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Company

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LR-N990149

LCR S98-04 Supplement

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**SUPPLEMENT TO REQUEST FOR LICENSE AMENDMENT
DEFERRAL OF SURVEILLANCE REQUIREMENTS
SALEM GENERATING STATION UNIT 1
FACILITY OPERATING LICENSE NOS. DPR-70 DOCKET NO. 50-272**

REFERENCE: PSE&G LETTER LR-N990005, JANUARY 15, 1999
REQUEST FOR LICENSE AMENDMENT
DEFERRAL OF SURVEILLANCE REQUIREMENTS
SALEM GENERATING STATION UNIT 1
FACILITY OPERATING LICENSE NOS. DPR-70
DOCKET NO. 50-272

Gentlemen:

Public Service Electric and Gas Company (PSE&G) hereby supplements our request for revision to the Technical Specifications (TS) for Salem Generating Station Unit 1 (PSE&G letter LR-N990005, dated January 15, 1999) . As required by 10CFR50.91(b)(1), a copy of this supplemental submittal has been sent to the State of New Jersey.

The Reference request for amendment proposed one-time change to certain Unit 1 Technical Specification surveillance requirements for fuel cycle 13. The proposed changes will allow Unit 1 operation to continue to the thirteenth refueling outage (1R13), currently scheduled to begin on September 18, 1999.

Additionally the Reference noted that should a maintenance outage of sufficient duration occur, performance of certain of the surveillance tests that satisfy surveillance requirements for which relief was being requested, would be considered. Salem Unit 1 was shutdown for a short outage from February 28, 1999 to March 4, 1999.

A surveillance test, which partially satisfied several surveillance requirements for which relief was being requested, was performed during the February 28 to March 4, 1999

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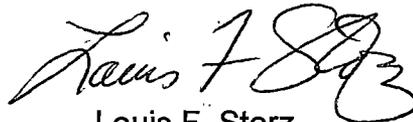
outage. The surveillance test, calibration of Pressurizer Level Channel I (Level Instrument 1LT459) was performed on March 2, 1999. The associated surveillance requirements Technical Specification 4.3.1.1.1, Table 4.3-1, item 11, Pressurizer Water Level – High; Technical Specification 4.3.3.5, Table 4.3-6, item 2, Pressurizer Level; and Technical Specification 4.3.3.7 Table 4.3-11 item 4, Pressurizer Water Level all require a once per 18 months channel calibration. These surveillance requirements are satisfied by calibration of Pressurizer Level Channel I, II and III sensors (Level Instruments 1LT459, 1LT460 and 1LT461). Calibration of Channels I, II and III satisfies 4.3.1.1.1, Table 4.3-1, item 11 and 4.3.3.7 Table 4.3-11 item 4. Calibration of Channels I and II satisfy 4.3.3.5; Table 4.3-6, item 2.

As was pointed out in the Reference, calibration of 1LT460 (Channel II) was last performed in July of 1998 and will not be overdue prior to 1R13. Additionally, as committed to in the Reference, 1LT461(Channel III) was calibrated on February 23, 1999. Therefore, relief is no longer required for the above noted surveillance requirements.

The Attachments to the Reference have been revised to reflect the fact that relief for calibration of the Pressurizer Level Channel is no longer required (i.e. all reference to this relief, including that on the marked up Technical Specifications pages, has been deleted). The revised Attachments have been included with this supplement for your reference.

Should you have any questions regarding this supplement, we will be pleased to discuss them with you.

Sincerely,



Louis F. Storz
Senior Vice President -
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Affidavit
Attachments (3)



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**SALEM GENERATING STATION UNIT 1
FACILITY OPERATING LICENSE NO. DPR-70
DOCKET NO. 50-272
SUPPLEMENT TO
CHANGE TO TECHNICAL SPECIFICATIONS (TS)
DEFERRAL OF SURVEILLANCE REQUIREMENTS**

BASIS FOR REQUESTED CHANGE

BACKGROUND

Salem Unit 1 was removed from service in May of 1995. On June 9, 1995, the Nuclear Regulatory Commission (NRC) issued a Confirmatory Action Letter. Subsequently, PSE&G conducted a comprehensive review of our operational readiness. This review led to the development of the Salem Restart Plan (SRP). The SRP consisted of a comprehensive and systematic approach for the identification, review, approval, assessment and affirmation of the activities needed to support the restart and reliable operation of the Salem Units. Completion of the SRP and resolution of other emergent issues resulted in the outage lasting for almost three years. Permission to restart Unit 1 was given by the NRC on April 1, 1998, and Mode 2 was first achieved on April 7, 1998.

Required surveillances were performed during the extended shutdown, however, because of the length of the outage and delays in the restart, some surveillance requirements will be overdue prior to reaching the next refuel outage (1R13) currently planned to start on 9/18/99. Should a maintenance outage of sufficient duration occur, many of the surveillances for which relief is being requested, will be performed. An outage will be of sufficient duration if the surveillance testing can be performed during the outage without impacting the length of the outage.

The surveillance requirements discussed in this request are proposed for deferral because there is reasonable justification for their deferral. Continued operation during Unit 1 fuel cycle 13 is reasonable, prudent, and consistent with protection of public health and safety.

REQUESTED CHANGE AND PURPOSE

This amendment modifies Technical Specification surveillance requirements 4.8.3.1.a.1.a, 4.8.3.1.a.1.b (Electric Power Systems, Electrical Equipment Protective Devices); 4.1.2.2.c (Reactivity Control Systems, Flow Paths-Operating); 4.3.2.1.1, Table 4.3-2 (Engineered Safety Feature Actuation System Instrumentation-Surveillances

Requirements); 4.5.1.d (Emergency Core Cooling Systems, Accumulators); 4.5.2.e.1 (Emergency Core Cooling Systems, ECCS Subsystems-Tave ≥ 350 °F); 4.7.6.1.d.2 (Plant Systems, Control Room Emergency Air Conditioning System); 4.7.10.b (Plant Systems, Chilled Water System- Auxiliary Building Subsystem); 4.3.3.7, Table 4.3-11(Surveillance Requirements for Accident Monitoring Instrumentation); 4.8.1.1.2.d.7 (Electric Power Systems, AC Sources); 4.3.2.1.3 (Instrumentation, Engineered Safety Feature Actuation System Instrumentation-Surveillance Requirements); 4.8.2.3.2.f, (Electrical Power Systems, 125Volt D.C. Distribution-Operating); and 4.8.2.5.2.c.2, 4.8.2.5.2.d (Electrical Power Systems, 28 Volt D.C. Distribution-Operating) on a one-time basis, for Salem Unit 1.

The proposed amendment will modify the above referenced T.S. surveillance requirements by adding notes to allow a one-time deferral for cycle 13. The purpose of this change is to compensate for the extended duration of the Salem Unit 1 1995 – 1998 outage by deferring certain surveillance requirements to 1R13 thus avoiding the undesirable effects of an unnecessary forced outage. This is accomplished through a one-time amendment to the Technical Specifications noted above.

In addition to the above changes, several administrative and editorial changes previously requested in LCR S97-08 (PSE&G letter LR-N970150, dated November 14, 1997) are being included in this request. These changes are contained on pages that will be affected by certain of the surveillance deferral requested changes. The pages affected are 3/4 3-11, 3/4 3-57, 3/4 3-57a and 3/4 7-34. The changes proposed are:

- a. Revise specification 3/4.7.10 to capitalize the defined terms in accordance with TS 1.0. (Page 3/4 7-34)
- b. Revise Unit 1 TS Table 4.3-11 Item 10 (Auxiliary Feedwater Flow Rate) channel check frequency from "SU#" to "S/U#". (Page 3/4 3-57)
- c. Revise Unit 1 TS Table 4.3-11 Item 15 (Containment Pressure - Narrow Range) channel calibration requirement from "NA" to "R". (Page 3/4 3-57a)
- d. Change Unit 1 TS Table 4.3-11 surveillance frequencies that are marked "N/A" or "NA" to the TS defined term of "N.A.". (Page 3/4 3-57 and 57a)
- e. Revise Unit 1 TS Table 4.3-1, third column heading from "CALIBRATION" to "CHANNEL CALIBRATION". (Page 3/4 3-11)

JUSTIFICATION FOR REQUESTED CHANGES

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

4.3.2.1.3 (Instrumentation, Engineered Safety Feature Actuation System Instrumentation)

This surveillance requirement is partially satisfied by performing relay time response and sequence testing of the safeguard equipment control (SEC) system. The other surveillance testing which is performed to satisfy 4.3.2.1.3 will not be overdue until after the start of 1R13.

Unit 1 has three SEC trains. The relay time response and sequence surveillance testing of one of the SECs (1B SEC) will be overdue just prior to the start of 1R13. The other two surveillance tests are not overdue until after the start of the outage. The surveillance testing will be overdue on the following dates: 1A SEC – 9/19/99; 1B - 9/6/99; and 1C – 9/23/99. The Technical Specification surveillance requirement frequency is once per 18 months. This request asks that the requirement be deferred to the outage (1R13) to be performed during the appropriate window during that outage.

The Salem Unit 1 SEC system is special custom-made safeguard equipment, which includes a control electronic unit (ceu). The function of the ceu is to respond to a safety injection (SI), blackout and voltage degradation or combination of all above signals. The SEC cabinet accepts and combines accident and undervoltage input signals to select the proper mode of operation. Based on these inputs the SEC provides the appropriate outputs for equipment loading. The system has a self-test feature, which continually tests each sequencing circuit and the continuity of the output relay coils. The entire self-test process takes less than five minutes to be completed. Upon completion, the process is started all over again. This self-testing process will continue as long as no problem has occurred in the affected SEC panels. If a problem is detected, the self-test will energize the local and control room alarm. When the alarm is received in the main control room, an operator will be dispatched to check the affected SEC panel. This self-test feature alerts the operators to failures that could affect the operability of the SEC.

In addition to the self-test feature, a monthly functional test is performed on each SEC as an added assurance of operability.

Surveillance test results were reviewed for both Salem units. This review confirmed that the SECs are reliable.

The SEC manufacturer was contacted to determine if deferral of the surveillance requirement is acceptable. Based on the assurance provided by the automatic self-test feature, the manufacturer agreed that it is acceptable to defer the surveillance requirement.

Performance of the 18-month surveillance testing involves personnel accessing the panels and includes the lifting of leads. These activities involve the possibility of personnel error and/or inadvertent disturbance of the equipment that could result in unplanned actuation. Consideration of net safety gain made deferral of the surveillance requirement into the refueling outage preferable over performance of the activities an extra time during a maintenance outage. The surveillance can only be performed with the unit shutdown.

Based on the above discussion, deferral of surveillance requirement 4.3.2.1.3 from 9/6/99 (the 1B SEC overdue date) to the 1R13 outage (currently scheduled to begin 9/18/99), will not impact system availability or reliability.

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)

Completion of these surveillance requirements involve performance of 18 month battery service tests. Unit 1 has three 125 Volt batteries and two 28 Volt batteries. The surveillances for these batteries become overdue as follows: 1A 125 Volt Battery – 6/4/99; 1B 125 Volt Battery – 9/4/99; 1C 125 Volt Battery – 8/21/99; 1A 28 Volt Battery – 7/22/99; and 1B 28 Volt Battery – 11/4/99. This request asks that the requirement to perform the battery service tests be deferred to the 1R13 outage to be performed during the appropriate window during that outage.

Salem 28 Volt D.C. and 125 Volt D.C. systems testing complies with the testing requirement as specified in the IEEE 450-1975. Salem 28 Volt D.C. and 125 Volt D.C. systems are/have been tested routinely on weekly, quarterly, 18 months and 60 months basis.

During the weekly test, the specific gravity, voltage and temperature of pilot cell and overall battery voltage are measured and logged. During the quarterly surveillance, the individual cell voltages and individual cell specific gravities are measured. Battery room ambient temperature acceptability and D. C. bus voltage is verified daily.

Weekly and quarterly data is monitored and trended by the system manager. Upon indication of any decline in cell voltage, specific gravity etc, appropriate action will be taken before the issue becomes critical.

As of the last performance of the 60 month battery tests the capacity factors for 28 Volt D.C. and 125 Volt D.C. batteries were all above 100%. The 18-month battery service tests for each battery were performed during the extended shutdown. Tests for two of the batteries (1A and 1C 125 Volt) were performed twice during the shutdown. A

review of the results of the last performance tests and the service tests performed during the outage confirmed that the batteries still possess adequate capacity margin to justify a delay in the 18 month battery service tests.

Decline in battery performance would occur slowly and would be detected under the weekly and or quarterly testing before the battery capacity could become critical.

Discussion with the battery manufacturer (C&D) indicates that other plants with similar C&D batteries have already completed several 24 month fuel cycles with no adverse consequences. Plant Vogtle has justified increasing the surveillance frequencies to 24 months.

During the performance of 125-Volt D.C. 18-month battery service testing the entire dc train will be tagged out resulting in the associated diesel generator being unable to start in the event of a loss of offsite power.

These considerations support deferring the service tests to the refueling outage over performance of an extra service test during a maintenance outage.

Based on the above discussion, deferral of surveillance requirements 4.8.2.3.2.f from 6/4/99 (the earliest 125 Volt D.C. 18 month battery service test overdue date), and 4.8.2.5.2.c.2 and 4.8.2.5.2.d from 7/22/99 (the 1A 28 Volt D.C. 18 month battery service test overdue date) to the 1R13 outage is prudent with the impact on battery performance and reliability being insignificant.

4.8.3.1.a.1.a, 4.8.3.1.a.1.b (Electric Power Systems, Electrical Equipment Protective Devices)

Surveillance Requirements 4.8.3.1.a.1.a and 4.8.3.1.a.1.b are partially satisfied by inspection, calibration and meggering of 1A, 1B, 1C 460VAC transformer relays and current transformers (CT's). The requirement to perform the above work becomes overdue 5/26/99, 8/4/99, and 7/8/99 for 1A, 1B and 1C transformers respectively. Unit 1 1R13 outage is currently scheduled to begin on 9/18/99.

The three most recent completed surveillance inspection work orders for each bus were reviewed. Test data sheets from these completed surveillances were reviewed. In all cases, as-found test data was within procedural acceptance criteria. No failures or equipment problems were found, no repair actions were required, and test results were satisfactory in all cases. As documented in the data sheets, as-found equipment condition was satisfactory in all cases. This demonstrates that the subject equipment

has performed well over the past several years and has demonstrated satisfactory stability and reliability.

Based on the demonstrated reliability of the subject relays as observed in the review of previous test data over a period of several years, sufficient justification exists to assure the relays will continue to perform within acceptance limits during the deferral period, and surveillance requirement deferral to 1R13 will not pose risk to safe plant operation.

The inspection, calibration and meggering of 1A, 1B, 1C 460VAC transformer relays and current transformers (CT's) are being considered for inclusion in a mid-cycle maintenance outage, should one occur.

Surveillance Requirements 4.8.3.1.a.1.a and 4.8.3.1.a.1.b are partially satisfied by inspection, calibration and meggering of 1F 4KV Bus Overload Relays. The overdue date for performance of this work is 9/1/99.

The most recently completed surveillance inspection work orders for this equipment were reviewed. In all cases reviewed, as-found test data was within procedural acceptance criteria. No failures or equipment problems were found, no repair actions were required, and test results were satisfactory. In all cases, as documented in the test data sheets, as-found condition of the equipment was satisfactory. This demonstrates that the subject relays have demonstrated satisfactory stability and reliability over the past several years. Based on the demonstrated reliability of the subject relays as reflected in test data taken over the past several years, sufficient justification exists to expect that the relays will continue to perform within acceptance limits during the deferral period. The deferral of this surveillance to 1R13 will pose no risk to safe plant operation.

4.1.2.2.c (Reactivity Control Systems, Flow Paths-Operating), 4.3.1.1.1, Table 4.3-1 (Reactor Trip System Instrumentation-Surveillance Requirements); 4.3.2.1.1, Table 4.3-2 (Engineered Safety Feature Actuation System Instrumentation-Surveillance Requirements); 4.5.1.d (Emergency Core Cooling Systems, Accumulators); 4.5.2.e.1 (Emergency Core Cooling Systems, ECCS Subsystems-Tave \geq 350 °F); 4.7.6.1.d.2 (Plant Systems, Control Room Emergency Air Conditioning System); and 4.7.10.b (Plant Systems, Chilled Water System-Auxiliary Building Subsystem)

These surveillance requirements are grouped together because all but one are satisfied by performance of the Manual Safety Injection (SI) test (S1.OP-ST.SSP-0001).

The one requirement that is partially satisfied by performance of the Manual SI is 4.7.6.1.d.2. This requirement asks for verification of proper alignment of the control room emergency air conditioning system in response to an SI signal and to a control room high radiation test signal. The Manual SI test obviously satisfies the first of the two requirements. The surveillance testing that is performed to verify proper alignment of the system in response to a control room high radiation signal (SC.OP-ST.CAV-0001) assures that the control room air conditioning circuitry and equipment, also tested during the SI test, is operable. SC.OP-ST.CAV-0001 was last performed on 07/11/98.

The Manual Safety Injection test was last performed during the extended shutdown in the second half of 1997. The test will become overdue on 9/16/99. The Manual SI can only be performed in modes 5, 6 or defueled. Therefore, the test must be deferred to 1R13 currently scheduled to start on 9/18/99, after its due date.

The automatic logic portion of the SI System, both trains "A" and "B", are tested by performance of other surveillance tests (S1.IC-ST.SSP-0008 and S1.IC-ST.SSP-0009). Each of these tests is performed every two months. The last three train A tests were performed on 11/24/98, 10/01/98 and 8/05/98; with train B tests performed on 10/29/98, 9/04/98 and 7/09/98. The Emergency Safeguards Feature (ESF) Solid State Protection System (SSPS) slave relays for both safety trains are tested by performance of two other surveillance tests (S1.OP-ST.SSP-0009 and S1.OP-ST.SSP-0010). Each of these tests is performed every two months. The last three train A tests were performed on 11/16/98, 9/21/98 and 7/31/98; with train B tests performed on 10/19/98, 8/28/98 and 7/02/98. The logic test and the ESF SSPS surveillance tests overlap. The overlap is such that the continuity of the coils of the safeguards output relays is checked in the logic test and the same coils are energized in the ESF SSPS test. The Manual SI test energizes the coils of the safeguards output relays. The Manual SI provides system verification out to the final control element (e.g. manually trips a feedpump turbine). The ESF SSPS checks the circuit out to the actuating device of the control element (e.g. checks the continuity of the feedpump trip coil). Stated simply, the logic tests and the ESF SSPS tests check every component that the Manual SI test checks except the "manual pushbutton" and the actual "movement" of the final control elements. The logic tests and the ESF SSPS tests are in full compliance with their tech spec surveillance frequencies.

A review of the last 3 performances of the manual SI test was performed. The review did not identify any performance issues. No failure of a final control element was noted. The site In-Service Test (IST) program also cycles, leak tests and stroke time tests a significant number of the valves associated with the SI test.

The "manual pushbutton" is a passive device. As such, environment and number of actuations affect degradation. The devices are located in the controlled environment of the control room. It is probable that there will be no required manual actuation of the devices during the short deferral period from 9/16/98 to 1R13.

In summary, because of the performance of overlapping actuation circuitry testing as well as component actuation testing there is assurance of equipment operability and plant safety during the short surveillance deferral interval.

4.8.1.1.2.d.7 (Electrical Power Systems, A.C. Power Sources) Diesel Generator 24 Hour Endurance Run

This surveillance requirement is satisfied by performance of 24-hour endurance runs on the emergency diesel generators. This surveillance is required to be performed with the unit shutdown.

The endurance runs on the Unit 1 diesel generators were last performed during the extended shutdown in the second half of 1997. The tests will be overdue on 7/19/99, 8/13/99 and 7/20/99 respectively for 1A, 1B and 1C diesels.

The normal frequency for these surveillance tests is 18 months. The test is called out in Regulatory Guide 1.108 to be performed once every 18 months. The purpose of the test is to demonstrate that the Emergency Diesel Generators can run at rated load for at least for 22 hours and at 10% overload for 2 hours. There are two main differences between this test and the normal monthly surveillance test. First, the duration is much longer. This tests the endurance of the engine including parameters such as pump and filter performance. Second, the test runs the engines in an overload condition. With those two exceptions, the endurance runs are identical to normal monthly surveillance runs.

The last 21, 24-hour endurance runs on the six Salem Units 1 & 2 emergency diesel generators were reviewed. There have been three test performances in which problems were reported. One problem (1C Emergency Diesel Generator) was spurious actuation of turbo boost after the load run was completed and while the engine was being unloaded. This did not affect the ability of the engine to carry rated load for the required time. Another problem (1B Emergency Diesel Generator) involved spurious vibration alarms actuated during the run. This did not affect the ability of the emergency diesel generator to complete the load run. The test was later completed satisfactorily. The final problem (1A Emergency Diesel Generator) was related to low fuel oil pressure while performing the overload portion of the test. The engine,

however, was successful in providing power to the bus during the 10% overload condition with no changes in output voltage or frequency noted.

The 2A Emergency Diesel Generator turbocharger failed during a surveillance run in February 1998. The results of the root cause investigation that was conducted, showed this failure to be an isolated incident. The turbocharger failed in its infancy. The good performance of the six turbochargers currently installed continues to provide for the reasonable assurance of the operability of the Diesels.

The emergency diesel generators at Salem are run every month as part of the normal surveillance program. During the tests, the engines are run to full load for at least one hour. Additionally, important engine and generator parameters are recorded and trended. Trends for each Unit 1 diesels were reviewed. Currently there are no trends that indicate that any of the Unit 1 emergency diesel generators would be unable to complete a 24-hour load run.

The Unit 1 emergency diesel generators have performed well during their normal surveillance testing. Based on the above discussion, the endurance runs of the Unit 1 emergency diesel generators can be safely deferred to 1R13.

Performance of 24-hour endurance runs on the emergency diesel generators is being considered for inclusion in a mid-cycle maintenance outage, should one occur.

4.3.3.7, Table 4.3-11(Surveillance Requirements for Accident Monitoring Instrumentation)

Technical Specification 4.3.3.7, Table 4.3-11, item 17, Containment Water Level – Wide Range requires a once per 18 months channel calibration. This surveillance requirement is satisfied by calibration of the containment level devices (1LT938 and 1LT939) by performance of S1.IC-CC.WD-0012 and S1.IC-CC.WD-0013 respectively. These calibrations were last performed during the second half of 1997. The calibrations will be overdue 8/18/99 and 8/28/99 for 1LT938 and 1LT939, respectively. Calibration of these devices requires removal of the screening protecting the containment sump and entry into the sump. This access results in having to declare all ECCS trains, which take suction from the sump during an accident scenario, inoperable. Therefore, these calibrations must be performed while in a unit shutdown.

A review of recent on line empirical data of containment sump level from SPDS (Safety Parameter Display System) which monitors the level devices (1LT938 and 1LT939) showed a maximum deviation from the mean of less than 0.2% compared to the

transmitter allowable value of 1.44%. The data reviewed not only reflects transmitter drift, but also by rack/computer drift. Therefore the allowable 1.44% is conservative.

Continuation of the current performance by the level devices will provide accurate level information to the refueling outage. To ensure continued acceptable performance, the levels will be monitored periodically to confirm that deviation from the mean average of the two sump transmitters remains acceptable. This periodic monitoring will begin in April of 1999.

Calibration of 1LT938 and 1LT939 is being considered for inclusion in a mid-cycle maintenance outage, should one occur.

Based on the above discussion, calibration of 1LT938 and 1LT939 can be safely deferred to 1R13.

Administrative and Editorial Changes

Revise specification 3/4.7.10 to capitalize the defined terms in accordance with TS 1.0. (Page 3/4 7-34)

The proposed change to Unit 1 TS 3/4.7.10 capitalizes the defined terms contained in this specification in accordance with definition section 1.0. This specification was added during Amendment 199 for Unit 1. The proposed pages for the addition of specification 3/4.7.10 did not capitalize each defined term in the specification due to an administrative error. This change to capitalize the defined terms is considered an editorial change to the TS.

Revise Unit 1 TS Table 4.3-11 Item 15 (Containment Pressure - Narrow Range) channel calibration requirement from "NA" to "R". (Page 3/4 3-57a)

Unit 1 TS Table 4.3-11 was revised in Amendment 79 to include the wide range containment pressure parameter. The change made under this amendment was to incorporate the TS changes outlined in Generic Letter (GL) 83-37, "NUREG-0737 Technical Specifications." GL 83-37 identified that the channel calibration frequency for containment pressure post accident monitoring instrumentation should be performed on a refueling interval. When PSE&G proposed the changes to TS Table 4.3-11, the containment pressure parameter was broken into two parts, narrow range and wide range. The containment pressure wide range channels were correctly identified to include a calibration frequency of every refueling; however, the containment pressure narrow range channels were identified that the channel calibration was "not applicable".

This error is believed to be a typographical error in the original license change request since PSE&G did not take exception to the calibration frequency requirements for containment pressure proposed in GL 83-37. Channel calibrations of the containment pressure narrow range channels have been and are currently being performed on a refueling interval although the TS Table 4.3-11 indicates the requirement to perform the channel calibration is "not applicable". Revising the channel calibration frequency requirement from "not applicable" to performance on a refueling interval is considered an administrative change to the TS.

Change Unit 1 TS Table 4.3-11 surveillance frequencies that are marked "N/A" or "NA" to the TS defined term of "N.A.". (Page 3/4 3-57 and 57a)

The proposed changes are editorial to use the correct notation for surveillance requirements that are "not applicable" as defined in TS Table 1.2. TS Table 1.2 defines the correct notation for a surveillance requirement that is "not applicable" as "N.A."

Revise Unit 1 TS Table 4.3-11 Item 10 (Auxiliary Feedwater Flow Rate) channel check frequency from "SU#" to "S/U#". (Page 3/4 3-57)

In Unit 1 TS Table 4.3-11, Item 10 pertaining to Auxiliary Feedwater Flow Rate states that the channel check is "SU" rather than "S/U". The footnote associated with this channel check states that the Auxiliary Feedwater System is used on each startup and flow rate is verified at that time. The term "S/U" is the only defined term for the frequency of startup (see TS Table 1.2). This is an editorial change to the TS.

Revise Unit 1 TS Table 4.3-1, third column heading from "CALIBRATION" to "CHANNEL CALIBRATION". (Page 3/4 3-11)

Revising Unit 1 Table 4.3-1 third column heading from "CALIBRATION" to "CHANNEL CALIBRATION" makes the title consistent with surveillance requirement 4.3.1.1.1 titles. The missing word "CHANNEL" in the title does not impact the ability to comply with the surveillance requirements. This change is considered an editorial change to the TS.

Based on the above discussions and the no significant hazards consideration determination presented in Attachment 2, PSE&G has determined that the proposed changes do not adversely affect or endanger the health or safety of the general public or involve a significant safety hazard and are therefore acceptable.

**SALEM GENERATING STATION UNIT 1
FACILITY OPERATING LICENSE NO. DPR-70
DOCKET NOS. 50-272
SUPPLEMENT TO
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 1 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 4.8.3.1.a.1.a, 4.8.3.1.a.1.b (Electric Power Systems, Electrical Equipment Protective Devices); 4.1.2.2.c (Reactivity Control Systems, Flow Paths-Operating); 4.3.2.1.1, Table 4.3-2 (Engineered Safety Feature Actuation System Instrumentation-Surveillance Requirements); 4.5.1.d (Emergency Core Cooling Systems, Accumulators); 4.5.2.e.1 (Emergency Core Cooling Systems, ECCS Subsystems-Tave \geq 350 °F); 4.7.6.1.d.2 (Plant Systems, Control Room Emergency Air Conditioning System); 4.7.10.b (Plant Systems, Chilled Water System- Auxiliary Building Subsystem); 4.3.3.7, Table 4.3-11 (Surveillance Requirements for Accident Monitoring Instrumentation); 4.8.1.2.d.7 (Electric Power Systems, AC Sources); 4.3.2.1.3 (Instrumentation, Engineered Safety Feature Actuation System Instrumentation-Surveillance Requirements); 4.8.2.3.2.f, (Electrical Power Systems, 125Volt D.C. Distribution-Operating); and 4.8.2.5.2.c.2, 4.8.2.5.2.d (Electrical Power Systems, 28 Volt D.C. Distribution-Operating) on a one-time basis, for Salem Unit 1.

The proposed amendment will modify the above referenced T.S. surveillance requirements by adding notes to allow a one-time deferral for cycle 13. The purpose of this change is to compensate for the extended duration of the Salem Unit 1 1995 – 1998 outage by deferring certain surveillance requirements to 1R13 thus avoiding the undesirable effects of an unnecessary forced outage. This is accomplished through a one-time amendment to the Technical Specifications noted above.

In addition to the above changes, several administrative and editorial changes previously requested in LCR S97-08 (PSE&G letter LR-N970150, dated November 14, 1997) are being included in this request. These changes are contained on pages that will be affected by certain of the surveillance deferral requested changes. The pages affected are 3/4 3-11, 3/4 3-57, 3/4 3-57a and 3/4 7-34. The changes proposed are:

- a. Revise specification 3/4.7.10 to capitalize the defined terms in accordance with TS 1.0. (Page 3/4 7-34)
- b. Revise Unit 1 TS Table 4.3-11 Item 10 (Auxiliary Feedwater Flow Rate) channel check frequency from "SU#" to "S/U#". (Page 3/4 3-57)
- c. Revise Unit 1 TS Table 4.3-11 Item 15 (Containment Pressure - Narrow Range) channel calibration requirement from "NA" to "R". (Page 3/4 3-57a)
- d. Change Unit 1 TS Table 4.3-11 surveillance frequencies that are marked "NA" to the TS defined term of "N.A.". (Page 3/4 3-57 and 57a)
- e. Revise Unit 1 TS Table 4.3-1, third column heading from "CALIBRATION" to "CHANNEL CALIBRATION". (Page 3/4 3-11)

For ease of review the surveillance requirements are considered in individual 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.***

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 1 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)

- 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 be acceptable 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 1 Technical Specifications, on a one-time basis, to defer surveillance requirements 4.8.2.3.2.f, and 4.8.2.5.2.c.2 and 4.8.2.5.2.d does not involve a significant reduction in any margin of safety.

4.8.3.1.a.1.a, 4.8.3.1.a.1.b (Electric Power Systems, Electrical Equipment Protective Devices)

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

The deferral of inspection, calibration and meggering of 1A, 1B, 1C 460VAC transformer relays and current transformers (CT's); and inspection, calibration and meggering of 1F 4KV Bus Overload Relays 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.

The condition of the equipment as found for the three most recent completed surveillances (i.e. no failures or equipment problems found, no repair actions required, and test results satisfactory in all cases) provides assurance that equipment condition and performance will be acceptable during the deferral period. The subject equipment has performed well over the past several years and has demonstrated satisfactory stability and reliability. The plant's response to accident conditions during the period of deferral will not be affected. Therefore, the consequences of an accident previously evaluated 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 inspection, calibration and meggering of 1A, 1B, 1C 460VAC transformer relays and current transformers (CT's); and inspection, calibration and meggering of 1F 4KV Bus Overload Relays 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 inspection, calibration and meggering of 1A, 1B, 1C 460VAC transformer relays and current transformers (CT's); and inspection, calibration and meggering of 1F 4KV Bus Overload Relays 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. The results of previous tests which demonstrate the reliable and stable operation of the equipment over recent years provides assurance that the equipment will operate as designed during the deferral period. 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 1 Technical Specifications, on a one-time basis, to defer surveillance requirements

4.8.3.1.a.1.a and 4.8.3.1.a.1.b does not involve a significant reduction in any margin of safety.

4.1.2.2.c (Reactivity Control Systems, Flow Paths-Operating), 4.3.1.1.1, Table 4.3-1 (Reactor Trip System Instrumentation-Surveillance Requirements); 4.3.2.1.1, Table 4.3-2 (Engineered Safety Feature Actuation System Instrumentation-Surveillance Requirements); 4.5.1.d (Emergency Core Cooling Systems, Accumulators); 4.5.2.e.1 (Emergency Core Cooling Systems, ECCS Subsystems-Tave \geq 350 °F); 4.7.6.1.d.2 (Plant Systems, Control Room Emergency Air Conditioning System); and 4.7.10.b (Plant Systems, Chilled Water System-Auxiliary Building Subsystem)

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

The deferral of the Manual Safety Injection (SI) surveillance test 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.

Other surveillance testing provides assurance that the equipment will be reliable during the short deferral period. This testing, in conjunction with successful previous SI test results assure that the equipment will function properly during the short deferral period. Therefore, the consequences of an accident previously evaluated 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 Manual Safety Injection (SI) surveillance test 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 Manual Safety Injection (SI) surveillance test 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. Other surveillance testing in conjunction with successful previous SI test results provides assurance that the equipment will be reliable during the short deferral period. The plant's response to accident conditions during the period of deferral will not be affected.

Thus, it can be concluded that this proposal to amend the Salem Unit 1 Technical Specifications, on a one-time basis, to defer surveillance requirements 4.1.2.2.c; 4.3.1.1.1, Table 4.3-1; 4.3.2.1.1, Table 4.3-2; 4.5.1.d; 4.5.2.e.1; 4.7.6.1.d.2; and 4.7.10.b does not involve a significant reduction in any margin of safety.

4.8.1.1.2.d.7 (Electrical Power Systems, A.C. Power Sources) Diesel Generator 24 Hour Endurance Run)

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

Deferral of performance of the diesel generator 24 hour endurance runs to 1R13 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.

Based of the favorable history for previous endurance runs for the six Salem Unit 1 & 2 emergency diesel generators, continued normal monthly surveillance testing and the trending of engine and generator parameters, diesel generator operability can be assured during the deferral period. Therefore, the consequences of an accident previously evaluated 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..

Deferral of performance of the diesel generator 24 hour endurance runs to 1R13 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.

Deferral of performance of the diesel generator 24 hour endurance runs to 1R13 does not involve any physical changes to the power plant or to the manner in which the power plant is operated. Satisfactory endurance run history, other surveillance testing and performance monitoring assures diesel generator operability during the deferral period.

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

Thus, it can be concluded that this proposal to amend the Salem Unit 1 Technical Specifications, on a one-time basis, to defer surveillance requirement 4.8.1.1.2.d.7 does not involve a significant reduction in any margin of safety.

4.3.3.7, Table 4.3-11(Surveillance Requirements for Accident Monitoring Instrumentation)

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

Deferral of calibration of the Containment Sump Level devices to 1R13 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.

Review of trends of the level channels during the current operating cycle and continued monitoring of the channels provides reasonable assurance that the channels will perform their design function during the deferral period. Therefore, the consequences of an accident previously evaluated 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..

Deferral of calibration of the Containment Sump Level devices to 1R13 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.

Deferral of calibration of the Containment Sump Level devices to 1R13 does not involve any physical changes to the power plant or to the manner in which the power plant is operated. Review of trends of the level channels during the current operating cycle and continued monitoring provides reasonable assurance that the channels will perform their design function during the deferral period. There will be no effect on the response to accident conditions during the period of deferral.

Thus, it can be concluded that this proposal to amend the Salem Unit 1 Technical Specifications, on a one-time basis, to defer surveillance requirement 4.3.3.7, Table 4.3-11, item 17 does not involve a significant reduction in any margin of safety.

Administrative and Editorial Changes

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

The proposed changes are administrative or editorial and do not involve any physical changes to the plant. The administrative changes and editorial changes do not delete any existing surveillance requirements or delete any requirements from the Limiting Condition for Operations (LCOs) or Action Statements and therefore do not reduce the actions that are currently taken to demonstrate operability of plant structures, systems, or components (SSCs). The additional surveillance requirement that is being added including the new surveillance corrects a past administrative error and should have been incorporated within the Tech Specs as part of an approved Amendment. This change will provide additional assurance that SSCs perform their intended safety functions. Surveillance testing has been and is currently being performed for the surveillance requirement that should have been incorporated and is now administratively being added to the Tech Specs. Since these changes do not modify any SSCs or reduce the current requirements for demonstrating operability of these SSCs, the proposed changes to the Tech Specs do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

The proposed changes to the Tech Specs are administrative and editorial corrections that do not affect the ability of the plant systems to meet their current Tech Spec requirements or design basis functions. There is no reduction in the current surveillance requirements required to demonstrate the operability of plant SSCs. These changes also do not involve any physical changes to plant SSCs. Therefore the

proposed changes do 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 proposed changes are administrative and editorial corrections that do not affect the ability of plant SSCs to perform their design basis accident functions. There is no reduction in the current surveillance requirements required to demonstrate the operability of plant SSCs. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

CONCLUSION

In summary, it can then be concluded that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. Nor do they create the possibility of a new or different kind of accident from any accident previously evaluated, nor do they involve a significant reduction in a margin of safety. Thus the proposal to defer the above discussed surveillance requirements to the Thirteenth Refueling Outage, and to make the administrative and editorial changes noted, does not create any significant hazards to safe operation.