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

August 8, 2011

EA-2011-176

Brian J. O'Grady, Vice President-Nuclear
and Chief Nuclear Officer
Nebraska Public Power District
Cooper Nuclear Station
72676 648A Avenue
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION – NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000298/2011006 AND NOTICE OF VIOLATION

Dear Mr. O'Grady:

On June 24, 2011, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Cooper Nuclear Station. The enclosed report documents the inspection findings, which were discussed on June 24, 2011, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to identification and resolution of problems, safety and compliance with the Commission's rules and regulations and with the conditions of your operating license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. The inspectors also interviewed a representative sample of personnel regarding the condition of your safety conscious work environment.

The inspectors concluded that Cooper Nuclear Station generally identified, evaluated, and corrected problems according to their safety significance. Cooper Nuclear Station generally analyzed operating experience appropriately, performed effective self-assessments, and maintained an effective safety conscious work environment.

The inspectors identified weaknesses in the areas of operability evaluations, thorough evaluations, and the effectiveness of corrective actions. This was evidenced most notably by repetitive diesel failures in 2009. The inspectors noted that the previous Problem Identification and Resolution inspection, documented in weaknesses in operability evaluations and that some root causes should have been more thorough. Therefore, the inspectors considered the weaknesses in operability evaluations and thorough evaluations to be repetitive weaknesses.

Based on the results of the inspection, the NRC has identified an issue that was evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has also determined that one violation is associated with this issue. The violation is being cited because Cooper Nuclear Station failed to restore compliance with

NRC requirements within a reasonable time after a previous violation was identified in NRC Inspection Report 05000298/2010007 (issued December 3, 2010). This is consistent with the NRC Enforcement Policy; Section 2.3.2, which states, in part, that a cited violation will be considered if the licensee fails to restore compliance within a reasonable time after a violation is identified.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Based on the results of the inspection, the NRC has also identified that two NRC-identified issues that were evaluated under the risk significance determination process as having very low safety significance (Green) and two Severity Level IV violations of NRC requirements occurred. All of these findings were determined to involve violations of NRC requirements. However, because of the very low safety significance of the violations and because they were entered into your corrective action program, the NRC is treating these violations as noncited violations consistent with Section 2.3.2 of the NRC Enforcement Policy.

If you contest these violations or the characterization of the violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 612 East Lamar Blvd., Suite 400, Arlington, Texas, 76011-4125; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Cooper Nuclear Station. In addition, if you disagree with the cross-cutting aspect assigned to any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV, and the NRC Resident Inspector at your facility.

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

Sincerely,

/RA/

Dr. Dale A. Powers, Acting Chief and Senior
Technical Analyst
Technical Support Branch
Division of Reactor Safety

Dockets: 50-298
License: DRP-46

Enclosure 1 - Notice of Violation
Enclosure 2 - Inspection Report 05000298/2011006 w/Attachments:
Attachment 1 - Supplemental Information
Attachment 2 - Initial Information Request
Attachment 3 - Supplemental Information Request

cc w/ Enclosure:
Distribution via Listserv

Electronic distribution by RIV:
Regional Administrator (Elmo.Collins@nrc.gov)
Deputy Regional Administrator (Art.Howell@nrc.gov)
DRP Director (Kriss.Kennedy@nrc.gov)
Acting DRP Deputy Director (Jeff.Clark@nrc.gov)
DRS Director (Anton.Vegel@nrc.gov)
Acting DRS Director (Robert.Caldwell@nrc.gov)
DRS Deputy Director (Tom.Blount@nrc.gov)
Senior Resident Inspector (Jeffrey.Josey@nrc.gov)
Resident Inspector (Michael.Chambers@nrc.gov)
Branch Chief, DRP/C (Vincent.Gaddy@nrc.gov)
Senior Project Engineer, DRP/C (Bob.Hagar@nrc.gov)
Project Engineer, DRP/C (Jonathan.Braisted@nrc.gov)
Project Engineer, DRP/C (Rayomand.Kumana@nrc.gov)
CNS Administrative Assistant (Amy.Elam@nrc.gov)
Public Affairs Officer (Victor.Dricks@nrc.gov)
Public Affairs Officer (Lara.Uselding@nrc.gov)
Project Manager (Lynnea.Wilkins@nrc.gov)
Acting Branch Chief, DRS/TSB (Dale.Powers@nrc.gov)
RITS Coordinator (Marisa.Herrera@nrc.gov)
Regional Counsel (Karla.Fuller@nrc.gov)
ACES (Ray.Kellar@nrc.gov)
Congressional Affairs Officer (Jenny.Weil@nrc.gov)
OEMail Resource
RIV/ETA: OEDO (John.McHale@nrc.gov)
DRS/TSB STA (Dale.Powers@nrc.gov)

SUNSI Rev Compl.	☑Yes ☐ No	ADAMS	☑Yes ☐ No	Reviewer Initials	DAP
Publicly Avail	☑Yes ☐ No	Sensitive	☐Yes ☑ No	Sens. Type Initials	DAP

RI:DRP/A	DRP/C	RI:DRS/EB2	RI:DRS/PSB2	C:DRP/PBC
BTindell	JJosey	NOkonkwo	IAnchondo	VGaddy
/RA/	**/RA/**	**/RA/**	**/RA/ E**	**/RA/**
7/25/2011	7/28/2011	7/25/2011	7/28/2011	7/29/2011
ACES	C:DRS/TSB			
RKellar	DPowers			
/RA/	**/RA/**			
8/5/2011	8/8/2011			

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

NOTICE OF VIOLATION

Nebraska Public Power District
Cooper Nuclear Station

Docket No. 50-298
License No. DPR-46
EA-2011-176

During an NRC inspection conducted June 6 through June 24, 2011, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

> Title 10 CFR 50, Appendix B, Criterion III, “Design Control,” requires, in part, measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2 and as specified in the license application, for those components to which this appendix applies, are correctly translated into specifications, drawings, procedures, and instructions.
>
> Contrary to the above, since December 3, 2010, the licensee failed to assure that applicable regulatory requirements and the design basis were correctly translated into specifications, drawings, procedures, and instructions. Specifically, the licensee failed to correctly translate regulatory and design basis requirements, associated with tornado and high wind generated missiles, into design information necessary to protect the emergency diesel generator fuel oil day tank vent line components.

This violation is associated with a Green Significance Determination Process finding.

Pursuant to the provisions of 10 CFR 2.201, Nebraska Public Power District is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region IV, 612 East Lamar Blvd., Suite 400, Arlington, Texas, 76011-4125 and a copy to the NRC Resident Inspector at Cooper Nuclear Station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation; EA-2011-176" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC’s document system (ADAMS), accessible from the

NRC Web site at http://www.nrc.gov/reading-rm/adams.html, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated this 8th day of August 2011.

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket:	05000298
License:	DRP-46
Report:	05000298/2011006
Licensee:	Nebraska Public Power District
Facility:	Cooper Nuclear Station
Location:	72676 648A Ave. Brownville, NE 68321
Dates:	June 6 through June 24, 2011
Team Leader:	B. Tindell, Senior Reactor Inspector
Inspectors:	I. Anchondo, Reactor Inspector J. Josey, Senior Resident Inspector N. Okonkwo, Reactor Inspector
Approved By:	Dr. Dale A. Powers Acting Chief and Senior Technical Analyst Technical Support Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000298/2011006; 6/6/2011 – 6/24/2011; Cooper Nuclear Station, Biennial Baseline Inspection of the Identification and Resolution of Problems.

A senior reactor inspector, two reactor inspectors, and a senior resident inspector performed the inspection. In this report, the inspectors documented two noncited violations of very low safety significance (Green), two severity level IV noncited violations, and one cited violation of very low safety significance (Green). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG 1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Identification and Resolution of Problems

The inspectors reviewed approximately 400 condition reports, work orders, cause evaluations, self-assessments and audits, operating experience evaluations, system health reports, trending reports, metrics, and other supporting documentation to determine if problems were being properly identified, prioritized, evaluated, and resolved.

The inspectors concluded that the licensee generally identified, evaluated, and corrected problems according to their safety significance. The licensee generally analyzed operating experience appropriately, performed effective self-assessments, and maintained an effective safety conscious work environment.

The inspectors identified weaknesses in the areas of operability evaluations, thorough evaluations, and the effectiveness of corrective actions. This was evidenced most notably by repetitive diesel failures in 2009 and three recent cited violations. The inspectors noted that the previous Problem Identification and Resolution inspection, documented in NRC Inspection Report 2009007, identified weaknesses in operability evaluations and that some root causes could have been more thorough. Therefore, the inspectors considered the weaknesses in operability evaluations and thorough evaluations to be repetitive weaknesses. In addition, NRC Inspection Report 2011002 documents a repetitive weakness in initiating condition reports evidenced by multiple noncited violations. The inspectors concluded that the licensee needs to be more effective at correcting the observed corrective action program weaknesses in identification, operability evaluations, and thorough evaluations.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” associated with four examples of the licensee’s failure to promptly identify and correct conditions adverse to quality. Specifically, the licensee failed to identify and correct excessive setpoint drift of reactor core isolation cooling

system pressure switches, the leak of oil from the service water booster pump, a vulnerability that allowed non-quality controlled material to be installed in safety related applications, and the cause of a failure of the high pressure coolant injection steam line high flow instrument. The licensee entered the finding into the corrective action program as Condition Reports 2011-07060, 2011-07105, 2011-07151, and 2011-06653.

The performance deficiency was determined to be more than minor because if left uncorrected, the continued failure to promptly identify and correct conditions adverse to quality could result in more risk significant equipment being inoperable, and is therefore a finding. This finding affected the Mitigating Systems Cornerstone. Using Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding was determined to have a crosscutting aspect in the area of problem identification and resolution, associated with the corrective action program component, in that, the licensee failed to implement a corrective action program with a low threshold for identifying issues; issues are identified completely, accurately and in a timely manner commensurate with their safety significance [P.1(a)] (Section 4OA2.5a).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to correct a condition adverse to quality. Specifically, the licensee determined that an interim corrective action to prevent recurrence was ineffective, yet it took no effective corrective action. As a result, the licensee was vulnerable to a repetitive condition adverse to quality. The licensee entered the issue into the corrective action program as Condition Report 2011-07152.

  The finding was determined to be more than minor because the performance deficiency could be reasonably viewed as a precursor to an event in that the interim action was not effective as a barrier to prevent recurrence of an event. The finding is associated with the Mitigating Systems Cornerstone. The inspectors performed a Phase 1 screening in accordance with Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined that this finding had a crosscutting aspect in the area of problem identification and resolution associated with corrective actions because the licensee failed to prioritize and thoroughly evaluate a condition report that documented an inadequate interim corrective action to prevent recurrence [P.1(c)] (Section 4OA2.5d).

- Green. The inspectors identified a cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to assure that the applicable design basis for applicable structures, systems, and components were correctly translated into specifications, procedures, and instructions. Specifically, the licensee failed to justify through evaluation that the diesel generator fuel oil day tanks would be available following a tornado missile strike on the tank vents. The violation was cited because the licensee failed to restore compliance in a reasonable time following documentation of the issue as a noncited violation in NRC Inspection Report 2010007 (issued December 3, 2010). The licensee entered this issue into the corrective action program as Condition Report 2011-06655.

  The performance deficiency was determined to be more than minor because it was associated with the protection against the external factors attribute of the Mitigating Systems Cornerstone, and affected the associated cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, and is therefore a finding. Using Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding was determined to have a crosscutting aspect in the area of human performance, associated with the decision making component in that the licensee failed to use conservative assumptions in decision making and adopt a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate it is unsafe in order to disapprove the action [H.1(b)] (Section 4OA2.5e).

Cornerstone: Miscellaneous

- Severity Level IV. The inspectors identified a noncited violation of 10 CFR 50.73, "Licensee Event Report System," associated with the licensee's failure to submit a licensee event report within 60 days following discovery of an event meeting the reportability criteria as specified. Specifically, a condition prohibited by technical specifications occurred when a zurn strainer failure rendered the service water system inoperable for longer than the action statement and would have prevented fulfillment of a safety function. The licensee entered the finding into the corrective action program as Condition Report 2011-06778.

  The inspectors reviewed this issue in accordance with NRC Inspection Manual Chapter 0612 and the NRC Enforcement Manual. Through this review, the inspectors determined that traditional enforcement was applicable to this issue because the NRC's regulatory ability was affected. Specifically, the NRC relies on the licensees to identify and report conditions or events meeting the criteria specified in regulations in order to perform its regulatory function; and when this is not done, the regulatory function is impacted. The inspectors determined that this finding was not suitable for evaluation

using the significance determination process, and as such, was evaluated in accordance with the NRC Enforcement Policy. The finding was a violation determined to be of very low safety significance, was not repetitive or willful, and was entered into the corrective action program. Therefore, this violation is being treated as a Severity Level IV noncited violation consistent with the NRC Enforcement Policy. This finding had a crosscutting aspect in the area of problem identification and resolution associated with the corrective action component, in that, the licensee failed to appropriately and thoroughly evaluate for reportability aspects all factors associated with the equipment failure [P.1(c)] (Section 4OA2.5b).

- Severity Level IV. The inspectors identified a noncited violation of 10 CFR 50.59, "Changes, Tests, and Experiments," associated with the failure to adequately evaluate a change in order to ensure that it did not require prior NRC approval. Specifically, the licensee revised a residual heat removal pump motor cable sizing calculation to a smaller sized cable without a change evaluation. The licensee entered the issue into the corrective action program as Condition Report 2011-01730.

  The finding was determined to be more than minor because the licensee failed to perform a 10 CFR 50.59 evaluation when required. Specifically, the NRC relies on licensees to identify and report conditions or events meeting the criteria specified in regulations in order to perform its regulatory function, and when this is not done the regulatory function is impacted, and is therefore more than minor. Violations of 10 CFR 50.59 are considered to impede or impact the regulatory process, so they are dispositioned using the traditional enforcement process. The enforcement manual specifies that the severity level is determined in parallel with the Significance Determination Process (SDP). The inspectors performed a Phase 1 screening in accordance with Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. Therefore, the inspectors categorized the finding as Severity Level IV in accordance with the enforcement manual. The finding was a violation determined to be of very low safety significance, was not repetitive or willful, and was entered into the corrective action program. Therefore, this violation is being treated as a noncited violation consistent with the NRC Enforcement Policy. The inspectors determined the cause of the finding through interviews and document reviews. This finding was determined to have a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program in that the licensee failed to appropriately and thoroughly evaluate all factors associated with the design change [P.1(c)] (Section 4OA2.5c).

B. Licensee-Identified Violations

None

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152)

The inspectors based the following conclusions on the sample of corrective action documents that were initiated in the assessment period, which ranged from April 11, 2009, to the end of the on-site portion of this inspection on June 24, 2011.

.1 Assessment of the Corrective Action Program Effectiveness

a. Inspection Scope

The inspectors reviewed documents, interviewed personnel, attended meetings, and walked down plant equipment to determine if problems were being appropriately identified, prioritized, evaluated, and resolved.

The inspectors verified that the licensee entered problems into the condition report system for resolution. The inspectors reviewed the information related to problems to ensure that the evaluations were thorough. The inspectors verified that the licensee considered the extent of cause and extent of condition for problems as appropriate, as well as how the licensee assessed previous occurrences. The inspectors assessed how the licensee prioritized problems so that corrective actions were appropriate and timely. In addition, the inspectors verified the effectiveness of corrective actions, completed or planned, and looked for additional examples of similar problems. The inspectors also expanded their review to the previous five years for age-related problems to determine whether they were being effectively addressed.

In order to accomplish the above, the inspectors reviewed approximately 250 condition reports out of approximately 20,000 that had been issued during the assessment period. The inspectors also reviewed a sample of system health reports, self-assessments, trending reports, metrics, selected logs, audits, operability evaluations, and results from surveillance tests and preventive maintenance tasks. The inspectors reviewed a sample of corrective actions closed to other corrective action documents. The inspectors attended the licensee's Condition Review Group and the Corrective Action Review Board to observe the management of prioritizations, evaluations, and corrective actions. The inspectors interviewed plant personnel to identify other processes that may exist where problems may be identified and addressed outside the corrective action program. The inspectors reviewed corrective action documents that addressed past NRC-identified violations to ensure that the corrective action addressed the issues as described in the inspection reports. The inspectors considered risk insights and selected the DC Distribution System for a detailed work order and condition report review, and a system walkdown.

At the time of the inspection, a potentially greater than green finding was identified in NRC Inspection Report 2010006. In addition, a special inspection was ongoing due to a

radiation protection event associated with a shuttle tube, as documented in NRC Inspection Report 2011008. The inspectors excluded these issues from this inspection due to the predecisional nature of the findings.

b. Assessments

1. Assessment - Effectiveness of Problem Identification

The inspectors concluded that the licensee identified conditions adverse to quality and entered them into the corrective action program in accordance with the licensee's corrective action program guidance and NRC requirements. During the inspection, the inspectors observed that the licensee identified problems at a low threshold. However, NRC Inspection Report 2011002, Section 4OA2, documented a programmatic weakness associated with failure to initiate condition reports. This was evidenced by multiple examples of failure to initiate condition reports over several years with ineffective programmatic corrective actions by the licensee.

2. Assessment - Effectiveness of Prioritization and Evaluation of Issues

The inspectors concluded that generally, the licensee effectively evaluated problems. However, the inspectors determined that there were two indications of weak evaluations during this assessment period. Specifically, the inspectors identified five inadequate operability evaluations, and the inspectors identified multiple examples of evaluations that were not thorough. The inspectors noted that the previous Problem Identification and Resolution inspection report, NRC Inspection Report 2009007, also documented weaknesses in operability evaluations and that some root causes that were not thorough. Therefore, the inspectors considered the weaknesses in operability evaluations and thorough evaluations to be repetitive weaknesses that the licensee had not corrected.

Inadequate Operability Evaluations

- In Condition Report 2011-06686, the licensee documented that springs had been installed on both diesel generator fuel racks, which had not been evaluated as a modification. The inspectors identified during the inspection that the licensee had failed to include the moment arm in the calculation of torque on the fuel rack. The licensee updated the operability evaluation and concluded that both diesel generators were operable because the torque applied by the spring was less than allowable.

- In Condition Report 2010-08960, the licensee determined that the control room handswitch for RHR-MOV-27A, residual heat removal loop A injection outboard throttle valve, was experiencing an intermittent failure. However, the station declared the valve operable because the valve had passed troubleshooting and post maintenance testing. The inspectors

challenged the licensee's operability determination because the cause evaluation did not match the operability statement in that the cause of the intermittent failure had not been corrected, affecting the reliability of the valve to reposition by manipulating the handswitch. The licensee updated the operability evaluation to include the safety function of the valve, which only included automatic repositioning. The handswitch does not affect the automatic repositioning; therefore, the valve was operable.

- In Condition Report 2009-09486, the licensee documented a water hammer event in the reactor coolant system. The licensee identified that the event was a repeat of an event in 1994. However, the inspectors identified that the licensee had failed to evaluate or act on the operability concern raised in 1994. Specifically, General Electric recommended that the licensee test the low pressure coolant injection check valve to ensure that it was not damaged by the water hammer. The inspectors found that the licensee had restarted the plant following the 2009 water hammer without evaluating or testing the check valve. However, the valve passed an unrelated scheduled surveillance in 2011. Therefore, the valve was operable.

- In Condition Report 2011-04689, operations personnel documented an initial operability determination for a low oil level in a service water booster pump. However, the inspectors identified that the licensee failed to include the level trend and mission time for the pump in the evaluation. The licensee determined that the pump was inoperable on April 27, 2011, after revising the operability determination due to the inspectors' questions.

- In Condition Report 2010-02213, the licensee documented the failure of a service water zurn strainer. However, the inspectors identified that the licensee inappropriately credited manual actions for operability. This resulted in the licensee failing to submit an event report to the NRC, as documented in Section 4OA2.5b of this report.

Evaluations That Were Not Thorough

- The inspectors identified four examples of the licensee's failure to promptly identify and correct conditions adverse to quality that were associated with evaluations that were not thorough. Specifically, the licensee failed to identify and correct excessive setpoint drift of reactor core isolation cooling system pressure switches, determine and correct the leak path of oil from a service water booster pump, failed to identify and correct a vulnerability that allowed non-quality controlled material to be installed in safety related applications, and failed to identify and correct the cause of a malfunction of a high pressure coolant injection steam line high flow instrument. See Section 4OA2.5a of this report for more details.

- The inspectors identified that the licensee revised a residual heat removal pump motor cable sizing calculation to a smaller sized cable without a change evaluation. See Section 4OA2.5c of this report for more details.

- In NRC Inspection Report 2009008, inspectors documented that the licensee incorrectly concluded that a diesel generator lube oil piping failure was caused by four overstress events. However, two independent laboratories concluded that the cause was high cycle fatigue. The licensee's evaluation was not thorough, which resulted in ineffective corrective actions and an additional failure of the diesel generator.

- In NRC Inspection Report 2009005, inspectors documented a self-revealing failure of a diesel generator due to loose fasteners on the mechanical overspeed governor drive flange. The licensee's root cause found that personnel had failed to identify a trend of oil leaks and other loose fasteners as a symptom of generic fastener relaxation on the engines.

3. Assessment - Effectiveness of Corrective Action Program

The inspectors concluded that actions to correct problems were generally effective. However, the inspectors identified multiple examples of ineffective corrective actions, as seen below. In addition, the inspectors noted that the NRC had documented three cited violations due to ineffective or untimely corrective actions associated with NRC documented findings within the past two years, including the cited violation in this report. Therefore, the inspectors considered that the licensee had a weakness in ensuring effective corrective actions.

- Condition Report 2010-05972 was initiated August 19, 2010, because maintenance personnel had blocked open the steam exclusion barrier door for the emergency diesel generators without taking the appropriate compensatory measures. The licensee determined that this issue represented a significant condition adverse to quality, and had developed and implemented actions to prevent recurrence of this issue. Subsequently, the inspectors identified that maintenance personnel had again disabled a hazard barrier, the steam exclusion barrier doors for the control room, without taking the appropriate compensatory measures, as documented in Condition Report 2010-09639, and Condition Report 2011-00684. The inspectors determined that this was a recurrence of a significant condition adverse to quality because of ineffective corrective actions.

- The inspectors identified that the licensee revised a residual heat removal pump motor cable sizing calculation to a smaller sized cable in response to an NRC finding documented in NRC Inspection Report 2010007. However, the licensee failed to perform a change evaluation for the calculation change. Therefore, while the licensee's actions corrected the

compliance issue, the corrective actions were not fully effective. See Section 4OA2.5c of this report for more details.

- The inspectors identified that the licensee took no effective corrective action after determining that an interim corrective action to prevent recurrence was ineffective. Specifically, after the licensee identified that the craft lacked sufficient knowledge on the Risk Release for Maintenance process in a root cause evaluation, the licensee provided training as corrective action to prevent recurrence. However, the licensee identified that the training was ineffective and took no other interim effective corrective action. See Section 4OA2.5d of this report for more details.

- The inspectors identified that the licensee failed to justify that the diesel generator fuel oil day tanks would be available following a tornado missile strike on the tank vents. The violation was cited because the licensee failed to restore compliance in a reasonable time following documentation of the issue as a noncited violation in NRC Inspection Report 2010007. See Section 4OA2.5e of this report for more details.

- In NRC Inspection Report 2010004, inspectors documented a self-revealing finding for a breaker fire due to ineffective corrective actions. The same breaker had a fire the previous year, but the licensee failed to implement measurable and reasonable corrective actions.

- In NRC Inspection Report 2010007, inspectors documented a failure to correct conditions adverse to quality involving three examples of inadequate installation and testing of safety-related batteries.

- In NRC Inspection Report 2011002, inspectors documented a cited violation for the repetitive failure to correctly assess and manage the risk to offsite power equipment during nearby work with heavy equipment as required by 10 CFR 50.65(a)(4).

- In NRC Inspection Report 2010005, inspectors documented a cited violation for the failure to promptly correct a licensee identified violation involving inappropriately extending protective action recommendations when the wind changed direction.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors examined the licensee's program for reviewing industry operating experience, including reviewing the governing procedure and self-assessments. The inspectors reviewed a sample of industry operating experience evaluations to assess whether the licensee had appropriately evaluated the notifications for relevance to the facility. The inspectors also reviewed assigned actions to address the applicable operating experience to ensure they were appropriate. The inspectors reviewed a sample of root and apparent cause evaluations to ensure that the licensee had appropriately included industry operating experience.

b. Assessment

The inspectors concluded that the licensee adequately evaluated industry operating experience for relevance to the facility and appropriately entered applicable operating experience, including causal evaluations, into the corrective action program.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of licensee self-assessments and audits to assess whether the licensee was regularly identifying performance trends and effectively addressing them. The inspectors sampled self-assessments and audits in several different areas of the licensee's organization.

b. Assessment

The inspectors concluded that the licensee's self-assessment process was effective. The licensee had recently taken action to revise the self-assessment process to achieve better results. In addition, appropriate management attention was given to self-assessments and audits. Self-assessments and audits included personnel from outside organizations. Self-assessments and audits were determined to be critical.

.4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

The inspectors conducted individual interviews with twenty individuals. The interviewees represented various functional organizations and included contractor, staff, and supervisor levels. The inspectors conducted these interviews to assess whether conditions existed that would challenge the establishment of a safety conscious work environment.

b. Assessment

The inspectors concluded that the licensee maintained a safety conscious work environment. The individuals interviewed were aware of, and indicated that they were willing to use the various ways to bring problems to management's attention without fear of retaliation.

.5 Specific Issues Identified During This Inspection

a. Failure to Promptly Identify and Correct Conditions Adverse to Quality

Introduction. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with four examples of the licensee's failure to promptly identify and correct conditions adverse to quality. Specifically, the licensee failed to identify and correct excessive setpoint drift of reactor core isolation cooling system pressure switches, the leak of oil from the service water booster pump, a vulnerability that allowed non-quality controlled material to be installed in safety related applications, and the cause of a failure of the high pressure coolant injection steam line high flow instrument.

Description. The inspectors identified four examples of a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to promptly identify and correct conditions adverse to quality.

Example 1) The inspectors reviewed Condition Report 2009-01756, which had been initiated on March 5, 2009, to document that pressure switch RCIC-PS-87D was found out of technical specification allowed tolerance while the licensee was performing a surveillance test of the steam supply pressure monitors for the reactor core isolation cooling system. The licensee performed an apparent cause evaluation to determine why the switch had gone outside of its allowed tolerance band. Through this evaluation, the licensee determined that the mechanistic cause was set point drift. The licensee identified the apparent cause as inadequate set point monitoring during quarterly functional testing which allowed the set point to drift beyond the technical specification limit. The licensee replaced the switch and calibrated the replacement switch in accordance with the set point calculation.

The inspectors questioned the identified apparent cause. Specifically, the inspectors noted that the calculation that had established the set point for the switch also accounted for worse case drift. In doing this, the licensee incorporated a margin to ensure that the switch would not be outside of the technical specification limit. As such, the inspectors determined that the identified mechanistic cause was correct, but the identified apparent cause was incorrect. Therefore, the corrective actions were inadequate and subsequently, switch RCIC-PS-87D was found outside of its technical specification allowed tolerance during another surveillance test on December 7, 2009.

The licensee initiated Condition Report 2011-07060 to capture this issue in the corrective action program.

The inspectors noted that the licensee has since replaced this style pressure switch in the reactor core isolation cooling system with a switch of a different design.

Example 2) The inspectors reviewed Condition Report 2009-03602, which had been initiated because on May 7, 2009, the licensee identified that the B service water booster pump's inboard bearing oil level was below the level required for it to be considered operable. The licensee classified this condition report as a Category C, "broke-fix" issue, and assigned it to the operations department to address the issue of operators failing to recognize that the level in the bearing was below the operability limit. This classification required operations to do a fix evaluation. Based on their evaluation, operations determined that the cause of the issue was a lack of operations personnel knowledge on the required oil level.

Operations personnel documented that the oil had been drained and refilled one week prior to being discovered below the operability limit (2 3/4 of an inch below the reference mark). Prior to a post maintenance pump run, oil level was a "bubble" below the maximum startup level (2 3/16 of an inch below the reference mark). Operations personnel had noted that the oil level eventually leveled off near the minimum startup oil level (2 3/8 of an inch below the reference mark) following the pump run and cool down period. Subsequently, on May 7, 2009, the oil level was below the operability limit. The inspectors determined that the operations department evaluation sufficiently addressed the personnel knowledge issue, however, the cause of the oil level lowering was not identified or corrected.

The licensee initiated Condition Report 2011-07105 to capture this issue in the corrective action program.

Example 3) The inspectors reviewed Condition Report 2010-02123, which had been initiated because on March 23, 2010, when planning a safety related engineering package, the planner noted that one of the items specified for use, electrical lugs, were not safety related. Further investigation revealed that these lugs were listed as non-essential in the material control program; however, they were listed as safety related in the engineering package list of materials. Through subsequent reviews of previous packages to determine if these lugs had been installed in the plant, the planner determined that these same lugs had been incorrectly installed in the plant in safety related applications. Specifically, they had been installed in three service water booster pump closing circuitries. The licensee classified this condition report as a Category C, "broke-fix" issue, and assigned it to the work control group. This classification required the work control group to do a fix evaluation. Based on their evaluation, the work control group determined that two actions needed to be taken; 1) replace the non-safety related materials installed in the service water booster pumps, and 2) remove the non-safety related material from the warehouse.

During the inspectors' review of this fix evaluation they noted that while the licensee had taken action to ensure that the material could not be installed in the plant again, they had not taken action to determine how non-safety related material had been designated for

use in a safety related application in four safety related work orders. Therefore, the inspectors determined that the licensee had failed to promptly identify and correct a condition adverse to quality. The inspectors also noted that subsequently, the licensee had identified more instances where non-safety related materials had been designated for use in safety related applications through safety related work orders.

The licensee initiated Condition Report 2011-07151 to capture this issue in the corrective action program.

Example 4) The inspectors reviewed Condition Report 2010-07390, which had been initiated because on October 6, 2010, during the licensee's performance of surveillance testing of the high pressure coolant injection steam line high flow pressure instrument, HPCI-DPIS-77, it was found to be out of its technical specification allowed tolerance. The licensee performed an apparent cause evaluation to determine why the switch had gone outside of its allowed tolerance band. Based on their evaluation, the licensee determined that the apparent cause of this issue was the unavailability of spare parts necessitated an in-field repair.

The inspectors questioned the identified apparent cause. Specifically, during their review the inspectors noted that one month prior to the failure, HPCI-DPIS-77 had been taken out of service to replace two internal switch assemblies. This was done as part of the extent of condition actions resulting from the failure of a similar instrument. During the replacement of the switches, technicians broke a mounting post for the micro switches. Due to the unavailability of a complete spare instrument, the licensee had determined that the only option was to perform an in-field repair (i.e., replacing internal parts to fix the broken mounting post). An in-field repair required the technicians to perform a full disassembly and removal of the internal mechanism of the switch. During the alignment and calibration per station procedure, the technicians had difficulty adjusting the switches to the correct calibration tolerance, but after several hours of alignment and adjustment technicians were able to get the switches calibrated to the tolerance specified in the procedure.

The inspectors determined that the licensee considered an in-field repair acceptable, and that if done correctly, it would have corrected the condition. The inspectors determined that the inadequate in-field repair caused the misalignment of the mechanical components in the switch, which caused the failure to meet the surveillance requirement. Therefore, the inspectors determined that the licensee's conclusion in the apparent cause was incorrect.

The licensee initiated Condition Report 2011-06653 to capture this issue in the corrective action program.

These examples demonstrate the licensee's failure to have a low threshold for documenting additional issues in the corrective action program when evaluating existing conditions.

Analysis. The failure to promptly identify and correct conditions adverse to quality was a performance deficiency. The performance deficiency was determined to be more than minor because if left uncorrected, the licensee's continued failure to promptly identify and correct conditions adverse to quality could result in more risk significant equipment being inoperable, and is therefore a finding. This finding affected the Mitigating Systems Cornerstone. Using Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined the cause of the finding through interviews and document reviews. The finding was determined to have a crosscutting aspect in the area of problem identification and resolution, associated with the corrective action program component, in that, the licensee failed to implement a corrective action program with a low threshold for identifying issues; issues are identified completely, accurately and in a timely manner commensurate with their safety significance [P.1(a)].

Enforcement. Title 10 of the Code of Federal Regulations Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected." Contrary to the above, between March 5, 2009, and October 6, 2010, the licensee failed to promptly identify and correct conditions adverse to quality. Because this finding is of very low safety significance and has been entered into the corrective action program as Condition Reports 2011-07060, 2011-06653, 2011–07105, and 2011-07151, this violation is being treated as a noncited violation consistent with Section 2.3.2 of the NRC Enforcement Policy: NCV 05000298/2011006-01, "Failure to Promptly Identify and Correct Conditions Adverse to Quality."

b. Failure to Report Conditions Prohibited by Technical Specifications and Safety System Functional Failures

Introduction. The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.73, "Licensee Event Report System," associated with the licensee's failure to submit a licensee event report within 60 days following discovery of an event meeting the reportability criteria as specified. Specifically, a condition prohibited by technical specifications occurred when a zurn strainer failure rendered the service water system inoperable for longer than the action statement and would have prevented fulfillment of a safety function.

Description. On May 14, 2010, the licensee completed a root cause evaluation of a component failure associated with the train A service water zurn strainer wiper arm motor-to-gear box coupling, which had occurred on March 27, 2010, and was documented in Condition Report 2010-02213. This failure resulted in the strainer motor

not being able to perform its function of rotating the wiper arm for backwash, an essential function required for Technical Specification 3.7.2, Service Water System and Ultimate Heat Sink. The licensee's evaluation concluded that the failure was due to an inadequate design of the reduction gear to motor shaft. Through review of previous maintenance documents and condition reports, the licensee determined that this issue had existed since initial installation of the system.

The inspectors noted that the licensee had performed an operability evaluation at the time of the failure and determined the equipment was operable because manual actions could be taken to rotate the strainer for backwash functions. As such, the inspectors noted that when licensing personnel reviewed this issue for potential reportability they noted that this event was not reportable because the equipment was operable.

The inspectors questioned the operability position taken by the licensee. Specifically, while the strainer essential function could be performed by way of manual actions, this did not meet the station technical specification definition of operable:

> "A system, subsystem, division, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s), and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication and other auxiliary equipment that are required for the system, subsystem, division, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s)."

The identified condition appeared to meet the definition of operable with compensatory measures required, as defined by station procedure EN-OP-104:

> "OPERABLE-COM MEAS is a PCRS Flag for Continued Operability/Functionality based on an evaluation following an initial screening of Operable/Functional-Judgment or Inoperable. It is a category of identifying and tracking degraded or nonconforming conditions that represent a challenge to the Operability/Functionality of an SSC such that additional measures have to be taken to maintain or assure Operability/Functionality. Additional measures may involve compensatory measures, operational restraints (i.e., startup restraints, time limits, MODE change restrictions, and weather changes), further analysis, or a change to the licensing bases (i.e., CLB change)."

As such, the inspectors concluded that the strainer had in fact been inoperable prior to this event, and the licensee had operated the service water system in a condition prohibited by technical specifications. Furthermore, through reviews and discussions with licensee personnel, the inspectors determined that prior maintenance activities conducted by the licensee had allowed the B train of service water to be taken out of service while the affected A train of service water was credited as operable. The inspectors determined that these activities resulted in a condition that prevented the service water system from performing its safety function. The licensee initiated

Condition Report 2011-06778 to capture this issue in the station's corrective action program.

The inspectors determined that the licensee failed to appropriately and thoroughly evaluate for reportability aspects all factors associated with the equipment failure.

Analysis. The failure to submit a required licensee event report within 60 days after discovery of an event or condition requiring a report to the NRC was a performance deficiency. The inspectors reviewed this issue in accordance with NRC Inspection Manual Chapter 0612 and the NRC Enforcement Manual. Through this review, the inspectors determined that traditional enforcement was applicable to this issue because the NRC's regulatory ability was affected. Specifically, the NRC relies on the licensees to identify and report conditions or events meeting the criteria specified in regulations in order to perform its regulatory function; and when this is not done, the regulatory function is impacted. The inspectors determined that this finding was not suitable for evaluation using the significance determination process, and as such, was evaluated in accordance with the NRC Enforcement Policy. The finding was a violation determined to be of very low safety significance, was not repetitive or willful, and was entered into the corrective action program. Therefore, this violation is being treated as a Severity Level IV noncited violation consistent with the NRC Enforcement Policy. The inspectors determined the cause of the finding through interviews and document reviews. This finding had a crosscutting aspect in the area of problem identification and resolution associated with the corrective action component, in that, the licensee failed to appropriately and thoroughly evaluate for reportability aspects all factors associated with the equipment failure [P.1(c)].

Enforcement. Title 10 CFR 50.73(a)(1) requires, in part, that licensees shall submit a licensee event report for any event of the type described in this paragraph within 60 days after the discovery of the event. Title 10 CFR 50.73(a)(2)(i)(B) requires, in part, that the licensee report any operation or condition prohibited by the plant's technical specification, and Title 10 CFR 50.73(a)(2)(v) requires, in part, that the licensee report any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to

- Shutdown the reactor and maintain it in a safe condition
- Remove residual heat
- Control the release of radioactive material
- Mitigate the consequences of an accident

Contrary to the above, it was determined that the service water system had been operated in a condition prohibited by technical specifications due to a design inadequacy, and the licensee failed to correctly report this inadequacy that could have prevented the fulfillment of its safety function during past maintenance activities. This finding was determined to be applicable to traditional enforcement because the failure to report conditions or events meeting the criteria specified in regulations affects the NRC's regulatory ability. The finding was evaluated in accordance with the NRC's Enforcement Policy. The finding was a violation of very low safety significance, was not repetitive or

willful, and was entered into the corrective action program. This violation is being treated as a Severity Level IV noncited violation, consistent with the NRC Enforcement Policy: 05000298/2011006-02, "Failure to Report Conditions Prohibited by Technical Specifications and Safety System Functional Failures."

c. Failure to Perform 10 CFR 50.59 Evaluation for Design Change

Introduction. The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.59, "Changes, Tests, and Experiments," associated with the failure to adequately evaluate a change in order to ensure that it did not require prior NRC approval. Specifically, the licensee revised a residual heat removal pump motor cable sizing calculation to a smaller sized cable without a change evaluation.

Description. During an NRC component design basis inspection, inspectors identified that the licensee had changed residual heat removal pump motor cables from 4/0 to 2/0 power cables without adequate technical justification in the design basis calculations. The inspection finding was documented in NRC Inspection Report 2010007 and the licensee documented the concern in Condition Report 2010-05522. In order to resolve the problem, the licensee performed a calculation documented in NEDC-10-075 to justify the design change. In processing the corrective action and calculation change, the licensee did not perform an evaluation in accordance with 10 CFR 50.59 to ensure that the change did not require prior NRC approval. The inspectors determined that it was not immediately clear if it would have required prior NRC approval. The licensee entered the issue in the corrective action program as Condition Report 2011-07130.

The inspectors determined that the licensee failed to thoroughly evaluate the factors associated with the design change.

Analysis. The inspectors determined that the failure to perform a 10 CFR 50.59 evaluation for design change calculation NEDC-10-075 was a performance deficiency. The finding was determined to be more than minor because the licensee failed to perform a 10 CFR 50.59 evaluation when required. Specifically, the NRC relies on licensees to identify and report conditions or events meeting the criteria specified in regulations in order to perform its regulatory function, and when this is not done the regulatory function is impacted, and is therefore more than minor. Violations of 10 CFR 50.59 are considered to impede or impact the regulatory process, so they are dispositioned using the traditional enforcement process. The enforcement manual specifies that the severity level is determined in parallel with the Significance Determination Process (SDP). The inspectors performed a Phase 1 screening in accordance with Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. Therefore, the inspectors categorized the finding as Severity Level IV in accordance with the

enforcement manual. The finding was a violation determined to be of very low safety significance, was not repetitive or willful, and was entered into the corrective action program. Therefore, this violation is being treated as a noncited violation consistent with the NRC Enforcement Policy. The inspectors determined the cause of the finding through interviews and document reviews. This finding was determined to have a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program in that the licensee failed to appropriately and thoroughly evaluate all factors associated with the design change [P.1(c)].

Enforcement. Title 10 CFR 50.59, "Changes, Tests, and Experiments," Section (c)(1)(i) states, in part, that a licensee may make changes in the facility as described in the final safety analysis report (as updated) without obtaining a license amendment pursuant to 10 CFR 50.90 only if the change, test, or experiment does not meet any of the criteria in paragraph (c)(2). Paragraph (c)(2) states, in part, "a licensee shall obtain a license amendment pursuant to Section 50.90 prior to implementing a proposed change, test, or experiment if the change, test, or experiment would:

- Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the final safety analysis report (as updated);
- Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety previously evaluated in the final safety analysis report (as updated);
- Result in more than a minimal increase in the consequences of an accident previously evaluated in the final safety analysis report (as updated);
- Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the final safety analysis report (as updated);
- Create a possibility for an accident of a different type than any previously evaluated in the final safety analysis report (as updated);
- Create a possibility for a malfunction of an SSC important to safety with a different result than any previously evaluated in the final safety analysis report (as updated);
- Result in a design basis limit for a fission product barrier as described in the FSAR (as updated) being exceeded or altered; or
- Result in a departure from a method of evaluation described in the FSAR (as updated) used in establishing the design bases or in the safety analyses."

Contrary to the above, on December 27, 2010, the licensee failed to perform an evaluation that provided a bases for the determination that changing the design of RHR cable did not require a license amendment. Specifically, the licensee failed to perform a 10 CFR 50.59 evaluation for the calculation to justify the change of residual heat removal pump 1B and 1C motor power cable from 4/0 to 2/0. Because this finding is of very low safety significance and has been entered into the licensee's corrective action program as Condition Report 2011-01730, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy: 05000289/2011006-03; "Failure to Perform 10 CFR 50.59 Evaluation for Design Change."

d. Failure to Take Action for an Ineffective Corrective Action

Introduction. The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, for the failure to correct a condition adverse to quality. Specifically, the licensee determined that an interim corrective action to prevent recurrence was ineffective, which placed the licensee in a vulnerable condition until the additional corrective actions were in place.

Description. During root cause investigation, "Movement of the Reactor Building Crane Outside Its Operability Evaluation," documented in Condition Report 2009-03203, the licensee identified that the reactor building crane had been moved outside the allowance of station processes, causing a potential concern for equipment located under the crane. The personnel had incorrectly used the Risk Release for Maintenance process to move the crane. The licensee identified, as a root cause, that supervisory oversight and craft knowledge of the Risk Release for Maintenance process was lacking. The root cause evaluation implemented an interim corrective action to prevent recurrence in an effort to correct the lack of knowledge in the short term, as well as other long term corrective actions.

The licensee conducted a tailgate session that included a review of Procedure 3.4, "Configuration Change Control," Revision 48, with an emphasis on Risk Release for Maintenance. Subsequently, the licensee also revised training material, SKL0610102, "Project Management Training," from classroom instruction to a required qualification card to ensure procedural competency.

The licensee completed a corrective action effectiveness review for the above corrective actions. The reviewer initiated Condition Report 2009-06814 to document the continuing lack of knowledge on the Risk Release for Maintenance process. The reviewer stated that this was a result of ineffective tailgate training, which manifested in continued violations of the process. The Condition Report Group administratively closed this condition report with the comment that not enough time had elapsed to perform an effectiveness review. Subsequently, a new action was assigned to perform a new corrective action effectiveness review three to six months later.

The licensee performed a second corrective action effectiveness review, documented in LO-CNSLO-2009-00004, CA-25, which also concluded that the training was ineffective. However, by this time multiple violations of the Risk Release for Maintenance process had already occurred. In addition to other less significant violations, a root cause evaluation for a digital electrical hydraulic fluid leak concluded that the Risk Release for Maintenance process was violated again. The root cause evaluation assigned additional training.

The inspectors concluded that the licensee had failed to correct the lack of knowledge of the Risk Release for Maintenance process, which allowed other violations to occur. The licensee entered the finding into the corrective action program as Condition Report 2011-07152.

The inspectors determined that the licensee had failed to properly prioritize the condition report written for the ineffective interim corrective action to prevent recurrence, which resulted in no evaluation or corrective actions taken.

Analysis. The licensee's failure to take action for an ineffective interim corrective action to prevent recurrence was a performance deficiency, which resulted in a vulnerability to a repetitive condition adverse to quality. The finding was determined to be more than minor because the performance deficiency could be reasonably viewed as a precursor to an event in that the interim action was not effective as a barrier to prevent recurrence of a significant event until other corrective actions were in place. The finding was associated with the Mitigating Systems Cornerstone. The inspectors performed a Phase 1 screening in accordance with Manual Chapter 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined that the finding was of very low safety significance (Green) because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined the cause of the finding through interviews and document reviews. The inspectors determined that this finding had a crosscutting aspect in the area of problem identification and resolution associated with corrective actions because the licensee failed to prioritize and thoroughly evaluate a condition report that documented an inadequate interim corrective action to prevent recurrence [P.1(c)].

Enforcement. Title 10 of the Code of Federal Regulations Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformance's are promptly identified and corrected." Contrary to the above, on September 14, 2009, the licensee failed to assure that a condition adverse to quality was promptly corrected. Specifically, the licensee failed to promptly correct an ineffective interim corrective action to prevent recurrence associated with lack of knowledge of the Risk Release for Maintenance process. Since this violation was of very low safety significance and was documented in the licensee's corrective action program as Condition Report 2011-07152, it is being treated as a noncited violation, consistent with Section 2.3.2 of the NRC Enforcement Policy: NCV 05000298/2011006-04, "Failure to Take Action for an Ineffective Corrective Action."

e. Failure to Correctly Translate Design Requirements into Installed Plant Configuration

Introduction. The inspectors identified a Green cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to assure that the applicable design basis for applicable structures, systems, and components were correctly translated into specifications, procedures, and instructions. Specifically, the licensee failed to justify through evaluation that the diesel generator fuel oil day tanks would be available following a tornado missile strike on the tank vents. The violation is cited because the licensee failed to restore compliance in a reasonable

time following documentation of the issue as a noncited violation in NRC Inspection Report 2010007 (issued December 3, 2010).

Description. During an NRC component design basis inspection in July 2009, an issue was identified associated with the emergency diesel generator day tank vent lines. Specifically, the inspectors determined that the licensee did not have a design basis calculation to show that the fuel oil day tanks would be available following a tornado or high wind impact event on the day tank vent lines. The licensee entered this issue into their corrective action program as Condition Report 2010-05350. This issue was documented as a noncited violation, 05000298/2010007-04, for the licensee's failure to demonstrate that the design basis requirements were being met.

As a result of this condition report, corrective action 2 was generated which directed the station to perform a formal analysis of the diesel generator day tank vent lines pertaining to missile protection, and generate additional corrective actions if required. Station calculation NEDC 10-070, "Emergency Diesel Day Tank Vent Survival Subsequent to a Tornado Strike Sealing the Vents," Revision 0 dated November 30, 2010, was generated in response to this corrective action. With this, corrective action 2 was closed on December 14, 2010, and Condition Report 2010-05350 was closed on December 28, 2010.

On June 9, 2011, the inspectors reviewed the licensee's corrective actions from the previous noncited violation. During this review, the inspectors noted that station calculation NEDC 10-070 contained several assumptions that appeared to be non-conservative and could have an effect on the outcome of the calculation. The inspectors informed the licensee of this concern, and the licensee entered this issue into the corrective action program as Condition Report 2011-06655.

During subsequent re-analysis of NEDC 10-070, the licensee determined that it could not validate the assumptions that had been used without extensive engineering analysis. The licensee initiated Condition Report 2011-07064 to capture this issue. The licensee documented a reasonable justification of continued operation using engineering judgment, pending further analysis to validate their assumptions and establish a design basis for the emergency diesel generator fuel oil day tank vent lines relative to tornado and high wind impacts.

As such, the inspectors determined that the licensee had failed to restore compliance within a reasonable time after the previous noncited violation was identified on December 3, 2010.

Analysis. The inspectors determined that the licensee's failure to ensure that design requirements were correctly translated into installed plant equipment was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the protection against the external factors attribute of the Mitigating Systems Cornerstone, and affected the associated cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events

to prevent undesirable consequences, and is therefore a finding. Using Manual Chapter 0609, Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to have very low safety significance because the finding: (1) was not a design or qualification issue confirmed not to result in a loss of operability or functionality; (2) did not represent an actual loss of safety function of the system or train; (3) did not result in the loss of one or more trains of nontechnical specification equipment; and (4) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined the cause of the finding through interviews and document reviews. The finding was determined to have a crosscutting aspect in the area of human performance, associated with the decision making component in that the licensee failed to use conservative assumptions in decision making and adopt a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate it is unsafe in order to disapprove the action [H.1(b)].

Enforcement. Title 10 CFR 50, Appendix B, Criterion III, "Design Control," requires, in part, measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2 and as specified in the license application, for those components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. Contrary to the above, since December 3, 2010, the licensee failed to assure that applicable regulatory requirements and the design basis were correctly translated into specifications, drawings, procedures, and instructions. Specifically, the licensee failed to correctly translate regulatory and design basis requirements, associated with tornado and high wind generated missiles, into design information necessary to protect the emergency diesel generator fuel oil day tank vent line components. This performance deficiency was previously identified by the NRC and was documented as noncited violation 05000298/2010007-04. The inspectors determined that the licensee had failed to restore compliance within a reasonable time following issuance of this noncited violation. Therefore, this violation is being cited, consistent with the NRC Enforcement Policy, Section 2.3.2, which states, in part, that a cited violation will be considered if the licensee fails to restore compliance within a reasonable time after a violation is identified: VIO 05000298/2011006-05, "Failure to Correctly Translate Design Requirements into Installed Plant Configuration."

4OA6 Meetings

Exit Meeting Summary

On June 24, 2011, the inspectors presented the inspection results to B. O'Grady, and other members of the licensee staff. The licensee's management initially questioned the characterization of several findings presented. After further telephonic discussions, the licensee's management acknowledged the issues presented. The inspector asked the licensee's management whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

L. Dewhirst, Manager, Corrective Action and Assessments
J. Flaherty, Licensing Engineer
A. Zaremba, Director of Nuclear Safety Assurance

NRC Personnel

D. Powers, Acting Chief, Technical Support Branch

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

05000298/2011006-05	VIO	Failure to Correctly Translate Design Requirements into Installed Plant Configuration (Section 4OA2.5e)

Opened and Closed

05000298/2011006-01	NCV	Failure to Promptly Identify and Correct Conditions Adverse to Quality (Section 4OA2.5a)
05000298/2011006-02	NCV	Failure to Report Conditions Prohibited by Technical Specifications and Safety System Functional Failures (Section 4OA2.5b)
05000298/2011006-03	NCV	Failure to Perform 10 CFR 50.59 Evaluation for Design Change (Section 4OA2.5c)
05000298/2011006-04	NCV	Failure to Take Action for an Ineffective Corrective Action (Section 4OA2.5d)

LIST OF DOCUMENTS REVIEWED

CONDITION REPORTS

2009-03685	2009-09243	2010-02086	2010-09465	2011-06414
2009-03703	2009-09436	2010-02123	2010-09467	2011-06416
2009-03784	2009-09443	2010-02575	2010-09469	2011-06524
2009-03828	2009-09451	2010-02632	2010-09472	2011-06545
2009-03863	2009-09486	2010-02709	2010-09476	2011-06577
2009-03903	2009-09537	2010-02844	2010-09665	2011-06579
2009-04042	2009-09560	2010-02980	2010-09700	2011-06589
2009-04494	2009-09606	2010-03195	2011-00166	2011-06651
2009-04526	2009-09622	2010-03322	2011-00225	2011-06653
2009-04565	2009-09854	2010-03381	2011-00461	2011-06655
2009-04819	2009-09875	2010-03910	2011-00544	2011-06680
2009-04895	2009-10222	2010-04046	2011-00618	2011-06769
2009-04933	2009-10347	2010-04287	2011-00662	2011-06778
2009-05088	2009-10364	2010-05023	2011-00684	2011-06781
2009-05114	2009-10389	2010-05449	2011-00756	2011-06794
2009-05168	2009-10461	2010-05522	2011-00766	2011-07054
2009-05277	2009-10691	2010-05631	2011-01239	2011-07066
2009-05418	2010-00130	2010-05763	2011-01606	2011-07130

WORK ORDERS

4731279	4731460	4731466	4625525	4689508
4771612	4639731			

CALCULATIONS

NUMBER	TITLE	REVISION
NEDC 92-50AI	MS-PS-134 A/B/C/D Setpoint Calculation	1
NEDC 92-50AH	MS-PS-103 A/B/C/D Setpoint Calculation	1
NEDC 10-070	Emergency Diesel Day Tank Vent Survival Subsequent to a Tornado Strike Sealing the Vents	1
NEDC 97-012	Emergency Diesel Generator Fuel Oil On-Site Storage Technical Specification Requirements	3

PROCEDURES

NUMBER	TITLE	REVISION
0.31.1	Skill of the Craft Configuration Control	8
0.31.1	Configuration Control During Maintenance Activities	9
3.4	Configuration Change Control	48
0.50.5	Outage Shutdown Safety	14
0.40.9	Work Activity Risk Management Process	2
0.40	Work Control Program	70
2.1.11.1	Turbine Building Data	108
2.2.3.1	Traveling Screen, Screen Wash, and Sparger Systems	81
2.1.5	Reactor Scram	64
2.2.77	Turbine Generator	100
7.7.1	Special Process Control Maintenance Procedure	15
3.38	Welding/Repair-Replacement Program	2
0-HU-POLICY	Human Performance Policy	2
0-CNS-FAP-OM-002	Continuous Improvement Process	0
0.40.4	Planning	13
0-CHANGE-MGMT	Change Management	2
EPIP 5.7.20	Protective Action Recommended	21
0.9	Tagout	68

PROCEDURES

NUMBER	TITLE	REVISION
0.CNS-09	CNS material Master data Nomenclature Standard	3
0.9A	Tagout forms and Checklists	8
15.PCIS.301	Steam Line Break detection Temperature Switch Change out for Calibration	15
7.3.24.4	HGA Relay Setup and Pick-Up Test	3
7.0.4	Conduct of Maintenance	33
0.40	Work Control Program	76
0.5	Conduct of the Condition Report Process	67
0.5 CR	Condition Report Initiation, Review, and Classification	17
0.5 EVAL	Preparation of Condition Reports	22
0.5 ROOT-CAUSE	Root Cause Analysis Procedure	15
0.5 OPS	Operations Review of Condition Report/Operability Determination	31
0.5 CAER	Corrective Action Effectiveness Reviews	4

MISCELLANEOUS

NUMBER	TITLE	REVISION / DATE
SKL0610102	Project Manager Training	5
	Human Performance Review Board (HURB) Charter	June 1, 2011
	Leadership Logbook Reports – Chemistry and RP	May 2011
	Leadership Logbook Reports – Chemistry and RP	January 2011
	Leadership Logbook Reports – Chemistry and RP	February 2011
CNSLO-2010-0131	Focused Self Assessment, Risk Assessments	July 30, 2010
LO-HQNLO-2010-0009	Final Report for Assessment of Cooper OE Program	
	High Pressure Coolant Injection System Health Report	May 2011
	Reactor Core Isolation Cooling System Health Report	May 2011
KSV-32-26, Sh. 1	Control Linkage (Diesel Non-fail-safe)	Rev. N03

Information Request
May 3, 2011
Biennial Problem Identification and Resolution Inspection
Cooper Nuclear Station
Inspection Report 05000298/2011006

This inspection will cover the period from April 11, 2009, to June 24, 2011. All requested information should be limited to this period or to date of this request unless otherwise specified. To the extent possible, the requested information should be provided electronically in Adobe PDF or Microsoft Office format. Lists of documents should be provided in Microsoft Excel or a similar sortable format.

A supplemental information request will likely be sent during the week of May 30, 2011.

Please provide the following no later than May 23, 2011:

1. Document Lists

   Note: for these summary lists, please include the document/reference number, the document title or a description of the issue, initiation date, and current status. Please include long text descriptions of the issues.

   a. Summary list of all corrective action documents related to significant conditions adverse to quality that were opened, closed, or evaluated during the period

   b. Summary list of all corrective action documents related to conditions adverse to quality that were opened or closed during the period

   c. Summary lists of all corrective action documents which were upgraded or downgraded in priority/significance during the period

   d. Summary list of all corrective action documents that subsume or "roll up" one or more smaller issues for the period

   e. Summary lists of operator workarounds, engineering review requests and/or operability evaluations, temporary modifications, and control room and safety system deficiencies opened, closed, or evaluated during the period

   f. Summary list of plant safety issues raised or addressed by the Employee Concerns Program (or equivalent)

   g. Summary list of all Apparent Cause Evaluations completed during the period

   h. Summary list of all Root Cause Evaluations planned or in progress but not complete at the end of the period

2. Full Documents, with Attachments

a. Root Cause Evaluations completed during the period

b. Quality assurance audits performed during the period

c. All audits/surveillances performed during the period of the Corrective Action Program, of individual corrective actions, and of cause evaluations

d. Corrective action activity reports, functional area self-assessments, and non-NRC third party assessments completed during the period (do not include INPO assessments)

e. Corrective action documents generated during the period for the following:

i. NCV's and Violations issued to Cooper Nuclear Station

ii. LER's issued by Cooper Nuclear Station

f. Corrective action documents generated for the following, if they were determined to be applicable to Cooper Nuclear Station (for those that were evaluated but determined not to be applicable, provide a summary list):

i. NRC Information Notices, Bulletins, and Generic Letters issued or evaluated during the period

ii. Part 21 reports issued or evaluated during the period

iii. Vendor safety information letters (or equivalent) issued or evaluated during the period

iv. Other external events and/or Operating Experience evaluated for applicability during the period

g. Corrective action documents generated for the following:

i. Emergency planning drills and tabletop exercises performed during the period

ii. Maintenance preventable functional failures which occurred or were evaluated during the period

iii. Adverse trends in equipment, processes, procedures, or programs which were evaluated during the period

iv. Action items generated or addressed by plant safety review committees during the period

3. Logs and Reports

   a. Corrective action performance trending/tracking information generated during the period and broken down by functional organization

   b. Corrective action effectiveness review reports generated during the period

   c. Current system health reports or similar information

   d. Radiation protection event logs during the period

   e. Security event logs and security incidents during the period (sensitive information can be provided by hard copy during first week on site)

   f. Employee Concern Program (or equivalent) logs (sensitive information can be provided by hard copy during first week on site)

   g. List of Training deficiencies, requests for training improvements, and simulator deficiencies for the period

4. Procedures

   a. Corrective action program procedures, to include initiation and evaluation procedures, operability determination procedures, apparent and root cause evaluation/determination procedures, and any other procedures which implement the corrective action program at Cooper Nuclear Station

   b. Quality Assurance program procedures

   c. Employee Concerns Program (or equivalent) procedures

   d. Procedures which implement/maintain a Safety Conscious Work Environment

5. Other

   a. List of risk significant components and systems

   b. Organization charts for plant staff and long-term/permanent contractors

Note: "Corrective action documents" refers to condition reports, notifications, action requests, cause evaluations, and/or other similar documents, as applicable to Cooper Nuclear Station.

As it becomes available, but no later than May 23, 2011, this information should be uploaded on the Certrec IMS website. When these documents have been compiled (and by May 30, 2011), please download these documents onto a CD or DVD and sent it via overnight carrier to:

Harry A. Freeman
U.S. NRC Region IV
612 E. Lamar Blvd.
Suite 400
Arlington, TX 76011-4125

Please note that the NRC is not able to accept electronic documents on thumb drives or other similar digital media. However, CDs and DVDs are acceptable.

Supplemental Information Request
June 2, 2011
Biennial Problem Identification and Resolution Inspection
Cooper Nuclear Station
Inspection Report 05000298/2011006

This information should be uploaded on the Certrec IMS website or provided on a CD.

Please provide the following no later than June 6, 2011:

B. Tindell's Request:

1. Condition Report(s) associated with Licensee Event Report 2010-01

2. Condition Report(s) associated with CNSLO 2009-00221:

    a. Supplemental Work Practices - observation of supplemental valve team performance decline

    b. Outage Scheduling recommendation to accommodate incomplete on-line work into outage schedule for risk management

    c. Critical Equipment Failures due to Preventive Maintenance – Recommendation to implement an action to perform evaluations on inadequate Preventative Maintenance causes for potential Preventive Maintenance program impact.

3. List of currently incomplete First Time Perform Preventative Maintenance items and basis for schedule (reference CNSLO 2009-00221, Critical Equipment Failures due to Preventive Maintenance)

4. Full Condition Reports for all EE-DC system, as well as RCIC and HPCI systems related to DC electrical (valve, controller, cabling, etc.) from 1/1/2009 to Present

5. Currently open Work Orders for all the EE-DC system, as well as RCIC and HPCI systems related to DC electrical (valve, controller, cabling, etc.)

6. Completed Copies of Closed Corrective Work Orders for the EE-DC system, as well as RCIC and HPCI systems related to DC electrical (MOV, Controller, cabling, etc.) from January 1, 2009 to Present

7. Full Condition Report(s) associated with NRC Information Notices 2009-06, 2009-16, 2010-06

8. NCR 94-048

9. Current Revision of Training Lesson INT0231001, "OPS Shutdown Risk Management"

10. Part Evaluation 4649606

11. CNS Vendor Manual 0843

12. Full Condition Reports:

2005-3294	2006-554	2006-3900	2007-1559	2007-4363	2008-1402
2008-3157	2008-4152	2008-7910	2009-189	2009-734	2009-780
2009-937	2009-1756	2009-1855	2009-2238	2009-2626	2009-2643
2009-2644	2009-2645	2009-2646	2009-3057	2009-3150	2009-3828
2009-4895	2009-5168	2009-5246	2009-5375	2009-5449	2009-5607
2009-5727	2009-6392	2009-6471	2009-6536	2009-6716	2009-6883
2009-7519	2009 8398	2009-8667	2009-8678	2009-9243	2009-09486
2009-10139	2009-10161	2009-10222	2009-10226	2009-10239	2009-10310
2009-10347	2009-10389	2009-10691	2009-10810	2009-10805	2009-10816
2009-10831	2010-199	2010-223	2010-974,	2010-975	2010-977
2010-979	2010-1596	2010-1854	2010-1881,	2010-3689	2010-3910
2010-08192	2010-8204	2010-8210	2010-8447,	2010-8763	2010-8771
2010-9188	2010-9350	2011-461	2011-615	2011-618	2011-681
2011-1239	2011-1665,	2011-1779	2011-1783	2011-1784	2011-1793
2011-4330	2011-4694	2011-4589	2011-4758	2011-4767	2011-4776
2011-4780					

13. Completed Work Orders:

    4624211, 4659630, 4737773, 4638031, 4686573, 4733908, 4705209, 4692514

14. NEDC 92-050AR, “Setpoint Calculation,” revision 1 and current revision

15. EE-DC, RCIC, HPCI Design Basis Documents

16. One Line Electrical Diagrams of DC System, RCIC, and HPCI

17. 2.1.4, “Normal Shutdown,” Current Revision and Revision in effect as of November 7, 2009

18. 2.2.69,2 “RHR System Shutdown Operations,” Current Revision and Revision in effect as of November 7, 2009

I. Anchondo's Request:

1. Full Condition Reports:

2009-03203	2009-07191	2009-09875	2010-00245	2010-00389	2010-01834
2009-09023	2009-09138	2009-09451	2011-00461	2009-09606	2010-06100
2009-08061	2010-03195	2010-04115	2009-02051	2009-02124	2009-02553
2009-07896	2009-08315	2009-09560	2009-10537	2010-00083	2010-01551
2010-08827	2010-09015	2009-02655	2009-10015	2009-02828	2009-02970
2010-09174	2010-09153	2010-02700	2010-05585	2009-06779	2009-06766
2009-10604	2009-06762	2009-06759	2010-08755	2010-08902	2010-08946
2010-09596	2010-09613	2010-09633	2003-04111	2005-03995	2006-03749
2011-03859	2011-03214	2010-08762	2010-00545	2010-08758	2009-04546
2009-05277	2009-03828	2008-09443	2009-09854	2009-04019	2009-06187
2009-06196	2010-08150	2010-08724	2011-03917	2011-01653	2010-02875
2009-7782	2009-9854	2009-10756	2010-587		

2. Full Condition Report(s) related to closed substantive crosscutting issue [H.4(a)]

3. Full Condition Report(s) associated with adverse trend in apparent cause evaluations documented in NRC inspection report 2010003

4. Full Condition Report(s) associated with NRC Information Notices:

2010-23 2010-12 2010-08 2009-23 2009-10

5. Full Condition Reports and completed copies of associated Work Order(s):

2009-08610	2009-09023	2009-09606	2010-03195	2009-04115	2010-08364
2010-09015	2009-01874	2009-00232	2009-07008	2009-08061	2010-03091
2010-05631	2010-09146	2010-06100	2010-09146	2008-08645	2009-03714
2008-08695	2009-08890	2009-07770	2010-09173	2010-09678	2011-02775
2011-03214	2010-04515				

6. WO 4731460 WO 4731279 WO 4731467 WO 4731466 TTC 4731453

J. Okonkwo's Request:

1. Full Condition Reports:

2009-3863	2009-4526	2009-5490	2009-6000	2009-8197	2009-8412
2009-8452	2009-9171	2009-9537	2009-8623	2010-8769	2010-8169
2011-4658	2010-4695	2011-4256	2010-8770	2010-1349	2010-1553
2010-924	2010-314	2010-8093	2010-5815	2010-1688	2010-2980
2010-9065	2009-10347	2009-9003	2009-8552	2010-8193	2010-8242
2010-5023	2011-3763	2009-6063	2009-7538	2009-641	2008-948
2009-166	2009-611	2009-3729	2009-4019	2010-1763	2010-2282
2009-644	2010-3137	2011-0063	2009-3441	2009-3718	2009-3721
2009-3754	2009-4180	2009-4615	2009-5544	2009-6834	2010-167
2010-228	2010-1025	2010-3442	2011-166	2011-1367	2011-3519
2006-9802	2006-3563	2006-3826	2006-6301	2007-1216	2009-3363
2009-2721	2009-312	2009-2297	2011-1175	2009-6375	2009-2800
2010-5936	2010-8555	2010-8310	2010-8328	2010-8764	2010-9113
2011-0662	2009-4923	2010-9412	2011-2226	2011-2724	2010-8759
2011-2084	2010-8764	2009-741	2009-814	2008-7832	2009-6883
2009-5114	2009-611	2010-5629	2009-6187	2009-625	2009-9192
2010-9070	2009-6034	2010-10133	2010-09700	2010-09665	2011-1324
2010-1891	2010-4208	2010-1812	2010-1934,	2010-2394, , , ,	

2. Full Condition Report(s) associated with NRC Information Notices 2011-01, 2010-25, 2010-13, 2009-25, 2009-19, 2009-08, and Regulatory Issue Summary 2009-10

3. Effluent Reports from January 1, 2009, to Present

K. Josey's Request:

1. Full Condition Report(s) associated with NRC Information Notices 2011-04, 2010-20, 2010-03, 2009-22, 2009-09, 2009-02

2. System engineers notebook for HPCI and RCIC

3. NEDC 92-050AB Revision 1 and 2

4. Complete copies of all work orders and surveillance test procedures associated with HPCI-DPIS-76 and 77, since February 16, 2005.

5. Procedure for manual operation of zurn strainers, and copy of evaluation to credit manual action of zurn strainers.

6. Completed Work Orders associated with the zurn strainer couplings from 2005 to present.