



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

February 25, 2014

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

**SUBJECT: BROWNS FERRY NUCLEAR PLANT - NRC SUPPLEMENTAL INSPECTION
REPORT 05000296/2014009**

Dear Mr. Shea:

On January 24, 2014, the U. S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection pursuant to Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," at your Browns Ferry Nuclear Plant, Unit 3. The enclosed inspection report documents the inspection results, which were discussed with Mr. Keith Polson and other members of your staff during the exit meeting on January 24, 2014.

In accordance with the NRC Reactor Oversight Process Action Matrix, this supplemental inspection was performed to follow-up on a white Initiating Events Cornerstone Performance Indicator (PI), in Unplanned Scrams per 7,000 Critical Hours for Unit 3, which crossed the Green to White threshold in the first quarter of 2013. TVA verbally informed the NRC of their staff's readiness for this inspection on November 19, 2013.

The objectives of the supplemental inspection were to provide assurance that: 1) the root causes and the contributing causes of risk-significant performance issues were understood; 2) the extent of condition and extent of cause of risk-significant performance issues were identified; and 3) the licensee's corrective actions for risk-significant performance issues were or will be sufficient to address and prevent recurrence of the root and contributing causes.

Based on the results of this inspection, we concluded that you have adequately completed a root cause analysis of the issue, and have identified appropriate corrective actions to prevent recurrence of the issue. No findings were identified concerning the root cause evaluation and corrective actions.

The NRC has determined that inspection objectives stated above have been met. Therefore, in accordance with IMC 0305, "Operating Reactor Assessment Program," the performance issue will not be considered in the Action Matrix after the end of the first quarter 2013. Although this PI will not be considered an Action Matrix input effective the second quarter of 2013, this letter is not an assessment follow-up letter as defined in IMC 0305 and Browns Ferry Unit 3 will remain in the Regulatory Response Column. It should be noted that a preliminary White apparent violation (AV 05000259, 260, 296/2013005-02) is currently outstanding, as documented in inspection report 05000259/2013005, 05000260/2013005, 05000296/2013005.

J. Shea

2

In accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding," 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's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Jonathan H. Bartley, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket No.: 50-296
License No.: DPR-68

Enclosure: NRC Inspection Report 05000296/2014009
w/Attachment - Supplementary Information

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3

Letter to Joseph W. Shea from Jonathan H. Bartley dated February 25, 2014

SUBJECT: BROWNS FERRY NUCLEAR PLANT - NRC SUPPLEMENTAL INSPECTION
REPORT 05000296/2014009

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**U.S. NUCLEAR REGULATORY COMMISSION
REGION II**

Docket No.: 50-296

License No.: NPF-68

Report No.: 05000296/2014009

Licensee: Tennessee Valley Authority (TVA)

Facility: Browns Ferry Nuclear Plant, Unit 3

Location: Corner of Shaw and Nuclear Plant Roads
Athens, AL 35611

Dates: January 21, 2014, through January 24, 2014

Inspector: L. Pressley, Resident Inspector, Browns Ferry

Approved by: Jonathan H. Bartley, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Enclosure

SUMMARY

Inspection Report (IR) 05000296/2014009; 1/21/2014 – 1/24/2014; Browns Ferry Nuclear Plant, Unit 3; Supplemental Inspection - Inspection Procedure (IP) 95001

This supplemental inspection was conducted by a resident inspector. 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.

Cornerstone: Initiating Events

The NRC staff performed this supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," to assess the licensee's evaluations associated with four unplanned reactor scrams that occurred from May 22, 2012, through February 25, 2013, and caused the Initiating Events Cornerstone Performance Indicator (PI), Unplanned Scrams per 7,000 Critical Hours, to cross the safety significance threshold from Green-to-White in the first quarter of 2013.

During this supplemental inspection, the inspector determined that the licensee performed a comprehensive individual evaluation of each of the four reactor scrams and then performed a collective evaluation of the four reactor scrams to determine if there were underlying causes that were common to the four scrams. The licensee concluded that the root cause for the scrams was less than adequate rigor in the review of vendor supplied design change products. The licensee concluded that the root cause was common to only two of the unplanned automatic scrams, which occurred on May 22 and 29, 2012. The licensee concluded that the contributing cause of inadequate use of the corrective action program was common to the unplanned manual scram, which occurred on May 24, 2012, and the complicated unplanned automatic scram which occurred on February 25, 2013.

Given the licensee's acceptable performance in addressing the event, the white performance indicator will only be considered in assessing plant performance for the first quarter of 2013 in accordance with the guidance in Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program." Inspectors will review the licensee's implementation of corrective actions as part of baseline inspections.

Findings

No findings were identified.

Enclosure

REPORT DETAILS

4. OTHER ACTIVITIES

4OA4 Supplemental Inspection (95001)

.01 Inspection Scope

The NRC staff performed this supplemental inspection in accordance with inspection procedure (IP) 95001 to assess the licensee's evaluation of a white performance indicator (PI) which affected the initiating events cornerstone in the reactor safety strategic performance area on Unit 3. The inspection objectives were:

- To provide assurance that the root and contributing causes of risk-significant performance issues were understood
- To provide assurance that the extent of condition and extent of cause of risk-significant performance issues were identified
- To provide assurance that the licensee's corrective actions for risk-significant performance issues were or will be sufficient to address the root and contributing causes and to prevent recurrence.

The licensee entered the Regulatory Response Column of the NRC's Action Matrix for Unit 3 in the first quarter of 2013 as a result of a White PI. This PI was associated with unplanned scrams per 7,000 critical hours and was characterized as having White safety significance based on crossing the Green-to-White threshold of more than three scrams in four quarters. There were three automatic and one manual scram during four quarters. One of the automatic scrams was considered complicated. The NRC issued inspection reports which documented the initial event follow-up inspections of the individual scrams that contributed to crossing the Green-to-White threshold of more than three scrams in four quarters. The following is a list of those four inspection reports:

1. IR 05000296/2012004, Section 4OA3.2, Unit 3 Automatic Reactor Scram due to De-Energization of Reactor Protection System from Actuation of 3A Unit Station Service Transformer Differential Relay on May 22, 2012
2. IR 05000296/2012005, Section 4OA3.2, Unit 3 Manual Reactor Scram During Startup Due to Multiple Control Rod Insertion on May 24, 2012
3. IR 05000296/2012004, Section 4OA3.4, Unit 3 Automatic Reactor Scram Due to an Actuation of a Main Transformer Differential on May 29, 2012
4. IR 05000296/2013004, Section 4OA3.2, Automatic Reactor Shutdown Due to an Actuation of the Reactor Protection System from a Turbine Trip on February 25, 2013

The licensee informed the NRC on November 19, 2013, that they were ready for the supplemental inspection. In preparation for the inspection, the licensee performed a root cause analysis (RCA) in association with problem evaluation report (PER) 716774.

Enclosure

The inspector reviewed the licensee's RCA in addition to other preceding evaluations. The inspector reviewed corrective actions that were taken or planned to address the identified causes. The inspector also held discussions with licensee personnel to ensure that the root and contributing causes and the contribution of safety culture components were understood and corrective actions taken or planned were appropriate to address the causes and prevent recurrence.

.02 Evaluation of the Inspection Requirements

02.01 Problem Identification

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

The licensee's RCA for problem evaluation report (PER) 716774 provided details of each of the RCA's from the four scrams. The licensee's RCA determined the scrams were unplanned and therefore self-revealing. The inspector determined that the RCA for PER 716774 explicitly identified the conditions under which the scrams occurred and how they were identified.

- b. IP 95001 requires that the inspection staff determine that the evaluation documented how long the issue existed and prior opportunities for identification.

The inspector determined that the licensee's RCA detailed the sequence of events, specifically when and how the scrams occurred. Inspector noted that the licensee recognized the impact of the four unplanned scrams on the performance indicators (PI's) of the reactor oversight process (ROP). The RCA stated that opportunities to identify and take appropriate actions to circumvent the crossing of the PI threshold were not available given the three scrams occurred within a seven day window following a refueling outage. The inspector also determined that the licensee performed an adequate review and analysis of prior opportunities of identification through analysis of the individual scrams as well as previous similar events which were detailed in the RCA for PER 716774.

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

The licensee's RCA recognized that the four scrams exceeded the PI threshold of greater than three unplanned scrams per 7,000 critical hours causing the indicator to go to white. Also included in the RCA was the licensee's own safety consequences evaluation. This evaluation was a probabilistic risk analysis (PRA) which calculated the aggregate risk impact of the four scrams. The licensee's PRA evaluation concluded that both the non-specific scram evaluation and specific initiating event analysis resulted in a very small change in risk, which was equivalent to very low safety significance.

The inspector determined that the licensee's RCA for PER 716774 appropriately evaluated and documented the risk consequences and compliance concerns associated with the issue.

d. Findings

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 the problem was evaluated using a systematic methodology to identify the root and contributing causes.

The licensee used the following systematic methods to complete the RCA for PER 716774:

- Event and causal factor charting
- Collective analysis
- Barrier analysis
- Safety culture analysis
- Organizational and programmatic deficiencies analysis
- Common cause analysis
- Gap analysis

The inspector determined that the licensee's RCA for PER 716774 evaluated and identified root and contributing causes using a systematic methodology.

- b. IP 95001 requires that the inspection staff determine that the root cause evaluation was conducted to a level of detail commensurate with the significance of the problem.

The licensee's RCA included multiple evaluation methods which are described in section 02.02.a.

The licensee's RCA documented the root cause was less than adequate rigor in the review of vendor supplied design change products. This root cause was only applicable to two of the scrams included in the analysis which occurred on May 22 and May 29, 2012. The licensee did consider alternate potential root causes as part of their analysis of the four scrams. The possible alternate root causes were determined to not meet the licensee's criteria to be identified as a root cause. As a result, the alternate root causes were either identified as contributing causes or other associated causes with appropriate analysis and corrective actions.

The licensee determined that the contributing causes included:

- Inadequate use of the corrective action program
- Knowledge deficiencies in development of post maintenance test instructions
- Inadequate procedure use and adherence

Based upon the review of the extensive analysis performed for the licensee's RCA for PER 716774, the inspector determined that the root cause evaluation was conducted to a level of detail commensurate with the significance of the problem.

- c. IP 95001 requires that the inspection staff determine that the root cause evaluation included a consideration of prior occurrences of the problem and knowledge of prior operating experience (OE).

The licensee's RCA included a detailed discussion of previous similar events, which included a review of relevant internal (TVA) and external industry OE. The licensee determined that the issues identified in the RCA were similar to available internal and external OE. The licensee previously initiated PER's: 571836, 607051, 610391 and 703283 to indicate that the scrams on May 22 and May 29, 2012, and February 25, 2013, were OE preventable. The licensee did not identify any specific corrective actions that would have addressed the specific issues identified in the RCA.

Based on the licensee's detailed evaluation and conclusions, the inspector determined that the licensee's RCA for PER 716774 included a consideration of prior occurrences of the problem and knowledge of prior OE.

- d. IP 95001 requires that the inspection staff determine that the root cause evaluation addressed the extent of condition and the extent of cause of the problem.

The licensee's extent of condition review analyzed ROP indicators at all three Browns Ferry units in addition to other TVA nuclear sites. The licensee's analysis concluded that the potential exists to exceed other performance indicator thresholds. In order to address the extent of condition with all PI's the licensee previously initiated PER's 601479 and 550072 to address further loss of available PI margin prior to crossing a threshold, and ensure appropriate actions are taken to monitor and improve the available PI threshold margin.

The licensee's extent of cause review was based upon the root cause of less than adequate rigor in the review of vendor supplied design change products. The licensee extended this cause to the general application of rigor, or thoroughness and completeness when performing site tasks. The licensee determined that all programs, processes and activities could be affected by this cause. The licensee previously initiated PER 516437 in order to improve and reinforce management's expectations for high standards for all site processes.

The inspector determined that the licensee's RCA for PER 716774 addressed the extent of condition and the extent of cause of the issue.

- e. IP 95001 requires that the inspection staff determine that the root cause, extent of condition, and extent of cause evaluations appropriately considered the safety culture components as described in IMC 0305.

The licensee's RCA performed an evaluation to determine if there were deficiencies in the safety culture. Each aspect defined in IMC 0305 was evaluated to determine if it was associated with the causes identified within the RCA. The licensee concluded that the fundamental performance attributes associated with the RCA were contained within the human performance (HU) and problem identification and resolution (PI&R) areas. The licensee addressed the identified safety culture issues through corrective actions associated with each root and contributing cause.

The inspector determined that the licensee appropriately considered the safety culture components with regard to the issues identified within the RCA for PER 716774.

f. Findings

No findings were identified.

02.03 Corrective Actions

- a. IP 95001 requires that the inspection staff determine that appropriate corrective actions are specified for each root and contributing cause or that the licensee has an adequate evaluation for why no corrective actions are necessary.

There were no specific immediate corrective actions associated with PER 716774. Immediate and interim actions for each of the individual scrams were addressed within the respective PER's and were collectively detailed within the RCA for PER 716774. In general, specific corrective actions to address the causes associated with PER 716774 corresponded to previously identified PER's and their associated corrective actions to prevent recurrence.

To address the root cause of less than adequate rigor in the review of vendor supplied design change products, the licensee took the following actions:

- Revised the procedures associated with reviews and implementation of design changes to provide a clear standard for performance
- Revised the modifications procedure to include documentation of OE and actions taken to mitigate any associated risk
- Revised the human performance tools procedure to incorporate a focus on risk factors, mitigation strategies, and decision making.

To address the contributing cause of inadequate use of the corrective action program, the licensee took actions to implement a corrective action program of excellence. In order to accomplish this action the licensee is incorporating procedure changes with focus on accountability, and updating the training program and qualification requirements for analysts. To address the contributing cause of knowledge deficiencies in development of post maintenance test instructions, the licensee took actions to revise the associated modification procedures and train affected personnel on single point vulnerabilities. To address the contributing cause of inadequate procedure use and adherence, the licensee performed training to reinforce expectations on accountability and proper behaviors with regard to procedure use and adherence.

Enclosure

The inspector determined that the corrective actions utilized to address each root and contributing cause for the RCA for PER 716774 were appropriate.

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

The licensee assigned due dates for all corrective actions associated with the RCA for PER 716774 as required by procedure NPP-SPP-22.303, PER Analysis, Actions, Closures and Approvals. This procedure required that corrective actions be completed with reasonable quickness and that due dates for actions were established commensurate with the impact on nuclear safety or as is required to meet regulatory commitments. The Inspector reviewed the assigned due dates for all the corrective actions associated with the RCA for PER 716774. All the actions for the RCA were considered complete by the licensee.

The inspector determined that in general the corrective actions for the RCA for PER 716774 were reasonably prioritized with consideration of the risk significance and regulatory compliance.

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

The licensee established due dates for all corrective actions associated with the RCA for PER 716774. All the actions for the RCA were considered complete by the licensee. The inspector reviewed the scheduled dates that implemented and completed the corrective actions.

The inspector determined that the licensee established an appropriate schedule to implement and complete the corrective actions associated with the RCA for PER 716774.

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

The licensee established an effectiveness review plan as part of the RCA for PER 716774. This review plan will determine the effectiveness of the corrective actions to prevent recurrence by using both qualitative and quantitative assessment measures as follows:

The qualitative review will consist of a snapshot assessment of technical reviews of vendor supplied products. This assessment will include input from an external subject matter expert. The quantitative review will be demonstrated by each Browns Ferry Unit achieving the following:

- Less than or equal to one reactor scram per 7,000 critical hours of operation
- Less than or equal to three unplanned power changes greater than 25 percent power per 7,000 critical hours of operation
- No site clock resets for technical rigor that resulted in plant trips and a steadily declining trend in overall site clock resets for technical rigor for a time period of six months

The inspector determined that both quantitative and qualitative measures of success had been developed for determining the effectiveness of the corrective actions to prevent recurrence in the RCA for PER 716774.

- e. IP 95001 requires that the inspection staff determine that the corrective actions planned or taken adequately address a Notice of Violation (NOV) that was the basis for the supplemental inspection, if applicable.

This supplemental inspection was performed in response to a White PI input for Unit 3 in the Unplanned Scrams per 7,000 Critical Hours of the Initiating Events Cornerstone. Given that a NOV was not part of the basis for this supplemental inspection this section was not applicable.

- f. Findings

No findings were identified.

02.04 Evaluation of IMC 0305 Criteria for Treatment of Old Design Issues

The licensee did not request credit for self-identification of an old design issue; therefore, the risk-significant issue was not evaluated against the IMC 0305 criteria for treatment of an old design issue.

40A6 Exit Meeting

On January 24, 2014, the inspector presented the inspection results to Mr. Keith Polson and other members of his staff. The inspector asked the licensee if any of the material examined during the inspection should be considered proprietary. The licensee did not identify any proprietary information.

ATTACHMENT: SUPPLEMENTARY INFORMATION

Enclosure

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee

M. Acker, Licensing Engineer
J. Bashore, Licensing Contractor
P. Donahue, Assistant Director Site Engineering
G. Doyle, Director Browns Ferry 95003 Team
R. Myatt, Corporate Engineering
R. Pochron, Program Manager Maintenance Support
K. Polson, Site Vice President
T. Scott, Performance Improvement Manager

ITEMS OPENED, CLOSED AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Procedures:

BP-259, NPG TCM Role and Oversight of Supplemental Personnel, Rev. 11
BP-286, Risk Reviews of Plant Modification, Rev. 1
DS-M18.1.3, Engineering Procurement & Vendor Technical Quality, Rev. 3
NEDP-5, Design Document Reviews, Revs. 8, 10
NPG-SPP-03.1, Corrective Action Program Rev. 7
NPG-SPP-03.1.4, Corrective Action Program Screening and Oversight, Revs. 9, 15
NPG-SPP-03.1.7, PER Analysis, Actions, Closures and Approvals, Rev. 10
NPG-SPP-06.9.3, Post-Modification Testing, Rev. 4
NPG-SPP-07.7, NPG TCM Role and Oversight of Supplemental Personnel, Rev. 0
NPG-SPP-09.3, Plant Modifications and Engineering Change Control, Revs, 12, 16
NPG-SPP-09.3.2, Risk Ranking, Compensating Actions, and Augmented Reviews, Rev. 1
NPG-SPP-18.2.2, Human Performance Tools, Revs. 5, 7
NPG-SPP-22.202, Human Performance Tools, Rev. 5
NPG-SPP-22.300, Corrective Action Program Rev. 0
NPG-SPP-22.302, Corrective Action Program Screening and Oversight, Rev. 1
NPG-SPP-22.303, PER Analysis, Actions, Closures and Approvals, Rev. 1

Root Cause Analyses (RCA's):

RCA 516437, Management and Leadership Standards, Rev. 3
RCA 555573, Wrong Initial Relay Setting Leads to Unit 3 Trip, Rev. 2
RCA 558183, Current Transformer Reverse Polarity Cause Unit 3 Scram, Rev. 4
RCA 558437, During Unit 3 Startup While Resetting Half Scram on RPS B Half Scram was Received on RPS A due to a Spike on the A IRM, Rev. 2
RCA 562343, Excessive Number of Unit 3 Unplanned Scrams, Rev. 2

RCA 687732, Unit 3 Feedwater Long Cycle Return Line Connection Separation from the Miscellaneous Drain Header Resulting in Automatic Scram Due to Loss of Vacuum, Rev. 3
 RCA 716774, Excessive Number of Unit 3 Unplanned Scrams, Rev. 3

Problem Evaluation Reports (PER's):

PER 369800, NRC Issued a Red Violation for Unit 1
 PER 435440, Issues Identified by the Mid-Cycle Integrated Performance Assessment
 PER 475878, Ineffective CAP across NPG
 PER 484548, Human Performance Shortfalls
 PER 516437, Management and Leadership Standard Shortfalls
 PER 543131, 95003 Fundamental Problem: Technical Rigor
 PER 550072, U1 HPCI Changed From Green to White Under MSPI Reporting
 PER 555573, Unit 3 Reactor Scram
 PER 558183, U3 Reactor Scram
 PER 558437, Unit 3 Manual Scram During Startup
 PER 558975, 5/24/13 Unit 3 Reactor Scram
 PER 562343, Unit 3 Unplanned Scrams PI will change from Green to White
 PER 571836, RCA 555573 was determined to be OE Preventable
 PER 601479, ROP KPIs > 50% Green
 PER 607051, PER 558183 – OE Preventable
 PER 610391, PER 558183 Identified Root Cause #3 OE Preventable
 PER 687732, Automatic Scram due to RPS Actuation
 PER 703283, RCA 687732 on Unit 3 Vacuum Loss scram OE Preventable
 PER 716774, Unit 3 ROP Indicator for Unplanned Scrams Changed from Green to White
 PER 736217, Evaluation Report: Common Cause and Significant Issue Gap Analyses of Degraded Mitigating Systems Cornerstones and Events with Low to Moderate Impact on Safety, Rev. 0
 PER 795417, BFN-PI-F-13-002 Self-Assessment Deficiency 1
 PER 808848, BFN ENG-S-14-013 Deficiency 1
 PER 808849, BFN ENG-S-14-013 Deficiency 2
 PER 808850, Learning Opportunity 1, BFN-ENG-S-14-013
 PER 836744, Inaccurate Statement Regarding Effectiveness Review Appear in the report for RCA 716774
 PER 838064, Observation for Unplanned Scrams White Performance Indicator Inspection

Miscellaneous Reports:

BFN-ENG-S-13-008, Snap-Shot Self-Assessment Report, Technical Human Performance Tools Used within Engineering after the Technical Human Performance (THU) Procedure has been Implemented, Rev. 0
 BFN-ENG-S-13-026, Snap-Shot Self-Assessment Report, Technical Pre-Job Briefs Used in Engineering to Identify Precursors and the Use of Human Performance Tools that are put in Place to Prevent Errors, Rev. 0
 BFN-ENG-S-14-013, (EFR 562343-019), Snap-Shot Self-Assessment Report, Dates 10/29-31/2013
 BFN-MNT-S-13-002, Snap-Shot Self-Assessment, (PER 558183), Protective Relay Group Procedure Revisions
 BFN-PI-F-13-002, Browns Ferry Leadership Performance Management Biennial Assessment (BP-289) and PER 516437-024 Interim Effectiveness Review

BFN IIP CAP Action Closure Report, Implement Training Identified in CC5-CA-04 IIP CAP PER 369800-172
BFN IIP CAP Action Closure Report, Implement a Corrective Action Program Model of Excellence, IIP CAP PER 475878-001
BFN IIP CAP Action Closure Report, Update TPD-PI Based on Performance Weaknesses Identified, IIP CAP PER 475878-005
BFN IIP CAP Action Closure Report, Revise Existing NPG CAP Procedures, IIP CAP PER 475878-009
BFN IIP CAP Action Closure Report, Roll out Directive on Accountability to First Line Supervisors and Above, IIP CAP PER 484548-053
Common Cause and Significant Issue Gap Analyses of Degraded Mitigating Systems Cornerstones and Events with Low to Moderate Impact on Safety, PER 736217
Effectiveness Review for PER 555573
Effectiveness Review for PER 558183
Nuclear Power Group Performance Improvement TPD-PI, Training Program Description, Rev. 5
TVA Form 41340, (NPG-SPP-09.3.2-1) DCN Consequence / Risk Factor Evaluation
TVA Form 41341, (NPG-SPP-09.3.2-2) DCN Risk Compensating Actions
TVA Root Cause Analysis Training