



KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER  
VICE PRESIDENT - NUCLEAR

April 4, 1985

Mr. R.P. Denise, Director  
Wolf Creek Task Force  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

APR 11 1985

KMLNRC 85-081  
Re: Docket No. STN 50-482  
Subj: Response to Inspection Report 50-482/84-59

Dear Mr. Denise:

This letter provides the Kansas Gas and Electric Company (KG&E) response to your letter of March 8, 1985, which transmitted Inspection Report STN 50-482/84-59. As requested, the violation identified in the Inspection Report is being addressed in three parts:

- a) Corrective steps which have been taken and the results achieved;
- b) Corrective steps which will be taken to avoid further violations; and
- c) The date when full compliance will be achieved.

VIOLATION 482/84-59-01: FAILURE TO IDENTIFY AND CORRECT TEST DEFICIENCIES

Finding:

10 CFR 50, Appendix B, Criterion XI, as implemented by SNUPPS Quality Assurance Programs for Design and Construction, Section 17.1.11, requires that test results be documented and evaluated to assure that the test requirements have been satisfied.

Contrary to the above, the test results packages for Chemical and Volume Control System Preoperational Testing did not receive adequate evaluation and/or documentation of the acceptability of the test results in that they were reviewed and approved with deficiencies which could adversely affect system acceptability, as evidenced by the following examples:

- 1. In SU3-BG03, "Charging System," stroke time testing of

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charging system containment isolation valves BG-HV8105 and BG-HV8106 was not performed under full-flow conditions nor was an evaluation performed to determine if the valves could close in the allowable time under maximum expected operational or emergency conditions.

2. In SU3-BG05, "Boric Acid Blending System," acceptance criteria step 2.2 for the Boron Injection Pump, evaluated pump performance on the basis of pump discharge pressure and flow, vice developed head and flow. This resulted in an acceptance criteria which had no real meaning since the effects of suction pressure were ignored.
3. In SU3-BG06, "Chemical and Volume Control System," stroke time testing of the letdown containment isolation valves BG-HV8152 and BG-HV8160 was not performed under full-flow conditions nor was an evaluation performed to determine if the valves could close in the allowable time under maximum expected operational or emergency conditions.

Response:

a) Corrective steps which have been taken and results achieved:

1. In SU3-BG03 "Charging System," stroke time testing of charging system containment isolation valves BG-HV8105 and BG-HV8106 was performed at approximately 45 GPM flow vice full flow of 120 GPM. Stroke times recorded were 8.92 seconds closing for valve BG-HV8105, and 7.78 seconds closing for valve BG-HV8106. Subsequent to this test, stroke time testing was performed at a flow rate of 122 GPM. Stroke times recorded were 8.99 seconds closing for valve BG-HV8105, and 8.40 seconds closing for BG-HV8106. The times recorded at maximum expected flow closely agree with those recorded in SU3-BG03 at a near normal flow and confirm the design criteria for these valves.
2. In SU3-BG05, "Boric Acid Blending System," Acceptance Criteria 2.2 states, "Boron Injection Makeup Pump PBG08 has a capacity of  $\geq 40$  GPM at  $\geq 100$  psig." This acceptance criteria was approved as appropriate and consistent with the specific objective stated in FSAR Section 14.2.12.1.28.1a. (WC Addendum). This section states as an objective of the SU3-BG05 test:

"To demonstrate the operating characteristics of boron injection makeup . . . pump and verify the ability of the boric acid blending system to make

up at design flow rates to the chemical and volume control system (CVCS)."

The specific developed head versus flow performance of this pump had previously been documented in test ME01-01. Consequently, the SU3-BG05 test was designed to verify that the operating characteristics of the pump were consistent with system design performance while transferring fluid to the boron injection surge tank, and did not consider the maximum suction head of approximately 3.9 psi contributed by level in the boric acid mix tank. The boron injection makeup pump has been demonstrated to perform acceptably as an individual component and as an integral part of the system.

A Supplemental/Correction Report to test SU3-BG05 has been issued adding a chronological test log entry. The chronological test log entry adds a copy of the ME01-01 test to the SU3-BG05 test results package, and documents that if acceptance criteria 2.2 had been stated to include a requirement for developed head, the acceptance criteria would have been met.

3. In SU3-BG06, "Chemical and Volume Control System," stroke time testing of letdown containment isolation valves BG-HV8152 and BG-HV8160 was performed at approximately 45 GPM vice full flow of 120 GPM. Stroke times recorded were 8.14 seconds closing for valve BG-HV8152, and 7.78 seconds closing for valve BG-HV8160. These valves were also stroke time tested at 0 GPM on three other occasions. Stroke times recorded were 8.27, 8.15 and 8.78 seconds closing for valve BG-HV8152, and 7.72, 7.42, and 8.2 seconds closing for valve BG-HV8160. Additionally, the valve supplier had previously performed testing on a valve of the same type and model and had documented the closing time as meeting the 10 second requirement at a flow rate of 650 GPM.

A Supplemental/Correction Report to test SU3-BG06 has been issued adding the above information to the test results package.

- b) Corrective steps which will be taken to avoid further violations:

Recognizing that items such as these can arise during the Startup Test Program and in other aspects of plant operation, a copy of the Inspection Report and this response is being routed to each Section Superintendent and all PSRC members as required reading.

Mr. R.P. Denise  
KMLNRC 85-081

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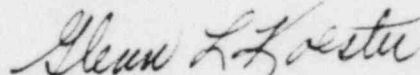
These items are believed to be isolated instances and are subject to some degree of interpretation as to testing necessary to confirm design criteria. Each of these items has been addressed individually within the context of the preoperational test program; however, with the completion of preoperational testing, further corrective steps in that program are not appropriate.

c) Date when full compliance will be achieved:

Full compliance has been achieved.

If you have any questions concerning the subject, please contact me or Mr. Otto Maynard of my staff.

Yours very truly,



Glenn L. Koester  
Vice President - Nuclear

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