

June 15, 2005

10 CFR 72.212

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop: OWFN P1-35  
Washington, D.C. 20555-0001

Gentlemen:

In the Matter of	)	Docket Nos.	50-259
Tennessee Valley Authority	)		50-260
			50-296
			72-052

**BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, AND 3 -  
INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) - REQUEST  
NRC ACCEPTANCE AT BFN FOR CERTAIN PRE-OPERATIONAL TESTING AND  
TRAINING EXERCISE REQUIREMENTS PREVIOUSLY PERFORMED AT SEQUOYAH  
(SQN) NUCLEAR PLANT**

TVA is requesting NRC acceptance for not re-performing certain requirements in 10 CFR 72.212(b)(2)(i)(A), "Conditions Set Forth in the Certificate of Compliance have been met" for BFN. Specifically, TVA is requesting that it not be required to re-perform certain activities in the Pre-Operational Testing and Training Exercise scheduled to be conducted at BFN in July of 2005, which were performed and accepted by NRC at SQN in May 2004.

For BFN and SQN, TVA is using the Holtec International, Inc., HI-STORM 100 Cask System, Certificate of Compliance (COC) No. 1014, Amendment 1. The Pre-Operational Testing and Training Exercise requirements are listed under Condition 10 of the Certificate of Compliance. TVA is seeking NRC acceptance to not re-perform certain requirements in sections 10.f and 10.j for BFN as listed below.

- 10.f Multi-purpose canister (MPC) welding, and NDE inspections.
- 10.J HI-STORM 100 Cask System unloading, including cooling fuel assemblies, flooding MPC cavity, and removing MPC lid welds.

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These activities were successfully demonstrated by TVA and witnessed by NRC at SQN in May 2004 during its Pre-Operational Testing and Training Exercise. TVA considers that these activities are non site specific, since they were performed in a shop area using the same cask system, contractor personnel, equipment, and procedures (except for BFN site specific editorial changes) that would be utilized to perform the activities at BFN. TVA believes that re-performing these activities at BFN would be a costly (at least \$200,000) duplication of effort with no compensating increase in the level of quality and safety.

The enclosure to this letter provides a detailed justification of each activity covered by TVA's request. TVA seeks review and approval of this request by July 1, 2005, to support spent fuel canister loading in late July 2005.

There are no new regulatory commitments in this letter. If you have any questions, please contact me at (256) 729-2636.

Sincerely,

Original signed by:

William D. Crouch  
Acting Manager of Licensing  
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cc: See Page 3

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(Via NRC Electronic Distribution)

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DTL:JWD:BAB

Enclosure

cc (Enclosure):

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- J. C. Fornicola, LP 6A-C
- D. F. Helms, BR 4T-C
- R. G. Jones, NAB 1A-BFN
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- E. J. Vigluicci, ET 11A-K
- NSRB Support, LP 5M-C
- EDMS WT CA-K

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**ENCLOSURE**

**TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT (BFN)  
UNITS 1, 2, AND 3**

**INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI),  
REQUEST NRC ACCEPTANCE AT BFN FOR CERTAIN PRE-OPERATIONAL  
TESTING AND TRAINING EXERCISE REQUIREMENTS PREVIOUSLY  
PERFORMED AT SEQUOYAH (SQN) NUCLEAR PLANT**

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In accordance with 10 CFR 72 and submitted in the 72.212 report, each utility is required to demonstrate all aspects of operation of the system they propose to utilize for dry fuel storage. This includes the ability to remove fuel from a stored canister that has been placed in dry storage. TVA requests NRC acceptance at BFN for certain aspects of dry cask storage mock-up demonstrations previously performed at TVA's Sequoyah Nuclear Plant (SQN) in 2004.

The Pre-Operational Testing and Training Exercise requirements for dry cask storage systems are listed under Condition 10 of the Certificate of Compliance. TVA feels the following items should be considered complete, for demonstration purposes at BFN, based on completed performance demonstrations at SQN.

- 10.f Multi-purpose canister (MPC) welding, and NDE inspections.
- 10.J HI-STORM 100 Cask System unloading, including cooling fuel assemblies, flooding MPC cavity, and removing MPC lid welds.

The specific basis for each item is provided below. Part 72 requires the licensee to demonstrate all aspects of the process they propose to use. TVA is the licensee and as such has previously demonstrated these activities that are not specifically related to a site location. They are related to the system purchased. TVA has chosen Stone & Webster Construction Inc. (SWCI) as the contractor to manage the actual field work associated with the Holtec System for dry fuel storage. The SWCI management team that performed the work for TVA at Sequoyah Nuclear Plant using the Holtec system will be the same performing this work at BFN. SWCI has a contract with Welding Services Inc. (WSI) to provide the welding service for this work. WSI performed the welding for SWCI at Sequoyah on the Holtec system canisters.

### Canister Welding

SWCI plans to continue their alliance with WSI for welding of the canisters at BFN. WSI is providing the same supervisor used at SQN for the welding operations at BFN. WSI has further indicated that every attempt will be made to use the same welders and quality control personnel that were used at SQN. The TVA contract for the initial loading at SQN included the BFN initial campaign as part of the contract award. As such, this ensures the same approach employed at SQN will be that used at BFN. SWCI and WSI in addition to using the same management and supervision intend to use the same process, procedures, equipment, and NDE procedures along with a duplicate weld traveler for the BFN canisters. WSI has completed over 200 dry fuel storage canister closure welds with over 50 being Holtec's design.

### Helium Cool-Down System Operation

TVA purchased a Holtec helium cool-down system generic for use on BWR and PWR design fuel canisters manufactured by Holtec. This system was assembled at SQN, demonstrated during the NRC Pre-Operational Testing and Training Exercise review, and will be the same system used at Browns Ferry. TVA is preparing site specific procedures for use of this system at BFN, but the procedure will be mechanically the same procedure used at Sequoyah. The process and procedure as well as the equipment have been previously demonstrated by TVA at SQN. Training personnel to perform this demonstration does not insure that these individuals would be the ones to actually perform the process since it is anticipated that this system will never be used. If it is used, it would most likely be years from the time the canisters were placed in service. TVA intends to continue the use of SWCI for dry fuel storage operations to insure that trained supervision is available should this system ever require use.

### Weld Removal/Canister Cutting

TVA purchased a canister cutting and weld removal system from the E. H. Wachs Company. This equipment is specifically designed for removal of the vent/drain port covers and main closure weld cutting on Holtec canisters of both the MPC 32 and MPC 68 design. The equipment was demonstrated during the NRC Pre-Operational Testing and Training Exercise review at SQN on a MPC 68 design canister mock-up (only mock-ups provided by Holtec). It was verified to fit the MPC 32 design for access to the vent/drain ports. TVA is developing BFN specific procedures for use of this equipment using the template from SQN. The actual mechanics for operating the equipment will be identical to that used at SQN. Training personnel to perform this work at BFN is identical to that for training personnel to operate the helium cool-down

system at SQN. TVA and SWCI both have contracts with the E. H. Wachs Company and in the unlikely event a canister should require cutting we would most likely elect to have them perform this work under the supervision of SWCI and TVA jointly.

In summary, the above represent non site specific dry cask storage mock-up demonstration activities that TVA has previously performed satisfactorily, as witnessed by the NRC. These activities were previously performed in a shop area at SQN using the same cask system, contractor personnel, equipment, and procedures (except for BFN site specific editorial changes) that would be utilized to perform the activities at BFN. TVA believes that re-performing these activities at BFN would be a costly (at least \$200,000) duplication of effort with no compensating increase in the level of quality and safety.