James C. Worley
1108 Elm Street
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September 18, 2018

Ms. Gwen Pinson
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, KY 40602-0615

Re: Case 2018-00292 East Kentucky Power Cooperative – Construct
Testimony by Mr. Ralph Luciani on the Bluegrass Capacity Penalty Risk Analysis

Dear Ms. Pinson:

The testimony of Mr. Luciani is important to EKPC's attempt to justify spending $63million to install a second fuel source at the Bluegrass Generating Station. The purpose of Mr. Luciani's testimony was "to determine the financial exposure EKPC may face if the Bluegrass Station is unable to perform as expected during PAHs....." (Page 3 of Luciani's direct testimony).

The testimony fails to either prove or disprove the true benefit of the proposed project. The analysis presented by Mr. Luciani is not a risk analysis. It is a cost/benefit analysis for various hypothetical scenarios. There is no statistical analysis of the probability of each of those scenarios occurring.

The paragraphs below comment on some specific assertions in Mr. Luciani's testimony

- On attachment RL-2 at the top of Page 5, Laciani states:

  "Based on the scenarios analyzed in this study, the fuel oil alternative may not pay for itself over 20 years in present value terms. If so, the fuel oil alternative still will provide valuable "insurance" against high single year penalties of as much as $79 million."

  Comment:

  Is this an insurance analysis or a return-on-investment analysis? If it is a return-on-investment analysis, then the first sentence above says that it is a bad investment. If it is an insurance analysis, should EKPC not have hired someone with an actuarial background to do the analysis? Where does the justification for stating "penalties of as much as $79 million" come from? (See below to a discussion of the actual penalties, which are significantly less than this.) What are the probabilities that such an event would occur? Was the purpose of quoting a $79 million penalty just for the purpose of being able to quote a number that was greater than the cost of the investment?

- Below Table 2 on the same page he states:

  "The PAH cases are based on the frequency of a Polar Vortex event. Since 2012 there have been no PAHs relevant to EKPC other than during the 2014 Polar Vortex, which had 20 PAHs impacting the EKPC zone. To reflect more severe weather, an 80-PAH polar vortex event every 10 years was included in the *High PAH case*, based on the most impacted region of PJM during the 2014 Polar Vortex."

  Comment:

  What are the probabilities of an 80-PAH event happening at the same time there is a gas interruption in the EKPC zone? What percentage of the total PJM area was impacted by the 80-PAH event? Was this area significantly different in geography and environment than the EKPC zone?

- Towards the end of Page 5 Luciani discussed the chance of a gas interruption.

  Even though there was no interruption during the 2014 event. Luciani tries to make the case that, because gas load has been added to the pipeline, the probability of a gas interruption is higher. (My summary)

  Comment:

  This argument has no validation behind it. Did Luciani discuss this possibility with Texas Gas Pipeline to get their estimate of the probability of an interruption of supply? Does he have in his possession any expert analysis of the probability of future gas interruptions?

- In the Risk/Trade off section at the bottom of page 6 of attachment RL-2, Luciani states:

  "Based on our assessment, the fuel alternatives may not pay for themselves under a "most likely" future of limited gas interruptions and should be viewed as a type of insurance against bad outcomes."

  Comment:

  This is the second time he has stated that the investment is not justified by the analysis and the investment is only an insurance against apparently improbable events.

EKPC's use of Luciani's analysis

EKPC quotes Mr. Luciani's results in Item 20 of its application. It is here, but not in Luciani's analysis that we learn that the actual cost to EKPC for failing to operate during a PAH is actually about 60% penalty and 40% loss of income.

In Item 29 EKPC takes Luciani's analysis as gospel to justify the investment.

Comments:

Out of pocket losses are significantly less, by 40%, than the $24 million to $79 Million that we hear over and over in Luciani's analysis. The true out-of-pocket costs are closer to $14 million to $47 million. The losses and investment returns should be based on the out-of-pocket costs of the unavailability of Bluegrass Station and should not include the lost opportunity of income.

As stated earlier, Luciani's analysis is only a cost/benefit analysis for hypothetical situations for which there is no justification showing the probability of these situations actually occurring.

Conclusion:

EKPC's conclusions are built on a foundation of sand. There is no analysis showing the events they project will occur. Using comments made by Luciani in his analysis, one could conclude that the probability of a PAH and a gas interruption occurring simultaneously in any year is on the order of 1% or less.

The intimation is that this investment is really insurance since the cost/benefit analysis does not justify it. Has EKPC approached the insurance industry to see if coverage is available for losses such as are described in their application?

An alternative approach by EKPC could be to keep the $63 million it is going to borrow for this project as an available line of credit. This would more than cover the potential cost of penalties.

EKPC would like its customers to pay $63 million plus interest for a system that its own expert cannot justify.

As a customer of a distribution cooperative that is served by EKPC, I urge the Public Service Commission to deny EKPC's request based on the testimony presented.

Yours truly,

James C. Worley

c.: Attorney General