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Nine Mile Point Nuclear Station

December 9, 2009

U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**ATTENTION:** Document Control Desk

**SUBJECT:** Nine Mile Point Nuclear Station  
Unit No. 2; Docket No. 50-410

License Amendment Request Pursuant to 10 CFR 50.90: Removal of Operating Mode Restrictions for Performing Surveillance Testing of the Division 3 Battery – Technical Specification 3.8.4, DC Sources – Operating

Pursuant to 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC (NMPNS) hereby requests an amendment to the Nine Mile Point Unit 2 (NMP2) Renewed Facility Operating License NPF-69. The proposed amendment would revise Technical Specification (TS) 3.8.4, "DC Sources - Operating," by removing the Mode restrictions for performance of TS Surveillance Requirements (SRs) 3.8.4.7 and 3.8.4.8 for the Division 3 direct current (DC) electrical power subsystem battery. The Division 3 DC electrical power subsystem feeds emergency DC loads associated with the High Pressure Core Spray (HPCS) system. These surveillances verify that the battery capacity is adequate for the battery to perform its required functions. The proposed amendment would remove these Mode restrictions for the Division 3 battery, thereby allowing performance of SR 3.8.4.7 and SR 3.8.4.8 for the Division 3 battery during Mode 1, 2, or 3 in conjunction with scheduled HPCS system outages. Eliminating the requirement to perform SR 3.8.4.7 and SR 3.8.4.8 during Mode 4 or 5 (cold shutdown or refueling conditions) will provide greater flexibility in scheduling Division 3 battery testing activities by allowing the testing to be performed during non-outage times.

The Enclosure provides a description and technical bases for the proposed changes and existing TS pages marked up to show the proposed changes. NMPNS has concluded that the activities associated with the proposed amendment represent no significant hazards consideration under the standards set forth in 10 CFR 50.92. The enclosed submittal contains no regulatory commitments.

NMPNS requests approval of this license amendment request by December 15, 2010, with implementation within 90 days of receipt of the approved amendment.

A001  
NRR

Pursuant to 10 CFR 50.91(b)(1), NMPNS has provided a copy of this license amendment request, with Enclosure, to the appropriate state representative.

Should you have any questions regarding the information in this submittal, please contact T. F. Syrell, Licensing Director, at (315) 349-5219.

Very truly yours,



**STATE OF NEW YORK** :  
: **TO WIT:**  
**COUNTY OF OSWEGO** :

I, Thomas A. Lynch, being duly sworn, state that I am the Nine Mile Point Plant General Manager, and that I am duly authorized to execute and file this license amendment request on behalf of Nine Mile Point Nuclear Station, LLC. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Nine Mile Point employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.



Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Onondaga, this 9<sup>th</sup> day of December, 2009.

WITNESS my Hand and Notarial Seal:

  
Notary Public

My Commission Expires:

3/17/2012  
Date

DENNIS E. VANDEPUTTE  
Notary Public, State of New York  
No. 01VA6183401  
Qualified in Onondaga County  
Certificate Filed in Oswego County  
Commission Expires 3/17/2012

TAL/DEV

Enclosure: Evaluation of the Proposed Change

cc: S. J. Collins, NRC  
R. V. Guzman, NRC  
Resident Inspector, NRC  
A. L. Peterson, NYSERDA

# ENCLOSURE

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## EVALUATION OF THE PROPOSED CHANGE

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### ATTACHMENTS

- 1. Nine Mile Point Unit 2 - Proposed Technical Specification Changes (Mark-up)
- 2. Nine Mile Point Unit 2 - Changes to Technical Specification Bases (Mark-up)

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**1.0 SUMMARY DESCRIPTION**

This evaluation supports a request to amend Renewed Facility Operating License NPF-69 for Nine Mile Point Unit 2 (NMP2).

The proposed amendment would revise Technical Specification (TS) 3.8.4, "DC Sources - Operating," by removing the Mode restrictions for performance of TS Surveillance Requirements (SRs) 3.8.4.7 and 3.8.4.8 for the Division 3 direct current (DC) electrical power subsystem battery. The Division 3 DC electrical power subsystem feeds emergency DC loads associated with the High Pressure Core Spray (HPCS) system. These surveillances verify that the battery capacity is adequate for the battery to perform its required functions. The proposed amendment would remove these Mode restrictions for the Division 3 battery, thereby allowing performance of SR 3.8.4.7 and SR 3.8.4.8 for the Division 3 battery during Mode 1, 2, or 3 in conjunction with scheduled HPCS system outages. Eliminating the requirement to perform SR 3.8.4.7 and SR 3.8.4.8 during Mode 4 or 5 (cold shutdown or refueling conditions) will provide greater flexibility in scheduling Division 3 battery testing activities by allowing the testing to be performed during non-outage times.

**2.0 DETAILED DESCRIPTION**

**2.1 Description of the Proposed Change**

TS 3.8.4, "DC Sources - Operating," specifies requirements for the Division 1, Division 2, and Division 3 DC electrical power subsystems. The three DC electrical power subsystems are required to be operable in plant Modes 1 (Power Operation), 2 (Startup), and 3 (Hot Shutdown). Currently, SR 3.8.4.7 and SR 3.8.4.8 contain notes which prohibit performance of the surveillance during Modes 1, 2 or 3. The proposed changes would modify the notes associated with these SRs to remove the Mode restrictions for the Division 3 battery.

Specifically, NOTE 2 for SR 3.8.4.7 and the NOTE for SR 3.8.4.8 currently state:

"This Surveillance shall not be performed in MODE 1, 2, or 3. However, credit may be taken for unplanned events that satisfy this SR."

Each of these notes would be revised to state:

"This Surveillance shall not be performed in MODE 1, 2, or 3 (not applicable to Division 3). However, credit may be taken for unplanned events that satisfy this SR."

Attachment 1 provides the existing TS pages marked-up to show the proposed changes. Marked-up pages showing associated changes to the TS Bases are provided in Attachment 2 for information only. The TS Bases changes will be processed in accordance with the NMP2 TS Bases Control Program (TS 5.5.10).

**2.2 Background**

The NMP2 DC electrical power system, described in Section 8.3.2 of the NMP2 Updated Safety Analysis Report (USAR), provides the alternating current (AC) emergency power system with control power and provides both motive and control power to selected safety-related equipment. The emergency 125 VDC electrical power system consists of three independent Class 1E DC electrical power subsystems, Divisions 1, 2, and 3. Each subsystem consists of a battery, associated battery chargers, and all the

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associated control equipment and interconnecting cabling. As required by 10 CFR 50, Appendix A, General Design Criteria (GDC) 17, the DC electrical power system is designed to have sufficient independence, redundancy, and testability to perform its safety functions, assuming a single failure. The emergency 125 VDC electrical power system is illustrated on USAR Figure 8.3-10.

During normal operation, the DC loads are powered from the battery chargers with the batteries floating on the system. In case of loss of normal power to the battery charger, the DC loads are automatically powered from the associated battery. Each DC battery subsystem is separately housed in a ventilated room apart from its charger and distribution centers. Each subsystem is located in an area separated physically and electrically from the other subsystems to ensure that a single failure in one subsystem does not cause a failure in a redundant subsystem. There is no sharing between the redundant Class 1E subsystems such as batteries, battery chargers, or distribution panels. The independence of the three divisions of the emergency DC system is maintained throughout the distribution system and the DC loads.

The function of the Division 3 DC electrical power subsystem is to provide a reliable, continuous 125 VDC power source for the emergency DC loads associated with the HPCS system. Those loads include the Division 3 diesel generator (DG) field flashing control logic, the control and switching function of the 4.16 kV Division 3 breakers, and control and motive power for the HPCS system logic, HPCS DG control and protection, and all Division 3 related controls. The Division 3 DC electrical power subsystem is classified as Class 1E. As noted above, the Division 3 battery and battery chargers are physically separated from and electrically independent of all other divisional batteries and battery chargers.

USAR Table 8.3-10 outlines the Division 3 battery load profile, including both the load magnitudes and durations. The Division 3 battery has adequate storage to carry the required load continuously for at least 2 hours. Each of the two 100-percent capacity Division 3 DC electrical power subsystem battery chargers has sufficient capacity to restore the battery bank from the design minimum charge to its fully charged state within 24 hours while supplying normal steady state loads.

The TS require that periodic service tests (SR 3.8.4.7) and performance discharge tests (SR 3.8.4.8) be performed for each of the Division 1, 2, and 3 batteries. The battery service test verifies the battery's capability to satisfy the design requirements (battery duty cycle) of the DC electrical power system. The discharge rate and test length (2 hours for Division 3) correspond to the design duty cycle requirements as specified in the USAR. The battery performance test is a test of constant current capacity of the battery to detect any change in capacity. The performance discharge test is intended to determine overall battery degradation due to age and usage. The TS-required frequencies for performing these surveillance tests are not being changed by the proposed license amendment.

### **3.0 TECHNICAL EVALUATION**

The Bases for TS 3.8.4 currently state that the reason for the Mode restriction notes for SR 3.8.4.7 and SR 3.8.4.8 is that removing a required DC electrical power subsystem from service would perturb the electrical distribution system and challenge safety systems. However, the noted concern is not warranted with respect to the Division 3 DC electrical power subsystem. As discussed in USAR Sections 6.3.1.1.3, 8.3.1.4, and 8.3.2, the HPCS system is a stand-alone system with a dedicated DG and independent distribution system; thus, there is minimal opportunity for the performance of these SRs to have any impact on other safety related plant equipment. The Division 3 battery and battery chargers are physically separated from and electrically independent of all other divisional batteries and battery chargers, and interconnection with the battery and battery chargers or the emergency DC load groups of any other division is not permitted under any conditions of plant operation. The Division 3 battery is disconnected

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from the battery chargers during the surveillance tests and has no connection with any other equipment that is required to be operable. Therefore, performance of the required testing during plant operation would not result in a challenge to any other plant safety system.

Currently, the HPCS system is removed from service to perform scheduled maintenance while in Mode 1, 2, or 3 as allowed by the TS. The proposed changes to SR 3.8.4.7 and SR 3.8.4.8 are desired to allow the Division 3 battery tests to be performed in conjunction with these scheduled HPCS system outages. The changes will allow the Division 3 battery service test required by SR 3.8.4.7 and the Division 3 battery performance discharge test required by SR 3.8.4.8 to be performed in Modes 1, 2, or 3 in conjunction with a HPCS system outage or for unplanned events. The TS allow the HPCS system to be inoperable for up to 14 days if the Reactor Core Isolation Cooling system is operable. This provides ample time for the performance of the battery SRs.

The time needed to perform the battery testing is approximately 38 hours. Thus, the Division 3 battery is expected to be unavailable to support the HPCS system for approximately 38 hours. This testing period is within the period of time that the HPCS system will already be out of service for a planned system outage. Therefore, the battery testing does not increase unavailability of the supported system or represent any change in risk above the current practice of planned HPCS system maintenance outages.

Regarding risk management, the testing of the Division 3 battery will be enveloped by the risk management of the HPCS system outage. Risk management of the system outage is addressed in several ways. First, in addition to the TS limitations that apply to inoperable HPCS system equipment, the Safety Function Determination Program described in NMP2 TS 5.5.11 and required by TS LCO 3.0.6 is utilized to protect against a loss of safety function. Second, the NMP2 approach to performing maintenance uses a protected division concept. This means that, without special considerations, work is performed on only one division of equipment at a time. Additionally, access to areas of the plant containing protected equipment is restricted. These administrative controls provide additional assurance that work is performed on only one division at a time.

Nine Mile Point Nuclear Station, LLC (NMPNS) has integrated risk management procedures in place that address the requirements of 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants." The procedures provide assurance that risk-significant plant equipment configurations are precluded or minimized when plant equipment is removed from service. Additionally, the HPCS system reliability and availability are monitored and evaluated in relationship to Maintenance Rule goals to ensure that total outage times do not degrade operational safety over time.

#### **4.0 REGULATORY EVALUATION**

##### **4.1 Applicable Regulatory Requirements/Criteria**

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met.

10 CFR 50, Appendix A, GDC 17, "Electric power systems," requires, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of structures, systems, and components that are important to safety. The onsite system is required to have sufficient independence, redundancy, and testability to perform its safety function, assuming a single failure. In addition, this criterion requires provisions to minimize the probability of losing electric power from the remaining electric power supplies as a result of loss of power from the unit, the offsite transmission network, or the

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onsite power supplies. The Division 3 battery and battery chargers are physically separated from and electrically independent of all other divisional batteries and battery chargers, and interconnection with the battery and battery chargers or the emergency DC load groups of any other division is not permitted under any conditions of plant operation. The proposed TS changes affect only the operating conditions during which certain Division 3 battery testing can be performed; the design or function of the emergency DC electrical power system is not affected. Thus, the emergency DC electrical power system continues to comply with the requirements of GDC 17.

GDC 18, "Inspection and testing of electric power systems," requires that electric power systems that are important to safety be designed to permit appropriate periodic inspection and testing. The emergency DC electrical power system is divided into three separate and independent divisions feeding redundant safety-related electrical load groups, thereby permitting the inspection and testing of any division while the other divisions are feeding their connected loads. The proposed TS changes do not alter this inspection and testing capability.

NRC Regulatory Guide (RG) 1.129, "Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," Revision 1, February 1978, describes a method acceptable to the NRC for performing maintenance, testing, and replacement of large lead storage batteries at nuclear power plants. The RG states that the battery service test should be performed during refueling operations or at some other outage. As indicated in NMP2 USAR Table 1.8-1 and USAR Section 8.3.2.1.2, the battery service tests are performed in accordance with the TS requirements. This license amendment request would allow the periodic Division 3 battery service tests and performance discharge tests to be performed on-line.

#### **4.2 Precedent**

The NRC has approved similar license amendments to remove mode restrictions for surveillance testing of the Division 3 battery. Examples include:

- River Bend Station, Unit 1 (License Amendment No. 141 issued by NRC letter dated August 12, 2004 – ADAMS Accession No. ML042300415).
- Grand Gulf Nuclear Station, Unit 1 (License Amendment No. 159 issued by NRC letter dated October 27, 2003 - ADAMS Accession No. ML033030330).

#### **4.3 Significant Hazards Consideration**

Nine Mile Point Nuclear Station, LLC (NMPNS) is requesting an amendment to Renewed Facility Operating License NPF-69 for Nine Mile Point Unit 2 (NMP2). The proposed amendment would modify Technical Specification (TS) 3.8.4, "DC Sources – Operating," by revising two Surveillance Requirements (SRs) pertaining to the Division 3 direct current (DC) electrical power subsystem battery. The Division 3 DC electrical power subsystem feeds emergency DC loads associated with the High Pressure Core Spray (HPCS) system. The SRs currently prohibit performing the DC electrical power subsystem battery service test and the battery performance discharge test in Mode 1, 2, or 3. The proposed amendment would remove these Mode restrictions for the Division 3 battery, thereby allowing these two TS-required battery tests to be performed during Mode 1, 2, or 3 in conjunction with scheduled HPCS system outages.

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NMPNS has evaluated whether or not a significant hazards consideration is involved with the proposed amendment 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 Division 3 (HPCS) DC electrical power subsystem and its associated emergency loads are accident mitigating features, not accident initiators. Therefore, the proposed TS changes to allow performance of Division 3 battery surveillance testing (service test and the battery performance discharge test) in any plant operating mode will not significantly impact the probability of any previously evaluated accident.

The design and function of plant equipment is not being modified by the proposed amendment. Neither the battery test frequency nor the time that the TSs allow the HPCS system to be inoperable are being revised. Battery testing in accordance with the proposed TS changes will continue to verify that the Division 3 DC electrical power subsystem is capable of performing its required function of providing DC power to HPCS system equipment, consistent with the plant safety analyses. The battery testing period is within the period of time that the HPCS system will already be out of service for a planned system outage. The battery testing does not increase unavailability of the supported HPCS system or represent any change in risk above the current practice of planned system maintenance outages. Any risk associated with the testing of the Division 3 battery will be enveloped by the risk management of the HPCS system outage. In addition, the HPCS system reliability and availability are monitored and evaluated in relationship to Maintenance Rule goals to ensure that total outage times do not degrade operational safety over time.

Testing is limited to only one electrical division of equipment at a time to ensure that design basis requirements are met. Should a fault occur while testing the Division 3 battery, there would be no significant impact on any accident consequences since the other two divisional DC electrical power subsystems and their associated emergency loads would be available to provide the minimum safety functions necessary to shut down the unit and maintain it in a safe shutdown condition.

Therefore, the proposed amendment 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.

No changes are being made to the plant that would introduce any new accident causal mechanisms. Equipment will be operated in the same configuration with the exception of the plant operating mode in which the Division 3 battery surveillance testing is conducted. Performance of these surveillance tests while online will continue to verify operability of the Division 3 battery. The proposed license amendment does not impact any plant systems that are accident initiators and does not adversely impact any accident mitigating systems, since the

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HPCS system will already be out of service. The battery testing will not increase the out-of-service time for the HPCS system.

Therefore, the proposed amendment 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.

Margin of safety is related to confidence in the ability of the fission product barriers (fuel cladding, reactor coolant system, and primary containment) to perform their design functions during and following postulated accidents. The proposed changes to the TS surveillance testing requirements for the Division 3 battery do not affect the operability requirements for the battery, as verification of such operability will continue to be performed as required. Continued verification of operability supports the capability of the Division 3 DC electrical power subsystem to perform its required function of providing DC power to HPCS system equipment, consistent with the plant safety analyses. Consequently, the performance of the fission product barriers will not be adversely impacted by implementation of the proposed amendment. In addition, the proposed changes do not alter setpoints or limits established or assumed by the accident analysis.

The battery testing will be performed when the HPCS system is already out of service for a planned system outage. The battery testing does not increase unavailability of the supported HPCS system or represent any change in risk above the current practice of planned system maintenance outages, as currently allowed by the TS.

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

Based on the above, NMPNS concludes that the proposed amendment does not involve a 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.

#### **4.4 Conclusions**

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.

#### **5.0 ENVIRONMENTAL CONSIDERATION**

A review has determined that the proposed amendments 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 amendments do not involve: (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or

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cumulative occupational radiation exposure. Accordingly, the proposed amendments meet 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 amendments.

# **ATTACHMENT 1**

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## **NINE MILE POINT UNIT 2**

### **PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)**

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The current versions of Technical Specification Pages 3.8.4-3 and 3.8.4-4 have been marked-up by hand to reflect the proposed changes.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.4.6 Verify each required Division 1 and 2 battery charger supplies <math>\geq 300</math> amps and the required Division 3 battery charger supplies <math>\geq 40</math> amps at <math>\geq 130</math> V for <math>\geq 4</math> hours.</p>	<p>24 months</p>
<p>SR 3.8.4.7 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. The modified performance discharge test in SR 3.8.4.8 may be performed in lieu of the service test in SR 3.8.4.7 provided the modified performance discharge test completely envelops the service test.</li> <li>2. This Surveillance shall not be performed in MODE 1, 2, or 3. However, credit may be taken for unplanned events that satisfy this SR.</li> </ol> <p>-----</p> <p>Verify battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test.</p>	<p>(not applicable to Division 3)</p> <p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.4.8</p> <p>-----NOTE-----            This Surveillance shall not be performed in MODE 1, 2, or 3. However, credit may be taken for unplanned events that satisfy this SR.</p> <p>-----</p> <p>Verify battery capacity is <math>\geq 80\%</math> of the manufacturer's rating when subjected to a performance discharge test or a modified performance discharge test.</p>	<p>(not applicable to Division 3)</p> <p>60 months</p> <p><u>AND</u></p> <p>12 months when battery shows degradation or has reached 85% of expected life with capacity &lt; 100% of manufacturer's rating</p> <p><u>AND</u></p> <p>24 months when battery has reached 85% of the expected life with capacity <math>\geq 100\%</math> of manufacturer's rating</p>

## **ATTACHMENT 2**

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### **NINE MILE POINT UNIT 2**

### **CHANGES TO TECHNICAL SPECIFICATION BASES (MARK-UP)**

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The current versions of Technical Specifications Bases pages B 3.8.4-7 and B 3.8.4-9 have been marked-up by hand to reflect the proposed changes. These Bases pages are provided for information only and do not require NRC approval.

BASES

SURVEILLANCE  
REQUIREMENTS

SR 3.8.4.6 (continued)

is required to be based on the largest combined demands of the various steady state loads and the charging capacity to restore the battery from the design minimum charge state to the fully charged state, irrespective of the status of the unit during these demand occurrences. The minimum required amperes and duration ensure that these requirements can be satisfied.

The Surveillance Frequency is acceptable given the administrative controls existing to ensure adequate charger performance during these 24 month intervals. In addition, this Frequency is intended to be consistent with expected fuel cycle lengths.

SR 3.8.4.7

A battery service test is a special test of the battery's capability, as found, to satisfy the design requirements (battery duty cycle) of the DC electrical power system. The discharge rate and test length correspond to the design duty cycle requirements as specified in Reference 4.

The Surveillance Frequency of 24 months is acceptable, given unit conditions required to perform the test and the other requirements existing to ensure adequate battery performance during these 24 month intervals. In addition, this Frequency is intended to be consistent with expected fuel cycle lengths.

The Division 3 test may be performed in MODE 1, 2, or 3 in conjunction with HPCS system outages.

This SR is modified by two Notes. Note 1 allows the performance of a modified performance discharge test in lieu of a service test provided the modified performance discharge test completely envelops the service test. This substitution is acceptable because a modified performance discharge test represents a more severe test of battery capacity than SR 3.8.4.7. The reason for Note 2 is that performing the Surveillance would remove a required DC electrical power subsystem from service, perturb the electrical distribution system, and challenge safety systems. Credit may be taken for unplanned events that satisfy the Surveillance.

(continued)

BASES

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SURVEILLANCE SR 3.8.4.8 (continued)

in the battery size calculation. A capacity of 80% shows that the battery is getting old and capacity will decrease more rapidly, even if there is ample capacity to meet the load requirements.

The Surveillance Frequency for this test is normally 60 months. If the battery shows degradation, or if the battery has reached 85% of its expected life and capacity is < 100% of the manufacturers rating, the Surveillance Frequency is reduced to 12 months. However, if the battery shows no degradation but has reached 85% of its expected life, the Surveillance Frequency is only reduced to 24 months for batteries that retain capacity  $\geq$  100% of the manufacturers rating. Degradation is indicated, consistent with IEEE-450 (Ref. 9), when the battery capacity drops by more than 10% of rated capacity in the previous 72 months or when it is below 90% of the manufacturers rating. The 12 month and 60 month Frequencies are consistent with the recommendations in IEEE-450 (Ref. 9). The 24 month Frequency is derived from the recommendations of IEEE-450 (Ref. 9).

The Division 3 test may be performed in MODE 1, 2, or 3 in conjunction with HPCS system outages.

This SR is modified by a Note. The reason for the Note is that performing the Surveillance would remove a required DC electrical power subsystem from service, perturb the electrical distribution system, and challenge safety systems. Credit may be taken for unplanned events that satisfy the Surveillance.

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REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
2. Regulatory Guide 1.6, Revision 0, March 10, 1971.
3. IEEE Standard 308, 1974.
4. USAR, Section 8.3.2.
5. USAR, Chapter 6.
6. USAR, Chapter 15 and Appendix A.
7. 10 CFR 50.36(c)(2)(ii).

(continued)