Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

September 22, 2003
NOC-AE-03001472
10CFR50.90

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Proposed Change to Loss of Power and AC Sources Technical Specifications

References:
1. Letter from J. J. Sheppard, STPNOC, to NRC Document Control Desk, dated February 14, 2002, "Proposed Change to Loss of Power and AC Sources Technical Specifications" (NOC-AE-01001214)
2. Letter from T. J. Jordan, STPNOC, to NRC Document Control Desk, dated October 24, 2002, "Response to NRC Questions on Proposed Change to Loss of Power and AC Sources Technical Specifications" (NOC-AE-02001402)
3. Letter from T. J. Jordan, STPNOC, to NRC Document Control Desk, dated September 22, 2003, "Proposed Change to Loss of Power Instrumentation Technical Specifications" (NOC-AE-03001578)

STP Nuclear Operating Company (STPNOC) withdraws the proposed amendment to South Texas Project Operating Licenses NPF-76 and NPF-80 described in Reference 1 and supersedes it with this application.

The originally proposed license amendment request would change the Technical Specification 3.3.2 requirements for Loss of Power Instrumentation (Functional Unit 8) and Technical Specifications 3.8.1.1, 3.8.1.2, and 3.8.1.3 for AC Sources.

This submittal withdraws the proposed changes to Technical Specification 3.3.2 requirements for Loss of Power Instrumentation and the proposed changes to Technical Specification 3.8.1.1 that are described in Reference 1. The changes originally proposed for Technical Specification 3.3.2 are being submitted separately (Ref.3). The changes proposed for Technical Specifications 3.8.1.2 and 3.8.1.3 are unchanged and are attached.

In a change not related to the previous submittals, this submittal also requests an administrative change to Technical Specification 3.2.4 to correct a typographical error.

A001

STPNOC requests approval of the proposed amendment by January 15, 2004 to support planning for the STP Unit 2 Spring refueling outage, scheduled to begin at the end of March 2004. Approval by the start of the outage is needed to enable STPNOC to take advantage of the change in the outage. STPNOC requests 60 days for implementation of the amendment after it is approved.

The STPNOC Plant Operations Review Committee and Nuclear Safety Review Board have reviewed and concurred with the proposed change to the Technical Specifications.

In accordance with 10 CFR 50.91(b), STPNOC is notifying the State of Texas of this request for license amendment by providing a copy of this letter and its attachments.

If there are any questions regarding the proposed amendment, please contact Mr. A. W. Harrison at (361) 972-7298 or me at (361) 972-7902.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on September 22, 2003.
Date

T. J. Jordan
Vice President
Engineering & Technical Services

awh/

Attachments:
1. Description of Changes and Safety Evaluation
2. Annotated Technical Specification Pages
3. Inserts for Technical Specification Bases

cc:
(paper copy)

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ATTACHMENT 1

DESCRIPTION OF CHANGES

AND

SAFETY EVALUATION

1.0 Introduction

STPNOC is proposing to revise the STP Technical Specifications so that they better reflect the design and function of the ESF load sequencer. The current Technical Specification requirements impose unnecessarily restrictive actions that are not consistent with other STP Technical Specification requirements or the STP design basis.

The proposed changes to the STP Technical Specifications are based in part on the Westinghouse Standard Improved Technical Specifications (NUREG-1431). STP's plant specific differences are described and justified.

STPNOC also proposes to correct a minor typographical error in Technical Specification 3.4.2.

2.0 Description

Each of the proposed changes to the Technical Specifications is described in Table 1 below.

Table 1: Description of Proposed Changes

Page	Affected Section	Description of Change	Reason for Change
3/4 2-10	TS 3.4.2	Correct ACTION c. to reletter as ACTION b.	Correct typographical error.
3/4 8-9 3/4 8-9a	TS 3/4.8.1.2 TS 3/4.8.1.3	The surveillance requirements are revised to delete the applicability of SRs associated with the load sequencer and/or ECCS (i.e. 4.8.1.1.2.e.4, 4.8.1.1.2.e.5, 4.8.1.1.2.e.6, 4.8.1.1.2.e.8, 4.8.1.1.2.e.10, 4.8.1.1.2.e.11, 4.8.1.1.2.e.13, and 4.8.1.1.2.f,), and to identify SRs that the AC sources are to be capable of meeting but which are not required to be performed (i.e., SRs 4.8.1.1.2.a.3, 4.8.1.1.2.e.2, 4.8.1.1.2.e.3, 4.8.1.1.2.e.7, 4.8.1.1.2.e.9, 4.8.1.1.2.e.12, and 4.8.1.1.2.g)	The automatic start of the Standby Diesel Generator (SDG) and load sequencing is not required in the modes of applicability for these TS. ECCS is not required to be operable in the modes of applicability for these TS. Not requiring certain SRs to be performed prevents a SDG from being unavailable for required testing at a time when there may be limited AC sources available. The proposed changes assure that the TS clearly represent the STP design basis and reduce the potential for confusion with regard to applying the TS requirements.

3.0 Background

The changes with respect to the requirements for the ESF sequencer and the SRs that are applicable in Mode 5 and 6 will clarify the STP Technical Specifications and minimize the potential for confusion in their application.

4.0 Technical Analysis

Proposed Change to SR for TS 3/4.8.1.2 and TS 3/4.8.1.3

The current TS 4.8.1.2 and 4.8.1.3 refer the operator to the Surveillance Requirements for TS 3.8.1.1 with only one exception each. Application of the current TS would require the surveillance requirements for the ESF sequencer to be met in Modes 5 and 6 and would further require the surveillance requirements related to ECCS to be met. However, as described below, the sequencer and ECCS functions are not required by the STP design basis for OPERABILITY in these Modes. Tables 2 and 3 below outline the changes proposed for these TS surveillance requirements. The tables apply to both TS since both TS are applicable in Modes 5 and 6.

Table 2 lists the SRs that are still required to be met but are not required to be performed. The technical basis is the same for each surveillance in the table and is as stated in the NUREG-1431 Bases:

> ... to preclude requiring the OPERABLE DG(s) from being paralleled with the offsite power network or otherwise rendered inoperable during performance of SRs, and to preclude deenergizing a required 4160 V ESF bus or disconnecting a required offsite circuit during performance of SRs. With limited AC sources available, a single event could compromise both the required circuit and the DG. It is the intent that these SRs must still be capable of being met, but actual performance is not required during periods when the DG and offsite circuit is required to be OPERABLE.

SR 4.8.1.1.2.e.12 and 4.8.1.1.2.g have no corresponding NUREG-1431 requirements, but the same technical justification applies.

Table 3 lists the SRs that are not applicable in Modes 5 and 6 and the basis for the exclusion of each one. The changes are generally consistent with NUREG-1431 and the differences are identified in the table.

The ESF Load Sequencer is not required to be operable in Mode 5 or Mode 6. STP's accident analyses take no credit for automatic load shedding or sequencing in these modes.

The pertinent design basis accidents in Modes 5, 6, and defueled are the Fuel Handling Accident, Low Temperature Overpressure, and Boron Dilution (Mode 5 with RCS filled and vented). The STP analyses for these accidents do not assume a concurrent loss of off-site power. Assuming a loss of off-site power with a Fuel Handling Accident is not required. Assuming a loss of off-site power in this scenario would remove the forced air circulation and subsequent dispersion of the contaminated air, which may be nonconservative. In the case of Low Temperature Overpressure, assuming a loss of off-

site power would not have an adverse effect on the results of the analysis. Assuming a loss of off-site power with a dilution event would be nonconservative because the loss of power will terminate the dilution flow as the charging pump loses power.

A loss of off-site power in Mode 5 or Mode 6 would be expected to cause a loss of power to RHR and interrupt decay heat removal. Although the loss of power instrumentation and the sequencer are normally operable for their associated SDG in Mode 5 and Mode 6, the current TS do not require them to be operable. Operator response may require manual start of the Standby Diesel Generator and manual loading of the ESF bus. The STP design does not automatically sequence RHR on to the bus even in Modes where the sequencer is required to be operable. Application of the definition of OPERABLE – OPERABILITY in conjunction with the use of STP's procedures provides adequate guidance for STP operators to determine the instrumentation required for the plant configuration. For instance, during reduced inventory operations, STP procedures require all diesel support instrumentation to be operable.

Table 2: Surveillance Requirements to Be Met But Not Required To Be Performed

SR	Description
4.8.1.1.2.a.3	At least once per 31 days on a staggered test basis: Verifying the generator is synchronized, loaded to 5000 to 5500 kW, and operates with a load of 5000 to 5500 kW for at least 60 minutes (4)(6)
4.8.1.1.2.e.2	At least once per 18 months during shutdown, by: Verifying the generator capability to reject a load of greater than or equal to 785.3kW while maintaining voltage at 4160 ± 416 volts and frequency at 60 ± 4.5 Hz (4)(5)
4.8.1.1.2.e.3	At least once per 18 months during shutdown, by: Verifying the generator capability to reject a load of 5500 kW without tripping. The generator voltage shall not exceed 5262 volts during and following the load rejection(4)(5)
4.8.1.1.2.e.7	At least once per 18 months during shutdown, by: (10) Verifying the standby diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to 5700 to 6050 kW(4)(5)(6) and during the remaining 22 hours of this test, the diesel generator shall be loaded to 5000 to 5500 kW. (6) The steady-state generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz during this test. Within 5 minutes after completing this 24-hour test, perform a fast start per Specification 4.8.1.1.2.a.2(7)
4.8.1.1.2.e.9	At least once per 18 months during shutdown, by: Verifying the standby diesel generator's capability to: a) Synchronize with the offsite power source while the generator is loaded with its ESF loads upon a simulated restoration of offsite power, b) Transfer its loads to the offsite power source, and c) Be restored to its standby status
4.8.1.1.2.e.12	At least once per 18 months during shutdown by: Verifying that the standby diesel generator emergency stop lockout feature prevents diesel generator starting
4.8.1.1.2.g	At least once per 10 years by draining each fuel tank, removing the accumulated sediment and cleaning the tank.

Table 3: Surveillance Requirements Not Applicable in Mode 5 and 6

SR	Description	Basis for Proposed Change
4.8.1.1.2.e.4	At least once per 18 months during shutdown by: Simulating a loss-of-offsite power by itself, and: a) Verifying deenergization of the ESF busses and load shedding from the ESF busses, and b) Verifying the diesel starts on the auto-start signal within 10 seconds, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the ESF busses shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.	This proposed change differs from NUREG-1431. As discussed above, the ESF Load Sequencer is not required to be OPERABLE by the STP design basis or accident analyses.
4.8.1.1.2.e.5	At least once per 18 months during shutdown by: Verifying that on a Safety Injection test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 10 seconds after the autostart signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test	The STP ECCS is not required to be operable in Mode 5 or Mode 6 and this change is consistent with the ECCS instrumentation requirements that do not require the ECCS signals when the ECCS System is not required to be OPERABLE This is consistent with NUREG-1431.
4.8.1.1.2.e.6	At least once per 18 months during shutdown by: Simulating a loss-of-offsite power in conjunction with a Safety Injection test signal, and: a) Verifying deenergization of the ESF busses and load shedding from the ESF busses; b) Verifying the diesel starts on the auto-start signal within 10 seconds, energizes the auto-connected ESF (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the ESF loads. After, energization, the steady-state voltage and frequency of the ESF busses shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test; and c) Verifying that all automatic diesel generator trips, except engine overspeed, generator differential, and low lube oil pressure are automatically bypassed upon loss of voltage on the ESF bus concurrent with a Safety Injection Actuation signal.	The STP ECCS is not required to be operable in Mode 5 or Mode 6 and this change is consistent with the ECCS instrumentation requirements that do not require the ECCS signals when the ECCS System is not required to be OPERABLE. Items a and b are consistent with NUREG-1431. Item c differs from NUREG-1431 in that a correlation with NUREG-1431 would list this SR with the SRs in Table 2. However, within the STP TS, this is a SR that is directly associated with supporting ECCS requirements and is more appropriately listed with the SRs that are not applicable in Mode 5 and 6.

SR	Description	Basis for Proposed Change
4.8.1.1.2.e.8	At least once per 18 months during shutdown by: Verifying that the auto-connected loads to each standby diesel generator do not exceed the 2000-hour rating of 5935 kW	This SR is appropriately performed to confirm the ESF loads for the Mode 1, 2, 3, and 4 events. Since STP does not require an operable sequencer in Mode 5 or 6, there are no auto-connected loads to verify in these modes.
4.8.1.1.2.e.10	At least once per 18 months during shutdown by: Verifying that with the standby diesel generator operating in a test mode, connected to its bus, a simulated Safety Injection signal overrides the test mode by: (1) returning the diesel generator to standby operation, and (2) automatically energizing the ESF loads with offsite power (5)	The STP ECCS is not required to be operable in Mode 5 or Mode 6 and this change is consistent with the ECCS instrumentation requirements that do not require the ECCS signals when the ECCS System is not required to be OPERABLE This is consistent with NUREG-1431.
4.8.1.1.2.e.11	At least once per 18 months during shutdown by: Verifying that the automatic load sequence timer is OPERABLE with the first sequenced load verified to be loaded between 1.0 second and 1.6 seconds, and all other load blocks within ± 10% of its design interval	This proposed change differs from NUREG-1431. As discussed above, the ESF Load Sequencer is not required to be OPERABLE by the STP design basis or accident analyses.
4.8.1.1.2.e.13	At least once per 18 months during shutdown by: Demonstrating the OPERABILITY of the automatic load shed bypass and the manual load shed reinstatement features of the load sequencer	This proposed change differs from NUREG-1431. As discussed above, the ESF Load Sequencer is not required to be OPERABLE by the STP design basis or accident analyses.
4.8.1.1.2.f	At least once per 10 years or after any modifications which could affect standby diesel generator interdependence by starting all standby diesel generators simultaneously, during shutdown, and verifying that all standby diesel generators accelerate to at least 600 rpm in less than or equal to 10 seconds	This SR is not applicable in Mode 5 and 6 where the full complement of SDGs is not required and interdependence is of lesser concern. This is consistent with NUREG-1431.

Notes from TS page 3/4 8-7 applicable to Tables 2 and 3 (for completeness of information - no changes proposed):

(1) Loss of one 13.8 kV Standby Bus to 4.16 kV ESF bus line constitutes loss of one offsite source. Loss of two 13.8 kV Standby busses to 4.16 kV ESF bus lines constitutes loss of two offsite sources.

(2) All diesel generator starts for the purpose of these surveillances may be preceded by a prelube period.

(3) A diesel generator start in less than or equal to 10 seconds (fast start) shall be performed every 184 days. All other diesel generator starts for the purpose of this surveillance may be modified starts involving reduced fuel (load limit) and/or idling and gradual acceleration to synchronous speed.

(4) Generator loading may be accomplished in accordance with vendor recommendations, including a warmup period prior to loading.

(5) The diesel generator start for this surveillance may be a modified start (see SR 4.8.1.1.2a.2)).

(6) Momentary transients outside this load range due to changing conditions on the grid shall not invalidate the test.

(7) If Specification 4.8.1.1.2a.2) is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the standby diesel generator may be operated at 5000-5500 kW for a minimum of 2 hours or until operating temperature has stabilized.

(8) (Not used)

(9) (Not used)

(10) This test may be performed during power operation provided that the other two diesel generators are operable.

(11) Credit may be taken for events that satisfy any of these Surveillance Requirements.

The typographical mistake in TS 3.2.4 occurred during the incorporation of the TS markups in STPNOC's letter dated October 24, 2001 (NOC-AE-01001042). The "b" of ACTION b. was inadvertently changed to a "c". STPNOC proposes to correct the typographical mistake in this submittal. There are no safety implications from this minor administrative correction.

5.0 Regulatory Safety Analysis

5.1 No Significant Hazards Determination

STPNOC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10CFR50.92, "Issuance of amendment," as discussed below.

1) Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No.

   The proposed changes do not change the plant design basis, system configuration or operation, and do not add or affect any accident initiator.

   Therefore, STPNOC concludes that there is no significant increase in the probability or consequences of an accident previously evaluated.

2) Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No.

   The proposed changes do not change the plant design basis, system configuration or operation, and do not add or affect any accident initiator.

   Therefore, STPNOC concludes the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3) Does the proposed change involve a significant reduction in a margin of safety?

   Response: No.

   No actual plant equipment or accident analyses will be affected by the proposed change. Additionally, the proposed changes will not relax any criteria used to establish safety limits, will not relax any safety systems settings, or will not relax the bases for any limiting conditions of operation. Therefore, STPNOC concludes the proposed changes do not involve a significant reduction in the margin of safety.

Conclusion

Based upon the analysis provided herein, the proposed amendments do not involve a significant hazards consideration.

5.2 Applicable Regulatory Requirements/Criteria

The regulatory basis for Technical Specification 3.8.1.2 and 3.8.1.3 (Electrical Power Systems, A.C. and D. C. Power Sources, Operating and Shutdown) is to ensure that sufficient power will be available to supply the safety-related equipment required for: (1) the safe shutdown of the facility, and (2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. sources satisfy the requirements of General Design Criteria (GDC) 17 of Appendix A to 10CFR Part 50.

The South Texas design has met GDC 2 and 4 with respect to structures, systems, and components of the onsite A.C. and D.C. power system being capable of withstanding the effects of natural phenomena (such as earthquake, tornadoes, hurricanes, and floods), missiles, and environmental conditions associated with normal operation and postulated accidents.

The South Texas design has met GDC 5 with respect to structures, systems, and components of the A.C. and D.C. onsite power system. The onsite power system and components associated with Units 1 and 2 are housed in physically separate seismic Category I structures and are not shared.

The South Texas design has met GDC 17 which requires that all redundant equipment and circuits are separated by physically locating them in separate areas, separating by distance in the same area, and/or providing barriers between them.

The South Texas design has met GDC 18 with respect to the onsite A. C. and D.C. power system. The onsite power system is designed to be testable during station operation as well as when the station is shut down.

Because the proposed changes do not alter the design basis, change the plant configuration or significantly change operation procedures, STP maintains compliance with all applicable regulatory requirements.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 Environmental Considerations

10 CFR 51.22(b) specifies the criteria for categorical exclusions from the requirements for a specific environmental assessment per 10 CFR 51.21. This amendment request meets the criteria specified in 10 CFR 51.22(c)(9). The specific criteria contained in this section are discussed below.

(i) the amendment involves no significant hazards consideration

As demonstrated in the No Significant Hazards Consideration Determination, the requested license amendment does not involve any significant hazards consideration.

(ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite

The requested license amendment involves no change to the facility and does not involve any change in the manner of operation of any plant systems involving the generation, collection or processing of radioactive materials or other types of effluents. Therefore, no increase in the amounts of effluents or new types of effluents would be created.

(iii) there is no significant increase in individual or cumulative occupational radiation exposure

The requested license amendment involves no change to the facility and will not increase the radiation dose resulting from the operation of any plant system. Furthermore, implementation of this proposed change will not involve work activities which could contribute to occupational radiation exposure. Therefore, there will be no increase in individual or cumulative occupational radiation exposure associated with this proposed change.

Based on the above it is concluded that there will be no impact on the environment resulting from this change. The change meets the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.21 relative to specific environmental assessment by the Commission.

7.0 References

1. NUREG-1431 "Standard Technical Specifications, Westinghouse Plants"
2. South Texas Project Updated Final Safety Analysis Report
3. Procedure 0POP04-AE0001, "First Response to Loss of Any or All 13.8 KV or 4.16 KV Bus"
4. Procedure 0POP04-AE0003, "Loss Of Power To One Or More 13.8 KV Standby Bus"
5. Procedure 0PGP03-ZO0035, "Reduced RCS Inventory Operations"

ATTACHMENT 2

PROPOSED TECHNICAL SPECIFICATION CHANGES

3/4.2.4 QUADRANT POWER TILT RATIO

LIMITING CONDITION FOR OPERATION

3.2.4 The QUADRANT POWER TILT RATIO shall not exceed 1.02.

APPLICABILITY: MODE 1, above 50% of RATED THERMAL POWER*.

ACTION:

With the QUADRANT POWER TILT RATIO determined to exceed 1.02:

a. Within 2 hours reduce THERMAL POWER at least 3% from RATED THERMAL POWER for each 1% of indicated QUADRANT POWER TILT RATIO in excess of 1 and similarly reduce the Power Range Neutron Flux-High Trip Setpoint within the next 4 hours.

~~b.c.~~ Within 24 hours and every 7 days thereafter, verify that $F_Q(Z)$ (by F_{xy} evaluation) and $F^N_{\Delta H}$ are within their limits by performing Surveillance Requirements 4.2.2.2 and 4.2.3.2. THERMAL POWER and setpoint reductions shall then be in accordance with the ACTION statements of Specifications 3.2.2 and 3.2.3.

SURVEILLANCE REQUIREMENTS

4.2.4.1 The QUADRANT POWER TILT RATIO shall be determined to be within the limit above 50% of RATED THERMAL POWER by:

a. Calculating the ratio at least once per 7 days when the alarm is OPERABLE, and

b. Calculating the ratio at least once per 12 hours during steady-state operation when the alarm is inoperable.

4.2.4.2 The QUADRANT POWER TILT RATIO shall be determined to be within the limit when above 75% of RATED THERMAL POWER with one Power Range channel inoperable by using the movable incore detectors to confirm indicated QUADRANT POWER TILT RATIO at least once per 12 hours by either:

a. Using the four pairs of symmetric thimble locations, or

b. Using the movable incore detection system to monitor the QUADRANT POWER TILT RATIO with a full incore map.

* See Special Test Exceptions Specification 3.10.2.

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

a. One circuit between the offsite transmission network and the Onsite Class 1E Distribution System, and

b. Two[1] standby diesel generators each with a separate fuel tank containing a minimum volume of 60,500 gallons of fuel.

APPLICABILITY: Mode 5 and Mode 6 with water level in the refueling cavity <23 ft above the reactor pressure vessel flange.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or required boron concentration, movement of irradiated fuel, operations with a potential for draining the reactor vessel or crane operation with loads over the spent fuel pool. Immediately initiate actions to restore the inoperable A.C. electrical power source to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.8.1.2 ~~The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the requirements of Specifications 4.8.1.1.1, 4.8.1.1.2 (except for Specification 4.8.1.1.2a.3), and 4.8.1.1.3.~~ **For AC sources required to be OPERABLE, the surveillance requirements of Specification 3.8.1.1, "AC Sources – Operating", are applicable (except 4.8.1.1.2.e.4, 4.8.1.1.2.e.5, 4.8.1.1.2.e.6, 4.8.1.1.2.e.8, 4.8.1.1.2.e.10, 4.8.1.1.2.e.11, 4.8.1.1.2.e.13, and 4.8.1.1.2.f).**

NOTES-

The following surveillance requirements are not required to be performed: 4.8.1.1.2.a.3, 4.8.1.1.2.e.2, 4.8.1.1.2.e.3, 4.8.1.1.2.e.7, 4.8.1.1.2.e.9, 4.8.1.1.2.e.12, and 4.8.1.1.2.g.

4.8.1.2.1 The alternate onsite emergency power source shall be demonstrated functional by:

a. Within 4 hours of taking credit for the onsite emergency power source as a standby diesel generator, verify it starts and achieves steady state voltage (±10%) and frequency (±2%) in 5 minutes.

b. Within 4 hours of taking credit for the onsite emergency power source as a standby diesel generator and every 8 hours thereafter, verify the emergency power source is capable of being aligned to the required ESF bus by performing a breaker alignment check.

[1]An alternate onsite emergency power source, capable of supplying power for one train of shutdown cooling may be substituted for one of the required diesels for 14[2] consecutive days (SR 4.8.1.2.1 is the only requirement applicable).

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.3 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

a. One circuit between the offsite transmission network and the Onsite Class 1E Distribution System, and

b. One standby diesel generator with a separate fuel tank containing a minimum volume of 60,500 gallons of fuel.

APPLICABILITY: Mode 6 with water level in the refueling cavity ≥23 ft above the reactor pressure vessel flange.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or required boron concentration, operations with a potential for draining the reactor vessel or crane operation with loads over the spent fuel pool. Immediately initiate actions to restore the inoperable A.C. electrical power source to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.8.1.3 ~~The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the requirements of Specifications 4.8.1.1.1, 4.8.1.1.2 (except for Specification 4.8.1.1.2a.3), and 4.8.1.1.3.~~ **For AC sources required to be OPERABLE, the surveillance requirements of Specification 3.8.1.1, "AC Sources – Operating", are applicable (except 4.8.1.1.2.e.4, 4.8.1.1.2.e.5, 4.8.1.1.2.e.6, 4.8.1.1.2.e.8, 4.8.1.1.2.e.10, 4.8.1.1.2.e.11, 4.8.1.1.2.e.13, and 4.8.1.1.2.f).**

NOTES:

The following surveillance requirements are not required to be performed: 4.8.1.1.2.a.3, 4.8.1.1.2.e.2, 4.8.1.1.2.e.3, 4.8.1.1.2.e.7, 4.8.1.1.2.e.9, 4.8.1.1.2.e.12, and 4.8.1.1.2.g.

ATTACHMENT 3

INSERTS FOR TECHNICAL SPECIFICATION BASES

AC Sources Bases Inserts

For Technical Specifications 3.8.1.2 and 3.8.1.3, the SRs required to be met but not required to be performed preclude requiring the OPERABLE DG(s) from being paralleled with the offsite power network or otherwise rendered inoperable during performance of SRs, and to preclude deenergizing a required 4160 V ESF bus or disconnecting a required offsite circuit during performance of SRs. With limited AC sources available, a single event could compromise both the required circuit and the DG. It is the intent that these SRs must still be capable of being met, but actual performance is not required during periods when the DG and offsite circuit is required to be OPERABLE.

The ESF Load Sequencer is not normally required to be operable in Mode 5 or Mode 6. STP's accident analyses take no credit for automatic load shedding or sequencing in these modes. Although the loss of power instrumentation and the sequencer are normally operable for their associated SDG in Mode 5 and Mode 6, the TS do not require them to be operable. Operator response may require manual start of the Standby Diesel Generator and manual loading of the ESF bus. The STP design does not automatically sequence RHR on to the bus even in Modes where the sequencer is required to be operable. Application of the definition of OPERABLE – OPERABILITY in conjunction with the use of STP's procedures provides adequate guidance for STP operators to determine the instrumentation required for the plant configuration. For instance, during reduced inventory operations, STP procedures require all diesel support instrumentation to be operable.