



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30303

MAY 18 1984

Report No.: 50-416/84-09

Licensee: Mississippi Power and Light Company
 Jackson, MS 39205

Docket No.: 50-416

License No.: NPF-13

Facility Name: Grand Gulf

Inspection at Grand Gulf site near Port Gibson, Mississippi

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|-------------|----------------------|----------------|
| Inspectors: | <u>G. A. Belisle</u> | <u>5/16/84</u> |
| | G. A. Belisle | Date Signed |
| | <u>L. E. Foster</u> | <u>5/16/84</u> |
| | L. E. Foster | Date Signed |
| | <u>C. F. Smith</u> | <u>5/16/84</u> |
| | C. F. Smith | Date Signed |

Accompanying Personnel: H. Whitcomb III, Region II

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| Approved by: | <u>C. M. Upright</u> | <u>5/16/84</u> |
| | C. M. Upright, Section Chief | Date Signed |
| | Division of Reactor Safety | |

SUMMARY

Inspection on April 9 - 13, 1984

Areas Inspected

This routine, unannounced inspection involved 125 inspector-hours on site in the areas of licensee action on previous enforcement matters, independent inspection effort, test and experiments, QA program review, non-licensed personnel training, audits, surveillance testing and calibration control, and licensee action on previously identified inspection findings.

Results

Of the eight areas inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

D. Ables, General Instructor
*J. Bailey, Compliance Coordinator
D. Barber, Planning Supervisor (Maintenance)
K. Black, Engineering Supervisor (Station Services)
D. Bost, NPE Civil Engineer
R. Byrd, Compliance Licensing Engineer
*J. Cross, Plant Manager
*D. Cupstid, Startup Supervisor/Technical Manager
*L. Daughtery, Compliance Superintendent
T. Enright, G. E. Lead Startup Test Engineer
*S. Feith, Nuclear Site QA Manager
C. Ferguson, Maintenance Field Engineer
*R. Fron, MP&L Technical Assistant
J. Guilford, Field Superintendent
B. Harvey, I&C Technician
*P. Hughes, Corporate Regulatory Compliance
D. Hunt, Training Superintendent
R. Janysek, P. O. Inspector
G. Johnson, LLRT Coordinator
J. Jones, Nuclear Instruction Supervisor
J. Kimble, Lead Maintenance Field Engineer
J. Klyng, Plant Quality
J. Langberg, Instrument Mechanic
E. Langley, I&C Technician
B. Lee, QA Electrical Maintenance
S. Mooney, I&C Supervisor
J. Owens, Electrical Supervisor
R. Patterson, Responsible Engineer Systems
T. Reaves, Jr., Manager of QA
*R. Rogers, Assistant Plant Manager, Operations
W. Russell, Electrician
J. Simmons, Technical Engineer
R. Sorrels, Surveillance Coordinator
*S. Tanner, QA Supervisor
A. Tony, Surveillance Coordinator
G. Vining, Maintenance Field Engineering Supervisor
D. Wells, Nuclear Instructor
T. Whitfield, Electrician

Other licensee employees contacted included construction craftsmen, technicians, operators, security force members, and office personnel.

NRC Resident Inspector

*A. Wagner, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 13, 1984, with those persons indicated in paragraph 1 above. The licensee acknowledged the following inspection finding in a telephone conversation between G. Belisle and W. Edge on April 17, 1984.

Inspector Followup Item 416/84-09-01, Inclusion of QA Program Adequacy in Semiannual Report, paragraph 7.

3. Licensee Action on Previous Enforcement Matters (92702)

- a. (Closed) Severity Level V Violation (416/83-38-12): Failure to Issue An Incident Report. The licensee response dated November 4, 1983, was considered acceptable by Region II. The inspector reviewed Corrective Action Request (CAR) 687 and verified the corrective action taken as the result of this CAR. The inspector verified that IR-83-8-126 had been determined to be non-reportable. The inspector verified that 06-RE-SB13-V-0401, Shutdown Margin Demonstration, Revision 20, had been issued. CAR 687 was closed by corrective action verification by auditing personnel on January 6, 1984.

The inspector concluded that the licensee had determined the full extent of the violation, taken action to correct current conditions, and developed corrective actions needed to preclude recurrence of similar problems. Corrective actions stated in the licensee response have been implemented.

- b. (Closed) Severity Level V Violation (416/83-38-14): Failure to Issue An Audit Within TS Required Time Frames. The licensee response dated October 31, 1983, was considered acceptable by Region II. The inspector reviewed ten audits conducted during 1984 and verified that these audits were issued and forwarded to applicable management personnel within TS required time frames. The following are the specific audits selected for review:

| <u>AUDIT</u> | <u>AUDIT DATES</u> | <u>ISSUE DATES</u> |
|--------------|--------------------|--------------------|
| MAR 84/0002 | 1/3 - 6/84 | 1/10/84 |
| MAR 84/0007 | 1/11-18/84 | 1/19/84 |
| MAR 84/0012 | 1/18 - 2/8/84 | 2/14/84 |
| MAR 84/0022 | 2/1 - 29/84 | 3/12/84 |
| MAR 84/0027 | 2/8 - 14/84 | 2/16/84 |
| MAR 84/0030 | 2/2 - 27/84 | 3/14/84 |

| | | |
|-------------|----------------|---------|
| MAR 84/0035 | 2/1 - 3/7/84 | 3/08/84 |
| MAR 84/0039 | 3/6 - 12/84 | 3/14/84 |
| MAR 84/0044 | 2/28 - 3/27/84 | 4/04/84 |
| MAR 84/0048 | 3/22 - 29/84 | 3/30/84 |

The inspector concluded that the licensee had determined the full extent of the violation, taken action to correct current conditions, and developed corrective actions needed to preclude recurrence of similar problems. Corrective actions stated in the licensee response have been implemented.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection Effort (92706)

a. Main Steam Line Radiation Monitor Functional Test

The inspector interviewed an I&C supervisor and two craft contract personnel during this functional test performance. The inspector verified by interview the following work performance aspects:

Craft personnel qualifications and training

Work performance authorization (MWO I41734)

How craft personnel are delegated various work functions

If craft personnel are required to use up-to-date procedures

How QC interfaces with various job functions

What instructions are given to craft personnel by supervisory personnel if the acceptance criteria for the functional test could not be met

If craft personnel are trained in the significance of QC hold points

During the functional test performance, acceptance criteria could not be met. One craft person immediately notified the supervisor. The supervisor came to the work performance area and a course of action was decided upon by craft personnel and the supervisor. This course-of-action included operations personnel notification and rerunning previous procedural steps. Preparations were also being made to troubleshoot the defective equipment.

Within this area, no violations or deviations were identified.

b. QC Hold Point Verification

The inspectors observed QC verification of craft personnel replacing component identification tags. The inspectors interviewed these craft personnel and verified many work aspects as discussed in paragraph 5.a. During job performance, the craft supervisor and superintendent arrived at the work location. The inspectors interviewed both personnel and again verified certain work aspects as previously discussed. The inspectors specifically asked what guidance had been given to these personnel by MP&L management about job quality. Both the supervisor and the superintendent responded that MP&L management required that quality work was expected on all work activities and deviations from this would not be tolerated. These personnel also stated that if quality work could not be performed by their people, they could not work on site.

Within this area, no violations or deviations were identified.

c. Design Change Package (DCP) 84/4506, Upper and Lower Containment Air Lock Seal System Modification

The inspector performed a field inspection of the implementation of DCP 84/4506. In interviews with licensee craftworkers, plant quality, and field supervisory personnel, the inspector was informed that this DCP was initiated by Material Nonconformance Report (MNCR) 00380-84. This MNCR identified a nonconformance of the upper and lower containment personnel air locks in that the entire air system from check valves upstream of the air accumulators to the inflatable seals is not seismically designed as required by Bechtel Specification C-153.0. The DCP was initiated to upgrade the containment air locks to ensure that Seismic Category 1 requirements are met.

The inspector reviewed the Design Change Implementation Package (DCIP) at work Station Elevation 208 Containment Building, and verified by interviews that craft workers are trained and qualified, plant quality personnel are knowledgeable in the significance of QC hold points and the work was being performed in accordance with approved procedures and latest design documents. The inspector requested information as to the seismic qualification of the instruments (pressure switches and air pressure regulators) within the system. Licensee field supervisory personnel stated that the instruments were not seismically qualified. The inspector discussed the seismic qualification of the instruments with a licensee responsible engineer who stated that the instruments were presently in the process of being seismically qualified by Wylie Laboratory. In addition, a licensee responsible engineer stated that post modification acceptance test (Surveillance Procedure 06-ME-1M23-R-0001, Personnel Airlock Door Seal Air System Test, Safety Related), would not be performed until Wylie Laboratory had confirmed successful seismic qualification of the instruments. The inspector asked when a certified test report may be expected from Wylie Laboratory. Licensee

personnel stated that a test report is normally provided in four to six weeks; however, MP&L will expedite the submittal of the test report.

The inspector discussed performance of the post modification acceptance test with licensee test personnel in addition to reviewing Surveillance Procedure 06-ME-1M23-R-0001.

Within this area, no violations or deviations were identified.

d. Rod Pattern Control Test

The inspector observed two I&C technicians performing Surveillance Test 06-IC-1C11-M-0004, Rod Pattern Control System Low and Intermediate Limiter Function Test. Prior to observing the tests, the inspector checked the Maintenance Work Order (MWO) card for authorizations, verified the procedure was a controlled copy, reviewed the attachments to the procedure, and noted that instruments being used had valid calibration stickers attached. Discussions revealed that the technicians had been trained and were knowledgeable of the procedure. The inspector accompanied one technician during his observation of instruments and communication with a reactor operator required as prerequisites to performing the actual tests. During the test, one technician read the procedural steps which were performed by the accompanying technician. Instrument readings were observed, called out, verified by other technician, and entered on attached data sheets. Upon completion of the test, the control room was notified and the completed data package, including task card, was reviewed and signed by the I&C Supervisor.

Within this area, no violations or deviations were identified.

e. Intermediate Range Monitor

The inspector observed four technicians troubleshooting the Intermediate Range Monitoring System. The licensee had experienced problems with this system, a design change had been implemented, and the system still experienced problems. Work was being performed under MWO P42589-CN C51-26; however, as the trouble was not found, another MWO will have to be issued in order to authorize continuation of the trouble shooting operation. The work was also being monitored by a General Electric representative. Discussions revealed that the system will be retested per 06-IC-1C51-V-0001, Revision 20, after the present problems are resolved.

Within this area, no violations or deviations were identified.

f. Shift Turnover

The inspector observed the shift turnover between the first shift I&C Supervisor and the second shift I&C Supervisor. The first shift supervisor explained the tasks being performed, status of the tasks,

priority tasks to be performed on second shift, and the progress of surveillance test presently being performed on a containment door. Discussions revealed that the I&C Group has approximately 340 monthly surveillance tests to perform each month. They have 20 I&C technicians which includes 10 contract personnel. At present, they are meeting test schedules; however, if the contract personnel are released in June, schedules may not be met. Record keeping activities performed by the supervisors were also observed.

Within this area, no violations or deviations were identified.

6. Tests and Experiments (35749, 37703)

- Reference Documents:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) MPL-TOP-1A, Operational Quality Assurance Program, Revision 3, Section 3.0, Design Control, Section 11.0, Test Control
 - (c) Technical Specification Section 6.5.1, Plant Safety Review Committee, Section 6.5.2, Safety Review Committee
 - (d) FSAR Section 14.2 Construction, Preoperational and Initial Startup Test Program, Amendment 34.
 - (e) Regulatory Guide 1.64, Revision 2, Quality Assurance Requirements for the Design of Nuclear Power Plants
 - (f) ANSI N45.2.11-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants.
 - (g) Regulatory Guide 1.33, Revision 2, Quality Assurance Program Requirements (Operation)
 - (h) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

The inspector reviewed the licensee's test and experiment program required by references (a) through (h) to verify that it is in conformance with regulatory requirements, commitments in the application, and industry guides and standards. The following criteria were used during this review:

- A formal method has been established to handle all requests or proposals for conducting plant tests involving safety related components.
- Provisions have been made to assure that all tests will be performed in accordance with approved written procedures.
- Responsibilities have been assigned for reviewing and approving test procedures.
- A formal system, including assignment of responsibility, has been established to assure that all proposed tests will be reviewed to determine whether they are as described in the FSAR.
- Responsibilities have been assigned to assure that a written safety evaluation required by 10 CFR 50.59 will be developed for each test to assure that it does not involve an unreviewed safety question or a change in Technical Specifications.

The documents listed below were reviewed to verify that the previously listed criteria had been incorporated into the licensee tests and experiments program.

- 01-S-06-24, Administrative Procedure, Safety and Environmental Evaluations, Safety Related, Revision 3
- 01-S-07-2, Plant Administrative Procedure, Test and Retest Control, Safety Related, Revision 2
- 01-S-07-4, Plant Administrative Procedure, Plant Changes and Modifications, Safety Related, Revision 9
- 09-S-07-6, Technical Section Procedure, Control of Retest Requirements, Safety Related (Draft Copy)
- 09-S-01-601, Technical Special Test Instructions, Revision 2
- 09-S-01-08, Control of Design Change Activities, Revision 0
- NPE 01-304, Performance of Design and Preparation of Design Change Packages, Revision 6
- SUM 5000, Grand Gulf Startup Manual, Administrative Procedures, Revision 6.

The inspector interviewed licensee management concerning the tests and experiments program of safety related systems, components, and structures conducted during the preoperation phase of construction and requested information concerning the status of the preoperational tests. Licensee management stated that the preoperational tests were successfully completed and preparations were being made for the startup power ascension tests.

The inspector reviewed the licensee program for test and experiments of safety related systems, components, and structures along with the performance of the safety evaluation required by 10 CFR 50.59. Administrative Procedure 01-S-06-24 controls preparation and approval of safety evaluations for procedures and changes to procedures, changes affecting equipment or systems, and tests or experiments applicable to Title 10 of the Code of Federal Regulations Part 50.59. This procedure assigns responsibilities and delineates the method for performing safety evaluations required by 10 CFR 50.59. The inspector reviewed the handling of tests and experiments within the licensee design change program in addition to the requirements for maintenance retest caused by maintenance activities. The inspector determined that postmodification tests and test acceptance criteria are specified by the responsible engineer as part of the design change package. This information is contained in Section 7.0 of the design change package as described in Procedure 01-304, Performance of Design and Preparation of Design Change Package.

The inspector determined that the performance of postmodification acceptance testing and retesting caused by maintenance activities are performed in accordance with approved written procedures. The inspector reviewed a draft copy of Technical Section Procedure 09-S-07-6, Control of Retest Requirements. This procedure details how retest requirements are determined to ensure that permanent plant equipment conforms to specified design requirements after modification or maintenance activities. It assigns responsibilities and delineates the method for specifying maintenance retest and postmodification acceptance tests. The inspector interviewed licensee management to determine changes being incorporated into the draft copy of the procedure. Licensee management stated that the changes involve a transfer of responsibility for specifying required maintenance retesting and additional retest instructions for design change modifications from the Technical Superintendent to the Maintenance Superintendent. Concurrently, the responsibility of the maintenance planning group relative to specifying maintenance retests has been decreased while that of Maintenance Engineering has increased. In further discussions with the Senior Resident Inspector concerning these changes, the inspector was informed that these changes are being made as a result of a licensee commitment to the NRC. The inspector determined that postmodification tests and maintenance retest requirements are met using existing written approved plant procedures. For those postmodification tests and maintenance retests where written procedures do not exist, Maintenance Engineering is assigned responsibility for development of the required test procedures. In addition, Maintenance Engineering is assigned responsibility for review and approval of test procedures developed by maintenance planning.

The inspector reviewed the licensee program for special tests. Procedure 09-S-01-601, Technical Special Test Instruction, delineates the method for preparing retest requirements for special tests and experiments. The licensee definition of special test/experiment contained in procedure 01-S-07-02, Test and Retest Control is, "A test used to verify newly installed items meet specified requirements or to determine if installed items can meet requirements other than the original design." The inspector

interviewed licensee personnel to verify that safety evaluations are performed for special tests which are defined in 10 CFR 50.59 as tests or experiments not described in the FSAR. Specifically, the inspector interviewed licensee personnel concerning Technical Specification Section 3/4.10, Special Test Exceptions/Drywell Integrity. This section of the technical specification describes several startup tests which require imposition of certain special test exceptions. Among these is the Rod Pattern Control System Limiting Condition for Operation which requires suspension of sequence constraints imposed on control rod groups by the rod pattern control system by use of individual rod position bypass switches. The inspector requested information from licensee personnel concerning whether or not the special test exceptions, and the tests with which they are associated, are described in the FSAR. In addition, the inspector requested information concerning whether or not imposition of special test exceptions places the reactor in an abnormal mode of operation. Licensee personnel confirmed that the tests with which the special test exceptions are associated are described in the FSAR and the imposition of special test exceptions does not place the reactor in an abnormal mode of operation. Consequently, the requirements of 10 CFR 50.59 applicable to special tests and experiments are not required in this case.

Within this area, no violations or deviations were identified.

7. QA Program Review (35701)

Reference: 10 CFR 50, Appendix B, Quality Assurance Requirements for Nuclear Power Plants and Fuel Reprocessing Plants

The inspector reviewed the licensee Quality Assurance (QA) Program required by the reference to verify that activities were conducted in accordance with regulatory requirements, and industry guides and standards.

The following criteria were used during this review:

- Personnel responsible for QA program changes understand the change significance.
- Implementing procedure changes are in conformance with the approved QA program.

The licensee submitted a QA program update to NRC Region II for review on June 10, 1983, (AECM-83/0323). Additional information relative to this submittal was requested from the licensee September 23, 1983. A meeting between licensee and NRC personnel was held January 10, 1984, to discuss QA matters. This program is currently under review by NRC personnel for acceptability.

The following documents were reviewed to verify that previously listed criteria had been incorporated into licensee QA program activities:

- MPL-TOP-1A, Operational Quality Assurance Program, Revision 3
- QAP 2.10, QA Status Report to Management, Revision 2
- QAP 16.10, Corrective Action Request, Revision 16
- QAP 18.00, QA Audits Planning and Scheduling, Revision 4
- QAP 18.10, QA Audits, Revision 12
- QAP 18.14, QA Monitoring Audits, Revision 5
- PMI-83/9290, QA Semi-Annual Status Report to Management, dated August 30, 1983
- PMI-84/0498, QA Semi-Annual Status Report to Management, dated February 29, 1984

Within this area, one inspector followup item was identified. QAP 2.10 requires that the Manager of QA report semi-annually to the Senior Vice President, Nuclear, the status and adequacy of the QA program. Two previous reports (PMI-83/9290 and PMI-84/0498) were reviewed. These reports contain the following information: significant changes to the QA program; audits performed; NRC inspections performed; significant deficiencies; resolution of nonconformances; training and staffing; and trending (these are not intended to be all inclusive). These reports, however, do not definitively state QA program adequacy. The licensee stated that QA program adequacy to meet regulatory requirements is provided by Joint Utility Management Audits (JUMA) and the Middle South Services QA Audit of MP&L QA program which is performed in October.

This semi-annual report is a self imposed MP&L requirement. No violation is being written for failure to follow QAP 2.10 since it is beyond the scope of existing regulatory requirements; however, until the QA Program adequacy is addressed in the semi-annual report to management, this is identified as an inspector followup item (416/84-09-01).

8. Non-Licensed Personnel Training (41700)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.8, Second Proposed Revision 2, Personnel Selection and Training
 - (c) ANSI/ANS 3.1, Personnel Selection and Training, Draft December 1979
 - (d) ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel

(e) Regulatory Guide 8.13, Instruction Concerning Prenatal Radiation Exposure

(f) Technical Specification, Section 6

The inspector reviewed the licensee training program required by references (a) through (f) and verified that these activities are conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review to assess the program adequacy and, if fully implemented, will assure the following:

- The program complies with regulatory requirements and licensee commitments.
- The program covers training in the areas of administrative controls and procedures, radiological health and safety, industrial safety, security procedures, the emergency plan, quality assurance, fire fighting, and prenatal radiation exposure.
- Non-licensed personnel are trained in functions they perform including related technical and on-the-job training.

The documents listed below were reviewed to verify that previously listed criteria had been incorporated into the licensee training program:

Final Safety Safety Analysis Report (FSAR)

01-S-04-4, General Employee Training Program, Revision 7

01-S-04-7, Shift Technical Advisor Training Program, Revision 4

01-S-04-14, Training Records, Revision 7

01-S-04-17, Mechanical Maintenance Retraining and Replacement Training Program, Revision 5

01-S-04-18, Electrical Maintenance Retraining and Replacement Training Program, Revision 3

01-S-04-19, Instrument and Control Section Retraining and Replacement Training Program, Revision 2

The inspectors reviewed general employee training requirements for 28 licensee and contractor personnel. The inspectors were informed that GET tests are changed approximately every six months. Testing is given in a room large enough to permit spacing between personnel and proctors are present during testing. The inspectors verified GET course content relative to reference (e) requirements. Female employees sign a form stating that they have received prenatal radiation exposure training.

Within this area, no violations or deviations were identified. However, the conclusion regarding the adequacy of non-licensed personnel training were based in part on review of training records. The validity of these training records is the subject of an ongoing NRC investigation. Implementation of the Grand Gulf non-licensed personnel training program has also been reviewed by the NRC Senior Resident Inspector and will be documented in Inspection Report No. 50-416/84-16.

9. Audits (40702, 40704)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.144, Auditing of Quality Assurance Programs for Nuclear Power Plants, Revision 1
 - (c) ANSI N45.2.12-1977, Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants
 - (d) Regulatory Guide 1.146, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants, Revision 0
 - (e) ANSI N45.2.23-1978, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants
 - (f) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operation), Revision 2
 - (g) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
 - (h) Technical Specifications, Section 6

The inspector reviewed the licensee audit program required by references (a) through (h) and verified that auditing activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- The scope of the audit program has been defined and is consistent with technical specification and QA program requirements.
- Responsibilities have been assigned in writing for overall management of the audit program.
- Methods have been defined for taking corrective action when deficiencies are identified during audits.

- The audited organization is required to respond in writing to audit findings.
- Distribution requirements for audit reports and corrective action responses have been defined.
- Checklists are required to be used in the performance of audits.
- QA audit personnel meet minimum education, experience, and qualification requirements for the audited activity.

The document listed below were reviewed to verify that these criteria had been incorporated into auditing activities:

MPL-TOP-1A, Operational Quality Assurance Program, Revision 2

QQAP 16.10, Corrective Action Request, Revision 16

QAP, 18.00, QA Audits Planning and Scheduling, Revision 4

QAP 18.10, QA Audits, Revision 12

QAP 18.14, QA Monitoring Audits, Revision 5

The following nine audits were selected for review:

MAR-83/102

MAR-83/94

MAR-83/88

MAR-83/69

MAR-83/112

MAR-83/100

MAR-83/90

MAR-84/0035

MAR-84/0027

During the inspection of QA audits, the inspector observed site personnel perform an audit evaluating the adequacy of a contractor's measuring and test equipment calibration program. No major problems were identified while the inspector observed auditing activities. Minor comments generated by the inspector pertaining to the technique used by site QA in conducting audits were discussed with the Nuclear Site QA Manager.

Within this area, no violations or deviations were identified.

10. Surveillance Testing and Calibration Control (35745)

- References:
- (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
 - (b) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operation), Revision 2

- (c) ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
- (d) FSAR, Section 13.5.3.1, Surveillance Instruction, Amendment 28
- (e) Technical Specifications, Section 4 and Section 6
- (f) MPL-TOP-1A, Revision 3, Sections 5, 11, and 12

The inspector reviewed the licensee surveillance testing and calibration control program required by references (a)-(c) and licensee commitments as specified in references (d)-(f). This review was to verify that the licensee's program had been developed and was being conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications. The following criteria were used during this review:

- A master schedule for surveillance testing and calibration has been established which includes: frequency; responsibilities for performance; and testing status.
- Responsibilities have been assigned to maintain this schedule up-to-date.
- Requirements have been established for conducting surveillance testing in accordance with approved procedures which include appropriate acceptance criteria.
- Responsibilities have been assigned for review and evaluation of test data.
- Responsibilities have been assigned for assuring that required schedules for surveillance are satisfied.

The inspector also verified that similar controls have been established for calibration of instrumentation not specifically identified in Technical Specifications. The documents listed below were reviewed to verify that these criteria had been incorporated into surveillance testing and calibration control activities:

AP 01-S-06-12, GGNS Surveillance Program, Revision 7

AP 01-S-07-8, Control of Permanent Plant I&C Equipment Calibration, Revision 5

AP 01-S-03-1, GGNS Quality Program, Revision 5

AP 01-S-03-4, GGNS Quality Classification, Revision 5

- AP 01-S-07-01, Control of Work on Plant Equipment and Facilities,
Revision 11
- AP 01-S-07-7, Planning and Scheduling Plant Work, Revision 6
- AP 01-S-07-3, Calibration and Control of Measuring and Test Equipment,
Revision 6
- AP 01-S-06-2, Conduct of Operation, Revision 9
- TP 09-S-05-8, Surveillance Procedure Scheduling, Draft Copy of
Revision 0
- TP 09-S-05-7, GGNS Technical Specification/Surveillance Program Master
Cross-Index, Revision 3

To determine if individual surveillance test procedures had been developed to meet Section 4 Technical Specification requirements, the inspector interviewed licensee personnel and compared test procedures against Technical Specification (TS) requirements. During interviews, it was revealed that in 1983 the licensee formed a Surveillance Review Group to evaluate the procedures to ensure that procedures encompassed and met all TS requirements. Problems were identified which resulted in a major review of surveillance procedures. This major rewrite of procedures was accomplished by 30 engineers during a 9-month period. Revision 20 of the procedures incorporated the changes required by this major review.

The inspector selectively picked several TS requirements and compared them against the approved surveillance procedures. Individual surveillance due dates were checked against the Data Base Schedule to verify that tests had been performed prior to the due dates. The following TS requirements and associated procedures were reviewed:

| <u>TS Requirement</u> | <u>Surveillance Procedure</u> |
|-----------------------|---|
| 3/4-3.2.1 | 06-IC-1B21-R-0005 |
| 3/4-3.2.2 | 06-IC-1B21-0005 |
| 3/4-3.7.11 | 06-CH-SD17-R-0027 |
| 3/4-4.6.1 | 03-1-01-1, 3, and 4 |
| 3/4-4.6.1.2 | 03-1-01-1 |
| 3/4-5.2.1 | 06-IC-IE12-R-0001 |
| 3/4-4.6.1.3 | 06-TE-SB13-V-1111 |
| 3/4-4.6.1.1 | 06- ME-1M10-0001 |
| 3/4-12.3 | SP-R-12-(Not on computer printout- reason is this is on the Interlaboratory Comparison Program) |

The inspector examined surveillance procedures to determine if they were up-to-date, if they had outstanding change notices, and if the surveillance frequencies met TS requirements. The following procedures were examined:

06-IC-1B21-R-0022, Revision 21

06-IC-1B21-R-0015, Revision 20, This procedure had five outstanding TCNs attached. Discussion revealed that TCNs were to be incorporated into the procedure within 90 days.

06-IC-IE-31-M-1015, Revision 21

06-HP-IT48-R-0005, Revision 20

06-IC-IE31-R-0029, Revision 20

The licensee utilizes a Surveillance Procedure Tracking and Scheduling Group who are responsible for generating a morning task report, collecting completed surveillance data from supervisors, calculating new due dates, issuing new color coded surveillance task cards (red color for TS requirements, blue color for PM, buff for all other, and green for required maintenance activities), and ensuring that the data is updated. The inspector interviewed I&C personnel and examined several documents associated with the performance of surveillance testing, calibration, and preventative maintenance activities to verify that these activities were being performed, met acceptance criteria, and results were being documented as required. The following documents were reviewed:

MWO IN4019, LPCI System Calibration per Surveillance Instruction
06-IC-1E12-R-0001-2

MWO EL3419, Smoke Detector Check per 06-EL-SP65-SA-0001

MWO IN5612, Time Response of Steam Line Flow Instrument per
06-IC-1E31-R-0029-2

MWO IN41332, Differential Flow per 06-IC-1E31-M-1015

Morning task reports for four areas (administrative, miscellaneous, shop equipment, and the feedwater system) dated April 12, 1984.

The inspector interviewed QA personnel and reviewed several audit reports written by the site QA Group on surveillance test activities. Audits reviewed and results are listed below:

MAR: 84/0054, Implementation of Technical Specification Requirements 3/4.4.1.1 for Recirculation Loops and 3/4.4.1.4, Idle Recirculation Loop Startup. This audit consisted of examination of documents plus the actual observation of the surveillance test

being performed. Findings of the auditor were stated (both positive and negative). The audit report stated that the procedure performed, 06-IC-1B33-R-0001 verified compliance with TS requirements 4.4.1.1. and that procedure 06-OP-1B33-V-0005 adequately implemented TS 4.4.1.4. Checklists especially prepared for TS 3/4.4.1.1 and TS 3/4.4.1.4 were utilized by the auditors.

- PMI: 84/3155 concerned overdue response for Monitoring Audit Reports and discussed commitments made by the audited group to correct deficiencies.
- MAR: 84/0029, Control Rod Scram Accumulators, TS Requirement 3/4.1.3.3. The audit identified some inadequacies in the procedures, a TS concern, pressure gage inoperable, and an inadequate valve locking mechanism. The equipment deficiencies were corrected and responsible management were requested to evaluate the effectiveness of their programs.
- MAR: 84/0032 Radioactive Gaseous Effluent Doses, Unit 1, verified compliance with TS 3/4.11.2.1 through 3/4.11.2.7, 11.4, and 6.8-6.15. Some findings included the proposed revision of Technical Specification 3/4.11.2.4 and 3/4.11.2.5. The auditor observed the performance of the surveillance and used checklists during the audit.
- MAR: 84/0037 LPCI/RHR Subsystem A Quarterly Functional Test. One CAR, No. 2078, plus some personnel safety and communication concerns were initiated by this audit.
- MAR: 84/0036 RCIC Steam Supply Low Pressure Functional Test. The auditor observed the actual test, checklists were used, and the audit findings were documented.
- MAR: 84/0034, Standby Service Water System. CAR No. 2080, concerning the lack of verification of valves being locked closed was identified. NRC was notified of the above on March 13, 1984. A checklist was used and actual observation was performed by the auditors.

Within this area, no violations or deviations were identified.

11. Licensee Action on Previously Identified Inspection Findings (92701)

(Closed) Inspector Followup Item 416/83-38-16: Erroneous Reference in Corrective Action Procedure. The inspector reviewed QAP 16.10, Corrective Action Request, dated 11/10/83. The erroneous reference has been deleted.

(Open) Inspector Followup Item 416/83-38-06: Computerized Surveillance Scheduling System Deficiencies. The licensee has developed and is implementing a means to update the computer data to reflect the status of surveillances. Administrative Procedure (DRAFT) 09-S-05-8, Surveillance

Procedure Scheduling, Revision 0, is the controlling document; however, the procedure has not been reviewed and approved for official use. Until this procedure has been approved, this item remains open.