



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

August 3, 2011

10 CFR 50.4(b)(6)  
10 CFR 50.34(b)  
10 CFR 2.390(d)(1)

U.S. Nuclear Regulatory Commission  
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Watts Bar Nuclear Plant, Unit 2  
NRC Docket No. 50-391

**Subject: Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information (RAI) Regarding Final Safety Analysis Report Amendment Related Section 3.11 - Revised Response (TAC No. ME2731)**

Reference: 1. Letter from TVA to NRC, "Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information (RAI) Regarding Final Safety Analysis Report Amendment Related Section 3.11 (TAC No. ME2731)," dated September 1, 2010 [ML102500170]

Reference 1 provided a response to RAI 3.11-2. Enclosure 1 to this letter provides a revised response to RAI 3.11-2.

There are no new regulatory commitments contained in this letter. If you have any questions, please contact Bill Crouch at (423) 365-2004.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 3<sup>rd</sup> day of August, 2011.

Respectfully,

David Stinson  
Watts Bar Unit 2 Vice President

DO30  
R111

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Enclosure:

1. Revised Response to RAI 3.11-2

cc (Enclosure):

U. S. Nuclear Regulatory Commission  
Region II  
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NRC Resident Inspector Unit 2  
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1260 Nuclear Plant Road  
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## ENCLOSURE 1

### Revised Response to RAI 3.11-2

#### Tennessee Valley Authority - Watts Bar Nuclear Plant - Unit 2, Docket No. 50-391

**3.11-2** *Confirm that equipment being replaced or refurbished will be qualified as Category 1 as required by 10 CFR 50.49.*

**Note:** Since only portion e. of the original response is revised, it is the only portion included in this response.

**Original Response:**

Replaced equipment is being procured qualified to the NUREG-0588, Category 1 requirements.

A small population of components is being refurbished as follows:

e. Cables purchased on Contract 81K5-830078

TVA purchased identical cables under Rockbestos contracts 80K7-826542 and 81K5-830078. The cable purchased under contract 80K7-826542 was purchased and installed prior to the February 22, 1983, cutoff date stipulated in Regulatory Guide 1.89, Revision 1 for Category II qualification and therefore meets the full Regulatory Guide 1.89 and NUREG-0588 requirements for Category II qualification. Verification of the purchasing and installation documentation for cables purchased under Rockbestos contract 81K5-830078 has determined that the cables were purchased in 1982 but installed in 1985. In accordance with Regulatory Guide 1.89, Revision 1, Environmental Qualification of Certain Electric Equipment Important to Safety for Nuclear Power Plants, paragraph 6, "Replacement electric equipment installed subsequent to February 22, 1983, must be qualified in accordance with the provisions of 50.49 unless there are sound reasons to the contrary. The NRC staff considers the following to be sound reasons for the use of replacement equipment previously qualified in accordance with the DOR Guidelines or NUREG-0588 in lieu of upgrading...6.c. Identical equipment to be used as a replacement was on hand as part of the utilities stock prior to February 22, 1983." The cable from contract 81K5-830078 is not "replacement" equipment (i.e., it is new), and it was on hand prior to February 22, 1983, but was installed after 1983. Since the cable from contract 81K5-830078 is of identical design and the installation of the cable is no different than that supplied on contract 80K7-826542, the cable purchased under contract 81K5-830078 is considered equally qualified and acceptable under the Category II requirements. This is documented in EQ Binder WBNEQ-CABL-036.

# ENCLOSURE 1

## Revised Response to RAI 3.11-2

### Tennessee Valley Authority - Watts Bar Nuclear Plant - Unit 2, Docket No. 50-391

#### Revised Response:

Replaced equipment is being procured qualified to the NUREG-0588, Category 1 requirements.

A small population of components is being refurbished as follows:

e. Cables

During verification and validation of Unit 2 EQ cables, it was determined that procurement and installation dates of some Unit 2 EQ cables from WBN contracts do not meet the cutoff dates for procurement (May 23, 1980, as specified in IE Bulletin 79-01B, Supplement 2) and installation (February 22, 1983, as specified in Regulatory Guide 1.89, Revision 1). The approximate number of cables is as follows:

<u>Contract</u>	<u>Qty</u>	<u>Manufacturer</u>
71C070005476202	1 cable	Triangle-Pwc-Inc.
79K0500824965	8 cables	American Insulated Wire Corp
80K0700826542	26 cables	Rockbestos Company
81K0500830078	85 cables	Rockbestos Company
<b>Total</b>	<b>120 Cables</b>	

These cables were new cables installed in the plant for the first time in Unit 2. Material purchased on these contracts has been determined to meet the qualification criteria of NUREG-0588 Category II using the guidelines established in IEEE 323-1971.

Material purchased on contracts 71C070005476202, 79K0500824965, and 80K0700826542 was purchased prior to May 23, 1980, and was on hand as part of TVA stock before February 22, 1983. However, this material was not installed in Unit 2 until the 1983 to 1985 time frame. Material from each of these contracts was installed at other TVA facilities prior to the February 22, 1983, date and is in full compliance with the qualification criteria of 10 CFR 50.49 as documented in site EQ Qualification Binders. Unit 2 material from these contracts is considered equally qualified as those at other TVA facilities.

Material purchased on contract 81K0500830078 was purchased after May 23, 1980, but was received as part of TVA stock before February 22, 1983. However, this material was not installed in Unit 2 until the 1983 to 1985 time frame. Material from this contract was considered identical design, and the installation of the cable is no different than that supplied on contract 80K0700826542.

## ENCLOSURE 1

### Revised Response to RAI 3.11-2

#### Tennessee Valley Authority - Watts Bar Nuclear Plant - Unit 2, Docket No. 50-391

In accordance with C.6 of Regulatory Guide 1.89, Revision 1 (Environmental Qualification of Certain Electric Equipment Important to Safety for Nuclear Power Plants), "Replacement electric equipment installed subsequent to February 22, 1983, must be qualified in accordance with the provisions of 50.49 unless there are sound reasons to the contrary. The NRC staff considers the following to be sound reasons for the use of replacement equipment previously qualified in accordance with the DOR Guidelines or NUREG-0588 in lieu of upgrading: ... c. Identical equipment to be used as a replacement was on hand as part of the utility's stock prior to February 22, 1983."

These cables were on hand as part of TVA stock before February 22, 1983, and the material was equal to material installed and qualified at other TVA facilities prior to February 22, 1983. Therefore, TVA chose not to upgrade these cables to Category I requirement when installing them in the 1983 to 1985 time frame.

There are approximately 3,700 EQ cables installed for Unit 2. Therefore, these approximately 120 cables represent a small percentage of the total EQ cables installed in Unit 2. Should these cables require replacement in the future, TVA will follow our internal design criteria and thus comply with NUREG-0588 and replace the cables with material that meets the qualification criteria of NUREG-0588 Category I using the guidelines established in IEEE 323-1974.