



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-16-021

March 10, 2016

10 CFR 50.12

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Sequoyah Nuclear Plant, Units 1 and 2  
Renewed Facility Operating License Nos. DPR-77 and DPR-79  
NRC Docket Nos. 50-327 and 50-328

Subject: **Sequoyah Nuclear Plant (SQN) Units 1 and 2 - Nuclear Decommissioning Trust Fund Balance - Request for Exemption**

- References:
1. Letter from TVA to NRC, CNL-15-017, "Decommissioning Funding Status Report," dated March 31, 2015 (ML15098A176)
  2. Letter from TVA to NRC, CNL-15-189, "Decommissioning Funding Update," dated September 10, 2015 (ML15253A867)
  3. Letter from NRC to TVA, "Issuance of Renewed Facility Operating Licenses Numbers DPR-77 and DPR-79 for Sequoyah Nuclear Plant, Units 1 and 2," dated September 25, 2015 (ML15097A454)
  4. Letter from NRC to TVA, "Issuance of Facility Operating License No. NPF-96, Watts Bar Nuclear Plant Unit 2," dated October 22, 2015 (ML15251A587)

In accordance with the provisions of Title 10 of the *Code of Federal Regulations* (CFR) 50.12(a), "Specific Exemptions," Tennessee Valley Authority (TVA) is requesting a one-time exemption from the requirements in 10 CFR 50.82(a)(8) to the extent necessary to authorize TVA to reallocate surplus funds from its nuclear decommissioning trust (NDT) funds for Sequoyah Nuclear Plant (SQN) Units 1 and 2 to the NDT funds for Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3 and Watts Bar Nuclear Plant (WBN), Units 1 and 2. TVA's NDT funds for both SQN units would continue to meet the NRC's financial assurance requirements pursuant to 10 CFR 50.75(e)(1)(ii) both prior to and after the proposed reallocation of assets.

In Reference 1, TVA submitted the latest Decommissioning Funding Status Report, which provided the status of decommissioning funding for BFN, Units 1, 2, and 3; SQN, Units 1 and 2; and WBN, Unit 1. In Reference 2, TVA notified the Nuclear Regulatory Commission (NRC) of an amendment to the Master Decommissioning Trust Agreement in order to create a separate fund for WBN, Unit 2. Subsequent to the submittal of References 1 and 2, two events occurred that necessitate the reallocation of funds to proportionally balance TVA's funds. On September 25, 2015, TVA received renewed operating licenses for SQN, Units 1 and 2 (Reference 3), and on October 22, 2015, TVA received the operating license for WBN, Unit 2 (Reference 4). The operating license renewals for SQN Units 1 and 2 resulted in an immediate overfunding of their respective NDT funds due to the 20 additional reactor years per unit for additional fund earnings. Conversely, as provided in Reference 2, the establishment of a new fund for WBN Unit 2, which utilizes the external sinking fund method of funding assurance, currently requires annual contributions of approximately \$3.5 million. Thus, the request for authority to rebalance the NDT funds is necessary. A detailed description of this exemption request and justification for the exemption are provided in the enclosure to this letter.

TVA requests that this exemption request be approved no later than August 31, 2016. If TVA is unable to reallocate some of the surplus from its SQN, Units 1 and 2 NDT funds, TVA and its ratepayers would bear unnecessary costs to augment the WBN Unit 1 and Unit 2 NDT funds.

There are no new regulatory commitments contained in this submittal. If you have any questions concerning this matter, please contact Mr. Edward Schrull at 423-751-3850.

Respectfully,

**J. W. Shea**

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J. W. Shea  
Vice President, Nuclear Licensing

Enclosures:

1. Sequoyah Nuclear Plant Units 1 and 2 Nuclear Decommissioning Trust Fund Balances - Request for Exemption from 10 CFR 50.82(a)(8)

cc:

NRC Regional Administrator – Region II  
NRC Senior Resident Inspector – Browns Ferry Nuclear Plant  
NRC Senior Resident Inspector – Sequoyah Nuclear Plant  
NRC Senior Resident Inspector – Watts Bar Nuclear Plant

**ENCLOSURE 1**

**Sequoyah Nuclear Plant Units 1 and 2 Nuclear Decommissioning Trust Fund  
Balances  
Request for Exemption from 10 CFR 50.82(a)(8)**

## **Background**

10 CFR 50.82(a)(8) states:

- (8)(i) Decommissioning trust funds may be used by licensees if -
  - (A) The withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in §50.2;
  - (B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise and;
  - (C) The withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.
  
- (ii) Initially, 3 percent of the generic amount specified in §50.75 may be used for decommissioning planning. For licensees that have submitted the certifications required under 10 CFR 50.82(a)(1) and commencing 90 days after the NRC has received the PSDAR, an additional 20 percent may be used. A site-specific decommissioning cost estimate must be submitted to the NRC prior to the licensee using any funding in excess of these amounts.
  
- (iii) Within 2 years following permanent cessation of operations, if not already submitted, the licensee shall submit a site-specific decommissioning cost estimate.
  
- (iv) For decommissioning activities that delay completion of decommissioning by including a period of storage or surveillance, the licensee shall provide a means of adjusting cost estimates and associated funding levels over the storage or surveillance period.

10 CFR 50.2 states:

*Decommission* means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits-

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.

## **Requested Exemption**

In accordance with the provisions of 10 CFR 50.12(a), "Specific Exemptions," Tennessee Valley Authority (TVA) is requesting a one-time exemption from the requirements in 10 CFR 50.82(a)(8) to the extent necessary to authorize TVA to reallocate surplus funds (funds in excess of the net present value of the NRC minimum formula amount) from its nuclear decommissioning trust (NDT) funds for Sequoyah Nuclear Plant (SQN) Units 1 and 2 to the NDT funds for Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3 and Watts Bar Nuclear Plant (WBN), Units 1 and 2. TVA's NDT funds for both SQN units would continue to meet the NRC's financial assurance requirements pursuant to 10 CFR 50.75(e)(1)(ii) both prior to and after the proposed reallocation of assets. A detailed description of this exemption request and justification for the exemption are provided below.

## **Justification**

In Reference 1, TVA submitted the latest Decommissioning Funding Status Report, which provided the status of decommissioning funding for BFN, Units 1, 2, and 3; SQN, Units 1 and 2; and WBN, Unit 1. In Reference 2, TVA notified the Nuclear Regulatory Commission (NRC) of an amendment to the Master Decommissioning Trust Agreement in order to create a separate NDT fund for WBN, Unit 2. Subsequent to the submittal of References 1 and 2, two events occurred that necessitate the reallocation of funds to proportionally balance TVA's NDT funds. On September 25, 2015, TVA received renewed operating licenses for SQN, Units 1 and 2 (Reference 3), and on October 22, 2015, TVA received the operating license for WBN, Unit 2 (Reference 4). The operating license renewals at SQN Units 1 and 2 resulted in an immediate overfunding of their respective NDT funds due to the 20 additional reactor years per unit for additional fund earnings. Conversely, as provided in Reference 2, the establishment of a new NDT fund for WBN Unit 2, which utilizes the external sinking fund method of funding assurance, currently requires annual contributions of approximately \$3.5 million. Thus, the request for authority to rebalance the NDT funds is necessary.

Table 1 provides the current and proposed balances for the NDT funds for the seven TVA nuclear power plants.

The left side of Table 1 shows the current balances in TVA's NDT funds by unit as of December 31, 2015, based on the current allocation percentages. The liabilities are estimated using currently available Bureau of Labor Statistics indices. The assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors remain the same as provided in References 1 and 2.

The right side of Table 1 shows the proposed reallocation of excess funds from its SQN Units 1 and 2 NDT funds to its BFN Units 1, 2, and 3 and WBN Units 1 and 2 NDT funds in order to proportionally distribute the overfunding across all seven funds. Both prior to and after the reallocation of funds, the balances in the SQN Units 1 and 2 NDT funds would continue to be in excess of the NRC's minimum funding requirements.

**Table 1**

CURRENT (As of December 31, 2015)				PROPOSED REALLOCATION (Based on December 31, 2015 data)			
Plant, Unit	Current NDT Balance (\$Millions)	Liabilities (\$Millions)	Current Over/Under Funding (\$Millions)	Proposed Reallocated NDT Balance (\$Millions)	Liabilities (\$Millions)	Proposed Overfunding (\$Millions)	*Percent Overfunded
Browns Ferry Unit 1	\$249.6	\$230.9	\$18.7	\$313.1	\$230.9	\$82.2	135.6
Browns Ferry Unit 2	\$238.9	\$225.0	\$13.9	\$305.1	\$225.0	\$80.1	135.6
Browns Ferry Unit 3	\$214.5	\$204.0	\$10.5	\$276.7	\$204.0	\$72.7	135.6
Sequoyah Unit 1	\$343.1	\$127.6	\$215.5	\$173.0	\$127.6	\$45.4	135.6
Sequoyah Unit 2	\$326.2	\$121.6	\$204.6	\$164.9	\$121.6	\$43.3	135.6
Watts Bar Unit 1	\$159.3	\$161.8	(\$2.5)	\$219.4	\$161.8	\$57.6	135.6
Watts Bar Unit 2	\$3.5	\$61.1	(\$57.6)	\$82.9	\$61.1	\$21.8	135.6
<b>Totals</b>	<b>\$1,535.1</b>	<b>\$1,132.0</b>	<b>\$403.1</b>	<b>\$1,535.1</b>	<b>\$1,132.0</b>	<b>\$403.1</b>	<b>-</b>

\*As shown in Table 1, the proposed reallocation percentage as of December 31, 2015 would be approximately 136% overfunded in each of the seven NDT funds. However, at the time of the approval of this proposed exemption, the current market conditions may require a different allocated percentage. TVA would reallocate the surplus proportionally such that all seven units would remain fully funded.

10 CFR 50.82(a)(8) authorizes licensees to use the trust funds for specific purposes, but does not address whether licensees are authorized to reallocate excess funds from one unit's fund within an NDT to another unit's fund within the same NDT. To the extent 10 CFR 50.82(a)(8) might be construed to prohibit the reallocation of assets among the units within an NDT, TVA requests a one-time exemption from any such requirement so that it might complete a reallocation of surplus funds from its NDT funds for SQN Units 1 and 2 to its NDT funds for BFN Units 1, 2, and 3 and WBN Units 1 and 2.

**10 CFR 50.12 Criteria**

The standards set forth in 10 CFR 50.12 provide that the NRC may grant exemptions from the requirements of the regulations in this part for reasons consistent with the following:

- the exemption is authorized by law
- the exemption will not present an undue risk to the public health and safety
- the exemption is consistent with the common defense and security
- special circumstances are present

As explained in more detail below, the requested exemption satisfies all four of these standards.

### ***Authorized by Law***

Because decommissioning funding requirements are within the discretion of the NRC, this exemption is authorized by law.

### ***Public Health and Safety and Common Defense and Security***

This exemption will not present an undue risk to public health and safety and is consistent with the common defense and security. The reallocation of assets will not affect the total value of assets available for decommissioning, because there is no planned sale or liquidation of assets. Moreover, TVA will continue to maintain sufficient funds in its NDT to complete decommissioning in a safe, secure manner.

### ***Special Circumstances***

This request for an exemption involves the special circumstances described below.

- *Adequate and Proportionate Funding and Protection of Public and Environment.* The reallocation of assets from the SQN Units 1 and 2 NDT funds to the BFN Units 1, 2, and 3 and WBN Units 1 and 2 NDT funds is consistent with the underlying purpose of the NRC's decommissioning rule. As noted in the Statements of Consideration (SOC) for the Final Rule on Decommissioning of Nuclear Power Reactors (Reference 5), the NRC's primary concerns, as a licensee transitions to decommissioning, are that the licensee will have sufficient funds to complete decommissioning, and that the activities undertaken by the licensee will protect the public and environment. The proposed reallocation of funds satisfies those concerns, for after the reallocation, the NDT funds for all seven units would be adequately and proportionately funded, which would help ensure that TVA could decommission its nuclear units in a manner that protects the public and environment.
- *Undue Hardship.* Compliance with any interpretation of 10 CFR 50.82(a)(8) that would prohibit the proposed reallocation of assets from SQN Units 1 and 2 NDT funds to BFN Units 1, 2, and 3 and WBN Units 1 and 2 NDT funds would result in undue hardship and other costs that are significantly in excess of those contemplated when the regulation was adopted. If TVA is unable to reallocate some of the surplus from SQN Units 1 and 2 NDT funds to BFN Units 1, 2, and 3 and WBN Units 1 and 2 NDT funds, TVA and its ratepayers would bear unnecessary costs to augment the WBN Unit 1 and Unit 2 NDT funds. This is unnecessary, because SQN Units 1 and 2 current NDT balances greatly exceed the NRC's requirements, and SQN Units 1 and 2 balances will meet NRC requirements following the proposed reallocation. TVA and its ratepayers should not be financially penalized under circumstances where TVA's NDT balances are, and will remain, healthy in accordance with the NRC's requirements.
- *One-Time Exemption.* The requested relief from 10 CFR 50.82(a)(8) is a one-time exemption. TVA is requesting authority to reallocate assets prior to September 30, 2016, and the reallocation contemplated would be completed no later

than September 30, 2016. 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).

### **Precedent**

The NRC has previously approved a similar exemption request associated with the transfer of decommissioning funds between units. TVA believes the relevant portion of the safety evaluation listed below provides a precedent.

1. Letter from NRC to Arizona Public Service Company, "Palo Verde Nuclear Generating Station, Unit 1 Decommissioning Trust Fund Balance (TAC No. MB3158)," dated December 11, 2001 (ML013340484)

Note that the approved precedent was to transfer funds from one NDT to another separate NDT. The TVA proposed reallocation is to facilitate a rebalancing of funds within one master NDT.

### **Conclusion**

10 CFR 50.82(a)(8) might be construed to prohibit a licensee from reallocating assets from one unit's NDT fund to another unit's NDT fund. However, under the circumstances presented here, such a reallocation is consistent with the purpose of the NRC's decommissioning rule, for the reallocation would help ensure both adequate and proportionate funding for all seven of TVA's NDT funds, which in turn would enable TVA to decommission its nuclear units in a safe, secure manner that protects the public and environment. Moreover, the reallocation, which would be a one-time event, would prevent TVA and its ratepayers from bearing unnecessary costs to augment the WBN Unit 1 and Unit 2 NDT funds. TVA requests that this exemption request be approved by NRC in a timely manner to ameliorate that undue hardship.

### **References**

1. Letter from TVA to NRC, CNL-15-017, "Decommissioning Funding Status Report," dated March 31, 2015 (ML15098A176)
2. Letter from TVA to NRC, CNL-15-189, "Decommissioning Funding Update," dated September 10, 2015 (ML15253A867)
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4. Letter from NRC to TVA, "Issuance of Facility Operating License No. NPF-96, Watts Bar Nuclear Plant Unit 2," dated October 22, 2015 (ML15251A587)
5. 61 FR 39278, Final Rule - Decommissioning of Nuclear Power Reactors, July 29, 1996