



Fort Calhoun Station  
P.O. Box 550  
Fort Calhoun, NE 68023

January 16, 2007  
LIC-07-0001

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

- References:
1. Docket No. 50-285
  2. NRC Generic Letter 2006-02, "Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power" (NRC-06-0013)
  3. Letter from OPPD (H. J. Faulhaber) to NRC (Document Control Desk), "60 Day Response to Generic Letter 2006-02" dated April 3, 2006 (LIC-06-0025)
  4. Letter from NRC (C. Haney) to OPPD (R. T. Ridenoure), "Request for Additional Information Regarding Resolution of Generic Letter 2006-02, Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power," dated December 5, 2006 (NRC-06-0168)
  5. Letter from NRC (C. Haney) to OPPD (R. T. Ridenoure), "Revised Response Date For Request For Additional Information Regarding Resolution Of Generic Letter 2006-02, Grid Reliability And The Impact On Plant Risk And The Operability Of Offsite Power," dated December 13, 2006 (NRC-06-0176)

**SUBJECT: Response to Request for Additional Information Regarding Resolution of Generic Letter 2006-02, "Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power"**

Attached is the Omaha Public Power District (OPPD) response to Reference 4, which is an NRC request for additional information (RAI) regarding resolution of Generic Letter (GL) 2006-02 (Reference 2). In Reference 5, the NRC extended the due date of the required response to January 31, 2007. Reference 3 is OPPD's initial response to GL 2006-02.

No commitments to the NRC are made in this letter.

I declare under penalty of perjury that the foregoing is true and correct. (Executed on January 16, 2007.)

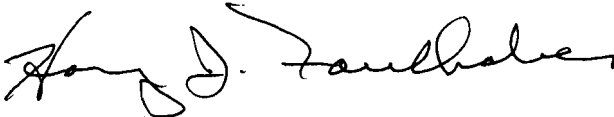
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If you have additional questions, or require further information, please contact Mr. Thomas C. Matthews at (402) 533-6938.

Sincerely,

A handwritten signature in black ink, appearing to read "H. J. Faulhaber". The signature is fluid and cursive, with a large initial "H" and "J".

H. J. Faulhaber  
Division Manager  
Nuclear Engineering

HJF/mle

Attachment: Response to RAI Regarding Resolution of Generic Letter 2006-02

**ATTACHMENT**

**Response to Request for Additional Information Regarding Resolution of Generic Letter 2006-02,  
“Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power”**

**REQUESTED INFORMATION (only Question 4 was applicable to Fort Calhoun Station)**

**NRC Question**

**4. Identification of Applicable Single Contingencies**

**In response to question 3(a) you did not identify the loss of other critical transmission elements that may cause the offsite power system (OSP) to degrade, other than the loss of the nuclear unit. If it is possible for specific critical transmission elements (such as other generators, critical transmission line, transformers, capacitor banks, voltage regulators, etc.) to degrade the OSP such that inadequate post-trip voltage could result, have these elements been included in your N-1 contingency analysis? When these elements are included in your GO's contingency analysis model and failure of one of these transmission elements could result in actuation of your degraded voltage grid relay, is the offsite power declared inoperable? If not, what is your basis for not declaring the offsite power inoperable?**

**OPPD Answer**

As stated in OPPD's response (Reference 3) to Item 2(e) of Generic Letter (GL) 2006-02, alarms are generated on the OPPD energy management system (EMS) to notify both Fort Calhoun Station (FCS) and the control area operator (CAO) when the predicted post-plant-trip voltages at Substation 1251 drop below 161.0kV, 160.8kV, and 158.8kV. These post-plant-trip voltages are specified in Quality Procedure NOD-QP-36, "Grid Operations and Control of Switchyard at FCS" to maintain FCS stability. The calculation of post-plant-trip voltage is done only for the real-time system configuration.

The grid steady-state analysis considered the following six worst-case contingencies to determine the grid's capability to supply plant loads following a plant trip:

1. Outage of the 345kV line from OPPD Substation 3451 to MidAmerican (MEC) Raun Substation.
2. Outage of MEC Council Bluffs Unit 3.
3. Simultaneous outage of MEC Council Bluffs Unit 3, the 345kV line from OPPD Substation 3451 to OPPD Substation 3459 and the 345kV line from OPPD Substation 3451 to OPPD Substation 3454.
4. Outage of the 345kV line from MEC Council Bluffs Substation to OPPD Substation 3456.
5. Simultaneous outage of both 161kV lines from OPPD Substation 1211 to OPPD Substation 1250.
6. Simultaneous outage of the 345kV line from OPPD Substation 3451 to OPPD Substation 3459 and the 345kV line from OPPD Substation 3451 to OPPD Substation 3454.

As stated in OPPD's response (Reference 3) to Item 3(a) of GL 2006-02, at an actual or post-trip calculated value of 160.8kV, FCS will enter Technical Specification 2.7(2)c due to inoperability of house transformers T1A-3 and T1A-4. The NRC Operations Center will be notified within four hours. If at the same time either emergency diesel generator is inoperable, the reactor will be placed in hot shutdown within six hours. At an actual or post-trip calculated value of 158.8kV for more than eight hours, the reactor will be placed in hot shutdown within twelve hours. The house transformers are

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considered inoperable due to the increased likelihood of activating the degraded voltage circuitry in the event of a design basis accident coincident with loss of the offsite power supply.