



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

September 17, 2010

10 CFR 50.34

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 - Response to NRC Question
Regarding WBN Unit 2 Emergency Plan (TAC No. ME0853)**

Reference: 1. Email from Rafael Rodriquez of the NRC to William D. Crouch, TVA,
"Question RE: WB-2 Emergency Plan," dated July 7, 2010

The purpose of this letter is to address a question from the U.S. Nuclear Regulatory Commission (NRC) in an email dated July 7, 2010 (Reference), regarding the WBN Unit 2 Emergency Plan. The enclosure to this letter lists the question asked by the NRC and TVA's response.

There are no new commitments associated with this submittal. If you have any questions, please contact William Crouch at (423) 365-2004.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 17th day of September 2010.

Sincerely,


Masoud Bajestani
Watts Bar Unit 2 Vice President

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Enclosure:

1. Response to NRC Question Regarding WBN Unit 2 Emergency Plan

cc (Enclosure):

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Enclosure

Response to NRC Question Regarding WBN Unit 2 Emergency Plan

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

NRC Question:

With regard to emergency planning, 10 CFR 70.22(i)(3)(xiii) states the following:

“Hazardous chemicals. A certification that the applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, if applicable to the applicant's activities at the proposed place of use of the special nuclear material.”

Do the proposed activities related to the use of special nuclear material at Watts Bar Unit 2 require this certification? If not, please explain why these responsibilities are not applicable to the proposed activities involving special nuclear material.

TVA Response:

The Environmental Protection Agency (EPA) Emergency Planning and Community Right-to-Know Act of 1986, Title III, Pub. L. 99-499, requires sites which possess Special Nuclear Material to submit reports based on onsite chemicals, depending upon chemical inventory and certain events. WBN complies with these requirements as described below. None of these reports impact any site emergency procedures or other requirements.

- A. Tier I Reports or notifications are made any time a new chemical is brought onsite in certain quantities. For this report, TVA submits a notification to the local fire department, local emergency planning, and state emergency planning offices.
- B. The Tier II Report is submitted by March 1 every year. This report includes an inventory of chemical storage and chemical usage. We have several chemicals that are required to be reported.
- C. The Toxic Release Inventory is submitted to the EPA and the Tennessee Department of Environment and Conservation (TDEC) by July 1 every year. It is a detailed inventory of all releases to the environment. This includes releases to air, water, land, etc.

The only hazardous chemical stored at WBN, which will be impacted significantly by the startup of Unit 2, is ammonium hydroxide. WBN currently has one 625 gallon tank of ammonium hydroxide and is in the process of installing a second 625 gallon tank as part of the startup of Unit 2. Watts Bar will make notifications as described above when the ammonium hydroxide is brought onsite to fill the tank.

Enclosure

Response to NRC Question Regarding WBN Unit 2 Emergency Plan

The tanks will be located inside the Turbine Building. The tank foundation and Turbine Building would act as a catch basin to prevent direct runoff. The Watts Bar Emergency Plan Implementing Procedure 1 (EPIP-1), "Emergency Plan Classification Flowchart," which was provided to the NRC in TVA's April 27, 2010 submittal (Reference), directs the actions in response to toxic gases present within the facility.

The impact of toxic gas is addressed by Section 4 of EPIP-1 as shown on pages 21 through 28 of the procedure. Specifically, Section 4.4 provides instructions for declaration of Unusual Event, Alert, Site Area Emergency, or General Emergency. Evacuations of onsite or offsite persons would be initiated based on the severity of the event. The flow chart provides actions and escalation conditions based on symptoms. As conditions warrant, the flow chart will escalate the event classification and direct an evacuation of the site and nearby emergency planning zone, as required.

Thus, WBN complies with the requirements of the Act and has emergency procedures to address the event in case of a spill.

Reference:

1. TVA letter to NRC, "Watts Bar Nuclear Plant (WBN) Unit 2 - Response to U.S. Nuclear Regulatory Commission Request for Additional Information Regarding Radiological Emergency Plan (TAC No. ME0853)," dated April 27, 2010