



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

March 6, 2007

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

Gentlemen:

In the Matter of)	Docket Nos. 50-327
Tennessee Valley Authority)	50-328
		50-390

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2, AND WATTS BAR
NUCLEAR PLANT (WBN) UNIT 1 – ENHANCEMENT OF THE CAPABILITY OF THE
CONTAINMENT HYDROGEN IGNITERS

The need for enhancement of the capability of containment hydrogen igniters was identified in Nuclear Regulatory Commission (NRC) Generic Safety Issue (GSI)-189, "Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident." This topic was also discussed at a NRC meeting conducted with several nuclear utilities on January 17, 2007. As a result, TVA has decided to voluntarily enhance the capability of the containment hydrogen igniters at SQN and WBN. TVA believes that the proposed enhancements described in this submittal will resolve the NRC's concerns related to GSI-189.

As described at the aforementioned January 17 NRC meeting, the SQN and WBN enhancements will involve a number of activities. SQN has procured two trailer mounted diesel generator sets and WBN has procured one trailer mounted diesel generator set. Each set has a capacity of 2 megawatts. These generators can be connected with temporary cables to the plant power system to provide back-up power to plant systems, including either train of hydrogen igniters for an affected unit. The connections can be made in a timely fashion. The connection points are located in an area that provides a measure of protection for the connections. The generators and cabling are stored in a location that is on site but away from the auxiliary building structure. The generators are capable of being moved to various on-site locations to facilitate connection. The use of a readily available mobile generator capability with connections that can be made in a timely fashion will enable one train of hydrogen igniters to be placed in service in a relatively short period of time once the need has been determined. The generators and cabling were procured as commercial-grade and will be maintained in accordance with vendor recommendations. Procedures developed for the use of this equipment will be similar in nature to those used to cope with severe accidents.

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A revision to the back-up generator connection procedures to support the additional function and associated personnel training on the procedure is expected to be completed by December 31, 2007. Should unforeseen circumstances, such as the need for complex plant modifications, affect the schedule; the NRC will be notified of the schedule changes.

TVA believes that the aforementioned enhancements will resolve the NRC's concerns about GSI-189. As an additional benefit, these enhancements aid in the mitigation of certain security scenarios. TVA's commitments to the described enhancements are summarized in Enclosure 1.

If there are any questions or if additional information is required, please contact Mr. Robert H. Bryan, General Manager Licensing and Industry Affairs, at (423) 751-8201.

Sincerely,

A handwritten signature in cursive script that reads "Preston D. Swafford".

Preston D. Swafford
Senior Vice President, Nuclear Support

cc: See page 3

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Enclosure:

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ENCLOSURE 1

List of Commitments

1. Sequoyah and Watts Bar will revise the back-up generator procedure(s) to include supplying one train of containment hydrogen igniters per unit, and train personnel to the procedure revision, by December 31, 2007.