

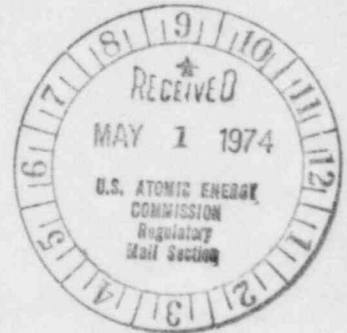


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General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

April 26, 1974



Mr. John F. O'Leary, Director
Directorate of Licensing
US Atomic Energy Commission
Washington, DC 20545

Re: Docket 50-255
License DPR-20
AO-3-74 and AO-4-74

Dear Mr. O'Leary:

Attached are abnormal occurrence reports AO-3-74 and AO-4-74
for the Palisades Plant.

Yours very truly,

Ralph B. Sewell (Signed)

RBS/ds

Ralph B. Sewell
Nuclear Licensing Administrator

CC: JGKeppler,
USAEC

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ABNORMAL OCCURRENCE REPORT
Palisades Plant

1. Report Number: AO-3-74, Docket 50-255
2. (a) Date: April 25, 1974
(b) Occurrence Date: April 16, 1974
3. Facility: Palisades Plant
4. Identification of Occurrence: Pressurizer Pressure Sensor Drift
5. Conditions Prior to Occurrence: Refueling Shutdown
6. Description of Occurrence: While reviewing the refueling surveillance calibration sheets, it was noted that the pressurizer pressure sensors had drifted down (indicating low). This caused the safety injection initiation setting for pressurizer low pressure to be below the 1550 psia limit specified in Table 3.16.1 of the Technical Specifications on three of the four channels. Two of the three low channels were found to be 15 psi lower than the required Technical Specifications setting and the third channel was 5 psi low.
7. Designation of the Apparent Cause of the Occurrence: The apparent cause of this occurrence has been designated as sensor drift exceeding that which was expected and specified by the vendor.
8. Analysis of the Occurrence: The effect of these sensors being set outside the specified limit is considered to be negligible with regard to emergency core cooling system performance. Review of CENPD-31 "Revised Analysis of Palisades Emergency Core Cooling System Performance" shows an almost instantaneous decrease in pressure to less than 1400 psia following the worse case break. The time delay added by the initiation setting being less than previously analyzed is essentially zero.

In addition, the Palisades Plant safety analyses assumed a 22 psi uncertainty existed on all pressure instruments. This uncertainty was not exceeded.

9. Corrective Action: The pressure sensors have been recalibrated and pressure switches reset to allow a 10 psi drift instead of the previously allowed 5 psi drift. The pressure sensor will be checked during the steam generator inspection which is scheduled to occur after about 90 full power days of operation. At that time, the calibration data will be used to determine a future surveillance frequency.

The vendor has been contacted to determine if any modifications can be made to these pressure sensors to reduce the drift. The vendor's recommendations will be factored into permanent corrective action taken.

10. Failure Data: Review of the four previous system calibrations revealed that at least one sensor had exceeded expected drift on each occasion. The equipment identification is as follows:

Component: Pressure Transmitter 0102

Manufacturer: Foxboro

Nameplate Data: Type 611GM Pressure Transmitter

ABNORMAL OCCURRENCE REPORT
Palisades Plant

1. Report Number: AO-4-74, Docket 50-255
2. (a) Date: April 18, 1974
(b) Occurrence Date: April 17, 1974
3. Facility: Palisades Plant
4. Identification of Occurrence: Steam Generator Pressure Sensor Drift
5. Conditions Prior to Occurrence: Refueling Shutdown
6. Description of Occurrence: While reviewing refueling surveillance procedures M-FWS-2, it was noted that two steam generator pressure transmitter outputs had drifted up (indicating high) by as much as 32 psi (3.2%). The system settings were previously established assuming a 5 psi (.5%) drift. Thus, Channel A of steam generator #2 was found 27 psi (32 psi - 5 psi) lower than Technical Specifications setting of 500 psia. Channel C was found 7 psi low.

Of the eight sensors associated with the reactor low pressure trip and MSIV closure function of the two steam generators, five had drifted outside the expected .5%. Three of these five did not cause Technical Specifications violations due to opposite receiver drift or drift in a conservative direction.
7. Designation of Apparent Cause of the Occurrence: Violation was result of establishing the MSIV trip closure and the reactor low pressure trip setpoints assuming a .5% drift. The drift exceeded this value in a nonconservative direction resulting in nonconservative safety system settings.
8. Analysis of Occurrence: A steam line isolation signal is actuated on low steam generator pressure to protect against an excessive rate of heat removal from the steam generators. The most severe rate of heat removal would exist during the postulated steam line rupture. The effect of these sensors initiating the steam line isolation function at a slightly lower pressure than that specified is considered negligible. The initial pressure decrease is so rapid that the added time delay is essentially zero. In addition, a 22 psi uncertainty was applied to the 500 psia setting limit in the safety analysis (FSAR, Section 14.14). Seven of the eight sensors were found to be set within this uncertainty limit.
9. Corrective Action: Recalibrated to specified values. Initiated procedure change to change system setting to 510 psi for low pressure trip and 540 psi for MSIV closure block reset to allow a 10 psi (1%) drift.

The manufacturer has been contacted and requested to investigate to determine the cause of the drift experience.

10. Failure Data: Similar to A0-3-74, Docket 50-255

The equipment identification is:

Component: Pressure Transmitter 0102

Manufacturer: Foxboro

Nameplate Data: Type 611GM Pressure Transmitter