



NOV 03 2009

10 CFR 73.5

LR-N09-0249

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

**SALEM GENERATING STATION – UNIT 1 and UNIT 2
FACILITY OPERATING LICENSE NOS. DPR 70 and DPR-75
NRC DOCKET NOS. 50-272 and 50-311**

**HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
NRC DOCKET NO. 50-354**

**Subject: REQUEST FOR EXEMPTION FROM PHYSICAL SECURITY
REQUIREMENTS (NON-SAFEGUARDS VERSION)**

In accordance with the requirements of 10CFR 73.5, PSEG Nuclear LLC requests the Nuclear Regulatory Commission (NRC) approve an exemption from specific requirements of 10 CFR Part 73, "Physical Protection of Plants and Materials" for the combined Salem – Hope Creek Generating Station site by extending the deadline for the implementation of certain measures required by the new rule.

The NRC issued a Final Rule for new security requirements in the Federal Register dated March 27, 2009. Pursuant to the Final Rule, the new security requirements must be implemented by March 31, 2010. PSEG Nuclear has evaluated these new requirements and determined that many of the new requirements can be implemented within this brief implementation period. PSEG Nuclear has determined, however, that implementation of specific parts of the new requirements will require more time to implement since they involve significant physical modifications that have a large impact on the PSEG Nuclear defense security strategy and Protected Area boundary. Therefore, additional time beyond the March 31, 2010 date is requested to complete these security modifications.

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PSEG Nuclear is requesting the implementation date be extended from March 31, 2010 to December 17, 2010 for certain new security requirements contained in 10 CFR 73.55 as described in the Enclosure to this letter. PSEG Nuclear has determined that its current security program along with the new security requirements that will be implemented by March 31, 2009 will provide continued assurance of public health and safety and common defense and security. Accordingly, the requested exemption is authorized by law and will not endanger life or property or the common defense and security in accordance with 10 CFR 73.5.

PSEG Nuclear requests approval of this exemption request by January 29, 2010 so that appropriate and timely actions can be taken to revise and implement the PSEG Nuclear security program. The proposed exemptions are requested to be effective upon issuance.

The information provided in the two Enclosures to this letter include a redacted version of the accompanying letter's (LR-N09-0248) enclosure and the environmental impact statement, both of which are free from proprietary and safeguards information and available for public disclosure.

The second separate safeguards letter (LR-N09-0248) accompanying this one contains one enclosure which is designated Safeguards material.

There are no regulatory commitments made in this letter. If you have any questions or require additional information, please do not hesitate to contact Lee Marabella at (856) 339-1208 or Michelle Patti at (856) 339-3691.

Sincerely,



Jeffrie J. Keenan
Manager, Licensing

Enclosures (2):

Enclosure 1: PSEG Salem and Hope Creek Stations Non-proprietary version

Enclosure 2: Environmental Impact Statement

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PSEG Salem and Hope Creek Stations
Non-proprietary Version
Enclosure 1

PSEG Salem and Hope Creek Stations
Non-proprietary version
Enclosure 1

A. Background

Prior to the new rule making PSEG Nuclear (PSEG) had identified a need to upgrade the Hope Creek Protected Area (PA) perimeter cameras in order to enhance the site's protective strategy and intrusion detection system hardware to improve system reliability. A comprehensive upgrade project was approved through the Plant Health Committee in September 2007, and a design basis document (DBD) was developed and taken to the Corporate Senior Management Team for approval of funding. The upgrade schedule was extended to ensure PSEG would be in compliance with the new standards. The new security rule making was in the Federal Register Notice dated March 27, 2009 and associated supporting regulatory guides were completed in July 2009.

While the new security rule and associated guidelines were being developed. Based on the evolution of the final rule, PSEG Nuclear has determined that implementation of specific parts of the new requirements will require additional time beyond March 31, 2010 date to complete these modifications.

B. Salem and Hope Creek Security System Upgrade

Salem and Hope Creek is a three unit nuclear facility with a large PA that encompasses all three units. The PA includes: the containment, turbine, auxiliary, fuel handling, service water and circulating water buildings, an administrative building, the Independent Spent Fuel Storage Installation and a portion of the Material Center. The PA of the facility is the second largest in the United States. The project includes:

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The extent of the Salem and Hope Creek Physical Security System Upgrade is significant and is an important improvement to the defensive strategy and to comply with the new rule. Due to the significant number of engineering design packages, procurement needs, and installation activities, some of the requirements contained in 10CFR73.55 will require additional time beyond March 31, 2010.

With approval of this exemption request, the Part 73 provisions required to be implemented by March 31, 2010 will be completed except for the proposed exemptions

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Enclosure 1

described in section C below. These items, subject to the request for an exemption, will be implemented by December 17, 2010. PSEG will then be in full compliance with the new rule.

C. Proposed Exemptions

PSEG request an exemption, from the implementing deadline only, for the three items listed below in this section. The basis for requesting an extension of the March 31, 2010 date to December 17, 2010 is based on completion of the PA upgrade to address many of the new rule requirements, resource and logistical impacts of the three units upcoming refueling outages (Salem Unit 2 fall 2009, Salem Unit 1 spring 2010 and Hope Creek fall 2010). PSEG Nuclear is continuing efforts to implement the remaining new requirements identified in the March 27, 2009 Federal Register Notice and associated Regulatory Guides completed in July 2009 by March 31, 2010. Accordingly, the requested exemption is authorized by law and will not endanger life or property or the common defense and security in accordance with 10 CFR 73.5.

The following is a detailed description of the work activities associated with the security upgrade project. Each specific project described below has a specific new requirement that is being addressed along with other equipment upgrades to enhance the security strategy or improve the performance of the equipment.

The full scope of the security upgrades include:

Item 1

Protected area perimeter upgrades:

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Following publication of the new Part 73 rule requirements, this work scope was identified with a cost in excess of \$10 million. The following regulations are impacted by the PA perimeter upgrades:

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Regulation

10 CFR 73.55(.....) states:

10 CFR 73.55(....) states:

10 CFR 73.55(.....) states:

10 CFR 73.55(....) states:

10 CFR 73.55(....) states:

10 CFR73.55(....) states:

Issue

The current configuration of the PA boundary has [

.....
.....

.....] Relocating a facility, providing additional protection, and changing out equipment/components will require extensive amount of engineering and physical work.

The size of Salem and Hope Creek Protected Area perimeter

[.....
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.....]

Current configuration of the PA boundary utilize a portion of the [.....] structures. This area is monitored to provide assessment and detection from the PA side of the boundary and [.....]

[.....] The changes to these areas will relocate the assessment and detection equipment and reconfigure the PA boundary [.....].

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Item 2

The Upgraded Uninterruptible Power Supply (UPS)/Inverter for security loads will be completed by March 31, 2010,
[.....
.....]

The work scope was identified with a cost of approximately \$500,000. The sections of the rule that exemption is requested, due to the complexity of the PA upgrade, are:

Regulation

10CFR73.55(.....).....states:

Issue

[.....
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.....]

Item 3

Security Center redesign
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The engineering scope was identified with a cost of approximately \$250,000, the implementation cost is currently being developed. The sections of the rule that exemption is requested for, due to the modification that are known at this time, are:

Regulation

10 CFR73.55(.....) states:

10 CFR 73.55(.....) states:

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Issue

The current PA boundary has a portion of the security center's [.....
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.....].

Additional time is needed to construct and install the required access screening equipments in the new facility.

The total estimated cost for all the new security-related modifications scheduled for Salem and Hope Creek Stations (SHC) is in excess of \$20 million. The additional work scope required by the new Part 73 requirements and not associated with modifications listed in this enclosure are expected to be completed by March 31, 2010.

PSEG request exemption to these specific items from Part 73 physical security requirements. Each of these exemptions are linked to the Security System Upgrade Project. The project milestones are listed in Section E.

D. Challenges to Compliance by March 31, 2010

The PA perimeter upgrade project extends beyond just Part 73 related modifications; however, all these security-related modifications are linked together. The size and scope of the project adds considerable challenges when coupled with planned refueling outages, Part 26 implementation, personnel and material resources.

The Salem and Hope Creek PA perimeter upgrade project will replace the [.....
.....] to better survey the PA. Due to the size of the facility, PSEG Nuclear will need to perform much of the work in parallel; however, many of the work activities are independently sequenced. For example, [.....performed at the same time, all of this work must be performed in parallel. The access facility must implement a phased change out and turnover to the new equipment; therefore, the installation must be performed in series avoiding outage periods.

Engineering for all the major modifications are in progress; however, the engineering packages have not been completed to identify all the specifics needed to implement the packages. The proposed schedule permits the engineering process to ensure the engineering regulatory requirements are met.

Pre-outage in-processing requires the use of the security computer. The in-processing

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dates are shown below on the project schedule.

Vendor resources are also restricted due to the limited available of suppliers. The PSEG schedule as proposed provides expected time for vendor support.

E. Milestone Table

The milestone schedule is for the PA [.....] completion only; however, PSEG believes this schedule bounds the time needed to complete the security project. This milestone schedule has been developed based on current information and anticipated challenges.

PSEG Salem and Hope Creek Stations
Enclosure 2
Environmental Assessment

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Environmental Assessment
Enclosure 2

1. Describe any change to the types, characteristics, or quantities of non-radiological effluents discharged to the environment as a result of the proposed exemption.

PSEG Nuclear Response

There are no expected changes in the types, characteristics, or quantities of non-radiological effluents discharged to the environment associated with the proposed exemption. This application is associated with implementation of security changes. These security changes will not result in changes to the design basis requirements for the structures, systems, and components (SSCs) at the Salem or Hope Creek Generating Stations that function to limit the release of non-radiological effluents during and following postulated accidents. All the SSCs associated with limiting the release of offsite non-radiological effluents will therefore continue to be able to perform their functions, and as a result; there is no significant non-radiological effluent impact. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of non-radiological effluents. In addition, the method of operation of non-radiological waste systems will not be affected by this change.

2. Describe any changes to liquid radioactive effluents discharged as a result, of the proposed implementation.

PSEG Nuclear Response

There are no expected changes to the liquid radioactive effluents discharged as a result of this exemption. The proposed security changes will not interact to produce any different quantity or type of radioactive material in the reactor coolant system. These security changes will not result in changes to the design basis requirements for the SSCs at the Salem or Hope Creek Generating Stations that function to limit the release of liquid radiological effluents during and following postulated accidents. All the SSCs associated with limiting the release of liquid radiological effluents will therefore, continue to be able to perform their functions, and as a result, there is no significant liquid radiological effluent impact.

3. Describe any changes to gaseous radioactive effluents discharged as a result of the proposed exemption.

PSEG Nuclear Response

There are no expected changes to the gaseous radioactive effluents discharged as a result of this exemption. The proposed security changes will not interact to produce any different quantity or type of radioactive material in the reactor

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coolant system. These security changes will not result in changes to the design basis requirements for the SSCs at the Salem or Hope Creek Generating Stations that function to limit the release of gaseous radiological effluents during and following postulated accidents. All the SSCs associated with limiting the release of gaseous radiological effluents will therefore, continue to be able to perform their functions, and as a result, there is no significant gaseous radiological effluent impact.

4. Describe any change in the type or quantity of solid radioactive waste generated as a result of the proposed exemption.

PSEG Nuclear Response

These security changes will not result in changes to the design basis requirements for the structures, systems, and components (SSCs) at Salem or Hope Creek Generating Stations that function to limit the release of solid waste during and following postulated accidents. All the SSCs associated with limiting the release of solid radioactive waste will therefore continue to be able to perform their function. Radiation surveys will be performed in accordance with plant radiation protection procedures on excavated dirt that could be contaminated, such as inside the protected area or radiation control areas, that will be disposed of offsite. Any contaminated dirt will be handled in accordance with plant procedures. Salem and Hope Creek Generating Stations have a radiation survey program and procedures to handle any contaminated excavated soil that is inside the protected area or radiation control areas.

5. What is the expected change in occupational dose as a result of the proposed exemption under normal and design basis accident conditions?

PSEG Nuclear Response

Under normal power operation there would be no expected radiological impact on either the workforce or the public. There are no other expected changes in normal occupational operating doses. Control room dose is not impacted by the proposed security changes and would not impact occupational dose.

6. What is the expected change in the public dose as a result of the proposed change under normal and DBA accident conditions?

PSEG Nuclear Response

Dose to the public will not be changed by the proposed security changes during normal operations. As noted in items 2, 3 and 4 above there is no basis to contemplate an increased source of liquid, gaseous or solid radiological effluents

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that could contribute to increased public exposure during normal operations and DBA conditions. The proposed security changes do not impact systems used during normal operation or systems used to detect or mitigate a DBA.

7. What is the impact to land disturbance for the proposed security changes?

PSEG Nuclear Response

Proposed security changes include the addition of new camera towers and new aggregate material (crushed stone) in the location of current stone material. A new section of Protected Area will also be added. Land disturbance is considered when performing environmental impact evaluations. Additional environmental impact evaluations will be completed as required.

New Jersey has special coastal wetlands requirements that are applicable to the work that will be conducted at Hope Creek. The New Jersey Coastal Area Facility Review Act requires special permits (CAFRA Permits) to be issued prior to disturbing any wetlands and other areas adjacent to tidal waterways. The CAFRA also regulates any new structures. Requests for CAFRA Permits are reviewed and, upon approval, are issued by the New Jersey Department of Environmental Protection. In addition to CAFRA Permits, PSEG is required to secure Soil Erosion and Sediment Control permits, waterfront development permits, freshwater wetlands permits and coastal wetlands permits.

The Security Project will replace multiple sections of existing buried drainage lines of varying sizes. The conduct of this work evolution requires inserting well points and other equipment to de-water the work areas and to manage the effluent of the de-watering process.

The Project will be constructing a completely new material receiving platform and environmental structure outside of the Protected Area to serve as the interface point for commercial trucking deliveries.

Additions to the existing Security Center required to comply with the new Security Rule will likely require the installation of new footings and foundations.

Additional camera towers, microwave towers, and at least one Bullet Resistant Enclosure will be added that will also require excavations and permits.

CAFRA and coastal wetlands permitting activities routinely take 90 to 180 days for processing by the State of New Jersey.

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Conclusion:

The engineering of a design must be completed, including PE-Sealed Drawings and Calculations, prior to submitting a request for the various Permits from the State of New Jersey.

Engineering will not complete on some of these elements until well into the 1st Quarter of 2010.

Plant Procedures and Policies will not allow construction activities to begin prior to receiving the requisite Permits from the State of New Jersey.

There is no significant radiological environmental impact associated with the proposed security change at Salem and Hope Creek Generating Stations. These proposed changes will not affect non-radiological plant effluents.