

January 27, 2006

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Ms. Elizabeth O'Donnell Executive Director Commonwealth of Kentucky Public Service Commission 211 Sower Boulevard PO Box 615 Frankfort, KY 40602-0615

JAN 2 7 2005 PUBLIC SERVICE COMMISSION?

RE: Application for Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky. PSC Case No. 2005-00458

Dear Ms. O'Donnell:

Enclosed please find an original and eight (8) copies of EKPC's Answer to Commission Staff's First Data Request and EKPC's Answer to Doug Doerrfeld's First Data Request, along with the original and eight (8) copies of a Petition for Confidential Treatment of Information.

Also enclosed in the back of each Answer to Commission Staff's First Data Request are copies that contain an Exhibit Index and a Master CD/Rom, which includes all Exhibits referred to in each Answer. Please insert the Master CD/Rom into your computer and open the file named Index.pdf and proceed by clicking on the icon you wish to view.

I hope this meets with the approval of the Commission. If not, please advise and we can furnish you with the necessary hard copies.

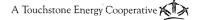
Very truly yours,

Sherman Goodpaster III

Senior Corporate Counsel

SG/ti

4775 Lexington Road 40391 P.O. Box 707, Winchester, Kentucky 40392-0707 Tel. (859) 744-4812 Fax: (859) 744-6008 http://www.ekpc.coop



### **COMMONWEALTH OF KENTUCKY**

### **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

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PUBLIC SERVICE

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THE APPLICATION OF EAST KENTUCKY	)
POWER COOPERATIVE, INC. FOR A CERTIFICATE	)
OF PUBLIC CONVENIENCE AND NECESSITY FOR	) CASE NO
FOR THE CONSTRUCTION OF A 138 kV ELECTRIC	) 2005-00458
TRANSMISSION LINE IN ROWAN CO, KENTUCKY	)

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# ANSWER TO COMMISSION STAFF'S FIRST DATA REQUEST DATED JANUARY 20, 2006

### PSC Request 1 Page 1 of 1

#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 1

#### **RESPONSIBLE PARTY:** JOE SETTLES

**REQUEST:** Refer to page 2 of the Prepared Testimony of Mark Brewer ("Brewer Testimony"). When utility services affect land under its jurisdiction, explain whether it is the United States Forest Service's ("USFS") usual practice to conduct environmental assessments ("EA") rather than having an outside third party conduct the EA.

**RESPONSE:** Based on EKPC's experience, the USFS can have members of their local staff prepare the EA or they can ask that the applicant provide a consultant for that service. Either option is acceptable and the decision is likely based upon their local staff availability and expertise. The Daniel Boone National Forest Staff ("DBNF Staff") had someone available to prepare the EA for this project, and elected to do.

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### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC CASE NO. 2005-00458

### INFORMATION REQUEST RESPONSE

### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 2

### **RESPONSIBLE PARTY:** MARK BREWER

**REQUEST:** Refer to page 2 of the Brewer Testimony. Explain whether the six alternate routes examined by the USFS in its EA included East Kentucky's Option 1 through Option 3.

**RESPONSE:** EKPC is not aware that the USFS specifically or officially adopted EKPC's Options as those alternatives set forth in the EA. However, three of their routes are very similar to EKPC's Options 1 through 3.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 3

#### RESPONSIBLE PARTY: MARK BREWER AND JOE SETTLES

**REQUEST:** Refer to page 2 of the Brewer Testimony. Provide a list and discussion of the materials that East Kentucky provided to the USFS that enabled the USFS to conduct its EA.

**RESPONSE:** Refer to the written correspondence provided for Data Response Item 21 Exhibit A below for all of the documentation provided to the USFS. Most of this material is information requested by the USFS related to the Environmental Assessment ("EA"). Maps and drawings in the possession of EKPC that were provided to the USFS no longer exist, other than Brewer Exhibits B1 through B11 which may have been shared or discussed with the USFS.

EKPC provided a mist netting survey, a cultural resource survey, information from EKPC's open house, and maps to help the USFS prepare the document. EKPC biologists, contractors and USFS personnel performed the mist netting survey. EKPC staff compiled the data and prepared the report for the USFS. The archaeological survey detailed the findings of cultural resources in the area. This survey work and report were prepared by AMEC Inc., and USFS personnel reviewed the results of the survey. EKPC also provided the USFS with the number of attendees at EKPC's open house and public

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input that concerned route location. These reports and open house information were a part of the data set the USFS apparently used in preparing the Environmental Assessment for the project.

#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

# INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 4

#### **RESPONSIBLE PARTY:** MARK BREWER

**REQUEST:** Refer to page 2 of the Brewer Testimony. Discuss whether East Kentucky expressed a ranked preference of its routes to the USFS when the materials were provided to the USFS.

**RESPONSE:** EKPC does not believe that a preference was presented at the time the three EKPC Options were initially presented to the USFS. However, during the course of the route selection process and review of potential routes, EKPC's ranked preference was made known.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 5

#### **RESPONSIBLE PARTY:** MARK BREWER

**REQUEST:** Refer to page 2 of the Brewer Testimony. Of the route(s) that did not cross the Daniel Boone National Forest ("Forest") that were evaluated by the USFS, discuss and provide documentation as to the nature of each route that rendered it unacceptable to the USFS when compared to the preferred route through the Forest.

**RESPONSE:** EKPC does not have access to the documentation of routes evaluated by the USFS and associated reasons that rendered them unacceptable, other than as provided in the Environmental Assessment (EA).

However, as stated in the Prepared Testimony of Mark Brewer, EKPC was contacted by the USFS for assistance in refining these routes. There were conversations discussing the impact of USFS Alternative E and H as shown on Application Exhibit VIII<sub>2</sub> such as high impact to residential and commercial development, significant riparian issues and overall impact to private property owners.

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### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC CASE NO. 2005-00458

### INFORMATION REQUEST RESPONSE

# COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 6

**RESPONSIBLE PARTY:** JOE SETTLES

**REQUEST:** Refer to page 3 of the Brewer Testimony. Discuss whether it is common for the USFS to seek outside assistance in performing EA's.

**RESPONSE:** It has been EKPC's experience that it is more common for an outside contractor to prepare the environmental document than a USFS employee. Of four recent EKPC projects on National Forest System Lands, one of the Environmental Assessments was prepared by USFS personnel, and three were prepared by a third party.

#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 7

#### RESPONSIBLE PARTY: JOE SETTLES AND MARK BREWER

**REQUEST:** Refer to page 3 of the Brewer Testimony. Describe the materials and expertise the USFS required of East Kentucky in order to complete the EA of East Kentucky's proposed route.

**RESPONSE:** EKPC provided mist-netting crews for the bat survey work performed for this project. Individuals involved in this survey included John MacGregor (Indiana Bat Recovery Team Member); Eric R. Britzke (Tennessee Technological University, Cookeville, Tennessee); Tom Biebighauser (Daniel Boone National Forest, Morehead Ranger District, Morehead, Kentucky); Annie Tibbels and Maarten Vonhof (University of Tennessee, Knoxville, Tennessee); Amy Bradshaw, Tracy Jubenville, Paul McMurray, and Mark Vukovich (Eastern Kentucky University, Richmond, Kentucky); Josh Littrell and Chris Carpenter (biological consultants); and Seth Bishop, Jeff Hohman, Joe Settles, and Josh Young (East Kentucky Power Cooperative, Winchester, Kentucky). The place of employment for the individuals above is current for the time the survey was performed. Once the mist netting survey was completed, EKPC staff prepared a report detailing the results and efforts of the survey. This report was provided to the USFS for their use in preparation of any environmental documents.

AMEC Earth and Environmental, Inc. archaeological personnel conducted the Phase 1 archaeological survey required for the project. The report was authored by David Schatz and Lorene Miner. The principal investigator of the report was Anne Bader. The report was prepared for EKPC and submitted to the USFS upon completion.

Additionally, some of the information contained in the documents supplied as part of Item 21 and the development of routes as explained in Item 8 were used to develop and refine the contents of the EA.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 8

#### RESPONSIBLE PARTY: MARK BREWER AND JOE SETTLES

**REQUEST:** Refer to page 3 of the Brewer Testimony. Describe the specific assistance East Kentucky provided to the USFS to refine the routes within the specific corridors that had been identified by the USFS.

**RESPONSE:** The USFS had specific questions or concerns on alternative routes that included ways to avoid steep slopes, clearing in riparian areas, creeks and streams, and to minimize access roads, etc. EKPC and the USFS discussed erosion control, best construction management practices, etc. and worked together to refine the alternative routes to address their specific concerns. Refer to Brewer Exhibits B1 through B11 attached to the Prepared Testimony of Mark Brewer for examples of some of the variations of the primary alternatives that were evaluated and considered. These refinements were relayed to the USFS by maps, meetings and phone conversations.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 9

#### **RESPONSIBLE PARTY:** MARK BREWER

**REQUEST:** Refer to page 3 of the Brewer Testimony. Explain whether East Kentucky used its new Electric Power Research Institute model for route selection as presented and discussed in Case No. 2005-00207 to assist the USFS in selecting potential route corridors or in evaluating potential routes within selected corridors.

**RESPONSE:** EKPC began using the EPRI Line Routing Methodology for lines of significant length or particular complexity in September 2004. This process was not used for the Cranston – Rowan 138kV line for two reasons. 1) The EPRI-GTC was not available in 2002, the year the Special Use Permit application was submitted to the USFS. 2) As stated in the Application, the USFS is the authorized agency that will determine where EKPC will be allowed to place this line on National Forest System Lands. EKPC has no authority over the USFS, and even if the model had been available, the USFS does not use the EPRI methodology.

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### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC CASE NO. 2005-00458

### INFORMATION REQUEST RESPONSE

COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 10

RESPONSIBLE PARTY: JOE SETTLES

**REQUEST:** Refer to page 3 of the Brewer Testimony. Provide a copy of the USFS EA report.

**RESPONSE:** See attached **DATA RESPONSE ITEM 10 EXHIBIT A.** 

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### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

### INFORMATION REQUEST RESPONSE

# COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 11

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Refer to page 4 of the Brewer Testimony. Provide the Internet address for the Permits Policy Manual of the Kentucky Transportation Cabinet, Department of Highways.

**RESPONSE:** The internet address is: http://www.transportation.ky.gov/KYTCIforms/psb guidance\_manuals.asp

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### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC CASE NO. 2005-00458

### INFORMATION REQUEST RESPONSE

COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 12

RESPONSIBLE PARTY: JOE SETTLES

**REQUEST:** Refer to page 5 of the Brewer Testimony. Provide a copy of the Appeal to the USFS's Finding of No Significant Impact and a copy of the document rejecting the Appeal.

**RESPONSE:** See Data Response Item 12 Exhibit A attached hereto.

#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 13

#### RESPONSIBLE PARTY: MARY JANE WARNER AND DARRIN ADAMS

**REQUEST:** Refer to the Prepared Testimony of Mary Jane Warner ("Warner Testimony").

- Provide a copy of the transmission study that was performed for the
   Gilbert Unit No. 3 at the Spurlock Station.
- b. Explain why the proposed transmission line was assumed to be in place at the time the study was performed.

**RESPONSE:** (a) Multiple transmission studies were performed from 2002 to 2004 that pertain to the generation additions at Spurlock. See attached **Data Response Item 13 Exhibit A, B, C and D**.

(b) EKPC first identified the potential constraints during its preliminary and system impact studies for the E.A. Gilbert Unit, which commenced in the latter part of 2000. Further study determined that some of the constraints and other reliability issues would be present even without the addition of the E.A. Gilbert Unit. Therefore, a separate transmission study ("Cranston-Rowan Study") was performed by Stanley Consultants, Inc. on behalf of EKPC to assess the need for system improvements to address transmission issues in the Rowan County area. That study, entitled *Justification of* 

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*Cranston-Rowan 138 kV Line*, and dated April 23, 2002, identified the Cranston-Rowan 138 kV Project as the recommended alternative to address the transmission issues, with a recommended completion date of summer 2004. At the time the Cranston-Rowan Study was completed, EKPC reasonably believed that construction could be completed by this date, which would have the line in place to address anticipated problems during the 2004 summer peak period. Therefore, the study for the E.A. Gilbert Unit, which was in progress concurrently with the Cranston-Rowan Study, incorporated the preliminary and final results of the Cranston-Rowan Study. As a result, the E.A. Gilbert Study assumed that the Cranston-Rowan 138 kV line would already be in service when the Gilbert Unit became operational in Spring 2005.

### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 14

RESPONSIBLE PARTY: MARY JANE WARNER AND DARRIN ADAMS

**REQUEST:** Refer to page 3 of the Warner Testimony.

a. Provide the transmission study that was conducted for Spurlock Unit No.4 that is currently under construction.

b. Provide a list of all construction projects in the Spurlock Unit No. 4 transmission study that will require a CPCN and for which East Kentucky has yet to request Commission approval.

**RESPONSE:** (a) The studies identified as Data Response Item 13, Exhibits A and B included consideration for a fourth unit at Spurlock.

(b) All projects identified in the system impact studies for the E.A. Gilbert Unit as being needed specifically due to the addition of the fourth Unit at Spurlock have been completed. The other facilities that were identified as needed for other reasons, but that provided additional transmission reinforcements that support the operation of the E.A. Gilbert Unit, have been completed with two exceptions:

• The Cranston-Rowan 138 kV line that is the subject of this proceeding

• The J.K. Smith-Spencer Road 138 kV line. This line was identified as being needed for future generation additions at the J.K. Smith Station. It was assumed to be in

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PSC Request 14 Page 2 of 2

place for the system impact studies performed for the Gilbert Unit. This line would provide some marginal benefits for the operation of the E.A. Gilbert Unit. However, recent EKPC studies have identified alternative transmission line outlets from the J.K. Smith Station that have displaced the J.K. Smith-Spencer Road 138 kV line as a recommended EKPC construction project. One of these is a rebuild of an existing EKPC 69 kV line as a new double circuit line consisting of a 345 kV line from J.K. Smith to a new station called North Clark, and a 138 kV line (to be operated at 69 kV) between J.K. Smith and the North Clark Station. This project is expected to be completed by June 2007, and will not require a CPCN, since it involves the rebuild of an existing transmission line on the existing right-of-way. This project will be more beneficial to the operation of the Spurlock and J.K. Smith Units than the J.K. Smith-Spencer Road 138 kV line would be.

The only facilities identified in the system impact studies that are needed for Spurlock #4 in addition to those needed for the Gilbert Unit are the facilities needed to connect Unit #4 to the Spurlock Substation, which does not require a separate CPCN prior to construction.

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#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

# COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06 ITEM 15 RESPONSIBLE PARTY: MARY JANE WARNER AND DARRIN ADAMS

**REQUEST:** Refer to page 3 of the Warner Testimony.

a. When did East Kentucky first become aware of the need to upgrade its facilities in the Rowan County area?

b. After East Kentucky became aware of the need to upgrade its facilities, describe the process, including a timeline, used by the Transmission Planning Group to track the need for and implementation of the necessary upgrades.

**RESPONSE:** (a) EKPC first identified the potential need for the Cranston-Rowan 138 kV line during a preliminary analysis for the E.A. Gilbert Unit, which occurred around October of 2000. The detailed system impact study began later in 2000 and included the Cranston-Rowan 138 kV line as a facility that would be in-service prior to the addition of the E.A. Gilbert Unit. Further studies conducted in July and August of 2001 determined that some of the constraints and other reliability issues would be present even without the addition of the E.A. Gilbert Unit. Therefore, a separate transmission study was performed by Stanley Consultants, Inc. on behalf of EKPC to assess the need for system improvements to address transmission issues in the Rowan County area. That study, entitled *Justification of Cranston-Rowan 138 kV Line*, and dated April 23, 2002, identified the Cranston-Rowan 138 kV Project as the recommended action.

(b) Once the need for the Cranston-Rowan 138 kV line was identified as described in part (a) of this response, the line was included in all planning studies and power flow models that simulated conditions for 2004 Summer and beyond. It eventually became evident that the Environmental Assessment process with the USFS would keep the project from being completed by 2004 Summer. This became evident in early 2004. As models were developed for various scheduling scenarios, the viability of the Cranston-Rowan Project being completed by specific dates was evaluated to determine in which models the Project should be included. The need for the Cranston-Rowan Project in 2004 was included in all pertinent filings with the Commission in the period from January 2001 until early 2004. A timeline with more details is as follows:

<u>October 2000</u> – Overloads first identified in Rowan County area during a preliminary analysis of the addition of the E.A. Gilbert Unit at Spurlock.

<u>November 2000</u> – The detailed analysis of the E.A. Gilbert and Spurlock #4 Unit additions begins. The Cranston-Rowan 138 kV Project is included in this analysis at this time.

<u>February 2001</u> – Stanley Consultants completes a document entitled Development of Transmission Outlet Plan: E.A. Gilbert Unit No. 3 Located at Spurlock Generating Station, Maysville Kentucky. This document identifies the Cranston-Rowan 138 kV Project as a needed system addition associated with the E.A. Gilbert Unit.

<u>July 2001</u> – EKPC's Long-Range Transmission Plan is completed by Stanley Consultants, and includes the Cranston-Rowan 138 kV Project.

<u>July-August 2001</u> – Further analysis is performed which identifies the need for the Cranston-Rowan 138 kV Project as a general transmission system upgrade independent of the addition of the future units at Spurlock.

<u>January-April 2002</u> – Stanley Consultants performs a study to evaluate the problems in the Rowan County area and identify potential solutions.

<u>April 2002</u> – The document entitled *Justification of Cranston-Rowan 138* kV *Line*, and dated April 23, 2002, is completed by Stanley Consultants and identifies the Cranston-Rowan 138 kV Project as the recommended solution.

<u>June 2002</u> – The EKPC Board of Directors approves the Cranston-Rowan Project for construction.

<u>February 2003</u> – The need for the Spurlock-Flemingsburg-Goddard 138 kV line (SFG) as a replacement for other system upgrades and additions near Spurlock is identified. The ultimate integration of the SFG project into the transmission network is dependent on the Cranston-Rowan 138 kV Project completion.

<u>April 2003</u> – The Rural Utility Service (RUS) approves EKPC's request to amend its Three-Year Work Plan to include the Cranston-Rowan 138 kV Project.

<u>September 2003</u> – PSC Case No. 2003-380 is initiated related to the SFG Project. That proceeding results in unanticipated delays in the implementation of the project.

<u>February/March 2004</u> – The USFS decided to revise the Environmental Assessment for the Cranston-Rowan Project to comply with new forest standards.

<u>Early 2004</u> – Stanley Consultants conducts a study of the potential operational issues associated with bringing the E.A. Gilbert Unit on line without the basic transmission system improvements that had been delayed. This study evaluates the impact of the SFG and Cranston-Rowan 138 kV lines not being completed when needed fro normal system load growth.

<u>Late 2004</u> – Continued analysis of potential operational issues is conducted by EKPC and by Stanley Consultants due to further delays in the Cranston-Rowan 138 kV line and the new requirement to obtain a CPCN for this Project. The need for generation re-dispatch due to the absence of the Cranston-Rowan 138 kV line is identified.

<u>April-May 2005</u> – EKPC completes an assessment of its transmission system for 2005 Summer to satisfy ECAR requirements developed as a result of the August 2003 blackout in the ECAR and surrounding regions. This assessment indicates potentially severe problems, including the possibility of cascading outages due to the absence of the Cranston-Rowan line.

## EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

#### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

## ITEM 16

# RESPONSIBLE PARTY: MARY JANE WARNER AND DARRIN ADAMS JASON WITT AND CHUCK DUGAN

## **REQUEST:** Refer to page 3 of the Warner Testimony.

- a. Explain whether East Kentucky has had to reduce generation at Spurlock
  Station or require the dispatch of combustion turbines ("CTs") at the J. K.
  Smith Station ("Smith Station") since bringing Gilbert Unit No. 3 on line,
  to alleviate overloading problems.
- b. If generation at Spurlock Station has been reduced or the dispatch of CTs at Smith Station has been necessary to alleviate overloading problems, provide a list of actions taken and the additional costs incurred, by month, since Gilbert Unit No. 3 came on line in March 2005.

**RESPONSE:** (a) EKPC has had to reduce generation at Spurlock Station and has also had to dispatch combustion turbines at the J.K. Smith Station to alleviate overloading problems since bringing Gilbert Unit #3 online. The specifics of those instances that involve the needed Cranston-Rowan 138 kV line are provided in the response to part (b) of this request.

(b) During the time since March 2005, several incidents occurred -- beginning in June 2005 -- during which the Goddard – Rodburn 138 kV facility reached significant loading levels (e.g., greater than 90% of the seasonal normal rating without contingency) that could have required re-dispatch at additional cost. It is extremely difficult to assign an accurate cost to this specific congestion and resulting re-dispatch because of several operating conditions and responses, which masked the problem and subsequent costs that could otherwise be associated with the absence of the Cranston-Rowan 138 kV line:

- During a significant portion of the time Goddard Rodburn 138 kV was heavily loaded, the Avon – Boonesboro North 138 kV circuit was more severely congested, necessitating a re-dispatch of EKPC generation to correct for this more problematic facility. The Goddard – Rodburn 138 kV facility congestion was reduced as an indirect consequence of generation re-dispatch that occurred to correct problems on the Avon – Boonesboro North 138 kV facility.
- During some instances of congestion on the Goddard Rodburn 138 kV facility, EKPC was utilizing Combustion Turbines for economic reasons as a simple response to system load. Again, as an indirect consequence of CT usage to balance generation and load, the Goddard – Rodburn 138 kV facility congestion was reduced.
- On some occasions, generation re-dispatch was necessary to accommodate Transmission Loading Relief (TLR) procedures on facilities other than Goddard – Rodburn 138 kV or Avon – Boonesboro North 138 kV. As an indirect

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consequence of Spurlock and JK Smith re-dispatch for these other TLRs, the congestion problem on Goddard – Rodburn 138 kV was reduced.

• Some historical data appears to suggest that the Goddard – Rodburn 138 kV facility had exceeded the continuous rating in cases where re-dispatch did not occur; however application of historical temperature data shows that in such cases, the facility was not overloaded because this facility rating increases as temperature decreases. By referencing ambient temperatures to the ratings table, it can be shown that in these cases, the facility was typically below the continuous ratings. This behavior was particularly prevalent during fall months when the static summer ratings were still in effect but ambient temperatures were well below the temperature on which the static rating was based. It is important to note that had temperatures been higher during these times, the facility would have exceeded its thermal rating without additional action.

Between June 1 and December 31, 2005 (a period totaling 214 days), events occurred on 76 days during which generation was re-dispatched in a non-economic manner to compensate for loading on facilities responsive to the proposed Cranston – Rowan 138 kV line. For instance, many of these events involve actions to reduce loading on the Avon-Boonesboro North 138 kV line. The Cranston-Rowan 138 kV line is not specifically needed to eliminate this problem. However, the Cranston-Rowan line would reduce the flow on the Avon-Boonesboro North line, and therefore would have either eliminated the need to re-dispatch on some of these occasions or would have reduced the amount of re-dispatch required to eliminate the overload.

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The following table provides additional information regarding the total number of non-economic re-dispatch occurrences and monthly costs.

Month	Number of Occurrences	Estimated differential re-dispatch cost
June	19	\$1,721,900 <sup>(1)</sup>
July	19	\$1,311,600 <sup>(1)</sup>
August	19	\$2,657,100 <sup>(1)</sup>
September	17	\$2,267,000 <sup>(1)</sup>
October	0	\$0
November	1	\$10,600
December	1	\$161,800

(1) These re-dispatch costs are attributable to facilities other than the Goddard-Rodburn 138 kV line. However, the Cranston-Rowan 138 kV line would have reduced flows on the overloaded facilities, which would have decreased the amount of re-dispatch required.

The first distinguishable incident involving re-dispatch specifically for the Goddard – Rodburn 138 kV line loading occurred on 11/30/05 and 12/1/05. The differential cost for the two-day period was \$172,400 resulting from generation reduction at Spurlock and operation of JK Smith Combustion Turbines. This cost information was included in the previous table, and was solely due to the absence of the Cranston-Rowan 138 kV line.

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## EAST KENTUCKY POWER COOPERATIVE, INC.

## PSC CASE NO. 2005-00458

## INFORMATION REQUEST RESPONSE

# COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 17

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Refer to page 6 of the Warner Testimony. Explain how East Kentucky and USFS personnel jointly developed possible corridors for East Kentucky's transmission line project.

**RESPONSE:** Refer to Prepared Testimony of Mark Brewer, pages 2 and 3, and EKPC's Response to Item 8 above.

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## EAST KENTUCKY POWER COOPERATIVE, INC.

## PSC CASE NO. 2005-00458

#### INFORMATION REQUEST RESPONSE

### COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 18

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## RESPONSIBLE PARTY: MARK BREWER AND MARY JANE WARNER

**REQUEST:** Refer to page 7 of the Warner Testimony. On page 2 of the Brewer Testimony, six alternative routes are mentioned as being evaluated by the USFS. The Warner Testimony mentions seven alternatives. Provide a description of the seventh route.

**RESPONSE:** The EA documented an evaluation including 8 alternatives. One of the eight was a "No Action" alternative and one was the identical to another except that no herbicide was to be used. In the Warner testimony the no herbicide alternative was included as one of the alternatives considered. In the Brewer Testimony the no herbicide alternative was not considered.

# EAST KENTUCKY POWER COOPERATIVE, INC.

# PSC CASE NO. 2005-00458

# INFORMATION REQUEST RESPONSE

# COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 19

RESPONSIBLE PARTY: JOE SETTLES AND MARK BREWER

**REQUEST:** Refer to page 7 of the Warner Testimony. Describe the USFS EA process

and explain why it took so long to complete.

**RESPONSE:** Please refer to EKPC's Response to Item 41 herein.

Below is an outline of the major milestone dates of the USFS EA activity for this project.

- July 2002 EKPC applied for a special use permit with the USFS for this project.
- Summer 2003 EKPC and USFS personnel performed environment survey work
- December 19, 2003- The Pre-decisional EA was sent from the Morehead Ranger District to the Supervisor's Office (SO) for review
- January 26, 2004 The Pre-decisional EA was sent out for public comment
- February/March 2004 The USFS finalized the New Forest Plan for the DBNF
- The Supervisor's Office ("SO") decided to revise EA to new forest standards and sent Pre-decisional EA back to Morehead Ranger District ("MRD") for rewrite/revision
- July 27, 2004 MRD sends  $2^{nd}$  draft of the document back to SO for review
- SO added new comments to document, sent it back to MRD for revision
- September 29, 2004 MRD made the requested revisions and the 3<sup>rd</sup> draft of the document to SO office for review
- The SO sent the document back to MRD with additional comments
- MRD prepared a 4<sup>th</sup> draft of the document and sent it to the SO for review
- The Pre-decisional EA was issued on January 28<sup>th</sup> of 2005
- The Finding of No Significant Impact ("FONSI") was issued on February 4<sup>th</sup>, 2005
- The FONSI was appealed by Heartwood, Southern Appalachian Biodiversity Project, Mr. Jim Bensman, and Mr. Doug Doerrfeld on April 11, 2005.
- The appeal was denied and the decision was upheld by the Appeal Deciding Officer/Regional Forester Robert Jacobs on May 13, 2005.