

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

REGION III

Report No. 50-346/77-21

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: July 6-7, 1977

Inspector: *T. N. Tambling*  
T. N. Tambling

7/15/77  
(date signed)

Accompanying Personnel: R. Knief

*R. C. Knop*  
Approved by: R. C. Knop, Chief  
Reactor Projects Section 1

7/15/77  
(date signed)

Inspection Summary

Inspection on July 6-7, 1977 (Report No. 50-346/77-21)

Areas Inspected: Deferred preoperational tests prerequisites for mode 3 operations, licensee event reports, review of operations and personnel qualifications. The inspection involved 17.5 inspector-hours on site by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

8002050714

## DETAILS

### 1. Persons Contacted

#### Principal Licensee Employees

- \*J. Evans, Station Superintendent
- \*L. Stalter, Technical Engineer
- \*J. Ligenfelter, Nuclear and Performance Engineer
- \*W. Green, Assistant to Station Superintendent
- \*J. Buck, Operations Quality Assurance Manager
- R. Zemenski, Operations Engineer
- \*S. Batch, Tech Staff
- \*E. Michaud, Test Program Manager (B&W)

The inspector also talked with and interviewed other licensee employees, including members of the technical and engineering staff, reactor shift crews, training department members and startup test leaders.

\*denotes those attending exit interview.

### 2. Deferred Preoperational Tests

The inspector reviewed the following deferred\* preoperational tests to determine the status of outstanding deficiencies.

T.P. 256.02 - Station and Instrument Air Acceptance Test.

Testing was completed.

T.P. 271.09 - Main Steam Isolation Valve Test.

Operation of the main steam steam isolation valves was verified during mode 4 operations. Final close out of deficiencies and additional retesting is scheduled during mode 3.

T.P. 600.4 - Make up and Purification System Test.

The two outstanding deficiencies were corrected and retested. Check out of the redesignated letdown orifice will continue through mode 3 to full system pressure and temperature.

\*completion of certain portions of these tests had been deferred until after fuel loading when conditions would permit retest.

3. Status of Preoperational Testing to be Completed Prior to Mode 2

The current status of deferred preoperational testing to be completed prior to mode 2 (initial criticality) was reviewed. Within this review a representative of the licensee stated that all testing is presently scheduled to be completed except in two areas. These areas are:

T.P. 100.01 - Communication System

All part of the testing will be completed except for final signoff on the turbine building. The licensee proposed to postpone the final acceptance of the turbine building area until after the turbine is in operations (Mode 1)

T.P. 230.1 - Clean Liquid Waste System

The backup clean waste booster pump is not scheduled for delivery until mid August. The system has been tested, but this deficiency would remain open until the repaired pump is installed and run.

4. Plant Tour

The inspector walked through various areas of the plant to observe operations and activities in progress, to inspect the general state of cleanliness, housekeeping and construction activities. Repair work on the makeup pump and leaking packing on the containment spray pump was discussed with representatives of the licensee.

No items of noncompliance or deviations were identified.

5. Review of Nonroutine Events Reported by the Licensee

The inspector reviewed licensee actions with respect to the following listed nonroutine events reports to verify that the events were reviewed and evaluated by the licensee as required by Technical Specifications, that corrective action was taken by the licensee, and that safety limits, limiting safety system settings, and limiting conditions for operation were not exceeded. The inspector examined selected Station Review Board minutes, licensee investigation reports, logs, and records, and inspected equipment and interviewed selected personnel.

Loss of Decay Heat Flow in mode 5 Due to Accidental Shorting (NP-32-77-02).

Loss of Decay Heat Flow in mode 5 Due to Closure of DH-11 (NP-32-77-03).

Loss of Both Source Range Nuclear Instrumentation Channels while Performing Preoperational Test. (NP-33-77-1)

Channel Checks required by Table 4.3-2 of Technical Specifications were not being checked. (NP-33-77-S)

No items of noncompliance or deviations were identified. The inspector noted that the licensee had identified and corrected three infractions with Technical Specifications related to these events.

6. Response Time Testing

The inspection reviewed the response time testing performed for measuring the sensor portion of the reactor coolant pumps loss to the "High Flux/Number of Reactor Coolant Pumps On" of the Reactor Protection System (Table 3.3-2(8) of the Technical Specification). It was noted that the results were apparently conservative because the pump breakers were included in the time. The current transformers on one phase of the 13.8 Kv leads has a calculated response time of less than 1 millisecond. The breaker time is considerable longer therefore the conservatism. The inspector has no further questions on this subject at this time.

7. Organization Changes

The licensee announced that they were creating the position of Assistant Station Superintendent. The current Operations Engineer had been designated to fill the position. Mr. R. Zemenski had been designated to fill the positions of Operations Engineer.

The inspector reviewed the qualifications of both Messers. T. Murray and R. Zemenski against ANSI N18.1. The inspector has no further questions at this time pending FSAR and Technical Specification changes to describe the new position of Assistant Station Superintendent.

8. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on July 7, 1977. The inspector summarized the scope and findings of the inspection. The licensee representative made the following remarks:

Acknowledged the statements by the inspector with respect to non-routine event reports and the noncompliance reported and corrected by the licensee. (Paragraph 5)

Stated that based upon the current schedule the plant should be in mode 3 by July 11, 1977, (Paragraph 2) and that deferred pre-operational test prerequisites of mode 2 should be complete by July 20, 1977, (Paragraph 3). The inspector stated that he would review the exceptions on TP 100.01 and TP 230.01 (Paragraph 3) and would inform the licensee at a later date.

The licensee requested the status of the review on TP 710.01, Zero Power Physics Test (Inspection Report No. 50-346/77-16). The inspector stated that the test procedure was still under review and that he would inform the licensee as soon as the review was completed.

The licensee stated that they would be submitting a FSAR and Technical Specifications change to cover the proposed plant organizational change (Paragraph 7).

The licensee requested that the inspector designate which power ascension tests that he wanted to be kept informed as to the date they would be performed. The inspector stated that he wanted to be kept informed on the date of initial criticality. As to which other power ascension tests, the inspector would notify the licensee later.

After the inspection and exit interview, on July 11, 1977, the inspector called the licensee and informed him that based upon the NRC review, the stuck rod - shut down measurements of TP - 710.01 (ZPPT) must be performed within the constraints of the accident analysis in the FSAR for the ejected rod accident or an new accident analysis must be submitted to NRR for review.

As presently written the proposed test measurement involves operation with control rod configurations that allows the potential worth of an ejected rod to be greater than analyzed in the FSAR and could result in an unanalyzed accident.