



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-14-136

July 24, 2014

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Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
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Atlanta, Georgia 30303-1257

Browns Ferry Nuclear Plant, Unit 1
Renewed Facility Operating License No. DPR-33
NRC Docket No. 50-259

Subject: **Confirmatory Action Letter Tier 2 Commitments Related to the Browns Ferry Integrated Improvement Plan**

- References:
1. Letter from TVA to NRC, "Commitments Related to the Browns Ferry Integrated Improvement Plan," dated August 9, 2013
 2. Letter from NRC to TVA, "Confirmatory Action Letter - Browns Ferry Nuclear Plant, Units 1, 2, And 3, Commitments Related To The Integrated Improvement Plan," dated August 22, 2013 [EA 13-185]
 3. Letter from NRC to TVA, "Browns Ferry Nuclear Plant – Confirmatory Action Letter and Severity Level III 10 CFR 50.9 Violation Follow-Up Inspection Report 05000259/2013014, 05000260/2013014, and 05000296/2013014," dated January 27, 2014 [EA 11-018, EA 11-252, and EA 13-185]
 4. Letter from TVA to NRC, "Confirmatory Action Letter Tier 2 Commitments Related to the Browns Ferry Integrated Improvement Plan," dated July 2, 2014

In Reference 1, the Tennessee Valley Authority (TVA) submitted to the Nuclear Regulatory Commission (NRC) commitments associated with continuing efforts to improve performance at the Browns Ferry Nuclear Plant (BFN). Those commitments were specific to certain actions in the BFN Integrated Improvement Plan (IIP) and consisted of Tier 1 (short-term) and Tier 2 (long-term) actions.

Reference 2 documented the NRC review of these commitments, confirmed them as Confirmatory Action letter (CAL) commitment items, and outlined specific requirements for NRC follow-up inspections to assess adequate implementation of Tier 1 and Tier 2 commitment items.

Reference 3 documented the NRC review of TVA's commitments, including the schedule for completion of items and planned key activities, and determined that TVA's actions, when implemented would provide NRC with the necessary assessment bases to evaluate transition of BFN Unit 1 out of Column 4 of the Agency Action Matrix. Reference 3 also documented the NRC supplemental inspection and closure of the CAL Tier 1 commitment items.

The purpose of this letter is to inform the NRC that subsequent to the Reference 4 notification of the completion of 12 of the 21 commitment action items addressed on the CAL Tier 2 list of commitments provided in Reference 1, TVA has completed 8 additional commitment action items. In accordance with the requirements of Reference 2, this correspondence also includes the bases for closure of commitment items in the context of the internal TVA reviews established in the IIP.

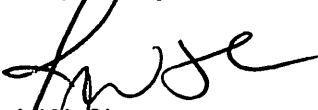
The following list of Tier 2 commitment action items have been completed, and closure details are provided in the Enclosure to this letter.

- Commitment No. 20 - Resource Management (RM)
- Commitment No. 21 - Strategic Equipment Management (SEM)
- Commitment No. 23 - Equipment Programs & System Management (EPSM)
- Commitment No. 25 - Operational Focus (OF)
- Commitment No. 26 - Management & Leadership Standards (MLS)
- Commitment No. 27 - Work Management (WM)
- Commitment No. 28 - Equipment Performance Monitoring & Trending (EPMT)
- Commitment No. 30 - Procedure Instruction & Quality (PIQ)

The closure of the remaining Tier 2 commitment action item is expected prior to its commitment date, and an additional letter will address this closure. With regard to the closeout of Fundamental Problems (FPs), TVA committed to assess the effectiveness of the IIP actions and close the FPs in accordance with Procedure 95003-007, "Project Review Boards." This procedure required all closed actions for each FP to be reviewed by BFN's Closure Review Board. These closed actions were also reviewed collectively by BFN's Corrective Action Review Board, which replaced the Effectiveness Review Challenge Board described in Reference 1.

There are no new regulatory commitments made in this letter. Should you have any questions concerning this submittal, please contact Jamie L. Paul, Nuclear Site Licensing Manager at (256)729-2636.

Respectfully,



J. W. Shea
Vice President, Nuclear Licensing

Enclosure: List of CAL Tier 2 Regulatory Commitments and Bases for Closures

cc (Enclosure):

NRC Senior Resident Inspector - Browns Ferry Nuclear Plant

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ENCLOSURE

Tennessee Valley Authority

Browns Ferry Nuclear Plant, Unit 1

List of CAL Tier 2 Regulatory Commitments and Bases for Closures

REGULATORY COMMITMENTS

| Commitment No. | IIP PER Action No. | Commitment Description | Commitment Due Date |
|--------------------|--------------------|---|---------------------|
| Tier 2 Commitments | | | |
| 20 | 755599-020 | <p>Close the "Resource Management" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>20 - RM Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Revised BP-264, "Nuclear Business Management Process," to develop/implement a strategic, multi-year planning calendar process that includes current and future impacts to the sites' resources and organizational capacity</p> <p>Provided training or process exemptions for Browns Ferry Nuclear Plant (BFN) Radiation Protection technicians within the accredited training program to close the gaps identified in the assessment of missed initial training classes</p> <p>Reviewed the Critical Skills Management Process to identify if an enhancement can list qualified mentors for the skills required for Programs and Components engineers</p> <p>Evaluated the need for an additional "Fix It Now" supervisor to maintain continuity between rotating managers and to improve efficiency</p> <p>Presented to the appropriate Site and Corporate Senior Management Team a pilot plan for consolidating procedure writers into a single site organization</p> <p>Reviewed the 2013 Business plan to identify any items that will not be completed as planned or that will be added and processed an "NPG Business Plan Change Control Form" for any initiatives that will not be completed</p> <p>Performed an impact assessment of the remaining open IIP actions against core work load and site activities</p> <p>Created a team with members from stakeholder organizations to implement changes to the hiring process to decrease time to fill position vacancies and to reduce the burden to managers participating in the process</p> <p>Created/added to Fleet Metrics Report a metric that addresses the number and age of open positions, by department, to enable oversight and accountability for the hiring process</p> <p>Revised NPG-SPP-02.8, "Integrated Trend Review", to incorporate a resource</p> | 07/31/2014 |

REGULATORY COMMITMENTS

| Commitment No. | IIP PER Action No. | Commitment Description | Commitment Due Date |
|----------------|--------------------|---|---------------------|
| | | <p>management / organizational capacity cognitive trend evaluation in the process</p> <p>Revised BP-264 to ensure differences between standard and budgeted organization staffing plans/levels are justified and risks of understaffing are addressed</p> <p>Revised TVA-SPP-11.1.3, "Workforce Planning," to create workforce plans that evaluate the risk of attrition</p> <p>Created a new procedure that outlines a process that specifically allows hiring to fill anticipated, but undeclared vacancies</p> | |
| 21 | 755599-021 | <p>Close the "Strategic Equipment Management" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>21 - SEM Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Completed the reconciliation of Long Term Asset Management (LTAM) information by removing outdated entries and including current entries</p> <p>Utilized the Excelerated Leadership Strategic Performance (ELP) Management process to ensure participants in the LTAM process are aligned on their responsibilities and priorities</p> <p>Applied the change management process in accordance with COO-SPP-01.2, "Change Management," to address LTAM implementation</p> <p>Initiated a new Nuclear Operating Experience Report based on the revision to the Apparent Cause Evaluation (ACE) to ensure other sites review the ACE and took actions, as necessary</p> <p>Conducted a meeting of Department Managers in the Plant Health Committee meeting. Using NPG-SPP-09.18, "Integrated Equipment Reliability Program," briefed in detail the roles and responsibilities stated in the procedure to the applicable role players</p> <p>Conducted an effectiveness review utilizing the metrics developed in Corrective Action (CA) CA-1 to assess LTAM progress / improvement</p> <p>Assigned an engineer to oversee and monitor progress of the LTAM process as defined in NPG-SPP-09.18.12, "Long Term Asset Management Process Integration Procedure"</p> <p>Assigned a "Key Manager" for the work weeks in accordance with NPG-SPP-07.1, "On Line Work Management," to observe, document, and feedback the conduct of the T-Meetings which support his/her work week to the meeting attendees and to site management</p> | 07/31/2014 |

REGULATORY COMMITMENTS

| Commitment No. | IIP PER Action No. | Commitment Description | Commitment Due Date |
|-----------------------|---------------------------|---|----------------------------|
| 23 | 755599-023 | <p>Close the "Equipment Programs & System Management" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>23 - EPSM Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Revised all Limitorque procedures to incorporate all Limitorque Technical and Maintenance updates based on the results outlined in PER action 410394-010</p> <p>Obtained internal valve dimensions from valve vendors to perform Performance Prediction Methodology calculations</p> <p>Using the Nuclear Operating Model (NOM) as a model, utilized the ELP Management process to ensure management alignment in the ownership and accountability for program leadership expectations</p> <p>Corporate Engineering implemented discipline-specific Site Standard Practices for Engineering Programs</p> <p>Coordinated with Corporate Engineering the upgrade of the Engineering progression plan</p> <p>Implemented the Work Group-specific training for Engineering Programs</p> <p>Implemented a valve packing program at BFN</p> <p>Took necessary actions to achieve approved Engineering programs staffing</p> <p>Revised the current Engineering Support Personnel Training Program description to align with ACAD 98-004, "Guidelines for Training and Qualification of Engineering Personnel"</p> <p>Performed Training Needs Analysis (TNA) and developed/implemented it for each engineering program</p> | 08/31/2014 |

REGULATORY COMMITMENTS

| Commitment No. | IIP PER Action No. | Commitment Description | Commitment Due Date |
|----------------|--------------------|--|---------------------|
| 25 | 755599-025 | <p>Close the "Operational Focus" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>25 - OF Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Implemented the ELP Management process to reinforce and institutionalize Conservative Decision Making principles at BFN</p> <p>Established initial and continuing training requirements, and developed and delivered training to provide expected behaviors for leaders and craft that support their roles and responsibilities</p> <p>Implemented the improvements to Online Risk Management process (NPG-SPP-07.3, "Work Activity Risk Management Process") to address weaknesses in risk awareness and risk management</p> <p>Implemented changes to NEDP-22, "Operability Determinations And Functional Evaluations," and OPDP-8, "Operability Determination Process And Limiting Conditions For Operation Tracking," to address timeliness, rigor, regulatory margin of Operability Determinations</p> <p>Reviewed, revised, and adjusted, as needed, the BFN communications plan to ensure alignment and reinforced the NOM principle that nuclear safety is an overriding priority</p> <p>Created a site-wide awareness/focus on safety (daily)</p> <p>Established an Operability Determination Review Board (ODRB) to perform independent reviews of Operability Determinations</p> <p>Developed and implemented metrics to address conservative decision making, risk, operability determinations/functional assessments, and nuclear safety culture to be utilized during site Management Review Meetings (MRMs)</p> <p>Revised NPG-SPP-10.5, "Plant Operations Review Committee," to add to Section 3.5.6, "Recommended Presentation Format", a new part C, and revised Attachment 4, "PORC Checklist"</p> <p>Reviewed and revised, as necessary, the station response to Significant Operating Experience Reports SOERs 94-1, "Nonconservative Decisions And Equipment Performance Problems Result In A Reactor Scram, Two Safety Injections, And Water-Solid Conditions," and 96-1, "Control Room Supervision, Operational Decision-Making, and Teamwork," recommendations with respect to decision making to ensure adequate implementation of these recommendations</p> | 09/30/2014 |

REGULATORY COMMITMENTS

| Commitment No. | IIP PER Action No. | Commitment Description | Commitment Due Date |
|-----------------------|---------------------------|---|----------------------------|
| 26 | 755599-026 | <p>Close the "Management & Leadership Standards" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>26 - MLS Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Utilized the ELP Management process to ensure management alignment in the ownership and accountability for leadership expectations</p> <p>Implemented policy issued by the SVP that focuses BFN leaders on standards/expectations in the NOM</p> <p>Implement department level weekly meetings in a 2Cs (compliments/concerns) format to identify issues/concerns and actions to address concerns</p> <p>Developed/implemented site recognition program for excellence in Safety and Human Performance</p> <p>Implemented First Line Supervisor (FLS) Peer Team led by the Plant General Manager, consisting of supervisors with the right attitude and leadership ability, respected by peers to align FLS with site leadership team and drive high standards</p> <p>Revised/published standard observation schedule document requiring each BFN supervisor to complete paired observation with immediate supervisor each quarter for one year</p> <p>Conducted Safety Culture briefings (by SVP) with site personnel covering the 95003 processes and BFN Column 4</p> <p>Distributed a Fleet Focus communication by the Chief Nuclear Officer (CNO) reinforcing expectations on making the Corrective Action Program (CAP) a priority</p> <p>Conducted CAP Accountability Meetings with the Director of Safety & Licensing</p> <p>Formed CAP and Commitment Review and Validation Team with senior management and industry experts</p> <p>Implemented Outage Performance Improvement Team Crews</p> | 12/15/2014 |

REGULATORY COMMITMENTS

| Commitment No. | IIP PER Action No. | Commitment Description | Commitment Due Date |
|----------------|--------------------|--|---------------------|
| 27 | 755599-027 | <p>Close the "Work Management" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>27 - WM Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Utilized the ELP Management process to ensure management alignment in the ownership and accountability for executing the work management process at BFN</p> <p>Revised NPG-SPP-07.3 to ensure that the responsibilities for risk characterization, critical evolution meetings, and risk management plan development are clearly assigned and to resolve definitions and role differences with NPG-SPP-07.1</p> <p>Revised NPG-SPP-07.1.4, "Work Control Prioritization - On Line," to...add a focus code for Work Orders related to Functional Evaluation interim and compensatory measures</p> <p>Filled the BFN Assistant Work Control Director position</p> <p>Conducted an Institute of Nuclear Power Operations (INPO) style work management seminar for the purpose of identifying any alignment issues detracting from the implementation of the Work Management Process</p> <p>Established training requirements, and developed and delivered training to provide expected behaviors for leaders and craft that support their roles and responsibilities</p> <p>Completed and revised and updated, as necessary, the communication strategy of PER 516455 CA-1/CA-2 "Develop and implement a communication strategy to address site alignment and reinforced the NOM principle that nuclear safety is the overriding priority."</p> <p>Utilizing the current BFN site MRM process, developed/implemented metrics for risk, OD/FAs, conservative decision making, safety culture</p> <p>Implemented industry standard Functional Equipment Group (FEG) week management program</p> <p>Conducted training per TNA performed for 2009-PER 146444-CA 038-001 (formal work management training)</p> <p>Verified proper implementation of Corrective Action to Prevent Recurrence (CAPR) actions 02, 03, 10, 11, and 22 from PER 475878 (CNO message to align organization on importance of CAP)</p> <p>Verified proper implementation of the CAPR actions 03, 04, 05, and 06 from PER 435440 (dedicated cause analysts; training for others)</p> | 12/15/2014 |

REGULATORY COMMITMENTS

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|----------------|--------------------|--|---------------------|
| 28 | 755599-028 | <p>Close the "Equipment Performance Monitoring & Trending" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>28 - EPMT Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Updated the Core Business Hours Policy</p> <p>Established appropriate staffing levels for the Engineering Rapid Resolution Team</p> <p>Utilized the ELP Management process</p> <p>Completed TNA and presented resulting training to Engineering on Equipment Reliability</p> <p>Revised Maximo to include Electric Power Research Institute standardized parameters related to equipment type and component specific failure parameters</p> <p>Developed an equipment maintenance integrated tracking and trending process plan to document equipment related failures/issues</p> | 12/15/2014 |
| 30 | 755599-030 | <p>Close the "Procedure and Instruction Quality" fundamental problem in accordance with Procedure 95003-007, "Project Review Boards."</p> <p><u>30 - PIQ Summary of IIP Action Plan - Corrective Actions:</u></p> <p>Using the NOM, utilized the ELP Management process to ensure management alignment in the ownership and accountability for leadership expectations at BFN</p> <p>Revised NPG-SPP-01.1, "Administration of Standard Programs & Processes (SPPs); Standard Department Procedures (SDPs); and Business Practices (BPs)," and NPG-SPP-01.2, "Administration of Site Technical Procedures," to be consistent with PPA-AP-907-001, "Procedure Process"</p> <p>Revised NPG-SPP-01.1 and NPG-SPP-01.2 to define specific roles and responsibilities at all levels for individuals involved with program execution. Listed all training requirements and/or qualifications for program execution</p> <p>Revised NPG-SPP-07.6, "NPG Work Control Planning Procedure," to address the High Impact Team (HIT) results. Defined additional program elements and specific roles and responsibilities for personnel involved with work control planning</p> | 12/15/2014 |

REGULATORY COMMITMENTS

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| | | <p>Revised the Planner Training Program Description, TPD-PLN, to address the HIT team results and revision of NPG-SPP-07.6</p> <p>Used a graded approach and developed a Nuclear Power Group training program description (TPD) for administrative and technical procedure writers</p> <p>Implemented a policy issued by the Site Vice President (SVP) that focuses BFN leaders on the standards and expectations, including accountability, contained in the NOM and INPO 09-011, "Achieving Excellence in Performance Improvement," as the "picture of excellence" for the station</p> <p>Implemented Various Manager, FLS, and department level weekly alignment meetings including 2Cs format to solicit feedback and confirm alignment on priorities, standards, and expectations</p> <p>Revised NPG-SPP-01.2 to incorporate a process for requesting procedure changes</p> <p>Developed a detailed Preventative Maintenance (PM) administration procedure or guideline that guides users on the use of MAXIMO and the data required for PM change request, PM Basis, etc.</p> <p>Implemented GEN042 training for common technical Procedure PREPARERS, VERIFIERS, and Independent Qualified Reviewers (IQRs)</p> <p>Revised or established a NPG-SPP-18 series procedure to incorporate procedure use and adherence guidance currently contained in NPG-SPP-01.1 and NPG-SPP-01.2</p> <p>Revised NPG-SPP-01.1 and NPG-SPP-01.2 to define when full-scope IQR reviews are required</p> <p>Created a NPG-SPP-07.6 HIT that will be responsible for revising NPG-SPP-07.6</p> <p>Completed a TNA for planner training with respect to BFN use of the procedure template for work instruction packages. This is to determine if the training provided to planners is sufficient for the task of planning work instructions to the BFN expectations</p> <p>Used a graded Systematic Approach to Training approach to analyze the procedure writer job to determine the training needed by procedure writers. Used the results of the job analysis and determine if the GEN042, Procedure Writer's PPA Certification, training satisfies the procedure writer training needs</p> | |

REGULATORY COMMITMENTS

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| | | <p>Developed and implemented fleet metrics to monitor procedure program performance with respect to administrative and technical procedure quality</p> <p>Developed and implemented fleet metrics to monitor work instruction package quality</p> <p>Assembled a cross-functional HIT with members from Operations, Maintenance, Engineering, Chemistry, Radiation Protection, Project Management, and Work Control. Used HIT input to create a detailed BFN Site Procedure Upgrade Project plan for procedures under the cognizance of NPG-SPP-01.2</p> <p>Created a detailed NPG Site Procedure Upgrade Gap to Excellence plan for procedures under the cognizance of NPG-SPP-01.1</p> <p>Revised MMDP-1, "Maintenance Management System," to provide more detailed expectations as to the type and quality of work instruction package feedback to be documented following job performance and post-job review</p> <p>Revised NPG-SPP-07.6 and EAM-WM-006, "EAM Work Management Feedback Tracking," to provide more guidance for the determination of work order feedback quality</p> | |