

U. S. NUCLEAR REGULATORY COMMISSION

Region I

50320-830211
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Report No. 50-320/83-04

Docket No. 50-320

License No. DPR-73 Priority -- Category C

Licensee: GPU Nuclear Corporation

P.O. Box 480

Middletown, Pennsylvania 17057

Facility Name: Three Mile Island Nuclear Station, Unit 2

Inspection At: Middletown, Pennsylvania

Inspection Conducted: February 27 - April 3, 1983

Inspectors:

Joel S. Wiebe 4/11/83
J. Wiebe, Senior Resident Inspector (TMI-2) date signed

Kimberly L. Barr 4/12/83
K. Barr, Radiation Specialist date signed

T. Moslak 4/12/83
T. Moslak, Radiation Specialist date signed

Bony O'Neill 4/13/83
B. O'Neill, Radiation Specialist date signed

L. H. Thonus 4/11/83
L. Thonus, Resident Inspector (TMI-2) date signed

Approved by:

A. Fasano for 4/19/83
A. Fasano, Chief, Three Mile Island-2 Projects date signed
Section, Projects Branch No. 2

Inspection Summary:

Inspection conducted on February 27 - April 3, 1983 (Inspection Report Number 50-320/83-04)

Areas Inspected: Routine safety inspection conducted by site inspectors of licensee action on previous inspection findings; routine plant operations; licensee event reports; health physics review; reactor building entries; and radioactive material shipments. The inspection involved 294 inspector-hours.
Results: No violations or deviations were identified.

DETAILS

1. Persons Contacted

General Public Utilities (GPU) Nuclear Corporation

- *D. Carl, Safety Review Group Administrator
- *S. Chaplin, Licensing Engineer
- *J. Chwastyk, Manager, Plant Operations
- *D. Dieter, Operations Quality Assurance
 - J. Flanigan, Radiological Engineering Manager
 - J. Hildebrand, Radiological Controls Director
- *M. Kendig, Operations Quality Assurance
- *G. Kunder, Manager, Safety Review Group
 - J. Renshaw, Manager, Radiological Controls Field Operations
- *R. Wells, Licensing Engineer

Other licensee personnel were also interviewed.

*denotes those present at the exit interview.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved item (320/81-10-01): Adequacy of Submerged Demineralizer System (SDS) procedures. The subject procedures were revised by the licensee and resubmitted to the NRC site staff. The NRC site staff verified the adequacy of the revised procedures and gave approval to implement the subject procedures.

(Open) Unresolved item (320/83-03-03): Adequacy of procedures for reactor coolant system (RCS) draindown. Because of the similarity between this item and item (320/81-10-01) described above, the NRC site staff requested the licensee to review their administrative controls for procedure preparation and procedure review. On March 8, 1983, the licensee presented their findings and proposed corrective actions to the NRC site staff. The findings and corrective actions are summarized below.

Problem

Procedures are generated and reviewed in a piecemeal manner which makes it difficult for reviewers to get an overview of the project. In some cases procedures were generated and reviewed without having the related project Engineering Change Memorandum (ECM) or Safety Evaluation Report (SER) in hand.

Corrective Action

1. Procedures will not be issued until the ECM or SER is in hand.
2. The ECM or SER will be shown on the planning schedule as a prerequisite for procedure issuance.
3. A lead engineer responsible for interface and integration will be appointed for each project.

Problem

Inadequate or incorrect procedures are not always identified during the review cycle.

Corrective Action

Project schedules will be revised to include enough time for adequate procedure review.

Problem

The new Administrative Procedures are not always implemented correctly.

Corrective Action

1. Training will be given to applicable new personnel.
2. Present personnel will be retrained as necessary.
3. The Safety Review Group will evaluate the effectiveness of the training on the new Administrative Procedures.

Problem

Poor communications exist between departments.

Corrective Action

1. The above actions should help promote better communications.
2. Improving communications between departments was emphasized at the Senior Management level during their discussion of this problem.

This item will remain unresolved pending NRC review of implementation and effectiveness of licensee corrective action.

(Closed) Unresolved item (320/81-14-03): Adequacy of shift turnover and shift to shift information transfer. The licensee instructed control room personnel on the importance of logging information which could affect subsequent shifts and passing on information at shift turnover. The inspector reviewed control room logging practices and observed eight shift turnovers. Logging practices and turnovers were satisfactory. This area will continue to be given special attention during subsequent inspections.

3. Routine Plant Operations

Inspections of the facility were conducted to assess compliance with general operating requirements of Technical Specification 6.8.1 in the following areas: licensee review of selected plant parameters for abnormal trends; plant status from a maintenance/modification viewpoint including plant cleanliness and fire protection; licensee control of ongoing and special evolutions including control room personnel awareness of these evolutions; control of documents including log keeping practices; area radiological controls; and security plan implementation.

Random inspections of the control room during regular and back shift hours were conducted at least three times per week. The shift foreman's log and selected portions of the control room operators log were reviewed for the period February 27 - April 3, 1983. Other logs reviewed during the inspection period include the controlled key log, fire protection log, caution tag log, and lifted lead log.

Operability of components in systems required by Technical Specifications or plant procedures to be available for response to emergencies was reviewed to verify that they could perform their intended functions. Shift staffing for licensed operators and fire brigade members and selected licensee planning meetings were observed. All areas observed were acceptable.

4. Licensee Event Reports

The inspector reviewed five Licensee Event Reports (LERs) required to be submitted in accordance with Technical Specifications (TS) 6.9.1.8 and 6.9.1.9 (and NUREG 0161) to verify the following: Event and cause description clearly reported event information; the required LER form was properly completed; and adequate corrective action was specified. LERs 83-03/01L-0, 83-04/03L-0, 83-05/03L-0, 83-06/03L-0 and 83-07/03L-0 were reviewed.

Initial screening of these events was completed to determine generic applicability, need for additional site verification, and the necessity for additional NRC management review. No additional actions were warranted for these LERs.

5. Routine Health Physics and Environmental Review

a. Plant Tours

The NRC site radiation specialists completed routine plant inspection tours. These inspections included all radiation protection control points and selected radiologically controlled areas. Licensee performance in the following areas was satisfactory:

- Access control to radiologically controlled areas
- Adherence to Radiation Work Permit (RWP) requirements
- Proper use of respiratory protection equipment
- Adherence to radiation protection procedures
- Use of survey meters including personnel frisking techniques
- Cleanliness and housekeeping conditions
- Fire protection measures.

b. Measurement Verification

Measurements were independently made by the inspector to verify the quality of licensee performance in the areas of radioactive material shipping, radiation and contamination surveys, and onsite environmental air and water sampling and analyses.

6. Reactor Building Entries

a. The site staff monitored reactor building (RB) entries conducted during the inspection period. The following items were verified on a sampling basis.

- The RB entry was properly planned and coordinated to assure that task implementation included adequate as low as is reasonably achievable (ALARA) review, personnel training, and equipment testing.
- Radiological precautions were planned and implemented including the use of a Radiation Work Permit (RWP).
- Specific radiological procedures were developed for unique tasks and were properly implemented.

b. The site staff reviewed selected documents, applicable procedures, and RWPs concerning reactor building entries.

Entries 185 through 203 were conducted during this inspection period.

7. Radioactive Material Shipments

The NRC site radiation specialists inspected several radioactive material shipments during the inspection period to verify the items listed below.

- The licensee had complied with approved packaging and shipping procedures.
- The licensee had prepared shipping papers, which certified that the radioactive materials were properly classified, described, packaged, and marked for transport.
- The licensee had applied warning labels to all packages and had placarded vehicles.
- The licensee had controlled the radioactive contamination and dose rates below the regulatory limits.

Inspector review of this area consisted of (1) examination of shipping papers, procedures, packages, and vehicles, and (2) performance of radiation and contamination surveys of the shipments which were inspected.

8. Unresolved Items

Unresolved items are findings about which more information is needed to ascertain whether it is a violation, a deviation, or acceptable. Unresolved items are addressed in paragraph 2.

9. Exit Interview

On April 5, 1983, a meeting was held with licensee representatives (denoted in paragraph 1) to discuss the inspection scope and findings.