



Tennessee Valley Authority, 1101 Market Street, LP 5A, Chattanooga, Tennessee 37402-2801

March 23, 2011

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

In the Matter of _____)
Tennessee Valley Authority)

Clinch River Site
Project Number 785

TVA VOLUNTARY RESPONSE TO RIS 2011-02

- Reference: 1) NRC Regulatory Issue Summary 2011-02, Licensing Submittal Information and Design Development Activities for Small Modular Reactor Designs
- 2) TVA letter to NRC dated December 22, 2010, Addendum to the Key Assumptions Letter for the Possible Licensing and Construction of Small Modular Reactor Modules at the Clinch River Site
- 3) TVA letter to NRC dated December 30, 2010, TVA Voluntary Response to RIS 2010-01

The purpose of this letter is to provide the TVA voluntary response to the NRC RIS 2011-02 (Reference 1). TVA is providing this information solely to assist the NRC in its planning and scheduling efforts. Information in this response supplements information previously provided in the Key Assumptions Letter regarding licensing activities at the Clinch River Site (Reference 2) and TVA's earlier voluntary response to RIS 2010-01 (Reference 3).

As stated in TVA's response to RIS 2010-01 (Reference 3), TVA plans to submit a Construction Permit Application (CPA) in the fourth quarter of FY2012 for up to six mPower™ reactor modules at the Clinch River site in Roane County, Tennessee.

TVA and Generation mPower (B&W NE and Bechtel) have worked to coordinate our plans and schedules as reflected in our respective responses to this RIS. Accordingly, TVA's voluntary response to this RIS is provided in Enclosure 1.

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NRC

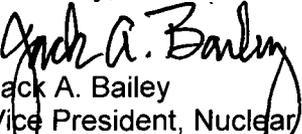
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If you have any questions, please contact Gordon Arent at 1101 Market Street, LP5A, Chattanooga, Tennessee 37402-2801, by telephone at (423)751-2233, or via email at garent@tva.gov.

Sincerely,



Jack A. Bailey

Vice President, Nuclear Generation Development
Nuclear Generation Development and Construction

Enclosure

cc: See Page 3

cc (w/o Enclosures):

R.W. Borchardt
U.S. Nuclear Regulatory Commission
One White Flint North, 16E15
11555 Rockville Pike
Rockville, Maryland 20852-2378

Michael Johnson
U. S. Nuclear Regulatory Commission
Two White Flint North, 6F15
11545 Rockville Pike
Rockville, Maryland 20852-2738

Eric Leeds
U.S. Nuclear Regulatory Commission
One White Flint North, 7H4
11555 Rockville Pike
Rockville, Maryland 20852-2738

Michael Mayfield
U.S. Nuclear Regulatory Commission
Two White Flint North, 6E4
11545 Rockville Pike
Rockville, Maryland 20852-2738

Victor McCree
U. S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

cc (Enclosure):

G. P. Arent, EQB 1 B-WBN
A. S. Bhatnagar, LP 6A-C
A. L. Sterdis, LP 5A-C
S. A. Vance, WT 6A-K
E. J. Vigluicci, WT 6A-K
P.C. Willingham, LP-6A-C
EDMS, WT CA-K

Enclosure 1
TVA Voluntary Response to NRC Regulatory Issue Summary 2011-02

On February 2, 2011, NRC issued NRC Regulatory Issue Summary (RIS) 2011-02, "Licensing Submittal Information and Design Development Activities for Small Modular Reactor Designs." The NRC stated that the intent of the RIS was to obtain new or updated information on the scheduling of CP, ESP, COL, DC, DA, or ML application submissions related to advanced reactor designs. The purpose of this RIS is to facilitate the establishment of a predictable and consistent method for reviewing applications. The following TVA responses address the RIS 2011-02 questions applicable to the Clinch River SMR.

Design and Licensing Submittal Information

Will the applicants be organized into DCWGs? If known, what is the membership of the DCWG and which party is the primary point-of-contact designated for each DCWG? Have protocols been developed to provide coordinated responses for RAIs with generic applicability to a design center?

TVA's Construction Permit Application (CPA) is expected to be the lead licensing application for the standard Generation mPower design. TVA and Generation mPower are working to integrate the CPA, Design Certification Application (DCA) and Operating License (OL) activities. Protocols are being developed to ensure that coordinated responses are provided for RAIs with generic applicability to the design center and to maintain configuration management among the applications. TVA believes that this approach is consistent with the intent of the DCWG process, with TVA being the lead applicant. As additional customers are identified, DCWG membership will expand.

Which applicant that references the design will be designated as the reference COL applicant or, alternatively, how will various applications (e.g., CP, DC, COL) be coordinated to achieve the desired design-centered licensing review approach?

- TVA's Addendum to the Key Assumptions Letter (reference 2) addressed the utilization of a "One Design - One Review" approach. TVA is fully committed to standardization while using the 10 CFR Part 50 process to pursue the license for the first plant. TVA remains confident that the Operating License stage Final Safety Analysis Report can serve as a template for the reference COL applicant.

When (month and year) will CP, COL, or ESP applications be submitted for review? In addition, what are the design, site location, and number of units at each site?

- As stated in TVA's response to RIS 2010-01 (reference 3), TVA plans to submit a Construction Permit Application in the fourth quarter of FY2012 for up to six mPower SMR modules at the Clinch River site in Roane County, Tennessee.

Are vendors or consultants assisting in the preparation of the application(s)? If so, please describe roles and responsibilities for the design and licensing activities.

- The Construction Permit Application is being developed by TVA with support from Generation mPower (B&W and Bechtel), including Regulatory Framework development, site layout and the conduct of subsurface investigations. TVA has also contracted with Worley Parsons to provide project management assistance, Burns and Roe to provide owner's engineer services, as well as other contractors to provide site characterization, facility and licensing support services.

Design, Testing, and Application Preparation

What is the applicant's status in the development and implementation of a quality assurance program?

- TVA-NQA-PLN89-A "Tennessee Valley Authority Nuclear Quality Assurance Program," is the governing Quality Assurance program for the Clinch River SMR. TVA is currently developing specific implementing procedures for the Clinch River SMR project.