

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/82-31(DPRP)

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: Davis-Besse Site, Oak Harbor, Ohio

Inspection Conducted: October 3 - 30, 1982

Inspectors: *L. A. Reyes for*
L. A. Peebles

11/24/82

L. A. Reyes for
W. G. Rogers

11/24/82

L. A. Reyes for
P. M. Byron

11/24/82

Approved By: *L. A. Reyes*
L. A. Reyes, Chief
Projects Section 2B

11/24/82

Inspection Summary:

Inspection On: October 3 - 30, 1982 (Report No. 50-346/82-31 (DPRP))

Areas Inspected: Routine Safety inspection of Operational Safety Verification; Monthly Maintenance Observation; Monthly Surveillance Observation; LER Followup; IE Circular Followup; IE Bulletin Followup; Plant Trips; Regional Requests on Fire Doors and Independent Inspection. The inspection involved a total of 133 inspector-hours onsite by three NRC inspectors including 33 inspector-hours onsite during offshifts.

Results: Of the eight areas inspected, no items of noncompliance were identified in seven areas; one item of noncompliance was identified in one area (inadequate maintenance procedure - Paragraph 4).

DETAILS

1. Persons Contacted

T. Murray, Station Superintendent
*B. Beyer, Assistant Station Superintendent
S. Quennoz, Assistant Station Superintendent
*P. Carr, Maintenance Engineer
J. Werner, Instrument Engineer
D. Miller, Operations Engineer
W. O'Conner, Assistant Operations Engineer
D. Briden, Chemist and Health Physicist
J. Hickey, Training Manager
L. Simon, Operations Supervisor
C. Daft, Q.A. Director
J. Greer, Q.A Supervisor
J. Hartigan, Lead Maintenance Support Engineer
E. Caba, Senior Assistant Engineer
*T. Powers, Administrative Coordinator
*J. Faris, Administrative Coordinator
*H. Fosholdt, QA
*G. Bradley, Licensing

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

*Denotes those attending the exit interview on October 29, 1982.

2. Action on Previous Inspection Findings:

(Closed) Unresolved Item (346/82-23-01). The inspector is satisfied that the SFAS performance was due to a faulty power supply and not due to a violation of channel separation criteria in the SFAS wiring. This conclusion is based upon testing performed on the power supply by the vendor. This item is considered closed.

(Open) Open Item (346/81-01-02). The inspector reminded the licensee that the meggering program required by the Immediate Action Letter on water in the electrical penetrations was still in effect until written relief from Region III was granted. The inspector requested that he be informed when the licensee was ready to present the investigation results and engineering review to the NRC so that adequate coordination could be achieved for the review.

(Open) Open Item (346/81-22-01). As a result of review of SP 1104.15 to close this open item the inspector observed that the procedure had not been updated to include valves CV 5017A, 5017B, 5018A and 5018B on the valve verification list. The inspector requested action on this item.

3. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of October. 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 October, the inspector walked down the accessible portions of the following safety related systems to verify operability:

- a. Auxiliary Feed Water
- b. Component Cooling Water
- c. Service Water
- d. Decay Heat Removal
- e. Diesel Generators and Low Voltage Switchgear
- f. Hydrogen Dilution Systems
- g. Hydrogen Purge

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 walkdowns, the inspector observed that two vent valves on the Decay Heat Removal System (DH-25 and DH-173) which should have had "blue" pipe caps in place per Administrative Procedure AD 1839.03 had non-colored pipe caps in place. The licensee was informed of the lack of strict adherence to his procedure for assurance of containment integrity. The licensee stated that the matter would be reviewed.

While performing the Hydrogen Purge walkdown, the inspector observed PDI 5059A, DP Gauge across the demister, to be valved out of service contrary to normal position. The dragon valves' positions were reported to the shift supervisor who instructed personnel to return the DP Gauge to service. The shift supervisor reported the situation on a deviation report. The licensee is investigating the reason the DP Gauge was valved out of service versus in service. It should be noted that valving out the DP Gauge did not make the Hydrogen Purge System inoperable.

No item of noncompliance or deviations 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.

The inspector witnessed portions of the repair of the buried fire system piping and questioned personnel as to procedural requirements for restoring the piping to original specifications. The inspector determined that the repair was being accomplished with inadequate procedures in that re-installation of the piping, specifically the structural backfill, in the area of a newly installed mechanical joint did not conform to the original specifications. The personnel involved were not aware of the proper methods to restore the piping to specifications as the procedure had no requirements. The cognizant engineer had stated that the original construction specification was no longer valid and no specific requirements applied.

The inspector questioned the maintenance engineer on the lack of requirements. A re-review was conducted and it was determined that certain requirements did apply and a work package was assembled which included an existing maintenance procedure.

Maintenance on the fire protection system or any other system required for nuclear safety must be controlled to assure that the system is returned to original design requirements so that the system is capable of performing its intended function.

This failure to have an adequate procedure while doing maintenance on a safety related system is considered an item of noncompliance (346/82-31-01).

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:

Auxiliary Feed Water Pump No. 2 repair of oil leaks and adjustment of governor spline.

Diesel generator preventative maintenance.

Following completion of maintenance on the auxiliary feed water pump and diesel generator, the inspector verified that these systems had been returned to service properly.

No other items of noncompliance or deviations were identified.

5. Monthly Surveillance Observation

The inspector observed technical specifications required surveillance testing on the following systems: Instrument Daily Checks, Chlorine Detector System Monthly Test, Decay Heat/Low Pressure Injection Pump and Check Valve Test. The inspector 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:

Reactor Protection System Ch 2

Boric Acid Pump Test 1-2. This pump was initially declared inoperable due to noisy operation, but the valving was re-checked and MU-343 was partially open. The test was re-run satisfactorily.

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.

<u>Action</u>	<u>LER Number</u>	<u>Subject</u>
(Closed)	81-63	Hydrogen Analyzer breakers found in a tripped condition
(Closed)	82-19	Distorted Auxiliary Feedwater internal headers
(Closed)	82-34	Failure of integrated SFAS level 4 test due to disconnected manual containment spray pushbutton
(Closed)	82-32	SW-6 found out of its required position

(Closed)

82-50

Loss of power to MCC E 12A due to
breaker BE 106 tripping on ground
fault

No items of noncompliance or deviations were identified.

7. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the Bulletin was received by licensee management and reviewed for its applicability to the facility. If the Bulletin was applicable 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 presented in the Bulletin and the licensee's response, that the 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.

(Closed) 80-09 Hydramotor Actuator Deficiencies. The referenced actuators are used in the ventilation systems. A periodic test has been written and implemented to assure operability.

No items of noncompliance or deviations were identified.

8. IE Circular Followup

For the IE Circulars listed below, the inspector verified that the Circular was received by the licensee management, that a review for applicability was performed, and that if the circular were applicable to the facility, appropriate corrective actions were taken or were scheduled to be taken.

(Closed) 81-02 Performance of NRC licensed individuals while on duty

(Closed) 81-04 Role of STA and importance of reporting operationed events

No items of noncompliance or deviations were identified.

9. Plant Trips

Following the plant trips on October 28 and 29 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 October 29.

The first trip occurred during main turbine stop valve testing. The licensee plans further testing and adjustment of the recently installed Anticipatory Reactor Trip System (ARTS) so that only an actual turbine trip is sensed and not the closure of a single valve.

The second trip occurred during start-up while doing testing on the Main Feedwater Pumps without the ARTS in trip bypass.

No items of noncompliance or deviations were identified.

10. Independent Inspection Effort

The inspectors routinely attended meetings with licensee management and various shift turnovers between shift supervisors and licensed/non-licensed operators. These meetings and discussions provided a daily status of plant operating and testing activities as well as discussion of significant problems or incidents.

The problem involving moisture in the instrument air system has been resolved by repairing the bypass valve around the air dryer.

During a routine tour of the auxiliary building, the inspector observed numerous ANTI-C's on the area located behind ventilation ducting on top of the hot shop on the 603' levels in RACA. It was apparent that this area had been used during the refueling outage and was now abandoned. No work is presently being done in that area. The inspector informed the licensee; mentioned the ALARA and fire protection implications; and requested expeditious clean-up. The licensee took actions to clean-up the area.

The inspector reviewed the correction of deficiencies in the newly installed containment high range radiation monitors and found them to be adequate. (reference: inspection report 82-20)

11. Regional Requests on Fire Doors

The inspector was requested by Region III to inspect the combination bullet/fire-resistant doors manufactured by Protective Materials, Inc. (PM), Seabrook, N.H. The doors in question control access to the Control Room and the Central Alarm Station (CAS). This was a followup to a previous Regional request.

Investigation revealed that PM had taken a standard three-hour rated fire door manufactured by American Welding and modified it for dual usage. The inspector observed with T. Hart, TECo Fire Protection Engineer, that the double door to the Control Room (Door 509) had Underwriters Laboratories (UL) fire-rated labels affixed to the exterior door by PM as did the door to CAS (Door 512). Door 512 also had a UL bullet-resistant label affixed by PM. Photographs of the labels and doors, as well as the dimensions of the doors, were sent to Region III.

A review of licensee records revealed that the doors were supplied and installed in 1978 by their contractor, Bentley Construction. However, the licensee issued a purchase order to PM in 1981 to field certify that Doors 509 and 512 met the three-hour fire rating. PM inspected the doors and affixed their UL labels at that time.

The licensee considered that they had sufficient documentation to indicate their doors did not fall under the Part 21 issued by Kewaunee on November 20, 1980. Region III did not consider that the licensee had sufficient or valid documentation.

After several discussions with the Resident Inspector and Region III, the licensee contacted UL who informed them that PM was not authorized to affix the field-installed labels and the validity of the American Welding UL fire labels was questionable. Subsequently, the licensee stated to Region III and the Resident that they would institute an hourly compensatory fire watch commencing October 11, 1982, and continue their attempt to obtain certified test data from PM, but not declare the doors inoperable. In addition, they committed to performing an analysis on Doors 509 and 512. This is considered an open item.
(346/82-31-01)

No items of noncompliance or deviations were identified.

12. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on October 29 and summarized the scope and findings of the inspection activities. The licensee acknowledged the findings.

Also, the inspectors acknowledge the licensee's prompt action to modify their access restraints to the auxiliary feed water pump room to allow the NRC equivalent rights as that of Toledo Edison employees.