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December 2, 1983
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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) REPORTABLE CONDITION #51
NON-SEISMIC CLASS I DEH CABINETS - REVISED FINAL REPORT

Reference: Letter G02-81-0155, dated June 24, 1981, R. G. Matlock to R. H. Engelken.

In accordance with the provisions of 10CFR50.55(e), your office was transmitted a Final Report on the above condition via the reference. The corrective action committed to in that report, installation of a steel frame to prevent toppling of the DEH cabinet during a seismic event, has been determined to be unnecessary. The attachment provides the Project's revised Final Report.

If you have any questions regarding this subject, please contact Roger Johnson, WNP-2 Project QA Manager, at (509) 377-2501, extension 2712.

G. C. Sorensen
Manager, Regulatory Programs

RTJ/kd

Attachment: As stated

cc: W.S. Chin, BPA
N.D. Lewis, EFSEC
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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 #51
NON-SEISMIC CLASS 1 DEH CABINETS

FINAL REPORT (REV. 1)

Description of Deficiency

The digital electro-hydraulic (DEH) control system for the turbine-generator is a Quality Class II system. Regulatory Guide 1.29 requires that such systems should be designed and constructed so that a seismic event would not cause them to fail and impair the function of safety-related systems. The DEH cabinets are located in the control room, but have not been designed, manufactured, or installed to Seismic Category 1 requirements.

Safety Implications

Failure of the DEH cabinet structure or supports during a seismic event could cause damage to safety-related equipment located in the Reactor Controls Bench Board mounted directly in front of the DEH cabinet. Damage to the safety-related equipment could result in the loss of ability to safely shut down the plant. In addition, DEH cabinet failure may do bodily harm to Control Room personnel who may be in the immediate area.

Corrective Action

Dynamic tests were performed on the DEH cabinets to determine their response frequencies. These tests demonstrated that the cabinets respond as essentially rigid structures. The cabinets and supports were then reanalyzed for equivalent horizontal and vertical static loads obtained from applicable response spectra, at the cabinet response frequencies. This reanalysis concluded that the DEH cabinets cannot fall over during the design basis safe shutdown earthquake (SSE). Therefore no physical restraints to prevent toppling of the cabinets are required.

EAF:kjt