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Via Courier

February 6, 2013

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

Re: Docket 2012-00578 Initial Requests for Information

Dear Mr. Derouen:

Enclosed for the filing are an original and ten copies of the *Initial Requests for Information of Alexander Desha, Tom Vierheller, Beverly May, and Sierra Club* and a certificate of service in docket 2012-00578 before the Kentucky Public Service Commission. This filing contains no confidential information.

Sincerely,

Ruben Mojica
Sierra Club Environmental Law Program
85 2nd Street, 2nd Floor
San Francisco CA, 94105
(415)977-5737

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

The Application of Kentucky Power Company For:)	
(1) A Certificate of Public Convenience and Necessity)	
Authorizing the Transfer to the Company of An)	
Undivided Fifty Percent Interest in the Mitchell)	
Generating Station and Associated Assets; (2) Approval)	
Of The Assumption by Kentucky Power Company of)	CASE NO. 2012-00578
Certain Liabilities In Connection With the Transfer Of)	
The Mitchell Generating Station; (3) Declaratory Rulings;)	
(4) Deferral of Costs Incurred In Connection With The)	
Company's Efforts to Meet Federal Clean Air Act And)	
Related Requirements; and (5) For All Other Required)	
Approvals and Relief)	

**ALEXANDER DESHA, TOM VIERHELLER, BEVERLY MAY, AND
SIERRA CLUB'S INITIAL REQUESTS FOR INFORMATION FROM KENTUCKY
POWER COMPANY**

Proposed intervenors Alexander Desha, Tom Vierheller, Beverly May, and Sierra Club (collectively "Movants") pursuant to the Kentucky Public Service Commission's ("Commission") January 25, 2013 ("January 25 Order"), propound the following requests for information on the Kentucky Power Company ("KPC") regarding KPC's application for a certificate of public convenience and necessity and other approvals regarding the proposed transfer to KPC of a 50% interest in the Mitchell Generating Station that is the subject of the above captioned proceeding.

KPC shall answer these requests for information in the manner set forth in the January 25 Order and by the February 20, 2013 deadline set forth in the Appendix of the January 25 Order. Please produce the requested documents in electronic format to:

Robb Kapla
Sierra Club
85 Second Street, 2nd Floor
San Francisco, CA 94105
robb.kapla@sierraclub.org

Shannon Fisk
Earthjustice
1617 John F. Kennedy Blvd., Suite 1675
Philadelphia, PA 19103
sfisk@earthjustice.org

Wherever the response to a request consists of a statement that the requested information is already available to the Proposed Intervenors, provide a detailed citation to the document that contains the information. This citation shall include the title of the document, relevant page number(s), and to the extent possible paragraph number(s) and/or chart/table/figure number(s).

In the event that any document referred to in response to any request for information has been destroyed, specify the date and the manner of such destruction, the reason for such destruction, the person authorizing the destruction and the custodian of the document at the time of its destruction.

The Proposed Intervenors reserve the right to serve supplemental, revised, or additional discovery requests as permitted in this proceeding.

DEFINITIONS

Unless otherwise specified in each individual interrogatory or request, “you,” “your,” “Kentucky Power,” or “Company” refers to Kentucky Power Company, and its affiliates, employees, and authorized agents.

“AEP” means American Electric Power and its affiliates, employees, and authorized agents.

“And” and “or” shall be construed either conjunctively or disjunctively as required by the context to bring within the scope of these interrogatories and requests for production of documents any information which might be deemed outside their scope by another construction.

“Any” means all or each and every example of the requested information.

“Communication” means any transmission or exchange of information between two or more persons, whether orally or in writing, and includes, without limitation, any conversation or discussion by means of letter, telephone, note, memorandum, telegraph, telex, telecopy, cable, email, or any other electronic or other medium.

“CO₂” means carbon dioxide.

“CONE” means net cost of new entry

“Document” refers to written matter of any kind, regardless of its form, and to information recorded on any storage medium, whether in electrical, optical or electromagnetic form, and capable of reduction to writing by the use of computer hardware and software, and

includes all copies, drafts, proofs, both originals and copies either (1) in the possession, custody or control of the Companies regardless of where located, or (2) produced or generated by, known to or seen by the Companies, but now in their possession, custody or control, regardless of where located whether or still in existence.

Such “documents” shall include, but are not limited to, applications, permits, monitoring reports, computer printouts, contracts, leases, agreements, papers, photographs, tape recordings, transcripts, letters or other forms of correspondence, folders or similar containers, programs, telex, TWX and other teletype communications, memoranda, reports, studies, summaries, minutes, minute books, circulars, notes (whether typewritten, handwritten or otherwise), agenda, bulletins, notices, announcements, instructions, charts, tables, manuals, brochures, magazines, pamphlets, lists, logs, telegrams, drawings, sketches, plans, specifications, diagrams, drafts, books and records, formal records, notebooks, diaries, registers, analyses, projections, email correspondence or communications and other data compilations from which information can be obtained (including matter used in data processing) or translated, and any other printed, written, recorded, stenographic, computer-generated, computer-stored, or electronically stored matter, however and by whomever produced, prepared, reproduced, disseminated or made.

Without limitation, the term “control” as used in the preceding paragraphs means that a document is deemed to be in your control if you have the right to secure the document or a copy thereof from another person or public or private entity having actual possession thereof. If a document is responsive to a request, but is not in your possession or custody, identify the person with possession or custody. If any document was in your possession or subject to your control, and is no longer, state what disposition was made of it, by whom, the date on which such disposition was made, and why such disposition was made.

In the interest of efficiency during discovery and the hearing process, bates stamp all documents produced in response to these interrogatories and requests for production.

For purposes of the production of “documents,” the term shall include copies of all documents being produced, to the extent the copies are not identical to the original, thus requiring the production of copies that contain any markings, additions or deletions that make them different in any way from the original

“DSM” means demand-side management programs including demand-response, interruptible load, and efficiency programs.

“EPA” or “US EPA” means the United States Environmental Protection Agency

“GHG” means greenhouse gas

“Identify” means:

- (a) With respect to a person, to state the person’s name, address and business relationship (e.g., “employee”) to Kentucky Power;
- (b) With respect to a document, to state the nature of the document in sufficient detail for identification in a request for production, its date, its author, and to identify its

custodian. If the information or document identified is recorded in electrical, optical or electromagnetic form, identification includes a description of the computer hardware or software required to reduce it to readable form.

“kWh” means kilowatt-hours.

“MW” means megawatt.

“MWh” means megawatt-hours.

“NOx” means nitrogen oxides

“PJM” means PJM Interconnection LLC

“Relating to” or “concerning” means and includes pertaining to, referring to, or having as a subject matter, directly or indirectly, expressly or implied, the subject matter of the specific request.

“RPM” means reliability pricing model

“RTO” means Regional Transmission Organization

“SOx” means sulfur oxides

PRIVILEGE OR CONFIDENTIALITY

If you claim a privilege including, but not limited to, the attorney-client privilege or the work product doctrine, as grounds for not fully and completely responding to any request for information, describe the basis for your claim of privilege in sufficient detail so as to permit the Commission to adjudicate the validity of the claim if called upon to do so.

To the extent that you can legitimately claim that any response or responsive document is entitled to confidentiality, the Proposed Intervenors are willing to enter into a confidentiality agreement that would protect such response or document from public disclosure.

TIME

Unless otherwise provided, the applicable time period for each of these requests for information is January 1, 2009 to the present.

5. Refer to p. 16, lines 20-22 of the testimony of Gregory G. Pauley.
 - a. Explain your contention that net book value is “an appropriate means of pricing the transfer.”
 - b. State whether any other pricing of the Mitchell transfer was considered.
 - i. If not, explain why not.
 - ii. If so, identify such other pricing and explain why it was rejected.
 - c. State whether Kentucky Power attempted to negotiate a lower price for the Mitchell transfer than the net book value.
 - i. If not, explain why not.
 - ii. If so:
 1. Explain what negotiations occurred and when they occurred
 2. Provide any notes, minutes, reports, or other documentation of such negotiations
 3. Explain why any such lower price was rejected.

6. With regards to the Waterford Generating Station, located in Waterford, Ohio and owned by AEP affiliate Ohio Power Company:
 - a. Identify the net book value of Waterford as of December 31, 2011 or as of the most recent date for which such data is available
 - b. State whether Kentucky Power evaluated obtaining ownership of all or a portion of Waterford in order to replace all or some of the capacity and energy from the retiring Big Sandy 2 unit
 - i. If so:
 1. Explain the results of such evaluation
 2. Produce any documents regarding such evaluation
 3. Explain why ownership of all or a portion of Waterford was not pursued further
 - ii. If not, explain why not.
 - c. State whether Kentucky Power communicated with AEP or Ohio Power regarding the possibility of obtaining ownership of all or a portion of Waterford in order to replace all or some of the capacity and energy from the retiring Big Sandy 2 unit
 - i. If so:
 1. Produce any such communications or notes, minutes, reports, or other documentation related to such communications
 2. Identify the dates of such communications
 3. Explain the results of such communications
 - ii. If not, explain why not.

7. With regards to the Lawrenceburg Generating Station, located in Lawrenceburg, Indiana and purchased by AEP in May 2007:

- a. Identify the net book value of Lawrenceburg as of December 31, 2011 or as of the most recent date for which such data is available
- b. State whether Kentucky Power evaluated obtaining ownership of all or a portion of Lawrenceburg in order to replace all or some of the capacity and energy from the retiring Big Sandy 2 unit
 - i. If so:
 1. Explain the results of such evaluation
 2. Produce any documents regarding such evaluation
 3. Explain why ownership of all or a portion of Lawrenceburg was not pursued further
 - ii. If not, explain why not.
- c. State whether Kentucky Power communicated with AEP regarding the possibility of obtaining ownership of all or a portion of Lawrenceburg in order to replace all or some of the capacity and energy from the retiring Big Sandy 2 unit
 - i. If so:
 1. Produce any such communications or notes, minutes, reports, or other documentation related to such communications
 2. Identify the dates of such communications
 3. Explain the results of such communications
 - ii. If not, explain why not.

8. With regards to the Riverside Generating Station, located in Zelda, Kentucky:

- a. State whether Kentucky Power evaluated obtaining ownership of all or a portion of Riverside in order to replace all or some of the capacity and energy from the retiring Big Sandy 2 unit
 - i. If so:
 1. Explain the results of such evaluation
 2. Produce any documents regarding such evaluation
 3. Explain why ownership of all or a portion of Riverside was not pursued further
 - ii. If not, explain why not.
- b. State whether Kentucky Power communicated with the owners of Riverside regarding the possibility of obtaining ownership of all or a portion of Riverside in order to replace all or some of the capacity and energy from the retiring Big Sandy 2 unit

1. Produce any such communications or notes, minutes, reports, or other documentation related to such communications
 2. Identify the dates of such communications
 3. Explain the results of such communications
 - ii. If not, explain why not.

9. Refer to p. 4 lines 1-6 of the testimony of Karl Bletzacker. For each of the “long-term, energy-related commodity pricing forecasts for use in the Kentucky Power unit disposition analysis” referenced therein:
 - a. Identify the date of the forecast
 - b. Identify the annual forecasted price for each of the years 2012 through 2040
 - c. State whether the Fundamentals Analysis Group, or any other AEP group, has produced a more recent price forecast for each such commodity
 - i. If so, identify the annual forecasted price for each of the years 2012 through 2040 set forth in that more recent price forecast.

10. Produce in machine readable format all input and output files, and all workpapers in electronic format with formulas intact, from all AuroraXMP modeling performed in preparing the analyses set forth in the Company’s application.

11. Refer to p. 5 line 17 to p. 6 line 16 of the testimony of Karl Bletzacker.
 - a. Identify the name and date of each consultancies’ natural gas forecast used in developing the natural gas price forecast used in this application. Produce each such forecast.
 - b. Identify the “price elasticity of supply over time” and the “corresponding change in natural gas prices” that resulted from applying it to the AuroraXMP natural gas burn.
 - c. With regards to the chart on p. 6 lines 5-16, identify each consultant natural gas price forecast included in the “Consultant’s range,” the date of each such forecast, and the annual natural gas price in \$/mmBtu for each of 2012 through 2030 for each such forecast.

12. Refer to p. 6 lines 18-19 of the testimony of Karl Bletzacker.
 - a. Explain the basis for your contention that “despite current negative reaction, the environmental impacts of shale gas development will ultimately be manageable.”
 - b. Identify and produce any documents or analyses supporting that contention.
 - c. State the estimated impact on the price of natural gas of the steps that may be taken to make the environmental impacts of shale gas development manageable.

13. Refer to p. 7 lines 6-8 of the testimony of Karl Bletzacker.
 - a. Identify the “postponed Renewable Portfolio Standards” referenced therein.
 - b. Explain the impact that the postponement of Renewable Portfolio Standards would have on the price of natural gas.

14. Refer to p. 8, lines 3-6 of the testimony of Karl Bletzacker.
 - a. Identify the impact, in dollars or percent, that the Mercury and Air Toxics Standard is projected to have on natural gas prices in the Fundamentals Analysis Group’s natural gas price projection used in this proceeding.
 - i. Describe how that impact was determined, and produce any documents or analyses that support such determination.
 - b. Identify each other “impending environmental regulation focused on coal-fired generation” that impacted the price of natural gas in the Fundamentals Analysis Group’s natural gas price projection used in this proceeding.
 - i. For each such regulation, identify the impact, in dollars per mMBtu or percent, on the natural gas price.

15. Refer to p. 11 line 10 to p. 12 line 2 of the testimony of Karl Bletzacker.
 - a. Identify and produce any documents or analyses supporting Kentucky Power’s “current assessment” of the likelihood of successful federal climate legislation.
 - b. Explain the basis for selecting a \$15/tonne price, as opposed to some other price, for the CO2 Price/Tax starting in 2022.
 - c. Identify the value assumed for the CO2 Price/Tax for each of the years 2023 through 2040, and explain the basis for such values.
 - d. Identify and produce any analyses, legislative proposals, or other documents on which your CO2 Price/Tax relies.
 - e. Identify the annual CO2 emissions per year from Mitchell Units 1 and 2 for the past five years.
 - f. Identify the projected annual CO2 emissions per year from Mitchell Units 1 and 2

for the years 2013 through 2040.

16. Confirm whether each of the following commodity price forecasts used in the present application are the same as those used in your analysis in Case No. 2012-00401. If so, explain your basis for concluding that such forecast has not changed since the previous analysis. If not, explain how the forecast has changed.

- a. Natural gas prices
- b. CO2 prices
- c. Coal prices
- d. Peak energy prices
- e. Off-peak energy prices
- f. Capacity values

17. Refer to p. 3 lines 14-16. Identify the amount of energy and capacity that the Mitchell Plant has provided to Kentucky Power in each of the past ten years.

18. For each of Mitchell Units 1 and 2, identify the following for each of 2003 through 2012:

- a. Capacity factor
- b. Availability
- c. Forced outage rate
- d. Heat rate
- e. MWhs of energy generated
- f. Fixed O&M expenses
- g. Variable O&M expenses
- h. Fuel costs
- i. Non-environmental capital expenditures
- j. Capital expenditures for environmental controls

19. For each of Mitchell Units 1 and 2, identify the projected values for each of the following for each of 2013 through 2040:

- a. Capacity factor

- b. Availability
- c. Forced outage rate
- d. Heat rate
- e. MWhs of energy generated
- f. Fixed O&M expenses
- g. Variable O&M expenses
- h. Fuel costs
- i. Non-environmental capital expenditures
- j. Capital expenditures for environmental controls

20. Refer to p. 6 line 16 through p. 7 line 3 of the testimony of Jeffery LaFleur.

- a. Please provide all analyses prepared by or for the Company to support its position that the Mitchell units could continue to operate through 2040;
- b. Please identify all coal units in the United States of which the Company is aware that are comparable to Mitchell Units 1 or 2 in terms of design, capacity, and capacity factor whose owner is projecting a useful life of 65 or more years;
- c. Produce the most recent depreciation analysis, or condition or performance assessment for Mitchell Unit 1, Mitchell Unit 2, or both units combined.

21. Refer to p. 5 lines 7-9 of the testimony of John McManus.

- a. Explain the basis for your contention that the Mitchell units are expected to be able to comply with the MATS limits without needing to install additional pollution controls or improve existing controls.
 - i. Produce any analysis or document supporting that contention.
- b. For each of the years 2008 through 2012, identify the emissions rate for Mitchell Unit 1 and Unit 2 for each of the following pollutants:
 - i. Sulfur dioxide
 - ii. Particulate matter
 - iii. Mercury
 - iv. Hydrochloric acid
 - v. Nitrogen oxides
- c. For each of the emission rates identified in response to 18.b, state whether the rate is based on data collected through continuous emissions monitoring, or through stack testing.

22. State whether AEP or Kentucky Power has performed any air quality modeling to evaluate the Mitchell Generating Station's compliance with the 1-hour SO₂ NAAQS.
 - a. If so, identify and produce the results of such modeling.
 - b. If not, explain why not.

23. Identify the year in which each FGD system was installed on each of Mitchell Units 1 and 2, and the SO₂ removal efficiency achieved by each FGD for each of the past five years.

24. Refer to p. 4 lines 19-23 of the testimony of Scott Weaver.
 - a. Identify, by name, position, and company, each individual who performed the economic modeling for this proceeding.
 - b. Identify and explain what steps were taken to validate the results of the economic modeling.

25. Refer to p. 5, line 8 to p. 7 line 17 of the testimony of Scott Weaver.
 - a. Identify, by name, position, and company, each individual who was involved in identifying the six alternative options that "were assumed to be available to KPCo."
 - b. Provide all analyses underlying the Company's decision to assume the six options summarized in Table 1, as opposed to other possible resource options
 - c. State whether the Company considered any options other than those listed in Options 1 through 6 in Table 1
 - i. If so, provide detailed descriptions of all other options considered, the level to which they were considered (i.e. discussion only, analysis, modeling, etc...), and any analyses, modeling files, or workpapers that examined such options
 - ii. If not, explain why not
 - d. Explain why the Company chose not to include in its application an option in which it would retire Big Sandy Unit 2 and replace it with a mix of NGCC units and purchases, but starting with a lower initial quantity of NGCC capacity, for example 350MW, coming into service in January 2017, followed by a second addition of new gas CC capacity coming into service five years later.
 - e. Explain why the Company chose not to include in its application an option in which it would retire Big Sandy Unit 2 and replace it with a combination of fossil resources, renewable energy purchases, and demand side management beyond the levels set forth on page 7 of Exhibit SCW-1.

26. State whether you have evaluated whether the 1-hour SO₂ NAAQS will necessitate upgrades to the FGDs on Mitchell Unit 1 or Unit 2.
- a. If so:
 - i. Explain the results of such evaluation
 - ii. Produce any documents regarding that evaluation.
 - iii. Identify the estimated cost of such upgrades.
 - b. If not, explain why not.
27. State whether you have evaluated whether the 1-hour SO₂ NAAQS will necessitate the use of a lower-sulfur coal blend for Mitchell Unit 1 or Unit 2.
- a. If so, explain the results of such evaluation and produce any documents regarding the evaluation.
 - b. If not, explain why not.
28. State whether you have evaluated the impacts of a potential GHG NSPS standard for existing fossil fuel units on the cost or operations of Mitchell Unit 1, Mitchell Unit 2, or both units.
- a. If so, explain the results of such evaluation and produce any documents regarding the evaluation.
 - b. If not, explain why not.
29. With regards to the Strategist modeling the Company performed for this proceeding:
- a. Identify the level of off-system sales projected for each year of 2013 through 2040
 - b. Identify the level of off-system sales revenues projected for each year of 2013 through 2040
 - c. State when the Company carried out the analysis used to determine the projected levels of off-system sales and off-system sales revenues the Company used in its application.
 - d. State whether the Company's Strategist modeling allocates 100% of off-system sales revenues to ratepayers
 - e. State whether the Company presently allocates a portion of its off-system sales revenues to shareholders.
 - i. If so, identify what portion of off-system sales revenues are allocated to shareholders

- f. If off-system sales revenues were allocated in the Strategist modeling differently than the Company presently allocates such revenues
 - i. Explain why
 - ii. Explain how treating the allocation of off-system sales revenues in the Strategist modeling the same as the Company's present allocation would impact the results of such modeling.

30. Refer to pp. 27-29 of the rebuttal testimony of Scott Weaver in Case No. 2012-00401. State whether the 20% demand vector used in the initial modeling in Case No. 2012-00401 was also used in the modeling performed for the present proceeding. If so, explain why.

31. State whether you assumed a correlation between any of the following factors in any of the economic modeling carried out for this proceeding.
 - a. Natural gas prices and coal prices
 - b. Natural gas prices and CO2 prices
 - c. Natural gas prices and market energy prices
 - d. Natural gas prices and energy demand
 - e. Coal prices and CO2 prices
 - f. Coal prices and market energy prices
 - g. Coal prices and energy demand
 - h. CO2 prices and market energy prices
 - i. CO2 prices and energy demand
 - j. Market energy prices and energy demand

32. For each correlation identified in your responses to request #31 above:
 - a. Identify the assumed correlation
 - b. State whether the same assumed correlation was used in both the Strategist and Aurora modeling.
 - i. If not, explain how and why the assumed correlations differ.
 - c. Explain the basis for each assumed correlation
 - d. Identify and produce any documents or analyses supporting each correlation.

33. Refer to pp. 5-7, Table 1 of the testimony of Scott Weaver.

- a. Explain why the Company decided to include in Option 2 and Option 3 a natural gas combined cycle (CC) plant with duct-firing for peaking purposes, rather than a CC to serve base and intermediate load and a combustion turbine unit to serve peak load.
- b. Identify the heat rate(s) the Company assumed for the natural gas CC plants with duct-firing in Option 2 and Option 3, respectively, for each year through 2040, and explain the basis for such assumed heat rates.
- c. Identify the annual capacity factor(s) the Company assumed for the natural gas CC plants with duct-firing in Option 2 and Option 3 for each year through 2040 and explain the basis for such assumed capacity factors.
- d. Identify the annual capacity factors the Company assumed for the new-build CC units assumed in Options 3B, 4A, 4B, 5B, and 6 for each year through 2040, and explain the basis for such assumed capacity factors.
- e. Identify the annual capacity factors the Company assumed for the 50% Mitchell interest in Options 5A and 6 for each year through 2040, and explain the basis for such assumed capacity factors.
- f. Identify the annual fixed O&M costs assumed for the 50% Mitchell ownership interest in Options 5A and 6 for each year through 2040.
- g. Identify the annual variable O&M costs assumed for the 50% Mitchell ownership interest in Options 5A and 6 for each year through 2040.
- h. Identify the annual capital costs assumed for the 50% Mitchell ownership interest in Options 5A and 6 for each year through 2040.
- i. Identify the annual fuel costs assumed for the 50% Mitchell ownership interest in Options 5A and 6 for each year through 2040.

34. Refer to p. 20 of the testimony of Scott Weaver and Table 1-1 of Exhibit SCW-1, page 3.

- a. Identify the Company's projection of peak demand and internal load for each of 2031 through 2040, and the basis for that projection.
- b. Describe the factors driving the Company's projection that the compound rate of growth from 2021 to 2030 will be higher than from 2011 to 2020.
- c. Provide Kentucky Power's weather-normalized peak demand and internal load by year for 2001 through 2010, and the corresponding compound annual rate of growth for each.
- d. Provide Kentucky Power's actual, weather-normalized internal load by major retail rate class for 2001 through 2010
- e. Provide Kentucky Power's projection of internal load by major retail rate class by year through 2040.

- f. State whether the peak demand and internal load projections for Kentucky Power found on Exhibit SCW-1, page 3 include the impacts of demand response and energy efficiency projected at page 7 of Exhibit SCW-1.
 - g. State whether the peak demand and internal load projections for Kentucky Power found on Exhibit SCW-1, page 3 incorporates the impacts of federal energy efficiency provisions, such as those found in the Energy Independence and Security Act of 2007 and the American Recovery and Reinvestment Act of 2009.
 - i. If so, identify each such provision that is incorporated, and the level of peak demand reduction and/or energy savings that is assumed from each such provision.
35. Describe all current DSM programs offered by Kentucky Power, including demand-response, interruptible load, and efficiency programs. For each such program, identify the:
- a. Annual cost of implementation for the life of the program
 - b. MW and MWh reductions achieved per year
 - c. Life expectancy of individual program measures
 - d. Total Resource Cost test score for each program
 - e. Monetary savings from each program
36. Describe each new DSM program, including demand-response, interruptible load, and efficiency programs, that Kentucky Power plans to offer in the future. For each such program, identify the estimated:
- a. Annual cost of implementation for the life of the program
 - b. MW and MWh reductions achieved per year
 - c. Life expectancy of individual program measures
 - d. Total Resource Cost test score for each program
 - e. Monetary savings from each program
37. Provide any DSM potential studies performed by or for AEP and/or Kentucky Power in the last five years, including attendant workbooks or calculations. State whether such studies are incorporated into the current case. If so, explain how. If not, explain why not.

38. With regards to each of AEP's operating companies, identify:

- a. How many MWs of capacity from energy efficiency and demand response programs each company bid into the 2015/16 PJM Base Residual Auction
- b. How many of these MWs successfully cleared the auction
- c. What percentage of the efficiency MWs available to be bid does this represent

39. Refer to p. 7 of Exhibit SCW-1.

- a. Explain how the total demand response peak reduction and the cumulative energy efficiency projections for Kentucky Power and AEP-East identified therein were determined.
- b. Identify the annual budget for energy efficiency programs, demand response programs, and interruptible load programs projected for Kentucky Power for each of 2013 through 2040.
- c. Explain what is meant by "PJM Approved" interruptible demand response
 - i. Explain why Kentucky Power is projected to get zero peak demand reduction through PJM Approved interruptible demand response programs for each year of 2012 through 2031.
- d. State whether the projected levels of cumulative energy efficiency identified therein for Kentucky Power represent the implementation of all cost-effective energy efficiency programs and measures.
 - i. If so, produce any analysis supporting that claim
 - ii. If not, explain why not, and identify what the level of all cost-effective energy savings is for Kentucky Power for each year of 2013 through 2040.
- e. State whether the projected levels of peak demand reduction identified therein for Kentucky Power represent the implementation of all cost effective demand response programming.
 - i. If so, produce any analysis supporting that claim.
 - ii. If not, explain why not, and identify what the level of cost effective demand response is for Kentucky Power for each year of 2013 through 2040.
- f. State whether Kentucky Power or AEP performed or reviewed any DSM modeling in determining the total demand response peak reduction and cumulative energy efficiency projections identified therein.
 - i. If so, identify the model used, and produce, in machine readable format with formulas intact, the input and output files and workpapers for such modeling.
 - ii. If not, explain why not.
- g. Explain why you project no additional cumulative energy savings from energy

efficiency after 2022 through 2031 for Kentucky Power. Produce any documents supporting that explanation.

- h. Explain why you project virtually no additional peak demand reduction from demand response programs after 2022 through 2031 for Kentucky Power. Produce any documents supporting that explanation.
- i. Explain why the level of cumulative energy savings from energy efficiency for Kentucky Power is projected to be lower, as a percent of total internal load, in 2022 than is the level, as a percent of internal load, that is projected for the AEP-East system in 2013.
- j. Explain why the AEP-East system is projected to achieve three to four times as much energy savings, as a percent of internal load, from energy efficiency than Kentucky Power is projected to achieve in each of 2013 through 2031.
- k. Explain why the AEP-East system is projected to achieve more than twice as much peak demand reduction, as a percent of total demand, from demand response than Kentucky Power is projected to achieve in each of 2013 through 2031.
- l. Identify the level of peak demand reduction and cumulative energy savings that are projected for Kentucky Power and the AEP-East system for each year of 2032 through 2040.

40. Refer to p. 27 lines 6-11 of the testimony of Scott Weaver.

- a. Explain how demand side management has been “incorporated into the Company’s resource planning process.”
- b. State whether you modeled demand side management in the Strategist modeling.
 - i. If so, explain how.
 - ii. If not, explain why not.

41. Refer to Exhibit SCW-3, page 2. With regards to each of the long-term commodity price forecasts for each of the scenarios listed therein:

- a. Identify the date the forecast was created
- b. Identify and produce all analyses or documents that the Company reviewed and/or prepared in developing the forecast
- c. Explain how the 2012 price forecast listed therein for each commodity compares to the actual price of that commodity in 2012.

42. Refer to p. 29 line 21 through p. 31 line 13 of the testimony of Scott Weaver.

- a. Please list each combination of commodity pricing scenarios the Company used to test the sensitivity of its “base” evaluation, e.g. “lower band” natural gas plus

“early carbon”, or “higher band” natural gas plus “no carbon”

- b. Please provide the results of each combination of commodity pricing scenarios the Company used to test the sensitivity of its base evaluation
43. Refer to p. 34 lines 12-15 of the testimony of Scott Weaver. With regards to the decision of Kentucky Power to opt-out of the latest annual PJM-RPM (3-year forward) capacity market/auction and remain under the Fixed Resource Requirement framework:
- a. Identify and explain all bases for Kentucky Power’s decision to opt-out
 - b. Identify and produce all analyses, reports, and other documents regarding Kentucky Power’s decision to opt-out
 - c. State whether Kentucky Power’s decision to opt-out forecloses the Company from bidding its efficiency and peak demand savings into the PJM Base Residual Auctions
 - i. If so, explain whether and how that inability to bid efficiency and peak demand savings factored into Kentucky Power’s opt-out decision.
44. Refer to p. 35 line 8 to p. 36 line 7 of the testimony of Scott Weaver.
- a. Explain your basis for contending that “the price of capacity under the PJM/RPM construct could begin to ultimately mirror, or exceed, Net CONE on a consistent basis”
 - b. Explain how likely it is that the price of capacity under the PJM/RPM construct would equal or exceed Net CONE on a consistent basis.
 - c. Identify and produce any analyses or reports projecting that the price of capacity under the PJM/RPM construct would equal or exceed Net CONE on a consistent basis
 - d. Provide an example of the price of capacity exceeding CONE “on a consistent basis” within PJM or any other electricity capacity market within the United States.
 - e. Explain your basis for contending that “the price of the attendant PJM market energy could likewise exceed projected pricing levels”
 - f. Explain how like it is that the price of the attendant PJM market energy would exceed projected pricing levels
 - g. Identify and produce any analyses or projections that the price of the attendant PJM market energy may exceed projected pricing levels
 - h. With respect to Options #4A and #4B, state whether Kentucky Power has pursued short or long term bilateral agreements to procure capacity or energy in an effort to mitigate the “pricing uncertainty and economic risks” associated with an increase (or decrease) in the price of energy or capacity in the PJM market in

future years.

- i. If so, explain the results of such effort.
- ii. If not, explain why not.

45. Refer to p. 37 lines 4-14 of the testimony of Scott Weaver.

- a. Explain the basis for your contention that “it is very reasonable to assume that a long term (minimum, 10-20 year term) competitive purchase power agreement (“PPA”) solicitation-for not only up to as much as 1,100 MW of replacement capacity, but for the largely baseload energy also being replaced would likely be offered/priced at the cost of a new-build combined cycle in response to such an RFP”
- b. Identify and produce any analyses or documents supporting that contention.
- c. Explain how that contention squares with the fact that the AEP Fundamentals Group is projecting that the PJM/RTO capacity price will, in most years, be well below the cost of a new-build combined cycle

46. Refer to p. 37 line 19 to p. 38 line 4 of the testimony of Scott Weaver. Identify all steps that AEP or Kentucky Power took to determine whether there are existing CC generating assets available as an option for replacing all or part of capacity and/or energy from the Big Sandy 2 unit.

47. Refer to p. 38 lines 4-9 of the testimony of Scott Weaver.

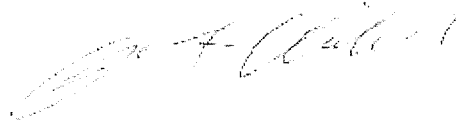
- a. State whether Kentucky Power or AEP has carried out any analysis supporting the contention that “there is an emerging concern that these [CC] facilities will soon be facing significant, time-based turbine inspections and expensive re-builds as well as other steam-cycle and balance-of-plant maintenance issues, thereby lessening their relative economic values”
 - i. If so, produce such analysis
 - ii. If not, explain the basis for that contention.

48. Refer to p. 39 lines 7-8 of the testimony of Scott Weaver. Produce the competitive solicitation referenced therein, and any responses received to such solicitation.

49. Refer to p. 45 line 16 to p. 47 line 4 of the testimony of Scott Weaver. State whether any of the following uncertainties were considered in your evaluation. If so, explain how the uncertainty was considered and provide any documentation of that consideration. If not, explain why not.

- a. Uncertainty regarding future peak demand
 - b. Uncertainty regarding future internal retail load
 - c. Uncertainty regarding future environmental regulations
 - d. Uncertainty regarding future emission price
 - e. The possibility of a reduction in the cost of electricity from sources other than coal or natural gas
50. Produce all STRATEGIST input and output files (in machine readable format), and all workpapers (in electronic format with formulas intact), for each option and under each commodity pricing scenario that the Company evaluated in preparing the analyses set forth in the Company's application.
51. Produce any modeling input and output files, workpapers, and results for the modeling of any options or scenarios that the Company did not include in the application but which were evaluated in preparing the analyses set forth in the application.

Respectfully submitted,



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Dated: February 6, 2013

CERTIFICATE OF SERVICE

I certify that I mailed a copy of Alexander Desha, Tom Vierheller, Beverly May, and Sierra Club's Initial Requests for Information by first class mail on February 6, 2013 to the following:

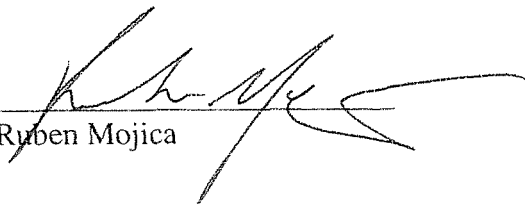
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