82-724-000

Inited engineers & constructors inc.

30 South 17th Street Post Office Box 8223 Philadelphia, PA 19101 BOSTON DALLAS ECHELON. KNOXVILLE PHILADELPHIA VALLEY FORGE

October 29, 1982

Director Office of Inspection and Enforcement U. S. Nuclear Regulatory Commission Washington, D.C. 20555

> 10CFR21 Report of a Potential Defect Related to Washington Public Power Supply System -WNP-1 and 4

Reference: UE&C to NRC dated 8/13/82

Dear Sir:

In the referenced letter, United Engineers & Constructors Inc. informed the Commission as to the latest status of analysis pertaining to a reportable condition under 10CFR21 regarding the structural steel framing in the Containment.

This is to inform you that the tests that were being conducted to determine the flexibility of the framing connections have been comrieted and the structural analysis and design have been finalized considering the thermal and seismic effect and the interface with the supported systems.

As a result of our reanalysis and design, physical modifications will be made to the subject structural steel consisting of reinforcing a limited number of framing connections, removal of certain bracing members and providing "sliding" joints for certain main framing members.

The results of our testing program defined the load capacities and the corresponding elongations of representative types of framing connections. These results were used in our analysis to verify the capability of the connections for all load conditions including elevated temperature.

Based on the final geometry and using the results of the final analyses, the structural members were checked to insure conformance to the acceptance criteria identified in the FSAR.

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In no case is there yielding of the concrete embedments for the annular steel platforms and the elongations of the framing connections are within acceptable limits as determined from our testing program. All required framing modifications have been identified and the modifications will be performed when construction resumes. Change documents have been prepared and issued to field engineering for implementation.

Verification of seismic design of safety related systems, utilizing the new Amplified Response Spectra (ARS) generated for the modified structural framing, will be performed in accordance with our ongoing program as reported earlier to the Commission by letters dated August 8, 1980 and September 10, 1981.

This report concludes our investigation and redesign of the subject matter.

Very truly yours,

Sarsten

Vice President - Power

ANDA: rf

cc: Regional Director USNRC - Region 1
Regional Director USNRC - Region 5
R. W. Root - Washington Public Power Supply System