



444 South 16th Street Mall  
Omaha NE 68102-2247

December 5, 2003  
LIC-03-0160

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

- References:
1. Docket No. 50-285
  2. Letter from OPPD (R. T. Ridenoure) to NRC (Document Control Desk) dated July 25, 2003, Fort Calhoun Station Unit No. 1 License Amendment Request, "Reactor Coolant System Leakage Limits", (LIC-03-0050)

**SUBJECT: Response to NRC Request for Additional Information on Fort Calhoun Station's Reactor Coolant System Leakage Limits Amendment Request**

During the NRC review of Reference 2, Fort Calhoun Station (FCS) was requested to provide additional information regarding the leak rate calculation and steam generator tube surveillance program. The response to these questions is attached.

No commitments are made to the NRC in this letter.

If you have any questions or require additional information, please contact Dr. R. L. Jaworski at (402) 533-6833.

Sincerely,



R. T. Ridenoure  
Vice President

RTR/RLJ/rj

Attachment: Responses to NRC Questions on RCS Leakage Amendment Request

- c:
- B. S. Mallett, NRC Regional Administrator, Region IV
  - A. B. Wang, NRC Project Manager
  - J. G. Kramer, NRC Senior Resident Inspector
  - Division Administrator - Public Health Assurance, State of Nebraska

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## **Responses to NRC Questions on RCS Leakage Amendment Request**

### NRC Question 1

The licensee does have a surveillance requirement (SR) to evaluate reactor coolant system (RCS) leakage daily. It would be helpful if the licensee explain what they do to evaluate the RCS leakage daily and how the current SR is applicable to the revised Limiting Condition for Operation (LCO) statements on Operational LEAKAGE.

### FCS Response:

Presently the plant computer performs a temperature and pressure compensated mass inventory calculation. This same calculation can be performed by hand using the same data points and information from the steam tables and saturated water tables (if required). This is the same test that other plants perform daily and have a Technical Specifications that requires it be performed every three days. This same RCS inventory balance will be performed after amendment approval.

### NRC Question 2:

Also, the Standard Technical Specification has a SR discussing the verification of steam generator integrity. Does FCS currently have a similar requirement and if so, please explain how it is applicable to the revised LCO statements?

### FCS Response:

Yes, FCS currently has a surveillance requirement 3.17, FCS Steam Generator Tube Surveillance Program, which applies to in-service surveillance of steam generator tubes and ensures the integrity of the steam generator tubes. This surveillance requirement, like all FCS surveillance requirements are contained in Section 3.0, SURVEILLANCE REQUIREMENTS, and is applied to the support the requirements of Section 2.0, LIMITING CONDITIONS FOR OPERATION. Specifically, Technical Specification 3.17 prescribes the steam generator tube testing and program requirements. This is consistent with the NUREG-1432 Section SR 3.4.13.2 requirement to "Verify SG tube integrity is in accordance with the Steam Generator Tube Surveillance Program," at a frequency "In accordance with the Steam Generator Tube Surveillance Program."

The steam generator tube program requirements in NUREG-1432 and in the FCS Technical Specifications are related by association but not directly applicable to the LCO statements.

Further Clarification:

As a general comment, this License Amendment Request was prepared, with the intention of minimizing changes to the existing specification and basis. FCS does not want to revise any analysis that relied upon the use of the "Once a day determination of leak rate," or other present values. Thus the frequency/values were left "as is".

Also, all of the FCS Surveillance requirements are found in Section 3 of the FCS Technical Specifications. To adopt all of the wording of NUREG-1432 it would be necessary to place surveillance requirements in Section 2. It would be counter productive to implement an Improved Standard Technical Specification (ISTS) and place both the LCO and Surveillance requirements into Section 2 so that it agreed with the format of ISTS. Further, none of the FCS Section 2 LCO Technical Specifications use a tabular format, mixing the Technical Specification 2.1.4 section in a table format with other Section 2.0 Technical Specifications in the original sentence/paragraph format would not consistent.