



**PSEG**

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Salem Generating Station

January 4, 1990  
NLR-90006

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Gentlemen:

REQUEST FOR DISCRETIONARY ENFORCEMENT  
TECHNICAL SPECIFICATION 3.0.3 AND 3.5.2 ACTION (C)  
FACILITY OPERATING LICENSE DPR-75  
SALEM GENERATING STATION  
UNIT NO. 2  
DOCKET NO. 50-311

Public Service Electric and Gas Company (PSE&G) hereby requests discretionary enforcement from Technical Specification Action Statements 3.0.3 and 3.5.2(c) for Salem Unit 2. Specifically, we are requesting an additional 4 hours beyond the 7 hour requirement to be in Hot Standby per 3.0.3 and 3.5.2 ACTION (c).

The requested relief would provide us the opportunity to stabilize the Unit at its current power level of approximately 60% in anticipation of the issuance of a waiver of compliance for Technical Specification 4.5.2.h.2.b which would allow us to exit 3.0.3 and 3.5.2 ACTION (c).

The attached document is a draft of our emergency technical specification change request for Technical Specification 4.5.2.h.2.b which we will be submitting to NRC-NRR shortly.

Your timely assistance in this matter is requested in order to avert a plant shutdown currently planned for 4:30 PM. If you have any questions, please contact us.

Sincerely,

*L. K. Miller*  
L. K. Miller  
General Manager -  
Salem Operations

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The Energy People

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ATTACHMENT 1

EMERGENCY LICENSE AMENDMENT REQUEST  
FACILITY OPERATING LICENSE DPR-75  
SALEM GENERATING STATION - UNIT NO. 2  
DOCKET NO. 50-311

I. Description of Proposed Change

The proposed change would add a footnote to Surveillance Requirement 4.5.2.h.2.b stating that a one time waiver of the 550 gpm maximum flow requirement is in place from January 4, 1990 until ~~commencement of~~ the Unit 2 Fifth Refueling outage.

*initial entry into mode 5 during*

II. Reason for Proposed Change

*a recent review of surveillance test data obtained during*  
During ~~the investigation initiated to address recent Westinghouse concerns regarding ECCS flow inconsistencies~~, an error was found in the ECCS flow calculations for the current fuel cycle. When the error was corrected, the total pump flow rate was in excess of the value allowed by TS surveillance requirement 4.5.2.h.2.b. This has resulted in declaring both trains of ECCS inoperable and entering specification 3.0.3. This emergency license amendment is therefore required to prevent shutdown of SGS Unit 2.

*the Unit 2 fourth refueling outage,*

III. Justification for Proposed Change

Operation with existing ECCS conditions will not place the plant in an unsafe condition. PSE&G believes that there is ample technical justification for the requested relief. PSE&G has previously evaluated similar conditions at Unit 1 in LER 89-020-00 dated June 14, 1989. The conditions analyzed in the

Unit 1 LER were on the order of 15% in excess of the 550 gpm requirement. The existing conditions at Unit 2 are on the order of 1% in excess of the 550 gpm limit. As a result, of the Unit analysis bounds the existing Unit 2 conditions.

*The basis for the ECCS upper limit is pump runout protect  
At pump runout, cavitation could occur.*

Cavitation would result from the loss of insufficient suction pressure to the pump. The required <sup>NPSH</sup> ~~suction pressure~~ for the ~~maximum~~ elevated flow is ~~in excess of 23 feet~~ ~~water head~~ (23 ft. at 550 gpm). For accident conditions, the minimum possible RWST tank level reached would be at 15.24 feet, which corresponds to ~~40~~ <sup>40</sup> feet available NPSH. ~~feet water available suction pressure.~~ At this minimum RWST tank level, suction is re-aligned to the discharge of the RHR pumps during ECCS actuation. ~~The discharge pressure corresponds to 30 feet of head during recirculation.~~ The minimum suction pressure available to the Centrifugal Charging Pumps would occur just before re-alignment with the RWST at 15 feet. This is ~~25%~~ more than what is required for maximum flow at 550 gpm. The increase flow represents a <sup>1%</sup> ~~25%~~ increase in discharge rate compared with a ~~26%~~ increase in ~~suction pressure.~~

The increased flow rate would place a higher load requirement on the pump motor. Since the motors of the Unit 1 pumps were determined to be sized to accommodate the increased flow rate, a similar conclusion can be made for the Unit 2 motors since the flow increase is smaller and the Unit 2 motors are identical in design to the Unit 1 motors.

The increased horse power required to produce the increased flow would place an additional load on the emergency D/Gs. Since the increased load for the Unit 1 conditions would not exceed the allowable 2000 hour continuous load rating, a similar conclusion can be made for the Unit 2 conditions since the flow increase is smaller.

The expected increased flow to the RCS during postulated ECCS injection and recirculation phases would not impact the cooling function of the system. We therefore conclude that, with the existing conditions, the affected Unit 2 systems and components would be able to perform their intended safety functions, and temporary operation under existing conditions would not adversely affect the health and safety of the public. Furthermore, we believe that ~~enforcement discretion~~ provides a safer course of action than imposing an unnecessary transient to shut down the plant.

#### IV. Significant Hazards Consideration Evaluation

The proposed change to the SGS Technical Specifications:

1. Does not involve a significant increase in the probability ~~of~~ consequences of an accident previously evaluated.

or

a review

Based on ~~evaluation of the ECCS~~ system, the affected Unit 2 systems and components would be able to perform their intended safety functions during operation under existing conditions. We therefore believe that operating with existing ECCS conditions until the beginning of the Fifth Unit 2 Refueling Outage would not adversely affect public health and safety and would not increase the probability or consequences of a previously analyzed accident.

2. Does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change impacts a plant operating parameter associated with the ECCS system; however, since all ECCS equipment can perform its intended safety function while operating with the modified ECCS pump parameter, operation

on a temporary basis with the modified parameter will not create the possibility of a new or different kind of accident.

3. Does not involve a significant reduction in a margin of safety.

As discussed previously, all ECCS components would be able to perform their intended safety functions during operation under existing conditions. We therefore conclude that no safety margin will be significantly reduced while operating under existing ECCS conditions.

#### V. Conclusion

As discussed in Item IV above, PSE&G has concluded that the proposed change to the Technical Specification does not involve a Significant Hazards Consideration since the change (i) does not involve a significant increase in the probability or consequences of a previously analyzed accident, (ii) does not create the possibility of a new or different kind of accident, and (iii) does not involve a significant reduction in a margin of safety.