



Portland General Electric Company

Bart D. Withers Vice President

July 19, 1985

Trojan Nuclear Plant
Docket 50-344
License NPF-1

Director of Nuclear Reactor Regulation
ATTN: Mr. E. J. Butcher, Jr., Acting Chief
Operating Reactors Branch No. 3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington DC 20555

Dear Mr. Butcher:

Safety Parameter Display System

Your Safety Evaluation of June 13, 1985 for the Trojan Safety Parameter Display System identified additional information which was required by the NRC staff in order to complete their review. The additional information is attached.

Sincerely,

Bart D. Withers
Vice President
Nuclear

Attachment

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

Mr. John B. Martin
Regional Administrator, Region V
U.S. Nuclear Regulatory Commission

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ADDITIONAL INFORMATION ON TROJAN
SAFETY PARAMETER DISPLAY SYSTEM (SPDS)

NRC Request

Satisfactory justification was not provided for the omission of the steam generator liquid sample parameter. The licensee should indicate how radiation status (Radioactivity Control Critical Safety Function) of the secondary system (steam generators and steam lines) can be rapidly assessed when the steam generators and/or steam lines are isolated.

PGE Response

The radiation status of the secondary system is normally assessed by the SPDS by monitoring PRM-10 (designated STM GEN BLDN on the SPDS). PRM-10 is located on the steam generator blowdown piping just downstream of the steam generator sample connections. During accident conditions, valves in the steam generator sample system which receive automatic closure signals would have to be realigned to monitor the present activity levels.

NRC Request

The Trojan SPDS appears to use a nonstandard color coding convention. The licensee should change the color coding convention to agree with plant and/or stereotypical color codes. If the licensee decides to leave the color code as it is now proposed, further justification should be provided to assure the staff that the present color coding scheme is:

1. Consistent with plant conventions and is not confusing.
2. Not distracting during normal plant conditions.
3. Easily readable during abnormal and emergency conditions.

PGE Response

The color coding of the SPDS was developed by the system vendor as part of the man-machine interface design basis. The vendor applied accepted human engineering principles in the color selection process. It is our intent to review the color coding as part of our own human factors review of the installed system. Our review will evaluate the colors for consistency with Plant conventions, readability, brightness, detectability, resolution, etc. Our human factors review is discussed in our July 3, 1985 letter and is due to be complete by December 1, 1985.

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