



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

July 29, 2016

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street, LP 3R-C  
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 - INDIVIDUAL NOTICE OF ISSUANCE  
OF AMENDMENT TO FACILITY OPERATING LICENSE (CAC NO. MF6050)

Dear Mr. Shea:

The U.S. Nuclear Regulatory Commission has forwarded the enclosed Individual Notice of Issuance of Amendment to Facility Operating License to the Office of the Federal Register for publication.

This notice relates to your amendment request dated March 31, 2015, as supplemented by letters dated April 28, May 27, June 15, September 14, September 25, November 30, December 22, and December 29, 2015, February 22 and March 31, 2016. The amendment changes Technical Specification (TS) 4.2.1 "Fuel Assemblies," to increase the maximum number of tritium-producing burnable absorber rods allowed in the core from 704 to 1792. The amendment also changes TS 3.5.1, "Accumulators," Surveillance Requirement (SR) 3.5.1.4 and TS 3.5.4, "Refueling Water Storage Tank (RWST)," SR 3.5.4.3, to delete outdated information related to the tritium production program at Watts Bar Nuclear Plant, Unit 1.

If you have any questions, please contact me at 301-415-1349.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeanne Dion", is written over a horizontal line.

Jeanne Dion, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure:  
Individual Notice of Issuance

cc w/encl: Distribution via Listserv

**ENCLOSURE**

**FEDERAL REGISTER NOTICE**

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 50-390; NRC-2015-0162]**

**Tennessee Valley Authority; Watts Bar Nuclear Plant, Unit 1; Maximum Number of  
Tritium Producing Burnable Absorber Rods**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** License amendment; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an amendment to Facility Operating License No. NPF-90, issued to the Tennessee Valley Authority, for operation of the Watts Bar Nuclear Plant, Unit 1. The amendment allows Watts Bar Nuclear Plant, Unit 1, to irradiate up to 1792 tritium producing burnable absorber rods (TPBARs) per cycle. This amendment revised Technical Specification (TS) 4.2.1, "Fuel Assemblies," to increase the maximum number of TPBARs allowed in the core from 704 to 1792. The amendment also revised Surveillance Requirement (SR) 3.5.1.4 of TS 3.5.1, "Accumulators," and SR 3.5.4.3 of TS 3.5.4, "Refueling Water Storage Tank (RWST)," to delete outdated information related to the tritium production program.

**DATES:** [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Please refer to Docket ID **NRC-2015-0162** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2015-0162**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**  
You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search.](#)" For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Jeanne Dion, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-1349, e-mail: [Jeanne.Dion@nrc.gov](mailto:Jeanne.Dion@nrc.gov).

**SUPPLEMENTARY INFORMATION:** The NRC has issued Amendment No. 107 to Facility Operating License No. NPF-90 issued to the Tennessee Valley Authority, which revised the TSs for operation of the Watts Bar Nuclear Plant, Unit 1, located in Rhea County, TN. A publicly-

available version is in ADAMS under Accession No. ML16159A057. Documents related to this amendment are listed in the Safety Evaluation enclosed with the amendment. The amendment was effective as of the date of its issuance.

The amendment revised TS 4.2.1, "Fuel Assemblies," to increase the maximum number of TPBARs allowed in the core from 704 to 1792. The amendment also revised SR 3.5.1.4 of TS 3.5.1, "Accumulators," and SR 3.5.4.3 of TS 3.5.4, "Refueling Water Storage Tank (RWST)," to delete outdated information related to the tritium production program.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in chapter I of title 10 of the *Code of Federal Regulations*, which are set forth in the license amendment.

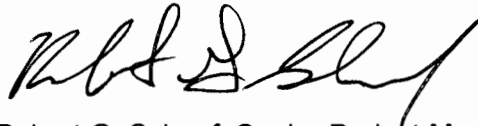
A Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the *Federal Register* on July 7, 2015 (80 FR 38752). A correction to the notice was published on April 22, 2016 (81 FR 23761), to correct a typographical error in the original notice. No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared an Environmental Assessment, published on July 5, 2016 (81 FR 43656), related to the action and has concluded that an environmental impact statement is not warranted because there will be no environmental impact attributable to the action beyond that which has been predicted and described in the Commission's Final Environmental Statement for the facility dated December 1978 and supplemented in April 1995.

For further details with respect to this action, see the application for amendment dated March 31, 2015, as supplemented by letters dated April 28, 2015, May 27, 2015, June 15, 2015, September 14, 2015, September 25, 2015, November 30, 2015, December 22, 2015, December 29, 2015, February 22, 2016, and March 31, 2016 (ADAMS Accession Nos. ML15098A446, ML15124A334, ML15147A611, ML15167A359, ML15258A204, ML15268A568, ML15335A468, ML16054A661, ML16004A161, ML16053A513, and ML16095A064, respectively).

Dated at Rockville, Maryland, this 29th day of July 2016.

For the Nuclear Regulatory Commission.

A handwritten signature in black ink, appearing to read 'R. G. Schaaf', written in a cursive style.

Robert G. Schaaf, Senior Project Manager,  
Plant Licensing Branch II-2,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.

July 29, 2016

Mr. Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
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If you have any questions, please contact me at 301-415-1349

Sincerely,  
**/RA RSchaaf for/**  
Jeanne Dion, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-390

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ADAMS Accession Nos.: LTR: ML16159A071 FRN: ML16214A134

OFFICE	DORL/LPL2-2/PM	DORL/LPL2-2/LA	OGC	DORL/LPL2-2/BC	DORL/LPL3-2/PM
NAME	JDion	BClayton	JWachutka	TOrf	JDion (RSchaaf for)
DATE	7/07/2016	7/20/2016	7/19/2016	7/29/2016	7/29/2016

OFFICIAL AGENCY RECORD