

ELECTRICAL POWER SYSTEMS

EXISTING SALEM UNIT 1 TECH.  
SPEC. PAGE WITH MARKED-UP  
CHANGE

SURVEILLANCE REQUIREMENTS (Continued)

2. The pilot cell specific gravity, corrected to 77°F, and full electrolyte level, is  $\geq 1.200$ .
  3. The pilot cell voltage is  $\geq 2.08$  volts.
  4. The overall battery voltage is  $\geq 27$  volts.
- b. At least once per 92 days by verifying that:
1. The voltage of each connected cell is  $\geq 2.13$  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  $\geq 1.200$  and 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 emergency loads for 8 hours 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. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

REPLACE WITH

SALEM - UNIT 1

3/4 8-12

AMENDMENT NO. 28

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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ELECTRICAL POWER SYSTEMS

EXISTING SALEM UNIT 2 TECH.  
SPEC. PAGE WITH MARKED-UP  
CHANGE

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.
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- 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. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service 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.

REPLACE WITH

REVISED PAGES - UNIT NO. 1

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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REVISED PAGES - UNIT NO. 2

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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Description of Change

Revise Surveillance Requirement 4.8.2.5.2.e for both Salem Unit 1 and Salem Unit 2 as indicated in the attached pages. This change will remove the requirement for performing two separate tests of the 28-volt batteries during certain plant shutdowns and allow the satisfactory performance of the more stringent of the two tests to satisfy the surveillance requirements for both the 18 month and the 60 month tests on those occasions when the 60 month test is performed.

Reason for Change

Performance of the Battery Service Test during those outages in which the 60 month Battery Capacity Discharge Test is also performed adds up to an extra week to the outage schedule. On an 18 month cycle, the battery service tests are completed on each of the batteries. At approximately every third outage, however, the Service Test is accomplished, the battery is recharged, and the battery is subjected to the full capacity Discharge Test, which is far more demanding on the battery than the Service Test.

Significant Hazards Consideration

The proposed change does not involve a significant hazards consideration because operation of Salem Generating Station Units 1 and 2 would not:

- (1) involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed change in testing will not significantly impact the operability of the batteries. The performance of the battery discharge test will adequately determine whether the battery operates within acceptable limits relative to its original design capacity as well as the original requirements for the battery design. As such, a separate service test is not necessary at the interval when the discharge test is performed.
- (2) create the possibility of a new or different kind of accident from any accident previously evaluated. The change in testing in no way affects the operability of the batteries or their ability to function in an accident situation. There is no significant increase in the amounts, and no significant change in the types of effluents that may be released offsite as a result of the proposed change. Also, the proposed change involves no significant increase in individual or cumulative occupational radiation exposure.

- (3) involve a significant reduction in a margin of safety.

The purpose of the battery service test is to demonstrate the ability of the battery to satisfy the design requirement (battery duty cycle) of the DC system, that is, the ability to support the equipment important to safety for a specific time period. The battery is sized during the plant design stages to have the capacity to perform this function. The purpose of the capacity discharge test is to show that the battery remains within an acceptable percentage of its original design capacity, which was initially demonstrated in the battery acceptance test.

Since the battery capacity discharge test demonstrates that the battery is still within acceptable limits relative to its original design, this test also demonstrates, unless a significant change to the DC system has been made during subsequent plant operation (such a change would have been evaluated pursuant to 10CFR50.59), that the battery can also satisfy the original design duty cycle. Thus, the capacity discharge test satisfies the intent of the service test and renders performance of the service test unnecessary when performance of the discharge test is required.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48FR14870) of amendments that are not likely to involve a significant hazard. Since the proposed change is consistent with existing Standard Technical Specification provisions, it is representative of a minor change to facility operation, clearly in keeping with NRC regulatory recommendations.

Also, it should be noted that an identical license change was proposed and an amendment granted by the Commission for Salem Unit 1 (Amendment No. 70) and Salem Unit 2 (Amendment No. 45) on January 26, 1986 for the 125-volt DC distribution system (Technical Specification 3/4.8.2.3).

Based on these considerations, Public Service Electric and Gas Company (PSE&G) has determined that this change does not involve a significant hazards consideration. PSE&G feels that this license change request should be categorized as a Category 2 amendment proposal, i.e. one which should not require a detailed technical review since evidence of the NRC acceptance of the proposed wording is provided in the existing Westinghouse Standard Technical Specifications.

ELECTRICAL POWER SYSTEMS

EXISTING SALEM UNIT 1 TECH.  
SPEC. PAGE WITH MARKED-UP  
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SURVEILLANCE REQUIREMENTS (Continued)

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  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 emergency loads for 8 hours 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. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

REPLACE WITH

SALEM - UNIT 1

3/4 8-12

AMENDMENT NO. 28

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ELECTRICAL POWER SYSTEMS

EXISTING SALEM UNIT 2 TECH.  
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## ELECTRICAL POWER SYSTEMS

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REVISED PAGES - UNIT NO. 2

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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