

Washington Public Power Supply System

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REGION V IDE

May 14, 1982
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Mr. R. H. Faulkenberry
Nuclear Regulatory Commission
Region V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596

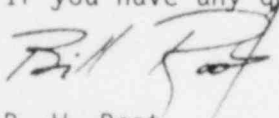
Subject: NUCLEAR PROJECTS 1 AND 4
DOCKET NOS. 50-460 AND 50-513
REPORTABLE CONDITION TRANSAMERICA DELAVAL
DIESEL GENERATOR AIR STARTING SYSTEM

Reference: Telecon ME Rodin, Supply System to PP Narbut,
Region V Nuclear Regulatory Commission

In the above reference, the Supply System informed your office of a reportable deficiency in accordance with the requirements of 10CFR50.55(e).

Attachment A, to this letter, includes a brief description of the identified deficiency and the Project's planned corrective action. With the exception of implementation, all actions have been completed. Due to the construction delay of the WNP-1 Project, the required corrective action will not be implemented until sometime after restart. When that date becomes known, we will so inform your office.

If you have any questions or desire further information, please advise.


R. W. Root
Acting Program Director

RWR:MER:lm

Attachment

cc: CR Bryant, BPA/399
EW Edwards, Bechtel/860
V. Mani, UE&C/896
V. Stello, Director of Inspection, NRC
A. Toth, NRC
FDCC/899

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ATTACHMENT A
WNP-1/4
DOCKET NOS. 50-460 AND 50-513
REPORTABLE CONDITION PER 10CFR50.55(e)
EMERGENCY DIESEL GENERATOR STARTING AIR PRESSURE SENSING LINE

BACKGROUND

The Supply System purchased Emergency Diesel Generators, two per plant, from Transamerica Delaval. A problem exists with the starting air pressure sensing lines in the starting air storage system which could result in loss of engine availability. Transamerica Delaval has reported this deficiency under the requirements of 10CFR Part 21. The starting air system was designed and major components supplied by Transamerica Delaval.

DESCRIPTION OF THE DEFICIENCY

Under the current design of the diesel generator starting air system, the major components of the system i.e., air storage tank, isolation valve, pressure switches and the air compressor, have been designed and installed in accordance with seismic category I requirements. However, the sensing line tubing which is used to connect the various components of the system has not been seismically qualified. During normal operation of the system, the pressure within the air storage tanks cycles between 215 and 250 psig with a low pressure alarm set point at 210 psig. Because the tubing within this system has not been seismically qualified it is conceivable that, during a seismic event, the sensing line tubing could fail. If such a failure were to occur, the calculated tank air discharge flow rate through the break in the tube (worse case) would be of a magnitude such that from the time the control room operator received a low pressure alarm and the time an operator could be dispatched to and reach the isolation valve and manually close it, engine availability would be lost. The ability to automatically start the engine on air pressure is lost when the pressure within the starting tank falls below 150 psig.

SAFETY IMPLICATIONS

A tube break as described above jeopardizes our ability to provide the necessary auxillary power needed during an emergency to effect a safe shut down of the plant.

CORRECTIVE ACTION

This deficiency will be eliminated by installing a 1/8" restricting orifice between the manual isolation valve and the starting air storage tank. An orifice of this size increases the available operator action time to 53 minutes. This is sufficient time to allow valve closure prior to reaching the critical tank pressure of 150 psig. Further, an orifice of this size is sufficient to permit reasonable transmission of changes in pressure from the tank to the pressure sensors, thus the design fix does not impair the re-charging capabilities of the air starting system.

A field change document is in the process of being prepared and approved by the Architect Engineer which will implement the design fix. Installation will be performed by a site contractor after restart of the WNP-1 Project.