



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

July 27, 2010
NOC-AE-10002579
10 CFR 50.54(f)

U.S. Nuclear Regulatory Commission
One White Flint North
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Rockville, MD 20852

South Texas Project
Units 1 and 2
Docket No. STN 50-498, STN 50-499
Nine-Month Supplemental Response to Generic Letter 2008-01
(TAC Nos. MD7881 and MD7882)

- References: 1. NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," dated January 11, 2008
2. Letter from Mohan C. Thadani to Edward D. Halpin dated September 22, 2008, South Texas Project, Units 1 and 2 – Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems, Proposed Alternative Course of Action and Request for Additional Information" (TAC Nos. MD7881 and MD7882)
3. Letter from G. T. Powell to NRC Document Control Desk dated October 13, 2008, "Nine-Month Response to Generic Letter 2008-01" (NOC-AE-08002355) (ML082960430)

The Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2008-01 (Reference 1) to request that each licensee evaluate the emergency core cooling, decay heat removal, and containment spray systems to ensure that gas accumulation is maintained less than the amount that challenges operability of these systems, and that appropriate action is taken when conditions adverse to quality are identified.

The enclosure provides the results of evaluations performed following South Texas Project Unit 2 refueling outage 2RE14 completed in the spring of 2010 consistent with Reference 2 and committed to in Reference 3.

In summary, STP Nuclear Operating Company (STPNOC) has concluded that, based on the reviews of the plant configuration, plant-specific operating experience, and procedures, the subject systems/functions comply with the current licensing and design bases and applicable regulatory requirements. System piping walk-downs and slope determinations performed have not yielded any information to alter this conclusion. All identified systems are capable of performing their design function.

There are no new commitments in this letter.

STI: 32707888

A member of the STARS (Strategic Teaming and Resource Sharing) Alliance


Callaway - Comanche Peak - Diablo Canyon - Palo Verde - San Onofre - South Texas Project - Wolf Creek

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NRK

If there are any questions or if additional information is needed, please contact either Mr. Wayne Harrison at 361-972-7298 or me at 361-972-7566.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 27, 2010

A handwritten signature in black ink, appearing to read "G. T. Powell", written in a cursive style.

G. T. Powell
Vice President,
Engineering

JAL/RSE

Enclosure: Nine-Month Supplemental Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"

cc:

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Nine-Month Supplemental Response to NRC Generic Letter 2008-01,
"Managing Gas Accumulation in Emergency Core Cooling,
Decay Heat Removal, and Containment Spray Systems"

This enclosure describes the results of evaluations performed pursuant to Generic Letter 2008-01 on previously incomplete activities, such as system piping walkdowns, at the South Texas Project (STP). This supplement addresses results of design evaluation reviews conducted since the October 13, 2008 submittal (Reference 3).

The original conclusions documented in the Nine-Month response (Reference 3) with respect to the licensing basis evaluation, testing evaluations, and corrective action evaluations have not changed.

A. EVALUATION RESULTS

1. Design Basis Documents

No changes have been made to any STP design basis documents as a result of evaluations performed for this GL response.

2. Confirmatory Walkdowns

In the Nine-Month response, (Reference 3), STPNOC committed to complete the following:

- Complete the slope survey of inaccessible piping in Unit 2 during the spring outage of 2010 and provide a report within 90 days after completion of the outage.

STP slope survey and evaluation of normally inaccessible piping in Unit 2 is complete. This activity involved slope surveys of applicable GL 2008-01 systems piping in the Unit 2 Reactor Containment Building. Much of the piping required scaffolding to provide proper access to perform the slope surveys.

The piping slope surveys were performed using conventional surveying tools (laser level equipment). The activity involved both insulated and un-insulated inaccessible piping. On insulated piping, the insulation was temporarily removed as necessary to gain access to the pipe surface. Additionally, ultrasonic examination of selected pump suction piping was performed.

Industry guidance was utilized to determine the applicable acceptance criteria and in the assessment of the data. For pump suction piping, industry guidance provided by the Nuclear Energy Institute (NEI) was utilized to perform the evaluations (Reference 6). For pump discharge piping evaluations, industry guidance provided by the Pressurized Water Reactor Owners Group (PWROG) was utilized (Reference 7). A PWROG Position Paper providing guidance on the quantities of non-condensable gases that can enter the RCS from the ECCS piping was also utilized as required in the evaluations (Reference 8). The results of the slope surveys, assessment of data, and the evaluations performed on the subject piping were found to be acceptable.

Nine-Month Supplemental Response to NRC Generic Letter 2008-01,
“Managing Gas Accumulation in Emergency Core Cooling,
Decay Heat Removal, and Containment Spray Systems”

3. Vent Valves

No new vent locations or modifications to existing vent valves were found to be necessary as a result of the slope surveys or the evaluations performed.

4. Procedures

No additional procedures or additional procedure revisions were considered necessary as a result of the slope surveys or the evaluations performed.

B. DESCRIPTION OF NECESSARY ADDITIONAL CORRECTIVE ACTIONS

1. Additional Corrective Actions

As a result of the slope surveys and evaluations performed, no additional corrective actions were required.

2. Corrective Action Updates

No updates or changes to previous corrective actions have been identified as a result of the slope surveys and evaluations.

Conclusion

STPNOC has completed the slope surveys and evaluations of the normally inaccessible portions of GL systems piping in Unit 2 and has concluded they are in compliance with the current licensing and design bases and applicable regulatory requirements and remain capable of performing their design function.

This completes the STPNOC response to the regulatory commitments described in Reference 3.

Nine-Month Supplemental Response to NRC Generic Letter 2008-01,
"Managing Gas Accumulation in Emergency Core Cooling,
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References:

1. NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," dated January 11, 2008
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3. Letter from G. T. Powell to NRC Document Control Desk dated October 13, 2008, "Nine-Month Response to Generic Letter 2008-01" (ML082960430) (NOC-AE-08002355)
4. Letter from G. T. Powell to NRC Document Control Desk dated January 22, 2009, "Nine Month Supplemental Response to Generic Letter 2008-01" (ML090330142) (NOC-AE-09002384)
5. Letter from G. T. Powell to NRC Document Control Desk dated February 16, 2010, "Nine Month Supplemental Response to Generic Letter 2008-01," (ML100501160) (NOC-AE-10002511)
6. NEI APC 09-20, "Evaluation of Unexpected Voids or Gas Identified in Plant ECCS and Other Systems" from J.H. Riley, NEI, dated May 18, 2009.
7. Letter from PWR Owners Group, Transmittal of Revision 1 of Letter Report for Gas Voids Pressure Pulsations (PA-SEE-0451) dated September 08, 2008
8. Letter from Westinghouse, "PWROG Position Paper on Non-condensable Gas Voids in ECCS Piping; Qualitative Engineering Judgment of Potential Effects on Reactor Coolant System Transients Including Chapter 15 Events," dated September 4, 2008