



[7590-01-P]

## NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-327 and 50-328; NRC-2016-0199]

**Tennessee Valley Authority; Sequoyah Nuclear Plant, Units 1 and 2**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Exemption; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a March 10, 2016, request, as supplemented by letter dated June 24, 2016, from the Tennessee Valley Authority (TVA or the licensee). The exemption permits a one-time reallocation of surplus funds from the nuclear decommissioning trust funds (DTFs) for the Sequoyah Nuclear Plant (SQN), Units 1 and 2, to the DTFs for the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, and the Watts Bar Nuclear Plant (WBN), Units 1 and 2.

**DATES:** This exemption was issued on September 9, 2016.

**ADDRESSES:** Please refer to Docket ID **NRC-2016-0199** 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-2016-0199**. Address questions about NRC dockets to Carol Gallagher;

telephone: 301-415-3463; e-mail: 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:** Andrew Hon, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-8480; e-mail: [Andrew.Hon@nrc.gov](mailto:Andrew.Hon@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Background**

The Commission's regulations at §§ 50.75 and 50.82 of title 10 of the *Code of Federal Regulations* (10 CFR), provide that disbursements or payments from a DTF, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the

operation of the DTF, are restricted to expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2 or transfer to another financial assurance method until final decommissioning has been completed. According to 10 CFR 50.2, “decommission” means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of the license or release of the property under restricted conditions and termination of the license. A strict interpretation of this regulatory language would prohibit a licensee from transferring funds from the DTF for one facility to the DTF for another facility. Therefore, an exemption from 10 CFR 50.75(h)(2) and 10 CFR 50.82(a)(8) is needed to allow TVA to reallocate surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2.

## **II. Request/Action**

In accordance with 10 CFR 50.12, “Specific exemptions,” TVA has, by letter dated March 10, 2016 (ADAMS Accession No. ML16071A237), as supplemented by letter dated June 24, 2016 (ADAMS Accession No. ML16179A346), requested that the NRC grant it a one-time exemption from the requirements of 10 CFR 50.75(h)(2) and 10 CFR 50.82(a)(8) so that it may reallocate surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2. TVA stated that the purpose of the proposed reallocation of surplus funds is to proportionally balance the DTFs for all of its nuclear power reactor facilities. According to TVA, two events have occurred that prompted their request for the proposed reallocation of surplus funds: (1) the issuance of renewed operating licenses for SQN Units 1 and 2, authorizing their operation for an additional 20 years; and (2) the issuance of the operating license for WBN Unit 2. TVA stated that the issuance of the SQN Units 1 and 2 renewed operating licenses resulted in an immediate projected overfunding of the DTFs for

these units because they now have an additional 20 years to accrue earnings. Conversely, the DTF for WBN Unit 2, because of the recent issuance of an operating license for WBN Unit 2, currently requires annual contributions of approximately \$3.5 million. TVA claims that if an exemption allowing the reallocation of some of the surplus funds from the DTFs for SQN Units 1 and 2 to the DTF for WBN Unit 2 is not granted, then TVA and its ratepayers would bear unnecessary costs to augment the DTF for WBN Unit 2.

The TVA asserted that special circumstances are present that warrant the grant of the requested exemption. Specifically, TVA stated, in part, that the reallocation of surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2 is consistent with the underlying purpose of the NRC's decommissioning rules, which is to provide reasonable assurance that adequate funds will be available to complete decommissioning and thus protect the public and the environment (61 FR 39278, 39281; July 29, 1996). Additionally, TVA claimed that compliance with an interpretation of the regulations that would prohibit the proposed reallocation of surplus funds would result in undue hardship and other costs that are significantly in excess of those contemplated when the regulations were adopted. Finally, TVA stated that the requested exemption from 10 CFR 50.75(h)(2) and 10 CFR 50.82(a)(8) would be a one-time exemption and that TVA will continue to comply with the external sinking fund method of decommissioning funding assurance in accordance with 10 CFR 50.75(e)(1)(ii).<sup>1</sup>

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<sup>1</sup> As support for its request, TVA cited a letter from NRC to Arizona Public Service Company, "Palo Verde Nuclear Generating Station, Unit 1 - Decommissioning Trust Fund Balance (TAC No. MB3158)," December 11, 2001 (ADAMS Accession No. ML013340484) and a letter from NRC to Southern California Edison Company, "San Onofre Nuclear Generating Station, Units 2 and 3 – Exemptions from the Requirements of 10 CFR Part 50, Sections 50.82(a)(8)(i)(A) and Section 50.75(h)(2) (TAC Nos. MF3544 and MF3545)," September 5, 2014 (ADAMS Accession No. ML14101A132).

### III. Discussion

In accordance with 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when (1) the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) any of the special circumstances listed in 10 CFR 50.12(a)(2) are present. These special circumstances are:

- (i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or
- (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or
- (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or
- (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or
- (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or
- (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

Authorized by Law

In accordance with 10 CFR 50.12, the NRC may grant an exemption from the requirements of 10 CFR part 50, if the exemption is authorized by law. The exemption requested in this instance is authorized by law because no other prohibition of law exists to preclude the activities which would be authorized by the exemption. Specifically, the requested exemption would allow the one-time reallocation of surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2 such that each fund would separately satisfy the NRC's minimum funding assurance requirements with a projected excess available to address site-specific costs to decommission the facility. In addition to the NRC's regulations at 10 CFR 50.75 and 10 CFR 50.82, from which TVA is requesting an exemption, the regulations of the Federal Energy Regulatory Commission (FERC) at 18 CFR 35.32 and 18 CFR 35.33 also address the use of nuclear power plant DTFs. It states in 18 CFR 35.32(a)(6), in pertinent part, that "[a]bsent the express authorization of the [FERC], no part of the assets of the [DTF] may be used for, or diverted to, any purpose other than to fund the costs of decommissioning the nuclear power plant to which the [DTF] relates, and to pay administrative costs and other incidental expenses, including taxes, of the Fund." It states in 18 CFR 35.33, in pertinent part, that the trustee of the DTF may use the DTF assets only to "[s]atisfy the liability of a utility for decommissioning costs of the nuclear power plant to which the [DTF] relates as provided by [18 CFR] 35.32; and [p]ay administrative costs and other incidental expenses, including taxes, of the [DTF] as provided by [18 CFR] 35.32."<sup>2</sup> By

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<sup>2</sup> The NRC's regulations recognize the applicability of such non-NRC rules to power reactor licensees by stating in 10 CFR 50.75(a) that, "[f]unding for the decommissioning of power reactors may also be subject to the regulation of Federal or State Government agencies (e.g., Federal Energy Regulatory Commission

prohibiting the use of the assets of a DTF to fund the costs of decommissioning nuclear power plants other than the nuclear power plant to which the DTF relates, these regulations would preclude the reallocation of surplus funds that is proposed by TVA with its requested exemption. TVA, though, as a Federally owned corporation, is exempt from these regulations (16 USC 824(f)). Therefore, the requested exemption is not precluded by any other prohibition of law and is, thus, authorized by law.

#### No Undue Risk to the Public Health and Safety

The underlying purpose of the NRC's decommissioning rules is to provide reasonable assurance that adequate funds will be available to complete decommissioning and thus protect the public and the environment (61 FR 39278, 39281; July 29, 1996). The NRC has determined by rule at 10 CFR 50.75 that, for power reactor licensees, reasonable assurance of funds for decommissioning is demonstrated when a power reactor licensee covers, using one of the methods of 10 CFR 50.75(e), including the external sinking fund method used by TVA, an amount which may be more, but not less, than the amount stated in the table in 10 CFR 50.75(c)(1) adjusted using a rate at least equal to that stated in 10 CFR 50.75(c)(2). This is known as the formula amount. This reasonable assurance is then maintained by the requirement that each power reactor licensee report to the NRC every two years on, among other things, the updated formula amount, the amount of decommissioning funds accumulated to the end of the calendar year, the schedule of the annual amounts remaining to be collected, and, if necessary, plans for adjusting levels of funds assured for decommissioning to demonstrate that a reasonable level of assurance will be provided that funds will be available

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(FERC) and State Public Utility Commissions) that have jurisdiction over rate regulation. The requirements of this section . . . are in addition to, and not substitution for, other requirements, and are not intended to be used by themselves or by other agencies to establish rates.”

when needed to cover the cost of decommissioning. Reasonable assurance is also maintained by restricting disbursements or payments from a DTF, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, to expenses for legitimate decommissioning activities. Based on this regulatory structure, there is no undue risk to the public health and safety when a power reactor licensee covers by the external sinking fund method an amount greater than or equal to the formula amount.

The requested exemption to allow a one-time reallocation of surplus funds from the DTFs for SQN Units 1 and 2, to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2 will not present an undue risk to the public health and safety because, as reallocated, each of these DTFs would separately satisfy the minimum formula amount with a projected excess available to address site-specific costs to decommission the facility. This was verified by the NRC staff, which independently performed a decommissioning funding assurance analysis for each unit, using the proposed DTF reallocation amounts. The analysis included an independent calculation of the formula amount for each unit using the equation and adjustment factor in 10 CFR 50.75(c) and the most recent labor and energy and waste burial data available from the U.S. Department of Labor, Bureau of Labor Statistics, and NUREG-1307, "Report on Waste Burial Charges" (ADAMS Accession No. ML13023A030), respectively, and an independent fund growth analysis through the permanent termination of operations (assuming an annual real rate of return of 5%, as allowed by 10 CFR 50.75(e)(1)(ii) and authorized by the TVA Board of Directors, TVA's rate-setting authority). In each calculation, the NRC staff found that the projected fund balance for each of the reallocated DTFs exceeded the NRC's formula amount, which is, by rule, the minimum requirement to demonstrate reasonable assurance of funds for decommissioning. Moreover, TVA has rate-setting authority and the requested exemption does



not foreclose the option for ratepayer contributions in order to fund any potential future shortfalls. Therefore, the NRC staff concludes that there is reasonable assurance that the bulk amount of the funds necessary to complete radiological decommissioning will be available for each unit after the proposed reallocation and, thus, that the requested exemption will not present an undue risk to the public health and safety.

#### Consistent with the Common Defense and Security

The requested exemption would grant a one-time exemption from the requirements of 10 CFR 50.75(h)(2) and 10 CFR 50.82(a)(8) to allow the reallocation of surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2. Neither the regulation nor the proposed exemption has any relation to security issues. Therefore, the common defense and security is not impacted by the requested exemption.

#### Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. As explained above, the underlying purpose of the NRC's decommissioning rules is to provide reasonable assurance that adequate funds will be available to complete decommissioning. This underlying purpose is achieved by requiring power reactor licensees to cover, using one of the methods of 10 CFR 50.75(e), an amount which may be more, but not less, than the formula amount, to report biennially regarding the amount covered and whether adjustment is necessary, and to make disbursements or payments from a DTF only for decommissioning

activities. Under the particular circumstances, however, prohibiting the proposed reallocation of funds is not necessary to achieve the underlying purpose of the decommissioning regulations of maintaining reasonable assurance that adequate funds will be available to complete decommissioning.

The TVA proposed to reallocate funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2. Although this would be prohibited by a strict interpretation of the NRC's decommissioning rules, such a prohibition is not necessary to achieve the underlying purpose of those rules because, as reallocated, each of the DTFs would separately satisfy the minimum formula amount with a projected excess available to address site-specific costs to decommission the facility. As discussed above, this was verified by the NRC staff, which independently performed a decommissioning funding assurance analysis for each unit, using the proposed DTF reallocation amounts, and found that the projected fund balance for each DTF, as reallocated, would exceed the NRC minimum funding assurance requirements. Therefore, the NRC staff concludes that prohibiting the proposed reallocation of funds through the application of 10 CFR 50.75(h)(2) and 10 CFR 50.82(a)(8) would not be necessary to achieve the underlying purpose of these regulations; instead, the proposed reallocation would provide reasonable assurance that adequate funds will be available for the radiological decommissioning of the reactors.

### Environmental Considerations

With respect to its impact on the quality of the human environment, the NRC has determined that the issuance of the exemption discussed herein meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(25). Under 10 CFR 51.22(c)(25), the

granting of an exemption from the requirements of any regulation of 10 CFR Chapter I is an action that is a categorical exclusion provided that: (i) there is no significant hazards consideration; (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which an exemption is sought involve those types of requirements identified in 10 CFR 51.22(c)(25)(vi).

The exemption allows the licensee to reallocate surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2. Neither the regulation nor the exemption has any relation to the operation of the facilities. Therefore, the Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation, has determined that approval of the exemption request involves no significant hazards consideration because it does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. Similarly, as a result of the exemption, which is not related to facility operation, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite and there is no significant increase in individual or cumulative public or occupational radiation exposure. The exempted regulation is not associated with construction, so there is no significant construction impact. The exempted regulation does not concern the source term (i.e., potential amount of radiation in an accident), nor mitigation. Therefore, there is no significant increase in the potential for or consequences from radiological accidents. Finally, the requirements for using DTFs for decommissioning

activities from which the exemption is sought involve recordkeeping requirements, reporting requirements, or other requirements of an administrative, managerial, or organizational nature.

Based on the above, the NRC staff concludes that the exemption meets the eligibility criteria for the categorical exclusion set forth in 10 CFR 51.22(c)(25). Therefore, in accordance with 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request.

#### **IV. Conclusions**

The NRC has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Also, special circumstances pursuant to 10 CFR 50.12(a)(2)(ii) are present. Therefore, the NRC hereby grants TVA a one-time exemption from the requirements of 10 CFR 50.75(h)(2) and 10 CFR 50.82(a)(8) to allow the requested reallocation of surplus funds from the DTFs for SQN Units 1 and 2 to the DTFs for BFN Units 1, 2, and 3 and WBN Units 1 and 2.

Dated at Rockville, Maryland, this 9<sup>th</sup> day of September 2016.

For the Nuclear Regulatory Commission.

Anne T. Boland, Director,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.