

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352

June 23, 2011

Mr. Larry Weber 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 05000315/2011008;

05000316/2011008

Dear Mr. Weber:

On May 20, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution (PI&R) team inspection at your D. C. Cook Nuclear Power Plant, Units 1 and 2. The enclosed report documents the inspection findings, which were discussed on May 20, 2011, with you and other members of your staff.

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

The inspection team concluded that on the basis of the sample selected for review, in general, problems were properly identified, evaluated, and corrected. The team noted that your staff reviewed operating experience for applicability to station activities. Audits and self-assessments were performed at an appropriate level to identify most deficiencies. Based on the independent assessment of safety culture results, interviews conducted during the inspection, and review of the employee concerns program, freedom to raise nuclear safety concerns was demonstrated.

Based on the results of this inspection, no findings were identified.

L. Weber -2-

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

Sincerely,

/RA/

Jamnes L. Cameron, Chief Branch 6 Division of Reactor Projects

Docket No. 50-315; 50-316 License No. DPR-58; DPR-74

Enclosure: Inspection Report 05000315/2011008; 05000316/2011008

w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServe

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-315; 50-316 License No: DPR-58; DPR-74

Report No: 05000315/2011008; 05000316/2011008

Licensee: Indiana Michigan Power Company

Facility: D. C. Cook Nuclear Power Plant, Units 1 and 2

Location: Bridgman, MI

Dates: May 2, 2011, through May 20, 2011

Inspectors: J. Rutkowski, Project Engineer, Team Lead

P. LaFlamme, Resident Inspector V. Meghani, Regional Inspector M. Munir, Regional Inspector

Approved by: Jamnes L. Cameron, Chief

Branch 6

Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000315/2011008; 05000316/2011008; 05/02/2011 – 05/20/2011; D. C. Cook Nuclear Power Plant, Units 1 and 2; Routine Biennial Problem Identification and Resolution Inspection

This inspection was performed by three NRC regional inspectors and one D.C. Cook Nuclear Power Plant resident inspector. No findings or violations of NRC requirements were identified during this inspection. 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.

Problem Identification and Resolution

On the basis of the sample selected for review, the team concluded that implementation of the corrective action program (CAP) at D. C. Cook Nuclear Power Plant was generally effective. The licensee had a low threshold for identifying problems and entering them in the CAP. Items entered into the CAP were screened and prioritized in a timely manner using established criteria; were properly evaluated commensurate with their safety significance; and corrective actions were generally implemented in a timely manner, commensurate with the safety significance. The team noted that the licensee reviewed operating experience for applicability to station activities. Audits and self-assessments were determined to be performed at an appropriate level to identify most deficiencies. On the basis of interviews conducted during the inspection, workers at the site expressed freedom to enter safety concerns into the CAP.

A. NRC-Identified and Self-Revealed Findings

No findings were identified.

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution (71152B)

The activities documented in Sections .1 through .4 constituted one biennial sample of Problem Identification and Resolution (PI&R) as defined in Inspection Procedure 71152.

.1 <u>Assessment of the Corrective Action Program Effectiveness</u>

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's Corrective Action Program (CAP) implementing procedures and attended CAP meetings to assess the implementation of the CAP by site personnel.

The inspectors reviewed risk and safety significant issues in the licensee's CAP since the last NRC Pl&R inspection in August 2008. The selection of issues ensured an adequate review of issues across NRC cornerstones. The inspectors used issues identified through NRC generic communications, department self assessments, licensee audits, operating experience reports, and NRC documented findings as sources to select issues. The inspectors reviewed Action Requests (ARs), which the licensee considered equivalent to condition reports, and General Tracking (GT) items generated as a result of facility personnel's performance in daily plant activities. In addition, the inspectors reviewed a selection of completed investigations from the licensee's various investigation methods, which included root cause, apparent cause, and common cause investigations.

The inspectors selected the Unit 1 and 2 high head injection charging systems to review in detail. The inspectors' review was to determine whether the licensee staff were properly monitoring and evaluating the performance of these systems through effective implementation of station monitoring programs. A 5 year review on the high head injection charging systems was undertaken to assess the licensee's efforts in monitoring for system degradation due to aging aspects. The inspectors also performed partial system walkdowns of the Unit 1 AB and CD emergency diesel generator systems and spent fuel pool cooling. A review of the use of the station maintenance rule program to help identify equipment issues was also conducted.

During the reviews, the inspectors determined whether the licensee staff's actions were in compliance with the facility's CAP and 10 CFR Part 50, Appendix B, requirements. Specifically, the inspectors determined whether licensee personnel were identifying plant issues at the proper threshold, entering the plant issues into the station's CAP in a timely manner, and assigning the appropriate prioritization for resolution of the issues. The inspectors also determined whether the licensee staff assigned the appropriate investigation method to ensure the proper determination of root, apparent, and contributing causes. The inspectors also evaluated the timeliness and effectiveness of corrective actions for selected issue reports, completed investigations, and NRC findings, including non-cited violations.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the information reviewed, including initiation rates of ARs and GTs, and interviews, the inspectors concluded that the threshold for identifying issues and initiating ARs or GT items was appropriate and consistent with licensee's procedural requirements. In addition, the inspectors noted that the licensee reviewed trends in equipment and human performance on a regular basis.

Observations

The inspectors noted that the licensee generates approximately 9000 ARs per year with the majority of the identified items being of relatively low significance. The inspectors also identified that approximately an additional 6000 items per year were identified as GTs. The licensee stated that GTs were not formally tracked as part of the CAP. The inspectors did however consider some items identified as GTs as being part of the licensee's overall PI&R processes and several GTs were reviewed as part of the inspection. Additionally the resident inspector staff stated that they had identified some GTs that would be more appropriately classified as ARs.

Inspectors noted that the licensee included self-revealing issues under the coding of self-identified issues which appeared to be inconsistent with the guidance and definitions in the NRC Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports." However, additional review indicated that the inconsistency was due to the difference in NRC and licensee definitions of self-revealing issues and did not affect the overall program effectiveness. The licensee uses the code "Event Driven" to identify the issues that fit the self-revealing definition in the IMC 0612. GT 2011-6078, "Assess the Event Driven Definition Against NRC Definition," was written to initiate a review of the used definitions.

From review of documents and from interviews with a sample of plant staff, the inspectors determined that organizations and individuals identified and documented issues in accordance with licensee expectations and procedural requirements. The interviews identified that, in at least one contractor organization, personnel identifying issues did not themselves initiate documentation, but referred issues to supervision, who had issues documented by a person familiar with licensee requirements.

Findings

No findings were identified.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the classification of ARs and GTs and determined that, in general, ARs and GTs were assigned appropriate prioritization and evaluation levels. Appropriate prioritization and evaluation levels were assigned during screening committee meetings observed by the inspectors. Evaluations in apparent cause and root cause reports that were reviewed were adequate. The inspectors noted some minor weaknesses in evaluation and identification of corrective actions.

Observations

During review of AR 2011-1783, "Damaged Main Steam Pipe Supports in ESW Pipe Tunnel," the inspectors noted that multiple design and installation errors contributed to the problem identified in the AR. However, the licensee evaluation and corrective actions did not identify or evaluate the human performance deficiencies. The licensee captured this concern in AR 2011-5968, "Human Performance Issues Not Addressed in AR 2010-1783."

The inspectors noted that the backlog of open ARs was approximately 600 with an average age of about 60 days. There were approximately 3800 open GTs with no calculation of age since GTs are not normally tracked by the licensee under the CAP. The inspectors noted instances where the planned actions under GTs were rescheduled just before the original scheduled completion date. In a few instances the inspectors found multiple rescheduling of the same item. In review of AR 2010-3656, "1-ABD-B-3D Breaker Tripped Open When Pump Auto Started ," the inspectors noted that the enhancement actions, which had original due dates of June 2010, had been extended three additional times and were currently planned to be completed by September 2011. Upon further discussions with licensee staff, the inspectors determined that the enhancement actions were not characterized as conditions adverse to quality and therefore more flexibility for resolution was allowed per the licensee's CAP. The inspectors did not identify any rescheduled items that significantly affected plant processes or equipment.

Findings

No findings were identified.

(3) Effectiveness of Corrective Actions

In general, the inspectors noted that the corrective actions addressed the cause of the identified problem and appeared to have been effective in the majority of samples reviewed. While the licensee identified about 1300 examples of recurrence of an issue or ineffective corrective action, the inspectors identified no additional recurrence of items. The inspectors noted that there were some inconsistencies in closing out corrective actions and that those closeouts were not in accordance with station expectations. Additionally the inspectors noted that to fully evaluate the effectiveness of corrective actions may require reviewing multiple ARs and potentially GTs and some work orders.

Observations

The inspectors reviewed the corrective actions associated with AR 2010-3656, "1-ABD-B-3D Breaker Tripped Open When Pump Auto Started," and noted that the effectiveness review for the issue was completed as required by PMP-7030-CAP-002, "Condition Evaluation, Action and Closure." Specifically, step 9 of AR 2010-3656-1, stated that an effectiveness review was not required, which was contrary to procedural requirements. After additional review, the inspectors determined that this deficiency was identified by the licensee while preparing for the NRC inspection. This condition was entered into the licensee's CAP as AR 2011-4631, "No Effectiveness Review for Significant Condition Adverse to Quality." However, AR 2011-4631 was not

incorporated into or referenced in AR 2010-3656, which made it difficult to properly track and evaluate actions taken in response to the original AR.

The inspectors also reviewed enhancement actions associated with AR 2010-3656 that had been added as separate general tracking actions, 2010-4132 and 2010-4104, which in turn called for minor procedure enhancements. The inspectors concluded that this illustrated another instance of complexity in following and evaluating actions taken in response to conditions adverse to quality.

The inspectors walked down the Unit 1 and 2 east motor driven auxiliary feedwater systems, essential service water pipe tunnel, and Unit 1 AB and CD emergency diesel generator systems to review system status and to sample the use of tagging to identify system status. The inspectors noted that deficiency tags associated with AR 09071002, "Essential Service Water Pipe Tunnel Sump Pump," and AR 08127033, "Breaker Labeled Wrong Potential Human Performance Error Trap," were not removed following AR closure. Failure to remove tags following AR and work completion could under certain circumstances result in failure to identify new equipment deficiencies. This issue was entered into the licensee's corrective action program as AR 2011-5979, "Improper DT Tag Removal When Completing/Cancelling Work."

The inspectors identified instances where actions requesting or tracking specific tasks were closed prior to completion of the tasks. AR 2010-9232, "Trend Evaluation Needed on Firedoors/Dampers," was initiated to perform a trend evaluation on fire doors and dampers. Action Request 2010-9232, Action 5, stated there was a need to identify a standard manufacturing company for door latch/crash bar assemblies and for closure assemblies. The action was closed to a tracking action AR 2010-9232-9, which in turn was closed without the action being completed. Similarly, AR 2010-9232-6, action to provide training on installation and maintenance, was closed after the training was set up but not completed. The inspectors also identified inappropriate closure of AR 00839907-05, "Identification of Unknown Piping Near 12-FP-104," and AR 08326051, "Investigate Unidentified Pipe." The items were created for tracking of a task to investigate and identify a buried pipe associated with a root cause evaluation performed for AR 838930, "Ruptured Fire Header on the West Side of the Plant." Both the AR 00839907-05 and the AR 08326051 were closed to a work order 55332059. which was in a cancellation request state. The licensee issued AR 2011-5992, "Actions Closed Without Performing Requested Actions," and AR 2011-5420, "Improper Coding Work Order 55332059."

The inspectors reviewed the licensee's on-line equipment work order numbers. The number of items classified as "critical" appeared consistent with industry norms. Although the inspectors did not identify any specific issue of concern, the inspectors questioned the size and age of the overall backlog. The inspectors noted that there were about 2800 open on-line work order items. About 230 of those were classified as "corrective" with an average age of 423 days; about 2500 were classified as "deficient" with an average age of 800 days. There were about 19 work orders that were over 10 years old and about 325 that were over 5 years old. The inspectors noted that the licensee was in the process of reclassifying work orders under a recently implemented new classification scheme.

The inspectors also reviewed the open procedure change requests since procedure effectiveness might influence the effectiveness of corrective actions. The licensee had

about 2250 open procedure enhancement requests with about 300 classified as requiring more than just enhancements to the procedures.

Findings

No findings were identified.

.2 Assessment of the Use of Operating Experience

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's implementation of the facility's Operating Experience (OE) program. Specifically, the inspectors reviewed implementing operating experience program procedures, attended meetings to observe the use of OE information, and completed evaluations of OE issues and events, and OE program Quick-Hit Self-Assessment. The inspectors' review was to determine whether the licensee was effectively integrating OE experience into the performance of daily activities, whether evaluations of issues were proper and conducted by qualified personnel, whether the licensee's program was sufficient to prevent future occurrences of previous industry events, and whether the licensee effectively used the information in developing departmental assessments and facility audits. The inspectors also assessed whether corrective actions, as a result of OE experience, were identified and effectively and timely implemented.

b. Assessment

The inspectors determined that the overall performance of the operating experience program was adequate.

c. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors assessed the licensee staff's ability to identify and enter issues into the CAP, prioritize and evaluate issues, and implement effective corrective actions, through efforts from departmental and program assessments and audits.

b. Assessment

The inspectors concluded that self-assessments and audits were typically accurate, thorough, and effective at identifying most issues and enhancement opportunities at an appropriate threshold level. The inspectors concluded that these audits and self-assessments were completed by personnel knowledgeable in the subject area.

c. Findings

No findings were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

The inspectors assessed the licensee's safety conscious work environment through the reviews of the facility's employee concern program implementing procedures, discussions with coordinators of the employee concern program, interviews with personnel from various departments, and reviews of issue reports. The inspectors also reviewed the results from a Safety Culture Survey.

The inspectors interviewed approximately 30 individuals from various departments to assess their willingness to raise nuclear safety issues. The individuals were selected to provide a distribution across the various departments at the site and included long-term contractors. The sample was of individuals predominantly at first-line supervision and below first-line supervision. In addition to assessing individuals' willingness to raise nuclear safety issues, the interviews also addressed changes in the CAP and plant environment over the past two years. Items discussed included:

- knowledge and understanding of the CAP;
- effectiveness and efficiency of the CAP;
- willingness to use the CAP;
- management's support of the CAP;
- feedback on issues raised; and
- ease of input to the CAP database system.

b. Assessment

Interviews indicated that the licensee has an environment where people are free to raise issues without fear of retaliation. Documents provided to the inspectors regarding the 2011 safety culture assessment stated that D. C. Cook Nuclear Plant maintained a healthy safety culture. Based on results from NRC-conducted interviews and a review of the survey data, the inspectors did not identify any data that contradicted that conclusion but had questions on the survey response format and how several of the licensee-interview results were dispositioned by the licensee's survey contractor.

All inspector-interviewed personnel indicated that station personnel would raise safety issues and were comfortable doing so. All interviewed individuals knew that, in addition to the CAP, they could raise issues to their management, to the Employee Concerns personnel, or to the NRC. None of the individuals interviewed indicated they had been retaliated against for raising issues nor were they aware of anyone who had been retaliated against. While most of the interviewees stated that they viewed the process for identifying and correcting issues as good, several interviewees indicated that they believed low-level issues could linger for long periods of time.

Observations

The licensee's nuclear safety culture assessment (NSCA) was coordinated for the licensee by Utilities Service Alliance (USA). Allowable responses to written survey questions were: exceeds expectations, meets expectations, and does not meet expectations. As structured in the survey analysis both "exceeds" and "meets expectations" are counted as positive responses thus giving survey respondents the

choice of two positive and one negative response. NRC feedback to the Nuclear Energy Institute on the USA survey format is that the "meets expectations" response is a neutral response and should not be counted as either a positive or a negative response for survey interpretation.

The NSCA report only provided a general breakdown of survey responses associated with ten high-level principles used by the industry in safety culture assessment. While not providing the specific detail on the breakdown of responses to each survey question associated with elements (sub-principles) that make up each of the ten principles, the assessment report did provide graphs showing the inferred sub-principle breakdown of responses to questions asked during interviews with licensee personnel. The NSCA report stated that interview responses and survey data are both used to "provide contextual cues" in developing findings during an assessment. The NSCA report did list some negative observations, associated with sub-principles, which appeared to be consistent from the displayed interview responses shown in the assessment report. In reviewing the presented data the inspectors questioned why at least two of the interview sub-principles were not considered as negative response areas as they appeared to the inspectors as equal or more negative than some of the sub-principles listed as negative observations. The items were:

- 3F: effects of impending changes are anticipated and managed such that trust in the organization is maintained; and
- 6B: anomalies are recognized, thoroughly investigated, promptly mitigated, and periodically analyzed in the aggregate.

Licensee personnel, including some that participated in development of the final NSCA report, were not able to provide the inspectors the reasons for not including the above two items as negative observations other than re-stating that interview results were cognitively combined with survey results.

Findings

No findings were identified.

4OA6 Management Meetings

Exit Meeting Summary

On May 20, 2011 the inspectors presented the inspection results to Mr. L. Weber and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

- M. Boznak, Work Control-Project Manager
- K. Gossman, ESY/System Manager
- M. Horvath, Manager Employee Concerns
- M. Kennedy, Performance Improvement Specialist
- J. Labis, Employee Concerns Investigator
- R. Niedzielski, Senior Licensing Activity Coordinator
- R. Pickard, Engineering Program Manager
- T. Siefer, Engineer II
- M. Siewart, Maintenance

Nuclear Regulatory Commission

J. Lennartz, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

| | | • | |
|---------------|--|---|--|
| <u>Opened</u> | | | |
| None. | | | |
| Closed | | | |
| None. | | | |

LIST OF DOCUMENTS REVIEWED

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

ROOT CAUSE AND APPARENT CAUSE EVALUATIONS

| <u>Number</u> | Description or Title |
|-----------------|---|
| | Common Cause Analysis: Contractor Performance Errors Indicate |
| 838917 | Potential Oversight Weakness |
| | Root Cause Analysis of Procedure Use and Adherence Declining |
| AR 00855125 | Trend |
| AR 00855711-01 | Unit 2 RCS Temperature Transient |
| | Fire Protection Program organizational Effectiveness In-Depth |
| AR 00856318 | Apparent Cause Evaluation |
| AR 2010-2558-01 | Root Cause Evaluation on Station Response to Wetted Cables |
| AR 2011-1216 | Analysis of Human Performance Errors |
| AR 2011-1216-3 | Human Performance Error |
| | Perform Further Evaluation on SIAFI in 2011 Operations Training |
| AR 2011-1237 | ASER |
| | Common Cause Analysis: Contractor Performance Errors Indicate |
| 838917 | Potential Oversight Weakness |
| | Root Cause Analysis of Procedure Use and Adherence Declining |
| AR 00855125 | Trend |
| AR 2010-8974-5 | Need for GL 89-13 program assessment identified |
| AR 838930-01 | Ruptured fire header on the west side of the plant |
| AR 2010-8269-3 | Missed Surveillance of 2-FW-128 |
| | Common Cause Analysis: Contractor Performance Errors Indicate |
| 838917 | Potential Oversight Weakness |
| | Root Cause Analysis of Procedure Use and Adherence Declining |
| AR 00855125 | Trend |

CORRECTIVE ACTION DOCUMENTS GENERATED DUE TO THE INSPECTION

| <u>Number</u> | <u>Description or Title</u> | |
|---------------|--|--|
| 2011-5448 | Observation form inspection on Requirements for RCE Pre- | |
| | Assessments When Scope Changed | |
| 2011-5405 | Balance of Plant Heat Exchanger Health Report | |
| 2011-5420 | Improper Coding WO 55332059 | |
| 2011-5969 | Repair Tags Hanging From Conduit Below MCC in 1AB EDG Room | |
| 2011-5971 | Organization Focus on Age of Corrective/Deficient Maint Work | |
| | Orders | |
| 2011-5979 | Improper DT Tag Removal When Completing/Canceling Work | |
| 2011-5992 | Actions Closed Without Performing Requested Action | |

CORRECTIVE ACTION DOCUMENTS GENERATED DUE TO THE INSPECTION

| <u>Number</u> | Description or Title | |
|---------------|--|--|
| 2011-6078 | Assess the Event Driven Definition Against NRC Definition | |
| 2011-5420 | Improper coding WO 55332059 | |
| 2011-5968 | Human Performance issues not addressed in AR 2010-1783 | |
| 2011-5969 | Repair Tags Hanging from Conduit Below MCC in 1AB EDG Room | |
| 2011-5992 | Actions closed without performing requested actions | |

CORRECTIVE ACTION DOCUMENTS REVIEWED DURING THE INSPECTION

| Number | Description or Title | |
|-------------|---|--|
| 85005 | Gap in Remote Waterway for the Recirculation Sump | |
| 861668 | Program Effectiveness Review for Change Management | |
| 865140 | Trend Evaluation for Human Performance Errors | |
| 00860140-23 | Effectiveness Review for Crane Operator Struck 12kv Power Line | |
| 2010-11148 | Ineffective CA for 2009 Material Handling AFI | |
| 2010-12141 | Self-Assessment on Trending Program | |
| 2010-14131 | USA Nuclear Safety Culture Assessment (In-progress AR) | |
| 2011-2518 | Communication of SA results is marginally effective. | |
| 2011-2801 | HU Error Isolates Glycol to Unit 1 Ice Condenser | |
| 2011-5149 | Nuclear Safety Culture Standard Recommendations (in- progress AR) | |
| AR 00018407 | The Time to Pressurizer Overfill Due to an Inadvertent Safety Injection | |
| AR 00811935 | WO 55224712 Did Not Incorporate Effects on Chemistry | |
| AR 00811935 | Provide Lessons Learned to WC Planners | |
| AR 00811935 | WO 55224712 Did Not Incorporate Effects on Chemistry | |
| AR 00812412 | Unplanned Activity Inside T-3 Creating Schedule Surprise | |
| AR 00813320 | Chemistry Work Schedule Issues | |
| AR 00827054 | Dept Clock Reset – Maintenance Rule Ownership | |
| AR 00836901 | OE That is Provided by Planning May Not be Pertinent | |
| AR 00840166 | AR 00808627 (CAQ) Was Closed Out Without Corrective Actions | |
| AR 00849705 | Valve was removed | |
| AR 00853712 | Program Requirements Not Being Met | |
| AR 00854207 | Unit 2 Pressurizer Level Indication Probably Reading High | |
| AR 00855570 | Fire Penetration Seal Surveillance Discrepancy | |
| AR 00856163 | Unsatisfactory Performance of a Fire Drill | |
| AR 00856241 | Combustibles Not Considered in Risk Significant Fire Zone | |
| AR 00856242 | Non-Compliance of NFPA 805 & Lack of Integrated Project Scheduling | |
| AR 00856433 | Status Control | |

CORRECTIVE ACTION DOCUMENTS REVIEWED DURING THE INSPECTION

| Number | Description or Title | |
|---------------|---|--|
| AR 00857023 | Planners Missing Initial Training Requirement | |
| AR 00857024 | Training Credited Incorrectly | |
| AR 00858157 | Boric acid leak on 2-PP-50E outboard seal | |
| AR 09013039 | 1-IMO-91 Evidence of Body/Bonnet leak | |
| AR 09133001 | Small dry Boric Acid leak on 1-CS-301E | |
| AR 09141045 | Oil weapage from the motor actuator of 2-QMO-226 | |
| AR 09195035 | 2E-CCP I/B Mechanical Seal Leak | |
| AR 09301066 | Oil leak from oil Unit 2 E charging pump oil pipe connection | |
| AR 2010-0281 | Cognitive Trend of Yellow and Red FCNs from 4Q2010 Mods | |
| AR 2010-1195 | Span Potentiometer for U2 A PACHMS OOS | |
| AR 2010-10969 | Daily MCC Cable Pit Inspections for Standing Water | |
| AR 2010-12155 | AR 2010-3539 Closed Out Inappropriately | |
| AR 2010-12968 | NRC Inspector Identified Divider Barrier Seal Issue | |
| AR 2010-12977 | Filtered Output Check Failed for U2 LPMS Channel 750 | |
| AR 2010-14221 | Work Packages Did Not Contain Operating Experience | |
| AR 2010-14224 | WO 5530357701 Did Not Contain Operating Experience | |
| AR 2010-1783 | Damaged main steam pipe supports in ESW pipe tunnel | |
| AR 2010-2001 | AGA Module B failed its monthly surveillance | |
| AR 2010-2219 | 1-CS-300W Packing Leak | |
| AR 2010-2471 | EC 0000050291 changes not per 12-MHP-5021-001-203 | |
| AR 2010-3656 | 1-ABD-B-3D breaker tripped open when pump auto started. | |
| AR 2010-3683 | U-2 Train B PACHMS failed as found data | |
| AR 2010-3732 | Electrical Cable Condition Testing and Cable Cutting Methods | |
| AR 2010-4104 | 12-IHP-5021-EMP-021 Att. 2 Step 1.1.2 | |
| AR 2010-4132 | Electrical Troubleshooting Training | |
| AR 2010-4728 | Link for simulator PPC and RDR lost during drill on 5/18/10 | |
| AR 2010-5110 | Radio frequency use in OSC needs to be evaluated | |
| AR 2010-5261 | Oil coming from motor/speed increaser coupling guard | |
| AR 2010-5749 | OE31268 Wrong Grade of Sodium Hydroxide | |
| AR 2010-5749 | OE31268 Wrong Grade of Sodium Hydroxide | |
| AR 2010-6540 | U2 East CCP Inboard bearing seals leak oil | |
| AR 2010-6767 | Develop Plan for Improvement | |
| AR 2010-6934 | ANS siren 952 did not respond to silent test signal | |
| AR 2010-7311 | Change Management Plan for Operations Support Group | |
| AR 2010-8803 | Fire Protection Organization Effectiveness Weaknesses | |
| AR 2010-9096 | CR Inappropriately Evaluated & Identified Condition Not Addressed | |
| AR 2010-9232 | Trend Eval needed on Firedoors / Dampers | |
| AR 2011-0346 | 2E-CCP Outboard Bearing Housing Oil Leak | |
| AR 2011-0758 | Cognitive Trend on Increase in MRULE Functional Failures | |
| AR 2011-1485 | 2CD Plant Battery Ground Alarm Intermittent | |

CORRECTIVE ACTION DOCUMENTS REVIEWED DURING THE INSPECTION

| Number | Description or Title | |
|--------------|---|--|
| AR 2011-2148 | Misposition of 2-NRV-101 During Daily Unit 2 RCS Sampling | |
| AR 2011-2310 | 2W-CCP Outboard Mechanical Seal Leak | |
| AR 2011-2368 | Chemistry Misposition Training Effectiveness | |
| AR 2011-2375 | Found Dry Boric Acid on 2-CS-623W | |
| AR 2011-2752 | Near Miss Shield Block Fell 10 Feet to the Floor | |
| AR 2011-3580 | RP Department-Cognitive Trend-Human Performance | |
| AR 2011-4691 | 1-QPI-253-V1 E CCP Discharge Press. HW spins freely | |
| AR 2011-5979 | Improper DT Tag Removal When Completing/Cancelling Work | |
| AR 836761 | Procurement ENG did not comply with procedure PO 1529227 | |
| AR 839907-05 | Identification of unknown piping near 12-FP-104 | |
| AR 850250 | 2-FRV-230 required retest during surveillance | |
| AR 854492 | Error in technical data book vibration limit | |
| CR 00844022 | Failure to Follow Work Control Process | |
| CR 00852616 | Maintenance Rule On-Line Risk Assessment Inaccurate | |
| GT 00815470 | Evaluation of WCAP-16755-NP | |
| GT 00827411 | MR Expert Panel Depth of Qualifications | |
| GT 2010-4820 | Lessons Learned May 18 Emergency Preparedness Exercise | |
| WR 06373565 | Several Fire Seals are exhibiting Edge Curl | |

MISCELLANEOUS

| Number | Description or Title | Date or Revision |
|---------------|---|------------------|
| 11-INT-02 | 2011 Employee Concerns Case Folder | |
| 11-INT-05 | 2011 Employee Concerns Case Folder | |
| 11-INT-08 | 2011 Employee Concerns Case Folder | |
| CNP.096 | Corrective Action Health Index for April, 2011 | 4/11 |
| CNP.269 | Performance Indicators: Site Procedures Health Index | 4/11 |
| EC 50291 | Modify main steam drain piping | 0 |
| FCN-50291-10 | Field Change Notice – repair / redesign damaged supports | 3/23/10 |
| OP-1-12010-23 | MCC Aux One-Line 600V Bus 11A, 11B Engineered Safety System | 23 |
| | Listing of ECP Cases Since 2008 | 3/30/11 |
| | List of ARs Generated from USA Nuclear Safety Culture Assessment | Undated |
| | Performance Indicators for Number of Online Corrective Maintenance and Deficient Maintenance Backlogs | 3/11 |
| | Scheduling Process Indications | 5/16/11 |
| | Unit 1 Emergency Core Cooling System Health and Status | 2006- |
| | Reports | 2010 |

MISCELLANEOUS

| Number | Description or Title | Date or |
|--------|---|----------|
| | | Revision |
| | Unit 2 Emergency Core Cooling System Health and Status | 2006- |
| | Reports | 2010 |
| | Corrective Action Review Board Minutes | 11/1/11 |
| | System Health Report, Q4-2010, Spent Fuel Pool | Q4-2010 |
| | Program Health Report, Balance of Plant Heat Exchangers | Q1-2011 |
| | Trend reports | Q4-2010 |
| | | and Q4- |
| | | 2011 |

PROCEDURES

| Number | Description or Title | Revision |
|---------------------|---|----------|
| 12-FPP-4030-066-019 | Inspection of In Place Fireproof Materials | 2 |
| 12-IHP-5021-EMP-021 | Cable Termination and Splicing | 11 |
| 12-IHP-5021-EMP-033 | Cable Removal and Installation | 17 |
| 12-IHP-5021-EMP-046 | DC Ground Fault Troubleshooting | 7 |
| 12-OHP-4022-018-001 | Loss of Spent Fuel Pool Cooling | 12, 13 |
| 12-THP-4030-002-008 | Primary to Secondary Leak Rate | 12 |
| 12-THP-6020-CHM- | | |
| 110 | RCS Chemistry Shutdown and Refueling | 30 |
| 12-THP-6020-CHM- | | |
| 201 | Steam Generator Chemistry Specifications | 26 |
| 12-THP-6020-CHM- | | |
| 202 | Feedwater | 16 |
| 2-OHP-4023-E-0 | Reactor Trip or Safety Injection | 36 |
| 2-OHP-4023-ES-1.1 | SI Termination | 16 |
| CLG-137 | Conduct of Chemistry | 14 |
| | Design Basis Document for the Emergency Core | |
| DB- 12-ECCS | Cooling System | 5 |
| ES-Fire -0601-QCF | Fire Rated Seals | 3 |
| OHI-4000 | Conduct of Operations: Standards | 59 |
| | Flow Diagram CVCS-Reactor Letdown & Charging Unit | |
| OP-1-5129-59 | No 1 | 59 |
| OP-1-5142-43 | Flow Diagram Emergency Core Cooling Unit 1 | 43 |
| | Flow Diagram CVCS-Reactor Letdown and Charging | |
| OP-2-5129-52 | Unit No. 2 | 52 |
| OP-2-5142-50 | Flow Diagram Emergency Core Cooling Unit 2 | 50 |
| PDI-7020 | Performance Assurance Oversight Program | 8 |
| | Policy for Maintaining a Safety Conscious Work | |
| PMI-2015 | Environment | 2 |
| PMI-6020 | Chemistry Policy | 9 |
| PMI-7030 | Corrective Action Program | 39 |

PROCEDURES

| Number | Description or Title | Revision |
|------------------|---|----------|
| PMI-7030-CAP-001 | Action Initiation | 28 |
| PMI-7030-CAP-002 | Condition Evaluation, Action and Closure | 20 |
| | Corrective Action Program Management Oversight | |
| PMI-7030-MOP-001 | Process | 9 |
| PMP-2010-PRC-003 | Procedure Use and Adherence | 26 |
| PMP-2010-PRC-003 | Procedure Use and Adherence | 26 |
| PMP-2070-TRN-004 | Training and Qualification | 22 |
| PMP-2291-PLN-001 | Work Control Activity Planning Process | 43 |
| PMP-4010-CHG-001 | Change Management Process | 5 |
| PMP-4010-JOB-001 | Pre-Job Briefs and Post Job Reviews | 20 |
| PMP-4043-APC-001 | Abnormal Position Control | 13 |
| PMP-6020-SCM-001 | Station Chemistry Manual | 4 |
| PMP-7030-CAP-001 | Action Initiation | 28 |
| PMP-7030-CAP-002 | Condition Evaluation, Action And Closure | 20 |
| | Corrective Action Program Management Oversight | |
| PMP-7030-MOP-001 | Process | 9 |
| PMP-7030-OE-001 | Operating Experience Program | 19 |
| PMP-7030-TND-001 | Trend Analysis | 1 |
| PMP-7034-SAP-001 | Conduct Of Self Assessments | 21 |
| | Licensed Operator Requalification Procedure Use and | |
| RQ-C-3556 | Adherence | 9/1/10 |
| TRP-2070-TAP-100 | Systematic Approach to Training Analysis | 10 |

SELF ASSESSMENT REPORTS AND EFFECTIVENESS REVIEWS

| Number | Description or Title | <u>Date</u> |
|------------------|---|-------------|
| 855701 | Effectiveness Review for USA Nuclear Safety Culture | |
| AR 2010-14131 | USA Nuclear Safety Culture Assessment | |
| AR 00836531 | Self-Assessment Results Not Effectively Communicated | |
| AR 00842569 | Quick Hit Self-Assessment Control of Combustible Materials | |
| AR 0855437 | Operating Experience Self-Assessment | |
| AR 2010-1119-2 | Unit 1 exciter coupling found out of alignment | |
| AR 2010-9434 | Corrective Action Low Score Commonality Evaluation | |
| AR 830610-19,-20 | Thru wall leak on piping upstream of 1-NFP-222-V2 | |
| GT 00824311 | Maintenance Rule Programmatic QHSA | |
| GT 00836896 | Effectiveness of Process to Communicate Self- Assessment Results | |
| GT 00841641 | Maintenance Planner Training Program Effectiveness | |
| GT 00855701 | Effectiveness Review for USA Nuclear Safety Culture | |
| GT 00861443 | Emergency Operating Procedures | |
| GT 2010-1185 | In-Plant Airborne Radioactivity Control & Mitigation and Occupational Dose Assessment | |

SELF ASSESSMENT REPORTS AND EFFECTIVENESS REVIEWS

| <u>Number</u> | Description or Title | <u>Date</u> |
|---------------|---|-------------|
| | Quick Hit Assessment of Plant Operations Review | |
| GT 2010-12089 | Committee Effectiveness | |
| GT 2010-12142 | Self-Assessment of the Self-Assessment Program | |
| | Self Assessment – GL-89-13 and Heat Exchanger | |
| GT 2010-9782 | Programs | |
| PA-07-06 | Performance Assurance Chemistry Audit Report | |
| PA-10-03 | Performance Assurance Training Audit Report | |
| | Performance Assurance (PA) Secondary Water | |
| PA-SR-09-003 | Chemistry Program Surveillance Summary Report | |
| | USA Nuclear Safety Culture Assessment | 3/11/11 |

LIST OF ACRONYMS USED

AR Action Request

ADAMS Agencywide Document Access Management System

CAP Corrective Action Program
CFR Code of Federal Regulations

GT General Tracking item
IMC Inspection Manual Chapter

IR Inspection Report

NRC U.S. Nuclear Regulatory Commission NSCA Nuclear Safety Culture Assessment

OE Operating Experience

PARS Publicly Available Records System
PI&R Problem Identification and Resolution

USA Utilities Service Alliance

L. Weber -2-

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

Sincerely,

/RA/

Jamnes L. Cameron, Chief Branch 6 Division of Reactor Projects

Docket No. 50-315; 50-316 License No. DPR-58; DPR-74

Enclosure: Inspection Report 05000315/2011008; 05000316/2011008

w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServe

| DOCUMENT NAME: | G:\DRPIII\COOK\DCC 2011 008 PI&R.docx |
|------------------------------------|---|
| ☐ Publicly Available | ☐ Non-Publicly Available ☐ Sensitive ☐ Non-Sensitive |
| To receive a conv of this document | indicate in the concurrence box "C" = Conv. without attach/encl "F" = Conv. with attach/encl "N" = No.conv. |

| OFFICE | RIII | RIII | | | |
|--------|----------------|----------|--|--|--|
| NAME | JRutkowski:dtp | JCameron | | | |
| DATE | 06/22/11 | 06/23/11 | | | |

Letter to L. Weber from J. Cameron dated June 23, 2011.

SUBJECT: D. C. COOK NUCLEAR POWER PLANT, UNITS 1 AND 2 – NRC PROBLEM

IDENTIFICATION AND RESOLUTION INSPECTION 05000315/2011008;

05000316/2011008

DISTRIBUTION:

Tammy Tomczak
ROPreports Resource

Daniel Merzke
RidsNrrDorlLpl3-1 Resource
RidsNrrPMDCCook Resource
RidsNrrDirsIrib Resource
Cynthia Pederson
Steven Orth
Jared Heck
Allan Barker
Carole Ariano
Linda Linn
DRPIII
DRSIII
Patricia Buckley