



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

May 6, 2010

Mr. Sam Belcher
Vice President Nine Mile Point
Nine Mile Point Nuclear Station, LLC
P.O. Box 63
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT 2 – FOLLOW-UP
SUPPLEMENTAL INSPECTION REPORT 05000410/2010006 WITH
ASSESSMENT LETTER

Dear Mr. Belcher:

On March 25, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed a follow-up supplemental inspection pursuant to Inspection Procedure (IP) 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," at your Nine Mile Point Nuclear Station, Unit 2. The enclosed inspection report documents the inspection results, which were discussed at the exit meeting on March 25, 2010, with you and members of your staff.

As required by the NRC Reactor Oversight Process Action Matrix, this supplemental inspection was performed because the Mitigating Systems Performance Index (MSPI) for the cooling water systems crossed the Green to White performance indicator safety threshold in the 4th quarter of 2008. This MSPI change occurred due to a combination of high unavailability of service water (SW) pumps due to maintenance activities and SW pump reliability challenges caused by foreign material intrusion events on November 4, 2008. An earlier 95001 inspection conducted to review these events (reference inspection report No. 05000410/2009009, dated November 24, 2009) concluded that Constellation had significant weaknesses in the root and contributing causal evaluations. Specifically, Constellation failed to identify inadequate work control and procedural adherence causal factors that led to the November 4, 2008, SW intrusion events. Accordingly, the NRC issued a parallel White finding and identified the need to conduct a follow-up supplemental inspection after Constellation had re-evaluated their performance and informed the NRC staff of their readiness for re-inspection.

The objectives of this supplemental inspection were: 1) to review Constellation's revised causal analyses and associated corrective actions for the White cooling water system MSPI; and 2) to evaluate Constellation's self-assessment and associated corrective actions for their failure to identify the relevant causal factors that led to the finding of significant weaknesses. The inspection consisted of examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and the conditions of your operating license. The team reviewed selected procedures and records, observed activities, and interviewed personnel.

Based upon the results of this inspection, no findings of significance were identified. The NRC determined that Constellation's re-evaluation of the root and contributing causes, and the associated corrective actions taken or planned to address the identified performance deficiencies that contributed to the White cooling water system MSPI were appropriate. Additionally, their self-assessments and corrective actions for the initially weak causal analyses were determined to be appropriate. As such, the inspection objectives of Inspection Procedure 95001 have been satisfied and the parallel White MSPI finding is closed. Per Inspection Manual Chapter (IMC) 0305, the parallel White finding was closed in the first quarter of 2010 with the completion of the inspection on March 25, 2010. Accordingly, Unit 2 returned to the Licensee Response Column of the IMC 0305 Action Matrix in the second quarter of 2010.

In accordance with 10 CFR Part 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 (PARS) component of the 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,



Glenn T. Dentel, Chief
Projects Branch 1
Division of Reactor Projects

Docket No.: 50-410
License No.: NPF-69

Enclosure: Inspection Report 05000410/2010006
w/Attachment: Supplemental Information

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Based upon the results of this inspection, no findings of significance were identified. The NRC determined that Constellation's re-evaluation of the root and contributing causes, and the associated corrective actions taken or planned to address the identified performance deficiencies that contributed to the White cooling water system MSPI were appropriate. Additionally, their self-assessments and corrective actions for the initially weak causal analyses were determined to be appropriate. As such, the inspection objectives of Inspection Procedure 95001 have been satisfied and the parallel White MSPI finding is closed. Per Inspection Manual Chapter (IMC) 0305, the parallel White finding was closed in the first quarter of 2010 with the completion of the inspection on March 25, 2010. Accordingly, Unit 2 returned to the Licensee Response Column of the IMC 0305 Action Matrix in the second quarter of 2010.

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Sincerely,
 /RA/
 Glenn T. Dentel, Chief
 Projects Branch 1
 Division of Reactor Projects

Docket No.: 50-410
 License No.: NPF-69

Enclosure: Inspection Report 05000410/2009009
 w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-410

License No.: NPF-69

Report No.: 05000410/2010006

Licensee: Nine Mile Point Nuclear Station, LLC (NMPNS)

Facility: Nine Mile Point, Unit 2

Location: Oswego, NY

Dates: March 22-25, 2010

Inspectors: W. Cook, Senior Reactor Analyst, Division of Reactor Safety
A Rosebrook, Senior Project Engineer, Division of Reactor Projects

Approved By: Glenn T. Dentel, Chief
Projects Branch 1
Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000410/2010006; 03/22-25/2010; Nine Mile Point Nuclear Station, Unit 2; Follow-Up Supplemental Inspection for White Performance Indicator – Inspection Procedure (IP) 95001.

The report covered an on site inspection by two region based inspectors. No findings were identified. 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.

Cornerstone: Mitigating Systems

The NRC performed this supplemental inspection in accordance with IP 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," to assess Constellation's evaluations and corrective actions associated with the Green to White cooling water systems Mitigating System Performance Index (MSPI) change reported in the 4th quarter of 2008 and the parallel White finding documented in NRC Inspection Report No. 05000410/2009009, dated November 24, 2009, following the first 95001 supplemental inspection.

The team concluded that the root and contributing cause evaluations associated with the White cooling water system MSPI and the parallel White finding were thorough and self-critical. Additionally, the extent of condition and extent of cause evaluations completed by Constellation were comprehensive. Constellation identified a number of station-wide weaknesses in the areas of procedural adherence and work control necessitating broad corrective actions to improve overall station performance in these areas. The team concluded that Constellation's corrective actions have appropriately addressed the identified root and contributing causes, have been properly prioritized and scheduled, and have been implemented commensurate with their safety significance. The team noted that many of the corrective actions involve enhancements to fleet-wide procedures and processes.

The inspection objectives of Inspection Procedure 95001 have been satisfied and the parallel White MSPI finding is closed. Per Inspection Manual Chapter (IMC) 0305, the parallel White finding was closed in the first quarter of 2010 with the completion of the on site inspection on March 25, 2010. Unit 2 returned to the Licensee Response Column of the IMC 0305 Action Matrix in the second quarter of 2010.

Other Findings:

None

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REPORT DETAILS

4. OTHER ACTIVITIES

4OA4 Supplemental Inspection (95001)

.01 Inspection Scope

This follow-up supplemental inspection was conducted in accordance with Inspection Procedure (IP) 95001, "Inspection for One or Two White Inputs into a Strategic Performance Area." The purpose of the inspection was to assess Constellation's actions to address significant weaknesses identified by the NRC staff during an earlier supplemental inspection, and to review their causal evaluations and corrective actions associated with a White Mitigating Systems Performance Index (MSPI) for Cooling Water Systems. The inspection team also reviewed Constellation's response to the parallel White finding issued for Constellation's failure to identify the inadequate work control and procedural adherence causal factors that led to the reliability challenges impacting the Unit 2 service water (SW) pumps in November 2008.

The inspection objectives were:

- To provide assurance that Constellation understood the root and contributing causes for the November 2008 service water system foreign material intrusion event and associated weaknesses in their initial causal evaluation of that event (parallel White finding);
- To provide assurance that Constellation identified the extent of condition and extent of cause of the basis for the parallel White finding; and,
- To provide assurance that Constellation has taken or planned corrective actions that were sufficient to address the root and contributing causes and to prevent recurrence of the specific and broad station performance issues surfaced via the Cooling Water Systems White Performance Indicator (PI) and parallel finding.

.01.01 Background

The cooling water systems MSPI is based upon the sum of the SW system's unavailability and unreliability indices, over the previous 12 quarters. Between October 2007 and February 2008, the Unit 2 'E' SW pump was removed from service (made unavailable) for preventive maintenance. This unplanned out-of-service time contributed to the PI unavailability index and caused the PI to approach, but not cross the Green/White PI threshold. On November 7, 2008, the 'F' service water pump was started and failed to achieve sufficient flow output because of material still lodged in the pump impeller from the November 4, 2008, intrusion event. The 'F' SW pump was promptly secured and declared inoperable (a demand failure). This demand failure, which contributed to the unreliability index, in combination with the existing high unavailability index value for the cooling water systems, caused the PI to cross the Green/White threshold. In January

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2009, Constellation reported this threshold change in their fourth quarter 2008 performance indicator data to the NRC.

As a result of the White MSPI for cooling water systems, Nine Mile Point Unit 2 entered the Regulatory Response Column per the Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," Action Matrix. Constellation completed its causal evaluations and independent reviews by July 20, 2009, and informed the NRC staff of its readiness for the 95001 Supplemental Inspection. In October 2009, Region I completed this inspection and issued a parallel White finding for significant weaknesses in Constellation's causal evaluation and associated corrective actions for the White PI.

To address the White PI, Constellation had initiated two Category 1 (root cause evaluation) Condition Reports (CRs). CR 2009-000080 addressed the specific root and contributing causes for the PI change from Green to White. CR 2008-008492 addressed the organizational response to the Unit 2 service water system foreign material intrusion event, focusing on the Operations staff's response to the impact of the foreign material on service water pump operability. A third CR of particular interest to the October 2009 inspection team was CR 2008-008330, "Sediment hose sucked into two service water pumps." This was a Category 2 CR that required an apparent cause evaluation. The inspection team identified that Constellation had not adequately identified the root and contributing causes for the SW intrusion events of November 4, 2008.

Following the October 2009 supplemental inspection, Constellation upgraded CR-2008-08330 from a Category 2 to a Category 1 CR and thoroughly re-evaluated the events and station performance leading up to, and including, the material intrusion events of November 4, 2008. Constellation also revisited and revised CR 2008-8492, developing additional root and contributing causes. To address the performance shortcomings in their evaluation of the foreign material intrusion events, including the lack of appropriate procedural guidance and adherence associated with the parallel White finding, Constellation initiated a fourth Category 1 CR (2009-07201). The team noted that a number of additional CRs were initiated based upon the four Category 1 CRs. A comprehensive list of the CRs reviewed by the team is documented in Attachment A to this report. In addition to the Constellation staff reviews required per the station Corrective Action Program (CAP), independent assessments of the casual evaluations were performed by the Quality Performance and Assessment (QPA) department and outside contractors.

.02 Evaluation of the Inspection Requirements

.02.01 Problem Identification

a. Determination of who identified the issue and under what conditions.

Constellation's failure to identify the inadequate work control and procedural adherence causal factors associated with the November 2008 SW pump foreign material intrusion events were identified by the NRC and documented in Inspection Report No. 05000410/2009009. Constellation's subsequent evaluation of the basis for having not identified these causal factors and the related corrective actions were documented in Category 1 CR 2009-7201. The team noted that Constellation also conducted re-

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evaluations of CRs 2008-8330 and 2008-8492 resulting in the identification of additional root and contributing causes for these related performance issues. As documented in CR 2009-7201, Constellation identified less than adequate rigor in cause determinations and less than adequate procedure adherence standards for not having properly identified the causal factors for the foreign material intrusion events and associated station response. A contributing cause identified by Constellation was organizational tunnel vision. The team observed that Constellation characterized these causal factors as site-wide weaknesses and not unique to the performance issues involving the November 2008 SW system intrusion events. Contributing causes identified in revised CRs 2008-8330 and 2008-8492 include: management oversight of work planning less than adequate (LTA); process for managing risk in Work Orders LTA; risk inadequately assessed/managed; ineffective implementation of CAP; ineffective use of industry Operating Experience; weaknesses in diving controls; weaknesses in foreign material exclusion controls; and LTA engagement of shift management. The team reviewed Constellation's new and revised causal analyses and determined they were reasonable, thorough, and well supported. The team did not identify any additional root or contributing causes.

b. Determination of how long the issue existed and prior opportunities for identification.

As documented in IR 05000410/2009009 and confirmed by Constellation's revised causal evaluations, procedural adequacy and adherence issues both contributed to the events leading to the White cooling water system MSPI and permeated the licensee's less than adequate evaluation of the causal factors and associated corrective actions. The two root causes identified in CR 2009-7201 were: 1) Management not consistently reinforcing rigorous application of cause determination process, including effective Management Review Committee oversight of the CAP; and 2) Organizational standards for administrative procedure compliance are inconsistently applied and less than adequate. The team concluded that these causal factors contributed to Constellation's failure to identify procedural adequacy and compliance issues related to the SW intrusion event and mischaracterized procedural compliance issues as "missed opportunities." As captured in CR 2009-7201, Constellation identified that station management and staff failed to comply with numerous station and fleet procedures regarding their response and follow-up to the service water intrusion event, including non-compliance with the CAP guidance. Based upon interviews with Constellation management, the team established that the causal factors discussed above had evolved over a number of years and that the re-evaluation of the SW intrusion event and associated performance issues following the October 2009 95001 supplemental inspection precipitated the determination that the station's procedural adherence standards had deteriorated and were less than adequate.

c. Determination of the plant-specific risk consequences and compliance concerns associated with the issue.

No additional compliance concerns were identified during this 95001 supplemental inspection. As documented in IR 05000220 & 05000410/2008005 and IR 05000410/2009009, the NRC appropriately assessed the significance of the identified performance deficiencies and associated findings. Likewise, Constellation's evaluation of the cooling water system PI threshold change from Green to White was well defined, documented, and communicated to the NRC and external stakeholders. The issuance of

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a parallel White finding in IR 05000410/2009009, for Constellation's failure to appropriately evaluate and implement corrective actions for the White cooling water system PI, was consistent with IMC 0305, "Operating Reactor Assessment Program," and the basis for this follow-up 95001 supplemental inspection.

d. Findings

No findings of significance were identified.

.02.02 Root Cause, Extent of Condition, and Extent of Cause Evaluation

a. Evaluation of methods used to identify the root and contributing causes.

The inspectors reviewed Constellation's cause determination methodology and concluded it was adequately applied. Constellation used a combination of causal analysis methods and tools, including: fault tree analysis; comparative time line; 'Why' staircase; barrier analysis; Management Oversight and Risk Tree (MORT); and root cause road map.

b. Level of detail of the root cause evaluations.

The team concluded the level of detail for the principle root cause evaluations involving the White cooling water system MSPI were appropriate. As briefly mentioned above, CR 2008-8330 was initially a Category 2 CR. The apparent cause for the service water intrusion event was identified as "faulty mental model of risks" and a contributing cause was "poor equipment layout." The detailed re-evaluation by Constellation identified that the service water intrusion event was initially improperly classified as a Category 3 event by the CR screening committee. The licensee concluded that the CR screening committee did not recognize that the intrusion event adversely impacted the operability of multiple trains of safety related equipment. In addition, the committee did not recognize that the foreign material intrusion satisfied a criterion for a Site Clock Reset. Either if these factors should have resulted in the CR being re-classified as a Category 1 CR and a root cause analysis should have been performed. To the credit of the Management Review Committee, they did upgrade the CR from a Category 3 to a Category 2, but their basis was not well-founded and they also should have identified the above Category 1 CR criteria were satisfied.

CR 2009-7201 identified a number of additional issues involving the level of rigor applied to the CR 2008-8330 apparent cause evaluation. Constellation concluded that the lead reviewer for the apparent cause evaluation was: not qualified or properly trained in accordance with fleet procedures; too directly involved in the event to have provided an objective assessment; not relieved of normal work duties so that sufficient time could be devoted to the causal evaluation; and the mentor assigned to assist the reviewer did not provide adequate oversight and assistance. As a consequence, Constellation concluded that the initial casual analysis was not well-founded and conclusions not adequately supported. In addition, Constellation concluded that station management and independent QPA review of CR 2008-8330 was less than adequate.

Constellation's re-examination of all of the SW intrusion event associated CRs identified the common theme/causal factor of procedure adherence standards being less than

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adequate. This casual factor repeatedly surfaced in Constellation's reassessment of the SW intrusion events and follow-up actions, providing a clearer indication of the depth and breadth of the performance problems that lead to the PI threshold change. In addition, the failure to adhere to administrative procedures was a significant contributor to Constellation's poor implementation of the CAP and their consequential failure to initially self-identify these more fundamental procedural adherence and adequacy causal factors.

c. Consideration of prior occurrences of the problem and knowledge of prior operating experience.

As documented in IR 05000410/2009009, the team noted that diving operations in the SW system fore bay area was a "first time activity" and Constellation had no prior in-plant operating experience to draw from. Notwithstanding, Constellation had adequate procedural guidance in place to ensure appropriate controls and management oversight, per station procedure CNG-OP-4.01-1000. Constellation subsequently acknowledged that they failed to appropriately implement this station guidance and additional work planning and control processes. Based upon team review of the casual evaluations and interviews with station staff, Constellation further acknowledged a longstanding performance trend of less than adequate conformance with station administrative programs and processes. Station management offered that the performance issues leading to the SW intrusion events had evolved over time, but that previous efforts to affect performance improvement were not entirely effective.

d. Determination of the extent of condition and the extent of cause of the problem.

Each of the pertinent Category 1 CRs includes an extensive examination of the extent of condition and extent of cause. The team examined these reviews and concluded that Constellation has adequately assessed these areas. Because a number of the root and contributing causes involved broad programmatic areas, Constellation appropriately examined these areas (i.e., procedural adherence, work planning and control, Corrective Action Program implementation, "tunnel vision," risk assessment, etc.) to capture the broader implications and need for more comprehensive and long-term corrective actions and station personnel behavior changes.

The team also noted that each CR contains an evaluation of "Recurring Events, Industry and In-House" that specifically targets operating experience that was or was not previously addressed by Constellation and that was relevant to the events or human performance attributes associated with the causal factors. Further, each of the Category 1 CRs contains a table entitled "Safety Culture Component Assessment" that identifies each of the applicable IMC 0305 cross-cutting attributes (under the broad areas of human performance, problem identification and resolution, and safety conscious work environment) associated with an identified root or contributing cause. Further, the table cross-references each of these attributes with an appropriate corrective action.

e. Determine that the root cause evaluation, extent of condition, and extent of cause appropriately considered the safety culture components as described in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

See Section .02.02.d. above.

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f. Findings

No findings of significance were identified.

.02.03 Corrective Actions

a. Appropriateness of corrective actions.

The team reviewed the corrective actions associated with each of the root and contributing causes identified in CRs 2008-8830, 2008-8492, and 2009-7201. To facilitate their review, the team grouped Constellation's corrective actions into five general areas: Corrective Action Program and Management Oversight; Procedural Adherence; Operations Performance and Conservative Decision Making; Quality Performance Assessment Effectiveness; and, Work Planning, Work Coordination and Accountability. Constellation prepared a detailed "Causal Analysis/Action Matrix" to support the team's review of corrective actions. Because of the broad nature of some of the causal factors and the large number of specific and programmatic corrective actions, the team found the Matrix a useful tool in cross-referencing and verifying the appropriateness of corrective actions, either completed, in progress, or planned.

Corrective Action Program and Management Oversight

The team reviewed corrective actions taken or planned in this area and concluded the actions were appropriate. The team noted a number of special review and re-training sessions focused on the lessons learned and process/procedure implementation expectations at the supervisory and management level. In addition, station and fleet procedure enhancements were implemented or planned to improve the effectiveness of the CAP. A number of actions were focused on enhancing the functional guidelines (roles and responsibilities) for the CAP Management Review Committee members and individual evaluators and sponsors. In addition, station managers and supervisors are now required to complete a number of formal observations per week to ensure they are out in the plant monitoring and mentoring their staffs.

Procedural Adherence

The team reviewed the corrective actions taken or planned in this area and determined that the corrective actions were appropriate. Constellation's procedural adherence corrective actions include specific actions (taken or planned) targeted at the individuals and groups directly involved in the SW intrusion events, corrective actions at the department level (operations, maintenance, and work planning), and corrective actions at the site level addressing all station personnel concerning procedural compliance responsibilities and expectations. One specific action involves the development and use of a human performance-procedural compliance simulator. The simulator has plant personnel exercise an actual station procedure (in a mock-up) under the direction and critique of a direct supervisor and/or trainer. Another action involves the use of "Procedure In Hand" days. The purpose of this periodic exercise is to closely examine a procedure frequently used by a group to ensure everyone understands and properly implements the explicit and implied content. Another corrective action involves the development of a new performance indicator specifically designed to monitor procedural

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adherence issues. This performance indicator is getting added management attention to ensure a positive performance trend is achieved and maintained.

Operations Performance and Conservative Decision Making:

The team reviewed the corrective actions taken or planned in this area and considered them appropriate. Many of the corrective actions in this area were reviewed during the previous 95001 inspection. During this inspection, the team observed that many of these actions (reference CR 2008-8492) had increased emphasis placed on procedural adherence. These corrective actions included: enhanced coaching and mentoring; development and use of case studies; and departmental team training with increased focus on compliance with administrative procedures.

Quality Performance and Assessment (QPA) Effectiveness:

The team's review of corrective actions in this area found those actions to be appropriate. As documented in IR 05000410/2009009, neither the Constellation staff nor the independent oversight provided by the QPA group identified the pattern of procedural non-compliances associated with the SW intrusion event. Instead, QPA populated an extensive list of "missed opportunities," vice procedural non-compliances, that any one of which may have prevented the November 4, 2008, intrusion event or improved the station's overall response to the event and assessment of SW pump operability.

The team noted that a corporate Quality Assurance Department assessment of the effectiveness of the station QPA organization (SA-2010-000026) was completed in February 2010. The assessment was conducted by the Director of Fleet Assessments and the Manager of Fleet QPA. The assessment noted a number of QPA initiated CRs that identified procedural adherence issues that the station QPA organization failed to pursue to an appropriate resolution. The assessment was particularly critical of QPA management for accepting less than adequate resolution of specific instances and identified adverse trends in procedural use and adherence.

In addition to the QPA program enhancements implemented via revisions to CNG-QL-1.01-1007, a team interview with the station QPA Director identified that greater use and sharing of corporate QA resources, including periodic meetings to exchange recent oversight observations and trends was being utilized by all of the Constellation stations' QPA groups. Similar to a number of the line organization corrective actions, many of the lessons learned in the QPA area are being applied across the Constellation fleet and incorporated into fleet administrative and quality assurance guidance documents.

Work Planning, Work Coordination and Accountability:

Corrective actions taken or planned in this area were considered appropriate by the team. Actions taken in this area included extensive revisions to the station diving control procedures (S-MAP-MAI-0108 and S-MAP-MAI-0110). Constellation informed the team that these diving procedures are planned to be modeled throughout the Constellation fleet as the new standard for diving operations. Constellation also has corrective actions to revise a number of higher level process control procedures including CNG-OP-4.01-1000, "Integrated Risk Management," CNG-MN-1.01-1003, "Work Order Planning," and CNG-

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MN-1.01-1004, "On-Line T-Week Process." These work control program guidance documents were identified by Constellation (reference CR -2008-8330) to have not been adhered to (with respect to ensuring appropriate work planning milestones were being met and proper integration/scheduling with plant operations to minimize risk) and in need of revision to ensure adequate administrative barriers/controls (to enhance staff accountability) were established before work order packages are released to be worked. The team noted that interim compensatory measures in the work control area had not been totally effective and recently identified shortcomings, highlighted by the station QPA group, resulted in an escalation of the QPA finding (due to insufficient station progress). Additional corrective actions were implemented including focused departmental and site-wide training, an independent third party assessment, and increased station and corporate management focus. The team concluded that Constellation thoroughly examined the station work control processes and implementation practices following the October 2009 supplemental inspection. Corrective actions planned or taken in this area were comprehensive and appropriate to prevent recurrence.

b. Prioritization and schedule for implementing and completing corrective actions.

The team concluded that Constellation's prioritization and scheduling of corrective actions associated with the identified root and contributing causes for the White cooling water system MSPI and parallel White finding were appropriate and commensurate with their safety significance. The team acknowledges the considerable depth and breadth of Constellation's review of the procedural adherence concerns and the deliberate station and corporate attention being focused on the corrective actions. As detailed in Constellation's Causal Analysis/Action Matrix, the team's sampling of actions taken, to date, and the schedule for completion of planned corrective actions were determined to be reasonable.

c. Measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

The inspectors reviewed Constellations planned Effectiveness Reviews (integral part of each Category 1 CR) for each of the principle CRs (2008-8330, 2008-8492 and 2009-7201). The team noted that each Effectiveness Review identified both immediate and long-term reviews to monitor performance. One of the real-time performance monitoring processes currently in use at the station is the procedure adherence Key Performance Indicator (KPI). This process is being implemented and monitored on a continuous basis by station management and the results periodically shared with station staff. Recent performance trends were discussed with the team and future plans to institutionalize this KPI were outlined. The team considered this and other Constellation effectiveness review initiatives to be appropriate and timely.

d. Findings

No findings of significance were identified.

4OA5 Other.1 (Closed) 05000410/2009009-02: Parallel Performance Indicator White Finding

During the October 2009 supplemental 95001 inspection, the team determined that Constellation had not identified that work control and procedural adherence causal factors were significant contributors to the SW intrusion event that led to the White cooling water system MSPI. Subsequent licensee re-evaluation of the November 4, 2008, SW intrusion event and Constellation staff response identified station-wide procedural adherence and work control program deficiencies. This follow-up 95001 supplemental inspection identified that Constellation has adequately identified, evaluated, and implemented appropriate corrective actions to address these performance issues. Based upon Constellation's satisfactory actions to address these issues, the parallel White MSPI finding is closed.

4OA6 Meetings.01 Exit Meeting Summary

The team presented the inspection results to Mr. Sam Belcher and other members of his staff on March 25, 2010. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.02 Regulatory Performance Meeting Summary

Following the March 25, 2010, exit meeting, Mr. Glenn Dentel, Chief, Reactor Projects Branch 1, and the inspection team met with Mr. Sam Belcher and other members of his staff to convene a Regulatory Performance Meeting, in accordance with IMC 0305, "Operating Reactor Assessment Program." Mr. Belcher and Mr. Terry Syrell outlined the corrective actions taken and planned by Constellation to address the White MSPI and parallel White finding.

ATTACHMENT: SUPPLEMENTAL INFORMATION

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SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

S. Belcher, Vice President
R. Brown, Training
W. Byrne, Manager, Nuclear Safety and Security
J. Cole, Radiation Protection
J. Dean, Quality Performance and Assessment (QPA)
S. Doty, Manager, Maintenance
K. Engelmann, Licensing
M. Eron, System Engineering
J. Evans, Long Island Power Associates
J. Gerber, Manager, Integrated Work Management
J. Krakuszeski, Manager, Operations
T. Lynch, Plant General Manager
J. Lyon, Communications
L. Martiniano, QPA
T. Mogren, Operations
G. Pitts, QPA
W. Smith, Performance Improvement
A. Sterio, Engineering
G. Stowers, Licensing
T. Syrell, Director, Licensing
P. Walsh, Human Reliability
D. Wolniak, Performance Improvement
J. Yoe, Fleet Operations

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

05000410/2009009-02 FIN Parallel Performance Indicator White Finding

LIST OF DOCUMENTS REVIEWED

Procedures

N2-SOP-11, "Loss or Degraded Service Water System"
S-MAP-MAI-0108, "Control of Non-RCA Diving Activities," Rev 05 and Rev 06

Attachment

S-MAP-MAI-0110," Control of RCA Diving Activities," Rev 08 and Rev 09
CHG-MN-1.01-1001, "Foreign Material Exclusion"
CHG-OP-4.01-1000, "Integrated Risk Management"

Work Orders:

WO -08-17939-00
WO -05-12872-00

Condition Reports

CR 2008-008409	CR-2009-003050
CR-2003-002341	CR-2009-003050
CR-2005-002021	CR-2009-003352
CR-2005-002353	CR-2009-003416
CR-2005-004857	CR-2009-004590
CR-2005-005095	CR-2009-007201
CR-2006-003133	CR-2009-008112
CR-2006-005454	CR-2009-008191
CR-2007-006747	CR-2010-001133
CR-2007-007243	CR-2010-002009
CR-2008-008330	
CR-2008-008430	
CR-2008-008444	
CR-2008-008492	
CR-2008-008982	
CR-2009-000080	
CR-2009-000867	
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CR-2009-002478	
CR-2009-002480	
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CR-2009-003047	
CR-2009-003049	

LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CR	Condition Report
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EDG	emergency diesel generator
EOP	emergency operating procedure
EPRI	electric power research institute
FME	foreign material exclusion
GPM	gallons per minute
IMC	Inspection Manual Chapter
IP	Inspection Procedure
KPI	Key Performance Indicator
LER	Licensee Event Report
MOB	Management Oversight Board
MORT	Management Oversight and Risk Tree
MRC	Management Review Committee
MSPI	Mitigating System Performance Index
NCV	non-cited violation
NEI	Nuclear Energy Institute
NMP2	Nine Mile Point Unit 2
NOV	notice of violation
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PI	performance indicator
QPA	Quality Performance and Assessment
SDP	significance determination process
SOP	special operating procedure
ST	surveillance test
SW	service water
TS	technical specification
UFSAR	updated final safety analysis report
WO	work order