WBN2Public Resource

From: Boyd, Desiree L [dlboyd@tva.gov]
Sent: Thursday, August 23, 2012 2:40 PM
To: Epperson, Dan; Wilson, George; Poole, Justin
Cc: Arent, Gordon; Hamill, Carol L; Boyd, Desiree L
Subject: TVA letter to NRC_2012-08-23_TRM Section 3.7.2 Submittal
Attachments: 2012-08-23_TRM Section 3.7.2 Submittal_Final.pdf

Please see attached TVA letter that was sent to the NRC today.

Thank You,

~*~*~*~*~*~*~*~*~*~*~*~

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423-365-8764

Hearing Identifier: Watts_Bar_2_Operating_LA_Public
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Subject: TVA letter to NRC_2012-08-23_TRM Section 3.7.2 Submittal
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From: Boyd, Desiree L

Created By: dlboyd@tva.gov

Recipients:
"Arent, Gordon" <garent@tva.gov>
Tracking Status: None
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Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

August 23, 2012

10 CFR 50.36

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

Watts Bar Nuclear Plant, Unit 2
NRC Docket No. 50-391

Subject: **Watts Bar Nuclear Plant (WBN) Unit 2 – Update to Technical Requirements Manual (TRM) Bases Section 3.7.2, Developmental Revision B**

References:
1. TVA letter to NRC dated August 23, 2012, "Watts Bar Nuclear Plant (WBN) – Unit 2 – Final Safety Analysis Report (FSAR), Amendment 109 (A109)"
2. TVA letter to NRC dated February 2, 2010, "Watts Bar Nuclear Plant (WBN) - Unit 2 - Developmental Revision B of the Technical Specifications (TS), TS Bases, Technical Requirements Manual (TRM), TRM Bases, and Pressure and Temperature Limits Report (PTLR)"

This letter provides an update to Technical Requirements Manual Bases 3.7.2, "Flood Protection Plan," Developmental Revision B to change the upper value for submergence during flooding. Specifically, in the second paragraph of the Background section, change the current value from "736.9 ft" to "741.0 ft." This value is consistent with the flood value provided in Unit 2 FSAR, A109 (Reference 1). This change will be incorporated as part of TRM, Developmental Revision C at a later date.

Enclosure 1 provides a mark-up of the changed page. Enclosure 2 provides the list of regulatory commitments associated with this letter.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 23rd day of August, 2012.

Respectfully,

Raymond A. Hruby, Jr.
General Manager, Technical Services
Watts Bar Unit 2

Enclosures:

1. WBN Unit 2 TRM Section 3.7.2 Mark-up
2. List of Regulatory Commitments

cc (Enclosures):

U. S. Nuclear Regulatory Commission
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Marquis One Tower
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Atlanta, Georgia 30303-1257

NRC Resident Inspector Unit 2
Watts Bar Nuclear Plant
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bcc (Enclosures):

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Fred Brown, Deputy Regional Administrator for Construction
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Enclosure 1

WBN Unit 2 TRM Bases Section 3.7.2 Mark-up

B 3.7 PLANT SYSTEMS

B 3.7.2 Flood Protection Plan

BASES

BACKGROUND

Nuclear power plants are designed to prevent the loss of capability for cold shutdown and maintenance thereof resulting from the most severe flood conditions that can reasonably be predicted to occur at the site as a result of severe hydrometeorological conditions, seismic activity, or both (Ref. 1). Assurance that safety-related facilities are capable of surviving all possible flood conditions is provided by the flood protection plan.

The elevations of plant features which could be affected by the submergence during floods vary from 714.5 ft Mean Sea Level (MSL) (access to electrical conduits) to ~~736.9~~ **741.0** ft MSL (including wave runup). Plant grade is elevation 728 ft MSL which can be exceeded by extreme rainfall floods and closely approached by seismic-caused dam failure floods. A warning plan is needed to assure plant safety from floods.

The warning plan is divided into two stages. This two-stage plan is designed to allow adequate time for preparing the plant for operation in the flood mode and to avoid excessive economic loss in case a potential flood does not fully develop. Stage I warning, which is a minimum of 10 hours, allows preparation steps, causing some damage to be sustained, but will postpone major economic damage. Stage II warning, which is a minimum of 17 hours, is a warning that a forthcoming flood above grade is predicted.

Stage I procedures consist of a controlled reactor shutdown and other easily revokable steps, such as moving flood supplies above the probable maximum flood elevation and making temporary connections and load adjustments on the onsite power supply. After unit shutdown, the Reactor Coolant System will be cooled and the pressure will be reduced to less than 350 psig. Stage II procedures are the least easily revokable and more damaging steps necessary to have the plant in the flood mode when the flood exceeds plant grade. Heat removal from the steam generators will be accomplished by adding river water from the Fire Protection System, and relieving steam to the atmosphere through the steam generator power operated relief valves. Other essential plant cooling loads will be transferred from the Component Cooling Water System to the Essential Raw Cooling Water System (ERCW); the ERCW

(continued)

ENCLOSURE 2
List of Regulatory Commitments

1. Specifically, in the second paragraph of the Background section, change the current value from “736.9 ft” to “741.0 ft.” This value is consistent with the flood value provided in Unit 2 FSAR, A109 (Reference 1). This change will be incorporated as part of TRM, Developmental Revision C at a later date.