

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-255/86006(DRS)

Docket No. 50-255

License No. DPR-20

Licensee: Consumers Power Company
212 West Michigan Avenue
Jackson, MI 49201

Facility Name: Palisades Nuclear Generating Plant

Inspection At: Covert, MI

Inspection Conducted: January 27 through February 7, 1986

Inspector: *C. J. Paparella*
for P. J. Williams

2/26/86
Date

Approved By: *C. J. Paparella*
for M. A. Ring, Chief
Test Programs Section

2/26/86
Date

Inspection Summary

Inspection on January 27 through February 7, 1986 (Report No. 50-255/86006(DRS))

Areas Inspected: A routine safety inspection to followup on previously identified items, this inspection involved 28 inspector-hours including 3 inspector-hours onsite during offshifts.

Results: Of the area inspected one violation was identified (inadequate testing of safety-related systems - Paragraph 3) that requires action by the licensee.

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DETAILS

1. Persons Contacted

*R. A. Fenech, Technical Engineer
*J. D. Alderink, Superintendent, Mechanical Maintenance Engineering
*R. E. McCaleb, Quality Assurance Director
*J. G. Lewis, Technical Director
*V. J. Beilfuss, Project Engineer
J. M. Buechler, Section Head, Quality Assurance-Construction
D. A. Bixel, Senior System Engineer

*Denotes those personnel present at the exit interview.

Additional station technical and administrative personnel were contacted by the inspector during the course of the inspection.

2. Licensee Action on Previous Inspection Findings

The inspector reviewed the licensee actions on the following items and the results are as stated:

(Closed) Unresolved Item (255/85026-01(DRS)): This item involved the failure of the licensee to conduct a 48 hour endurance run on the new auxiliary feedwater pump (P8C). Discussions with the Office of Nuclear Reactor Regulation (NRR) indicate that this testing is required to verify design. This item is upgraded to a violation and discussed in paragraph 3a.

(Closed) Unresolved Item (255/85026-02(DRS)): This item concerned the failure of the licensee to conduct a flow test of the new auxiliary feedwater pump (P8C) alternate suction supply line. The licensee has been unable to provide any documentation to support the ability of the alternate suction line to supply water. Therefore, this item is upgraded to a violation and discussed in paragraph 3b.

(Closed) Open Item (255/85026-03(DRS)): This item documented the requirement of the inspector to review and evaluate any Quality Assurance audits and surveillances for testing activities of the auxiliary feedwater pump (P8C). At the time of the activities, the licensee's program did not require any documented audits or surveillances. The Quality Assurance Program for construction testing has been amended to include these activities during future modifications. Therefore, this item is considered closed.

(Open) Open Item (255/85026-04(DRS)): This item concerned the requirement to complete a walkdown by the inspector of the installed equipment to verify that controlled drawings reflect the as-built configurations. The inspector was unable to complete this inspection effort due to the activities for plant startup by the licensee. The inspector has identified this inspection activity as a candidate for resident inspector action. This item is still open.

(Closed) Open Item (255/85026-05(DRS)) This item concerned determining if the various flow and pressure instruments had been properly installed. The inspector was unable to visually inspect the instruments due to plant startup activities, but has reviewed test procedure GMO-8343-501 for the testing activities and surveillance RO-8, Revision 22 "Engineered Safeguards System." These tests appear to adequately verify proper installation of the instruments. The inspector also conducted detailed discussions with the cognizant test engineer. The test engineer demonstrated a thorough knowledge of the proper installation of the instruments and the possible consequences if improperly installed. The inspector has no further concerns in this area and this item is considered closed.

(Open) Open Item (255/85026-06(DRS)): This item concerns a comparison of Technical Specification values to the data collected during pre-operational testing for design verification of the new auxiliary feedwater pump (P8C). The issued Technical Specifications contained no values for determining pump operability, but a supplement to the technical specifications will be issued in the future that should contain the values. This item is considered open pending issue of this supplement and review by the NRC.

3. Review of Completed Test Results GMO-8343-501

During the review of the test results, the following concerns were identified as unresolved items in Inspection Report No. 85026:

- a. Subsequent to the accident at Three Mile Island standard practice for auxiliary feedwater system testing has been to conduct a 48 hour endurance run and a 1 hour restart after cooldown of all auxiliary feedwater pumps. The licensee committed to meet this requirement in a letter dated August 11, 1982 in response to an Office of Nuclear Reactor Regulation (NRR) question. The successful completion of this test feature is considered a requirement to verify that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed. Following the modification which made pump P8C into the third auxiliary feedwater pump, the licensee did not perform the 48 hour endurance run testing. The failure to perform this testing is considered an example of a violation (255/86006-01a) of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control."
- b. In order to provide a redundant water supply to auxiliary feedwater pump P8C, the licensee installed an alternate suction supply from the service water system. The licensee failed to conduct a flow test to demonstrate an adequate Net Positive Suction Head (NPSH) existed through this newly installed suction supply line to supply water to the third auxiliary feedwater pump (P8C). This failure to demonstrate that components will perform satisfactorily in service is considered an example of a violation (255/86006-01b) of 10 CFR Part 50, Appendix B, Criterion XI.

No other violations or deviations were identified.

4. Exit Interview

The inspector met with the licensee representatives denoted in Paragraph 1 on February 6, 1986. The inspector summarized the scope and the findings of the inspection. The licensee acknowledged the statements made by the inspector with respect to the violation (Paragraph 3). The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary.