



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
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February 24, 2004

EA-04-037

Duke Energy Corporation  
ATTN: Mr. R. A. Jones  
Site Vice President  
Oconee Nuclear Station  
7800 Rochester Highway  
Seneca, SC 29672

**SUBJECT: OCONEE NUCLEAR STATION - NRC INSPECTION REPORT  
05000269/2004009, 05000270/2004009, AND 05000287/2004009;  
PRELIMINARY GREATER THAN GREEN FINDING**

Dear Mr. Jones:

This letter and the enclosed supporting documentation discusses a finding that appears to have greater than very low safety significance. As described in section 1R12.1 of NRC Inspection Report 05000269/2003004, 05000270/2003004, and 05000287/2003004, issued on October 24, 2003, a finding [Unresolved Item (URI) 05000269,270,287/2003004-01] was identified that involved inadequate corrective actions. Specifically, inadequate corrective actions for increased pump seal leakage resulted in degradation of the standby shutdown facility (SSF) auxiliary service water (ASW) pump inboard bearing and the associated lubricating oil.

The as found conditions of the bearing and the bearing lubricating oil indicated that the ASW pump may not have been capable of performing its safety function. The bearing had experienced corrosion and the bearing lubricating oil contained excessive water. We reviewed information provided by Duke Energy Corporation (DEC) which evaluated the ability of the pump to perform its safety mission, including information provided by the bearing vendor and a technical expert in lubrication. The bearing vendor performed a limited examination of the bearing. Specific operational experience or testing data was not provided to support the evaluation. The evaluation relied heavily on the technical consultants' characterization of the bearing loading as light and the pump mission time as short. An additional uncertainty in the evaluation of the pump operability is whether the water was entering the bearing primarily during pump operation or while the pump was in standby. We concluded that there was not reasonable assurance that the SSF ASW pump would have been capable of operating for its 72 hour mission time specified in the Updated Final Safety Analysis Report and the Technical Specification Bases.

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This finding was assessed based on the best available information, including influential assumptions, using the applicable Significance Determination Process (SDP) and was preliminarily determined to be a Greater Than Green Finding. Enclosed is a summary of the SDP Phase III analysis. Additional information from DEC would allow a more refined risk analysis. Such information could include: (1) Operational experience or testing data that provides insights on the ability of the SSF ASW pump to operate in the as-found condition; and (2) a more detailed understanding of water entry into the pump bearing and the effects on water/oil concentration during a 72 hour operating period.

The finding has a greater than very low safety significance because the SSF ASW pump is relied upon to provide decay heat removal in the event that main feedwater and emergency feedwater are not available. The pump was degraded with the packing leak for approximately eleven months. The finding does not represent a current safety concern since you have implemented corrective actions including replacement of the bearing, changing out the lubricating oil, and preventing any future seal leakage from being directed into the bearing.

The finding is also an apparent violation (AV) of 10 CFR 50, Appendix B, Criteria XVI, Corrective Action, for failure to promptly identify and correct this significant condition adverse to quality. Specifically, excessive SSF ASW pump seal water leakage was identified in work requests on two separate occasions between September 19, 2002 and August 18, 2003, but was not corrected. Consequently, water contamination of the inboard bearing lube oil resulted; thereby, jeopardizing the pump's ability to fulfill its intended function. This apparent violation (identified as AV 05000269,270,287/2004009-01: Failure to Promptly Identify and Correct Seal Water Leakage Contamination of the SSF ASW Pump Inboard Bearing Lube Oil) is being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. Accordingly, for administrative purposes, URI 05000269,270,287/2003004-01 is considered closed. The current Enforcement Policy is included on the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>.

Before we make a final decision on this matter, we are providing you an opportunity to: (1) present to the NRC your perspectives on the facts and assumptions, used by the NRC to arrive at the finding and its significance, at a Regulatory Conference or (2) submit your position on the finding to the NRC in writing. If you request a Regulatory Conference, it should be held within 30 days of the receipt of this letter and we encourage you to submit supporting documentation at least one week prior to the conference in an effort to make the conference more efficient and effective. If a Regulatory Conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. If you decide to submit only a written response, such a submittal should be sent to the NRC within 30 days of the receipt of this letter.

Please contact Mr. Robert Haag at (404) 562-4550 within 10 business days of the date of your receipt of this letter to notify the NRC of your intentions. If we have not heard from you within 10 days, we will continue with our significance determination and enforcement decisions and

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you will be advised by separate correspondence of the results of our deliberations on this matter.

Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued at this time. In addition, please be advised that the number and characterization of the apparent violation may change as a result of further NRC review.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). However, the NRC is continuing to review the appropriate classification of the enclosed SDP Phase III Summary and Attachments within our records management program, considering changes in our practices following the events of September 11, 2001. Using our interim guidance, the enclosed summary and attachments have been marked as Proprietary Information or Sensitive Information in accordance with Section 2.790(d) of Title 10 of the Code of Federal Regulations. Please control the document accordingly (i.e., treat the document as if you had determined that it contained trade secrets and commercial or financial information that you considered privileged or confidential). We will inform you if the classification of these documents change as a result of our ongoing assessments. ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Leonard D. Wert, Deputy Director  
Division of Reactor Projects

Docket Nos.: 50-269, 50-270, 50-287  
License Nos.: DPR-38, DPR-47, DPR-55

Enclosure: SDP Phase III Summary w/Attachments

cc.(letter only):

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