



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

July 14, 2011

10 CFR 50.68(b)(6)

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 – Final Safety Analysis Report (FSAR) – Response to Request for Additional Information (RAI) Regarding Compliance with 10 CFR 50.68(b)(6)

Reference: TVA letter to NRC dated February 25, 2011, "Watts Bar Nuclear Plant (WBN) Unit 2 – Final Safety Analysis Report (FSAR) – Response to Chapters 11 and 12 Request for Additional Information"

This letter provides a response to a verbal request to provide additional information that establishes that WBN Unit 2 is in compliance with 10 CFR 50.68(b)(6). The reference provided TVA's position on compliance with the stated regulation. The referenced letter did not completely address the need for information on conformance with 10 CFR 50.68(b)(6).

Enclosure 1 provides the requested information. A new commitment is provided in Enclosure 2.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 14th day of July, 2011.

Respectfully,

David Stinson
Watts Bar Unit 2 Vice President

DO30
HRR

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Enclosures:

1. WBN Unit 2 Response to RAI Regarding Compliance with 10 CFR 50.68(b)(6)
2. Regulatory Commitment

cc (Enclosures):

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ENCLOSURE 1
WBN UNIT 2 RESPONSE TO RAI
REGARDING COMPLIANCE WITH 10 CFR 50.68(b)(6)

NRC Question

TVA's response to NRC Question 27 provided in reference 1 did not provide an adequate basis to establish conformance with 10 CFR 50.68(b)(6) related to adequate radiation monitors to detect excessive radiation and initiate appropriate safety actions. Additional information is required for the NRC staff to conclude that WBN Unit 2 conforms to 10 CFR 50.58(b)(6).

TVA Response

WBN conforms fully with the criteria of 10 CFR 50.68(b)(6). There are five radiation monitors located on elevation 757 of the Auxiliary Building in the vicinity of the new fuel vault and the spent fuel pool. Two of the monitors, 1-RE-90-1 and 2-RE-90-1, are area monitors that alert personnel in the vicinity of the fuel storage areas of excessive radiation for personnel protection and to initiate safety actions. These monitors also alarm in the main control room to alert the operators to initiate appropriate safety actions. There are two additional area radiation monitors, 0-RE-90-102 and 0-RE-90-103, that are located at the spent fuel pool to provide a more rapid response to a fuel handling accident, the presence of excessive radiation, or the presence of a fuel bundle with inadequate water shielding. These monitors alarm in the main control room and also isolate the normal Auxiliary Building ventilation system to reduce the release of radioactivity offsite. These monitors will also isolate the containment ventilation system if the containment or annulus is open to the Auxiliary Building during refueling operations. The fifth radiation monitor in the spent and new fuel area is a particulate air monitor. This monitor alarms locally for protection of personnel in the vicinity of the monitor and also serves to alert the plant staff of an excessive radiation condition that requires action.

This information will be incorporated in FSAR Section 4.3.2.7, "Criticality of Fuel Assemblies," in a future FSAR amendment.

ENCLOSURE 2

REGULATORY COMMITMENT

Revise FSAR Section 4.3.2.7, "Criticality of Fuel Assemblies," to incorporate the information provided in Enclosure 1 in a future FSAR amendment.