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December 28, 2006  
LIC-06-0148

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

- References:
1. Docket No. 50-285
  2. NRC Generic Letter 2003-01, "Control Room Habitability," dated June 12, 2003 (NRC-03-0109)
  3. Letter from OPPD (R. T. Ridenoure) to NRC (Document Control Desk), "Response to Generic Letter 2003-01, Control Room Habitability," dated December 5, 2003 (LIC-03-0150)
  4. Letter from OPPD (R. L. Phelps) to NRC (Document Control Desk), "Revised Generic Letter 2003-01, Control Room Habitability Commitments," dated October 5, 2004 (LIC-04-0107)
  5. Letter from NRC (A. B. Wang) to OPPD (R. T. Ridenoure), Request for Additional Information Related to Generic Letter 2003-01, Control Room Habitability," dated November 28, 2006 (NRC-06-0165)

**SUBJECT: Response to Request for Additional Information Related to Generic Letter 2003-01, "Control Room Habitability"**

Attached is the Omaha Public Power District (OPPD) response to Reference 5, which is an NRC request for additional information (RAI) concerning Generic Letter (GL) 2003-01 (Reference 2). Reference 3 is OPPD's initial response to GL 2003-01. Reference 4 was submitted to modify a commitment regarding the timeframe for submitting a license amendment request modeled after Technical Specification Task Force (TSTF)-448, "Control Room Habitability."

No commitments to the NRC are made in this letter. If you have additional questions, or require further information, please contact T. C. Matthews at (402) 533-6938.

Sincerely,

H. J. Faulhaber  
Division Manager  
Nuclear Engineering

HJF/mle

Attachment: Response to RAI Regarding Generic Letter 2003-01

**ATTACHMENT**

**Response to Request for Additional Information Regarding Generic Letter 2003-01, “Control Room Habitability”**

## **REQUESTED INFORMATION**

It is not clear from OPPD's response to Item 1 b of the GL whether or not the most limiting unfiltered inleakage into the control room envelope is incorporated into the hazardous chemical assessments. The NRC reviewed the FCS Toxic Gas Analysis (EA-FC-94-012, Revision 3) and it did not provide the information needed to complete our review. Therefore, the NRC staff is unable to complete its evaluation of your response to Item 1 b of GL 2003-01. The NRC staff requests that OPPD submit an additional response to Item 1 b of GL 2003-01 that addresses the following:

### **NRC Question:**

1. OPPD did not provide an assumed inleakage value while in the recirculation mode. Provide the assumed value for inleakage while in the recirculation mode.

### **OPPD Answer:**

The exact amount of control room unfiltered air inleakage during a toxic gas event is not quantified because of conservatisms incorporated in the toxic gas analysis. Total outside airflow into the control room during non-recirculation modes, i.e., normal or filtered mode is approximately 1000 cubic feet per minute (CFM). Unfiltered air infiltration into the control room in non-recirculation modes has been measured at approximately 35 CFM. Unfiltered air infiltration has not been measured in recirculation mode, but engineering judgment is that it remains approximately 35 CFM.

### **NRC Question:**

2. Provide supporting details that: (1) indicate that the most limiting unfiltered inleakage into the control room envelope is incorporated into the hazardous chemical assessments or (2) indicate that unfiltered inleakage into the control room envelope is not specifically incorporated into the hazardous chemical assessment because toxic gases are not considered to be a threat based on hazard screening performed on chemicals stored onsite or transported nearby, in accordance with applicable regulatory criteria/guidance.

### **OPPD Answer:**

When the toxic gas monitors sense 50 ppm of ammonia, they alarm and the control room ventilation system is automatically transferred to recirculation mode. However, the toxic gas analysis does not credit the automatic transfer to recirculation mode, but assumes that outside airflow into the control room remains 1000 CFM. This is a conservative assumption because in recirculation mode, outside airflow is zero, and unfiltered air infiltration (~35 CFM) is the only path for toxic gas to enter the control room. Control room operators are required to don self-contained breathing apparatus (SCBA) within 5 minutes of verifying the alarm because the toxic gas analysis assumes that a much greater volume of air is entering the control room. This timeframe is conservative because in recirculation mode, with no outside airflow, the rate of toxic gas entry into the control room would be much lower than assumed in the toxic gas analysis.