

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II 245 PEACHTREE CENTER AVENUE NE, SUITE 1200 ATLANTA, GEORGIA 30303-1257

March 17, 2015

Mr. Mano Nazar President and Chief Nuclear Officer Nuclear Division NextEra Energy P.O. Box 14000 Juno Beach, FL 33408-0420

SUBJECT: TURKEY POINT NUCLEAR GENERATING STATION UNITS 3 AND 4 - U.S.

NUCLEAR REGULATORY COMMISSION EVALUATION OF CHANGES, TESTS, AND EXPERIMENTS AND PERMANENT PLANT MODIFICATIONS INSPECTION

REPORT 05000250/2015007 AND 05000251/2015007

Dear Mr. Nazar:

On February 6, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Turkey Point Unit 3 and 4 facilities, and discussed the results of this inspection with Mr. Kiley and other members of your staff. Inspectors documented the results of this inspection in the enclosed inspection report.

The NRC inspectors documented one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements. The NRC is treating this violation as a noncited violation (NCV) consistent with Section 2.3.2.a of the NRC Enforcement Policy.

If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the Turkey Point station.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region II; and the NRC resident inspector at the Turkey Point station.

M. Nazar

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 Public Document Room or from the Publicly Available Records (PARS) component of 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 Engineering Branch 1 Division of Reactor Safety

Docket Nos. 05000250, 05000251 License Nos. DPR-31, DPR-41

Enclosure:

IR 05000250/2015007 and 05000251/2015007 w/Attachment: Supplementary Information

cc: Distribution via Listserv

M. Nazar

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 Public Document Room or from the Publicly Available Records (PARS) component of 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 Engineering Branch 1 Division of Reactor Safety

Docket Nos. 05000250, 05000251 License Nos. DPR-31, DPR-41

Enclosure:

IR 05000250/2015007 and 05000251/2015007 w/Attachment: Supplementary Information

cc: Distribution via Listserv

<u>DISTRIBUTION</u>: RIDSNRRDIRS PUBLIC RidsNrrPMTurkeyPoint Resource

☑ PUBLICLY AVA	AILABLE	☐ NON-PUBLICLY AVAILABLE	BLE	☐ SENSITIVE	☑ NON-SENSITIVE
ADAMS: 🛛 Yes	ACCESSION NUM	IBER: ML15077A138	SUNSI REVIEW	/ COMPLETE ⊠ FC	ORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS	RII:DRS	RII:DRS	RII:DRP	
	TNF1	EJS2	NCC2	JHB1	EJS2 via email	
NAME	T. FANELLI	E. STAMM	N. COOVERT	J. BARTLEY	E. STAMM	
DATE	3/ /2015	3/ /2015	3/ /2015	3/ 17/2015	3/ /2015	
E-MAIL COPY	YES NO	YES NO	YES NO	YES NO	YES NO	

OFFICIAL RECORD COPY

U. S. NUCLEAR REGULATORY COMMISSION REGION II

Docket Nos.: 50-250, 50-251

License Nos.: DPR-31, DPR-41

Report Nos.: 05000250/2015007, 05000251/2015007

Licensee: Florida Power & Light Company (FP&L)

Facility: Turkey Point Nuclear Generating Station Units 3 & 4

Location: 9760 S. W. 344th Street

Homestead, FL 33035

Dates: January 26, 2015, to February 6, 2015

Inspectors: T. Fanelli, Reactor Inspector (Team Leader)

E. Stamm, Senior Reactor Inspector

N. Coovert, Reactor Inspector

Approved by: Jonathan H. Bartley, Chief

Engineering Branch 1

Division of Reactor Safety

SUMMARY

Inspection Report (IR) 05000250/2015007, 05000251/2015007; 01/26/15 – 02/06/15; Turkey Point Nuclear Generating Station Units 3 & 4; NRC Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications.

This report covers a two-week, on-site inspection by three regional inspectors. The inspectors identified one Green non-cited violation (NCV). The significance of inspection findings is indicated by their color (Green, White, Yellow, Red) using the NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Components Within the Cross Cutting Areas," dated December 04, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated January 28, 2013. The Nuclear Regulatory Commission's (NRC's) program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

Green: The NRC identified a Green non-cited violation (NCV) of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the licensee's failure to adequately monitor the performance or condition of the Unit 3 containment atmospheric temperature system against licensee established goals or demonstrate that the performance of the containment atmospheric temperature system was being effectively controlled through preventive maintenance, such that the system remained capable of performing its intended function. Specifically, there were multiple individual component failures on both units since March 2011 and the Unit 3 containment atmospheric temperature system was non-functional from November 5, 2014, to January 17, 2015. In response to the NRC identified issue, the licensee initiated action report (AR) 02023116, and classified the temperature elements into 10 CFR 50.65(a)(1) status on February 23, 2015, under AR 02004990.

The inspectors determined that the performance deficiency was more than minor because it affected the Equipment Performance attribute of the Mitigating Systems cornerstone objective. The licensee did not ensure the availability, reliability, and capability of the Unit 3 containment atmospheric temperature system that was used for emergency operating procedures. The inspectors determined the finding to be of very low safety significance (Green) because it was not a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), it did not represent the loss of a system and/or function, it did not represent an actual loss of function of at least a single train or two separate safety systems out-of-service for greater than its Technical Specifications (TS) allowed outage time, and it did not represent an actual loss of a non-TS equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. The inspectors determined the finding was indicative of present licensee performance and was associated with the cross-cutting aspect of Evaluation, in the area of Problem Identification and Resolution. Specifically, the licensee failed to thoroughly evaluate issues that were identified in the last three years associated with containment atmospheric temperature system failures to ensure that resolutions addressed causes and extent of conditions commensurate with their safety significance. [P.2] (Section 1.b.1)

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R17 <u>Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications</u> (71111.17T)

a. <u>Inspection Scope</u>

<u>Evaluations of Changes, Tests, and Experiments</u>: The team reviewed seven safety evaluations performed pursuant to Title 10 of the *Code of Federal Regulations* (CFR) 50.59, "Changes, tests, and experiments," to determine if the evaluations were adequate and that prior NRC approval was obtained as appropriate. The team also reviewed 13 screenings where licensee personnel had determined that a 10 CFR 50.59 evaluation was not necessary. The team reviewed these documents to determine if:

- the changes, tests, or experiments performed were evaluated in accordance with 10 CFR 50.59 and that sufficient documentation existed to confirm that a license amendment was not required;
- the safety issues requiring the changes, tests or experiments were resolved;
- the licensee conclusions for evaluations of changes, tests, or experiments were correct and consistent with 10 CFR 50.59; and
- the design and licensing basis documentation used to support the change was updated to reflect the change.

The team used, in part, Nuclear Energy Institute (NEI) 96-07, "Guidelines for 10 CFR 50.59 Implementation," Revision 1, to determine acceptability of the completed evaluations and screenings. The NEI document was endorsed by the NRC in Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," dated November 2000.

This inspection constituted 7 evaluation samples and 13 screening and/or applicability determination samples as defined in Inspection Procedure (IP) 71111.17-04.

<u>Permanent Plant Modifications</u>: The team reviewed six permanent plant modifications that had been installed in the plant during the last three years. The modifications reviewed are listed below:

- EC 242408, Containment Spray Pump Full Flow Recirculation Modification, Rev. 0
- EC 242466, PT3-26 GL 2008-01 Vent Valve Installation Inside and Outside Cont., Rev. 1
- EC 249693, 3A and 3C load center circuit breakers replacement, Rev. 2
- EC 249947, TOL heaters replacement for MOV-3-872, Rev. 0
- EC 250386, Add Valve Operator Extension and Hand Wheel to Valve 4-867, Rev. 1
- EC 275133, GL 2008-01 Unit 4 Safety Injection High Vent Point Installations, Rev. 4

The modifications were selected based upon risk significance, safety significance, and complexity. The team reviewed the modifications selected to determine if:

- the supporting design and licensing basis documentation was updated;
- the changes were in accordance with the specified design requirements;
- the procedures and training plans affected by the modification had been adequately updated;
- the test documentation as required by the applicable test programs had been updated; and
- post-modification testing adequately verified system operability and/or functionality.

The team also used applicable industry standards to evaluate acceptability of the modifications and performed walkdowns of accessible portions of the modifications. Documents reviewed are listed in the Attachment.

This inspection constituted six permanent plant modification samples as defined in IP 71111.17-04.

b. Findings

b.1 <u>Failure to Establish a Reasonable Maintenance Effectiveness Demonstration for Unit 3</u> Containment Atmospheric Temperature System

Introduction: The NRC identified a Green non-cited violation (NCV) of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the licensee's failure to adequately monitor the performance or condition of the Unit 3 containment atmospheric temperature system against licensee established goals or demonstrate that the performance of the containment atmospheric temperature system was being effectively controlled through preventive maintenance, such that the system remained capable of performing its intended function. Specifically, there were multiple individual component failures on both units since March 2011 and the Unit 3 containment atmospheric temperature system was non-functional from November 5, 2014, to January 17, 2015.

<u>Description</u>: The containment atmospheric temperature monitoring system included three analog Foxboro Spec 200 instrument loops for each unit. Each instrument loop contained an environmentally qualified resistance temperature detector (RTD) [temperature elements (TEs)-3(4)-6700, -6701, or -6702] inside containment and the analog SPEC 200 temperature transmitter modules outside of containment. The instrument loops supplied the temperature indications to a digital Foxboro distributed control system (DCS) for temperature indications in the control room. The control room operators use these temperature indications while implementing the emergency operating procedures (EOPs) to determine when adverse containment monitoring conditions exist. To provide the EOP function, it was necessary for an entire instrument loop, from the RTD to the DCS, to function properly.

The inspectors reviewed approximately 18 occurrences over the last three years when one or more temperature loops on either unit were non-functional and in many cases for several months at a time. The licensee documented the failures in condition reports, work orders, and/or operator logs; however, they did not assess the failures to determine if the performance of the Unit 3 containment atmospheric temperature system was being effectively controlled through preventive maintenance. As of November 5, 2014, TE-3-6700 was spiking high, and was determined to be non-functional. At the time, the two other channels, TE-3-6701 and TE-3-6702, were already determined to be non-functional. The Unit 3 containment temperature monitoring system remained in this

configuration until January 17, 2015. The licensee documented this system failure in action requests (AR) 2004990 and 2005388, which included the performance of an apparent cause evaluation. The investigation concluded the most probable causes for the multiple failures were aging, obsolescence, reduced reliability of refurbished spare components, and an inadequate preventative maintenance strategy.

The inspectors reviewed the maintenance rule scope bases evaluations for the low safety significant maintenance rule systems, containment normal coolers (system 57) and DCS (system 95). Although both system bases documents included the RTDs, neither of the documents contained licensee-established functional failure criteria for all the components in the containment atmospheric temperature system such that the licensee could effectively monitor the performance of the system. The licensee acknowledged that the containment atmospheric temperature indicators did not have a clearly defined function and associated performance criteria under systems 57 or 95 that allowed the licensee to demonstrate if the performance of the Unit 3 containment atmospheric temperature system was being effectively controlled through preventive maintenance and as a result. The licensee documented the issue in AR 02023116, which determined that the maintenance rule functions which apply for the temperature elements (TEs)-3-6700, -6701, and -6702 were inoperable. Therefore, this condition was considered a maintenance rule functional failure (MRFF) and classified the temperature elements into 10 CFR 50.65(a)(1) status on February 23, 2015, under AR 02004990..

Analysis: The licensee's failure to either monitor the performance or condition of the Unit 3 containment atmospheric temperature system against licensee established goals or to demonstrate that the performance of the containment atmospheric temperature system was being effectively controlled through preventive maintenance, such that the system remained capable of performing its intended functions, was a performance deficiency. This performance deficiency was considered more than minor because it affected the Equipment Performance attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee did not ensure the availability, reliability, and capability of the containment atmospheric temperature system, as indicated by multiple failures and extended unavailability of components needed to perform their intended functions as used in EOPs. The inspectors used IMC 0609, Att. 4, "Initial Characterization of Findings," issued June 19, 2012, for Mitigating Systems, and IMC 0609, App. A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012, and determined the finding to be of very low safety significance (Green) because it was not a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), it did not represent the loss of a system and/or function, it did not represent an actual loss of function of at least a single train or two separate safety systems out-ofservice for greater than its Technical Specifications (TS) allowed outage time, and it did not represent an actual loss of a non-TS equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. The inspectors determined the finding was indicative of present licensee performance and was associated with the cross-cutting aspect of Evaluation, in the area of Problem Identification and Resolution, per IMC 0310, "Components Within the Cross-Cutting Areas." Specifically, the licensee failed to thoroughly evaluate issues that were identified in the last three years associated with containment atmospheric temperature system failures to ensure that resolutions addressed causes and extent of conditions commensurate with their safety significance. [P.2]

Enforcement: Title 10 CFR 50.65 (a)(1), states, in part, that the holders of an operating license shall monitor the performance or condition of SSCs within the scope of the rule as defined by 10 CFR 50.65 (b), against licensee-established goals, in a manner sufficient to provide reasonable assurance that such SSCs are capable of fulfilling their intended functions. Title 10 CFR 50.65 (a)(2) states, in part, that monitoring as specified in 10 CFR 50.65 (a)(1) is not required where it has been demonstrated that the performance or condition of an SSC is being effectively controlled through the performance of appropriate preventive maintenance, such that the SSC remains capable of performing its intended function. Contrary to the above, from the time the licensee first implemented their 10 CFR 50.65 program until February 4, 2015, the licensee failed to monitor the performance or condition of the Unit 3 containment atmospheric temperature system within the scope of the rule as defined by 10 CFR 50.65 (b), against licensee-established goals, in a manner sufficient to provide reasonable assurance that the system was capable of fulfilling its intended function; and failed to demonstrate that the performance or condition of the Unit 3 containment atmospheric temperature system was being effectively controlled through the performance of appropriate preventive maintenance, such that the system remained capable of performing its intended function. The licensee documented the issue in AR 02023116, and classified the temperature elements into 10 CFR 50.65(a)(1) status on February 23, 2015, under AR 02004990. This violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy. This issue is identified as NCV 5000250/2015007-01, Failure to Establish a Reasonable Maintenance Effectiveness Demonstration for Unit 3 Containment Atmospheric Temperature System.

b.2 (Opened) Unresolved Item (URI) 5000250, 251/2015007-02, Potential departure from the Eagle 21 design basis

<u>Introduction</u>: The inspectors identified an Unresolved Item (URI) regarding the licensee's compliance with TS and the design bases for the Eagle 21 digital reactor protection system.

Description: The inspectors reviewed the licensee's 10 CFR 50.59 screening associated with the Eagle 21 modifications for the Thermal Over-Power (OPΔT), Thermal Over-Temperature (OTΔT) trip functions, and the Main Steam Pressure Lead/Lag module. These were documented in engineering change packages 246973 for Unit 3 and 246974 for Unit 4. The Eagle 21 was the computerized portion of the reactor protection system. The inspectors noted that WCAP-12374, "Topical Report Eagle-21 Microprocessor-Based Process Protection System," specified design bases compliance with the following:

- IEEE 279-1971, "Criteria for Nuclear Power Plant Protection Systems,"
- IEEE 603-1980, "IEEE Standard Criteria for Safety Systems for Nuclear Power Generating Stations,"
- RG 1.153-1985, "Criteria for Power, Instrumentation, and Control Portions of Safety Systems,"
- IEEE 7-4.3.2-1982, "Application Criteria for Programmable Digital Computer Systems In Safety Systems of Nuclear Power Generating Stations," and
- RG 1.152-1985, "Criteria for Programmable Digital Computer System Software in Safety-Related Systems in Nuclear Plants."

Following the extended power uprate (EPU), the licensee determined that the four computerized surveillance tests established to verify the Eagle 21 performance requirements for the (OP & OT) ΔT trips would not pass. The inspectors determined that

the licensee changed their procedures to set certain variables to zero in the Eagle 21 computer programs transfer function before performing the surveillance tests. After completing the tests, the licensee re-programmed the zeroed variables to their correct values (the post EPU configurations) before returning the Eagle 21 to service. The inspectors determined that the surveillance tests no longer demonstrated the adequacy of the (OP & OT) ΔT performance requirements or the Eagle 21 final outputs. Because of the inspector's questions, the licensee reevaluated the surveillance testing requirements and captured this issue in AR 2023314, Potential Missed Surveillance on CHs 1, 2 and 3 of Eagle 21. The licensee's reevaluation determined that at least one of the tests, the dynamic function surveillance test, could have been performed with the post EPU configuration. In the AR's prompt operability determination, the licensee determined that the surveillance testing changes did not affect plant operability. The inspectors determined that the Eagle 21 design bases required field changes to follow specific design control measures for safety system criteria and computer system requirements including software development, hardware-software integration, computer system validation, and verification. The inspectors could not verify that the licensee's Eagle 21 modifications met the specified design bases for the protective functions. The inspectors determined that the licensee's failure to perform appropriate surveillance testing of the (OP & OT) ΔT performance requirements as determined by TS was a performance deficiency.

The inspectors opened URI 05000250, 251/2015007-02 to determine if the associated performance deficiency is more than minor. To resolve this URI, the inspectors needs to determine if the design and verification processes used for the modifications met the Eagle 21 design bases requirements in accordance with 10 CFR 50, Appendix B Criterion III. In addition, the inspectors needs to verify the following six items:

- that the as installed (OP & OT) ΔT Eagle 21 configurations were field verified against the design basis from the Updated Final Safety Analysis Report (UFSAR) and TS, in accordance with 10 CFR 50.55a(h)(2), and 10 CFR 50, Appendix B Criterion III,
- that the availability and adequacy of Eagle 21 design bases information was consistent with 10 CFR 50.34(b) and 10 CFR 50.71(e),
- that the Eagle 21 design bases were evaluated in accordance 10 CFR 50.59(c)(2)(i) & (ii),
- the applicability of the licensee's commitment to the designed Eagle 21 (OP & OT) ΔT surveillance testing requirements, trip time response testing,
- that the licensee identified the causes for the failures in the surveillance equipment, and that the licensee can calibrate the equipment to perform the four surveillance tests with post EPU configurations installed in accordance 10 CFR 50, Appendix B Criterion XII, and
- the adequacy of the licensee oversight of Eagle 21 vendor modifications in accordance with 10 CFR 50, Appendix B Criterion VII.

b.3 (Opened) URI 5000251/2015007-03, Required Appendix R Instrumentation Not Functional on Unit 4 Alternate Shutdown Panel

<u>Introduction</u>: The inspectors identified an URI regarding the processes and procedures used to evaluate the impacts of Appendix R steam generator (S/G) pressure indicators (PIs), when two of three PIs used for the Unit 4 alternate shutdown panel (ASP) 4C264 were designated as non-functional for approximately ten months. Specifically, the lack of the two S/G PIs during a fire event that requires main control evacuation may have

adverse impacts on the ability to safely shutdown the plant and the effects of this condition may not have been evaluated.

<u>Description</u>: The USFAR, Revision C26, Appendix 9.6A, Fire Protection Program Report, Section 5.0, Alternate Shutdown Capability, stated, in part, that instrumentation and controls to achieve and maintain hot standby are provided on the ASP and supplemented by manual actions at local stations for achieving cold shutdown. Table 9.6A-2 in Section 5.0, lists components, instruments, and controls required for alternate shutdown. This table included PI-3(4)-1606/-1607/-1608, S/G pressure for A/B/C respectively.

On January 29, 2015, the inspectors identified there were three ARs/works requests (WRs) on 4-PI-1606 and 4-PI-1607. These were two of the three required Appendix R S/G PIs on the Unit 4 ASP. The ARs were initiated on October 16, 2013; April 24, 2014; and July 13, 2014. At the time of discovery, the licensee did not have compensatory actions in place for this condition.

The licensee captured the inspector's concerns in their corrective action program as AR 02027171, and initiated an apparent cause evaluation. As a result, the licensee performed a calibration check on 4-PI-1607 on February 21, 2015, under work order (WO) 40316782-01 and identified that the surveillance was satisfactory. In addition, they performed corrective maintenance on 4-PI-1606 on February 25, 2015, under WO 40262270-02 and returned the PI to functional status.

Based upon the two non-functional S/G PIs on Unit 4 ASP for approximately ten months, the inspectors requested additional information, including the completed apparent cause evaluation, to determine if the licensee followed their processes and procedures required for Appendix R equipment. This issue is unresolved pending further licensee analysis to resolve the issue and to determine if a performance deficiency exists. This issue is identified as URI 5000251/2015007-02, Required Appendix R Instrumentation Not Functional on Unit 4 Alternate Shutdown Panel.

4OA6 Meetings, Including Exit

On February 6, 2015, the team presented inspection results to Mr. Mike Kiley and other members of the licensee's staff. On February 23, the team re-exited the inspection results with Mr. Mike Kiley and members of the licensee's staff. The team verified that any proprietary information retained by the inspectors in order to resolve any violations or unresolved items would be disposed of properly upon resolution of the issues.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

- D. Agrait, Mechanical Design Engineer
- K. Arsenault, ISI/NDE Coordinator
- A. Baez, System Engineer
- P. Barnes, Design Engineering Supervisor
- A. Carrasquillo, System Engineer
- P. Czaya, Licensing
- A. DeLeon, Engineering
- J. Goad, Mechanical Design Engineer
- M. Guth, Supervisor Licensing
- C. Johnson, Civil/Mechanical Design Supervisor
- M. Kiley FPL Site VP
- R. Leavitt, Electrical Design Engineer
- R. Montolvo, Design Engineer
- C. O'Farrill, Nuclear Fuel Manager
- A. Rameriez, System Engineer
- K. Remington, Maintenance Rule Coordinator
- A. Restrepo, PRA Engineer
- S. Roberson FPL E I&C Supervisor
- S. Scroggs, Senior Director of Development
- S. Shafer, Operations Shift Manager
- R. Smith, System Engineer
- B. Stamp FPL Ops Director
- D. Synder, Fleet BACC Program Owner
- B. Tomanto, Engineering
- T. Walch, Instructor ILT
- T. Wendeln, Simulator Instructor

NRC personnel

- R. Dennig, Chief, Office of Nuclear Reactor Regulation (NRR), Containment and Ventilation Branch
- M. Endress, Resident Inspector, Turkey Point
- M. Hamm, Reactor Systems Engineer, NRR
- T. Hoeg, Senior Resident Inspector, Turkey Point
- A. Klett, Project Manager, NRR
- M. Riches, Project Engineer, Region II, Division of Reactor Projects (DRP), Reactor Projects Branch 3
- A. Sallman, Senior Reactor Systems Engineer, NRR
- S. Sandal, Chief, Region II, DRP, Reactor Projects Branch 3

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened and Closed

05000250/2015007-01 NCV Failure to Establish a Reasonable Maintenance

Effectiveness Demonstration for the Unit 3 Containment Atmospheric Temperature System Used in EOPs [Section 1.b.1]

<u>Opened</u>

05000250, 251/2015007-02 URI Potential Departure From the Eagle 21 Design

Basis [Section 1.b.2]

0500025251/2015007-03 URI Required Appendix R Instrumentation Not

Functional on Unit 4 Alternate Shutdown Panel

[Section 1.b.3]

LIST OF DOCUMENTS REVIEWED

10 CFR 50.59 Evaluations

EC 246874, Replacement of Main Steam Isolation Valve Assemblies (Unit 3), Rev. 1

EC 246883, Replacement of Main Steam Isolation Valve Assemblies (Unit 4), Rev. 1

EC 246919, Unit 4 Normal Containment Cooler Replacement, Rev. 0

EC 246920, Add Supplemental Spent Fuel Cooling Capability, Rev. 002

EC 247016, PCM-09148 UNIT 3 replacement of beta annunciator system. Rev. 001

EC 273225, ECC Auto-Start Control Circuit, Rev. 0

EC 273226, restore automatic actuation of third ECC, Rev. 0

10 CFR 50.59 Screenings

EC 242470, RV -3/4-6511 Replacement, Rev. 0

EC 246973, Main steam pressure L/L module install & eagle 21 changes PCM-09077, Rev. 0

EC 246974, U4 EPU main steam L/L module install & eagle 21 changes PCM-09078, Rev. 1

EC 249438, Repowering of the alternate SFP cooling pump motor - EPU U4, Rev. 0

EC 270716, Installation of Vent Valves to the Unit 3 Boration Piping, Rev. 2

EC 272691, Unit 4 ICW/TPCW Header Isolation Valve Actuator Replacement, Rev. 3

EC 272914, U4 degraded cable replacement, Rev. 0

EC 274198, Unit 3 Condensate Storage Tank Vent Repair, Rev. 1

EC 278832, Unit 3 ICW/TPCW Header Isolation Valve Actuator Replacement, Rev. 5

EC 278834, Replace I/P & positioner for HCV-3-121 with a DVC6200 positioner, Rev. 1

EC 279790, Replace I/P & Positioner for HCV 4-121 with a DVC6200, Rev. 2

EC 281866, Pilot for Remediation of High Algae Concentration Cooling Canal System, Rev. 1

EC 281985, Salinity Abatement Management and Overall Water Quality Improvement of the Turkey Point Power Station Cooling Canal System, Rev. 4

Permanent Plant Modifications

EC 242408, Containment Spray Pump Full Flow Recirculation Modification, Rev. 0

EC 242466, PT3-26 GL 2008-01 Vent Valve Installation Inside and Outside Cont., Rev. 1

EC 249693, 3A and 3C load center circuit breakers replacement, Rev. 2

EC 249947, TOL heaters replacement for MOV-3-872, Rev. 0

EC 250386, Add Valve Operator Extension and Hand Wheel to Valve 4-867, Rev. 1

EC 275133, GL 2008-01 Unit 4 Safety Injection High Vent Point Installations, Rev. 4

Licensing Bases Documents

Updated Final Safety Analysis Report Technical Specifications and Bases Technical Requirements Manual

Calculations

18712-202-E03, Multiple High Impedance Fault Analysis for DC circuits, Rev. 0, 11/09/11

25489-000-DBC-C00G-00207, Evaluation of Auxiliary Building Wall & Roof for Valve Extension Penetrations for EC 250386, Rev. 1

32-9090905, Stress Analysis for CS Pumps A & B Discharge and Full Flow Test Lines @ Turkey Point Unit 4, Rev. 005

32-9092400, Turkey Point Unit 4 Containment Spray Test Loop Hydraulic Analyses, Rev. 001

CN-CRA-08-65, Turkey Point Units 3 and 4 (FPL/FLA) LOCA Mass and Energy Release Analysis for the EPU Program, Rev. 1

CN-CRA-08-65, Turkey Point Units 3 and 4 (FPL/FLA) LOCA Containment Response for the EPU Program, Rev. 0

EC 273226, Fan Startup Time Evaluation, Rev. 0

Evaluation of Calculation PTN-4FSE-07-002, "Unit 4 Safety Related AC Electrical Distribution PSB-1, Short Circuit, Voltage Drop and Bus Loading Analysis – ETAP Program, Rev. 0,

FPL-046-PR-01, Failure Modes and Effects Analysis for the Proposed Auto-Start Circuit of the 38 Emergency Containment Cooler, Rev.0

PTN-3FSE-07-001, U3 Safety Related AC Elec. Distr. PSB-1, Short Circuit. Volt. Drop & Bus Load Analysis ETAP PROG., Rev. 02

PTN-BFJE-91-019, AC Emergency Power System Coordination Calculation, Rev. 11

PTN-BFJE-92-023, load center breaker and ground fault relay settings

PTN-BFJE-94-002, 3A & 3C Load Center Breaker Replacement, 02/01/12

PTN-BFJM-90-079, NRC Generic Letter 89-10 MOV Actuator Evaluation, Rev. 31

PTN-BFSI-13-002, Overpower/over temperature DT set case scaling Procedures 3 / 4-PMI-041.6-8

PTN-BSFM-02-006, AOV Program - ICW to TPCW Isolation Valve/Actuator Capacity, Rev. 0 PTN-BSFM-10-010, Spent Fuel Pool System Hydraulic Analysis for Extended Power Uprate, Rev. 1

PTN-BSHC-11-1001, PTN Units 3 and 4 Containment Free Volume Post EPU/AST Modifications, Rev. 0,

PTN-BSHM-09-015, Ventilation and Air Conditioning MWt EPU, Rev. 0 & 2

PTN-BSHM-09-017, Component Cooling System Hydraulic Evaluation for Extended Power Uprate (EPU), Rev. 4

Corrective Action D	<u>ocuments</u>		
AR 00406213	AR 01666335	AR 01860512	AR 01985630
AR 00417328	AR 01709347	AR 01873030	AR 01990010
AR 00485021	AR 01728959	AR 01895877	AR 01993023
AR 00485055	AR 01737417	AR 01902361	AR 01993325
AR 00583154	AR 01737417	AR 01905371	AR 01993603
AR 00591405	AR 01737855	AR 01906121	AR 01996610
AR 00592066	AR 01772046	AR 01909864	AR 01998025
AR 01246973	AR 01779638	AR 01911880	AR 02000146
AR 01246974	AR 01783046	AR 01917506	AR 02001773
AR 01566355	AR 01787088	AR 01929951	AR 02002124
AR 01570004	AR 01791721	AR 01957953	AR 02009999
AR 01606964	AR 01849369	AR 01961031	AR 02015952
AR 01608132	AR 01850784	AR 01977781	AR 02016311
AR 01629446	AR 01855100	AR 01979748	

Procedures

- 0-ADM-547, Gas Accumulation Management Program, Revisions 9A & 9B
- 0-ADM-016, Fire Protection Program, Revisions 8 and 9A
- 0-ADM-213, Technical Specification Related Equipment and Risk Significant SSC Out-of-Service Logbook, Rev. 7
- 0-BD-ONOP-105, Control Room Evacuation, 05/27/04
- 0-ONOP-105, Control Room Evacuation, Rev. 11
- 0-OSP-200.1, Schedule of Plant Checks and Surveillances, Revisions 13 and 14
- 3-ONOP-033.1, Spent Fuel Pit (SFP) Cooling Malfunction, Rev. 9B
- 3-ONOP-033.2, Refueling Cavity Seal Failure, Rev. 3
- 3-ONOP-033.3, Accidents Involving New or Spent Fuel, Rev. 5A
- 3-OP-047, CVCS- Charging and Letdown, Rev. 12B3-OSP-046.3, CVCS-Boration Systems Flow path Verification, Rev. 4
- 3-OSP-201.1, RO Daily Logs, Rev. 15 & 16
- 4-ARP-097.CR.A, Control Room Response Panel A, Window 3/5 Rev. 12
- 4-EOP-ECA-1.1, Loss of Emergency Coolant Recirculation, Rev. 3
- 4-EOP-ES-1.3, Transfer to Cold Leg Recirculation, Rev. 4
- 4-EOP-ES-1.4, Transfer to Hot Leg Recirculation, Rev. 4
- 4-OSP-068.5A, 4A CS Pump Comprehensive Inservice Test, Rev. 3
- 4-OSP-068.5B, 4B CS Pump Comprehensive Inservice Test, Rev. 3
- 4-NOP-300, Alternate Shutdown Panel, Rev. 0
- 4-OSP-300.2, Pre-Staging Equipment and Alternate Shutdown Panel 4C264 Switch and Instrumentation Alignment Check, Rev. 1

Completed Procedures:

- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 6/26/14 to 6/30/14
- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 7/14/14
- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 7/17/14
- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 7/18/14
- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 7/20/14
- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 7/23/14 to 7/25/14
- 3-OSP-201.1, RO Daily Logs, Rev. 15, Attachment 7, 7/27/14
- 4-OSP-068.5, Comprehensive Containment Spray System Inservice Test, 11/23/09
- 4-OSP-068.5A, 4A CS Pump Comprehensive Inservice Test, 2/1/12
- 4-OSP-068.5A, 4A CS Pump Comprehensive Inservice Test, 2/7/14

```
4-OSP-068.5A, 4A CS Pump Comprehensive Inservice Test, 5/2/14
```

4-OSP-068.5B, 4B CS Pump Comprehensive Inservice Test, 4/20/12

4-OSP-068.5B, 4B CS Pump Comprehensive Inservice Test, 6/11/14

4-OSP-300.2, Pre-Staging Equipment and Alternate Shutdown Panel 4C264 Switch and Instrumentation Alignment Check, dates 09/07/13, 10/06/13, 12/02/13, 12/29/13, 01/26/14, 02/23/14, 03/23/14, 04/25/14, 05/17/14, 06/14/14, 07/13/14, 08/10/14, 09/07/14, 10/28/14, 11/30/14, 12/27/14, and 01/25/15

Drawings

5610-M-202, Primary and Refueling Water Piping Plans & Sections, Rev. 12

5610-M-3016, Fire Protection System, Sheet 5, Rev. 28

5610-M-430-204, Charging Pump Pressure Discharge Flow & CVCS Hand Controls, Rev. 6

5613-M-3062, Safety Injection System, Sheet 2, Rev. 23

5613-M-3047, Chemical and Volume Control System, Sheet 1, Rev. 22

5613-M-3047, Chemical and Volume Control System, Sheet 2, Rev. 57

5613-M-3047, Chemical and Volume Control System, Sheet 3, Rev. 23

5614-M-3047, Chemical and Volume Control System, Sheet 1, Rev. 22

5614-M-3047, Chemical and Volume Control System, Sheet 2, Rev. 65

5614-M-3047, Chemical and Volume Control System, Sheet 3, Rev. 23

5614-M-3062, Safety Injection System, Sheet 1, Rev. 37

5614-M-3062, Safety Injection System, Sheet 2, Rev. 22

5614-M-3068, Containment Spray System, Sheet 1, Rev. 21

5614-E-26, Elementary SDTA Valves, Sheet 50A, Rev. 3

5614-M-3072, Main Steam System, Sheet 1, Rev. 40

Miscellaneous Documents

5610-000-DB-004.13, LOCA Containment Integrity, 1/17/08

5610-000-DB-004.16.1, Fuel Handling Accidents, 1/8/08

5610-030-DB-001, Component Cooling Water System, 4/17/13

5610-055-DB-001, Emergency Containment Coolers, 4/17/13

5610-055-DB-002, Emergency Containment Coolers, 4/17/13

5610-062-DB-001, Safety Injection System, 4/17/13

5610-068-DB-001, Containment Spray System, 4/17/13

5610-072-DB-001, Main Steam Isolation Valve Assemblies, 4/17/13

5610-M-722, Appendix R Safe Shutdown Analysis, Rev. 51

5610-M-722A, Nuclear Safety Capability Fire Shutdown Analysis Basis Document, Rev. 2

5610-M-722B, Nuclear Safety Capability Fire Safe Shutdown Analysis (FSSA) Fire Area MM, Rev. 1

6918778-LOC 121, Summary of Unit 3 Cycle 26 Core Reload & Non-EPU Plant Modifications Lesson Plan, 12/1/11

Appendix R Safe Shutdown Analysis Manual Action List, Action 311, Rev. 31

Assessment of Seismic Stress due to Actuator Weight Increase on POV-3-4882/4883

Columbus Chemical Industries Inc. Safety Data Sheet for Hydrogen Peroxide (10% w/w), Product No. 8836, 12/03/12

Equipment Qualification Documentation Package 1001 Environmental Qualification Generic Approach and Treatment of Issues, Rev. 25, 9/8/14

FCN-FPLO-40536, Eagle 21 Tuning constants Change and Software Modifications for U3 EOU, 11/02/11

FPL046-PR-01, Project Report for Failure Modes and Effects Analysis for the Proposed Auto-Start Circuit of the 3B Emergency Containment Coolers, Rev. 0 FPL-11-87, Letter From Westinghouse to Mr. C. O'Farrill, Operability Assessment Addressing the EPITOME Computer Code Issue for the Turkey Point LOCA Mas and Energy Releases, 3/11/11

FPL-12-137, Letter From Westinghouse to Mr. A. Katz, Assessment of Impact due to Change in Containment Heat Sinks, 4/25/12

J-2680, Supplemental Spent Fuel Pit Heat Exchangers 3E208B & 4E208B, 3/14/11

Long-Term Algae Control Evaluation, Rev. 0

Maintenance Rule Bases Information Final Scope Evaluation, System 072-SB-04, Main Steam, 11/06/13

Material Safety Data Sheet for EarthTec®, EPA Reg. No. 64962-1, 1/14

NEETPX-019-PI-001, Cooling Water System Algae Control Pilot Study Plan at Turkey Point, Rev. 0

Operator's Risk Report, 2/3/15

PTN 6902121, Operations Training – Emergency Core Cooling – HHSI, 1/16/14

PTN Algae Control Interim Report, 05/28/14

SD-021, Emergency Core Cooling System, 6/15/12

Work Orders

38024388-01, RV 3-6511 Install Different RV Per MSP 09-007 Safety Related, 8/3/12

38024388-02, RV 3-6511 Prefab Welded Downstream Piping & Test New, 4/20/12

38024395-01, RV 4-6511: Implement EC 242470, 3/31/13

38024395-02, RV 4-6511: Prefab for EC 242470, 12/17/12

38026834-01, RHR System Piping – Request to UT RHR Pipe Before Mod, 3/17/09

38026835-01, RHR/SI System Piping Inside Containment – Request to Laser Scan Various Pipes, 3/23/09

38026836-01, SI System Piping for Gas Entrapment – Request to UT SI Pipe Before Head Lift, 3/17/09

39001827-01, Install Full Flow Recirc Mod 08-043 for the Cont. Spray Pump, 6/19/12

39005546-01, 3/4" Vent VIv for GL 2008-01 SI Iso, 3-1495, 3/30/09

39005547-01, 3/4" Vent VIv for GL 2008-01 RHR Iso, 3-1499, 3/31/09

39005548-01, 3/4" Vent VIv for GL 2008-01 RHR Iso, 3-1498, 3/31/09

39005549-01, 3/4" Vent VIv for GL 2008-01 SI Iso, 3-1496, 3/31/09

39005760-01, 3/4" Vent VIv for GL 2008-01 RHR Iso, 3-1497, 3/31/09

39005819-01, 3/4" Vent VIv for GL 2008-01 SI Iso, 3-1500, 3/31/09

39009690-01, RHR ALT LO Head Si to Cold Legs Motor Operated Valve Operator, 10/18/10

39020860-11, Full Flow Recirc Line, 11/1/09

40003627-04, EPU/P-3-496 bench calibrate TMD801 module, 05/24/12

40011000-03, 3T8, "Vent" Tank Repairs per Engineering Instructions, 2/16/12

40012720-01, Annunciator input contact configuration, 12/02/11

40033233-20, U4 Annunciator Replacement Pre outage Pre-Fabrication, 12/21/12

40067462-05, 30105 BRK IMPLEMENT EC 249693 for 3A Breaker Replacement, 06/16/12

40067462-12, 30112 BRK IMPLEMENT EC 249693 FOR 3A Breaker Replacement, 05/29/12

40069768-12, EPUV/EC-246874 -MOV-3-1400 Perform Diagnostic Testing, 4/13/12

40069768-36, EPU/EC 246874 -Support/Perform 3-PTP-072.6 on 3A MS, 4/24/12

40069768-17, EPU/EC-246874 -POV-3-2604 Perform Diagnostic Testing, 5/16/12

40069768-22, EPU/EC-246874 -Support 3-PTP-072.18 Dynamic Stroking MSBV, 8/11/12

40069769-08, EPUV/EC-246874 -MOV-3-1401 Perform Diagnostic Testing, 4/13/12

40069769-19. EPU/EC 246874 -Support/Perform 3-PTP-072.7 ON 3B MS. 4/24/12

40069769-09, EPU/EC-246874 -POV-3-2605 Perform Diagnostic Testing, 5/15/12

40069770-08, EPUV/EC-246874 -MOV-3-1402 Perform Diagnostic Testing, 4/16/12

40069770-17, EPU/EC 246874 -Support/Perform 3-PTP-072.8 on 3C MS, 4/24/12

```
40069770-09, EPU/EC-246874 -POV-3-2606 Perform Diagnostic Testing, 5/16/12
40071137-01, EPU/EC-246973 install test ERPOMS in rack 3QR1. 6/6/12
40071137-15, EPU/EC-246973 install test ERPOMS in rack 3QR11. 6/8/12
40071137-33, EPU/EC-246973 post PMT validation of TI-3-432A,B,C, & D, 08/29/12
40077796-29. EPU/EC-246974 install test ERPOMS in rack 4QR1. 2/22/13
40086155-06, Splice New Cables To Existing Cables (Back feed Not Required), 2/7/13
40086155-24, MH430 Splice New Cables To Existing Cables, 2/7/13
40087738-02, EPU/EC 246883 -Support 4-PTP-072.6 (4A MSIV), 2/14/13
40087738-03, EPU/EC 246883 -Support 4-PTP-072.7 (4B MSIV), 2/14/13
40087738-04, EPU/EC 246883 -Support 4-PTP-072.8 (4C MSIV), 2/14/13
40087738-07, EPU/EC 246883 -Support TI-246883-01 (4A MSIV), 1/7/13
40087738-08, EPU/EC 246883 -Support TI-246883-02 (4B MSIV), 1/12/13
40087738-09, EPU/EC 246883 -Support TI-246883-03 (4C MSIV), 1/12/13
40089591-01, Install New Vent Valve for Piping in the Scope of GL 2008-01, 4-1495, 3/15/13
40089592-01, Install New Vent Valve for Piping in the Scope of GL 2008-01, 4-1496, 1/30/13
40089592-04, Install New Vent Valve for Piping in the Scope of GL 2008-01, 4-1496, 3/15/13
40092251-01, 3-1495 Implement EC 242466 Rev. I, 5/29/12
40092251-02, 3-1495 Implement EC 242466 Rev. I, 5/28/12
40092251-03, 3-1496 Implement EC 242466 Rev. I, 6/12/12
40092251-04, 3-1497 Implement EC 242466 Rev. I, 5/22/12
40092251-05, 3-1498 Implement EC 242466 Rev. I, 5/29/12
40092251-06, 3-1499 Implement EC 242466 Rev. I, 5/29/12
40092251-07, 3-1500 Implement EC 242466 Rev. I, 5/25/12
40093039-01, Install New Vent Valve for Piping per Scope of EC -242466, 6/14/12
40093899-01, U3 STEAM Air Eject Loop Calibration, 05/17/12
40103402-02, EPU/EAC-273225 Wire Run From CV-3-2908 TO MCC 3B (3B08), 1/19/12
40103402-10, EPU/EAC-273225 BRKR 30820 Breaker Modification, 03/03/12
40103491-21, EPU/EC-273225 Calibration of Relays, 1/30/12
40103491-29, EPU/EAC-273225 Breaker 30820 ,Follow-Up Verifications, 4/22/12
40119493-05, EPU/EC-273226 Calibrate New Agastat Relays, 11/16/12
40125939-03, EC 272691 -POV 4-4883 Coat New Actuator, 9/24/14
40125939-01, EC 272691 -POV 4-4883 Replace Actuator, 9/30/14
40142938-37, EPU/EC-247048 scale, recalibration &loop, 6/17/12
40145053-02, EPU/Implement EC-250386 4-867 Valve Operator Extension, 1/27/13
40157513-01, EPU/EC273225 Post Functional Check Installations, 5/17/12
40158491-01, EPU/SCP-main steam pressure lead/lag and Eagle 21CNG, 5/28/12
40166654-05, EPU/DCS additional overall (Final) PMT of various ECs, 4/11/13
40223031-01, EPU/MCC 4D BRKR 40805 wire missing (4A ECC 4V30A) EC 273226, 3/20/13
40239457-01, POV-3-4882 ICW/TPCW Isolation Actuator Replacement, 1/9/14
40239461-01, POV-3-4883 ICW/TPCW Isolation Actuator Replacement, 3/28/14
40239467-01, HCV-3-121 Replace I/P & positioner with DCV6000, 4/20/14
40262270-02, PI-4-1606, ALT SHUTDOWN PANEL 4A S/G PRESS IND OUT OF, 02/25/15
40316782-01, PI-4-1607, GAUGE DEVIATES >30# FROM PI-4-484, 02/21/15
40322355-01, Install Temp Pipe from Deep Water Well #3 to Intake Canal, 7/7/14
```

Work Requests

94080564, Alternate Shutdown Panel 4A S/G Press Indicator Out of Spec, 08/09/13

94082137, Procedure Deviation, 09/07/13

94083023, PI-4-1606 Alt. SD Panel 4A SG Pressure Indication, 09/24/13

94085597, Steam Generator A Pressure Indicator PI-4-1606 Erratic, 11/03/13

94096051, PI-4-1607, Gauge Deviates >30# From PI-4-484, 04/24/14

Condition Reports generated as a result of the inspection

AR 02021821, Boric Acid Build-Up on 4-202A From Active Leak at 4-120B, 1/29/15

AR 02022582, Operability Screen to AR 02021821, 2/2/15

AR 02023116, Maintenance Rule Scoping for TE-*-6700/6701/6702, 2/4/15

AR 02028300, Follow Up to AR 2027171, 02/25/2015

AR 02029051, 10 CFR 50.59 Screening Lacks Rigor, 02/28/2015

AR 02021104, Ladder inadequately located in guarded equipment SFP HX Room, 1/29/15

AR 02021529. Insulation missing from main steam line non-return check valve, 1/30/15

AR 02022874, Temp Mod SFP Cooling Config Control ECO Not Released, 2/3/15

AR 02022937, Untimely Initiation WO Actions for an Active Boric Acid Leak, 2/3/15

AR 02023282, NRC Observation: Trending Containment Equivalent Hours, 2/4/15

AR 02027171, Non-Functional U4 ASP SG Pressure Indicators, 02/23/2015