



KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER
VICE PRESIDENT - NUCLEAR

May 2, 1986

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

KMLNRC 86-071
Re: Docket No. STN 50-482
Ref: 1) Letter KMLNRC 85-122 from GLKoester, KG&E,
to HRDenton, NRC, dated 5/22/85
2) Letter from BJYoungblood, NRC, to GLKoester, KG&E,
dated 8/16/85
Subj: Low Temperature Overpressure Protection

Dear Mr. Denton:

This letter describes a modification to the design of low temperature overpressure protection (LTOP) alarm circuitry described in Reference 1. A schedule for implementation of this modified design is also provided.

Reference 1 proposed reliance on existing Technical Specifications and administrative controls with the addition of alarm circuits on certain RHR/RCS suction isolation valves for LTOP. As the alarm circuit was proposed, if either valve BB-PV-8702A or EJ-HV-8701B is open or does not have power available and the pressure interlock activation setpoint is reached, an alarm would annunciate in the control room. The NRC approved this design in Reference 2.

During the development of the installation package, it was determined that the design proposed in Reference 1 would perform its intended function, but would produce alarms that could not be cleared even with correct valve alignment. This is because the alarms would be generated above the closure interlock activation setpoint of 682 psig when power was removed from BB-PV-8702A as procedurally required. In order to remedy this situation, Kansas Gas and Electric Company (KG&E) proposes modified alarm circuits which will alarm if either valve BB-PV-8702A or EJ-HV-8701B is open at pressures above the interlock setpoint. A single annunciator window will represent these two alarm circuits, but they will be alarmed individually on the Balance of Plant Computer.

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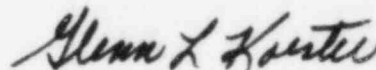
May 2, 1986

Figure 1 outlines the design as described in Reference 1 and the modified design. The modified alarm circuits do not affect the analysis provided in Reference 1 with regard to compliance to Standard Review Plans 5.2.2 and 5.4.7 and the corresponding Branch Technical Positions RSB 5-2 and RSB 5-1. The valve position inputs for the alarms in the modified circuit come directly from valve stem mounted limit switches rather than from the motor control center inputs as in the previous design. The modified circuit continues to provide annunciation in the control room for misaligned valves once the interlock setpoint is reached. An alarm response procedure will direct the operator to verify valve closure upon receipt of this alarm.

The modified design requires new cables to be run to the valves in containment and requires an outage to complete. Implementation of this modification is scheduled to be completed prior to startup following refueling which is currently planned to begin October 9, 1986. The schedule for implementation of the modified design is consistent with that outlined in Wolf Creek Generating Station SSER5 Section 5.2.2.

If you have any questions concerning this submittal please contact me or Mr. O. L. Maynard of my staff.

Very truly yours,



Glenn L. Koester
Vice President - Nuclear

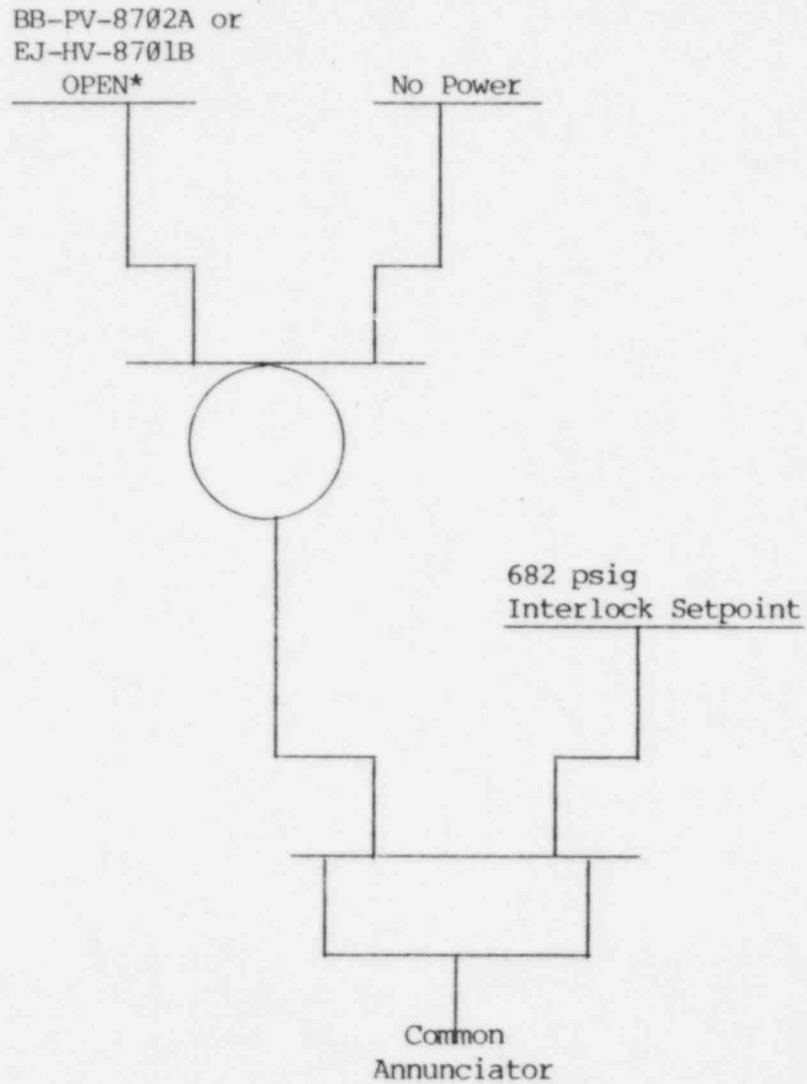
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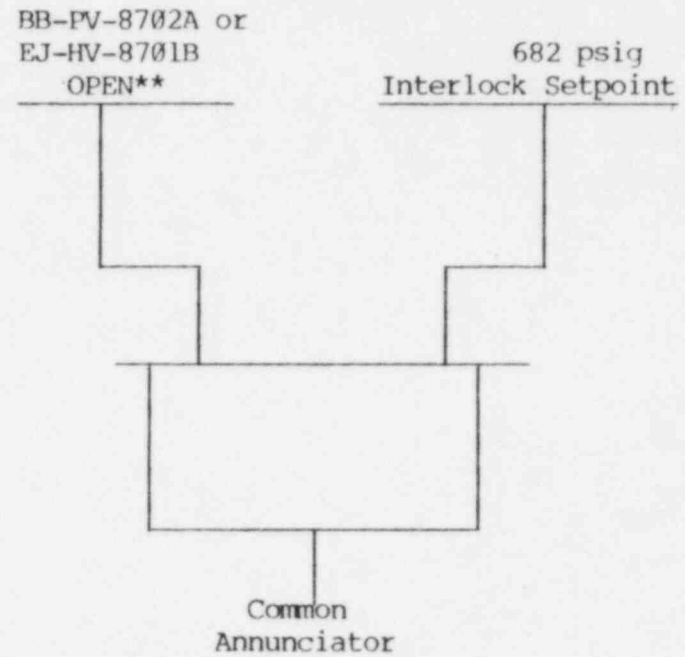
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FIGURE 1

Present NRC Approved Design
(Ref: KMLNRC 85-122)



Modified Design



*Position provided by auxiliary relay at MCC
**Position provided by valve stem mounted
limit switches