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10130 (IR-92-14)  
(EA-92-107)  
Ref. # 10CFR2.201

August 13, 1992

William J. Cahill, Jr.  
Group Vice President

Mr. James Lieberman, Director  
Office of Enforcement  
U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - UNIT 1  
DOCKET NO. 50-445  
NRC INSPECTION REPORT NOS. 50-445/92-20; 50-446/92-20  
AND 50-445/92-14; 50-446/92-14  
RESPONSE TO NOTICES OF VIOLATION AND PROPOSED  
IMPOSITION OF CIVIL PENALTY (EA 92-107)

REF: NRC letter from James L. Milhoan to Mr. William J. Cahill, Jr.,  
dated July 23, 1992

Gentlemen:

In the above reference, the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalty of \$125,000 related to Comanche Peak Steam Electric Station (CPSES) Unit 1. This Notice identified violations related to a lack of spent fuel pool cooling and the mechanism used to restore cooling on May 11 and 12, 1992. TU Electric accepts these violations and agrees to pay the civil penalty. Attachment 2 provides TU Electric's reply to the Notice of Violation pursuant to 10 CFR 2.201 and the terms of the Notice. Enclosed is a check in the amount of \$125,000. Additionally, in accordance with the above reference, TU Electric is also providing its reply to the Notice of Violation associated with NRC Inspection Report Nos. 50-445/92-14; 50-446/92-14. This reply is provided in Attachment 3.

TU Electric has taken these violations seriously. In response to the spent fuel pool cooling event, TU Electric took the following actions: 1) immediate corrective actions were initiated to ensure continued safe plant operations; 2) an Evaluation Team was established to review the event; 3) using the results of the Evaluation Team review, the causal factors preventive actions, and generic implications of the event were identified; and 4) the event was evaluated in conjunction with TU Electric's recent performance to identify any additional areas for improvement. Each of these sets of actions is summarized in Attachment 1.

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In addition to the violations, the above reference also identified concerns related to "... operator attentiveness to control board indications, the effectiveness of the shift turnover process, communications within the operations organization, and the effectiveness of corrective actions for similar previous concerns..." Attachment 4 provides TU Electric's response to these concerns. TU Electric has conducted a review of recent performance to identify any commonalities that may have been present and identified need for additional actions focused on supervision, individual performance, and procedures. TU Electric has made improvements in each of these areas.

If you have any questions, please contact me.

Sincerely,

William J. Cahill, Jr.

By: 

A. B. Scott, Jr.  
Vice President Nuclear  
Operations

OB/t:  
Attachments  
Enclosure

c - Mr. J. L. Milhoan, Region IV  
Mr. T. A. Bergman, NRR  
Resident Inspectors, CPSES (2)

ATTACHMENT 1 TO TXX-92364

SUMMARY OF TU ELECTRIC ACTIONS IN RESPONSE TO  
THE SPENT FUEL POOL COOLING EVENT

### SUMMARY OF TU ELECTRIC ACTIONS IN RESPONSE TO THE SPENT FUEL POOL COOLING EVENT

TU Electric took the following actions in response to the spent fuel pool cooling event at CPSES: 1) immediate corrective actions were initiated to ensure the safety of plant operations, 2) an Evaluation Team was established to review the event; 3) using the results of the Evaluation Team review, the causal factors preventive actions, and generic implications of the event were identified; and 4) the event was evaluated in conjunction with TU Electric's recent performance to identify any additional areas for improvement. Each of these sets of actions is summarized below.

#### 1. Immediate Corrective Actions

When TU Electric learned that cooling had been lost for the spent fuel pool, it took immediate action to restore cooling and took further action to assure long term cooling. These actions included providing flow from the Unit 2 Component Cooling Water (CCW) System to spent fuel pool heat exchanger No. 2, expediting completion of maintenance related to spent fuel pool heat exchanger No. 1, and realigning spent fuel pool cooling using the Unit 1 CCW and spent fuel pool heat exchanger No. 1.

Additionally, TU Electric took a number of actions to ensure that plant operations continued to be safely conducted. These actions included verifying that other crossties between Units 1 and 2 were in their isolation position or, if not, performing operational, safety, and environmental reviews removing the personnel involved in the event from watchstanding pending remedial training and evaluation; providing information on the event to other crews including information on the need for proper communications, awareness of plant conditions, and procedural compliance; taking short term actions to increase supervisor and management participation in work activities; and restricting the use of spent fuel pool heat exchanger No. 2 to when heat exchanger No. 1 is unavailable prior to operation of Unit 2.

In addition, some of the corrective actions in progress for other events were determined to be applicable to the spent fuel pool cooling event. These corrective actions include a requirement that first time performance of sensitive (high risk and infrequently performed) tasks be completed under the observation of an individual who has previously performed the evolution or be subject to increased supervision; training and testing of personnel by their supervision on their knowledge and practice of the seven steps of TU Electric's self-verification process; and re-instruction of personnel on management expectations concerning independent verification.

## 2. Evaluation Team Review

Shortly after the event, TU Electric established an Evaluation Team to review the event. This team included personnel from Operations, Licensing, Nuclear Overview, Design Engineering, Plant Engineering, and Training.

As discussed in the Evaluation Team Report that was made available to the NRC, the Evaluation Team developed a chronology and description of the event, identified the root causes and contributing factors for the event, made recommendations for addressing the causes and contributing factors, determined the safety significance of the event, and evaluated the control of interfaces between Units 1 and 2. With respect to the latter, the Evaluation Team determined that the controls over the interfaces between the Units were adequate for the most part. However, the Team also made some specific findings regarding interface controls, and action was taken to address these findings.

## 3. Causal Factors, Preventive Actions, and Generic Implications

Based upon the results of the Evaluation Team review and its own evaluation, TU Electric management determined that the causal factors for the event pertained to three areas. These areas are personnel performance, assessment of impact of activities, and procedures.

TU Electric initiated preventive actions in each of these areas. The preventive actions in the area of personnel performance are discussed in the response to Violation A in Attachment 2. The preventive actions in the area of impact assessment of activities are discussed in the response to Violations A, B, C, E, and F in Attachment 2. Finally, the preventive actions in the area of procedures are discussed in the response to Violation D in Attachment 2.

TU Electric also looked at the generic implications associated with each of these areas. With respect to personnel performance, TU Electric conducted the evaluation discussed in Section 4, below. In the area of impact assessment of activities, TU Electric determined that there were no widespread problems with impact assessments for maintenance activities and clearances; determined that the programs for controlling the impact of changing the interfaces between Units were generally adequate as discussed in Section 2 above; and reviewed a sample of design modifications which confirmed the adequacy of operations impact assessments. Finally, with respect to procedures, TU Electric reviewed a sample of existing Operations procedures for technical adequacy and accuracy, and determined that, although some errors existed, they were few in number and did not significantly impact the ability to use the procedures. Identified errors were corrected and editorial and technical reviews of procedure changes have been strengthened by counseling of procedure writers/reviewers and requiring utilization of checklists.

Finally, TU Electric took steps to prevent the recurrence of similar problems during testing and operation of CPSES Unit 2. These actions included training of Unit 2 Operations personnel regarding the event; preparations to ensure coordination between Unit 1 and Unit 2 personnel during Hot Functional Testing (HFT) of Unit 2; performing a readiness evaluation for Unit 2 HFT; and performing an impact assessment of Unit 2 HFT on Unit 1.

#### 4. Evaluation of Recent Performance

TU Electric management evaluated the spent fuel pool cooling event in conjunction with recent performance to identify any additional areas for improvement. This review considered a number of recent events, including personnel errors and plant trips prior to the first refueling outage, post-refueling outage valve line-up errors, Institute of Nuclear Power Operations (INPO) evaluation results, the wrong unit/wrong valve event (reference NRC Inspection Report 50-445/92-08; 50-446/92-08), and the CPSES Licensee Event Reports for 1992.

Based upon its review, TU Electric determined that the actions it had taken to correct and prevent errors in response to the previous events were generally timely correctly scoped and resulted in improvements. For example, the overall level of personnel errors and significant personnel errors has decreased since the beginning of 1992. However, the recent events indicated a need for additional actions focussed on supervision, individual performance, and procedures. The actions taken for supervision and individual performance are included as part of the preventive actions discussed in the response to Violation A in Attachment 2. As noted in Section 2 above the actions taken for procedures are included as part of the preventive actions discussed in the response to Violation D in Attachment 2.

TU Electric requested INPO conduct an assistance visit and critique these actions. The conclusions of the INPO team were that personnel behavior and performance in the areas of procedure compliance, self-verification and supervisory monitoring have improved and are meeting management's expectations. However, INPO recommended that TU Electric examine the basis for the behavior and performance change to ensure that the improvements will continue. TU Electric has taken actions based on INPO recommendations to ensure that the improvements will to be sustained.

ATTACHMENT 2 TO TXX-92364

REPLY TO NOTICE OF VIOLATION  
AND IMPOSITION OF CIVIL PENALTY  
(EA 92-107)

REPLY TO NOTICE OF VIOLATION  
AND IMPOSITION OF CIVIL PENALTY  
(EA 92-107)

RESTATEMENT OF VIOLATION A  
(445/92-20; EA 92-107)

CPSES Technical Specification 6.8.1 states, in part, "Written procedures shall be established, implemented, and maintained covering . . . the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978."

Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, recommends: (1) the establishment of administrative procedures, including procedures covering "Procedure Adherence and Temporary Change Method"; (2) the establishment of procedures for startup, operation, and shutdown of safety-related PWR systems, including procedures covering "Fuel Storage Pool Purification and Cooling System"; and (3) the establishment of administrative procedures, including procedures covering "Equipment Control (e.g., locking and tagging)."

1. CPSES Operations Department administrative procedure ODA-407, Revision 3, "Guideline on Use of Procedures," established by the licensee in accordance with the requirements of Technical Specifications 6.8.1, in section 6.1.1 states in part, "Operations personnel are responsible for ensuring that all systems and equipment are operated in accordance with Technical Specifications and within the guidelines of approved procedures."
  - a. Section 6.1.6 of ODA-407, Revision 3, requires, in part, that operators shall stop tasks in progress and immediately notify the Shift Supervisor upon discovery of a procedure error or inadequacy. Section 6.2.1.1 of ODA-407, Revision 3, states, in part, "Prior to initial use of any procedure the Prerequisites (Initial) Conditions shall be verified."

Contrary to the above, on May 11, 1992, at about 11:18 p.m., the auxiliary building auxiliary operator failed to stop the task in progress and notify the Shift Supervisor of an apparent procedure error or inadequacy. Specifically, twice during an attempt to use Procedure SOP-506 to establish spent fuel pool flow through Heat Exchanger X-02, the auxiliary operator started the pump but got no flow because valves were in the wrong position.

- b. Section 6.2.1.6 of ODA-407, Revision 3, states, in part, "If a condition or situation exists which is not addressed by procedure . . . . Concurrence of the Shift, Unit, or Radwaste Supervisor



should be obtained prior to performing the evolution. The actions taken to respond to the condition or situation shall be logged in the Unit Log."

Contrary to the above, on May 11, 1992, at about 11:20 p.m., after failing to identify an existing procedure for establishing component cooling water flow through Heat Exchanger X-02, the BOP reactor operator attempted to achieve a system configuration, using system piping and instrumentation diagrams, without obtaining the concurrence of the Unit or Shift Supervisor. Further, he failed to log the actions taken to respond to the situation.

2. CPSES System Operating Procedure SOP-506, Revision 5, "Spent Fuel Pool Cooling and Cleanup System", was established by the licensee in accordance with the requirements of Technical Specification 6.8.1.

- a. Section 5.1.13, Cooling Unit 1 SFP with SFP Cooling Water Pump X-01 and Heat Exchanger X-02, step A. Of SOP-506, Revision 5, states "Ensure all prerequisites in Section 2.1 are met." Section 2.1 states, in part, "The Component Cooling Water System is available to supply cooling water to the SFP Heat Exchanger, as required."

Contrary to the above, on May 11, 1992, at 10:30 p.m., operators failed to ensure component cooling water was available to Heat Exchanger X-02 as required by Step A. Of Section 5.1.13 of System Operating Procedure SOP-506, Revision 5.

- b. Section 5.1.14, Securing from the Use of SFP Cooling Water Pump X-02 and SFP Heat Exchanger X-02 [sic] on Unit 1 SFP, step E. Of SOP-506, Revision 5, states, in part, "Open the following valves: ... XSF-0008, SFP HX X-02 IN VLV; XSF-0005, SFP CLG WTR PMP X-01 DISCH VLV."

Contrary to the above, on May 11, 1992, at about 10 p.m., the auxiliary building auxiliary operator failed to open Valves XSF-0008 and XSF-0005 while performing Section 5.1.14 of System Operating Procedure SOP-506, Revision 5.

- c. Section 5.1.15, Securing from the Use of SFP Cooling Water Pump X-01 and SFP Heat Exchanger X-02 on Unit 1 SFP, step C, of SOP-506, Revision 5, states, "Close and lock XSF-0011-R0, SFP HX X-01/X-02 IN XTIE VLV RMT OPER." In the margin to the left of this step is the symbol "[IV]".

Section 6.2.1.8 of ODA-407, Revision 3, states, in part, "When procedure steps requiring Independent Verification have the symbol "[IV]" adjacent to the step, documentation of this step is required. The verification shall be documented in either the

procedure if space for initials is provided AND the procedure is retained . . . or on the Independent Verification Log Sheet (STA-694-1) when the procedure is not retained . . . ."

Contrary to the above, on May 13, 1992, between 6 p.m., and midnight, while performing System Operating Procedure SOP-506 Revision 5, operators failed to lock and have the closure of Valve XSF-0011-RO independently verified as required by SOP-506, Revision 5 and ODA-407, Revision 3.

3. CPSES Station Administrative procedure STA-605, Revision 10, "Clearance and Safety Tagging," established by the license in accordance with the requirements of Technical Specification 5.8.1, in section 6.1.1, states, in part, "A clearance is required: Any time a component must remain "out-of-service" to afford personnel or equipment protection."

CPSES Clearance Report (STA-605-18) No. X-92-01140, special instructions state, "Ensure SFP Cooling Pump 01 is not in service prior to hanging tags."

Contrary to the above, on May 11, 1992, at about 9:30 p.m., operators failed to comply with the requirements of Clearance Report No. X-92-01140 in that Pump X-01 remained in service while the tags were being hung.

4. Section 6.4.1 of Station Administrative Procedure STA-605, Revision 10, "Clearance and Safety Tagging," requires the qualified operator serving as the clearance preparer to review the Impact Sheet against applicable approved station drawings, design modifications, and procedures. Section 6.4.2 of this procedure requires the licensed operator serving as the clearance reviewer to review the Impact Sheet for completeness and accuracy. Section 6.5.1 of this procedure requires the senior licensed operator serving as the clearance screener to review the Impact Sheet and Clearance Report for impact on plant equipment.

Contrary to the above, the licensee did not perform an adequate impact review, including the preparation, review, and screening of Clearance X-92-01140 for Work Order C92-1074 which took Flow Element X-FE-4848A out of service on May 12, 1992. The impact review did not identify the need to use Unit 2 component cooling water to provide cooling to the X-02 spent fuel pool heat exchanger while the X-01 heat exchanger was out of service due to the flow element maintenance.

**RESPONSE TO VIOLATION A**  
**(445/92-20; EA 92-107)**

TU Electric accepts the violation and provides the following information, as requested:

1. Reason for the Violation

These violations were caused by personnel error and less than adequate performance by the personnel involved. Other causes and contributory factors for some of these procedural noncompliances were insufficient pre-job briefing and involvement by supervisors; incomplete or unclear verbal communication among the supervisor, Balance of Plant (BOP) Reactor Operator (RO), and Auxiliary Operator (AO) who was standing his first qualified auxiliary building watch and had not performed this evaluation before; and an undue sense of urgency on the part of the BOP RO to restore spent fuel pool cooling.

2. Corrective Steps Taken and Results Achieved

Action was initiated to establish Unit 2 Component Cooling Water (CCW) flow to spent fuel pool heat exchanger X-02 in accordance with approved operating procedures. Following completion of maintenance on the spent fuel pool heat exchanger X-01 flow element, spent fuel pool cooling was established using heat exchanger X-01 and the Unit 1 CCW. Valve XSF-0011-RO was locked closed, and its position was independently verified.

3. Corrective Steps Taken to Avoid Further Violations

The personnel involved in the event (Unit Supervisor, BOP RO, and AO) were removed from watchstanding pending remedial training and re-evaluation. These personnel also received disciplinary action.

Operations department work instructions related to the clearance process are being revised to clearly identify impact assessment items and to make such items requirements rather than recommendations.

Information on the event was provided to other crews, with emphasis on the importance of achieving effective communications, both oral and written; maintaining awareness of plant conditions; and ensuring procedural compliance (including independent verification, adherence to clearance precautions, and requesting supervisory assistance when encountering problems or unclear procedures). Additionally, lessons learned from the event were reviewed with operating personnel. Finally, the event was added to the formal operator training program.

As part of the corrective actions for a prior event, operating and maintenance personnel were trained and tested by their supervision on their knowledge and practice of the self-verification process and were re-instructed on management expectations concerning independent verification. Furthermore, remaining personnel were re-instructed on management expectations concerning self-verification.

Restrictions were established to ensure that first time performance of sensitive tasks (high risk and infrequently performed) will be completed

under observation of either an individual who has previously performed the evolution or supervisory personnel.

A Personnel Performance Review Committee was established. This committee, which is chaired by the Plant Manager, has responsibility for reviewing significant personnel errors and near misses to assure follow-up actions are identified to improve personnel performance. Additionally, management expectations for issuance of ONE forms for barrier challenges and near misses was reinforced and clarified in procedures in order to obtain further improvement in personnel performance and other activities.

Management conducted meetings with shift supervisors to discuss the event and to reinforce performance expectations. Seminars with similar goals were conducted for unit supervisors.

Plant management initiated short term actions to increase supervisor and management participation in work activities. Observation managers monitored activities in the control room and the field. Increased monitoring of the control room and field activities was also performed by the Nuclear Overview Department. Monitoring included supervisory involvement, no undue sense of urgency, adequacy of task prioritization, familiarity with assigned tasks, and sufficiency of pre-job briefings. Other actions to be taken through initial Unit 2 operations include utilizing four senior reactor operators per shift, adding an additional engineer on shift to provide on-shift unit supervisor assistance in performing administrative duties, and adding a shift advisor to facilitate smooth transition into Unit 2 operations.

TU Electric has also taken long-term actions to improve supervisory oversight. These actions include adding a permanent AD supervisor, establishing a goal whereby first line supervisors are normally expected to spend half of their time with their workers, placing emphasis on supervisory accountability for individual performance and managerial accountability for supervisory performance, and requiring senior reactor operators to complete shift supervisor/unit supervisor philosophy modules on management expectations.

#### 4. Date of Full Compliance

TU Electric is in full compliance.

**RESTATEMENT OF VIOLATION B**  
**(445/92-20; EA 92-107)**

10 CFR 50.59 states in part that the holder of a license authorizing operation of a facility may (i) make changes in the facility as described in the safety analysis report . . . without prior Commission approval, unless the proposed change . . . involves a change in the technical specifications incorporated in the license or an unreviewed safety question.

10 CFR 50.59(b)(1) states, in part, that the licensee shall maintain records of changes in the facility to the extent that these changes constitute changes to the facility as described in the safety analysis report, and that these records must include a written safety evaluation which provides the basis for the determination that the change does not involve an unreviewed safety question.

The Final Safety Analysis Report, Figure 9.2-3, sheet 6, depicts Component Cooling Water (CCW) Valves X-HV-4649 and 2CC-0312 as LC-2. FSAR Figure 3.2.1, defines the LC-2 designation as locked closed during Unit 2 construction to serve as the Unit 1/Unit 2 cross tie isolation point.

Contrary to the above, on May 13, 1992 in accordance with Procedure ODA-403 which allowed for deviation of valves designated as LC-2 at the discretion of the shift supervisor and Procedure SOP-502B, Revision 1 which authorized manipulation of valves X-HV-4649 and 2-CC-0312, the licensee made a change to the facility as described in the final safety analysis report by providing cooling to Spent Fuel Cooling Heat Exchanger HX-02 with Unit 2 CCW by opening valves X-HV-4649 and 2-CC-0312 without having made the determination that such actions did not constitute an unreviewed safety question.

**RESPONSE TO VIOLATION B**  
**(445/92-20; EA 92-107)**

TU Electric accepts the violation and provides the following information, as requested:

1. **Reason for the Violation**

Procedure ODA-403 did not require a 10 CFR 50.59 review prior to manipulation of LC-2 valves. Additionally, personnel relied upon Procedure SOP-502B, which permitted manipulation of LC-2 valves X-HV-4649 and 2CC-0312. This procedure was prepared in anticipation of upcoming operation of Unit 2. A 50.59 safety evaluation was not prepared for use of this procedure based upon the controls (which were later determined to be inadequate) in ODA-403.

2. Corrective Steps Taken and Results Achieved

A 10 CFR 50.59 safety evaluation was subsequently prepared for the use of Unit 2 CCW for cooling the spent fuel pool heat exchangers. This evaluation determined that use of the Unit 2 CCW did not represent an unreviewed safety question.

TU Electric also verified that other LC-2 valves were in their isolation position, or performed 10 CFR 50.59 safety reviews to confirm that the positions of the valves did not represent an unreviewed safety question.

3. Corrective Steps Taken to Avoid Further Violations

TU Electric revised Procedure ODA-403 to require the performance of a 10 CFR 50.59 review prior to manipulation of LC-2 valves. TU Electric also established operational controls that require a 10 CFR 50.59 safety review prior to using Unit 2 components for Unit 1 before Unit 2 receives an operating license. Additionally, TU Electric is in process of revising STA-821 to incorporate the LC-2 valves to have a single program for Unit 1/Unit 2 crossties.

4. Date of Full Compliance

TU Electric is in full compliance. STA-821 is scheduled to be revised by August 30, 1992.

**RESTATEMENT OF VIOLATION C**  
**(445/92-20; EA 92-107)**

10 CFR Part 50, Appendix R, Criterion III requires, in part, that measures be established to assure that applicable regulatory requirements and the design basis, as defined in 50.2 and as specified in the license application, for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures and instructions.

Contrary to the above, the licensee failed to translate the design criteria of Design Modification 91-076, which physically isolated Unit 1 CCW from Spent Fuel Pool Cooling Heat Exchanger X-02, into operational procedures in that:

1. Procedure SOP 502A, "Component Cooling Water (CCW), Unit 1" was not revised to provide instructions for the reversal of the installed spectacle flanges as required to ensure the redundancy requirements as specified in FSAR 9.1.3.3 could be met.
2. Procedure ALM-032A of the Alarm Procedures Manual was not revised to reflect the design modification change condition which would prohibit Unit 1 CCW from serving heat exchanger HX-02 and Unit 2 CCW from serving heat exchanger HX-01.

**RESPONSE TO VIOLATION C**  
**(445/92-20; EA 92-107)**

TU Electric accepts the violation and provides the following information, as requested:

1. **Reason for the Violation**

Personnel who reviewed Design Modification (DM) 91-076 for installation of the spectacle flange did not identify the need to revise Procedures SOP-502A and ALM-32A.

2. **Corrective Steps Taken and Results Achieved**

Procedures SOP-502A and ALM-32A were subsequently revised to reflect DM 91-076.

TU Electric also reviewed a sample of other DMs to determine the adequacy of their associated Operations Impact Assessments. No deficiencies in the assessments were identified as a result of these reviews.

3. Corrective Steps Taken to Avoid Further Violations

The preparers of Operations Department procedures have been required to review the procedure problems associated with DM 91-076.

The Design Modifications Review Group's involvement in design modification assessments has been strengthened by requiring the Group to complete its operations impact assessments of the impact of design modifications on procedures prior to modification approval by the Station Operations Review Committee (SORC).

4. Date of Full Compliance

TU Electric is in full compliance.



**RESTATEMENT OF VIOLATION D**  
**(445/92-20; EA 92-107)**

Technical Specification 6.8.1 requires that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

Procedures SOP-506, "Spent Fuel Pool Cooling and Cleanup System" and Alarm Response Procedure ALM-0032A, had been established by the licensee in accordance with this Technical Specification.

Contrary to the above, as of May 13, 1992, the licensee did not adequately maintain the above referenced procedures. Specifically:

1. Section 5.1.9 of Procedure SOP-506 incorrectly referenced Procedure SOP-502A, the Unit 1 Component Cooling Water system operating procedure, and this error misled the reactor operator and contributed to a loss of cooling to Spent Fuel Pool Cooling Heat Exchanger X-02 on May 11, 1992.
2. An incorrect and unapproved version of a change to Alarm Response Procedure ALM-0032A, Section 2.8, was inserted into the control room binder on May 16, 1992.

**RESPONSE TO VIOLATION D**  
**(445/92-20; EA 92-107)**

TU Electric accepts the violation and provides the following information, as requested.

1. **Reason for the Violation**

The personnel who prepared and reviewed Procedure SOP-506 did not pay sufficient attention to the details in the procedure.

With respect to ALM-0032A, the Operations Manager found a hand switch label problem in the Procedure Change Notice (PCN) processed for his signature. The PCN was corrected and approved, but as a result of personnel error, was inserted in the control room copy with one page missing and an incorrect page included.

2. **Corrective Steps Taken and Results Achieved**

Procedure SOP-506 was revised to correct the errors. The control room binder was updated to include the correct and approved version of ALM-0032A, Section 2.8.

The Operating Department has performed a survey of each crew for the purpose of identifying additional procedure problems. Additionally, the need for feedback from procedure users to management has been re-emphasized to operating personnel. As a result of these actions, a number of procedures have been revised to correct certain deficiencies and to provide enhancements and clarifications for the procedures.

Finally, a sample of Operations procedures was selected to be reviewed for technical adequacy. It was determined that some errors in the procedures did exist; however, the vast majority of these procedures were considered to be of acceptable quality. Most errors found as a result of this were editorial in nature and some had minor technical errors. These errors were corrected.

3. Corrective Steps Taken to Avoid Further Violations

Action has been taken to improve self-verification by procedure writers and technical reviewers. This action includes development of a PCN checklist to look for administrative errors and dissemination of lessons learned to procedure writers and technical reviewers. Industry practices for successful techniques to reduce procedure errors and deviations were re-examined for any additional enhancements. It was determined that procedures are consistent with industry practices. Additionally, field walkdowns as applicable will be performed for new procedures and revisions and changes to procedures to assure that procedures are correct and usable.

Finally, emphasis has been placed on responding to procedure change requests in a timely manner to help ensure that personnel do not work around any procedure problems.

4. Date of Full Compliance

TU Electric is in full compliance.

**RESTATEMENT OF VIOLATION E**  
**(445/92-20; EA 92-107)**

10CFR 55.59(c)(3)(iii) requires the operator requalification program to include on-the-job training so that, "Each licensed operator is cognizant of facility design changes, procedure changes, and facility changes."

Technical Specification 6.4 states, in part, "A retraining and replacement training program for the unit staff shall be maintained...." Training Procedure TRA-202, Revision 5, "Auxiliary Operator Training" and Procedure TRA-204, Revision 6, "Licensed Operator Requalification Training Program" were found to implement the requirements of Technical Specification 6.4.

Section 6.2.i of Procedure TRA-204, Revision 6 states "The requalification program shall ensure licensed personnel are informed of changes to plant procedures, modifications to plant design, facility license changes, and relevant industry or facility operating experience."

Section 6.2.1 of Procedure TRA-202, Revision 5, states, in part, "Continuing training shall occur as a part of Auxiliary Operator Training; however, this period shall be adjusted to ensure that all personnel are informed of changes... in a timely manner." It further states, in part, that "Types of changes which may affect job/task performance plant operation may include ... plant modifications and procedure changes."

Contrary to the above, the licensed and auxiliary operators did not receive requalification or continuing training with respect to Design Modification (DM) 91-076 which isolated Unit 1 component cooling water to Spent Fuel Pool Cooling Heat Exchanger X-02.

**RESPONSE TO VIOLATION E**  
**(445/92-20; EA 92-107)**

TU Electric accepts the violation and provides the following information, as requested:

1. **Reason for the Violation**

Personnel who reviewed DM 91-076 for training impact did not identify the need for formal training of operators. The DM was determined to be below the threshold for incorporation into the formal training process and instead was placed in the normal shift operator notification process, and may have been overlooked or forgotten by some shift operation crews.

2. **Corrective Steps Taken and Results Achieved**

Operators have been trained on DM 91-076. TU Electric also reviewed a sample of other DMs to determine the adequacy of their associated

Operation Impact Assessments. No deficiencies in the assessments were identified as a result of these reviews.

3. Corrective Steps Taken to Avoid Further Violations

The Design Modification Review Group's involvement in design modification assessments has been strengthened by requiring the Group to perform operations impact assessments of the impact of design modifications on training prior to SORC approval of the modification.

4. Date of Full Compliance

TU Electric is in full compliance.

**RESTATEMENT OF VIOLATION F**  
**(445/92-20; EA 92-107)**

10 CFR Part 50, Appendix B, Criterion XVI, states, in part, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected."

Procedure STA-421, Revision 2, "Operations Notification and Evaluation (ONE) Form," requires actual or potential adverse conditions be documented using the ONE form process. Additionally, Procedure STA-422, Revision 5, "Processing of Operations Notification and Evaluation (ONE) Forms," Section 6.1.1, states, in part, "Any individual discovering an actual or potential adverse condition shall identify the condition in accordance with STA-421...."

Procedure STA-606, Revision 17, "Work Requests and Work Orders," specifies work order priorities to be assigned on work orders. Priority 13 is used for maintaining plant reliability, safety issues, and longer term Technical Specifications Action Statements.

Contrary to the above, on May 11, 1992, spent fuel pool pump X-02 experienced a failed rotor bearing and the required ONE Form was not initiated until May 20, 1992, and the work to repair the motor bearing was assigned Priority 22 in lieu of the required 13.

**RESPONSE TO VIOLATION F**  
**(445/92-20; EA 92-107)**

TU Electric accepts the violation and provides the following information, as requested:

1. **Reason for the Violation**

The Spent Fuel Pool Pump Motor, CPX-SFAPSF-20M, was started and shut down on 5/11/92. Mechanical Maintenance was requested to uncouple the pump and determined the failure to be within the motor on 5/13/92. Following a detailed Electrical Maintenance Work Order revision (40 steps; 7 pages), disassembly of the motor began on 5/19/92. It was determined on 5/20/92 that the failure occurred in the split sleeve bearing and a ONE Form was initiated documenting such. The work order was assigned priority 22. There was a lack of a urgency and sense of urgency among CPSES management regarding the out of service status of non-Technical Specification safety related equipment, which led to untimely issuance of a ONE Form.

2. Corrective Steps Taken and Results Achieved

A ONE Form was prepared for spent fuel pool pump X-02 on 5/20/92. On 5/21/92 the Work Order priority was raised to priority 13 by the Work Control Center Manager. The pump was repaired and placed back into service. Additionally, a separate ONE Form was issued to document programmatic concerns regarding prioritization of work activities for non-Technical Specification safety related equipment.

3. Corrective Steps Taken to Avoid Further Violations

The importance of timely initiation of ONE Forms was reemphasized to plant management during Plan of the Day Meetings. With respect to specific non-Technical Specification safety-related systems, TU Electric has established additional work control practices to return these systems to service in a timely manner by identifying them as "High Level of Awareness" activities in the Plan of the Day schedule. These practices are similar to the controls established for systems that are subject to limiting conditions for operating action statements contained in the Technical Specifications. This will provide for daily management review of these activities, and priorities can be elevated as directed by management.

4. Date of Full Compliance

TU Electric is in full compliance.

ATTACHMENT 3 TO TXX-92364

REPLY TO NOTICE OF VIOLATION  
(50-445/92-14; 50-445/92-14)

REPLY TO NOTICE OF VIOLATION  
(50-445/92-14; 50-46/92-14)

RESTATEMENT OF VIOLATION  
(445/9214-01)

00: Technical Specification 6.9.1 states, in part, that written procedures be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

Regulatory Guide 1.33, Appendix A, paragraphs 1.c and 1.h recommended that administrative procedures be developed for procedure adherence and temporary change method, log entries, record retention, and procedure review, respectively. Paragraph 9.1.1 recommended maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with procedures, documented instructions, or drawings appropriate to the equipment.

1. Operations department Procedure ODA-407, "Guidance on the Use of Procedures," Revision 3, requires shift supervisor or unit supervisor permission before any operations procedure step could be marked as not applicable.

Contrary to the above, on May 8, 1992, a reactor operator marked the prerequisite step to Procedure ODT-446A, "Solid State Protection Train B Actuation," Revision 3, as not applicable without obtaining shift supervisor or unit supervisor permission. Subsequently, the shift supervisor determined that the step was required and it was completed satisfactorily.

2. Operations Procedure ODI-104, "Operations Department Logkeeping and Equipment Instructions," Revision 9, required that abnormal conditions and out-of-specification readings should be circled in red and the following information should be included in the comment section: (1) the reason for the condition or reading, (2) the corrective action performed or attempted, (3) the results of the corrective action; and (4) the time and person notified.

Contrary to the above, a review of completed auxiliary operator log readings for the auxiliary and fuel buildings, for the period April 21 through May 2, 1992, identified several instances where abnormal readings were not identified in accordance with Procedure ODI-104.

3. Procedure INC-7717A, "Channel Calibration N16 Power Monitor Module Protection IV, Channel 0440, Revision 1, Step 11.1.1.1 required that, "In rear of 'Cabinet 10 N-16 Power Protection IV,' open N16 High Voltage Power Supply breaker, 'CB2'."



Contrary to the above, on May 8, 1992, at approximately 11 p.m. (CST), during the performance of Procedure INC-7717A, Step 11.1.1.1, the I&C technicians entered the back of Cabinet 10 at Power Protection Channel II and opened the associated N-16 high voltage power supply Breaker CB2. This resulted in a loss of power to Power Protection Channel II.

4. Administrative Procedure STA-606, "Work Requests and Work Orders," Revision 17, paragraph 6.6.3.20 required that the field work request tag or sticker be removed at the completion of the work. Paragraph 6.6.3.22a required that the shift supervisor be notified of fire protection systems/equipment that have been returned to service.

Contrary to the above, field work request tags were not removed from safety-related equipment following completion of field work. These included field Work Request Tags 101420, 103297, 101421, 101433, 122419, 123351, and 127336. On April 27 it was identified that Fire Impairment 92-X-196, for turbine building rollup Door T102-J was active with the door locked open, although Work Request 124524 (Work Order No. 92-1749), page 7, documented that on March 27, 1992, Fire Impairment 92-X-196 had been cleared and the door closed and locked.

#### RESPONSE TO VIOLATION A (445/9214-01)

TU Electric accepts the violation and provides the following information, as requested:

##### 1. Reason for Violation

These errors were attributable to less than adequate self-verification, a lack of attention to detail and less than adequate supervisory overview.

As evidenced by, the similarities of the violations, TU Electric's assessment has indicated that this violation may have been prevented in the event corrective measures specified in attachments 2 and 4 of this letter had been in place and implemented prior to the occurrence of these procedural deviation.

##### 2. Corrective Steps Taken and Results Achieved

The corrective actions taken by TU Electric for this violation are similar to the actions specified in Attachment 2 and Attachment 4 of this response. The specific actions taken are as follows:

1. The operator involved in marking the prerequisite steps not applicable was counseled on the requirements of ODA-407. Additionally the procedure was revised to state the steps more clearly.

2. The individuals involved in the logkeeping practices were counseled and were retrained to the requirements of ODA-301 and OWI-104. Additionally, the shift supervisor reviewed the affected log with the individuals involved and coached them in proper implementation of the applicable procedures.
3. As stated in CPSES License Event Report (LER) 92-009-00, personnel involved in opening the wrong 16 high voltage power supply breaker were trained and tested by their supervision on their knowledge and practice of self-verification. Additionally, these personnel were re-instructed on management's expectations regarding independent verification.
4. A ONE Form was initiated to document the failure to remove the work request tags after completion of work. The work request tags identified in the violation were removed. However, there may be some work request tags left in the field which cannot be traced by the computer data base because the maintenance planners may have rejected the work and did not remove the work request tags; or work which may have been incorporated in a generic work order and the field work request tags may no longer be valid. For these reasons maintenance management has initiated a plan to perform walkdowns to retrieve work request tags associated with completed work or rejected work requests. These walkdowns are in progress and reconciliation of the field tags with the computer data base. Will be completed during the last quarter of 1992.

### 3. Corrective Steps Taken to Avoid Further Violations

Cognizant personnel were trained and tested by their supervision on their knowledge and practice of the self-verification process and re-instructed on management's expectations regarding independent verification. Additionally, increased supervision and management participation in work related activities has been implemented. Finally, the first time performance of sensitive tasks will be completed under observation of an individual who has previously performed the evolution or increased supervision will be utilized. With regard to work request tags, personnel will be directed to remove the tags after work has been completed and place them in the work order package. Post work reviewers will be required to verify that the work request tags are in the work package. Additionally, a justification for missing work request tags in the package at post work review will be provided.

### 4. Date of Full Compliance

The results of walkdowns for removal of work request tags and additional enhancement to the program (if required) will be completed during the last quarter of 1992.

**RESTATEMENT OF VIOLATION B**  
**(445/9214-02)**

CPSES Technical Specification 4.0.4 states, in part, that entry into an Operational Mode or other specified condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation has been performed within the stated surveillance interval.

Technical Specification Requirement 4.3.1.1 states, in part, that "Each reactor trip system instrumentation channel and interlock and automatic trip logic shall be demonstrated OPERABLE by the performance of the Reactor Trip System Instrumentation Surveillance Requirements specified in Table 4.3-1." Table 4.3-1, Reactor Trip System Instrumentation Surveillance Requirement, Functional Unit 2.b Power Range, Neutron Flux Low Setpoint," required that the analog channel operability test (ACOT) be performed for the applicable modes (Modes 1 [below P-10] and 2) if not completed within the past 31 days." Surveillance Procedure INC-7375A, "ACOT LI CAL Neutron Flux PWR RN Channel N41, "Revision 7, implemented this TS requirement for Modes 1 and 2.

Contrary to the above, a reactor startup was commenced on May 9, 1992, (Mode 3 to 2) without having met the surveillance requirement specified in TS 4.3.1.1, Table 4.3-1.2.b, for the power range neutron flux low power setpoint. Surveillance Procedure INC-7375A was last performed on January 9, 1992, for the power range neutron flux Channel 41 low setpoint. This resulted in the surveillance requirement being exceeded by 90 days.

**RESPONSE TO VIOLATION B**  
**(445/9214-02)**

TU Electric accepts the violation and provides the following information, as requested:

1. **Reason For Violation**

Lack of attention to detail by the I&C surveillance test coordinator and less than adequate supervisory oversight led to this violation.

As evidenced by, the similarities of the violations, TU Electric's assessment has indicated that this violation may have been prevented in the event corrective measures specified in attachments 2 and 4 of this letter had been in place and implemented prior to the occurrence of this surveillance issue.

2. **Corrective Steps Taken and Results Achieved**

As stated in Licensee Event Report (LER) 92-010-00, the specific actions taken included; a ONE Form issued to document the event, the appropriate action per the TU Electric discipline program was implemented for the individuals involved, a task team was formed to review the surveillance test process and the surveillance in question was satisfactorily performed prior to reactor

startup for the June 11, 1992, manual reactor trip following a loss of both main feedwater pumps (reference LER-92-014-00).

3. Corrective Steps Taken to Avoid Further Violations

As stated in Attachment 2 and Attachment 4 TU Electric has taken actions to improve communication, self-verification, and attention to detail and to ensure more effective supervisory oversight. Additionally, the surveillance task team will standardize the methods each department uses to comply with the surveillance test program, including the responsibility and accountability assigned to each departments surveillance test coordinator. Moreover, the surveillance task team is standardizing the methods used by different departments in scheduling, tracking and recording surveillance tests. The maintenance database used to track surveillance tests has been reviewed and changes are in progress to standardize the descriptions and scheduling of the tests. This will allow management to more easily perform an independent review of upcoming surveillance test requirements.

4. Date of Full Compliance

Full compliance has been achieved.

ATTACHMENT 4 TO TXX-92364

RESPONSE TO OTHER NRC CONCERNS

## RESPONSE TO OTHER NRC CONCERNS

### RESTATEMENT OF NRC CONCERNS (445/92-20; EA 92-107)

In addition to the violations surrounding the spend fuel pool cooling event, the NRC is concerned about operator attentiveness to control board indications, the effectiveness of the shift turnover process, communications within the operations organization, and the effectiveness of corrective actions for similar previous concerns (e.g., EA 91-189, which involved similar weaknesses in personnel performance resulting in a misalignment of the Residual Head Removal system).

### RESPONSE TO NRC CONCERNS (445/92-20; EA 92-107)

TU Electric also has concerns in the areas identified by the NRC. As a result, TU Electric has taken actions in each of these areas. These actions are discussed below.

#### 1. Operator Attentiveness to Control Board Indications

TU Electric has placed increased emphasis on annunciator control. In particular, the importance of a "black board" concept was re-emphasized and the number of lit annunciators was reduced, allowing operators to give greater attention to those annunciators that are lit. Additionally, TU Electric has required each shift to log each lit annunciator and the reason why it is lit to ensure that operators are cognizant of lit annunciators. Finally, shift supervisors discussed control board awareness expectations with their operators.

#### 2. Effectiveness of the Shift Turnover Process

TU Electric has taken a number of steps to improve the shift turnover process. As discussed in Attachment 2, information on the event was provided to other crews. This information emphasized the importance of achieving effective written communications, including logging of changes in configuration during the shift. Additionally, the shift turnover process has been enhanced by the logging of each lit annunciator as discussed above.

#### 3. Communications Within the Operations Organization

TU Electric has taken steps to improve communications within the Operations organization. The emphasis of the morning plan-of-the-day meetings has been reoriented to focus more on upcoming events, surveillances, and maintenance. Information on the event was provided to other crews with emphasis on the importance of achieving effective

communications, both oral and written. Additionally, as discussed in Attachment 2, TU Electric has taken action to relieve unit supervisors of some administrative duties and has established a goal whereby first line supervisors are normally expected to spend half of their time with their workers. Management expectations regarding communication have been reemphasized. These actions should improve communications between supervisors and their personnel.

4. Corrective Action for Previous Concerns

TU Electric conducted a review of recent performance to identify any commonalities that may have been present in recent events, including the events associated with EA 91-189, and to determine the adequacy of the corrective actions for those events.

In general, TU Electric determined that actions to correct and prevent recent errors were generally timely, correctly scoped and resulted in improvements as evidenced by an overall decrease in the level of personnel errors and significant personnel errors since the beginning of 1992. However, review of recent events indicated a need for additional actions focused on supervision, individual performance, and procedures. The specific actions taken in each of these areas are discussed in Attachment 2. Additionally, TU Electric requested the Institute for Nuclear Power Operations (INPO) to conduct an assistance visit and to critique these actions. The conclusions of the INPO team were that personnel behavior and performance in the areas of procedure compliance, self-verification and supervisory monitoring has in fact improved and is meeting management's expectations. However, INPO recommended that TU Electric should examine the basis for the behavior and performance changes to ensure that the improvement brought about by these corrective actions will continue. TU Electric has taken actions based on INPO recommendations to ensure that the improvements will be sustained.

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-354  
UNIT Hope Creek  
DATE 8/14/92  
COMPLETED BY V. Zabielski  
TELEPHONE (609) 339-3506

*VCZ*

MONTH July 1992

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1. 1035  
2. 1040  
3. 1047  
4. 1040  
5. 1011  
6. 1034  
7. 1032  
8. 1024  
9. 1058  
10. 1026  
11. 1025  
12. 1006  
13. 1033  
14. 952  
15. 1032  
16. 1034

17. 1039  
18. 1023  
19. 1025  
20. 1031  
21. 1026  
22. 1041  
23. 1033  
24. 1043  
25. 1043  
26. 1022  
27. 1029  
28. 1039  
29. 1036  
30. 1032  
31. 1028

OPERATING DATA REPORT

COCKET NO. 50-354  
 UNIT Hope Creek  
 DATE 8/14/92  
 COMPLETED BY V. Zabielski  
 TELEPHONE (609) 339-3506

OPERATING STATUS

1. Reporting Period July 1992 Gross Hours in Report Period 744

2. Currently Authorized Power Level (Mwt) 3293  
 Max. Depend. Capacity (MWe-Net) 1031  
 Design Electrical Rating (MWe-Net) 1067

3. Power Level to which restricted (if any) (MWe-Net) None

4. Reasons for restriction (if any)

	<u>This</u> <u>Month</u>	<u>Yr To</u> <u>Date</u>	<u>Cumulative</u>
5. No. of hours reactor was critical	<u>744.0</u>	<u>4793.5</u>	<u>41,954.8</u>
6. Reactor reserve shutdown hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
7. Hours generator on line	<u>744.0</u>	<u>4731.4</u>	<u>41,306.0</u>
8. Unit reserve shutdown hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
9. Gross thermal energy generated (MWH)	<u>2,438,906</u>	<u>15,207,255</u>	<u>131,204,397</u>
10. Gross electrical energy generated (MWH)	<u>601,480</u>	<u>5,060,010</u>	<u>43,412,504</u>
11. Net electrical energy generated	<u>766,364</u>	<u>4,836,392</u>	<u>41,487,941</u>
12. Reactor service factor	<u>100.0</u>	<u>93.8</u>	<u>85.2</u>
13. Reactor availability factor	<u>100.0</u>	<u>93.8</u>	<u>85.2</u>
14. Unit service factor	<u>100.0</u>	<u>92.6</u>	<u>83.9</u>
15. Unit availability factor	<u>100.0</u>	<u>92.6</u>	<u>83.9</u>
16. Unit capacity factor (Using MDC)	<u>99.9</u>	<u>91.8</u>	<u>81.8</u>
17. Unit capacity factor (Using Design MWe)	<u>96.5</u>	<u>88.7</u>	<u>79.0</u>
18. Unit forced outage rate	<u>0.0</u>	<u>2.7</u>	<u>4.9</u>
19. Shutdowns scheduled over next 6 months (type, date, & duration): Refueling outage, 9/12/92, 60 days			
20. If shutdown at end of report period, estimated date of start-up: N/A			

OPERATING DATA REPORT  
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-354  
 UNIT Hope Creek  
 DATE 8/14/92  
 COMPLETED BY V. Zabielski  
 TELEPHONE (609) 339-3506

MONTH July 1992

NO.	DATE	TYPE F=FORCED S=SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER (2)	CORRECTIVE ACTION/COMMENTS
						None

Summary

REFUELING INFORMATION

DOCKET NO. 60-354  
 UNIT Hope Creek  
 DATE 8/14/92  
 COMPLETED BY S. Hollingsworth  
 TELEPHONE (609) 339-1051

MONTH July 1992

1. Refueling information has changed from last month:  
 Yes  No
  2. Scheduled date for next refueling: 9/12/92
  3. Scheduled date for rescart following refueling: 11/11/92
  4. A. Will Technical Specification changes or other license amendments be required?  
 Yes  No
  - B. Has the reload fuel design been reviewed by the Station Operating Review Committee?  
 Yes  No
- If no, when is it scheduled? The week of September 7
5. Scheduled date(s) for submitting proposed licensing action: N/A
  6. Important licensing considerations associated with refueling:  
 - Same fresh fuel as current cycle: no new considerations
  7. Number of Fuel Assemblies:
 

A. Incore	<u>764</u>
B. In Spent Fuel Storage (prior to refueling)	<u>760</u>
C. In Spent Fuel Storage (after refueling)	<u>1003</u>
  8. Present licensed spent fuel storage capacity: 4006  
 Future spent fuel storage capacity: 4006
  9. Date of last refueling that can be discharged to spent fuel pool assuming the present licensed capacity:  
 (does not allow for full-core offload) 11/4, 2010  
 (EOC16)

HOPE CREEK GENERATING STATION

MONTHLY OPERATING SUMMARY

July 1992

Hope Creek entered the month of July at approximately 100% power. The unit operated for the entire month without experiencing any shutdowns or reportable power reductions. As of July 31, the plant had been on line for 47 consecutive days.

SUMMARY OF CHANGES, TESTS, AND EXPERIMENTS  
FOR THE HOPE CREEK GENERATING STATION

JULY 1992

The following items have been evaluated to determine:

1. If the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
2. If a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or
3. If the margin of safety as defined in the basis for any technical specification is reduced.

The 10CFR50.59 Safety Evaluations showed that these items did not create a new safety hazard to the plant nor did they affect the safe shutdown of the reactor. These items did not change the plant effluent releases and did not alter the existing environmental impact. The 10CFR50.59 Safety Evaluations determined that no unreviewed safety or environmental questions are involved.

DCP

Description of Safety Evaluation

4EC-3206/04

This DCP installed two resin samplers on the influent lines to the Cation Regeneration Vessel and Resin Mix and Hold Vessel to measure the effectiveness of the regeneration backwash process.

The Condensate Demineralizer System has no safety-related functions and is not required to be operable following an accident. There is no change to any system's function and no reduction in any system performance as a result of this DCP. Therefore, this DCP did not involve any Unreviewed Safety Questions.



Procedure  
Revision

Description of Safety Evaluation

HC.OP-FT.EG-0101(Q)  
Rev 0

This new procedure will individually stroke the Safety Auxiliary Cooling System cross-tie valves supplying the Primary Containment Instrument Gas Compressors. Prior to stroking each valve, the Valve Operation Test and Evaluation System will be installed and ready to collect data during the valve cycling.

This procedure does not functionally change the Safety Auxiliary Cooling System or the Primary Containment Instrument Gas System. The probability and consequences of either an accident or malfunction are unchanged. Therefore, this procedure does not involve an Unreviewed Safety Question.

NC.NA-AP.ZZ-0069(Q)  
Rev 0

This administrative procedure describes the control process for the coordination of work activities between implementing work organizations and the operating shift.

This procedure will enhance work control coordination by providing controls to ensure that work activities are performed safely and in compliance with licensing requirements. This procedure complies with the UFSAR in that it provides additional controls for work control coordination. Therefore, this procedure does not involve an Unreviewed Safety Question.

UFSAR Section

Description of Safety Evaluation

Table 9.5-20  
Table 9.5-22  
Table 9.5-24  
Table 9.5-26  
Table 9.5-28

This UFSAR Change adjusts the calibration frequency of the Standby Diesel Generator instruments based on their maintenance history. A note will be revised to state that the instrumentation will be calibrated on a 18 month schedule until an analysis is completed. At that time, the frequency will be based on the completed analysis; therefore, no Unreviewed Safety Questions are involved with this UFSAR change.