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P.O. Box 236, Hancocks Bridge, New Jersey 08038-0236

PSEG Nuclear LLC

10 CFR 50.90

LR-N21-0056
LAR H21-05

November 3, 2021

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

Hope Creek Generating Station
Renewed Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: **License Amendment Request (LAR) to Amend the Hope Creek Technical Specifications (TS) to Revise Surveillance Requirements (SRs) for Electric Power Monitor Channels for the Reactor Protection System (RPS) and Power Range Neutron Monitoring System (PRNMS)**

In accordance with the provisions of 10 CFR 50.90, PSEG Nuclear LLC (PSEG) is submitting a request for an amendment to the Technical Specifications (TS) for Hope Creek Generating Station (Hope Creek).

The proposed amendment revises TS SR 4.8.4.4.a and SR 4.8.4.6.a for performance of a CHANNEL FUNCTIONAL TEST for the RPS and PRNMS Electric Power Monitoring Channels respectively to relocate the mode requirements for performance of the SR to a separate note in TS and relocate the surveillance frequency to licensee control. The proposed change controls the frequency of performance of the SR via the Surveillance Frequency Control Program.

PSEG concludes that the proposed change 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.

The Enclosure provides a description and assessment of the proposed change. Attachment 1 provides the existing TS page marked to show the proposed change.

PSEG requests approval of this LAR in accordance with standard NRC approval process and schedule. Once approved, the amendment will be implemented within 60 days from the date of issuance.

There are no regulatory commitments contained in this letter.

In accordance with 10 CFR 50.91, PSEG is notifying the State of New Jersey of this LAR by transmitting a copy of this letter and enclosure to the designated State Official.

If there are any questions or if additional information is needed, please contact Mr. Michael Wiwel at 856-339-7907.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 11/3/21
(Date)

Respectfully,

Edward Casulli
Site Vice President
Hope Creek Generating Station

Enclosure: Evaluation of the Proposed Change
Attachment 1: Technical Specification Page Markups

cc: Administrator, Region I, NRC
NRC Project Manager
NRC Senior Resident Inspector, Hope Creek
Ms. A. Pfaff, Manager, NJBNE
PSEG Corporate Commitment Tracking Coordinator
Site Commitment Tracking Coordinator

## Enclosure

## Evaluation of the Proposed Change

Subject: License Amendment Request (LAR) to Amend the Hope Creek Technical Specifications (TS) to Revise Surveillance Requirements (SRs) for Electric Power Monitor Channels for the Reactor Protection System (RPS) and Power Range Neutron Monitoring System (PRNMS)

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ATTACHMENT:

1. Markup of proposed Technical Specification Pages

## 1.0 SUMMARY DESCRIPTION

The proposed change revises Hope Creek Generating Station (HCGS) Technical Specification (TS) Surveillance Requirement (SR) 4.8.4.4.a for performance of a CHANNEL FUNCTIONAL TEST of the reactor protection system (RPS) electric power monitoring channels. The proposed change relocates the embedded requirement regarding performance of the CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous six months, to a separate note specific to this SR.

The proposed change also relocates the frequency of performance of the CHANNEL FUNCTIONAL TEST from the TS to the Surveillance Frequency Control Program (SFCP). The existing TS surveillance interval requirements will be maintained in the SFCP for this SR. This proposed change is consistent with the equivalent SR 3.3.8.2.1 in NUREG-1433, Standard Technical Specifications – General Electric BWR/4 (Reference 1).

The same two changes described above are proposed for SR 4.8.4.6.a for performance of a CHANNEL FUNCTIONAL TEST of the Power Range Neutron Monitoring System (PRNMS) electric power monitoring channels. SR 4.8.4.6.a for the PRNMS power monitoring channels is identical in format and description to SR 4.8.4.4.a.

## 2.0 DETAILED DESCRIPTION

### 2.1 System Design and Operation

The Hope Creek RPS consists of instrumentation systems that monitor various plant parameters and provide input signals to the RPS logic which generates an automatic reactor trip whenever one or more measured plant parameters exceed their pre-established setpoints. The RPS power system is designed to provide power to the RPS logic system and prevent auxiliary power system switching transients from causing an inadvertent reactor scram and to protect safety related RPS loads from being damaged by degraded voltage conditions.

The power to each of the RPS buses is supplied from two 120 Vac sources. The primary source of power for each RPS division is from an alternating current (AC) motor-generator (MG) set. The alternate source of power is from a non-Class 1E motor control center (MCC). Each motor generator set is supplied from a non-Class 1E 480 V MCC that is separate from the other RPS division's MG set. Each MG set supplies power for independent trip systems of the RPS, the Nuclear Steam Supply Shutoff System (NSSSS) and parts of the process radiation monitoring system.

The RPS power supply is classified as non-safety related, because failure of the power supply causes a reactor scram and isolation due to the fail-safe design of their logic. Each MG set includes a high inertia flywheel to maintain voltage and frequency to the trip and isolation logic channels to ride through electrical switching transients without causing a trip. Either MG set can be taken out of service by manually transferring the respective RPS bus to its alternate power source although a provision is made to prevent transfer of both RPS buses to its alternate source at the same time.

The power to the PRNMS comes from two non-Class 1E 120 Vac uninterruptible power sources (UPS). Each UPS provides power to each Average Power Range Neutron Monitor (APRM) channel, thus providing redundant power to each APRM within the PRNMS. Redundant power is required to each APRM channel to prevent loss of a single power supply affecting multiple

APRMs which would result in a reactor scram. Two of the four 2-out-of-4 PRNMS voter modules within a RPS division are fed by one of the two UPS feeds. The opposite UPS feed provides power to the other two voter modules. Similar to the RPS power configuration described above, the Class 1E loads associated with the PRNMS are fed from non-Class 1E power sources.

Two redundant electrical protective assemblies (EPA), each of which consists of Class 1E protective circuitry for under-voltage, over-voltage and under-frequency conditions, are provided between the RPS and PRNMS loads and each of its power sources to provide Class 1E to non-Class 1E isolation and protection of safety related loads. The EPA consists of a circuit breaker with a trip coil driven by logic circuitry that senses line voltage and frequency and trips open the circuit breaker when bus voltage and frequency are outside acceptable limits. Trip of the circuit breaker of an EPA associated with the RPS bus results in a trip of that RPS division based on the fail-safe design of the trip logic, thus resulting in a half scram.

Similarly, a trip of an EPA associated with the PRNMS results in a half scram due to deenergization of two 2-out-of-4 PRNMS logic voters that are tied to the same RPS division. In addition, the remainder of the PRNMS equipment will lose the redundancy in power supply to its signal processing electronics resulting in display indications and alarms to notify the control room operator of the loss of power supply redundancy to the PRNMS.

2.2 Current Technical Specification Requirements

SURVEILLANCE REQUIREMENTS

4.8.4.4 The above specified RPS electric power monitoring channels shall be determined OPERABLE:

a. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of 24 hours, unless performed in the previous 6 months.

b. In accordance with the Surveillance Frequency Control Program by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints:

   1. Over-voltage $\leq$ 132 VAC, (Bus A), 132 VAC (Bus B)

   2. Under-voltage $\geq$ 108 VAC, (Bus A), 108 VAC (Bus B)

   3. Under-frequency $\geq$ 57 Hz. (Bus A and Bus B)

4.8.4.6 The above specified power range NMS electric power monitor channels shall be determined OPERABLE:

a. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of 24 hours, unless performed in the previous 6 months.

b. In accordance with the Surveillance Frequency Control Program by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints:

1. Over-voltage $\leq$ 132 VAC, (Bus A), 132 VAC (Bus B)

2. Under-voltage $\geq$ 108 VAC, (Bus A), 108 VAC (Bus B)

3. Under-frequency $\geq$ 57 Hz. (Bus A and Bus B)

## 2.3 Reason for the Proposed Change

As currently configured, Hope Creek SR 4.8.4.4.a and SR 4.8.4.6.a require performance of the Channel Functional Test for the RPS and PRNMS electric power monitoring channels respectively whenever the plant enters COLD SHUTDOWN for more than 24 hours unless the Functional Test was performed in the previous six months. The current TS format of the SR does not accommodate the potential to revise the SR interval per the SFCP based on the established performance of the power monitoring channels. Hope Creek has implemented Technical Specification Task Force (TSTF) change 425, Revision 3, “Relocate Surveillance Frequencies to Licensee Control – RITSTF [Risk-Informed TSTF] Initiative 5b,” as approved by the NRC through TS Amendment 187 (Reference 2). Hope Creek SR 4.8.4.4.a, is equivalent to SR 3.3.8.2.1 in NUREG-1433 which is included in TSTF-425. When PSEG adopted TSTF-425, relocation of SR 4.8.4.4.a to the SFCP was inadvertently omitted. This proposed change corrects that omission.

NUREG-1433 is silent on any TS requirements regarding PRNMS electric power monitoring since the power supply configuration for the Hope Creek PRNMS differs from the typical BWR. Regardless of this absence, the purpose and components associated with the PRNMS electric power monitoring channels are directly aligned with the same purpose and components used for RPS electric power monitoring. Therefore, the proposed change to Hope Creek SR 4.8.4.6.a is considered to be aligned with NUREG-1433 and, in turn, its surveillance frequency is applicable for relocation to the SFCP as described in TSTF-425. Like SR 4.8.4.4.a, PSEG inadvertently omitted SR 4.8.4.6.a when TSTF-425 was adopted. This proposed change corrects that omission.

## 2.4 Description of the Proposed Change

The proposed TS changes are as follows with proposed deletions shown as strike-through and proposed additions shown in bold italics:

SURVEILLANCE REQUIREMENTS

4.8.4.4 The above specified RPS electric power monitoring channels shall be determined OPERABLE:

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***NOTE***
***SR 4.8.4.4.a only required to be performed prior to entering MODE 2 or 3 from MODE 4, when in MODE 4 for > 24 hours.***

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a. By performance of a CHANNEL FUNCTIONAL TEST ~~each time the plant is in COLD SHUTDOWN for a period of 24 hours, unless performed in the previous 6 months~~ ***in accordance with the Surveillance Frequency Control Program.***

b. In accordance with the Surveillance Frequency Control Program by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints:

   i. Over-voltage ≤ 132 VAC, (Bus A), 132 VAC (Bus B)

   ii. Under-voltage ≥ 108 VAC, (Bus A), 108 VAC (Bus B)

   iii. Under-frequency ≥ 57 Hz. (Bus A and Bus B)

SURVEILLANCE REQUIREMENTS

4.8.4.6 The above specified power range NMS electric power monitoring channels shall be determined OPERABLE:

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***NOTE***
***SR 4.8.4.6.a only required to be performed prior to entering MODE 2 or 3 from MODE 4, when in MODE 4 for > 24 hours.***

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a. By performance of a CHANNEL FUNCTIONAL TEST ~~each time the plant is in COLD SHUTDOWN for a period of 24 hours, unless performed in the previous 6 months~~ ***in accordance with the Surveillance Frequency Control Program.***

b. In accordance with the Surveillance Frequency Control Program by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints:

   i. Over-voltage ≤ 132 VAC, (Bus A), 132 VAC (Bus B)

   ii. Under-voltage ≥ 108 VAC, (Bus A), 108 VAC (Bus B)

iii. Under-frequency ≥ 57 Hz. (Bus A and Bus B)

Markups of the above-described changes are shown in Attachment 1.

## 3.0 TECHNICAL EVALUATION

RPS Electrical Power Monitoring

Performance of the Channel Functional Test SR for the RPS electric power monitoring channels involves tripping of each RPS breaker that provides power to an entire division of RPS and NSSS logics in order to functionally test its associated EPA. De-energization of all the downstream loads fed from that RPS power division, in turn, results in a trip of that RPS division (i.e. a half scram) and partial actuation logic inputs to the NSSSS. The direction to perform the test in COLD SHUTDOWN identified in Hope Creek SR 4.8.4.4.a ensures the test is not performed when the reactor is in startup or during power operations. Restriction of performance of the SR outside of Modes 1 and 2 removes the potential risk of a plant transient during performance of the test that may occur due to an inadvertent failure in the opposite RPS division while performing the test or due to human error in performing the test. The avoidance of performing this SR in Modes 1 or 2 was originally identified by the NRC in Generic Letter 91-09 (Reference 5) which resulted in a formal amendment to the Hope Creek TS to change SR 4.8.4.4.a (Reference 6).

The equivalent channel functional test in SR 3.3.8.2.1 in NUREG-1433 also ensures the test is not performed in Modes 1 or 2. The TS Bases for SR 3.3.8.2.1 identifies the test is performed while the plant is in a condition in which the loss of the RPS bus will not jeopardize steady state power operation since the design of the system is such that the power source must be removed from service to conduct the surveillance. The Bases goes on to say that the required 24 hour time duration in Mode 4 is intended to indicate an outage of sufficient duration to allow for scheduling and proper performance of the Surveillance.

Both the HC and NUREG-1433 SRs do not require the CHANNEL FUNCTIONAL TEST for the RPS power monitoring channels to be performed while the reactor is in startup or at power due to the elevated risk of a plant scram and or isolation associated with performance of the surveillance. SR 3.3.8.2.1 in NUREG-1433 provides this direction regarding the Mode in which the SR is required to be performed within a specific note associated with the SR, whereas the HC TS includes the mode requirement in the SR. Relocating the mode requirement to a note is consistent with the format in NUREG-1433 and does not change the modes in which SR 4.8.4.4.a is required to be performed.

Hope Creek has implemented TSTF-425, as approved by the NRC through TS Amendment 187 (Reference 2). This amendment relocates most periodic frequencies of TS surveillances to a licensee-controlled document and allows Hope Creek station to programmatically change the frequencies of relocated SRs based on the guidance within NEI 04-10, “Risk-Informed Technical Specifications Initiative 5B, Risk Informed Method for Control of Surveillance Frequencies” (Reference 3). The relocation of the Frequency for the RPS electric power monitoring CHANNEL FUNCTIONAL TEST to the SFCP is consistent with TSTF-425, Revision 3, and with the NRC staff's model safety evaluation in Reference 4 (including the scope exclusions identified in Section 1.0, "Introduction"), because the subject SR involves a fixed periodic Frequency. Changes to the Frequency for the RPS electric power monitoring channel Surveillance would be controlled under the SFCP. The SFCP provides the necessary administrative controls to require that Surveillances related to testing, calibration, and inspection

are conducted at a frequency 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. Following approval of the proposed change, the current six-month frequency associated with SR 4.8.4.4.a will be assigned and managed within the Hope Creek SFCP.

PRNMS Electrical Power Monitoring

Much of the above assessment for the proposed change to the RPS electric power monitoring channels can be applied to the same electric power monitoring channels for the PRNMS. Performance of SR 4.8.4.6.a involves tripping one of the two 120 Vac sources supplying the PRNMS. Tripping one of the PRNMS supplies results in a half scram via deenergization of two of the four 2-out-of-4 logic modules associated with an RPS division. The 2-out-of-4 logic modules provide the voting logic interface between the PRNMS and the RPS. Deenergization of a logic module will cause a trip of the RPS channel associated with that logic module. In addition, performance of the Channel Functional Test results in a temporary degradation in the power redundancy built into the design of the PRNMS. The same transient avoidance rationale for performance of SR 4.8.4.4.a in Mode 4 also applies to SR 4.8.4.6.a.

Similarly, the identical format of SR 4.8.4.6.a to SR 4.8.4.4.a prevents the surveillance frequency of the Channel Functional Test to be assessed under the SFCP per TSTF-425 regardless of the established performance of the channel components and established record of test performance.

The power supply configuration for the Hope Creek PRNMS is different than most BWRs in that the system is fed from two non-class 1E UPS busses rather than directly from the RPS busses as found in most other boiling water reactors. Because of this different configuration, there are no TS for PRNMS Electric Power Monitoring in NUREG-1433; only the electric power monitoring channels for RPS are identified. Despite this absence within Standard TS, the format of SR 3.3.8.2.1 within NUREG-1433 can be directly applied to the PRNMS Electric Power Monitoring Channels due to their identical design purpose, configuration, and potential risk during testing outside of Shutdown. Similarly, TSTF-425 can be considered equally applicable to SR 4.8.4.6.a and its Surveillance Frequency relocated and controlled under the SFCP.

## 4.0 REGULATORY EVALUATION

### 4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50.36(c) provides that TS will include Surveillance Requirements (SRs) which 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." The proposed change involves revising Channel Functional Tests SR 4.8.4.4.a and SR 4.8.4.6.a for the RPS and PRNMS electric power monitoring channels respectively to apply a Surveillance Frequency in accordance with the SFCP. All LCO's associated with loads fed from RPS as well as the PRNMS remain unchanged and the required Actions or shut down requirements remain in accordance with 10 CFR 50.36(c). Therefore, the proposed changes are consistent with current regulations.

Although not the direct subject matter of this requested amendment, the following 10 CFR 50, Appendix A, General Design Criteria apply to the systems covered by the proposed changes in this amendment application.

10 CFR 50, Appendix A, General Design Criteria (GDC).

CRITERION 18 - *Inspection and testing of electric power systems*. Electric power systems important to safety shall be designed to permit appropriate periodic inspection and testing of important areas and features, such as wiring, insulation, connections, and switchboards, to assess the continuity of the systems and the condition of their components. The systems shall be designed with a capability to test periodically (1) the operability and functional performance of the components of the systems, such as onsite power sources, relays, switches, and buses, and (2) the operability of the systems as a whole and, under conditions as close to design as practical, the full operation sequence that brings the systems into operation, including operation of applicable portions of the protection system, and the transfer of power among the nuclear power unit, the offsite power system, and the onsite power system.

CRITERION 22 - *Protection system independence*. The protection system shall be designed to assure that the effects of natural phenomena, and of normal operating, maintenance, testing, and postulated accident conditions on redundant channels do not result in loss of the protection function, or shall be demonstrated to be acceptable on some other defined basis. Design techniques, such as functional diversity or diversity in component design and principles of operation, shall be used to the extent practical to prevent loss of the protection function.

CRITERION 23 - *Protection system failure modes*. The protection system shall be designed to fail into a safe state or into a state demonstrated to be acceptable on some other defined basis if conditions such as disconnection of the system, loss of energy (e.g., electric power, instrument air), or postulated adverse environments (e.g., extreme heat or cold, fire, pressure, steam, water, and radiation) are experienced.

Following implementation of the proposed changes, Hope Creek will remain in compliance with the above regulations and guidance.

4.2 Precedents

Although no specific precedent exists for these changes, the proposed changes are consistent with NUREG-1433 - Improved Standard Technical Specifications – General Electric BWR/4 Plants Revision 5. In addition to NUREG-1433, the NRC approved similar changes in amendments adopting TSTF-425 including:

1. Letter from NRC to James Barstow, “Browns Ferry Nuclear Plant, Units 1, 2 and 3 – Issuance of Amendment Nos. 315, 338 and 298 Regarding the Adoption of Technical Specifications Task Force Traveler TSTF-425, Revision 3 (EPID L-2020-LLA-0058),” dated April 8, 2021 (ADAMS Accession No. ML21041A489)

2. Letter from NRC to Jon A. Franke, “Susquehanna Steam Electric Station, Units 1 and 2 – Issuance of Amendments RE: Adoption of TSTF-425 (CAC Nos. MF5151 and MF5152,” dated May 20, 2016 (ADAMS Accession No. ML16005A234)

3. Letter from NRC to Paul Fessler, “Fermi 2 Issuance of Amendment RE: Revise Technical Specifications by Relocating Surveillance Frequencies to Licensee Control in Accordance with Technical Specification Task Force Traveler 425, Revision 3 (TAC No. MF4859,” dated July 14, 2015 (ADAMS Accession No. ML15155B416)

4.3 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, PSEG Nuclear LLC (PSEG) requests an amendment to Renewed Facility Operating License No. NPF-57 for Hope Creek Generating Station (Hope Creek). The proposed change revises Technical Specification (TS) Surveillance Requirement (SR) 4.8.4.4.a, performance of a Channel Functional Test for the Reactor Protection System (RPS) electric power monitoring channels. The proposed revision reformats the SR to relocate the frequency of performance of the SR into the Hope Creek Surveillance Frequency Control Program (SFCP) and to locate the existing SR text regarding the required reactor Mode for performance of the Surveillance into a separate note for the SR.

PSEG proposes the same change to Hope Creek SR 4.8.4.6.a, performance of a Channel Functional Test of the Power Range Neutron Monitor System (PRNMS) electric power monitoring channels to relocate the frequency of performance of the SR to the Hope Creek SFCP and assign a specific note regarding reactor Mode for performance of the Surveillance.

PSEG has evaluated whether 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 change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed change relocates the specified Surveillance Frequency for Hope Creek SR 4.8.4.4.a for performing the Channel Functional Test for the RPS electric power monitoring channels and SR 4.8.4.6.a for performing the same channel Functional Test for the PRNMS electric power monitoring channels to licensee control under the established Surveillance Frequency Control Program. Surveillance frequencies are not an initiator to any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased. No change is being made to the method of performance of the Channel Functional Test for either the RPS or PRNMS electric power monitor channels nor are there any physical changes to any plant structure, system or component (SSC). The systems and components required by the TS for the RPS and PRNMS electric power monitoring channels are still required to be operable, meet the acceptance criteria for the surveillance requirements, and be capable of performing their design function. As a result, the consequences of any accident previously evaluated are not significantly increased.

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

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

   Response: No

   The proposed change to the Hope Creek SRs for the RPS and PRNMS electric power monitoring channels does not physically alter the design or method of testing of these channels or any plant SSC, nor does the proposed change impact any SSCs whose failure can initiate a design basis accident. No new or different accidents result from the proposed

change. All plant equipment will be operated in the same configuration and manner that is currently established in the design basis of the plant.

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

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

   Response: No

   The proposed change does not alter the permanent plant design, including instrument setpoints, nor does it change the assumptions contained in the safety analyses. The proposed change only affects Surveillance Frequencies which has no effect on the method by which the RPS or PRNMS electric power monitoring channels are tested or the method of testing of any other Hope Creek instruments.

   There is no change in the design configuration or reduction in capability of the RPS or PRNMS to produce a reactor trip. No physical change is being made to the plant as part of this proposed change, therefore all plant SSCs will continue to meet their design basis functional requirements as described in the Updated Final Safety Analysis Report (UFSAR).

   The proposed change does not alter a design basis or safety limit; therefore it does not significantly reduce the margin of safety.

   Therefore, it is concluded that the proposed changes do not involve a significant reduction in a margin of safety.

Based upon the above, PSEG 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.

### 4.4 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.

## 5.0 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 significant increase in the amounts of any effluent 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.

## 6.0 REFERENCES

1. NUREG-1433, Standard Technical Specifications – General Electric BWR/4, Revision 5 Volume 1.

2. Letter from NRC to Thomas Joyce, “Issuance of Amendment RE: Relocation of Specific Surveillance Frequencies to a Licensee-Controlled Program Based on Technical Specification Task Force (TSTF) Change TSTF-425 (TAC No. ME3545),” Dated February 25, 2011 (ADAMS Accession No. ML103410243)

3. NEI 04-10, Revision 1 “Risk-Informed Technical Specifications Initiative 5B, Risk Informed Method for Control of Surveillance Frequencies,” April 2007 (ADAMS Accession No. ML071360456)

4. 74 FR 31996, “Notice of Availability of Technical Specification Improvement to Relocate Surveillance Frequencies to Licensee Control-Risk-Informed Technical Specification Task Force (RITSTF) Initiative 5b, Technical Specification Task Force-425 Revision 3,” July 6, 2009.

5. Generic Letter 91-09, “Modification of Surveillance Interval for the Electrical Protective Assemblies in Power Supplies for the Reactor Protection System,” June 27, 1991

6. Letter from NRC to Steven Miltenberger, “Change to Surveillance Intervals for Electrical Protective Assemblies, Hope Creek Generating Station (TAC No. M81699), Dated November 5, 1991 (ADAMS Accession No. ML011760347)

## Attachment 1

## Technical Specification Page Markups

The following Technical Specifications pages for Renewed Facility Operating License NPF-57 are affected by this change request:

| Technical Specification | Page |
|---|---|
| SR 4.8.4.4.a | 3/4 8-40 |
| SR 4.8.4.6.a | 3/4 8-44 |

## REACTOR PROTECTION SYSTEM ELECTRICAL POWER MONITORING

### LIMITING CONDITION FOR OPERATION

3.8.4.4 Two RPS electric power monitoring channels for each inservice RPS MG set or alternate power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With one RPS electric power monitoring channel for an inservice RPS MG set or alternate power supply inoperable, restore the inoperable power monitoring channel to OPERABLE status within 72 hours or remove the associated RPS MG set or alternate power supply from service.

b. With both RPS electric power monitoring channels for an inservice RPS MG set or alternate power supply inoperable, restore at least one electric power monitoring channel to OPERABLE status within 30 minutes or remove the associated RPS MG set or alternate power supply from service.

### SURVEILLANCE REQUIREMENTS

4.8.4.4 The above specified RPS electric power monitoring channels shall be determined OPERABLE:

a. By performance of a CHANNEL FUNCTIONAL TEST ~~each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.~~ in accordance with the Surveillance Frequency Control Program.

b. In accordance with the Surveillance Frequency Control Program by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.

1. Over-voltage ≤ 132 VAC, (Bus A), 132 VAC (Bus B)

2. Under-voltage ≥ 108 VAC, (Bus A), 108 VAC (Bus B).

3. Under-frequency ≥ 57 Hz. (Bus A and Bus B)

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NOTE

SR 4.8.4.4.a only required to be performed prior to entering MODE 2 or 3 from MODE 4, when in MODE 4 for ≥ 24 hours.

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ELECTRICAL POWER SYSTEM

POWER RANGE NEUTRON MONITORING SYSTEM ELECTRICAL POWER MONITORING

LIMITING CONDITION FOR OPERATION

3.8.4.6 The power range neutron monitoring system (NMS) electric power monitoring channels for each inservice power range NMS power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With one power range NMS electric power monitoring channel for an inservice power range NMS power supply inoperable, restore the inoperable power monitoring channel to OPERABLE status within 72 hours or deenergize the associated power range NMS power supply feeder circuit.

b. With both power range NMS electric power monitoring channels for an inservice power range NMS power supply inoperable, restore at least one electric power monitoring channel to OPERABLE status within 30 minutes or deenergize the associated power range NMS power supply feeder circuit.

SURVEILLANCE REQUIREMENTS

4.8.4.6 The above specified power range NMS electric power monitoring channels shall be determined OPERABLE:

a. By performance of a CHANNEL FUNCTIONAL TEST ~~each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.~~ in accordance with the Surveillance Frequency Control Program.

b. In accordance with the Surveillance Frequency Control Program by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.

1. Over-voltage ≤ 132 VAC (BUS A), 132 VAC (BUS B)

2. Under-voltage ≥ 108 VAC (BUS A), 108 VAC (BUS B)

3. Under-frequency ≥ 57 Hz. -0, +2%

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NOTE

SR 4.8.4.6.a only required to be performed prior to entering MODE 2 or 3 from MODE 4, when in MODE 4 for ≥ 24 hours.

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