June 29, 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 PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT NO. 05000305/2007008

Dear Mr. Christian:

On May 18, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed a baseline team inspection at your Kewaunee Power Station. The enclosed report documents the inspection findings, which were discussed on May 24 with Mr. Crist and other members of your staff.

The inspection examined activities conducted under your license as they relate to the identification and resolution of problems, and your compliance with the Commission's rules and regulations, and with the conditions of your operating licenses. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

On the basis of the samples selected for review, the inspectors concluded that, in general, problems were properly identified, evaluated, and corrected. The inspectors identified one finding of very low safety significance (Green) during this inspection. The finding pertained to the failure to adequately implement procedural guidance during investigative analyses of root cause, collective significance, and apparent cause evaluations. This finding was also determined to be a violation of NRC requirements. However, because the violation was of very low safety significance and because the issue was entered into your corrective action program, the NRC is treating this violation as a Non-Cited Violation consistent with Section VI.A of the NRC Enforcement Policy.

If you contest the subject or severity of a Non-Cited Violation 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 a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - 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 Resident Inspector Office at the Kewaunee Power Station facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and any response you provide 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). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Jamnes L. Cameron, Chief
Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 05000305/2007008
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 D. Christian from J. Cameron dated June 29, 2007

SUBJECT: KEWAUNEE POWER STATION - NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT NO. 05000305/2007008

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-305
License No:	DPR-43
Report No:	05000305/2007008
Licensee:	Dominion Energy Kewaunee, Inc.
Facility:	Kewaunee Power Station
Location:	Kewaunee, Wisconsin
Dates:	April 30, 2007, through May 24, 2007
Inspectors:	A. Barker, Project Engineer (Team Leader) D. Jones, Reactor Inspector R. Ruiz, Reactor Inspector J. Cai, Human Factors Analyst, Office of Nuclear Reactor Regulation
Approved by:	J. Cameron, Chief Branch 5 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000305/2007008; Dominion Electric Kewaunee, Inc.; on 4/30/2007 - 5/24/2007; Kewaunee Power Station; biennial baseline inspection of the identification and resolution of problems. A violation was identified in the area of prioritization and evaluation of issues.

This report covered a 2-week, expanded-size baseline inspection of problem identification and resolution (PI&R) (Inspection Procedure 71152). The inspection was conducted by three regional inspectors. In addition, one human factors analyst from the Office of Nuclear Reactor Regulation conducted a review of safety-conscious work environment. One finding of very low safety significance (Green) was identified during this inspection, and was classified as a Non-Cited Violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 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.

Identification and Resolution of Problems

In general, the station identified issues and entered them into the corrective action program (CAP) at the appropriate level. In addition, issues that were identified from instances where previous corrective actions were ineffective or inappropriate were also entered into the CAP. The inspectors concluded that issues were properly prioritized. The finding described in the report depicts the licensee's lack of thoroughness in performing CAP investigative analyses. The implementation of the Dominion-wide Central Reporting System CAP software and the department corrective action coordinators in their formal roles will provide a framework and CAP focus with defined organizational accountability. The inspectors also determined that conditions at the Kewaunee Power Station were conducive to identifying issues. The licensee staff at Kewaunee was aware of and familiar with the CAP and other station processes, including the Employee Concerns Program, through which concerns could be raised. The one finding identified during this inspection was of very low safety significance (Green).

A. Inspector-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

- Green The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to adequately implement procedure DNAP-1604, "Cause Evaluation Program," and the Cause Evaluation Handbook during investigative analyses of root cause, collective significance, and apparent cause evaluations. The licensee subsequently revised several apparent cause evaluations (ACEs), such as ACE 3374 on the diesel generator B fuel rack shaft binding, and completed industry benchmarking to improve root cause evaluation and ACE investigative analysis.

This finding was associated with the Mitigating Systems Cornerstone. The finding was more than minor because, if left uncorrected, the licensee's analyses of conditions adverse to quality, such as the investigation of the diesel generator B fuel rack shaft binding, as documented in ACE 3374, would not be performed at an appropriate investigative depth for cause determination. The inspectors assessed the significance of this finding as very low safety significance (Green) because the finding did not represent an actual loss of safety function of the equipment. The finding was associated with cross-cutting aspect P.1(c), in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly analyze the sequence of events and the cause and effect relationships potentially impacting the causal determination of CAP evaluations. (Section 4OA2.a)

B. Licensee-Identified Violations

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (PI&R)

a. Assessment of the Corrective Action (CA) Program

(1) Inspection Scope

The inspectors reviewed documentation generated since the previous biennial baseline inspection of the identification and resolution of problems, completed on December 16, 2005, including: NRC inspection report findings, selected corrective action documents, licensee self-assessments and audits, operating experience reports and human performance initiatives to determine if problems were being identified and entered into the corrective action program (CAP) at the proper threshold. The inspectors also reviewed and discussed with licensee staff the licensee's CAP implementation, metrics, and status, and departmental performance indicators. In addition, the inspectors expanded their review of the auxiliary building roof degradation to include CAP documents initiated over the past 5 years.

The inspectors reviewed procedures, inspection reports, and corrective action documents to verify that identified issues were appropriately characterized and prioritized in the CAP. Evaluations documented in CAP documents were reviewed for appropriateness of depth and thoroughness of methodology relative to the significance or potential impact of the issue. The inspectors attended CAP meetings to observe the screening analysis of current issues, and the management review of root and apparent cause evaluations (RCEs and ACEs, respectively) and corrective action of existing condition reports (CRs).

The inspectors reviewed past inspection results, selected CAP documents, RCEs, and collective significance evaluation reports to verify that corrective actions were specified, commensurate with the safety significance of the issues, and implemented in a timely manner. The inspectors evaluated the effectiveness reviews developed for corrective action to prevent recurrence (CAPR). The inspectors also reviewed the licensee's corrective action for non-cited violations (NCVs) documented in NRC inspection reports.

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152.

(2) Assessment

(a) Identification of Issues

The inspectors concluded that, in general, the licensee identified issues and entered them into the CAP at the appropriate level. The licensee also used the CAP to document instances for which previous corrective actions were ineffective or were inappropriately closed.

On December 7, 2006, the licensee implemented a procedure change to GNP-11.08.01, "Action Request Process," to require that a CR be initiated upon receipt of any NRC issued NCV, cited violation (VIO), finding (FIN), or unresolved item (URI). The inspectors viewed this initiative as an accountability measure to support issue resolution within the CAP. The procedure change would also support the trending of NRC-issued violations for the purpose of tracking cross-cutting issues. The inspectors verified that this CR initiation guidance was included in the pending site transition to the Dominion-wide Central Reporting System CAP software.

(b) Prioritization and Evaluation of Issues

The inspectors observed the daily screening of new action requests (ARs) by site senior managers and some of the department corrective action coordinators (DCACs). At the time of the inspection, the licensee had not established formal implementation of a screening process with DCACs assembled for this specific role. The DCACs were scheduled to implement their formal CAP screening role within a few weeks following the inspection.

The screening of ARs resulted in decisions to assign additional department follow-up, to conduct corrective action, and to conduct condition and apparent cause evaluations. The inspectors determined that some of the dialogue that formed the participant decisions was based on the review of the issue for causal evaluation, rather than evaluating the condition itself. From this dialogue approach, the resulting outcome prescribed specific corrective actions (CAs) to complete. However, none of the issue screening reviews resulted in an inappropriate prioritization or significance characterization.

The inspectors concluded that issues were properly prioritized for significance. However, the inspectors developed the following observations regarding a CAP action request screening.

CAP Action Request Screening

Condition report CAP043908 identified that an unqualified worker performed a 10 CFR 50.59 screening. During the CAP screening meeting, the issue was not appropriately challenged to determine the prompt impact on station systems, structures and components. The operability status of CAP043908 was marked as "not applicable." However, the basis of operability characterized the issue as an administrative issue related to worker qualification and was discussed with training representatives. This discussion resulted in the conclusion that, at the time, there was no indication of a fault with any of the work performed by the unqualified individual, and, as a result, there were no current operability or reportability concerns. On April 19, 2007, the CAP screening direction was to perform an ACE assigned to training, to determine why an unqualified person remained on the qualification list and a review of the individual's work for the effect on the plant. The ACE was assigned the default 30-day due date. The inspectors determined that the scope of activities completed by the individual included 11 procurement technical evaluations. The evaluations were for classification of solder flux, a neutralizer, grease for various uses, and the rest being component equivalencies.

The component equivalencies included six for an upgraded component and one specifically designed to replace an obsolete component. The licensee generated CAP044522 to address the CAP screening issue for lessons learned and process improvement.

Procedure Non-Compliance

Introduction: The inspectors identified a finding of very low safety significance (Green) and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement the procedural guidance of DNAP-1604, "Cause Evaluation Program," and the "Cause Evaluation Handbook," during investigative analysis of root cause, collective significance, and apparent cause evaluations.

Description: Procedure DNAP-1604, "Cause Evaluation Program," Revision 6, provides guidance in performing root cause evaluations. Specifically, procedure section 3.2.7(g), provides guidance to validate the analysis and root cause selection through attributes such as: 1) listed cause was a specific behavior, condition, or process, 2) cause and effect relationship were thoroughly examined, and 3) valid causal factors were identified and linked via cause and effect to the identified causes. The inspectors reviewed root cause evaluation (RCE) 0717, "NRC Identified Cross-Cutting Issue - Problem Identification and Resolution," Revision 1 and RCE 0760, "NRC Identified Cross-Cutting Issues Remain Open," Revision 0, to determine level of thoroughness in the evaluation conduct to identify root cause(s). In addition, the root cause evaluation that was changed to collective significance evaluation (CSE) K-2006-737, Revision 2, pertaining to the NRC human performance cross-cutting issue, was reviewed based on the procedure guidance contained in the Cause Evaluation Handbook, Revision 7. Specifically, handbook Chapter 21, "Collective Significance Analysis," provided guidance to develop a matrix of events and causes. The guidance directed that the events or assessments being considered be listed on one axis of the matrix. The dysfunctional behaviors, adverse conditions and causes identified for each event or assessment would be listed on the other axis of the matrix. Further, the guidance directed that other dysfunctional behaviors, adverse conditions and causes that could have been logically drawn from the report but were not explicitly identified were to be added. The identified issues are specified as follows:

RCE 0717, NRC Identified Cross-Cutting Issue - Problem Identification and Resolution, Revision 1

The inspectors reviewed the "event and causal factor chart" of RCE 0717 for a logical cause and effect relationship. The event and causal factor chart had a sequence path that identified "no continuing training" as a causal factor. For this sequence path, the next logically linked causal factor was, "not believed necessary." The next logically linked, and last causal factor was, "CAP not considered core business." This "CAP not considered core business" causal factor was identified as a root cause. The inspectors determined that this causal factor was broad and communicated a high level conclusion that was questionable from a logic cause and effect relationship. This linked causal

factor sequence and root cause identification was made for two independent inappropriate actions; one was “evaluator performance degrades” and the other was “management does not correct.”

Another example of a high level conclusion that was questionable from a logic cause and effect relationship was for the inappropriate action of “improvement initiative less than adequate (LTA).” The linked causal factor sequence presented was, “not based on full analysis,” then “no RCE/ACE assigned,” then “not entered into system,” with the root cause being “LTA enforcement of management expectations.”

RCE 0760, NRC Identified Cross-Cutting Issues Remain Open, Revision 0

The inspectors reviewed the “why staircase historical” of RCE 0760 for a logical cause and effect relationship. The top-tier statement for this why staircase was “NRC identified crosscutting issues remain open.” One of the paths of the why staircase analysis began with “Improvement Initiative (Excellence Plan) LTA.” This path continued with “Not based on causal analysis,” then “Not entered into the CAP process,” then “LTA enforcement of management expectations,” and the final stair was “LTA Management implementation of the CAP process.” The “LTA Management implementation of the CAP process” was broad and communicated a high level conclusion that was questionable from a logic cause and effect relationship.

CSE K-2006-737, NRC Human Performance Cross-Cutting Issue, Revision 2

CSE K-2006-737 was initiated to review past human performance events and issues to evaluate for common cause. In addition, the CSE would review the CAP database for human performance trends in the area of procedure usage. The inspectors concluded that CSE K-2006-737 was deficient in evaluation analysis methodology and corrective action. The evaluation analysis assigned issues, such as NRC findings, action requests and human performance clock resets, and cause codes using a root cause methodology tool. The top three codes based on numerical occurrence were designated as the leading contributors. There was no additional analysis conducted to determine “why” the leading contributors were identified or if there were common elements between issues. In addition, the evaluation analysis did not develop a matrix of events and causes as directed by the Cause Evaluation Handbook.

The CSE identified the top contributor to station performance in the area of procedure usage as “lack of enforcement of standards, policies and administrative controls.” The corrective action for this issue referenced the Kewaunee Excellence Plan. The CA in the Excellence Plan identified action that had been implemented and routine items that were being implemented. For CA closeout, the expectations for human performance tools were to be reinforced in training and included in the training observation program. In addition, coaching was to occur for a deviation from standards and daily reinforcement of expectation was to be conducted. The inspectors concluded that the CA was routine fundamental human performance initiatives, resulting in no additional action to align with the significance of the identified top contributor. The CSE was originally conducted in the fall of 2006. The current revision of the CSE is Revision 2. The licensee staff recognized prior to this inspection that the evaluation quality did not meet site standards, and planned to complete another revision.

The inspectors expanded the sample scope for the evaluation of issues by reviewing several other ACEs. Procedure DNAP-1604, "Cause Evaluation Program," provided guidance in performing ACEs. Specifically, procedure sections 3.1.3, "perform analysis" and 3.1.4, " determine apparent cause," referenced the use of the Cause Evaluation Handbook to determine sequence of events, areas of failure, such as, organizational and programmatic issues, and to determine an apparent cause with supporting details. In addition, procedure section 3.1.4 specifically stated "the why staircase is a useful tool to determine the cause of an event or condition. It is appropriate to go to the third or fourth level in determining the apparent cause." The identified issues are as follows:

Corrective Action Review Board (CARB) Investigative Analysis Review

The licensee developed a quality review checklist to evaluate the thoroughness and completeness of documents presented to the CARB for review. Using the checklist provided a numerical rating, which was intended to objectively describe the relative quality of the document. Documents rated "low" quality using the checklist would require additional information prior to presentation to the CARB for review. Documents rated "high" quality would have sufficient information for review by the CARB, including a thorough cause evaluation. The CARB review of ACEs did not challenge the organization to perform thorough investigative analyses. The following three ACEs are identified in terms of quality review rating prior to presentation and approval date.

- ACE 3374 on the diesel generator B exceeding 2800 KW during testing received a quality review rating of 100 out of the possible 100 points. CARB approved ACE 3374 on May 2, 2007.

- ACE 3250 on an event where the reactor was made critical and remained below the point of adding heat for approximately five hours received a quality review rating of 100 out of the possible 100 points. CARB approved ACE 3250 on November 7, 2006.

- ACE 3364 on an event where a procedure change resulted in starting the reactor coolant pump B outside limits specified by the vendor received a quality review rating of 89 out of the possible 100 points. CARB approved ACE 3364 on May 9, 2007.

The inspectors concluded that the presentation of the investigative analysis of the ACEs listed above offered the CARB an opportunity to question their thoroughness. The questions that would challenge thoroughness could have been on the depth of review of "why" a condition occurred, or if all of the investigative factors were analyzed to determine apparent cause. Additional details on the events is provided below.

ACE 3374, Diesel Generator B exceeds 2800 KW During SP-42-312B

The inspectors observed the engineering presentation of ACE 3374 at the CARB meeting on May 2, 2007. The apparent cause of the binding fuel rack shaft was determined to be a buildup of an oxidation layer on the fuel rack shaft at the bearing/shaft interface. The CARB approved ACE 3374 with no challenge to the

apparent cause, such as, to question why the oxidation was building-up. The inspectors concluded that the oxidation layer was an outcome of the condition, not an apparent cause. Work Order 07-1464 that made the repairs, identified heavy, medium and light scratches radially along the shaft at the bearing locations. This was not discussed at the CARB or documented in the ACE. However, this was documented in CAP041621 that was linked to CAP041567, that was used to determine the need to conduct an ACE. The inspectors determined that the oxidation layer was actually the deposit of bearing material onto the shaft. This was obtained through an interview with the maintenance supervisor assigned to the job. CAP044497 was generated by the licensee to document that an incomplete ACE was approved by CARB.

ACE 3250, Reactor Taken Critical and Remained Below POAH For Five Hours and Five Minutes

ACE 3250 documented an evaluation of a May 2006 event in which the reactor was made critical and remained below the point of adding heat (POAH) for approximately five hours. The apparent cause of this event was that the procedure did not have guidance which limited how long the reactor should remain critical below the POAH. The ACE identified numerous issues with two operating crews that included not having just-in-time training to perform a specific operating task, and questions regarding procedure content for the reactor startup. Later that day, at 1030 hours, the on-coming crew took the shift and raised reactor power above the POAH in 25 minutes. This sequence of events was not used to determine the apparent cause.

The author of CAP033953 identified that the Updated Safety Analysis Report (USAR) text described the main steam line rupture and rod ejection as reactivity transients. The CAP author also described that accident analysis had identified high-power peaking factors for power levels low in the source range. The author concluded that any delay in bringing reactor power from the point of criticality to the POAH should be avoided. The author requested that the review of these plant startup activities consider conservative decision making. The ACE did not include an analysis of the impact of the USAR information provided or the request to consider conservative decision making in the investigation.

ACE 3364, Revision to Procedure N-RC-36A, "Reactor Coolant Pump Operation," With Insufficient Engineering Evaluation

ACE 3364 documented an evaluation of a May 2006 event in which a procedure change resulted in starting the reactor coolant pump (RxCP) B outside the operating limits specified by the vendor. The documented apparent cause was a weak procedure change process. A contributing factor to the event was an "ineffective plant operations review committee (PORC) review." Some of the factors that degraded the PORC review documented in the ACE were as follows:

- "Because the procedure change was needed immediately to continue plant startup, PORC had no time to review the change prior to the

meeting. Starting RxCP B and then plant startup was waiting for the Labyrinth seal DP limit change."

- "The process owner that approved the revision was the only operations representative at the PORC meeting."

- "Revision preparation was incomplete because it was rushed. PORC requested 15 changes to the revision unrelated to the technical change, including completing Box G (i.e., process owner approval) and the 50.59 approval."

The above documented PORC review characterization was not analyzed in the ACE for acceptable organizational standards. The inspectors interviewed a CARB representative who did recall generating comments on this PORC review characterization. However, his comments were not addressed in the ACE.

Analysis: The failure to adequately implement the procedural guidance of DNAP-1604, "Cause Evaluation Program," and the Cause Evaluation Handbook, during investigative analysis of root cause, collective significance, and apparent cause evaluations constituted a performance deficiency warranting a significance evaluation. Using Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated November 2, 2006, the inspectors concluded that the finding is greater than minor because, if left uncorrected, the licensee's analyses of conditions adverse to quality, such as that documented in the ACE 3374 investigation of the diesel generator B fuel rack shaft binding, would not be performed at an appropriate investigative depth for cause determination. The inspectors reviewed Appendix B to IMC 0612 and determined that this finding, as it applies to the diesel generator B fuel rack shaft binding, was required to be evaluated by the Significance Determination Process (SDP). The SDP evaluation was required due to the finding's impact on the Mitigating Systems Cornerstone objective of ensuring the operability, availability, reliability, or function of a system that responds to initiating events to prevent undesirable consequences. The inspectors assessed the significance of this finding as very low safety significance (Green) because the finding did not represent an actual loss of safety function of the diesel generator B. The inspectors determined that the finding was associated with a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program because the licensee failed to thoroughly evaluate problems such that the resolutions address causes (P.1(c)). Specifically, the licensee failed to thoroughly analyze the sequence of events and the cause and effect relationships potentially impacting the causal determination of CAP evaluations.

Enforcement: Appendix B of 10 CFR Part 50, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality 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 DNAP-1604, "Cause Evaluation Program," and the Cause Evaluation Handbook were not adequately implemented during investigative analysis of root cause, collective significance, and apparent cause evaluations. 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 CAP, as CR013580, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000305/2007008-01). Corrective action for this NCV included licensee revision of ACE 3374 from subsequent investigative analyses to conclude that the apparent cause of the shaft binding involved the transfer of material from the aluminum shaft bearing to the steel shaft at the bearing/shaft interface. The most likely cause of the material transfer was the formation of a galvanic cell at the bearing/shaft interface. In addition, CR013580 documented the industry benchmarking completed to improve RCE and ACE investigative analysis for consistency and quality.

(c) Effectiveness of Corrective Action

In general, the inspectors concluded that the licensee had taken effective CAs to address identified problems. The inspectors interviewed licensee staff regarding the effectiveness of selected CA and programmatic changes resulting from the disposition of the identified issues and NCVs. The CAs for the samples reviewed appeared to be appropriate in scope. The inspectors determined that the licensee generated ARs when a CA was identified as either inadequate or inappropriate. However, the inspectors developed observations regarding the documentation of effectiveness review in a RCE and the CAP probation program entry criteria. These observations are described below.

RCE Effectiveness Review

Effectiveness reviews developed in RCE 0760, "NRC Identified Cross-Cutting Issues Remain Open," Revision 0, did not document the standards to be used to monitor or evaluate CAPRs. The identification of standards was one of the effectiveness review mandatory elements required to be documented in the RCE report. Specifically, GNP-11.08.01, "Action Request Process," Attachment O, Revision 32, delineated the process for CA monitoring and effectiveness review. RCE 0760, section 1.4.4, identified the recommendation for effectiveness review. The effectiveness review included the performance of an independent assessment, performance indicators, review of CARB warning flags, and status reporting to executive management and the site leadership team. However, the establishment of quantitative or qualitative acceptance criteria (i.e., standards) were not documented. This incomplete documentation distracted from the ability to perform a quality review of the report. Through further inspection, acceptance criteria that would support RCE 0760 effectiveness review was identified from other sources, such as Kewaunee Power Station recovery plan initiatives.

CAP Departmental Probation

The inspectors reviewed CAP documents associated with recent NCVs and cross-cutting issues to determine whether the CA was appropriate to address the cross-cutting aspects that were associated with the issues. Specifically, RCE 0717, "NRC Identified Cross-Cutting Issue – PI&R," Revision 1, was performed by the licensee in response to a third consecutive NRC assessment letter that notified the site of a substantive cross-cutting issue in the area of PI&R in March 2006. The inspectors reviewed the establishment of the probation program and its entry criteria (i.e., performance indicators) in procedure GNP-11.08.01, "Action Request Process."

Per that procedure, a department would enter probationary status if 2 of 4 performance criteria displayed degraded red performance for 3 consecutive months or if a single performance criterion displayed degraded red performance for 6 of the 12 previous months. The probation program performance criteria were: priority 1 & 2 evaluation average age; priority 1 & 2 corrective action average age; priority 3 & 4 evaluation/corrective action average age; and average RCE/ACE initial grade less than 85 for a month. The inspectors concluded that the probation entry criteria was at a level that did not challenge the organization and appeared, empirically, to have had limited impact on organizational performance. The inspectors concluded that if a department entered probationary status, the program CAs appeared to be appropriate to facilitate enhanced performance. The licensee generated CAP044909 to evaluate the probation entry criteria.

Auxiliary Building Roof Degradation

The inspectors developed an expanded sample scope for the auxiliary building roof degradation that included the review of CAP documents initiated over the past 5 years. The sample selection was made by the inspectors to determine the source of the water that had accumulated in electrical terminal boxes documented in the CAP. Also, the inspectors reviewed, as operating experience, Information Notices (INs) 89-63, "Possible Submergence of Electrical Circuits Located Above the Flood Level Because of Water Intrusion and Lack of Drainage," and IN 84-47, "Environmental Qualification Tests of Electrical Terminal Blocks."

Chronic auxiliary building roof leakage has damaged seals between the auxiliary building and containment. The auxiliary building roof leakage CA was to address the affected component in the leakage pathway, such as the use of caulk, duct tape and plastic barriers and floor berms positioned to collect and direct the water accumulation. The following time line provides documented CAP issues associated with the auxiliary building roof leakage.

December 2001	CAP000310 - Aux Bldg Roof Leaking
October 2002	CAP013537 - Chronic Auxiliary Building Roof Leak at SW Interface With Containment Building
February 2003	CAP014644 - Roof Leaking Near R-21 on Fan Floor in Aux Building
June 2003	CAP016785 - Water in EQ Terminal Box 2337
September 2003	CAP017913 - Leak Through Aux Building Roof and Shield Building Wall Joint
December 2003	CAP019137 - Auxiliary Building Roof Leak
December 2003	CAP019368 - Indications of Chronic Roof Leakage at Sewer Vent Line Above the Aux Bldg 657' El
March 2004	CAP020521 - No CAP Initiated for WR 04-727 (leak dripping onto TB1375)

March 2004	CAP020590 - Aux Building Roof Leakage Moving from RCA thru to Clean Area and Back Into RCA
April 2004	CAP020846 - Failure to Address Roof Leakage Affecting TB1375
June 2004	CAP021622 - Zone K6 Plant Inspection. Plastic over TB1375 is in poor condition. The duct tape is starting to peel away and the plastic is covered with scale and dirt from water running down it.
December 2004	CAP024634 - Auxiliary Building Roof Leak Investigation
April 2005	CAP026914 - Found Rusted and Corroded Terminal Strips in EQ Enclosure TB1375
January 2006	CAP031029 - Boot Seal for Penetration 2N Contains Water
March 2006	CAP031937 - Water Leaking Into RCA
May 2006	CAP033741 - 657' Elevation. Deteriorated expansion joint between the floor and containment
November 2006	CAP039422 - Pull Box Found With Approximately ½ inch of Water in the Bottom.
January 2007	CAP040505 - Replacement of the Auxiliary Building Roofing
February 2007	CAP041831 - Delaminated / Spalled Shield Bldg. Concrete at El. 664' of Aux Bldg. Rm. 403
February 2007	CAP041851 - Water Found in Boot Seal at Pen 25N
March 2007	CAP043172 - Roof Drain Pipe Leaks at Roof Penetration
April 2007	CAP043674 - Auxiliary Building Roof Leak into Electrical Junction Box

From the above time line, CAP041831 documented the completion of maintenance rule evaluation MRE003051 on April 27, 2007. The evaluation identified that the condition of the auxiliary building, function 89A-02, should be considered for (a)(1) status. During the inspection, the approval of this recommendation was still under review.

The inspectors conducted a walk down of the auxiliary building on May 17, 2007. The inspectors concluded that the chronic nature of the auxiliary building roof leakage resulted in the licensee staff accepting this degrading condition as a housekeeping issue. Specifically, on auxiliary building floor elevation 642, a mop and pail, squeegees and a wet vacuum were positioned for daily clean-up of rain water. The following CAP document excerpts are provide as issue acceptance by the organization.

March 2006 CAP031937: "The roof of the RCA is leaking. The South west area in the 657' level of the RCA has had water infiltrating from the outside environment into the RCA for 6 years. The Controlled Area Maintenance Operators (CAMO) and the RP department have had to make removal of the water a routine daily task."

April 2007 CAP043674: "A roof leak into the 657' level of the auxiliary building, previously identified by CAP043172, is leaking through an opening in the floor to the 642' level and wetting an electrical junction box."

Recommendation: "Redirect leak away from junction box."

The inspectors' walk down of the auxiliary building also identified two additional issues that the licensee documented in the CAP. The first issue was terminal box number 1376 located on auxiliary building floor elevation 642 that was labeled as environmentally qualified, but did not have a weep hole or a cover to box gasket installed. The licensee generated CAP045012 on this issue. The second issue resulted directly from the auxiliary building roof leakage. Extensive corrosion was identified on the downstream float trap of the B steam generator power operated relief valve (PORV) vent stack drain line. The functionality of the float trap to drain rain water from the PORV vent stack line could not be assured due to possible internal corrosion that may have entered through a corroded trap pipe union. The licensee generated CAP044975 on this issue. The effect of a water volume existing in the downstream side of the PORV required evaluation for impact on PORV lift setpoint and valve functionality during annual environmental temperature changes. At the time of the inspection, this evaluation was not available. As a result, an Unresolved Item (URI) is open pending licensee resolution of the issue. (URI 05000305/2007008-02).

b. Assessment of the Use of Operating Experience

(1) Inspection Scope

The inspectors reviewed the licensee's program for handling operating experience (OPEX). Specifically, the inspectors reviewed the implementing procedure and attended CAP meetings to observe the use of OPEX. In addition, the inspectors reviewed selected OPEX evaluated by the station that included NRC 2007 generic communications and electrical grid reliability OPEX.

(2) Assessment

No findings of significance were identified.

In general, OPEX information was utilized at the station. The inspectors observed the site staff discussing both internal and industry OPEX during site status meetings and CAP action request screening. In addition, OPEX information was used within CAP investigations to support cause determination and extent of condition. During licensee staff interviews, the inspectors identified that the use of OPEX was considered during daily work activities.

The inspectors reviewed self-assessment KPS-SA-07-43 on the CAP that was approved on April 25, 2007. The self-assessment identified an area for improvement pertaining to industry OPEX document evaluations that were not being processed in a timely manner. In addition, some OPEX board screening actions to determine station applicability did not adequately address the key issues. The self-assessment identified that CAP043332 was generated on this area for improvement.

c. Assessment of Self-Assessments and Audits

(1) Inspection Scope

The inspectors reviewed selected self-assessments and a Nuclear Oversight (NOS) CAP audit to determine whether the self-assessments and audit were being effectively managed and adequately covered the subject areas, the self-assessment and audit programs were functioning to identify issues, and the issues were being entered into the CAP. The inspectors also interviewed licensee staff regarding the self-assessment program attributes and its implementation.

(2) Assessment

No findings of significance were identified.

The inspectors concluded that the selected self-assessments and NOS audit 06-15, "Corrective Action," completed in December 2006, effectively covered the subject areas and identified deficiencies as appropriate, with an associated basis to understand the adverse condition. A multi-discipline team approach with external site peer participation was utilized for self-assessment KPS-SA-07-43 on the CAP to gain a broad perspective. As appropriate, the self-assessment and NOS audit deficiencies were documented in the CAP.

Self-assessment KPS-SA-07-18, "Corrective Action Program - Timeliness of Evaluations," was performed to address a CA assignment associated with CAP041663 that was initiated on the CARB's ability to approve ACE and RCE reports. One of the notable areas for improvement that the self-assessment identified was to create a CARB subcommittee, staffed by DCACs and supervisors, to review all ACEs. Also, the subcommittee would provide a semi-annual report to the full CARB on lessons learned from the review of ACEs. The dispositioning of the six areas for improvement identified by this self-assessment was tracked by CA031538. This CA would also verified that RCE 0760, "NRC Identified Cross-Cutting Issues Remain Open," would include CA comparable to the self-assessment's areas for improvements.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The NRC annual assessment letter dated March 2, 2007, communicated future inspections at Kewaunee, identified that the NRC planned to perform an expanded biennial problem identification and resolution inspection in April 2007. Based on those plans, an inspection team member from the Office of Nuclear Reactor Regulation

performed an assessment of the licensee's Safety-Conscious Work Environment (SCWE). Approximately 25 individuals were interviewed from various departments about their willingness to raise nuclear safety issues. These individuals were selected from departments which scored low or had low response rates on the licensee's 2006 Safety Culture Assessment, and included both the worker and first-line supervisor levels. In addition, the site and fleet employee concerns program (ECP) managers were interviewed, and several ECP files from the past year and other selected documents related to SCWE were reviewed.

In addition, the remaining inspectors interviewed selected licensee staff to determine whether there were any impediments to the establishment of a SCWE. The licensee's programs to publicize the CAP and ECP programs were also reviewed.

(2) Assessment

No findings of significance were identified.

All interviewees indicated that they felt comfortable in raising safety issues. The interviewees explained that they would typically raise issues to their supervisors and/or enter them into the CAP. The interviewees, in general, had positive experiences with raising issues to their supervisors. Most interviewees also stated that site management and the NRC were available avenues that could be used to raise issues. No one interviewed was aware of any instances of retaliation for raising safety issues. All interviewees were aware of the site's ECP. The majority of the interviewees did not have an opinion of ECP because they had not had a need to use the program. The few interviewees who had used the program or were aware of others that had experience using the program, expressed positive opinions about ECP's effectiveness and confidentiality.

Based on the interview results, discussions with the site and fleet ECP coordinators and review of several ECP files from the past year, the inspectors determined that the conditions at the Kewaunee Power Station were conducive to identifying issues. However, the inspectors developed observations regarding the CA developed to address the issues identified by the 2006 Safety Culture Assessment.

2006 Safety Culture Assessment

The site conducted a safety culture assessment in 2006, and a number of CAs were generated to address the assessment results. The two issues described in the area for improvement under the "Other Safety Culture Components" section of the executive summary was not appropriately addressed. The first was "inconsistent implementation of standards and expectations in work activities," which did not have any associated CA. This issue was similar to the top contributor identified in CSE 2006-737 that pertained to the NRC human performance cross-cutting issue. The second was "lack of accountability at all levels at the Station." The CA for this area was to issue an accountability letter template to department managers for their use as needed. The inspectors reviewed this template and concluded that the scope of the letter was limited to the CAP, and did not address the scope of the area for improvement. The CA description discusses a general lack of accountability at all levels of the organization,

and stated that significant management attention and oversight were needed. The inspectors questioned how this letter would address the general issue of accountability at the site, its application to upper levels of management or how this would represent significant management attention and oversight.

4OA6 Meetings

.1 Exit Meeting

On May 24, 2007, the inspectors presented the preliminary inspection results to Mr. M. Crist and members of his staff. The licensee did not identify any information that would likely be included in the inspection report as proprietary.

4OA7 Licensee-Identified Violations

None.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

R. Adams, Radiation Protection/Chemistry DCAC
L. Armstrong, Site Engineering Director
R. Bower, Station Trend Coordinator
T. Breene, Nuclear Licensing Manager
M. Crist, Plant Manager
K. Davison, Recovery Director
J. Gadzala, Kewaunee Licensing
S. Gauthier, Security DCAC
M. Hale, Radiation Protection/Chemistry Manager
L. Hartz, Site Vice-President
W. Henry, Maintenance Manager
M. Hicks, Organizational Effectiveness Manager
S. Hills, Maintenance DCAC
J. Kudick, Engineering DCAC
B. Loften, Supply Chain Manager
W. Matthews, Senior Vice-President, Nuclear Operations
P. Morgan, Training DCAC
T. O'Connen, Supply Chain DCAC
J. Owens, Corrective Action Supervisor
J. Ruttar, Operations Manager
C. Sly, Dominion Licensing
T. Webb, Director, Licensing and Safety
S. Yuen, System/Component Engineering Manager
K. Zastrow, ECP Site Manager

Nuclear Regulatory Commission

J. Cameron, Chief, Reactor Projects Branch 5

ITEMS OPENED, CLOSED, AND DISCUSSED

Items Opened

05000305/2007008-01	NCV	Procedure Non-Compliance (Section 4OA2.a)
05000305/2007008-02	URI	Auxiliary Building Roof Degradation (Section 4OA2.a)

Items Closed

05000305/2007008-01	NCV	Procedure Non-Compliance (Section 4OA2.a)

Items Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire documents, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

Condition Reports Related to NRC Non-Cited Violations

033870; NRC 85002 Inspection Root Cause reports Required Revision; May 15, 2006
038226; Reactor vessel level decreased during ICS fill and vent; October 11, 2006
038824; CREZ Boundary Not Adequately Reflected in USAR Safety Analysis; October 26, 2006
031264; Supervisor Review of CE 16554 deficient; February 03, 2006
033245; Service Water Leak on line branch to Diesel Generator B; April 25, 2006
033136; NRC Senior Resident Questioned the Adequacy of a 10 CFR 50.59 review; April 20, 2006
033492; Cables 1NI5010 & 1NI5012 associated with both safety trains; May 02, 2006
031525; How does R-16 & R-20 pinwheel blockage affect radiation readings; February 20, 2006
031927; Processes to Determine Quality Classification; March 10, 2006
031522; B RHR Pump Seal and Flange Leakage Inspection; February 20, 2006
030273; Unusual Event declared due to Carbon Dioxide discharge; November 25, 2005
030538; CA-18094 closed with no action taken - CAQ not addressed; December 14, 2005
030527; Further Actions on RHR Pump Seal Leakage - ref ACE3136; December 14, 2005
031350; Problem with SV-1 during SP-54-086; February 10, 2006
030377; EH Control Panel indication for CV-3 is not lit. Valve is 98 percent open; December 3, 2005
040096; CSR Fire Suppression System Coverage - NRC Potential NCV of Appendix R, III.G.3; December 15, 2006
039885; NRC Questions on cable Spreading Room Lead Pipe; December 07, 2006
033942; N-O-01/N-O-02 guidance discrepancies regarding boron concentrations; May 17, 2006
033997; Sump A&B Volume Error in C10984; May 18, 2006
033998; ICS System Flow Calcs Contain Non-Conservative Assumptions and Method; May 18, 2006

Corrective Action Program Documents

CAP 005317; One 3/8" bolt is missing on the turbo to air box flange on “A” diesel generator; March 12, 1999
CE004679; One 3/8" bolt is missing on the turbo to air box flange on “A” diesel generator; March 12, 1999
CAP043450; DG A air intake filter housing to turbo is cracked; March 30, 2007
CAP020755; SW Pump 1B1 lower motor bearing noise; April 7, 2004
CAP019715; SW-913AB-2 relief valve lifted; January 27, 2004
CAP038629; AFW Pump B tripped on low discharge pressure; October 21, 2006
CAP007623; TDAFW pump lube oil pump cycles repeatedly; May 8, 1996
CAP002326; Aux feedwater oil level questioned; April 3, 2001
CAP013376; TDAFW pump low lube oil pressure alarm; October 21, 2002
CAP041663; Corrective Action Review Board Performance Improvement Items; February 12, 2007

CAP025823; TDAFW pump oil level low during RT-FW-05B-1; March 1, 2005
CAP042078; TDAFW pump gov angle drive oil level is low; February 22, 2007
CAP041575; B EDG fuel rack sluggish and needs to be checked out; February 9, 2007
CAP041621; Scratching and residue found on fuel rack shaft; February 10, 2007
CAP042953; Not All Actions Created for RCE737; March 14, 2007
CAP043334; PI&R Self Assessment AFI: Violations and Findings; March 28, 2007
CAP042579; NRC Identified Cross Cutting Issues in PI&R and in Human Performance Remain Open; March 06, 2007
CAP037892; Metallic Particles Found In Packing Gland Follower On SW-1300B; October 2, 2006
CAP036652; SW-1300B Failed during manual operation; September 3, 2006
CAP029508; SW-4B OOS following AOV testing; October 05, 2005
CA023546; Improve Standards and Expectations: (OR2-1, OR3-1); May 9, 2006.
CA023559; Line Involvement in Training; May 9, 2006.
CA024462; Conduct a Safety Culture Assessment; June 29, 2006.
CA025346; Conduct a Safety Culture Assessment; August 12, 2006.
CA025347; Conduct a Safety Culture Assessment; August 12, 2006.
CA025348; Conduct a Safety Culture Assessment; August 12, 2006.
CA025349; Conduct a Safety Culture Assessment; August 12, 2006.
CA025350; Conduct a Safety Culture Assessment; August 12, 2006.
CA025351; Conduct a Safety Culture Assessment; August 12, 2006.
CA025352; Conduct a Safety Culture Assessment; August 12, 2006.
CA025353; Conduct a Safety Culture Assessment; August 12, 2006.
CA025354; Conduct a Safety Culture Assessment; August 12, 2006.
CA025355; Conduct a Safety Culture Assessment; August 12, 2006.
CA025356; Conduct a Safety Culture Assessment; August 12, 2006.
CA025357; Conduct a Safety Culture Assessment; August 12, 2006.
CA025358; Conduct a Safety Culture Assessment; August 12, 2006.
CA025359; Conduct a Safety Culture Assessment; August 12, 2006.
CA026942; KEP-Human Performance Excellence-Standards, October 4, 2006.
CA026945; KEP-Human Performance Excellence-Standards, October 4, 2006.
CA026946; KEP-Human Performance Excellence-Standards, October 4, 2006.
CA026947; KEP-Human Performance Excellence-Standards, October 4, 2006.
CA026957; KEP-Human Performance Excellence-Training, October 4, 2006.
CA026962; KEP-Human Performance Excellence-Training, October 4, 2006

<u>NRC OPEX Documents</u>
IN 89-63; Possible Submergence of Electrical Circuits Located Above the Flood Level Because of Water Intrusion and Lack of Drainage; September 5, 1989
IN 84-47; Environmental Qualification Tests of Electrical Terminal Blocks; June 15, 1984
IN 2007-01; Recent Operating Experience Concerning Hydrostatic Barriers; January 31, 2007
IN 2007-05; Vertical Deep Draft Pump Shaft and coupling Failures; February 9, 2007
IN 2007-06; Potential Common Cause Vulnerabilities in Essential Service Water Systems; February 9, 2007
RIS2004-05; Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power; April 15, 2004
GL2006-02; Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power; February 1, 2006

Corrective Action Program Documents Generated Because of the Inspection
CAP044909; CAP Probation Criteria Requires Evaluation; May 15, 2007
CAP044497; ACE 3374 approved by CARB, based on incomplete information; May 3, 2007
CAP044448; CAP 43908 "50.59 Unqualified Worker Issue" Prompt Operability Questioned by PI&R; May 2, 2007
CAP044522; PI&R Inspection Observation Regarding CAP Screening; May 4, 2007
CAP044910; Possible Deviating Condition in ACE 3364 Not Addressed; May 15, 2007
CAP044911; ACE 3250 Not adequately addressing recommendations by initiator; May 15, 2007
CAP 045012; TB 1376 labeled EQ does not have a weep hole; May 17, 2007
CAP044908; Leaky Aux Building roof issue; May 15, 2007
CAP044975; Trap downstream of SD-20 has surface rust; May 17, 2007
CAP044962; Penetration 309 has missing insulation; May 17, 2007
CAP045000; CAPRs Not generated for CAP036731/RCE0737; May 17, 2007
CAP044436; CARB rejection rate indicator does not have defined targets; May 2, 2007

Audits, Assessments and Self-Assessments
NOS Audit 06-15; Corrective Action; December 14, 2006
Self-Assessment KPS-SA-07-18; Corrective Action Program - Timeliness of Evaluations; April 25, 2006
Self-Assessment KPS-SA-07-43; Corrective Action Program; March 20, 2007
Kewaunee Safety Culture Self-Assessment 2006; SA013817; May 11, 2006
Kewaunee Safety Culture Self-Assessment 2006; June 30, 2006

Procedures
Dominion Cause Evaluation Handbook; Revision 7
PI-AA-100-1002; Focus on Four; Revision 3
DNAP-1907; Human Performance (HU) Program; Revision 8
DNAP-0114; Dominion Nuclear Self-Evaluation Program; Revision 3
ECP-GL-1; Nuclear Employee Concerns Program; Revision 1
GNP-11.08.01; Action Request Process; Revision 32
GNP-11.08.02; Action Request Process Trending; Revision E
NAD-14.01; Operating Experience Program; Revision G
DNAP-0104; Dominion Nuclear Self-Assessment Program; Revision 3
DNAP-0110; Identifying and Addressing Nuclear Safety and Quality Concerns; Revision 1
DNAP-1604; Cause Evaluation Program; Revision 6
N-CRD-49B; Reactor Startup; Revision AR

Root, Apparent and Collective Significance Cause Evaluations
K-2006-737; NRC human performance cross-cutting issue; Revision 2
Root Cause Evaluation 0717; NRC Identified Cross-Cutting Issue Problem Identification and Resolution; Revision 1
Root Cause Evaluation 0760; NRC Identified Cross-Cutting Issues Remain Open; Revision 0
Apparent Cause Evaluation 3374; CAP041567 - Diesel Generator B exceeds 2800 KW during SP-42-312B
Apparent Cause Evaluation 3250; Reactor taken Critical and remained below POAH for 5 hours and 5 minutes
Apparent Cause Evaluation 3364; Procedure change resulted in starting safety related equipment (RXCP B) outside limits specified by the Vendor
Apparent Cause Evaluation 3328; AFW Pump B tripped on low discharge pressure

Root Cause Evaluation 0720; Service Water to B Diesel Generator; March 30, 2006

Other Documents
10CFR21-0085; EMD Engine Driven Water Pump Assemblies; October 4, 2002
Corrective Action Program Expectations Sample Letter; May 17, 2007
EFR026973; KEP-Human Performance Excellence-Training; October 4, 2006
Employee Concerns Program 2007 Metrics
Human Performance Excellence Plan; May 3, 2007
Human Performance Excellence Plan; May 14, 2007
Kewaunee Safety Culture Assessment Results Presentation; June 29, 2006
Nuclear Safety Culture and Safety Conscious Work Environment Computer Based Training Presentation
Safety Conscious Work Environment Continuing Training for Supervisors Presentation
Work Observation Focus for Weeks of January 01, 2007 to April 16, 2007
Tracking and Processing Record for SOP-SW-02-32; Drain and Fill Train A Service Water Header; September 07, 2006
Tracking and Processing Record for N-CC-31; Component Cooling System Operation; September 10, 2006
March 2007 KPS Corrective Action Program Performance Report; April 30, 2007
Work Order 07-001464-000; Troubleshoot the issue with the B EDG fuel rack and ejector binding and bearings in the fuel rod (CAP041575); February 9, 2007
Plant Operations Review Committee Meeting Minutes Number 06-028; May 1, 2006
Dominion Central Reporting System Handbook; May 8, 2007

LIST OF ACRONYMS USED

ACE	Apparent Cause Evaluation
ADAMS	Agency Wide Access Management System
AR	Action Request
CA	Corrective Action
CAP	Condition Action Program
CAPR	Corrective Action to Prevent Recurrence
CARB	Corrective Action Review Board
CFR	Code of Federal Regulations
CR	Condition Report
CSE	Collective Significance Evaluation
DCAC	Department Corrective Action Coordinator
ECP	Employee Concerns Program
FIN	Finding
IMC	Inspection Manual Chapter
IN	Information Notice
IP	Inspection Procedure
LTA	Less Than Adequate
MRE	Maintenance Rule Evaluation
NCV	Non-Cited Violation
NOS	Nuclear Oversight
NRC	Nuclear Regulatory Commission
OPEX	Operating Experience
PI&R	Problem Identification and Resolution
PMT	Post-Maintenance Testing
POAH	Point of Adding Heat
PORC	Plant Operations Review Committee
PORV	Power Operated Relief Valve
RCE	Root Cause Evaluation
RxCP	Reactor Coolant Pump
SCWE	Safety-Conscious Work Environment
SDP	Significance Determination Process
URI	Unresolved item
USAR	Updated Safety Analysis Report
VIO	Violation