

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-346/81-16

Docket No. 50-346

License No. NPF-3

Licensee: Toledo Edison Company
Edison Plaza, 300 Madison Avenue
Toledo, OH 43652

Facility Name: Davis-Besse Nuclear Power Station, Unit 1

Inspection At: Oak Harbor, OH

Inspection Conducted: September 1-4, 8-11, 14-15, 21-25, and 28-30, 1981

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10/15/81

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Reactor Projects Section 2B

10/15/81

Inspection Summary

Inspection on September 1-4, 8-11, 14-15, 21-25, and 28-30, 1981 (Report No. 50-346/81-16)

Areas Inspected: Routine, unannounced inspection of followup of previous inspection items, Operational Safety Verification, maintenance activities, Monthly Surveillance Observations, followup on Licensee Event Reports, IE Bulletin followup and Plant Trip on September 3, 1981. The inspection involved a total of 202 inspector-hours onsite by two NRC inspectors including 59 inspector-hours onsite during offshifts.

Results: Of the seven areas inspected, no items of noncompliance or deviations were identified in six areas, one apparent item of noncompliance was identified in another area (failure to sign Maintenance Work Orders on completed maintenance activities).

DETAILS

1. Persons Contacted

- *T. D. Murray, Station Superintendent
- B. Beyer, Assistant Station Superintendent
- *S. Quennoz, Assistant Station Superintendent
- P. Carr, Maintenance Engineer
- *J. Werner, Administrative Coordinator
- D. Miller, Operations Engineer
- D. Briden, Chemist and Health Physicist
- J. Hickey, Training Supervisor
- L. Simon, Operations Supervisor
- G. Daft, Operations QA Manager
- *J. Greer, QC Supervisor

*Denotes those attending the exit interview on September 22, 1981.

The inspectors also interviewed other licensee employees, including members of the technical, operations, maintenance, I&C, training and health physics staff.

2. Followup On Previous Inspection Items

50-346/80-12-01 (Closed) Open Item: Loss of gaitronics during the April 19, 1980 event. Procedure SP 1107.09, Instrument AC System Procedure, was revised to allow the inverters to be supplied from the DC Bus when the normal feed for the regulated rectifiers from motor control centers E12A or F12A are to be de-energized. The licensee has upgraded the internal communication system of portable radios by installing a passive antenna to improve communication at the frequencies used at the station. The use of fifteen (15) two channel portable walkie-talkie radios is covered under administrative memorandum No. 14. Management review of the April 19, 1980 event resulted in increased review of abnormal electrical lineup during outages.

50-346/81-03-06 (Closed) Deviation: Failure to review and approve Procedure AD 1805.00 by QA Revision 16. The procedure was reviewed and approved by QA on September 4, 1981.

50-346/81-03-03 (Open) Noncompliance: Example, Failure to Update Control Room Procedures File. During a review of the procedure file at the auxiliary shutdown panel the inspector found that Procedures SP 1106.16 and AD 1839.02 were not the latest revision.

3. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of September. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified

proper return to service of affected components. Tours of the auxiliary building and turbine building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the month of September, the inspector walked down the accessible portions of the Emergency Diesel Generator No. 2 systems to verify operability. The inspector also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

During a review of the locked valve log the inspector noticed that both ECCS room coolers for No. 2 ECCS room were valve out of service. Cooler No. 1-1 was isolated on January 25, 1981 and cooler No. 1-2 was isolated on September 12, 1981. On September 15, 1981 the inspector notified the licensee that FSAR Section 6.3.6 list the ECCS room coolers as essential auxiliary equipment to support the ECCS operation during a LOCA. Upon notification the licensee returned No. 1-1 cooler to service.

The licensee has initiated Deviation Report 81-140 and is working with the Architect Engineer to determine when in the ECCS actuation mode (injection or recirculation) are the ECCS room coolers required. Repairs are underway to return the coolers to operable status. This item is unresolved pending the licensee submittal of the above mentioned information. (50-346/81-15-02)

On September 25, 1981 while conducting a plant tour the inspector found several cracks in the auxiliary building floor drain piping. All cracks found were adjacent to welds in the piping. The licensee is removing a section of the pipe for analysis and will conduct repairs once the failure mechanism is identified. The inspectors will followup the licensee's corrective action. (50-346/81-16-03)

4. Maintenance Activities

During the review of the licensee maintenance activities of safety related systems and components the inspector determined that a serious breakdown exists in the administrative controls used to implement the maintenance program. The Maintenance Work Order (MWO) system established to control the conduct of maintenance is not enforced as per the requirements of Administrative Procedure AD 1844.00, "maintenance." This procedure requires that upon completion of maintenance, the responsible foreman reviews and approves the MWO and forwards it to the Shift Supervisor for any testing required. Once the testing is completed the shift supervisor should sign the MWO and forward it to the maintenance engineer.

Contrary to this requirement the licensee is using a verbal notification from the maintenance foreman to notify the Shift Supervisor of the completion of maintenance. Subsequent to this verbal notification the Shift Supervisor is testing the equipment and declaring it operable.

The above mentioned practice has resulted in numerous MWOs implemented during the 1979 and 1980 outages to be shown outstanding when indeed the work was completed. In addition, since the MWO and work performed is not routed to Quality Control for review and approval there is no assurance that the work conducted and the parts used were of the required quality. This has resulted in the operation of the unit with outstanding Nonconformance Reports issued in the parts used or the work conducted.

The below listed MWOs are examples of systems and components and the equipment declared operable without the completion of an MWO.

a. Emergency Diesel Generators

MWO 80-275 Change out turbocharger drive gear
MWO 81-2602 Obtain backlash readings

b. Auxiliary Feedwater System

MWO 79-317 Suction strainers for auxiliary feedwater pump
MWO IC-572-81 Static "O" ring pressure switch

c. Core Flood System

MWO 77-2024 Work in valves CF1A and CF1B
MWO 80-3400 Repair valve CF-30

d. Makeup and Purification System

MWO 79-1985 Repair Makeup Pump 1-1

e. Reactor Protection System

MWO IC-523-80 Ground between RPS Ch. 3 and VLPM cabinet

f. Reactor Coolant Pumps

MWO 80-4163 Replacement of RCP Seal 1-2-1

g. Containment Ventilation System

MWO C-78-390 Cooling duct for REs 2004 through 2007

Another example of breakdown in the Administrative Controls of the maintenance program is the implementation of MWO 77-424. This MWO was signed as completed on September 13, 1978. The work covered by this MWO included the installation of grouted seismic supports on the Steam Feedwater Rupture Control System Instrument lines. On September 4, 1981 the inspector found that these supports were not painted or grouted.

On October 30, 1981 Maintenance Technicians working under MWO 81-3496 removed the Reactor Coolant Drain Tank Rupture disk. No tagging was performed on the isolable lines that discharge into the drain tank. Water from the isolable line was spilled on the floor resulting in an unplanned release of less than two curies of noble gasses. The Administrative Controls for the conduct of maintenance require that tagging be conducted prior to the performance of maintenance.

Failure to comply with the requirements of Administrative Procedure AO 1844.00 "Maintenance" is considered an item of noncompliance.

No additional items of noncompliance or deviations were identified.

5. Monthly Surveillance Observation

The inspector observed technical specifications required surveillance testing on the Reactor Protection System Channel No. 3 (ST 5030.02) and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector also witnessed portions of the following test activities:

RCS Water Balance (ST 5042.02)
AFW No. 2 Monthly Test (ST 5071.01)

No items of noncompliance or deviations were identified.

6. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

80-33	Hydraulic Snubber deficiencies
81-39	Containment Personnel Airlock Surveillance Exceeded 72 hours
81-42	Negative pressure door 302 broken latching mechanism
81-46	Unsealed Penetration in safety related firewall
81-47	Quadrant Power tilt exceeded
81-48	RCS Flow not recorded during deboration
81-49	RPS channel Intermediate Range Failed High
81-51	BWST Channel 3 level Failed High

No items of noncompliance or deviations were identified.

7. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presentation in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

81-02 Supplement 1 failure of gate valves to close against differential pressure.

No items of noncompliance or deviation were identified.

8. Plant Trips

Following the plant trips on September 2, 1981, the inspector ascertained the status of the reactor and safety systems by observation of control room indicators and discussions with licensee personnel concerning plant parameters, emergency system status and reactor coolant chemistry. The inspector verified the establishment of proper communications and reviewed the corrective actions taken by the licensee.

All systems responded as expected, and the plant was returned to operation on September 3, 1981.

No items of noncompliance or deviations were identified.

9. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of non-compliance, or deviations. The unresolved items disclosed during the inspection are discussed in Paragraph 3.

10. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month of September.