

Mr. Leon R. Eliason
 Chief Nuclear Officer - President-
 Nuclear Business Unit
 Public Service Electric & Gas
 Company
 Post Office Box 236
 Hancocks Bridge, NJ 08038

December 12, 1997

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY
 OPERATING LICENSE AND OPPORTUNITY FOR HEARING, SALEM NUCLEAR
 GENERATING STATION, UNIT NO. 1

Dear Mr. Eliason:

The Commission has requested the Office of the Federal Register to publish the enclosed "Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for Hearing." This notice relates to your application for amendment dated December 11, 1997, which would provide a one-time change to the Technical Specifications for the Salem Nuclear Generating Station, Unit 1 to allow purging of the containment during Modes 3 (Hot Standby) and 4 (Hot Shutdown) upon return to power from the current refueling outage.

Sincerely,

/s/

Patrick D. Milano, Senior Project Manager
 Project Directorate I-2
 Division of Reactor Projects - I/II
 Office of Nuclear Reactor Regulation

Docket No. 50-272

Enclosure: Notice

cc w/enclosure:
 See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 12, 1997

Mr. Leon R. Eliason
Chief Nuclear Officer & President-
Nuclear Business Unit
Public Service Electric & Gas
Company
Post Office Box 236
Hancocks Bridge, NJ 08038

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Sincerely,

A handwritten signature in black ink that reads "Patrick D. Milano".

Patrick D. Milano, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-272

Enclosure: Notice

cc w/enclosure:
See next page

Mr. Leon R. Eliason
Public Service Electric & Gas
Company

Salem Nuclear Generating Station,
Units 1 and 2

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UNITED STATES NUCLEAR REGULATORY COMMISSIONPUBLIC SERVICE ELECTRIC AND GAS COMPANYDOCKET NO. 50-272NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-70 issued to Public Service Electric & Gas Company (the licensee) for operation of the Salem Nuclear Generating Station, Unit 1, located in Salem County, New Jersey.

The proposed amendment would provide a one-time change to the Technical Specifications to allow purging of the containment during Modes 3 (Hot Standby) and 4 (Hot Shutdown) upon return to power from the current outage (1R13). Because of the replacement of the steam generators, a large amount of new thermal insulation was installed. Although this insulation was pre-baked to minimize off-gassing, previous Salem and other industry experience indicates that there could be significant off-gassing from the insulation during the plant heat-up resulting in an uninhabitable containment atmosphere. The ability to purge the containment during Modes 3 and 4 will provide the most safe, efficient means of removing the off-gasses from the insulation.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

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The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

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

Performance of containment purging as proposed in this license change request does not modify any primary system, secondary system, or power supply system. The purging equipment will be operated as it was designed to be operated. In summary, no accident initiator will be affected by the proposed containment purging in Modes 3 and 4. For this reason, the activity does not involve an increase in the probability of an accident previously evaluated.

A conservative engineering evaluation was performed to calculate an upper bound for the dose consequences of a postulated LOCA during Modes 3 or 4 prior to Unit 1 Cycle 13 power operation. The computations performed evaluate a postulated release of the entire core inventory. The release is modeled as a "puff" release of core activity that is transported directly to the environment via the plant vent, taking no credit for containment isolation. The release is modeled as being instantaneous. This is conservative because the highest atmospheric dispersion factors are associated with the initial release period (0 to 2 hours). Twenty-five percent of the core radioactive iodine and one hundred percent of the core noble gas inventories were assumed to be immediately available for release from the containment in accordance with Regulatory Guide 1.4. Computations were developed for whole body gamma dose, beta skin dose and thyroid dose at the Unit 1 control room air intakes, and whole body gamma dose and thyroid dose at the exclusion area boundary (EAB).

The evaluation results show that the whole body dose and the thyroid dose at the EAB are negligible compared to the 10 CFR 100 limits and that the doses are less than the corresponding doses calculated for the design basis LOCA.

The results also indicate that the thyroid dose at the control room air intakes is negligible when compared to the GDC 19 and SRP 6.4 criteria and that the calculated whole body dose is well within its limit. The computed thyroid and whole body control room doses are less than the corresponding doses calculated for the design basis LOCA.

The computations indicate that the calculated control room beta skin dose is within the 75 rem limit for protective eyewear use. In consideration of the possibility of a LOCA, however low, protective eyewear will be provided to control room personnel during the purging process.

Even though no credit is taken for containment isolation in the dose assessment, it should be noted that the valves are expected to close when requested to do so. The containment supply and exhaust valves are tested within the surveillance program to check valve stroke times. Additionally, they are designed to close in response to Containment Ventilation Isolation and Phase A Isolation signals. This response is also tested periodically. Each purge penetration is protected by two automatic isolation valves which are safety related and leak tested. Therefore, although no credit has been taken for isolation of the purge supply and exhaust penetrations, the valve closure will probably occur in the event of a design basis accident in Modes 3 or 4.

Additionally, the actual time of purging will be minimized, significantly reducing the chance that the worst case of a LOCA while purging could occur.

Plant effluent monitors provide the same monitoring capability in Modes 3 and 4 as they do in Modes 5 and 6 and the guidance necessary to assess the radiological consequences of any purge in Modes 3 and 4 is contained, and will be followed, in existing plant procedures.

For the above reasons, it is concluded that purging of the containment in Modes 3 and 4 during return from 1R13 does not involve a significant increase in either the probability or the 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.

As is noted above, no accident initiators are affected by the proposed activity. The safety function of the purge valves is containment isolation. Performance of containment purging as proposed in this license change request does not modify any primary system, secondary system, or power supply system. Purging proposed in Modes 3 and 4 will be conducted and monitored in the same manner as it is routinely carried out in the shutdown modes. Therefore no new "accident initiators" are created by this activity. One difference is considered in the dose analysis. Although it is believed that containment isolation would occur, the conservative dose analysis, which takes no credit for containment isolation, calculates the doses for a LOCA during purging, to be within regulatory guidance. For these reasons, the activity will not create the possibility of a new or different type of accident from any previously evaluated.

3. The proposed change does not involve a significant reduction in a margin of safety.

Margin of safety is associated with the confidence in the ability of the fission product barriers (the fuel and fuel cladding, the Reactor Coolant System pressure boundary, and the containment) to limit the level of radiation doses to the public. The proposed purging of the containment will occur at the end of an extended outage of over 2 1/2 years in length. The level of decay heat and activity in the reactor is very low compared to the levels associated with full power operations. For this reason, the likelihood of fuel damage following a LOCA occurring during the purging process is significantly reduced. Additionally the length of time that the purging will occur has been limited. This reduces the likelihood of the LOCA occurring during the purging process.

Conservative dose assessment performed to provide an upper bound shows that whole body and thyroid dose to the public is virtually non-existent, and whole body and thyroid dose to the control room personnel is well within regulatory guidance and lower than design basis accident analysis.

The dose computations indicate that the calculated control room beta skin dose is within the 75 rem limit for protective eyewear use. In consideration of the possibility of a LOCA, however low, protective eyewear will be provided to control room personnel during the purging process.

For these reasons, the activity does not involve a significant reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be

delivered to Room 6D22, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By January 20, 1998 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Salem Free Public Library, 112 West Broadway, Salem, New Jersey 08079. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion

which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Jeffrie J. Keenan, Esquire, Nuclear Business Unit - N21, P. O. Box 236, Hancocks Bridge, NJ 08038, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated December 11, 1997, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street,

NW., Washington, DC, and at the local public document room located at the Salem Free Public Library, 112 West Broadway, Salem, New Jersey 08079.

Dated at Rockville, Maryland, this 12th day of December 1997.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
Project Directorate 1-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation