups know absolutely nothing about energy supply forecasting. First, comparing one forecast to another forecast cannot establish the accuracy of either. Only by comparing forecasts to actual results allows one to make judgments about forecast accuracy. Ironically, the difference in the two forecasts mentioned on page 6 of Environmental Groups' comments proves that EKPC does amend its forecasts to take into account changing circumstances. While it is true that the forecasts prepared in 2004, 2006 and 2008 are different, it is inappropriate to draw a conclusion that there is an “over-estimation” trend until the 2020 actual data has been collected and compared to the different forecasts. Assumptions did change dramatically from the 2004 to the 2008 forecast mainly due to the economic downturn in the United States. That is one reason why the Rural Utilities Service (“RUS”) requires forecasts to

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<sup>36</sup> Environmental Groups' Comments, at 6.

<sup>37</sup> Id., at 6.

<sup>38</sup> Id., at 7.

<sup>39</sup> Id., at 8.

<sup>40</sup> Id.

be completed every two years so that these changes and the resulting impacts will be captured. In actuality, in comparing historical actual total requirements to the load forecast appropriate for comparison to that time period, EKPC has actually **underforecasted** in 7 of the last 15 years (1994 to 2008) by approximately 0.3%.

It is true that a formal load forecast has not been prepared since August 2008. As stated, RUS requires EKPC to prepare load forecasts every two years and the company is in compliance with that requirement. Note that RUS formally approved EKPC's 2008 load forecast. EKPC continually monitors the performance of its forecast. Using a 2008 forecast for long-term planning is completely appropriate considering that: (a) the forecast was reviewed and for the long-term still on track with the regional economic projections developed by Global Insight for use in the 2008 load forecast; (b) the impacts of the declining U.S. economy were showing in the historical data for 2006 and 2007 and were, therefore, taken into account for the early years of the forecast; (c) the forecast is still very viable after taking into account the mild weather over the past year; (d) an adjustment was made to the 2009 and 2010 forecasts for Gallatin Steel, EKPC's largest load, whose production was down in 2008 and adjustments were made to the load contribution prior to running the optimization model for expansion planning; and (e) as explained in the IRP and the responses to the data requests, adjustments were also made to requirements for future demand-side impacts which were over 200 MW during the study period.

The Environmental Groups further complained that EKPC's load forecast failed to consider mandatory improvements in the efficiency of various appliances, including such large energy users as supermarket refrigeration, commercial HVAC systems and small electric motors.<sup>41</sup>

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<sup>41</sup> Id., at 7.

EKPC's response to data request 83 explains that the Large Commercial Class is projected customer by customer. This approach is used due to the small number of customers (approximately 120) and the strong relationships that the member systems have with these customers. In this case, the efficiency standards were only incorporated if improvements were being implemented by the individual customer. In these cases, there would be a general reduction due to improvements. EKPC has not asked for the detail of the improvements that individual companies are making. Therefore, allocating the reductions specifically to one of the standards is not possible. The Small Commercial Class represents only approximately 15% of EKPC's sales to members. Given the small size of the class and its diversity (including everything from cable repeaters to gas stations to schools and retail shops), the efficiency standards are not accounted for in the forecast until they are evident in the history or in feedback from the member systems regarding expected lower load.

The Environmental Groups' charge that EKPC's analysis of "one of its largest users" is based on guess work.<sup>42</sup> Although not completely clear, this recommendation is apparently directed at the way EKPC makes projections of Gallatin Steel usage. While Owen Electric is Gallatin Steel's power provider, not EKPC, both Owen Electric and EKPC are in contact with Gallatin Steel every day. Both cooperatives have regular meetings with Gallatin Steel and Gallatin Steel has actually made presentations to the EKPC Board of Directors concerning its operations. EKPC believes that both the type and frequency of contact have resulted in the best possible forecast of peak demand and energy. The Power Supply Contract between Owen, EKPC and Gallatin Steel has demand and energy use highly structured which provides for a measure of stability relating to future power use. Finally, the method that EKPC and Owen

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<sup>42</sup> Id., at 8.

Electric use to make their forecast of Gallatin Steel is the same method used by virtually every long-term electric utility planner. The key to good long-term load forecasting for very large loads such as Gallatin Steel is to have effective and on-going communications. One of the purposes of an IRP is to take a long-term look at supply and demand, including energy forecasting. In fact, preparing an IRP takes EKPC and other utilities approximately 12 months to complete from start to finish. It is important that near term events such as a severe economic recession, or a housing boom, not have an undue influence over the long term forecast resulting in numbers that are skewed and unreliable. EKPC has had decades of experience with energy forecasting. And, as discussed previously, it has an excellent track record when later comparing historic forecasts with actual members. The Environmental Groups' unsubstantiated claims that EKPC's forecast is "flawed", that it has historically "over-estimated" its energy needs, and that EKPC's analysis and forecasting are largely based on "guess work", are wholly unsupportable and should be completely disregarded by Commission Staff.

## V. FUTURE SUPPLY SIDE FOSSIL RESOURCES

In this section, the Environmental Groups complain that EKPC's projections rely too heavily on coal-fired power plants for future supply needs. They complain that EKPC's 2009 IRP is "not very transparent or user friendly in general and especially when it comes to the supply side of fossil generation sources."<sup>43</sup> Elsewhere, the Environmental Groups assert that EKPC uses "absurd inputs into its model to get results out that pick base load units to meet peak demand."<sup>44</sup>

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<sup>43</sup> Id., at 8.

<sup>44</sup> Id., at 9.

Besides its general harangue regarding EKPC's reliance on fossil fuel, it also suggests that EKPC should obtain "outside professional assistance in evaluating projections of future fuel costs . . ." <sup>45</sup> Finally, and most puzzling, is the Environmental Groups' peculiar statement that "EKPC also lacks some basic understanding of coal-fired plants . . .", <sup>46</sup> and that "EKPC fails to realistically consider future environmental regulations pertaining to fossil fuel resources."<sup>47</sup>

EKPC takes very seriously its projections of future supply side fossil resources. It utilizes an hourly chronological model that evaluates its load and available resources to develop an economic dispatch each and every hour of the study period under multiple load and operating scenarios. The model combines all the information into an optimal plan to meet these operating conditions. Should EKPC itself define which part of its load should be served by a specific type of capacity, it would circumvent the technology that has been developed to simulate the EKPC system. Such pre-defined definitions are typical of old planning methods used prior to the age of massive computer availability. Graphing the load shape into peaking, intermediate and base load groupings is applicable only at a screening level to get a rough idea of what is needed for a particular system. Modern technology has alleviated the need for this step and allowed utilities to develop plans that meet its load needs on a real-time basis and not on an annual average basis.

As shown on Table 8.(3)( b) 12-1 through 12-14, and pages 8-107 through 8-119, of the 2009 IRP, EKPC utilizes its base load coal-fired capacity anywhere from a low of 35 – 50% capacity factor on its smallest, oldest units, to an 85% capacity factor on its newest, most efficient units. Those same tables show that EKPC owns and operates 7 combustion turbines

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<sup>45</sup> Id., at 12.

<sup>46</sup> Id.

<sup>47</sup> Id., at 13.



which are utilized for peaking periods. EKPC also has 2 more turbines currently under construction, which will be operational by the end of 2009. EKPC utilizes its combustion turbines anywhere from a low of 1% capacity factor to a high of 25% capacity factor on the new efficient gas-fired turbines. EKPC operates its system in a cost effective and reasonable manner and does not use base load capacity to meet peak demands. The older, less efficient coal-fired units in EKPC's fleet are currently running in a manner reflective of intermediate units. The capital for these units has already been spent and utilizing them as such provides a distinct economic advantage to the EKPC system.

The Environmental Groups assert that EKPC lacks understanding of coal-fired power plants and how they will be impacted by future environmental regulation. EKPC has owned and operated coal-fired power plants for over 60 years. Its generation fleet is among the most advanced in the United States, both in terms of its new state of the art CFB fleet as well as the advanced pollution control equipment installed on its units. EKPC's CFB fleet is designed to meet all current and future emission standards. Spurlock 3 and 4 complied with the maximum achievable control technology ("MACT") standards at the time that the permits to construct and operate those units were issued.

EKPC's current generation fleet is well positioned to comply with any future greenhouse gas ("GHG") regulations through the use of biomass and other renewable fuels as well as capture and sequestration technology when that technology is commercially viable. Indeed, Spurlock 3 and 4 are equipped with state of the art SNCR systems and meet best available control technology ("BACT") requirements for Nitrogen Oxides.

EKPC is also constantly monitoring future regulatory developments. The company's long-term strategy of constructing highly efficient, ultra-low emitting generation to serve the

rising load in its service territory allows it to respond well to all potential future air regulations. As noted in its IRP, EKPC has a strategy for compliance with any future GHG regulations, including CO<sub>2</sub>, N<sub>2</sub>O and any other GHGs included in future regulations.

The Environmental Groups' suggestion that EKPC should obtain outside professional assistance in evaluating projections of future fuel costs is puzzling simply because EKPC currently does this very thing and has been doing so for over 10 years. Indeed, EKPC's assumptions are developed with assistance from ACES Power Marketing and Energy Ventures Analysis. Then, the Navigant report, which has been widely discussed in the IRP and in discovery, is a review of EKPC's fuel assumptions. Furthermore, EKPC, and all other regulated electric generation utilities, have two hearings at the Commission each year to discuss fuels and market conditions. The Environmental Groups' position on this issue is indicative of a basic lack of understanding of EKPC's IRP and the way it arrives at future fuel cost projections and should be disregarded by the Commission Staff.

## **VI. SUPPLY SIDE RENEWABLES**

In typical fashion, the Environmental Groups complain that EKPC lacks a "serious commitment to meeting its customers' needs with clean, renewable energy from sources like wind and solar."<sup>48</sup>

First, and foremost, EKPC owns and operates 15 MW of renewable energy which is more than any other utility in Kentucky. In addition, EKPC purchases 170 MW of hydroelectric power from Southeastern Power Administration (SEPA) and 65 MW from the Greenup hydroelectric plant. It has included more renewable power supply options in this IRP than in any of its previous IRPs, including wind and solar power supply products. Unfortunately, the

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<sup>48</sup> Id., at 14.

operating and cost characteristics of these products resulted in them not being included in the 2009 IRP expansion plan.

EKPC met with the Sierra Club in March 2009 and discussed the response to the renewables RFP which EKPC issued in April 2008. At that meeting, the following information was shared:

- The total number of bids received was 22. Of the bids received, 21 provided the following pricing information:

<b>Renewable Technology</b>	<b>Proposals Received</b>	<b>S/MWh Energy</b>	<b>Additional Charges</b>
Biodiesel	1	\$300	
Biomass	4	\$30-\$110	
Hydro	1	\$125	
MSW	1	\$55	
Solar	5	\$250-\$580	
Waste Heat	1	\$60	
Wind	8	\$60-\$110	Transmission

- The total MW offering was almost 2,200.
- From the 22 responses received, 12 were selected for the short list. This group represented over 900 MW, including:

<b>Technology</b>	<b>Location</b>	<b>MW</b>
Biodiesel	KY	50
Biomass	KY	87
MSW	KY	25
Solar	KY	101
Waste heat	KY	2
Wind	Iowa	300
Wind	KY	50
Wind	Indiana	200
Wind	WV	100

After on-site and teleconference meetings with the various developers, the narrowed list of six potential projects is over 140 MW. And, EKPC is continuing its analyses and negotiations with these six renewable developers today.

Indeed, EKPC has evaluated and continues to evaluate wind projects. However, Kentucky's wind resources are severely limited and the state is tied for last place among the 50 states for wind generation potential.<sup>49</sup>

For the Environmental Groups to say that EKPC effectively ignores supply side renewables is simply untrue. EKPC's 2009 IRP is replete with discussion and possible implementation of future supply side renewable resources.

## **VII. DEMAND SIDE MANAGEMENT (DSM)**

The Environmental Groups complain that EKPC's demand side management program, as articulated in the 2009 IRP, ". . . is less aggressive than is reasonable but on the right track."<sup>50</sup> The Environmental Groups state that EKPC could achieve significantly greater energy reductions but for EKPC's rejection of various DSM programs.<sup>51</sup>

The Environmental Groups suggest that EKPC should conduct a quantitative analysis of its 103 DSM programs including a consideration of the economies of scale that could be achieved by combining programs.<sup>52</sup> The Environmental Groups hold Kentucky Power up as leading the way for providing sizeable amounts of DSM and renewable resources in its most recently filed IRP.<sup>53</sup> However, it should be noted that Kentucky Power, in its IRP Case No. 2009-339, projects energy savings from DSM of 119 GWh with total energy requirements of 8,710 GWh by 2018. That is 1.4% of its total energy requirements. By way of comparison, EKPC's IRP calls for energy savings from DSM of 455 GWh with total energy requirements of

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<sup>49</sup> AWEA Wind Energy Projects, updated March 31, 2007.

<sup>50</sup> Id., at 17.

<sup>51</sup> Id.

<sup>52</sup> Id.

<sup>53</sup> Id., at 11.

14,985 GWh by 2018. That is 3.0% of total energy requirements, more than twice Kentucky Power's.

In EKPC's IRP, as well as the responses to discovery, the company explains in great detail how DSM cost benefit analyses are done. John Farley of John Farley Consulting performed the DSM analyses for EKPC. Mr. Farley's experience is extensive and was provided in response 9 to the PSC's supplemental data requests. EKPC gathered input for demand side management programs from Kentucky Environmental Foundation, Kentuckians for the Commonwealth, Sierra Club, University of Kentucky, other utilities, including LG&E/KU, TVA, and Great River Energy, Good Cents Solutions and Florida Solar Energy Association, as well as staff from its member systems. As stated in response 17 to the PSC's second data request, the 103 programs included in the tables were evaluated qualitatively by experts at the member systems and EKPC. Based upon four criteria, these were either taken through the quantitative phase until new information indicated that a new analysis should be conducted.

The Environmental Groups again reference the report authored by Susan Zinga and Andy McDonald, titled "A Portfolio of Energy Efficiency and Renewable Energy Options for East Kentucky Power Cooperative", which EKPC discussed with and pointed out to the Environmental Groups several errors which grossly overestimated the potential savings from DSM.<sup>54</sup>

EKPC's analysis of all of its DSM programs is reasonable and on-going and the current IRP represents a snapshot of DSM programs deemed beneficial at the time of filing. Other programs have been evaluated since then and will continue to be evaluated in the future.

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<sup>54</sup> See EKPC's Response to PSC Staff Supplemental Data Request 5.

## VIII. CONCLUSION

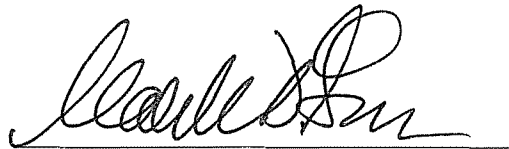
EKPC's 2009 IRP integrates supply side and demand side resources and articulates a very diverse resource portfolio. Its expansion plan is not simply to build one coal plant after another. It considers other types of power supply resources including natural gas, renewables, demand side management and purchase power agreements.

The 2009 IRP provides a reasoned and well-thought-out road map for EKPC in order to comply with its mandate of providing reliable and low cost power to its members.

The Environmental Groups' comments provide no helpful or practical recommendations of any kind. Rather, these comments are used as a vehicle to ramble on about EKPC's poor financial condition and antiquated business plan. Indeed, the Environmental Groups' general attitude of contrariness toward EKPC manifests a certain disrespect both toward EKPC and the IRP process. It is, to say the least, counterproductive and inconsistent with the reasons for allowing the Environmental Group to intervene. EKPC is confident that the Commission Staff can see this.

EKPC welcomes and appreciates the close scrutiny which Commission Staff will surely give to this IRP and each of the reasonable recommendations which will follow and pledges its full cooperation in seeing that those recommendations are carried out in its 2012 IRP.

This 2nd day of October, 2009.



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**CERTIFICATE OF SERVICE**

I hereby certify that a true and accurate copy of the foregoing was served by U.S. Mail, postage prepaid, on October 2, 2009 to the following:

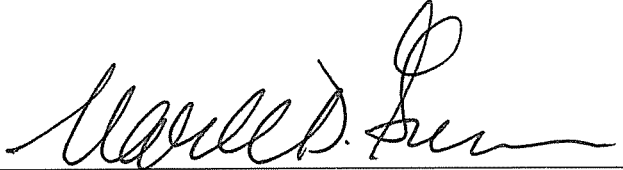
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COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

In the Matter of:

OCT 02 2009

A REVIEW PURSUANT TO 807 KAR 5:098 OF )  
THE 2009 INTEGRATED RESOURCE PLAN FOR ) CASE NO.  
EAST KENTUCKY POWER COOPERATIVE, INC. ) 2009-00106

PUBLIC SERVICE  
COMMISSION

**MOTION OF EAST KENTUCKY POWER COOPERATIVE, INC.  
TO STRIKE ENVIRONMENTAL GROUPS' SUPPLEMENTAL  
COMMENTS ON 2009 INTEGRATED RESOURCE PLAN**

Comes now East Kentucky Power Cooperative, Inc. ("EKPC"), by counsel, and moves the Kentucky Public Service Commission to strike the Supplemental Comments on EKPC's 2009 Integrated Resource Plan filed by Sierra Club, Kentucky Environmental Foundation and Kentuckians for the Commonwealth (collectively "Environmental Groups").

In support of this motion, EKPC states the following:

**I. THE ISSUE ADDRESSED IN THE SUPPLEMENTAL  
COMMENTS IS IRRELEVANT TO EKPC'S INTEGRATED  
RESOURCE PLAN**

The information which the Environmental Groups ask the Commission to consider deals with a United States Environmental Protection Agency ("EPA") Order finding that EKPC's Spurlock 4 air pollution permit violates the Clean Air Act. While EKPC certainly takes issue with this finding, it is wholly irrelevant to EKPC's 2009 IRP. This Order concerns an EKPC generating unit for which this Commission has previously granted a Certificate of Public Convenience and Necessity. It has already been built, and is currently producing electricity every day. What could a U.S. EPA Order involving this generating plant possibly have to do with EKPC's 2009 IRP? The answer, quite simply, is "nothing".



Previously, the Commission entered an Order on EKPC's Motion for Rehearing in this case, admonishing the Environmental Groups that issues involving Smith 1 were not relevant to this inquiry since a CPCN had already been granted for its construction. The filing of supplemental comments involving the Spurlock 4 unit falls into the same category. It has no place in this proceeding.

**II. THE ENVIRONMENTAL GROUPS' SUPPLEMENTAL COMMENTS ARE UNTIMELY**

By Order dated July 2, 2009, the Commission set forth a procedural schedule governing discovery, comment period and informal conference. According to this procedural schedule the deadline for any party desiring to file written comments on EKPC's IRP was September 18, 2009. There was absolutely no provision in the Procedural Order for the filing of supplemental comments. Moreover, the Environmental Groups' supplemental comments were filed with the Commission on September 29, 2009, 11 days past the deadline for filing any written comments.

The Commission's Procedural Order provides the timeline for completion of all activities in this case. It is unfairly prejudicial to EKPC and the Intervenors for the Environmental Groups to file a pleading which is neither authorized by the procedural schedule nor filed by the appropriate deadline. The Environmental Groups' Supplemental Comments were accompanied by neither a motion to extend the procedural schedule nor a request for deviation from it. For this reason alone, the Commission should strike the filing of the Environmental Groups' Supplemental Comments.

WHEREFORE, EKPC respectfully requests that the Commission enter an Order striking the Supplemental Comments of the Environmental Groups, finding that they are both irrelevant and untimely to the consideration of EKPC's 2009 Integrated Resource Plan.

This 2nd day of October, 2009.



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