



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

October 21, 2010

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

In the Matter of)
Tennessee Valley Authority)

Docket Nos. 50-438 and 50-439

**TENNESSEE VALLEY AUTHORITY (TVA) - BELLEFONTE NUCLEAR PLANT (BLN)
UNITS 1 (CPPR-122) AND 2 (CPPR-123) – ANTICIPATED ACTIVITIES DURING THE
PERIOD OF CONSTRUCTION DEFERRAL**

- References:
1. Letter from TVA to NRC, "Bellefonte Nuclear Plant (BLN) Project - TVA Board of Directors' Decision Funding the Next Project Phase During Fiscal Year 2011," dated August 30, 2010 [ML102440618].
 2. Letter from TVA to NRC, "Bellefonte Nuclear Plant (BLN) Units 1 (CPPR-122) and 2 (CPPR-123) - Key Regulatory Assumptions for the Possible Completion of Construction Activities," dated April 9, 2010 [ML101050030].
 3. Letter from NRC to TVA, "Bellefonte Nuclear Plant, Units 1 and 2 - Order Granting Reinstatement of Construction Permits Nos. CPPR-122 and CPPR-123," dated March 9, 2009 [ML090610237].
 4. Letter from TVA to NRC, "Bellefonte Nuclear Plant Units 1 and 2- Request to Reinstate Construction Permits CPPR-122 (Unit 1) and CPPR-123 (Unit 2)," dated August 26, 2008 [ML082410087].

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In a letter dated August 30, 2010 (Reference 1) TVA informed the Nuclear Regulatory Commission (NRC) of the TVA Board of Directors' August 20, 2010 decision to provide funding for Fiscal Year 2011 activities for the Bellefonte Unit 1 (BLN Unit 1) project to maintain the option for future power generation. The TVA Board's authorization for Fiscal Year 2011 will support first year project work including continued asset and facility preservation, initial engineering and design, procurement of some long-lead components, and development of a licensing Regulatory Framework. The purpose of this letter is to provide the NRC Staff with a summary of anticipated activities at the Bellefonte site that will occur during Fiscal Year 2011.

In addition to conducting activities necessary to maintain and preserve site assets, and develop site infrastructure and non-safety related site facilities, TVA plans to begin activities designed to satisfy provisions outlined in section III.A.6 of the Commission Policy Statement on Deferred Plants (GL-87-15, Deferred Policy Statement). These activities will begin in early FY2011 and, in addition to informing initial project development, will be utilized to develop the information identified in the Deferred Policy Statement as required from the Licensee if construction is reactivated.

As described in TVA's letter to the NRC dated April 9, 2010, "Key Regulatory Assumptions for the Possible Completion of Construction Activities" (Reference 2), TVA plans to conduct certain activities necessary to further develop the licensing and engineering baseline for the project, as well as those necessary to reestablish plant configuration management, address the pre-service condition of SSCs, and prepare for possible construction reactivation as described in the Deferred Policy Statement. Activities in this area may include the development and submittal of programs necessary to establish the regulatory framework and topical reports related to plant design. TVA believes that engagement in these areas and specific technical reviews are consistent with section II.A.4 of the Deferred Policy Statement.

Additional activities may include continuation of plant design development, review and closure of historical open items, walk downs of plant SSCs to reestablish plant configuration management following the temporary cessation of TVA Nuclear Quality Assurance Plan (NQAP) activities at the Bellefonte site and address the pre-service condition, and development and implementation of programs and procedures in preparation for the possible reactivation of construction for Unit 1. As applicable, these activities will be carried out under the TVA NQAP. TVA will develop adequate procedures to ensure that work activities performed at BLN during the deferral period will not further plant construction or completion. TVA will not engage in any work activities that would preclude the NRC from identifying SSCs that may require special attention or performing inspections to verify that SSCs meet their quality and performance requirements. TVA anticipates that the above activities will necessitate the assignment of dedicated NRC review and inspection resources.

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The Enclosure contains further details regarding TVA's current plans to support the BLN project during Fiscal Year 2011. These activities are scheduled to begin in early FY 2011. Should TVA decide to move forward with completion activities, TVA will follow the notice of resumption of construction activities described in the Deferred Policy Statement. This would include submitting a letter notifying the NRC Director of Nuclear Reactor Regulation a minimum of 120 days in advance of the intent to resume construction activities, along with the other information listed in Section III.A.6 of the policy.

No regulatory commitments are identified in this letter. If you have any questions concerning this matter, please call Zackary W. Rad at (256) 574-8265.

Sincerely,



Raymond A. Hruby, Jr.
General Manager
Bellefonte Project

Enclosure:

1. Bellefonte Nuclear Plant Units 1 & 2, Anticipated Activities During Fiscal Year 2011

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Enclosure 1
Bellefonte Nuclear Plant Units 1 & 2
Anticipated Activities During Fiscal Year 2011

During Fiscal Year 2011, TVA will conduct certain activities in order to address the provisions of Section III.A.6 of the Commission Policy Statement on Deferred Plants (GL-87-15, Deferred Policy Statement). These activities will begin in early FY2011 and, in addition to informing initial project development, will be utilized to develop the information identified in the Deferred Policy Statement as required from the Licensee if construction is reactivated. TVA anticipates that these activities will necessitate the assignment of dedicated NRC review and inspection resources.

By letter and accompanying Order dated March 9, 2009, the NRC granted TVA's request to reinstate Construction Permits (CPs) CPPR-122 (BLN Unit 1) and CPPR-123 (BLN Unit 2) (Reference:3). Following the reinstatement of the CPs, TVA reinstated the TVA Nuclear Quality Assurance Plan (TVA NQAP) at the site including Appendix G of the plan, which is written specifically to address the application of the TVA NQAP to BLN during the period of deferral. The TVA NQAP applies to personnel and organizations performing activities that could affect quality-related structures, systems, and components at BLN. Consequently, engineering and work activities conducted during the period of deferral that could affect quality-related structures, systems, and components will be performed under the TVA NQAP. This includes the design and field engineering activities planned to begin during FY2011 as described below.

1. Engineering activities

TVA is beginning engineering activities that will establish the current status of the plant site and equipment as well as defining the scope of any substantive changes made to the plant design and site since the last FSAR revision was submitted. These activities will address the material condition of the plant and equipment, effects of investment recovery activities and the temporary cessation of the TVA NQAP, as well as changes to the plant design baseline driven by material condition, obsolescence, technology improvements, and changes to applicable regulatory requirements and guidance.

TVA has undertaken a systematic planning process for performing these initial engineering tasks that will benefit from the knowledge gained through the Browns Ferry (BFN) Unit 1 restart, Watts Bar (WBN) Unit 2 completion project, and recent Detailed Scoping, Estimating and Planning (DSEP) assessments performed at the BLN site. The fundamental elements of this phase of engineering include:

- Procedure development and training / indoctrination
- Development of system packages
- Walk downs to support design basis reconstitution and other program issues, and address open items, and
- Development of conceptual design packages

1.1 Engineering Process Development

TVA plans to begin initial engineering activities in early FY 2011, beginning with the development of programs, processes and procedures that will govern the engineering tasks to be performed on the project. This includes procedures for development of design basis documents, calculations, ASME Code related activities, and field walk downs.

1.2 System Packages

Initial engineering activities will focus on retrieval of documents and development of System Packages. Retrieved documents will include as-designed and as-built drawings, calculations and system descriptions. The System Packages will provide input into future decisions on overall system design changes and areas of review to support design basis verification.

1.3 Walk Downs to Support Design Basis Reconstitution and Other Programmatic Issues

Walk downs will be essential to establishing the as-found plant configuration and verifying the plant design baseline. These walk downs will also be integral to the elements of the Quality Verification Program which will determine material condition of the plant, identify potential issues resulting from investment recovery and the temporary cessation of the TVA NQAP, address replacement item concerns, and inform applicable refurbishment and replacement decisions.

1.4 Conceptual Design Package

An additional output of TVA's initial engineering efforts will be system conceptual design packages. The development of these packages is planned to begin during FY2011. These packages will contain, as applicable, detailed discussions of necessary design changes and the basis for these changes, required material and equipment, drafts of reconstituted design basis documents, any proposed approaches to improve design margins or confirm adequate margin exists, CAD versions of primary drawings, plans to resolve open items, and concept and requirement level input to future Operating License application updates.

2. Licensing Activities

Near term licensing activities will identify original regulatory requirements applicable to the plant as well as new regulations that have become applicable since plant construction was deferred. A description of TVA's proposed plans for compliance with these regulations or a commitment to submit such plans will be developed. TVA also plans to engage the NRC in certain areas that will aid in updating the licensing and design basis for BLN. Specifically, TVA plans to discuss applicable new regulatory requirements and guidance regarding equipment obsolescence, industry identified concerns and issues specific to the BLN plant, and to potentially develop submittals to address technical and programmatic issues associated with plant design changes.

2.1 Regulatory and Licensing-Related Activities

TVA plans to develop several licensing-related submittals during FY2011.

- Bellefonte Quality Verification Program – This Program will address potential concerns related to the temporary cessation of the TVA NQAP during the period when some removal of plant equipment took place under TVA's commercially controlled investment recovery program. TVA reinstated quality assurance at the Bellefonte site in March 2009, when TVA submitted Revision 20 of the TVA NQAP.
- Regulatory Framework – As discussed in TVA's request for the reinstatement of the BLN Construction Permits for Units 1 (CPPR-122) and 2 (CPPR-123) (Reference 4), the Regulatory Framework will contain a review of new standards, guidance and regulation for applicability to BLN Unit 1.
- Generic Communications – As a supplement to the Regulatory Framework, TVA plans to review previously issued Generic Letters, Bulletins, Circulars, Information Notices and Unresolved Safety Issues for applicability and propose appropriate dispositions.

2.1.1 Quality Verification Program (QVP)

TVA plans to develop and begin the implementation of a Quality Verification Program (QVP) to address the temporary cessation of TVA NQAP activities at the Bellefonte site. As initially discussed in TVA's Key Regulatory Assumptions for the Possible Resumption of Construction Activities (Reference 2), TVA plans to implement a QVP at BLN that will be similar in nature to those previously employed during the initial licensing of Watts Bar Unit 1, the recovery and restart of Browns Ferry Unit 1, and the program TVA is currently implementing for the Watts Bar Unit 2 construction completion project. The QVP will be developed and implemented under the current TVA NQAP and include basic elements that utilize the requisite quality records, verify plant fidelity with the design basis, reestablish configuration management, evaluate the potential degradation of plant structures, systems, and components (SSCs), and identify required remediation efforts. The QVP will consist of four basic elements, as follows:

- Design Basis Verification
- Quality Records Verification
- Replacement Items Verification
- Refurbishment/Replacement

TVA plans to submit this program for NRC review during the first quarter of FY 2011.

2.1.2 Regulatory Framework

TVA is reviewing current and historical revisions of NRC NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition" (SRP), as well as potentially applicable regulations (including new regulations that have become effective since plant construction was deferred and are potentially applicable to BLN). TVA is also reviewing current and historical revisions of regulatory guides, codes and standards, industry initiatives, and studies performed during the BLN DSEP effort. This review also includes prior communications with NRC, such as position papers, that may contain licensing issues which have been reviewed and approved by the NRC as well as those which may contain licensing issues that were outstanding at the time of deferral. The result of this effort will be TVA's proposed Regulatory Framework for Licensing BLN Unit 1. Similar to the Regulatory Framework prepared for Watts Bar Unit 2, it will consist primarily of an extensive table that will address each section (topic or system) of the FSAR and SRP, applicable regulations, regulatory guides, ASME codes and other industry standards. In addition, TVA plans to address outstanding licensing issues not addressed by responses to generic communications, their status and the manner in which TVA plans to resolve them. TVA plans to submit this Regulatory Framework during the second quarter of FY 2011, although the actual timing of this submittal will be dependent upon further regulatory discussions.

2.1.3 Generic Communications

TVA is in the process of reviewing NRC generic communications including information notices, bulletins, generic letters, TMI items and unresolved safety issues. Similar to the process established for Watts Bar Unit 2, TVA will submit to NRC, in tabular form, the identification of those generic communications that are applicable to BLN and their status. TVA will provide a basis for those communications deemed to be closed and the actions currently identified for each communication that TVA believes is open. TVA plans to submit this document during the third quarter of FY 2011, although the actual timing of this submittal will be dependent upon further regulatory discussions.

2.2 Topical / Technical Engagement

TVA plans to engage the NRC in certain areas that will aid in updating the licensing and design basis for BLN. Engagement may involve face-to-face communications and, in some cases, technical or topical submittals for NRC review.

- Fire Protection Program – TVA is evaluating implementation of NFPA 805 for its Fire Protection Program and anticipates discussions with NRC during FY 2011.
- Seismic – TVA is evaluating the development of site specific seismic spectra that will consider high frequency content. Discussions with the staff are anticipated to occur during FY 2011.

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- Human Factors Engineering / Control Room Design Review – TVA is developing an overall integrated human factors engineering plan and control room design review and, subsequently, a redesign of the control room. TVA anticipates that an initial meeting to ensure analysis methods are consistent with NRC expectations will take place during FY 2011.
- Digital Instrumentation & Control Upgrades – TVA plans to upgrade I&C systems to reflect the evolution in I&C system requirements using digital technology, and anticipates a “Phase 0” meeting with the staff during FY 2011 to discuss its overall plan to ensure it is on track with NRC expectations.
- Hydrology - TVA Plans to address any potential impacts to the BLN site licensing and design basis which may result from the recent reanalysis of the design basis flood event for the BLN site. Discussions with the staff are anticipated to occur during FY 2011.