

**2007-08 Winter**

Without Cranston-Rowan County Project:

<b>Limiting Facility</b>	<b>Company</b>	<b>Percent Overload</b>	<b>Worst-Case Contingency</b>	<b>Unit Outage</b>
Goddard KU- Rodburn 138 kV	LGEE	115.5%	Spurlock-North Clark 345 kV	Brown #3

With Cranston-Rowan County Project:

<b>Limiting Facility</b>	<b>Company</b>	<b>Percent Overload</b>	<b>Worst-Case Contingency</b>	<b>Unit Outage</b>
None				



EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2005-00458

INFORMATION REQUEST RESPONSE

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

ITEM 32

RESPONSIBLE PARTY: DARRIN ADAMS

**REQUEST:** Provide a copy of the ECAR Winter 2005-2006 Assessment.

**RESPONSE:** The Executive Summary of this document is attached as **Data Response Item 32 Exhibit A**. The remainder of this document is the subject of the Applicant's Petition for Confidential Treatment and is included on CD-Rom in that Petition filed this date.



EAST KENTUCKY POWER COOPERATIVE, INC.

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INFORMATION REQUEST RESPONSE

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

ITEM 33

RESPONSIBLE PARTY: DARRIN ADAMS

**REQUEST:** Explain the circumstances under which Kentucky Utilities Company's ("KU") Goddard-Rodburn 138 kV line was taken out of service for maintenance on September 6, 2005. Was the line forced out of service?

**RESPONSE:** LG&E Energy took the Goddard-Rodburn 138 kV line out of service for maintenance from September 6, 2005 through September 9, 2005. LG&E Energy's Operations personnel indicated that the outage was required for pole and cross-arm replacement. LG&E was required to obtain approval of the line outage from the Midwest ISO. Notification was provided to EKPC's Operations personnel by the LG&E Energy Operations personnel approximately one week prior to the start of the outage.



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ITEM 34

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Provide the assumptions, calculations, and the Natural Electrical Code citations used to derive Brewer Exhibit F and Brewer Exhibit G.

**RESPONSE:** Assumptions: NESC High Wind @ 60° F, no ice.

Calculations: Attached, **Data Response Item 34 Exhibit A.**

Code citations: NESC Sections, 250C, 233 and 234.

There is an error on Brewer Exhibit F and Exhibit G. The 123' of conductor swing on the EKPC line should have been measured from the centerline of the structure, not the conductor attachment point. This will modify the gap distance between the two right-of-ways from 35' to 19.5'. See attached **Revised Drawings, Data Response Item 34**

**Exhibit B and Data Response Item 34 Exhibit C.**





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ITEM 35

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Brewer Exhibit G is based on a 1,790 foot span length. Because the amount of blowout would be considerably less (and thus less required right-of-way) for a shorter span length, describe the span lengths East Kentucky would anticipate to be used in the Post-Hearing Parallel route. The average span length for East Kentucky's proposed line when crossing the Forest appears to be about 1,000 feet. Compare and contrast the average span length for the Post-Hearing Parallel route to the average span length for East Kentucky's proposed line.

**RESPONSE:** The span of 1,790 +/- is the span length EKPC expects for the Post Hearing Route. The average span length for the parallel section of the Post Hearing Parallel route is 1,009 feet and the average span length for the EKPC preferred route is 908 feet. (Refer to **Data Response Item 35 Exhibit A**) In mountainous terrain, the topography (ridge top to ridge top) dictates the span length and therefore the average spans. For both the Post Hearing Parallel and EKPC preferred route, most of these line are routed through mountainous territory. Therefore, the spans and average spans are dictated by the ridge top to ridge top distances.



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ITEM 36

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** What would be the blowout and resulting right-of-way requirement for the Post-Hearing Parallel route under more typical span lengths?

**RESPONSE:** The span lengths identified for the Post Hearing Parallel Route are defined by the existing terrain. The preliminary design for the Post Hearing Parallel Route was based on Digital Elevation Models (DEM's) which are suitable for a preliminary design. The blowout and right-of-way requirements as presented in the Prepared Testimony are representative of what is to be expected.



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ITEM 37

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Brewer Exhibit G indicates matched pole placement on the KU and East Kentucky easements. It follows that the KU conductors would experience a similar amount of blowout as East Kentucky's; yet the diagram illustrating the minimum phase separation assumes that there is no blowout of the KU conductor at the same time East Kentucky is experiencing severe blowout under extreme wind conditions. Clarify Exhibit G.

**RESPONSE:** The EKPC preliminary design for the Post Hearing Parallel Route attempts to locate the proposed lines as close to the existing KU line as possible while maintaining an acceptable level of risk for phase to phase contact between the two lines. The exhibit shows the amount of blowout that the EKPC proposed route could be expected to have. Blowout on the KU line was not considered for two reasons: (1) due to the possibility that a structure was or could be placed at or near the mid-span location on the 1790' +/- span, to prevent blowout; and (2) it was known that the KU line has a different conductor, which would result in different blowout characteristics and responses. This could result in the swings of the different lines being "out of phase" with

one another. Therefore, for purposes of the EKPC preliminary design, it was assumed that the KU conductors are in a static position.



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ITEM 38

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Brewer Exhibit G appears to indicate that the conductor (under blowout conditions) can extend significantly beyond the easement (88.5 feet). Would the 100-foot easement provide adequate clearances from potential obstructions at the edge of the easement? Would the same answer apply to East Kentucky's proposed line? Explain in detail.

**RESPONSE:** Based upon the preliminary design for the Post Hearing Parallel Route, the 100 ft. easement should be adequate. The Post Hearing Route crosses hollows that have tree top elevations significantly below the elevation of the belly of the sags. Therefore the conductor blow out will be above the level of the tree tops.

Yes, based upon the detailed design of the EKPC Proposed Route, the 100 foot wide easement is adequate.





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

ITEM 39

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Did East Kentucky have any communications with the Kentucky Department of Transportation regarding the I-64 alternative route other than the letter dated November 27, 2005 (Brewer Exhibit D) and the response dated November 28, 2005 (Brewer Exhibit E)? If yes, describe the nature of those communications and provide copies of any correspondence or documents that were sent or received by East Kentucky.

**RESPONSE:** Yes, Mr. Brewer contacted by phone Mr. Dan Suit, with the KY Department of Transportation on or about November 17<sup>th</sup>, 2005 and discussed the possibility of paralleling/sharing right of way with the I-64 corridor. Mr. Brewer also asked about the possibility of obtaining access from I-64. Mr. Suit advised that they had not allowed that in the past and recommended submission of a letter to Ms. Katrina Bradley, district engineer, for an official response.

No other documents other than those filed with the Application are available.



EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2005-00458

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

ITEM 40

RESPONSIBLE PARTY: MARK BREWER

**REQUEST:** Did East Kentucky consider the possibility of routing just outside the I-64 right-of-way and not requiring access from I-64? Did the Kentucky Department of Transportation reject that alternative? If East Kentucky considered this alternative, explain why it was rejected.

**RESPONSE:**

(a) Yes, this was considered in the initial 2002 routing process and again with the 2003 USFS during the USFS route selection process.

(b) The KY DOT was not presented that option since they have no jurisdiction over private or USFS properties.

(c) The documentation for the 2002 analysis no longer exists. However, this alternative was not considered a viable option because it created significantly higher impact on the forest and surrounding areas than the preferred route, as outlined in Mark Brewer's Prepared Testimony. The 2003 USFS documentation for this alternative is included in the Environmental Assessment (EA) and in the Prepared Testimony of Mark Brewer.



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PSC CASE NO. 2005-00458

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ITEM 41

RESPONSIBLE PARTY: MARK BREWER AND MARY JANE WARNER  
JOE SETTLES

**REQUEST:** Explain why East Kentucky assumes that USFS will require 3 years to review additional alternatives, especially in view of the fact that the area in question has already been analyzed by the USFS.

**RESPONSE:** Historically, it has been taken approximately three years to obtain a permit from the USFS. The current application for this project was submitted to the USFS over 3 years ago and a permit has not yet been received. The reason that EKPC estimates for the 3 year turnaround is the significant amount of work that has to be performed as part of the EA and USFS process, much of which has to be done sequentially. The following is an estimated time line based upon previous experiences:

1. Prepare and submit permit to the USFS – 1 week
2. Make provisions and secure firm/agency for preparing EA – 1 month
3. Evaluate potential corridors and determine preferred route – 3 to 4 months
4. Acquire aerial survey for the line design – 4 months
5. Line Design – 1 to 2 months
6. USFS line design review for EA and Forest Plan compliance – 1 to 2 months.
7. Refine design for compliance – 1 month.
8. Field stake the exact location of the line and structures – 5 to 6 months
9. Archeological and biological review of the line and structures – 3 to 4 months.
10. Locate and map all access roads with USFS personnel – 2 to 3 months

11. Archeological and biological review of the access roads – 2 to 3 months.
12. Compile and prepare EA – 3 months
13. Publish and provide comment period on EA – 2 months
14. Prepare and issue Finding of No Significant Impact (FONSI) – 1 month
15. Appeal period for FONSI – 3 months
16. Final Decision and issuance of permit – 2 to 3 months.

If the Preferred route passes the EA and USFS requirements, items 10 and 11 could overlap somewhat with items 8 and 9. Other activities would also be required but could be performed concurrently, such as FAA and KAZC applications for determination and permit. Further, this schedule does not take into account reviews by other federal and state administrative bodies and their resulting impacts.

EKPC has worked with the Daniel Boone National Forest on 4 transmission line projects over the last 10 years – Cranston Tap, Wiborg Sub and Tap, Big Creek Sub and Tap, and Rowan – Cranston Transmission Line. Of these 4 projects, 2 have been completed – Cranston and Wiborg. The Cranston project took two years to complete the environmental review process and obtain a special use permit. The Wiborg project began in December of 2000 and a special use permit was not obtained until April of 2003. The Big Creek Projects and Rowan – Cranston Projects started in December of 2002, and we have not received a special use permit for either of these projects at this point. History dictates that projects of this type involving federal lands typically requires a minimum of two years of review before obtaining the special use permit necessary to implement these projects.





EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2005-00458

INFORMATION REQUEST RESPONSE

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

ITEM 42

RESPONSIBLE PARTY: MARK BREWER AND JOE SETTLES

**REQUEST:** Describe all communications between East Kentucky and the USFS regarding the Cranston-Rowan transmission project since July 17, 2005. Provide copies of correspondence and documents exchanged between East Kentucky and the USFS since July 17, 2005.

**RESPONSE:** On November 30, 2005 a letter was sent to Dave Manor, USFS, requesting that the author of the EA submit a Prepared Testimony. No reply was received. On November 23, 2005 a letter was sent to George Bain, Assistant Forest Supervisor, requesting that the USFS issue the permit for the Cranston-Rowan 138kV line. On December 5, 2005, a voice mail was left with Tom Beibighauser asking for a list of the Interdisciplinary Team Members. An email was received on December 6, 2005 with the answer. On or about December 9<sup>th</sup>, a voice mail was left with Tom Beibighauser asking for their definition of "hard look" on the alternatives considered. An email was received on December 9, 2005 advising we contact their legal staff for any further information. In addition, Mark Brewer's calendar indicated there may have been calls to Tom Beibighauser on July 25, 2005 and November 18, 2005. He has no record or specific memory on what those calls were about, other than updates.

Communication with the Forest Service regarding this project has been minimal since July 17, 2005. EKPC has requested the USFS issue the special use permit for this project. That correspondence was drafted by our attorney, Tim Haggerty and is attached as **Data Response Item 42 Exhibit A**. We received a letter issued by Kathleen Atkison that denied that request (attached **Data Response Item 42 Exhibit B**).



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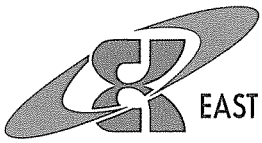
COMMISSION STAFF'S 1ST DATA REQUEST DATED 1-20-06

ITEM 43


RESPONSIBLE PARTY: SHERMAN GOODPASTER

**REQUEST:** Provide a copy of the July 20, 2005 post-hearing inquiries from the Commission's Staff to the USFS and the state and federal highway officials and a copy of the August 3, 2005 response from the USFS and any other responses that may have been received since August 19, 2005.

**RESPONSE:** These inquiries and responses were sent and received by the Commission Staff and as a result, should be in the Commission file in Case No. 2005-00089. EKPC has no Objection to the Commission Staff introducing these documents into the record of the current case.



EAST KENTUCKY POWER COOPERATIVE

A Touchstone Energy Cooperative 

**Case No. 2005-00458**  
**Master Exhibit CD**

Item 10 Exhibit A
Item 12 Exhibit A
Item 13 Exhibit A
Item 13 Exhibit B
Item 13 Exhibit C
Item 13 Exhibit D
Item 21 Exhibit A
Item 24 Exhibit A
Item 32 Exhibit A
Item 34 Exhibit A
Item 34 Exhibit B
Item 34 Exhibit C
Item 35 Exhibit A
Item 42 Exhibit A
Item 42 Exhibit B