

UNITED STATES NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Operations Inspection

IE Inspection Report No. 050-346/76-24

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

Davis-Besse, Unit 1  
Oak Harbor, Ohio

License No. CPR-80  
Category: B

Type of Licensee: PWR (B&W) 906 MWe

Type of Inspection: Routine, Announced

Dates of Inspection: December 13 and 28-30, 1976

Principal Inspector: *R. D. Martin*  
R. D. Martin

1/10/77  
(Date)

Accompanying Inspector: *J. Barker*  
J. Barker  
(December 13, 1976 only)

1/10/77  
(Date)

Other Accompanying Personnel: None

Reviewed By: *R. C. Knop*  
R. C. Knop, Chief  
Reactor Projects Section 1

1/10/77  
(Date)

8002030183

## SUMMARY OF FINDINGS

### Inspection Summary

Inspection on December 13 and 28-30, 1976, (76-24): Witness of preoperational testing activities, review of test procedures, and review of completed and approved test procedure results. No items of noncompliance identified during this inspection.

### Enforcement Action

No items of noncompliance with NRC requirements were identified during this inspection.

### Licensee Action on Previously Identified Enforcement Items

#### A. IE Inspection Report No. 050-346/76-10

The inspector verified that the corrective action described in the licensee response for both the infraction and the deficiency had been completed. This item is considered closed. (Paragraph 10.a., Report Details)

#### B. IE Inspection Report No. 050-346/76-20

This inspection report described an infraction for which there were two examples.

The inspector verified that the corrective action described in the licensee response regarding the violation of Construction Work Permit controls had been completed. (Paragraph 10.b., Report Details)

The corrective action regarding the reevaluation of the insulation covered surfaces of the reactor coolant system is still in progress (Paragraph 10.b., Report Details). This item remains open.

### Other Significant Findings

#### A. Systems and Components

None identified during this inspection.

#### B. Facility Items (Plans and Procedures)

The licensee is in the final phases of the Hot Functional Testing Sequence. Cooldown is expected to occur during the first week in January.

C. Managerial Items

None identified during this inspection.

D. Deviations

None identified during this inspection.

E. Status of Previously Reported Unresolved Items

1. IE Inspection Report No. 76-01 (page 6).

This report referred to changes that should be made to TP 600.03 and related procedures. During this inspection, Revision 1 (dated November 30, 1976) was reviewed and the appropriate changes were completed. This matter is closed.

2. IE Inspection Report No. 76-10 (page 9).

This report referred to changes that were to be made to TP 315.01. During this inspection, Revision 1 (dated October 15, 1976) was reviewed and the appropriate changes were completed. This matter is closed.

3. IE Inspection Report No. 76-10 (page 10).

This report referred to certain concerns about the validity of the reactimeter when used at elevated power levels. During this inspection the licensee indicated that the use of the reactimeter for rod reactivity measurements at power is for information only. No rod reactivity worth curves will be modified based solely on reactimeter data obtained during power ascension testing. This matter is closed.

4. IE Inspection Report No. 76-12 (page 6).

This report referred to changes to be made to TP200.11 and to the reference documents used in its preparation. During this inspection, Revision 1 of TP 200.11 (dated December 3, 1976) was reviewed, as well as Test Specification TS 200.11, (Rev. 01 dated September 28, 1976). This matter is closed.

5. IE Inspection Report No. 76-12 (page 9).

This report discussed record storage matters regarding chemical testing records. Further discussions with the licensee during this inspection as well as the present record controls in use or planned by the licensee adequately address these matters. This item is closed.

6. IE Inspection Report No. 76-20 (page 11).

This report referred to certain changes to be made to TP 600.01. During this inspection, the control copy of TP 600.01 was reviewed and the appropriate changes had been made. This item is closed.

7. IE Inspection Report No. 76-20 (page 9).

This report indicated that the inspector would follow the progress of the modification of the Dragon 2 and 5 valve instrument manifolds. During this inspection, the records of the modification work were reviewed, and it was determined that all installed valves had been modified. Additional spare parts are needed to complete the modification of units in stock. This matter is considered closed.

8. IE Inspection Report No. 76-23

This report referred to the commitment of the licensee to conduct a dimensional verification of the installation of the Core Flood Tank piping system. During this inspection, the completed QC Inspection Plan 5011 was reviewed by the inspector. No significant deficiencies were noted during this review, and this item is considered closed.

Management Interview

- A. The following persons attended the management interview at the conclusion of the inspection:

Toledo Edison Company

L. Roe, Vice President, Facilities Development  
J. Evans, Station Superintendent  
L. Stalter, Technical Engineer  
T. Murray, Operations Engineer  
W. Green, Assistant to Station Superintendent  
B. Beyer, Maintenance Engineer  
C. Domeck, Project Engineer  
C. Daft, Quality Control Supervisor  
J. Buck, Quality Assurance Supervisor  
J. Hughes, QC (TECo/Bechtel)

Babcock and Wilcox

E. Michaud, Test Program Manager

B. Matters discussed and comments are as follows:

1. The inspector indicated that he had reviewed the status of the testing program and the progress of the licensee in preparing for fuel loading. The inspector indicated that he would estimate fuel loading as being possible during early March, 1977. The licensee indicated his intention to be ready to begin loading prior to that date.
2. The inspector summarized his progress in resolving several outstanding items (See Status of Previously Reported Unresolved Items section of this report.)
3. The inspector summarized his concerns (previously discussed with staff members of the licensee) regarding the consequences of the post LOCA overpressurization of the Emergency Ventilation System boundary reported in recent FSAR revisions.
  - a. Will the doors of the boundary retain their integrity, (structural and/or leak tightness) under the calculated positive pressure?
  - b. Will the doors be capable of being opened, if entry is required, under the maximum negative pressure established by the EVS?
  - c. Will the increased flow rate through the EVS during the high pressure period result in EVS filter pressure drops which exceed the structural limits for the filter media.

The inspector understands these items to be under review by the licensee, and he will review the results during a subsequent inspection.

4. The inspector requested and received a commitment that a Periodic Test Procedure (or other suitable control) would be developed to assure retesting of the leak tightness of water-proof trench cover installed over DH11 and DH12 in the containment.
5. The inspector understands that appropriate controls will be developed to assure that the oil used in the HPI pump bearings will be properly qualified prior to its use.
6. The inspector summarized his review of completed and approved test procedure packages. (Paragraph 3, Report Details)
7. The inspector summarized his review of Test Procedures. (Paragraph 2, Report Details)

8. The inspector summarized his review of licensee actions with respect to previously cited items of noncompliance. (See Licensee Action on Previously Identified Enforcement Items section of this report.)
9. The inspector summarized his review of the activities associated with the Hot Functional Testing sequence. (Paragraph 5, Report Details)
10. The inspector summarized the witnessing of the conduct of portions of TP 205.07 "High Pressure Injection System SFAS Test." (Paragraph 1, Report Details)

## REPORT DETAILS

### Persons Contacted

The following persons, in addition to those listed under the Management Interview section of this report, were contacted during this inspection:

S. Batch, Assistant Engineer  
L. Simon, Shift Foreman  
M. Derivan, Shift Foreman  
D. Lee, HFT Test Leader  
S. Denison, HFT Test Coordinator  
W. Alton, Assistant Engineer  
B. Kirk, Assistant Engineer  
J. Troknya, Office Supervisor  
G. Waugh, Assistant Engineer  
S. Hall, Shift Foreman  
G. Humphries, Instrument and Control Engineer  
J. Hickey, Training Supervisor  
K. Aebie, Assistant Engineer  
J. Lingenfelter, Senior Assistant Engineer

### 1. High Pressure Injection/Safety Feature Actuation System Test

The inspector witnessed the licensee's implementation of TP 205.07 "HPI SFAS Test" as performed on HPI pumps 1-1/2.

TP 205.07 was temporarily modified to verify the operability of the HPI system and the SFA system without completing all portions of TP 205.03 and TP 310.01 respectively. The inspector had no problems with this modification, with the stipulation that TP 205.03 and TP 310.01 as revised would be completed at some later date. The modification in no way deterred from the completion of TP 205.07 "HPI SFAS Test," as modified. The acceptance criteria (TP 205.07 sections 8.1, 8.2, and 8.3) were met.

During the performance of the test, personnel actions were timely, and appeared correct and thorough. The inspector observed that the evening shift conducted its activities in a very professional manner. A review of the appropriate test documentation revealed no deficiencies when compared to the Administrative Procedures which govern these test activities.

### 2. Test Procedure Review

- a. The inspector reviewed the following approved test procedures. No significant deficiencies were noted during that review.

TP 220.03 "Spent Fuel Pool Cooling and Purification System  
Preoperational Test"

TP 254.01 "Nitrogen Supply System Acceptance Test"

TP 271.09 "MSIV Preoperational Test"

TP 500.02 "Steam Generator Chemistry Test"

TP 500.03 "Initial Radiochemistry Test"

TP 600.10 "RCS Hot Leakage Test"

TP 800.01 "Shield Survey"

TP 800.08 "ICS Turning at Power"

TP 2400.43 "SFAS Response Time Testing"

b. The inspector provided comments to the licensee on the following procedures.

(1) TP 130.06 "Polar Crane Acceptance Test"

In view of pinion gear wear already noted on the Polar Crane, expansion of the component inspection aspects of this procedure should be rereviewed. Moreover, this procedure is fairly old and does not appear to reflect the more recent crane testing procedural methods used on other cranes at the facility. The licensee indicated that a revision to this procedure is planned.

(2) TP 800.22 "NSS Heat Balance"

This procedure should be reviewed by QA as it is a safety related Test Procedure. The inspector indicated his concern that the procedure calls for adjusting flow instrumentation readings if the mismatch between reactor and turbine power exceeds 1%. This action has to be reviewed to assure that it does not conflict with the calibration requirements of the facility Technical Specifications.

3. Review of Completed and Approved Results

The inspector reviewed the following test procedure packages for completeness with regard to:



- a. Meeting acceptance criteria.
- b. Appropriate management review and approval.
- c. Conformance to the requirements of administrative procedures.

TP 200.16 "Pressurizer Level Verification Test"  
TP 269.01 "Fuel Oil System Acceptance Test"  
TP 380.01 "EHC Acceptance Test"  
TP 400.02 "Start-up Transformers 01 and 02 Acceptance Test"  
TP 400.C4 "13.8 KV Acceptance Test"

No significant deficiencies were noted during the review of the completed approved test results.

4. Testing of Modified Surveillance Specimen Holders

During this inspection, the inspector discussed the progress of the data collection for the evaluation of the modified surveillance specimen holders as described in the licensee's final report dated August 4, 1976, issued pursuant to 10 CFR 50.55(e).

Based on these discussions and a review of test information, the inspector has concluded that he has no further questions on this matter. He understands the reactor vendor is preparing an evaluation report to be submitted to the NRC in the near future.

5. HFT Status Review

The inspector reviewed the following documents to ascertain the status of the Hot Functional Testing program and to assure licensee compliance with their requirements for test program conduct as contained in the AD 1801 series of administrative procedures.

- a. Test Coordinator's Logbook (Entries from December 10, 1976 to December 30, 1976)
- b. TP 600.01 "Hot Functional Testing Controlling Procedure"
- c. TP 200.08 "Pressurizer Relief Valve Test"
- d. TP 271.08 "OTSG Level Verification"
- e. TP 273.01 "Auxiliary Feedwater System Preoperational Test"

The review of the above test procedures also included reviews of temporary procedure changes, QC Verification sheets, chronological logs, deficiency reports, and other related material. No significant deficiencies were noted during this review.

6. Noncompliance Review

During record reviews, observations, and discussions with the licensee, the inspector verified the distribution, review and timeliness of the licensee response to enforcement items. The inspector determined that the status of the corrective action was as follows:

a. Inspection Report No. 050-346/76-10

- (1) Item A: The inspector verified that the Shift Foreman and Control Room Copy of the Administration Manual were up to date and that responsibility has been assigned a staff member to assure their continued maintenance. This item is closed.
- (2) Item B: The inspector verified that the Quality Control Instruction QCI-3110 was revised as indicated in the licensee response. This item is closed.

b. Inspection Report No. 050-346/76-20

- (1) Item A: This item remains open pending the completion of the piping inspection after the conclusion of Hot Functional Testing. The work conducted to date appears satisfactory but final closeout will await completion of the inspection and corrective actions.
- (2) Item B: The inspector reviewed the letter from J. Evans to C. Huston on November 9, 1974, the letter from C. Huston to J. Evans and all site contractors of November 17, 1976, and the revisions to Start-up Procedure 10A. This item is closed.