UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

April 29, 2010

Rafael Flores, Senior Vice President
and Chief Nuclear Officer
Luminant Generation Company, LLC
Comanche Peak Nuclear Power Plant
P.O. Box 1002
Glen Rose, TX 76043

Subject: COMANCHE PEAK NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION REPORT 05000445/2010002 AND 05000446/2010002

Dear Mr. Flores:

On March 20, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Comanche Peak Nuclear Power Plant. The enclosed integrated inspection report documents the inspection findings, which were discussed on March 30, 2010, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents one self-revealing and two NRC-identified findings of very low safety significance (Green). All of these findings were determined to involve violations of NRC requirements. Additionally, a licensee-identified violation, which was determined to be of very low safety significance, is listed in this report. However, because of the very low safety significance and because they are entered into your corrective action program, the NRC is treating these findings as noncited violations, consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest the noncited violations or the significance of the noncited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 612 E. Lamar Blvd, Suite 400, Arlington, Texas, 76011-4125; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the Comanche Peak Nuclear Power Plant facility. In addition, if you disagree with the characterization of any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV, and the NRC

Resident Inspector at the Comanche Peak Nuclear Power Plant. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

In accordance with 10 CFR 2.390 of the NRC's “Rules of Practice,” a copy of this letter, and its enclosure, will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC’s document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Wayne C. Walker, Chief
Project Branch A
Division of Reactor Projects

Docket: 50-445: 50-446
License: NPF-87; NPF-89

Enclosure:
NRC Inspection Report 05000445/2010002 and 005000446/2010002
w/Attachment: Supplemental Information

cc w/Enclosure:
Mr. Fred W. Madden, Director
Regulatory Affairs
Luminant Generation Company LLC
P.O. Box 1002
Glen Rose, TX 76043

Timothy P. Matthews, Esq.
Morgan Lewis
1111 Pennsylvania Avenue, NW
Washington, DC 20004

County Judge
P.O. Box 851
Glen Rose, TX 76043

Mr. Richard A. Ratliff, Chief
Bureau of Radiation Control
Texas Department of Health
P.O. Box 149347, Mail Code 2835
Austin, TX 78714-9347

Environmental and Natural
Resources Policy Director
Office of the Governor
P.O. Box 12428
Austin, TX 78711-3189

Mr. Brian Almon
Public Utility Commission
William B. Travis Building
P.O. Box 13326
Austin, TX 78711-3326

Ms. Susan M. Jablonski
Office of Permitting, Remediation
and Registration
Texas Commission on
Environmental Quality
MC-122
P.O. Box 13087
Austin, TX 78711-3087

Anthony Jones
Chief Boiler Inspector
Texas Department of Licensing
and Regulation
Boiler Division
E.O. Thompson State Office Building
P.O. Box 12157
Austin, TX 78711

Chief, Technological Hazards
Branch
FEMA Region VI
800 North Loop 288
Federal Regional Center
Denton, TX 76209

Chairperson, Radiological Assistance Committee
Region VI
Federal Emergency Management Agency
Department of Homeland Security
800 North Loop 288
Federal Regional Center
Denton, TX 76201-3698

Electronic distribution by RIV:
Regional Administrator (Elmo.Collins@nrc.gov)
Acting Deptuty Regional Administrator (Art.Howell@nrc.gov)
DRP Director (Dwight.Chamberlain@nrc.gov)
DRP Deputy Director (Anton.Vegel@nrc.gov)
DRS Director (Roy.Caniano@nrc.gov)
DRS Deputy Director (Troy.Pruett@nrc.gov)
Senior Resident Inspector (John.Kramer@nrc.gov)
Resident Inspector (Brian.Tindell@nrc.gov)
Senior Project Engineer (David.Proulx@nrc.gov)
Branch Chief, DRP/A (Wayne.Walker@nrc.gov)
CP Site Secretary (Sue.Sanner@nrc.gov)
Public Affairs Officer (Victor.Dricks@nrc.gov)
Public Affairs Officer (Laura.Uselding@nrc.gov)
Branch Chief, DRS/TSB (Michael.Hay@nrc.gov)
RITS Coordinator (Marisa.Herrera@nrc.gov)
Regional Counsel (Christine.Boote@nrc.gov)
Congressional Affairs Officer (Jenny.Weil@nrc.gov)
Regional State Liaison Officer (Bill.Maier@nrc.gov)
NSIR/DPR/EP (Eric.Schrader@nrc.gov)
OEMail Resource
DRS/TSB STA (Dale.Powers@nrc.gov)
OEDO RIV Coordinator (Leigh.Trocine@nrc.gov)
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Publicly Avail	☑Yes ☐ No	Sensitive	☐ Yes ☑ No	Sens. Type Initials	WW

SRI:DRP/A	RI/DRP/A	SPE:/DRP/A	C:DRS/OB	C:DRS/PSB1
JGKramer	BWTindell	DProulx	MHaire	MPShannon
/RA/E-Walker for	**/RA/E-Walker for**	**/RA/**	**/RA/**	**/RA/**
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GEWerner	TRFarnholtz	NFO'Keefe	WCWalker	
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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket:	50-445, 50-446
License:	NPF-87, NPF-89
Report:	05000445/2010002 and 05000446/2010002
Licensee:	Luminant Generation Company LLC
Facility:	Comanche Peak Nuclear Power Plant, Units 1 and 2
Location:	FM-56, Glen Rose, Texas
Dates:	January 1 through March 20, 2010
Inspectors:	J. Kramer, Senior Resident Inspector B. Tindell, Resident Inspector B. Larson, Senior Operations Engineer G. Guerra, Emergency Preparedness Inspector
Approved By:	Wayne Walker, Chief, Project Branch A Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000445/2010002, 05000446/2010002; 01/01/2010 - 03/20/2010; Comanche Peak Nuclear Power Plant, Units 1 and 2, Postmaintenance Testing, Surveillance Testing.

The report covered a 3-month period of inspection by resident inspectors and announced baseline inspections by region based inspectors. Three Green noncited violations were identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609, "Significance Determination Process." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified Findings and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a for the failure of maintenance personnel to follow procedural requirements for reinstalling a pressurizer pressure control card. As a result, when operators raised reactor coolant pressure to normal operating pressure at the end of the refueling outage, a pressurizer power operated relief valve opened due to a mispositioned gain setting on the control card. The licensee entered the finding into the corrective action program as condition report CR-2009-006665.

  The finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone and affects the cornerstone objective to limit those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the inadvertent lifts of the power operated relief valves could lead to a loss of reactor coolant system inventory and pressure control. Using NRC Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to require a Phase 2 analysis. For a bounding analysis, the inspectors used the Phase 2 pre-solved table section for "one power operated relief valve that fails to close" for 3 to 30 days, and determined that the finding was of very low safety significance. The finding has a human performance crosscutting aspect associated with work practices because the licensee did not provide appropriate oversight of contractor personnel performing the maintenance activity of installing the instrument control card [H.4c] (Section 1R19).

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, for the failure to follow procedures that require initiating a condition report for degradation to safety-related equipment. During a surveillance activity, maintenance personnel discovered that an undervoltage relay was outside the as-found setpoint for pick-up voltage and failed to enter the condition into the corrective action program. As a result, the cause and effect of the degraded condition was not evaluated. The licensee entered the finding into the corrective action program as condition report CR-2010-001429.

The finding was more than minor because if the licensee continues to fail to document degraded safety-related equipment in the corrective action database, there is potential that this could lead to a more significant safety concern, in that, the cause of the degradation will not be evaluated and corrected. Using NRC Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance because the finding did not result in the inoperability of safety-related relays. This finding has a problem identification and resolution crosscutting aspect associated with the corrective action program, in that, the licensee did not implement a corrective action program with a low threshold for identifying issues [P.1a] (Section 1R22.b.1).

- Green. The inspectors identified a noncited violation of 10 CFR 50.55a(f)(4)(ii) for the failure to test a safety-related check valve in accordance with the requirements of the American Society of Mechanical Engineers (ASME) Code. Specifically, the licensee tested the closure of an auxiliary feedwater pump suction check valve by injecting water into the system through a test assembly and measured the pressure increase at the test assembly. The test assembly pressure did not represent system pressure due to the test assembly setup and as a result, the test did not provide the required positive indication of check valve closure. The licensee entered the finding into the corrective action program as condition report CR-2010-000897.

  The finding was more than minor because it was associated with the human performance attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective, in that, the testing program did not ensure the availability, reliability, and capability of the auxiliary feedwater pump suction check valve. Using NRC Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance because the finding did not result in an actual loss of safety function. This finding has a human performance crosscutting aspect associated with resources because the licensee failed to provide adequate and available equipment to personnel [H.2d] (Section 1R22.b.2).

B. Licensee-Identified Violations

A violation of very low safety significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and corrective action program condition report numbers are listed in Section 4OA7.

REPORT DETAILS

Summary of Plant Status

Comanche Peak Nuclear Power Plant Unit 1 began the reporting period at 100 percent power. On January 9, 2010, the reactor tripped due to a turbine trip that resulted from a main transformer failure, (Section 4OA3.1). On January 11, 2010, the unit was synchronized to the grid and reached approximately 55 percent power on one main transformer. On January 19, 2010, the unit was shutdown for a planned outage to install a spare transformer. On January 21, 2010, the unit was synchronized to the grid and reached 100 percent power the following day. The unit operated at approximately 100 percent power for the remainder of the reporting period.

Comanche Peak Nuclear Power Plant Unit 2 operated at approximately 100 percent power for the entire reporting period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors evaluated the design, material condition, and procedures for coping with the design basis probable maximum flood. The evaluation included a review to check for deviations from the descriptions provided in the Final Safety Analysis Report for features intended to mitigate the potential for flooding from external factors. As part of this evaluation, the inspectors performed a walkdown of the 138 kV switchyard house to identify potential external flood hazards. Additionally, the inspectors performed a walkdown of the protected area to identify any modification to the site that would inhibit site drainage during a probable maximum precipitation event or allow water ingress past a barrier. The inspectors reviewed the abnormal operating procedure for mitigating the design basis flood to ensure it could be implemented as written.

These activities constitute completion of one external flooding sample as defined in Inspection Procedure 71111.01-05.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignments (71111.04)

a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- February 5, 2010, Unit 1 motor driven auxiliary feedwater 1-01 pump following pump isolation for a valve surveillance

- February 10, 2010, Unit 1 diesel generator 1-01 and the turbine driven auxiliary feedwater pump while diesel generator 1-02 was unavailable for testing

- March 9, 2010, Unit 2 centrifugal charging pump 2-01 while centrifugal charging pump 2-02 was unavailable for maintenance

The inspectors selected these systems based on their risk significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors reviewed for any discrepancies that could affect the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, Final Safety Analysis Report, technical specification requirements, outstanding work orders, condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the corrective action program with the appropriate significance characterization.

These activities constituted completion of three partial system walkdown samples as defined in Inspection Procedure 71111.04-05.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors conducted fire protection walkdowns in the following risk-significant plant areas:

- February 18, 2010, fire area EC, Units 1 and 2 train B battery rooms and uninterruptible power supply distribution rooms

- February 18, 2010, fire area EH, Units 1 and 2 train A battery rooms and uninterruptible power supply distribution rooms

- February 18, 2010, fire area EA, Units 1 and 2 electrical and control building 778' elevation

- February 18, 2010, fire zones SB5 and SB6, Unit 1 motor driven auxiliary feedwater pump rooms

The inspectors reviewed areas to assess if licensee personnel had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant; effectively maintained fire detection and suppression capability; maintained passive fire protection features in good material condition; and had implemented

adequate compensatory measures for out of service, degraded or inoperable fire protection equipment, systems, or features, in accordance with the licensee's fire plan. The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's individual plant examination of external events, their potential to affect equipment that could initiate or mitigate a plant transient, or their impact on the plant's ability to respond to a security event. The inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use, that fire detectors and sprinklers were unobstructed, that transient material loading was within the analyzed limits, and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. Specific documents reviewed during this inspection are listed in the attachment.

These activities constituted completion of four quarterly fire-protection inspection samples as defined in Inspection Procedure 71111.05-05.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors reviewed the Final Safety Analysis Report, the flooding analysis, and plant procedures to assess susceptibilities involving internal flooding. The inspectors reviewed the corrective action program to determine if licensee personnel identified and corrected flooding problems. On January 19, 2010, the inspectors performed a walkdown of the Unit 2, train B, containment spray pumps to verify the adequacy of flood control measures during maintenance on the containment spray pumps. The inspectors discussed observations with the shift manager. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one flood protection measures inspection internal flooding sample as defined in Inspection Procedure 71111.06-05.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Quarterly Licensed Operator Requalification Program Inspection

a. Inspection Scope

On February 16, 2010, the inspectors observed emergency operating procedures training of licensed operators to verify that operator training was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- Licensed operator knowledge
- Communication of risk-significant changes to procedures

- Communication of operating experience and lessons-learned
- Training met established objectives

These activities constituted completion of one quarterly licensed operator requalification program sample as defined in Inspection Procedure 71111.11.

b. Findings

No findings of significance were identified.

.2 Annual Inspection

a. Inspection Scope

The inspectors reviewed the annual operating test results for 2009. Since this was the first half of the biennial requalification cycle, the licensee was not required to administer a written examination. The inspectors assessed the results to determine if they were consistent with NUREG 1021, “Operator Licensing Examination Standards for Power Reactors,” guidance and Manual Chapter 0609, Appendix I, “Operator Requalification Human Performance Significance Determination Process,” thresholds. This review included the test results for a total of 13 crews (10 shift crews and 3 staff crews) composed of 49 senior reactor operators and 30 reactor operators. All individuals and crews passed all portions of the operating test.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors evaluated the following risk significant systems, components, and degraded performance issues:

- Unit 2 service water
- Buried piping
- Containment critical space inspections

The inspectors reviewed events where ineffective equipment maintenance has resulted in valid or invalid automatic actuations of engineered safeguards systems and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- Implementing appropriate work practices
- Identifying and addressing common cause failures
- Scoping of systems in accordance with 10 CFR 50.65(b)
- Characterizing system reliability issues for performance
- Charging unavailability for performance
- Trending key parameters for condition monitoring
- Ensuring proper classification in accordance with 10 CFR 50.65(a)(1) or (a)(2)

The inspectors verified appropriate performance criteria for structures, systems, and components classified as having an adequate demonstration of performance through preventive maintenance, as described in 10 CFR 50.65(a)(2), or as requiring the establishment of appropriate and adequate goals and corrective actions for systems classified as not having adequate performance, as described in 10 CFR 50.65(a)(1).

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified that maintenance effectiveness issues were entered into the corrective action program with the appropriate significance characterization. Specific documents reviewed during this inspection are listed in the attachment.

These activities constituted completion of three maintenance effectiveness samples as defined in Inspection Procedure 71111.12-05.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

a. Inspection Scope

The inspectors reviewed licensee personnel's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- January 29, 2010, Unit 2 turbine driven auxiliary feedwater pump unavailable with severe weather in area
- February 19, 2010, risk assessment and risk management actions associated with the heavy load movement of a new Unit 1 main transformer within the protected area
- February 22, 2010, Unit 1 train A service water freeze seal for planned maintenance
- March 11, 2010, Unit 1 train B diesel generator unavailable with work activities above the Unit 1 train A switchgear

The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that licensee personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When licensee personnel performed emergent work, the inspectors verified that the licensee personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed the technical specification requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

These activities constituted completion of four maintenance risk assessments and emergent work control inspection samples as defined in Inspection Procedure 71111.13-05.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following issues:

- CR-2009-006761, Unit 1, seal injection interruption to reactor coolant pump 1-01
- CR-2010-000280, Unit 1, auxiliary feedwater leakage to main feedwater during startup
- CR-2010-001287, Unit 2, dent in motor wrapper for valve 2-HV-2493A-MO, motor driven auxiliary feedwater pump 2-02 discharge to steam generator 2-03 isolation valve motor operator
- CR-2010-001739, Unit 1, safety injection pump 1-02 lube oil cooler service water flow indication drifting
- CR-2010-002226, Unit 1, sequencer undervoltage relays calculated pickup to dropout ratio greater than 110 percent
- CR-2010-002349, Unit 1, train A diesel generator, water in cylinder

The inspectors selected these potential operability issues based on the risk-significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that technical specification operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the technical specifications and Final Safety Analysis Report to the licensee's evaluations, to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors reviewed a sampling of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Specific documents reviewed during this inspection are listed in the attachment.

These activities constituted completion of six operability evaluation inspection samples as defined in Inspection Procedure 71111.15-05.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

To verify that the safety functions of important safety systems were not degraded, the inspectors reviewed temporary modification 35-505-35 that involved an electrical jumper between battery cells 38 and 40. The inspectors reviewed the temporary modification and the associated safety evaluation screening against the system design bases documentation, including the Final Safety Analysis Report and the technical specifications, and verified that the modifications did not adversely affect the system operability/availability. The inspectors also verified that the installation was consistent with the modification documents and that configuration control was adequate. Additionally, the inspectors verified that the temporary modification was identified on control room drawings and appropriate tags were placed on the affected equipment. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one temporary plant modification inspection sample as defined in Inspection Procedure 71111.18-05.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed the following postmaintenance activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- October 16, 2009, controller testing following calibration of pressurizer pressure control circuitry card
- January 25, 2010, centrifugal charging pump 2-01 motor oil analysis following oil change
- February 23, 2010, containment spray pump 2-03 testing following cooler clean and inspect
- March 10, 2010, diesel generator 2-02 starting air compressor 2-03 unloader and air receiver isolation solenoid operated valve testing following valve replacement and air compressor maintenance
- March 12, 2010, diesel generator 1-02 operability test following cylinder head replacement

The inspectors selected these activities based upon the structure, system, or component's ability to affect risk. The inspectors evaluated the activities to ensure the testing was adequate for the maintenance performed, the acceptance criteria were clear, and the test ensured equipment operational readiness.

The inspectors evaluated the activities against technical specifications, the Final Safety Analysis Report, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with postmaintenance tests to determine whether the licensee was identifying problems and entering them into the corrective action program and that the problems were being corrected commensurate with their importance to safety. Specific documents reviewed during this inspection are listed in the attachment.

These activities constituted completion of five postmaintenance testing inspection samples as defined in Inspection Procedure 71111.19-05.

b. Findings

Introduction. The inspectors reviewed a Green self-revealing noncited violation of Technical Specification 5.4.1.a for the failure of maintenance personnel to follow procedural requirements for carefully reinstalling a pressurizer pressure control card. As a result, when operators raised reactor coolant pressure to normal operating pressure at the end of a refueling outage, a pressurizer power operated relief valve opened due to a mispositioned gain setting on a control card.

Description. On October 16, 2009, maintenance personnel performed a calibration of a controller card that provides an input to the pressurizer spray valves, heaters, and a power operated relief valve. The maintenance activity involved the removal of the card, calibration of the card in a test fixture, and reinstallation of the card. When the card was reinstalled, the licensee determined that maintenance personnel inadvertently mispositioned the gain thumbwheel setting. On November 1, 2009, when operators raised reactor coolant pressure to normal operating pressure at the end of a refueling outage, a pressurizer power operated relief valve briefly opened due to the mispositioned gain setting. Operators took manual control of pressurizer master controller and lowered it to a value where the power operated relief valve would not be open. On November 5, 2009, operators observed 10 percent fluctuations in the pressurizer spray valves. As part of the repair activities, maintenance personnel replaced the controller card and observed that the gain was set at 9 instead of 1.

The inspectors discussed the technician's performance with maintenance supervision and determined that licensee did not provide appropriate oversight of contractor personnel performing the maintenance activity of carefully reinstalling the instrument card.

Analysis. The licensee's failure to carefully follow procedural requirements when reinstalling a control card was a performance deficiency and result in the mispositioning of a gain thumbwheel and the lifting of a pressurizer power operated relief valve. The finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone and affects the cornerstone objective to limit those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the inadvertent lifts of the power operated relief valves could lead to a loss of reactor coolant system inventory and pressure control. Using NRC Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," and assuming the worst case degradation, a stuck open power operated relief valve, the finding would result in exceeding the

technical specification limit for reactor coolant system leakage. Therefore, the finding was determined to require an Appendix A significance determination process Phase 2 analysis.

The inspectors determined that the risk from a stuck open power operated relief valve bounded the event. Therefore, the Phase 2 pre-solved table for "one power operated relief valve that fails to close" was used to evaluate the finding. The gain was misadjusted for 21 days, from October 16 through November 5, 2009. Therefore, the inspectors used the "3 - 30 days" section of the table for evaluating the finding and determined the finding was of very low safety significance. The finding has a human performance crosscutting aspect associated with work practices because the licensee did not provide appropriate oversight of contractor personnel performing the maintenance activity of inserting the instrument card [H.4c].

Enforcement. Technical Specification 5.4.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A. Regulatory Guide 1.33, Appendix A, Item 9, requires, in part, procedures for performing maintenance. Procedure INC-7722B, "Channel Calibration Pressurizer Pressure Control Channel PX-0455," Revision 0, provides instruction for channel calibration. Steps 8.9.34 and 8.9.37 require, in part, to record the gain thumbwheel setting and reinstall the card. Contrary to the above, on October 16, 2009, maintenance personnel reinstalled the card with the gain inadvertently mispositioned to 9, which ultimately caused a pressurizer power operated relief valve to momentarily open. Since the violation was of very low safety significance and was documented in the licensee's corrective action program as condition report CR-2009-006665, it is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy: NCV 05000446/2010002-01, "Mispositioned Instrument Card Setting Causes Pressurizer Power Operated Relief Valve to Open."

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the Final Safety Analysis Report, procedure requirements, technical specifications, and associated corrective action documents to ensure that the surveillance activities listed below demonstrated that the systems, structures, and/or components tested were capable of performing their intended safety functions:

Pump or Valve Inservice Test

- January 25, 2010, Unit 2 train A centrifugal charging pump inservice test in accordance with OPT-201B, "Charging System," Revision 7

Routine Surveillance Testing

- January 27, 2010, Unit 1 undervoltage relay testing in accordance with Procedure MSE-S1-0673A, "Unit 1 Train A Sequencer Undervoltage Relay Surveillance," Revision 5

- January 29, 2010, Unit 2, turbine driven auxiliary feedwater pump suction check valve test in accordance with Procedure OPT-530B, "AFW Check Valve Reverse Flow Test," Revision 2

- February 5, 2010, Unit 1, motor driven auxiliary feedwater pump train A suction check valve test in accordance with Procedure OPT-530A, “AFW Check Valve Reverse Flow Test,” Revision 2

- February 5, 2010, Unit 1, turbine driven auxiliary feedwater pump discharge to steam generator 1-04 check valve test in accordance with Procedure OPT-530A, “AFW Check Valve Reverse Flow Test,” Revision 2

- March 11, 2010, Unit 2, control rod exercising in accordance with Procedure OPT-106B, “Control Rods Exercise,” Revision 8

The inspectors either witnessed or reviewed test data to verify that the significant surveillance test attributes were adequate to address the following:

- Preconditioning
- Evaluation of testing impact on the plant
- Acceptance criteria
- Test equipment
- Procedures
- Jumper/lifted lead controls
- Test data
- Testing frequency and method demonstrated technical specification operability
- Test equipment removal
- Restoration of plant systems
- Fulfillment of ASME Code requirements
- Updating of performance indicator data
- Reference setting data
- Annunciators and alarms setpoints

Specific documents reviewed during this inspection are listed in the attachment.

These activities constituted completion of six surveillance testing inspection samples (one inservice test sample and five routine surveillance testing samples) as defined in Inspection Procedure 71111.22-05.

b. Findings

1. Failure to Initiate a Condition Report for a Degraded Undervoltage Relay

Introduction. The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion V, for the failure to follow procedures that require initiating a condition report for degradation to safety-related equipment. During a surveillance activity, maintenance personnel discovered that an undervoltage relay was outside the as-found setpoint criteria for pick-up voltage and failed to enter the condition into the corrective action program. As a result, the cause and effect of the degraded condition was not evaluated.

Description. On January 27, 2010, the inspectors observed maintenance personnel perform calibrations of undervoltage relay 27-1C/1EA1 in accordance with Procedure MSE-S1-0673A, “Unit 1 Train A Sequencer Undervoltage Relay Surveillance,” Revision 5. The inspectors observed that the relay was outside the as-found setpoint criteria for pick-up voltage. The maintenance personnel adjusted and

retested the relay. The relay as-left value was within the calibration limits. The following week, the inspectors checked the corrective action program for a condition report documenting the out-of-tolerance as-found relay and did not find one. The inspectors questioned maintenance management about the lack of a condition report for the relay and one was initiated. The licensee concluded that the system had remained operable with the relay in the as-found condition. The inspectors verified that the work order documentation for the surveillance test was complete and had been signed by a work supervisor and operations shift management. The inspectors noted that none of the personnel involved in the testing of the relay or the review of the work order package initiated a condition report for the relay outside the as-found setpoint criteria as required by Procedure STA-421, "Initiation of Condition Reports."

The inspectors determined, through discussion with licensee personnel, that the individual, involved with the performance and review of the maintenance activity did not have an adequate understanding of the threshold for the initiation of condition reports.

Analysis. The licensee's failure to initiate a condition report for degraded safety-related equipment was a performance deficiency and resulted in the failure to formally evaluate the degraded condition. The finding was more than minor because if the licensee continues to fail to document degraded safety-related equipment in the corrective action database, there is potential that this could lead to a more significant safety concern, in that, the cause of the degradation will not be evaluated and corrected. Using NRC Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance because the finding did not result in the inoperability of safety-related equipment. This finding has a problem identification and resolution crosscutting aspect associated with the corrective action program, in that, the licensee did not implement a corrective action program with a low threshold for identifying issues [P.1a].

Enforcement. Title 10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be prescribed by documented instructions of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions. Procedure STA-421, "Initiation of Condition Reports," Revision 16, Attachment 8.A, Step 6.2 required, in part, that equipment malfunctions, damage, or degradation, other than anticipated wear be documented in a condition report. Contrary to the above, on January 27, 2010, the licensee did not document equipment degradation, failure of an undervoltage relay as-found setpoint, in a condition report. Since the violation was of very low safety significance and was documented in the licensee's corrective action program as condition report CR-2010-001429, it is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy: NRC 05000445/2010002-02, "Failure to Initiate a Condition Report for a Degraded Undervoltage Relay."

2. Failure to Test a Check Valve by Positive Means

Introduction. The inspectors identified a Green noncited violation of 10 CFR 50.55a(f)(4)(ii) for the failure to test a safety-related check valve in accordance with the requirements of the ASME Code. Specifically, the licensee tested the closure of an auxiliary feedwater pump suction check valve by injecting water into the system through a test assembly and measured the pressure increase

at the test assembly. The test assembly pressure did not represent system pressure due to the test assembly setup and as a result, the test did not provide the required positive indication of check valve closure.

Description. On January 29, 2010, inspectors observed inservice testing of check valve 2AF-0032, Unit 2 turbine driven auxiliary feedwater pump suction check valve, in accordance with OPT-530B, "AFW Check Valve Reverse Flow Test," Revision 2. The licensee tested the check valve closure by pressurizing the downstream section of piping. The licensee injected water through a test assembly and measured the pressure increase using a hand held gauge attached to the test assembly.

During the test, the inspectors observed a permanent pressure gauge attached to the section of piping in order to verify the results. The pressure gauge indicated that there was no pressure increase during the test which conflicted with the licensee's results. Due to the inspectors' question, the licensee determined that the tubing used to connect the test assembly to the system caused a significant pressure drop because of its small diameter. The licensee evaluated previous test results for this check valve and other affected tests and concluded that previous tests were performed adequately because larger sized tubing with less pressure drop was used. In addition, the check valve passed a re-test with an updated test method that used the permanent pressure gauge.

The inspectors determined through interviews that the primary cause of the performance deficiency was that the correct test assembly was not available for the test.

Analysis. The licensee's failure to observe a safety-related check valve test by positive means was a performance deficiency. As a result, the testing did not provide assurance that an auxiliary feedwater pump check valve was functioning as designed. The finding was more than minor because it was associated with the human performance attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective, in that, the testing program did not ensure the availability, reliability, and capability of an auxiliary feedwater pump suction check valve. Using NRC Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance because the finding did not result in an actual loss of safety function. This finding had a human performance crosscutting aspect associated with resources because the licensee failed to provide adequate and available equipment to personnel [H.2d].

Enforcement. Title 10 CFR Part 50.55a.(f)(4)(ii), requires, in part, that inservice tests to verify operational readiness of valves whose function is required for safety be tested in accordance with the requirements of the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM) Code. The 2000 Addenda to the 1998 ASME OM Code, Subsection ISTC, "Inservice Testing of Valves in Light-Water Reactor Nuclear Power Plants," ISTC-5220, "Check Valves," ISTC-5221, "Valve Obturator Movement," paragraph (a), requires, in part, that testing shall be demonstrated by observations made by positive means. Contrary to the above, on January 29, 2010, the licensee performed a safety-related check valve test using non-positive observations. Specifically, the measured pressure in a test rig had a substantial differential pressure across it such that the measured pressure did not accurately reflect system pressure, and therefore, check valve closure. Since the

violation was of very low safety significance and was documented in the licensee's corrective action program as condition report CR-2010-000897, it is being treated as a noncited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy: NCV 05000446/20010002-03, "Failure to Test a Check Valve by Positive Means."

1EP2 Alert and Notification System Testing (71114.02)

a. Inspection Scope

The inspectors discussed with licensee staff the operability of offsite siren emergency warning systems and backup alerting methods, to determine the adequacy of licensee methods for testing the alert and notification system in accordance with 10 CFR Part 50, Appendix E. The licensee's alert and notification system testing program was compared with criteria in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1; Federal Emergency Management Agency Report REP-10, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants"; and the licensee's current Federal Emergency Management Agency approved alert and notification system design report, Alert and Notification System for CPSES Final Report, dated September 28, 2004. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one alert and notification system testing sample as defined in Inspection Procedure 71114.02-05.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation Testing (71114.03)

a. Inspection Scope

The inspectors discussed with licensee staff the operability of primary and backup systems for augmenting the on-shift emergency response staff to determine the adequacy of licensee methods for staffing emergency response facilities in accordance with their emergency plan. The inspectors reviewed the documents and references listed in the attachment to this report, to evaluate the licensee's ability to staff the emergency response facilities in accordance with the licensee's emergency plan and the requirements of 10 CFR Part 50, Appendix E. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one emergency response organization augmentation testing sample as defined in Inspection Procedure 71114.03-05.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspectors reviewed the licensee's corrective action program requirements in Procedure STA-421, "Initiation of Condition Reports," Revision 16. The inspectors reviewed summaries of 175 corrective action program documents assigned to the emergency preparedness department and emergency response organization between May 1, 2008 and February 28, 2010, and selected 39 for detailed review against the program requirements. The inspectors evaluated the response to the corrective action requests to determine the licensee's ability to identify, evaluate, and correct problems in accordance with the licensee program requirements, planning standard 10 CFR 50.47(b)(14), and 10 CFR Part 50, Appendix E. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one correction of emergency preparedness weaknesses and deficiencies sample as defined in Inspection Procedure 71114.05-05.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

On January 27, 2010, the inspectors completed the emergency preparedness component of the force-on-force exercise evaluation sample as defined in Inspection Procedure 71114.07-05 and documented the completion in NRC Inspection Report 05000445/2010201 and 05000446/2010201. In accordance with Inspection Procedure 71114.07-05, this meets the requirements of observing an emergency preparedness drill or simulator-based training evolution as required by Procedure 71114.06 and should be performed in place of that drill/training evolution every three years.

On March 10, 2010, the inspectors evaluated the conduct of a licensee emergency drill to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the simulator to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also compared any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the corrective action program. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the attachment.

These activities constituted completion of two emergency preparedness drill samples as defined in Inspection Procedure 71114.06-05.

b. Findings

No findings of significance were identified.

4OA1 Performance Indicator Verification (71151)

.1 Data Submission Issue

a. Inspection Scope

The inspectors performed a review of the data submitted by the licensee for the fourth quarter 2009 performance indicators for any obvious inconsistencies prior to its public release in accordance with NRC Inspection Manual Chapter 0608, "Performance Indicator Program."

This review was performed as part of the inspectors' normal plant status activities and, as such, did not constitute a separate inspection sample.

b. Findings

No findings of significance were identified.

.2 Unplanned Scrams per 7000 Critical Hours (IE01)

a. Inspection Scope

The inspectors sampled licensee submittals for the unplanned scrams per 7000 critical hours performance indicator for Units 1 and 2 for the period from January through December 2009. To determine the accuracy of the performance indicator data reported during those periods, performance indicator definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, was used. The inspectors reviewed the licensee's operator narrative logs, event reports and NRC integrated inspection reports to validate the accuracy of the submittals. The inspectors also reviewed the corrective action database to determine if any problems had been identified with the performance indicator data collected or transmitted for this indicator and none were identified. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of two unplanned scrams per 7000 critical hours samples as defined in Inspection Procedure 71151.05.

b. Findings

No findings of significance were identified.

.3 Unplanned Power Changes per 7000 Critical Hours (IE03)

a. Inspection Scope

The inspectors sampled licensee submittals for the unplanned power changes per 7000 critical hours performance indicator for Units 1 and 2 for the period from January through December 2009. To determine the accuracy of the performance indicator data reported during those periods, performance indicator definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, was used. The inspectors reviewed the licensee's operator narrative logs, maintenance rule records, event reports and NRC integrated inspection reports to validate the accuracy of the submittals. The inspectors also reviewed the licensee's corrective action database to determine if any problems had

been identified with the performance indicator data collected or transmitted for this indicator. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of two unplanned power changes per 7000 critical hours samples as defined in Inspection Procedure 71151.05.

.4 Unplanned Scrams with Complications (IE04)

a. Inspection Scope

The inspectors sampled licensee submittals for the unplanned scrams with complications performance indicator for Units 1 and 2 for the period from January through December 2009. To determine the accuracy of the performance indicator data reported during those periods, performance indicator definitions and guidance contained in Nuclear Energy Institute Document 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 5, was used. The inspectors reviewed the licensee’s operator narrative logs, event reports and NRC integrated inspection reports to validate the accuracy of the submittals. The inspectors also reviewed the licensee’s corrective action database to determine if any problems had been identified with the performance indicator data collected or transmitted for this indicator. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of two unplanned scrams with complications samples as defined in Inspection Procedure 71151.05.

b. Findings

No findings of significance were identified.

.5 Drill/Exercise Performance (EP01)

a. Inspection Scope

The inspectors sampled licensee submittals for the drill and exercise performance, performance indicator for the period from the second quarter 2009 through the fourth quarter 2009. To determine the accuracy of the performance indicator data reported during those periods, performance indicator definitions and guidance contained in Nuclear Energy Institute Document 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 5, was used. The inspectors reviewed the licensee’s records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the Nuclear Energy Institute guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the performance indicator; assessments of performance indicator opportunities during predesignated control room simulator training sessions, performance during the 2009 biennial exercise, and performance during other drills. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of one drill/exercise performance sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings of significance were identified.

.6 Emergency Response Organization Drill Participation (EP02)

a. Inspection Scope

The inspectors sampled licensee submittals for the emergency response organization drill participation performance indicator for the period from the second quarter 2009 through the fourth quarter 2009. To determine the accuracy of the performance indicator data reported during those periods, performance indicator definitions and guidance contained in Nuclear Energy Institute Document 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 5, was used. The inspectors reviewed the licensee’s records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the Nuclear Energy Institute guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the performance indicator, rosters of personnel assigned to key emergency response organization positions, and exercise participation records. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of one emergency response organization drill participation sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings of significance were identified.

.7 Alert and Notification System (EP03)

a. Inspection Scope

The inspectors sampled licensee submittals for the alert and notification system performance indicator for the period from the second quarter 2009 through the fourth quarter 2009. To determine the accuracy of the performance indicator data reported during those periods, performance indicator definitions and guidance contained in Nuclear Energy Institute Document 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 5, was used. The inspectors reviewed the licensee’s records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the Nuclear Energy Institute guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the performance indicator and the results of periodic alert notification system operability tests. Specific documents reviewed are described in the attachment to this report.

These activities constitute completion of one alert and notification system sample as defined in Inspection Procedure 71151-05.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Physical Protection

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's corrective action program at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. The inspectors reviewed attributes that included: the complete and accurate identification of the problem; the timely correction, commensurate with the safety significance; the evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrences reviews; and the classification, prioritization, focus, and timeliness of corrective actions. Minor issues entered into the licensee's corrective action program because of the inspectors' observations are included in the attached list of documents reviewed.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings of significance were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. The inspectors accomplished this through review of the station's daily corrective action documents.

The inspectors performed these daily reviews as part of their daily plant status monitoring activities, so these reviews and did not constitute any separate inspection samples.

b. Findings

No findings of significance were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's corrective action program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors focused their review on repetitive equipment issues, but also considered the results of daily corrective action item screening discussed in Section 4OA2.2, above, licensee trending efforts, and licensee human performance results. The inspectors nominally considered the 6-month period of the third and fourth quarter 2009, although some examples expanded beyond those dates where the scope of the trend warranted.

The inspectors also included issues documented outside the normal corrective action program in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self-assessment reports, and maintenance rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's corrective action program trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

These activities constitute completion of one semi-annual trend inspection sample as defined in Inspection Procedure 71152-05.

b. Findings

No findings of significance were identified.

4OA3 Event Followup (71153)

.1 Unit 1 Reactor Trip

a. Inspection Scope

On January 9, 2010, the Unit 1 main turbine tripped due to a pressure relay actuation on main transformer 01. The turbine trip caused an automatic reactor trip. Upon notification of the reactor trip, the inspectors responded to the control room to evaluate the plant and operator response. The inspectors performed a control board walkdown to check equipment status. The inspectors discussed the transient, plant response, and emergency operating procedure usage with shift supervision.

These activities constitute completion of one event followup inspection sample as defined in Inspection Procedure 71153-05.

b. Findings

No findings of significance were identified.

.2 (Closed) Licensee Event Report 05000446/2008002-00, P-14 Trip Function for Steam Generator 2-02 Narrow Range Level Channel Inoperable Due to Mispositioned Hand Switch

On May 22, 2008, the licensee performed a main control board walk down and identified that a steam generator level control hand switch 2-LS-0529C was in the incorrect

position. The incorrectly positioned hand switch caused the high-high level trip function for steam generator 2-02, protection set 1, narrow range level channel to be inoperable. The licensee determined that the switch had been in the incorrect position from May 14, 2008 to May 22, 2008, which exceeded the technical specification allowed outage time. The inspectors reviewed condition report CR-2008-001804 that documented the event. The licensee issued a shift order defining specific switch restoration requirements in the channel operational test procedure. In addition, the licensee revised procedures that involve manipulation of the steam generator level control switches, enhanced labeling on the steam generator level control hand switches, and reviewed the operation's training material associated with the steam generator water level control to ensure that it adequately addressed the technical specification requirements. The enforcement aspects of this license event report are discussed in Section 4OA7. This licensee event report is closed.

These activities constitute completion of one event followup inspection sample as defined in Inspection Procedure 71153-05.

4OA6 Meetings

Exit Meeting Summary

On January 19, 2010, the inspectors discussed the inspection results of the licensed operator requalification program annual operating test with Mr. S. Feemster, Operations Training Simulator Instructor. The licensee acknowledged the results. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

On March 4, 2010, the inspectors presented the onsite emergency preparedness inspection results to Mr. R. Flores, Senior Vice President and Chief Nuclear Officer, and other members of the licensee's staff. The licensee acknowledged the issues presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

On March 30, 2010, the inspectors presented the resident inspection results to Mr. R. Flores, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors acknowledged review of proprietary material during the inspection. No proprietary information has been included in the report.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (Green) was identified by the licensee and was a violation of NRC requirements which meet the criteria of Section VI.A.1 of the NRC Enforcement Policy, for being dispositioned as a noncited violation.

Technical Specification Limiting Condition for Operation 3.3.2 Condition I requires, in part, that with one channel of instrumentation inoperable, place the channel in trip in 72 hours or be in Mode 3 in 78 hours. Contrary to the above, between May 14 and May 22, 2008, the licensee placed steam generator level control hand switch 2-LS-0529C in the 2-LY-0529 position which caused the high-high level trip function for SG 2-02, protection set 1, narrow range level channel to be inoperable and failed to

place the channel in trip in 72 hours or be in Mode 3 in 78 hours. The licensee documented the violation in the corrective action program as condition report CR-2008-001804. The violation was determined to be of very low safety significance because it did not represent an actual loss of safety function of a single train of equipment. This is the enforcement aspect of the licensee event report discussed in Section 4OA3.2.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

R. Flores, Senior Vice President and Chief Nuclear Officer
M. Lucas, Site Vice President
S. Bradley, Manager, Radiation Protection
D. Fuller, Manager, Emergency Preparedness
T. Hope, Manager, Nuclear Licensing
D. Kross, Plant Manager
F. Madden, Director, Oversight and Regulatory Affairs
B. Mays, Director, Site Engineering
B. Patrick, Director, Maintenance
S. Sewell, Director, Operations
K. Tate, Manager, Security
D. Wilder, Manager, Plant Support

NRC Personnel

J. Kramer, Senior Resident Inspector
B. Tindell, Resident Inspector

LIST OF ITEMS OPENED AND CLOSED

Opened and Closed

05000446/2010002-01	NCV	Mispositioned Instrument Card Setting Causes Pressurizer Power Operated Relief Valve to Open (Section 1R19)
05000445/2010002-02	NCV	Failure to Initiate a Condition Report for Degraded Undervoltage Relay (Section 1R22.b.1)
05000446/2010002-03	NCV	Failure to Test a Check Valve by Positive Means (Section 1R22.b.2)

Closed

05000446/2008002-00	LER	P-14 Trip Function for Steam Generator 2-02 Narrow Range Level Channel Inoperable Due to Mispositioned Hand Switch (Section 4OA3.2)

LIST OF DOCUMENTS REVIEWED

Section 1RO1: Adverse Weather Protection

CONDITION REPORTS

2010-002078

Section 1RO4: Equipment Alignments

PROCEDURES/DOCUMENTS

NUMBER	TITLE	REVISION
OPT-201B-1	Train A Valve Position Data Sheet	4

DRAWINGS

NUMBER	TITLE	REVISION
M2-0234	Flow Diagram Station Service Water System	CP-8
M2-0254	Flow Diagram Chemical and Volume Control System Volume Control Tank Loop	CP-24
M2-0261	Flow Diagram Safety Injection System Sheet 1	Cp-15

Section 1RO5: Fire Protection

PROCEDURES

NUMBER	TITLE	REVISION
FPI-501	Fire Preplan Instruction Manual, Electrical and Control Building	4
ABN-806A	Response to Fire in the Electrical and Control Building	6
ABN-806B	Response to Fire in the Electrical and Control Building	4

MISCELLANEOUS

NUMBER	TITLE	REVISION
2323-ES-100	Separation Criteria	91

CONDITION REPORT

2010-001707

Section 1RO6: Flood Protection Measures

CONDITION REPORT

2010-001840

Section 1R11: Licensed Operator Requalification Program

PROCEDURES

NUMBER	TITLE	REVISION
EOP-1.0A	Loss of Reactor or Secondary Coolant	8
EOS-1.2A	Post LOCA Cooldown and Depressurization	8
EOS-1.3A	Transfer to Cold Leg Recirculation	8
EOS-1.4A	Transfer to Hot Leg Recirculation	8
ECA-1.1A	Loss of Emergency Coolant Recirculation	8
ECA-1.2A	LOCA Outside Containment	8

Section 1R12: Maintenance Effectiveness

PROCEDURES

NUMBER	TITLE	REVISION
OPT-305	Containment Closeout Inspection	11
NQA 3.09-9.03	Inspection of Critical Spaces	7

CONDITION REPORTS

2009-006540 2010-002128

WORK ORDERS

3497112

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

PROCEDURE

NUMBER	TITLE	REVISION
STA-604	Configuration Risk Management and Work Scheduling	8
MSM-G0-0205	Freeze Seal Formation and Maintenance	6

CONDITION REPORTS

2010-002449 2010-001966 2009-008938

Section 1R15: Operability Evaluations

PROCEDURES

NUMBER	TITLE	REVISION
MSM-C0-3831	Emergency Diesel Engine Cylinder Head Maintenance	3

CONDITION REPORTS

2009-005169	2010-000669	2010-000280	2008-003293

Section 1R18: Plant Modifications

PROCEDURES

NUMBER	TITLE	REVISION
STA-602	Temporary Modifications and Transient Equipment Placements	16

CONDITION REPORTS

2008-002132

Section 1R19: Postmaintenance Testing

PROCEDURE

NUMBER	TITLE	REVISION
OPT-517B	DG Starting Air Receiver Check Valve Test	7
OPT-214A	Diesel Generator Operability Test	19
TSP-514	Lubricant Analysis Program	3
TDM-302B	RCS/RHR Controller Data	1
ALM-0053B	Alarm Procedure 2-ALB-5C	2

WORK ORDERS

3842446	3693832	3705227

CONDITION REPORTS

2010-000741	2010-000742	2009-006924

Section 1R22: Surveillance Testing

PROCEDURES

NUMBER	TITLE	REVISION
OPT-201B	Charging System	7
	Inservice Test Plan	4

CONDITION REPORTS

2010-000897

WORK ORDERS

3835601 3882319

Section 1EP2: Alert Notification System Testing

DOCUMENTS

NUMBER	TITLE	REVISION
Staff Guideline 012	Alert and Notification System Surveillance	15
STA-662	Administrative Control of Siren System	0

Section 1EP3: Emergency Response Organization Augmentation Testing

DOCUMENTS

NUMBER	TITLE	REVISION
Staff Guideline 005	Quarterly Augmentation Verification of the Emergency Response Organization	12
Drill	Quarterly Augmentation Verification	March 11, 2009
Drill	Quarterly Augmentation Verification	December 17, 2009

Section 1EP5: Correction of Emergency Preparedness Weaknesses and Deficiencies

DOCUMENTS

NUMBER	TITLE	REVISION
STA-421	Initiation of Condition Reports	16

DOCUMENTS

NUMBER	TITLE	REVISION
Drill	Communications Drill	January 30, 2008 April 30, 2008 June 30, 2008 October 28, 2008
Drill	Communications Drill	February 25, 2009 May 26, 2009 September 9, 2009 December 15, 2009
Drill	Health Physics Drill	November 18, 2008 May 20, 2009
Drill	Radiation Monitoring Drill	July 7, 2008 August 4, 2008 November 17, 2008
Drill	Radiation monitoring Drill	April 16, 2009 April 23, 2009 May 14, 2009
Drill	Contaminated Injured Person Drill	Nov-Dec 2008 July-Aug 2009
Exercise	Blue Team Dress Rehearsal Exercise	February 10, 2009
Exercise	Gold Team Exercise	May 20, 2009
Exercise	Green Team Exercise	August 12, 2009
Exercise	Red Team Exercise	November 11, 2009
QA Surveillance	Various dates	April 30, 2008 May 28, 2008 August 13, 2008
QA Surveillance	Various dates	April 1, 2009 May 6, 2009 July 16, 2009 November 12, 2009
SA-2008-004	2008 Self Assessment of CPSES Emergency Response Organization	2008
SA-2009-002	Emergency Preparedness Program Assessment	November 16-19, 2009

CONDITION REPORTS

2008-001701	2008-001710	2008-001925	2008-002003
2008-002637	2008-002647	2008-003381	2008-003555
2008-004060	2008-004094	2009-000046	2009-000481
2009-001261	2009-001347	2009-001403	2009-001541
2009-001720	2009-001734	2009-001742	2009-002123
2009-002268	2009-002496	2009-002829	2009-003234
2009-003428	2009-003593	2009-003876	2009-003877
2009-003878	2009-004096	2009-004735	2009-005434
2009-005461	2009-006800	2009-006862	2010-001310
2010-001334	2010-001537	2010-002052	

Section 4OA1: Performance Indicator Verification

DOCUMENTS

NUMBER	TITLE	REVISION
Staff Guideline 020	NRC Performance Indicators	13
Staff Guideline 021	Development of Drill/Exercise Book and Drill/Exercise Summary Reports	12

MISCELLANEOUS DOCUMENTS

NUMBER	TITLE	REVISION
Plan	Comanche Peak Emergency Plan	37
EPP-100	Maintaining Emergency Preparedness	7
Eval-2008-001	Emergency Preparedness	
Eval-2008-020	Emergency Preparedness	
Eval-2009-001	Emergency Preparedness	
Eval-2009-010	Loss Prevention	
Eval-200-012	Loss Prevention	

Section 4OA2: Identification and Resolution of Problems

CONDITION REPORTS

2009-001100	2009-008260	2009-008267	2009-008610
2010-000205			