



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

July 30, 2010

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 Request for Additional Information Regarding Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves (TAC No. MD6717)**

- References:
1. NRC letter to TVA, "Watts Bar Nuclear Plant, Unit 2 - Request for Additional Information Regarding Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves (TAC No. MD6717)," dated July 29, 2010
 2. TVA letter to NRC, "Watts Bar Nuclear Plant (WBN) - Unit 2 - Initial Responses to Bulletins and Generic Letters," dated September 7, 2007 [ML072570676]
 3. TVA letter to NRC, "Watts Bar Nuclear Plant (WBN) Unit 2 - Supplemental Information Regarding Certain NRC Generic Letters and Bulletins," dated April 1, 2010 [ML100950044]

The purpose of this letter is to submit the Tennessee Valley Authority (TVA) response to U.S. Nuclear Regulatory Commission (NRC) request for additional information (RAI) regarding pressure locking and thermal binding of safety-related power-operated gate valves (Reference 1).

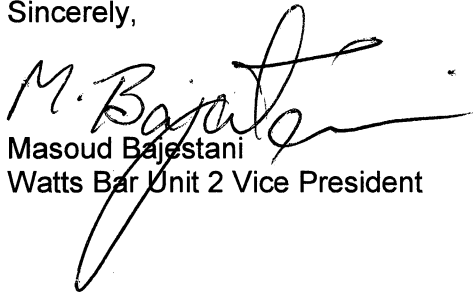
In a letter dated September 7, 2007 (Reference 2), TVA submitted initial information to the NRC regarding pressure locking and thermal binding of safety-related power-operated gate valves as related to Generic Letter 1995-07 for WBN Unit 2. Supplemental information was submitted April 1, 2010 (Reference 3).

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Enclosure 1 to this letter lists the individual questions posed by the NRC and TVA responses to those questions. Enclosure 2 identifies those actions committed to by TVA in this letter. 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 30th day of July 2010.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Bajestani', is written over the typed name and title.

Masoud Bajestani
Watts Bar Unit 2 Vice President

Enclosures:

1. Response to NRC Request for Additional Information Regarding Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves
2. List of Regulatory Commitments

cc (Enclosures):

U. S. Nuclear Regulatory Commission
Region II
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
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NRC Resident Inspector Unit 2
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Enclosure 1

Response to NRC Request for Additional Information Regarding Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves

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

1. NRC Request

Which valves related to GL 1995-07 require modifications? Please provide a list of these valves.

TVA Response

The 95-07 review of WBN Unit 2 Generic Letter (GL) 89-10 motor operated valves (MOVs) has been completed with the following conclusions:

Eleven Valves Identified for Disk Modification	
1.	2-FCV-1-16
2.	2-FCV-63-8
3.	2-FCV-63-11
4.	2-FCV-63-156
5.	2-FCV-63-157
6.	2-FCV-74-1
7.	2-FCV-74-2
8.	2-FCV-74-8
9.	2-FCV-74-9
10.	2-FCV-74-33
11.	2-FCV-74-35

Seven Valves Identified for Valve Bonnet Modification	
1.	2-FCV-63-72
2.	2-FCV-63-73
3.	2-FCV-63-172
4.	2-FCV-72-40
5.	2-FCV-72-41
6.	2-FCV-72-44
7.	2-FCV-72-45

Enclosure 1

Response to NRC Request for Additional Information Regarding Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves

Additionally, controls for Valves 2-FCV-72-2 (EDCR 53292) and -39 (EDCR 53287) will be modified to add a time delay which will eliminate the potential for pressure locking, as is done with Unit 1 Valves 1-FCV-72-2 and -39. Note that this is a controls mod and not a valve modification. EDCRs 53292 and 53287 shall be implemented to eliminate the potential for pressure locking prior to startup.

2. NRC Request

Which valves are missing from the list of valves related to GL 1995-07? Please provide a list of the missing valves.

TVA Response

TVA has confirmed that none of the missing 89-10 valves from TVA's April 1, 2010, letter (Reference 3) are 95-07 valves. There are no missing GL 95-07 valves. The 20 valves identified above are currently installed in WBN Unit 2.

3. NRC Request

Have there been any plant modifications that changed the original GL 1995-07 assessment for WBN Unit 1? If so, what is the impact of these modifications on WBN Unit 2?

TVA Response

In addition to the time delay changes mentioned above, there are 2 other Unit 1 valves, 1-FCV-63-25 and -26, which are being evaluated for GL 95-07 impacts to address new input parameters from the Joint Owners' Group (JOG) Topical Report MPR 2524A. Unit 1 has initiated a design change to address JOG pressure locking and MOV requirements. Valves 2-FCV-63-25 and -26 will be evaluated for impact due to new parameters from the JOG Topical Report MPR 2524A prior to startup.

Enclosure 2

List of Regulatory Commitments

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

Commitment	Committed Date
EDCRs 53292 and 53287 shall be implemented to eliminate the potential for pressure locking prior to startup.	Prior to Startup
Valves 2-FCV-63-25 and -26 will be evaluated for impact due to new parameters from the JOG Topical Report MPR 2524A prior to startup.	Prior to Startup