

March 4, 2024

TSTF-24-01
PROJ0753

Attn: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Transmittal of TSTF-599, Revision 0, "Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators"

Enclosed for NRC review is TSTF-599, Revision 0, "Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators."

The following information is provided to assist the NRC staff in prioritizing their review of TSTF-599:

- **Applicability:** TSTF-599 is applicable to all plant types except the Westinghouse AP1000.
- **Classification:** TSTF-599 eliminates the periodic Surveillance Requirement to verify that all required diesel generators achieve rated frequency and voltage within the specified time period when started simultaneously.
- **Specialized Resource Availability:** TSTF-599 is a normal priority change. The TSTF requests that TSTF-599 be reviewed within 18 months and be made available for adoption under the Consolidated Line Item Improvement Process (CLIIP).

The Technical Specifications Task Force should be billed for the review of the traveler.

Should you have any questions, please do not hesitate to contact us.



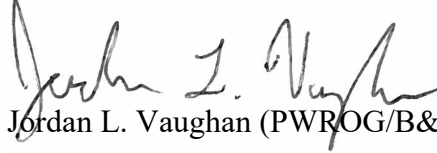
Andrew M. Richards, Jr. (PWROG/W)



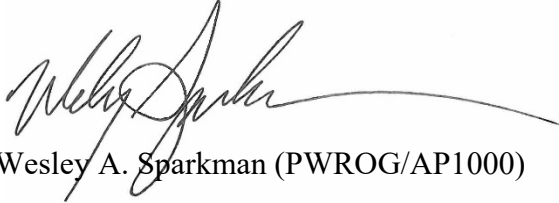
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Enclosure

cc: Michelle Honcharik, Technical Specifications Branch
Shivani Mehta, Technical Specifications Branch
Victor Cusumano, Technical Specifications Branch

Technical Specifications Task Force Improved Standard Technical Specifications Change Traveler

Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators

NUREGs Affected: 1430 1431 1432 1433 1434 2194

Classification: 1) Technical Change

Recommended for CLIP?: Yes

Correction or Improvement: Improvement

NRC Fee Status: Not Exempt

Benefit: Reduces Testing

Changes Marked on ISTS Rev 5.0

PWROG RISD & PA (if applicable): PA-LSC-1972

See attached.

Revision History

OG Revision 0

Revision Status: Active

Revision Proposed by: TSTF

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 27-Jun-23

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 17-Jul-23

TSTF Review Information

TSTF Received Date: 18-Jul-23

Date Distributed for Review 18-Jul-23

TSTF Comments:
(No Comments)

TSTF Resolution: Approved

Date: 07-Aug-23

NRC Review Information

NRC Received Date: 07-Aug-23

Affected Technical Specifications

SR 3.8.1.20

AC Sources - Operating

04-Mar-24

	Change Description: Deleted
SR 3.8.1.20 Bases	AC Sources - Operating
	Change Description: Deleted
Ref. 3.8.1 Bases	AC Sources - Operating
SR 3.8.2.1 Bases	AC Sources - Shutdown

1. SUMMARY DESCRIPTION

The proposed change eliminates the periodic Surveillance Requirement (SR) to verify that all required diesel generators (DGs) achieve rated frequency and voltage within the specified time period when started simultaneously. The proposed change affects the Standard Technical Specifications (STS) in NUREG-1430, NUREG-1431, NUREG-1432, NUREG-1433, and NUREG-1434¹.

2. DETAILED DESCRIPTION

2.1. System Design and Operation

The onsite Class 1E AC Distribution System is divided into redundant load groups so that the loss of any one group does not prevent the minimum safety functions from being performed. Each load group has one or more connections to the preferred offsite power sources and to one or more DGs. Most plants are designed with one DG per load group, but some dual-unit sites have one dedicated DG per unit and share one DG (a swing DG). Some sites are designed with two DGs per load group. The BWR/6 design also has a DG dedicated to the High Pressure Core Spray (HPCS) System.

A unit's DGs start automatically on receipt of a signal indicating an accident has occurred or on a loss of offsite power to the associated Engineered Safety Features (ESF) bus. In the event of an accident accompanied by a loss of offsite power, the ESF electrical loads are automatically connected to the DGs in sufficient time to provide for safe reactor shutdown and to mitigate the consequences of a Design Basis Accident (DBA) such as a loss of coolant accident (LOCA).

Each DG must be capable of starting, accelerating to rated speed and voltage, and connecting to its respective ESF bus on detection of bus undervoltage. This is accomplished within a plant-specific time limit. Each DG must also be capable of accepting the required loads and operating until offsite power can be restored to the ESF buses.

The DGs are independent and redundant. On the receipt of the appropriate signals, all of the unit's DGs start in parallel. However, the accident analyses assume a worst case single failure, which is frequently the failure of one DG to start and load. Therefore, the accident analyses usually assume only one of the unit's ESF buses receives power.

¹ NUREG-1430 provides the STS for Babcock & Wilcox plant designs.

NUREG-1431 provides the STS for Westinghouse plant designs.

NUREG-1432 provides the STS for Combustion Engineering plant designs.

NUREG-1433 provides the STS for BWR/4 plant designs, but is also representative of the BWR/2, BWR/3, and, in this case, of the BWR/5 plant design.

NUREG-1434 provides the STS for BWR/6 plant designs, but is also representative in some cases of the BWR/5 plant design.

2.2. Current Technical Specifications Requirements

NUREG-1430 through NUREG-1432, Specification 3.8.1, "AC Sources - Operating,"
Surveillance Requirement 3.8.1.20, states:

SR 3.8.1.20	<p>-----NOTE-----</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>-----</p> <p>Verify, when started simultaneously from standby condition, each DG achieves, in ≤ [10] seconds, voltage ≥ [3740] V and ≤ [4580] V, and frequency ≥ [58.8] Hz and ≤ [61.2] Hz.</p>	<p>[10 years</p> <p><u>OR</u></p> <p>In accordance with the Surveillance Frequency Control Program]</p>
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NUREG-1433, SR 3.8.1.20, states:

SR 3.8.1.20	<p>-----NOTE-----</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>-----</p> <p>Verify, when started simultaneously from standby condition, [each] [2A and 2C] DG achieves:</p> <p>a. In ≤ [12] seconds, voltage ≥ [3740] V and frequency ≥ [58.8] Hz and</p> <p>b. Steady state voltage ≥ [3740] V and ≤ [4580] V and frequency ≥ [58.8] Hz and ≤ [61.2] Hz.</p>	<p>[10 years</p> <p><u>OR</u></p> <p>In accordance with the Surveillance Frequency Control Program]</p>
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NUREG-1434, SR 3.8.1.20, states:

<p>SR 3.8.1.20</p> <p>-----NOTE----- All DG starts may be preceded by an engine prelube period. -----</p> <p>Verify, when started simultaneously from standby condition, [each] [Division 1, 2, and 3] DG achieves:</p> <p>a. In \leq [10] seconds, voltage \geq [3744] V and frequency \geq [58.8] Hz and</p> <p>b. Steady state voltage \geq [3744] V and \leq [4576] V and frequency \geq [58.8] Hz and \leq [61.2] Hz.</p>	<p>[10 years</p> <p><u>OR</u></p> <p>In accordance with the Surveillance Frequency Control Program]</p>
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The values in brackets are plant specific.

Note that every plant affected by the traveler has adopted TSTF-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b"². Therefore, in plant TS the SR Frequency is, "In accordance with the Surveillance Frequency Control Program."

This SR does not appear in every plant's TS. An equivalent SR appears in approximately 77% of Pressurized Water Reactor (PWR) TS and 71% of Boiling Water Reactor (BWR) TS. There is no equivalent SR in the AP1000 STS (NUREG-2194) because there are no STS requirements on DGs.

The TS Bases state that the SR demonstrates that the DG starting independence has not been compromised, and that each engine can achieve proper speed within the specified time when the DGs are started simultaneously. The Bases also state that the 10-year Frequency is consistent with the recommendations of Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants."

2.3. Reason for the Proposed Change

SR 3.8.1.20 requires the simultaneous fast start of all redundant diesel generators (DGs) and verification that the DGs reach required voltage and frequency in order to verify that the DG starting independence has not been compromised. The SR is required to be performed in

² NRC Agencywide Documents Access and Management System (ADAMS) Accession No. ML090850642 (submittal), 74FR31996 (approval).

accordance with the Surveillance Frequency Control Program (SFCP), with an initial frequency of every 10 years. At least four sites have extended the frequency to 20 years.

Based on past SR successful performance, the DG performance during actual events, the other tests performed on the DGs, and the potential detrimental effects on plant safety and DG reliability, the performance of the SR is not warranted by the safety benefit of the test. As a result, the test is proposed to be eliminated from the TS.

2.4. Description of the Proposed Change

The proposed change deletes SR 3.8.1.20. SR 3.8.1.20 is the last SR in STS 3.8.1, and no subsequent SRs need to be renumbered.

The TS 3.8.1 Bases are revised to delete the Bases for SR 3.8.1.20. SR 3.8.1.20 is referenced in the TS 3.8.2, "AC Sources - Shutdown," SR 3.8.2.1, Bases. The reference is deleted.

A model application is attached. The model may be used by licensees desiring to adopt the traveler following NRC approval.

3. TECHNICAL EVALUATION

Title 10 of the Code of Federal Regulations (10 CFR), Paragraph 50.36(c)(3) states that Surveillance Requirements, "are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

As described below, the industry has determined that SR 3.8.1.20 is not required to verify that the necessary quality of systems or components is maintained, that facility operation will be within the safety limits, and that the limiting conditions for operation (LCOs) will be met.

Performance History of SR 3.8.1.20

An industry survey was conducted of the performance history of SR 3.8.1.20, or the plant-specific equivalent. The survey identified over 50 performances in decades of data, and did not identify any failures to maintain DG independence.

DG Performance During Actual Events

A review of Licensee Event Reports from January 1, 2000, through August 29, 2021, identified 45 loss of offsite power events at 30 sites that resulted in the starting of the redundant DGs. In every case, the redundant DGs started and met their safety function as required.

A search of the Institute of Nuclear Power Operations (INPO) Consolidated Event System (ICES) database for the period of 2010 through 2019 did not identify any condition that would have caused an event that would have been detected by SR 3.8.1.20.

Identification of Common Cause Failure Mechanisms

It is highly unlikely that performance of SR 3.8.1.20 would identify that the redundant DGs are inoperable due to a common cause failure mechanism. In 2010, the TSTF was investigating the TS 3.8.1, Required Action B.3, requirement to perform a common cause evaluation when a DG is inoperable. A review of Licensee Event Reports from 2005 - 2010 was performed to identify common cause failures of two or more DGs. There were no instances in which the redundant DG was found to be inoperable due to a common cause failure. To place that information in context, a survey of licensees identified that plants entered Condition B an average of 27 times per year per unit. Over a five year period for the 104 units operating at the time, a common cause evaluation would have been performed approximately 14,000 times and no common cause failures were identified.

Overlap of Other DG Tests

SR 3.8.1.20 verifies that when started, the redundant DGs reach the required frequency and voltage within the specified time period. STS SR 3.8.1.7 also requires testing of each DG and verification that it reaches the required frequency and voltage within the specified time period. SR 3.8.1.7 is nominally performed every 6 months, but that Frequency may be changed under the Surveillance Frequency Control Program. There are no uniquely tested components during the performance of 3.8.1.20.

SR 3.8.1.20 does not duplicate the plant response to an actual event. The redundant DGs are started manually when SR 3.8.1.20 is performed. DG start due to a loss of offsite power signal or due to an ESF actuation signal is tested by STS SR 3.8.1.11 and SR 3.8.1.12.

Uniqueness of the DG Independence Test

Mitigation systems such as the Emergency Core Cooling System, containment spray and cooling, control room environmental control, electrical systems, and instrumentation, are designed with independent, redundant trains or subsystems. However, the TS for these systems do not require periodic verification that the subsystems remain independent. Preoperational testing and design controls are deemed sufficient to ensure that independence is not compromised. There are no unique aspects of the DGs that would warrant this exceptional testing for independence.

Safety Impact of Performing SR 3.8.1.20

For several plants, performance of SR 3.8.1.20 requires rendering the DGs inoperable during test preparation and recovery, such as pre-test or post-test turn-over of the DGs as recommended by the manufacturer. This is typically performed on one DG at a time. As a result, performance of SR 3.8.1.20 may reduce the availability of the DGs.

Most accident analyses assume a concurrent loss of offsite power and a limiting single failure, which is frequently the failure of one DG to start. Therefore, if one of the DGs is rendered inoperable in conjunction with performance of SR 3.8.1.20 and an accident were to occur, the plant may be unable to meet the assumptions of the accident analyses. Such a degradation of plant capability should only be intentionally imposed if the safety benefit outweighs the

increased risk. However, as discussed above, that is not the case for the performance of SR 3.8.1.20.

Summary

Based on the surveillance performance history, the DG performance during operational events, the other tests performed on the DGs, and the potential detrimental effects on plant safety, there does not appear to be a safety benefit provided by the performance of SR 3.8.1.20.

4. REGULATORY EVALUATION

Regulatory Guide 1.108, Revision 1, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," (August 1977), regulatory position C.2.b, stated:

Testing of redundant diesel generator units during normal plant operation should be performed independently (non-concurrently) to minimize common failure modes resulting from undetected interdependences among diesel generator units. However, during reliability demonstration of diesel generator units during plant preoperational testing and testing subsequent to any plant modification where diesel generator unit interdependence may have been affected or every 10 years (during a plant shutdown), whichever is the shorter, a test should be conducted in which redundant units are started simultaneously to help identify certain common failure modes undetected in single diesel generator unit tests.

On August 5, 1993, the NRC announced³ the withdrawal of Regulatory Guide 1.108. The guidance in Regulatory Guide 1.108 was updated and incorporated into Revision 3 of Regulatory Guide 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generator Units Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants." The notice stated that the withdrawal of Regulatory Guide 1.108 did not alter any prior or existing licensing commitments based on its use. Because most operating plants were licensed before 1993, the STS Bases were not revised to reference Regulatory Guide 1.9 in lieu of Regulatory Guide 1.108.

Regulatory Guide 1.9, Revision 3, (July 1993), Regulatory Position C.2.2.14, "Redundant Unit Test," states, "Demonstrate that, by starting and running both redundant units simultaneously, potential common failure modes that may be undetected in single emergency diesel generator unit tests do not occur."

Regulatory Guide 1.9, Revision 3, endorsed, with some exceptions, IEEE 387-1984, "Standard for Criteria for Diesel Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations." IEEE 387-2017 states:

Independence verification test: This testing involves demonstrating that the trains of standby electric power are independent at a frequency of once every 10 years (during a plant shutdown); or, subsequent to any modifications where diesel-generator unit

³ 58FRN41813, "Regulatory Guide; Withdrawal."

independence may have been affected (whichever is shorter), by starting all redundant units simultaneously to identify certain common-failure modes undetected in single diesel generator unit tests.

Previous versions of the standard contained a similar verification.

The regulation at Title 10 of the Code of Federal Regulations (10 CFR) Section 50.36(b) requires:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

Per 10 CFR 50.90, whenever a holder of a license desires to amend the license, application for an amendment must be filed with the Commission, fully describing the changes desired, and following as far as applicable, the form prescribed for original applications.

Per 10 CFR 50.92(a), in determining whether an amendment to a license will be issued to the applicant, the Commission will be guided by the considerations which govern the issuance of initial licenses to the extent applicable and appropriate.

Section IV, "The Commission Policy," of the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58FR39132), dated July 22, 1993, states in part that improved STS have been developed and will be maintained for each NSSL owners group. The Commission Policy encourages licensees to use the improved STS as the basis for plant-specific Technical Specifications." The industry's proposal of travelers and the NRC's approval of travelers is the method used to maintain the improved STS as described in the Commission's Policy. Following NRC approval, licensees adopt travelers into their plant-specific technical specifications following the requirements of 10 CFR 50.90. Therefore, the traveler process facilitates the Commission's policy while satisfying the requirements of the applicable regulations.

The regulation at 10 CFR 50.36(a)(1) also requires the application to include a "summary statement of the bases or reasons for such specifications, other than those covering administrative controls." The proposed traveler revises the Bases to be consistent with the Technical Specifications, and therefore, is in compliance with 10 CFR 50.36(a)(1).

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 approval of the proposed change will not be inimical to the common defense and security or to the health and safety of the public.

5. REFERENCES

None.

Model Application

[DATE]

10 CFR 50.90

ATTN: Document Control Desk
 U.S. Nuclear Regulatory Commission
 Washington, DC 20555-0001

DOCKET NO.PLANT NAME

[50]-[xxx]

SUBJECT: Application to Revise Technical Specifications to Adopt
 TSTF-599, "Eliminate Periodic Surveillance Test of Simultaneous
 Start of Redundant Diesel Generators"

Pursuant to 10 CFR 50.90, [LICENSEE] is submitting a request for an amendment to the Technical Specifications (TS) for [PLANT NAME, UNIT NOS.].

[LICENSEE] requests adoption of TSTF-599, "Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators," which is an approved change to the Standard Technical Specifications (STS), into the [PLANT NAME, UNIT NOS] TS. The proposed change eliminates the periodic Surveillance Requirement (SR) to verify that all required diesel generators (DGs) achieve rated frequency and voltage within the specified time period when started simultaneously.

The enclosure provides a description and assessment of the proposed changes. Attachment 1 provides the existing TS pages marked to show the proposed changes. Attachment 2 provides revised (clean) TS pages. Attachment 3 provides the existing TS Bases pages marked to show revised text associated with the proposed TS changes and is provided for information only.

[LICENSEE] requests that the amendment be reviewed under the Consolidated Line Item Improvement Process (CLIIP). Approval of the proposed amendment is requested within 6 months of completion of the NRC's acceptance review. Once approved, the amendment shall be implemented within [90] days.

There are no regulatory commitments in this letter.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated [STATE] Official.

[In accordance with 10 CFR 50.30(b), a license amendment request must be executed in a signed original under oath or affirmation. This can be accomplished by attaching a notarized affidavit confirming the signature authority of the signatory, or by including the following statement in the cover letter: "I declare under penalty of perjury that the foregoing is true and correct. Executed on (date)." The alternative statement is pursuant to 28 USC 1746. It does not require notarization.]

If you should have any questions regarding this submittal, please contact [NAME, TELEPHONE NUMBER].

Sincerely,

[Name, Title]

Enclosure: Description and Assessment

Attachments: 1. Proposed Technical Specification Changes (Mark-Up)
2. Revised Technical Specification Pages
3. Proposed Technical Specification Bases Changes (Mark-Up) – For Information Only

[The attachments are to be provided by the licensee and are not included in the model application.]

cc: NRC Project Manager
NRC Regional Office
NRC Resident Inspector
State Contact

ENCLOSURE

DESCRIPTION AND ASSESSMENT

1.0 DESCRIPTION

[LICENSEE] requests adoption of TSTF-599, "Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators," which is an approved change to the Standard Technical Specifications (STS), into the [PLANT NAME, UNIT NOS] TS. The proposed change eliminates the periodic Surveillance Requirement (SR) to verify that all required diesel generators (DGs) achieve rated frequency and voltage within the specified time period when started simultaneously.

2.0 ASSESSMENT

2.1 Applicability of Safety Evaluation

[LICENSEE] has reviewed the safety evaluation for TSTF-599 provided to the Technical Specifications Task Force in a letter dated [DATE]. This review included the NRC staff's evaluation, as well as the information provided in TSTF-599. [LICENSEE] has concluded that the justifications presented in TSTF-599 and the safety evaluation prepared by the NRC staff are applicable to [PLANT, UNIT NOS.] and justify this amendment for the incorporation of the changes to the [PLANT] TS.

2.2 Variations

[LICENSEE is not proposing any variations from the TS changes described in TSTF-599 or the applicable parts of the NRC staff's safety evaluation.] [LICENSEE is proposing the following variations from the TS changes described in TSTF-599 or the applicable parts of the NRC staff's safety evaluation:]

[The [PLANT] TS utilize different [numbering][and][titles] than the STS on which TSTF-599 was based. Specifically, [describe differences between the plant-specific TS numbering and/or titles and the TSTF-599 numbering and titles.] These differences are administrative and do not affect the applicability of TSTF-599 to the [PLANT] TS.]

[The [PLANT] TS contain requirements that differ from the STS on which TSTF-599 was based but are encompassed in the TSTF-599 justification. For example, the SR may specify that the DG attain a certain rpm instead of a specified frequency, which is equivalent. Describe differences and why TSTF-599 is still applicable.]

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Analysis

[LICENSEE] requests adoption of TSTF-599, "Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators," which is an approved change to the Standard Technical Specifications (STS), into the [PLANT NAME, UNIT NOS] TS. The

proposed change eliminates the periodic Surveillance Requirement (SR) to verify that all required diesel generators (DGs) achieve rated frequency and voltage within the specified time period when started simultaneously.

[LICENSEE] has evaluated if a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No

The proposed change eliminates a periodic Surveillance test which verifies that all required diesel generators (DGs) achieve rated frequency and voltage within the specified time period when started simultaneously. Simultaneous start of the redundant DGs is not an initiator of any accident previously evaluated. The fast start of the DGs is verified by other Surveillance tests and historical performance of the simultaneous test has always been successful. As a result, the DG reliability and the attendant effect on the consequences of any accident previously evaluated are not affected.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed change eliminates a periodic Surveillance test which verifies that all required diesel generators (DGs) achieve rated frequency and voltage within the specified time period when started simultaneously. No new or different accidents result from the proposed change. The changes do not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the changes do not impose any new or different requirements. The changes do not alter assumptions made in the safety analysis. The proposed changes are consistent with the safety analysis assumptions and current plant operating practice.

Therefore, 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 amendment involve a significant reduction in a margin of safety?

Response: No

The proposed change eliminates a periodic Surveillance test which verifies that all required diesel generators (DGs) achieve rated frequency and voltage within the specified

time period when started simultaneously. The proposed change does not adversely affect existing plant safety margins, or the reliability of the equipment assumed to operate in the safety analysis. As such, there are no changes being made to safety analysis assumptions, safety limits or limiting safety system settings that would adversely affect plant safety as a result of the proposed change.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, [LICENSEE] concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

3.2 Conclusion

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.

4.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

Technical Specifications Changes

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 NOTE</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>Verify, when started simultaneously from standby condition, each DG achieves, in \leq [10] seconds, voltage \geq [3740] V and \leq [4580] V, and frequency \geq [58.8] Hz and \leq [61.2] Hz.</p>	<p>[10 years</p> <p>OR</p> <p>In accordance with the Surveillance Frequency Control Program.]</p>

BASES

SURVEILLANCE REQUIREMENTS (continued)

other unanticipated OPERABILITY concerns) provided an assessment determines plant safety is maintained or enhanced. This assessment shall, as a minimum, consider the potential outcomes and transients associated with a failed partial Surveillance, a successful partial Surveillance, and a perturbation of the offsite or onsite system when they are tied together or operated independently for the partial Surveillance; as well as the operator procedures available to cope with these outcomes. These shall be measured against the avoided risk of a plant shutdown and startup to determine that plant safety is maintained or enhanced when portions of the Surveillance are performed in MODE 1 or 2. Risk insights or deterministic methods may be used for the assessment. Credit may be taken for unplanned events that satisfy this SR.

SR 3.8.1.20

~~This Surveillance demonstrates that the DG starting independence has not been compromised. Also, this Surveillance demonstrates that each engine can achieve proper speed within the specified time when the DGs are started simultaneously.~~

~~[The 10 year Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10).~~

OR

~~The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.~~

 REVIEWER'S NOTE

~~Plants controlling Surveillance Frequencies under a Surveillance Frequency Control Program should utilize the appropriate Frequency description, given above, and the appropriate choice of Frequency in the Surveillance Requirement.~~

~~This SR is modified by a Note. The reason for the Note is to minimize wear on the DG during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated, and temperature maintained consistent with manufacturer recommendations.~~

BASES

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- REFERENCES
1. 10 CFR 50, Appendix A, GDC 17.
 2. FSAR, Chapter [8].
 3. Regulatory Guide 1.9, Rev. [3].
 4. FSAR, Chapter [6].
 5. FSAR, Chapter [15].
 6. Regulatory Guide 1.93, Rev. [0], [date].
 7. Generic Letter 84-15.
 8. BAW-2441-A, Revision 2, Risk Informed Justification for LCO End-State Changes, September 2006.
 9. 10 CFR 50, Appendix A, GDC 18.
 10. [Regulatory Guide 1.108, Rev. [1], [August 1977].]
 11. Regulatory Guide 1.137, Rev. [], [date].
 12. ANSI C84.1-1982.
 13. ASME Code for Operation and Maintenance of Nuclear Power Plants.
 14. IEEE Standard 308-[1978].
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BASES

ACTIONS (continued)

Suspension of these activities does not preclude completion of actions to establish a safe conservative condition. These actions minimize the probability or the occurrence of postulated events. It is further required to immediately initiate action to restore the required AC sources and to continue this action until restoration is accomplished in order to provide the necessary AC power to the unit safety systems.

The Completion Time of immediately is consistent with the required times for actions requiring prompt attention. The restoration of the required AC electrical power sources should be completed as quickly as possible in order to minimize the time during which the unit safety systems may be without sufficient power.

Pursuant to LCO 3.0.6, the Distribution System's ACTIONS are not entered even if all AC sources to it are inoperable, resulting in de-energization. Therefore, the Required Actions of Condition A are modified by a Note to indicate that when Condition A is entered with no AC power to any required ESF bus, the ACTIONS for LCO 3.8.10 must be immediately entered. This Note allows Condition A to provide requirements for the loss of the offsite circuit, whether or not a train is de-energized. LCO 3.8.10 provides the appropriate restrictions for the situation involving a de-energized train.

SURVEILLANCE
REQUIREMENTSSR 3.8.2.1

SR 3.8.2.1 requires the SRs from LCO 3.8.1 that are necessary for ensuring the OPERABILITY of the AC sources in other than MODES 1, 2, 3, and 4. SR 3.8.1.8 is not required to be met since only one offsite circuit is required to be OPERABLE. SR 3.8.1.12 and SR 3.8.1.19 are not required to be met because the ESF actuation signal is not required to be OPERABLE. SR 3.8.1.17 is not required to be met because the required OPERABLE DG(s) is not required to undergo periods of being synchronized to the offsite circuit. ~~SR 3.8.1.20 is excepted because starting independence is not required with the DG(s) that is not required to be OPERABLE.~~

This SR is modified by a Note. The reason for the Note is 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

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 NOTE</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>Verify when started simultaneously from standby condition, each DG achieves:</p> <p>a. In $\leq [10]$ seconds, voltage $\geq [3740]$ V and frequency $\geq [58.8]$ Hz and</p> <p>b. Steady state voltage $\geq [3744]$ V and $\leq [4576]$ V, and frequency $\geq [58.8]$ Hz and $\leq [61.2]$ Hz.</p>	<p>[10 years</p> <p>OR</p> <p>In accordance with the Surveillance Frequency Control Program.]</p>

BASES

SURVEILLANCE REQUIREMENTS (continued)

required offsite circuit from service, perturb the electrical distribution system, and challenge safety systems. This restriction from normally performing the Surveillance in MODE 1 or 2 is further amplified to allow portions of the Surveillance to be performed for the purpose of reestablishing OPERABILITY (e.g., post work testing following corrective maintenance, corrective modification, deficient or incomplete surveillance testing, and other unanticipated OPERABILITY concerns) provided an assessment determines plant safety is maintained or enhanced. This assessment shall, as a minimum, consider the potential outcomes and transients associated with a failed partial Surveillance, a successful partial Surveillance, and a perturbation of the offsite or onsite system when they are tied together or operated independently for the partial Surveillance; as well as the operator procedures available to cope with these outcomes. These shall be measured against the avoided risk of a plant shutdown and startup to determine that plant safety is maintained or enhanced when portions of the Surveillance are performed in MODE 1 or 2. Risk insights or deterministic methods may be used for the assessment. Credit may be taken for unplanned events that satisfy this SR.

SR 3.8.1.20

~~This Surveillance demonstrates that the DG starting independence has not been compromised. Also, this Surveillance demonstrates that each engine can achieve proper speed within the specified time when the DGs are started simultaneously.~~

~~[The 10-year Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10).]~~

~~OR~~

~~The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.~~

~~REVIEWER'S NOTE~~

~~Plants controlling Surveillance Frequencies under a Surveillance Frequency Control Program should utilize the appropriate Frequency description, given above, and the appropriate choice of Frequency in the Surveillance Requirement.~~

BASES

SURVEILLANCE REQUIREMENTS (continued)

~~This SR is modified by a Note. The reason for the Note is to minimize wear on the DG during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations.~~

REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
2. FSAR, Chapter [8].
3. Regulatory Guide 1.9, Rev. [3].
4. FSAR, Chapter [6].
5. FSAR, Chapter [15].
6. Regulatory Guide 1.93, Rev. 0, December 1974.
7. Generic Letter 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability," July 2, 1984.
8. WCAP-16294-NP-A, Rev. 1, "Risk-Informed Evaluation of Changes to Technical Specification Required Action Endstates for Westinghouse NSSS PWRs," June 2010.
9. 10 CFR 50, Appendix A, GDC 18.
10. [Regulatory Guide 1.108, Rev. 1, August 1977.]
11. Regulatory Guide 1.137, Rev. [], [date].
12. ASME Code for Operation and Maintenance of Nuclear Power Plants.
13. IEEE Standard 308-1978.

BASES

ACTIONS (continued)

concentration, but provides acceptable margin to maintaining subcritical operation. Introduction of temperature changes including temperature increases when operating with a positive MTC must also be evaluated to ensure they do not result in a loss of required SDM.

Suspension of these activities does not preclude completion of actions to establish a safe conservative condition. These actions minimize the probability or the occurrence of postulated events. It is further required to immediately initiate action to restore the required AC sources and to continue this action until restoration is accomplished in order to provide the necessary AC power to the unit safety systems.

The Completion Time of immediately is consistent with the required times for actions requiring prompt attention. The restoration of the required AC electrical power sources should be completed as quickly as possible in order to minimize the time during which the unit safety systems may be without sufficient power.

Pursuant to LCO 3.0.6, the Distribution System's ACTIONS would not be entered even if all AC sources to it are inoperable, resulting in de-energization. Therefore, the Required Actions of Condition A are modified by a Note to indicate that when Condition A is entered with no AC power to any required ESF bus, the ACTIONS for LCO 3.8.10 must be immediately entered. This Note allows Condition A to provide requirements for the loss of the offsite circuit, whether or not a train is de-energized. LCO 3.8.10 would provide the appropriate restrictions for the situation involving a de-energized train.

SURVEILLANCE
REQUIREMENTSSR 3.8.2.1

SR 3.8.2.1 requires the SRs from LCO 3.8.1 that are necessary for ensuring the OPERABILITY of the AC sources in other than MODES 1, 2, 3, and 4. SR 3.8.1.8 is not required to be met since only one offsite circuit is required to be OPERABLE. SR 3.8.1.12 and SR 3.8.1.19 are not required to be met because the ESF actuation signal is not required to be OPERABLE. SR 3.8.1.17 is not required to be met because the required OPERABLE DG(s) is not required to undergo periods of being synchronized to the offsite circuit. ~~SR 3.8.1.20 is excepted because starting independence is not required with the DG(s) that is not required to be operable.~~

This SR is modified by a Note. The reason for the Note is 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

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 NOTE</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>Verify, when started simultaneously from standby condition, each DG achieves:</p> <p>a. In $\leq [10]$ seconds, voltage $\geq [3740]$ V and frequency $\geq [58.8]$ Hz and</p> <p>b. Steady state voltage $\geq [3740]$ V and $\leq [4580]$ V, and frequency $\geq [58.8]$ Hz and $\leq [61.2]$ Hz.</p>	<p>[10 years</p> <p>OR</p> <p>In accordance with the Surveillance Frequency Control Program.]</p>

BASES

SURVEILLANCE REQUIREMENTS (continued)

are tied together or operated independently for the partial Surveillance; as well as the operator procedures available to cope with these outcomes. These shall be measured against the avoided risk of a plant shutdown and startup to determine that plant safety is maintained or enhanced when portions of the Surveillance are performed in MODE 1 or 2. Risk insights or deterministic methods may be used for the assessment. Credit may be taken for unplanned events that satisfy this SR.

SR 3.8.1.20

~~This Surveillance demonstrates that the DG starting independence has not been compromised. Also, this Surveillance demonstrates that each engine can achieve proper speed within the specified time when the DGs are started simultaneously.~~

~~[The 10 year Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10).~~

~~OR~~

~~The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.~~

~~REVIEWER'S NOTE~~

~~Plants controlling Surveillance Frequencies under a Surveillance Frequency Control Program should utilize the appropriate Frequency description, given above, and the appropriate choice of Frequency in the Surveillance Requirement.~~

~~This SR is modified by a Note. The reason for the Note is to minimize wear on the DG during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated, and temperature maintained consistent with manufacturer recommendations.~~

REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
2. FSAR, Chapter [8].
3. Regulatory Guide 1.9, Rev. [3].
4. FSAR, Chapter [6].

BASES

REFERENCES (continued)

5. FSAR, Chapter [15].
 6. Regulatory Guide 1.93, Rev. [], [date].
 7. CE NPSD-1186-A, Technical Justification for the Risk Informed Modification to Selected Required Action End States for CEOG PWRs, October, 2001.
 8. Generic Letter 84-15.
 9. 10 CFR 50, Appendix A, GDC 18.
 10. [Regulatory Guide 1.108, Rev. [1], [August 1977].]
 11. Regulatory Guide 1.137, Rev. [], [date].
 12. ANSI C84.1-1982.
 13. ASME Code for Operation and Maintenance of Nuclear Power Plants.
 14. IEEE Standard 308-[1978].
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BASES

ACTIONS (continued)

concentration, but provides acceptable margin to maintaining subcritical operation. Introduction of temperature changes including temperature increases when operating with a positive MTC must also be evaluated to ensure they do not result in a loss of required SDM.

Suspension of these activities does not preclude completion of actions to establish a safe conservative condition. These actions minimize the probability or the occurrence of postulated events. It is further required to immediately initiate action to restore the required AC sources and to continue this action until restoration is accomplished in order to provide the necessary AC power to the unit safety systems.

The Completion Time of immediately is consistent with the required times for actions requiring prompt attention. The restoration of the required AC electrical power sources should be completed as quickly as possible in order to minimize the time during which the unit safety systems may be without sufficient power.

Pursuant to LCO 3.0.6, the Distribution System's ACTIONS are not entered even if all AC sources to it are inoperable, resulting in de-energization. Therefore, the Required Actions of Condition A are modified by a Note to indicate that when Condition A is entered with no AC power to any required ESF bus, the ACTIONS for LCO 3.8.10 must be immediately entered. This Note allows Condition A to provide requirements for the loss of the offsite circuit, whether or not a train is de-energized. LCO 3.8.10 provides the appropriate restrictions for the situation involving a de-energized train.

SURVEILLANCE
REQUIREMENTSSR 3.8.2.1

SR 3.8.2.1 requires the SRs from LCO 3.8.1 that are necessary for ensuring the OPERABILITY of the AC sources in other than MODES 1, 2, 3, and 4. SR 3.8.1.8 is not required to be met since only one offsite circuit is required to be OPERABLE. SR 3.8.1.12 and SR 3.8.1.19 are not required to be met because the ESF actuation signal is not required to be OPERABLE. SR 3.8.1.17 is not required to be met because the required OPERABLE DG(s) is not required to undergo periods of being synchronized to the offsite circuit. ~~SR 3.8.1.20 is excepted because starting independence is not required with DG(s) that are not required to be OPERABLE.~~

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 NOTE</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>Verify, when started simultaneously from standby condition, [each] [2A and 2C] DG achieves:</p> <p>a. In \leq [12] seconds, voltage \geq [3740] V and frequency \geq [58.8] Hz and</p> <p>b. Steady state voltage \geq [3740] V and \leq [4580] V and frequency \geq [58.8] Hz and \leq [61.2] Hz.</p>	<p>[10 years</p> <p>OR</p> <p>In accordance with the Surveillance Frequency Control Program.]</p>

BASES

SURVEILLANCE REQUIREMENTS (continued)

when portions of the Surveillance are performed in MODE 1 or 2. Risk insights or deterministic methods may be used for the assessment. Credit may be taken for unplanned events that satisfy this SR.

SR 3.8.1.20

~~This Surveillance demonstrates that the DG starting independence has not been compromised. Also, this Surveillance demonstrates that each engine can achieve proper speed within the specified time when the DGs are started simultaneously.~~

~~[The 10 year Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10).~~

~~OR~~

~~The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.~~

~~REVIEWER'S NOTE~~

~~Plants controlling Surveillance Frequencies under a Surveillance Frequency Control Program should utilize the appropriate Frequency description, given above, and the appropriate choice of Frequency in the Surveillance Requirement.~~

~~This SR is modified by a Note. The reason for the Note is to minimize wear on the DG during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations.~~

REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
2. FSAR, Section [8.2].
3. Regulatory Guide 1.9, **Rev. [3]**.
4. FSAR, Chapter [6].
5. FSAR, Chapter [15].
6. Regulatory Guide 1.93.

BASES

REFERENCES (continued)

7. Generic Letter 84-15.
 8. NEDC-32988-A, Revision 2, Technical Justification to Support Risk-Informed Modification to Selected Required End States for BWR Plants, December 2002.
 9. 10 CFR 50, Appendix A, GDC 18.
 10. [Regulatory Guide 1.108, Rev. [1], [August 1977].]
 11. Regulatory Guide 1.137.
 12. ANSI C84.1, 1982.
 13. FSAR, Section [6.3].
 14. ASME Code for Operation and Maintenance of Nuclear Power Plants.
 15. IEEE Standard 308.
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BASES

SURVEILLANCE
REQUIREMENTSSR 3.8.2.1

SR 3.8.2.1 requires the SRs from LCO 3.8.1 that are necessary for ensuring the OPERABILITY of the AC sources in other than MODES 1, 2, and 3. SR 3.8.1.8 is not required to be met since only one offsite circuit is required to be OPERABLE. SR 3.8.1.7, SR 3.8.1.11, SR 3.8.1.12, SR 3.8.1.13, SR 3.8.1.15, [SR 3.8.1.18], and SR 3.8.1.19 are not required to be met because DG start and load within a specified time and response on an offsite power or ECCS initiation signal is not required. SR 3.8.1.17 is not required to be met because the required OPERABLE DG(s) is not required to undergo periods of being synchronized to the offsite circuit. ~~SR 3.8.1.20 is excepted because starting independence is not required with the DG(s) that is not required to be OPERABLE.~~ Refer to the corresponding Bases for LCO 3.8.1 for a discussion of each SR.

This SR is modified by a Note which precludes requiring the OPERABLE DG(s) from being paralleled with the offsite power network or otherwise rendered inoperable during the 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.

REFERENCES

None.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 NOTE</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>Verify, when started simultaneously from standby condition, [each] [Division 1, 2, and 3] DG achieves:</p> <p>a. In \leq [10] seconds, voltage \geq [3744] V and frequency \geq [58.8] Hz and</p> <p>b. Steady state voltage \geq [3744] V and \leq [4576] V and frequency \geq [58.8] Hz and \leq [61.2] Hz.</p>	<p>[10 years</p> <p>OR</p> <p>In accordance with the Surveillance Frequency Control Program.]</p>

BASES

SURVEILLANCE REQUIREMENTS (continued)

-----REVIEWER'S NOTE-----
Plants controlling Surveillance Frequencies under a Surveillance Frequency Control Program should utilize the appropriate Frequency description, given above, and the appropriate choice of Frequency in the Surveillance Requirement.
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This SR is modified by two Notes. The reason for Note 1 is to minimize wear and tear on the DGs during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil being continuously circulated and temperature maintained consistent with manufacturer recommendations. The reason for Note 2 is that performing the Surveillance would remove a required offsite circuit from service, perturb the electrical distribution system, and challenge plant safety systems. This restriction from normally performing the Surveillance in MODE 1 or 2 is further amplified to allow portions of the Surveillance to be performed for the purpose of reestablishing OPERABILITY (e.g., post work testing following corrective maintenance, corrective modification, deficient or incomplete surveillance testing, and other unanticipated OPERABILITY concerns) provided an assessment determines plant safety is maintained or enhanced. This assessment shall, as a minimum, consider the potential outcomes and transients associated with a failed partial Surveillance, a successful partial Surveillance, and a perturbation of the offsite or onsite system when they are tied together or operated independently for the partial Surveillance; as well as the operator procedures available to cope with these outcomes. These shall be measured against the avoided risk of a plant shutdown and startup to determine that plant safety is maintained or enhanced when portions of the Surveillance are performed in MODE 1 or 2. Risk insights or deterministic methods may be used for the assessment. Credit may be taken for unplanned events that satisfy this SR.

SR 3.8.1.20

~~This Surveillance demonstrates that the DG starting independence has not been compromised. Also, this Surveillance demonstrates that each engine can achieve proper speed within the specified time when the DGs are started simultaneously.~~

~~[The 10 year Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10).]~~

OR

BASES

SURVEILLANCE REQUIREMENTS (continued)

~~The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.~~

~~REVIEWER'S NOTE~~

~~Plants controlling Surveillance Frequencies under a Surveillance Frequency Control Program should utilize the appropriate Frequency description, given above, and the appropriate choice of Frequency in the Surveillance Requirement.~~

~~This SR is modified by a Note. The reason for the Note is to minimize wear on the DG during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations.~~

REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
2. FSAR, Chapter [8].
3. Regulatory Guide 1.9, **Rev. [3]**.
4. FSAR, Chapter [6].
5. FSAR, Chapter [15].
6. Regulatory Guide 1.93.
7. Generic Letter 84-15, July 2, 1984.
8. NEDC-32988-A, Revision 2, Technical Justification to Support Risk-Informed Modification to Selected Required End States for BWR Plants, December 2002.
9. 10 CFR 50, Appendix A, GDC 18.
10. **[Regulatory Guide 1.108, Rev. [1], [August 1977].]**
11. Regulatory Guide 1.137.
12. ANSI C84.1, 1982.

BASES

SURVEILLANCE
REQUIREMENTSSR 3.8.2.1

SR 3.8.2.1 requires the SRs from LCO 3.8.1 that are necessary for ensuring the OPERABILITY of the AC sources in other than MODES 1, 2, and 3. SR 3.8.1.8 is not required to be met since only one offsite circuit is required to be OPERABLE. SR 3.8.1.7, SR 3.8.1.11, SR 3.8.1.12, SR 3.8.1.13, SR 3.8.1.15, [SR 3.8.1.18], and SR 3.8.1.19 are not required to be met because DG start and load within a specified time and response on an offsite power or ECCS initiation signal is not required. SR 3.8.1.17 is not required to be met because the required OPERABLE DG(s) is not required to undergo periods of being synchronized to the offsite circuit. ~~SR 3.8.1.20 is excepted because starting independence is not required with the DG(s) that is not required to be OPERABLE.~~ Refer to the corresponding Bases for LCO 3.8.1 for a discussion of each SR.

This SR is modified by a Note which precludes requiring the OPERABLE DG(s) from being paralleled with the offsite power network or otherwise rendered inoperable during the 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.

REFERENCESNone.
