

Attachment 2

**SALEM GENERATING STATION UNIT 2  
FACILITY OPERATING LICENSE NO. DPR-75  
DOCKET NOS. 50-311  
CHANGE TO TECHNICAL SPECIFICATIONS (TS)  
DEFERRAL OF SURVEILLANCE REQUIREMENTS**

10CFR50.92 NO SIGNIFICANT HAZARDS EVALUATION

Public Service Electric & Gas (PSE&G) has concluded that the proposed amendment to the Salem Generating Station Unit 2 TS does not involve a significant hazard. In support of this determination, an evaluation of each of the three standards set forth in 10CFR50.92 is provided below.

**REQUESTED CHANGE**

This amendment modifies Technical Specification surveillance requirements 4.3.2.1.3 (Instrumentation, Engineered Safety Feature Actuation System Instrumentation); 4.8.2.3.2.f, (Electrical Power Systems, 125V D.C. Distribution); and 4.8.2.5.2.c.2 and 4.8.2.5.2.d (Electrical Power Systems, 28 Volt D.C. Distribution) on a one-time basis, for Salem Unit 2.

The proposed amendment will modify the above referenced T.S. surveillance requirements by adding a note to allow a one-time exemption for cycle 10. The purpose of this change is to compensate for the extended duration of the Salem Unit 2 1995 – 1997 outage by deferring certain surveillance requirements to 2R10 thus avoiding the undesirable effects of an unnecessary forced outage. This is accomplished through a one-time amendment to Technical Specifications 4.3.2.1.3; 4.8.2.3.2.f; and 4.8.2.5.2.c.2 and 4.8.2.5.2.d.

For ease of review the surveillance requirements are considered in two groupings.

**BASIS**

4.3.2.1.3 (Instrumentation, Engineered Safety Feature Actuation System Instrumentation)

1. ***The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.***

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Deferral of the surveillance requirement does not involve any physical changes to the plant nor does it change the way the plant is operated. Thus the proposal does not increase the probability of an accident previously evaluated.

The SEC automatic self-test feature, the monthly functional surveillance testing and the positive surveillance testing history provide sufficient assurance of the operability of the system. These features also provide assurance that a degraded condition, if it did occur, would be detected.

Thus, it is reasonable to conclude that this proposal represents no significant increase in the consequences of an accident previously analyzed.

**2. *The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.***

Deferral of the surveillance requirement does not involve any physical changes to the plant nor does it change the way the plant is operated.

Thus, it can be concluded that deferring the surveillance requirement to the refueling outage cannot create the possibility of a different kind of accident from any accident previously evaluated.

**3. *The proposed change does not involve a significant reduction in a margin of safety.***

Deferral of the surveillance requirement does not involve any physical changes to the plant nor does it change the way the plant is operated. The self-test feature and the monthly functional testing will provide reasonable assurance that the SECs will remain operable during the few weeks of deferral to the refueling outage. Also the ability to detect a degraded condition in the SEC will not be affected during the deferral period.

Therefore, the plant's response to accident conditions during the period of deferral will not be affected.

Thus, it can be reasonably concluded that this proposal to amend the Salem Unit 2 Technical Specifications, on a one-time basis, to defer surveillance requirement 4.3.2.1.3 does not involve a significant reduction in any margin of safety.

4.8.2.3.2.f. (Electrical Power Systems, 125 Volt D.C. Distribution), and 4.8.2.5.2.c.2 and 4.8.2.5.2.d (Electrical Power Systems, 28 Volt D.C. Distribution)

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1. ***The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.***

The deferral of the battery service tests to the refueling outage does not involve any physical changes to the power plant or to the manner in which the power plant is operated. Therefore, the probability of an accident previously evaluated is not increased.

Weekly and quarterly testing and performance monitoring by the system manager along with the current condition of the batteries (past test results demonstrating above 100% capacity) provide assurance that battery condition and performance will not deteriorate during the deferral period. Other positive industry experience for similar batteries on 24 month cycles also support this assurance. Therefore, the consequences of a loss of power accident will not be increased due to the deferral of the surveillance requirements.

2. ***The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.***

The deferral of the battery service tests to the refueling outage does not involve any physical changes to the power plant or to the manner in which the power plant is operated. No new failure mechanisms will be introduced by the surveillance deferral. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. ***The proposed change does not involve a significant reduction in a margin of safety.***

The deferral of the battery service tests to the refueling outage does not involve any physical changes to the power plant or to the manner in which the power plant is operated. Continuing weekly and quarterly testing and performance monitoring along with the current condition of the batteries provides assurance that battery condition and performance will not deteriorate to an unacceptable level during the deferral period and that any degradation that may occur will be detected. Therefore, the plant's response to accident conditions during the period of deferral will not be affected.

Thus, it can be reasonably concluded that this proposal to amend the Salem Unit 2 Technical Specifications, on a one-time basis, to defer surveillance requirements 4.8.2.3.2.f and 4.8.2.5.2.d does not involve a significant reduction in any margin of safety.

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### **CONCLUSION**

It can then be concluded that the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated. Nor does it create the possibility of a new or different kind of accident from any accident previously evaluated, nor does it involve a significant reduction in a margin of safety. Thus the proposal to defer the above discussed surveillance requirements to the Tenth Refueling Outage does not create any significant hazards to safe operation.

**SALEM GENERATING STATION UNIT NO. 2  
CHANGE TO TECHNICAL SPECIFICATIONS  
DEFERRAL OF SURVEILLANCE REQUIREMENTS  
TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES**

<u>Technical Specification</u>	<u>Page</u>
4.3.2.1.3	3/4 3-14
4.8.2.3.2.f	3/4 8-11a
4.8.2.5.2.c.2	3/4 8-14
4.8.2.5.2.d.	3/4 8-14

INSTRUMENTATION

3/4 3.2 ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION  
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3.3.2.1 The Engineered Safety Feature Actuation System (ESFAS) instrumentation channels and interlocks shown in Table 3.3-3 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3-4 and with RESPONSE TIMES as shown in Table 3.3-5.

APPLICABILITY: As shown in Table 3.3-3.

ACTION:

- a. With an ESFAS instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3-4, declare the channel inoperable and apply the applicable ACTION requirement of Table 3.3-3 until the channel is restored to OPERABLE status with the trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With an ESFAS instrumentation channel inoperable, take the ACTION shown in Table 3.3-3.

SURVEILLANCE REQUIREMENTS  
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4.3.2.1.1 Each ESFAS instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations for the MODES and at frequencies shown in Table 4.3-2.

4.3.2.1.2 The logic for the interlocks shall be demonstrated OPERABLE during the automatic actuation logic test. The total interlock function shall be demonstrated OPERABLE at least once per 18 months during CHANNEL CALIBRATION testing of each channel affected by interlock operation.

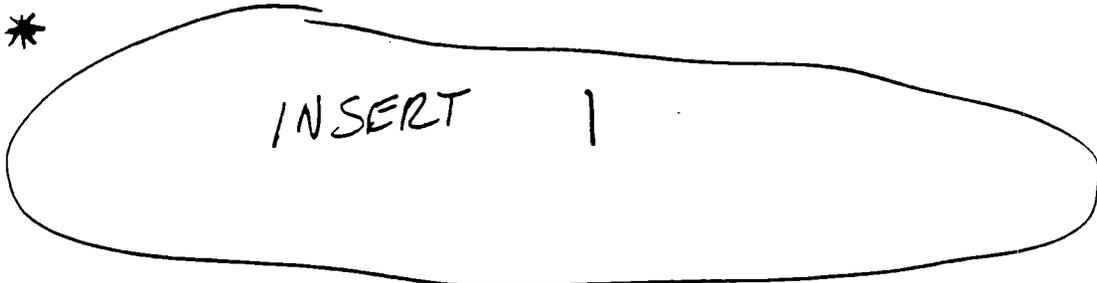
4.3.2.1.3 The ENGINEERED SAFETY FEATURES RESPONSE TIME of each ESFAS function shall be demonstrated to be within the limit at least once per 18 months. ~~Each~~ test shall include at least one logic train such that both logic trains are tested at least once per 36 months and one channel per function such that all channels are tested at least once per N times 18 months where N is the total number of redundant channels in a specific ESFAS function as shown in the "Total No. of Channels" Column of Table 3.3-3. The provisions of Specification 4.0.4 are not applicable to MSIV closure time testing. The provisions of Specification 4.0.4 are not applicable to the turbine driven auxiliary feedwater pump provided the surveillance is performed within 24 hours after the secondary steam generator pressure is greater than 680 psig. \*

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ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- .....
- 3. The connection resistance is:
    - ≤ 150 micro ohms for inter-cell connections,
    - ≤ 350 micro ohms for inter-rack connections,
    - ≤ 350 micro ohms for inter-tier connections,
    - ≤ 70 micro ohms for field cable terminal connections, and
    - ≤ 2500 micro ohms for the total battery connection resistance which includes all inter-cell connections (including bus bars), all inter-rack connections (including cable resistance), all inter-tier connections (including cable resistance), and all field terminal connections at the battery.
  
  - e. At least once per 18 months by verifying that the battery charger will supply at least 200 amperes at 125 volts for at least 4 hours.
  
  - f. At least once per 18 months, during shutdown, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual or simulated emergency loads for the design duty cycle when the battery is subjected to a battery service test. \*
  
  - g. At least once per 60 months, during shutdown, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. Satisfactory completion of this performance discharge test shall also satisfy the requirements of Specification 4.8.2.3.2.f if the performance discharge test is conducted during a shutdown where that test and the battery service test would both be required.
  
  - h. At least once per 12 months, during shutdown, if the battery shows signs of degradation OR has reached 85% of the service life with a capacity less than 100% of manufacturer's rating, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. Degradation is indicated when the battery capacity drops more than 10% of rated capacity from its capacity on the previous performance test, or is below 90% of the manufacturer's rating.
  
  - i. At least once per 24 months, during shutdown, if the battery has reached 85% of the service life with capacity greater than or equal to 100% of manufacturer's rating, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test.

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ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. The pilot cell specific gravity, corrected to 77°F, and full electrolyte level, is greater than or equal to 1.200.
  3. The pilot cell voltage is greater than or equal to 2.08 volts.
  4. The overall battery voltage is greater than or equal to 27 volts.
- b. At least once per 92 days by verifying that:
1. The voltage of each connected cell is greater than or equal to 2.13 volts under float charge and has not decreased more than 0.27 volts from the value observed during the original acceptance test.
  2. The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is greater than or equal to 1.200 has not decreased more than 0.02 from the value observed during the previous test.
  3. The electrolyte level of each connected cell is between the minimum and maximum level indication marks.
- c. At least once per 18 months by verifying that:
1. The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration.
  2. The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material. \*
  3. The battery charger will supply at least 150 amperes at 28 volts for at least 4 hours.
- d. At least once per 18 months, during shutdown, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual or simulated emergency loads for the design duty cycle when the battery is subjected to a battery service test. \*
- e. At least once per 60 months, during shutdown, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. Satisfactory completion of this performance discharge test shall also satisfy the requirements of Specification 4.8.2.5.2.d if the performance discharge test is conducted during a shutdown where that test and the battery service test would both be required.

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Document Control Desk  
Attachment 3

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\* A one time exemption to this surveillance requirement is granted during fuel cycle ten allowing Unit 2 operation to continue to the tenth refueling outage (2R10). The surveillance is to be completed at the appropriate time during the 2R10 outage, prior to the unit returning to Mode 4 upon outage completion.