August 31, 2006

Mr. M. Nazar
Senior Vice President and
Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

SUBJECT: D. C. COOK NUCLEAR POWER PLANT, UNITS 1 AND 2
NRC PROBLEM IDENTIFICATION AND RESOLUTION
INSPECTION REPORT 05000315/2006008; 05000316/2006008

Dear Mr. Nazar:

On August 18, 2006, the U.S. Nuclear Regulatory Commission completed a team inspection at the D. C. Cook Nuclear Power Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on August 18 2006, with Mr. Peifer and other members of your staff during an exit meeting.

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

On the basis of the sample selected for review, there were no findings of significance identified during this inspection. The team concluded that problems were properly identified, evaluated, and resolved within the problem identification and resolution programs. However, during the inspection, several examples of minor problems were identified, where the documentation of an issue was incomplete, in that, the extent of the evaluation and the status of the corrective actions could not be clearly discerned. Additionally, there were several examples where industry operating experience was not properly evaluated for applicability to the station.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public

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Sincerely,

/RA/

Christine A. Lipa, Chief
Branch 4
Division of Reactor Projects

Docket Nos. 50-315; 50-316
License Nos. DPR-58; DPR-74

Enclosure:
Inspection Report 05000315/2006008; 05000316/2006008
w/Attachment: Supplemental Information

cc w/encl:
M. Peifer, Site Vice President
L. Weber, Plant Manager
S. Simpson, Regulatory Affairs Manager
G. White, Michigan Public Service Commission
L. Brandon, Michigan Department of Environmental Quality -
Waste and Hazardous Materials Division
Emergency Management Division
MI Department of State Police
State Liaison Officer, State of Michigan
D. Lochbaum, Union of Concerned Scientists

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-315; 50-316
License Nos:	DPR-58; DPR-74
Report No:	05000315/2006008; 05000316/2006008
Licensee:	American Electric Power Company
Facility:	D. C. Cook Nuclear Power Plant, Units 1 and 2
Location:	1 Cook Place Bridgman, MI 49106
Dates:	July 31 through August 18, 2006
Inspectors:	N. Shah, Project Engineer, DRP–Team Lead J. Lennartz, Resident Inspector, DRP R. Winter, Reactor Engineer, DRS
Approved by:	C. Lipa, Chief Branch 4 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000315/2006008; 05000316/2006008; American Electric Power; on 7/31/2006-8/18/2006; D. C. Cook Nuclear Power Plant, Units 1 and 2; Biennial baseline inspection of the identification and resolution of problems. No violations or findings were identified.

The inspection was conducted by a regional projects inspector, a resident inspector, and a regional electrical engineering specialist.

Identification and Resolution of Problems

The team identified that the licensee was effective at identifying problems and incorporating them into the corrective action program. The licensee's effectiveness at problem identification was evidenced by the relatively few deficiencies identified by the team that had not been previously identified by the licensee during the review period. In general, the licensee was effectively prioritizing, evaluating, and correcting issues. However, the team found several examples where the documentation of an issue did not clearly indicate whether it had been properly evaluated, what the status of the corrective actions were, or whether it had been effectively resolved.

Operating experience usage was also effective, but the team found several examples where operating experience, primarily issued by the NRC, was not screened by the station or was not properly evaluated by the assigned department.

Licensee audits and self-assessments were generally thorough, probing, and made good use of outside resources to maintain independence. On the basis of interviews conducted during this inspection, workers at the site felt free to input safety findings into the corrective action program.

A. Inspector-Identified and Self-Revealed Findings

No findings of significance were identified.

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

a. Assessment of the Corrective Action Program

(1) Inspection Scope

The team assessed the licensee's processes for identifying and correcting problems. This included a review of program procedures, interviewing plant personnel, and evaluating various station meetings to understand the implementation of the licensee's corrective action program (CAP) and related activities.

The team reviewed selected CAP products, such as condition reports (CRs), audits, self-assessments, and other documents to determine if problems were being identified at the appropriate threshold and entered into the CAP. This review primarily covered those items generated since the 2004 NRC Problem Identification and Resolution Inspection (inspection report 05000315/2004014; 05000316/2004014), but also included a sample of items generated since 2001.

The team evaluated whether issues were effectively documented, evaluated and corrected in the CAP. The team reviewed selected CRs, Apparent Cause Evaluations, Root Cause Reports, prompt investigations, operability determinations, and Common Cause Analyses. Attributes reviewed included the technical adequacy of the cause determinations, adequacy of the extent of condition reviews including evaluations of potential common cause or generic concerns, and whether applicable industry operating experience had been considered.

Other attributes reviewed by the team included the quality of the licensee's trending of conditions and the corresponding corrective actions. The team searched for items or issues which looked like potential trends and assessed whether the licensee had appropriately identified and captured these trends within the CAP. The team also assessed licensee corrective actions stemming from previous Non-Cited Violations and Licensee Event Reports.

The team selected the Essential Service Water system for a more extensive review because the system historically had maintenance rule (a)(1) action plans to address unavailability and reliability issues and because the system ranked high on the licensee's Probabilistic Risk Assessment list. The team examined licensee initiated CRs, cause and operability evaluations, work orders and corrective actions generated over the past 5 years to identify those deficient conditions and trends that had occurred.

The team also conducted walkdowns and interviewed plant personnel to identify other processes that may exist where problems and findings could be identified. In particular, the team focused on the Performance Observation Program (POP) based on past

licensee identified examples where issues were identified that were not captured in the CAP.

During this inspection, the team reviewed 14 self-assessments, 8 audits, 22 CRs, 5 trend evaluations, and 15 apparent or root cause evaluations.

(2) Assessment

No findings of significance were identified.

On August 17, 2006, the team attended a Corrective Action Review Board meeting. This board, comprised of senior licensee management, was responsible for reviewing the quality of root cause evaluations and for monitoring the overall health of the CAP. During the meeting, the Board reviewed the current CAP performance indicator data. The team noted that the Board challenged the CAP program coordinators on the indicator data and appeared to provide effective high-level oversight of the CAP.

The team concluded that the licensee was effectively managing and monitoring the essential service water system. The team noted that the licensee had identified and initiated corrective actions that generally resolved deficient conditions. The team identified no apparent trends that had not been previously identified by the licensee. The team also noted that long standing issues such as relatively short service life on the service water pumps were being resolved within the CAP.

Identification of Issues

The licensee implemented a broad CAP governed by corporate-level policies and procedures. A shared computerized data base was used for creating individual reports and for subsequent management of the processes of issue evaluation and response. This included determining the issue's significance, addressing such matters as regulatory compliance and reporting, and assigning any actions deemed necessary or appropriate. Workers were encouraged to raise concerns and typically identified issues at a low threshold. This was evidenced by the large number of CRs generated annually (about 6000-7000/yr) which were reasonably distributed across the various departments. While workers were familiar with the various avenues for raising concerns (NRC, CAP, etc), most preferred to bring issues directly to their supervision.

The NRC inspectors had recently evaluated the licensee's trending program in the inspection quarter ending June 30, 2006. The inspection results were documented in Inspection Report 2006-004. The team noted that cause codes were being used and that thresholds were established and being used to identify trends in condition reports. The licensee had initiated a large number of trend reports (78 in 2005 and about 34 to date in 2006). However, the team noted that the licensee had not identified an apparent trend regarding incorrect reportability determinations. Since March 2006, the NRC identified three occasions where the licensee did not make a required report per 10 CFR 50.72 and/or 50.73. Although the licensee documented each occurrence in a CR, the events in the aggregate where not considered a potential trend. This was discussed with licensee management who initiated CR 0801181 to address the issue.

The licensee established the POP to conduct in-field observations of activities by supervision. This program had its own procedure and documentation forms separate from the corrective action program. This provided an opportunity for potentially significant issues to be identified through a POP observation, but not be captured in the CAP. In fact, shortly after the 2004 NRC PI&R inspection, the licensee identified some examples where this had occurred. The team reviewed a sampling of POP results generated by the maintenance and operations departments, who together accounted for the majority of the observations, and did not identify any cases where an issue was not captured in the CAP as appropriate.

Prioritization and Evaluation of Issues

Once initiated, CRs were first reviewed by the department CAP coordinators for completeness and for assignment of the applicable trend coding. The CRs were then reviewed by the Initial Screening Committee (ISC) to assign priority and actions. Potential operability issues were promptly routed to the operating shift for review by the Shift Manager. Selected issues were then reviewed by the station Management Screening Committee (MSC), comprising senior managers from each department, to verify that the overall CAP objectives were being met. The team attended several ISC and MSC meetings and observed that issues were being appropriately challenged and reportability, repetitiveness, and trending were discussed where appropriate.

Root and apparent cause evaluations were assigned by the ISC and/or MSC as appropriate. Once completed, the evaluation was reviewed by the initiating department for quality. A sampling of the evaluations were also reviewed by the Corrective Action Review Committee (CARC). Evaluations rejected by the CARC, were sent back to the initiating department and a CR was generated listing the reasons for the rejection. The team attended a CARC meeting and reviewed several CRs generated by the Committee; no issues were identified.

Although issues were generally appropriately screened and evaluated, the team identified some examples where the quality of the evaluation or of the documentation was weak. The majority of these issues were attributed to past problems which were identified and addressed by the licensee; however, there were some current examples:

- The inspectors concluded that the extent of condition evaluation for CR 06017004, “Unit 2 Experienced a Loss of MCC 2-ABD-C Due to Electrical Component Failure,” was narrowly focused. The evaluation pertained to the instantaneous trip function for a molded case circuit breaker (MCCB) that supplied the non-safety related auxiliary jacket water pump motor on the Unit 2 CD emergency diesel generator, which failed to open the breaker when the motor shorted to ground. This breaker was in the MCCB testing program and it failed to open due to hardened grease on the moveable mechanical parts inside the breaker. The team noted that no evaluation, based on risk and significance, was conducted to identify MCCB’s that should be tested prior to the next scheduled test date to preclude a more significant breaker failure. The team subsequently verified that no similar MCCB breaker failures having more significant adverse consequences had occurred and that there did not appear to be an adverse trend of MCCB failures.

- The evaluation for CR 05187067, "Failure of Unit 2 East Essential Service Water Radiation Monitor," did not fully document all the actions taken nor did it consider such items as industry operating experience or past corrective actions for similar, previous station issues.

- The evaluation for CR 05097036, "Adequacy of Locked High Radiation Area Controls," concluded that the controls for Very High Radiation Areas were adequate, without documenting the basis for the conclusion.

- An operations department self-assessment finding regarding the effectiveness of the surveillance test program, documented in CR 04162079, "Operations Self-Assessment SA-2004-OPS-003-QH Surveillance Program Evaluates the Effectiveness of the Surveillance Program as Applied to a Variety of Technical Specification Related Plant Equipment," identified an apparent trend. Specifically, the evaluation identified an increase in the number of surveillance test failures between 2001-2004. However, the apparent trend was not evaluated to determine the reason and significance for the increased number of failed items. The team reviewed subsequent surveillance test failures through June 2006 and noted a general decline in the number of test failures. The team also did not identify an adverse trend regarding repeat surveillance failures.

The licensee wrote CRs 0801523, 0801534, 0801657, and 0801697 to document the team's concerns.

The team attended a Plant Operations Review Committee meeting held on August 3, 2006. The meeting was held to discuss a potential Notice of Enforcement Discretion request due to elevated temperatures in the unit 1 lower containment areas. The team noted that the Committee's review of the issue was thorough and probing.

Effectiveness of Corrective Actions

Corrective actions were, in general, adequately implemented, were effective in addressing the parent issue, and were timely commensurate with the significance of the issue. However, the team found some examples where timely corrective actions were not taken, were not being effectively tracked, or were not properly evaluated or supported by the documented basis. These examples included:

- The team identified several examples where corrective actions were deferred with no documented basis. The team subsequently determined that the extensions were appropriate, however, the lack of documentation did make the basis for the decision making difficult to discern.

- The team noted that in the evaluation for CR 06082038, "In-Depth Apparent Cause Evaluation was Rejected by CARC," the originating department had concluded that a clock reset was unnecessary because the evaluation was approved by the department prior to the CARC rejection. The team felt that this was an inadequate basis for why a clock reset was unnecessary.

- In 2003, the licensee initiated CR 03036056, "Unit 2 Reactor Tripped on Low Steam Generator Level Coincident with Steam Flow/Feed Flow Mismatch due to Control Group 3, Dual Power Supply Failure in Rack 21," to address a station-wide issue with low voltage power supplies. The corrective actions for this issue were scheduled to be completed in December 2006; however, some of these actions were being implemented through other CRs which were not linked back to CR 03036056.

- One corrective action identified in the root cause evaluation documented in CR 04261020, "Root Cause Evaluation Needed for the Decision Making Process That Led to the Attempt to Move Accumulator Volume into #21 Accumulator by Raising the Pressures in the Remaining Three Accumulators Higher Than #21 Accumulator's Pressure," was to incorporate a presentation by senior management and the Operations Director regarding expectations for questioning attitude and sound, conservative operational decision making into the operator Initial License Training Program as an on-going action. The presentation was not incorporated into Lesson Plan RO-C-ADM14 (Standards) in January 2005 as specified, and then the corrective action was closed. However, based on discussions with licensee personnel, the presentation was presented to operators attending the most recently completed Initial License Training class.

The licensee documented the team's observations in CRs 0801608 and 0801657.

The team noted some deficiencies regarding tracking and documentation of effectiveness reviews specified in older root cause evaluations. For example, CR 02082003 was initiated after the unit 2 main turbine control valves failed to operate as designed during testing in 2003. One effectiveness review was scheduled following turbine testing during the unit 2 cycle 14 outage in 2004. A second effectiveness review was scheduled following a modification to the turbine control system originally scheduled for installation in the unit 2 cycle 15 outage in 2005. This modification was later deferred to the cycle 16 outage in 2006 and then once again deferred to the cycle 17 outage in 2007. There was no documentation of whether the first effectiveness review was completed and no basis for deferring the modification. The team later determined that the required testing had been performed during the cycle 14 outage and the reason for deferring the modification was reasonable and justified. The team also noted that effectiveness reviews for more recent evaluations (CRs 03114044 and 04354007) contained objective and measurable criteria and were implemented as designed.

b. Assessment of the Use of Operating Experience

(1) Inspection Scope

The team reviewed the licensee's program for handling operating experience. Specifically, the team reviewed the implementing procedure, attended meetings of the Operating Experience Screening Committee (OESC) and Prevention Review Board (PRB), reviewed operating experience evaluated by the plant, and verified that the licensee had adequately addressed some examples of operating experience provided by the team.

During this inspection, the team reviewed 22 CRs generated by the licensee addressing industry operating experience.

(2) Assessment

No findings of significance were identified.

The licensee primarily obtained operating experience from the NRC website or from an industry website. Operating experience from the NRC (Part 21 reports, Information Notices, etc) were documented in CRs and sent to the appropriate departments for screening. Industry operating experience was sent to the OESC for review and a CR was generated if warranted. The PRB selectively evaluated a sampling of operating experience documented in the CRs to determine if they had been appropriately reviewed.

In general, operating experience was being well utilized at the station. The team observed that it was discussed as part of the daily station planning meetings and as part of pre-job briefings. During interviews with the team, various licensee staff commented favorably on the use of operating experience in daily activities. The team also noted that the OESC and PRB generally did a good job in implementing how operating experience was used at the station.

However, the team did identify examples where some operating experience was not properly screened and/or reviewed. In particular, the team noted that, in some cases, the operating experience was inadequately screened for applicability by the individual departments. These examples included:

- The team identified that Westinghouse Technical Bulletin 06-02, dated March 2006, regarding testing of molded case circuit breakers, was applicable to the licensee, but was not entered into the CAP for evaluation.

- The inspectors identified that 10 CFR Part 21 reports listed on the NRC web site that were included in Event Notifications and Licensee Event Reports were not being screened into the licensee corrective action program for evaluation. The team identified three examples of such reports that were potentially applicable to the licensee, but which had not been entered into the CAP for evaluation.

- The evaluation for CR 05097036, “Adequacy of Locked High Radiation Area Controls,” stated that prior operating experience had not been screened by the station; however, there was no corrective action to determine why it had not been screened.

- The department evaluation for CR 05081020, “OE20236 - NRC Event Notification of Missed Unusual Event Notification,” erroneously concluded that the operating experience did not apply to the station.

- The team identified that CRs documenting NRC generated operating experience were not being reviewed by the PRB. This was contrary to the objective of the PRB as stated above.

The team also noted that in a 2006 audit, the licensee's Performance Assurance group had identified that the security department was not adequately reviewing operating experience for applicability. The licensee generated CRs 0801206, 0801523, 0801525, 0801649, and 0801659, and to address the team's observations.

c. Assessment of Self-Assessments and Audits

(1) Inspection Scope

The team reviewed selected department self-assessments, and Performance Assurance audits of the corrective actions, operations, maintenance, engineering and plant support (radiation protection, security, and emergency preparedness) programs. The team evaluated whether these audits were being effectively managed, were adequately covering the subject areas, and were properly capturing identified issues in the CAP. In addition to the document review, the team also interviewed licensee staff regarding the implementation of the audit and self-assessment programs. The team focused on those audits and assessments completed since 2004.

During this inspection, the team reviewed 14 self-assessments and 8 audits.

(2) Assessment

No findings of significance were identified.

The audits and assessments were performed primarily under well-defined and focused procedures. A sampling of the audits and assessments were reviewed by the PRB as part of the management oversight of the program.

The team noted that the audits and assessments were generally critical and probing and typically utilized outside resources to maintain independence. There were a number of findings and observations identified across the spectrum of performance, including issues of proper CAP implementation. As appropriate, the audit/assessment findings were documented in CRs. However, the team noted that recommendations identified in the audits or assessments were not always tied to a specific CR for resolution. However, the team verified that, in most cases, the recommendations were being properly evaluated.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The inspectors interviewed approximately 22 members of the plant staff, across all major work groups and all levels of responsibility. The purpose of the interviews was to assess whether a safety-conscious work environment existed at the station. The interviews were conducted using the guidance provided in Appendix 1 of NRC Inspection Procedure 71152, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R Issues."

The inspectors also reviewed the licensee's "2004 Safety Conscious Work Environment Survey." In particular, the inspectors reviewed some of the corrective actions implemented after the survey and discussed the effectiveness of these actions with those licensee staff interviewed during the inspection.

In addition to the interviews, the inspectors looked for any evidence that plant employees might be reluctant to raise safety concerns during document reviews and observations of activities. The inspectors reviewed the station procedures related to the Employee Concerns Program (ECP), and discussed the implementation of this program with the station's program coordinator.

The inspectors also reviewed the licensee's implementation of the Differing Professional Opinion (DPO) program. This program provided an alternative avenue for resolving disagreements between licensee staff and supervision regarding technical issues. Specifically, the inspectors reviewed the implementing procedure for the program and the resolution of DPO issues identified since 2004.

As an aid in assessing this area, the inspectors referred to "Principles for a Strong Nuclear Safety Culture," which was an industry guidance document developed in 2004. The inspectors also referred to station procedure PMI-2015, "Policy for Maintaining a Safety-Conscious Work Environment," revision 2.

(2) Assessment

No findings of significance were identified.

Workers indicated that they felt comfortable identifying issues and discussing concerns with supervision without fear of reprisal. The inspectors observed that all personnel interviewed were aware of the different avenues through which they could express concerns including the corrective action program, informing their supervision, contacting the ECP coordinator, or coming to the NRC; however, most workers said they preferred reporting issues directly to their immediate supervisor. Only two of the interviewees had any interface with the licensee's ECP or DPO programs; both individuals had generally favorable impressions of their experience.

The licensee trained first line supervisors on safety culture fundamentals as one of the key corrective actions following the 2004 survey. The inspectors noted that the training materials were consistent with the licensee's policy statement and the aforementioned industry guidance. Between January and June 2006, the ECP staff performed some follow-up assessments of safety culture in various station departments. These assessments primarily consisted of interviews with department staff. The overall results were documented in a July 30, 2006, Memorandum to the Site Vice President. The responses provided to the ECP staff were generally consistent with those provided during the NRC inspectors interviews. The licensee planned to conduct another site wide assessment of safety conscious work environment (safety culture) in 2007.

The inspectors noted that the ECP process was readily utilized by station staff. In 2005 and as of August 14, 2006, there were 53 and 48 issues, respectively, processed by the ECP. The licensee expected the number of issues to be higher in 2006, based on

having both a spring and fall outage scheduled in that year. The inspectors did not notice a particular trend in the specific issues that were identified. The inspectors concluded that issues were being appropriately handled by the ECP through interviews with the ECP staff and a review of selected closed case files.

Since 2004, the licensee has had only two DPO issues. One of these issues (i.e., DPO 04-001) did not appear to be adequately addressed by the licensee staff. The issue dealt with the adequacy of local leak rate testing for containment isolation valves having a rubber diaphragm in place of a metal disk. These valves were tested in the reverse direction of their safety function (i.e., in the non-accident direction). Although the testing was in accordance with the Technical Specification and licensing basis, it did not challenge the packing, bellows seals and containment side diaphragms of these valves. Therefore, there was a potential for a valve to pass the testing, but actually be inoperable due to an undetected leak. The licensee identified 23 valves that may yield non-conservative results when reverse-tested. Corrective actions included revising testing procedures and, for some of the valves, implementing modifications to allow for testing in the accident direction. This issue was documented in CR 4063027. This issue had also been previously reviewed by the NRC, as discussed in inspection report 05000315/316-2004010(DRP). As stated in that report, there were no violations or findings associated with this issue.

The inspectors noted that the licensee's closure memo in the DPO file only discussed the regulatory aspects and not the technical concerns. Additionally, the associated CR did not discuss the status of the corrective actions. During an interview, the originator of the DPO stated that while the procedure revisions were made, he was unaware if or when the modifications would be completed. Licensee management subsequently provided the inspectors with the scheduled completion dates for the modifications. However, the inspectors were concerned that the lack of documentation in the CR and the lack of feedback to the originator of a DPO could result in some workers losing confidence that issues would be effectively resolved. This was discussed with the program coordinator who initiated CR 0801230 to address this issue.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. M. Peifer and other members of licensee management at the conclusion of the inspection on August 18, 2006. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. The licensee stated that all proprietary information provided to the inspectors had been returned.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

R. Brown, Human Performance Manager
T. Brown, Radiation Protection Manager
B. Gillespie, Training Manager
M. Horvath, Employee Concerns Program Coordinator
C. Hutchinson, Manager NDM–Site Programs Group
J. Jensen, Vice President-Support Services
C. Lane, Manager, Engineering Programs
S. Papageorgiou, Learning Organization
M. Peifer, Site Vice President
M. Scarpello, Supervisor, Nuclear Regulatory Assurance
S. Simpson, Manager, Nuclear Regulatory Assurance
S. Vasquez, Maintenance Manager
B. Wallace, Learning Organization
J. Wicks, Assistant Operations Manager
V. Woods, Performance Assurance Manager

Nuclear Regulatory Commission

B. Kemker, Senior Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

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

Station Procedures

PDP-7020-001, "Performance Assurance Audit Review Process," Revision 10
PMP-7030-CAP-002, "Condition Evaluation, Action and Closure," Revision 3
PMP-7034-SAP-001, "Conduct of Self-Assessments," Revision 9
PMP-7030-CAP-001, "Action Request Initiation," Revision 20
PMI-7030, "Corrective Action Program," Revision 35
LOP-7030-MOP-001, "CAP Management Oversight Processes," Revision 2
PMP-7030-OE-001, "Operating Experience Program," Revision 9
Employee Concerns Program Desktop Guideline, "Employee Concerns Program," Revision 0
PAG-A02, "Differing Professional Opinions Guideline, " Revision 1
PMP-2291-INT-001, "Work Control Activity Initiation Process," Revision 14
PMP-2291-EXE-001, "Work Control Activity Execution Process," Revision 18
12-EHP-5016-MCCB-001, "Molded Case Circuit Breaker Maintenance Program," Revision 6
DTG-7030-CAP-007, "Closing Condition Report Actions to Work Request," Revision 2
PMP-4010-ODM-001, "Operational Decision Making," Revision 3

Self-Assessments

SA-2004-SPS-008, "Security Corrective Action Self-Assessment," July 20, 2004
SA-2004-SPS-005F, "Self-Assessment of 2004 Annual E-Plan Exercise," June 15, 2004
SA-2005-CAP-005C, "Self-Assessment of the Corrective Action Program," October 3, 2005
SA-2005-RPS-005-QH, "Assessment of the Organizational Effectiveness Section of the RP [radiation protection]/ENV [environmental] Department Recovery Plan," January 7, 2005
CR 5013048, "Quick Hit Self-Assessment Review of Corrective Action Work Processes," November 9, 2005
CR 5311006, "Quick Hit Self-Assessment of 2005 Emergency Preparedness Drill and Exercise Reports and Condition Reports," September 20, 2005
CR 5206020, "Quick Hit Self-Assessment of the Effectiveness of Actions Implemented to Improve the Self-Assessment Program," December 8, 2005
CR 5290035, "Self-Assessment of the Operating Experience Program," May 22, 2006
CR 4229046, "Plant Wide Safety Culture Survey," August 16, 2004
CR 06062049, "Perform Quick-Hit Self-Assessment of Excess Engineering Departmental Human Performance Clock Resets in 1Q06," January 3, 2006
CR 04162079, "Operations Self-Assessment SA-2004-OPS-003-QH Surveillance Program Evaluates the Effectiveness of the Surveillance Program as Applied to a Variety of Technical Specification Related Plant Equipment," June 10, 2004
CR 04189074, "Conduct a Self-Assessment on the Human Performance Program and the Look Ahead Process," July 7, 2004

CR 05257015, “Perform Self-Assessment of Excess Engineering Departmental Human Performance Resets in 3Q05,” September 14, 2005
CR 04162072, “Operations Self-Assessment SA-2003-OPS-004-QH Operations Corrective Action Program Evaluates the Operations Department’s Implementation of the Plant’s Corrective Action Program as required by PMP-7034-SAP-001,” June 10, 2004

Performance Assurance (PA) Audits

PA-04-16, “Corrective Action Program Audit,” October 29, 2004
PA-05-10, “Corrective Action Program Audit,” September 12, 2005
PA-05-07, “Performance Assurance Audit of the Emergency Plan,” July 8, 2005
PA-06-01, “Radiation Protection Program Audit,” January 13, 2006
PA-06-02, “Security Program Audit,” February 3, 2006
PA-05-03, “Plant Operations,” March 4, 2005
PA-05-04, “Maintenance, Work Control and Special Processes Audit,” July 1, 2005
PA-05-11, “Engineering Programs Audit,” November 5, 2005

Condition Reports (CRs)

0127096, “ECAP 06129032 Was Closed With No Corrective Actions,” May 26, 2006
04162065, “Apparent Level III Violation with Civil Penalty for Inaccurate Information Submitted During 1999 License Renewal Application,” June 10, 2004
04351033,”PI&R Issue Regarding Potential of POP [Performance Observation Program] to Bypass the Corrective Action Program,” December 16, 2004
5217059, “eSAT Associated with NRC Green Finding Pertaining to VCT [volume control tank] Venting and Inadequate Procedural Guidance,” August 5, 2005
5179010, “Evaluation of OE17355 and Initial Screening of OE14191 Failed to Take Corrective Actions for Conditions Adverse to Quality,” June 28, 2005
5097036, “NRC Identified Concern with Adequacy of Personnel Access Barrier at the Entrance to the Reactor Coolant Drain Tank,” April 7, 2005
3127045, “2-PW-275 Failed to Pressurize During LLRT local leak rate testing] Testing,” May 7, 2003
3135023, “Historical Failure to Identify Source of Leakage When Boric Acid Deposits Were Identified on Lower Vessel and Lower Vessel Cavity,” May 14, 2003
1121066, “2-DG-102A DG 2AB Starting Air Compressor 2-QT-142-AB2 Outlet Check Valve Failed its IST [Inservice Test] Leakrate,” May 1, 2001
6013029, “Leakage Past 2W-CCP [centrifugal charging pump] Inboard Mechanical Seal Shaft Sleeve Contains Evidence of an Unidentified Corrosion Product,” January 13, 2006
4305061, “Momentary Air Binding of the 2E CCP While Manually Making up to the VCT From the Refueling Water Storage Tank,” October 31, 2004
4336124, “Upon Inserting Control Bank D .5 Steps to 219.5 Steps Overall, Individual Rod Position Indication for Control Rod H8 Lowered From 207.5 Steps to 200 Steps,” December 1, 2004
6152008, “PI&R Review of CRs Identified a Weakness for Equipment and In-Depth Apparent Cause Evaluations for Identifying Internal Operating Experience,” May 31, 2006
2100074, “Significant Accumulations of Boric Acid on the Reactor Vessel Supports,” April 16, 2002

6167035, “CARB#350 [Corrective Action Review Board] Did Not Concur with the IDACE for CR 5327014,” June 16, 2006
6027011, “CARB 341 Rejected the Final Effectiveness Review for Root Cause CR 04180042,” January 27, 2006
6167035, “CARB 349 Rejected the Root Cause Presented for CR 06117010,” June 9, 2006
04354007, “Unplanned TS LCO Action Entry and Unit 1 Secondary Transient Caused by Low Area Temperatures on 12/19/2004 as a Result of a Winterization Cover Blowing Off,” December 19, 2004
05172031, “1-Batlit-481 is a Station Blackout Emergency Light, Therefore it Must Be Aimed and Discharge Tested as Such,” June 21, 2005
04169044, “Breakers Failed Instantaneous Test per 12-IHP-5030-EMP-006,” June 25, 2004
05242056, “The Effectiveness Review of CR 03114044, Fish Intrusion Event, Were Determined to be Non-Effective,” August 30, 2005

Operating Experience CRs

4163025, “Topical Report TR4-37, causes of Significant Outage Impacts During Unit Restoration and Start-up,” June 11, 2004
4173040, “ABB [Asea Brown Boveri] Has Issued a Part 21 Notification,” June 21, 2004
4179008, “OE18547-Failure of a Charging Pump Discharge Check Valve Leads to Gas Voiding in Pump Suction,” June 27, 2004
4247024, “The NRC has Issued Information Notice 2002-05, ‘Foreign Material in Standby Liquid Control Tanks,’” September 3, 2004
4286028, “OE18720-Unanticipated Increase of Source Term During Refuel Outage,” October 12, 2004
4296031, “OE19337-Remote Dosimetry Monitoring System Limitations Result in Missed Dose Rate Alarm,” October 22, 2004
5080049, “OE20413-Jersey Barrier Dropped During Lift at Florida Nuclear Plant,” March 21, 2005
5081020, “OE20236--NRC Event Notification of Missed Unusual Event Notification,” March 22, 2005
05201076, “NRC Information Notice 2005-20, ‘Electrical Distribution System Failures Affecting Security Equipment,’” July 20, 2005
2086005, “NRC Information Notice 2002-12, Submerged Safety-Related Electrical Cables,’” March 27, 2002
4022018, “NRC Information Notice 2004-01 ‘Auxiliary Feedwater Pump Recirculation Line Orifice Fouling,’” January 22, 2004
4335046, “NRC Information Notice 2004-21 ‘Additional Adverse Effect of Boric Acid Leakage: Potential Impact on Post-Accident Coolant pH,’” November 30, 2004
05111044, “Received 10 CFR Part 21 Notification From Engine Systems on Sub-Components on Woodward Governors,” April 21, 2005
06024089, “10 CFR 21 Notification From Engine Systems Inc Regarding Woodward DRU Controls,” January 24, 2006
05230078, “Part 21 2005-0031 - Potential Failure of Certain Eaton Electrical Freedom Series Heater Pack Models,” August 18, 2005
0617006, “Westinghouse Nuclear Safety Advisory Letter NSAL066, LOCA Mass Energy Release Analysis,” June 20, 2006
04191041, “Westinghouse Technical Bulletin TB-05-12, Steam Generator Level Process Pressure Evaluation,” July 9, 2004

04160040, “OE18509 - Velan Check Valve Failure Results in RCS Boundary Isolation Failure,” June 8, 2004
04190067, “Westinghouse Technical Bulletin TB-04-13, Replacement Solutions for Obsolete Classic Molded Case Circuit Breakers, UL Testing Issues, Breaker Design Life and Trip Band Adjustment,” July 8, 2004
5222059, "OE21197-Turbine Driven Auxiliary Feedwater Pump Outboard Bearing Elevated Temperatures at Farley," August 10, 2005
5012021, "OE19814-Loss of Essential Service Water Safety Function Due to Plugging of Service Water Pump Discharge Strainers. This Condition was Identified at Another Facility," January 12, 2005
4226026, "OE18835-Plant Service Water Pump Motor Upper Thrust Bearing Failure Following Maintenance. This Condition was Identified at Another Facility," August 13, 2004

Licensee Identified Trends

CR 5101050, “Two Previous CRs Identified As-Found Deficiencies in the Fit and Function of TDAFP [turbine driven auxiliary feedwater pump] Trip and Throttle Valve Parts,” April 11, 2005
CR 5279024, “A review of CR Event Code Trends of Problem Identification and Resolution Related Processes for the Period April 1, 2005, Through September 30, 2005, Indicated a Decline,” October 6, 2005
CR 5287047, “An Adverse Trend Exists With the Reliability of the EDG Air Intake Filters,” October 14, 2005
CR 6038028, “A Review of CRs Assigned to Event Code B1a3, ‘Incomplete or Ineffective Corrective Actions,’ in January 2006, Revealed that AFI [actions for improvement] Response Deficiencies are a New Contributor to this Trend,” February 7, 2006
CR 6040019, “Potential Adverse Trend Involving the Closure of Corrective Action Program and Work Request Documents Without Resolving the Identified Problems,” February 9, 2006

Root, Apparent and Common Cause Evaluations

6103023, “A Visible Crack was Found in the Crown of the #2 Rear Bank Piston of the 2CB EDG [Emergency Diesel Generator],” April 13, 2006
5187067, “R-20 East Essential Service Water Radiation Monitor is Erratic and Inoperable,” July 6, 2005
5136099, “A Common Cause Evaluation is Needed to Perform an Assessment of the Units 1 and 2 Nuclear Instrumentation System,” May 16, 2005
6047031, “NRC Inspection Report 05000316/2005-013 Was Determined to Not Be Adequately Captured in the Corrective Action Program,” February 16, 2006
4257004, “Explosive Detector #3 is Not Working,” September 13, 2004
5056032, “Root Cause Evaluation of Human Performance Errors that have Occurred in Security and Support Services,” February 25, 2005
02082003, “Failure of Main Turbine Control Valves to Open During Control Valve Testing,” March 23, 2003
06017037, “Failure in Work Control Process,” January 17, 2006
06017004, “Unit 2 Experienced a Loss of MCC 2-ABD-C Due to Electrical Component Failure,” January 17, 2006
06051060, “The Issue of Overdutied 600V Breakers Has Not Been Evaluated Within the Correct Process,” February 17, 2006
03114044, “Fish Intrusion Event,” April 24, 2003

04261020, “Root Cause Evaluation Needed for the Decision Making Process That Led to the Attempt to Move Accumulator Volume into #21 Accumulator by Raising the Pressures in the Remaining Three Accumulators Higher Than #21 Accumulator’s Pressure,” September 17, 2004
4298002, "Root Cause Evaluation Foreign Material Exclusion Trend and Stop Work Order for FME Activities in the Screen House," October 23, 2004
4296044, "Root Cause Evaluation Weakness in implementation of Standards and Procedures for Foreign Material Exclusion (FME) have allowed Foreign Materials to enter Systems and Components susceptible to damage," October 22, 2004
50680022, "Apparent Cause Evaluation Unexpected Received Annunciator 204 Drops 53, East ESW Pump Discharge Pressure Low, Drop 55, East ESW [essential service water] Pump Strainer DP High, Drop 56, East ESW Header Pressure Low Drop 77, East ESW Pump Low Pressure Start-up, " March 9, 2005

Licensee CRs Initiated As a Result of the PI&R Inspection

801523, “Evaluation of OE20236 in CR 5081020 Was Inadequate,” August 14, 2006
801525, “Need to Re-evaluate OE20236,” August 18, 2006
801444, “DTG-7030-CAP-007 for Closing AR [action requests] to WR [work requests] Needs to be Revised,” August 11, 2006
801163, “Enhance Procedure PMP-2010-PRC-001,” August 4, 2006
801206, “Westinghouse Technical Bulletin TB-06-02,” August 6, 2006
801534, “PI&R Review of CR 4179008 Found Errors in the Condition Report Evaluation,” August 14, 2006
801181, “Potential Trend in Incorrect Reportability Determinations,” August 7, 2006
801230, “Enhancements to DPO [Differing Professional Opinions] Guide Identified During PI&R,” August 4, 2006
8016057, “Evaluate Guidance for Documenting Due Date Changes,” August 17, 2006
801658, “NRC Identified CR Not Listed as a Reference in Lesson Plan,” August 17, 2006
801659, “Not Evaluating Part 21s at Earliest Opportunity,” August 17, 2006
801649, “PRB [Prevention Review Board] Expansion to Consider NRC OE Products,” August 16, 2006
801597, “Issue DCP [design change package] for New Starting System Air Lines as Enhancement,” August 16, 2006
0801682, “NRC Timeliness Concerns of EDG Auxiliary Jacket Water Pump Actions,” August 17, 2006
801608, “CA Not Found in Lesson Plan IAW CR 04261020,” August 18, 2006
801590, “PMP-2010-PRC-003 Needs Enhancement,” August 16, 2006
801657, “During 2006 PI&R Inspection, Numerous Times the Questioning On Issues Led to Inadequate Documentation and What Was the Reason Behind Due Date Changes,” August 18, 2006
801697, “During the PI&R Inspection the Inspectors Noted a Weakness in the Quality of Documentation Reviewed,” August 18, 2006

Other

Letter dated January 20, 2006, from Philip E. Troy, Esq. concerning the assessment of the Employee Concerns Program

Memorandum dated July 30, 2006, to Mark Peifer, Site Vice President, from Jim Petro, Senior Nuclear Counsel and Mike Horvath, Employee Concerns Program Manager, regarding department assessments of safety-culture
"Request for Notice of Enforcement Discretion Regarding Unit 1 Containment Lower Compartment Temperature," discussed at Plant Operations Review Committee meeting on August 3, 2006
OP-2-5143A, Flow Diagram, Emergency Core Cooling Accumulator Piping, Revision 3
NRC Part 21 Report 2006-05-00, Defective Residual Heat Removal Check Valve, March 31, 2006
NRC Part 21 Report 2005-05-00, Charging Pump Runout During Safety Injection, January 27, 2005
NRC Part 21 Report 2005-05-01, Closure of Westinghouse Interim Report 04-006, April 12, 2005
NRC Part 21 Report 2005-42-00, Missing Taper Pins, April 12, 2005
TB-06-02, Westinghouse Technical Bulletin, "Aging Issues and Subsequent Operating Issues for Breakers That are at Their 20 Year Design / Qualified Lives; UL Certification / Testing Issues Update," March 10, 2006
Operating Experience Screening Committee Screening package for August 10, 2006
Corrective Action Review Committee meeting package for August 9, 2006
Prevention Review Board meeting package for August 8, 2006
Work Request 05365010, "Emergency Diesel Generator Auxiliary Jacket Water Pump," January 18, 2006
Work Request 04320050, "CD Emergency Diesel Auxiliary Jacket Water Pump," February 9, 2006
P-99-07602, "Calculation PS-4KVD-002 Shows that the Momentary Ratings on the 4KV Circuits are Exceeded for Fault Conditions," April 5, 1999
3036056, "Unit 2 Reactor Tripped on Low Steam Generator Level Coincident with Steam Flow/Feed Flow Mismatch due to Control Group 3, Dual Power Supply Failure in Rack 21," February 5, 2003

LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents and Management System
CR	Condition Report
CAP	Corrective Action Program
CARC	Corrective Actions Review Committee
DPO	Differing Professional Opinion
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
ECP	Employee Concerns Program
INPO	Institute for Nuclear Plant Operations
ISC	Initial Screening Committee
MCCB	Motor Controlled Circuit Breaker
MSC	Management Screening Committee
OESC	Operating Experience Screening Committee
NRC	U. S. Nuclear Regulatory Commission
PI&R	Problem Identification and Resolution
PRB	Prevention Review Board