

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-344/85-29
Docket No. 50-344
License No. NPF-1
Licensee: Portland General Electric Company
121 S. W. Salmon Street
Portland, Oregon 97204
Facility Name: Trojan Nuclear Plant
Inspection at: Rainier, Oregon
Inspection conducted: August 26-30, 1985

Inspector:

L. R. Kanow
L. R. Kanow, Reactor Specialist

9/10/85
Date Signed

Approved By:

T. Young, Jr.
T. Young, Jr., Chief Engineering Section

9-11-85
Date Signed

Summary:

Inspection between August 26-30, 1985 (Report 50-344/85-29)

Areas Inspected: Routine, unannounced inspection of IE Bulletins, Notices, outstanding open items, and implementation of selected TMI Action Items. During this inspection, Inspection Procedures 25565, 92706, and 92717 were covered. This inspection involved a total of 42 inspector-hours by one NRC inspector.

Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

*W. S. Orser, Plant Manager
*J. Reid, Manager, Plant Services
*M. Snook, QA Supervisor
*M. Schwartz, Engineering Supervisor
*S. Bauer, Onsite Regulatory Engineer
B. Reinhart, Instrumentation and Control Supervisor
S. Nichols, Training Supervisor
G. Bair, Reactor Engineer, Technical Services
B. Kershul, Licensing Engineer
T. Berquam, Electrical Supervisor

*Denotes attendance at exit interview conducted at Trojan Nuclear Plant on August 30, 1985.

2. IE Notice 85-49 (Closed) Relay Calibration Problem

Agastat brand model 7000 timing relays can exhibit as much as 32 percent error if they are bench calibrated in the horizontal position and then mounted in the vertical position.

The inspector reviewed this issue with personnel responsible for calibration of these relays to determine if the licensee utilized this brand and model, if they were aware of the potential problem and, whether the issue represented a potential problem at the facility.

The licensee has identified approximately 300 Agastat brand relays inservice (in safety-related and non-safety related equipment). A calibration program had been established to inspect and calibrate various time delay relays and devices. The inspector reviewed Maintenance Procedure MP-1-17 which institutes a standard for inspection and calibration of relays. Adequate precautions exist in the procedure to alert the technician to the position of the relays during testing and mounting. Based on this review this item is considered closed.

No violations or deviations were identified.

3. IE Notice 85-23 (Closed) Inadequate Surveillance and Post-Maintenance and Post-Modification System Testing

This Notice described the improper installation of differential pressure transmitters, calculational errors resulting in nonconservative setpoints, and installation problems for overpower delta temperature input logic cards.

The inspector reviewed the licensee's actions regarding this notice and found that an Operational Assessment Review 85-20 had been performed and that appropriate corrective actions had been identified. Based on this review this item is considered closed.

No violations or deviations were identified.

4. IE Bulletin 84-03 and TI-2515/65 (Open) Refueling Cavity Water Seal

In PGE's response dated November 30, 1984, the licensee evaluated the potential for and consequences of a reactor cavity water seal incident.

The licensee stated that due to the differences between the Trojan and Haddam Neck refueling cavity water seal design, material properties, and type of installation, partial or complete failure of the Trojan seal appears unlikely to occur. However, the licensee's review did identify two corrective actions to be taken; (1) implement a plant procedure specifically addressing actions to be taken following partial or complete failure of the refueling cavity water seal, and (2) during the 1986 refueling outage, modify the rod cluster control (RCC) change fixture to prevent partial uncovering of any fuel assemblies in the RCC change fixture.

The inspector verified that Plant Procedure FHP-13, Rev. 9, "Fuel Handling Procedure", adequately addresses the loss of refueling cavity water seal. Item (2) remains to be completed and will be verified during a future inspection.

No violations or deviations were identified.

5. GL 85-09 (Open) Technical Specifications for Generic Letter 83-28
Item 4.3

This Generic Letter requires licensees to submit proposed Technical Specification (TS) changes to explicitly require independent testing of the undervoltage and shunt trip attachments during power operation and independent testing of the control room manual switch contacts during each refueling outage.

In PGE's response, dated August 2, 1985, the licensee stated that the Westinghouse Owners Group (WOG) was considering a program to optimize reactor trip breaker maintenance and surveillance practices, which includes the development of TS changes consistent with this generic letter. PGE intends to participate in the WOG efforts, but will submit a TS change by November 1, 1985, if the WOG doesn't undertake the program.

No violations or deviations were identified.

6. GL 85-10 (Closed) Technical Specifications for Generic Letter 83-28

This Generic Letter was addressed to all Babcock and Wilcox pressurized water reactors and is not applicable to the Portland General Electric Company, therefore, this item is considered closed for tracking purposes.

7. TMI Task Action Plan Items

a. Item I.D.2 (Open) "Plant Safety Parameter Display Console"

Summary: NUREG-0737 requires the addition of a Safety Parameter Display System (SPDS) in the control room to display for operating personnel a minimum set of plant parameters which define the safety

status of the plant. Additional guidance and clarification is given in NUREG-0696 and Generic Letter 82-33.

Conclusion: In the safety evaluation dated June 13, 1985, NRR found PGE's continued implementation of the SPDS program acceptable, but that final acceptance of the SPDS was pending further review by the staff.

The inspector reviewed RDC-80-039 and on a sample basis the design change packages (DCPs) associated with the installation of the P2500 (SPDS). The inspector also visually inspected the accessible electrical portions of P2500 and the installed P2500 located at panels QTSC 6, 7, 8, and 9.

The inspector verified that instrumentation and components were correctly identified and located, adequate QC involvement during installation, and QA/QC documentation was properly signed and reviewed. At the time of the inspection, installation of approximately 34 inputs into the P2500 had not been completed. Also, the licensee was in the process of writing a procedure to provide for P2500 input verification.

This item remains open pending the verification of 1) completion of inputs into the SPDS; 2) turnover of the P2500 to operations; 3) review of personnel training; and 4) review of procedures, drawings and Technical Specification changes.

b. II.F.2 (Open) Instrumentation of Inadequate Core Cooling

Summary: This task action item requires that the licensee shall provide a primary coolant saturation meter to provide on-line indication of coolant saturation conditions. Additional instrumentation to provide an unambiguous indication of inadequate core cooling is to include reactor-water-level indication. Attachment 1 of this task action item requires upgrading to safety grade the incore thermocouple cabling to the control room. These thermocouples monitor core outlet temperatures.

Conclusions: The staff reviewed the PGE submittal dated March 18, 1983 describing the proposed system. The proposed use of the Westinghouse Reactor Vessel Level Instrumentation System (RVLIS) was found acceptable. At the time of the inspection approval for RVLIS implementation was currently under review (pending submittal of PGE implementation report).

The inspector reviewed on a sample basis QA/QC records and DCPs associated with RDC No. 80-111. The inspector performed a visual inspection of the accessible mechanical and electrical portion of the RVLIS beginning at the containment penetrations E-155, -142 to cabinets C60A and C60B in the control room (train A and B respectively). The inspector also verified digital outputs from the RVLIS monitors located on panel C09 in the control room.

Based on this review the inspector verified:

- ° Installation of the system.
- ° Instrumentation and components correctly identified and located.
- ° Physical independence between redundant instrument components of actuating devices in the control room.
- ° QC involvement during installation.
- ° QC documentation was adequately reviewed and signed. The inspector did note however that a Design Review Report written for DCP 13 had been dated and signed as being approved before the review was completed and signed-off.

At the time of the inspection, the licensee's Engineering Department did not have the completed Temporary Plant Test (TPT)-58 and therefore will be reviewed during a future inspection.

Operator training was at the time of the inspection being provided to the operators and Technical Specification changes had recently been submitted by PGE. Verification of these two items and a review of procedure and drawing changes will be performed during a future inspection.

This item remains open pending a review of the items mentioned above and a review of the core exit thermocouples.

c. II.K.3.5. (Open) Auto Trip of the Reactor Coolant Pumps (RCPs)

Summary: NUREG-0737 states that tripping of the RCPs in case of a loss-of-coolant accident (LOCA) is not an ideal solution, but that licensee's should consider other solutions to the small break LOCA problem. Until a better solution is found the RCPs should be tripped automatically in case of a small break LOCA.

Conclusions: PGE chose to provide criteria for a manual trip of the RCPs instead of providing for an automatic trip actuation. In PGE letter dated April 22, 1983, the licensee committed to (1) develop revised RCP trip criteria, (2) provide justification for manual RCP trip, (3) incorporate the use of PT-403 and -405 to provide indication of system pressure for manual RCP trip (modifications performed under RDC 83-004), (4) provide in the Emergency Procedure guidance to the operators when system conditions permit RCP operation, and (5) incorporate into the operator training program the revised operating criteria for the RCPs. These items will be reviewed during a future inspection.

8. Management Interview

Meetings were held with the licensee representatives (identified in paragraph 1) on August 30, 1985 to discuss the scope and findings of this inspection.