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REGION I

Report No. 50-219/88-09

Docket No. 50-219

License No. DPR-16 Priority -- Category C

Licensee: GPU Nuclear Corporation
1 Upper Pond Road
Parsippany, New Jersey 07054

Facility Name: Oyster Creek Nuclear Generating Station

Inspection Conducted: March 20 - April 23, 1988

Participating Inspectors: J. Wechselberger
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Approved By: W Bamark for 5/26/88
C. Cowgill, Chief Reactor Projects Section 1A Date

Inspection Summary:

Areas Inspected: Routine inspections were conducted by the resident inspectors and one region-based inspector (318 hours) of activities in progress including plant operations, radiation control, physical security, surveillance and maintenance. The inspectors reviewed the environmental qualification files for reactor vessel pressure switches (RE03s), licensee's actions surrounding the automatic initiation of the standby gas treatment systems (SBGTS) as a result of Augmented Offgas System (AOG) problems, the radiological considerations associated with placing the AOG system in service and performing AOG system maintenance and the maintenance activities involving an electrical outage of the AOG building, SBGTS, and stack gas sample flow. The inspector reviewed with the licensee operability concerns regarding V-26-16, 4160 volt undervoltage relay concerns, RE03 vibration issues, and V-24-30 piping support adequacy. In addition, the inspectors discussed cathodic protection job issues, locked high radiation door control, proper control of contaminated breaker cubicles, and installation and maintenance of contamination control containments with radiological controls personnel. The inspector also participated in a licensee presentation and tour of the site for Chairman Zech and the Region I Regional Administrator.

Results: No violations were identified. A significant concern was identified regarding the licensee's control of maintenance activities during plant operation periods. Two unresolved items were issued: one with regard to the adequacy of the licensee environmental qualification files for RE03s and the second concerning a number of effluent monitors being maintained under technical specification action statements.

DETAILS

1.0 Environmental Qualification of the High Pressure Scram Switches (RE03s)

The Barksdale Pressure Switches of Model Number B2T-A12SS installed in the reactor high pressure scram circuit have been experiencing spurious trips, setpoint drift and nonrepeatability after the 11R refueling outage (see Inspection Report 88-04). The inspector reviewed the failure history, licensee's corrective action, switch calibratio. est results and environmental qualifications of Barksdale pressure switches.

Due to erratic switch behavior, the licensee replaced the switches (RE03) with new Barksdale units, which also continued to show erratic behavior. The licensee investigation revealed that the original Barksdale switches had Honeywell microswitches, model number BZ-R812, and the new units contained microswitches with model number BZ-R179. As Microswitches BZ-R179 were showing increased incidences of switch failure, the licensee replaced the BZ-R179 microswitches with the original BZ-R812 microswitches obtained from spares available elsewhere in the plant. The licensee determined that the switch problem may be a combination of effects including internal microswitch design, proximity to trip setpoint and rack vibration which results in an increase in the contact resistance due to vibration induced arcing. To reduce vibration, the licensee installed vibration dampers in the impulse lines for RE03A and B installed in Rack RK01 and, to provide additional margin in the reactor trip setpoint, the licensee reduced the reactor operating pressure to 1010 psig. Long term, the licensee is considering replacement of reactor high pressure trip system with an analog system and Rosemount 1153 transmitters in the first outage after the 12R refueling outage to allow for procurement of the instrumentation.

The inspector looked at a sample Barksdale pressure switch and microswitches of both BZ-R812 and BZ-R179 design. The inspector also reviewed the switch test and calibration procedure 619.3.017, Revision 17 and some deviation reports issued during 1987 and early 1988. The deviation reports indicated that the as-found trip setpoints were generally lower than as-left setting of 1050 psig, except in a few cases where one of the four switches was found outside the technical specification limit. The licensee considered this situation nonreportable as the other switches in the circuit tripped at an acceptable setpoint below the technical specification limit.

The licensee determined that reactor high pressure scram switches (RE03s) need not be environmentally qualified for the postulated accident environment in the reactor building. These switches were deleted from the Oyster Creek Electrical Equipment Environmental Qualification Master List (EEQML). The inspector reviewed licensee's justification for deleting the RE03s from the EEQML and discussed this with licensee's Environmental Qualification group. Documentation of this justification was found to be weak; however, the inspector did not identify any deficiency in the logic. The inspector had a concern regarding continued long term operability of these switches following a high energy line break (HELB) in the area of switch location. The licensee

was asked how they addressed long term operability of safety related equipment not in the EEQML but located in the possible high energy line break areas, following mitigation of the break. The inspector also reviewed the EQ File No. EQ O.C. 323, which documented environmental qualification of the Barksdale pressure Switches Model Numbers B2T-A12SS and B2T-M12SS. The switches were qualified by type test supplemented by analysis for the postulated accident harsh environment in the reactor building. The licensee was asked to respond to the following issues regarding adequacy of the information contained in the subject file:

a. The analysis does not appear to address the differences between the type test and the as-installed electrical conditions with regard to voltage and load.

b. Test specimens did not appear to reflect the end-of-life condition in terms of mechanical cycling.

c. Similarity between the wiring and termination for the test specimens and installed switches apparently has not been established.

d. Similarity between the microswitch in the test specimens and the installed switches was not established before February, 1988.

The statements above regarding the adequacy of the information in EQ O.C. 323 and the measures taken to ensure safety related equipment operability following a HELB and subsequent plant operation for those items not controlled by EEQML will remain an unresolved item pending further inspector review of the licensee's program (50-219/88-09-01).

2.0 Effluent Monitors

On February 15, 1988, the licensee entered a 48 hour Technical Specification (TS) sampling frequency for the noble gas monitor of the Augmented Offgas (AOG) ventilation system per Action Statement 123 of Table 3.15.2. The licensee stated that the monitor had been declared inoperable because the check source had decayed such that the monitor could not pass a daily channel check test. Although it was declared inoperable the monitor remained functional and in service. Inspector review of sample analysis for inoperability through April 1, 1988, indicated that the licensee had exceeded the 48 hour sampling requirement five times by three to seven hours. Two additional instances were identified where the 48 hour limit was marginally exceeded. During the time of inoperability, the AOG building did experience high levels of noble gas activity as discussed in sections 3.0 and 4.0. The inspector did note some instances where the licensee sampled the AOG vent daily. No instances were identified where the licensee failed to sample on alternating days. During this review, the inspector noted several other TS required monitors being maintained under action statements. The TS compliance of AOG noble gas monitor and other required TS monitors is an unresolved item (88-09-02).

3.0 Electrical Outage of the Augmented Offgas Building

On April 12, 1988, during a planned electrical outage of the Augmented Offgas (AOG) building, the licensee experienced a buildup of noble gases inside the AOG building. They determined the source of the activity to be from the plant stack. The flow path to the AOG building atmosphere was established when a "normally closed" solenoid valve "failed open" during the electrical outage. This, combined with maintenance on one recombiner blower, resulted in radioactive gases escaping to the AOG building. The flow path was isolated by closing a return valve from the plant stack. AOG building samples indicated approximately 20 MPC (Maximum Permissible Concentration) of noble gas and particulate daughter product activity. The AOG building was isolated and access to the building was controlled. In addition, monitoring was performed at building access points to verify no activity release.

Electrical power was restored to the AOG building on April 13, 1988. The licensee, through calculations and high volume samples, determined activity levels to be acceptable and established ventilation flow in the AOG building. Approximately 30 minutes later, a Marinelli sample was drawn. The results indicated below minimum detectable activity.

The resident inspectors reviewed this event and are concerned that during this significant maintenance outage, while the plant was operating, there was inadequate control and evaluation of the impact on plant equipment. Specifically, equipment was deenergized that was not expected to be deenergized when the electrical bus was secured. Also, the impact of this outage on ongoing maintenance activities within the AOG building was not evaluated. Specifically, there was inadequate tagging of the recombiner outlet purge valve for the recombiner blower repairs. This valve was used to isolate a boundary for work, yet "failed open" when electrical power was lost.

The licensee is conducting a critique of this event. The resident inspectors will review the results of this critique and the corrective actions taken to address these concerns.

4.0 Standby Gas Treatment System Engineered Safety Feature Actuation

On April 14, 1988, an automatic Engineered Safety Feature (ESF) actuation of the Standby Gas Treatment System (SGTS) occurred while attempting to place the Augmented Offgas (AOG) system in service. The licensee determined that as flow was directed to the AOG process pipe, moisture collection caused pressure to increase. This increase in pressure caused stack gases to be released through a drain line located in the base of the stack when system pressure exceeded that of the static head of water in the drain sump. The reactor building (RB) ventilation exhaust radiation monitors, located in close proximity to this drain sump, detected the increased radiation levels and at their trip setpoint of 13 millirem (mr), initiated the SGTS and isolated the RB. The radiation levels peaked at 17 mR and then returned to their normal readings. RB ventilation was returned to a normal configuration and SGTS was

secured. The AOG piping was manually drained and the system was placed into service. The licensee notified the Nuclear Regulatory Commission (NRC) via the Emergency Notification System (ENS) at approximately 10:30 AM.

Concurrent with the ESF actuation of SGTS, the RB experienced a sharp increase in short lived airborne radioactivity from noble gases and daughter products. In response the licensee restricted access to the RB and implemented decontamination measures for workers who were externally contaminated by noble gas daughter products. The inspector reviewed the personnel contamination reports. Discussion with licensee personnel indicated no significant exposures occurred. The source of the RB airborne activity has not been identified.

The resident inspectors reviewed this event and are concerned about the difficulties encountered in placing the AOG system in service, specifically, the tendency for water to collect in the AOG process piping. The licensee stated that it is their intention to install a larger drain line in order to further facilitate process pipe draining. In addition, the licensee stated that it was their intention to install a deeper "seal pot" in the stack drain sump in order to provide further margin from stack gases escaping via the AOG drain line.

The licensee is conducting a critique of this event. The resident inspectors will review the results of this critique and the corrective actions taken to address these concerns.

5.0 Standby Gas Treatment System Tagging Error

On March 24, 1988, while working on Standby Gas Treatment System (SGTS) train II, the licensee determined that SGTS I was not available. The licensee notified the resident inspectors and the Nuclear Regulatory Commission (NRC) duty officer of this equipment configuration. Their investigation concluded that personnel error had caused the opposite train (SGTS I) breaker to be opened. In addition, they concluded that SGTS II was available and would have responded to an automatic initiation signal. Subsequently, both SGTS I and II were returned to their normal configurations and satisfactorily tested.

The resident inspector reviewed this event and concluded that the configuration of SGTS II did not present a personnel hazard for the scope of work that was being performed. In addition, it was concluded that SGTS II would have started and run upon receipt of an automatic initiation signal. Lastly, it was concluded that technical specifications were not violated.

The licensee is conducting a critique of this event and is preparing a Licensee Event Report pursuant to part 50.73. The resident inspectors will review these results and any corrective action taken by the licensee.

6.0 Loss of Stack Gas Sample Flow

On March 25, 1988, a Chemistry technician observed that there was no flow to the stack gas radiation monitors. In addition, it was discovered that the sample valves were closed. This condition rendered the stack gas radiation monitors inoperable. The plant technical specifications require these instruments to be operable and if they are not, to take grab samples every eight hours.

The licensee determined that a "tagout" implemented earlier in the day had removed power from the stack gas sample valves. This loss of electrical power caused the valves to move to the "closed" position. Stack gas sample flow was restored. The radiation monitors were out of service for approximately 6-1/2 hours. The licensee further determined that a separate tagout had defeated the stack gas sample flow low annunciator. This annunciator, had it been in service, would have alerted the operators to a degraded condition in the stack gas radiation monitors.

The resident inspectors reviewed this event and are concerned that the tagouts were implemented without assessing the full impact on plant equipment; in that the sample valves were deenergized and that a control room annunciator was defeated. The inspectors are further concerned that the planner had identified that stack gas sample flow would be lost, and yet this information was not communicated to the control room. The inspectors concluded, however, that plant technical specifications were not violated.

The licensee is conducting a critique of this event. The resident inspectors will review the results of this critique and evaluate the corrective actions taken to address these concerns.

7.0 Radiological Controls

a. Augmented Offgas (AOG)

During the high airborne radioactivity incident discussed in section 3.0 and 4.0, initial licensee response to the radiological conditions (high noble gas and daughter product activity) was good. However, several weaknesses were identified in later radiological monitoring. Specifically, the licensee did not take any noble gas Marinelli samples prior to re-initiation of the building ventilation. Approximately 50 particulate and iodine samples were taken and analyzed. Particulate and iodine samples are inadequate for quantitatively assessing noble gas activities. Also, licensee procedures specify the use of Marinelli samples for noble gases. A Marinelli sample was taken from the AOG ventilation system approximately one-half hour after re-initiation of ventilation. The inspector considered this to be incomplete evaluation of the potential hazard.

The inspectors met with licersee management to discuss the sequence of events and licensee corrective action. During this meeting, the licensee provided a decay corrected evaluation of the noble gas activity at the time of release based on the previous days noble gas sample. Although not the preferred method, the inspector considered this to be adequate in satisfying survey requirements. The licensee indicated the cause of the radiological monitoring problem was a breakdown in communication between the radiation protection and chemistry groups. Chemistry performs most Marinelli sampling for noble gases at Oyster Creek. The licensee indicated the following corrective actions would be taken: 1) include the events leading to the release in the Maintenance History File to prevent recurrence, 2) provide training to radiation protection personnel regarding noble gas sampling and when it is needed and 3) improve communication channels between radiation protection and chemistry personnel.

The inspectors will review the licensee's corrective action in a future inspection.

8.0 Dilution Pump Diving Operations

On March 29, 1988, the inspector observed a diving operation at the dilution pump intake structure. The inspector requested to see the breathing air certification document for the compressor being used. The only certification document available at that time was for the backup air cylinder. The licensee subsequently obtained a telecopy of the compressor certificate from the diving company. Inspector review of the document indicated an unusually high concentration of carbon monoxide (CO). The inspector questioned licensee personnel to determine who was responsible for evaluating breathing air to ensure the quality was Grade D or better. Discussions with licensee personnel did not indicate clear understanding of responsibilities for nonradiological diving. When the licensee evaluated the certification document, it was determined that the level of CO was within regulatory limits although high, indicating a potential problem with the compressor. At this point, the licensee terminated diving operations. The licensee completed the evolution using compressed air cylinders. The licensee tested the compressor output and determined the air quality to be Grade D.

The licensee performed an evaluation of the incident. A procedure revision was initiated to clearly define responsibilities and to ensure all breathing air is properly evaluated when used. Meetings were held to establish communications and delineate responsibility definition. The inspector considered licensee action to be adequate and appropriate.

9.0 Turbine Building 1-5 Sump Monitor

The inspector observed Short Form 49470 maintenance on the turbine building sump water level indicator and surveillance test 621.3.028, "Turbine Building 1-5 Sump Liquid Radiation Monitoring System Test and Calibration" on March 31, 1988. During the short form maintenance, the sump water level was in-

creased with demineralized water. Chemistry performed the required Technical Specification sampling prior to removing the sump pump hold tags. Maintenance was performed per the short form authorization. No unacceptable conditions existed during this evolution. Required signoffs were obtained prior to beginning the surveillance test and calibration. The surveillance was terminated due to problems in establishing the correct high voltage setting. The inspector noted that appropriate chemistry sampling continued until the monitor was placed in service several days later.

10.0 4160 V Undervoltage Relay - D Bus

On April 6, 1988, the licensee experienced an undervoltage relay signal (light) for the 4160 V "D" bus. Instrumentation personnel performed surveillance 632.2.002, "Grid Undervoltage Channel Functional Test". Surveillance results were satisfactory. However, the signal continued to exist. Engineering assistance was requested to determine the relay status. The "D" bus was declared inoperable. Loads were transferred to the "C" bus. The "D" bus was placed in a tripped condition per Technical Specifications. Discussions with the licensee indicate the cause of the signal (light) remains unknown. The troubled "D" bus relay was replaced with a new one and the bus was returned to service. Testing of the new relay did not indicate a similar problem. The troubled relay was sent to the manufacturer for testing and analysis. The inspector will evaluate the results when the analysis is complete. These undervoltage relays are in widespread use in the nuclear industry.

11.0 Plant Operational Review

11.1 Vacuum Relief Valve, V-26-16

On March 29, 1988, during surveillance testing of the Reactor Building (RB) to torus vacuum relief valve, the valve was reported to have "binding" as it traveled in the "close" direction. As a result of this report, the valve was declared inoperable and the "in series" containment isolation valve was locked in the closed position as required by the plant technical specifications.

The licensee performed a technical evaluation and concluded that the observed motion was characteristic for a butterfly valve of this construction. The "binding" was attributed to the resistance encountered as the valve disc moved into the rubber seat. In addition, the valve fully closed each time it was operated. The valve was then declared operable and the "in series" containment isolation valve was unlocked.

The resident inspector reviewed this event and made several observations to the licensee. During installation of the valve, a "red rubber" gasket was used. It was observed that the gasket had been cut from a sheet of stock rubber and that the gasket was off-center in its installation and could potentially cause binding.

In addition, it was observed that there were no technical drawings available for this valve. These items were discussed with Plant Management and Plant Engineering. The inspector had no further concerns regarding this event.

11.2 Chemistry Sampling

On March 8, 1988, the licensee identified an apparent iodine spike in reactor coolant activity. Licensee review of this anomaly indicated a possible time error was made in the samoling documentation. The licensee also indicated a need for improved standardization of decay time prior to analysis. The inspector reviewed this analysis and coolant analysis summaries since the previous outage. A gradual increase in dose equivalent iodine was apparent as the fuel cycle progressed. The March 8 sample indicated a slightly elevated total iodine concentration. However, the dose equivalent iodine was consistent with the fuel cycle trend. Discussions with the licensee management indicated that the higher than average total iodine may have been due to short-lived interferences. The inspector considered licensee evaluation to be adequate and appropriate.

11.3 The inspector reviewed details associated with key operational events that occurred during the report period. A summary of these inspection activities follows.

-- As noted in Inspection Report 88-04 the licensee installed a vibration dampening device on RK01 to reduce the potential of vibration induced trips on the RE03 A & B, High Pressure Scram Switches. As concluded in 88-04 this coupled with the reduced operating pressure and the installation of original equipment microswitches has apparently eliminated the previous switch problems. In addition, the licensee discovered that some of the instrument piping clamps securing RE03 instrument lines were loose and required tightening. This was accomplished after the installation of the vibration modification. The inspector had no further questions regarding this issue.

-- On April 4 the plant reduced load to resolve a level control problem with the main flash tank level controller. The controller had apparently malfunctioned causing the drain valves to close, pressuring the flash tank slightly but enough to cause level column isolation valve packing leaks. The licensee found a sticking transmitter, performed maintenance on the level controller transmitter and continued to monitor controller performance. No additional problems occurred, and as a result the licensee increased power to full load. Previously the level controller for the auxiliary flash tank was adjusted to prevent the large capacity auxiliary flash tank pump from frequent starts. The licensee has taken action to address

these level control problems, and this appears to have been effective as no other flash tank level control problems were evident before the end of the report period.

-- The licensee experienced problems with #1 and #2 service water (SW) pumps during the report period. The #1 SW pump had high vibration while #2 SW pump had bearing problems. The licensee added approximately 300 lb on top of the #1 SW to dampen the axial vibration. This appears to have been effective in reducing the vibration. The licensee has experienced some problems in repairing the #2 SW pump bearing. Currently the licensee is in a 30-day limiting conditions for operation extending from April 15 for the #2 SW pump. The inspector will follow licensee actions to repair the #2 SW pump.

-- The licensee discovered that the containment isolation valve V-24-30 was supported by a rope and questioned whether pipe supports were required. Apparently the original valve was replaced in a recent outage and the rope was used as a support during this installation process. The licensee determined that the present valve weight was greater than the original valve weight and that this weight difference was sufficient to require pipe supports on the 3/4" reactor coolant system sample line. Upon discovery that the piping was not properly supported the licensee deactivated and closed V-24-29, the redundant containment isolation valve inside the drywell. In addition, the licensee determined the rope was sufficient to support the valve and associated piping during analyzed conditions. The inspector will review the licensee's calculations and critique of this event. The licensee is planning a modification to add the appropriate piping supports.

-- The licensee reduced power to approximately 70% to repair a seal leak on the "A" condensate pump on April 19. In addition the licensee performed maintenance on "B" main feed pump auxiliary oil pump and the "D" recirculation pump motor generator set brushes. While the plant was at reduced power and as a result of main steam isolation valve, NS03A's failure to move during a 5% closure test the licensee declared the valve inoperable in accordance with technical specifications and demonstrated the valves operability by performing a full closure test at 40% power. In the past the licensee has experienced slower closing times for certain MSIVs during the 5% test. The licensee has reviewed this in the past but has not reached a definitive conclusion. The slower 5% closure time does not affect the full closure of the valve which uses a separate closing system/mechanism. The licensee is contemplating a technical specification change to remove the daily 5% closure test from the Oyster Creek Technical Specifications. The inspector will review this with the licensee.

11.4 Routine tours of the control room were conducted by the inspectors during which time the following documents were reviewed:

-- Control Room and Group Shift Supervisor's Logs;

-- Technical Specification Log;

-- Control Room and Shift Supervisor's Turnover Check Lists;

-- Reactor Building and Turbine Building Tour Sheets;

-- Equipment Control Logs;

-- Standing Orders; and,

-- Operational Memos and Directives.

11.5 Routine tours of the facility were conducted by the inspectors to make an assessment of the equipment conditions, safety, and adherence to operating procedures and regulatory requirements. The following areas are among those inspected:

-- Turbine Building

-- Vital Switchgear Rooms

-- Cable Spreading Room

-- Diesel Generator Building

-- Reactor Building

The following additional items were observed or verified:

a. Fire Protection:

-- Randomly selected fire extinguishers were accessible and inspected on schedule.

-- Fire doors were unobstructed and in their proper position.

-- Ignition sources and combustible materials were controlled in accordance with the licensee's approved procedures.

-- Appropriate fire watches or fire patrols were stationed when equipment was out of service.

b. Equipment Control:

-- Jumper and equipment mark-ups did not conflict with Technical Specification requirements.

-- Conditions requiring the use of jumpers received prompt licensee attention.

-- Administrative controls for the use of jumpers and equipment mark-ups were properly implemented.

c. Vital Instrumentation:

-- Selected instruments appeared functional and demonstrated parameters within Technical Specification Limiting Conditions for Operation.

d. Housekeeping:

-- Plant housekeeping and cleanliness were in accordance with approved licensee programs.

No unacceptable conditions were identified.

12. Review of Periodic and Special Reports

Upon receipt, periodic and special reports submitted by the licensee pursuant to Technical Specification requirements were examined by the inspectors. This review included the following considerations: the report includes the information required to be reported to the NRC; planned corrective actions are adequate for resolution of identified problems; and the reported information is valid. During this inspection period, a review was conducted of the March 1988 Monthly Operating Report.

12.1 Chairman Zech Visit

Chairman Zech visited Oyster Creek on April 4, 1988. The licensee made extensive presentations to the Chairman describing Oyster Creek's strengths and weaknesses and conducted a tour of the plant. The Chairman met individually with the control room operators and addressed chemistry technicians and other operators onsite.

13.0 Radiation Protection

13.1 During entry to and exit from the RCA, the inspectors verified that proper warning signs were posted, personnel entering were wearing proper dosimetry, personnel and materials leaving were properly monitored for radioactive contamination, and monitoring instruments were functional and in calibration. Posted extended Radiation Work permits (RWPs) and survey status boards were reviewed to verify that they were current and

accurate. The inspector observed activities in the RCA to verify that personnel complied with the requirements of applicable RWPs and that workers were aware of the radiological conditions in the area.

13.2 During the course of this inspection, the following areas were evaluated with respect to regulatory requirements and licensee procedures:

-- The cathodic protection modification was observed on an ongoing basis and with respect to radiological control problems identified in NRC inspection (50-219/88-11). Radiation Protection management met with resident inspectors to discuss concerns and corrective measures for ongoing work. Inspectors will continue to evaluate this evolution.

-- Radiological controls for locked high radiation areas were discussed with the radiation protection staff. The licensee is replacing two doors which have presented repetitive access control problems. The licensee also plans to include specific high radiation area control problems in training to heighten worker awareness of problems at Oyster Creek. The licensee detailed plans to decontaminate and shield areas to reduce the number of locked high radiation areas. The inspector viewed this as a good initiative.

-- During a facility tour, several radiological posting anomalies were identified. Specifically, a panel in the 480 Volt room and reactor building breaker cubicles were posted "Internal Contamination". Discussions with the licensee indicated that the 480 V room panel should have had additional posting requiring a Radiation Work Permit (RWP) for entry. The licensee immediately made this posting. Breaker cubicles located in the reactor building were already in an area requiring an RWP for entry. No further action was determined to be necessary by the licensee. The inspector considered this action to be appropriate.

-- Some radiation protection technicians expressed a concern to the inspector regarding a lack of responsibility definition for the installation and maintenance of contamination control containments (i.e. glove bags and tents). Discussions with radiation protection management indicated that a new procedure revision had recently been completed where any qualified person could install the containments, radiation protection would inspect them, and the user would repair and remove them. The inspector had no further questions regarding this matter.

14.0 Observation of Physical Security

During daily tours, the inspectors verified that access controls were in accordance with the Security Plan, security posts were properly manned, protected area gates were locked or guarded and that isolation zones were free

of obstructions. The inspectors examined vital area access points to verify that they were properly locked or guarded and that access control was in accordance with the security plan.

No unacceptable conditions were identified.

15.0 Backshift Inspection

NRC inspections of licensee activities on backshifts were conducted on the following days:

Thursday March 31, 1988
Sunday April 3, 1988
Thursday April 14, 1988
Thursday April 21, 1988

16.0 Unresolved Items

Unresolved items are matters for which more information is required in order to ascertain whether they are acceptable, violations, or deviations. Unresolved items are discussed in paragraphs 1.0 and 2.0 of this report.

17.0 Exit Interview

A summary of the results of the inspection activities performed during this report period were made at meetings with senior licensee management at the end of this inspection. The licensee stated that, of the subjects discussed at the exit interview, no proprietary information was included.