

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 612 EAST LAMAR BLVD, SUITE 400 ARLINGTON, TEXAS 76011-4125

January 24, 2011

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 05000445/2010005 AND 05000446/2010005

Dear Mr. Flores:

On December 31, 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 January 10, 2011, with Mr. M. Lucas, Site Vice President, 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 finding of very low safety significance (Green). The finding was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it was entered into your corrective action program, the NRC is treating the finding as a noncited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy. If you contest the noncited violation or the significance of the noncited violation, 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. In addition, if you disagree with the cross-cutting aspect of the 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.

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 05000445/2010005 and 05000446/2010005

w/Attachment: Supplemental Information

cc w/Enclosure:

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ROPreports

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 50-445, 50-446

License: NPF-87, NPF-89

Report: 05000445/2010005 and 05000446/2010005

Licensee: Luminant Generation Company LLC

Facility: Comanche Peak Nuclear Power Plant, Units 1 and 2

Location: FM-56, Glen Rose, Texas

Dates: September 19 through December 31, 2010

Inspectors: J. Kramer, Senior Resident Inspector

B. Tindell, Resident Inspector

J. Dixon, Senior Resident Inspector, South Texas Project B. Tharakan, Resident Inspector, South Texas Project

L. Micewski, Project Engineer

C. Alldredge, Nuclear Safety Professional Development Program

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L. Carson II, Senior Health Physicist

C. Graves, Health PhysicistD. Stearns, Health PhysicistC. Denissen, Reactor Engineer

Approved By: Wayne Walker, Chief, Project Branch A

Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000445/2010005, 05000446/2010005; 09/19/2010 - 12/31/2010; Comanche Peak Nuclear Power Plant, Units 1 and 2; Identification and Resolution of Problems.

The report covered a 3-month period of inspection by resident inspectors and announced baseline inspections by region based inspectors. One Green noncited violation was 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 to establish controls for grounded test equipment. As a result, the test equipment caused a ground interaction that degraded safety-related instrumentation. The licensee entered the finding into the corrective action program as Condition Report CR-2009-008643.

The finding was more than minor because it was associated with the procedure quality attribute of the initiating events cornerstone and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability. Specifically, grounding interactions caused by test equipment resulted in instrument channel deviations and unintended control rod movement. 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 contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment would not be available. The finding has a problem identification and resolution crosscutting aspect associated with the corrective action program because the licensee failed to thoroughly evaluate the problem and identify the cause of the issue IP.1cl (Section 4OA2).

B. Licensee-Identified Violations

None.

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REPORT DETAILS

Summary of Plant Status

Comanche Peak Nuclear Power Plant Unit 1 began the reporting period at 100 percent power. On October 29, 2010, power was reduced to approximately 55 percent power for turbine valve testing and to perform maintenance on main feedwater pump B. The unit returned to 100 percent power the following day and operated at approximately 100 percent power for the remainder of the reporting period.

Comanche Peak Nuclear Power Plant Unit 2 began the reporting period at 100 percent power. On November 13, 2010, power was reduced to approximately 73 percent power for turbine valve testing. The unit returned to 100 percent power the same day and operated at approximately 100 percent power for the remainder of the 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 performed a review of the licensee's adverse weather procedures for seasonal extreme low temperatures. The inspectors verified that weather-related equipment deficiencies identified during the previous year were corrected prior to the onset of low temperatures and evaluated the implementation of the adverse weather preparation procedures and compensatory measures.

The inspectors focused on plant-specific design features and the licensee's procedures used to mitigate or respond to adverse weather conditions. The inspectors placed additional emphasis on fire protection, service water, and the diesel generators. The inspectors reviewed the Final Safety Analysis Report and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant-specific procedures. Specific documents reviewed during this inspection are listed in the attachment. The inspectors also reviewed corrective action program items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their corrective action program in accordance with station corrective action procedures.

These activities constitute completion of one readiness for seasonal adverse weather sample as defined in Inspection Procedure 71111.01-05.

b. Findings

No findings were identified.

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1R04 Equipment Alignments (71111.04)

.1 Partial Walkdown

a. Inspection Scope

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

- November 4, 2010, Unit 1 diesel generator 1-02 when diesel generator 1-01 was unavailable for maintenance
- December 14, 2010, the switchyard and 6.9 kV busses when transformer XST-2 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 focused on 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 constitute completion of two partial system walkdown samples as defined in Inspection Procedure 71111.04-05.

b. Findings

No findings were identified.

.2 Complete Walkdown

a. Inspection Scope

On November 19, 2010, the inspectors performed a complete system alignment inspection of the main steam system to verify the functional capability of the system. The inspectors selected this system because it was considered both safety-significant and risk-significant in the licensee's probabilistic risk assessment. The inspectors walked down the system to review mechanical and electrical equipment line ups, electrical power availability, system pressure and temperature indications, as appropriate, component labeling, component lubrication, component and equipment cooling, hangers and supports, operability of support systems, and to ensure that ancillary equipment or debris did not interfere with equipment operation. The inspectors reviewed a sample of past and outstanding work orders to determine whether any

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deficiencies significantly affected the system function. In addition, the inspectors reviewed the corrective action program database to ensure that system equipment alignment problems were being identified and appropriately resolved. Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one complete system walkdown sample as defined by IP 71111.04-05.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

a. <u>Inspection Scope</u>

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

- September 26, 2010, fire zone SB4, Unit 1 pipe tunnel and storage tanks
- October 22, 2010, fire zone 1SK17C, Unit 1 main steam penetration area
- October 22, 2010, fire zone 2SK17C, Unit 2 main steam penetration area
- December 18, 2010, fire area SD, Unit 2 810 foot electrical equipment area

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.

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

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

On November 19, 2010, the inspectors performed a walkdown of the auxiliary building 810 foot elevation to verify the adequacy of flood control measures. The inspectors

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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. The inspectors discussed observations with licensee personnel. Specific documents reviewed during this inspection are listed in the attachment.

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

b. <u>Findings</u>

No findings were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspectors reviewed licensee programs, verified performance against industry standards, and reviewed critical operating parameters and maintenance records for the safety injection pump lube oil coolers. The inspectors verified the licensee utilized the periodic maintenance method outlined in Electric Power Research Institute Report NP 7552, "Heat Exchanger Performance Monitoring Guidelines." In addition, the inspectors verified the licensee properly utilized biofouling controls; the licensee's heat exchanger inspections adequately assessed the state of cleanliness of their tubes; and the heat exchanger was correctly categorized under 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." Specific documents reviewed during this inspection are listed in the attachment.

These activities constitute completion of one heat sink inspection sample as defined by Inspection Procedure 71111.07-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

On October 25, 2010, the inspectors observed a crew of licensed operators in the plant's simulator to verify that operator performance 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 performance
- Crew's clarity and formality of communications
- Crew's ability to take timely actions in the conservative direction
- Crew's prioritization, interpretation, and verification of annunciator alarms
- Crew's correct use and implementation of abnormal and emergency procedures
- Control board manipulations
- Oversight and direction from supervisors
- Crew's ability to implement appropriate emergency plan actions and notifications

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The inspectors compared the crew's performance in these areas to pre-established operator action expectations and successful critical task completion requirements.

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

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. <u>Inspection Scope</u>

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

- Unit 1 residual heat removal
- Unit 1 component cooling water
- 6.9 kV breakers

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 constitute completion of three maintenance effectiveness samples as defined in Inspection Procedure 71111.12-05.

b. Findings

No findings were identified.

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1R13 Maintenance Risk Assessments and Emergent Work Control (7111.13)

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:

- October 20, 2010, Unit 2, alternate offsite power source to 6.9 kV bus 2EA2 inoperable and shifting the 6.9 kV bus to the alternate feed and back
- December 7, 2010, Units 1 and 2, offsite power transformer XST-1 inoperable for maintenance

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 constitute completion of two maintenance risk assessments and emergent work control inspection samples as defined in Inspection Procedure 71111.13-05.

b. Findings

No findings were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following issues:

- CR-2010-000915, pin hole leak on weld in station service water screenwash piping
- CR-2010-005737, service water pump packing adjustment
- CR-2010-008861, refueling water purification class 5 piping connected to refueling water storage tank class 2 piping

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

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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 constitute completion of three operability evaluation inspection samples as defined in Inspection Procedure 71111.15-05.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

The inspectors reviewed a temporary modification to the Unit 1 train B safeguards sump. 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 modification did not adversely affect the system operability/availability. The inspectors also verified that the installation and restoration were 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, appropriate tags were placed on the affected equipment, and licensee personnel evaluated the combined effects on mitigating systems and the integrity of radiological barriers.

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

b. Findings

No findings 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:

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- September 26, 2010, Unit 2, oil pump operation and leak check following maintenance to the isolation valve for pressure indicator 2-PI-5388A, centrifugal charging pump 2-02 lube oil filter inlet
- October 4, 2010, Unit 2, valve 2-HV-4393, diesel generator 2-01 jacket water cooler service water return valve, testing following valve maintenance
- October 14, 2010, Unit 1, containment hydrogen sensor calibration assembly maintenance and channel 1128A catalytic recombiner product gas hydrogen and oxygen analyzer calibration
- October 20, 2010, Unit 2, shifting 6.9 kV bus to the alternate feed and back following breaker 2EA2-2, startup transformer to 6.9 kV switchgear 2EA2 alternate feed, replacement
- October 29, 2010, Unit 1, valve 1-FCV-0530, feedwater flow control to steam generator 1-03 valve, positioner testing following valve positioner replacement
- November 5, 2010, Unit 1, diesel generator 1-01 testing following generator load sensor replacement and digital governor replacement
- December 9, 2010, Unit 2, phase rotation testing of the alternate power generators following installation

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 constitute completion of seven postmaintenance testing inspection samples as defined in Inspection Procedure 71111.19-05.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. <u>Inspection Scope</u>

The inspectors reviewed the Final Safety Analysis Report, procedure requirements, technical specifications, and corrective action documents to ensure that the surveillance

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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

 October 13, 2010, Unit 1, inservice test on diesel generator 1-01 starting air receiver check valve in accordance with procedure OPT-517A, "DG Starting Air Receiver Check Valve Test," Revision 8

Reactor Coolant System Leakage Detection Surveillance Testing

 December 15, 2010, Units 1 and 2, reactor coolant system leak-rate detection surveillance test in accordance with procedure OPT-303, "Reactor Coolant System Water Inventory," Revision 13

Routine Surveillance Testing

 December 22, 2010, Unit 1, control room technical specification surveillance logs in accordance with procedure OPT-102A, "Operations Shiftly Routine Tests," Revision 14

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 constitute completion of three surveillance testing inspection samples (one inservice test sample, one reactor coolant system leakage sample, and one routine surveillance testing sample) as defined in Inspection Procedure 71111.22-05.

b. Findings

No findings were identified.

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1EP04 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors performed an in office review of the Comanche Peak Nuclear Power Plant Emergency Plan, Revision 38 and Procedure EPP-201, "Assessment of Emergency Action Levels Emergency Classification and Plan Activation," Revision 12, both submitted by letter, dated December 2, 2010. The revisions to these documents implemented the Nuclear Energy Institute Report 99-01, Revision 5, "Methodology for Development of Emergency Action Levels," February 2008 (ML080450149). Comanche Peak received approval to implement this emergency action level methodology in a safety evaluation report dated May 17, 2010 (ML100850115).

The revisions were compared to the criteria of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, to Nuclear Energy Institute Report 99-01, "Methodology for Development of Emergency Action Levels," Revision 5, and to the standards in 10 CFR 50.47(b) to determine if the revision adequately implemented the requirements of 10 CFR 50.54(q). This review was not documented in a safety evaluation report; therefore, these documents are subject to future inspection.

These activities constitute completion of two emergency action level and emergency plan change samples as defined in Inspection Procedure 71114.04-05.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstones: Occupational and Public Radiation Safety

2RS06 Radioactive Gaseous and Liquid Effluent Treatment (71124.06)

a. Inspection Scope

This area was inspected to: (1) ensure the gaseous and liquid effluent processing systems are maintained so radiological discharges are properly mitigated, monitored, and evaluated with respect to public exposure; (2) ensure abnormal radioactive gaseous or liquid discharges and conditions, when effluent radiation monitors are out-of-service, are controlled in accordance with the applicable regulatory requirements and licensee procedures; (3) verify the licensee's quality control program ensures the radioactive effluent sampling and analysis requirements are satisfied so discharges of radioactive materials are adequately quantified and evaluated; and (4) verify the adequacy of public dose projections resulting from radioactive effluent discharges. The inspectors used the requirements in 10 CFR Part 20; 10 CFR Part 50, Appendices A and I; 40 CFR Part 190; the Offsite Dose Calculation Manual, and licensee procedures required by the technical specifications as criteria for determining compliance. The inspectors interviewed licensee personnel and reviewed and/or observed the following items:

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- Radiological effluent release reports since the previous inspection and reports related to the effluent program issued since the previous inspection, if any
- Effluent program implementing procedures, including sampling, monitor setpoint determinations and dose calculations
- Equipment configuration and flow paths of selected gaseous and liquid discharge system components, filtered ventilation system material condition, and significant changes to their effluent release points, if any, and associated 10 CFR 50.59 reviews
- Selected portions of the routine processing and discharge of radioactive gaseous and liquid effluents (including sample collection and analysis)
- Controls used to ensure representative sampling and appropriate compensatory sampling
- Results of the inter-laboratory comparison program
- Effluent stack flow rates
- Surveillance test results of technical specification required ventilation effluent discharge systems since the previous inspection
- Significant changes in reported dose values, if any
- A selection of radioactive liquid and gaseous waste discharge permits
- 10 CFR Part 61 analyses and methods used to determine which isotopes are included in the source term
- Offsite dose calculation manual changes, if any
- Meteorological dispersion and deposition factors
- Latest land use census
- Records of abnormal gaseous or liquid tank discharges, if any
- Groundwater monitoring results
- Changes to the licensee's written program for indentifying and controlling contaminated spills/leaks to groundwater, if any
- Identified leakage or spill events and entries made into 10 CFR 50.75 (g) records, if any, and associated evaluations of the extent of the contamination and the radiological source term
- Offsite notifications and reports of events associated with spills, leaks, or groundwater monitoring results, if any

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 Audits, self-assessments, reports, and corrective action documents related to radioactive gaseous and liquid effluent treatment since the last inspection

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

These activities constitute completion of the one radioactive gaseous and liquid effluent treatment sample as defined in Inspection Procedure 71124.06-05.

b. Findings

No findings were identified.

2RS07 Radiological Environmental Monitoring Program (71124.07)

a. <u>Inspection Scope</u>

This area was inspected to: (1) ensure that the radiological environmental monitoring program verifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid effluent release program; (2) verify that the radiological environmental monitoring program is implemented consistent with the licensee's technical specifications and/or offsite dose calculation manual, and to validate that the radioactive effluent release program meets the design objective contained in Appendix I to 10 CFR Part 50; and (3) ensure that the radiological environmental monitoring program monitors non-effluent exposure pathways, is based on sound principles and assumptions, and validates that doses to members of the public are within the dose limits of 10 CFR Part 20 and 40 CFR Part 190, as applicable. The inspectors reviewed and/or observed the following items:

- Annual environmental monitoring reports and offsite dose calculation manual
- Selected air sampling and thermoluminescence dosimeter monitoring stations
- Collection and preparation of environmental samples
- Operability, calibration, and maintenance of meteorological instruments
- Selected events documented in the annual environmental monitoring report which involved a missed sample, inoperable sampler, lost thermoluminescence dosimeter, or anomalous measurement
- Selected structures, systems, or components that may contain licensed material and has a credible mechanism for licensed material to reach ground water
- Records required by 10 CFR 50.75(g)
- Significant changes made by the licensee to the offsite dose calculation manual as the result of changes to the land census or sampler station modifications since the last inspection

- 14 - Enclosure

- Calibration and maintenance records for selected air samplers, composite water samplers, and environmental sample radiation measurement instrumentation
- Inter-laboratory comparison program results
- Audits, self-assessments, reports, and corrective action documents related to the radiological environmental monitoring program since the last inspection

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

These activities constitute completion of the one radiological environmental monitoring program sample as defined in Inspection Procedure 71124.07-05.

b. Findings

No findings were identified.

2RS08 Radioactive Solid Waste Processing, and Radioactive Material Handling, Storage, and Transportation (71124.08)

a. <u>Inspection Scope</u>

This area was inspected to verify the effectiveness of the licensee's programs for processing, handling, storage, and transportation of radioactive material. The inspectors used the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations contained in 49 CFR Parts 171-180 for determining compliance. The inspectors interviewed licensee personnel and reviewed the following items:

- The solid radioactive waste system description, process control program, and the scope of the licensee's audit program
- Control of radioactive waste storage areas including container labeling/marking and monitoring containers for deformation or signs of waste decomposition
- Changes to the liquid and solid waste processing system configuration including a review of waste processing equipment that is not operational or abandoned in place
- Radio-chemical sample analysis results for radioactive waste streams and use of scaling factors and calculations to account for difficult-to-measure radionuclides
- Processes for waste classification including use of scaling factors and 10 CFR Part 61 analysis
- Shipment packaging, surveying, labeling, marking, placarding, vehicle checking, driver instructing, and preparation of the disposal manifest
- Audits, self-assessments, reports, and corrective action reports radioactive solid waste processing, and radioactive material handling, storage, and transportation performed since the last inspection

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

These activities constitute completion of the one radioactive solid waste processing, and radioactive material handling, storage, and transportation sample as defined in Inspection Procedure 71124.08-05.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

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

40A1 Performance Indicator Verification (71151)

.1 <u>Data Submission Issue</u>

a. Inspection Scope

The inspectors performed a review of the data submitted by the licensee for the third quarter 2010 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 were identified.

.2 Mitigating Systems Performance Index - Residual Heat Removal System (MS09)

a. Inspection Scope

The inspectors sampled licensee submittals for the mitigating systems performance index residual heat removal system performance indicator for Units 1 and 2 for the period from the fourth quarter 2009 through the third quarter 2010. 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 6, and NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," definitions and guidance were used. The inspectors reviewed the licensee's operator narrative logs, operability assessments, maintenance rule records, maintenance work orders, issue reports, event reports and NRC integrated inspection reports for the period of fourth quarter 2009 through the third quarter 2010 to validate the accuracy of the submittals. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the performance indicator data collected or

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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 mitigating systems performance index residual heat removal system samples as defined by Inspection Procedure 71151-05.

b. Findings

No findings were identified.

.3 Mitigating Systems Performance Index - Cooling Water Systems (MS10)

a. Inspection Scope

The inspectors sampled licensee submittals for the mitigating systems performance index cooling water systems performance indicator for Units 1 and 2 for the period from the fourth quarter 2009 through the third quarter 2010. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6. The inspectors reviewed the licensee's operator narrative logs, event reports and NRC integrated inspection reports for the period of the fourth quarter 2009 through the third quarter 2010 to validate the accuracy of the submittals. The inspectors reviewed the mitigating systems performance index component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable Nuclear Energy Institute guidance. The inspectors also reviewed the licensee's issue report 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 mitigating systems performance index-cooling water systems samples as defined in Inspection Procedure 71151-05.

b. Findings

No findings were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

a. <u>Inspection Scope</u>

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

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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. <u>Findings</u>

No findings 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. <u>Findings</u>

No findings were identified.

.3 Selected Issue Follow-up Inspection

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's corrective actions with regard to a potential channel independence issue with channels III and IV of Unit 2 containment pressure instruments. The inspectors reviewed documents and interviewed personnel to determine if the licensee completely and accurately identified problems in a timely manner commensurate with its significance, evaluated and dispositioned operability issues, considered the extent of condition, prioritized the problem commensurate with its safety significance, identified root and contributing causes of significant conditions adverse to quality, identified appropriate corrective actions, and completed corrective actions in a timely manner commensurate with the safety significance of the issue.

These activities constitute completion of one in-depth problem identification and resolution sample as defined in Inspection Procedure 71152-05.

b. Findings

<u>Introduction</u>. The inspectors reviewed a Green self-revealing noncited violation of Technical Specification 5.4.1.a for the failure to establish controls for grounded test

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equipment. As a result, the test equipment caused a ground interaction that degraded safety-related instrumentation.

<u>Description</u>. On December 14, 2009, while performing Unit 2 nonsafety instrument calibrations, the plant computer alarmed as a result of channel IV containment pressure diverging from the other 3 channels. In addition, operators observed that the channel IV reactor coolant system cold leg temperature channel had diverged. The licensee declared the channels inoperable and stopped the calibration. The channels then returned to previous normal indication.

The licensee performed a root cause evaluation of the event. The licensee discovered that the test equipment used for the calibration grounded the nonsafety instrumentation, which was normally ungrounded. This produced noise on the plant ground. The licensee discovered a ground on the containment pressure channel cable shield which allowed the ground noise to propagate to the channel. The inspectors determined that an isolation amplifier between the safety-related portion of the channel and the ground isolated the noise to the nonsafety-related portion of the channel. The licensee also determined that the channel IV temperature instrument was susceptible to noise due to a filter on an instrument card. The licensee determined that lack of procedural controls contributed to the event because the procedure did not prohibit using grounded test equipment on ungrounded systems.

The inspectors determined that the grounding interaction had the potential to upset plant stability because in 2006, a similar calibration resulted in inadvertent control rod movement. In addition, industry operating experience indicated that electrical noise can induce inadvertent reactor trips. The inspectors also determined that in this case, no mitigation equipment was affected because the safety-related portion of the containment pressure channel was unaffected and the cold leg temperature channel was biased in the conservative direction.

The inspectors determined that the licensee failed to thoroughly evaluate the problem in 2006 when the ground noise caused unintended control rod movement and again in 2008 when the calibration caused instrument divergence.

Analysis. The licensee's failure to establish controls for grounded test equipment was a performance deficiency and resulted in a grounding interaction that affected safety-related equipment. The performance deficiency was more than minor because it was associated with the procedure quality attribute of the initiating events cornerstone and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability. Specifically, grounding interactions caused by test equipment resulted in instrument channel deviations and unintended control rod movement. 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 contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment would not be available. The finding has a problem identification and resolution crosscutting aspect associated with the corrective action program because the licensee failed to thoroughly evaluate the problem and identify the cause of the issue [P.1c].

<u>Enforcement</u>. Technical Specification 5.4.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures

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recommended in Regulatory Guide 1.33, "Quality Assurance Program Requirements," Revision 2, Appendix A. Regulatory Guide 1.33, Revision 2, Appendix A, Item 9, requires, in part, procedures for performing maintenance to be appropriate to the circumstances. Contrary to the above, on December 14, 2009, the licensee failed to provide procedures for maintenance that were appropriate to the circumstances. Specifically, the licensee failed to provide controls that prevented the use of grounded test equipment on floating ground systems. Since the violation was of very low safety significance and was documented in the licensee's corrective action program as Condition Report CR-2009-008643, it is being treated as a noncited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000446/2010005-01, "Inadequate Control of Test Equipment Causes Ground Interaction."

4OA3 Event Followup (71153)

.1 (Closed) Licensee Event Report 05000446/2009001-00, Unit 2 Gamma-Metrics Calibration Impact on Containment Pressure and RCS Tcold

On December 19, 2009, the licensee received plant computer alarms which led to the discovery that Unit 2 containment pressure channel IV, and channel IV of the overtemperature N-16 and overpower N-16 reactor trips were inoperable due to fluctuating indications. The licensee determined that test equipment used to calibrate gamma-metrics caused the indications by inducing noise on the plant ground. The enforcement aspects of this licensee event report are discussed in Section 4OA2.3 of this report. This licensee event report is closed.

.2 (Closed) Licensee Event Report 05000446/2010002-00, Unit 2 EDG 2-02 Inoperable Due to Remaining in Droop Mode Versus Isochronous Mode

On July 29, 2010, the licensee completed an evaluation that concluded that the Unit 2 diesel generator 2-02 was inoperable during the period from September 8, 2008, to September 20, 2009, as a result of being in the droop mode during isochronous operations. The licensee determined that the diesel was in the droop mode due to a high-resistance contact that was corrected on October 15, 2009. The enforcement aspects were addressed in NRC Inspection Report 05000445/2010004; 05000446/2010004. This licensee event report is closed.

These activities constitute completion of two event follow up inspection samples as defined in Inspection Procedure 71153-05.

40A6 Meetings

Exit Meeting Summary

On December 9, 2010, the inspectors presented the results of the radiation safety inspections to Mr. J. Taylor, Manager, Technical Support, and other members of the licensee 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 December 21, 2010, the inspectors conducted a telephonic exit meeting to present the results of the in office inspection of changes to the licensee's emergency plan and emergency action levels to Mr. D. Wilder, Director, Plant Support, and other members of

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the licensee's staff. The licensee acknowledged the issues presented. The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

On January 10, 2011, the inspectors presented the resident inspection results to Mr. M. Lucas, Site Vice President, 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.

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SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

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

Opened and Closed

- K. Tate, Manager, Security
- J. Taylor, Manager, Technical Support
- D. Wilder, Director, Plant Support

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u> </u>		
05000446/2010005-01	NCV	Inadequate Control of Test Equipment Causes Ground Interaction (Section 4OA2.3)
Closed		
05000446/2009001-00	LER	Unit 2 Gamma-Metrics Calibration Impact on Containment Pressure and RCS Tcold (Section 4OA3.1)
05000446/2010002-00	LER	Unit 2 Diesel Generator 2-02 Inoperable Due to Remaining in Droop Mode Versus Isochronous Mode (Section 4OA3.2)

A-1 Attachment

LIST OF DOCUMENTS REVIEWED

Section 1RO1: Adverse Weather Protection

CONDITION REPORTS

2007-000378 2010-010887

PROCEDURES

<u>NUMBER</u> <u>TITLE</u> <u>REVISION</u>

8

ABN-912 Extreme Cold Weather/Heat Tracing and Freeze Protection

System Malfunction

Section 1RO4: Equipment Alignments

CONDITION REPORTS

2008-003248 2009-006738

PROCEDURES

NUMBER TITLE REVISION

DBD-ME-202 Main Steam, Reheat and Steam Dump System 21

MISCELLANEOUS

NUMBER TITLE REVISION

MI-0202 Flow Diagram Main Steam Reheat and Steam Dump 33

Section 1R06: Flood Protection

CONDITION REPORTS

2009-005608 2009-006258 2010-007522 2010-007719

Section 1R07: Heat Sink Performance

PROCEDURES

<u>NUMBER</u> <u>TITLE</u> <u>REVISION</u>

STA-734 Service Water Fouling Monitoring Program 3

WORK ORDERS

3698138 3719677

A-2 Attachment

Section 1R12: Maintenance Effectiveness

CONDITION REPORTS

2009-003272 2009-006309 2010-004213

PROCEDURES

NUMBER TITLE REVISION

OPT-217A Service Water System 15

Section 1R15: Operability Evaluations

REPORTS

TE-95-1067

PROCEDURES

NUMBER TITLE REVISION

MSM-C0-7310 Service Water Pump Maintenance 5

WORK ORDERS

3992736

Section 1R18: Plant Modifications

CONDITION REPORTS

2010-000024 2010-011443

Section 1R19: Postmaintenance Testing

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
ABN-602	Response to 6900/480V System Malfunction	7
SOP-603B	6900 V Switchgear	9
INC-2085	Rework and Replacement of I&C Equipment	4
OPT-214A	Diesel Generator Operability Test	20
MSE-S1-0880	Unit 1 Diesel Generator Load Rejection	3
SOP-609A	Diesel Generator System	19
MSE-C0-0866	Emergency Diesel Generators DSC Governor Testing	1
INC-7845X	COT/ Channel Calibration Catalytic Recombiner "X-01" Product Gas Hydrogen and Oxygen Analyzer, Channel 1128A	7

A-3 Attachment

PROCEDURES

NUMBER TITLE REVISION

INC-2052 Containment Hydrogen Sensor Calibration Assembly 1

Maintenance

STA-677 Preventive Maintenance Program 11

WORK ORDERS

3987202 4022042 4014947 4021100

3992082 4036593 3673936

CONDITION REPORTS

2010-009334 2010-009336

Section 1R22: Surveillance Testing

PROCEDURES

NUMBER TITLE REVISION

ALM-0021A CPSES Alarm Procedures Manual 9

ALM-0021B CPSES Alarm Procedures Manual 3

CONDITION REPORTS

2009-008439

WORK ORDERS

3727032

Section 1EP4: Emergency Action Level and Emergency Plan Changes

MISCELLANEOUS

<u>NUMBER</u> <u>TITLE</u> <u>REVISION</u>

EPP-201, Emergency Action Level Technical Bases Document n/a

Attachment 3

Section 2RS06: Radioactive Gaseous and Liquid Effluent Treatment

PROCEDURES

NUMBER
EPG-9.03 CPNPP Buried Pipe Inspection Program
1
OWI-404 Operations Vent and Drain Guidelines
4
PPT-SX-7503A Control Room Vent Filtration Carbon Analysis-Train A
0

A-4 Attachment

PRO	CEDU	IRES
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<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
PPT-SX-7504B	Control Room Vent Filtration Carbon Analysis-Train B	0
PPT-SX-7510B	ESF Filter Unit Test-CPX-VAFUPK-16	1
PPT-SX-7512B	Primary Plant ESF Filter Carbon Analysis-Train B	1
PPT-SX-7522B	Control Room Vent Filtration Test CPX-VAFUPK-22	1
STA-758	Filter Ventilation System Testing	0

AUDITS, SELF-ASSESSMENTS, AND SURVEILLANCES

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
EVAL-2009-007	CPNPP Quality Assurance Evaluation Report	November 25, 2009
	Assessment Plan: Radioactive Waste, Effluent, Environmental	October 23, 2009

CONDITION REPORTS

2008003046	2008003144	2008003544	2009006651
2009006677	2009006871	2009008107	2009002167
2010002815	2010005548		

RELEASE PERMITS

G2008-033	G2008-016	G2008-069	G2008-082
G2008-083	G2009-112	G2009-144	G2009-179
G2010-041	G2010-060	L2008-035	L2009-043
L2010-067			

IN-PLACE FILTER TESTING RECORDS

<u>SYSTEM</u>	<u>TEST</u>	<u>DATE</u>
Control Room Pressurization, Unit X-21	Charcoal Adsorber Leak Test	June 8, 2010
Control Room Pressurization; Unit X-22	Charcoal Adsorber Leak Test	October 28, 2010
Control Room Filtration; Unit-X-23	Charcoal Adsorber Leak Test	September 28, 2010
Control Room Filtration; Unit-X-24	Charcoal Adsorber Leak Test	December 2, 2010
Primary Plant Vent Exhaust, Unit X-16	Charcoal Adsorber Leak Test	December 2, 2010

A-5 Attachment

MISCELLANEOUS DOCUMENTS

<u>IIILE</u>	<u>DATE</u>
Radiochemistry Cross Check Program 2008, 4 th Quarter	November 14, 2008

Radiochemistry Cross Check Program 2009, 4th Quarter

November 11, 2009

2008 Annual Radiological Effluent Release Report

2009 Annual Radiological Effluent Release Report

Offsite Dose Calculation Manual

Section 2RS07: Radiological Environmental Monitoring Program

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
STA-654	Groundwater Protection Program	7
STA-717	Non-Radiological Environmental Protection Program	4
RPI-104	Radiation Protection Procedures, Shift Orders and Procedure Use and Adherence	4
RPI-710	Radiological Environmental Monitoring, Sampling, and Analysis Program	16
ENV-323	Groundwater Sampling Program	4

AUDITS, SELF-ASSESSMENTS, AND SURVEILLANCES

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
NEI 07-07	NEI Groundwater Protection Initiative Peer Self Assessment	January 29, 2010
SR-2009-23	EXELON Nuclear Audit of AREVA Environmental, Inc.	August 25, 2009
NUPIC 20459	NUPIC Joint Audit of GEL Laboratories, LLC	September 10, 2009
EVAL-2009-007	Radioactive Waste, Effluent, and Environmental	November 25, 2009

CONDITION REPORTS

2008000678	2008000886	2009004119	2009008104
2010002024	2010002062	2010003104	2010005641
2010007417	2010008111	2010010071	2010011063

CALIBRATION AND MAINTENANCE RECORDS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
WO 322720	Vendor Inspection of Meteorological System Primary Tower	May 3, 2006
WO 3902960	Channel Calibration, Backup 10m Tower Wind Speed	September 7, 2010
WO 3916627	Channel Calibration, Primary Tower Air Delta Temperature	September 28, 2010

CALIBRATION AND MAINTENANCE RECORDS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
WO 3911736	Channel Calibration, Backup Tower 10m Wind Direction	September 1, 2010
WO 3903012	Channel Calibration, Primary 60m Tower Wind Direction	August 18, 2010
WO 3916701	Channel Calibration, Primary Tower 10 m Wind Direction	September 29, 2010

MISCELLANEOUS DOCUMENTS

<u>TITLE</u>	<u>DATE</u>
GEL Laboratory Analysis, Fish Samples	November 11, 2010
GEL Laboratory Analysis, Drinking Water	August 24, 2010
GEL Laboratory Analysis, Sediment	August 5, 2010
Low Volume Air Sampler Calibration Data Sheet, HP-2190B	August 24, 2010
Low Volume Air Sampler Calibration Data Sheet, HP-2188B	August 23, 2010

Section 2RS08: Radioactive Solid Waste Processing and Radioactive Material handling, Storage, and Transportation

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
RPI-204	Radioactive Waste Handling	13
RPI-230	Radioactive Material Shipments	5
RPI-242	Radioactive Waste Characterization and Classification	7
STA-633	Mixed Waste Control Program	1
STA-709	Radioactive Waste Management Program	9
STA-713	Process Control Program	2

AUDITS, SELF-ASSESSMENTS, AND SURVEILLANCES

NUMBER TITLE DATE

EVAL-2009-007 Radioactive Waste, Effluent, and Environmental November 25, 2009

CONDITION REPORTS

2008001462 2009006578 2010010145

RADIOACTIVE MATERIAL SHIPMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
2008-004	Туре В	April 15, 2008
2008-060	Type A	September 10, 2008
2008-083	Surface Contaminated Object	November 24, 2008

A-7 Attachment

RADIOACTIVE MATERIAL SHIPMENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
2009-005	Low Specific Activity	February 18, 2009
2010-019	Low Specific Activity	March 23, 2010
2010-035	Low Specific Activity	May 27, 2010
2010-054	Surface Contaminated Object	December 8, 2010

Section 4OA2: Identification and Resolution of Problems

CONDITION REPORTS

2009-008643 2010-006868

A-8 Attachment