

November 5, 2004

MEMORANDUM TO: Daniel S. Collins, Acting Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

FROM: G. Edward Miller, Project Engineer /RA/  
Project Directorate I, Section 2  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

SUBJECT: SALEM NUCLEAR GENERATING STATION UNIT NOS. 1 AND 2,  
RECEIPT OF DRAFT RESPONSES (TAC NOS. MC3857 AND MC3858)

By letter dated July 23, 2004, PSEG Nuclear, LLC (PSEG), requested Nuclear Regulatory Commission approval of changes to the Technical Specification (TS) definition of OPERABILITY and required actions for shutdown power TSs. On October 28, 2004, a draft request for additional information (RAI) was transmitted to PSEG by facsimile. The draft RAI is available in the Agencywide Document Access and Management System under accession number ML043080264. On November 4, 2004, the NRC staff received, via e-mail, the enclosed draft response from PSEG. The enclosed draft response does not constitute an official PSEG response to NRC staff questions.

Docket Nos. 50-272 and 50-311

Enclosure: Draft Response

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DRAFT REQUEST FOR ADDITIONAL INFORMATION  
REGARDING PROPOSED AMENDMENT REQUEST  
TO MODIFY TECHNICAL SPECIFICATION DEFINITION OF OPERABLE  
SALEM GENERATING STATION, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-272 AND 50-311

By letter dated July 23, 2004, PSEG Nuclear, LLC (PSEG) submitted a request for changes to the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), Technical Specifications (TSs). The proposed changes would modify the TS definition of operable, with respect to available power sources. Additionally, the proposed change would modify the TS action statements for shutdown AC and DC electrical power requirements. The NRC has developed the following draft questions during its review of the application. The questions do not convey or represent an NRC staff position regarding the request.

1. In support of the change to the definition of OPERABLE, you state that the proposed change improves clarity, removes any potential confusion, and is consistent with the Improved Standard Technical Specifications (ITS). Additionally, you state that the intent of your current TS 3.8.1.1 is to allow operation to be governed by the time limits of the Limiting Condition for Operation of the normal or emergency power source, rather than the corresponding action statement for each affected system or component (which would be allowed by the proposed change to the definition of OPERABLE). The proposed change to the definition of OPERABLE will affect all Technical Specifications, not just TS 3.8.1.1. Although an it is not necessary to address the effect on each TS individually, the global effect this change would cause does need to be addressed.

**PSEG Response:**

**Salem TS were revised by License Amendments 253 (Unit 1) and 234 (Unit 2) expressly to allow operation, during Mode 1 – 4, to be governed by the time limits of the Limiting Condition for Operation (LCO) of the normal or emergency power source (LCO 3.8.1.1), rather than the corresponding action statements for each affected system or component. The definition of OPERABLE was not changed at that time because it would have impacted the application of the definition of OPERABLE during Modes 5 & 6, which was beyond the scope of License Change Request S01-02. However, by not changing the definition of OPERABLE at that time created an administrative inconsistency between the definition of OPERABLE and LCO 3.8.1.1. Changing the definition of OPERABLE under LCR S04-06 has no impact of the application of specific LCOs during Modes 1- 4 since it is clear from LCO 3.8.1.1 that the individual LCOs for supported systems need be entered only if a redundant feature is inoperable. Based on this, there is no “global effect” caused by this request since it was addressed previously.**

2. Your submittal states that the LCOs for AC and DC sources and Distribution during Modes 5 and 6 and during movement of irradiated fuel assemblies are modified to be consistent with the intent of the ITS. The proposed required actions for LCO 3.8.1.2, Electrical Power - Shutdown, would state “With less that the above minimum

ENCLOSURE

required A.C. electrical power sources OPERABLE, immediately declare the affected required features inoperable, or suspend all operations involving CORE ALTERATIONS or positive reactivity changes until the minimum required A.C. electrical power sources are restored to OPERABLE status.”

The ITS include an additional requirement of suspending the movement of irradiated fuel. Explain why this requirement has not been included in the action statement for 3.8.1.2.

**PSEG Response:**

**ITS include an additional requirement of suspending the movement of irradiated fuel as an option for a loss of an offsite circuit. The requirement of suspending the movement of irradiated fuel is not optional when the one required DG is inoperable. ITS only require one DG and one offsite circuit whereas Salem TS require one offsite circuit and two DGs. The proposed TS did not specify to suspend the movement of irradiated fuel because it would only be required if both DGs were inoperable, and in that case all required features would be affected and declared inoperable. However, we agree that to be clear, TS should require suspending the movement of irradiated fuel, operations involving positive reactivity additions, and immediately initiate action to restore one required DG to OPERABLE status. These actions are added to the TS in the attached revised proposed changed pages. These revised pages should replace the corresponding pages in our July 23, 2004 License Change Request LCR S04-06.**

3. Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.91(a) you provided your analysis of the issue of no significant hazards consideration using the standards in 10 CFR 50.92.

In support of your negative response to Question 1, you stated that the proposed changes would not modify the manner in which the plant is operated. The NRC staff believes that with less power systems required to be operable per the TSs, the manner in which the plant is operated will indeed be changed. Either provide a revised justification for this response, or explain how the proposed change will not modify the manner in which the plant is operated.

**PSEG Response:**

**The proposed changes would not modify the manner in which the plant is operated since the required features will have both normal and emergency power. There is no intent to have any less required features available without backup power than the current specifications allow. The proposed specifications would only provide flexibility to continue refueling or resume refueling when no required features are affected by a power system availability.**

ELECTRICAL POWER SYSTEMS

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system (vital bus system), and
- b. Two separate and independent diesel generators with:
  - 1. Separate day tanks containing a minimum volume of 130 gallons of fuel, and
  - 2. A common fuel storage system containing a minimum volume of 23,000 gallons of fuel, and
  - 3. A fuel transfer pump.

APPLICABILITY: MODES 5 and 6.

ACTION:

- a. With one of the above minimum required A.C. electrical power sources not OPERABLE, immediately declare the affected required features inoperable, or suspend all operations involving CORE ALTERATIONS or positive reactivity changes until the minimum required A.C. electrical power sources are restored to OPERABLE status.

b. With two of the required diesel generators not OPERABLE, suspend all operations involving CORE ALTERATIONS and all operations involving positive reactivity additions, and immediately initiate action to restore one required DG to OPERABLE status.

SURVEILLANCE REQUIREMENTS

-----NOTE-----  
 The following surveillances are not required to be performed to maintain operability during Modes 5 and 6. These surveillances are: 4.8.1.1.1.b, 4.8.1.1.2.d.2, 4.8.1.1.2.d.3, 4.8.1.1.2.d.4, 4.8.1.1.2.d.6, 4.8.1.1.2.d.9, 4.8.1.1.2.e, 4.8.1.1.2.f, and 4.8.1.1.2.g.  
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4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the Surveillance Requirements of 4.8.1.1.1, 4.8.1.1.2, 4.8.1.1.3 (except for requirement 4.8.1.1.3.a.2) and 4.8.1.1.4.

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