



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

March 1, 2011

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

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) – REVISION TO RESPONSE TO  
REGULATORY ISSUE SUMMARY 2010-10**

- Reference:
1. Letter from TVA to NRC, "Bellefonte Nuclear Plant (BLN) Units 1 (CPPR-122) and 2 (CPPR-123) – Response to Regulatory Issue Summary 2010-10," dated January 18, 2011 [ML110210124].
  2. Letter from NRC to TVA, "Bellefonte Request for Withholding Information from Public Disclosure," dated February 4, 2011.

By letter dated January 18, 2011, TVA voluntarily responded to Nuclear Regulatory Commission (NRC) Regulatory Information Summary (RIS) 2010-10, "Process for Scheduling Acceptance Review of New Reactor Licensing Applications and Process for Determining Budget Needs for Fiscal Year 2013" (Reference 1). Although TVA holds Construction Permits for BLN Units 1&2 issued under 10 CFR Part 50, discussions with NRC staff indicated value in TVA providing similar information relative to the BLN project.

TVA submitted an affidavit with this letter, also dated January 18, 2011, which requested that certain information contained in the letter be withheld from public disclosure pursuant to 10 CFR 2.390.

By letter dated February 4, 2011, the NRC provided TVA a proprietary letter (Reference 2) in response to TVA's response to RIS 2010-10. This letter indicated that TVA's request to withhold proprietary information had been reviewed in accordance with the requirements of 10 CFR 2.390 and, on the basis of the statements in the affidavit, concluded that some of the material may be withheld in accordance with 10 CFR

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2.390(a)(4), and that certain other material should be released and placed in the NRC Public Document Room (PDR). The enclosure of NRC's letter outlined the reasons for agreeing or disagreeing with TVA's request for withholding information.

TVA has reviewed NRC's letter with the associated enclosure and agrees with NRC's conclusions.

The purpose of this letter is to revise and supersede TVA's initial submittal (Reference 1) in its entirety. NRC's conclusions regarding TVA's initial withholding request have been incorporated in this revision.

Therefore, Enclosure 1 of this letter provides TVA's revised voluntary response to RIS 2010-10 in regards to our planned 10 CFR Part 50 licensing activities for Fiscal Years 2011 through 2013.

This letter includes both public and proprietary versions of Enclosure 1. The proprietary version of Enclosure 1 includes TVA proprietary information and should be withheld from public disclosure in accordance with 10 CFR 2.390(a)(4). Enclosure 2 is the accompanying TVA affidavit supporting the proprietary nature of the information contained in the proprietary version of Enclosure 1. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission, and addresses with specificity the considerations listed in 10 CFR 2.390(b)(4) of the Commission's regulations. TVA hereby requests that the enclosed proprietary information be withheld from public disclosure in accordance with the aforementioned regulation.

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

Enclosures:

1. TVA Response to RIS 2010-10 (Public and Proprietary Versions)
2. TVA Affidavit

cc: See page 3

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Enclosure 1  
TVA Response to RIS 2010-10

NRC Request No.1

The staff is seeking notification on the number and the degree of complexity of ESP, LWA, DC, and COL applications, and any other licensing requests that applicants expect to submit in FY 2013, no later than 30 days from the date of this RIS. This information will assist the staff in determining FY 2013 budget needs.

Response

This response includes licensing requests anticipated for FY 2011 thru FY 2013, the degree of complexity of these requests, and their anticipated impact on NRC resource needs during this time period. The FY 2011 dates are generally consistent with timeframes previously communicated to NRC, and any changes from these previously communicated timeframes are identified. TVA has included estimates of NRC review resources based on historical information from similar projects to aid the staff in determining resource needs.

FY 2011:

The expected FY 2011 submittal reviews, along with their breadth and level of complexity of the subjects, are summarized below:

- TVA submitted its request to NRC to extend Construction Permit No. CPPR-122 (BLN Unit 1) on Oct. 8, 2010. TVA anticipates the results of the TVA's Integrated Resource Plan to be completed in April 2011. TVA anticipates the NRC Staff to continue the review of the construction permit extension request and estimates the NRC review effort to take 6 persons 6 months to complete or approximately 3 Fulltime Equivalent (FTE).
- Continuation of the BLN Units 3&4 Hydrology review. The Bellefonte 3&4 COLA annual update, submitted on December 22, 2010, included a revised FSAR Section 2.4 which reflects the updated Probable Maximum Flood and Potential Dam Failure analysis. TVA has responded to all requests for additional information (RAI) regarding the flood analysis with the exception of providing the results of sensitivity analysis addressing 100% rain runoff and unit hydrograph peaking. TVA expects to submit the results of these sensitivity analyses by March 1, 2011. This is not an additional expected activity as TVA has previously requested the NRC continue this hydrology review associated with the BLN Units 3&4 Part 52 COLA; however, the results of this review will have a direct impact on the anticipated update to the BLN Units 1&2 Part 50 License Application. TVA estimates the remaining review effort will require approximately 12 person-months to complete or 1 Fulltime Equivalent (FTE).
- Review of the BLN Units 1&2 Quality Verification Program. The Quality Verification Program is a specific program to address the temporary cessation of

TVA NQAP activities at BLN Units 1&2 and involves the use of elements of Design Basis Verification, Quality Records Verification, Replacement Items Verification, and Refurbishment/Replacement. It is now expected to be submitted at the end of the second quarter of FY 2011. TVA estimates that this effort will require up to 3 FTE.

- Review of the BLN Units 1&2 Regulatory Framework. The Regulatory Framework will include a tabular summary addressing each section of the FSAR and associated Standard Review Plan (SRP) section and identifying applicable regulations, regulatory guides, ASME Code requirements and requirements of other industry standards. It will also include outstanding issues that affect the licensing basis of BLN but not addressed by responses to generic communications, the status of these issues, and an indication of the manner in which TVA intends to resolve them. TVA now plans to submit the Regulatory Framework during the third quarter of FY 2011. TVA estimates that this effort will require approximately 1.5 FTE during FY 2011.

Additionally, TVA will submit, as part of the Regulatory Framework submittal, a summary of the status of the NRC generic communications including a plan to resolve each, the basis for resolution or, in a limited number of cases where the approach for resolution has not yet been determined, a future date when such information will be available. A similar summary will be provided for the NRC unresolved safety issues (USIs). TVA estimates that this effort will require approximately 0.5 FTE during FY 2011.

- Topical/Technical Engagements. 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. Each of these areas includes significant technical content and complexity. TVA plans to initiate this process for one or more of the areas prior to the end of FY 2011, but anticipates that the NRC may have limited time during this FY to engage in either face-to-face reviews or submittal reviews. The first areas that TVA plans to engage NRC on are:
  - Fire Protection approach and potential implementation of NFPA 805
  - Seismic analysis and the development of site specific spectra considering high frequency content. Included in this discussion will be the seismic position papers that TVA submitted to NRC in the 1990 timeframe.
  - Digital Instrumentation and Control system upgrades to reflect the evolution of I & C requirements using digital technology.
  - Human Factors Engineering/Control Room Design Review, including potential redesign of the control room.

TVA estimates that review of each topical/technical area will require approximately 0.5 FTE during FY 2011. Therefore, TVA estimates FY 2011 efforts will require approximately 1.0 FTE.

FY 2012:

During FY 2012, TVA anticipates that NRC will complete its review of the Regulatory Framework, including generic communications and unresolved safety issues, and resolve any issues related to the Regulatory Framework submittal. TVA estimates the review effort remaining after FY 2011 will require approximately 5.5 FTE. [REDACTED]

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[REDACTED] TVA estimates that this effort will require approximately 0.75 FTE. TVA expects continued communications on the four topical/technical areas mentioned above and, depending on progress made during FY 2011, there may be a significant effort required in FY 2012 to address these communications. TVA estimates this remaining review effort will require approximately 2.5 FTE. In addition, the following subjects may require similar efforts starting in the early part of FY 2012:

[REDACTED]

TVA estimates that review of each topical/technical area will require approximately 0.5 FTE.

Other activities that may take place in FY 2012 are:

[REDACTED]

- [REDACTED] TVA estimates that this effort will require approximately 0.5 FTE.
- [REDACTED] TVA estimates that review of this update will require approximately 0.5 FTE.
- [REDACTED] TVA estimates that review of this update will require approximately 0.5 FTE.
- [REDACTED] TVA estimates that review of this update will require approximately 1 FTE during FY 2012.

[REDACTED] TVA estimates that this effort will require up to 2 FTE.

[REDACTED] TVA estimates that this effort will require approximately 1 FTE.

FY 2013:

TVA anticipates that review of the licensing submittals developed in FY2012 will require the use of NRC resources into FY2013. Additionally, the following activities may be initiated:

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[REDACTED] TVA estimates the remaining review effort, [REDACTED], will require approximately 10 FTE.

[REDACTED] TVA estimates that review of these responses will require approximately 2 FTE.

[REDACTED] TVA estimates that review of these submittals will require approximately 2 FTE.

#### NRC Request No.2

The staff is seeking notification of any changes to previously announced or submitted schedules concerning the construction of power reactors under 10 CFR Part 52. In support of staffing and planning, this includes projected submission dates beyond FY 2013.

Response

Not applicable.

#### NRC Request No.3

To ensure that the NRC can effectively schedule resources and to facilitate the achievement of an acceptance review of 60 calendar days, the staff requests that, 90 days before the expected submission date, an applicant or licensee (as applicable) declare the expected submission date (month, day, and year) and the degree of complexity of each of its ESP, LWA, DC, and partial or complete COL applications or licensing action request that it intends to submit to the NRC.

Response

TVA will work with NRC to establish more detailed expectations and schedule information as the project progresses and such information become available.

NRC Request No.4

In addition, the NRC staff is requesting the voluntary submission to the NRC of addressee construction plans and schedules for the fabrication of large components and modules, when available.

Response

Currently the only large components scheduled to begin fabrication during the designated time period are Replacement Once Through Steam Generators (ROTSGs) for BLN Unit 1. Contract No. 4088 was awarded to Babcock and Wilcox Canada (BWC) for BLN Unit 1 ROTSGs on September 30, 2010. [REDACTED]

TVA  
Business  
Proprietary

The major production milestones/schedule durations are as follows:

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

If construction resumes, TVA will undertake those activities necessary to complete construction pursuant to a schedule that supports full power operation by [REDACTED]. Under such a schedule, construction on safety related SSC's is projected to begin in [REDACTED], and hot functional testing and fuel loading is projected to begin in early [REDACTED].

TVA considers the above redacted (bracketed) information to be Business Proprietary, as supported by affidavit included in Enclosure 2. TVA is providing this information solely to assist the NRC in its planning efforts. Please recognize that the TVA Board has not made a decision to construct any additional nuclear facilities beyond WBN2 at this time.



Enclosure 2  
TVA Letter dated March 1, 2011

Enclosure 2  
TVA Affidavit

In the Matter of )

Tennessee Valley Authority )  
Voluntary Response )  
RIS 2010-10 )  
)  
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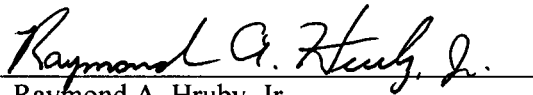
STATE OF ALABAMA )  
COUNTY OF JACKSON )

1. My name is Raymond A. Hruby, Jr. I am General Manager, Bellefonte Project for the Tennessee Valley Authority (TVA), and, as such, I am authorized to execute this affidavit.
2. I am familiar with the criteria applied by TVA to determine whether certain TVA information is proprietary. I am familiar with the policies established by TVA to ensure the proper application of these criteria.
3. I am familiar with the TVA information contained in TVA's voluntary response to "Regulatory Issue Summary 2010-10, "Process for Scheduling Acceptance Reviews of New Reactor Licensing Applications and Process for Determining Budget Needs for Fiscal Year 2013," dated November 15, 2010. Bracketed (redacted) information contained in pages E1-3 through E1-5 of this response has been classified by TVA as proprietary in accordance with the policies established by TVA for the control and protection of proprietary and confidential information.
4. This response contains information of a proprietary and confidential nature and is of the type customarily held in confidence by TVA and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this response as proprietary and confidential.
5. TVA has made the information in this response available to the U.S. Nuclear Regulatory Commission in confidence with the request that the bracketed (redacted) information contained in this response be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR §2.390. The bracketed (redacted) information qualifies for protection under 10 CFR §2.390(a)(4), "Trade secrets and commercial or financial information."
6. In accordance with the criteria established in 10 CFR §2.390(b)(4), TVA hereby asserts the following bases for classifying the bracketed (redacted) information in this response as proprietary:

Enclosure 2

TVA Letter dated March 1, 2011

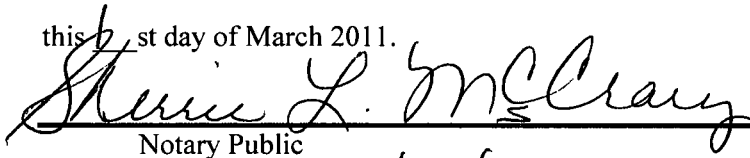
- (a) The information in this response has been held in confidence by TVA;
  - (b) The information in this response is of the type normally held in confidence by TVA because it reveals preliminary planning information regarding the timing of construction or development of new generation sources, and a decision to pursue these new generation sources has not been authorized or approved by the TVA Board of Directors;
  - (c) TVA is transmitting this information voluntarily to the NRC and in confidence;
  - (d) The information in this response is not available in any public source; and,
  - (e) If revealed, the information in the response could substantially harm the competitive position of TVA by revealing planning information that is preliminary in nature and could harm TVA's efforts to subsequently procure competitive goods and services.
7. In accordance with TVA's policies governing the protection and control of information, proprietary information contained in this response has been made available, on a limited basis, to others outside of TVA only as required and under suitable agreements providing for nondisclosure and limited use of the information.
8. The foregoing statements are true and correct to the best of my knowledge, information, and belief.



Raymond A. Hruby, Jr.  
General Manager, Bellefonte Project  
Nuclear Generation, Development, and Construction  
Tennessee Valley Authority  
256-574-8206

Sworn to and subscribed before me

this 1st day of March 2011.

  
Notary Public

My commission expires:

1/19/2015