

Public Service  
Electric and Gas  
Company

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U.S. Nuclear Regulatory Commission  
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Gentlemen:

CONTROL ROOM OPERATOR USAGE DURING HUMAN FACTORS  
MODIFICATIONS TO THE CONTROL ROOMS  
SALEM GENERATING STATION UNIT NOS. 1 & 2  
DOCKET NOS. 50-272 AND 50-311

During the week of October 16, 1988, NRC Region 1 requested Public Service Electric and Gas Company (PSE&G) to submit its program for using Reactor Operators (ROs) during the duration of the Control Room redesign effort. The Attachment to this letter provides PSE&G's program for RO usage during the modification period and the basis for establishing this program.

Please contact us if you have any questions relative to this transmittal.

Sincerely,



Attachment

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Licensing Project Manager

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## ATTACHMENT

During the next three (3) refueling outages for each Salem Unit, Control Room design improvements will be implemented. These improvements are a result of a complete human factors review of the Control Room area which was performed to meet the requirements of NUREG-0737 Supplement 1. The changes involve relocating control and bezel indications, slight modifications to the indicators and improved labeling. The changes are considered minor and do not result in any changes to the Emergency Operating Procedures (EOPs), Abnormal Operating Procedures (AOPs), Integrated Operating Procedures (IOPs), system Operating Procedures (OPs), or Emergency Plan Procedures.

Salem Unit 2 is currently undergoing the first phase of the three scheduled Control Room human factors modification phases. Salem Unit 1 is scheduled to complete phase one during its eighth refueling outage. Phases two and three will involve human factor improvements on the physical layout of the overhead alarm system and modification of various sections of the Control Room back panels.

PSE&G has determined that the Control Room human factor changes are minor in nature as they are restricted to cosmetic and location changes and they do not involve functional changes to operational systems. However, Operations Management has determined that it is prudent to restrict the movement of the ROs between Unit 1 and Unit 2 Control Rooms until the next Unit 1 refueling outage. This was based on PSE&G's desire to reduce, to the absolute minimum, any possible stress or confusion which might result during plant operations.

PSE&G does not intend to rotate the ROs between the units. However, should a condition exist where a Unit 1 RO is required to stand licensed duty on Unit 2; the operator will be required to: (1) review the differences between the Unit 1 and Unit 2 Control Rooms; and (2) stand a 2-hour parallel console watch or a two hour simulator training session prior to assuming the watch. Should a Unit 2 RO be required to stand licensed duty on Unit 1; the operator will be required to: (1) review the differences between Unit 1 and Unit 2 Control Rooms; and (2) stand a 4-hour parallel console watch. Transferring to Unit 2 is less restrictive since all of the operators will be receiving quarterly requalification training on the simulator (current Unit 2 configuration).

Senior Reactor Operators (SROs) will continue to rotate between the units. These licenses require a higher level of command and control as they are responsible for directing and evaluating the overall integrated plant operations. These functions are unaffected by the changes made in phase one of the modifications.

Prior to the Unit 1 startup from the eighth refueling outage, all licensed operators will attend "refamiliarization" training which will focus on the physical and technical differences between the units. This training will be developed and conducted by our training department. After the Unit 1 startup, the ROs will resume their normal rotation between the units.