



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

September 2, 2014

**LICENSEE:** Tennessee Valley Authority

**FACILITY:** Watts Bar Nuclear Plant, Unit 1

**SUBJECT:** SUMMARY OF AUGUST 14, 2014, PUBLIC MEETING WITH TENNESSEE VALLEY AUTHORITY, PACIFIC NORTHWEST NATIONAL LABORATORY AND NATIONAL NUCLEAR SECURITY ADMINISTRATION OF DEPARTMENT OF ENERGY REGARDING INCREASE IN TRITIUM PRODUCTION

On August 14, 2014, a public meeting was held between Nuclear Regulatory Commission (NRC) staff and representatives of Tennessee Valley Authority (TVA or the licensee) at the request of the licensee. The purpose of this meeting was to discuss the TVA's plan to submit a license amendment request in January 2015 to increase allowable tritium-producing (TP) bar loading for Watts Bar Nuclear Plant, Unit 1 (WBN-1). The enclosure contains a list of attendees. The licensee's presentation slides may be accessed from the NRC Agencywide Documents Access and Management System (ADAMS) Accession No. ML14231A067. The Department of Energy National Nuclear Security Administration's (NNSA's) presentation slides may be accessed from the NRC ADAMS Accession No. ML14231A072.

**Background**

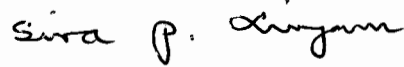
Tritium, a radioactive material with a half-life of 12.3 years, is an integral component of nuclear weapons. An assured supply of tritium must be available to meet the requirements of the nuclear weapons stockpile. One of NNSA's missions is to provide freshly filled tritium reservoirs that have reached their end of life. To achieve this, NNSA requested TVA to place the TP bars in the reactor at WBN-1. As a result, NRC approved a license amendment for TVA on May 4, 2009, to allow loading up to 704 TP bars at WBN-1. TVA is now planning to submit another license amendment in January 2015 requesting NRC approval to increase allowable TP bar loading from 704 to 1792 TP bars at WBN-1 to accommodate NNSA's needs. A pre-submittal meeting was held on August 14, 2014, at NRC headquarters to discuss the changes to the existing agreements on the use of TP bars at WBN-1. The participants included personnel from NRC, TVA, Pacific Northwest National Laboratory, and NNSA.

**Summary**

The licensee and its representatives presented their approach to increase allowable tritium production at WBN-1. The licensee is planning to submit the license amendment request (LAR) in January 2015 to increase allowable TP bar loading from 704 to 1792 TP bars for WBN-1, and will request NRC approval of the LAR by August 2016. No regulatory decisions were made at the meeting.

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Please direct any inquiries to me at 301-415-1564, or by email to [siva.lingam@nrc.gov](mailto:siva.lingam@nrc.gov).

A handwritten signature in black ink, reading "Siva P. Lingam". The signature is written in a cursive, flowing style.

Siva P. Lingam, Project Manager  
Watts Bar Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure:  
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

U. S. NUCLEAR REGULATORY COMMISSION (NRC)

PUBLIC MEETING WITH TENNESSEE VALLEY AUTHORITY (TVA)

REGARDING INCREASE IN TRITIUM PRODUCTION

FOR WATTS BAR NUCLEAR PLANT, UNIT 1

AUGUST 14, 2014

NRC

Margaret Chernoff  
Jeremy Dean  
Ryan Lantz  
Siva Lingam  
Louise Lund  
Mathew Panicker  
Ben Parks (by phone)  
Roger Pedersen  
Jessie Quichocho  
Undine Shoop (by phone)

TVA

Carla Borrelli  
Mark Burzynski (TVA contractor)  
Thomas Hess  
Jim Lemons

Pacific Northwest National Laboratory Supporting TVA

Cheryl Thornhill

National Nuclear Security Administration of Department of Energy Supporting TVA

Jim Chapman (NNSA contractor)  
Kevin Greenaugh  
Tom Rotella

Westinghouse Supporting TVA

Darrin Smith (by phone)

Platts Nucleonics Week

William Freebairn (by phone)

Enclosure

Please direct any inquiries to me at 301-415-1564, or by email to [siva.lingam@nrc.gov](mailto:siva.lingam@nrc.gov).

**/RA/**

Siva P. Lingam, Project Manager  
Watts Bar Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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List of Attendees

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**Package Accession No.: ML14231A129**

**Meeting Notice Accession No.: ML14213A185**

**Meeting Summary Accession No.: ML14231A160**

**Slides Presentation Accession Nos.: ML14231A067 and ML14231A072**

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