

Public Service  
Electric and Gas  
Company

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United States Nuclear Regulatory Commission  
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Gentlemen:

**RADIATION MONITORING SYSTEM UPGRADE UPDATE  
SALEM GENERATING STATION  
UNIT NOS. 1 AND 2  
DOCKET NOS. 50-272 AND 50-311**

Public Service Electric & Gas Company (PSE&G) hereby provides a status update for the upgrade of the Salem Generating Station, Unit Nos. 1 and 2, Radiation Monitoring System (RMS). During a meeting with NRC Region 1 personnel on April 18, 1991, PSE&G presented plans to upgrade the RMS. Upgrades were necessary due to spurious Engineered Safety Feature (ESF) actuations and the significant resources necessary to maintain the RMS operable.

To date, the following improvements have been implemented:

- o In 1991, new inverters were installed in Unit No. 2 to improve conditioning of the instrument power supply for the RMS. This installation improved reliability by providing a more stable and reliable power source. This change was not required on Unit No. 1 due to different RMS equipment vendors.
- o In 1991, the electronics for fifteen RMS channels (four for Unit No. 1 and eleven for Unit No. 2) were replaced. These modifications were the result of a task force study to eliminate the numerous invalid ESF actuations generated from the RMS channels.
- o In 1993, the RMS upgrade project identified and developed design change packages to eliminate eight channels (six for Unit No. 1 and two for Unit No. 2) that were not required.

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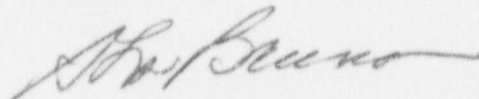
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- o From 1992 through 1994, RMS task forces were created to optimize reliability through improved maintenance focus and minor modifications. The results from the task forces have been favorable in improving reliability and establishing the most meaningful upgrade schedule.
- o Since 1993, the RMS upgrade project has issued the RMS Manuals as an engineering controlled document. Additionally, there is an ongoing effort to validate all secondary source decay tables for use within the RMS manuals.

For Salem Unit No. 1, PSE&G has developed and approved an implementation schedule for the RMS upgrade. For Salem Unit No. 2, the schedule has been developed and is in the approval cycle. A pilot project to replace the plant vent monitor is scheduled for the Salem Unit No. 1 refueling outage 1R12 (Spring 1995). The purpose of the pilot program is to evaluate the vendor's ability to supply equipment to the PSE&G specifications and to evaluate the engineering support that would be used to implement the modifications. The high priority channels were identified in the project planning documents. For Unit No. 1, these channels will be completed during the 1R13 refueling outage (Fall 1996). For Salem Unit No. 2, the high priority channels are planned for the 2R9 refueling outage (Spring 1996). Additional RMS enhancements will continue following 1R13 and 2R9, to continue to reduce corrective maintenance and further improve system reliability.

Should there be any questions with regard to this submittal, please do not hesitate to contact us.

Sincerely,



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