TECHNICAL SPECIFICATION CHANGES

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PLANT SYSTEMS

STEAM GENERATOR ATMOSPHERIC STEAM DUMP VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.7 At least three steam generator atmospheric steam dump valves (ASD's) shall be OPERABLE.

APPLICABILITY: Modes 1, 2 and 3.

ACTION:

a. With one of the required ASD's inoperable due to causes other than excessive seat leakage, within 7 days restore the ASD to OPERABLE status, or be in HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

b. With more than one of the required ASD's inoperable due to causes other than excessive seat leakage, within 24 hours restore at least two of the required ASD's to OPERABLE status or be in HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

c. With one or more of the required ASD's inoperable because of excessive seat leakage, close the associated block valve(s) and restore the ASD to OPERABLE status within 30 days, or be in HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.7 No additional requirements other than those required by Specification 4.0.5. The provisions of ~~specification~~ 4.0.4 are not applicable for entry into Mode 3.

SAFETY EVALUATION

SAFETY EVALUATION

This amendment application requests a revision to Technical Specification 3/4 7.1.7 to allow an exception to the provisions of Technical Specification 4.0.4. This is required because the surveillances for the Steam Generator atmospheric steam dump valves (ASD) can only be completed after entry into the mode for which the surveillance requirements apply.

Background

Callaway Facility Operating License NPF-30, License Condition C(11) required that UE perform a steam generator tube rupture (SGTR) analysis and propose Technical Specification changes consistent with the analytical assumptions of the analysis. The SGTR analysis was submitted and has been approved by the staff as documented in Reference 1. Technical Specification changes were proposed and approved as required by the License Condition via Amendment 45 to the Callaway Operating License (Reference 2).

Amendment 45 added Technical Specification 3/4 7.1.7 which requires that 3 ASD valves be operable in Mode 1, 2, and 3. This assures that at least one ASD valve on an intact loop is operable to cool the plant down following a postulated SGTR event. Amendment 45 was implemented during Cycle 4 operation.

Refuel 4 began on September 21, 1990. During Refuel 4, maintenance will be performed on the ASD valves. The valves are Masoneilan control valves configured such that system pressure acts on top of the valve plug. When the valve is actuated to the open position the actuator must act against system pressure. For this reason the surveillance to assure operability is required to be performed at nominal reactor coolant system (RCS) operating temperature and steam generator pressure.

Currently Technical Specification 3/4 7.1.7 does not contain an exception to Technical Specification 4.0.4 Specification 4.0.4 prohibits entry into an operational mode or other specified condition when surveillance requirements have not been performed within the specified surveillance interval. Since maintenance will be performed during this outage the surveillances would be required to be performed prior to declaring the valve operable for entry into Mode 3. However, since the surveillance needs to be performed at nominal RCS operating temperature and steam generator pressure, an exception to the provisions of 4.0.4 is required. Technical Specification 3/4 3.3.5, "Remote Shutdown Instrumentation", Surveillance Requirement 4.3.3.5.3 currently contains an exception to Specification 4.0.4 for the ASD valve controls on the auxiliary shutdown panel.

Currently Technical Specification 3/4 7.1.7 does contain an exception to the provisions of Specification 3.0.4. The exception to Specification 3.0.4 would allow entry into Mode 3 without the ASD valves operable or the surveillances completed, provided the actions of the Specification are met. In this case, with more than one of the required valves inoperable, Action b allows 24 hours to restore two of the valves to an operable condition prior to commencing a plant shutdown. Because of other tests requirements in Mode 3, prior to reaching nominal RCS operating temperature and steam generator pressure, the 24 hours per Action b does not provide sufficient time to complete the surveillances for the ASD valves.

Evaluation

The change proposed by this amendment application adds an exception to the provisions of Specification 4.0.4. The proposed change does not involve an unreviewed safety question because operation of Callaway Plant with this change would not:

1. Involve an increase in the probability or consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR. The change allows the surveillances for the ASD valves be performed at conditions similar to those in which the valves would be required to function in the event of a SGTR. Since no design change is being made the probability of an accident previously evaluated has not increased. The testing of valves at conditions similar to those anticipated when the valves are required to function provides assurance that the consequences of an accident and probability or consequences of a malfunction are not increased over those evaluated in the FSAR.

2. Create the possibility for an accident or malfunction of equipment of a different type than previously evaluated in the FSAR. This is based on the fact that no design changes are involved. The change provides assurance that the ASD valves will perform as designed.

3. Involve a reduction in the margin of safety as defined in the basis for any Technical Specification. This change provides assurance that the ASD valves will perform as designed to mitigate the consequences of a postulated SGTR event. The margin of safety is not reduced.

Conclusion

Based on the above discussions the proposed revision to Technical Specification 3/4 7.1.7 does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated

in the safety analysis report; or create a possibility for an accident or malfunction of a different type than any previously evaluated in the safety analysis report; or reduce the margin of safety as defined in the basis for any technical specification. Therefore, the proposed revision does not adversely affect or endanger the health or safety of the general public or involve an unreviewed safety question.

References

1. NRC letter from A. T. Gody, Jr. to D. F. Schnell dated August 6, 1990, "Safety Evaluation for the Callaway Plant Steam Generator Tube Rupture Analysis."

2. NRC letter form T. W. Alexion to D. F. Schnell dated May 15, 1989, "Amendment 45 to Facility Operating License NPF-30".

SIGNIFICANT HAZARD EVALUATION

SIGNIFICANT HAZARDS EVALUATION

This amendment application requests a revision to Technical Specification 3/4 7.1.7. to allow an exception to the provisions of Technical Specification 4.0.4 This is required because the surveillances for the Steam Generator atmospheric steam dump valves (ASD) can only be completed after entry into the mode for which the surveillance requirements apply.

Currently Technical Specification 3/4 7.1.7 does not contain an exception to Technical Specification 4.0.4 Specification 4.0.4 prohibits entry into an operation mode or other specified condition when surveillance requirements have not been performed within the specified surveillance interval. Since maintenance is being performed during this outage the surveillances would be required to be performed prior to declaring the valve operable for entry into Mode 3. However, since the surveillance needs to be performed at nominal reactor coolant system operating temperature and steam generator pressure, an exception to the provisions of 4.0.4 is required.

The change proposed by this amendment application adds an exception to the provisions of specification 4.0.4. The proposed change does not involve a significant hazard consideration because operation of Callaway Plant with this change would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The change allows the surveillances for the ASD valves to be performed at conditions similar to those in wh the valves would be required to function in the event of a SGTR. Since no design change is being made the probability of an accident previously evaluated has not increased. The testing of valves at conditions similar to those anticipated when the valves are required to function provides assurance that the consequences of an accident and probability or consequences of a malfunction are not increased over those evaluated in the FSAR.

2. Create the possibility of a new or different kind of accident from any previously evaluated. This is based on the fact that no design changes are involved. The change provides assuranc that the ASD, valves will perform as designed.

3. Involve a significant reduction in a margin of safety. This change provides assurance that the ASD valves will perform as designed to mitigate the consequences of a postulated SGTR event. The margin of safety is not reduced.

Based on the above discussions and those presented in Attachment 2, it has been determined that the requested Technical Specification revision does not involve a significant increase in the probability or consequences of an accident or other adverse condition over previous evaluations; or create the possibility of a new or different kind of accident or condition over previous evaluations; or involve a significant reduction in a margin of safety. Therefore, the requested license amendment does not involve a significant hazards consideration.