

Proposed TS Change Request - TSP 940004

LIST OF AFFECTED PAGES AND MARKED-UP TECHNICAL SPECIFICATIONS

<u>Page</u>	<u>Specification</u>	<u>Description of Change</u>
IV	Index	Note deletion of Section 3/4.3.3.3 of TS
3/4 3-47	3.3.3.3 4.3.3.3.1 4.3.3.3.2	Relocate information from this TS to FSAR or equivalent controlled document. Remove all seismic monitoring instrumentation from TS.
3/4 3-48	Table 3.3-7	Same as TS page 3/4 3-47
3/4 3-49	Table 4.3-4	Same as TS page 3/4 3-47
B 3/4 3-3	3/4.3.3.3	Relocate pertinent Bases information from TS to FSAR or equivalent controlled document. Remove 3/4.3.3.3 from TS.

## INDEX

### LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 AXIAL FLUX DIFFERENCE .....	3/4 2-1
3/4.2.2 HEAT FLUX HOT CHANNEL FACTOR .....	3/4 2-4
3/4.2.3 RCS FLOW RATE AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR .....	3/4 2-8
3/4.2.4 QUADRANT POWER TILT RATIO .....	3/4 2-12
3/4.2.5 DNB PARAMETERS .....	3/4 2-15
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR TRIP SYSTEM INSTRUMENTATION .....	3/4 3-1
3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION .....	3/4 3-15
3/4.3.3 MONITORING INSTRUMENTATION	
Radiation Monitoring .....	3/4 3-41
Movable Incore Detectors .....	3/4 3-46
DELETED .....	3/4 3-47
Meteorological Instrumentation .....	3/4 3-50
Remote Shutdown Instrumentation .....	3/4 3-53
Accident Monitoring Instrumentation .....	3/4 3-56
Explosive Gas Monitoring Instrumentation .....	3/4 3-67
Loose-Part Detection Instrumentation .....	3/4 3-72

## INDEX

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<u>SECTION</u>	<u>PAGE</u>
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 AXIAL FLUX DIFFERENCE.....	3/4 2-1
3/4.2.2 HEAT FLUX HOT CHANNEL FACTOR.....	3/4 2-4
3/4.2.3 RCS FLOW RATE AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR.....	3/4 2-8
3/4.2.4 QUADRANT POWER TILT RATIO.....	3/4 2-12
3/4.2.5 DNB PARAMETERS.....	3/4 2-15
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR TRIP SYSTEM INSTRUMENTATION.....	3/4 3-1
3/4.3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION.....	3/4 3-15
3/4.3.3 MONITORING INSTRUMENTATION	
Radiation Monitoring.....	3/4 3-41
Movable Incore Detectors.....	3/4 3-46
<del>DELETED Seismic Instrumentation.....</del>	<del>3/4 3-47</del>
Meteorological Instrumentation.....	3/4 3-50
Remote Shutdown Instrumentation.....	3/4 3-53
Accident Monitoring Instrumentation.....	3/4 3-56
Explosive Gas Monitoring Instrumentation.....	3/4 3-67
Loose-Part Detection Instrumentation.....	3/4 3-72

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Pages 3/4 3-47, 3/4 3-48, and 3/4 3-49 have been deleted.

## INSTRUMENTATION

### SEISMIC INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.3.3 The seismic monitoring instrumentation shown in Table 3.3-7 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.3.1 Each of the above seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and ANALOG CHANNEL OPERATIONAL TEST operations at the frequencies shown in Table 4.3-4.

4.3.3.3.2 Each of the above seismic monitoring instruments actuated during a seismic event greater than or equal to 0.01 g shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. A Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 10 days describing the magnitude, frequency spectrum and resultant effect upon facility features important to safety.

INSTRUMENTATION

TABLE 3.3-7

SEISMIC MONITORING INSTRUMENTATION

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>MEASUREMENT RANGE</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>
1. Triaxial Time-History Accelerographs System, including the following components:		
a. Reactor Building Foundation Mat Accelerometer	0.1 to 40 Hz 0.01 to 1.0g	1
b. Reactor Building Ring Girder Accelerometer	0.1 to 40 Hz 0.01 to 1.0g	1
c. Reactor Building Foundation Mat Trigger	1 to 10 Hz 0.005 to 0.02g	1*
2. Triaxial Peak Accelerographs		
a. Side of Steam Generator	0-32 Hz -5g to +5g	1
b. Accumulator Safety Injection Line	0-32 Hz -5 to +5g	1
c. RHR System Heat Exchanger	0-20 Hz -2g to +2g	1
3. Triaxial Seismic Switches		
a. Reactor Building Foundation Mat	0.1 to 30 Hz 0.01 to 0.25 g	1*
4. Triaxial Response-Spectrum Recorders		
a. Reactor Building Foundation Mat	(1)	1*
b. Steam Generator Support	(1)	1
c. Intermediate Bldg., Elev. 463'	(1)	1
d. Auxiliary Bldg. Foundation	(1)	1

\* With control room indication and/or alarm.

(1) Range varies for the multiple elements of the instrument, i.e., 1.6g at 2 Hz, 10g at 5 Hz, 34g at 10 Hz, 12g at 16 Hz.

INSTRUMENTATION

TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>
1. Triaxial Time-History Accelerographs, including the following components:			
a. Reactor Building Foundation Mat Accelerometer	M	R	SA
b. Reactor Building Ring Girder Accelerometer	M	R	SA
c. Reactor Building Foundation Mat Trigger*	M	R	SA
2. Triaxial Peak Accelerographs			
a. Side of Steam Generator	NA	R	NA
b. Accumulator Safety Injection Line	NA	R	NA
c. RHR System Heat Exchanger	NA	R	NA
3. Triaxial Seismic Switches			
a. Reactor Building Foundation Mat*	M	R	SA
4. Triaxial Response-Spectrum Recorders			
a. Reactor Building Foundation Mat*	M	R	SA
b. Steam Generator Support	NA	R	NA
c. Intermediate Bldg. Elev. 463'	NA	R	NA
d. Auxiliary Bldg. Foundation	NA	R	NA

\* With control room indications and/or alarm.

## INSTRUMENTATION

### BASES

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#### 3/4.3.3.3 SEISMIC INSTRUMENTATION

Deleted

#### 3/4.3.3.4 METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public and is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February 1972.

#### 3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

#### 3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG 0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."



## INSTRUMENTATION

### BASES

#### 3/4.3.3.3 SEISMIC INSTRUMENTATION

**DELETED**

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix "A" of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

#### 3/4.3.3.4 METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public and is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February 1972.

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## Proposed TS Change Request - TSP 940004

### DESCRIPTION OF AMENDMENT REQUEST AND SUPPORTING SAFETY EVALUATION

#### Description of Amendment Request

The proposed TS change involves relocation of the Seismic Monitoring Instrumentation (SMI) Limiting Condition for Operation (LCO), Surveillance Requirements (SRs), and associated tables and bases contained in TS section 3/4.3.3.3 to the Final Safety Analysis Report (FSAR) or an equivalent controlled document. Also, based on a conversation with Mr. George Wunder of NRC, SCE&G plans to delete the requirement for a Special Report when a seismic instrument is inoperable for more than 30 days.

The NRC issued a policy statement, "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors", dated July 22, 1993, which provided a specific set of four criteria for determining which regulatory requirements and operating restrictions should be included in TS. This policy statement is the basis for the proposed TS change. Criterion 1 of the policy statement explicitly identifies SMI as an example of instrumentation not required to be retained in TS. Criterion 1 states in part "....This criterion should not, however, be interpreted to include instrumentation to detect precursors to reactor coolant pressure boundary leakage or instrumentation to identify the source of actual leakage (e.g. loose parts monitor, seismic instrumentation, valve position indicators)."

SCE&G's desire to remove SMI from the TS was discussed with the NRC. Also, SCE&G's plans to upgrade the existing SMI during the next operating cycle and through refueling outage 9 (scheduled for Spring 1996) were discussed. The upgrade is necessary because the existing system is difficult to maintain and replacement parts for some components are no longer available. The upgrade will replace and/or remove some existing components utilizing newer technology, however, the overall system will function as originally designed. Use of newer technology will allow deletion of several instruments including three obsolete triaxial peak accelerographs. Relocation of the TS to the FSAR or an equivalent controlled document allows SCE&G to perform the SMI upgrade under 10CFR50.59. This allows implementation of the upgrade in logical phases without requiring a TS change prior to implementing each phase.

#### Safety Evaluation

SMI is required by 10CFR100 Appendix A, in order to promptly record the motion of a seismic event and to evaluate the response of certain plant components and structures. This capability is necessary to permit comparison of the measured plant response during a seismic event to that used in the plant Design Basis. Relocation of the TS requirements for SMI to a controlled document, such as the FSAR, will not impact the equipment capabilities.

The NRC policy statement on Technical Specifications Improvements dated July 22, 1993, provided a specific set of four objective criteria to determine which regulatory requirements and operating restrictions should be included in TS. This policy statement is the basis for the TS change. This policy statement explicitly identifies the SMI as an example of instrumentation that is not required to be retained in TS.

The SMI system and associated TS requirements have been evaluated against the four NRC criteria contained in the "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" dated July 22, 1993. The evaluation is detailed on Attachment III, which contains information supporting a finding of No Significant Hazards and concludes that the current TS requirements do not meet any of the criteria for regulatory requirements and operating restrictions that should be included in TS. Accordingly, since the NRC policy statement establishes that any TS requirements which do not meet any of the four criteria may be proposed for relocation from the plant TS to licensee-controlled documents such as the FSAR, SCE&G proposes to relocate the TS, LCO, SRs, and associated tables and bases for the SMI to the FSAR or equivalent controlled document.

The SMI LCO, SRs, and associated tables and bases proposed for relocation from the TS will continue to be covered under administrative controls that will satisfy the applicable requirements of TS section 6 "Administrative Controls". These requirements include a review of changes to plant systems and equipment and to the applicable administrative controls in accordance with the provisions of 10CFR50.59.

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DESCRIPTION OF AMENDMENT REQUEST  
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The NRC issued a policy statement, "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors", dated July 22, 1993, which provided a specific set of four criteria for determining which regulatory requirements and operating restrictions should be included in TS. This policy statement is the basis for the proposed TS change. Criterion 1 of the policy statement explicitly identifies SMI as an example of instrumentation not required to be retained in TS. Criterion 1 states in part "....This criterion should not, however, be interpreted to include instrumentation to detect precursors to reactor coolant pressure boundary leakage or instrumentation to identify the source of actual leakage (e.g. loose parts monitor, seismic instrumentation, valve position indicators)."

SCE&G's desire to remove SMI from the TS was discussed with the NRC. Also, SCE&G's plans to upgrade the existing SMI during the next operating cycle and through refueling outage 9 (scheduled for Spring 1996) were discussed. The upgrade is necessary because the existing system is difficult to maintain and replacement parts for some components are no longer available. The upgrade will replace and/or remove some existing components utilizing newer technology, however, the overall system will function as originally designed. Use of newer technology will allow deletion of several instruments including three obsolete triaxial peak accelerographs. Relocation of the TS to the FSAR or an equivalent controlled document allows SCE&G to perform the SMI upgrade under 10CFR50.59. This allows implementation of the upgrade in logical phases without requiring a TS change prior to implementing each phase.

No Significant Hazards Evaluation

SCE&G has concluded that the proposed change to the VCSNS TS (i.e. relocating the SMI LCO, SRs, and associated tables and bases contained in TS to the FSAR or equivalent controlled document) does not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three standards, set forth in 10CFR50.92 is provided below.

1. The proposed Technical Specification (TS) change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The function of the SMI system is to record the motion and effect of a seismic event. SMI can not initiate or mitigate a previously evaluated accident. Furthermore, the proposed TS change to relocate the SMI requirements from TS

to the FSAR or equivalent controlled document is in accordance with the criteria (specifically Criterion 1) for determining those requirements that may be relocated from TS as defined by the NRC in its policy statement, "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors," dated July 22, 1993. The SMI LCO, SRs, and associated tables and bases proposed for relocation from TS will continue to be implemented by administrative controls that will satisfy the requirements of TS section 6 "Administrative Controls". These requirements include a review of changes to plant systems and equipment and to the applicable administrative controls in accordance with 10CFR50.59.

Criterion 2 of the July 22, 1993, NRC policy statement states, "A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier." The SMI system does not monitor a process variable that is an initial condition for accident or transient analysis. Also, the SMI is not a design feature or an operating restriction that is an initial condition since it only provides information regarding the motion of and the plant structure/equipment response to an earthquake. Therefore, the current VCSNS SMI TS requirements do not meet Criterion 2 of the July 22, 1993, NRC policy statement.

Criterion 3 of the NRC policy statement states, "A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier." The VCSNS SMI system does not function or actuate in order to mitigate the consequences of a Design Basis Accident or Transient. Therefore, the current VCSNS SMI TS requirements do not meet Criterion 3 of the July 22, 1993, NRC policy statement.

Criterion 4 of the NRC policy statement states, "A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety." Operating experience has shown that the VCSNS SMI system has no impact on public health and safety as defined by the NRC policy statement. Furthermore, VCSNS specific probabilistic risk assessment (PRA) does not credit the SMI system as a part of the plant response to an accident. Therefore, the current VCSNS SMI TS requirements do not meet Criterion 4 of the July 22, 1993, NRC policy statement for determining those requirements that should remain in TS.

The proposed TS change will maintain the current operation, maintenance, testing, and system operability controls for the SMI system. Furthermore, any future changes to the SMI system will be evaluated for the effect of those changes on system reliability and function as required by 10CFR50.59. The SMI system performance will not decrease due to the proposed TS change and the system will continue to be administratively controlled in accordance with TS section 6 (including the requirements of 10CFR50.59) thereby precluding a future decrease in SMI system performance/requirements.

The current TS Section 3.3.3.3, does not require plant shutdown if any SMI is inoperable and the provisions of TS Section 3.0.3 (i.e. plant shutdown) are not applicable. Therefore, the inoperability of this system and the consequences of an accident while this system is inoperable, were previously considered as not significant enough to require a change to the plant operating condition.



Since the SMI system does not meet the criteria for instrumentation required in TS and since it will continue to be administratively controlled (including the requirements of 10CFR50.59), the proposed TS change will not involve an increase in the probability or consequences of an accident previously evaluated.

2. The proposed TS change does not create the possibility of a new and different kind of accident previously evaluated.

The function of the SMI system is to record the motion and effect of a seismic event. The proposed TS change to relocate the SMI requirements from TS to the FSAR or equivalent controlled document is in accordance with the criteria for determining TS candidates for relocation as defined by the NRC in the policy statement, dated July 22, 1993. The SMI system does not monitor a process variable that is an initial condition for an accident or transient analysis. The SMI is also not a design feature or an operating restriction that is an initial condition of a Design Basis Accident or Transient analysis since it only provides information regarding the motion of and the plant structure/equipment response to an earthquake.

The proposed TS change to relocate the TS requirements will not alter the operation of the plant, or the manner in which the SMI system will perform its function. Any future changes will continue to be administratively controlled in accordance with TS section 6, including the requirements of 10CFR50.59.

The proposed TS change will not impose new conditions or result in new types of equipment malfunctions which have not been previously evaluated. Therefore, the proposed TS change does not create the possibility of a new or different type of accident from any accident previously evaluated.

3. The proposed TS change does not involve a significant reduction in a margin of safety.

The proposed TS change to relocate the SMI requirements from TS is in accordance with the criteria for determining TS candidates for relocation as defined by the NRC in its policy statement, dated July 22, 1993.

Criterion 1 of the NRC final policy statement states, "Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary." The NRC policy statement explains that "...This criterion is intended to ensure that Technical Specifications control those instruments specifically installed to detect excessive reactor coolant leakage. This criterion should not, however, be interpreted to include instrumentation to detect precursors to reactor coolant pressure boundary leakage or instrumentation to identify the source of actual leakage (e.g. loose parts monitor, seismic instrumentation, valve position indicators)." Based on this NRC guidance, the VCSNS FSAR, and TS bases 3/4.3.3.3, the SMI does not "detect and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary." Therefore, the current VCSNS SMI TS requirements do not meet Criterion 1. Operating experience has shown that the VCSNS SMI system has no impact on public health and safety as defined by the NRC policy statement. In addition, the VCSNS PRA does not credit the SMI system as a part of the plant response to accidents.

The SMI LCO, SRs, and associated tables and bases proposed for relocation to the FSAR or equivalent controlled document will continue to be covered by administrative controls that will satisfy the requirements of TS section 6 "Administrative Controls." Those requirements include a review of future changes to the system and applicable administrative controls in accordance with the provisions of 10CFR50.59.

Accordingly, based on NRC specific guidance, operating experience, and continued imposition of administrative controls, the proposed TS change does not involve a reduction in a margin of safety.