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November 30, 1999

Docket Nos. 50-321  
50-366



HL-5863

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications:  
Surveillance Requirement 3.8.1.12

Ladies and Gentlemen:

In accordance with the provisions of 10 CFR 50.90, as required by 10 CFR 50.59(c)(1), Southern Nuclear Operating Company (SNC) hereby proposes changes to the Plant Hatch Unit 1 and Unit 2 Technical Specifications, Appendix A to operating licenses DPR-57 and NPF-5, respectively. The proposed change to Surveillance Requirement (SR) 3.8.1.12 removes the restriction preventing the SR 3.8.1.12 from being performed in Mode 1 or 2.

Enclosure 1 provides the basis for the proposed change. Enclosure 2 details the basis for SNC's determination that the proposed change does not involve a significant hazards consideration. This enclosure also provides an environmental assessment. Enclosure 3 provides page change instructions for incorporating the proposed change, as well as the revised Technical Specification pages. Enclosure 4 provides page change instructions for the Bases pages as well as the pages themselves for your information. Enclosure 5 provides the corresponding markups of the Technical Specifications and Bases pages.

Since the proposed change provides significant flexibility in outage scheduling and can result in significant reductions in outage critical path time, SNC requests that this amendment be issued and approved no later than March 1, 2000. It is noteworthy that this change was granted to Nine Mile Point Nuclear Station, Unit 2 on March 7, 1995.

In accordance with the requirements of 10 CFR 50.91, the designated state official will be sent a copy of this letter and all applicable enclosures.

Mr. H. L. Sumner, Jr. states he is Vice President of Southern Nuclear Operating Company and is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

H. L. Sumner, Jr.

Sworn to and subscribed before me this 30<sup>th</sup> day of November 1999.

Elaine E. Balten  
Notary Public

Commission Expiration Date: 5-25-2003

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Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Technical Specifications Page Change Instructions and Revised Pages
4. Bases Page Change Instructions and Revised Bases Pages
5. Marked-Up Technical Specifications and Bases Pages

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

State of Georgia  
Mr. L. C. Barrett, Commissioner - Department of Natural Resources

## Enclosure 1

### Edwin I. Hatch Nuclear Plant Request to Revise Technical Specifications: Surveillance Requirement 3.8.1.12

#### Basis for Change Request

#### Proposed Change:

The proposed change to the Unit 1 and Unit 2 Technical Specifications Surveillance Requirement (SR) 3.8.1.12 eliminates the requirement preventing performance of the diesel generator 24-hour run while operating in either Mode 1 or Mode 2. Specifically, Note 2 to SR 3.8.1.12 is revised to allow performance of the diesel generator test while operating in either Mode 1 or Mode 2, provided at least two other diesel generators are operable.

The change is desired because having the ability to perform the diesel generator 24-hour run in Modes 1 and 2 will provide flexibility in outage scheduling and may aid in reducing outage critical path time.

#### Background:

Plant Hatch is equipped with a total of three emergency busses per unit (i.e., designated busses 1/2E, 1/2F, and 1/2G) that provide power to the safety-related equipment necessary to ensure the plant can be placed and maintained in a safe condition following accidents and some anticipated operational occurrences (AOOs). Each bus has a normal, alternate and emergency power supply. The normal and alternate sources come from two separate and independent offsite power supplies. The diesel generators provide emergency power for each bus.

Plant Hatch has a total of five emergency diesel generators that provide power to the emergency busses during accident situations when normal power and alternate power are unavailable. Four of the diesels are unit specific, with one diesel, the swing diesel, having the capability to provide power to either unit's emergency bus F. The diesel generators automatically start on a loss of coolant accident (LOCA) signal (low reactor water level or high drywell pressure) and tie to their respective emergency busses upon a loss of offsite power (LOSP) signal. Two diesel generators, one of which can be the swing diesel, are sufficient to ensure the plant can be placed and maintained in a safe shutdown condition following a LOCA/LOSP.

#### Basis for Change:

SR 3.8.1.12 requires that each diesel generator, loaded at a specific power factor, operate for  $\geq 24$  hours. Note 2 to SR 3.8.1.12 requires the test to be performed in a Condition other than Mode 1 or 2. The reason for the restriction, as given in the Bases, is that, if the diesel is tied to the bus during normal operation, it can cause perturbations in the electrical distribution system, possibly resulting in challenges to plant operation and safety systems. However, based on experience and engineering judgement, the likelihood of a diesel generator running in parallel to the grid causing a perturbation in the electrical distribution system is low and most likely to occur when the diesel generator is first being connected to the bus. Per plant procedures, diesel generator output is synchronized to the 4-kV bus, and hence the grid, prior to being connected to its bus.

**Enclosure 1  
Basis for Change Request**

Per plant procedures, the output frequency, voltage, and phase angle of the diesel generator are compared to the output frequency, voltage, and phase angle of the emergency bus. When the frequency, voltage, and phase angle are synchronized, the diesel generator is connected to the bus. Thus, the probability of an electrical perturbation that can challenge plant operation is greatly reduced. Once the diesel generator is running and connected to its bus, the likelihood of a disturbance is small.

Nonetheless, the following precautions, which are either currently in place or are provided in the proposed change, can be taken to minimize the likelihood and consequences of electrical system disturbances.

1. As mentioned earlier, plant procedures currently require the diesel generator to be synchronized to the grid prior to being connected to the bus.
2. The proposed change to SR 3.8.1.12 prevents the diesel generator test from being performed in Mode 1 or 2 if one or more of the other two diesel generators on that unit are not operable. Additionally, if during performance of the test either of the other two diesels become inoperable, the surveillance will be suspended.
3. Procedure restrictions allowing only one diesel to be connected to the bus will be implemented.
4. A procedural restriction prohibiting the diesel generator from being connected with the offsite grid in Mode 1 or 2 during severe weather or unstable grid conditions will be implemented.

When a diesel generator is in the test mode and an accident signal is received, the auto-start logic circuitry removes the diesel from the test mode, returning it to Standby. Therefore, the diesel is capable of autostarting and connecting to the bus in an accident situation if the 24-hour run is being performed. SR 3.8.1.15 tests this feature by verifying that a diesel generator operating in the test mode will be automatically taken out of test on an actual or simulated LOCA signal. This SR is performed once per 18 months.

Finally, it is noteworthy that the diesel generator monthly test also connects the diesel generator to its 4-kV bus for a 1-hour period. This amounts to each diesel being connected to its bus during operating conditions for a maximum of 0.13% of the operating cycle. Adding the 24-hour run means the maximum time a diesel is connected to its bus under operating conditions increases to 0.32% of the cycle.

## Enclosure 2

### Edwin I. Hatch Nuclear Plant Request to Revise Technical Specifications: Surveillance Requirement 3.8.1.12

#### 10 CFR 50.92 Evaluation and Environmental Assessment

#### 10 CFR 50.92 Evaluation

In 10 CFR 50.92(2), the Nuclear Regulatory Commission provides the following standards to be used in determining the existence of a significant hazards consideration:

...a proposed amendment to an operating facility licensed under 50.21(b) or 50.22 for a testing facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of an accident of a new or different kind from any previously evaluated; or 3) involve a significant reduction in the margin of safety.

Southern Nuclear Operating Company has reviewed the proposed license amendment request and determined its adoption does not involve a significant hazards consideration based on the following discussion:

#### Justification for Proposed Changes

1. *The proposed change does not involve a significant increase in the probability or the consequences of a previously evaluated event for the following reasons:*

The primary function of the diesel generators is to supply emergency power to the safety-related equipment necessary to safely shut down the plant in case of a design basis event, such as a loss of coolant accident (LOCA) concurrent with a loss of offsite power (LOSP). The diesels are not designed to prevent such an event. Accordingly, the probability of a LOCA/LOSP event is not increased by allowing the performance of the 24-hour run with the reactor operating.

It is possible that, with a diesel generator connected to its bus, an electrical disturbance will travel through the system and affect the other busses. This is most likely to happen when initially connecting the diesel to the bus. However, the surveillance procedures require that diesel generator output voltage be synchronized with the bus prior to the diesel output breaker being closed in, thus reducing the chance of an electrical distribution system disturbance.

If a LOCA occurred concurrent with an LOSP while a diesel generator is connected to the bus in its 24-hour run, the diesel logic automatically realigns itself to the Standby mode of operation, allowing the diesel to supply power to the emergency bus. A Technical Specifications surveillance requirement tests this feature. Also, the proposed specification prevents the test from being performed unless the other two diesel generators are operable; this includes suspending the surveillance if one of the other available diesels becomes

Enclosure 2  
10 CFR 50.92 Evaluation

inoperable during the actual test. This restriction will ensure that two diesels are available to safely shut down the plant if necessary.

Additionally, this amendment request does not affect any other system or piece of equipment necessary to prevent or mitigate the consequences of previously evaluated events. As a result, the consequences of a LOCA/LOSP event are not increased.

**2. *The proposed changes do not create the possibility of an accident of a new or different kind from any previously evaluated based upon the following:***

This proposed modification to SR 3.8.1.12 does not introduce any new modes of operation or testing. In fact, each diesel generator is already connected to its respective bus during operation to satisfy SR 3.8.1.2, the monthly test. In the monthly test, the diesel is run loaded for 1 hour, connected to the grid, with the unit in operation. Therefore, allowing the 24 hour test to be performed for the diesels introduces nothing new with respect to diesel testing, and as a result, the possibility of a new type of event is not created.

**3. *The change does not significantly reduce the margin of safety for the following reasons:***

The probability of an electrical disturbance affecting plant operation while connecting the diesel to the bus is minimized by the fact that the diesel's output voltage and phase angle are synchronized with those of the grid prior to being tied to the emergency bus. Based on engineering judgement, with the diesel synchronized and running connected to the grid, the likelihood of an electrical disturbance being transferred through the system and causing a plant transient is very small. Furthermore, since only one diesel will be tied to the bus in either Mode 1 or Mode 2, neither of the other two diesel generators will be affected by the disturbance.

If a LOCA/LOSP occurred during the 24-hour run, the diesel generator's auto-logic would take the diesel out of the test mode. This feature is tested once per 18 months per Technical Specifications. With the diesel no longer in test, it would be free to once again tie itself to the bus. Additionally, only one diesel will be tied to the line during a 24-run performed with the reactor operating, with other diesel generators available to supply power to their respective emergency busses. This ensures two diesels are available to shut down the plant and maintain it in a safe condition.

Other precautions will also be placed into plant procedures; specifically, the 24-hour run will not be performed on line during periods of severe weather or during grid instabilities.

For the above reasons, the proposed Technical Specifications change will not significantly reduce the margin of safety.

Environmental Assessment

10 CFR 51.22(c)(9) provides criterion for and identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed amendment to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed license amendment would not:

- 1) Involve a significant hazards consideration;
- 2) Result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite;
- 3) Result in a significant increase in individual or cumulative occupational radiation exposure.

Southern Nuclear Operating Company (SNC) has determined that the proposed Technical Specifications changes described in Enclosure 1 meet the eligibility criteria for categorical exclusion. The basis for this determination is as follows:

- 1) As demonstrated in the first part of this enclosure, the proposed change does not involve a significant hazards consideration.
- 2) The proposed change involves a diesel generator surveillance requirement. No changes are proposed to any portion of the gaseous, liquid, or solid radioactive waste program. All procedures for the handling, treatment and disposal of radioactive wastes remain the same.
- 3) This proposed change only involves diesel generator surveillance requirements. It will not require plant personnel to place themselves in any situation which may increase their occupational exposure.

**Enclosure 3**

**Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications  
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**Page Change Instructions  
and  
Revised Technical Specifications Pages**

**Unit 1**

<b><u>Page</u></b>	<b><u>Replace</u></b>
<b>3.8-15</b>	<b>3.8-15</b>

**Unit 2**

<b><u>Page</u></b>	<b><u>Replace</u></b>
<b>3.8-15</b>	<b>3.8-15</b>



**SURVEILLANCE REQUIREMENTS (continued)**

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Momentary transients outside the load and power factor ranges do not invalidate this test.</li> <li>2. This Surveillance shall not be performed in MODE 1 or 2, unless the other two DGs are OPERABLE. If either of the other two DGs becomes inoperable, this surveillance shall be suspended. Credit may be taken for unplanned events that satisfy this SR.</li> <li>3. If grid conditions do not permit, the power factor limit is not required to be met. Under this condition, the power factor shall be maintained as close to the limit as practicable.</li> <li>4. For the swing DG, a single test at the specified Frequency will satisfy this Surveillance for both units.</li> </ol> <p>-----</p> <p>Verify each DG operating at a power factor <math>\leq 0.88</math> operates for <math>\geq 24</math> hours:</p> <ol style="list-style-type: none"> <li>a. For <math>\geq 2</math> hours loaded <math>\geq 3000</math> kW; and</li> <li>b. For the remaining hours of the test loaded <math>\geq 2775</math> kW and <math>\leq 2825</math> kW.</li> </ol>	<p>18 months</p>

(continued)

**SURVEILLANCE REQUIREMENTS (continued)**

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Momentary transients outside the load and power factor ranges do not invalidate this test.</li> <li>2. This Surveillance shall not be performed in MODE 1 or 2, unless the other two DGs are OPERABLE. If either of the other two DGs becomes inoperable, this surveillance shall be suspended. Credit may be taken for unplanned events that satisfy this SR.</li> <li>3. If grid conditions do not permit, the power factor limit is not required to be met. Under this condition, the power factor shall be maintained as close to the limit as practicable.</li> <li>4. For the swing DG, a single test at the specified Frequency will satisfy this Surveillance for both units.</li> </ol> <p>-----</p> <p>Verify each DG operating at a power factor <math>\leq 0.88</math> operates for <math>\geq 24</math> hours:</p> <ol style="list-style-type: none"> <li>a. For <math>\geq 2</math> hours loaded <math>\geq 3000</math> kW; and</li> <li>b. For the remaining hours of the test loaded <math>\geq 2775</math> kW and <math>\leq 2825</math> kW.</li> </ol>	<p>18 months</p>

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**Enclosure 4**

**Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications  
Surveillance Requirement 3.8.12**

**Page Change Instructions  
and  
Bases Pages**

**Unit 1**

<b><u>Page</u></b>		<b><u>Replace</u></b>
3.8-34		3.8-34
3.8-35		3.8-35
3.8-36		3.8-36
3.8-37		3.8-37

**Unit 2**

<b><u>Page</u></b>		<b><u>Replace</u></b>
3.8-34		3.8-34

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SR 3.8.1.12 (continued)

possible, testing must be performed using a power factor  $\leq 0.88$ . This power factor is chosen to be representative of the actual design basis inductive loading that the DG could experience. A load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(3); takes into consideration plant conditions required to perform the Surveillance; and is intended to be consistent with expected fuel cycle lengths.

This Surveillance has been modified by four Notes. Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary power factor transients above the limit do not invalidate the test. The reason for Note 2 is that during operation with the reactor critical, performance of this Surveillance could cause perturbations to the electrical distribution systems that would challenge continued steady state operation and, as a result, plant safety systems. However, it is acceptable to perform this SR in MODES 1 and 2 provided the other two DGs are OPERABLE, since a perturbation can only affect one divisional DG. If during the performance of this Surveillance, one of the other DGs becomes inoperable, this Surveillance is to be suspended. Credit may be taken for unplanned events that satisfy this SR. Note 3 is provided in recognition that if the offsite electrical power distribution system is lightly loaded (i.e., system voltage is high), it may not be possible to raise voltage without creating an overvoltage condition on the ESF bus. Therefore, to ensure the bus voltage, supplied ESF loads, and DG are not placed in an unsafe condition during this test, the power factor limit does not have to be met if grid voltage or ESF bus loading does not permit the power factor limit to be met when the DG is tied to the grid. When this occurs, the power factor should be maintained as close to the limit as practicable. To minimize testing of the swing DG, Note 4 allows a single test (instead of two tests, one for each unit) to satisfy the requirements for both units. This is allowed since the main purpose of the Surveillance can be met by performing the test on either unit (no unit

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SR 3.8.1.12 (continued)

specific DG components are being tested). If the swing DG fails one of these Surveillances, the DG should be considered inoperable on both units, unless the cause of the failure can be directly related to only one unit.

SR 3.8.1.13

This Surveillance demonstrates that the diesel engine can restart from a hot condition, such as subsequent to shutdown from normal Surveillances, and achieve the required voltage and frequency within 12 seconds. The 12 second time is derived from the requirements of the accident analysis to respond to a design basis large break LOCA. The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(5).

This SR is modified by three Notes. Note 1 ensures that the test is performed with the diesel sufficiently hot. The requirement that the diesel has operated for at least 2 hours at near full load conditions prior to performance of this Surveillance is based on manufacturer recommendations for achieving hot conditions. Momentary transients due to changing bus loads do not invalidate this test. Note 2 allows all DG starts to be preceded by an engine prelube period to minimize wear and tear on the diesel during testing. To minimize testing of the swing DG, Note 3 allows a single test (instead of two tests, one for each unit) to satisfy the requirements for both units. This is allowed since the main purpose of the Surveillance can be met by performing the test on either unit (no unit specific DG components are being tested). If the swing DG fails one of these Surveillances, the DG should be considered inoperable on both units, unless the cause of the failure can be directly related to only one unit.

SR 3.8.1.14

This Surveillance is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(6), and ensures that the manual synchronization and automatic load transfer from the DG to the offsite source can be made and that the DG can be returned to ready-to-load status when offsite power is restored. It also ensures that the

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SR 3.8.1.14 (continued)

auto-start logic is reset to allow the DG to reload if a subsequent loss of offsite power occurs. The DG is considered to be in ready-to-load status when the DG is at rated speed and voltage, the output breaker is open and can receive an auto-close signal on bus undervoltage, and the load sequence timers are reset.

The Frequency of 18 months is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(6), and takes into consideration plant conditions required to perform the Surveillance.

This SR is modified by a Note. The reason for the Note is that performing the Surveillance would remove a required offsite circuit from service, perturb the electrical distribution system, and challenge safety systems. Credit may be taken for unplanned events that satisfy this SR. This Surveillance tests the applicable logic associated with the Unit 1 swing bus. The comparable test specified in the Unit 2 Technical Specifications tests the applicable logic associated with the Unit 2 swing bus. Consequently, a test must be performed within the specified Frequency for each unit. The Note specifying the restriction for not performing the test while the unit is in MODE 1, 2, or 3 does not have applicability to Unit 2. As the Surveillance represents separate tests, the Unit 1 Surveillance should not be performed with Unit 1 in MODE 1, 2, or 3 and the Unit 2 test should not be performed with Unit 2 in MODE 1, 2, or 3.

SR 3.8.1.15

Demonstration of the test mode override ensures that the DG availability under accident conditions is not compromised as the result of testing. Interlocks to the LOCA sensing circuits cause the DG to automatically reset to ready-to-load operation if an ECCS initiation signal is received during operation in the test mode. Ready-to-load operation is defined as the DG running at rated speed and voltage with the DG output breaker open. Although Plant Hatch Unit 1 is not committed to this standard, this SR is consistent with the provisions for automatic switchover required by IEEE-308 (Ref. 13), paragraph 6.2.6(2).

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SR 3.8.1.15 (continued)

The intent in the requirements associated with SR 3.8.1.15.b is to show that the emergency loading is not affected by the DG operation in test mode. In lieu of actual demonstration of connection and loading of loads, testing that adequately shows the capability of the emergency loads to perform these functions is acceptable. This testing may include any series of sequential, overlapping, or total steps so that the entire connection and loading sequence is verified.

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(8); takes into consideration plant conditions required to perform the Surveillance; and is intended to be consistent with expected fuel cycle lengths.

This SR is modified by a Note. The reason for the Note is that performing the Surveillance would remove a required offsite circuit from service, perturb the electrical distribution system, and challenge safety systems. Credit may be taken for unplanned events that satisfy this SR. This Surveillance tests the applicable logic associated with the Unit 1 swing bus. The comparable test specified in the Unit 2 Technical Specifications tests the applicable logic associated with the Unit 2 swing bus. Consequently, a test must be performed within the specified Frequency for each unit. The Note specifying the restriction for not performing the test while the unit is in MODE 1, 2, or 3 does not have applicability to Unit 2. As the Surveillance represents separate tests, the Unit 1 Surveillance should not be performed with Unit 1 in MODE 1, 2, or 3 and the Unit 2 test should not be performed with Unit 2 in MODE 1, 2, or 3.

SR 3.8.1.16

Under accident conditions, loads are sequentially connected to the bus by the automatic load sequence timing devices. The sequencing logic controls the permissive and starting signals to motor breakers to prevent overloading of the DGs due to high motor starting currents. The 10% load sequence time interval tolerance ensures that sufficient time exists for the DG to restore frequency and voltage prior to applying the next load and that safety analysis assumptions regarding ESF equipment time delays are not violated. Reference 2 provides a summary of the automatic loading of ESF buses.

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SR 3.8.1.12 (continued)

overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 9), paragraph 2.a.(3); takes into consideration plant conditions required to perform the Surveillance; and is intended to be consistent with expected fuel cycle lengths.

This Surveillance has been modified by four Notes. Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary power factor transients above the limit do not invalidate the test. The reason for Note 2 is that during operation with the reactor critical, performance of this Surveillance could cause perturbations to the electrical distribution systems that would challenge continued steady state operation and, as a result, plant safety systems. However, it is acceptable to perform this SR in MODES 1 and 2 provided the other two DGs are OPERABLE, since a perturbation can only affect one divisional DG. If during the performance of this Surveillance, one of the other DGs becomes inoperable, this Surveillance is to be suspended. Credit may be taken for unplanned events that satisfy this SR. Note 3 is provided in recognition that if the offsite electrical power distribution system is lightly loaded (i.e., system voltage is high), it may not be possible to raise voltage without creating an overvoltage condition on the ESF bus. Therefore, to ensure the bus voltage, supplied ESF loads, and DG are not placed in an unsafe condition during this test, the power factor limit does not have to be met if grid voltage or ESF bus loading does not permit the power factor limit to be met when the DG is tied to the grid. When this occurs, the power factor should be maintained as close to the limit as practicable. To minimize testing of the swing DG, Note 4 allows a single test (instead of two tests, one for each unit) to satisfy the requirements for both units. This is allowed since the main purpose of the Surveillance can be met by performing the test on either unit (no unit specific DG components are being tested). If the swing DG fails one of these Surveillances, the DG should be considered inoperable on both units, unless the cause of the failure can be directly related to only one unit.

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**Enclosure 5**

**Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications  
Surveillance Requirement 3.8.12**

**Marked-Up Technical Specifications  
and  
Bases Pages**

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Momentary transients outside the load and power factor ranges do not invalidate this test.</li> <li>2. This Surveillance shall not be performed in MODE 1 or 2, <del>except for the swing DG. For the swing DG, this Surveillance shall not be performed in MODE 1 or 2 using the Unit 1 controls.</del> Credit may be taken for unplanned events that satisfy this SR.</li> <li>3. If grid conditions do not permit, the power factor limit is not required to be met. Under this condition, the power factor shall be maintained as close to the limit as practicable.</li> <li>4. For the swing DG, a single test at the specified Frequency will satisfy this Surveillance for both units.</li> </ol> <p>-----</p> <p>Verify each DG operating at a power factor <math>\leq 0.88</math> operates for <math>\geq 24</math> hours:</p> <ol style="list-style-type: none"> <li>a. For <math>\geq 2</math> hours loaded <math>\geq 3000</math> kW; and</li> <li>b. For the remaining hours of the test loaded <math>\geq 2775</math> kW and <math>\leq 2825</math> kW.</li> </ol>	<p>18 months</p>

*Unless the other two DGs are operable, If either of the other two DGs become inoperable, this surveillance shall be suspended.*

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Momentary transients outside the load and power factor ranges do not invalidate this test.</li> <li>2. This Surveillance shall not be performed in MODE 1 or 2, <del>except for the swing DG. For the swing DG, this Surveillance shall not be performed in MODE 1 or 2 using the Unit 2 controls.</del> Credit may be taken for unplanned events that satisfy this SR.</li> <li>3. If grid conditions do not permit, the power factor limit is not required to be met. Under this condition, the power factor shall be maintained as close to the limit as practicable.</li> <li>4. For the swing DG, a single test at the specified Frequency will satisfy this Surveillance for both units.</li> </ol> <p>-----</p> <p>Verify each DG operating at a power factor <math>\leq 0.88</math> operates for <math>\geq 24</math> hours:</p> <ol style="list-style-type: none"> <li>a. For <math>\geq 2</math> hours loaded <math>\geq 3000</math> kW; and</li> <li>b. For the remaining hours of the test loaded <math>\geq 2775</math> kW and <math>\leq 2825</math> kW.</li> </ol>	<p>18 months</p>

Unless the other two DGs are operable. If either of the other two DGs become inoperable, this surveillance shall be suspended

(continued)

BASES

**SURVEILLANCE  
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SR 3.8.1.12 (continued)

overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 9), paragraph 2.a.(3); takes into consideration plant conditions required to perform the Surveillance; and is intended to be consistent with expected fuel cycle lengths.

This Surveillance has been modified by four Notes. Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary power factor transients above the limit do not invalidate the test. The reason for Note 2 is that during operation with the reactor critical, performance of this Surveillance could cause perturbations to the electrical distribution systems that would challenge continued steady state operation and, as a result, plant safety systems. Credit may be taken for unplanned events that satisfy this SR. Note 3 is provided in recognition that if the offsite electrical power distribution system is lightly loaded (i.e., system voltage is high), it may not be possible to raise voltage without creating an overvoltage condition on the ESF bus. Therefore, to ensure the bus voltage, supplied ESF loads, and DG are not placed in an unsafe condition during this test, the power factor limit does not have to be met if grid voltage or ESF bus loading does not permit the power factor limit to be met when the DG is tied to the grid. When this occurs, the power factor should be maintained as close to the limit as practicable. To minimize testing of the swing DG, Note 4 allows a single test (instead of two tests, one for each unit) to satisfy the requirements for both units. This is allowed since the main purpose of the Surveillance can be met by performing the test on either unit (no unit specific DG components are being tested). If the swing DG fails one of these Surveillances, the DG should be considered inoperable on both units, unless the cause of the failure can be directly related to only one unit.

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(continued)

## INSERT

However, it is acceptable to perform this SR in modes 1 and 2 provided the other two DGs are OPERABLE, since a perturbation can only affect one divisional DG. If during the performance of this surveillance, one of the other DGs becomes inoperable, this surveillance is to be suspended.

BASES

SURVEILLANCE  
REQUIREMENTS

SR 3.8.1.12 (continued)

possible, testing must be performed using a power factor  $\leq 0.88$ . This power factor is chosen to be representative of the actual design basis inductive loading that the DG could experience. A load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(3); takes into consideration plant conditions required to perform the Surveillance; and is intended to be consistent with expected fuel cycle lengths.

This Surveillance has been modified by four Notes. Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary power factor transients above the limit do not invalidate the test. The reason for Note 2 is that during operation with the reactor critical, performance of this Surveillance could cause perturbations to the electrical distribution systems that would challenge continued steady state operation and, as a result, plant safety systems. Credit may be taken for unplanned events that satisfy this SR. Note 3 is provided in recognition that if the offsite electrical power distribution system is lightly loaded (i.e., system voltage is high), it may not be possible to raise voltage without creating an overvoltage condition on the ESF bus. Therefore, to ensure the bus voltage, supplied ESF loads, and DG are not placed in an unsafe condition during this test, the power factor limit does not have to be met if grid voltage or ESF bus loading does not permit the power factor limit to be met when the DG is tied to the grid. When this occurs, the power factor should be maintained as close to the limit as practicable. To minimize testing of the swing DG, Note 4 allows a single test (instead of two tests, one for each unit) to satisfy the requirements for both units. This is allowed since the main purpose of the Surveillance can be met by performing the test on either unit (no unit specific DG components are being tested). If the swing DG fails one of these Surveillances, the DG should be considered inoperable on both units, unless the cause of the failure can be directly related to only one unit.

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However, it is acceptable to perform this SR in modes 1 and 2 provided the other two DGs are OPERABLE, since a perturbation can only affect one divisional DG. If during the performance of this surveillance, one of the other DGs becomes inoperable, this surveillance is to be suspended.