Portland General Electric Company
Trojan Nuclear Plant
P.O. Box 439
Rainier, Oregon 97048
(503) 556-3713

October 11, 1982
CPY-786-82

MR. R. H. Engelken
Regional Administrator
US Nuclear Regulatory Commission
Region V
1450 Maria Lane - Suite 210
Walnut Creek, California 94596-5368

Dear Sir:

In accordance with the Trojan Plant Operating License Appendix A, USNRC Technical Specification 6.9.1.9.b, Licensee Event Report No. 82-18 concerning steam pressure transmitter PT-524 failing high is attached. This failure resulted in violation of ESF instrumentation channel operability required by Technical Specification 3.3.2.1.

Sincerely,

C. P. Yundt, General Manager

R. L. Steele, Manager
Nuclear Projects Engineering

CPY/GGB/WON:ga

Attachments

c: LER Distribution
File 93.24a(Q)

IE-22

REPORTABLE OCCURRENCE

1. Report No: 82-18

2. Report Date: October 11, 1982

3. Occurrence Date: September 18, 1982

4. Facility: Trojan Nuclear Plant, PO Box 439, Rainier, Oregon 97048

5. Identification of Occurrence:

Steam pressure transmitter, PT-524, for 'B' steam generator failed high. This caused the associated 'B' steam generator steam flow indicator, FI-522, to fail high also since it receives an input from PT-524 for steam flow pressure compensation.

6. Conditions Prior to Occurrence:

The plant was operating in Mode 1 at 100% power prior to the occurrence.

7. Description of Occurrence:

'B' steam generator steam pressure transmitter, PT-524, failed high. This transmitter provides a pressure compensation signal for flow indicator, FI-522, which failed high also. The PT-524 failure tripped one bistable feeding the steam line differential pressure safety injection logic and tripped one bistable feeding the low steam generator level with feed flow - steam flow mismatch reactor trip logic. In addition the steam generator water level control system was affected since steam flow channel 522 (fed by PT-524) was selected as the controlling channel at the time of the failure.

8. Designation of Apparent Cause of Occurrence:

The cause of the steam pressure transmitter failure has not been determined. The transmitter manufacturer has been contacted and is studying the situation in an attempt to determine the specific cause of the failure.

9. Significance of Occurrence:

The failure of PT-524 caused a trip in its associated bistable in the low steam generator level with steam flow - feed flow mismatch reactor trip. This was a failure in the conserative direction since it provided one-half of the reactor trip logic for loop B. The PT-524 failure correctly tripped one of two associated bistables in the steam line differential pressure safety injection. However, the PT-524 failure would have prevented its second associated safety injection bistable from tripping even if an actual steam line differential pressure condition existed in loop B. Safety injection coincidence was therefore reduced to 2 out of 2 (vice 2 out of 3) for loop B violating ESF instrumentation channel operability required by Technical Specification 3.3.2.1. The redundant pressure transmitters were operable and all three reactor trip and safety injection bistables affected by the failure were placed in the tripped condition 45 minutes after the failure. There was no effect on plant or public safety.

10. Corrective Action:

The controlling 'B' steam generator steam flow channel was switched to the alternate channel immediately after the PT-524 failure. The three affected safety injection and reactor trip bistables were placed in the tripped condition 45 minutes later. Instrumentation and control technicians found the transmitter indicating normal when they arrived to troubleshoot the failure. The transmitter was vented and verified to be operating properly. The transmitter was returned to service with no failure cause identified. The transmitter manufacturer has been contacted and is studying the situation in an attempt to determine the specific cause of the failure.