



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

Report Nos.: 50-416/84-51

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Docket Nos.: 50-416

License Nos.: NPF-29

Facility Name: Grand Gulf 1 and 2

Inspection Conducted: November 26 - 30, 1984

Inspector: C. Julian 1/9/85
C. Julian Date Signed

Team Members: R. V. Crlenjak
J. E. Caldwell
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Approved by: Albert Gibson 1/14/85
A. Gibson, Branch Chief Date Signed
Division of Reactor Safety

SUMMARY

Scope: This routine, announced inspection entailed 162 inspector-hours on site in the areas of assessment of operational readiness at the 50% power test plateau.

Results: Of the areas inspected, one apparent violation was found (Failure to do monthly audits of Temporary Alteration logs, see paragraph 5).

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REPORT DETAILS

1. Licensee Employees Contacted

- *J. E. Cross, GGNS General Manager
- *R. F. Rogers, Technical Assistant to General Manager
- *C. R. Hutchinson, Manager Plant Maintenance
- *M. J. Wright, Acting Manager Plant Operations
- *J. W. Yelverton, Manager Plant Support
- *J. L. Robertson, Technical Support Superintendent
- *G. H. Davant, Startup Engineer
- *L. F. Daughtery, Compliance Superintendent
- *T. G. Lee, Health Physicist

Other licensee employees contacted included numerous technicians, operators, mechanics, security force members, and office personnel.

NRC Resident Inspector

- *J. E. Caldwell
- *R. C. Butcher

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on November 30, 1984, with those persons indicated in paragraph 1 above. The licensee representatives acknowledged their understanding of the one violation and other inspection findings.

3. Licensee Action on Previous Enforcement Matters

416/83-43-04: Violation, Failure To Implement Regulatory Requirements.

This item concerned improper use of the words "should" and "must" in administrative procedures and is related to Inspector Followup Item 416/83-38-17. The inspector verified that the commitments by the licensee in their letter AECM-84/0385 of July 27, 1984, in response to the December 5, 1983 Region II Confirmation of Action letter have been accomplished. MP&L management has directed that the word "should" is to be carried out as a requirement. General Employee Training has been revised to emphasize that procedural steps containing "should" and "must" are to be complied with. As committed to by MP&L, all 108 Administrative Procedures have been reviewed and revised for clarity.

The inspector reviewed eight of the revised procedures and observed that the procedure steps still contain liberal use of the words "should" and "must" rather than "shall" or "will". The inspector reiterated to the plant

management at the exit interview that the NRC will continue to expect all procedures to be followed regardless of the content of permissive verbs. Plant management acknowledged their understanding of the NRC position. The violation and the IFI are closed.

416/83-30-01: Violation, Use of Banana Test Jacks in Control Panels Without 50.59 Analysis.

The inspector has reviewed the progress on this item during previous inspections. The licensee has performed a generic evaluation and concluded that the controlled use of these test jacks is safe. The inspector agrees with this position since the licensee has stipulated that the test jacks will be clearly marked and referenced in procedures to reduce the probability of use of the wrong test connection. The licensee has implemented such controls and this item is closed.

416/83-53-04: Deviation, Qual Card Deficiencies

416/83-53-06: Violation, Failure to Perform 50.59 Evaluation on Revised Training Procedures

416/83-53-08: Deviation, Failure to Perform OTEC Records Review

These items resulted from a special training inspection. The inspector reviewed the recently revised training procedures as follows:

01-S-04-1 Licensed Operator Training & Qualification Program, Rev. 7, 11/2/84

14-S-02-6 Licensed Operator Training Program Implementation, Rev. 8, 8/21/84

The inspector concluded that if these procedures are followed, further deviations and violations will be prevented. These items are closed.

416/84-07-04: Unresolved Item, Concern for Qualification Process for Mechanical Maintenance Personnel

The inspector reviewed the recently revised procedure 01-S-07-33 for training of all maintenance personnel and concluded that if the procedure is followed, future violations will be prevented. This item is closed.

416/83-35-01: Violation: Failure to Document Temporary Alteration Evaluations

The licensee response dated Sept. 26, 1983, was considered acceptable by Region II. The inspector reviewed the 50.59s for all current temporary alterations identified as deficient.

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 of September 26, 1983, were verified complete. This item is closed.

416/83-50-02 Deviation: Failure to Train on Design Change Packages
Prior to Criticality

The licensee response dated Feb. 14, 1984, was considered acceptable by Region II. The inspector verified that training had been given on required design change packages. This item is considered closed.

416/84-25-01: Violation: Failure to Follow Procedure in Releasing Material

The inspector reviewed and verified the licensee's corrective action as stated in MP&L's letter dated October 5, 1984. The inspector had no further questions. This item is closed.

416/84-25-02: Violation: Greater Than 1% Liquid in a Radioactive Waste
Container for Disposal.

The inspector reviewed and verified information in MP&L's letter dated October 5, 1984. The inspector had no further questions. This item is closed.

416/84-39-09: Unresolved Item: Taking Iodine and Particulate Samples During
Post Accident Conditions

The inspector reviewed and verified the licensee's corrective action which included the addition of a new sample location to take post accident samples to preclude a possibility of personnel over-exposure. The inspector had no further questions. This item is closed.

416/83-58-01: Violation: Failure to Provide Diesel Training

The licensee's corrective actions were addressed in their letter to the NRC (AECM-84/0156) dated March 14, 1984. As outlined in this letter, the licensee took the following corrective actions: 1) A memorandum was issued from the assistant plant manager-maintenance to responsible maintenance superintendents, dated December 27, 1983, informing them of the FSAR requirements for maintenance training. 2) Vendor training was conducted on-site for both DeLaval and EMD engines in order that qualified personnel would be available on each crew for maintenance on the emergency diesel generators. As a result of this training, all maintenance supervisors are qualified to perform diesel maintenance. Also, each shift has at least three people who have completed the vendor courses and are qualified to perform diesel maintenance. Twelve training records were reviewed. All training records correctly documented training. This item is closed.

416/84-21-01: Unresolved Item: Inconsistencies in Alarm Response Procedures

The inspector verified that the observed inconsistencies have been corrected. This item is closed.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraphs 6, 8 and 9.

5. Review of Shift Logs and Records

A review of current and recently completed operating logs and records was made. The operations section procedure, Shift Logs and Records (02-S-01-5), was reviewed for adherence to procedure. Control room operator, shift superintendent, water treatment/radwaste, temporary alteration, operator rounds, and control room surveillance logbooks are some of the records maintained by the operations shift personnel in accordance with 02-S-01-5. With the exception of the temporary alteration control logbook and the following minor comments, all logbooks examined were being maintained in accordance with the plant procedure.

The control room roundsheet, page 5 for panel 878, contained a reading for Seal Steam Generator Outlet Pressure (psig) with a minimum value of 72 and a maximum value of 94. During the month of September and October, a log reading of about 50 psig was taken and red circled as an abnormal reading with a note in the remarks indicating this as the normal pressure. A review of the current log revealed the same 72-94 range. A more timely change on the logsheet or resolution of this discrepancy in pressure range seems appropriate.

The shift superintendent log entries were made differently by different personnel. Some entries were made with the time specified, some by numbering of entries, and some entries in a general essay. The example given in Attachment II of 02-S-01-5 shows entries by time or chronological order.

Inspection of the temporary alteration logbook revealed nearly 60 outstanding temporary alterations, and two-thirds of these items were initiated in 1981 and 1982. Inspection of plant procedure, Control of Temporary Alterations, (01-S-06-3), was conducted along with the temporary alteration logbook and jumper log. Three examples of inadequate procedural adherence were found for procedure step 6.4.

The first example was procedure step 6.4.1 which requires a monthly review of the jumper log and documentation of this review on Attachment VI. The only reviews signed as completed were on July 26, 1984 and September 28, 1984.

A second example was found for step 6.4.3 for the monthly audit of the temporary alteration logbook. Inspection of Attachment VI revealed completed audits for June 27, July 25, August 26, and September 28 but no audit was conducted after September 28. A plant task card completed

October 26, 1984 indicated an audit had been completed, but this was not documented as required in the log index.

The third example was also for step 6.4.3 which requires that during the monthly audit, for each temporary alteration installed greater than six months, an updated disposition be requested from the initiating Section Superintendent. Also, any alteration which has not been dispositioned within twelve months would be noted and routed to the General Manager. Discussions with plant personnel and reviews of available records revealed that disposition of outstanding items has not been accomplished as required.

This is a violation of Technical Specification 6.8 for failure to follow procedures (416/84-51-01).

6. Review of Alarm Response Instructions

Unresolved item 84-21-01 concerning errors in alarm response instructions was reviewed and closed.

A review of plant alarm response instructions in the control room found one page missing for annunciator P-870-10-H3 (DRWL CHILL CHLD WTR TEMP HI). However, this instruction page was found in other plant instruction copies and had inadvertently separated from the control room copy. The licensee took prompt action to replace the missing page.

One annunciator window (P-601-21A-H4) had its alarm light illuminated and with a black grease pencil the words RCIC WATER LEG PUMP DISCHARGE PRESSURE LOW written on the window. Varying responses from operations personnel were received as to the exact status of this alarm. The exact status of this alarm is not known. This is being left as an unresolved item (416/84-51-02).

7. Post Trip Analysis

Several recent post trip analyses were reviewed and all appeared adequate. The inspector noted that the Plant Safety Review Committee (PSRC) does not conduct a formal review of the completed post trip analysis. The trip reports are reviewed as part of the associated incident report, but a backlog of final incident reports are outstanding. None of the 1984 trip reports have yet been through a final formal review due to the backlog of incident reports. The licensee informed the inspector that a Plant Safety Review Committee subcommittee is to address this backlog in the near future.

The on-shift post trip review allowing restart is reviewed by the PSRC with the incident report. A subsequent off-shift review is conducted by the engineering staff and the inspector noted that these reviews often contain important recommendations for future corrective action. The inspector recommended that the PSRC consider including a final review of the complete post trip review package as one of their normal tasks. Licensee representatives agreed to consider this recommendation. This will be an inspector followup item IFI 416/84-51-03.

8. Committee Activities

Through discussion with plant personnel, the inspector learned that the PSRC has a backlog of approximately 157 incident reports (IR) and 215 design change packages (DCP) to be reviewed. The inspector stated at the exit interview that although the Technical Specifications do not specify the time interval allowed for the PSRC to review these items, a large backlog is not indicative of operational readiness. MP&L representatives stated at the exit interview that this backlog will be cleared by February 1, 1985. This matter will be considered as unresolved item (416/84-51-04) and will be reviewed during a future inspection.

Previous inspection report item 416/84-47-01 identified that the corporate Safety Review Committee (SRC) also has a backlog of items. Through discussion with corporate personnel, it was learned that there was approximately 1000 total backlog items outstanding. MP&L representatives committed to take action to clear out this backlog by March 1, 1985. This will continue to be considered an unresolved item 416/84-47-01 pending future review.

9. Maintenance Program

- References:
- a) 1-S-07-1, Control of Work on Plant Equipment and Facilities
 - b) 01-S-06-1, Protective Tagging System
 - c) 07-S-01-21, Protective Tagging System Under Maintenance Section Authority
 - d) 01-S-06-3, Control of Temporary Alterations
 - e) 01-S-07-13, Cleaning Processes
 - f) 10-S-03-3, Control of Ignition Sources
 - g) 01-S-07-33, Qualification and Certification of Maintenance Section Personnel
 - h) 01-S-07-16, Spare Parts Program
 - i) 01-S-07-8, Control of Permanent Plant I&C Equipment Calibration
 - j) 01-S-07-14, Control and Use of the GGNS Equipment Index
 - k) 01-S-07-3, Calibration and Control of Measuring and Test Equipment

- l) 12-S-01-5, Plant Quality Checking, Reporting, and Follow-up
- m) 01-S-07-28, Repair/Replacement Program
- n) 12-S-02- Temp 6, MWO Authorization Review
- o) 12-S-01-10, Review of Safety Related Documents
- p) 01-S-07-30, Evaluations of Component Malfunctions
- q) 01-S-07-15, Preventative Maintenance Program
- r) 01-S-07-9, Housekeeping

The inspectors reviewed the references and other implementing procedures and conducted interviews with plant management, operations and maintenance personnel to verify the following aspects of the maintenance program:

- Written procedures were established for initiating requests for routine and emergency maintenance.
- Criteria and responsibilities for review and approval of maintenance requests were established.
- Criteria and responsibilities that form the basis for designating the activity as safety or non-safety related were established.
- Criteria and responsibilities were designated for performing work inspection of maintenance activities.
- A written preventative maintenance program for safety-related structures systems, and components was established.
- Administrative controls for special processes were established.
- Methods and responsibilities for equipment control were clearly defined and established.
- Written procedures were established and responsibilities designated for cleanliness control of safety-related components and systems.
- Administrative controls and responsibilities for general housekeeping were established.

The following Maintenance Work Orders (MWO) were reviewed:

M46585	M46006	M46847
M45430	M46210	M46714
M45345	M4606	M45485

M46918	M46622	M47004
M46318	M44280	
M45771	M46442	
M46016	M38930	

All of the above MWOs were not prepared with all of the information required on the MWO form as required by Administrative Procedure 01-S-07-1, Revision 13, dated November 6, 1984. Sufficient information was provided to perform and document the work but all the blanks on the form are not typically filled. The licensee had previously identified this problem in Plant Quality Deficiency Report (PQDR) 247-84, dated October 25, 1984. As stated in this PQDR, disposition action is required by the Operations Superintendent no later than December 7, 1984. Until appropriate corrective action is taken, this will be identified as an Unresolved Item (416/84-51-05).

Section 6.3.2 of newly revised Administrative Procedure 01-S-07-9, Housekeeping Revision 7, dated October 17, 1984, states that "Detailed inspections must be scheduled and performed on a weekly, monthly, or other basis by task schedule such that all accessible areas and equipment are inspected monthly." These inspections are to be documented and maintained as a quality assurance record. The inspector observed that the monthly detailed housekeeping inspections were not being conducted by any of the maintenance disciplines. These inspections were not being conducted because the responsible maintenance superintendents had not received the latest revision of the Housekeeping Administrative Procedure in time to fulfill the prescribed inspection requirements. There is no system in effect which insures that Administrative Procedures which require specific actions to be completed within a certain periodicity are promptly conveyed to the responsible individuals. The inspectors stated their concern that a more significant procedure revision may be missed due to this discrepancy. Until a method is established to insure Administrative Procedures which require action are disseminated in a timely manner, this will remain an inspector followup item (416/84-51-06).

The inspectors identified a backlog of 578 MWOs and 607 preventative maintenance (PM) items under the responsibility of the Mechanical Maintenance Superintendent at the time of this inspection. These backlogs, however, have been steadily decreasing. The improvement in this area can be attributed to effective management supervision. Specifically, the following actions have been instituted: 1) Manual and computer tracking systems have been initiated to identify overdue PMs and MWOs which remain outstanding. 2) Priorities have been established to insure critical work is completed in an expeditious manner. 3) PMs are being systematically reviewed when assigned to the appropriate supervisors. These reviews check for PM adequacy, redundancy, correct manhour authorization, correct periodicities, and applicability. 4) Contractor personnel are being tasked with accomplishing certain maintenance activities in order that the skills of the journeymen are more efficiently and effectively used.

The inspectors witnessed the performance of Surveillance Instruction 06-ME-1M23-V-0001, Containment and Drywell Airlock Seal Leak Test. The inspectors reviewed the procedure for technical adequacy, conformance to Technical Specifications, verified the test instrument calibration, observed the conduct of the test, removal from service and return to service of the system and reviewed the test data. The inspectors also witnessed the return to service of a CRD pump after maintenance had been performed on the pump. No violations or deviations were identified.

10. Plant Operations

The senior resident inspector observed several areas which are related to plant operations. These observations were conducted throughout the plant during daily tours and in the review of plant records.

- a. Drawing and Schematics - The inspector reviewed the plant drawings and schematics which are provided in the Control Room for use by the operators and engineers conducting plant operations and testing. The inspector noted that most plant drawings were adequate; however, a significant number of plant drawings such as detailed instrument and control schematics were found to be illegible. Licensee representatives explained that this is caused by the original being of poor quality. Until the licensee replaces these drawings, this item is considered an inspector followup item (416/84-51-07).
- b. Technical Specifications (T.S.) - The inspector reviewed the control room copy of T.S. and the control room surveillance logbook. This logbook is utilized for tracking limiting conditions for operation (LCO) which are initiated by plant surveillances. In general, these items were controlled in an appropriate manner. Several instances were noted where logbook items were not completed. These minor deficiencies were pointed out to plant management. The inspector also reviewed the position statements, authorized by plant management, for the purpose of clarifying certain T.S. requirements. The inspector found these plant positions to be conservative.
- c. Plant Tours - During the conduct of plant tours, the inspector reviewed plant/equipment conditions and cleanliness. Equipment observed and plant cleanliness was found to be satisfactory. Several minor deficiencies were pointed out to plant management.
- d. Conduct of Operations - The inspector observed operations within the control room and throughout the plant. Communications between plant personnel appeared to be carried out in a particularly efficient manner. In general, the formal atmosphere within the control room was noted as a positive indication of efficient operations and professionalism among the plant staff.

11. Surveillance Scheduling and Implementation

A review was made of the licensee's surveillance program tracking system (SPTS); a computerized system used to track surveillance procedures to ensure TS surveillance requirements are met. The SPTS, being updated daily by a select group, maintains the current status of the last completion date, "normal interval" due date, and "extended interval" late date for those TS surveillance procedures with a performance frequency of weekly or greater.

The reports generated by this system can sequentially list the surveillance procedures by due date or late date and also sort into separate disciplines if so desired. Since the SPTS also indicates the mode in which the surveillance procedure is applicable, the generated reports are used to track and ensure TS requirements are met before changing modes of plant operation.

As of the date of this inspection all due dates and late dates are calculated by hand due to software inability to calculate dates for procedures with special or stepped-up frequencies. This, however, is being resolved and will be accomplished by computer in the future.

12. Radiation Protection - Startup (83521)

FSAR, Section 14.2.12.3.2 specifies certain tests to be performed following fuel loading and during power ascension. The inspector reviewed test procedure 1-000-54-02-1, Radiation Monitoring - Test Condition 1, radiation baseline survey at 20% to 100% power to determine that the design shielding is adequate for safe plant operation and to keep personnel radiation exposures as low as reasonably achievable (ALARA). The inspector reviewed all radiation survey results as required by 1-000-54-02-1, Radiation Monitoring, and concluded the shielding appeared to be adequate with the exceptions of seven (7) drywell penetrations located near the Reactor Water Cleanup System (RWCU) inside the Containment Building, and the drywell personnel airlock. These areas revealed excessive levels of gamma and neutron radiation levels which could create a radiation hazard for personnel. The inspector discussed with licensee personnel their plans for controlling access to these areas and adding additional shielding to reduce the radiation levels. The inspector was informed by licensee personnel that they intend to add additional shielding and administratively control access to these areas until the design change request (DCR) has been completed. The inspector informed licensee management representatives that this item would remain as an inspector followup item and would be reviewed upon subsequent inspections. (50-416/84-08).

13. Health Physics Program

a. Organizations and Management Controls (83722)

The inspector reviewed the licensee's organization, staffing level and lines of authority as they related to radiation protection, radioactive material control and plant chemistry, and verified that the licensee had not made organizational changes which would adversely affect the ability to control radiation exposures, radioactive material or plant chemistry.

b. Training and Qualifications (83723)

Paragraph 4.5.2 of ANSI N18.1 states that technicians in responsible positions shall have a minimum of two years of working experience in their specialty. The inspector reviewed the experience and training records for selected Health Physicists (H. P. Technicians) currently working at the station. The inspector observed H. P. technicians during implementation of radiological controls for selected activities.

The inspector reviewed the qualifications of the newly appointed Chemistry and Radiation Control Superintendent and discussed the qualifications with licensee management and the individual.

Plant procedure 01-S-04-04, General Employee Training Program, establishes the program for implementing the requirement to instruct each individual entering the restricted area.

The inspector discussed the radiation protection aspects of the general employee training program with licensee representatives, selectively reviewed the training records of personnel from various plant organizations and attended portions of the training classes. During tours of the plant, the inspector interviewed workers to assess their knowledge and understanding of radiation protection requirements.

The inspector reviewed changes in the licensee's training policies, goals, program and methods, related to radiation protection, radioactive material control and plant chemistry, discussed the changes with licensee representatives and verified that the changes should not adversely affect the licensee's program.

Plant procedure 01-S-04-09, Health Physics Training Program establishes the training /retraining program for Health Physics personnel. The inspector discussed the replacement training and refresher training program for Health Physics personnel with licensee representatives and reviewed selected training records.

c. External Exposure Control and Personal Dosimetry (83724)

10 CFR 20.101 specifies the applicable radiation dose standards. The inspector reviewed the computer printouts (NRC Form 5 equivalent) for the period August to October 1984 and verified that the radiation dose recorded for plant personnel were well within the quarterly limits of 20.101(a).

10 CFR 20.101(b)(3) requires the licensee to determine an individual's accumulated occupational dose to the whole body on an NRC Form 4 or equivalent record prior to permitting the individual to exceed the limits of 20.101(a). The inspector reviewed selected occupational exposure histories for individuals who exceeded the values in 10 CFR 20.101(a). The exposure histories were being completed and maintained as required by 10 CFR 20.102.

10 CFR 20.202 requires each licensee to supply appropriate personnel monitoring equipment to specific individuals and require the use of such equipment. The inspector reviewed changes to plant procedure 01-S-08-3, Personnel Radiation Exposure Monitoring for personnel dosimetry. The changes were made in accordance with plant administrative procedures and appear not to reduce the effectiveness of the licensee's dosimetry program. During tours of the plant, the inspector observed workers wearing appropriate personnel monitoring devices.

Technical Specification 6.8.1 requires the licensee to have written radiation protection procedures, including the use of radiation work permits. The inspector reviewed plant procedure 08-S-01-24, Radiation Work Permits which provided detailed instructions on the preparation and processing of Radiation Work Permits (RWPs). The inspector reviewed selected active RWPs for appropriateness of the radiation protection requirements based on work, scope, location, and conditions. During tours of the plant, the inspector observed the adherence of plant workers to the RWP requirements and discussed the RWP requirements with plant workers at the job site.

The inspector discussed the reporting requirements of 10 CFR 20.408(b) with licensee representatives and reviewed selected individual exposure records maintained by the licensee and copies of exposure reports sent to the NRC and to individuals during the period January to October 1984.

The inspector discussed the reporting requirements of 10 CFR 20.402, 20.403 and 20.405 with licensee representatives and determined that the licensee had not had an event which required reporting in accordance with these sections of 10 CFR 20.

10 CFR 20.203 specifies the posting, labeling and control requirements for radiation areas, high radiation areas, airborne radioactivity areas and radioactive material. Additional requirements for control of high radiation areas are contained in Technical Specification 6.12. Plant procedure 08-S-02-20, Establishing and Posting Controlled Areas contains additional information on the posting and control of radiological areas. During tours of the plant, the inspector reviewed the licensee's posting and control of radiation areas, high radiation areas, airborne radioactivity areas, contamination areas, radioactive material areas and the labeling of radioactive material.

The inspector observed the posting of notices required by 10 CFR 19.11 during tours of the plant. No violation or deviations were identified.

d. Internal Exposure Control (83725)

The inspector reviewed selected results of general in-plant air samples taken during the period August to October 1984 and the results of air samples taken to support work authorized by specific radiation work permits. The use of process and engineering controls to limit airborne radioactivity concentrations in the plant was discussed with licensee representatives and the use of such controls was observed during tours of the plant. By review of records, observations and discussions with licensee representatives, the inspector evaluated the licensee's respiratory protection program, including training, medical qualifications, fit-testing, MPC-hour controls, quality of breathing air, and the issue, use, decontamination, repair and storage of respirators.

The inspector reviewed the following plant procedures which established the licensee's internal exposure control and assessment program and verified that the procedures were consistent with regulations, Technical Specifications and good health physics practices:

- 08-S-02-32, Evaluation of Internal Exposure
- 08-S-02-41, MPC Hour Tracking
- 08-S-02-42, Inspection and Maintenance of Respiratory Equipment
- 08-S-02-43, Testing of Respiratory Equipment

e. Surveys, Monitoring, and Control of Radioactive Material (83726)

The inspector reviewed selected records of radiation and contamination surveys performed during the period of August to October 1984 and discussed the survey results with licensee representatives. During tours of the plant the inspector observed health physics technicians performing radiation and contamination surveys. The inspector performed independent radiation and loose surface contamination surveys in the auxiliary building and in the restricted area outside the auxiliary building and verified that the areas were properly posted.

The inspector discussed with the licensee the method used to release material from the restricted area and observed technicians performing release surveys for material. The inspector observed personnel using the personnel frisker (RM-14/RM-16 with HP-210 pancake probe) to perform contamination surveys of themselves prior to exiting the controlled area.

f. ALARA Program (83728)

The inspector reviewed plant procedure 01-S-01-08, ALARA Program which establishes the program for keeping occupational exposures ALARA and discussed the administrative aspects of the program with licensee representatives. During tours of the plant, the inspector interviewed workers to determine their knowledge of the ALARA program and their direct involvement in the program. The inspector discussed the ALARA goals and objectives for the current year with licensee representatives and reviewed the man-rem estimates and results for the current year. As of October 31, 1984, the actual collective exposure for calendar year 1984 was 8.0 man-rem which represented 34% percent of the estimated exposure for the year.

g. Solid Waste (84722)

The inspector reviewed the following plant procedures for the packaging, classifying, and tracking of radioactive waste shipped to low-level waste burial facilities:

- 08-S-06-10, Radioactive Materials Classification
- 08-S-06-11, Internal Classification of Radioactive Materials
- 08-S-06-20, Packaging Radioactive Materials
- 08-S-06-30, Radioactive Material Shipment Surveys
- 08-S-06-40, Marking, Labeling, and Placarding Radioactive Material
- 08-S-06-50, Loading Radioactive Material

The inspector reviewed the methods used by the licensee to assure that waste was properly classified, met the waste forms and characteristics required by 10 CFR 61 and met disposal site license conditions and discussed the use of these methods with licensee representatives. Technical Specification 6.13 requires the licensee to prepare waste for burial in accordance with a Process Control Program (PCP). The inspector discussed the provisions of the PCP with licensee representatives and during tours of the plant, observed the processing, control and storage of solid waste. The inspector reviewed selected manifests prepared for waste shipments made during October 1984 to verify that a tracking system was being use to insure that shipments arrived at the intended destination without undue delay.

h. Transportation of Radioactive Material (86721)

The inspector reviewed selected records of radioactive waste shipments made during October 1984 and verified that the licensee had maintained the records required by 10 CFR 71.91. The inspector reviewed plant procedure 08-S-05-02, Shipping Radioactive Material for the preparation, documentation and shipment of radioactive material and verified that the procedure was consistent with regulations.

No violations or deviations were identified in the health physics program.

14. Followup on Previously Identified Items

(Closed) IFI 416/83-53-01; Incorporation of Design Changes in Training.

The licensee has gathered all training personnel together in their new facility such that communication between the various training groups is possible. This item is closed.

(Closed) IFI 416/83-50-01; Verification of SRO Certification

This item is closed based on the licensee's previous completion of the recertification program for all licensed personnel.

(Closed) IFI 416/83-53-05; Simulator Training Requalification Procedures.

The inspector reviewed the recently revised procedures for requal training as follows.

01-S-04-2 Licensed Operator Requalification Training; Rev. 4, 11/5/84

01-S-02-3 Licensed Operator Requalification Program Implementation, Rev. 0, 11/14/84

If followed, these procedures will ensure that knowledge and performance weaknesses identified during simulator training will be fed back into the requal program for future emphasis. This item is closed.

(Closed) IFI 84-06-01; Suppression pool level instruments do not read the same due to improper temperature compensation. The wide range suppression pool level detectors have been recalibrated for 80 °F (in lieu of 170 °F) and a nomograph is provided in emergency procedure 05-S-01-EP-3 so that suppression pool level can be determined at elevated temperatures if necessary.

All but three of the additional items addressed in sections 5.a through 5.e of inspection report 416/84-06 were corrected during the full power license/technical specification TS/FSAR review. The three unchanged items were considered to be generic in nature and not requiring a TS change by the licensee and NRR. These items concern the determination of accident

monitoring and suppression pool operability with regards to temperature and level instrumentations, and the possible inadvertant non-compliance with the TS by not utilizing cross referencing. The inspector had no further questions. This item is closed.

(Closed) IFI 416/84-06-02; Typographical error in TS 4.5.3.1.a.2. The typographical error was corrected in the full power license to require a suppression pool water level of at least 12'8", in lieu of 12' 5", when in operational condition 4 or 5. Those items addressed in section 5.g of inspection report 416/84-06 concerning identification of suppression pool temperature instrumentation and elimination of "and/or" in related TS operability statements were determined by NRR as not requiring correction and therefore no TS change was made. The inspector had no further questions. This item is closed.

(Closed) IFI 416/84-06-03; Typographical error in TS 3.6.3.2.b. The typographical error was corrected in the full power license to indicate the use of a "RHR" heat exchanger for containment spray operability. This item is closed.

(Closed) IFI 416/84-06-04; TS 4.6.3.2.b for containment spray has wrong flow rate and procedure allows 96 hours to review. Containment spray surveillance operability requirement 4.6.3.2.b, was changed in the full power license to require that each RHR pump develop a flow of at least 7450 GPM (in lieu of 5650 GPM) while recirculating water through the RHR heat exchanger to the suppression pool. The associated surveillance procedure allows up to 96 hours to evaluate the test data. The inspector has verified that this is in accordance with section XI of the ASME code pertinent to testing pumps, and therefore has no further questions. This item is closed.

(Closed) IFI 416/84-06-05; Licensee to consider walkdown to verify TS tables for isolation valves. Based on the related efforts during the 1982 and 1983 surveillance review program, as well as the walkdowns conducted during a review of the LLRT program, the licensee considers that the TS isolation valve tables are accurate and does not plan additional walkdowns. This item is closed.

(Closed) IFI 416/84-06-08; TS only require seven ADS valves; the plant, however, has eight ADS valves. TS 3.5.1.a.3 and 3.5.1.b.2 were changed in the full power license to require eight operable ADS valves. This item is closed.

(Closed) IFI 416/84-06-09; TS does not agree with SER and FSAR for ECCS pump head on surveillance tests. TS surveillance requirement 4.5.1.b now indicates developed heads of ≥ 290 psid and 445 psid in lieu of previous 261 psid and 182 psid for the LPCS and HPCS pumps respectively. This ensures that the systems meet the design requirements. This item is closed.

(Closed) IFI 416/84-06-10; Low atmospheric pressure could cause containment DP sensor set points to be non-conservative. By order dated April 18, 1984, the drywell and containment pressure instrument setpoints and allowable values were revised to account for the effect of worst case negative barometric pressure changes. The inspector had no further questions. This item is closed.

(Closed) IFI 416/84-06-11; MSIV outboard leakage control system does not have heaters, thus making TS 4.6.1.4 incorrect. Surveillance requirements addressing the non-existent heaters in the outboard MSIV leakage control sub-system, have been eliminated in the full power license. This item is closed.

(Closed) IFI 416/84-06-12; TS 4.6.1.1.a incorrectly calls for an equipment hatch test after opening any type B penetration. This item was corrected by requiring a leak rate test of the seals associated with the penetration that was opened. In addition, there was some concern that the wording of TS 4.6.1.1.b was ambiguous. However, the licensee and NRR did not find this to be the case and no TS change was made. The inspector had no further questions. This item is closed.

(Closed) IFI 416/84-06-13; Licensee to review and correct semi-daily log sheet and TS cross reference. Both the TS cross reference and the semi-daily log sheet were verified as being revised during the full power license TS review. The inspector had no further questions. This item is closed.

(Closed) IFI 416/83-35-05; The inspectors visually verified the Division III diesel generator air dryer system valves were labelled with valve numbers and noun name descriptions. The pre-filter drain valve was correctly aligned. There are no further questions. This item is closed.

(Closed) IFI 416/83-53-03; Improper Frisking by Operator. The inspector reviewed the licensee's corrective action which included a revision to General Employee Training (GET) to emphasize the proper technique and importance of frisking when working in the plant. The inspector also observed personnel using the personnel frisker to perform contamination surveys of themselves prior to exiting the controlled area. The inspector had no further questions.

(Closed) IFI 416/84-35-01; Additional training on tech. spec. amendment 13 to three training department SROs. The inspector reviewed the individuals training folders to verify that additional training had been received. This item is considered closed.

(Open) IFI 416/83-53-07; Maintenance of Licensed Personnel Operating Proficiency. This item concerned the lack of a requirement in the training procedures that each licensed person shall stand one 8 hour watch at least once per month to be considered on "active status". The inspector reviewed the licensee procedures and could find no such requirement. This item will remain open pending future inspection.