

ENCLOSURE 2

**SAN ONOFRE NUCLEAR GENERATING STATION
UNITS 1, 2, AND 3**

PROCEDURE CHANGES IMPLEMENTED IN 1993

<u>Procedure Number:</u>	<u>Title</u>	<u>Page</u>
S03-XXVI-11.6869.0.2	Check Valve Chatter Testing	2-1
S023-XXVII-20.24	Field Procedure and Operating Instructions for Installation of a Flexible Stabilizer in a Recirculating Steam Generator	2-2
S023-5-1.5	Plant Shutdown From Hot Standby to Cold Shutdown	2-3
S0123-III-2.10.23	Unit 2/3 Secondary Chemical Feed Systems Operation	2-4
S0123-VII-8.5.4	Transfer of Waste/Radioactive Material from Other Than Normal Plant Systems to a Container for Processing	2-5

Procedure Number S03-XXVI-11.6869.0.2

Title: Check Valve Chatter Testing

Description:

The purpose of this procedure is to provide a method to determine the causes of the check valve chatter, to verify valve alignment changes, and to verify check valve upgrades or piping changes will be effective in eliminating the problem.

To meet the above objective, valve alignment changes were made; piping changes for instrumentation connections were previously completed. These changes involved (1) additional instrumentation connections were added to the AFW steam feedline, (2) the bypass valve around HV-8200 and 8201 will provide warming steam for portions of the test, (3) three blowdown orifice stations in the turbine supply piping drain system will remain open, (4) bypass valves around the check valves will be closed for short periods of time.

The added valves by-pass the check valves and ensures steam line drainage and reduce check valve seat flutter during warm steam flow conditions. The bypass around the check valves will increase the steam inventory in containment following a main steam line break inside containment. The effects of this additional inventory will not increase the probability of occurrence of a malfunction of equipment because the steam energy will be removed by the containment cooling system. The additional steam rate will not damage the containment coolers and not increase the probability of their malfunction.

Safety Evaluation:

The probability of occurrence of an accident, or malfunction of any equipment important to safety previously evaluated in the UFSAR will not increase as a result of this change. The possibility of either an accident or malfunction of a different type than previously evaluated in the UFSAR will not be created as a result of this change. This change has no effect on either the existing Limiting Conditions for Operation or the Surveillance Requirements in the Technical Specifications; thus, the margin of safety as defined in the bases for the Technical Specifications will not be reduced as a result of this change.

Procedure Number S023-XXVII-20.24

Title: Field Procedure and Operating Instructions for Installation of a Flexible Stabilizer in a Recirculating Steam Generator

Description:

This procedure provides instruction for the installation of a flexible stabilizer in a main steam generator. The purpose of the stabilizer is to protect adjacent tubes from a severed tube end. The stabilizer is designed to mitigate the effects of a plugged tube becoming severed due to propagation of the circumferential cracking near the tubesheet.

Safety Evaluation:

The only accident previously evaluated that could be affected by using this steam generator tube stabilizer is the steam generator tube rupture addressed in the FSAR. However, additional support is provided by the Inconel 690 span sleeve that extends across the area of the defect. Hence, a severed tube is prevented from striking adjacent tubes and causing a tube rupture. Therefore, there is no increase in the consequences of an accident, no increase in the probability or consequences of a malfunction of equipment, and does not create the possibility of an accident of a different type than any previously evaluated in the FSAR. The Technical Specification (TS) requires that steam generator tubes be plugged when defective to maintain the margin of safety as defined in the basis. The steam generator roll tube plug (with attached stabilizer) will perform its intended function during normal operating and accident conditions for the life of the plant, and therefore, the margin of safety for the TS will not be reduced.

Procedure Number S023-5-1.5

Title: Plant Shutdown From Hot Standby to Cold Shutdown

Description:

The objective of the change to this procedure is to (1) prevent inadvertent Safety Injection Actuation Signal (SIAS) while on Shutdown Cooling in Mode 4 by raising the Low Pressurizer Pressure Trip (LPPT) Automatic Bypass Removal setpoint to 450 psia, (2) improve coordination for placing LTOP in service, and (3) improve coordination for performing ISI Valve testing in Mode 4.

Safety Evaluation:

The LPPT automatic enable setpoint implemented by this procedure change is consistent with Combustion Engineering's revised safety analysis limit and Edison's setpoint calculation. This setpoint can be set as high as 450 psia and still perform its design function. The TCN value for the LPPT automatic enable setpoint will not be installed in mode 3 and above when pressurizer low pressure SIAS is in mode 4 or below and pressurizer pressure is less than 500 PSI where it is needed to prevent an inadvertent SIAS while on shutdown cooling.

The probability of occurrence of an accident, or malfunction of any equipment important to safety previously evaluated in the UFSAR will not increase as a result of this change. The possibility of either an accident or malfunction of a different type than previously evaluated in the UFSAR will not be created as a result of this change. This change has no effect on either the existing Limiting Conditions for Operation or the Surveillance Requirements in the Technical Specifications; thus, the margin of safety as defined in the bases for the Technical Specifications will not be reduced as a result of this change.

Procedure Number S0123-III-2.10.23

Title: Unit 2/3 Secondary Chemical Feed Systems Operation

Description:

The revision to this procedure provides a method to vent an air-bound feed pump, to include chemical feed valve alignment (normal and with Full Flow Condensate Polisher Demineralizer (FFCPD) bypassed), and a method for adding Hydrazine to the Condensate Storage Tank (CST) T-120.

Safety Evaluation:

Hydrazine addition to CST T-120 will not alter any assumptions previously made in evaluating the radiological consequences of an accident described in the FSAR and does not play a direct role in mitigating the radiological consequences of an accident. The Auxiliary Feedwater (AFW) System is the only equipment important to safety affected by the proposed change. There are no effects on this system as a result of the proposed change. The CST is required to maintain 280,000 gallons to ensure adequate water is available for 24 hours without makeup from non-safety, non-seismic sources. The AFW system was originally designed with a chemical feed system which includes hydrazine injection. The introduction of hydrazine through the CST to the AFW will have no effect on the system and is bounded by previous analysis.

The probability of occurrence of an accident, or malfunction of any equipment important to safety previously evaluated in the UFSAR will not increase as a result of this change. The possibility of either an accident or malfunction of a different type than previously evaluated in the UFSAR will not be created as a result of this change. This change has no effect on either the existing Limiting Conditions for Operation or the Surveillance Requirements in the Technical Specifications; thus, the margin of safety as defined in the bases for the Technical Specifications will not be reduced as a result of this change.

Procedure Number S0123-VII-8.5.4

Title: Transfer of Waste/Radioactive Material from Other Than Normal Plant Systems to a Container for Processing

Description:

The Full Flow Condensate Polisher Demineralizer (FFCPD) is used to produce high quality secondary water for the steam generators. The polishing process ensures that the highest quality water is used in the steam plant to minimize scale formation and corrosion. Condensate polishing is accomplished by passing condensate through large demineralizing vessels that contain both anion and cation resins. The spent resin (actually a mixture of resin and sludge) addressed in this safety evaluation is carryover and residue from regeneration of the mixed bed and cation polishers. While not designed as a radioactive system, the FFCPD became contaminated as a result of steam generator primary-to-secondary leakage. The resin transfer will be administratively controlled to prevent an unplanned release of radioactivity to the environment. The quantity released from the hold up tank (HUT) will be monitored to ensure that the radioactive material transferred does not exceed 10 Ci, which is consistent with Technical Specification (TS) 3.11.1.4.

Safety Evaluation:

The FFCPD is a non-safety related system which is desirable, but not required, for plant operation. Therefore, the HUT isolation during the transfer process does not change the consequences of any accident evaluated in the FSAR. The controls which will be placed on the transfer process ensure that any spillage of the resin will be within the existing safety analysis. Thus, dewatering of resin will not increase the consequences of any accident considered in the FSAR

TS 3.11.1.4 may be considered applicable to the resin dewatering process, given that the spent resin disposal container is near the FFCPD. The current activity of the material to be transferred is well below the 10 Ci limit of that TS.

The probability of occurrence of an accident, or malfunction of any equipment important to safety previously evaluated in the UFSAR will not increase as a result of this change. The possibility of either an accident or malfunction of a different type than previously evaluated in the UFSAR will not be created as a result of this change. This change has no effect on either the existing Limiting Conditions for Operation or the Surveillance Requirements in the Technical Specifications; thus, the margin of safety as defined in the bases for the Technical Specifications will not be reduced as a result of this change.