

Description of Changes

It is proposed to delete the footnote on Table 3.6.3-1 and add the actual isolation signals as shown on the attached marked up pages.

Safety Analysis

- **Detailed Description**

The modification installs new CRM panels, logic, and power to existing isolation valves. The panels perform no safety function but do provide information for reactor coolant pressure boundary leak detection analysis. The valve logic and control does perform a safety function by closing the valves and providing containment isolation. The logic and power for these valves is identical to containment isolation designs already in place in the plant. The design elements include redundant logic, removal of power to cause the safety function to occur, and separation of the redundant channels to preclude common mode failures. The design details are in accordance with the appropriate Codes and Standards in the FSAR. Although the original design did not, the new design has been improved and utilizes two separate divisions to power the inboard and outboard isolation valves.

The installation maintains the independence of redundant Class 1E systems as described in FSAR Sections 8.3.1.11.4 and 8.1.6.1.N. Isolation between Class 1E control circuits and their inputs to the non-Class 1E annunciator or SPDS is provided through Potter & Brumfield isolation relays as described in FSAR Section 8.1.6.1.N item 2. New raceway is installed seismically in accordance with the applicable PP&L Specification. New cable and internal equipment wiring is installed in seismically supported raceway. The installation of safety related equipment or new components in existing safety related equipment has been seismically analyzed. Where required, the mechanical loading of the raceway due to the addition of new cables was evaluated. Voltage drops in the new control circuits and those circuits affected by the proposed action were evaluated and found acceptable.

- **Conclusion**

The modification associated with the proposed technical specification change meets all applicable design requirements as delineated above.

The proposed technical specification change identifies the provision of logic and power to the previously installed containment isolation valves. The design details are in accordance with appropriate Codes and Standards. The design elements include redundant logic, removal of power to cause the safety function to occur, and separation of redundant channels to preclude common mode failures. The penetrations are further isolable by manual block valves permitting installation of electrical power and logic and associated valve testing without jeopardizing primary containment integrity in any operating condition.

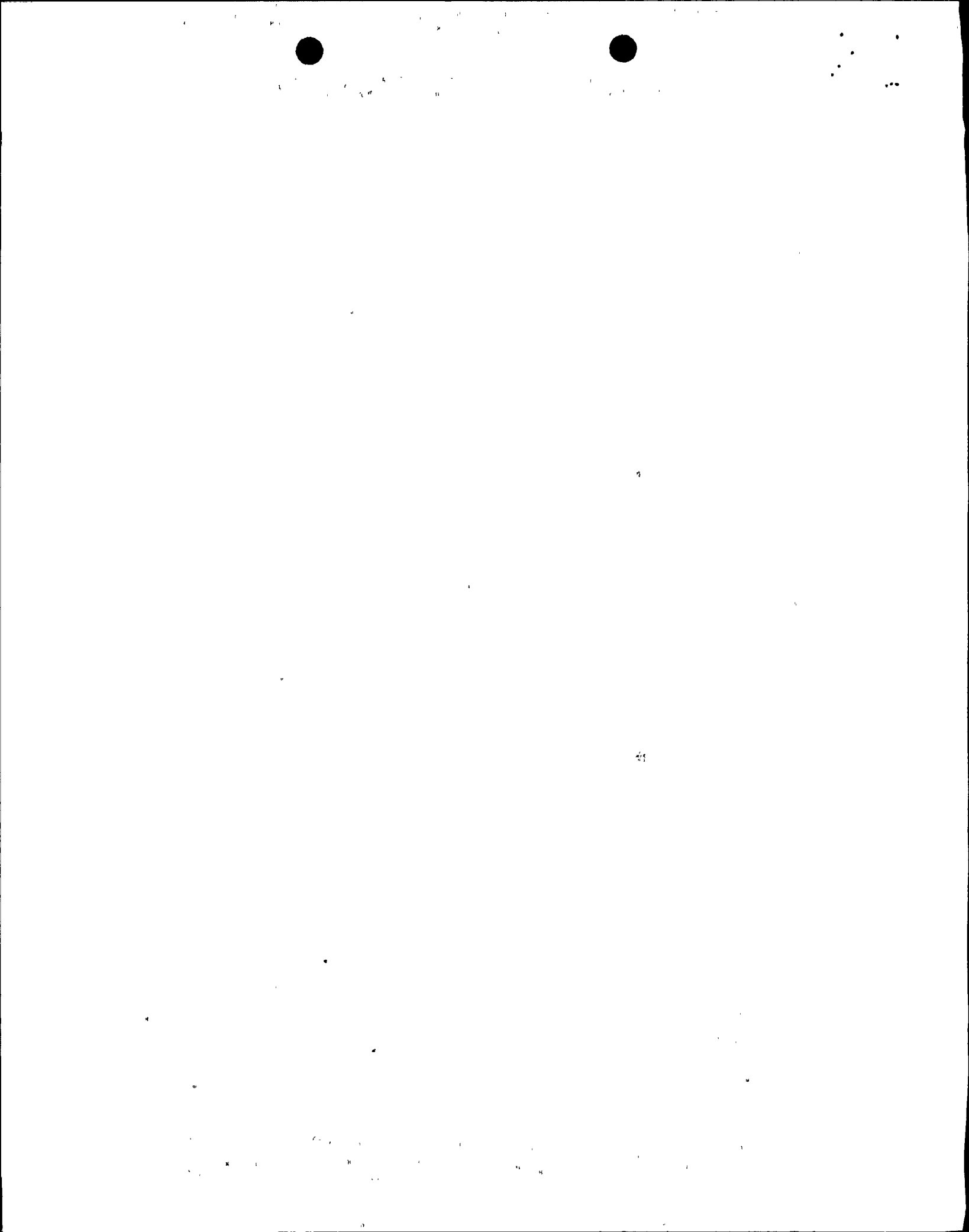
Based on the above, the proposed change will not adversely impact the safe operation of Susquehanna SES.

NO SIGNIFICANT HAZARDS CONSIDERATIONS

The proposed changes do not:

- I. Involve a significant increase in the probability or consequences of an accident previously evaluated.

The subject modification installs new CRM and Wetwell Sampling Panels and logic and power to isolation valves. The panels perform no safety function but do provide information for reactor coolant pressure boundary leak detection analysis. The valve logic and control does perform a safety function by closing and providing containment isolation. The logic and power for these valves is identical to containment isolation designs already in place in the plant. The design utilizes the same design as used for similar existing valves. The design elements include redundant logic, removal of power to cause the safety function to occur, and separation of the redundant channels to preclude common mode failures. The design details are in accordance with the appropriate Codes and Standards in the FSAR. Since the original design was reviewed and found adequate, and the new design utilizes two separate divisions to power the inboard and outboard isolation valves while the original design did not, the addition of this equipment does not increase the probability of an accident or equipment malfunction by an amount greater than the uncertainty in the original accident probability analyses but will decrease it, thus no licensing-basis recognizable change in probability can be said to have occurred due to this modification (reference NSAC-125). In view of the small size of the lines (1") and the small number of valves being added there is no evidence that in the aggregate, any significant increase in containment leakage probability has been generated.



There is no specific condition or situation that would affect any accident analysis evaluated in the FSAR. Further, the design criteria, such as separation criteria, applied to this modification are the same as applied to other similar containment isolation cases that have been previously thoroughly evaluated. Therefore, the proposed action does not increase the consequences of an accident or malfunction previously evaluated in the FSAR.

- II. Create the possibility of a new or different kind of accident from any accident previously evaluated.

As discussed above in Item I, nothing in the design of this modification is different from existing Susquehanna containment design or design practice. No features of the design or the locations for installation have been identified by any design criterion that would indicate the existence of any mechanism for creation of an accident or malfunction of a different type than previously analyzed in the FSAR.

Installation of the proposed action maintains the independence of redundant Class 1E systems as described in FSAR Sections 8.3.1.11.4 and 8.1.6.1.N. Isolation between Class 1E control circuits and their inputs to the non-Class 1E annunciator or SPDS is provided through Potter & Brumfield isolation relays as described in FSAR Section 8.1.6.1.N item 2. New raceway is installed seismically in accordance with the applicable PP&L Specification. New cable and internal equipment wiring is installed in seismically supported raceway. The installation of safety related equipment or new components in existing safety related equipment has been seismically analyzed. Where required, the mechanical loading of the raceway due to the addition of new cables was evaluated. Voltage drops in the new control circuits and those circuits affected by the proposed action were evaluated and are acceptable.

- III. Involve a significant reduction in a margin of safety.

Technical Specification 3/4.6.3, specifically Table 3.6.3-1, "Primary Containment Isolation Valves" identifies the valves needed to isolate primary containment. The proposed change identifies the provision of logic and power to previously installed isolation valves. The design details are in accordance with appropriate codes and standards. The design elements include redundant logic, removal of power to cause the safety function to occur, and separation of redundant channels to preclude common mode failures. The penetrations are further isolable by manual block valves permitting

installation of electrical power and logic and associated valve testing without jeopardizing primary containment integrity in any operating condition.

Based on the above, the proposed change does not significantly reduce the margin of safety.

IMPLEMENTATION

The modifications associated with this proposed change are currently scheduled to be performed after May 15, 1991.

In order to avoid performing this modification "at risk" PP&L requests that your approval be provided prior to the implementation date, with the condition that the amendment become effective upon installation of the modification.

Any questions on this submittal should be directed to Mr. W.W. Williams at (215) 774-7910.

Very truly yours,



H. W. Keiser

cc: ~~(NRC Document Control Desk)~~ (original)
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