

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No.: 50-219/91-13
Docket No.: 50-219
License No.: DPR-16
Licensee: GPU Creek Generating Station
P. O. Box 388
Forked River, New Jersey
Facility Name: Oyster Creek Generating Station
Inspection At: Forked River, New Jersey
Inspection Dates: April 8 - 12, 1991

Inspector:

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Performance Programs Section, OB, DRS

7/25/91
Date

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7/25/91
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N. Blumberg
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Section, OB, DRS

7/25/91
Date

Inspection Summary: Routine announced inspection from April 8 - 12, 1991
(Report No. 50-219/91-13)

Areas Inspected: Surveillance Procedures and the conduct of surveillance tests to ensure they conformed with administrative requirements and Technical Specifications (T.S.). Also, a follow-up review was performed on previous NRC concerns noted during inspections 89-18 and 89-81.

Results: No violations or deviations were identified. The licensee's surveillance program was in compliance with the Technical Specifications and 10 CFR 50. The Quality Assurance (QA) organization was actively monitoring and auditing the surveillance program. Concerns were identified in inconsistent

administrative controls for maintenance procedures used in the surveillance program which could result in inadequate procedures or reviews and in the untimely implementation of Deviation Report findings.

DETAILS

1.0 Persons Contacted

- *R. Barrett, Plant Operations Director
- *J. Barton, Director, Oyster Creek Nuclear Generating Station
- *R. Blouch, Manager, Technical Support
- *T. Blount, Licensing Engineer
- *G. Busch, Manager, Oyster Creek Licensing
- *P. Cervenks, Plant Engineer
- T. Concoran, Operations Support Engineer
- T. Dempsey, Manager, Plant Engineering
- *B. Falzarano, Maintenance Supervisor, Planning
- *R. Fenti, Manager, Site QA
- *A. Rone, Plant Engineering Director
- *J. Solakiewicz, Operations QA Manager
- W. Stewart, Safety Review Manager
- *P. Thompson, QA Audit Manager
- *R. Thompson, Core Engineering Manager

United States Nuclear Regulatory Commission

- *E. Collins, Senior Resident Inspector
- J. Nakoski, Resident Inspector

The inspectors also contacted other administrative and technical personnel during the inspection.

* Denotes those attending the exit meeting.

2.0 Licensee's Surveillance Test Program, Procedures, and Records (IP 61700 and 61725)

2.1 Program and Procedures Review

The inspectors reviewed the surveillance test program described in Station Procedure 116, "Surveillance Test Program" (documents reviewed are listed in Attachment A). A matrix in Procedure 116 listed the Technical Specification (T.S.) surveillance test requirements, test frequencies, and respective test documents. The inspectors reviewed a sample number of T.S. surveillance procedures in the matrix and found them to be written in accordance with the T.S. Section 4.0 surveillance and operability requirements. Surveillance procedures included required prerequisites and preparations for tests, acceptance criteria, signature certifications, test results forms, and restoration of system and equipment status. Deviations to surveillance tests were reported in Deviation Reports (DVRs) and monitored by the Root Cause Assignment Group (RCAG). Operational QA audits and monitoring reports also verified timely and correct conduct of surveillance tests.

Oyster Creek used procedures from several organizations to meet T.S. surveillance requirements. Approximately 20 surveillance requirements were accomplished using maintenance or other department procedures which were not written as "surveillance procedures." Procedure 116 required that the Supervisor of Operations Engineering review all surveillance procedures to ensure that they comply with all requirements of the licensee's QA plan for surveillance tests. However, since surveillances written in other departments were not reviewed by the Supervisor of Operations Engineering, original procedures and changes did not receive this QA plan compliance review. For example, only "600 series" surveillance procedures were required to contain a separate section explicitly defining all "acceptance criteria." Operations Engineering management recognized this as a potential problem and agreed to review the applicable documents to ensure that all surveillance program requirements were clearly specified and to ensure that all acceptance criteria needed to satisfy T.S. operability requirements were met.

The inspectors reviewed test results of numerous T.S. surveillances, including the Standby Liquid Control System, the Emergency Diesel Generators, the Station Batteries, and the Fire Protection System. With the exceptions noted below, the inspectors concluded that test results were properly recorded, deficiencies were corrected, and applicable certifications were made in accordance with Procedure 116 requirements.

One concern was noted in the record copy of T.S. surveillance 612.4.002, "Standby Liquid Control System Functional Test." The procedure contained a final review signature by the Group Shift Supervisor which certified that all of the procedure steps had been completed and that the results had been reviewed to determine that all acceptance criteria had been satisfied. However, the signature was entered before all required procedure steps had been completed. Although the system functional test had been completed, additional work was still outstanding. The procedure was not expected to be completed until later in the outage. The Plant Operator Manager indicated that the signature represented a partial review of work completed through the date of entry and that another final signature would be entered when the Standby Liquid Control (SLC) system was fully restored. However, the document was not written to accommodate multiple review signatures. Consequently, the potential existed for the remaining work to be accomplished without a final supervisory review. Operations management acknowledged this and agreed to review the need for any additional actions necessary to ensure that this does not happen.

Deviation Reports (DVRs) were introduced in May 1990 to identify deficiencies such as procedure problems encountered during the conduct of surveillances. The inspectors reviewed approximately 600 closed DVRs and 150 open DVRs written in 1990 and 1991. Thirteen instances were noted in all of the closed DVRs where procedure changes were necessary to correct the deficient condition. Eleven instances were noted in the open DVRs

where procedure changes were potentially required. The inspectors considered these numbers relatively low and noted that only one change involved a technically incorrect procedure. The remainder were essentially procedure enhancements. No general patterns or generic procedure problems were identified in these DVRs. The inspectors' review of surveillances also supported the results of the DVRs.

One concern was raised regarding DVR 90-586, written in September 1990 against the "Turbine Building RAGEMS High Range Monitor Functional Test." A gas flow warning required by the procedure did not print out within the required time. Operations initiated a DVR (90-586) requesting Plant Engineering to investigate and correct the problem. However, two quarterly surveillances were conducted after September 1990 without evidence that Plant Engineering had taken any corrective action on the DVR, or that operators were aware of the potential for repeated test deviations. The inspectors expressed concerns that QA corrective action audit finding S-OC-90-15.01 reported a lack of follow-up activities to verify implementation and closeout of corrective actions in a timely manner. Management indicated that they were responding to the audit finding. For example, they had recently established a Root Cause Assignment Group (RCAG) which met daily after the Plan-of-the-Day (POD) meeting to review the status and determine priorities for resolving all outstanding DVRs. A "Root Cause Standard" document was provided with a formal methodology for conducting root causes of deficiencies and for determining the impact of any DVR upon plant operations. The Group Shift Supervisor was required to review all new DVRs for system operability determinations and the RCAG was required to ensure that the impact of DVRs upon subsequent surveillances were determined. This action, together with Plant Engineering's investigation of DVR 90-586, appeared to be adequate to ensure that surveillance tests are not repeated without timely and appropriate consideration or resolution of outstanding DVRs.

The inspectors reviewed the licensee's program to perform necessary surveillance procedure revisions after plant modifications had been accomplished. The Plant Engineering Department maintained a comprehensive list of all plant procedures associated with system modifications which required a revision. Surveillance procedures affected by work in progress during the current outage were noted and an additional list was maintained to track each revision. The inspectors reviewed approximately 25 out of 95 surveillance procedure revisions completed and in progress and determined that each one fully and accurately reflected the system modification.

The inspectors also reviewed the program in place for accomplishing procedure revisions as necessitated by Vendor Bulletins, Technical Manual changes, etc. GPUN Technical Functions Department was responsible for ensuring site organizations were notified when procedures were effected by manual changes or other information from outside the company. The Vendor Document Control (VDC) Engineer maintained a formal system for processing

all new technical information and for reviewing notifications for technical content. He also tracked the dissemination of this information throughout plant organizations for incorporation into site documents. Formal notifications were made to individuals to review the material for applicability. The VDC Engineer maintained open action items until all necessary dispositions had been accomplished and verified. Untimely responses were tracked and pursued to obtain disposition on new technical information which could effect plant equipment or operation. Surveillance procedure changes in progress were annotated to indicate the expected date of completion. Information for tracking procedure changes was clearly recorded, and the review status was current and regularly updated. The inspectors considered this system to be a highly effective means of ensuring that plant procedures were properly updated in a timely manner and to preclude the use of outdated or invalid procedures.

Conclusion

The licensee's surveillance test program was generally well documented with approved detailed procedures in use as required by the T.S. Based on the review of selective surveillance procedures and test results, the inspectors concluded that the licensee was conducting a satisfactory surveillance program. Concerns were noted regarding a premature signature entry prior to the completion of all specified work and the inconsistent administrative controls over nonsurveillance procedures which were used to satisfy T.S. requirements. The licensee acknowledged the potential for these to cause inadequate procedures or review and agreed to take appropriate actions. An additional concern was identified in the untimely disposition of a deviation prior to the next performance of a surveillance test. The daily involvement of the RCAG appeared adequate to ensure the timely and proper disposition of DVRs.

2.2 Quality Assurance (QA)

The inspectors reviewed QA's involvement in the Surveillance Test Program as documented in selected QA Audits and Operations QA Monitoring Reports (QAMRs). QA audits were performed in accordance with procedure 6100-QAP-7218.01, "Quality Assurance Audit Program," and QAMRs were performed in accordance with procedure 6130-QAP-7210.04, "O.C. QA MOD/OPS Monitoring Program."

QA audit coverage of the surveillance program was performed in the following audit areas: Plant Operations, Plant Engineering, Inservice Inspection (ISI), Maintenance, and Corrective Action. These audits were scheduled in a manner which conformed to the program coverage requirements in Section 6 of the Oyster Creek T.S. The inspectors reviewed six QA audit reports, the GPUN Audit Program Matrix, the QA Audit Schedule, and the Status of Completion and Scheduling of 1991 Oyster Creek Site Audits. The GPUN Audit Program Matrix listed applicable programs, activities, and attributes against each audit title. The inspectors noted an absence of required audit attributes for reviewing proper

administrative requirements in station procedures. QA audits would not have reviewed surveillance program administrative requirements in nonsurveillance procedures used to fulfill some T.S. requirements. However, the overall review indicated that QA audits of surveillances were well planned, scheduled, conducted, and issued in a timely manner. Corrective action responses were also timely.

The inspectors reviewed the QA audit schedule and eighteen selected QAMRs which indicated that the overall schedule had been satisfactorily implemented to date. Current preparations for QA monitoring of surveillances were also reviewed. The preparation package for performance of QAMR 9010402 contained a comprehensive checklist for monitoring the planned core spray system surveillance test. The QA monitor's preparation included review of the Technical Specifications, the past surveillance history of the system, and a review of applicable procedures.

Conclusion

In all areas reviewed by the inspectors, the QA Audit and Monitoring programs for surveillances complied with applicable 10 CFR 50, Appendix B requirements. The QA Audit and Monitoring programs functioned effectively to ensure that surveillances were planned, scheduled, conducted, documented, monitored, and audited as required.

3.0 Review of Licensee Actions on Previous NRC Concerns

3.1 (Open) Unresolved Item (UNR) 50-219/89-81-01: Condenser Low Vacuum Scram

NRC Augmented Inspection Team (AIT) Inspection Report 50-219/89-81 (condenser low vacuum scram) reported that the Oyster Creek Technical Specification (T.S.) Table 3.1.1, "Protective Instrumentation Requirements," listed two trip systems as the minimum number of operable systems required for the low condenser vacuum trip function. In this table, the minimum number of instrument channels required per operable channel was also two. The report concluded that the T.S. table did not reflect the as-built design of the condenser vacuum instrument channel considering the Standard T.S. definition of "instrument."

Oyster Creek's low vacuum scram instrument logic was designed so that either vacuum trip system VTS-1 or VTS-2 was required to be operable for the scram function to operate. Each trip system was designed with three bellows instrument channels. All three channels were required to be operable for the trip system to be operable. The licensee considered that, by definition, the T.S. table reflected the number of vacuum trip system limit switches required to be operable.

The licensee subsequently reconstituted the design objectives of the low condenser vacuum scram function and provided clarification for the definition of "trip system" and "bellows instrument system." The licensee prepared a Technical Specifications Change Request (TSCR #202) to amend Table 3.1.1 to require a minimum of one operable trip system and a minimum

of three instrument channels per operable trip system. This change had not yet been submitted to the NRC for approval; however, the licensee informed the Nuclear Reactor Regulation (NRR) office that the TSCR would be submitted by June 27, 1991. Pending the licensee's submittal and subsequent NRC approval of the TSCR, this item remains open.

3.2 (Open) Notice Of Violation (NOV) 50-219/89-81-03: Operable Scram Functions Less Than Required by Technical Specifications.

NRC Augmented Inspection Team Report 50-219/89-81 identified a violation of Technical Specification requirements in that the scram function trip setting for low vacuum had drifted below the required 23 inches of Hg in four out of six sensing elements for both trip systems resulting in the number of operable systems being less than required. The licensee reported that the cause of this violation was attributed to sensing element drift, and the lack of margin for drift in the "as-left" setpoint specified in the calibration procedure. The "as-left" setpoint specified was 23 \pm .5 -0 inches Hg vacuum; whereas, the T.S. limit was greater than or equal to 23 inches Hg vacuum.

Corrective actions taken to prevent recurrence were identified in a letter to the NRC, dated July 30, 1990, and were as follows:

1. The "as left" setpoint in the calibration procedure was initially changed to 24 \pm .35 -0 inches, and again later to 23.65 \pm .35 -0 after performing a statistical analysis to allow for expected instrument drift.
2.
 - a. The T.S. requirement for the low vacuum scram was evaluated.
 - b. A conclusion was reached that the scram provided no safety function.
 - c. A decision was made to retain the scram function in the Technical Specifications for turbine and condenser protection.
 - d. The scram setpoint defined in the Technical Specifications was reset from 23 to 20 inches to more easily accommodate condenser backwashing. Technical Specifications Change Request No. 188 was submitted on July 10, 1990, and approved on March 4, 1991, to accommodate this change in the scram setpoint.

The licensee met with the NRC on April 30, 1990, and nine other commitments were established as follow-up actions associated with this violation. The inspectors determined the current status of the actions on these items as follows:

1. Commitment: Submit a letter providing the status of the instrument setpoint review program.

Status: Completed on May 29, 1990.

2. Commitment: Evaluate the T.S. requirements for revision or elimination of the low vacuum scram function.

Status: Not complete. T.S. Change Request (TSCR) No. 188 was submitted on July 10, 1990, to propose a reduction in the low vacuum scram setpoint from 23 inches to 20 inches Hg. This change was approved on March 4, 1991. GPUN's assessment of whether the T.S. requirement for the low vacuum scram adequately reflected the as-built design of the vacuum trip system was completed on September 25, 1990. A decision was made to change T.S. Table 3.1.1 to require a minimum of one operable trip system and a minimum of three instrument channels per operable trip system (reference UNR 50-219/89-01 above). However, as of this inspection, a TSCR had not been submitted to accommodate this change. The licensee anticipated that this would not occur until startup after the current outage.

3. Commitment: Conduct operator self-verification training.

Status: Not complete. This training was originally scheduled for completion by July 1990. It was still in progress during this inspection because some operators had not yet completed it. The licensee anticipated that this may not be completed before the end of the current outage (June 1991).

4. Commitment: Review the guidance for use of information/caution tags.

Status: Not complete. Procedure 108, "Equipment Control" had undergone a major revision (Rev. 50) which was completed before this inspection. This revision included requirements in Section 4.9.1 for the use of information tags on any component that was out of service to alert operators to this condition. However, this revision will not be effective until training has been completed after the current outage. The inspectors determined that this action was adequate, but could not consider this item complete until the revised procedure is issued.

5. Commitment: Submit an Licensee Event Report (LER) in accordance with 10 CFR 50.73 to report the as-found scram settings.

Status: This was completed on May 18, 1990, when LER 89-23 was submitted.

6. Commitment: Update the scram function description in the Final Safety Analysis Report (FSAR).

Status: Complete. A revised description was prepared by the licensee and submitted to the NRC. This was incorporated into Revision 5 to the FSAR in December 1990. The inspectors determined that this action was adequate to consider this item complete.

7. Commitment: Revise the Operations Plant Manual (OPM) to explain the operation of the condenser low vacuum scram sensing and trip mechanism as appropriate.

Status: Not complete. The turbine controls section of the OPM was revised on April 15, 1991. However, as of this inspection, the revision had not received final management approval for issue. Consequently, it was not available for NRC review for completion.

8. Commitment: Evaluate the merits of providing interlocks for the main condenser valves to prevent the backwashing of a condenser half with the corresponding half in any mode other than normal lineup for operation.

Status: Complete. Operating Procedure #323, Rev. 33, was issued on July 3, 1990, and required the use of information tags on a condenser half that is out of service. The use of interlocks was not considered necessary. The inspectors reviewed Revision 33 and determined that this action was acceptable to consider this item complete.

9. Commitment: Review Procedure 106, "Conduct of Operations" for conflicts in guidance for operators on instrument verification.

Status: Complete. Revision 59 to Procedure 106 was issued on November 11, 1990, to make this guidance consistent throughout. This revision was reviewed by NRC resident inspectors in July 1990 (reference inspection report 50-219/90-09), and was determined to be acceptable.

The NOV shall remain open pending completion of the licensee's actions on commitment items 2, 3, 4, and 7 above, and subsequent NRC review.

One additional item related to the NOV was also reviewed. The AIT reported low vacuum scram setpoint drifts below the T.S. limit which were identified in test records from the previous outage. It also appeared necessary to enhance the corrective action process at Oyster Creek because this data did not agree with GPUN's approach to evaluating drift in the T.S. instrument loop setpoints. In response to this violation, the licensee referred to an evaluation of historical calibration data up to January 30, 1989, which indicated that the drift of the scram setpoint past the T.S. limit was not likely, and that the drift had always been in the conservative direction. Subsequent NRC correspondence noted an apparent conflict between nonconservative drifts identified in the AIT report and the licensee's response indicating that setpoint drifts had always been in the conservative direction. On October 25, 1990, NRC designated this as a required follow-up item.

The inspectors reviewed a licensee memorandum prepared on December 19, 1990, to address the apparent conflict. The memo noted that

the test data reviewed by the AIT was dated February 25, 1989, and that no conflict existed because the licensee's original statement referred to data obtained prior to January 30, 1989. It further acknowledged that surveillance data taken on February 25, 1989, showed six out of twelve data points exceeding the T.S. limit. This occurred shortly after the January 30, 1989, evaluation concluded that drifts past the T.S. limit were not likely. The licensee amended this statement to indicate that, over a ten year period, the T.S. limit was exceeded two out of sixty times, and that this was within NRC Regulatory Guide 1.105 allowances for minimum drift probability limit of 95%. Overall, 96.7% of the historical as-found data was acceptable.

Based upon a review of this information and discussions with GPUN licensing engineers, the inspectors determined that this action resolved NRC concerns over the apparent conflicts. This item is satisfactorily resolved.

3.3 (Open) UNR 50-219/89-18-01: Anticipated Transient Without Scram (ATWS) Rule; 10 CFR 50.62.

This item was generated during the inspection performed under Temporary Instruction 2500/20, Revision 1, to verify compliance with the ATWS rule: 10 CFR 50.62. The licensee was found not to comply with the requirement for diversity of type and function between equipment in the Alternate Rod Injection (ARI) system and the Reactor Protection System (RPS). The ARI system instrument components were diverse from the RPS components with the exception of the reactor low-low level trip channels. The reactor low-low level trip channels utilized Rosemount transmitters and Foxboro Spec 200 modules for instrument loop signal processing. The RPS utilized the same type of signal processing.

The licensee evaluated the existing equipment and corresponded with the BWR Owners Group to determine what actions would be necessary to make the ARI system comply with the requirements of the diversity rule. The licensee submitted a letter to NRR on March 29, 1991, stating that a request for relief would be submitted by June 27, 1991. The request would be based upon circumstances of "extraordinary difficulty" recognized by the NRC Staff in a response to the Committee for Review of Generic Requirements. The licensee has planned contingency actions to modify the ARI system during the 14R outage in the event that relief is not granted. Further inspection activity will be based upon NRR's decision on the exemption request. This item shall remain open pending the results of that request.

3.4 (Closed) UNR 50-219/89-18-02: (ATWS Rule; 10 CFR 50.62).

During the ATWS inspection, the licensee was awaiting NRC/NRR guidance and recommendations as stated in the NRC safety evaluation report, dated November 4, 1988, to incorporate operability and surveillance requirements for the ARI and the Recirculation Pump Trip (RPT) into the facility's

Technical Specifications. As of this inspection, the licensee had not received any guidance or recommendation from NRR, although they did anticipate this would be provided. The correspondence between NRR and the licensee will track the current status of this matter and regional tracking is no longer necessary. This item is closed.

4.0 Management Meetings

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on April 8, 1991. The findings of the inspection were periodically discussed with licensee personnel during the course of the inspection. The inspectors met with licensee representatives (denoted in paragraph 1.0 above) at the conclusion of the inspection on April 12, 1991. The inspectors summarized the scope and findings of the inspection as described in this report.

Attachment: Attachment A

ATTACHMENT AGPUN PROCEDURES

1000-PLN-7200.01, GPUNC Operational Quality Assurance Plan for Three Mile Island Unit 1 and Oyster Creek, Rev.4

PLANT PROCEDURES

104 Control of Nonconformances and Corrective Action, Rev.13

112.1 Technical Specification Supporting Installed Instrumentation Calibration/Administration Program

116 Surveillance Test Program, Rev.31 and Rev.32 (Draft)

124.3 Conduct of Plant Modifications, Rev.1

2000-STD-1218.02 Procedure Writers Standard, Rev.0

6100-QAP-7218.01 Quality Assurance Audit Program, Rev.11

6130-QAP-7210.04 O.C. QA MOD/OPS Monitoring Program, Rev.9

SURVEILLANCE PROCEDURES (SP)

612.4.001 Liquid Poison Pump Operability Test and Valve IST, Rev.15 and Rev.16

612.4.002 Standby Liquid Control System Functional Test, Rev.19

613.3.003 Shutdown Cooling System "B" Loop Flow Indicator FI-17-2 - Calibration, Rev.0

617.3.001 Control Rod Drive Return Flow to Reactor Flow Indicator FI-225-998 - Calibration, Rev.0

617.4.014 Alternate Rod Injection Logic Test

621.4.035 Turbine Building RAGEMS High Range Monitor Functional Test, Rev.3

634.2.001 Main Station Battery Discharge and Low Voltage Relay Annunciator Test, Rev.20

636.2.004 Diesel Generator Battery Discharge (Load Test) and Low Voltage Annunciator," Rev.14

641.3.002	Service Water Pump 1-2 Discharge Pressure Indicator, PI-30 - Calibration, Rev.1
644.3.004	Condensate Storage Tank Level Indicator LI-424-993 - Calibration, Rev.4
644.3.005	Condensate Transfer Pump "B" Discharge Pressure Indicator, PI-21 - Calibration, Rev.0
645.6.007	Fire Protection System Flush, Rev.4
664.3.004	Fuel Zone Level Monitoring System Processor Surveillance Test, Channel A & B, Rev.6
828.9	Secondary System Analysis: Liquid Poison, Rev.4

DEVIATION REPORTS (DVRs)

DVRs sampled for the period June 1990 to March 1991 were 600 closed DVRs, 100 open 1990 DVRs, and 50 open 1991 DVRs.

QA AUDIT and MONITORING REPORTS

GPUN Audit Program Matrix

QA Audit Schedule

Status of Completion and Scheduling of 1991 Oyster Creek Site Audits

QA Audit Reports

S-OC-89-03	Inservice Inspection
S-OC-89-06	Plant Engineering
S-OC-90-05	Plant Engineering
S-OC-90-08	Plant Operations
S-OC-90-12	Maintenance
S-OC-90-15	Corrective Action, Especially Audit Finding S-OC-15.01 Regarding Lack of Follow-up Activities in the DVR Effort.

Other Documents

Post-Trip Review Report PTRG-89-132, "Low Vacuum in B Condenser Due to Loss of Circulating Water," December 1989

13R Procedures Summary, Plant Engineering Department, 3/28/91

13R Oyster Creek Modifications Summary, 1/28/91

PED Procedure Status List - 13R Outage

"List of Surveillances That Were Completed After Their Due Date, From 1/1/90 to 4/1/90"

"Oyster Creek Station Tech Spec Log Sheet", 1/21/91, 3/9/91, & 3/25/91

GPUN Memo, dated December 10, 1989, "Analysis of the December 7, 1989, Vacuum Transient."

GPUN Memo, dated July 12, 1990, LER 90-007, "Individual Components Exceeded T.S. Interval Due to Personal Error"

GPUN Memo, dated July 30, 1990, "Response to Notice of Violation"

GPUN Memo, dated September 25, 1990, "T.S. Operability Requirements Condenser Low Vacuum Scram"

GPUN Memo, dated December 19, 1990, "Apparent Calibration History Conflict"

GPUN Memo, dated March 29, 1991, "Alternate Rod Injection Implementation at OCNCS per 10 CFR 50.62"

GPUN Memo, dated March 18, 1991, "Long Range Plan"

Other Documents

Post-Trip Review Report PTRG-89-132, "Low Vacuum in B Condenser Due to Loss of Circulating Water," December 1989

13R Procedures Summary, Plant Engineering Department, 3/28/91

13R Oyster Creek Modifications Summary, 1/28/91

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"Oyster Creek Station Tech Spec Log Sheet", 1/21/91, 3/9/91, & 3/25/91

GPUN Memo, dated December 10, 1989, "Analysis of the December 7, 1989, Vacuum Transient."

GPUN Memo, dated July 12, 1990, LER 90-007, "Individual Components Exceeded T.S. Interval Due to Personal Error"

GPUN Memo, dated July 30, 1990, "Response to Notice of Violation"

GPUN Memo, dated September 25, 1990, "T.S. Operability Requirements Condenser Low Vacuum Scram"

GPUN Memo, dated December 19, 1990, "Apparent Calibration History Conflict"

GPUN Memo, dated March 29, 1991, "Alternate Rod Injection Implementation at OCNGS per 10 CFR 50.62"

GPUN Memo, dated March 18, 1991, "Long Range Plan"

Appx B

- XI: Test procedures included provisions for assuring that prerequisites for a given test had been met; provisions for test instrumentation to be used and was documented; test results were documented and evaluated, attested to by supervisory signatures; TS operability requirements were met and verified.

Content of procedures for Hold Points

- XVII: QA Records; Inspection and test records as a minimum must have inspector ID, data recorder, type of observation, results, acceptability, actions taken on any deficiencies. Docs must be identifiable and retrievable.