



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

January 30, 2020

Mr. James Barstow
Vice President, Nuclear Regulatory Affairs
and Support Services
Tennessee Valley Authority
1101 Market Street, LP 4A-C
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 2 – CORRECTION TO AMENDMENT
NO. 30 TO FACILITY OPERATING LICENSE NPF-96 REGARDING USE OF
OPTIMIZED ZIRLO™ FUEL ROD CLADDING (EPID L-2018-LLA-0197)

Dear Mr. Barstow:

On May 22, 2019, the U.S. Nuclear Regulatory Commission (NRC or Commission) issued Amendment No. 27 to Facility Operating License No. NPF-96 for the Watts Bar Nuclear Plant (WBN), Unit 2 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18347B330). Amendment No. 27 revised WBN, Unit 2 Technical Specification (TS) 4.2.1, "Fuel Assemblies," to authorize the irradiation of up to 1,792 tritium producing burnable absorber rods (TPBARs).

On July 25, 2019, the Commission issued Amendment No. 30 to Facility Operating License No. NPF-96 for the Watts Bar Nuclear Plant, Unit 2 (ADAMS Accession No. ML19112A004). Amendment No. 30 also revised TS 4.2.1 to permit the use of Optimized ZIRLO™ fuel rod cladding material. When the NRC staff issued Amendment No. 30, it erroneously did not include the wording regarding TPBARs from Amendment No. 27 on TS page 4.0-1.

The NRC staff concludes that the error was introduced during the preparation of Amendment No. 30. The proposed correction does not change any of the conclusions in the safety evaluation associated with Amendment No. 30 and does not affect the associated notice to the public. Enclosed, please find corrected WBN, Unit 2 TS page 4.0-1.

Sincerely,

/RA/

Kimberly J. Green, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosure: Corrected TS page 4.0-1

cc: Listserv

ENCLOSURE

WATTS BAR NUCLEAR PLANT, UNIT 2

DOCKET NO. 50-391

CORRECTED PAGE TO LICENSE AMENDMENT NO. 30

FACILITY OPERATING LICENSE NO. NPF-96
TECHNICAL SPECIFICATION PAGE 4.0-1

4.0 DESIGN FEATURES

4.1 Site

4.1.1 Site and Exclusion Area Boundaries

The site and exclusion area boundaries shall be as shown in Figure 4.1-1.

4.1.2 Low Population Zone (LPZ)

The LPZ shall be as shown in Figure 4.1-2 (within the 3-mile circle).

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of ZIRLO® or Optimized ZIRLO™ clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO₂) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. For Unit 2, Watts Bar is authorized to place a maximum of 1792 Tritium Producing Burnable Absorber Rods into the reactor in an operating cycle.

4.2.2 Control Rod Assemblies

The reactor core shall contain 57 control rod assemblies. The control material shall be silver indium cadmium as approved by the NRC.

(continued)

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ADAMS Accession No.: ML20015A479***by e-mail**

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