

May 10, 2007

Mr. David A. Christian
Senior Vice President and
Chief Nuclear Officer
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: KEWAUNEE POWER STATION - NRC INTEGRATED
INSPECTION REPORT 05000305/2007002

Dear Mr. Christian:

On March 31, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Kewaunee Power Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on April 4, 2007, with Ms. L. Hartz 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.

Based on the results of this inspection, there were six NRC-identified findings of very low safety significance, all of which involved a violation of NRC requirements. Additionally, one issue was reviewed under the NRC traditional enforcement process and determined to be a Severity Level IV violation of NRC requirements. However, because these violations were of very low safety significance and because the issues were entered into your corrective action program, the NRC is treating these issues as non-cited violations (NCVs), in accordance with Section VI.A.1 of the NRC Enforcement Policy. If you contest any NCV in this report, 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 DC 20555-0001; with copies to the Regional Administrator - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Kewaunee Power Station.

D. Christian

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

Sincerely,

/RA/

Patrick L. Loudon, Chief
Branch 5
Division of Reactor Projects

Docket No. 50-305
License No. DPR-43

Enclosure: Inspection Report 05000305/2007002
w/Attachment: Supplemental Information

cc w/encl: L. Hartz, Site Vice President
C. Funderburk, Director, Nuclear Licensing
and Operations Support
T. Breene, Manager, Nuclear Licensing
L. Cuoco, Esq., Senior Counsel
D. Zellner, Chairman, Town of Carlton
J. Kitsembel, Public Service Commission of Wisconsin
State Liaison Officer, State of Wisconsin

D. Christian

-2-

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Sincerely,

Patrick L. Loudon, Chief
Branch 5
Division of Reactor Projects

Docket No. 50-305
License No. DPR-43

Enclosure: Inspection Report 05000305/2007002
w/Attachment: Supplemental Information

cc w/encl: L. Hartz, Site Vice President
C. Funderburk, Director, Nuclear Licensing
and Operations Support
T. Breene, Manager, Nuclear Licensing
L. Cuoco, Esq., Senior Counsel
D. Zellner, Chairman, Town of Carlton
J. Kitsembel, Public Service Commission of Wisconsin
State Liaison Officer, State of Wisconsin

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Letter to David A. Christian from Patrick L. Loudon dated May 10, 2007

SUBJECT: KEWAUNEE POWER STATION - NRC INTEGRATED
INSPECTION REPORT 05000305/2007002

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-305

License No: DPR-43

Report No: 05000305/2007002

Licensee: Dominion Energy Kewaunee, Inc.

Facility: Kewaunee Power Station

Location: Kewaunee, WI 54216

Dates: January 1 through March 31, 2007

Inspectors: S. Burton, Senior Resident Inspector
P. Higgins, Resident Inspector
D. Lords, Reactor Engineer
J. Robbins, Reactor Engineer
R. Ruiz, Resident Inspector
J. Bartleman, Reactor Engineer

Approved by: Patrick L. Loudon, Chief
Branch 5
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000305/2007002; 01/01/2007 - 03/31/2007; Kewaunee Power Station. Adverse Weather, Maintenance Effectiveness, Maintenance Risk Assessments and Emergent Work Control, Operability Evaluations, Refueling and Other Outage Activities, and Other Activities

This report covers a three-month period of inspection by resident inspectors and announced inspections by regional specialists. Six Green findings with associated non-cited violations (NCVs) and one severity Level IV NCV were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP 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 3, dated July 2000.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Initiating Events

- Green. The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement procedure E-O-05, "Response to Natural Events," during a high wind advisory. Specifically, on February 22, 2007, during the advisory, the inspectors identified several items stored outdoors near the plant main output transformer that could become missile hazards during actual high winds. As part of corrective actions, the licensee removed the items. The issue was entered into the licensee's corrective action program.

The inspectors determined that the finding is greater than minor because, if left uncorrected, the loose items could become a more significant safety concern by allowing the accumulation of missile hazards in these areas, thereby increasing the likelihood of an initiating event. The inspectors determined that the finding warranted evaluation using the Significance Determination Process (SDP) because the finding was associated with an increase in the likelihood of an initiating event. The finding was determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance because the licensee failed to communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely and in a timely manner. (Section 1R01)

Cornerstone: Mitigating Systems

- Green. The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of Technical Specification 6.8, "Procedures," during a review on January 27, 2007, of maintenance performed on the station blackout diesel generator. The maintenance, which was conducted to repair a cooling water leak, inappropriately replaced existing parts with commercial grade components. The

inspectors determined that, in accordance with procedure GNP-01.01.01, "Determination of Nuclear Safety Designed Classifications, QA [Quality Assurance] Type and EQ [Environmental Qualification] Type," the new components should have been designated as "augmented quality." As part of corrective actions, the licensee revised its parts database to show the appropriate classification for parts for the diesel. The issue was entered into the corrective action program.

The inspectors determined that the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the installation of parts in equipment with a lower quality designation than required potentially impacted equipment reliability. The finding was determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to take timely effective corrective actions for a similar prior occurrence. Barriers to prevent recurrence had not been established during supervisory reviews that granted multiple extensions to the corrective actions for the prior occurrence. (Section 1R12)

- Green. The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of Technical Specification 6.8, "Procedures," when the licensee failed, on January 8, 2007, to follow procedures for performing the monthly surveillance test on power range instrument N-42 and failed to obtain an approved procedure change as required by administrative procedures when the technicians established an alternate ground point contrary to procedural requirements. As part of corrective actions, the licensee counseled the technicians involved and discussed the event with all members of the instrument and control department. The issue was entered into the corrective action program.

The inspectors determined that the finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure required the use of the ground associated with the related card to verify proper continuity within the circuit and the use of an alternate ground point was a substantive change to the procedure. The finding was determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance because personnel did not follow procedures. (Section 1R13.2)

- Green. The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," during a review of procedures related to the control and storage of material. On March 21, 2007, the inspectors identified a number of unsecured equipment carts located in the vicinity of the seismically-classified, safety-related auxiliary building special ventilation system. The inspectors concluded that, although this was allowed by plant procedure GNP-01.31.01, "Plant Cleanliness and Storage," it was a condition that potentially affected quality (safe operation of the

ventilation system during a seismic event) and should not have been allowed by the procedure. As part of corrective action, the licensee properly secured the carts and evaluated other carts positioned near safety-related equipment. The issue was entered into the corrective action program.

The inspectors determined that the finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure allowed uncontrolled storage of materials in the vicinity of the auxiliary building special ventilation system that could render the system inoperable during a seismic event. The finding was determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance because the licensee failed to provide accurate procedures to assure the operability of safety-related equipment was maintained. (Section 1R15.2)

- Green. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," when the licensee failed to have in place adequate procedures to preclude a common mode failure of both trains of the safety-related service water (SW) system. Specifically, adequate procedures were not established for the maintenance of the SW system to prevent corrosion and degradation of the plant equipment water (PEW) filter vessels from affecting the safety-related SW bearing water supply components. As part of corrective actions, the licensee wrote the appropriate maintenance procedures. The issue was entered into the corrective action program.

The inspectors concluded that this finding is greater than minor because it was associated with the procedure quality and equipment performance attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the lack of appropriate procedures allowed the degradation of PEW components to cause the inoperability of two safety-related SW pumps. The finding was determined to be of very low safety significance. This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to thoroughly evaluate problems such that the resolutions addressed causes and extent of condition, as necessary. (Section 1R15.3)

- Green. The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of Technical Specification 6.8, "Procedures," on February 28, 2007, when the licensee failed to adequately perform a containment closeout inspection to ensure that debris and foreign materials were identified and removed in accordance with plant procedures. Specifically, inspectors identified unsecured metal sheets inside containment during a walkdown. As part of corrective actions, the sheets were removed from containment. The issue was entered into the corrective action program.

This finding is greater than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the

cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to identify and remove the steel sheets from containment could have affected the availability of both trains of the residual heat removal system (the accident recirculation sump) during a loss-of-coolant accident because of increased debris generation caused by the unsecured sheets. The finding was determined to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of human performance because personnel did not follow procedures, causing a condition to exist that potentially impacted the operability of both trains of the residual heat removal system. (Section 1R20.1)

- Green. The inspectors identified a finding of very low safety significance and an associated Severity Level IV, Non-Cited Violation of 10 CFR 50.74 for the licensee's failure to notify the NRC that one of its licensed operators was taking prescribed medication for a potentially disqualifying medical condition (hypertension). After a review of the licensed operator's medical status was completed by the NRC's medical review officer, a condition was added to the operator's license requiring him to take the medication as prescribed. The facility licensee entered this issue in their corrective action program. They required the individual licensed operator to take the medication as prescribed and incorporated these lessons learned in their requalification training program to ensure all licensed operators are aware of the requirement to notify the NRC of changes in their medical status.

Because violations of 10 CFR 50.74 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding was determined to be greater than minor because the medical condition that was not reported required a change to the operator's NRC license. Because the operator was always in the presence of other licensed operators while performing licensed duties and made no operational errors while he was taking the prescribed medication before his license had been appropriately revised, NRC management has determined this issue is a Green finding, of very low safety significance. This issue is considered an NCV because it was entered into the licensee's corrective action program. This finding also has a cross-cutting aspect in the area of human performance because a standard, specifically American National Standards Institute/American Nuclear Society (ANSI/ANS) 3.4, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants," was available but not correctly implemented. The correct implementation of the standard would have led to a proper notification of the NRC and timely conditioning of the operator's NRC license. (Section 4OA5.1)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Kewaunee operated at full power for the entire inspection period except for brief downpowers to conduct planned surveillance testing activities with the following exceptions:

- the unit entered the inspection period at 94 percent power due to heater drain pump "A" issues;
- on January 6, 2007, a downpower to 65 percent was performed to repair a blown fuse on the reheat stop and intercept valve on the turbine; power was returned to 94 percent on the same day;
- on January 12, the unit shut down following an automatic turbine/reactor trip during Turbine Mechanical Trip testing. Power operation was restored on January 15 with the unit returning to 99.6 percent power by January 17. The unit is restricted to a maximum power of approximately 99.6 percent due to concerns about the Advanced Measurement and Analysis Group (AMAG) system for calorimetric measurement;
- on January 24, a downpower to 93 percent was performed for heater drain pump "A" repairs. The unit remained at 93-95 percent power until February 3;
- on February 3, power was increased to 99.6 percent following repair of the pump;
- on February 13, power was rapidly reduced to 90 percent in response to losing heater drain pump "B." The unit returned to 94 percent power on February 14 and to 99.6 percent power on February 17, following repairs on the pump;
- on February 27, the unit tripped from 99.6 percent power during nuclear instrument calibrations;
- on March 10, power operation was restored and on March 11, the unit returned to 99.6 percent power;
- on March 26, a downpower to 92 percent was performed for replacement of the heater drain pump "B" motor. The unit returned to full power on March 28.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors performed a detailed review of the licensee's procedures and a walkdown of two systems to observe the licensee's preparations for adverse weather, including high winds. The inspectors focused on plant specific design features for the systems and implementation of the procedures for responding to or mitigating the effects of adverse weather. Inspection activities included, but were not limited to, a review of the licensee's adverse weather procedures, preparations for high wind, and a review of analysis and requirements identified in the Updated Safety Analysis Report (USAR). The inspectors also verified that operator actions specified by plant procedures were appropriate. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors evaluated readiness for seasonal susceptibilities for the following for a total of two samples:

- freezing susceptibilities as a result of anticipated sub-zero temperature conditions during the week ending February 2, 2007; and,
- response to high wind advisory issued for February 22, 2007.

b. Findings

Introduction: The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement procedure E-O-05, "Response to Natural Events," during a high wind advisory.

Description: On February 22, 2007, a high wind advisory was in effect for the Kewaunee County area from 1:53 a.m. to 12:00 noon. The inspectors observed the 6:00 a.m. operating shift turnover meeting in the control room, as well as the 6:30 a.m. plan of the day meeting, and noted that the licensee made no mention of the high wind advisory. As a result, the inspectors asked the licensee operations staff if the plant was currently in any adverse weather related procedures as a result of the high wind advisory and what the criteria were for entering such a procedure. The inspectors were later informed by the shift manager that no adverse weather response procedure was in effect at the time, but that as a result of the inspectors' questions, the licensee investigated and recognized that entry criteria for E-O-05 had been met. The procedure was subsequently entered at 7:55 a.m., more than six hours after the high wind advisory began. The licensee issued CAP042132 to capture the missed notification and late entry into E-O-05.

The next day, inspectors performed a confirmatory walkdown of the important outdoors areas to ensure that the licensee had properly implemented the requirements of E-O-05.

Specifically, Step C.6 called for maintenance to perform general maintenance procedure GMP-172, "Tornado Missile Hazard Monthly Inspection." Step 4.1 of GMP-172 specified that the switchyard and protected area south of transformer bays shall be inspected for tornado missile hazards. A missile hazard was defined in E-O-05 as "an unsecured object that could be picked up by 73 to 157 mph [miles per hour] winds and thrown against plant equipment with enough force to disable or significantly damage the struck equipment. Refer to Table 1 for examples of missile hazards." Additionally, "Plywood sheets (including pallets)" are among the list of examples of missile hazards provided in Table 1 of GMP-172. During this walkdown, inspectors identified four wooden pallets, a 4' x 8' plywood sheet, and a rack containing greater than 50 empty 5 gallon water bottles in the area near the main transformers at the south end of the protected area. This same plant area has been the subject of two recent NRC findings in May 2005 (Inspection Report (IR) 05000305/2005008) and January 2006 (IR 05000305/2006002) for the same condition, i.e., loose materials posing a missile hazard threat to equipment within the protected area.

Upon notification of the unsecured materials by the inspectors, the licensee removed the materials and issued CAP042221 to address the issue. Condition report CAP042221 further reported that maintenance was not given explicit direction to perform GMP-172 in accordance with E-O-05; rather, operations staff simply notified maintenance to perform a walkdown to generically remove any missile hazards from the yard. As a result of this lack of clear direction, GMP-172 was not performed.

Analysis: The failure to adequately implement E-O-05, "Response to Natural Events," during a high wind advisory constituted a performance deficiency warranting a significance evaluation. Using Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Disposition Screening," dated November 2, 2006, the inspectors concluded that the finding is greater than minor because, if left uncorrected, the loose items would become a more significant safety concern by becoming missile hazards, thereby increasing the likelihood of an initiating event had wind speed been greater. The inspectors determined that the finding warranted evaluation using the Significance Determination Process (SDP) because the finding was associated with an increase in the likelihood of an initiating event. Using IMC 0609, "Significance Determination Process " (SDP), Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," dated November 22, 2005, the inspectors answered "no" to the transient initiators screening question in the Phase 1 Screening Worksheet under the initiating events column. Therefore, this finding is of very low safety significance (Green). The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance because the licensee failed to communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely and in a timely manner.

Enforcement: Appendix B of 10 CFR 50, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Contrary to this requirement, Procedure E-O-05, a safety-related procedure, was not implemented until more than six hours after entry

criteria were met, and once entered, Step C.6 was not performed in accordance with GMP-172 as required. Because this failure to comply with 10 CFR 50, Appendix B, Criterion V, is of very low safety significance and has been entered into the licensee's corrective action program, as condition report CAP042221, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000305/2007002-01).

1R04 Equipment Alignment (71111.04)

.1 Partial Walkdown

a. Inspection Scope

The inspectors performed partial walkdowns of accessible portions of trains of risk-significant mitigating systems equipment. The inspectors reviewed equipment alignment to identify any discrepancies that could impact the function of the system and potentially increase risk. Identified equipment alignment problems were verified by the inspectors to be properly resolved. The inspectors selected redundant or backup systems for inspection during times when equipment was of increased importance due to unavailability of the redundant train or other related equipment. Inspection activities included, but were not limited to, a review of the licensee's procedures, verification of equipment alignment, and an observation of material condition, including operating parameters of equipment in-service. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following equipment train to assess operability and proper equipment line-up for a total of one sample:

- turbine-driven auxiliary feedwater (AFW) pump after it was returned to service from maintenance.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown

a. Inspection Scope

The inspectors performed a complete walkdown of equipment for two risk significant mitigating systems. The inspectors walked down the systems to review mechanical and electrical equipment line-ups, component labeling, component lubrication, component and equipment cooling, hangers and supports, and operability of support systems, and to ensure that ancillary equipment or debris did not interfere with equipment operation. A review of past and outstanding work orders was performed to determine whether any deficiencies significantly affected the system function. In addition, the inspectors reviewed the corrective action program database to ensure that any system equipment alignment problems were being identified and appropriately resolved. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following systems to assess operability and proper equipment line-up for a total of two samples:

- service water (SW) system; and
- AFW system.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Fire Zone Walkdowns (71111.05Q)

a. Inspection Scope

The inspectors walked down risk significant fire areas to assess fire protection requirements. The inspectors reviewed areas to assess if the licensee 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. 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 (IPEEE), or the potential to impact equipment which could initiate or mitigate a plant transient. The inspection activities included, but were not limited to, the control of transient combustibles and ignition sources, fire detection equipment, manual suppression capabilities, passive suppression capabilities, automatic suppression capabilities, compensatory measures, and barriers to fire propagation. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following areas for review for a total of eight samples:

- Fire Zone 95 A, 480-volt Switchgear Bus 1-51 and 1-52 Room;
- Fire Zone 95 B/TU-95B, Safeguards Alley;
- Fire Zone 95C/TU-95C, AFW Pump 1A Room;
- Fire Zone AX 23B, Reactor Auxiliary Building North Center;
- Fire Zone AX 23D, Component Cooling Water Pump 1B Room;
- Fire Zone AX 37, Control Rod Drive Equipment Room;
- Fire Zone TU-95A, Dedicated Shutdown Panel Room; and
- Fire Zone 94, Carbon Dioxide Tank Room.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope

The inspectors performed an annual review of flood protection barriers and procedures for coping with external flooding. The inspection focused on determining whether flood mitigation plans and equipment were consistent with design requirements and risk analysis assumptions. The inspection activities included, but were not limited to, a review and/or walkdown to assess design measures, seals, drain systems, contingency equipment condition and availability of temporary equipment and barriers, performance and surveillance tests, procedural adequacy, and compensatory measures. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following equipment for a total of one sample:

- seasonal external plant flooding designs to protect for susceptibilities during a period of anticipated rain on top of snow accumulation.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspectors performed an annual review of the licensee's testing of heat exchangers. The inspection focused on potential deficiencies that could mask the licensee's ability to detect degraded performance, identification of any common cause issues that had the potential to increase risk, and ensuring that the licensee was adequately addressing problems that could result in initiating events that would cause an increase in risk. The inspection activities included, but were not limited to, a review of the licensee's observations as compared against acceptance criteria, the correlation of scheduled testing and the frequency of testing, and the impact of instrument inaccuracies on test results. Inspectors also verified that test acceptance criteria considered differences between test conditions, design conditions, and testing criteria. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following equipment for a total of one sample:

- safety injection lubricating oil cooler.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

The inspectors performed a quarterly review of licensed operator requalification training. The inspection assessed the licensee's effectiveness in evaluating the requalification program, ensuring that licensed individuals operate the facility safely and within the conditions of their license, and evaluated licensed operator mastery of high-risk operator actions. The inspection activities included, but were not limited to, a review of high risk activities, emergency plan performance, incorporation of lessons-learned, clarity and formality of communications, task prioritization, timeliness of actions, alarm response actions, control board operations, procedural adequacy and implementation, supervisory oversight, group dynamics, interpretations of Technical Specifications (TSs), simulator fidelity, and licensee critique of performance. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors observed the following requalification activity for a total of one sample:

- a training crew during an evaluated simulator scenario.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed the technical support system (TSC) emergency diesel generator (EDG) system to assess maintenance effectiveness, including maintenance rule activities, work practices, and common cause issues. The TSC EDG was the station blackout power source. Inspection activities included, but were not limited to, the licensee's categorization of specific issues, including evaluation of performance criteria, appropriate work practices, identification of common cause errors, extent of condition, and trending of key parameters. Additionally, the inspectors reviewed implementation of the Maintenance Rule (10 CFR 50.65) requirements, including a review of scoping, goal-setting, performance monitoring, short-term and long-term corrective actions, functional failure determinations associated with reviewed corrective action program documents, and current equipment performance status. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors performed the following maintenance effectiveness review for a total of one sample:

- an issue/problem-oriented review of the TSC EDG system because the licensee designated it as risk significant under the Maintenance Rule and the system experienced a forced outage due to water in the lubricating oil system.

b. Findings

Introduction: A finding of very low safety significance (Green) and an associated NCV of the TS 6.8, "Procedures," was identified by the inspectors during a review maintenance performed on the TSC diesel generator. The maintenance, which was conducted to repair a cooling water leak, inappropriately replaced existing TSC diesel generator parts with commercial grade components.

Description: On January 22, 2007, during discussions with maintenance supervision, the inspectors identified that commercial grade parts had been installed in the TSC diesel generator. Maintenance supervision indicated that the basis for determining the grade of parts installed on the diesel was the related print which indicated that the component was quality assurance QA Type 3. The inspectors noted that NCV 05000305/2006002-03, "Failure to Apply Appropriate Quality Classification to TSC Diesel Generator Modifications as Required by Procedures," identified a similar condition and indicated that contrary to various commitments and requirements related data basis identified the diesel as QA Type 3 versus QA Type 2 or Augmented Quality. Because this issue appeared to be repetitive, the inspectors reviewed the associated corrective action program documents to determine the resolution of the prior issue.

The inspectors found that CAP032093 generated on March 17, 2006, included corrective action, CA022711, "TSC Diesel Components Potentially Misclassified as Q-Type 3," had been extended 5 times. The original due date for CA022711 was July 14, 2006, and the current due date was April 5, 2007. The inspectors found that procedure GNP-11.08.01, "Action Request Process," Step 6.8.2.1, indicated that the licensee should consider "interim actions that may be necessary to ensure the potential for further adverse conditions is minimized," and Step 6.8.2.3 indicated that the licensee should "review other pending activities to determine if the extension adversely affects their completion."

The inspectors also noted that a common basis for extension was that the extensions did not compromise risk or safety. The inspectors reviewed the licensee's maintenance rule documents and found that the TSC diesel generator, the station's station blackout generator, was classified as a "High Risk Significant" system in the "EDG," section of their Maintenance Rule basis document. Because the diesel was risk significant and because installation of parts of an appropriate quality can impact the ability of any system to perform properly, the inspectors concluded that the bases for granting extensions for CA022711 were not appropriate.

As a result of the above two observations, the inspectors concluded that the licensee's extensions for CA022711 were inappropriate when they extended corrective actions from the first occurrence without establishing barriers to monitor and prevent the condition from being repeated upon the next need for work to the TSC diesel which is a risk significant component.

The inspectors reviewed the quality assurance program to ascertain if any changes were made to reclassify the related equipment and found that the Dominion Nuclear Facility Quality Assurance Program Description, Topical Report DOM-QA-1, Revision 1, stated that the quality assurance program applies to the station blackout program.

Additionally, the prior revision of this procedure the “Kewaunee Quality Assurance Program,” Revision 25, indicated that station blackout requirements were “augmented quality.” The inspectors noted that the current revision appeared to be less specific; the licensee captured the potential disparity between these documents as CAP043065.

Because the design documentation had not been modified, the inspectors concluded that the quality classification of the TSC diesel remained as “Augmented Quality.” Additionally, the licensee completed a search of related records and could not find any other documentation, such as a design change, modification, commitment change, procurement technical evaluation, or QA typing change that reflected a change to the type classification. As such, the inspectors noted that augmented quality requirements were not applied to the replacement parts installed in January 2007. The failure to apply requirements for augmented quality parts to the TSC diesel was contrary to Kewaunee safety-related, general nuclear procedure GNP-01.01.01, “Determination of Nuclear Safety Designed Classifications, QA Type and EQ Type.” Procedure GNP-01.01.01 required that the application of one or more portions of the Operational Quality Assurance Program for a nonsafety-related item be applied when the function that an item performed was essential to satisfy a licensing or management commitment and that the augmented quality designation should be applied.

Analysis: The inspectors determined that the failure to follow GNP-01.01.01 is a performance deficiency warranting a significance evaluation. Using Appendix B of IMC 0612, the inspectors concluded that the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the installation in equipment of parts with a lower quality designation than required potentially impacted equipment reliability.

Using Appendix A of IMC 0609, the inspectors answered “no” to all the screening questions in the Significance Determination Process Phase 1 Screening Worksheet in the Mitigating Systems column; therefore, this finding is of very low safety significance (Green).

The inspectors also determined that the finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to take effective corrective actions when barriers to prevent recurrence were not established during supervisory reviews that granted multiple extensions to CA022711.

Enforcement: Technical Specification 6.8.a., states that written procedures shall be established, implemented, and maintained that meet the requirements and recommendations of Section 5.2.2, 5.2.5, 5.2.15, and 5.3 of American National Standards Institute ANSI N18.7-1976. Section 5.2.2 of ANSI N18.7-1976, specifies that “[p]rocedures shall be followed, and the requirements for use of procedures shall be prescribed in writing.” Kewaunee General Nuclear Procedure GNP-01.01.01, “Determination of Nuclear Safety Designed Classifications, QA Type and EQ Type,” specified that the appropriate QA class components be installed in certain equipment. Contrary to this, components installed in the TSC diesel generator were commercial grade components and not the required “Augmented Quality.” The licensee entered this

item into its corrective action program as CAP042691, CAP041009, and CAP041186. Corrective actions included placing QA-3 stock codes for the TSC diesel generator bill of materials on hold, and an update of the related equipment database to show the proper classification of the TSC diesel parts. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program, this violation is being treated as an NCV consistent with Section VI.A of the NRC enforcement policy (NCV 05000305/2007002-02).

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

a. Inspection Scope

The inspectors reviewed maintenance activities to review risk assessments (RAs) and emergent work control. The inspectors verified the performance and adequacy of RAs, management of resultant risk, entry into the appropriate licensee-established risk bands, and the effective planning and control of emergent work activities. The inspection activities included, but were not limited to, a verification that licensee RA procedures were followed and performed appropriately for routine and emergent maintenance, that RAs for the scope of work performed were accurate and complete, that necessary actions were taken to minimize the probability of initiating events, and that activities to ensure that the functionality of mitigating systems and barriers were performed. Reviews also assessed the licensee's evaluation of plant risk, risk management, scheduling, configuration control, and coordination with other scheduled risk significant work for these activities. Additionally, the assessment included an evaluation of external factors, the licensee's control of work activities, and appropriate consideration of baseline and cumulative risk. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors observed maintenance or planning for the following activities or risk significant systems undergoing scheduled or emergent maintenance for a total of four samples:

- maintenance RAs with emergent work on heater drain pump "A";
- maintenance RAs with emergent work on EDG "B" and EDG "A" in test;
- maintenance RAs with emergent work to repair ground on nuclear instrument N-42; and
- maintenance RAs with emergent work to repair leaking residual heat removal 1A fan coil unit;

b. Findings

.1 Inadequate Testing of EDG When the Redundant EDG was Out-of-Service

Introduction: An unresolved item was identified when the inspectors identified that the test performed on EDG "A" with EDG "B" out-of-service for maintenance did not appear to comply with the TSs.

Description: While reviewing emergent work on EDG "B," the inspectors noted that the estimated risk for the plant did not change during TS-required testing of the other EDG.

The inspectors reviewed the test and found that it did not connect the diesel to the gird as required by TSs. The procedure appeared to have been developed, in part, similar to standard TSs, but was not consistent with Kewaunee's custom TSs. The inspectors inquired about the appropriateness of the test and the licensee indicated that they believed the test was adequate. Subsequent to the inspectors' questions, the licensee further investigated the observation and identified some information that appeared to substantiate the inspectors' concerns, however, this information was incomplete in resolving the issue. Because the licensee was pursuing further information that could clarify the issue at the end of the inspection report period, the inspectors considered the issue unresolved pending final resolution (URI 05000305/2007002-03).

.2 Procedure Not Followed For Work on Power Range Instrumentation

Introduction: The inspectors identified a finding of very low safety significance (Green) and an associated NCV of TS 6.8, "Procedures," when the licensee failed to follow procedures for performing the monthly surveillance test on power range instrument N-42 and failed to obtain an approved procedure change as required by administrative procedures when the technicians established an alternate ground point contrary to procedural requirements.

Description: The inspectors reviewed emergent work that was added to the February 8, 2007, week schedule and identified that one addition included a repair/replacement of nuclear power range channel N-42 due to a problem with the ground test point identified during surveillance SP-48-003F on January 8, 2007. In January, the licensee concluded that the test card for N-42 had a faulty ground test point and initiated CAP040425, "Positive Rate Time Could Not Be Obtained During Monthly N-42 [surveillance], SP-48-003F," to resolve the problem. The inspectors were concerned that the deficiency was not corrected at the time of discovery and that a potentially degraded condition continued to affect the instrument. The inspectors reviewed CAP040425 and observed the related maintenance and found that the licensee had based operability of the instrument on an assumption that a ground wire had broken without physical evidence to support the nonconformance; that the licensee had established an alternate ground contrary to the procedural requirements during the January test; that the licensee had failed to obtain required procedure changes in January when an alternate test point was established; and that the shift manager agreed with the operability evaluation which noted that an alternate test point was used, but failed to challenge the maintenance staff about the fact that he had not seen an approved procedure change to support the use of an alternate test point.

The inspectors were concerned that the lack of a ground could potentially induce an unanalyzed failure that could impact operability of the nuclear instruments. The inspectors inquired about the methodology utilized to determine the failure mechanism and found that no evaluation or determination was performed to consider other possible failure modes that provide the same indication. The inspectors reviewed the maintenance activities and fortuitously for the licensee, the cause of the failure was as assumed.

Analysis: The inspectors concluded that the failure to obtain an appropriate procedure change to perform the test using an alternate ground location, is a performance

deficiencies warranting further review. Using Appendix B of IMC 0612, the inspectors concluded that the finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure requires the use of the ground associated with the related card to verify proper continuity within the circuit and the use of an alternate ground point was a substantive change to the procedure.

Using Appendix A of IMC 0609, the inspectors answered “no” to all the screening questions in the Significance Determination Process Phase 1 Screening Worksheet in the Mitigating Systems column; therefore, this finding is of very low safety significance (Green).

The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance because personnel did not follow procedures.

Enforcement: Technical Specification 6.8.a., states that written procedures shall be established, implemented, and maintained that meet the requirements and recommendations of Section 5.2.2, 5.2.5, 5.2.15, and 5.3 of American National Standards Institute ANSI N18.7-1976. Section 5.2.2 of ANSI N18.7-1976, specifies that “[p]rocedures shall be followed, and the requirements for use of procedures shall be prescribed in writing.” Contrary to this, the licensee failed to follow procedures SP-48-003F, “Nuclear Power Range Channel 2 (White) N-42 Monthly test,” Revision R, Step 6.6.2, when an alternate ground was established, and GNP-03.01.01, “Directive, Implementing Document, and Procedure Administrative Controls,” Revision Z, Step 6.5, when the related procedure change was not reviewed or obtained. Corrective actions, to date, included performance counseling on procedural compliance, an instrument and control department human performance stand down, and a maintenance department clock reset. Because this violation was of very low safety significance and it was entered into the licensee’s corrective action program as CAP042102, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000305/2007002-04).

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed operability evaluations which affected mitigating systems or barrier integrity to ensure that operability was properly justified and that the component or system remained available. The inspection activities included, but were not limited to, a review of the technical adequacy of the operability evaluations to determine the impact on TSs, the significance of the evaluations to ensure that adequate justifications were documented, and that risk was appropriately assessed. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors reviewed the following operability evaluations for a total of six samples:

- loss of SW bearing flushing/cooling water;
- AFW flow element disparity;
- auxiliary building penetrations;
- ultra low sulphur fuel oil used in emergency diesel generators;
- storage requirements potentially violate equipment seismic qualifications; and
- SW potential common mode failure.

b. Findings

.1 (Closed) Unresolved Item (URI) 05000305/2005008-04: Potential Common Mode Failure of Service Water Pumps

A URI was opened during the second quarter of 2005 regarding the possible susceptibility of the SW pumps to a common mode failure due to potential clogging issues associated with pump bearing and flushing water supply filters. The URI was opened pending further evaluation of the SW system operability by inspectors. Specifically, inspectors were concerned with the lack of an adequate design basis for specific time allowances relied upon by operators to perform required manual actions to maintain SW pump operability.

On June 18, 2005, while Kewaunee was shut down for refueling, the inspectors determined that times associated with the manual action of shifting filters to maintain the operability of the SW pumps were not supported by engineering analysis. Specifically, the licensee used informal sources and unverified information to conclude that the SW pumps could operate for two to four hours without bearing/seal water flow before any negative impact to the pumps would occur. Additionally, no plugging analysis or time study existed to support the basis for the time expected for the filters to clog and require manual swapping. As a result, the inspectors reviewed pump operability.

On August 16, 2005, Kewaunee issued Licensee Event Report (LER) 2005-010-00 to notify the NRC of the operable but non-conforming condition of the SW bearing/seal water system. This LER also described the interim compensatory measures and corrective actions to ensure continued operability of SW and allow mode changes. On July 21, 2006, Kewaunee withdrew LER 2005-010-00 based on the results of the engineering analysis and vendor testing that supported the licensee's position that sufficient time existed to perform the required manual actions and that the SW pumps remained operable.

The inspectors did not identify any concerns with the licensee's basis for operability, or with the licensee's resolution of the inspectors' issues. Therefore, no performance deficiency or violation was identified and this URI is closed.

.2 Inadequate Seismic Storage Requirements

Introduction: The inspectors identified a finding of very low safety significance (Green) and an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions,

Procedures, and Drawings,” during a review of procedures related to the control and storage of material. Specifically, procedure GNP-01.31.01, “Plant Cleanliness and Storage,” permitted uncontrolled storage of materials next to the seismically classified, safety-related auxiliary building special ventilation system.

Description: On March 21, 2007, while performing a plant status walk-down the inspectors noted a significant number of unsecured equipment carts located on the 657-foot elevation of the auxiliary building in the vicinity of the auxiliary building special and normal ventilation systems. The inspectors questioned the duty shift manager about the observation. He indicated that the equipment was acceptably stored in accordance with GNP-01.31.01, “Plant Cleanliness and Storage.”

The inspectors reviewed GNP-01.31.01 and found that the procedure indicated that uncontrolled storage was acceptable in the location in question. The inspectors further reviewed the Updated Safety Analysis Report (USAR) and found that Appendix B, Table B.2.1, indicated that the auxiliary building special ventilation system was a Seismic Class 1 system. Further, the inspectors found that the auxiliary building special ventilation system was a system governed by the TSs. Because of these observations, the inspectors concluded that GNP-01.31.01 did not provide adequate controls to assure the operability of auxiliary building special ventilation would be maintained during a seismic event.

Analysis: The inspectors determined that GNP-01.31.01 was not adequately developed because it did not provide protection for the auxiliary building special ventilation during seismic events; that the Shift Manager had opportunity to identify that the auxiliary building special ventilation system was deficient when a review was performed to determine the adequacy of controls for equipment stored in the vicinity of the system; and that these observations constituted performance deficiencies warranting evaluation.

Using Appendix B of IMC 0612, the inspectors determined that the finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure allowed uncontrolled storage of materials in the vicinity of the auxiliary building special ventilation system that could render the system inoperable during a seismic event.

Using Appendix A of IMC 0609, the inspectors answered “no” to all the screening questions in the Significance Determination Process Phase 1 Screening Worksheet in the Mitigating Systems column; therefore, this finding is of very low safety significance (Green).

The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance because the licensee failed to provide accurate procedures to assure the operability of safety-related equipment was maintained.

Enforcement: 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” states, in part, that activities affecting quality shall be prescribed by documented procedures of a type appropriate to the circumstances. Contrary to this,

GNP-01.31.01, "Plant Cleanliness and Storage," failed to prohibit uncontrolled storage of materials next to the seismically classified, safety-related, auxiliary building special ventilation system. The licensee entered this item into its corrective action program as CAP043166. Corrective actions, to date, included the conduct of plant tours of the auxiliary and turbine buildings to ensure equipment storage was appropriate with respect to safety-related equipment and, where necessary, removal of any carts without chocks or wheel locks. Because this violation was of very low safety significance and it was entered into the licensee's corrective action program, this violation is being treated as an NCV consistent with Section VI.A of the NRC enforcement policy (NCV 05000305/2007002-05).

.3 (Closed) URI 05000305/2006003-03: Potentially Inappropriate Safety/Nonsafety-Related Interface for Bearing Cooling and Flushing Water to the Safety-Related Service Water Pumps

b. Findings

Introduction: The inspectors identified a finding of very low safety significance (Green) and an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," when the licensee failed to have in place adequate preventive maintenance and performance monitoring procedures that could have precluded a common mode failure from affecting both trains of the safety-related SW system. Specifically, procedures were not established for the adequate maintenance of the SW system to prevent corrosion and degradation of the plant equipment water (PEW) filter vessels from effecting the safety-related portions of the SW bearing water supply components.

Description: An unresolved item was opened during the second quarter of 2006 regarding the possible inappropriateness of the design interface between the safety-related/nonsafety-related interface for bearing cooling and flushing water to the safety-related SW pumps. The URI was opened pending a review of forthcoming evaluations related to the potential common mode failure mechanism of the SW pumps as a result of the nonsafety-related PEW water supply. Those documents have since been issued and reviewed by inspectors.

Inspection report 05000305/2006003 documented a problem with the safety-related SW pump bearing flushing and cooling water that was self-revealed when the in-plant operator identified that SW pump 1B1 seal water pressure had decreased to zero pounds per square inch-gauge. As a result, the licensee declared the pump inoperable and entered the related TS limiting condition for operation. Subsequently, the 1A2 SW pump of the opposite train was also declared inoperable for the same reason. An investigation by the licensee determined that the cause of the problem was that the safety-related SW bearing water supply pressure regulator stem was bound open as a result of iron deposits that were introduced from the degradation of the nonsafety-related PEW supply filter vessels.

After the licensee's corrective maintenance activities were completed, but just prior to the licensee returning PEW to service, the inspectors inquired about the appropriateness of the PEW/SW interface. Because the licensee had failed to

recognize the common mode implications of the failure mechanism, inspectors identified the issue associated with the above URI.

Additionally, the inspectors noted that the licensee had multiple opportunities to correct this degraded condition prior to the self-revealing events that caused the inoperability of the 1B1 and 1A2 SW pumps in 2006. Specifically, the corrosion of the PEW filter vessels was first identified by the licensee in October 2000 through CAP10190, but was not corrected at the time. Additionally, in January 2001, June 2002, January 2003, June 2004, September 2004, and December 2005, the licensee initiated condition reports that documented further degraded conditions with the PEW and SW lube water components as a result of scale build-up, iron flocculent fouling, and filter bypass, but failed to identify and resolve the cause of the problems.

The licensee performed root cause evaluation (RCE) 723, which confirmed that multiple procedures and preventative maintenance activities necessary to maintain the SW and PEW systems were inadequate, thereby validating the inspectors observations. Based upon this information, without reviewing the appropriateness of the design interface, the inspectors concluded that at a minimum, procedures necessary to maintain the SW/PEW interface were inadequate and warranted further review.

Analysis: The inspectors identified that the licensee's failure to evaluate the potentially inadequate design of the SW system, despite multiple opportunities, is a performance deficiency warranting further review. Specifically, the inspectors identified that the condition was a common mode failure but the licensee had failed to evaluate the current failure against historical conditions or the system design prior to anticipated system restoration. Using Appendix B of IMC 0612, the inspectors concluded that the issue is greater than minor because it was associated with the design control and configuration control attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage).

Using Appendix A of IMC 0609, the inspectors answered "No" to all of the questions in the Mitigating Systems Cornerstone column of the Phase I worksheet; therefore, this finding is of very low safety significance (Green).

The inspectors also determined that the finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of condition, as necessary.

Enforcement: 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, and drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, and drawings. Contrary to this, the licensee failed to have in place adequate preventive maintenance and performance monitoring procedures that could have precluded an adverse condition from preventing the safety-related components of the SW bearing supply system from performing their safety functions as a result of the degradation of the non-safety-related PEW system. Corrective actions planned and

executed as a result of RCE 723, to date, included the revision of N-SW-02 (CA25302) and PMP-02-07 (CA25303), the establishment of preventive maintenance activities for changing PEW filters (CA025301), cleaning the SW supply line for SW pump cooling water (CA25304), and the shortening of the period of maintenance on pressure regulating valve SW-43 (CA25307). Because this violation of 10 CFR 50, Appendix B, Criterion V, is of very low safety significance and has been entered into the licensee's corrective action program as RCE 723, Revision B, with associated corrective actions, this violation is being treated as an NCV in accordance with the NRC Enforcement Policy (NCV 05000305/2007002-06).

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors verified that the post-maintenance testing procedures and activities were adequate to ensure system operability and functional capability. Activities were selected based upon the structure, system, or component's ability to impact risk. The inspection activities included, but were not limited to, witnessing or reviewing the integration of testing activities, applicability of acceptance criteria, test equipment calibration and control, procedural use and compliance, control of temporary modifications or jumpers required for test performance, documentation of test data, system restoration, and evaluation of test data. Also, the inspectors verified that maintenance and post-maintenance testing activities adequately ensured that the equipment met the licensing basis, TSs, and USAR design requirements. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors reviewed post-maintenance activities associated with the following components for a total of four samples:

- TSC EDG undervoltage relay replacement;
- RHR 1A fan coil unit replacement;
- safety injection lube oil cooler cleaning; and
- charging pump "C" instrument replacement.

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

The inspectors evaluated outage activities for two unplanned outages: the first outage began on January 12, 2007, and ended on January 15, and the second outage that began on February 27 and ended on March 10. The inspectors reviewed activities to ensure that the licensee considered risk in developing, planning, and implementing the outage schedule, developed mitigation strategies for loss of key safety functions, and adhered to operating license and TS requirements to ensure defense-in-depth. The inspection activities included, but were not limited to, a review of the outage plan,

monitoring of shutdown and startup activities, control of outage activities and risk, and observation of related maintenance activities. As part of this inspection, the documents listed in the Attachment were reviewed.

In addition to activities inspected utilizing specific procedures, the following represents a partial list of the major outage activities the inspectors reviewed/observed, all or in part:

- review of both outage plans and the ready-backlog;
- control room turnover meetings and selected pre-job briefings;
- reactor shutdown;
- equipment maintenance activities;
- management of outage risk and attendance at related planning meetings;
- refueling activities;
- startup activities, including criticality, feed pump startup, main turbine generator startup and synchronization, and elements of power escalation to full power; and
- identification and resolution of problems associated with the outage.

b. Findings

No findings of significance were identified except for the finding discussed below.

.1 Foreign Material in Containment as a Result of Inadequate Containment Closure Inspections

Introduction: The inspectors identified a finding of very low safety significance (Green) and an associated NCV of TS 6.8, "Procedures," when the licensee failed to adequately perform a containment closeout inspection to ensure that debris and foreign material was identified and removed in accordance with plant procedures prior to changing modes from cold shutdown to hot shutdown.

Description: On February 28, 2007, inspectors observed the licensee's performance of the initial containment entry and boric acid inspection following a plant trip the previous night. During this containment entry, inspectors identified a pile of nine loosely stacked, unsecured, sheets of 2'x4' 17-gauge stainless steel lying on the floor of the reactor coolant pump "A" vault. Subsequently, an extent of condition walkdown identified seven additional steel sheets located in the pressurizer vault that had been inappropriately wedged between a wall and an electrical conduit for storage. The licensee removed the metal sheets from containment on March 1 and verified that they were last used as decking for equipment carts to roll over grating during the previous refueling outage in September-October 2006. These steel decking sheets were for temporary use only and should have either been removed following the completion of work in those areas or secured in an approved storage location.

The inspectors performed a review of the licensee's containment closeout inspection procedure, GNP-12.17.01, Revision E, "Pre-Criticality Containment Inspection," that was performed after the Fall 2006 refueling outage and found no evidence that these metal sheets were identified during that walkdown. The purpose of this procedure is to provide guidance for implementing a post-outage inspection of containment for seismic housekeeping and foreign material exclusion concerns prior to changing modes from

cold shutdown to hot shutdown. Therefore, the inspectors concluded that the licensee failed to identify and remove the sheets from containment in accordance with procedure.

Due to the location of these materials in containment, inspectors had reason to believe that the metal sheets had the potential to affect the debris loading of the containment sump screens during a loss-of-coolant accident (LOCA). Excessive loading or clogging of the containment sump screens could cause a significant decrease in net positive suction head to the residual heat removal (RHR) pumps when in emergency recirculation mode, which would affect the operability of both trains of the RHR system. Additionally, through a review of design basis documents, the inspectors noted that seven of the sheets were found within the zone of influence of the worst debris-generating LOCA break location, which is assumed to occur from a reactor coolant pump hot leg break inside the "B" vault.

The inspectors reviewed the licensee's past operability and condition evaluation documented in CAP042304 (Condition Evaluation (CE)019965). This condition evaluation primarily focused on the "B" vault since it was the bounding debris generating location and because its location was such that it would blow down much closer to the sump screens. The licensee utilized the guidance in Nuclear Energy Institute (NEI) 04-07, "Pressurized Water Reactor Sump Performance Evaluation Methodology," Revision 0, and its associated Safety Evaluation Report, for the post-LOCA debris generation evaluation of this condition. Through this evaluation, the licensee concluded that the metal sheets did not result in the loss of operability of the RHR system per Regulatory Issue Summary 2005-20, "Revision to Guidance Formerly Contained in NRC Generic Letter 91-18, 'Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and On Operability,'" and no actual loss of safety function occurred. It was found that the steel sheets would not have contributed an appreciable amount of additional debris to the sump screen. The inspectors reviewed this evaluation and its bases and had no further concerns.

Analysis: The failure to adequately implement step 6.1 of GNP-12.17.01 by failing to identify the steel decking sheets as material that needed to be removed from containment is considered a performance deficiency warranting a significance evaluation. Using Appendix B of IMC 0612, the inspectors concluded that this finding is greater than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to identify and remove the steel sheets from containment could have affected the availability of both trains of the residual heat removal system (the accident recirculation sump) during a loss-of-coolant accident because of increased debris generation caused by the unsecured sheets.

Using Appendix A of IMC 0609, the inspectors answered "No" to all of the questions in the Mitigating System cornerstone column of the Phase I worksheet. Therefore, this finding is of very low safety significance (Green).

The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance because personnel did not follow procedures, which allowed conditions to exist that could have impacted the operability of both trains of the RHR system.

Enforcement: Technical Specification 6.8.a., states that written procedures shall be established, implemented, and maintained that meet the requirements and recommendations of Section 5.2.2, 5.2.5, 5.2.15, and 5.3 of American National Standards Institute ANSI N18.7-1976. Section 5.2.2 of ANSI N18.7-1976, specifies that “[p]rocedures shall be followed, and the requirements for use of procedures shall be prescribed in writing.” Step 6.1 of GNP-12.17.01, “Pre-Criticality Containment Inspection,” Revision E, stated “Inspect all levels of Containment using the following criteria and record the results on the data sheets. Conditions not satisfying the following criteria shall be recorded.” Substep 6.1.1 directed the “Removal of all debris, including debris which could be generated from non-permanent materials or equipment.” Contrary to this, on October 18, 2006, the licensee failed to remove the 16 metal sheets from containment in accordance with the requirements of GNP-12.17.01.

Corrective actions, to date, included removal of the metal sheets from containment, an extent of condition walkdown performed by the licensee, and the initiation of CE019965 to further evaluate the condition. Because this violation of TS 6.8 is of very low safety significance and has been entered into the licensee’s corrective action program as CAP042304 (CE019965), this violation is being treated as a non-cited violation in accordance with the NRC Enforcement Policy (NCV 05000305/2007002-07).

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed surveillance testing activities to assess operational readiness and to ensure that risk-significant structures, systems, and components were capable of performing their intended safety function. Activities were selected based upon risk significance and the potential risk impact from an unidentified deficiency or performance degradation that a system, structure, or component could impose on the unit if the condition was left unresolved. The inspection activities included, but were not limited to, a review for preconditioning, integration of testing activities, applicability of acceptance criteria, test equipment calibration and control, procedural use, control of temporary modifications or jumpers required for test performance, documentation of test data, TS applicability, impact of testing relative to performance indicator reporting, and evaluation of test data. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following surveillance testing activities for review for a total of eight samples:

- power range nuclear instrument N-43 monthly test, SP-48-003G;
- channel 3 reactor protection instrument channel test SP-47-316C;
- AFW pump lube oil pressure switch test, SP-05B-037;
- AFW pump discharge pressures switch test, SP-05B-305;

- EDG “A” carbon dioxide trip test;
- EDG “A” monthly surveillance test;
- engineered safety feature train “B” logic channel test; and
- charging pump “C” flow loop calibration.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors selected emergency preparedness exercises that the licensee had scheduled as providing input to the Drill/Exercise Performance Indicator. The inspection activities included, but were not limited to, the classification of events, notifications to offsite agencies, protective action recommendation development, and drill critiques. Observations were compared with the licensee’s observations and corrective action program entries. The inspectors verified that there were no discrepancies between observed performance and performance indicator reported statistics. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors selected the following emergency preparedness activity for review for a total of one sample:

- emergency notifications performed in conjunction with licensed operator requalification training. Drill notifications were made with state, county, and local agencies.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS2 Radioactive Material Processing and Transportation (71122.02)

.1 Radioactive Waste System Inspection Planning

a. Inspection Scope

The inspectors reviewed the liquid and solid radioactive waste system description in the USAR for information on the types and amounts of radioactive waste (radwaste) generated and disposed. The inspectors reviewed the scope of the licensee’s audit

program with regard to radioactive material processing and transportation programs to verify that it met the requirements of 10 CFR 20.1101(c). This review represented one sample.

b. Findings

No findings of significance were identified.

.2 Walkdown of Radioactive Waste Systems

a. Inspection Scope

The inspectors reviewed the liquid and solid radioactive waste system description in the USAR and the most recent information regarding the types and amounts of radioactive waste generated and disposed. The inspectors performed walkdowns of the liquid and solid radwaste processing systems to verify that the systems agreed with the descriptions in the USAR and the Process Control Program and to assess the material condition and operability of the systems. The inspectors reviewed changes to the waste processing system to verify the changes were reviewed and documented in accordance with 10 CFR 50.59 and to assess the impact of the changes on radiation dose to members of the public.

The inspectors reviewed the current processes for transferring waste resins into transportation containers to determine if appropriate waste stream mixing and/or sampling procedures were utilized. The inspectors also reviewed the methodologies for waste concentration averaging to determine if representative samples of the waste product were provided for the purposes of waste classification in accordance with 10 CFR 61.55. During this inspection, the licensee was not conducting waste processing. This review represented one sample.

b. Findings

No findings of significance were identified.

.3 Waste Characterization and Classification

a. Inspection Scope

The inspectors reviewed the licensee's radio-chemical sample analysis results for each of the waste streams, including dry active waste, resins, and filters. The inspectors also reviewed the licensee's use of scaling factors to quantify difficult-to-measure radionuclide (e.g., pure alpha- or beta-emitting radionuclide). The reviews were conducted to verify that the licensee's program assured compliance with 10 CFR 61.55 and 10 CFR 61.56, as required by Appendix G of 10 CFR Part 20. The inspectors also reviewed the licensee's waste characterization and classification program to ensure that the waste stream composition data accounted for changing operational parameters and thus remained valid between the annual sample analysis updates. This review represented one sample.

b. Findings

No findings of significance were identified.

4. Shipment Preparation

a. Inspection Scope

The inspectors reviewed shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness for a dry active waste shipment. The inspectors verified that the receiving licensee was authorized to receive the shipment packages. The inspectors reviewed the licensee's procedures for loading and closure. The inspectors observed radiation worker practices to verify that the workers had adequate skills to accomplish each task and to determine if the shippers were knowledgeable of the shipping regulations and whether shipping personnel demonstrated adequate skills to accomplish the package preparation requirements for public transport with respect to NRC Bulletin 79-19, "Packaging of Low-Level Radioactive Waste for Transport and Burial," and 49 CFR Part 172, Subpart H. The inspectors reviewed the training provided to personnel responsible for the conduct of radioactive waste processing and radioactive shipment preparation activities. The review was conducted to verify that the licensee's training program provided training consistent with NRC and Department of Transportation (DOT) requirements. This review represented one sample.

b. Findings

No findings of significance were identified.

.5 Shipping Records

a. Inspection Scope

The inspectors reviewed eight non-excepted package shipment manifests completed in years 2005 through 2007 to verify compliance with NRC and DOT requirements (i.e., 10 CFR Parts 20 and 71 and 49 CFR Parts 172 and 173). The inspectors reviewed current package preparation or shipping underway during the inspection. This review represented one sample.

b. Findings

No findings of significance were identified.

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed condition reports, audits, and self-assessments that addressed radioactive waste and radioactive materials shipping program deficiencies since the last inspection, to verify that the licensee had effectively implemented the corrective action

program and that problems were identified, characterized, prioritized, and corrected. The inspectors also verified that the licensee's self-assessment program was capable of identifying repetitive deficiencies or significant individual deficiencies in problem identification and resolution.

The inspectors also reviewed corrective action reports from the radioactive material and shipping programs since the previous inspection; interviewed staff and reviewed documents to determine if the following activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk:

- Initial problem identification, characterization, and tracking;
- Disposition of operability/reportability issues;
- Evaluation of safety significance/risk and priority for resolution;
- Identification of repetitive problems;
- Identification of contributing causes;
- Identification and implementation of effective corrective actions;
- Resolution of NCVs tracked in the corrective action program; and
- Implementation/consideration of risk significant operational experience feedback.

This review represented one sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

Cornerstones: Initiating Events and Mitigating Systems

.1 Reactor Safety Strategic Area

a. Inspection Scope

The inspectors used NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 4, to assess the accuracy of the PI data. The inspectors' review included, but was not limited to, conditions and data from logs, LERs, corrective action program documents, and calculations for each PI specified. As part of this inspection, the documents listed in the Attachment were reviewed.

The following PIs for the period of January through December 2006 were reviewed for a total of six samples:

- Unplanned Scrams per 7000 Critical Hours,
- Mitigating Systems Performance Index (MSPI), Emergency AC Power System,
- MSPI, High Pressure Injection System,
- MSPI, Heat Removal System,

- MSPI, Residual heat Removal System, and
- MSPI, Cooling Water Systems.

b. Findings

Introduction: The inspectors identified an unresolved item related to MSPI diesel generator unavailability. This issue was not considered a data reporting error because the licensee had submitted a frequently asked question (FAQ) for this issue as a result of questions identified during the MSPI pilot inspection performed in December 2006. This issue is considered unresolved pending resolution of the related FAQ.

Description: As noted in IR 05000305/2007007, an apparent violation of regulatory requirements was identified for a period of diesel generator unavailability from June through August 2006. Based on this period of unavailability, the inspectors concluded that the unavailability was also required to be reported under the MSPI. The licensee interpreted the requirement differently and, as a result, submitted an FAQ for the issue. This issue is considered unresolved pending resolution of the FAQ (URI 05000305/2007002-08).

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

As part of the routine inspections documented in this inspection report, the inspectors verified that the licensee entered the problems identified during the inspection into their corrective action program. Additionally, the inspectors verified that the licensee was identifying issues at an appropriate threshold and entering them in the program, and verified that problems included in the program were properly addressed for resolution. Attributes reviewed included: problems were completely and accurately identified; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent of condition reviews, and previous occurrences reviews were proper and adequate; and classification, prioritization, and focus were commensurate with safety and sufficient to prevent recurrence of the issue.

b. Findings

No findings of significance were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

To assist with the identification of repetitive equipment failures and specific human performance issues for follow-up by the inspectors, the inspectors performed a daily screening of items entered into the licensee's corrective action program. This review was

accomplished by reviewing daily CAP summary reports and attending corrective action review board meetings.

b. Findings

No findings of significance were identified.

.3 Selected Issue Follow-Up: Corrective Actions for NCV 05000305/2006002-03, "Failure to Apply Appropriate Quality Classification to TSC Diesel Generator Modifications as Required by Procedures"

a. Inspection Scope

The inspectors reviewed the adequacy of corrective actions for NCV 05000305/2006002-03, "Failure to Apply Appropriate Quality Classification to TSC Diesel Generator Modifications as Required by Procedures." The inspectors determined that the finding identified in Section 1R12 above (NCV 05000305/2007002-02) affected the cross-cutting area of problem identification and resolution because the licensee failed to take effective corrective actions when barriers to prevent recurrence were not established during supervisory reviews that granted multiple extensions to the condition report written to correct NCV 05000305/2006002-03.

b. Findings

No findings of significance were identified.

4OA3 Followup of Events and Notices of Enforcement Discretion (71153)

.1 Personnel Performance During Non-Routine Plant Evolutions and Events

a. Inspection Scope

The inspectors reviewed personnel performance to unplanned non-routine evolutions to review operator performance and the potential for operator contribution to the evolution, transient, or event. The inspectors observed or reviewed records of operator performance during the evolution. Reviews included, but were not limited to, operator logs, pre-job briefings, instrument recorder data, and procedures. As part of this inspection, the documents listed in the Attachment were reviewed.

The inspectors evaluated the following evolutions for a total of two samples:

- Unplanned reactor trip during turbine trip testing on January 12, 2007; and
- Unplanned reactor trip during nuclear instrument testing on February 27, 2007.

b. Findings

No findings of significance were identified.

4OA5 Other Activities

.1 (Closed) URI 05000305/2006004-01, Potential Medical Restriction Required On Operator's License

Introduction: The inspectors identified a finding of very low safety significance. The licensee failed to identify a potentially disqualifying medical condition for one of its licensed operators and, therefore, failed to notify the NRC within 30 days of the onset of the condition. This is a Severity Level IV, Non-Cited Violation. This finding was attributed to the cross-cutting area of human performance.

Description: In July 2006, NRC inspectors discovered that a licensed operator had been taking a prescription medication for approximately three months to control his blood pressure. The facility licensee's medical review officer failed to correctly apply the standard contained in American National Standards Institute/American Nuclear Society ANSI/ANS 3.4, "Medical Certification and Monitoring of Personnel Requiring Operator License for Nuclear Power Plants," Section 5.3.5, "Cardiovascular," which stated, in part, the following criterion shall be imposed: (1) blood pressure less than or equal to 160/100. The licensee's medical review officer reasoned that because the licensed operator's blood pressure before taking the prescribed medication was less than 160/100, he did not need a condition on his operator license. However, the inspectors noted that because his blood pressure was being controlled by medical means, it could not be guaranteed to be less than 160/100 if the operator stopped taking the medication and a condition was required for the operator's license. The NRC's medical review officer reviewed the operator's medical history and imposed a condition on the operator's license that he take the medication as prescribed. Because the facility's medical review officer failed to correctly apply the standard associated with a potentially disqualifying medical condition, a required notification to the NRC of that condition was not made. Facility licensees are required to notify the NRC within 30 days if a licensed operator or senior operator develops a permanent disability or illness, in accordance with 10 CFR 50.74, "Notification of Change in Operator or Senior Operator Status." The licensee entered the issue into its corrective action program as CA027038, "Information from NRC Regarding Medical Exams/Evaluations." The immediate action taken by the licensee was to ensure the operator was taking the prescribed medication at the prescribed frequency. The licensee incorporated the lessons learned into the requalification training program to make all licensed operators aware of the requirement to notify station management in the event they are required to take prescribed medication by their doctors.

Analysis: The inspectors determined that the failure of the facility licensee to notify the NRC of the change in medical condition was a performance deficiency warranting a significance evaluation. Because violations of 10 CFR 50.74 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process (and not the significance determination process). In accordance with the NRC Enforcement Policy, this finding is determined to be greater than minor because the medical condition that was not reported required a change to the operator's NRC license. Because the operator was always in the presence of other licensed operators while performing licensed duties and made no operational errors while he was taking prescribed medication before his license had been appropriately revised, NRC management has determined this issue is a Green finding, of very low safety significance.

Enforcement: 10 CFR 50.74 states, in part, that “Each licensee shall notify the appropriate Regional Administrator as listed in Appendix D to Part 20 of this chapter within 30 days of the following in regard to a licensed operator or senior operator: (c) Permanent disability or illness as described in 55.25 of this chapter.” Contrary to this, the inspectors identified that a licensed operator had been taking a prescription medication to control his blood pressure for approximately three months without notifying the NRC. The NRC’s medical review officer determined that a condition was necessary for the operator’s license. An amended license was issued to the operator requiring him to take the prescription medication at the prescribed frequency. Because the licensee failed to notify the NRC of the change in the licensee’s medical condition, it was a violation of 10 CFR 50.74. Because this violation was of very low safety significance and was entered into the corrective action program, this violation is being treated as a Severity Level IV, NCV consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000305/2007002-09). URI 05000305/2006004-01 is closed.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Ms. L. Hartz and other members of licensee management on March 31, 2007. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

Interim exits were conducted for:

- URI 05000305/2006004-01, reviewed with Mr. P. Short, Initial Licensed Operator Training Program Lead, February 15, and
- Radioactive Material Processing and Transportation with Ms. L. Hartz on March 9.

4OA7 Licensee-Identified Violations

None.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D. Allison, Supervisor, Radioactive Material Control
L. Armstrong, Site Engineering Director
T. Breene, Nuclear Licensing Manager
A. Brezinski, Radiation Waste Technologist
M. Crist, Plant Manager
D. Gauger, Chemistry Supervisor
L. Hartz, Site Vice-President
W. Henry, Maintenance Manager
J. Ruttar, Operations Manager
D. Shannon, Radiation Protection Manager
P. Short, Initial Licensed Operator Training Program Lead
S. Wood, Emergency Preparedness Manager

Nuclear Regulatory Commission

P. Loudon, Chief, Division of Reactor Projects, Branch-5

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000305/2007002-01	NCV	Failure to Adequately Implement E-0-05, "Response to Natural Events," during a High Wind Advisory (Section 1R01)
05000305/2007002-02	NCV	Inappropriate QA Class Components Installed in TSC Diesel Generator (Section 1R12)
05000305/2007002-03	URI	Inadequate Testing of Diesel Generator when the Redundant Diesel Generator was Out-of-Service (Section 1R13.1)
05000305/2007002-04	NCV	Nuclear Instrument Test Performed Contrary to Procedural Requirements (Section 1R13.2)
05000305/2007002-05	NCV	Inadequate Seismic Storage Requirements in Station Housekeeping Procedure (Section 1R15.2)
05000305/2007002-06	NCV	Failure to Evaluate the Potentially Inadequate Design of the Service Water System (Section 1R15.3)
05000305/2007002-07	NCV	Foreign Material in Containment as a Result of Inadequate Containment Closure Inspections (Section 1R20.1)

05000305/2007002-08	URI	Possible Error in MSPI Data Reported for Diesel Generator Availability (Section 4OA1.1)
05000305/2007002-09	NCV	Failure to Notify NRC of Licensee Medical Condition Change in Accordance with 10 CFR 50.74 (Section 4OA5.1)

Closed

05000305/2007002-01	NCV	Failure to Adequately Implement E-0-05, "Response to Natural Events," during a High Wind Advisory (Section 1R01)
05000305/2007002-02	NCV	Inappropriate QA Class Components Installed in TSC Diesel Generator (Section 1R12)
05000305/2007002-04	NCV	Nuclear Instrument Test Performed Contrary to Procedural Requirements (Section 1R13.2)
05000305/2005008-04	URI	Potential Common Mode Failure of Service Water Pumps (Section 1R15.1)
05000305/2007002-05	NCV	Inadequate Seismic Storage Requirements in Station Housekeeping Procedure (Section 1R15.2)
05000305/2006003-03	URI	Potentially Inappropriate Safety/Nonsafety-Related Interface for Bearing Cooling and Flushing Water to the Safety-Related Service Water Pumps (Section 1R15.3)
05000305/2007002-06	NCV	Failure to Evaluate the Potentially Inadequate Design of the Service Water System (Section 1R15.3)
05000305/2007002-07	NCV	Foreign Material in Containment as a Result of Inadequate Containment Closure Inspections (Section 1R20.1)
05000305/2006004-01	URI	Potential Medical Restriction Required on Operator's License (Section 4OA5.1)
05000305/2007002-09	NCV	Failure to Notify NRC of Licensee Medical Condition Change in Accordance with 10 CFR 50.74 (Section 4OA5.1)

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1R01: Adverse Weather

CAP042132; KPS Not Notified of High Wind Advisory
E-O-05; Response to Natural Events; Revision X
GMP-172; Tornado Missile Hazard Monthly Inspection; Revision C
GNP-12.06.01; Cold Weather Operations; Revision D
Kewaunee Nuclear Power Plant (KNPP) Control Room Log; Day Shift; February 22, 2007

1R04: Equipment Alignment

CAP034001; SW Pump 1A2 Discharge Pressure Slow to Rise
CAP037106; SW Strainer A1 Backwash Valve is Hard to Operate Manually
CAP038851; Circulating Pump B Seal Water Flow Low
CAP038874; 1A1 SW Rotating Strainer has Packing Leakage
CAP039925; SW-6005-5 Ball Valve Leaks
CAP040835; SW-900C Valve Position Indication is Broken
OPERM-202; Flow Diagram - Service Water (SW) System; Revision CA
SP-05B-346; Turbine Driven AFW Pump Low Suction and Low Discharge Pressure Trip Test

1R05: Fire Protection

AX-23B, AX-23D, AX-25/Elevation 586'; Revision E
AX-23B; Fire Zone Summary Component Reactor Auxiliaries North Center; Revision 6
AX-23D; Fire Zone Summary Component Cooling Water Pump 1B Room; Revision 6
AX-37; Fire Zone Summary Component Control Rod Drive Equipment Room; Revision 6
AX-37, AX-32, AX-34/Elevation 626'; Revision D
TU-94; Fire Zone Summary Component CO Tank Room; Revision 6
TU-95A; Fire Zone Summary Component Dedicated Shutdown Panel Room; Revision 6
TU-95B; Fire Zone Summary Component Safeguards Alley; Revision 6
TU-95C; Fire Zone Summary Component AFW Pump 1A Room; Revision 6
A-538; Drawing - CO2 Storage Tank Room; TU-94/Elevation 586'; Revision D
A-539; Drawing - 480V Switchgear Bus 1-51 and 1-52 Room; TU-95A/Elevation 586' Revision C
A-540; Drawing - 480V Switchgear Bus 1-61 and 1-62 Room and AFW Pump Area; TU-95B,
A-548; Drawing - Charging Pump, Boric Acid Concentrate Pump, and Residual Heat Removal
Pump Pit Areas
A-556; Drawing - Control Rod Drive, Reactor Trip Cabinet Area, Instrument Lab, and Emergency
Air
Kewaunee Nuclear Power Plant (KNPP) Fire Protection Program Analysis; Fire Zone Summaries

1R06: Flood Protection Measures

Individual Plant Examination for External Events Submittal; September 28, 1998
USAR; Hydrology; Revision 18

1R07: Heat Sink Performance

CA029569; NRC CDBI Questions on SI Lube Oil Cooler
CAP041327; NRC CDBI Questions on SI Lube Oil Cooler
CAP042299; Enhancement of CAP041327 Operability Discussion
Work Order (WO) 07-002435-000; Heat Exchanger-Lubricating Oil Safety Injection Pump 1A
WO 07-002438-000; Heat Exchanger-Lubricating Oil Safety Injection Pump 1B

1R11: Licensed Operator Requalification Program

LRC-HI-SEE01; [Title Not Included for Exam Security Purposes]

1R12: Maintenance Effectiveness

CAP029389; Abnormal Technical Support Center (TSC) Diesel Generator Conditions During RT-DGM-10-TSC
CAP030973; Circuit Breaker 14604, TSC Diesel Generator to Bus Tie Breaker Would Not Fully Latch When Charging the Closing Spring
CAP031068; Maintenance Rule Goals Missed for TSC Diesel Generator
CAP031759; Maintenance Rule (a)(1) Evaluation - System 40 Function 03
CAP040149; TSC Diesel Generator Coolant Leak
CAP041046; TSC D/G Oil Level Switches
CAP042878; TSC Diesel Generator Fuel Oil Pressure Gage Erratic
CAP043065; Conversion from OQAP to DOM-QA-1 May Have Missed Requirements for TSC DG
GNP-08.20.04; Maintenance Rule Functional Failure and Maintenance Preventable Function Failure Evaluations; Revision F
GNP-01.01.01, Determination of Nuclear Safety Designed Classifications, QA Type and EQ Type; Revision
GNP-08.20.04; Maintenance Rule (a)(1)/(a)(2) Evaluations; Revision D
NAD-08.09; Emergency and TSC Diesel Generator Reliability Program; Revision Original
NAD-08.20; Maintenance Rule Implementation; Revision D
WO 07-000151-000; Generator-TSC Diesel Generator
WO 07-000268-000; Generator-TSC Diesel Generator
91-083; Commitment - Station Blackout QA Audits (DCR 2425)
Dominion Nuclear Department Administrative Procedure D-MMAP-0011; Sampling Methodology for Material Acceptance; Revision 0
Letter from Wisconsin Public Service to USNRC; Station Blackout Response; September 18, 1992
Letter from NRC to Mr. C. A. Schrock; Kewaunee Nuclear Power Plant, Unit No. 1 - Station Blackout Rule; November 19, 1992
Letter from NRC to Mr. Ken Evers; Safety Evaluation of the Kewaunee Power Plant Response to the Station Blackout Rule (TAC No. 68558); November 20, 1990

1R13: Maintenance Risk Assessments and Emergent Work Control

CA029036; Positive Rate Time Could Not Be Obtained During Monthly N-042 SP-48-003F
CA030034; Senior Resident Concern - Faulty Assumption Results in Unsupported Operability Determination
CAP040425; Positive Rate Time Could Not Be Obtained During Monthly N-42 SP-48-003F
GMP-137; Brush/Tube Scrubber Cleaning Heat Exchanger Tubes and Inspection; Revision I
PTE 95-0029; Diesel Generator Jacket Water Cooler, CC Heat Exchanger and Trane FCUs; Revision 5

WO 07-003730-000; Fan Coil Unit-Residual Heat Pump PIT 1A
Kewaunee Online Production Project Report; February 6, 2007
Kewaunee Power Station (KPS) Maintenance Department Clock Reset Briefing Sheet;
February 9, 2007
Maintenance Planning Schedules; 01/22/07 through 03/31/07
On-Line Schedule Change Request; SW Pump 1B2 Lube Water Regulator Rebuild or Replace;
February 8, 2007
On-Line Schedule Change Request; Repair/Replace Ground Test Point on Positive Rate Circuit
for N42; February 6, 2007
Weekly Risk Management Charts; 01/22/07 through 02/03/07

1R15: Operability Evaluations

ACE003057; Inadequate Engineering Design Basis for SW Seal Water CUNO Filter Application
CA026047; Potentially Inappropriate Safety/Non-Safety-Related Interface for Bearing Cooling
CA029043; Replace AFW flow Elements Due to Use of an Unsupported Calculation Assumption
CA029044; Accuracy Calculations for the AFW Flow Elements Use an Unsupported Assumption
CA029789; Missed Opportunity to Prevent the A2 and B1 SW Pump Loss of Essential Gland
Water
CAP019722; Continued Reliance on manual Action for replacement of SW Seal Water CUNO
Filter
CAP027887; Inadequate Engineering Design Basis for SW Seal Water CUNO Filter Application
CAP034249; SW Pump B1 SW Backup Regulator Failed to Pickup
CAP034269; SW Pump A2 Backup Seal Water Regulator Failure
CAP034310; Need Change to Procedure PMP 02-07, Cleaning SW Pump Bearing Lube Water
Supply Pipes and Tubing
CAP034339; N-SW-02 Guidance for Setting SW Pump Gland Water Flow Needs Revision
CAP034340; Missed Opportunity to Prevent the A2 and B1 SW Pump Loss of Essential Gland
Water
CAP034346; SW Pump B1 Seal Water Regulator Showing a Decreasing Pressure
CAP036985; SW CUNO filter Change Frequency
CAP038489; GNP-12.17.01 Inspection Results
CAP038510; Repair or Replace Pressurizer Insulation
CAP038513; Containment Inspection Results Per GNP-12.17.01
CAP038542; GNP-12.17.01 Inspection Results
CAP040163; Accuracy Calculations for the AFW Flow Elements Use an Unsupported Assumption
CAP040928; CAP040163 Requires Clarification
CAP040983; Operability Statement Documented by Operations in CAP040163 was not Correct
CAP041109; Plumbing Needs to be Evaluated
CAP041305; Calcium Deposit Prevents SW Pump A2 Lube Water Regulator from Being Set
CAP041330; Further Clarification of Operability for CAP040163 and CAP040928
CAP041332; Potential Enhancements to AFW System Operating Procedures and Training
CAP041339; Main Transformer Oil Piping Experiencing Increase in Leaks
CAP041357; Provide Clarification for KPS EAL Matrix ICs HU1.7 and HA1.6
CAP041358; Snubber HMSD-H156 Fluid Level is Less than One Half
CAP041386; Flush Hot Spot #18
CAP041671; Unplanned Entry Into a 72-Hour Limiting Condition for Operation
CAP041672; SW Pump A2 Bearing Seal Water Flow Low
CAP042226; NRC Concern - Failure to Incorporate Analysis Assumptions in Procedure

CAP042240; Additional NRC Concerns on SW CUNO Filters
CAP042304; Boric Acid Containment Inspection Required Additional Dose to Complete
CAP042304 Past Operability Evaluation; Loose Sheet Metal Panels Were in the Containment
Vaults During Power Operations; Revision 1
CAP042371; Potentially Adverse Condition Not Properly Documented in CAP
CAP042374; Ineffective Corrective Actions for Containment Insulation Inspections
CAP043166; Inspectors Raise Concern with Improper Storage Allowed by Procedure
DCR 3605; Replacement of the Emergency Core Cooling System Sump B Strainer; Revision 1
EWR015109; Continued Reliance on Manual Action for Replacement of SW Seal Water CUNO
Filter
GNP-01.31.01; Plant Cleanliness and Storage; Revision L
GNP-12.17.01; Pre-Criticality Containment Inspection; Revision E
GNP-12.17.02; Containment Inspection During Operations; Revision D
KNPP RPJB-47; RWP Pre-Job Brief; Revision B
N-SW-02; Service Water System; Revision AJ
PCR012627; Conflicting Guidance for Operability of SW Pumps with Regard to Bearing Lube
Water System
PCR012768; Clarify Steps in GNP-03.01.03 Per Comments Given at Leadership Meeting
RT-MI-87e; Equipment Operator Logs; Revisions F and G
SP-05B-215; Auxiliary Feedwater to Steam Generator 1A Flow Loop Calibration; Revision O
SP-05B-216; Auxiliary Feedwater to Steam Generator 1B Flow Loop Calibration; Revision M
SP-05B-216; Auxiliary Feedwater to Steam Generator 1B Flow Loop Calibration; Revision N
SP-10-225; Diesel Fuel Oil Sampling; Revision Q
Classification of Structures, Systems and Components; Table B.2-1; Revision 16
KNPP Control Room Log; Day Shift; February 13, 2007
Dominion Nuclear Administrative Procedure DNAP-1907; Human Performance Program;
Revision 8
Dominion Guidance and Reference Document ER-AA-PRS-1004; Equipment Reliability Clock;
Revision 0
Dominion KPS Online Production Project Report; February 28, 2007
Dominion Root Cause Evaluation 723; Degradation of SW Pump Seal/Bearing Water Flow;
Revision B
Drawing A-209; General Arrangement Reactor and Auxiliary Building Miscellaneous Floor Plans;
Revision Y
Herguth Laboratories, Inc. Certificate of Analysis; Lab Number 524514; Diesel Fuel Oil for EDG
'A' Storage Tank
Thermal Properties of Petroleum Products; Table 6

1R19: Post-Maintenance Testing

CA029569; NRC CDBI Questions on SI Lube Oil Cooler
CAP041327; NRC CDBI Questions on SI Lube Oil Cooler
CAP042131; Small Leak from Weephole of Regulator 35034
CAP042133; 100 percent Speed Not Obtained on 1B Charging Pump During ICP-35-49
CAP042299; Enhancement of CAP041327 Operability Discussion
GMP-137; Brush/Tube Scrubber Cleaning Heat Exchanger Tubes and Inspection; Revision I
ICP-35-49; CVC-Charging Pump 1B Speed Control Loop 428B Calibration; Revision K
PTE 95-0029; Diesel Generator Jacket Water Cooler, CC Heat Exchanger and Trane FCUs;
Revision 5

RT-DGM-10-TSC; TSC Diesel Generator; Revision AH
WO 06-007950-000; Relay-Elect-Bus 46 UV Aux Rly
WO 07-002435-000; Heat Exchanger-Lubricating Oil Safety Injection Pump 1A
WO 07-002438-000; Heat Exchanger-Lubricating Oil Safety Injection Pump 1B
WO 07-003730-000; Fan Coil Unit-Residual Heat Pump PIT 1A
10 CFR 50.54 Review Process; TSC Diesel Out-of-Service for Maintenance/Testing Scheduled for 3/13/07 and Replace Relay
Kewaunee Nuclear Power Plant Asset Information Report; January 17, 2007
Kewaunee Nuclear Power Plant Major Activities for Week of March 12, 2007

1R20: Refueling and Other Outage Activities

CAP038489; GNP-12.17.01 Inspection Results
CAP038510; Repair or Replace Pressurizer Insulation
CAP038513; Containment Inspection Results Per GNP-12.17.01
CAP039331; Procedure Enhancements for A-HD-11;
CAP039533; Heater Drain Pump A Speed Failure
CAP039592; Control Room Deficiency
CAP039611; Received Annunciator 12-M, Reactor Coolant System (RCS) Loop B Flow Low, Due to Channel 1 (Red) Bistable
CAP040565; Automatic Reactor Trip
CAP042102; SRI Concern - Faulty Assumption Results in Unsupported Operability Determination
CAP042266; 52/RTB Has Exceeded Vendor Recommendation for Service Life on UVTA
CAP042657; Unbuckled Mirror Insulation Identified in Containment
E-O; Reactor Trip or Safety Injection; Revision AB
ES-0.1; Reactor Trip Response; Revision S
E-CVC-35; Emergency Boration; Revision R
ES-0.1; Reactor Trip Response; Revision R
GNP-02.02.01; Guidelines for Post Trip Activities; Revision B
GNP-03.01.01-1; Directive, Implementing Document, and Procedure Administrative Controls; Revision Y
GNP-03.01.01-1; Directive, Implementing Document, and Procedure Administrative Controls; Revision Z
GNP-03.01.03; Procedure Use and Adherence; Revision W
GNP-03.01.07; Infrequently Performed Tests or Evolutions; Revision B
N-0-02; Plant Startup from Hot Shutdown to 35 percent Power; Revision BB
N-0-02-CLA; Plant Prestartup Checklist; Revision M
N-CRD-49B; Reactor Startup; Revisions AQ and AR
N-HD-11; Heater and Moisture Separator Drain and Bleed Steam System; Revision T
N-RC-36A; Reactor Coolant Pump Operation; Revision AL
RC-36; Annunciator Response 47043-G; RCS Loop B TAVG Low Low; Revision G
RCE RCE000754; Automatic Reactor Trip; January 13, 2007
SP-48-0041; Nuclear Power Range Channel 3 (Blue) N43 Quarterly Calibration; Revision G
Dominion Event Review Team Report; Reactor Trip Occurred During Performance of
SP-54-063, Turbine Trip Mechanism Tests; January 13, 2007
Dominion Guidance and Reference Document OU-AA-1001; Forced Outage Planning and Recovery; Revision 0
Event Notification 43097; Invalid Actuation of Primary Containment Isolation System; January 12, 2007

Event Notification 43196; A Reactor Trip Occurred During Performance of a Surveillance Procedure Calibrating a Nuclear Power Range Instrument; February 27, 2007
Forced Outage Work List
Infrequently Performed Test Evolution Performance Approvals; January 14, 2007
Kewaunee Control Room Log - March 9, 2007
Kewaunee All Outage Activities by Mode Restraint Report
KPS Forced Outage Work List; Cycle 29
KPS Pre-Outage Milestones List
KPS Reactor Trip Report KW-02-28-07
Operability Determination 151; SSC Affected by the Degraded or Non-Conforming Condition; Revision 0

1R22: Surveillance Testing

CA029717; Question Concerning Daily Testing of an Emergency Diesel Generator (EDG)
CAP041597; Question Concerning Daily Testing of an EDG
CAP041620; Daily Test of Diesel Generator with Other Diesel Inoperable
CAP041687; Questions Concerning Daily Testing of an EDG with One EDG Inoperable
CAP042131; Small Leak from Weephole of Regulator 35034
CAP042133; 100 percent Speed Not Obtained on 1B Charging Pump During ICP-35-49
ICP-35-49; CVC-Charging Pump 1B Speed Control Loop 428B Calibration; Revision K
KNPP DCR 3006 Design Description; Diesel Generator Fuel System Failure Alarm; Revision 1
KNPP System Description System 10; Diesel Generator Mechanical; Revisions 1 & 2
N-DGM-10A; Diesel Generator A Manual Operation; Revision R
50.59 Applicability Review of N-DGM-10A; February 1, 2007
SP-05B-037; Turbine Driven Auxiliary Feedwater Pump and Auxiliary Steam System pressure Test; Revision H
SP-05B-305; Auxiliary Feedwater Pump A Low Discharge Pressure Switch Calibration; Revision I
SP-42-291A; Diesel Generator A Operability Test; Revision Q
SP-42-291A; Diesel Generator A Operability Test; Revision R
SP-42-312A; Diesel Generator A Availability Test; Revision Y
SP-42-312B; Diesel Generator B Availability Test; Revision Y
SP-48-003G; Nuclear Power Range Channel 3 (Blue) N-43 Monthly Test; Revision Q
SP-47-316C; Channel 3 (Blue) Instrument Channel Test; Revision X
SP-55-155B; Engineered Safeguards Train B Logic Channel Test; Revision R
SP-55-167-3A; MG® and MD® Valves Timing Test Train A (IST); Revision Orig
50.59 Applicability Review of ICP-35-49
Dominion Job Hazard Assessment Report SA-AA-110; February 22, 2007
Freedom of Information Act Request 2007-0120; February 21, 2007
Kewaunee Nuclear Power Plant Asset Information Report; January 17, 2007
Validation/Package Review Sheet (I&C); CVC-Charging Pump Speed Control Loop; February 21, 2007

1EP6: Drill Evaluation

LRC-HI-SEE01; [Title Not Included for Exam Security Purposes]

2PS2: Radioactive Material Processing and Transportation

Updated Safety Analysis Report; Section 11.0, Waste Disposal and Radiation Protection System; Revision 19

Nuclear Oversight Observation Report, 2005-003-2-006; Radioactive Waste Processing; completed on October 18, 2005
Nuclear Oversight Audit Report 06-08; Radiological Protection and Process Control Program, issued September 21, 2006
HP-09.029; RADMAN Operating Procedure; Revision B
NAD-01.016; Solid Radioactive Waste Process Control Program (PCP); Revision H
NAD-098.11; Failed Fuel Action Plan; Revision E
HP-09.031; Radioactive Material Shipping; Revision E
HP-09.011; Waste Stream Analysis; Revision D
GNP-11.08.01; Action Request Process; Revision AE
10 CFR 61 Analysis L25531 for DAW; February 9, 2006
10 CFR 61 Analysis L30668 for Resin February 21, 2007
10 CFR 61 Analysis L25531 for Filter; February 9, 2006
CAP028246; Radwaste Enhancements; July 1, 2005
CAP029284; CAP028246 Fails to Document Issue Details and Evaluation Results; September 19, 2005
CAP029431; Radioactive Waste Processing Procedures Need Enhancements; September 29, 2005
CAP034964; Radioactive Waste Procedures Contain Incorrect and Inadequate Guidance; July 3, 2006
CAP036355; Documentation for Rad Material Shipments Not adequate (Finding 06-08-02K); August 25, 2006
CAP034965; RAMQC Security Issues Not Updated in Procedures; July 3, 2006
CAP034966; Radwaste/Material Shipping Documents Do Not Depict All Required Data; July 3, 2006
CAP034963; QA Documentation Requirements Not Met for Radwaste Packages and Shipments; July 3, 2006
CAP042706; Evaluation of Significance of Several CAP Identified Issues Not Documented; March 9, 2007 (NRC-Identified)
CAP042584; Worker Playing Solitaire on the Computer in the Post Accident Sample Room; March 6, 2007 (NRC-Identified)
CAP042653; R-18 Digital Readout and Waste Disposal Panel Reading Greater than 10 Difference; March 8, 2007 (NRC-Identified)
CAP0042690; WG-36 Gauge on Waste Disposal Panel Reads Off-Scale Low, Below Zero; March 8, 2007 (NRC-Identified)
Shipping Package 062205-1; Low Specific Activity (LSA) LSA-II; June 22, 2005
Shipping Package 091505-1; Type A; September 15, 2005
Shipping Package 093005-1; Type A; September 30, 2005
Shipping Package 031506-1; LSA-II; June 20, 2005
Shipping Package 092906-2; SCO-II; September 29, 2006
Shipping Package 103006-2; LSA-II; October 30, 2006
Shipping Package 020807-1; LSA-II; February 8, 2007
Shipping Package 030807-1; LSA-II; March 8, 2007

40A1: Performance Indicator Verification

Kewaunee Power Station Performance Indicator Data Sheets, 1st Quarter 2007; January 22, 2007
Dominion Nuclear Administrative Procedure 2605; Emergency Preparedness Performance Indicators; Revision 3

40A2: Identification and Resolution of Problems

CAP029389; Abnormal Technical Support Center (TSC) Diesel Generator Conditions During RT-DGM-10-TSC
CAP030973; Circuit Breaker 14604, TSC Diesel Generator to Bus Tie Breaker Would Not Fully Latch When Charging the Closing Spring
CAP031068; Maintenance Rule Goals Missed for TSC Diesel Generator
CAP031759; Maintenance Rule (a)(1) Evaluation - System 40 Function 03
CAP040149; TSC Diesel Generator Coolant Leak
CAP041046; TSC D/G Oil Level Switches
CAP042878; TSC Diesel Generator Fuel Oil Pressure Gage Erratic
CAP043065; Conversion From OQAP to DOM-QA-1 May Have Missed Requirements for TSC DG

40A3: Event Follow-up

CA029717; Question Concerning Daily Testing of an EDG
CAP041597; Question Concerning Daily Testing of an EDG
CAP041620; Daily Test of Diesel Generator with Other Diesel Inoperable
CAP041687; Questions Concerning Daily Testing of an EDG with One EDG Inoperable
CAP042266; 52/RTB has Exceeded Vendor Recommendation for Service Life on UVTA E-O; Reactor Trip or Safety Injection; Revision AB
ES-0.1; Reactor Trip Response; Revision S
GNP-02.02.01; Guidelines for Post Trip Activities; Revision B
KNPP DCR 3006 Design Description; Diesel Generator Fuel System Failure Alarm; Revision 1
KNPP System Description System 10; Diesel Generator Mechanical; Revisions 1 and 2
N-HD-11; Heater and Moisture Separator Drain and Bleed Steam System; Revision T
N-DGM-10A; Diesel Generator A Manual Operation; Revision R
50.59 Applicability Review of N-DGM-10A; February 1, 2007
SP-42-291A; Diesel Generator A Operability Test; Revision Q
SP-42-291A; Diesel Generator A Operability Test; Revision R
SP-42-312A; Diesel Generator A Availability Test; Revision Y
SP-42-312B; Diesel Generator B Availability Test; Revision Y
SP-48-0041; Nuclear Power Range Channel 3 (Blue) N43 Quarterly Calibration; Revision G
SP-55-167-3A; MG® and MD® Valves Timing Test Train A (IST); Revision Orig
Dominion Guidance and Reference Document OU-AA-1001; Forced Outage Planning and Recovery; Revision 0
Event Notification 43196; A Reactor Trip Occurred During Performance of a Surveillance Procedure Calibrating a Nuclear Power Range Instrument; February 27, 2007
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KPS Forced Outage Work List; Cycle 29
KPS Reactor Trip Report KW-02-28-07
Operability Determination 151; SSC Affected by the Degraded or Non-Conforming Condition; Revision 0

LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater
ANSI/ANS	American National Standards Institute/American Nuclear Society
CA	Corrective Action
CAP	Condition Report
CE	Condition Evaluation
CFR	Code of Federal Regulations
DOT	Department of Transportation
DRP	Division of Reactor Projects
EDG	Emergency Diesel Generator
FAQ	Frequently Asked Question
GMP	General Maintenance Procedure
GNP	General Nuclear Procedure
IMC	Inspection Manual Chapter
IR	Inspection Report
KNPP	Kewaunee Nuclear Power Plant
KPS	Kewaunee Power Station
LER	Licensee Event Report
LOCA	Loss-of-Coolant Accident
LSA	Low Specific Activity
MSPI	Mitigating Systems Performance Index
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OQAP	Operational Quality Assurance Plan
PARS	Publicly Available Records System
PEW	Plant Equipment Water
PI	Performance Indicator
QA	Quality Assurance
RA	Risk Assessment
Radwaste	Radioactive Waste
RCE	Root Cause Evaluation
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RWP	Radiation Work Permit
SDP	Significance Determination Process
SSC	Structures, Systems, and Components
SW	Service Water
TS	Technical Specification
TSC	Technical Support Center
URI	Unresolved Item
USAR	Updated Safety Analysis Report
WO	Work Order