

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-329/82-17(DETP); 50-330/82-17(DETP)

Docket No. 50-329; 50-330

License No. CPPR-81; CPPR-82

Licensee: Consumers Power Company
1945 West Parnall Road
Jackson, Michigan 49201

Facility Name: Midland Nuclear Power Plant, Units 1 and 2

Inspection At: Midland Site, Midland, Michigan

Inspection Conducted: August 9-13, 1982

Inspectors: *D. L. Robinson*
D. L. Robinson

9/13/82

M. A. Ring
M. A. Ring

9/1/82

Approved By: *I. N. Jackiw*
I. N. Jackiw, Chief
Test Programs Section

9/20/82

Inspection Summary

Inspection on August 9-13, 1982 (Report No. 50-329/82-17(DETP);
50-330/82-17(DETP))

Areas Inspected: Routine announced inspection to review the preoperational test program administration; document control; design changes and modifications; plant maintenance and preventive maintenance; equipment protection and cleanliness measures. The inspection involved 60 inspector-hours on-site by two NRC inspectors including 0 inspector-hours on-site during off-shifts.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

- *G. B. Slade, Assistant Site Manager/Superintendent
- *R. E. McCue, Technical Superintendent
- *T. J. Palmisano, Technical Supervisor
- *A. L. Mercado, Supervisory Engineer, Test Support
- *R. D. Grosz, Supervisory Engineer, Electrical/I&C
- *R. M. Rice, Supervisory Engineer, NSSS
- *B. W. Marguglio, Director, Environmental Services and Quality Assurance
- *M. L. Curland, Quality Assurance Superintendent
- *R. A. Duke, Quality Assurance Engineer-Nuclear Operations
- *W. D. Shafer, Chief, Midland Section, NRC

*Denotes those attending the exit interview. The inspectors also contacted other members of the licensee's technical and administrative staff.

2. Licensee Action on Previous Inspection Findings

(CLOSED) Open Item (330/82-08-01): The licensee addressed recent preoperational test problems to ensure adequate administrative controls were instituted to minimize occurrence of similar problems at Midland. The inspectors determined that the response was acceptable.

(OPEN) Open Item (330/82-08-02): An FSAR change was submitted to eliminate the inconsistency between the Technical Department Organization as specified in the Test Program Manual (TPM) and the FSAR. However, a proposed reorganization will require another FSAR change and TPM revision.

(OPEN) Open Item (330/82-08-03): The inspectors discussed concerns about the TPM in the following areas:

- a. Need to specify responsibility for ensuring that all structures, systems and components important to safety are adequately tested to ensure that they will perform properly and satisfactorily in service.
- b. Need to assign responsibility for determination of required flow rate for flushes.
- c. Need to specify in writing the method and responsibility for appointing key test personnel.
- d. Need to define the minimum tagging requirements for turnover.
- e. Requirement for forms whose use is governed by a particular procedure to be consistent with that procedure.

- f. Assign responsibility for ensuring a test procedure is current prior to its use.
- g. Need to describe methods for assuring personnel involved in the conduct of a test are knowledgeable of the test procedure.
- h. Requirement for major changes to be approved prior to performance.
- i. Requirement for changes to acceptance criteria to be considered major changes.
- j. Need to define what constitutes a test interruption and the requirements for resuming testing.
- k. Provide methods for ensuring deficient conditions are promptly identified and documented in site (QA) recognized deficiency documentation system.

The inspectors reviewed proposed changes to the TPM but concluded that progress was insufficient to close the item.

3. Test Program Administration

The inspectors reviewed the licensee's administrative controls governing system turnover to the test organization and noted that when turnovers of an electrical system which had connections in a particular panel occurred, only the particular connections were turned over to the Technical Department. Control of entrance into that panel was not necessarily turned over at the same time. Other systems which were still under construction might have connections in the same panel. It appeared as if administrative controls were insufficient to prevent construction personnel from invalidating a tested system by inadvertently lifting tested leads during checkout of adjacent leads in the same panel. Subsequent Quality Control checks appeared limited to inspection of the leads which were supposed to be lifted. This is considered an open item (330/82-17-01) pending additional inspection in this area.

The inspectors reviewed the licensee's program to verify that methods have been established to control scheduling of test activities. The licensee committed to the weekly submittal of the daily working schedule to both the Region's Test Program Section and the Resident Inspector's Office with assurance of prompt notification in the event significant schedule changes arise. The inspectors noted that this schedule should address all preoperational, acceptance, generic, and safety-related specific tests to be conducted which directly satisfy FSAR and/or SER commitments.

The inspectors reviewed the licensee's program to verify that methods had been established to evaluate test results and provide for:

- a. Reduction of test data to a meaningful and understandable form.
- b. Comparison of test results to previously determined performance standards.
- c. Identification, documentation, and resolution of deficiencies.
- d. Retest following the completion of corrective actions or system modifications.
- e. Appropriate engineering reviews.

The inspectors noted that administrative controls were insufficient to ensure adequate engineering review of test results by the NSSS and AE representatives on the Test Working Group (TWG). The inspectors also noted that acceptance and generic test results were not subject to TWG review and approval. The scope and adequacy of engineering review as it pertains to the evaluation of test results is considered an unresolved item (330/82-17-02) pending further inspector review.

No items of noncompliance or deviations were identified.

4. Document Control

The inspectors reviewed the licensee's program to verify that administrative measures had been established to control the review, approval, and issuance of test procedures and their revisions. The inspectors noted that acceptance test procedures were not subject to TWG review despite directly satisfying FSAR and/or SER commitments. The exclusion of the acceptance test procedures from TWG review is considered an unresolved item (330/82-17-03) pending further inspector review.

The inspectors noted that the licensee maintains a master index in the document control center indicating current revisions of approved engineering drawings and vendor manuals. The inspectors observed that Interim Drawing Change Notices (IDCN) which reflect system changes since the last approved drawing revision were not indicated in the master index. The inspectors further noted that design specifications were only indexed if issued as part of a Design Change Package (DCP) or Design Change Notice (DCN) despite the licensee's acknowledgement that design specifications were often subject to change without a DCP or DCN. The ability of the master indexing system to adequately document design status is considered an open item (330/82-17-04) pending further inspector review.

The inspectors noted that the Test Program Manual required the use of the Reference Tracking System (RTS) to identify procedures potentially affected by a DCP or Startup Design Change Notice (SDCN). However, the licensee stated upon questioning that the RTS addressed only standard plant procedures and not test procedures. The exclusion of the test procedures from the RTS without a similar tracking system

in place to ensure proper procedure review following design changes is considered an open item (330/82-17-05) pending further inspector review.

No items of noncompliance or deviations were identified.

5. Design Changes and Modifications

The inspectors noted that the Test Organization was not involved in the review of design changes and modifications. Primary responsibility for this area rests with the Architect Engineer's Project Engineering Department. The apparent absence of licensee participation in the review of design changes and modifications is considered an open item (330/82-17-06) pending further inspector review.

The inspectors reviewed the licensee's program to verify that administrative controls had been established to control temporary modifications, jumpers, and bypasses. The inspectors noted that controls had not been established for determining when independent verification and functional testing of equipment was required following installation or removal of temporary jumpers, lifted leads, or fluid system modifications. The inspectors also noted that installed jumpers or lifted leads were not readily identifiable in the field. The apparent absence of such controls is considered an unresolved item (330/82-17-07) pending additional inspector review in this area.

No items of noncompliance or deviations were identified.

6. Plant Maintenance/Preventive Maintenance During Preoperational Testing

The inspectors reviewed the licensee's program to verify that the following items had been included in the administrative procedures in effect during preoperational testing:

- a. Plant maintenance was required to be performed in accordance with defined administrative controls.
- b. Methods had been established for initiating, reviewing approving and scheduling maintenance.
- c. Methods had been established for controlling replacement materials and parts that were designated for use in safety related maintenance activities.
- d. Controls had been established which required that only qualified personnel would perform maintenance activities.
- e. Maintenance administrative controls had been established which include the following:
 - a. Criteria for determining when maintenance procedures would be provided.

- . Method for preparing maintenance procedures.
- . Requirements for reviewing and approving maintenance procedures.
- . Methods of determining when training of personnel in the use of maintenance procedures was required.
- . Control of test and measurement equipment utilized in maintenance activities.

The inspectors noted that the administrative controls were insufficient to ensure the test engineer's concurrence prior to performing maintenance activities and his/her verification and qualification of the work after completion. The absence of such controls is considered an open item (330/82-17-08) pending further inspector review.

The inspectors reviewed the licensee's program to verify that controls had been established for preventive maintenance and equipment protection during and following preoperational testing including:

- a. Periodic surveillance as required
- b. Protection from environmental extremes
- c. Implementation of periodic maintenance and calibration programs
- d. Maintenance of cleanliness.

The inspectors verified that administrative controls had been established to require protection and retention of maintenance records.

No items of noncompliance or deviations were identified.

7. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on August 13, 1982. The inspectors summarized the scope and findings of the inspection. The licensee acknowledged the statements by the inspectors with respect to the unresolved and open items.