

**Ameren Transmission Company of Illinois's  
Response to MCPO Data Requests  
Docket No. 12-0598**

**Petition for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406.1 of the Illinois Public Utilities Act, and an Order pursuant to Section 8-503 of the Public Utilities Act, to Construct, Operate and Maintain a New High Voltage Electric Service Line and Related Facilities in Various Counties in the State of Illinois.**

**Data Request Response Date: 5/3/2013**

**OFFICIAL FILE**

ILL. C. C. DOCKET NO. 120598

MCPO CROSS EX. NO. 1

DATE: 5-16-13 LD

MCPO 14.01

Please reference Mr. Kramer's Rebuttal Testimony (ATXI Exhibit 11.0) at lines 307 through 313, 341 through 360 and 372 through 373.

- a) Does Ameren Services agree the loss of Oreana substation is a NERC Category D Extreme Contingency event. If not, please explain in detail why not?
- b) Does Ameren Services agree that while loss of all transmission lines in a common right-of-way is NERC Category D Extreme Contingency event, loss of two Oreana to ADM North 138 kV transmission lines in a common right-a-way plus a third Oreana to ADM North 138 kV transmission line in a separate right-of-way is neither a NERC Category B, C or D Contingency event. If not, please explain in detail why not.
- c) Does Ameren Services agree that, under the NERC Reliability Standards, ATXI and Ameren Illinois Company ("AIC") are only required to evaluate their combined transmission system for the risks and consequences of NERC Category D Extreme Contingency. If not, please explain in detail why not.
- d) Does Ameren Services agree that there may be a number of NERC Category D7 and/or D8 (loss of substation or loss of switching station) Extreme Contingency events on the combined ATXI and AIC transmission system that cause overloads, very low voltage conditions, instability and/or losses of load in excess of 500 MW following their occurrence.
- e) In response to Data Request MCPO-ATXI-4-10, Mr. Kramer identified analyses and studies performed by Ameren Illinois Company (then d/b/a AmerenIP) in ICC Docket No. 10-0079.
  - i) Does Ameren Services agree that the risks and consequences of the NERC Category D Extreme Contingency loss of Oreana substation that Mr. Kramer identified in his rebuttal testimony in this proceeding (Docket No. 12-0598) existed at the time Ameren Illinois Company made its filing in Docket No. 10-0079.
  - ii) Does Ameren Services agree that Ameren Illinois Company's Oreana to Latham 345 kV transmission project proposed in Docket No. 10-0079 was not proposed to address the risks and consequences of the NERC Category D

Extreme Contingency event of loss of Oreana substation, but rather proposed to address a NERC Category C Contingency event.

- iii) Does Ameren Services agree that Ameren Illinois Company's Oreana to Latham 345 kV transmission project proposed in Docket No. 10-0079 did not eliminate the risks and consequences of the NERC Category D Extreme Contingency event of loss of Oreana substation.
- f) To the extent of Ameren Services' knowledge, within the past 10 years, has ATXI and/or AIC ever experienced the complete outage of:
  - i) a 345 kV substation (when more than two 345 kV circuits serve that 345 kV substation),
  - ii) all 345 kV transmission circuits serving a substation (when more than two 345 kV circuits serve that substation),
  - iii) a 138 kV substation (when more than two 345/138 kV transformers serve that substation), or
  - iv) all 345/138 kV transformers serving a 138 kV substation (when more than two 345/138 kV transformers serve that substation).

If the answer to i, ii, iii or iv is in the affirmative provide the date, cause and consequences of each such event.

- g) Does ATXI or Ameren Illinois Company currently store a spare 345/138 kV transformer at the Oreana substation site or Latham substation site? If so, please identify which site the spare transformer is located at and the normal and emergency MVA rating of the spare transformer. In addition, please provide a complete copy of the latest test sheet for the spare transformer.

### RESPONSE

**Prepared By: Dennis Kramer**  
**Title: Director, Transmission Policy and Planning**  
**Phone Number: 314 554 2238**

- a) Yes, as stated in the title to Exhibit 11.2, "Results of analysis of the impact of a NERC TPL Standards Category D8 contingency event at Oreana substation".
- b) Yes, However if the MCPO-proposed third Oreana to ADM North 138 kV line was located in close physical proximity to the existing two Oreana to ADM North 138 kV lines, then Ameren Services in its planning role would probably investigate the impact of the loss of various line combinations due to the increased risk of multiple lines being impacted by a major weather event.
- c) Yes, that is the minimum requirement but it does not preclude or prevent additional analysis when warranted. Ameren Services in its planning role will analyze unusual system configurations for reliability impacts. I would classify having three parallel

transmission lines of the same voltage in close physical proximity to each other for the sole purpose of connecting two substations as an unusual system configuration that warrants examination,

d) It is possible that there may exist NERC Category D7 and D8 Contingency events on the combined ATXI and AIC transmission system that cause overloads, very low voltage conditions, instability and/or losses of load in excess of 500 MW following their occurrence.

e.i) Yes.

e.ii) Yes.

e.iii) Yes.

f.i) No, however ATXI and AIC are still reviewing the available information.

f.ii.) No, however ATXI and AIC are still reviewing the available information.

f.iii.) No, however ATXI and AIC are still reviewing the available information.

f.iv.) No, however ATXI and AIC are still reviewing the available information.

g.) No.