

## NRR-DMPSPeM Resource

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**From:** Saba, Farideh  
**Sent:** Friday, August 17, 2018 1:27 PM  
**To:** Wells, Russell Douglas  
**Cc:** Williams, Gordon Robert; Schrull, Edward Dustin; Jordan, Natreon; Venkataraman, Booma; Clayton, Beverly  
**Subject:** Acceptance review for Watts Bar - Revise TS 4.2.1 and 50.46 LAR and Exemption to Use Optimized Zirlo Assemblies (WBN-TS-18-11) (EPID Nos. L-2018-LLA-0197 and L-2018-LLE-0012)  
**Importance:** High

Russel,

By letter dated July 23, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML180205A492), the Tennessee Valley Authority submitted a license amendment request (LAR) and an Exemption for Watts Bar Nuclear Plant (Watts Bar), Units 1 and 2. The proposed amendment would revise Technical Specification (TS) 4.2.1, "Fuel Assemblies," and 5.9.5, "Core Operating Limits Report (COLR)," to allow the use of Optimized ZIRLO™1 as an approved fuel rod cladding material.. TVA stated that the proposed change is consistent with the Nuclear Regulatory Commission (NRC) safety evaluation (ADAMS accession No. ML051670403) that approved the use of Optimized ZIRLO fuel rod cladding material as documented in WCAP-12610-P-A and CENPD-404-P-A, Addendum 1-A (Proprietary) and WCAP-14342-A and CENPD-404-NP-A (ADAMS Accession No. ML062080569). In support of this LAR, TVA included an exemption request in accordance with Title 10 of *Code of Federal Regulations* (10 CFR) Section 50.12, "Specific exemptions," from certain requirements of 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," and 10 CFR 50, Appendix K, "ECCS Evaluation Models." TVA stated that this exemption request relates solely to the specific type of cladding material specified in these regulations for use in light water reactors. As written, the regulations presume use of either Zircaloy or ZIRLO® fuel rod cladding. The exemption is required because Optimized ZIRLO has a slightly different composition than Zircaloy or ZIRLO.

The purpose of this e mail is to provide you with the results of the NRC staff's acceptance review of the LAR and exemption request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the request has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

The NRC staff has reviewed your application and concluded that it does provide technical information in sufficient detail to enable the NRC staff to proceed with its detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment and exemption in terms of regulatory requirements and protection of public health and safety and the environment. Given the lesser scope and depth of the acceptance review as compared to the detailed technical review, there may be instances in which issues that impact the NRC staff's ability to complete the detailed technical review are identified despite completion of an adequate acceptance review. If additional information is needed, you will be advised by separate correspondence.

Based on the information provided in your submittal, the NRC staff has estimated that it will take approximately 350 and 200 hours to complete the LAR and the exemption request, respectively. The NRC staff expects to complete its reviews by August 2019. If there are emergent complexities or challenges in our review that would cause changes to the initial forecasted completion date or significant changes in the forecasted hours, the reasons for the changes, along with the new estimates, will be communicated during routine interactions with the assigned project manager.

These estimates are based on the NRC staff's initial review of the application and they could change, due to several factors including requests for additional information, unanticipated addition of scope to the review, and review by NRC advisory committees or hearing-related activities.

If you have any questions, please contact me at 301-415-1447

Thanks,

Farideh

Farideh E. Saba, P.E.

Senior Project Manager

NRC/ADRO/NRR/DORL

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