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**Washington Public Power Supply System**

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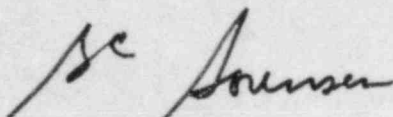
Mr. J. B. Martin  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, California 94596

Subject: NUCLEAR PROJECT NO. 2  
10CFR50.55(e) NON-REPORTABLE CONDITION #259  
INCOMPLETE ANCHOR BOLT ANALYSIS - RHR HEAT EXCHANGERS

Reference: 1. Telecon dated November 1, 1983, R.T. Johnson to Bob  
Dodds.  
2. Letter G02-83-1105, dated 12/1/83, G.C. Sorensen to  
J.B. Martin.

In accordance with the provisions of 10CFR50.55(e), your office was informed by the references of the above subject condition. The attachment provides the Project's final response on Condition #259.

If there are any questions concerning this matter, please contact Roger Johnson, WNP-2 Project QA Manager, (509) 377-2501, extension 2712.



G. C. Sorensen  
Manager, Regulatory Programs

JGT/kd

Attachment: As stated

cc: W.S. Chin, BPA  
N.D. Lewis, EFSEC  
A. Toth, NRC Resident Inspector  
Document Control Desk, NRC

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
NUCLEAR PROJECT NO. 2  
DOCKET NO. 50-397  
LICENSE NO. CPPR-93  
10CFR50.55(e) CONDITION #259  
INCOMPLETE ANCHOR BOLT ANALYSIS - RHR HEAT EXCHANGERS

Description of Deficiency

Revised loads transmitted by GE for the RHR Heat Exchanger lower supports were not fully evaluated by Burns and Roe for their effect on the anchor bolts. Specifically, the anchor bolt design load in the vertical up direction was 10 kip/bolt whereas the revised load provided by GEBR-2-81-189 was 76.22 kip/bolt.

Date and Method of Discovery

This condition was first identified by the Supply System during "Design Reverification" activities and was documented as Potential Findings Report (PFR) RHR-25 dated April 5, 1983.

Safety Implication

Overloading of the anchor bolts could result in failure of the RHR heat exchangers during post accident conditions. Should both heat exchangers sustain significant damage reactor cooldown would require the use of non-safety related systems.

Cause of Deficiency

This is considered to be an oversight with no generic implications.

Action to Prevent Recurrence

None required.

Corrective Action

Since the loads that the heat exchanger impart to the building structure are dependent on loads input to the heat exchanger from attached piping, a coupled analysis was performed by GE to determine actual loads to the anchor bolts. Since the coupled analysis was a time consuming task, contingency action was taken to modify the anchor bolts and washer plate assembly to be able to transmit the maximum loads (48 kip/bolt) equivalent to the capacity of the structural beams to which they attach (PED-215-CS-6492).

The results of the coupled analysis determined the maximum vertical up load to be 35 kip/bolt which is considerably larger than the 10 kip/bolt original design load. However, Burns and Roe recalculated and determined the original anchor bolt design to actually be capable of withstanding 38 kip/bolt which is greater than the coupled analysis load of 35 kips/bolt. Therefore, the original design is adequate and this condition is considered to be not reportable under 10CFR21.