Steven L. Beshear
Governor

Leonard K. Peters
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
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David L. Armstrong
Chairman

James W. Gardner
Vice Chairman

Charles R. Borders
Commissioner

October 25, 2011

PARTIES OF RECORD

Re: Case No. 2011-00295

The enclosed electronic mail message from John Rogness, Commission Staff, to Ranie Wohnhas of Kentucky Power Company, and the attachments to that message, have been filed in the record of the above-referenced case. The electronic mail message from Mike Cannata incorrectly references "KU Initial DRs and Interview Requests" but correctly references Case No. 2011-00295.

The Commission, pursuant to KRS 278.020(8) and KRS 278.255(3) has hired Accion Group to assist it in reaching its decision. The information requested from Kentucky Power will be included in a report from Accion that will be filed into the record of this case.

Sincerely,

Jeff Derouen
Executive Director

Attachments

cc: Parties of record

Burns, Faith (PSC)

From: Rogness, John (PSC)
Sent: Friday, October 21, 2011 11:47 AM
To: Burns, Faith (PSC)
Subject: FW: KU Initial DRs and Interview Requests

Attachments: The Accion Group - Initial Data requests - 10-2-11 .doc; The Accion Group - Interview Requests - 10-2-11 .doc


The Accion Group - Initial Dat...


The Accion Group - Interview R...

-----Original Message-----
From: Rogness, John (PSC)
Sent: Monday, October 03, 2011 11:38 AM
To: rkwohnhas@aep.com
Cc: Rogness, John (PSC); Newby, Daryl E (PSC); Cole, Kimra H (PSC); Johnson, Jeff A (PSC)
Subject: FW: KU Initial DRs and Interview Requests

Ranie,

Here is the Data request from Mike Cannata / Accion.

John

-----Original Message-----
From: Mike Cannata [mailto:mike@ridgesend.com]
Sent: Sunday, October 02, 2011 4:05 PM
To: Rogness, John (PSC); Harry Judd
Subject: KU Initial DRs and Interview Requests

John:

Attached are Accion's initial set of DRs and Interview Requests in the KU siting application of the Bonnyman to Soft Shell 138kV line (Case No. 2011-00295)

Due to schedule constraints, if KU needs any clarification of these items, they should be requested to do so immediately.

If you have any questions, please do not hesitate to call.

Mike Cannata

The Accion Group

For the Kentucky Public Service Commission

Focused Need Analysis

Of the

Application of Kentucky Power Company

For the Construction of the Bonnyman to Soft Shell 138kV Transmission Line

Case No. 2011-00295

Initial Data Requests*

October 2, 2011

1. Please supply a transmission map of the Kentucky Power (KP) and surrounding power systems that depicts transmission system and generation system facilities by voltage level.
2. Please supply a transmission map of the KP power sub-transmission power system that depicts sub-transmission system and generation system facilities by voltage level.
3. Please supply one-line system diagrams for the KP transmission and sub-transmission power systems. These diagrams should show substation breaker configurations.
4. Please supply a transmission map of the Reliability First Corp. and the SERC Reliability Corp. systems.
5. Please supply one-line breaker diagrams for the Bonnyman and Soft shell substations and any substations involved in the limiting contingency or contingencies.
6. Please supply a short description of the power analysis software used by KP in the study for the need for the proposed facilities. (I.e. power flow, transient stability, short circuit, and others as appropriate)
7. Please supply a copy of the KP voltage, thermal, stability, load power factor, and short circuit reliability design criterion that are applicable to the proposed facilities.
8. Please supply a copy of the PJM transmission reliability criterion.
9. Please supply a copy of the 10-year KP summer and winter coincident peak load projections used for the analysis of the need of the proposed facilities for the system as a whole and for subareas. As part of your response, please supply the date they were prepared. In addition, if there are newer vintage load forecasts, please supply them also.
10. Please supply a succinct description of the KP load forecasting methodology including inputs, econometric data requirements, load ratioing, and weather normalization.
11. Please supply the input parameters for the ratings programs used to rate KP transmission and sub-transmission line and substation components.
12. Please supply a copy of the final report justifying the proposed facilities if different from filing Exhibit 12.
13. If the limiting condition is voltage driven, please supply the transmission to sub-transmission transformer no load tap settings, no load tap capabilities, hold voltages, and tap changer ranges. Please also supply the same information for the sub-transmission/lower voltage transformers.

14. If the limiting condition is voltage driven, please supply the generator minimum VAR capability, maximum VAR capacity, MW size, hold voltages, and power factor for generators within the Hazard load area or within 25 miles of the Soft Shell and Hazard 138kV substations that are on the 138kV or lower voltage power system. As part of your response, please locate these facilities on a geographical transmission and sub-transmission map
15. If the limiting condition is voltage driven, please supply the location and size of capacitors on the 138kV and sub-transmission system. In addition, please also supply the load power factor at the low side of the sub-transmission to lower voltage transformers in the Hazard load area.
16. Please supply the estimated cost of installing distribution voltage rated capacitors on a $/KVAR basis.
17. If the limiting condition is thermally driven, please supply the component by component ratings of the limiting system line element(s). If a transformer is part of the limit, please supply the transformer nameplate ratings, overload ratings, and the transformer rating calculations.
18. If the limiting condition is thermally driven and a line, please supply the line conductor size, temperature to which the line was designed to operate, tension, and design clearances.
19. Please supply a description on how KP conducts economic evaluations between competing alternative projects. (Not alternative routes of the proposed line, but other transmission alternatives, generation alternatives, rebuild with composite conductors, etc.)
20. Please supply a list of alternative projects to the Bonnyman to Soft Shell 138kV line evaluated by KP and a copy of the economic evaluations.
21. Please supply a short description on how KP selects the final route of the proposed line versus alternative routes for the same facilities if different than Reese testimony, page 11.
22. Reference, Filing, page 5. Please identify the 4 property owners to date, by parcel referenced in Exhibit 9, that have expressed objections to the preferred alternate. Your response should also include a short description of each owner objection.
23. Reference Filing, Section 18, and page 8. Please supply the benefits and costs of the three alternatives stated compared to the preferred Bonnyman to Soft Shell 138kV alternative.
24. Reference Filing, Section 18, and page 8. Was a second Hyden to Wooten 161kV line considered as an alternative? If not, why not?
25. Reference Filing, Section 18, and page 8. Please describe any and all alternatives considered to defer the preferred project where the carrying cost of the deferral project(s) are less than the first year carrying costs of the preferred project.
26. Accion understands that the $62.5 million cost of the proposed project is in 2009 dollars. Please confirm or identify the year dollars the estimate is stated in. As part of your response, please also supply the impact of rising commodity prices on the projected cost of the project since the estimate was made.
27. Please supply the cost of the project in 2014 completion date dollars for the project segments as listed in Exhibit 12, page 13. Please identify the IDC portion of the estimate in each project segment as part of your response.
28. Reference Lasslo testimony, page 4, lines 11-19. Is the first contingency event described a design issue or a vegetation management issue. Please explain.
29. Reference Lasslo testimony, page 4, and line 24 through page 5, line12. The second event described here was a single contingency. If KY performs system adequacy analysis annually, as stated at the bottom of page 12 of the Lasslo testimony, and the system is designed to withstand the first contingency, please explain why customer load was required to be curtailed.
30. Reference Lasslo testimony, page 5, lines 7-13. Please supply the analysis performed to evaluate the factors generally listed here and specifically listed in Exhibit 13, Table 4 for each of the alternatives. As part of your

response, please indicate what weights were given to the factors (and their subsets) as described in the Kentucky Transmission Line Siting Model, Project Report dated July 31, 2006.

31. Reference Lasslo testimony, page 5, lines 19-22. Please explain the status of the NERC requirement regarding transmission design down to the 100kV level. In your response, please indicate the ability to obtain waivers to said design and the KY effort to attain such waivers.
32. Reference Reese testimony, page 9, and lines 17-26. Please explain how the two tier corridor selection process described relates to the process described in the Kentucky Transmission Line Siting Model, Project Report dated July 231, 2006.
33. Reference Exhibits 4, 5, and 6. Please supply edge of right-of-way EMF levels (magnetic and electric) for each of the three configurations.
34. Reference Exhibit 8. Please supply before and after one line breaker diagrams of the Bonnyman substation.
35. Reference Exhibit 12, page1. Why wasn't a looped alternative considered where the terminus of the new line would be the Hazard 138kV substation instead of the preferred radial alternative terminating at Bonnyman substation?
36. Reference Exhibit 12, page 3. In what year do KY system studies show that the completion of the 138kV loop from Bonnyman to Hazard substation is required to meet reliability criterion?
37. Reference Exhibit 12, page 6. Please relate the significance of closing the Lee City tie to the system diagram on Exhibit 12, page 2.

*Accion understands that some of these data requests may be voluminous. It is acceptable to supply or have a limited number of the responses available for inspection at the time of the interviews.

The Accion Group

For the Kentucky Public Service Commission

Focused Need Analysis

Of the

Application of Kentucky Power Company

For the Construction of the Bonnyman to Soft Shell 138kV Transmission Line

Case No. 2011-00295

Interview Requests for October 12, 2011 Interviews*

October 2, 2011

Please make the following subject matter experts available on October 12, 2011.

- T and Sub-T system design analysis including that required by PJM and the FERC.
- T, Sub-T & D system analysis models and study modeling.
- T, Sub-T & D system configurations.
- Siting and route selection.
- Load forecasting and modeling performed.
- T and Sub-T Component ratings and rating programs.
- Economic analysis of alternatives of different lives and net present value.
- Others as deemed necessary by KU.

*Not all experts will be required for the entire day. Accion will work with KU on October 12, 2011 to minimize KU time to the extent practical.