

Mark David Goss mdgoss@gosssamfordlaw.com

October 25, 2013

**VIA HAND DELIVERY** 

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602

Case No. 2013-00259

RECEIVED

OCT 2 5 2013

PUBLIC SERVICE COMMISSION

Dear Mr. Derouen:

RE:

Enclosed for filing, please find one original and ten copies of East Kentucky Power Cooperative, Inc. ("EKPC") responses to Sonia McElroy and Sierra Club's Initial Requests for Information dated October 4, 2013 in the above referenced case. Also enclosed are an original and ten copies of EKPC's Petition for Confidential Treatment of Information ("Petition") regarding the responses to Requests 13c.vii and 13c.xii and 30. One unredacted copy of the designated confidential portions of each of the responses to Requests 13c.vii and 13c.xii and 30, which are the subjects of the Petition, is enclosed in a sealed envelope.

If you have any questions or require additional information, please contact me.

Very truly yours,

Mark David Goss

**Enclosures** 

cc: Hon. Michael L. Kurtz

Hon. Joe Childers Hon. Kristin Henry Hon. Shannon Fisk

#### BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:		RECEIVED
AN APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR ALTERATION OF CERTAIN EQUIPMENT AT THE COOPER STATION AND APPROVAL OF A COMPLIANCE PLAN AMENDMENT FOR ENVIRONMENTAL SURCHARGE COST RECOVERY	) ) ) ) )	OCT 2 5 2013  PUBLIC SERVICE  COMMISSION  PSC CASE NO. 2013-00259

### MOTION FOR CONFIDENTIAL TREATMENT

Comes now East Kentucky Power Cooperative, Inc. ("EKPC"), by and through counsel, pursuant to KRS 61.878, 807 KAR 5:001, Section 13 and other applicable law, and for its Motion requesting that the Kentucky Public Service Commission ("Commission") afford confidential treatment to portions of various responses to data requests tendered by Sonia McElroy and the Sierra Club (collectively, the "Sierra Club") in the above-captioned proceeding, respectfully states as follows:

1. EKPC's Application requests the Commission to issue a Certificate of Public Convenience and Necessity ("CPCN"), pursuant to KRS 278.020(1), for an environmental compliance project that involves re-routing the existing duct work for EKPC's Cooper Station Unit #1 ("Cooper #1") such that its emissions are able to flow to the Cooper Station Unit #2 Air Quality Control System ("Cooper #2 AQCS") (the "Project"). For a capital investment of approximately \$15 million, EKPC will be able to retain 116 MW of existing capacity, thereby

reducing its need to procure new capacity from other sources. The Application also requests that the Commission authorize EKPC to amend its Environmental Compliance Plan, pursuant to KRS 278.183, so that EKPC may recover the costs associated with the Project through its existing environmental surcharge mechanism.

- 2. On October 4, 2013, the Sierra Club tendered data requests to EKPC concerning the Application, however, the Sierra Club was not granted status as an intervenor until October 18, 2013. Request 13(c)(vii) of the Sierra Club's data requests seeks the variable operations and maintenance ("O&M") inputs used in each year of the net present value ("NPV") analysis for each of the projects on EKPC's short list. Similarly, Request 13(c)(xii) requests the unit dispatch price inputs used in the same analysis. Request 30 seeks copies of a presentation made to EKPC's Board concerning the 2012 Request for Proposals ("RFP") and results. Contemporaneous with the filing of this Motion, EKPC is tendering information responsive to each of these requests.
- 3. The responses to the foregoing requests contain information that reflects market prices and assumptions or internal governance deliberations, and is therefore commercially sensitive and proprietary. This information includes the details of O&M costs and dispatch pricing for short list proposals considered by EKPC. Likewise, the responsive documents include the evaluative and informative information conveyed by EKPC's management to EKPC's Board as part of the internal process for deciding to move forward with the Project.
- 4. The above-described information (the "Confidential Information") that is included in EKPC's responses to the foregoing data requests is proprietary and commercially sensitive information that is retained by EKPC on a "need-to-know" basis and that is not publicly available. If disclosed, the Confidential Information would give bidders and potential business

partners a tremendous advantage in the course of ongoing and future negotiations to fulfill the balance of the anticipated future capacity need. Disclosure would also give participants in the broader energy market a material advantage in relations with EKPC as a result of knowing the cost and market assumptions and data used by EKPC or The Brattle Group, EKPC's retained consultant for managing the RFP and assisting with the evaluation of the bids received. These market advantages would very likely translate into higher costs for EKPC and, by extension, detrimentally higher rates for EKPC's Members. Likewise, disclosure of the materials presented to EKPC's Board would impede the effective governance of EKPC in the future. EKPC's management and directors must be confident that they can communicate in an open, candid and comprehensive manner without fear of having such communications published. publication would unjustly and unfairly benefit competitors, vendors and others with whom EKPC must do business. Publication of Board presentations would have a chilling affect on the Board's deliberations. Due to the pervasive nature of proprietary and commercially sensitive material in the response to Request No. 30, confidentiality is requested for the entirety of the Board presentation.

5. The Kentucky Open Records Act exempts the Confidential Information from public disclosure. See KRS 61.878(1)(c). As set forth above, disclosure of the Confidential Information would permit an unfair advantage to third parties and would have a detrimental impact upon the effective and efficient corporate governance of EKPC. Moreover, the Kentucky Supreme Court has stated, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary." Hoy v. Kentucky Industrial Revitalization Authority, 907 S.W.2d 766, 768 (Ky. 1995). The information derived from the responses to the foregoing requests clearly relates to EKPC's internal deliberations. Because the Confidential

Information is critical to EKPC's effective execution of business decisions and strategy, it satisfies both the statutory and common law standards for affording confidential treatment. Furthermore, the Commission has previously recognized that evaluative information derived from an RFP process should be afforded confidential treatment. See e.g. In the Matter of the Application of Atmos Energy Corporation for Approval of Third Party Gas Supply Agreement, Order, Case No. 2006-00194 (Ky. P.S.C. Aug. 18, 2006) ("The Commission has afforded confidential treatment to Atmos's proposed gas supply agreement, the particulars of the bids and Atmos's analysis.") (emphasis added).

- 6. EKPC does not object to limited disclosure of the Confidential Information described herein, pursuant to an acceptable confidentiality and nondisclosure agreement, to Gallatin Steel, the Sierra Club or any other intervenors with a legitimate interest in reviewing the same for the sole and limited purpose of participating in this case.
- 7. In accordance with the provisions of 807 KAR 5:001, Section 13(2), EKPC is filing one copy of responses to Request Nos. 13(c)(vii), 13(c)(xii) and 30 separately under seal. The public version of EKPC's filing notes that these responses have been submitted to the Commission under seal.
- 8. In accordance with the provisions of 807 KAR 5:001, Section 13(3), EKPC respectfully requests that the Confidential Information be withheld from public disclosure for a period of ten years. This will assure that the Confidential Information if disclosed after that time will no longer be commercially sensitive so as to likely impair the interests of EKPC if publicly disclosed.

WHEREFORE, on the basis of the foregoing, EKPC respectfully requests the Commission to enter an Order granting this Motion and to so afford such protection from public

disclosure to the unredacted copies of referenced responses, which are filed herewith under seal, for a period of ten years from the date of entry of such an Order.

This 25<sup>th</sup> day of October 2013.

Respectfully submitted,

Marke Parid Boss

Mark David Goss
David S. Samford
GOSS SAMFORD, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KY 40504
(859) 368-7740
mdgoss@gosssamfordlaw.com
david@gosssamfordlaw.com

Counsel for East Kentucky Power Cooperative, Inc.

#### **CERTIFICATE OF SERVICE**

This is to certify that a true and correct copy of the foregoing was deposited in the custody and care of the U.S. Mail, postage prepaid, on this the 25<sup>th</sup> day of October 2013, addressed to the following:

Mr. Mike Kurtz Boehm, Kurtz & Lowry 36 East Seventh Street Suite 510 Cincinnati, OH 45202

Joe Childers
Joe F. Childers & Associates
300 Lexington Building
201 West Short Street
Lexington, KY 40507

Shannon Fisk Earthjustice 1617 JFK Boulevard, Suite 1675 Philadelphia, PA 19103

Kristin Henry
Staff Attorney
Sierra Club
85 Second Street
San Francisco, CA 94105

Counsel for East Kentucky Power Cooperative, Inc

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	<u> </u>	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF KENTUCKY	)
	)
COUNTY OF CLARK	)

Darrin Adams, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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 25th day of October, 201

MY COMMISSION EXPIRES NOVEM

**NOTARY ID #40935** 

## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

#### In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

county of <u>Jackson</u>)

Block Andrews, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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.

Notary Public

Block anhens

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF KENTUCKY	)
COUNTY OF CLARK	)

Michelle K. Carpenter, being duly sworn, states that she has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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 25th day of October, 2013

WY COMMISSION EXPIRES HOVEMBER 30, 201 NOTARY ID #409357

Michelle K. Carpenter

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF KENTUCKY	)
	)
COUNTY OF CLARK	)

Dana C. Cox, being duly sworn, states that she has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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 25th day of October, 2013.

MY COMMISSION EXPIRES MOVEMBER 30, 201

Dary C. Cox

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF KENTUCKY	)
COUNTY OF CLARK	)

Scott Drake, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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  $25^{11}$ 

day of October, 2019

Notary Public

MY COMMISSION EXPIRES NOVEMBER 30, 26 NOTARY ID #409352 mmm.

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF KENTUCKY	)
	)
COUNTY OF CLARK	)

Jerry B. Purvis, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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 17 day of October, 2013.

Notary Public∶

MY COMMISSION EXPIRES NOVEMBER 30, 2013

NOTARY ID #409352

#### OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF MANUELLY STATE OF MAN

James Read, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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.

JENNIFER M. OSSEN
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
February 11, 2016

yay of October, 2018

Notary Public

jonumission expires.

2/11/16

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	•
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **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 Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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 day of October, 2013

NOTATY PUBLIC:

NOTARY ID #409352

#### BEFORE THE PUBLIC SERVICE COMMISSION

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AN APPLICATION OF EAST KENTUCKY POWER	)	
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)	
OF PUBLIC CONVENIENCE AND NECESSITY FOR	)	
ALTERATION OF CERTAIN EQUIPMENT AT THE	)	CASE NO.
COOPER STATION AND APPROVAL OF A	)	2013-00259
COMPLIANCE PLAN AMENDMENT FOR	)	
ENVIRONMENTAL SURCHARGE COST	)	
RECOVERY	)	

### **CERTIFICATE**

STATE OF KENTUCKY	)
	)
COUNTY OF CLARK	)

Patrick C. Woods, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sonia McElroy and Sierra Club's Requests for Information contained in the above-referenced case dated October 4, 2013, 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 25

day of October, 2013

MY COMMISSION EXPIRES NOVEMBER \$0, NOTARY ID # 4,09352

## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

### In the Matter of:

)	
)	
)	
)	CASE NO.
)	2013-00259
)	
)	
)	
	)

RESPONSES TO SONIA MCELROY AND SIERRA CLUB'S INITIAL REQUESTS FOR
INFORMATION TO
EAST KENTUCKY POWER COOPERATIVE, INC.
DATED OCTOBER 4, 2013

# INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 1

**RESPONSIBLE PARTY:** 

Patrick C. Woods

Request 1. Provide all EKPC responses to data requests from all parties in this

proceeding.

**Response 1.** All data responses have been provided.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 2

**RESPONSIBLE PARTY:** 

Patrick C. Woods

Request 2. Please provide all exhibits, testimony, and workpapers (machine readable, unprotected, with formulas in-tact) included in the filing in non-redacted, electronic versions.

Response 2. All exhibits, testimonies and workpapers included in the filing have been filed with the Commission.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 3

RESPONSIBLE PARTY: Patrick C. Woods

Request 3. Please provide a non-redacted, full color or original digital copy of any Integrated Resource Plans developed and/or filed in Kentucky by EKPC since 2008.

Response 3. The Sierra Club was granted intervention in Case No. 2009-00106 (EKPC's 2009 IRP) and in Case No. 2012-00149 (EKPC's 2012 IRP) and was provided non-redacted copies of the plans at that time.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 4

**RESPONSIBLE PARTY:** 

Michelle K. Carpenter/Dana C. Cox/Julia J. Tucker

**Request 4.** For each of Cooper Unit 1, Cooper Unit 2, and the Dale Station:

Request 4a. Identify the retirement date assumed in EKPC's filing.

Response 4a. No assumptions related to accounting retirement dates were included in the filing of Case No. 2013-00259. Also, it should be noted that EKPC does not keep accounting records by unit for Dale and Cooper.

Request 4b. Identify the remaining book life assumed in EKPC's filing.

Response 4b. See response 4.a. above.

Request 4c. Identify the current undepreciated book value and the expected undepreciated book value for each year of the remaining operating life of the unit.

Response 4c. The book value and net book value (NBV) of Dale Station at September 30, 2013 is \$99,331,757 and \$9,001,614 respectively. The net book value, assuming no further additions are made to the facility, will decrease by annual depreciation of approximately \$1,565,498 until fully depreciated at the end of its current estimated useful life of June 30, 2019.

The book value and net book value (NBV) of Cooper Station at September 30, 2013 is \$355,247,899 and \$248,492,575, respectively. The net book value, assuming no further additions will be made to the facility, will decrease by annual depreciation of approximately \$14,835,378 until fully depreciated at the end of its current estimated useful life of June 30, 2030.

Request 4d. Identify the current salvage value and the expected salvage value for each year of the remaining operating life of the unit.

**Response 4d.** Estimated salvage value is not calculated at the plant level.

**Request 4e.** Produce the most recent depreciation study.

Response 4e. The most recent depreciation study was provided in EKPC's application in Case No. 2006-00326, Wood Exhibit 1, pages 23 through 140 of 142. This application can be found on the Commission's website or at the following link:

http://psc.ky.gov/PSCSCF/2006%20cases/2006-00236/EKPC Application 060206.pdf.

Gannett Fleming performed the study and the rates contained therein were effective January 1, 2006 for accounting purposes. The study was approved by both the Commission and the Rural Utilities Service.

**Request 4f.** Produce the most recent condition or performance assessment.

Response 4f. The requested assessment was provided in EKPC's application in Case No. 2008-00472, pages 127 through 213 of 507. This application can be found on the Commission's website or at the following link: <a href="http://psc.ky.gov/PSCSCF/2008%20cases/2008-00472/20081114">http://psc.ky.gov/PSCSCF/2008%20cases/2008-00472/20081114</a> EKPC Application.PDF.

Request 4g. Produce the most recent retirement, continued unit operation, or life extension study or analysis.

Response 4g. The requested assessment was provided in EKPC's application in Case No. 2008-00472, pages 127 through 213 of 507. This application can be found on the Commission's website or at the following link: <a href="http://psc.ky.gov/PSCSCF/2008%20cases/2008-00472/20081114">http://psc.ky.gov/PSCSCF/2008%20cases/2008-00472/20081114</a> EKPC Application.PDF.

Request 4h. Produce any analysis or assessment of the economics of continued operation of such unit.

Response 4h. Please see EKPC's response to the Commission Staff's Initial Request for Information ("Staff's Initial Request"), Response 5.

<u>Request 4i</u> Produce any analysis or assessment of the need for the continued operation of each unit.

Response 4i. Please see EKPC's response to the Staff's Initial Request, Response 5.

Request 4i. Produce any analysis or assessment of the need for and cost of necessary or potentially necessary capital additions to any unit.

Response 4j. EKPC believes this request is overly broad and inadequately defined to elicit a reasonable response. If the Sierra Club can provide more explicit detail, EKPC would be willing to attempt to provide a response.

Please note that capital additions for each proposal considered in this case have been analyzed and reported in the response to the Staff's Initial Request, Response 5.

## **INTERVENORS Request 4**

### Page 4 of 4

**Request 4k.** Produce any analysis or assessment of the risks of continued operation of the units.

Response 4k. Please see EKPC's response to the Staff's Initial Request, Response 5.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 5

**RESPONSIBLE PARTY:** 

**James Read** 

Request 5. For each of Cooper Units 1 and 2 and the Dale Station, identify and produce any analysis comparing the cost of continued operation of the unit with retiring and replacing the unit's energy and capacity with a combination of any of the following energy resources:

- a. Energy efficiency.
- b. Demand response.
- c. Market purchases.
- d. Power purchase agreements.
- e. Existing natural gas combined cycle or combustion turbine

capacity.

- f. New natural gas combined cycle or combustion turbine capacity.
- g. Conversion of natural gas combustion turbines to natural gas

combined cycle units.

- h. Combined heat and power.
- i. Wind.
- j. Solar.
- k. Geothermal.
- 1. Any combination or permutation of the above resources.

### **INTERVENORS Request 5**

Responses 5a-1. See EKPC response to the Staff's Initial Request, Response 5. The base case for the analysis was retirement of Dale Unit Nos. 1, 2, 3, and 4 and Cooper Unit No. 1. EKPC evaluated remediation of Dale Unit Nos. 3 and 4 and remediation of Cooper Unit No. 1. EKPC did not evaluate retirement of Cooper Unit No. 2. All proposals were compared to (c) market purchases of energy and capacity. In addition, EKPC considered proposals for (d) power purchase agreements tied to (e) existing natural gas capacity, (i) wind generation, and (j) solar generation. EKPC also considered proposals for (f) construction of new natural gas generation. EKPC did not receive proposals for (a) energy efficiency, (b) demand response, (g) conversion of natural gas combustion turbines to natural gas combined cycle units, (h) combined heat and power, or (k) geothermal generation.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 6

**RESPONSIBLE PARTY:** 

**Darrin Adams** 

Request 6. Please provide a copy of any transmission adequacy studies performed by or for EKPC over the past three years.

Response 6. A copy of any transmission adequacy studies performed by or for EKPC over the past three years is included on the attached CD. Please note that Section 3 and all appendices of the 2010 and 2011 reports contain Critical Energy Infrastructure Information ("CEII") as designated by the Federal Energy Regulatory Commission ("FERC"). Also please note that Sections 3 and 4 and all appendices of the 2012 report contain CEII. The CEII related information has been removed from these reports. As described more fully in EKPC's response to the Sierra Club's Initial Request, Response 7, EKPC cannot provide CEII designated information.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 7

**RESPONSIBLE PARTY:** Darrin Adams

Request 7. Please provide a copy of FERC Form 715 information, including all submitted data, filed by or on behalf of EKPC for each of the last three years.

Response 7. The Federal Energy Regulatory Commission ("FERC") considers the information collected in FERC Form 715 to be "Critical Energy Infrastructure Information (CEII)" and FERC treats the information as such. CEII is defined as specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:

- 1. Relates details about the production, generation, transmission, or distribution of energy;
- 2. Could be useful to a person planning an attack on critical infrastructure;
- 3. Is exempt from mandatory disclosure under the Freedom of Information Act; and
- 4. Gives strategic information beyond the location of the critical infrastructure.

Consequently, EKPC cannot provide the requested FERC Form 715 information.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 8

**RESPONSIBLE PARTY:** 

**Darrin Adams** 

Request 8. State whether EKPC has examined the impact on capacity adequacy, transmission grid stability, transmission grid support, voltage support, or transmission system reliability if EKPC were to retire or idle the Dale Station or Cooper Units 1 or 2 in 2014, 2015, or 2016.

- a. If so, identify:
  - i. Any such impact.
  - ii. The cost of remediating each such impact.
  - iii. The time it would take to remediate each such impact.
- b. If not:
  - i. Explain why not.
- ii. Identify any studies or analyses that EKPC believes would be needed to identify any such impacts.
- iii. Identify when EKPC anticipates it would know such impacts, and under what circumstances such impacts would occur.

Responses 8a-b. EKPC's examination of capacity adequacy has been considered extensively in this case. Please see EKPC's response to the Staff's Initial Request, Response 5.

EKPC has examined the impact on the transmission system of taking all generation at Dale Station off-line, and no issues have been identified.

### **INTERVENORS Request 8**

Page 2 of 2

EKPC has been considering the simultaneous outages of Cooper Units 1 and 2 in conjunction with either a transmission-line or transformer contingency in our transmission-planning activities over the past 12 months. EKPC has identified some voltage concerns throughout its southern service region for the scenarios with both Cooper units off simultaneously. These voltage issues can be addressed through installation of capacitor banks in the region. The estimated total cost of these capacitor banks is \$2,000,000. The estimated time needed to design, procure, and install these capacitor banks is two to three years. One thermal loading issue on the EKPC transmission system has also been identified. The cost to address this thermal loading issue is estimated at \$250,000, and the estimated implementation time is 12 to 18 months. Another thermal loading issue has been identified on a neighboring transmission system. EKPC has notified the impacted party and coordination between EKPC and the impacted party regarding remediation for that loading issue is in progress.

### **INTERVENORS** Request 9

Page 1 of 1

# EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2013-00259 RESPONSE TO INFORMATION REQUEST

# INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 9

RESPONSIBLE PARTY: James Read

Refer to p. 5, paragraph 15 of EKPC's application. Produce all of the proposals received in response to the RFP referenced therein.

Response 9. Please see EKPC's response to the Staff's Initial Data Request, Response 5.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 10

**RESPONSIBLE PARTY:** 

Jerry B. Purvis

<u>Request 10.</u> Produce a copy of any forecast or projection of future CO2 costs, taxes, emissions allowances prices, or regulations that have been prepared by or for EKPC.

Response 10. EKPC certainly monitors and reviews information that could lead to certain assumptions about future CO<sub>2</sub> costs, taxes, and emission allowance prices. However, given the uncertainty of the final CO<sub>2</sub> requirements, determining realistic future CO<sub>2</sub> costs, taxes, and emission allowance prices is difficult at best. Consequently, EKPC has not prepared or had prepared any forecasts or projections of future CO<sub>2</sub> costs, taxes, or emission allowance prices that would be responsive to this request. While EKPC has opinions as to what future CO<sub>2</sub> regulations should or should not require, it cannot prepare forecasts or projections of future CO<sub>2</sub> regulations.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 11

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Request 11. Identify and produce any evaluation created or reviewed by EKPC of the cost, feasibility, or availability in the EKPC service territory, Kentucky, or any neighboring state of any of the following supply side resources:

- a. Wind.
- b. Solar.
- c. Hydro.
- d. Landfill gas to energy.
- e. Existing natural gas combined cycle capacity.
- f. New natural gas combined cycle capacity.

Responses 11a-f. By definition, EKPC solicited any potential projects dealing with these technologies through the RFP process. The evaluations were provided in EKPC's response to the Staff's Initial Request, Response 5.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 12

**RESPONSIBLE PARTY:** 

Julia J. Tucker

**Request 12.** Please provide the following information for the years 2008-2013:

Request 12a. A list of all wind energy projects built by EKPC

i. For each such wind energy project, identify the size, capital cost, fixed and variable operating cost, levelized cost of energy, and tax revenue for each year of operation.

Response 12a. EKPC has not built any wind projects.

Request 12b. A list of all wind energy power purchase agreements entered into by EKPC

i. For each such wind energy project, identify the size, capital cost, fixed and variable operating cost, and the price at which EKPC purchases power from the project for each year of the contract.

**Response 12b.** EKPC has not entered into any wind energy projects.

Request 12c. A list of all wind energy projects or power purchase agreements that EKPC considered but rejected participation in.

### **INTERVENORS Request 12**

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- i. For each such wind energy project, identify the size, capital cost, fixed and variable operating cost, and the LCOE or power purchase price for the project.
- ii. For each such wind energy project, explain why EKPC decided not to participate in it.

Response 12c. The wind energy projects received in the 2012 RFP are listed in EKPC's response to the Staff's Initial Request, Response 5. As reported in Case No. 2009-00106, EKPC's 2009 Integrated Resource Plan, Section 8, pages 8-12 and 8-13, EKPC received proposals for eight wind projects, one of which was in Kentucky. Please see <a href="http://psc.ky.gov/PSCSCF/2009%20cases/2009-">http://psc.ky.gov/PSCSCF/2009%20cases/2009-</a>

00106/20090422 EKPCs 2009 IRP and Petition for Confidentiality.PDF. None of those projects proved to be viable. EKPC continuously works with National Renewables Cooperative to review any viable wind projects. EKPC has not contracted with any wind project to date.

## INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 13

**RESPONSIBLE PARTY:** James Read

Refer to the Application, Exhibit 1a, page 5 of 14.

Request 13a. Identify the NPV of each of the proposals on the "Short List"

Response 13a. Please see EKPC's response to the Staff's Initial Request, Response 7.

Request 13b. Produce any analyses, modeling files, and workpapers (in electronic format with formulas intact) used to calculate the NPV of each of the proposals on the "Short List".

**Response 13b.** See EKPC's response to the Staff's Initial Request, Response 5.

Request 13c. Identify for each year of the analyses used to calculate the NPV of each of the proposals on the "Short List" the value for each of the following inputs used in the NPV analysis:

- i. Energy prices.
- ii. Coal prices.
- iii. Natural gas prices.
- iv. Capacity prices.
- v. Carbon prices.

### **INTERVENORS Request 13**

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- vi. Renewable energy credits.
- vii. Variable O&M.
- viii. Fixed O&M.
- ix. O&M costs to comply with environmental regulations.
- x. Environmental capital costs.
- xi. Non-environmental capital costs.
- xii. Unit dispatch price.
- xiii. Discount rate.
- xiv. Book life.
- xv. Analysis period (years).
- xvi. SO2 allowances.
- xvii. NOx allowances.
- xviii. Nameplate capacity.
- xix. Maximum summer capacity.

### Response 13c.i-xix

- i. Energy prices See EKPC's response to the Staff's Initial Request, Response 5.
- ii. Coal prices Included on the attached CD.
- iii. Natural gas prices Included on the attached CD.
- iv. Capacity prices See EKPC's response to the Staff's Initial Request, Response 5.
- v. Carbon prices Not explicitly incorporated.
- vi. Renewable energy credits See EKPC's response to the Staff's Initial Request, Response 5.
- vii. Variable O&M See EKPC's response to the Staff's Initial Request, Response 5 for new units. Existing units are included on the attached CD, filed under seal and subject to confidential treatment.

- viii. Fixed O&M See EKPC's response to the Staff's Initial Request, Response 5.

  Only applicable to each proposal; fixed O&M for all existing units except Dale Station and

  Cooper 1 are considered embedded costs.
- ix. O&M costs to comply with environmental regulations See EKPC's response to the Staff's Initial Request, Response 5. Only applicable to each proposal.
- x. Environmental capital costs See EKPC's response to the Staff's Initial Request, Response 5. Only applicable to each proposal.
- xi. Non-environmental capital costs See EKPC's response to the Staff's Initial Request, Response 5. Only applicable to each proposal.
- xii. Unit dispatch price See EKPC's response to the Staff's Initial Request, Response 5 and attached CD, filed under seal and subject to confidential treatment.
- xiii. Discount rate See EKPC's response to the Staff's Initial Request, Response 5.
- xiv. Book life Not applicable.
- xv. Analysis period (years) See EKPC's response to the Staff's Initial Request, Response 5.
- xvi. SO2 allowances See EKPC's response to the Staff's Initial Request, Response 5.
- xvii. NOx allowances See EKPC's response to the Staff's Initial Request, Response 5.
- xviii. Nameplate capacity Not applicable.
- xix. Maximum summer capacity See EKPC's response to the Staff's Initial Request, Response 5. Only applicable to each proposal.
- Request 13d. Please provide any analyses used to develop the inputs listed above with supporting workbooks in electronic, machine-readable format with formulas intact.
- Response 13d. Inputs were received from third parties, either forecasting experts or the individual proposals. No separate analysis was completed to derive the inputs.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 14

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Refer to Application Exhibit 1a, page 8 of 14, referring to the project being considered in this filing: "However, this project will limit the operational flexibility of the units at Cooper. Due to the fact that the scrubber will be shared by the units, the operation of the units will have to be carefully coordinated."

Request 14a. Describe in what ways the units will have to be carefully coordinated.

Response 14a. The minimum load set point for Cooper 1 will be raised when Cooper 2 is not in operation. The scrubber requires more exhaust flow than Cooper 1 can provide at its current minimum load level. The only time its operation will be affected is when Cooper 2 is not in service.

**Request 14b.** Provide analyses to support this statement.

Response 14b. Please see the Application, Exhibit 9, Direct Testimony of Block Andrews, Exhibit BA-1, Section 3.1.1, page 13 of 43.

Request 14c. Explain how the "carefully coordinated" operation of the units was treated in the NPV analysis for the Cooper retrofit project.

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Response 14c. The calculation of energy margins for Cooper Unit No. 1 reflected the limited operational flexibility. Energy margins were calculated in the RTSim generation simulation software.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 15

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Refer to Application Exhibit 1a, page 8 of 14, referring to the project being considered in this filing: "The greatest impact to unit operation will be when only unit 1 is in operation. During that time, unit 1 will be restricted to a minimum load of approximately 100 MW in order for the scrubber to continue operation."

Request 15a. Please provide analyses to support this statement.

Response 15a. See EKPC's response to Sierra Club's Initial Request, Response 14.

Request 15b. Please explain how the "minimum load of approximately 100 MW" limitation was treated in the NPV analysis for the Cooper retrofit project.

Response 15b. See EKPC's response to Sierra Club's Initial Request, Response 14c. The minimum load is being raised from 45 MW to 100 MW and the only costs to accomplish this are the fuel and scrubber costs. These variable costs are reflected in the production cost data. The energy margins incorporated in the NPV analysis reflect the 100 MW minimum load constraint on Cooper Unit No. 1. Energy margins were calculated in the RTSim generation simulation software.

Request 15c. Please provide the current minimum load for Cooper unit 1.

Response 15c. Current minimum load is 45 MW.

Request 15d. Please provide the projected annual capacity factor or annual generation (in MWh) of Cooper unit 1 for each year of the NPV analysis.

Response 15d. See EKPC's response to the Staff's Initial Request, Response 5.

Request 15e. Does an approximately 100 MW minimum load after the project change the flexibility of that unit, compared with before the project?

- i. If so, please explain.
- ii. If not, explain why not.

Response 15e. See EKPC's response to Sierra Club's Initial Request, Response 14.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 16

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to Exhibit 1a, page 9 of 14, referring to intermittent resources: "When evaluating proposals for the Short List, the value of the forecast energy from wind and solar resources was not discounted to reflect its intermittent quality. Therefore, the NPVs for the intermittent proposals overstate their value added to EKPC in relation to the NPVs of proposals for conventional resources."

Request 16a. Please explain how wind and solar energy should be "discounted" compared to conventional sources and provide any supporting analyses and workpapers (in electronic, machine-readable format with formulas intact) to support this statement.

Response 16a. The "discounting" would reflect costs attributable to the intermittent quality of energy produced by wind and solar generation resources. We did not perform any analysis to estimate these costs.

Request 16b. Please estimate the extent to which the NPV for wind and solar resources "overstate their value" and provide any supporting analyses and workpapers (in electronic, machine-readable format with formulas intact) to support this statement.

Response 16b. We did not perform any analysis to estimate the extent to which the NPVs for wind or solar resources overstate value.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 17

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to Application Exhibit 1a, page 10 of 14, referring to uncertainty: "With rapid technological change, the potential for demand response to diminish requirements for new capacity only increases."

- a. Please provide any analysis to support this statement.
- b. Did EKPC consider proposals for demand response to fulfill their capacity need?
- i. If so, please provide any supporting analyses including workbooks (in electronic, machine-readable format).
  - ii. If not, explain why not.

Response 17. We did not perform any analysis to support this statement. EKPC did not solicit proposals for demand response in the 2012 RFP.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 18

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to Application Exhibit 1a, page 11 of 14, referring to the risks of self-build: "This means that a self-build proposal needs to have a higher expected value added than an otherwise comparable proposal from a third party."

Request 18a. Please explain how much higher the expected value has to be for a self-build proposal compared to that of a third party for self-build to be the best option. Please also provide any analyses including workbooks (in electronic, machine-readable format) supporting this claim.

Response 18a. EKPC did not quantify how much higher the expected value for a self-build proposal would need to be and did not perform an analysis of this issue for any of the EKPC self-build proposals. The answer to this question is a subjective one that EKPC management would have to answer in the event they contemplated accepting a self-build proposal rather than a third-party proposal to build a comparable power plant.

Request 18b. Please explain the risks associated with self-build and provide any supporting analyses including workbooks (in electronic, machine-readable format).

Response 18b. If EKPC were to undertake a major construction project (e.g., construction of a combined-cycle natural gas facility), it would likely bear more of the risk associated with potential cost overruns than it would if it entered into a contract with a third party to construct the facility. No specific analysis of this risk was conducted. See the response to 18a above.

Request 18c. Is there a risk that capacity prices and energy prices will not be sufficient to support the continued operation of Cooper unit 1?

- i. If so, please explain and provide supporting analyses and workpapers (in electronic, machine-readable format).
  - ii. If not, why not?

Response 18c. A time could come when capacity prices and energy prices will no longer support the continued operation of Cooper Unit No. 1. However, EKPC has not performed any analysis that specifically identifies when that point in time could occur. The current analysis indicates that market prices are expected to support the continued operation of Cooper Unit 1.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 19

**RESPONSIBLE PARTY:** James Read

Refer to Application Exhibit 1a at page 12 of 14. Regarding the "over \$50 million" NPV for the Project "over a ten-year time horizon"

Request 19a. Produce any analyses, modeling files, and workpapers (in electronic format with formulas intact) used to calculate the NPV of the Project.

Response 19a. See EKPC response to the Staff's Initial Request, Response 5.

Request 19b. Please explain why the NPV analysis was performed for a ten-year time horizon, rather than over some other time period.

Response 19b. The NPVs of this and other proposals were calculated for several time horizons as a sensitivity analysis.

Request 19c. Please explain why it was assumed that "the plant would not provide energy margins or capacity revenues more than ten years after completion."

Response 19c. It was not assumed that "the plant would not provide energy margins or capacity revenues more than ten years after completion." The ten-year horizon was one of the sensitivity cases.

Request 19d. State whether it is possible that the future fixed costs of Cooper unit 1 could exceed the capacity revenues collected from the plant, for the analysis period

- i. If so, please explain and provide supporting analyses and workpapers (in electronic, machine-readable format).
  - ii. If not, why not?

Response 19d. The question is unclear. If the intent was to ask, "Is it possible that the fixed O&M costs of Cooper Unit No. 1 could exceed the capacity revenues collected from the plant in one or more years", the answer is yes, that is possible.

Request 19e. Identify for each year of the analyses used to calculate the NPV of each of the proposals on the "Short List" the value for each of the following inputs used in the NPV analysis:

- i. Market Energy prices.
- ii. Coal prices.
- iii. Natural gas prices.
- iv. Capacity prices.
- v. Carbon prices.
- vi. Renewable energy credits.
- vii. Variable O&M cost.
- viii. Fixed O&M cost.
- ix. O&M costs to comply with environmental regulations.
- x. Environmental capital costs.
- xi. Non-environmental capital costs.
- xii. Unit dispatch price.
- xiii. Heat rate.
- xiv. Discount rate.

#### **INTERVENORS Request 19**

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xv. Book life of the plant.

xvi. SO2 allowances.

xvii. NOx allowances.

xviii. Nameplate capacity.

xix. Maximum summer capacity.

Response 19e. See EKPC's response to the Staff's Initial Request, Response 5 and EKPC's response to Sierra Club's Initial Request, Response 13c.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 20

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to Application Exhibit 1a at pages 12 to 13 of 14. Regarding the statement that "even if it did not produce any electric energy over this time horizon, the retrofit of Cooper 1 would be a break-even NPV."

- a. Produce any analyses, modeling files, and workpapers (in electronic format with formulas intact) used to calculate such break-even NPV.
- b. State whether the values for the inputs identified in 19e above were the same in the analysis used to calculate the break-even NPV as they were in the analysis used to calculate the "over \$50 million" NPV of the Project.
- i. If not, identify the annual value for each input that is different, and explain why it is different.

Responses 20a-b. See EKPC's response to the Staff's Initial Request, Response 5.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 21

**RESPONSIBLE PARTY:** James Read

Request 21. Refer to Application Exhibit 1a. With regards to the NPV modeling results discussed therein:

- a. Identify the vendor of the model used to generate the NPV results, and provide contact information for the vendor.
- b. Does the model require a license in order to gain access to raw (i.e., as used) data files? If so, provide a vendor contact who could provide such a license.
- c. Does the model require a license in order to operate the model? If so, provide a vendor contact who could provide such a license.
- d. Did an employee of Brattle Group or EKPC operate the model? If so, please identify the individual or individuals who operate the model at Brattle Group or EKPC.
- e. If EKPC uses any other production cost or optimization models or market valuation models aside from the model for this case, please identify those models and their vendors.
- f. Produce in machine-readable, electronic, digital format, as used by Brattle Group or EKPC, with protections removed, all input files used in production cost or optimization or market valuation modeling for this case.
- g. Please identify any changes to the input files that may be required to reproduce modeling for this case. Please specify why such changes are required.

- h. To the extent that such input files, as used by the Brattle Group or EKPC, cannot be produced in a commonly accessible format (i.e., text file, spreadsheet, or Access file), produce input files in a commonly accessible format.
- i. Produce in machine-readable, electronic, digital format, as used by the Company, with protections removed, all output files used in production cost or optimization or market valuation modeling for this case.
- j. To the extent that such output files, as used by Brattle Group or EKPC, cannot be produced in a commonly accessible format (i.e. text file, spreadsheet, or Access file), produce input files in a commonly accessible format.
- k. Produce any other files, worksheets, or workpapers used to develop, interpret, or review inputs or outputs of production cost or optimization or market valuation modeling for this case.
- 1. Please identify the assumptions, including any supporting documentation, Brattle Group or EKPC or its agents used in each base case and sensitivity scenario modeled.

Response 21a. The NPV analysis was carried out using Microsoft Excel. The Excel spreadsheets were created by The Brattle Group.

**Response 21b.** A license to use Excel is required.

**Response 21c.** A license to use Excel is required.

Response 21d. Yes. The model was prepared and used at The Brattle Group under the direction of James Read.

Response 21e. The NPV model used output of the RTSim generation simulation software. RTSim is licensed by EKPC. The vendor of RTSim is Simtec.

Response 21f. The spreadsheets used for the NPV analysis are self-contained. They include proposal terms as well as market prices. They also contain the relevant output from RTSim software.

**Response 21g.** No changes to inputs are required.

**Response 21h.** See response to 21f. above.

Response 21i. See response to 21f. The outputs of the NPV analysis spreadsheets are contained in the summary tables.

**Response 21i.** See response to 21f. above.

Response 21k. None.

Response 211. Assumptions are contained in the worksheet inputs. See response to Sierra Club's Initial Request, Response 13 for other input assumptions.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 22

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to Application Exhibit 1a, page 13 of 14, referring to the project being considered in this filing: "It would leave EKPC with 116 MW more coal-fired capacity than it would have if Cooper 1 was retired, and thus with that much more capacity exposed to coal market price risk and the potential for a carbon tax and/or carbon regulations."

Request 22a. Explain what is meant by "coal market price risk" and provide supporting analyses and workpapers (in electronic, machine-readable format).

Response 22a. The term "coal market price risk" refers to uncertainty about future market prices of coal. No analysis of coal price risk was performed for the evaluation.

Request 22b. State whether the NPV analysis included a sensitivity for "coal market price risk"?

- i. If so, provide the supporting analysis and workpapers (in electronic, machine-readable format).
  - ii. If not, explain why not.

Response 22b. We did not perform specific sensitivity analyses with respect to future coal market prices. The NPV analysis is consistent with the possibility that realized coal prices may be higher or lower than forward and forecast market prices.

Request 22c. Explain the "potential for a carbon tax and/or carbon regulations" and provide supporting analyses and workpapers (in electronic, machine-readable format).

Response 22c. This refers to the possibility that the US Congress will enact and the President will sign legislation instituting either a tax on carbon or a cap-and-trade system for carbon. No analysis of this prospect was performed.

Request 22d. State whether the NPV analysis of the Project or of the proposals on the Short List included a sensitivity for the "potential for a carbon tax and/or carbon regulations".

- i. If so, provide the supporting analysis and workpapers (in electronic, machine readable format).
  - ii. If not, explain why not.

Response 22d. No. However, the forward market prices and price forecasts for power and fuels presumably reflect a range of possible outcomes for carbon regulation and associated impacts.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 23

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 3, lines 18-21.

- a. Has EKPC developed plans to bring the Dale plant into compliance with MATS and other EPA regulations?
- i. If so, please provide such analyses and workpapers (in electronic, machine-readable format).
  - ii. If not, explain why not.

Response 23a. One or more of the bids received from the EKPC production project team addressed this alternative and it was analyzed along with all of the other bids. The analysis is provided in EKPC's response to the Staff's Initial Request, Response 5.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 24

**RESPONSIBLE PARTY:** 

available).

Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 4, lines 11-14. Please provide the following, with supporting workpapers (in electronic, machine-readable format):

- a. EKPC's historical annual peak load since 2002 (or earliest available).
- b. EKPC's historical annual capacity reserve requirement since 2002 (or earliest available).
  - c. EKPC's historical annual sales since 2002 (or earliest available).
  - d. EKPC's historical annual generation since 2002 (or earliest
- e. EKPC's projected annual peak load assumed for each of the years of the NPV analysis.
- f. EKPC's projected annual capacity reserve requirement assumed for each of the years of the NPV analysis.
- g. EKPC's projected annual sales assumed for each of the years of the NPV analysis.

Responses 24a-g. See table on page 2 of this response.

Request 24h. EKPC's projected annual generation (by plant) assumed for each of the years of the NPV analysis.

Response 24h. Each alternative was run through the RTSim production cost model and plant operations were developed based on market and operating cost assumptions. See EKPC's response to the Staff's Initial Request, Response 5.

	24(a)	24(b)	24(c)	24(d)
Year	Actual Peak	Capacity Reserve	Actual Net Total	Annual
	Demand (MW)	Requirement (MW)	Requirements (MWh)	Generation
2002	2,141	321.15	11,456,830	9,873,289
2003	2,487	373.05	11,568,314	9,049,905
2004	2,487	373.05	11,865,797	8,995,991
2005	2,601	390.15	12,527,829	10,943,175
2006	2,503	375.45	12,331,203	11,109,919
2007	2,783	417.45	13,080,146	11,400,065
2008	2,953	442.95	12,947,087	10,565,726
2009	3,130	469.50	12,371,602	10,539,491
2010	2,761	414.15	13,354,642	12,494,407
2011	2,851	427.65	12,674,890	12,350,289
2012	2,349	352.35	12,170,868	10,980,324

	24(e)	24(f)	24(g)
Year	Weather-Normalized Net Peak Demand (MW)	Capacity Reserve Requirement (MW)	Weather-Normalized Net Total Requirements (MWh)
2013	2,947	69.18	12,898,564
2014	2,980	70.11	13,078,179
2015	3,017	71.04	13,285,509
2016	3,056	72.06	13,540,771
2017	3,101	73.08	13,728,389
2018	3,140	74.01	13,931,887
2019	3,175	74.79	14,116,106
2020	3,196	75.36	14,286,199
2021	3,229	76.11	14,420,814
2022	3,258	76.83	14,590,107
2023	3,296	77.70	14,784,691

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 25

**RESPONSIBLE PARTY:** Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 4, lines 16-17. Has EKPC evaluated the "cost to serve load" if Dale and Cooper Unit 1 were retired "without any replacement capacity"?

- a. If so, provide such analyses and workpapers (in electronic, machine-readable format).
  - b. If not, explain why not.

Responses 25a-b. The base case was assumed to be a "do nothing" case where the Dale and Cooper 1 units were retired and no other actions were taken. See EKPC's response to the Staff's Initial Request, Response 5.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 26

RESPONSIBLE PARTY: Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 7, lines 19-22.

a. Please provide all inputs EKPC provided to Brattle Group, including supporting workpapers (in electronic, machine-readable format).

b. Please provide Brattle Group's "fixed costs analysis" including workpapers in electronic, machine-readable format.

Responses 26a-b. See EKPC's response to the Staff's Initial Request, Response 5.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 27

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 8, lines 1-3.

**Request 27a.** Produce the "six proposals" mentioned in their entirety.

Response 27a. See EKPC's responses to the Staff's Initial Request, Responses 5 and 7.

Request 27b. Identify and produce the seventh proposal that EKPC chose to include in the Short List, and explain why EKPC chose to include it.

**Response 27b.** See EKPC's response to the Staff's Initial Request, Response 7.

Request 27c. Please provide the NPV analysis and results for each of the seven proposals, including supporting workpapers (in electronic, machine-readable format with formulas intact).

Response 27c. See EKPC's response to the Staff's Initial Request, Response 7.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 28

RESPONSIBLE PARTY: Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 8, lines 19-20.

a. Please explain how long the project will take to "pay for itself."

b. Please explain how the project will "help improve operating costs for the second unit at the facility" and provide supporting workpapers (in electronic, machine-readable format).

**Responses 28.** See EKPC's responses to the Staff's Initial Request, Responses 3 and 7.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 29

RESPONSIBLE PARTY: Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 9, lines 5-6.

Request 29a. a. Please explain the claim that procuring smaller amounts of capacity "spreads technology and operation risks."

Response 29a. See EKPC's responses to the Staff's Initial Request, Response 3.

Request 29b. State whether there are potential cost savings associated with procuring larger blocks of capacity.

- i. If so, please explain.
- ii. If not, explain why not.

Response 29b. EKPC evaluated the MW sizes of the bids received. There are generally cost savings on a per MW installed basis for larger projects.

Request 29c. State whether EKPC entertained any bids for the full 300 MW of capacity need.

- i. If so, please provide those bids and any analyses performed by Brattle Group or EKPC in evaluating these bids, including workpapers (in electronic, machine-readable format).
  - ii. If not, explain why not.

Response 29c. See EKPC's responses to the Staff's Initial Request, Response 5.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 30

**RESPONSIBLE PARTY:** Julia J. Tucker

Refer to the Direct Testimony of Julia J. Tucker, page 10, lines 5-7.

Please provide the presentations made to the board on the RFP process and results.

Response 30 The entirety of this response is included on the CD filed under seal and subject to confidential treatment.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 31

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to the Direct Testimony of James Read, page 6, lines 7-9.

Request 31a. Produce the proposals submitted by EKPC's PPE&C group in response to

the RFP

Response 31a. Please see EKPC's response to the Staff's Initial Request, Response 5.

Request 31b. Produce any analyses, including workpapers (in electronic, machine-readable format) performed by Brattle Group in evaluating the proposals submitted by EKPC's PPE&C group.

Response 31b. Please see EKPC's response to the Staff's Initial Request, Response 5.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 32

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to the Direct Testimony of James Read, page 7, lines 13-19.

- a. Please provide any analyses, including supporting workpapers (in electronic, machine-readable format), performed by Brattle Group or EKPC on the projected capacity and energy position for the analysis period.
- b. Please provide annual operating characteristics for Cooper unit 1 used in Brattle Group's analysis, and supporting workpapers (in electronic, machine-readable format), including (not limited to):
  - i. Nameplate capacity.
  - ii. Maximum summer capacity.
  - iii. capacity factor or annual generation (in MWh).
  - iv. Heat rate.
  - v. Variable O&M cost (in \$/MWh).
  - vi. Fuel Costs (in \$/MMBtu).
  - vii. Fixed O&M cost (in \$/kw-yr).
  - viii. Annual capital expenditures, if not included in fixed O&M.
- c. Please provide PJM market energy and capacity price assumptions used in Brattle Group's analysis including supporting workpapers (in electronic, machine-readable format).
- d. Given that EKPC has joined PJM, did the Brattle Group consider market purchases of capacity and energy as an alternative to the Cooper retrofit project?

#### **INTERVENORS Request 32**

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- i. If so, please provide supporting analyses, including workpapers (in electronic, machine-readable format).
  - ii. If not, explain why not.

**Responses 32a-d.** See EKPC's response to the Staff's Initial Request, Response 5.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 33

**RESPONSIBLE PARTY:** 

James Read

Refer to the Direct Testimony of James Read, page 8, lines 1-9. Please confirm that there are market conditions that could exist whereby the NPV of Cooper unit 1 could be negative.

- a. If so, please provide supporting analyses, including workpapers (in electronic, machine-readable format).
  - b. If not, explain why not.

Response 33. The question is unclear. The NPVs were calculated based on forward prices and price forecasts of capacity, energy, and coal at the time proposals were received. If the question is, "Could the NPV of continued operation of Cooper Unit No. 1 be negative at some time in the future," the answer is "yes".

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 34

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to the Direct Testimony of James Read, page 8, lines 11-12. State whether Brattle Group evaluated combinations of proposals to fulfill EKPC's capacity need.

- a. If so, please provide supporting analyses, including workpapers (in electronic, machine-readable format).
  - b. If not, explain why not

<u>Responses 34.</u> We evaluated proposals on a stand-alone basis in light of PJM market prices. See EKPC's response to the Staff's Initial Request 1.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 35

**RESPONSIBLE PARTY:** 

**James Read** 

Refer to the Direct Testimony of James Read, page 9, lines 15-17. Please explain the "market risks" that EKPC would hedge by shifting towards more natural-gas generation and provide supporting analyses, including workpapers (in electronic, machine-readable format).

Response 35. The term "market risk" refers to uncertainty about future market prices, including electricity, coal, natural gas, and other fuels. Uncertainty about market prices creates uncertainty about the future market value of generation assets. Reducing the concentration of coal-fired generation in the EKPC portfolio would tend to reduce uncertainty about the future value of the EKPC portfolio due to the imperfect correlation between market prices and the returns to generation assets. No analysis of this issue was performed.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 36

**RESPONSIBLE PARTY:** 

Jerry B. Purvis

**Request 36.** Refer to the Direct Testimony of Jerry B. Purvis.

Request 36a. Identify the type or types of coal that Cooper Unit 1 and Cooper Unit 2

currently burn

Response 36a. EKPC units Cooper 1 and Cooper 2 currently burn Central Appalachian bituminous coal.

Request 36b. State whether EKPC plans to change the type of coal it burns at Cooper unit 1 and Cooper Unit 2 over the next ten years

i. If so, please provide analyses performed by EKPC to support coal switching.

Response 36b. EKPC has no current plans to change the type of coal it is burning. However, this will be driven by availability, economics and permit compliance.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 37

**RESPONSIBLE PARTY:** Jerry B. Purvis

Refer to the Direct Testimony of Jerry B. Purvis, page 7, lines 4-5. Does EKPC expect to be responsible for the costs for additional CEMs to demonstrate MATS compliance?

- a. If so, please provide analyses and workpapers (in electronic, machine-readable format) that were used estimate costs for the CEMs to "demonstrate compliance with MATS."
  - b. If not, explain why not.

Responses 37a-b. In accordance with the EPA Consent NSR, EKPC installed CEMS on Cooper Unit 2 for demonstration purposes not as a compliance method. The existing CEMS required by the EPA Consent Decree shall be used as a compliance method for both Cooper Unit 1 and Unit 2. EPA and the Divisions of Air Quality have a pending application under the Kentucky Title V program that requests approval for this monitoring plan. Should DAQ and/or EPA require additional CEMS, EKPC would seek rate recovery through appropriate amendments to its environmental compliance plan and surcharge mechanism. At this time, no additional CEM costs have been assumed to demonstrate compliance with MATS.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 38

**RESPONSIBLE PARTY:** 

identified.

**Block Andrews** 

Refer to the Direct Testimony of Block Andrews, page 4, lines 14-19.

Request 38a. Did Burns & McDonnell or EKPC identify any options beyond that of ducting Cooper 1 exhaust through the Cooper 2 DFGD/PJFF system?

- i. If so, please enumerate all compliance options discussed or
- ii. If no other options were discussed or identified, please explain why not.

Responses 38a. Burns & McDonnell looked at Mercury controls and Dry Sorbent Injection in combination with either a new full fabric filter system, polishing fabric filter, conversion of existing ESP to a fabric filter system, ESP upgrades, or using ESP units 1 and 2 in series.

Request 38b. Did Burns & McDonnell or EKPC consider emissions averaging as a compliance option?

- i. If so, please provide analyses and workpapers (in electronic, machine-readable format) related to the consideration of emissions averaging.
  - ii. If not, why not?

Responses 38b. Yes. The MATS rule allows either individual unit emissions levels or multiple unit averaging. Unit averaging adds an additional level of complexity by nature of having to coordinate multiple unit emissions based on when and how they operate. No further evaluation of unit averaging was performed.

Request 38c. Did Burns & McDonnell or EKPC consider injecting dry sorbent used at the dry FGD and pumping it directly to Cooper 1's exhaust, ahead of the ESP (effectively creating a DSI system) as a compliance option?

- i. If so, please provide analyses and workpapers (in electronic, machine-readable format) related to the consideration of that option.
  - ii. If not, why not?

Responses 38c. Burns & McDonnell evaluated using Trona and Sodium Bicarbonate as the sorbent to control acid gases. We did not evaluate the hydrated lime sorbent used in Unit 2 FGD.

Responses 38c(ii). Based on the design coal, 92% SO<sub>2</sub> removal is required to meet MATS limit. A 95% HCl removal is required to meet the MATS limit. Hydrated lime injected upstream of the DSI will not meet the MATS removal requirements. Additionally, the additional dust loading from the DSI could increase PM emissions to the ESP which would make the unit unable to comply with the MATS 0.03 lb/MMBtu PM limits.

<u>Request 38d.</u> Did Burns & McDonnell or EKPC consider switching to an alternative type of coal, with different emission properties, as a compliance option?

Responses 38d. No. Neither Burns & McDonnell nor EKPC considered switching to an alternative type of coal, with different emission properties, as a compliance option.

#### **INTERVENORS Request 38**

Page 3 of 3

Request 38d(i). If so, please provide analyses and workpapers (in electronic, machine-readable format) related to the consideration of coal switching as a compliance option.

Responses 38d(i). Not applicable.

Request 38d(ii). If not, why not?

Responses 38d(ii). EKPC has no immediate plans to switch fuels. The control options chosen for this project would be expected to accommodate a wide range of fuel types which gives EKPC fuel flexibility.

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#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 39

**RESPONSIBLE PARTY:** 

**Block Andrews** 

Refer to the Direct Testimony of Block Andrews, page 7, lines 16 and 17, which state, "Andritz is willing to guarantee emissions and performance levels that will meet MATS, and BART compliance limits."

- a. Identify and explain the terms of the "guarantee" provided by Andritz regarding MATS and BART compliance.
- b. Provide all communications between Andritz and EKPC regarding any "guarantee" made to meet MATS and BART compliance limits.
- c. State whether Andritz is assuming liability, financial or otherwise, if MATS and BART compliance limits aren't met
  - i. If so, please provide all supporting documentation.
  - ii. If not, explain why not.

Response 39a. Please see EKPC's response to the Staff's Initial Request, Response 20. Please note that Andritz has guaranteed that the modified FGD system, subject to the proper operation of the equipment, will meet or exceed certain emission limits and performance levels specified in the contract. The specified emission limits will be in compliance with MATS and BART compliance limits. Andritz did not guarantee compliance with MATS and BART compliance limits, but rather the emissions and performance levels to be expected from the equipment, assuming it was operating properly.

Response 39h. The negotiation of the contract between EKPC and Andritz focused on the performance the equipment would be achieving. The resulting emission limits will comply with the MATS and BART requirements. As Andritz did not guarantee MATS and BART compliance, there are no communications between EKPC and Andritz that are responsive to the request.

Response 39c. The terms of a confidential Equipment Contract between EKPC and Andritz include liquidated damages or require corrective action for performance shortfalls.

Those remedies are not specifically tied to EKPC's operation of generating units to meet MATS and BART compliance limits.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 40

RESPONSIBLE PARTY: Block Andrews

Refer to the Direct Testimony of Block Andrews, page 12, lines 8 through 20:

- a. Please provide any and all analyses and workpapers (in electronic, machine-readable format) related to the cost estimations and assumptions.
- b. Please provide all documents and workpapers (in electronic, machine-readable format) related to "equipment costs based on budgetary proposals."

Responses 40a-b. Please see the Application, Exhibit 9, the Direct Testimony of Block Andrews, Exhibit BA-1, pages 37 through 40 of 43 for a breakdown of the estimated costs for this project. All documents, analyses, and workpapers supporting the estimated costs are not in the possession of EKPC but are proprietary information in the possession of Burns & McDonnell. Due to the competitively sensitive and proprietary nature of these materials, as well as the overly broad nature of the request, EKPC objects to the request.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 41

**RESPONSIBLE PARTY:** Block Andrews

Refer to the Direct Testimony of Block Andrews, page 13, line 1. Please provide the analyses and workpapers (in electronic, machine-readable format) related to the estimated increase of \$4.45/MWh in variable O&M costs associated with the Project.

Response 41. The O&M costs are described on page 37 of 43 of my initial testimony. Calculations are based on Engineer's proprietary data.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 42

**RESPONSIBLE PARTY:** 

**Scott Drake** 

Request 42. Please describe current DSM programs offered by EKPC, including demand-response, interruptible load, and efficiency programs. Please note the customer class and sector, first year or lifetime cost (specify), MW or MWh reductions, expected life, and penetration of these programs.

Refer to 2012 Integrated Resource Plan, Technical Appendix – Demand Side Management Vol. 2, Exhibit DSM-6, entire exhibit. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120420">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120420</a> EKPC IRP%20Appendix%20Vol%202.pdf, PDF pages 78 through 108 of 127.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 43

**RESPONSIBLE PARTY:** 

**Scott Drake** 

Request 43. Please describe proposed DSM programs to be offered by EKPC, including demand-response, interruptible load, and efficiency programs. Please note the customer class and sector, expected first year or lifetime cost (specify), MW or MWh reductions, expected life, and penetration of these programs.

Refer to 2012 Integrated Resource Plan, Technical Appendix – Demand Side Management, Vol. 2, Exhibits DSM-3, 4, and 5, entire exhibits. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-">http://psc.ky.gov/PSCSCF/2012%20cases/2012-</a>
00149/20120420 EKPC IRP%20Appendix%20Vol%202.pdf, PDF pages 23 through 77 of 127.

### PSC CASE NO. 2013-00259 RESPONSE TO INFORMATION REQUEST

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 44

**RESPONSIBLE PARTY:** 

**Scott Drake** 

Request 44. Please state whether existing DSM programs are incorporated into the current case.

- a. If so, describe how and provide workpapers showing such.
- b. If not, explain why not.

Responses 44a. EKPC issued a Request for Proposals (RFP) as explained in the 2012 IRP, Section 1.5 Recommended Plan of Action, page 7 and in detail in Section 1.6 Issues or Uncertainties that Could Affect Successful Implementation of Plan, page 8. The current case is the result of the RFP. All existing and proposed DSM programs were incorporated into the 2012 IRP that resulted in EKPC issuing the RFP.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 45

**RESPONSIBLE PARTY:** 

**Scott Drake** 

Request 45. Please state whether proposed DSM programs are incorporated into the current case.

- a. If so, describe how and provide workpapers showing such.
- b. If not, explain why not.

Responses 45a. See EKPC's response to Sierra Club's Initial Request, Response 44a.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 46

**RESPONSIBLE PARTY:** 

**Scott Drake** 

Request 46. Identify and produce any DSM potential studies performed by or for EKPC in the last six years, including attendant workbooks or calculations.

- a. State whether the results of any such studies are incorporated into the current case.
  - i. If so, explain how.
  - ii. If not, explain why not.

Refer to EKPC's response to Request No. 18 in Case No. 2012-00149, Movant's Supplemental Request for Information Response dated August 3, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-">http://psc.ky.gov/PSCSCF/2012%20cases/2012-</a>

00149/20120820 EKPC Response to Sonia%20McElroy%20 and%20 Sierra Club.pdf, PDF page 56 of 119. As noted in the response, the EPRI report was utilized as an overall reasonableness check, but was not utilized to evaluate individual programs examined in the 2012 IRP. Consequently, the EPRI report was not incorporated into the current case.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 47

**RESPONSIBLE PARTY:** Scott Drake

Refer to p. 8 of EKPC's 2012 Integrated Resource Plan. With regards to the statement that "EKPC's experience indicates that the financial investment required to successfully implement DSM programs exceeds the investment assumed in the California tests, principally due to promotional costs incurred to derive awareness, education and adoption in the EKPC service territory":

Request 47a. Identify the specific experience referenced therein.

Response 47a. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request 10a in Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717</a> EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20In formation%20dtd%20060812.pdf, PDF page 33 of 158.

Request 47b. Identify the percent or amount by which "the financial investment required to successfully implement DSM programs exceeds the investments assumed in the California tests".

Response 47b. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request 10b in Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717\_EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20Information%20dtd%20060812.pdf">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717\_EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20Information%20dtd%20060812.pdf</a>, PDF pages 33 and 34 of 158.

Request 47c. Identify and produce any documents, studies, or analyses upon which that statement is based.

Response 47c. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request 10c in Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717</a> EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20In formation%20dtd%20060812.pdf, PDF page 34 of 158.

Request 47d. Does EKPC assert that the California tests should not include "promotional costs incurred to derive awareness, education and adoption" of DSM programs? If so, provide the basis for this assertion.

Response 47d. EKPC includes promotional costs in the California tests when evaluating new DSM programs. The costs are based on the best available information obtained from other similar utility DSM programs.

Request 47e. State whether EKPC has factored this purported additional investment needed to implement DSM programs in the EKPC service territory in comparison to the investment assumed in the California tests into its analysis of the levels of energy savings or peak demand reduction that it can achieve through DSM programs.

- i. If so, explain how and produce any supporting workpapers (in machine readable format with formulas intact)
  - ii. If not, explain why not.

Response 47e(i). This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response Request No. 2 in Case No. 2012-00149, Movant's Supplemental Request for Information Response dated August 3, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120820">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120820</a> EKPC Response to Sonia%20McElroy%20 and%20 Sierra Club.pdf, PDF page 17 of 119.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 48

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Request 48. With regards to EKPC's most recent load forecast:

- a. Produce such forecast and any supporting analyses, modeling, or workpapers (in machine-readable format with formulas intact) supporting that forecast. Include in the forecast winter peak demand, summer peak demand, and annual energy requirements.
- b. Identify each specific "government regulation" efficiency provision, including but not limited to any provisions of the Energy Independence and Security Act and the American Recovery and Reinvestment Act, that were accounted for in that load forecast.
- c. For each such efficiency provision, identify the annual level of energy savings and peak demand reduction that were assumed in the forecast.

Responses 48a-c. A copy of EKPC's 2012 Load Forecast is provided on the attached CD.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 49

**RESPONSIBLE PARTY:** Scott Drake

Refer to the DSM Report found in Technical Appendix Volume 2 of EKPC's 2012 Integrated Resource Plan.

- a. State whether EKPC has carried out or reviewed any more recent analyses of the cost, feasibility, or potential for DSM programs since the DSM Report was completed.
- b. If so, produce all such analyses, along with supporting modeling files and workpapers (in machine readable format with formulas intact).
  - iv. Capacity prices.
  - v. Carbon prices.
  - vi. Renewable energy credits.
  - vii. Variable O&M cost.
  - viii. Fixed O&M cost.
  - ix. O&M costs to comply with environmental regulations.
  - x. Environmental capital costs.
  - xi. Non-environmental capital costs.
  - xii. Unit dispatch price.
  - xiii. Heat rate.
  - xiv. Discount rate.
  - xv. Book life of the plant.
  - xvi. SO2 allowances.

#### **INTERVENORS Request 49**

#### Page 2 of 2

xvii. NOx allowances.

xviii. Nameplate capacity.

xix. Maximum summer capacity.

Responses 49a. EKPC has not carried out or reviewed any more recent analyses of the cost, feasibility, or potential for DSM programs since the DSM Report was completed.

Responses 49b. Not Applicable

INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 50

**RESPONSIBLE PARTY:** 

**Scott Drake** 

Refer to p. 5 of the DSM Report found in Technical Appendix Volume 2 of EKPC's 2012 Integrated Resource Plan. Identify the "utilities around the country" and the "best practice DSM programs" referenced therein.

Response 50. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer EKPC's response to Request No. 37 in Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717</a> EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20In formation%20dtd%20060812.pdf, PDF pages 100 through 110 of 158.

INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 51

**RESPONSIBLE PARTY:** 

Scott Drake

Refer to p. 5 of the DSM Report found in Technical Appendix Volume 2 of EKPC's 2012 Integrated Resource Plan. Identify and produce the "regional studies of energy efficiency opportunities" referenced therein.

Response 51. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request No. 38 in PSC Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717\_EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20Information%20dtd%20060812.pdf">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717\_EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20Information%20dtd%20060812.pdf</a>, PDF pages 112 and 113 of 158.

INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 52

**RESPONSIBLE PARTY:** 

Scott Drake

Refer to p. 6 of the DSM Report found in Technical Appendix Volume 2 of EKPC's 2012 Integrated Resource Plan. Identify how each of the 113 DSM measures referenced therein scored on each of the four screening criteria.

Response 52. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request No. 39 in Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717</a> EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20In formation%20dtd%20060812.pdf, PDF pages 115 through 125 of 158.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 53

RESPONSIBLE PARTY: Julia J. Tucker

Refer to p. 8 of the DSM Report found in Technical Appendix Volume 2 of EKPC's 2012 Integrated Resource Plan. With regards to the DSMore modeling referenced therein:

Request 53a. Produce the DSMore modeling files, include all inputs and outputs, and workpapers (in machine-readable format with formulas intact) for all DSM modeling carried out by or for EKPC.

Response 53a. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request No.13 in Case No. 2012-00149, Movants' Supplemental Requests for Information dated August 3, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120820">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120820</a> EKPC Response to Sonia%20McElroy%20 and%20 Sierra Club.pdf, PDF page 46 of 119.

Request 53b. Identify the assumed value for each of following costs used in the DSMore modeling and specify the unit of its measure (e.g., \$/MWh, \$/MW, \$/ton, etc.):

- i. Marginal energy cost.
- ii. Marginal generation capacity cost.

#### **INTERVENORS Request 53**

#### Page 2 of 2

- iii. Marginal transmission & distribution capacity cost.
- iv. Fossil fuel cost.
- v. Environmental capacity cost.
- vi. Carbon price.
- vii. SO2 allowance price.
- viii. NOx allowance price.

Response 53b(i-vii). This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's responses to Request Nos. 40, 41 and 43 in Case No. 2012-00149, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717\_EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20Information%20dtd%20060812.pdf">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120717\_EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20Information%20dtd%20060812.pdf</a>, PDF pages 127 through 130 and 134 of 158.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 54

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Refer to p. 15 of the DSM Report found in Technical Appendix Volume 2 of EKPC's 2012 Integrated Resource Plan.

Request 54a. Explain the basis for the claim that \$0/MWh is the "likely value placed on carbon dioxide over the 15 year planning period," and produce any analyses or documents supporting that claim.

Responses 54a. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request No.43 in Case No. 2012-00149, First Request for Information Response, Movants' Initial Requests for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-">http://psc.ky.gov/PSCSCF/2012%20cases/2012-</a>

00149/20120717 EKPC%20Response%20to%20Movants%20Initial%20Requests%20for%20In formation%20dtd%20060812.pdf, PDF page 134 of 158.

Request 54b. State whether EKPC still believes that \$0/MWh is the "likely value placed on carbon dioxide" over the next 15 years.

- i. If so, explain why and produce any analyses or documents supporting that claim.
  - ii. If not, explain why not and identify what value is likely.

#### **INTERVENORS Request 54**

Responses 54b(i). EKPC did not explicitly forecast the potential value of carbon dioxide emissions. EKPC assumed that the market has taken a view of the likely costs associated with complying with proposed environmental rules and that those costs are appropriately reflected in the future expected market prices.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 55

**RESPONSIBLE PARTY:** Scott Drake

pages 104 and 105 of 119.

Refer to EKPC's response to Staff Initial Request 1b in the 2012 Integrated Resource Plan proceeding.

- a. Explain why "many EKPC Existing DSM Programs are not currently performing at that theoretical maturity level."
- b. Produce any analyses or evaluations of the performance of EKPC's existing DSM programs.
- c. Produce any analyses or evaluations of ways to improve the performance of such programs.
- d. Identify and explain any steps that EKPC has taken or is taking to improve the performance of any of its existing DSM programs.

Responses 55a-d. This request was asked and answered in the data requests issued by the Sierra Club in Case No. 2012-00149 and nothing has changed since that response was submitted. Refer to EKPC's response to Request No. 24 in Case No. 2012-00149, Movants' Supplemental Requests for Information dated August 3, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120820\_EKPC\_Response\_to\_Sonia%20McElroy%20\_and%20\_Sierra\_Club.pdf">http://psc.ky.gov/PSCSCF/2012%20cases/2012-00149/20120820\_EKPC\_Response\_to\_Sonia%20McElroy%20\_and%20\_Sierra\_Club.pdf</a>, PDF

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 56

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Refer to page 4 of EKPC's Response to Comments of Intervenor Sierra Club on the 2012 Integrated Resource Plan of EKPC, case 2012-00149, dated February 11, 2013. For each of the states listed at the bottom of the page and for the U.S. Total, provide.

- a. Average annual residential per-capita electric usage.
- b. The percentage of average annual per capita income that the average annual per-capita electric usage represents, based on average retail residential rates in that state.

Responses 56a-b. See page 2 of this response.

State	Consumption	Residential retail price	Annual amount spent on	Average income per	Share of
	(MWh/customer)	(cents/kWh)	electricity per customer	customer	income
California	06:9	15.55	\$1072.86	\$132,248	0.81%
Illinois	9.24	11.37	\$1051.07	\$113,811	0.92%
Indiana	12.44	10.38	\$1290.80	\$87,655	1.47%
Kentucky	14.38	9.33	\$1341.65	\$80,079	1.68%
Massachusetts	7.59	14.94	\$1133.95	\$135,487	0.84%
Michigan	8.06	14.14	\$1139.68	\$86,990	1.31%
Ohio	10.95	11.66	\$1276.77	\$92,516	1.38%
U.S.	11.19	11.88	\$1329.37	\$92,279	1.44%

Consumption is based on a five-year average spanning 2007-2011. Retail prices are from 2011. Income is from 2012. All data come from EIA.

electricity by customers to be a larger share of income for Kentuckians than said expenditures would be for customers from other national average. Moreover, Kentucky has a lower average income per customer than other states; this leads to expenditures on customers. As a result, the average annual amount spent on electricity per customer tends to be larger than other states and the Kentucky has much lower residential retail prices when compared to other states, but has much larger consumption by states.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 57

**RESPONSIBLE PARTY:** Scott Drake

Refer to page 4 of EKPC's 2012 Integrated Resource Plan and EKPC's response to SC data request 2-1 in the IRP proceeding

- a. State whether EKPC is still planning to achieve approximately 50 MW of cumulative summer peak demand reduction and 109,008 MWh of cumulative energy savings from non-interruptible DSM programs over the time period of 2013 through 2017.
- i. If not, identify what levels of peak demand reduction and energy savings EKPC is planning to achieve over the time period of 2013 through 2017.
- ii. If so, explain why those amounts are approximately onequarter of the 208.3 MW of summer peak demand reduction and 488,043 MWh of energy savings that EKPC's 2012 Integrated Resource Plan reported is cost-effectively achievable through non-interruptible DSM programs through 2017.

<u>Response 57.</u> Yes, EKPC is still planning to achieve the 50 MW reduction in summer peak demand.

Refer to EKPC's response to Request No. 1b in Case No 2012-00149, Commission Staff's First Request for Information dated June 8, 2012. Please see <a href="http://psc.ky.gov/PSCSCF/2012%20cases/2012-">http://psc.ky.gov/PSCSCF/2012%20cases/2012-</a>

<u>00149/20120625</u> EKPC%20Response%20to%20Commission%20Staff%201st%20Request%20f or%20Info%20with%20Conf%20Petition.pdf, PDF pages 17 and 18 of 139.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 58

**RESPONSIBLE PARTY:** 

Julia J. Tucker

Request 58. Refer to Exhibit JJT-1.

Request 58a Please confirm that EKPC stated in the RFP that it would not accept any proposals for demand response resources.

Responses 58a. Yes, EKPC stated in the RFP that it would not accept any proposals for demand response resources.

Request 58b. Please explain why EKPC limited the RFP to supply-side resources and did not accept proposals for demand-side resources.

**Responses 58b.** EKPC was evaluating the loss of large, central station supply.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 59

**RESPONSIBLE PARTY:** Jerry B. Purvis

Request 59. State whether EKPC has prepared or caused to be prepared any study of the costs to bring Cooper Unit 1 and Cooper Unit 2 (either individually or jointly), or the Dale Station into compliance with the regulatory options being considered in EPA's proposed effluent limitations guidelines.

- a. If so:
  - i. Identify the costs that were identified.
  - ii. State whether such costs were factored into the NPV

analysis for the Project.

- 1. If so, explain how.
- 2. If not, explain why not.
- iii. Produce all such studies.
- b. If not, explain why not.

Response 59b. EPA has not promulgated the final rule for the National Effluent Limitations Guidelines. Therefore, no costs can be developed in detail to address or be factored into a NPV analysis.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 60

**RESPONSIBLE PARTY:** 

Jerry B. Purvis

Request 60. State whether EKPC has prepared or caused to be prepared any study of the costs to bring Cooper Unit 1 and Cooper Unit 2 (either individually or jointly), or the Dale Station into compliance with the regulatory options being considered in EPA's proposed Clean Water Act Section 316(b) rule.

- a. If so:
  - i. Identify the costs that were identified.
  - ii. State whether such costs were factored into the NPV

analysis for the Project.

- 1. If so, explain how.
- 2. If not, explain why not.
- iii. Produce all such studies.

Response 60a. EPA has not promulgated the final rule for the Clean Water Act Section 316(b) rule. Therefore, no costs can be developed in detail to address or be factored into a NPV analysis.

#### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 61

**RESPONSIBLE PARTY:** 

Jerry B. Purvis

Request 61. State whether EKPC has prepared or caused to be prepared any study of the costs to bring Cooper Unit 1 and Cooper Unit 2 (either individually or jointly), or the Dale Station into compliance with the regulatory options being considered in EPA's proposed Coal Combustion Residuals rule.

- a. If so:
  - i. Identify the costs that were identified.
- ii. State whether such costs were factored into the NPV analysis for the Project.
  - 1. If so, explain how.
  - 2. If not, explain why not.
  - iii. Produce all such studies.
  - b. If not, explain why not.

Responses 61b. EPA has not promulgated the final rule for the Coal Combustion Residuals rule. Therefore, no costs can be developed in detail to address or be factored into a NPV analysis.

### INTERVENORS' INITIAL REQUEST FOR INFORMATION DATED 10/04/13 REQUEST 62

**RESPONSIBLE PARTY:** 

Jerry B. Purvis

Request 62. State whether EKPC has prepared or caused to be prepared any study of the costs to bring Cooper Unit 1 and Cooper Unit 2 (either individually or jointly), or the Dale Station into compliance with any potential new source performance standards for greenhouse gases for existing power plants under the Clean Air Act.

- a. If so:
  - i. Identify the costs that were identified.
  - ii. State whether such costs were factored into the NPV

analysis for the Project.

- 1. If so, explain how.
- 2. If not, explain why not.
- iii. Produce all such studies.
- b. If not, explain why not.

Response 62b. EPA has not filed proposed or final guidance under Section 111(d) of the Clean Air Act. Existing Electric Generating Units do not have to comply with New Source Performance Standards.