# Portland General Electric Company

Charles Goodwin, Jr. Assistant Vice Mesio

July 17, 1979

Trojan Nuclear Plant Docket 50-344 License NPF-1

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Mr. R. H. Engelken, Director U. S. Nuclear Regulatory Commission Region V Suite 202, Walnut Creek Plaza 1990 N. California Blvd. Walnut Creek, CA 94596



Dear Sir:

Attached please find the supplemental information as indicated in my letter to you dated May 18, 1979, which submitted our response to Item 13 of IE Bulletin 79-06A, Revision 1. The attached table summarizes the description and implementation schedule of design modifications at the Trojan Nuclear Plant as a result of the preliminary review of the TMI accident. The implementation schedule described in the table represents our best estimation to date based on available material delivery dates and the Trojan plant operational schedule.

A review of the Administrative Section of the Trojan Technical Specifications is currently underway. Some possible organizational changes have been identified and are being further reviewed and evaluated. This additional review and evaluation should be completed within 60 days. Should some of these organizational changes be desirable or necessary, a request for a license amendment will be submitted within 30 days after completion of the review or by mid-October 1979. Our survey and evaluation of management and technical resources in response to Harold Denton's letter of June 29, 1979 will supplement our current review and will be submitted to you by July 30, 1979.

In addition, a sufficiently high priority has been given for reviewing the Radiological Emergency Response Plan (RERP) in light of the TMI

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accident. We are currently working with the State of Oregon on the Oregon Emergency Operations Plan which will be submitted to the NRC for concurrence this fall. We also hope to have amended the Trojan RERP by this fall to incorporate those TMI-related changes presently identified.

Sincerely,

C. Goodwin, Jr. Assistant Vice President Thermal Plant Operation and Maintenance

CG/KM/4sb8A16 Attachment

c: Mr. Lynn Frank, Director State of Oregon Department of Energy

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Trojan Design Modification		Description of Design Modification	Status of Design Review	Implementation Schedule
1.	SI Initiation Logic Change	Disconnect the input relays of the pressurizer level bistables at the universal logic boards in the SSPS cabinet and change the input relay connectors of the pressurizer pres- sure bistables to produce an actua- tion signal from a two-out-of-three logic.	Completed.	Modifications were implemented and the system is currently in service.
2	Containment Sump Discharge	Change the control circuits of Con- tainment isolation valves MO-4180 and CV-4181 on the Containment sump line (FSAR Figure 11.2-14). This is to eliminate, following a Containment isolation signal reset, the automatic pumping of waste water out of Contain- ment if a high Containment sump level exists. In addition, a process radia- tion monitor will be installed on the Containment sump discharge line to monitor activity level of the liquid to be transferred from the Containment sump to the Auxiliary Building dirty waste drain tank or the clean waste receiving tank.	Preliminary design review stage.	Modification will be implemented before th startup of Cycle 3 operation(1).

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IMPLEMENTATION SCHEDULE OF DESIGN MODIFICATIONS IDENTIFIED

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#### IMPLEMENTATION SCHEDULE OF DESIGN MODIFICATIONS IDENTIFIED AS A RESULT OF PRELIMINARY REVIEW OF THE TMI ACCIDENT

Trojan Design Modification	Description of Design Modification Increase the upper ranges of the Auxiliary Building and main condenser air ejector Process Effluent Radiation Monitors (PERM-2 and PERM-6, respec- tively). The upper range of PERM-2 and PERM-6 will become 3 x 10 <sup>2</sup> µCi/cc (Xe-133).	Status of Design Review	Implementation Schedule Modification will be implemented before the startup of Cycle 3 operation(1).
3. PERM Range		Detailed design review stage.	
<ol> <li>Redesign of Containment Isolation Valve Response on Resetting Containment Isolation</li> </ol>	Modify the control circuits of Con- tainment isolation valves which auto- matically open, if previously in an open position, after the Containment isolation signal is reset. Approxi- mately 21 valves will be modified to prevent automatic opening after Con- tainment isolation signal reset. With present Trojan design, one of the redundant series Containment isolation valves in each line remains closed until opened by separate operator action, except steam generator blow- down sample line valves.	Prelimiary design review stage.	Modification will be implemented before the startup of Cycle 3 operation(1).

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#### IMPLEMENTATION SCHEDULE OF DESIGN MODIFICATIONS IDENTIFIED AS A RESULT OF PRELIMINARY REVIEW OF THE TMI ACCIDENT Trojan Design Status of Design Implementation Modification Description of Design Modification Review Schedule 5. Recycle Provide a cross connect return line Preliminary design Modification will be Connection from the waste gas decay tanks to the review stage. implemented before the From Waste Containment Building. Waste gas will startup of Cvcle 4 Gas System be discharged back to Containment operation(2). to Containment from any waste gas decay tank or pumped back directly from the waste

6. Low Suction Pressure Protection for Auxiliary Feedwater System (AFS) Pumps

7. Electric Motor-Driven AFS Pump
7. Electric Motor-Driven AFS Pump
Add an electric motor-driven AFS pump which is capable of delivering 1000 gpm at a head of 3400 ft. The new pump will take suction from the condensate storage tank and provide flow to an existing AFS pump discharge line.

gas compressors by manual alignment of the valve and spool piece which will be located on the return line.

Install a low suction pressure trip

switch for each auxiliary feedwater

pump.or an equivalent protective

device.

Detailed design review stage. Piping is installed.

Preliminary design

review stage.

Modification will be implemented before the startup of Cycle 3 operation(1).

Modification will be

startup of Cycle 3

operation(1).

implemented before the

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	Frojan Design Modification	Description of Design Modification Install position indicators to the AFS manual valves that isolate the motor-operated control valves. Indi- cation of these valve positions will be located at panel C05 in the con- trol room and locally at panel G160 in the form of red and green indica- ting lights.	Status of Design <u>Review</u> Preliminary design review stage.	Implementation Schedule Modification will be implemented before the startup of Cycle 3 operation(1).
8.	Status Indication of AFS Manual Valves			
9.	Independent Cooling Water Supply for Turbine-Driven AFS Pump	Add a self-cooling water supply to the AFS pump lube oil and bearing heat exchangers to ensure that pump operation will be independent of the Service Water System. The self- cooling water will be taken from the AFS pump discharge.	Detailed design review stage.	Modification will be implemented before the startup of Cycle 3 operation(1).

IMPLEMENTATION SCHEDULE OF DESIGN MODIFICATIONS IDENTIFIED

(1) Cycle 3 operation is currently expected to commence in the first half of 1980 (February thru May).

(2) Cycle 4 operation is expected to commence in the spring of 1981.

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