

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 2100 RENAISSANCE BLVD., SUITE 100 KING OF PRUSSIA, PA 19406-2713

December 17, 2015

EA-15-022

Mr. Timothy S. Rausch President and Chief Nuclear Officer Susquehanna Nuclear, LLC 769 Salem Blvd., NUCSB3 Berwick, PA 18603

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION UNITS 1 AND 2 – SUPPLEMENTAL INSPECTION REPORT 05000387/2015505 AND 05000388/2015505 AND ASSESSMENT FOLLOW-UP LETTER

Dear Mr. Rausch:

On November 6, 2015, the U. S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection pursuant to Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," at your Susquehanna Steam Electric Station (SSES), Units 1 and 2. The enclosed inspection report (IR) documents the inspection results, which were discussed on November 6, 2015, with Mr. B. Franssen, SSES Plant Manager, and other members of your staff.

As required by the NRC Reactor Oversight Process Action Matrix, this supplemental inspection was conducted because a finding of low to moderate safety significance (White) was identified in the first calendar quarter of 2015. This issue was documented previously in NRC IR 05000387/2015503 and 05000388/2015503 (ML15105A471), dated April 16, 2015, and cited Susquehanna Nuclear, LLC, for a failure to maintain in effect an Emergency Plan that met the standards in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.47(b)(4) and the requirements in 10 CFR Part 50, Appendix E, Section IV.C.2 for Units 1 and 2. The significance of this issue was finalized in NRC IR 05000387/2015504 and 05000388/2015504 (ML15173A297), Final Significance Determination for a White Finding with Assessment Follow-Up and Notice of Violation, dated June 22, 2015. The NRC staff was informed in late September 2015, of your staff's readiness for this inspection.

The objectives of this supplemental inspection were to provide assurance that: (1) the root causes and the contributing causes of risk-significant performance issues were identified; (2) the extent of condition and extent of cause of risk significant performance issues were identified; and (3) corrective actions for risk significant performance issues are sufficient to address the root and contributing causes and prevent recurrence. The inspection consisted of examination of activities conducted under your license as they related to safety, compliance with the Commission's rules and regulations, and the conditions of your operating license.

T. Rausch

Based on the results of this inspection, the NRC concluded that, overall, the supplemental inspection objectives were met and no significant weaknesses were identified. Additionally, no findings of significance were identified.

Based on the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," and the results of this inspection, the White Finding will be closed and Susquehanna Units 1 and 2 will transition from the Regulatory Response Column of the NRC's Action Matrix to the Licensee Response Column at the beginning of the first calendar quarter of 2016.

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 component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC website at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

/**RA**/

Raymond R. McKinley, Chief Plant Support Branch 1 Division of Reactor Safety

Docket Nos. 50-387 and 50-388 License Nos. NPF-14 and NPF-22

Enclosure:

NRC Inspection Report Nos. 05000387/2015505 and 05000388/2015505 w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

cc w/encl:

- R. Flinn, Jr., Director, PA Emergency Management Agency (PEMA) and Office of Homeland Security Advisor
- T. Scardino, RAC Chair, FEMA Region III

T. Rausch

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DDorman, RA

DLew, DRA

MScott. DRP

JColaccino, DRP

RI orson, DRS

JTrapp, DRS

R. Flinn, Jr., Director, PA Emergency Management Agency (PEMA) and Office of Homeland Security Advisor T. Scardino, RAC Chair, FEMA Region III DISTRIBUTION: SBarber,

SBarber, DRP ATurlin, DRP PMeier, DRP BBickett, ORA JGreives, DRP, SRI TDaun, DRP, RI AGould, DRP, AA RidsNrrPMSusquehanna Res RidsNrrDorlLpl1-2 Resource ROPReports Resource RKahler, NSIR, EPD SLaVie, NSIR, EPD

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DOCUMENT NAME:	G:\DRS\Plant Support Branch 1\Barr\EP 95001 Susq 2015\SSES 2015 EP 95001 Report.docx
ADAMS Accession No	o. ML15352A230

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OFFICE	RI/DRP	RI/DRP	RI/DRS			
NAME	SBarr	DSchroeder	RMcKinley			
DATE	12/17/2015	12/17/2015	12/17/2015			

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.	50-387 and 50-388
License Nos.	NPF-14 and NPF-22
Report Nos.	05000387/2015505 and 05000388/2015505
Licensee:	Susquehanna Nuclear, LLC (Susquehanna)
Facility:	Susquehanna Steam Electric Station, Units 1 and 2
Location:	Berwick, PA
Dates:	November 2 - 6, 2015
Inspectors:	S. Barr, Senior Emergency Preparedness Inspector, Lead Inspector A. Bolger, Emergency Response Coordinator
Approved by:	Raymond R. McKinley, Chief Plant Support Branch 1 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000387/2015505 and 05000388/2015505; 11/02/2015 – 11/06/2015; Susquehanna Steam Electric Station (Susquehanna), Units 1 and 2; Supplemental Inspection – Inspection Procedure (IP) 95001.

A senior emergency preparedness inspector from the Division of Reactor Safety and an emergency response coordinator from the Division of Reactor Safety performed this inspection. No significant weaknesses or 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 5, dated February 2014.

Cornerstone: Emergency Preparedness

The NRC staff performed this supplemental inspection in accordance with IP 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," to assess Susquehanna's evaluation associated with a performance deficiency described in Inspection Reports 05000387/2015503 and 05000388/2015503, dated April 16, 2015. The performance deficiency was associated with Susquehanna's failure to maintain in effect an emergency plan that met the standards in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.47(b)(4) and the requirements in 10 CFR Part 50, Appendix E, Section IV.C.2, for Unit 2. Specifically, PPL's interpretation of the 15-minute assessment and classification period degraded their ability to make timely Alert or Site Area Emergency declarations in certain cases. This potential delay in declaration of an Alert or Site Area Emergency could have impacted the ability of off-site response organizations to implement timely actions to protect the public during a radiological emergency.

Based on the results of the inspection, the inspectors concluded that Susquehanna had adequately performed root cause analyses of the event. The inspectors noted that corrective actions, both completed and planned, were reasonable to address the underlying and related issues. Based on the guidance in Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," dated April 9, 2015, and the results of this inspection, the White Finding will be closed and Susquehanna Units 1 and 2 will transition from the Regulatory Response Column of the NRC's Action Matrix to the Licensee Response Column at the beginning of the first calendar quarter 2016 (January 1, 2016). (Section 4OA4)

REPORT DETAILS

4. OTHER ACTIVITIES

4OA4 Supplemental Inspection (IP 95001)

.1 Inspection Scope

The NRC staff performed this supplemental inspection in accordance with Inspection Procedure (IP) 95001 to assess Susquehanna Steam Electric Station's (SSES) evaluation of a White Finding, which affected the Emergency Preparedness (EP) cornerstone in the Reactor Safety strategic performance area. The inspection objectives were to:

- Provide assurance that the root and contributing causes of risk-significant performance issues were understood;
- Provide assurance that the extent of condition and extent of cause of risk-significant issues were identified; and,
- Provide assurance that corrective actions for risk-significant issues were sufficient to address the root and contributing causes and prevent recurrence.

Susquehanna entered the Regulatory Response Column of the NRC's Action Matrix retroactive to the first calendar quarter of 2015 as a result of one inspection finding of low to moderate (White) safety significance. The finding associated with ensuring timely emergency event declaration for an unisolable primary system leak outside of primary containment was identified in NRC Inspection Reports 05000387/2015503 and 05000388/2015503 (ML15105A471), dated April 16, 2015. Specifically, Susquehanna's failure to maintain in effect an emergency plan that met the standards in 10 CFR 50.47(b) and the requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix E, Section IV.C.2, for Units 1 and 2. The finding was characterized as having low to moderate (White) safety significance based on the results of the staff's risk evaluation, performed using Inspection Manual Chapter (IMC) 0609, Appendix B, "Emergency Preparedness Significance Determination Process," which determined the significance of the finding as discussed in NRC Inspection Report 05000387/2015504 and 05000388/2015504 (ML15173A297), Final Significance Determination for a White Finding with Assessment Follow-Up and Notice of Violation, dated June 22, 2015.

In late September 2015, Susquehanna staff informed the NRC that the station was ready for the 95001 supplemental inspection. In preparation for the inspection Susquehanna staff completed a Root Cause Analysis Report (RCAR) for Condition Report (CR) 2015-11640 to examine the causes that lead to the discrepancy between SSES's procedures and 10 CFR Part 50, Appendix E, Section IV.C.2. Susquehanna used a variety of methods in their root cause determination including Why Charting, Event and Causal Factor Charting, TapRoot, and Safety Culture Analysis. The RCAR attributed the root cause to: 1) Susquehanna management not providing adequate oversight during the Final EP Rule implementation; and 2) station procedure NDAP-00-0706, Process for Issues Involving Significant Regulatory Action, not providing an adequate review process to challenge implementation of the Final EP Rule. The RCAR also identified two causal factors: 1) EP staff had a knowledge gap in the area of EP

Enclosure

regulations and the licensing bases with regard to Emergency Action Levels (EALs); and 2) less than adequate use of NRC operating experience during the proposed and Final EP Rule implementation.

The inspectors reviewed the RCAR, in addition to other documents listed in the attachment, which supported Susquehanna's actions to address the White Finding. The inspectors reviewed corrective actions, both completed and planned, to address the identified causes, extent of condition, and extent of cause. The inspectors also interviewed Susquehanna personnel to ensure that the root and contributing causes, and the contribution of safety culture, were understood; and corrective actions taken or planned were appropriate to address the causes and prevent recurrence.

.2 Evaluation of the Inspection Requirements

02.01 Problem Identification

a. IP 95001 requires that the inspection staff determine that Susquehanna's evaluation of the issue documents who identified the issue (i.e., licensee-identified, self-revealing, or NRC-identified) and under what conditions the issue was identified.

The inspectors determined that Susquehanna's RCAR adequately documented who identified the issue and under what conditions the issue was identified. Specifically, the RCAR described that on November 7, 2014, Susquehanna generated CR 2014-34697 to document the NRC questioning the timeliness of a classification for an unisolable leak during an EP drill. Subsequently, an NRC inspector questioned the timeliness of a declaration for a loss of Reactor Coolant System (RCS) Barrier in a January 9, 2015, EP drill. On April 1, 2015, Susquehanna generated CR-2015-09088 in response to the NRC identifying the proposed White Finding.

b. IP 95001 requires that the inspection staff determine that Susquehanna's evaluation of the issue documents how long the issue existed and prior opportunities for identification.

The inspectors determined that the RCAR adequately documented how long the issue existed and prior opportunities for identification. Susquehanna determined that the condition had existed since June 20, 2012, by which date the Final EP Rule required licensees to establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators. The RCAR further determined that opportunities to identify the issue had included: the licensee's review of the proposed EP Rule in 2008; their review of the Final EP Rule in 2011; industry conference calls conducted during Rule implementation; a contractor review of the Rule in 2012; and an SSES Nuclear Oversight audit in 2012. Susquehanna concluded that these reviews had been too broad in nature to identify this specific EAL implementation as an issue.

c. IP 95001 requires that the inspection staff determine that Susquehanna's evaluation documents the plant specific risk consequences, as applicable, and compliance concerns associated with the issue.

The inspectors determined that Susquehanna's evaluation adequately documented the plant specific risk consequences, as applicable, and compliance concerns associated with the issue. The RCAR concluded that there were no actual consequences, as there were no actual emergency events that related to the EAL in question. The RCAR did identify that the potential of failing to meet the timeliness requirements of declaring the specific EAL could have reduced offsite response organizations' ability to protect the public health and safety during an actual emergency. From a regulatory compliance standpoint, the RCAR concluded that the finding represented low to moderate safety significance. Susquehanna's extent of cause evaluation identified that 17 additional EP compliance gaps existed, and those gaps were risk ranked for potential regulatory risk consequence, with action due dates assigned based on that risk ranking.

d. <u>Findings</u>

No findings were identified.

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

a. IP 95001 requires that the inspection staff determine that Susquehanna evaluated the issue using a systematic methodology to identify the root and contributing causes.

The inspectors determined that Susquehanna evaluated the White Finding using a systematic methodology to identify root and contributing causes. The inspectors verified that Susquehanna staff implemented LS-125-1001, "Root Cause Analysis Manual," in the conduct of the station's causal analyses to identify the root and contributing causes. The station utilized the following systematic methods when investigating and reviewing the issue:

- Data gathering through interviews and document review,
- Comparative Timeline,
- Event and Causal Factor Charting,
- Why Charting,
- Taproot, and
- Safety Culture Analysis

The inspectors verified these methods were completed by reviewing attachments to the RCAR document, and verified that the root and contributing causal conclusions were consistently understood and supported by Susquehanna staff through the conduct of interviews.

b. IP 95001 requires that the inspection staff determine that Susquehanna's root cause analysis was conducted to a level of detail commensurate with the significance of the issue.

The inspectors determined that Susquehanna's root cause evaluation was conducted to a level of detail commensurate with the significance of the White Finding. The issue was screened as a significant condition adverse to quality, and a Level 1 root cause evaluation was performed. Consistent with LS-125-1001, "Root Cause Analysis Manual," Susquehanna conducted a root cause analysis that identified the root and contributing causes associated with timely event declaration. The root cause analysis was performed by a team of four SSES employees and one management sponsor, which employed a series of interviews with internal and external stakeholders, and then combined the results of those interviews with information developed from Event and Causal Analysis Charting, Why Charting, Safety Culture Analysis, and Taproot to determine the causes, causal factors, extent of cause, and extent of condition for the event.

c. IP 95001 requires that the inspection staff determine that Susquehanna's root cause analysis included a consideration of prior occurrences of the issue and knowledge of operating experience.

The inspectors determined the Susquehanna RCAR included an adequate evaluation of internal and external operating experience (OE). The evaluation included searches of the SSES corrective action program database for same or similar issues, as well as searches of industry OE. The results identified CRs related to EP issues such as drill player performance, equipment important to EP, and failure to critique drills properly, but none that identified an issue related to EAL bases or declaration timeliness. Based on their OE review, Susquehanna concluded that the finding was not OE preventable because there had been no OE that identified a gap in EAL bases or declaration timeliness. The team did identify, however, that there was a program to process interface issues between the OE program and significant regulatory action program procedures and guidance documents. That program had failed to identify NRC NSIR/DPR-ISG-01, "Interim Staff Guidance, Emergency Planning for Nuclear Power Plants," as OE, the use and understanding of which may have precluded the performance deficiency associated with this finding. Susquehanna initiated corrective actions to force a more consistent and systematic review process for NRC OE.

d. IP 95001 requires that the inspection staff determine that Susquehanna's root cause analysis addresses the extent of condition and extent of cause of the issue.

Susquehanna's RCAR determined that the extent of condition of interest was that the EAL bases document, EP-RM-004, EAL Classification Bases, does not meet the requirement for timely event declaration, as required by 10 CFR Part 50, Appendix E. The licensee expanded the extent of condition to include the potential extent of condition that all EALs at the station do not align with NRC regulation. Specifically, the extent of condition included:

- Incorrect interpretation of the timeliness criterion as applicable to Table F, EAL 2.c.2.
- Incorrect interpretation of the 15-minute timeliness criterion.
- Incorrect guidance provided in the EAL bases document that was beyond the guidance originally in NEI 99-01, Revision 4.

Immediate compensatory actions implemented to address the extent of condition included: a revision to EP-RM-004 to provide a clearer identification of when the EAL 2.c.2 threshold has been exceeded, and a reminder of the 15-minute classification time

limit established by the EP Rule; and, a read and acknowledge memo for all members of the Susquehanna emergency response organization (ERO) of the measured trigger time for the EAL 2.c.2 threshold.

Susquehanna's RCAR identified potential extent of causes for each of the two root causes and the two causal factors. The extents of cause were identified as:

- Root Cause 1: Extent of cause included all Rulemaking Dockets since 2004 that were in the final stage and required major changes to SSES processes/procedures. The Rulemaking Dockets were reviewed by the applicable departments under the corrective actions for the root cause analysis.
- Root Cause 2: Extent of cause included all procedures which govern NRC Final EP Rule implementation, to align that Rule implementation with implementation of other major changes at the station, which have procedures driving reviews and verification.
- Causal Factor 1: Extent of cause identified that operators and key ERO decision makers may have a potential knowledge gap in EAL bases and usage.
- Causal Factor 2: Extent of cause examined the utilization of NRC OE in the regulatory change process.

The inspectors determined that Susquehanna's root cause evaluation appropriately addressed the extent of condition and extent of cause of the root cause and causal factors of the issue.

e. As directed by IP 95001, determine that the root cause, extent of condition, and extent of cause evaluations appropriately considered a review of nuclear safety culture as described by NUREG-2165 "Safety Culture Common Language" and IMC 0310 "Aspects Within Cross-Cutting Areas."

Susquehanna performed a safety culture analysis as required by station procedure, LS-125-1001, "Root Cause Analysis Manual," Revision 1. The safety culture analysis consisted of evaluating the root cause, extent of condition, and extent of cause evaluations against the safety culture areas, traits, and attributes as described in the Institute of Nuclear Power Operations (INPO) 12-012 "Nuclear Safety Culture Traits and Attributes." During the analysis, Susquehanna determined that Operating Experience (P.5) was a significant contributing cause and was incorporated into the Root Cause Evaluation as Causal Factor 2. Specifically, due to the less than adequate use of NRC OE during the proposed and Final EP Rule implementation, the licensee found that there was a lack of processes that drive an effective use of OE to prevent regulatory events.

The following safety culture aspects were viewed as contributing to the event and were in alignment with the identified root causes:

- Challenge Management (H.3): Leaders use a systematic process for evaluating and implementing change so that nuclear safety remains the overriding priority.
- Roles, Responsibilities, and Authorities (X.3): Leaders clearly define roles, responsibilities, and authorities to ensure nuclear safety.

- Constant Examination (X.4): Leaders ensure that nuclear safety is constantly scrutinized through a variety of monitoring techniques, including assessments of nuclear safety culture.
- Work Management (H.5): The organization implements a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities.
- Documentation (H.7): The organization creates and maintains complete, accurate, and up-to-date documentation.

The inspectors determined that Susquehanna's root cause, extent of conditions, and extent of cause evaluations appropriately considered the safety culture aspects as described in IMC 0310.

f. Findings

No findings were identified.

02.03 Corrective Actions

a. IP 95001 requires the inspection staff to determine that (1) Susquehanna specified appropriate corrective actions for each root and/or contributing cause, or (2) an evaluation that states no actions are necessary is adequate.

Overall, the inspectors found that Susquehanna specified appropriate corrective actions for each root cause, causal factors, extent of condition, and extent of cause for the White Finding. Specifically:

Root Cause 1 identified that SSES Management did not provide adequate oversight during the Final EP Rule implementation. To address this root cause, corrective actions were identified to revise the NDAP-00-0706 procedure to include: the creation of a read and sign form to ensure the Manager(s) responsible for future Final EP Rule implementation reviews lessons learned from this White Finding RCA prior to implementation of Final EP Rule; the performance of a risk assessment to assure focus of more resources and oversight on high risk projects; the incorporation of a requirement for gathering and reviewing industry and NRC OE when completing risk screening and implementation of the Final EP Rule; and the inclusion of a line for line gap analysis between the NRC Final EP Rule (including all industry OE) and the SSES implementing procedures and any SSES implementing guidance to assure gaps are identified, evaluated, and resolved adequately based upon detailed management challenge board review. Additionally, the lessons learned from this event were included in staff training for further learning.

Root Cause 2 identified the NDAP-00-0706 process did not drive an adequate review process to challenge implementation of the Final EP Rule implementation. To address this root cause, corrective actions were identified to: revise the NDAP-00-0706 process to add a process to the procedure detailing how to identify the level of risk for a Final EP

Rule and require approval by the responsible manager and Nuclear Regulatory Assurance (NRA) Manager; change the team composition, required reviews and verification based on the risk level identified for the rule; add a requirement for Final EP Rule implementation to be tracked and reported out to the leadership team at a minimum of once per month; incorporate management review into the procedure to provide critical challenges; revise the procedure to describe Final EP Rule process; specify that the read and sign needs to be completed at the beginning of the project to implement the Final EP Rule and just prior to the final challenge review; and, incorporate requirement for gathering and reviewing industry and NRC OE when completing risk screening of Final EP Rule changes.

Causal Factor 1 identified that EP Staff had a knowledge gap in the area of EP regulations and licensing basis with regard to EALs. To address this causal factor, corrective action was taken for all EP staff to complete the INPO EP Fundamental course, anchor this as a qualification requirement in EP-113, and for the EP staff to receive additional training that includes EP planning standards review and focuses on direct applications of those standards at SSES.

Causal Factor 2 identified the less than adequate use of NRC operating experience during the proposed and final rule implementation. To address this casual factor, corrective action was taken to: revise NDAP-00-0706 to incorporate requirement for gathering and reviewing industry and NRC OE when completing risk screening of a Final EP Rule implementation; add requirement for gathering and reviewing industry and NRC OE when completing risk screening of a Final EP Rule implementation; add requirement for gathering and reviewing industry and NRC OE when completing risk screening and implementation of a Final EP Rule; and, include a line-by-line gap analysis between the NRC Final EP Rule (including all industry OE) and the SSES implementing procedures and any SSES implementing guidance to assure gaps are identified, evaluated, and resolved adequately based upon management challenge board review.

Immediate compensatory actions had been taken to revise the EAL bases based on the initial condition and provide a read and acknowledge of these changes to key EP decision makers. Other corrective actions were taken to revise EP-RM-004, EAL Bases, based on the determined extent of cause and extent of condition reviews and performance of a deep dive technical review into the emergency preparedness program. Gaps that were identified as a result of this deep dive were risk-ranked and captured as new corrective actions under the root cause.

b. IP 95001 requires that the inspection staff determine that Susquehanna prioritized corrective actions with consideration of risk significance and regulatory compliance.

The inspectors noted that Susquehanna appropriately prioritized corrective actions with due consideration of risk significance and regulatory compliance. Specifically, immediate compensatory action was taken to revise the EAL bases based on the initial condition and provide a read and acknowledge of these changes to key decision makers. To prevent recurrence and correct adverse conditions, Susquehanna identified additional corrective actions for the root causes and causal factors and assigned due dates based on the risk associated with each as appropriate.

c. IP 95001 requires that the inspection staff determine that Susquehanna established a schedule for implementing and completing the corrective actions.

The inspectors determined that Susquehanna had established an appropriate schedule for implementing and completing the corrective actions. Susquehanna had completed all key corrective actions prior to the 95001 supplemental inspection, while longer term corrective actions were reviewed by the inspectors and determined to have appropriate due dates.

d. IP 95001 requires that the inspection staff determine that Susquehanna developed quantitative and/or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence.

The inspectors determined that Susquehanna had developed adequate quantitative and qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence. The Susquehanna effectiveness review plan identified the following, to be completed after the implementation of corrective actions:

- Develop and administer a practice EP drill scenario and ensure that at least 80 percent of the drill players understand the timeliness requirements of declaring an unisolable leak after the new revision of EP-RM-004, EAL Classification Bases.
- Verify all drill evaluations conducted since the new revision of EP-RM-004, EAL Classification Bases, graded the drill and exercise performance indicator using the appropriate 15 minute clock starting time.
- Review at least one half of the High Risk Final EP Rule implementations completed following the revision of NDAP-00-0706, Process for Issues Involving Significant Regulatory Action, and ensure they followed the process outlined in the procedure.
- Review at least one half of the Low Risk Final EP Rule implementations completed following the revision of NDAP-00-0706, Process for Issues Involving Significant Regulatory Action, and ensure they were appropriately screened as low risk.
- Ensure that any remaining Final EP Rule implementation action is tracked and reported out to the SSES Leadership Team at least on a monthly basis, per the requirements of the revised NDAP-00-0706, Process for Issues Involving Significant Regulatory Action.
- e. IP 95001 requires that the inspection staff determine that Susquehanna's planned or taken corrective actions adequately address a Notice of Violation (NOV) that was the basis for the supplemental inspection.

On June 22, 2015, the NRC issued a Final Significance Determination for a White Finding with Assessment Follow-Up and NOV to Susquehanna which was discussed in NRC Inspection Report 05000387/2015504 and 05000388/2015504. Susquehanna restored compliance by immediately initiating compensatory actions as described in Section 02.03a above. During this inspection, the inspectors confirmed that Susquehanna's planned and taken corrective actions adequately addressed the NOV.

f. Findings

No findings were identified.

4OA6 Exit Meeting and Regulatory Performance Meeting

On November 6, 2015, the inspectors presented the inspection results to Mr. B. Franssen, SSES Plant Manager, and other members of the Susquehanna staff, who acknowledged the inspection results. The inspectors asked Susquehanna staff if any of the material examined during the inspection should be considered proprietary. They did not identify any proprietary information.

Upon completion of the exit meeting, a Regulatory Performance Meeting was conducted in accordance with IMC 0305. The meeting was led by the Reactor Projects Branch 4 Chief, Mr. Daniel Schroeder, and attended by Mr. B. Franssen, SSES Plant Manager, and other members of the Susquehanna staff. The purpose of the meeting was to discuss Susquehanna's corrective actions in response to the White Finding and NOV, and acknowledge the transition of Susquehanna from the Regulatory Response Column of the NRC's Action Matrix to the Licensee Response Column, effective at the beginning of the first quarter of 2016 assuming no other action matrix inputs in the intervening time frame.

ATTACHMENT: SUPPLEMENTAL INFORMATION

A-1

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Franke, Site Vice President

B. Franssen, Plant Manager

J. Gorman, Emergency Preparedness Manager

J. Jennings, Regulatory Assurance Manager

M. Thorpe-Kavanaugh, NOS Assessor and 95001 Team Leader

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Closed

05000387/388/2015503-01 NOV

Failure to Maintain a Standard EAL Scheme

LIST OF DOCUMENTS REVIEWED

Section 4OA4: Supplemental Inspection

Root Cause Analysis Report (RCAR) RCAR for CR-2015-11640, dated September 18, 2015, White Finding on Timeliness of Emergency Action Level Declaration RCAR Attachments, RSL1 CR-2015-11640, dated September 18, 2105

Procedures

EP-10, Susquehanna Emergency Preparedness Program Description, Revision 4 EP-RM-004, EAL Classification Bases, Revision 7 LS-115, Operating Experience Program Reviews, Revision 2 LS-125-1001, Root Cause Analysis Manual, Revision 1 NDAP-00-0706, Process for Issues Involving Significant Regulatory Action, Revision 8

Condition Reports

2014-05421	2014-22077	2014-25080
2014-26136	2014-29803	2014-34697
2014-35404	2015-03695	2015-06706
2015-09088	2015-11640	2015-15590
2015-22782	2015-22947	2015-22961
2015-23076	2015-23591	2015-23592
2015-24057	2015-24062	2015-24066
2015-24069	2015-25940	

CAs for RCAR	Condition Re	port 2015-11640
0/10/10/11		

ACT-01-CR-2015-11640	ACT-02-CR-2015-11640	ACT-03-CR-2015-11640
ACT-04-CR-2015-11640	ACT-05-CR-2015-11640	ACT-06-CR-2015-11640
ACT-07-CR-2015-11640	ACT-08-CR-2015-11640	ACT-09-CR-2015-11640
ACT-10-CR-2015-11640	ACT-11-CR-2015-11640	ACT-12-CR-2015-11640
ACT-13-CR-2015-11640	ACT-14-CR-2015-11640	ACT-15-CR-2015-11640
ACT-16-CR-2015-11640	ACT-17-CR-2015-11640	ACT-18-CR-2015-11640
ACT-19-CR-2015-11640	ACT-20-CR-2015-11640	ACT-21-CR-2015-11640
ACT-22-CR-2015-11640	ACT-23-CR-2015-11640	ACT-24-CR-2015-11640
ACT-25-CR-2015-11640	ACT-26-CR-2015-11640	ACT-27-CR-2015-11640
ACT-28-CR-2015-11640	ACT-29-CR-2015-11640	ACT-30-CR-2015-11640
ACT-31-CR-2015-11640	ACT-32-CR-2015-11640	ACT-33-CR-2015-11640
ACT-34-CR-2015-11640	ACT-35-CR-2015-11640	ACT-36-CR-2015-11640
ACT-37-CR-2015-11640	ACT-38-CR-2015-11640	ACT-39-CR-2015-11640
ACT-40-CR-2015-11640	ACT-41-CR-2015-11640	ACT-42-CR-2015-11640
ACT-43-CR-2015-11640	ACT-44-CR-2015-11640	ACT-45-CR-2015-11640
ACT-46-CR-2015-11640	ACT-47-CR-2015-11640	ACT-48-CR-2015-11640
ACT-49-CR-2015-11640	ACT-50-CR-2015-11640	ACT-51-CR-2015-11640
ACT-52-CR-2015-11640	ACT-53-CR-2015-11640	ACT-54-CR-2015-11640
ACT-55-CR-2015-11640	ACT-56-CR-2015-11640	ACT-57-CR-2015-11640

LIST OF ACRONYMS USED

10 CFR	Title 10 of the Code of Federal Regulations
CR	Condition report
EAL	Emergency Action Level
ECP	Engineering Change Package
EP	Emergency Preparedness
ERO	Emergency Response Organization
IP	Inspection Procedure
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
NEI	Nuclear Energy Institute
NOV	Notice of Violation
NRA	Nuclear Regulatory Assurance
NRC	U.S. Nuclear Regulatory Commission
OE	Operating Experience
RCAR	Root Cause Analysis Report
RCS	Reactor Coolant System
SSES	Susquehanna Steam Electric Station