

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Inspection Report: 50-382/95-07

License: NPF-38

Licensee: Entergy Operations, Incorporated
P.O. Box B
Killona, Louisiana 70066

Facility Name: Waterford Steam Electric Station, Unit 3

Inspection At: Waterford 3

Inspection Conducted: July 9 through August 19, 1995

Inspectors: E. J. Ford, Senior Resident Inspector

T. W. Pruett, Resident Inspector

Approved:

Gregory A. Pick for
C. A. VanDemburgh, Chief, Project Branch D

8/31/95
Date

Inspection Summary

Areas Inspected: Routine, unannounced inspection of plant status, plant operations, maintenance and surveillance observations, onsite engineering, and plant support activities.

Results:

Plant Operations

- A simulator fidelity difference was noted, in that the simulator had not yet been updated to reflect the new fire protection control panel that had been installed in the control room. The inspectors identified that the licensee had an estimated completion date for installing this control panel in the simulator. Verification by the inspectors of installation of the control panel modification is an inspection followup item (Section 2.1.1).
- The inspectors noted several good practices involving the simulation of plant noise effects, the inclusion of the nonlicensed operators in the training process, and the use of control board caution and danger tags. These practices enhanced the value of the operator's training (Section 2.1.1.).

- The operators in the simulator were well versed in the use of plant operating procedures and utilized them in a timely manner (Section 2.1.2).
- The inspectors noted good command and control in the simulator, in that the shift crews were well supervised with all individuals practicing repeat back communications and notification of task completion (Section 2.1.3).
- The licensee displayed an appropriate and meaningful exercise of management oversight during simulator operations (Section 2.1.4).
- The licensee effectively coordinated the communications between the onsite and offsite organizations during the toxic gas release of July 20, 1995. However, the evaluation of the licensee's review of the toxic gas procedures will be followed as an inspection followup item (Section 2.2.1).
- The inspectors noted an example of inadequate attention to detail, in that the control room personnel failed to detect a pegged-low component cooling water flow indication after starting Essential Chiller AB (Section 2.2.2).
- The inspectors identified that operations had incorrectly documented a plant deficiency by affixing a condition identification tag to the wrong valve (Section 2.3.1).
- The inspectors noted that a nuclear auxiliary operator did not adequately monitor significant operating parameters during a surveillance test of Emergency Diesel Generator A. Specifically, the nuclear auxiliary operator did not note if cylinder temperatures were out of specification. However, the control room supervisor provided excellent supervisory oversight in that he noted the nuclear auxiliary operator's poor performance and provided immediate feedback (Section 4.2).

Maintenance

- The licensee identified a past poor maintenance practice involving mylar in the fixed arcing contact on Emergency Feedwater Pump B on July 18, 1995, and High Pressure Safety Injection Pump B on April 25, 1995 (Section 3.1.1).
- Although the inspectors were initially concerned that the licensee reused torque nuts on the emergency feedwater pump coupling, the licensee demonstrated that this was an acceptable practice because the nuts provided a tight fit-up during reassembly. Nevertheless, the licensee took actions to provide training to mechanics on the

proper reuse of torque nuts or the use of a sealant on torque nuts that do not provide adequate resilience (Section 3.1.2).

- The inspectors concluded that the licensee failed to ensure that licensee-identified errors in work authorizations were corrected in the computer database. Specifically, the licensee did not ensure that five discrepancies in Work Authorizations 01097425 and 01037458 were corrected in the computer database. Additionally, the revision process did not include a provision for the originating department to verify that corrections have been made prior to the next issuance of the work authorization. The failure to ensure revisions are implemented for work authorizations is a noncited violation. (Section 3.1.3.1).
- The inspectors concluded that the technician used good judgment in delaying the testing of the overcurrent relay until discrepancies with the work authorization were resolved (Section 3.1.3.1).
- On June 6, 1995, the inspectors identified that electricians were improperly obtaining as-found values during testing of circuit breaker relays. On July 18, 1995, the inspectors again identified electricians improperly obtaining these as-found values. Based on the recurrence, the inspectors concluded that intra-department communications were ineffective in preventing personnel from improperly obtaining as-found data and is a noncited violation (Section 3.1.3.2).
- An instrument and control technician who performed work activities on the loose parts monitor showed a proactive attitude and displayed a desirable sense of ownership (Section 4.1).

Engineering

- The licensee's re-evaluation of their decision to not fully implement vendor recommendations for operation of Emergency Diesel Generator A following an extended low-load run will be followed as an inspection follow up item (Section 5).

Plant Support

- Based on the absence of observed foreign materials in the spent fuel area by the inspectors, the new foreign material exclusion controls were adequate and effective in preventing entry of objects into the spent fuel pool (Section 6.2).
- Discussions with the fuel receipt inspectors disclosed a good awareness of corrective actions for a previous violation concerning an unqualified receipt inspector (Section 6.2).

- The inspectors were concerned that the licensee practice of using a truck to close the fuel building railroad bay doors could damage the sealing surfaces of the envelope for the fuel handling building air filtration system. This maintenance practice will be followed as an inspection followup item (Section 6.3).
- Health physics' surveys of new fuel were done in an acceptable manner (Section 6.4).

Summary of Inspection Findings:

Inspection Followup Item 382/9507-01 was opened (Section 2.1.1).
Inspection Followup Item 382/9507-02 was opened (Section 2.2.1).
A Noncited Violation was identified (Section 3.1.3.1).
A Noncited Violation was identified (Section 3.1.3.2).
Inspection Followup Item 382/9507-03 was opened (Section 5).
Inspection Followup Item 382/9507-04 was opened (Section 6.3).

Attachments:

- Attachment 1 - Persons Contacted and Exit Meeting
- Attachment 2 - Acronym List

DETAILS

1 PLANT STATUS

The plant operated at essentially 100 percent power during this reporting period.

2 PLANT OPERATIONS (71707)

The objectives of this inspection were to ensure that the facility was being operated safely and in conformance with regulatory requirements, to ensure that the licensee's controls were effective in achieving continued safe operation of the facility, to independently verify the status of the plant, and to evaluate the effectiveness of the licensee's self-assessment programs.

2.1 Simulator Observations

On August 8 and 9, 1995, the inspectors observed portions of simulator training for an administrative crew and a regular operating crew. The administrative crew performed a candid self-critique of its performance, with an instructor acting as a facilitator, after each of the two scenarios on which it trained. The operating crew was being evaluated on two separate scenarios by the licensee training staff.

2.1.1 Simulator Fidelity

The inspectors noted that prior to the commencement of the initial scenario, the instructor discussed fidelity differences with the crews. The inspectors did not note anything that would detract from the intended training objectives or produce negative training. However, one simulator fidelity difference was noted, in that, the simulator had not been updated to reflect the new fire protection control panel. The licensee estimated that the simulator would be updated in March 1996. The licensee's installation of a simulator modification to install a fire protection panel is considered an inspection followup item (IFI 382/9507-01).

The inspectors noted several instances where the realism of the simulator training was enhanced. Specifically, during the progress of an accident scenario, the inspectors noted that sound effects closely mimicked the closure of the main steam isolation valves, as well as the starting sounds of the control room emergency air handling units. Additionally, the simulator control boards displayed caution and danger tags which had been updated from the actual control board on a weekly basis. The inspectors also noted the use of nuclear auxiliary operators (NAO) as an integral part of the simulated training environment. The inspectors concluded that the use of plant noise effects, the inclusion of the nonlicensed operators in the training process, and the use of control board tags all contributed to and enhanced the value of the training experience.

2.1.2 Use of Procedures

The inspectors noted good use of annunciator procedures especially during the early, malfunction-intensive portions of the scenario by the operating crew. All crew members demonstrated competency in the use of the various procedures for the facility. Also, there was no apparent lag time from the time a procedure should have been used and when it was actually put in use. The inspectors concluded that the operators were well versed in the use of plant operating procedures and utilized them in a timely manner.

2.1.3 Command and Control

The inspectors noted that good command and control, as well as proper communications techniques, were practiced by both crews. Only occasional instances of informal communications were observed. The inspectors concluded that good command and control were in evidence in that the shift crews were well supervised with all individuals practicing repeat-back communications and notification of task completion.

2.1.4 Management Oversight

During the testing of the regular operating crew, the inspectors noted the presence of an operations management representative performing an assessment of the crew's effectiveness. The inspectors considered his assessment and evaluation an appropriate and meaningful exercise of management oversight.

2.2 Control Room Observations

2.2.1 Toxic Gas Alert

The inspectors evaluated the licensee's response to the July 20, 1995, toxic gas release from a nearby chemical plant. The licensee declared an ALERT and evacuated all nonessential personnel from the site. Personnel required to remain onsite were sheltered. The licensee appropriately classified the event and implemented the provisions of Procedure EP-004-010, "Toxic Chemical Contingency Procedure," and Procedure OP-901-520, "Toxic Chemical Release." The licensee effectively coordinated the communications between the onsite and offsite organizations during the toxic gas release.

Subsequent to the event, the inspectors performed a detailed review of Procedure OP-901-520 and identified three concerns with the procedural requirements.

- A precautionary statement before Step 16 stated that the broad range toxic gas detection system and chlorine detection systems samples may not be representative of outside concentrations when the control room is in the isolate mode because the detectors do not sample the outside air. Step 16 requires operators to monitor and record the toxic gas and chlorine gas indications in the control room. The

inspectors were concerned that unreliable information from the toxic gas and chlorine gas monitors might be used by plant personnel. The inspectors questioned system engineering personnel and determined that the gas monitors should be representative of toxic gas concentrations in outside air since the sample line is located in the ventilation system inlet plenum and is functional when the control room is in isolate. The licensee stated that a procedure review would be performed to determine if the precautionary statement in the toxic gas procedure was misleading.

- Step 14 required the operators to advise the duty plant manager to consult with the load dispatcher to evaluate the need to perform a plant shutdown if the duration of the event is prolonged or unknown. However, the procedure did not provide guidance on determining how long the duration of the event could be or the chemical concentration of the toxic gas before a plant shutdown would be implemented. System engineering personnel stated that consideration of a plant shutdown might be based on the number of personnel remaining onsite and the quantity of available breathing air. Nevertheless, the licensee committed to performing a procedure review to determine if additional guidance is needed and what factors should be considered in evaluating a plant shutdown.
- Step 11 required the operators to direct the shift chemistry technician to sample the outside atmosphere using a drager tube sampling kit and confined space meter. However, the procedure did not provide guidance on when the initial sample should be taken or the frequency at which the samples should be performed. The licensee committed to reviewing the procedure to determine the appropriate intervals for sampling outside air spaces during a toxic gas release.

The evaluation of the licensee's review of the toxic gas procedures is considered an inspection followup item (IFI 382/9507-02).

2.2.2 Component Cooling Water Flow (CCW) Indication

On July 20, 1995, the inspectors noted that the control room indication for CCW flow to Essential Chiller AB was pegged-low. The inspectors questioned the control room supervisor (CRS) and nuclear plant operator (NPO) to determine the status of the indication. The NPO stated that the CCW flow to the essential chiller was pegged-high. However, after closer examination, the NPO noted that the indication had actually been pegged-low. The NPO tapped the meter and the flow indicator went from the pegged-low position to above the maximum indication of the instrument.

The typical flow rate for CCW to the essential chiller is 1,060 gpm and the maximum indication is 1,000 gpm. This indication deficiency is described in NRC Inspection Report 50-382/95-05 as an inspection followup item. The

control room logs indicated that the chiller had been started by the shift being questioned by the inspectors. Because the essential chiller did not trip on low CCW flow during start-up and because the indication for CCW flow is normally off scale, it is possible that the operators overlooked the pegged-low indication of the instrument. However, the inspectors concluded that the failure of control room personnel to verify proper operating parameters of the system upon startup was an example of inattention to detail. The inspectors discussed the assessment of operator performance with the shift supervisor (SS) and the operations superintendent. Both managers indicated that the failure to verify operating parameters was a poor practice and that the item would be discussed with the operator.

2.2.3 Hurricane Warning

On August 2, 1995, Waterford 3 declared a Notification Of Unusual Event (NOUE) upon the declaration of a hurricane warning by the National Weather Service for St. Charles Parish and the northern gulf coast as far west as southeastern Louisiana. The plant was at 100 percent power and had begun making preparations for the pending storm.

The inspectors responded to the facility on the evening of August 2 and remained onsite to monitor the licensee's preparations. On the morning of August 3, the resident inspectors were relieved by two visiting resident inspectors. Region I provided portable satellite communications support to the facility. On the afternoon of August 3, the Waterford 3 plant terminated the NOUE and resumed normal operations. The Weather Service hurricane warning was cancelled, prompting the plant's NOUE termination. However, a concurrent tornado watch remained in effect until approximately 7:13 p.m. that evening.

There were no significant adverse weather conditions experienced at the site and the plant remained at 100 percent power throughout the event.

2.3 Plant Tours

2.3.1 Improper Hanging of Condition Identification (CI) Tag

During plant tours on July 26, 1995, the inspectors noted that Valve SI-228A, "HPSI HDR A to RC LOOP 2B Flow Control," had CI Tag 297105 for Valve SI-226A dated June 6, 1995, affixed to it. The discrepancy was discussed with the SS who sent an operator to determine if there were any additional problems. The licensee discovered that the CI tags for Valves SI-226A and SI-228A had been swapped. The affixing of CI tags to the wrong valve is an example of inattention to detail by operations personnel when documenting plant problems. The inspectors discussed the improper hanging of CI tags with operations management who agreed with the inspectors' assessment.

3 MAINTENANCE OBSERVATION (62703)

The station maintenance activities affecting the safety-related structures, systems, and components listed below were observed and the documentation was

reviewed to ascertain that the activities were conducted in accordance with approved work authorizations (WA), procedures, Technical Specifications (TS), and appropriate industry code or standards.

3.1 Maintenance Observations

Work Authorization	Task
WA 01138217	Replacement of Core Protection Calculator C Memory Board
WA 01138140	Emergency Feedwater (EFW) Pump B Breaker Maintenance
WA 01138202	Replacement of Lubricant for EFW Pump B
WA 01138141	EFW Pump B 62-2 Time Delay Relay

3.1.1 EFW Pump B Breaker Maintenance

The inspectors observed the maintenance on EFW Pump B circuit breaker in accordance with WA 01138140 on July 18, 1995. During the inspection of the breaker, the electricians found a piece of mylar inside the fixed arcing contact. Mylar is used during periodic testing to cover the moveable arcing contact. The electricians stated that the mylar had probably been left inside the fixed arcing contact from a previous maintenance activity. The inspectors noted that electricians had previously found a piece of mylar in the fixed arcing contact of High Pressure Safety Injection Pump B on April 25, 1995 (NRC Inspection Report 50-382/95-04). In either instance, the location of the mylar would not have affected the operation of the breaker. Nevertheless, the inspectors concluded that failure to remove the mylar pieces was a poor past maintenance practice.

Following the April 25 discovery of mylar in the High Pressure Safety Injection Pump B circuit breaker, the licensee initiated a procedure revision to require a signoff for the removal of the mylar. The inspectors reviewed the draft procedure and noted that the next revision included a signoff for removal of the mylar. The inspectors concluded that the signoff should prevent the failure to remove mylar during future breaker maintenance activities.

3.1.2 Replacement of Lubricant for EFW Pump B

The inspectors observed the replacement of oil and grease on EFW Pump B in accordance with WA 01138202 on July 18, 1995. During the reassembly of the coupling the inspectors noted that the mechanic reused the gasketing material and prevailing torque nuts. Prevailing torque nuts (i.e., torque nuts with nylon spacers) are used in applications in which excessive vibration could cause the nut to loosen. The mechanic stated that the gasket did not require replacement because it had not degraded and because the application of the gasket prevented dirt from entering the coupling and did not provide a

pressure boundary. Additionally, the mechanic stated that the nuts did not require replacement because they adequately gripped the bolts.

The inspectors questioned the maintenance supervisor and maintenance engineer concerning the acceptability of reuse of gaskets and prevailing torque nuts. The maintenance supervisor stated that it is acceptable to reuse gaskets that have not degraded and do not provide a pressure boundary. The maintenance engineer stated that the nuts could be reused if sufficient resilience remained to provide a tight fit. Nevertheless, the maintenance supervisor stated that additional training may need to be provided to mechanics to clarify the meaning of a tight fit or that the use of a bolt sealant in conjunction with the nuts may be utilized.

The inspectors concluded that the reuse of the nuts on the EFW pump coupling should be acceptable because the nuts provided resilience during reassembly. Additionally, the inspectors concluded that the licensee's actions to provide training to mechanics on the proper reuse of prevailing torque nuts or using a sealant on the fastener should minimize the potential for improper reuse of prevailing torque nuts.

3.1.3 EFW Pump B 62-2 Time Delay Relay

The inspectors observed the performance of EFW Pump B 62-2 time drop out relay test in accordance with WA 01138141 on July 18, 1995.

3.1.3.1 Improper WA

The inspectors noted that the electrician used good judgment in delaying the work activity because the WA did not accurately describe the maintenance activity or provide an accurate description of the relay to be tested. Specifically, the WA referenced Procedure ME-007-005, "Time Delay Setting Check, Adjustment and Functional Test" instead of ME-007-030, "G.E. Auxiliary Relay Model 12HGA17C." Additionally, the WA equipment identification sheet specified a coil size of 125 Vdc instead of 2 amps DC.

The inspectors noted that the device had been previously field verified and that this effort should have confirmed the accuracy of the information in the computer database (Safety Information Management System) (SIMS) used to develop the WA. The inspectors questioned the electrical supervisor to determine the cause of the inaccurate information. The electrical supervisor stated that there have been several problems with this preventative maintenance task dating back to June 1989. In June 1989, the electrical planner noted that the WA specified the wrong procedure (ME-05-030) and made a pen and ink change to the WA and updated SIMS to use ME-07-005, which also was the wrong procedure for Relay 62-2. The June 1989 WA also contained errors on the equipment identification sheet regarding the correct procedure, coil size, and accuracy. However, only the accuracy of the relay was identified and corrected.

In August 1992, the planner noted that the WA specified the wrong procedure (ME-07-005) and made a pen and ink change to correct the WA, but failed to update the SIMS with the correct procedure (ME-07-030). The August 1992 WA contained errors regarding the coil size and procedure which were corrected by pen and ink changes but not corrected in SIMS.

In 1992, the licensee sent the entire WA package to data entry clerks for review of items to be revised in SIMS. (Currently only the sheets with revisions are forwarded to the data entry clerks.) However, the inspectors noted that no feedback process existed to ensure the data entry clerks made the correct entries prior to the next issuance of the WA.

The inspectors concluded that the licensee failed to ensure that identified errors in WAs were corrected in SIMS and that the current revision process may not be adequate to ensure revisions are implemented prior to the next issuance of the WA. Because the WA did not preclude satisfactory completion of the task, this item constitutes a violation of minor safety significance and is being treated as a noncited violation consistent with Section IV of the NRC Enforcement Policy.

3.1.3.2 Improper Documentation of As-found Value

The inspectors noted that the electricians did not properly document the as-found value of the 62-2 relay. The electricians began the test at 0.3 amps DC and increased the amperage in 0.1 amp DC steps. The inspectors noted that the initial actuation of the relay occurred at 0.6 amps DC. The electricians then lowered the amperage to 0.3 amps DC and slowly increased the amperage by 0.01 amp DC steps. The second actuation of the relay occurred at 0.46 amps DC. The electricians recorded the as-found value as 0.46 amps DC. The inspectors questioned the electricians to determine why 0.6 amps DC had not been recorded as the as-found value. The electricians stated that they had initially increased the amperage to 0.6 amps DC to locate the approximate operating range of the device and then performed a slow increase in the test signal to obtain an accurate as-found value.

The inspectors had previously observed similar occurrences of improperly obtaining as-found values on July 6, 1995 (NRC Inspection Report 50-382/95-06). Proper determination of as-found values is important because the information could be used to extend maintenance intervals. Additionally, improper determination of as-found values could result in operability evaluations not being performed if the as-found condition does not meet acceptance criteria. In response to the July 6, 1995, observations, the affected electrical foreman initiated a procedure revision to provide guidance to electricians on the proper method of obtaining as-found values. Additionally, the electrical supervisor stated that shop training would be performed to ensure electricians were aware of the proper method to obtain as-found data.

The inspectors questioned the foreman and electricians affected by the July 18, 1995, observations to determine if they were aware of the previous

discrepancies involving the determination of as-found values. The foreman and the electricians stated that they were unaware of any recent problems regarding obtaining and documenting as-found values. The inspectors then questioned the electrical supervisor to determine what the department's expectations were for disseminating information regarding newly identified discrepancies. The electrical supervisor stated that, as a minimum, the foreman involved in the July 6, 1995, discussions should have informed the remaining foremen and that each individual electrician should have been informed of the correct method to obtain as-found values prior to testing a relay.

The inspectors concluded that the intra-department communications were inadequate in that supervisory personnel and electricians were unaware of potential problems with obtaining as-found data which had been identified by the inspectors within the last two weeks. In response to the inspector observations, the electrical supervisor performed shop training for the electrical department to ensure correct methods of obtaining as-found values are implemented and counseled the foreman on the importance of disseminating information within the department. The inspectors concluded that the electrical supervisor's actions should be effective in ensuring electricians properly obtain as-found data. The failure to take adequate corrective action for this issue is a violation of minor safety significance and is being treated as a noncited violation consistent with Section IV of the NRC Enforcement Policy.

4 SURVEILLANCE OBSERVATION (61726)

The inspectors observed the surveillance testing of safety-related systems and components addressed below to verify that the activities were being performed in accordance with the licensee's approved programs and the Technical Specifications.

OP-903-102 Containment Air Lock Door Seal Leakage Test

MI-005-430 Calibration of Valve and Loose Parts Monitor

OP-903-068 Emergency Diesel Generator (EDG) and Subgroup Relay Test Train A

4.1 Loose Parts Monitor

On August 10, 1995, the inspectors watched an instrumentation and control technician performing work activities on the valve and loose parts monitor. The inspectors noted that TS Amendment 104 dated April 20, 1995, had removed the loose parts detection system from the TS and incorporated the requirements into the updated safety analysis report to be maintained under the provisions of 10 CFR 50.59. During discussions with the technicians, the inspectors learned that the technician was, on his own initiative, performing a review of a newly written procedure (MI-005-430) and contrasting it with the former TS-required procedure (MI-003-140) by manipulating the monitors controls. The technician stated that he was concerned that a procedure error may have

developed because several minor software changes had been made and because the procedure had been rewritten.

The inspectors noted that manipulations of the monitor controls would not produce system actions other than data display and, thus, no work authorizations were required (except for the SS's permission which had been granted). In that the technician had not been directed to perform the work activities, the inspectors concluded that the technician showed a proactive attitude and displayed a desirable sense of individual ownership.

4.2 EDG Subgroup Relay Test

The inspectors observed the licensee perform a surveillance test on EDG A in accordance with Procedure OP-903-068, Attachment 10.3, "Emergency Diesel Generator and Subgroup Relay Test," on July 17, 1995. The EDG ran unloaded for approximately 30 minutes and then the operator fully loaded the EDG within 176 seconds. Approximately 2-3 minutes following the full loading of the EDG, the system engineer noted the presence of gray smoke and small sparks emanating from a previously identified crack on the 8-left exhaust cylinder. At approximately the same time, the NAO noted a temperature indication of 1,026°F, which is greater than the allowable 1,000°F limit for cylinder exhaust temperature. The NAO informed the system engineer of the abnormal temperature indication and the system engineer directed the NAO to have the control room secure the EDG. The smoke and sparks were due to the accumulation of carbon in the cylinders during the extended low-load run of the EDG on June 10-16, 1995. As discussed in Section 5.2, the inspectors concluded that the additional loading of the EDG on July 17, 1995, as recommended by the vendor was sufficient to ensure the carbon deposits are removed in the future. The licensee successfully performed the surveillance test on July 18, 1995.

After the control room secured the EDG, the SS directed the NAO to manually insert an overspeed trip to prevent an auto-start of the EDG. Additionally, the SS declared the EDG inoperable pending an evaluation by the system engineer. The SS and the normally assigned CRS (the shift technical advisor was standing a control room supervisor proficiency watch) performed a walkdown of the EDG and questioned the NAO and system engineer. The NAO was unable to report which temperature indication was above 1,000°F or what the trend of system operating parameters had been. The system engineer stated that the temperature indication could have been an abnormal exhaust cylinder temperature or the normal turbo charger inlet temperature.

The inspectors questioned the CRS to determine why the operator failed to note the parameter with the abnormal temperature indication and why he failed to note any trend data. The CRS stated that the NAO's actions are not what is expected of operators and that he discussed the importance of collecting and being able to report relevant information with the NAO. The CRS also stated that he discussed the importance of questioning what is wrong with equipment operation instead of expecting the equipment to always function properly. The inspectors concluded that the NAO failed to note significant operating

parameters of the EDG during the surveillance test. However, the CRS provided excellent supervisory oversight in that he noted the NAO's poor performance and provided immediate feedback.

5 ONSITE ENGINEERING (37551)

The objectives of this inspection were to provide periodic engineering evaluations for Regional assessment of the effectiveness of the onsite engineering staff.

5.1 Evaluation of EDG A Low-Load Operation Following Switchgear Fire

Following the extended low-load run between June 10-16, 1995, during the forced outage related to the switchgear fire, the licensee ran EDG A fully loaded for 1 hour. The inspectors expressed concern about the build-up of carbon deposits which could result from low-load operations and questioned the licensee to determine how long EDG A should be run fully loaded to remove carbon deposits. The licensee contacted the vendor which recommended that a 4-hour full-load run of the EDG be performed to remove the carbon deposits. The system engineer stated that he recommended 3 hours of additional full-load operation to the SS. However, because the previous operation of the EDG during the 1-hour full-load run was satisfactory, the SS and system engineer decided that only one additional hour of full-load operation would be needed to remove carbon deposits.

The inspectors questioned the system engineer to determine why the vendor-recommended 4-hour full-load run had not been performed. The system engineer stated that he believed a build-up of carbon deposits did not exist since all of the operating parameters for the EDG were normal during both 1-hour full-load runs. Additionally, the system engineer stated that a concern existed for running the EDG for the full 4 hours since this would have lowered the fuel oil storage tank level to below the minimum required for TS. The low level would have rendered the EDG inoperable and could have delayed the reactor startup.

The inspectors questioned the SS to determine why the EDG had not been run per the vendor recommendation. The SS stated that he could not recall the discussion that transpired between the system engineer and himself. The SS also stated that a full 4-hour run would have been performed had there been any concern associated with the operability of the EDG.

The inspectors questioned the quality assurance manager to determine if guidance had been provided to the operating staff regarding additional implementation of the vendor recommendations to remove carbon deposits. The quality assurance manager indicated that the licensee would perform a review of why the vendor recommendations were not implemented. The evaluation will be followed as an inspection followup item (IFI 382/9507-03).

5.2 Evaluation of EDG A Operation Following Surveillance Testing

The inspectors questioned the system engineer to determine what actions would be taken to remove carbon deposits following the unsuccessful surveillance test of EDG A on July 17, 1995 (See Section 4.2). The system engineer stated that he contacted the vendor to obtain additional guidance on EDG operation prior to restarting the EDG. The vendor recommended that the EDG be started in accordance with the technical manual monthly operating test which recommends a slow loading of the EDG between 25 and 100 percent for a total of 2 hours and that no-load operation be minimized. The inspectors verified that the licensee implemented the vendor recommendation on July 17, 1995. During the slow-load increase on July 17 the licensee noted normal operating parameters and no sparks or smoke from the cracked 8-left exhaust cylinder. The inspectors concluded that the additional loading of the EDG should be sufficient to ensure the carbon deposits were removed.

6 PLANT SUPPORT ACTIVITIES (71750)

The objectives of this inspection were to ensure that selected activities in the different areas of plant support were implemented in conformance with the facility policies and procedures and in compliance with regulatory requirements.

6.1 Radiological Controlled Area Tours

The inspectors toured the radiological controlled area throughout the reporting period and observed that postings were proper and well maintained. During tours the inspectors verified that high-radiation doors were locked as required by the licensee's administrative controls.

6.2 Receipt Inspections

On August 8, 1995, the inspectors observed portions of the new fuel receipt inspection. The receipt of new fuel commenced on August 6, after having been delayed several days due to the threat of Hurricane Erin to the area.

The inspectors observed the activities in progress and reviewed Procedure RF-002-001, "Fuel Receipt," and associated documentation regarding the ongoing activities conducted by the licensee. Inspection of the fuel assemblies involved serial number verification, inspection of the fuel assemblies for debris or defects, as well as verification of the container accelerometers. The licensee was properly utilizing the procedure, which was followed verbatim, and the checklist was properly utilized. All required precautions were observed and good teamwork between participating groups was observed.

The inspectors noted that an extended housekeeping zone had been established which required the use of head nets and cotton gloves while in the fuel handling area to protect the fuel from debris imported into the area. The normal housekeeping barriers established as corrective actions to previous

normal housekeeping barriers established as corrective actions to previous foreign material exclusion concerns were in place and being properly observed. These barriers consisted of clear plexiglass plates protecting the spent fuel pool area. They had been previously enhanced by yellow and black tape to assure they would be visible in the event they had been inadvertently dropped into the pool. Based on the absence of observed foreign materials in the spent fuel area by the inspectors, the new controls were judged to be adequate and effective.

The inspectors' discussions with the fuel handling supervisor, the fuel receipt inspectors, the health physics (HP) technicians, and other workers in the area during the evolution showed that they were knowledgeable of the procedural requirements, safety requirements, and actions required to satisfactorily accomplish the tasks. The inspectors noted the appropriate use of safety harnesses around the pool area. The inspectors' discussions with the fuel receipt inspectors disclosed a good awareness of corrective actions concerning an unqualified receipt inspector.

6.3 Closure of Fuel Handling Bay Doors with Fuel Delivery Truck

During site tours the inspectors observed an inappropriate use of the fuel delivery truck to close the left side door of the railroad bay in the fuel handling building. The inspectors noted that the railroad bay doors constituted part of the envelope for the fuel handling building air filtration system and expressed concerns about this practice to licensee management. The improper closure of the bay doors is considered an inspection followup item pending the outcome of the licensee's review (IFI 382/9507-04).

6.4 HP Surveys of New Fuel

During observations for fuel receipt inspections, the inspectors noted HP technicians taking contamination swipes of the exterior and interior of the new fuel containers. After the fuel assemblies were placed in the upright position for fuel receipt inspection, the HP technicians conducted surveys of the bundles to assure no contamination was present. The inspectors noted that all survey instruments in use or in the area had current calibrations. The inspectors concluded that HP surveys of new fuel were done in an acceptable manner.

ATTACHMENT 1

1 PERSONS CONTACTED

1.1 Licensee Personnel

- *R. E. Allen Manager, Operational and Engineering Experience
- *R. G. Azzarello, Director, Design Engineering
- *R. F. Burski, Director, Nuclear Safety
- *G. G. Davie, Quality Assurance Manager
- *T. J. Gaudet, Supervisor, Licensing
- *J. G. Hoffpauir, Maintenance Superintendent
- *D. R. Keuter, General Manager, Plant Operations
- *J. J. Ledet, Security Superintendent
- *D. C. Matheny, Operations Superintendent
- *W. H. Pendergras, Shift Supervisor, Licensing
- *R. S. Starkey, Manager, Operations and Maintenance
- *D. W. Vinci, Licensing Manager

*Denotes personnel that attended the exit meeting. In addition to the above personnel, the inspectors contacted other personnel during this inspection period.

2 EXIT MEETING

An exit meeting was conducted on August 22, 1995. During this meeting, the inspectors reviewed the scope and findings of the report. During the exit meeting and in a subsequent discussion, the General Manager, Plant Operations, expressed concerns for the untimeliness of condition report initiation and emphasized expectations to his staff. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT 2

ACRONYM LIST

CCW	component cooling water
CI	condition identification
CRS	control room supervisor
EDG	emergency diesel generator
EFW	emergency feedwater
HP	health physics
NAO	nuclear auxiliary operator
NOUE	notification of unusual event
NPO	nuclear plant operator
SIMS	computer database
SS	shift supervisor
TS	Technical Specification
WA	work authorization