



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

November 6, 2009

10 CFR 73.4

ATTN: Document Control Desk  
Director, Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Watts Bar Nuclear Plant, Units 1 and 2  
Facility Operating License No. NPF-90  
NRC Docket Nos. 50-390 and 50-391

Subject: **Request for Scheduler Exemption from Certain Physical Security Implementation Requirements of 10 CFR 73.55 for Watts Bar Nuclear Plant, Non-Safeguards Information Version**

Reference: Letter from TVA to NRC dated November 6, 2009, "Request for Scheduler Exemption from Certain Physical Security Requirements of 10 CFR 73.55 for Watts Bar Nuclear Plant"

The purpose of this letter is to provide a public version of the request for a scheduler exemption from certain physical security requirements of 10 CFR 73.55 submitted in the referenced letter. This supplemental letter removes the information considered to be Safeguards Information and Security Sensitive information from the referenced letter but includes the Environmental Assessment.

In accordance with the requirements of 10 CFR 73.5, "Specific exemptions," the Tennessee Valley Authority (TVA), requests that the Nuclear Regulatory Commission (NRC) approve a scheduler exemption for the implementation of certain new requirements of 10 CFR Part 73, "Physical Protection of Plants and Materials," for the Watts Bar Nuclear Plant (WBN), Units 1 and 2. TVA requests approval to extend the March 31, 2010, implementation date for certain requirements in the revised rule to the dates described below. The details of this exemption request were discussed during a meeting between representatives of the NRC and TVA that was held on October 23, 2009.

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The NRC recently issued a new Rule regarding security requirements in the Federal Register (FR) dated March 27, 2009 (i.e., 74 FR 13926). In accordance with the requirements of the new Rule, the new security requirements must be implemented by March 31, 2010. TVA has evaluated these new requirements and determined that most of the new requirements can be implemented by the required date. However, TVA has also determined that implementation of specific parts of the new requirements will require additional time to implement since they involve new components and engineering that cannot be obtained or completed by the new Rule implementation date.

Accordingly, TVA is requesting an exemption from the March 31, 2010, implementation date for certain new requirements contained in 10 CFR 73.55 paragraphs (e), "Physical barriers," and (i), "Detection and assessment systems," to September 24, 2012, as described in Enclosure 1. Implementation of certain changes to ensure compliance with these specific provisions of the new Rule require procurement and engineering that will not be completed until after the March 31, 2010 implementation date. The schedular exemption request for the specific portions of the new Rule for which an exemption is needed is provided in Enclosure 1.

Enclosure 2 provides the Environmental Assessment input for the schedular exemption request.

The schedular extension is needed to complete the required modifications to comply with the new Rule. TVA's currently implemented security program along with the new Rule requirements that will be implemented by March 31, 2010, will continue to provide high assurance of public health and safety and common defense and security. Accordingly, the requested exemption is authorized by law and will not endanger life or property or the common defense and security in accordance with 10 CFR 73.5. Granting this exemption will allow TVA to implement the changes necessary to comply with the new provisions of 10 CFR 73.55 and is therefore in the public interest.

TVA requests approval of this exemption request prior to March 1, 2010, so that appropriate and timely actions can be taken to revise and implement the TVA security program. TVA requests that the exemptions, if approved, be effective upon issuance.

Enclosure 3 provides the commitments made in the referenced letter.

In addition, similar schedular exemption requests are being submitted for TVA's Browns Ferry and Sequoyah Nuclear Plants.

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Should you have any questions concerning this submittal, please contact Mr. Kevin Casey at (423) 751-8523.

Respectfully,



R. M. Krich  
Vice President  
Nuclear Licensing

- Enclosures:
1. Request for Schedular Exemption from the Implementation Date for New Physical Security Requirements for Watts Bar Nuclear Plant, Units 1 and 2
  2. Environmental Assessment Input Supporting the Schedular Exemption Request
  3. 10 CFR 73.55 Schedular Exemption Request Commitments

## ENCLOSURE 1

### A. Background

The NRC recently issued a new Rule regarding security requirements in the Federal Register dated March 27, 2009. In accordance with the requirements of the new Rule, the new security requirements must be implemented by March 31, 2010. Implementation of these new requirements will be performed along with several other modifications to improve and upgrade the security system at Watts Bar Nuclear Plant. The Tennessee Valley Authority (TVA) has evaluated these new requirements and determined that some of the new requirements can be implemented by March 31, 2010. TVA has determined that implementation of specific parts of the new requirements will require additional time beyond March 31, 2010, since they involve procurement and engineering that will not be completed until after the March 31, 2010, implementation date.

### B. Security System Upgrade

Several projects are being implemented at Watts Bar Nuclear Plant to meet the new provisions of 10 CFR 73.55. As noted, these projects are being performed along with other modifications to improve and upgrade the security system at Watts Bar Nuclear Plant. These projects include the following:

- ***[Safeguards Information Removed]***

Due to the amount of engineering design and component procurement activities involved in these projects, and subsequent implementation of the **[Safeguards Information Removed]** Projects, portions of the new requirements contained in 10 CFR 73.55 will require additional time beyond March 31, 2010 to be completed. The specific exemptions being requested and supporting details are described in Section C below.

### C. Requested Exemptions

TVA requests schedular exemptions, from the implementation deadline only, for the three portions of the new 10 CFR 73.55 requirements listed in this section. TVA's currently implemented security program along with the new Rule requirements that will be implemented by March 31, 2010, will continue to provide high assurance of public health and safety and common defense and security. Accordingly, the requested exemptions are authorized by law and will not endanger life or property or the common defense and security in accordance with 10 CFR 73.5, "Specific exemptions." Granting this exemption will allow TVA to implement the changes necessary to comply with the new provisions of 10 CFR 73.55, and is therefore in the public interest.

Item 1

Regulation

10 CFR 73.55(e), "Physical barriers."

(7) "Isolation zone."

(i) An isolation zone must be maintained in outdoor areas adjacent to the protected area perimeter barrier. The isolation zone shall be:

(C) Monitored with assessment equipment designed to satisfy the requirements of 10 CFR 73.55(i) and provide real-time and play-back/recorded video images of the detected activities before and after each alarm annunciation.

Issue

***[Safeguards Information Removed]***

Requested Scheduler Exemption

TVA requests a scheduler exemption from the March 31, 2010, implementation requirement of 10 CFR 73.55, to September 24, 2012, for the implementation of the new Rule provision described in Item 1 above for the Watts Bar Nuclear Plant. The isolation zone at the Watts Bar Nuclear Plant is currently maintained in outdoor areas adjacent to the protected area perimeter barrier. This isolation zone is currently monitored with assessment equipment and/or personnel of the detected activities before and after each alarm annunciation.

Item 2

Regulation

10 CFR 73.55(i), "Detection and assessment systems."

- (3) The licensee's intrusion detection and assessment systems must be designed to:
  - (vii) Ensure intrusion detection and assessment equipment at the protected area perimeter remains operable from an uninterruptible power supply in the event of the loss of normal power.

Issue

***[Safeguards Information Removed]***

Requested Scheduler Exemption

TVA requests a scheduler exemption from the March 31, 2010, implementation requirement of 10 CFR 73.55, to September 24, 2012, for the implementation of the new Rule provision described in item 2 above for the Watts Bar Nuclear Plant. The existing intrusion detection and assessment equipment will continue to provide the required protection.

Item 3

Regulation

10 CFR 73.55(i), "Detection and assessment systems."

(4) Alarm stations.

(i) Both alarm stations required by paragraph (i)(2) of this section must be designed and equipped to ensure that a single act, in accordance with the design basis threat of radiological sabotage defined in 10 CFR 73.1(a)(1), cannot disable both alarm stations. The licensee shall ensure the survivability of at least one alarm station to maintain the ability to perform the following functions:

- (A) Detect and assess alarms;
- (B) Initiate and coordinate an adequate response to an alarm;
- (C) Summon offsite assistance; and
- (D) Provide command and control.

Issue

**[Safeguards Information Removed]**

Requested Scheduler Exemption

TVA requests a scheduler exemption from the March 31, 2010, implementation requirement of 10 CFR 73.55, to September 24, 2012, for the implementation of the new Rule provision described in Item 3 above for the Watts Bar Nuclear Plant. The existing alarm stations continue to be adequately protected to ensure that alarm station functions can be carried out.

**ENCLOSURE 2**

**WATTS BAR NUCLEAR PLANT  
ENVIRONMENTAL ASSESSMENT INPUT  
SUPPORTING THE SCHEDULAR EXEMPTION REQUEST**

Enclosure 2

WATTS BAR NUCLEAR PLANT  
10 CFR 73.55 SCHEDULAR EXEMPTION REQUEST  
ENVIRONMENTAL ASSESSMENT INPUT

The Tennessee Valley Authority (TVA) is submitting under 10 CFR 73.5, "Specific exemptions," a request for a schedular exemption from the required March 31, 2010, implementation date for specific new requirements of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." This exemption is authorized by law and it will not endanger life or property and is consistent with the common defense and security.

To support the Nuclear Regulatory Commission's effort to prepare an environmental assessment for the 10 CFR 73.55 Schedular Exemption, the following information is provided:

1. The proposed action would provide TVA with a schedular exemption from the required implementation date of March 31, 2010.
2. The schedular exemption is needed to provide TVA with additional time from the required March 31, 2010, implementation date to perform the required security system upgrades to meet specific new requirements of 10 CFR 73.55 at the Watts Bar Nuclear Plant.
3. The schedular exemption request is to allow implementation of security system changes to be completed beyond the required implementation date. The schedular exemption request does not:
  - a. result in any expected changes to radiological or non-radiological liquid or gaseous effluents discharged from the site;
  - b. result in changes to type or quantity of solid radioactive waste generated; or,
  - c. result in any expected change in the radiological impact on either the workforce or public.

The design change packages implementing the physical modifications for the security system upgrades are being prepared per the requirements of TVA Standard Programs and Process (SPP) 9.3, "Plant Modifications and Engineering Change Control." As part of the design change package preparation, each package is screened for environmental impacts to ensure that if required, the applicable environmental review is performed.

4. The alternative to granting the schedular exemption would be to deny it, thereby requiring TVA to shutdown the Watts Bar Nuclear Plant and remove all nuclear fuel prior to March 31, 2010.

**ENCLOSURE 3**

**10 CFR 73.55 SCHEDULAR EXEMPTION REQUEST  
COMMITMENTS**

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Enclosure 3

10 CFR 73.55 SCHEDULAR EXEMPTION REQUEST  
COMMITMENTS

1. TVA will be in full compliance with 10 CFR 73.55(i)(4)(i)(A) - (D), 10 CFR 73.55(e)(7)(i)(C) and 10 CFR 73.55(i)(3)(vii) for Watts Bar Nuclear Plant by September 24, 2012.