

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/84-18(DRP)

Docket No. 50-346

License No. NPF-3

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

Facility Name: Davis-Besse 1

Inspection At: Oak Harbor, OH

Inspection Conducted: July 24 - August 17, 1984

Inspectors: W. G. Rogers

D. C. Kosloff

Approved By: *I. N. Jackiw*  
I. N. Jackiw, Chief  
Projects Section 2B

9-11-84  
Date

Inspection Summary

Inspection on July 24 - August 27, 1984. (Report No. 50-346/84-18(DRP))

Areas Inspected: Routine, unannounced inspection by resident inspectors of licensee action on previous inspection findings; operational safety; maintenance; surveillance; licensee event reports and observation of emergency exercise. The inspection involved 125 inspector-hours onsite by two NRC inspectors including 35 inspector-hours onsite during off-shifts.

Results: Of the six areas inspected, no items of noncompliance or deviations were identified in five areas; one item of noncompliance was identified in one area (failure to have adequate design control over a facility change - Paragraph 2).

## DETAILS

### 1. Persons Contacted

T. Murray, Assistant Vice President, Nuclear Mission  
S. Quennoz, Station Superintendent  
D. Miller, Operations Engineer  
D. Briden, Chemist and Health Physicist  
L. Simon, Operations Supervisor  
\*J. Faris, Administrative Coordinator  
D. Lee, Maintenance Engineer  
\*M. Stewart, Nuclear Training Manager  
\*S. Wideman, Licensing  
\*J. Wood, Facility Engineering General Supervisor

\*Denotes those personnel attending the August 24, 1984 exit interview.

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

### 2. Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (346/81-16-01): Failure of proper administration of Maintenance Work Order (MWO) System. The inspector reviewed the licensee's corrective action and found minor problems with the administration of the MWO system. The licensee has established the Outage Planning and Maintenance Planning groups. The backlog of outstanding MWOs has been substantially reduced. Based on these results, the inspector considers the item closed.

(Closed) Unresolved Item (346/84-06-08): Start up feed pump suction valve found open contrary to Final Safety Analysis Report. Item was escalated to an item of noncompliance (346/84-15-01C).

(Closed) Unresolved Item (346/84-06-06): Freon compressor control switches found "Off" on control room emergency ventilation systems #1 and #2. Item was escalated to an item of noncompliance (346/84-15-01A).

(Closed) Unresolved Item (346/84-06-09): Disconnection of both main steam isolation valve fire detectors. This item shall be followed up by a NRC regional fire protection inspector. Open Item (346/84-10-02).

(Closed) Unresolved Item (346/80-19-03): Relief request on decay heat suction valves, DH-11 and DH-12. On August 15, 1984, the licensee submitted a request to exempt DH-11 and DH-12 from the testing required by 10 CFR 50, Appendix J, Sections III.A.1.d. and III.C. Based on this submittal, the unresolved item is considered closed.

(Closed) Unresolved Item (346/84-12-03): Providing non-Class 1E operating power to reactor coolant system high point vent valve RC 4608A. The licensee committed to the NRC to provide Class 1E power to all high point vent valves to meet the requirements of NUREG-0737, II.B.1. The licensee design input to its architect engineer for detailed design required Class 1E power for all high point vent valves. The inspector reviewed the Facility Change Request (FCR) that provided the detailed instructions for installation of the high point vent system. The inspection revealed that the FCR directed valve RC 4608A to receive non-Class 1E power. This was due to the failure of the design engineer and the design reviewer to adequately trace through all the electrical diagrams from the valve to the design basis power source. Failure to adequately control the design process as required by 10 CFR 50, Appendix B, Criterion III is considered an item of noncompliance (346/84-18-01).

(Open) Open Item (346/83-19-03) Potential use of an electrical distribution book without incorporation into a controlled document. The licensee has issued the electrical distribution book as a controlled document. Based on this action, this item is considered closed. However, the technical content of the book has not been completely validated and errors have been noted by the licensee staff. The licensee committed to establish a procedure for the electrical distribution book's validation by September 1, 1984, and complete validation by mid-February 1985. This is considered an open item (346/84-18-02).

### 3. 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.

LER 82-65	Chlorine detectors out of service
LER 82-68	Axial flux imbalance computer alarm misprogrammed
LER 82-47	Output of radiation monitor RE 2004 on SFAS Channel 1 failed upscale
LER 82-49	Channels 2 and 3 of RE 4597 BA found reading high
LER 82-52	Reactor quadrant tilt exceeded the steady state limit
LER 82-55	SFAS Channel 4 radiation monitor RE 2007 failed low
LER 82-58	Setpoints of RE 4597 BA drifted
LER 82-59	RE 4597 AA found reading exceedingly low
LER 82-67	Fuel handling area exhaust radiation monitor, RE 8447 failed due to an internal connector failure
LER 84-01	Reactor trip on a xenon transient
LER 83-35	Fire door found open
LER 83-74	Borated water storage tank level transmitter failed
LER 82-57	Negative pressure door found open
LER 82-41	Main steam safety valves set improperly
LER 82-64	Component cooling valve failure due to lack of installation of a flanged bearing
LER 81-61	Absolute position indication malfunctions

Other LERs were reviewed and were not closed out at this time. The LERs were:

(Open) LER 81-35: The LER stated that the containment purge valves would be returned to service after implementation of FCR 434A. Per discussions with licensee personnel, the purge valves will not be returned to service. The inspector requested a revision to the LER to state the final resolution of LER 81-35.

(Open) LER 82-28: Swing check valve SW 44 rusted open. The LER attributed valve failure to a design error on selection of the valve's internal components material. However, the corrective action was to clean up the valve internals and tack weld the valve's disk. The root cause was not addressed. The inspector requested the licensee to review the event again, provide adequate corrective action and revise the LER to state the additional corrective action.

(Open) LER 82-09: Negative pressure door found open twice. The inspector verified the door was shut and operable after both events. The licensee committed to implement Facility Change Request 78-309 so that temporary hoses would not be required to be run under the door during flushing of radiation meter RE 1878. The LER will remain open until Facility Change Request 78-309 is implemented.

(Open) LER 82-39: Failure to maintain shield building differential pressure below Technical Specification limit. The licensee's long term corrective action to maintain the pressure inside Tech Spec limits was to modify the containment purge valves to allow operation in modes greater than cold shutdown and the potential installation of a Safety Features Actuation System block inhibit for the containment purge valves. These corrective actions will not take place per discussions with the licensee. The containment purge valves are deenergized closed and will remain in this condition in any mode other than cold shutdown. The inspector requested the licensee to review the event again, provide different corrective action and revise the LER to include that corrective action. Until the LER is revised and the corrective action implemented, the LER shall remain open.

(Open) LER 82-51: SFRCS power supply failed. The LER stated that the failed power supply would be returned to the factory for determination of the exact component failure in the power supply. The results of this factory determination have not been incorporated into the LER and the LER shall remain open until the LER is revised.

(Open) LER 82-61: Improper fire labels on fire doors. The affected fire doors are being fire watched per Technical Specifications. The long term corrective action is to implement Facility Change Request 83-09. This LER shall remain open until this long term corrective action is implemented.

No items of noncompliance or deviation were identified.

4. Monthly Maintenance Observation

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with technical specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and, fire prevention controls were implemented.

Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

Repair of the watertight door connecting the Auxiliary Feedwater Pump rooms

Repair of station battery charger DBC 1P

Battery Charger

No items of noncompliance or deviation were identified.

5. Monthly Surveillance Observation

The inspector observed technical specifications required surveillance testing on the emergency diesel generator ST 4081.01, diesel generator monthly test 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:

ST 5030.02 Reactor Protection System Monthly Functional Test  
ST 5071.04 Auxiliary Feedwater System Channel Functional Test  
ST 5084.02 Station Battery 250/125V DC Refueling and Five Year Test

No items of noncompliance or deviation were identified.

6. Emergency Preparedness

On July 31, 1984, the inspector observed Toledo Edison's conduct of their annual emergency preparedness exercise. In accordance with an exemption granted by the NRC, state and local government agencies did not participate in the exercise. The inspector verified that the licensee has a program for correcting identified discrepancies and that equipment disrupted was returned to its proper location after the drill.

7. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of August. 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 August, the inspector walked down the accessible portions of the emergency diesel generator systems to verify operability.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under technical specifications, 10 CFR, and administrative procedures.

During the operations review, the inspector noted that equipment associated with the control room emergency ventilation was declared inoperable after performance of a test of the ventilation system to ascertain the heat removal capacity of the system. There appeared to be a delay of approximately two shifts before the shift supervisor became aware of the condition of the equipment and declared it inoperable. The inspector will follow up on this item in a subsequent report. This is considered an unresolved item (346/84-18-03).

8. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 7.

9. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on August 24, 1984, and summarized the scope and findings of the inspection activities. The licensee acknowledged the findings.