UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

June 13, 2018

EA-15-081
EA-17-086

Mr. Brian Sullivan
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION – CONFIRMATORY ACTION LETTER (EA-17-086) FOLLOW-UP INSPECTION REPORT 05000293/2018010

Dear Mr. Sullivan:

On March 23, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an on-site team inspection at Pilgrim Nuclear Power Station (PNPS). The NRC inspectors discussed the results of this inspection with you and other members of your staff via a teleconference exit on May 3, 2018. The results of this inspection are documented in the enclosed report.

The NRC inspection team reviewed PNPS's progress in implementing the actions from the PNPS Recovery Plan that were committed to in the Confirmatory Action Letter (CAL) dated August 2, 2017 (NRC's Agencywide Documents Access and Management System (ADAMS) Accession No. ML17214A088) (EA-17-086). Specifically, for this inspection, the team reviewed the adequacy of the corrective actions PNPS completed to address 24 individual CAL items in the Operability Determination and Functionality Assessments, and the Safety Relief Valve (SRV) White Finding Area Action Plans. The team also reviewed site performance to determine whether all the actions completed for these plans, in aggregate, achieved the safety performance improvement objectives stated in the PNPS Recovery Plan.

The team determined that all 24 of the individual CAL items reviewed and the two associated Area Action Plans were effective in achieving the associated PNPS Recovery Plan performance improvement objectives and adequately completed. As a result, the 24 CAL items and the Operability Determination and Functionality Assessments and the SRV White Finding Area Action Plans are closed.

No findings or violations of NRC requirements were identified during this inspection.

As part of this inspection, the team also completed a follow-up supplemental inspection for the White finding related to the 'A' SRV failure. On September 1, 2015, the NRC issued the final significance determination for the White finding (ADAMS Accession No. ML15230A217). The White finding was associated with a violation of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," in that Entergy did not identify, evaluate, and correct a significant condition adverse to quality associated with the 'A' SRV.

Entergy did not identify, evaluate, and correct the 'A' SRV's failure to open upon manual actuation during a plant cool-down on February 9, 2013, following a loss of offsite power event caused by a winter storm. The failure to take actions to preclude repetition resulted in the 'C' SRV failing to open due to a similar cause following a January 27, 2015, loss of offsite power event also caused by a winter storm. The NRC determined that the 'A' SRV had been inoperable for a period greater than the technical specification allowed outage time of 14 days.

The Inspection Procedure (IP) 95003 Phase 'C' inspection report (ADAMS Accession No. ML17129A217) documented the completion of an initial review of Entergy's response to this finding using IP 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs." That review identified a significant weakness related to several concerns regarding methodologies used in the associated root cause evaluation (CR-PNP-2016-01621). Most notably, there were incorrect conclusions and assumptions related to the adequacy of information in the condition report originally written for the 'A' SRV operation during a 2013 plant transient. The significant weakness caused Entergy to inappropriately assess the impact of lack of rigor in shift manager operability determination review and its associated causal factors. Based on this significant weakness, the NRC determined that all objectives for the IP 95001 inspection could not be met.

The corrective actions required to address the impact of the SRV White finding significant weakness on the objectives of the IP 95001 inspection were included in the SRV White Finding Area Action Plan items in the CAL. These items were inspected during this inspection and the previous CAL follow-up inspection, the results of which were documented in NRC Inspection Report 05000293/2017010 (ADAMS Accession No. ML18032A463). During this most recent inspection, the team closed the remaining nine SRV White Finding Area Action Plan action items, and verified that all of the actions were complete and effective, and that they adequately addressed the identified significant weakness. The NRC concluded that PNPS's actions met the objectives of the IP 95001 inspection and, therefore, the White finding related to the 'A' SRV failure (EA-15-081) is closed.

In accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," this White finding will no longer be considered in assessing plant performance. However, PNPS will remain within the Multiple/Repetitive Degraded Cornerstone column of the NRC's Reactor Oversight Process Action Matrix pending completion of all actions needed to close the CAL. To review the remaining CAL actions and area action plans, the NRC currently plans and has scheduled at least three additional quarterly CAL follow-up inspections in addition to the two already completed. The NRC staff will assess the effectiveness of Entergy's implementation of these corrective actions and evaluate whether the safety performance of PNPS has demonstrated sustained improvement warranting transition of PNPS out of Column 4 in accordance with Inspection Manual Chapter 0305, Section 10.02d, paragraph 7. The NRC plans to communicate the results of this determination at a public meeting following the successful completion of these CAL closure activities. The final CAL follow-up inspection is currently scheduled to be completed in December 2018, and the report documenting the results of that inspection to be issued shortly thereafter. The NRC may schedule additional CAL inspections, as warranted.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Anthony Dimitriadis, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket No. 50-293
License No. DPR-35

Enclosure:
Inspection Report 05000293/2018010
w/Attachment: Confirmatory Action
Letter Item Status

cc w/encl: Distribution via ListServ

SUBJECT: PILGRIM NUCLEAR POWER STATION – CONFIRMATORY ACTION LETTER (EA-17-086) FOLLOW-UP INSPECTION REPORT 05000293/2018010 dated June 13, 2018

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number:	50-293
License Number:	DPR-35
Report Number:	05000293/2018010
Enterprise Identifier:	I-2018-010-0044
Licensee:	Entergy Nuclear Operations, Inc. (Entergy)
Facility:	Pilgrim Nuclear Power Station (PNPS)
Location:	Plymouth, MA
Inspection Dates:	03/19/2018 – 03/23/2018
Team Lead:	Leonard M. Cline Jr., Senior Project Engineer
Inspectors:	Peter Boguszewski, Project Engineer Matthew Fannon, Resident Inspector Christopher Highley, Resident Inspector Adam Ziedonis, Resident Inspector
Approved By:	Anthony Dimitriadis, Chief Reactor Projects Branch 5 Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring Entergy's performance at PNPS by conducting the confimatory action letter (CAL) follow-up inspection in accordance with the Reactor Oversight Process (ROP). The ROP is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information.

The team reviewed 24 of the 156 items that Entergy committed to complete in the PNPS CAL (EA-17-086). The team determined that all 24 of the items reviewed and the two associated area action plans—Operability Determination and Functionality Assessments (ODFA) and Safety Relief Valve (SRV) White Finding—were adequately completed and effective in achieving the associated performance improvement objectives. As a result, the 24 CAL items and these two area action plans are closed. In addition, based on the closure of the SRV White Finding Area Action Plan, Notice of Violation (NOV) 05000293/2015007-02, Failure to Identify, Evaluate, and Correct 'A' SRV Failure to Open Upon Manual Actuation, (EA-15-081), is also closed.

No findings or more-than-minor violations were identified.

Additional Tracking Items

Type	Issue number	Title	Report Section	Status
NOV	05000293/ 2015007-02	Failure to Identify, Evaluate, and Correct 'A' SRV Failure to Open Upon Manual Actuation	Inspection Results 92702	Closed
CAL	EA-17-086	PNPS Confirmatory Action letter	Inspection Results 92702	Discussed

INSPECTION SCOPES

This inspection was conducted using the appropriate portions of the applicable inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess Entergy's performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT, AND ABNORMAL

95001 - Supplemental Inspection Response to Action Matrix Column 2 Inputs

Scope of Review

The NRC completed its assessment of Entergy's corrective actions for a White finding associated with the 'A' SRV failure to open, using IP 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs," dated August 24, 2016. The purpose of this inspection was to confirm that the corrective actions taken by Entergy to address the White finding met the following four objectives:

- Objective 1 – To assure that the root and contributing causes of the significant performance issues are understood;
- Objective 2 – To independently assess and assure that the extent of condition and extent of cause of significant performance issues are identified;
- Objective 3 – To assure that corrective actions taken to address and preclude repetition of significant performance issues are prompt and effective; and
- Objective 4 – To assure that corrective action plans direct prompt actions to effectively address and preclude repetition of significant performance issues.

Background

On January 27, 2015, PNPS was reducing power, in accordance with station procedures, due to loss of one of the two 345kV distribution lines during a winter storm. While at 52 percent power, operators observed a generator load reject and automatic reactor scram when the remaining 345kV offsite distribution line de-energized. Operator response to the scram was challenged by multiple equipment issues, including failure of the 'C' SRV to operate at low pressure. On February 2, 2015, the NRC dispatched a Special Inspection Team to the station to review the event.

The Special Inspection Team identified a White finding with an associated violation of Title 10 of the *Code of Federal Regulations* Part 50, Appendix B, Criterion XVI, "Corrective Action," in that Entergy did not identify, evaluate, and correct a significant condition adverse to quality (SCAQ) associated with a failure of the 'A' SRV to open upon manual actuation during a plant cooldown on February 9, 2013, following a loss of offsite power event caused by a winter storm. The failure to take actions to preclude repetition of the SCAQ resulted in

the 'C' SRV failing to open during the January 27, 2015, event described above. More information on this event and the White finding can be found in NRC Inspection Reports 05000293/2015007 and 05000293/2015011 (ADAMS Accession Nos. ML15147A412 and ML15230A217, respectively).

On September 1, 2015, the NRC determined that due to its performance, Pilgrim was moved to the Multiple/Repetitive Degraded Cornerstone Column (Column 4) of the ROP Action Matrix retroactive to the beginning of the first quarter 2015. The entry into Column 4 was caused by the issuance of this White finding in the Mitigating Systems cornerstone while Pilgrim was in the Degraded Cornerstone Column (Column 3) of the ROP Action Matrix for more than five consecutive quarters. Pilgrim had entered the Degraded Cornerstone Column for two White inputs under the Initiating Events cornerstone. Four scrams in 2013 caused two performance indicators in the Initiating Events cornerstone, Unplanned Scrams per 7000 Critical Hours and Unplanned Scrams with Complications, to cross the threshold from Green to White (ML15026A069).

As a result of PNPS's transition into the Multiple/Repetitive Degraded Cornerstone Column (Column 4) of the ROP Action Matrix, the NRC implemented IP 95003, in a phased approach, to ensure that continued operation of the facility was acceptable until the final phase of the inspection could be completed. The final phase of IP 95003 implementation, or Phase 'C,' included a review of the White finding described above, using IP 95001. The results of the IP 95003 Phase 'C' Inspection are documented in NRC Inspection Report 05000293/2016011 (ADAMS Accession No. ML17129A217). As described in Section 4.4b of that inspection report, the NRC determined that the collective issues associated with the methodologies in Entergy's associated root cause evaluation (RCE) represented a significant weakness, such that the objectives of IP 95001 could not be satisfied. The scope of this CAL inspection included a review of Entergy's actions to address the significant weakness associated with the White finding, and to determine if the objectives of IP 95001 could be met. Entergy's response to the RCE concerns was included in the SRV White Finding Area Action Plan item SRV-4.1.

92702 – Follow-up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders

The inspectors reviewed the status of the corrective actions that Entergy had reported completed for 24 of the 156 items listed on Enclosure 2 of the PNPS CAL (EA-17-086) (ADAMS Accession No. ML17214A088). The inspectors also reviewed the status of the area action plans associated with these 24 items, which in accordance with Enclosure 2 of the PNPS CAL included the ODFA and SRV White Finding Area Action Plans. Entergy had reported these two area action plans were complete and effective.

The inspection team examined these areas to determine if:

(1) CAL item corrective actions were completed in a timely manner consistent with their safety significance;
(2) Area action plans were effective at addressing the performance issues identified in the CAL;
(3) CAL performance metrics were appropriate and accurate;
(4) Closure of each CAL item and area action plan was completed in accordance with established PNPS procedural guidance; and,

(5) The SRV White Finding Area Action Plan adequately addressed the weaknesses in Entergy's cause evaluation and corrective actions for NOV 05000293/2015007-02, "Failure to Identify, Evaluate, and Correct 'A' SRV Failure to Open Upon Manual Actuation" (ADAMS Accession Nos. ML15147A412 and ML15230A217) as documented in Sections 4.4 and 4.5 of the IP 95003 Phase 'C' Inspection Report (ADAMS Accession No. ML17129A217).

During this review, the inspectors completed the following specific activities:

(1) Reviewed Entergy's closure packages for each CAL action included in the scope of this inspection.
(2) Reviewed Entergy's closure reports for the ODFA and SRV White Finding Area Action Plans.
(3) Reviewed Entergy's effectiveness reviews and self-assessments completed for the ODFA and SRV White Finding Area Action Plans.
(4) Interviewed 20 senior reactor operators and 10 engineers.
(5) Observed one simulator evaluated scenario and one simulator training scenario.
(6) Reviewed simulator training results reported in the operator crew performance notebooks.
(7) Observed the conduct of daily Operability Determination Challenge Boards (ODCBs).
(8) Reviewed ODCB weekly feedback for each operating crew, and the monthly and quarterly roll-up reports of ODCB operability determination reviews.
(9) Reviewed approximately 100 operability determinations completed between October 2017 and March 2018.
(10) Confirmed the accuracy of the Recovery Plan performance metrics for both the SRV White Finding and the ODFA Area Action Plans.

INSPECTION RESULTS

Observation	95001
Objective 1 (*IP 95001, Section 02.02b)* Entergy performed RCE CR-PNP-2016-01621 in response to the NRC White finding associated with a failure of the 'A' SRV to open upon manual actuation during a plant cooldown on February 9, 2013. As discussed in Section 4.4b of the IP 95003 Phase 'C' inspection report, the NRC determined that the collective issues associated with the methodologies in Entergy's associated RCE represented a significant weakness. This ultimately resulted in Entergy inappropriately assessing the impact of shift manager review rigor, and any associated causal factors. In response to the significant weakness, Entergy completed Revision 3 to the RCE (CR-PNP-2016-1621). Revision 3 to the RCE addressed the problems identified during the IP 95003 Phase 'C' inspection and identified a third root cause for the White finding: the shift manager approved the operability determination for SRV 'A' without performing an adequate review that challenged and validated the results of the determination. The CAL team reviewed the results of the IP 95003 Phase 'C' inspection associated with the 'A' SRV White finding and Entergy's RCE, Revision 3. The team confirmed that Entergy had adequately addressed the collective issues identified by the IP 95003 Phase 'C' inspection team regarding the RCE. The CAL team interviewed approximately 20 shift managers and senior reactor operators and 10 engineers to assess the organizations understanding of the operability determination process improvements and the reinforcement of the specified role of	

the shift manager in the process. Based on these interviews, its review of the revised RCE, and the IP 95003 inspection results, the CAL team concluded that Entergy understood the root and contributing causes associated with the SRV White finding. Therefore, the CAL team concluded that Objective 1 was now satisfied.

Objective 2 (*IP 95001, Sections 02.02d, 02.02e, 02.03a, 02.04a, 02.03c, and 02.04b)*

The IP 95003 Phase 'C' inspection team conducted an independent extent of condition (EoC) and extent of cause (EoCa) review for the 'A' SRV White finding. The team determined that the extent of condition for the failure to identify, evaluate, and correct a SCAQ was narrowly focused on PNPS personnel, and did not evaluate personnel performance at other stations or the corporate offices. Entergy documented this weakness in CR-PNP-2017-00828 and completed several corrective actions that included reviewing Entergy Corporate performance relative to identifying and correcting SCAQs, revising corporate procedures, and initiating fleet-wide actions for training and leadership development in this area.

The IP 95003 Phase 'C' inspection team also determined that Entergy's EoCa review required more evaluation to assess the extent of cause related to the impacts of inadequate shift manager operability review rigor. Entergy expanded the scope of the EoCa for this issue to include all areas that require shift manager quality reviews. Entergy's corrective actions included procedure revisions that now require shift manager approval of limiting condition for operation entries and narrative logs, and also face-to-face sessions between operations management and all senior reactor operators to reinforce expectations associated with the procedure requirements governing review and approval of technical specification surveillance tests, narrative logs, and limiting condition for operation entries.

The IP 95003 Phase 'C' inspection team identified weaknesses in Entergy's consideration of the safety culture traits against the root cause, EoC, and EoCa evaluations. Specifically, the IP 95003 Phase 'C' inspection team identified weaknesses in how some of the safety culture traits had been applied to the issues associated with the operability determination process. As part of Revision 3 to RCE CR-PNP-2016-01621, Entergy re-performed the review of the safety culture traits and assigned traits to the newly identified third root cause, inadequate shift manager operability determination review rigor. Entergy determined that overall, there were 16 safety culture aspects associated with the root and contributing causes for the SRV White finding, and that all aspects would be addressed by the corrective actions already established by the PNPS Recovery Plan.

The CAL team determined that Entergy completed all of its corrective action program requirements for EoC and EoCa for the 'A' SRV White finding and that Entergy's review of the safety culture traits was adequate to satisfy the IP 95001 inspection requirement. Based on the results of the IP 95003 Phase 'C' inspection, Entergy's initial EoC and EoCa reviews, and the additional actions taken to address the IP 95003 Phase 'C' inspection identified weaknesses in EoC and EoCa, the CAL team concluded that the EoC and EoCa for all of the significant performance issues associated with 'A' SRV White finding were identified. Therefore, the CAL team concluded that Objective 2 was now satisfied.

Objective 3 (*IP 95001, Sections 02.03b, 02.04a, and 02.04c)*

The IP 95003 Phase 'C' inspection team determined that Entergy generally completed appropriate corrective actions to preclude repetition of the 'A' SRV White finding. However, the IP 95003 Phase 'C' inspection team identified a weakness in the lack of specific corrective

actions to address shift manager operability determination rigor. As discussed under Objective 1, Entergy completed Revision 3 to the RCE (CR-PNP-2016-1621) to address the significant weakness that was identified by the IP 95003 Phase 'C' inspection team. In this Revision 3 to the RCE, Entergy identified the lack of rigor in shift manager operability determination reviews as a root cause and has completed extensive corrective actions to address this problem. The actions included: (1) revising station procedures to clearly outline the roles and responsibilities of the shift manager in the operability determination process; (2) conducting shift manager and senior reactor operator training on the operability determination process; (3) creating operator aids and templates for the conduct of operability determinations; (4) creating an ODCB to independently assess all operability determinations using specific evaluation criteria; and (5) tracking the quality of crew operability determinations using metrics based on the results of ODCB evaluations. Entergy also performed operations management face-to-face training sessions with all shift manager-qualified individuals. The face-to-face sessions reinforced management expectations regarding the conduct of timely and rigorous shift manager reviews for operability and functionality determinations commensurate with the significance of the issue. This action was scheduled to recur semi-annually, until the 'A' SRV RCE effectiveness review determined the corrective action plan was effective and shift manager performance was acceptable. In March 2018, Entergy completed the effectiveness review and determined the corrective action was effective based on satisfactory operability determination metrics.

The CAL team interviewed approximately 20 shift managers and senior reactor operators and reviewed a sample of 100 completed operability determinations to independently assess the effectiveness of the operability determination process improvements and the reinforcement of the specified role of the shift manager in the process. Based on the results of these activities and the documentation of the additional corrective actions Entergy completed to address the lack of rigor in shift manager operability determination reviews, the CAL team concluded that the corrective actions Entergy had completed to address and preclude repetition of the 'A' SRV White finding were effective. Therefore, the CAL team concluded that Objective 3 was now satisfied.

Objective 4 (*IP 95001, Sections 02.03a, 02.04a, 02.03b, 02.04a, 02.03c, 02.04b, and 02.04c)*

As described in the results of the IP 92702 inspection described below, the CAL team determined that all corrective actions for the SRV White finding were complete and effective. The CAL team concluded that Objective 4 was now satisfied.

Observation	92702

CAL Item Closure

Based on the actions taken by the licensee, data evaluated by the team, and observations and interviews performed onsite, the team concluded the actions listed below were effective. Therefore, the following actions are closed (a narrative description of each item is listed in Enclosure 1 to the PNPS CAL (ADAMS Accession No. ML17214A088)):

- Operability Determinations and Functionality Assessments (ODFA) - 1.2, 1.3, 1.4, 1.5, 1.6, 2.2, 3.1, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8
- Safety Relief Valve (SRV) White Finding – 1.1, 1.2, 3.1, 3.2, 3.3, 3.4, 4.1, 5.1, 5.2

CAL Area Action Plan Summary Review

The inspectors concluded that the individual CAL items described above and the associated area action plans were adequately completed and were effective in achieving the associated performance improvement objectives described in the PNPS Recovery Plan.

Based on this conclusion, the ODFA and the SRV White Finding Area Action Plans listed in Enclosure 2 to the PNPS CAL are closed.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On May 3, 2018, the inspectors telephonically presented the CAL follow-up inspection results to Mr. Brian Sullivan, Site Vice President, and other members of PNPS staff.

DOCUMENTS REVIEWED

CAL Item Closure Packages

ODFA-1.2	ODFA-5.2	SRV-1.2
ODFA-1.3	ODFA-5.3	SRV-3.1
ODFA-1.4	ODFA-5.4	SRV-3.2
ODFA-1.5	ODFA-5.5	SRV-3.3
ODFA-1.6	ODFA-5.6	SRV-3.4
ODFA-2.2	ODFA-5.7	SRV-4.1
ODFA-3.1	ODFA-5.8	SRV-5.1
ODFA-5.1	SRV-1.1	SRV-5.2

Procedures

1.3.34, Operations Administrative Policies and Processes, Responsibilities, Revision 157
1.3.34, Operations Administrative Policies and Processes, Responsibilities, Revision 139
EN-OP-104, Operability Determination Process, Revision 14
EN-OP-104, Operability Determination Process, Revision 13
EN-OP-104, Operability Determination Process, Revision 6
EN-LI-118, Cause Evaluation Process, Revision 26
EN-LI-102, Corrective Action Program, Revision 32
1.3.37, Post Trip Review, Revision 36
EN-LI-123-12-PNP-RC, Comprehensive Recovery Plan and Performance Metrics, Revision 2
EN-FAP-LI-005, Recovery Project Adminstration Controls, Revision 4
EN-FAP-LI-002, Project Review Board Guide, Revision 5
EN-LI-104, Self Assessment and Benchmark Process, Revision 13
EN-LI-121, Trending and Performance Review Process, Revision 24
JA-PI-01, Analysis Manual, Revision 6
EN-WM-100, Work Request Generation, Screening and Classification, Revision 13
EN-OP-115, Conduct of Operations, Revision 24
Operations Policy No. 5, Operability Determinations (Operability Template), Revision 0
EN-OP-115-09, Log Keeping, Revision 2

Audits/Self Assessments/Surveillances

LO-PNPLO-2016-00089, Operability Determination Performance Improvement Plan – Corrective Action Effectiveness Review, 1/12/2017
LO-PNPLO-2018-00010, Self Assessment for NRC Inspection of Area Action Plan Operability Determination and Functionality Assessment (Human Performance Focus Area, 2/5/2018
QS-2018-PNPS-02, NIOS Assessment of Operability Determination/Functionality Assessment (ODFA) and SRV White Finding Recovery Problem Areas fro Readiness for NRC Inspection, Revision 1

Condition Reports

CR-PNP-2013-00825	CR-PNP-2018-02132	CR-PNP-2018-02141
CR-PNP-2018-00112	CR-PNP-2018-02133	CR-PNP-2018-02142
CR-PNP-2018-02125	CR-PNP-2018-02134	CR-PNP-2018-02143
CR-PNP-2018-02126	CR-PNP-2018-02135	CR-PNP-2018-02144
CR-PNP-2018-02127	CR-PNP-2018-02136	CR-PNP-2018-02145
CR-PNP-2018-02128	CR-PNP-2018-02137	CR-PNP-2018-02146
CR-PNP-2018-02129	CR-PNP-2018-02138	CR-PNP-2018-02147
CR-PNP-2018-02130	CR-PNP-2018-02139	CR-PNP-2018-02148
CR-PNP-2018-02131	CR-PNP-2018-02140	CR-PNP-2018-02149

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CR-PNP-2018-02232
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CR-PNP-2018-02234
CR-PNP-2018-02235
CR-PNP-2018-02236
CR-PNP-2018-02237
CR-PNP-2018-02238
CR-PNP-2018-02239
CR-PNP-2018-02240
CR-PNP-2018-02241
CR-PNP-2018-02242
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CR-PNP-2018-02251
CR-PNP-2018-02252
CR-PNP-2018-02253
CR-PNP-2018-02254
CR-PNP-2018-02255
CR-PNP-2018-02256
CR-PNP-2018-02257
CR-PNP-2018-02258
CR-PNP-2018-02259
CR-PNP-2018-02260

Operability Determinations

CR-PNP-2017-00009
CR-PNP-2017-00033
CR-PNP-2017-00086
CR-PNP-2017-00204
CR-PNP-2017-00215
CR-PNP-2017-00239
CR-PNP-2017-00257
CR-PNP-2017-00494
CR-PNP-2017-00499
CR-PNP-2017-00714
CR-PNP-2017-00961
CR-PNP-2017-01101
CR-PNP-2017-01236
CR-PNP-2017-01363
CR-PNP-2017-01405
CR-PNP-2017-01531
CR-PNP-2017-01709
CR-PNP-2017-01747
CR-PNP-2017-01846
CR-PNP-2017-02194
CR-PNP-2017-02276
CR-PNP-2017-02381
CR-PNP-2017-02434
CR-PNP-2017-02622
CR-PNP-2017-02785
CR-PNP-2017-02900
CR-PNP-2017-02994
CR-PNP-2017-03541
CR-PNP-2017-03694
CR-PNP-2017-03952
CR-PNP-2017-04208
CR-PNP-2017-04563
CR-PNP-2017-04768

CR-PNP-2017-05067	CR-PNP-2017-09211	CR-PNP-2017-12571
CR-PNP-2017-05075	CR-PNP-2017-09589	CR-PNP-2017-12603
CR-PNP-2017-05137	CR-PNP-2017-09683	CR-PNP-2017-12603
CR-PNP-2017-05255	CR-PNP-2017-09684	CR-PNP-2017-12623
CR-PNP-2017-05390	CR-PNP-2017-09690	CR-PNP-2018-00045
CR-PNP-2017-05531	CR-PNP-2017-09699	CR-PNP-2018-00093
CR-PNP-2017-05586	CR-PNP-2017-09838	CR-PNP-2018-00112
CR-PNP-2017-05801	CR-PNP-2017-09925	CR-PNP-2018-00169
CR-PNP-2017-05903	CR-PNP-2017-10010	CR-PNP-2018-00257
CR-PNP-2017-06029	CR-PNP-2017-10242	CR-PNP-2018-00258
CR-PNP-2017-06197	CR-PNP-2017-10374	CR-PNP-2018-00306
CR-PNP-2017-06380	CR-PNP-2017-10482	CR-PNP-2018-00476
CR-PNP-2017-07320	CR-PNP-2017-10647	CR-PNP-2018-00489
CR-PNP-2017-07390	CR-PNP-2017-10660	CR-PNP-2018-00553
CR-PNP-2017-07658	CR-PNP-2017-10833	CR-PNP-2018-00666
CR-PNP-2017-07658	CR-PNP-2017-11023	CR-PNP-2018-00667
CR-PNP-2017-07745	CR-PNP-2017-11430	CR-PNP-2018-00923
CR-PNP-2017-08038	CR-PNP-2017-11612	CR-PNP-2018-00958
CR-PNP-2017-08724	CR-PNP-2017-12093	CR-PNP-2018-01034
CR-PNP-2017-08849	CR-PNP-2017-12105	CR-PNP-2018-01101
CR-PNP-2017-08971	CR-PNP-2017-12214	CR-PNP-2018-01417
CR-PNP-2017-09154	CR-PNP-2017-12516	CR-PNP-2018-01565

Work Orders

WO-PNP-00435308 WO-PNP-00435311 WO-PNP-00435314 WO-PNP-00435316

Training Material

AFG-2016-01, Simulator Based Exercise, 09/22/2016
SES-2018-01, LORT/NRC Simulator Exam Scenario, 03/06/2018
TQF-210-DD03-GRADE, LOR Simulator Crew Performance Evaluation Grading Criteria , Revision 4
TQF-201-IM05, Remedial Training Plan, 01/09/2017
O-RQ-04-01-230, Training Material: Operability Determinations, Revision 1
O-RQ-04-01-238, Training Material: Operability Determination Functionality Assessment Fundamentals, Revision 0
O-RQ-06-02-177, LOR Cycle 7 Scenario #1 Loss 355 line, SSW leak, Chloride Intrusion, Revision 0
SES-2018-01, LORT/NRC Simulator Exam Scenario, 03/06/2018
TQF-201-IM05, Remedial Training Plan, 01/09/2017
AFG-2016-01, Simulator Based Exercise, 09/22/2016
O-RQ-04-01-257, LOR Cycle 3 2017, HIT Plant Status Update, Revison 1

Effectivenes Reviews

PNPLO-2016-0002 CA-53, Effectiveness Review CR-PNP-2016-01621 RC-3 CAPR-1, CA -79, 3/7/2018
PNPLO-2016-0002 CA-35, Effectiveness Review CR-PNP-2016-01621 RC-2 CAPR-1, CA-13, 3/6/2018
PNPLO-2016-0002 CA-34, Effectiveness Review CR-PNP-2016-01621 RC-1 CAPR-1 CA-11, 10/20/2017
PNPLO-2016-0002 CA-70, Effectiveness Review for the Operability Determination and Functionality Assessment (ODFA) Area Action Plan, 3/6/2018

Miscellaneous

ODCB Daily Meeting Minutes March 19, 2018
ODCB Daily Meeting Minutes March 20, 2018
ODCB Daily Meeting Minutes March 21, 2018
ODCB Daily Meeting Minutes March 22, 2018
ODCB Daily Meeting Minutes January 9, 2018
ODCB Daily Meeting Minutes January 10, 2018
ODCB Daily Meeting Minutes January 11, 2018
Overnight CR Report 2018-03-16
Overnight CR Report 2018-03-17
Overnight CR Report 2018-03-18
Overnight CR Report 2018-03-19
CR-PNP-2016-01621, PNPS, Root Cause Evaluation, Failure to classify SRV A Inoperable, Revision 3
CR-PNP-2018-0093, Pilgrim Station Scram Report – January 4, 2018,
CR-PNP-2016-1340, Comprehensive Recovery Plan Operability Determination and Functionality Assessment Area Action Plan Closure Report, March 9, 2018
CR-PNP-2016-1621, Comprehensive Recovery Plan Area Action Plan Safety Relief Valve White Finding Closure Report, March 9, 2018
Operator Aid #16-06, EN-OP-104 Entry Requirements, March 6, 2018
Operator Aid #16-07, Immediate Operability Determination, March 6, 2018
CR-PNP-2017-7015, Human Performance Evaluation, Missed Reportability Determination for CR-PNP-2017-6380

Confirmatory Action Letter Item Status

Line Item	Area Action Plan	CAL Item	Inspection Report Number	Closed
1	Nuclear Safety Culture	NSC-1.1		
2	Nuclear Safety Culture	NSC-1.2		
3	Nuclear Safety Culture	NSC-1.3		
4	Nuclear Safety Culture	NSC-1.4		
5	Nuclear Safety Culture	NSC-1.5		
6	Nuclear Safety Culture	NSC-1.6		
7	Nuclear Safety Culture	NSC-1.7		
8	Nuclear Safety Culture	NSC-1.8		
9	Nuclear Safety Culture	NSC-1.10		
10	Nuclear Safety Culture	NSC-2.2		
11	Nuclear Safety Culture	NSC-2.3		
12	Nuclear Safety Culture	NSC-3.1		
13	Nuclear Safety Culture	NSC-3.2		
14	Nuclear Safety Culture	NSC-3.3		
15	Nuclear Safety Culture	NSC-3.4		
16	Nuclear Safety Culture	NSC-3.5		
17	Nuclear Safety Culture	NSC-3.6		
18	Nuclear Safety Culture	NSC-3.7		
19	Nuclear Safety Culture	NSC-3.8		
20	Nuclear Safety Culture	NSC-4.1		
21	Nuclear Safety Culture	NSC-4.2		
22	Nuclear Safety Culture	NSC-5.1		
23	Nuclear Safety Culture	NSC-5.2		
24	Nuclear Safety Culture	NSC-5.3		
25	Nuclear Safety Culture	NSC-5.4		
26	Nuclear Safety Culture	NSC-6.1		
27	Nuclear Safety Culture	NSC-7.1		
28	Nuclear Safety Culture	NSC-8.1		
29	Nuclear Safety Culture	NSC-8.6		
30	Nuclear Safety Culture	NSC-8.8		
31	Nuclear Safety Culture	NSC-8.9		
32	Nuclear Safety Culture	NSC-8.10		
33	Nuclear Safety Culture	NSC-8.21		
34	Nuclear Safety Culture	NSC-8.22		
35	Nuclear Safety Culture	NSC-8.25		
36	Nuclear Safety Culture	NSC-8.26		
37	Nuclear Safety Culture	NSC-8.27		
38	Nuclear Safety Culture	NSC-8.28		
39	Nuclear Safety Culture	NSC-8.29		
40	Corrective Action Program	CAP-1.1	05000293/2017010	Y

Line Item	Area Action Plan	CAL Item	Inspection Report Number	Closed
41	Corrective Action Program	CAP-1.2		
42	Corrective Action Program	CAP-1.3		
43	Corrective Action Program	CAP-1.4		
44	Corrective Action Program	CAP-1.5		
45	Corrective Action Program	CAP-1.7		
46	Corrective Action Program	CAP-1.8		
47	Corrective Action Program	CAP-1.9		
48	Corrective Action Program	CAP-1.10		
49	Corrective Action Program	CAP-1.11		
50	Corrective Action Program	CAP-2.1		
51	Corrective Action Program	CAP-2.2		
52	Corrective Action Program	CAP-2.3		
53	Corrective Action Program	CAP-3.1		
54	Corrective Action Program	CAP-3.2		
55	Corrective Action Program	CAP-4.2		
56	Corrective Action Program	CAP-4.3		
57	Procedure Use and Adherence	PUA-1.1	05000293/2017010	Y
58	Procedure Use and Adherence	PUA-1.2	05000293/2017010	Y
59	Procedure Use and Adherence	PUA-1.3	05000293/2017010	Y
60	Procedure Use and Adherence	PUA-1.4	05000293/2017010	Y
61	Procedure Use and Adherence	PUA-1.6		
62	Procedure Use and Adherence	PUA-2.2		
63	Procedure Use and Adherence	PUA-2.3		
64	Procedure Use and Adherence	PUA-2.4		
65	Procedure Use and Adherence	PUA-2.5		
66	Procedure Use and Adherence	PUA-3.1		
67	Procedure Use and Adherence	PUA-3.2		
68	Procedure Use and Adherence	PUA-3.3		
69	Procedure Use and Adherence	PUA-3.4		

Line Item	Area Action Plan	CAL Item	Inspection Report Number	Closed
70	Procedure Use and Adherence	PUA-4.1	-	
71	Procedure Use and Adherence	PUA-4.2		
72	Procedure Use and Adherence	PUA-4.3		
73	Procedure Use and Adherence	PUA-5.1		
74	Procedure Use and Adherence	PUA-5.2		
75	Procedure Use and Adherence	PUA-5.7		
76	Procedure Use and Adherence	PUA-5.8		
77	Procedure Use and Adherence	PUA-5.9		
78	Operability Determinations and Functionality Assessments	ODFA-1.1	05000293/2017010	Y
79	Operability Determinations and Functionality Assessments	ODFA-1.2	05000293/2018010	Y
80	Operability Determinations and Functionality Assessments	ODFA-1.3	05000293/2018010	Y
81	Operability Determinations and Functionality Assessments	ODFA-1.4	05000293/2018010	Y
82	Operability Determinations and Functionality Assessments	ODFA-1.5	05000293/2018010	Y
83	Operability Determinations and Functionality Assessments	ODFA-1.6	05000293/2018010	Y
84	Operability Determinations and Functionality Assessments	ODFA-2.2	05000293/2018010	Y
85	Operability Determinations and Functionality Assessments	ODFA-3.1	05000293/2018010	Y
86	Operability Determinations and Functionality Assessments	ODFA-5.1	05000293/2018010	Y

Line Item	Area Action Plan	CAL Item	Inspection Report Number	Closed
87	Operability Determinations and Functionality Assessments	ODFA-5.2	05000293/2018010	Y
88	Operability Determinations and Functionality Assessments	ODFA-5.3	05000293/2018010	Y
89	Operability Determinations and Functionality Assessments	ODFA-5.4	05000293/2018010	Y
90	Operability Determinations and Functionality Assessments	ODFA-5.5	05000293/2018010	Y
91	Operability Determinations and Functionality Assessments	ODFA-5.6	05000293/2018010	Y
92	Operability Determinations and Functionality Assessments	ODFA-5.7	05000293/2018010	Y
93	Operability Determinations and Functionality Assessments	ODFA-5.8	05000293/2018010	Y
94	Operations Department Standards and Leadership	OPS-1.1		
95	Operations Department Standards and Leadership	OPS-1.2		
96	Operations Department Standards and Leadership	OPS-1.4		
97	Operations Department Standards and Leadership	OPS-1.6		
98	Operations Department Standards and Leadership	OPS-1.7		
99	Operations Department Standards and Leadership	OPS-2.2		
100	Operations Department Standards and Leadership	OPS-3.1		
101	Operations Department Standards and Leadership	OPS-3.2		
102	Operations Department Standards and Leadership	OPS-4.1		
103	Operations Department Standards and Leadership	OPS-4.2		
104	Risk Recognition and Decision Making	RRDM-1.1		

Line Item	Area Action Plan	CAL Item	Inspection Report Number	Closed
105	Risk Recognition and Decision Making	RRDM-1.2		
106	Risk Recognition and Decision Making	RRDM-1.3		
107	Risk Recognition and Decision Making	RRDM-2.1		
108	Risk Recognition and Decision Making	RRDM-3.1		
109	Risk Recognition and Decision Making	RRDM-3.2		
110	Risk Recognition and Decision Making	RRDM-3.3		
111	Risk Recognition and Decision Making	RRDM-4.3		
112	Risk Recognition and Decision Making	RRDM-4.8		
113	Risk Recognition and Decision Making	RRDM-4.9		
114	Procedure Quality	PQ-1.1	Reviewed - 05000293/2017010	N
115	Procedure Quality	PQ-2.1	05000293/2017010	Y
116	Procedure Quality	PQ-2.2	05000293/2017010	Y
117	Procedure Quality	PQ-3.1	05000293/2017010	Y
118	Procedure Quality	PQ-3.2	05000293/2017010	Y
119	Procedure Quality	PQ-3.3	05000293/2017010	Y
120	Procedure Quality	PQ-5.1	05000293/2017010	Y
121	Procedure Quality	PQ-5.2	Reviewed - 05000293/2017010	N
122	SRV White Finding	SRV-1.1	05000293/2018010	Y
123	SRV White Finding	SRV-1.2	05000293/2018010	Y
124	SRV White Finding	SRV-1.3	05000293/2017010	Y
125	SRV White Finding	SRV-2.1	05000293/2017010	Y
126	SRV White Finding	SRV-3.1	05000293/2018010	Y
127	SRV White Finding	SRV-3.2	05000293/2018010	Y
128	SRV White Finding	SRV-3.3	05000293/2018010	Y
129	SRV White Finding	SRV-3.4	05000293/2018010	Y
130	SRV White Finding	SRV-4.1	05000293/2018010	Y
131	SRV White Finding	SRV-5.1	05000293/2018010	Y
132	SRV White Finding	SRV-5.2	05000293/2018010	Y
133	Engineering Programs	EP-1.1	05000293/2017010	Y
134	Engineering Programs	EP-1.2		
135	Engineering Programs	EP-2.1		
136	Engineering Programs	EP-2.2		
137	Engineering Programs	EP-2.3		
138	Engineering Programs	EP-2.4		

Line Item	Area Action Plan	CAL Item	Inspection Report Number	Closed
139	Engineering Programs	EP-3.1		
140	Engineering Programs	EP-4.1		
141	Equipment Reliability	ER-1.1	05000293/2017010	Y
142	Equipment Reliability	ER-1.2	05000293/2017010	Y
143	Equipment Reliability	ER-1.3		
144	Equipment Reliability	ER-2.1		
145	Equipment Reliability	ER-2.2		
146	Equipment Reliability	ER-3.1		
147	Equipment Reliability	ER-3.2		
148	Equipment Reliability	ER-3.3		
149	Work Management	WM-1.1		
150	Work Management	WM-1.2		
151	Work Management	WM-1.3		
152	Work Management	WM-2.1		
153	Work Management	WM-2.2		
154	Work Management	WM-3.1		
155	Work Management	WM-3.3		
156	Work Management	WM-4.2		