



LR-N05-0094  
LCR H05-03  
LCR S05-02

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

**PROPOSED LICENSE TRANSFER AND CONFORMING LICENSE  
AMENDMENTS RELATING TO THE MERGER OF PUBLIC SERVICE  
ENTERPRISE GROUP AND EXELON CORPORATION  
HOPE CREEK GENERATING STATION  
DOCKET NO. 50-354  
FACILITY OPERATING LICENSE NO. NPF-57  
SALEM GENERATING STATION - UNIT 1 AND UNIT 2  
DOCKET NO. 50-272 AND 50-311  
FACILITY OPERATING LICENSE NO. DPR-70 AND DPR-75**

In accordance with Section 184 of the Atomic Energy Act, and 10 C.F.R. § 50.80, PSEG Nuclear LLC ("PSEG Nuclear") requests Nuclear Regulatory Commission ("NRC") consent to the transfer of PSEG Nuclear's interests in Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Generating Station, Units 1 and 2, respectively, and Facility Operating License No. NPF-57 for the Hope Creek Generating Station. This request is submitted by PSEG Nuclear on behalf of itself and Exelon Generation Company, LLC ("Exelon Generation") (together, "Applicants"). The Applicants specifically request that the NRC consent to the transfer of PSEG Nuclear's ownership interests and licensed operating authorities due to a proposed merger of PSEG Nuclear's parent corporation Public Service Enterprise Group ("PSEG") into the Exelon Corporation ("Exelon"). Under the merger agreement, the two companies will combine to create Exelon Electric & Gas Corporation ("EEG"), the nation's largest utility. The merger will be accomplished by converting PSEG shares into Exelon shares and is expected to result in PSEG shareholders holding about 32% of EEG. PSEG will merge into Exelon and upon completion of the merger, Exelon will change its name to EEG. EEG will then restructure its organization. PSEG Nuclear requests that the above facilities' operating licenses be transferred to Exelon Generation which will be an indirect wholly owned subsidiary of EEG. Applicants request NRC's prior written consent and issuance of conforming license amendments for Exelon

*This letter forwards proprietary information in accordance with 10CFR 2.390. The balance of this letter may be considered non-proprietary upon removal of Attachment 5A.*

*AP01*

Generation to be authorized to possess, use, and operate the units under essentially the same conditions and authorizations included in the existing licenses.

The transfer of the nuclear plants to Exelon Generation is being undertaken consistent with a publicly released December 20, 2004, announcement of the proposed merger of PSEG and Exelon. The merger has been unanimously approved by both companies' boards of directors, who have recommended that the merger be approved by the shareholders of each company. EEG will have an asset base of approximately \$79 billion with \$27 billion in annual revenues and \$3.2 billion in annual net income. With a total generation portfolio of approximately 52,000 MWe in domestic capacity, including long-term contracts, the combined company will be the nation's largest power generator and will be a leading domestic wholesale power marketer. By sharing resources and best practices, the combined company will be able to enhance operations and create efficiencies at all levels of the new company, including nuclear power plant generation.

Given Exelon Generation's strong, successful performance in running the nation's largest nuclear fleet, the companies expect to realize improved stability, higher capacity utilization rates and improved cost structure from combining nuclear operations under one management team. As previously docketed to the NRC, the companies have entered into a Nuclear Operating Services Contract ("NOSC"), which commenced on January 17, 2005. Under the NOSC, Exelon Generation has provided personnel to work full time in the PSEG Nuclear organization, including senior personnel to assist daily plant operations and to implement the Exelon Nuclear Management Model, which defines proven practices that Exelon Generation has used to manage its successful nuclear performance improvement program. This effort is currently assisting PSEG Nuclear in improving the operations of the Salem and Hope Creek facilities.

PSEG currently owns 57.41% each of Salem, Units 1 and 2, and 100% of the Hope Creek unit, and is the operator of these three nuclear plants.<sup>1</sup> Exelon Generation currently is the non-operating owner of 42.59% each of Salem, Units 1 and 2. As a result of the proposed transfers, Exelon Generation will become the owner of PSEG Nuclear's current ownership shares and will assume operational responsibility for these units. No physical changes will be made to the nuclear plants as a result of these transfers. The NOSC is in place and in

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<sup>1</sup> PSEG Nuclear is also a non-operating owner of 50% interests in Peach Bottom Atomic Power Station, Units 2 and 3. By separate application under 10 C.F.R. § 50.80, PSEG will seek NRC consent to transfer of these licensed interests to Exelon Generation.

effect there will be no significant change in the day-to-day management and operations of the plants. Current nuclear personnel and the existing organizations will continue to support the nuclear plants as more fully described in Attachment 1 of this submittal. Organization changes will occur as combined areas of expertise are integrated.

Because the proposed transfer results in a change in the name of the licensees, PSEG Nuclear also requests NRC approval of certain administrative amendments to conform the operating licenses and plant Technical Specifications to reflect the proposed transfers, which are being submitted in accordance with 10 C.F.R. § 50.90. In accordance with 10 C.F.R. § 50.91(b)(1), a copy of this submittal has been sent to the State of New Jersey. The changes are listed in Attachment 2 and Attachment 3 to this letter. Administrative changes to documents other than the existing licenses and the Technical Specifications will be necessary upon completing the transfer of the nuclear plants. Changes to documents such as the Updated Final Safety Analysis Reports, Physical Security Plans, and Emergency Plans will be achieved in a timely fashion during periodic or routine updates as required by NRC regulations, such as 10 C.F.R. § 50.71(e).

Additional information pertaining to the proposed reorganization, including the information required under 10 C.F.R. § 50.80, is included in Attachment 1. As this information demonstrates, the proposed merger and restructuring (1) will not have any adverse impact on the operation of Salem Units 1 and 2 and Hope Creek Unit 1; (2) will not negatively affect the managerial, technical, or financial qualifications of the licensed owner and operator of these plants; (3) will not affect assurance of decommissioning funding for the units; and (4) will not result in foreign ownership, control or domination of the licensee. Attachments 2 and 3 include mark-ups of the facility operating licenses and the relevant portions of the plant Technical Specifications, reflecting the conforming administrative amendments associated with the transfers.

In summary, the proposed merger and restructuring will not be inimical to the common defense and security or result in any undue risk to public health and safety, and the transfer of the NRC licenses associated with the merger will be consistent with the requirements of the Atomic Energy Act, NRC regulations, and the guidelines set forth in the relevant NRC Standard Review Plans.

There are certain regulatory approvals and filings beyond that of the NRC, which must be addressed prior to the completion of the merger and subsequent corporate restructuring and the transfer of the nuclear generating assets to Exelon Generation. These include, for example, approvals by the Federal

***This letter forwards proprietary information in accordance with 10CFR 2.390. The balance of this letter may be considered non-proprietary upon removal of Attachment 5A.***

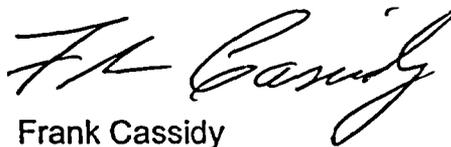
Energy Regulatory Commission ("FERC") and filings with the Securities and Exchange Commission ("SEC"). To facilitate the merger and restructuring, PSEG Nuclear respectfully requests the NRC review and complete action on this submittal within six months. Upon NRC approval of this proposed change, PSEG Nuclear requests that the amendments be made effective on the date of issuance. Consistent with past practice, we request that the approval allow for an execution of the merger, corporate restructuring and the license transfers to take place within a succeeding twelve month period. PSEG Nuclear will keep the NRC informed of any significant changes in the status of the other required approvals or other developments that could have an impact on the schedule for the merger, restructuring and license transfer.

The attached information includes a proprietary addendum Attachment 5A supporting this license transfer request that necessarily includes certain confidential business and financial information. Accordingly, PSEG Nuclear is submitting an affidavit formally requesting, pursuant to 10 C.F.R. § 2.390, that this proprietary information be withheld from public disclosure. A non-proprietary version of this attachment that is suitable for public disclosure is provided as Attachment 5.

In the event that the NRC has any questions about the proposed merger or wishes to obtain any additional information about the reorganization, please contact Christina L. Perino at (856) 339-1989.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,



Frank Cassidy  
President and Chief Operating Officer  
PSEG Nuclear

Executed on 3/4/05

Attachments (5)  
Addendum (1)  
Affidavits (2)

***This letter forwards proprietary information in accordance with 10CFR 2.390. The balance of this letter may be considered non-proprietary upon removal of Attachment 5A.***

C Mr. S. Collins, Administrator - Region I  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Mr. D. Collins, Licensing Project Manager  
U. S. Nuclear Regulatory Commission  
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Rockville, MD 20852

USNRC Senior Resident Inspectors – Salem and HC (X24)

Mr. Kent Tosch, Manager IV  
Bureau of Nuclear Engineering  
P. O. Box 415  
Trenton, NJ 08625

REF: LCR H05-03  
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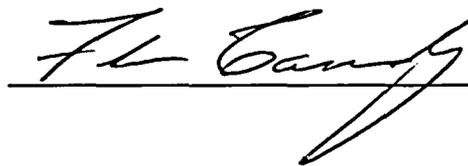
STATE OF NEW JERSEY        )  
  )  
COUNTY OF SALEM            )        SS.

Frank Cassidy, being duly sworn according to law deposes and says:

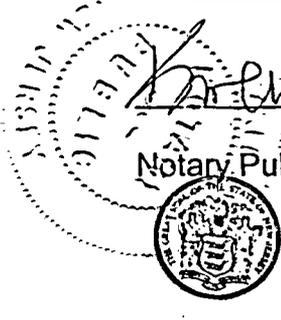
I am President and Chief Operating Officer PSEG Nuclear, and as such, I am familiar with the contents of the attachment accompanying this correspondence (LR-N05-0094), concerning the Salem Generating Station, Units 1 and 2, and the Hope Creek Station, Unit 1, and the matters set forth therein regarding PSEG Nuclear and its affiliates are true and correct to the best of my knowledge, information and belief.

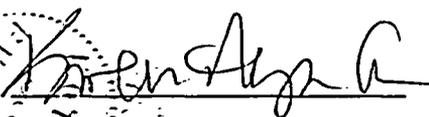
PSEG Nuclear requests that this correspondence be treated as confidential and withheld from public disclosure pursuant to 10 C.F.R. 2.390(a)(4).

Specifically, Attachment 5A contains information associated with the proposed Exelon Corporation merger and contains commercial and financial information that is privileged and confidential. Other than PSEG Nuclear's disclosure as required under 10 C.F.R. §50.80, the information therein has been held in confidence and not disclosed to the public. Internal distribution of this information has likewise been limited to essential PSEG Nuclear personnel.



Subscribed and Sworn to before me  
this 4<sup>th</sup> day of March, 2005



  
Notary Public of New Jersey  
KAREN AYALA  
NOTARY PUBLIC OF NEW JERSEY  
COMMISSION EXPIRES 11/12/09

REF: LCR H05-03  
LCR S05-02  
LR-N05-0094

STATE OF ILLINOIS            )  
  )  
COUNTY OF DUPAGE         )     SS.

Jeffrey A. Benjamin, being duly sworn according to law deposes and says:

I am Vice President, Licensing and Regulatory Affairs of Exelon Generation Company LLC, and as such, I am familiar with the contents of the attachments accompanying this correspondence (LR-N05-0094), concerning the Salem Generating Station, Units 1 and 2, and the Hope Creek Station, Unit 1, and the matters set forth therein regarding Exelon Generation Company, LLC and its affiliates are true and correct to the best of my knowledge, information and belief.

Exelon Generation Company, LLC requests that this correspondence be treated as confidential and withheld from public disclosure pursuant to 10 C.F.R. §2.390(a)(4).

Specifically, Attachment 5A contains information associated with the proposed Exelon Corporation merger and contains commercial and financial information that is privileged and confidential. Other than Exelon Generation Company's disclosure as required under 10 C.F.R. §50.80, the information therein has been held in confidence and not disclosed to the public. Internal distribution of this information has likewise been limited to essential Exelon Generation Company, LLC personnel.

*Jeffrey A Benjamin*

Subscribed and Sworn to before me  
this 3<sup>rd</sup> day of March, 2005

*Timothy A. Byam*  
Notary Public of Illinois



**PROPOSED LICENSE TRANSFER and CONFORMING LICENSE  
AMENDMENTS**

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**SALEM NUCLEAR GENERATING STATION UNITS 1 AND 2  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSES DPR-70, DPR-75 and NPF-57  
DOCKET NOS. 50-272, 50-311 and 50-354**

**ATTACHMENT 1  
EVALUATION OF REVISIONS TO THE OPERATING LICENSES AND  
TECHNICAL SPECIFICATIONS**

**RELATING TO THE MERGER OF PUBLIC SERVICE ENTERPRISE GROUP  
and EXELON CORPORATION**

## 1. Introduction

PSEG Nuclear LLC ("PSEG Nuclear") submits the following information and requests, pursuant to 10 C.F.R. § 50.80, Nuclear Regulatory Commission ("NRC") consent to the transfer of PSEG Nuclear's interests in Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Generating Station, Units 1 and 2, respectively, and Facility Operating License No. NPF-57 for the Hope Creek Generating Station (collectively referred to as the "Nuclear Plants"). This request is submitted by PSEG Nuclear on behalf of itself and Exelon Generation Company, LLC ("Exelon Generation") (together, "Applicants"). The Applicants specifically request that the NRC consent to the transfer of PSEG Nuclear's licensed authorities and responsibilities due to a proposed merger between PSEG Nuclear's parent company Public Service Enterprise Group ("PSEG") and Exelon Corporation ("Exelon"). Under the merger agreement, the two companies will combine to create Exelon Electric & Gas Corporation ("EEG"), the nation's largest utility. The merger will be accomplished by converting PSEG shares into Exelon shares and is expected to result in PSEG shareholders holding about 32% of EEG. PSEG will merge into Exelon and upon completion of the merger, Exelon will change its name to EEG. EEG will then restructure its organization, Exelon Generation will be an indirect wholly owned subsidiary of EEG and is the proposed owner and operator of the Nuclear Plants. Applicants request NRC's prior written consent and issuance of conforming amendments for Exelon Generation to be authorized to possess, use, and operate the Nuclear Plants under essentially the same conditions and authorizations included in the existing licenses.

PSEG Nuclear currently owns 57.41% of Salem Generating Station, Units 1 and 2, and 100% of the Hope Creek Generating Station Unit 1, and is the operating licensee holder for these three Nuclear Plants.<sup>2</sup> PSEG Nuclear is making this application as a result of an announced merger between PSEG and Exelon. As described more fully below, Exelon Generation will be an indirect wholly-owned subsidiary of EEG. As a result of the proposed transfers, Exelon Generation will become the owner of PSEG Nuclear's current ownership shares of the Nuclear Plants and will assume operational responsibility for these units.

No physical changes will be made to the Nuclear Plants as a result of these transfers. There will be no significant change in the day-to-day management and operations of the Nuclear Plants as Exelon Generation has been supporting plant operation at the Nuclear Plants under a previously executed Nuclear Operating Services Agreement. Nuclear personnel and the existing organizations will continue to support the plants as fully described further in Section 4, below.

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<sup>2</sup> PSEG Nuclear is also a non-operating owner of 50% interests in Peach Bottom Atomic Power Station, Units 2 and 3. By separate application under 10 C.F.R. § 50.80, PSEG Nuclear will seek NRC consent to transfer of these ownership interests to Exelon Generation.

Because the proposed merger and restructuring affects the named licensees, PSEG Nuclear also requests NRC approval of certain administrative amendments to conform the operating licenses and plant Technical Specifications to reflect the proposed transfers. Proposed changes are shown in mark-ups included as Attachments 2 and 3.

Administrative changes to documents other than the existing licenses and the Technical Specifications will be necessary upon completing the transfer of the Nuclear Plants. Changes to documents such as the Updated Final Safety Analysis Report, Physical Security Plan and Emergency Plan will be made in a timely fashion during periodic or routine licensing correspondence or updates required by NRC regulations, such as 10 C.F.R. § 50.71(e). Changes to other documents, such as procedures, drawings, and manuals will be made in accordance with periodic or routine internal processes applicable to those documents.

## 2. Statement of Purpose of Transfer and Nature of the Transaction Making the Transfer Necessary or Desirable

The transfer of the nuclear plants to Exelon Generation is being undertaken consistent with a public announcement released December 20, 2004 of the merger between Exelon and PSEG. The merger has been unanimously approved by both companies' boards of directors, who have recommended that the merger be approved by shareholders. EEG will have an asset base of approximately \$79 billion with \$27 billion in annual revenues and \$3.2 billion in annual net income. With a total generation portfolio of approximately 52,000 MWe in domestic capacity, including long-term contracts, the combined company will be the nation's largest power generator and will be a leading domestic wholesale power marketer.<sup>3</sup> By sharing resources and best practices, the combined company will be able to enhance operations and create efficiencies at all levels of the new company, including nuclear power plant generation.

Given Exelon Generation's strong, successful performance in running the nation's largest nuclear fleet, the companies expect to realize improved stability, higher capacity utilization rates and an improved cost structure from combining nuclear operations under one management team. As previously docketed to the NRC, the companies have entered into a Nuclear Operating Services Contract ("NOSC"), which commenced on January 17, 2005. Under the NOSC, Exelon Generation has provided personnel to work full time in the PSEG Nuclear organization, including senior personnel to assist daily plant operations and to implement the Exelon Nuclear Management Model, which defines proven

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<sup>3</sup> PSEG and Exelon have proposed to the Federal Energy Regulatory Commission a plan to divest by various means approximately 5500 MW of generation capacity to mitigate any market concentration issues resulting from the merger.

practices that Exelon Generation has used to manage its successful nuclear performance improvement program. This is currently assisting PSEG Nuclear in improving the operations of the Nuclear Plants.

PSEG Nuclear currently owns 57.41% each of Salem Generating Station, Units 1 and 2, and 100% of the Hope Creek Generating Station Unit 1, and is the operator of these three nuclear plants. Exelon Generation currently is the non-operating owner of 42.59% each of Salem Generating Station, Units 1 and 2. As a result of the proposed transfers, Exelon Generation will become the owner of PSEG Nuclear's current ownership shares and will assume operational responsibility for these units. No physical changes will be made to the nuclear plants as a result of these transfers. The NOSC is in place and in effect there will be no significant change in the day-to-day management and operations of the plants. Current nuclear personnel and the existing organizations will continue to support the nuclear plants. Organization changes will occur as combined areas of expertise are integrated.

The new corporate structure is illustrated in Attachment 4. The ultimate parent entity will be EEG with a wholly-owned deregulated subsidiary Exelon Ventures Company, LLC that in turn, wholly owns Exelon Generation.

As presently conceived by PSEG Nuclear and Exelon Generation, and consistent with the terms of the proposed merger, the key responsibilities, attributes, and relationships of the reorganized companies will be:

- (a) Exelon Generation will assume title to PSEG Nuclear's interests in the Nuclear Plants (including all real estate, buildings, equipment, spare parts, fixtures, inventory, documents, records, assignable contracts, other property necessary for the operation and maintenance of the plants, and all used and spent nuclear fuel and other licensed materials at the plants).
- (b) Exelon Generation will assume all responsibility for the operation and maintenance of the Nuclear Plants.<sup>4</sup>
- (c) Nuclear employees of PSEG Nuclear at the Nuclear Plants and at other locations will become employees of Exelon Generation or a wholly-owned subsidiary of Exelon Generation.
- (d) Exelon Generation will continue to have approval from the Federal Energy Regulatory Commission ("FERC") to sell wholesale power at market-based rates.

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<sup>4</sup> The transfer of the Nuclear Plants from PSEG Nuclear to Exelon Generation is conditioned upon receiving all necessary regulatory approvals, specifically including approval of this requested transfer and completing the merger.

- (e) Contracts associated with the electric generating business, including, but not limited to, wholesale electric purchase and sales agreements, fuel contracts, and other contractual rights and liabilities related to the Nuclear Plants, will be transferred by PSEG Nuclear to Exelon Generation.
- (f) Exelon Generation will become responsible for the decommissioning of the Nuclear Plants. As is discussed further below, Exelon Generation will become the owner of the Nuclear Decommissioning Trust Funds presently maintained by PSEG Nuclear.

3. General Corporate Information Regarding Exelon Generation Company, LLC

A. Name of New Licensee

The new licensee will be Exelon Generation Company, LLC.

B. Address

80 Park Plaza  
Newark, NJ 07102

C. Description of Business or Occupation

Exelon Generation is a limited liability company organized under the laws of the State of Pennsylvania. Exelon Generation is engaged principally in power generation of electricity as an EWG authorized to sell electricity at market-based rates.

D. Organization and Management

The proposed organization and management structure is more fully described in the Technical Qualifications section below.

Under Sections 103d and 104d of the Atomic Energy Act of 1954, as amended, an operating license may not be transferred to "any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation or a foreign government," or if in the opinion of the Commission, the transfer "would be inimical to the common defense and security." Following the proposed transfer, Exelon Generation will not be owned, controlled or dominated by an alien, a foreign corporation or a foreign government. The combined holding company, EEG, will be a public company with shares traded on the New York Stock Exchange. The shares are expected to be widely held – initially by the current shareholders of Exelon and Public Service Enterprise Group. In addition, neither PSEG Nuclear nor Exelon

Generation is acting as agent or representative of any other person in filing this application.

#### 4. Technical Qualifications

The technical qualifications of Exelon Generation to carry out its responsibilities as the licensed operator of the Nuclear Plants will meet or exceed the technical qualifications of the present PSEG Nuclear operating organization. The merger and proposed license transfers will bring the Nuclear Plants into the Exelon Generation nuclear operating organization. Exelon Generation currently operates the nation's largest nuclear fleet. Exelon Generation has demonstrated the ability to achieve and sustain performance improvement at its nuclear plants, and to operate its facilities reliably and safely.

##### I. Nuclear Organization

When the merger and proposed transfers become effective, Exelon Generation will assume responsibility for and control over the operation of the Nuclear Plants. Nuclear employees of PSEG Nuclear at the Nuclear Plants and at other locations will become employees of Exelon Generation or a wholly-owned subsidiary of Exelon Generation. The Nuclear Plants operating organizations will be integrated into the Exelon Generation nuclear organization, reporting to the Exelon Generation Chief Nuclear Officer (CNO). Once the merger is complete, the Exelon Generation nuclear organization will be headquartered at Kennett Square, Pennsylvania.

An organization chart illustrating the Exelon Generation nuclear organization, integrating Salem and Hope Creek, is contained in Attachment 4 to this application. The integrated Exelon Generation organization will provide:

- (1) A single CNO accountable for overall management, leadership, performance, and nuclear safety;
- (2) A Chief Operating Officer ("COO") with several Senior Vice Presidents as direct reports, with responsibilities for operations and operations support, providing a nuclear management team with a manageable span of control over nuclear units and nuclear support functions (primarily based on regional considerations);
- (3) Individual Site Vice Presidents with direct onsite responsibility and accountability for safe and reliable operation of their units;

- (4) Implementation of common high standards, best practices, effective programs and processes, and management controls; and
- (5) Effective and integrated oversight and technical support functions for the Exelon Generation nuclear stations.

The Exelon Generation nuclear organization is based upon an overriding philosophy of an engaged nuclear management team that establishes and enforces high standards and clear accountabilities. Exelon Generation specifically implements a management model that incorporates disciplined processes to assure day-to-day safety and operating rigor; performance reporting, monitoring, and metrics; and appropriate financial controls. Exelon Generation's management model emphasizes material condition assessment; function or department-specific gap analyses; templates for outage planning, preparation, and execution; human performance improvement; and issues management (including employee issues). Exelon Generation has established at its current nuclear facilities, a track record of improving and sustaining safety and operating performance.

Exelon Generation will apply its management model and also continue ongoing performance improvement initiatives at the Nuclear Plants, including initiatives in the area of safety conscious work environment and the corrective action program.

## II. Management Qualifications

The CNO of Exelon Generation will continue to be Mr. Christopher Crane. The CNO reports to Mr. John L. Skolds, Executive Vice President, Exelon and President of Exelon Generation. The CNO will be the senior corporate officer with all the necessary authority and full responsibility for the safe and reliable operation of the Exelon Generation nuclear fleet, including the Nuclear Plants. Several technical support functions, including Licensing and Regulatory Affairs and Nuclear Oversight, report directly to the CNO. The senior Vice President, Operations, with responsibility for the Nuclear Plants, will also report directly to the CNO.

The COO will continue to be Mr. Charles Pardee. The COO reports to the CNO and will have day-to-day management responsibilities for the plants and operations support. The other Senior Vice Presidents, Operations, and Senior Vice President, Operations Support, will report to the COO.

A Site Vice President is assigned for each operating nuclear site and reports to a Senior Vice President, Operations. The Site Vice President will be the senior nuclear executive on site with responsibility for overall plant nuclear safety and for compliance with the NRC operating licenses.

Chairpersons of the Nuclear Safety Review Boards for the Nuclear Plants will report directly to the CNO and will advise the CNO with respect to nuclear safety performance. The Station Operations Review Committees will advise the Plant Managers on matters of nuclear safety in plant operations.

### III. Support Functions

In integrating the Nuclear Plants into the Exelon Generation nuclear organization, Exelon Generation will also integrate the support functions for the stations. These organizations and personnel will be located and assigned with clear and unambiguous responsibilities and reporting relationships. Certain support functions (e.g., information technology) may be provided by an affiliated Exelon company.

Technical support in particular will be integrated under the Senior Vice President, Engineering and Technical Support and the Senior Vice President, Operations Support. This includes support for: engineering, fuels, project management, outages, training, security, operations, maintenance/work control, chemistry, radwaste, radiation protection, and industrial safety. These functions will not be diminished at the Nuclear Plants. The Exelon Generation integrated approach and the implementation of common programs, processes and best practices presents an opportunity for improvement at the Nuclear Plants.

PSEG Nuclear will also transfer to Exelon Generation control over the assets related to the Nuclear Plants that Exelon Generation will need to maintain and operate the units in accordance with NRC requirements. This will include, in addition to the plants and equipment, the necessary books, records, operating safety and maintenance manuals, and engineering and construction documents. Any necessary contracts with architect engineers, nuclear steam supply system vendors, and other major vendors, will also be assigned or transferred (as necessary) to Exelon Generation.

### IV. Conclusion

In total, Exelon Generation and its management team have the necessary technical qualifications to assume operational responsibility for the Nuclear Plants. The Exelon Generation nuclear management team is experienced and qualified, and the nuclear organization is well-designed to accommodate the addition of three units into its current fleet. The necessary management processes and controls will be applied, with clear lines of authority and communication. Technical support will continue to be available, and will be enhanced by the merger of PSEG Nuclear into a successful nuclear organization that can apply common programs, processes, and best practices. The nuclear onsite organizations and staff

will also be incorporated into the Exelon Generation organization. Accordingly, the proposed transfers have the potential to achieve synergies and to significantly improve performance of the Nuclear Plants.

## 5. Financial Qualifications

### A. Projected Operating Costs and Revenues

Following the proposed merger and proposed transfers, including the transfer of the Nuclear Plants held by PSEG Nuclear to Exelon Generation, Exelon Generation will continue to be financially qualified as the licensed owner and operator.

Exelon Generation will continue to own, operate, and market power from a diverse portfolio of nuclear, fossil, and hydroelectric generating units. Exelon Generation will continue to sell electricity to electric utility affiliates and market electricity at wholesale pursuant to rate tariffs approved by the Federal Energy Regulatory Commission. Exelon Generation presently meets, and will continue to meet, the financial qualifications requirement of 10 CFR 50.33, "Contents of applications; general information," paragraph (f)(2), by obtaining revenue from the sale of electricity from the nuclear plants sufficient to cover nuclear operating costs. Exelon Generation's substantial generating assets and revenue streams — including revenue streams from nuclear units and from fossil and hydroelectric units, as well as revenue from power marketing and other business operations — also provide assurance of Exelon Generation's ability to cover fixed operating costs associated with a six-month shutdown of one or more of the nuclear units.

Furthermore, based upon the financial stature of the company, Exelon Generation expects to have an investment grade bond rating, which will enable the company to raise additional funds as necessary.

The proprietary Addendum includes Attachment 5A which contains Exelon Generation and PSEG Nuclear five-year, post-merger financial projections for Exelon Generation, incorporating the combined generation capacity (nuclear and non-nuclear) to be operated by Exelon Generation. A non-proprietary version of this attachment that is suitable for public disclosure is provided as Attachment 5. The five year projections cover the first five years after the merger (beginning in 2006) and include: total revenue, total operating expenses, income before taxes, taxes, and net income. The financial information includes assumptions regarding the total generation supply and the price of electricity, as well as a projected balance sheet for Exelon Generation demonstrating the substantial assets of the combined generation business.

B. Decommissioning Funding Assurance

Under 10 C.F.R. § 50.75(b), a reactor licensee is required to provide decommissioning funding assurance by one or more of the methods described in 10 C.F.R. § 50.75(e). A funding assurance mechanism approved by the NRC is in place for Exelon Generation that meets these requirements.

For PSEG Nuclear, the amounts accumulated in the funds at the end of 2002 exceeded the amount needed to be collected by that date to be consistent with the formulas in 10 C.F.R. §50.75(c). The PSEG Nuclear fund is presently fully funded with no further collections through the state regulatory process anticipated. For the present Exelon Generation share, the amounts accumulated in the funds at the end of 2002 also exceeded the amounts needed to be collected. Exelon Generation is continuing to make collections for its existing share, and those collections are unaffected by the proposed transaction.

6. Restricted Data

This application does not contain any Restricted Data or classified National Security Information, and it is not expected that any such information will become involved in the license activities. However, in the event that such information does become involved, and in accordance with 10 C.F.R. § 50.37, "Agreement Limiting Access to Classified Information," PSEG Nuclear and Exelon Generation agree that it will appropriately safeguard such information and will not permit any individual to have access to such information until the individual has been appropriately approved for such access under the provisions of 10 C.F.R. Part 25, "Access Authorization for Licensee Personnel," and/or Part 95, "Security Facility Approval and Safeguarding of National Security Information and Restricted Data."

7. Other Nuclear Regulatory Issues

A. Continuation of Current Design and Licensing Basis

The proposed license transfer and conforming administrative amendments will authorize Exelon Generation to own, operate, and maintain the Nuclear Plants in accordance with the existing and respective operating licenses and Technical Specifications, and will subject Exelon Generation to all applicable provisions of the Atomic Energy Act and the NRC's rules, regulations and orders. The transfer and conforming administrative

amendments do not affect the physical configuration of the facility or substantively change the operating licenses (including Technical Specifications) under which the Nuclear Plants operate.

Exelon Generation will control or have access to the design and licensing basis documents to the same extent as PSEG Nuclear now does. While there will be certain administrative amendments to the Operating Licenses and corresponding Technical Specifications as indicated in Attachments 2 and 3 to this application, Exelon Generation does not seek any other changes to the current design and licensing basis for each nuclear plant.

Likewise, the proposed transfers will not change or invalidate design or operations information presently appearing in the Updated Final Safety Analysis Reports ("UFSARs") for the units. Changes to the UFSARs necessary to reflect the proposed transfers and the conforming license amendments will be incorporated into the UFSARs on a schedule that complies with 10 C.F.R. § 50.71(e), and not necessarily prior to NRC approval of this request.

**B. Price-Anderson Indemnity and Nuclear Insurance**

In accordance with 10 C.F.R. § 140.92, Article IV.2, "Financial Protection Requirements and Indemnity Agreements," PSEG Nuclear requests NRC approval of the assignment and transfer of the Price Anderson indemnity agreements for Salem, Hope Creek and Peach Bottom to Exelon Generation upon the consent to the proposed license transfer. Prior to the license transfers, Exelon Generation will obtain all required nuclear property damage insurance pursuant to 10 C.F.R. § 50.54(w) and nuclear liability insurance pursuant to 10 C.F.R. 140. Exelon Generation's Projected Income Statement and expected investment-grade rating, discussed above, provide adequate assurance that, pursuant to the requirements of 10 C.F.R. § 140.21(e) and (f), Exelon Generation would be able to pay its share of deferred premiums in the amount of \$10 million per nuclear unit.

**C. Standard Contract for Disposal of Spent Nuclear Fuel**

On or after the transfer date, Exelon Generation will assume responsibility for storage and disposal of spent nuclear fuel at the Nuclear Plants. PSEG Nuclear will assign, and Exelon Generation will assume, PSEG Nuclear's rights and obligations under the Standard Contract with the Department of Energy.

D. Off-Site Power Considerations

The physical system for supplying off-site power to the Nuclear Plants will be unchanged as a result of the transfer. The system is currently maintained and operated in accordance with the Lower Delaware Valley Transmission System Agreement of September 13, 1977, by and between Atlantic City Electric Company, Delmarva Power and Light Company, Jersey Central Power & Light Company, Philadelphia Electric Company, and PSE&G, as supplemented and amended, and in accordance with the PJM Interconnection Agreement. These agreements address, among other things, coordination of switching voltage levels and scheduling of maintenance outages, as well as additions, modifications, and normal maintenance of the transmission facilities. These agreements will remain in effect and will provide assurance of reliable sources of off-site power and continued compliance with General Design Criterion 17. Exelon Generation will assume the rights and obligations of PSEG Nuclear pursuant to these agreements.

E. Exclusion Area Control

Upon approval of the transfer, Exelon Generation will own all of PSEG Nuclear's interests in the Salem and Hope Creek exclusion area and will have authority to determine all activities within the exclusion area to the extent required by 10 C.F.R. Part 100.

F. Other Issues

1. Emergency Preparedness

Upon consummation of the transfer, Exelon Generation will assume authority and responsibility for functions necessary to fulfill the emergency planning requirements specified in 10 C.F.R. § 50.47(b) and Part 50, Appendix E. Transition plans will be established to ensure that the support described in the existing emergency plans will be maintained following the transfer.

Any changes made to the existing Salem and Hope Creek emergency plans will be made in accordance with 10 C.F.R. § 50.54(q). Because only a change in licensee is involved, no changes are anticipated that will result in a decrease in the effectiveness of the plans. Any specific emergency plan changes will be submitted to the NRC after the changes are made in accordance with 10 C.F.R. § 50.54(q) and Appendix E, Section V. If as a result of the transfers, any conditions are identified that would decrease the effectiveness of the approved

emergency plans, application to the NRC will be made and such proposed changes will not be implemented until approved by the NRC.

While Exelon Generation anticipates that no substantive changes will be made to the existing on-site emergency program, certain corporate support and/or corporate oversight functions may be changed, transferred on-site, or transferred to a corporate support organization. Persons assigned to perform these functions will meet the same or similar qualification requirements as the existing responsible corporate support personnel.

The current off-site emergency facilities and equipment, including the Emergency Operations Facility ("EOF"), the Training Center, and radiation monitoring equipment, will be transferred to Exelon Generation. As necessary, ownership of off-site emergency sirens will also be transferred to Exelon Generation and existing easements for the siren locations will be assigned to Exelon Generation. Existing agreements for support from organizations and agencies not affiliated with PSEG Nuclear will also be assigned to Exelon Generation, as necessary. PSEG Nuclear plans to notify the parties to such agreements in advance of the transfer and advise those parties of Exelon Generation's responsibility for management and operation of the Nuclear Plants.

In sum, the proposed license transfer will not impact compliance with the emergency planning requirements.

## 2. Security

Upon consummation of the transfer, Exelon Generation will assume authority and responsibility for the functions necessary to fulfill the security planning requirements specified in 10 C.F.R. Part 73. PSEG Nuclear does not anticipate any substantive changes to the existing NRC-approved physical security, guard training and qualifications, and safeguards contingency plans. Any changes that do occur, or necessary conforming changes, will be made in accordance with 10 C.F.R. § 50.54(p). Transition plans will be established to ensure that the support described in the existing security plans will be maintained following the transfer.

Exelon Generation anticipates that no substantive changes will be made to the existing on-site security program, but that certain corporate support and/or corporate oversight functions may be changed, transferred on site, or transferred to a corporate support organization. Persons assigned to perform these functions will meet

the same or similar qualification requirements as the existing responsible corporate support personnel.

Existing agreements for support from organizations and agencies not affiliated with PSEG Nuclear will be assigned to Exelon Generation, as necessary. PSEG Nuclear plans to notify the parties to such agreements in advance of the transfer of the licenses to Exelon Generation and to advise those parties of Exelon Generation's responsibility for management and operation of the plants.

In sum, the proposed license transfer will not impact compliance with physical security requirements.

### 3. Quality Assurance Program

Upon consummation of the transfer, Exelon Generation will assume authority and responsibility for the functions necessary to fulfill the quality assurance ("QA") requirements of 10 C.F.R. Part 50, Appendix B. PSEG Nuclear anticipates that it will be able to transfer all of the current functions of the existing QA organization to Exelon Generation. PSEG Nuclear does not anticipate any substantive changes to the existing Quality Assurance Plans, but any changes that do occur will be made in accordance with 10 C.F.R. § 50.54(a).

### 4. Training

The off-site Training Center and Simulator Buildings will be transferred to Exelon Generation. The proposed license amendment will not impact compliance with the operator re-qualification program requirements of 10 C.F.R. § 50.54 (and related sections), and will not impact maintenance of the Institute of Nuclear Power Operations accreditation for licensed and non-licensed training. Upon transfer of the license, Exelon Generation will assume ultimate responsibility for implementation of present training programs. Changes to the programs to reflect the transfer will not decrease the scope of the approved operator re-qualification program without the specific authorization of the NRC in accordance with 10 C.F.R. § 50.54(i).

### 8. Other Required Approvals/Schedule

The merger is conditioned upon, among other things, the approval by shareholders of both companies, and a number of regulatory approvals or reviews by federal and state energy authorities. These include, in addition to the NRC, the New Jersey Board of Public Utilities, the Pennsylvania Public Utility Commission, the Illinois Commerce Commission (notice filing only), the Federal

Energy Regulatory Commission, the Securities and Exchange Commission, and either the Department of Justice or the Federal Trade Commission on antitrust matters, depending upon which agency reviews the transaction. The companies intend to seek shareholder approval in the second quarter of 2005 and anticipate that the required regulatory approvals can be obtained within 12-15 months.

To facilitate implementation of the merger and subsequent restructuring, Exelon Generation and PSEG Nuclear are requesting NRC approval of the proposed transfers within six months, to be effective immediately upon issuance and allowing execution of the merger, restructuring, and transfers within a succeeding 12-month period. Exelon Generation will inform the NRC of any significant changes in the schedule.

Certain rulings by the Internal Revenue Service and/or certain legislative changes to the Internal Revenue Code or changes in IRS regulations may also be necessary to assure that decommissioning funds accumulated in the qualified and non-qualified decommissioning funds for the Nuclear Plants and presently maintained by PSEG Nuclear may be transferred to Exelon Generation on a tax-free basis. PSEG Nuclear and Exelon Generation intend to seek necessary letter rulings or changes necessary for the transfer of the funds on a tax-free basis. To the extent that satisfactory private letter rulings or other tax relief are not timely obtained, the parties will update the NRC on alternative plans for decommissioning funding assurance.

#### 9. Regulatory Safety Analysis

The changes proposed by LCR H05-03, for the Hope Creek Generating Station, and LCR S05-02, for the Salem Generating Station, are shown in Attachment 2 and Attachment 3. Attachment 2 contains the changes associated with the Operating License for each of the three units, while Attachment 3 contains the Technical Specification changes for each unit.

Consistent with the generic determination in 10 CFR 2.1315, "Generic determination regarding license amendments to reflect transfers," paragraph (a), the proposed license transfers and conforming license amendments involve no significant hazards consideration.

The proposed conforming license amendments also delete specific license conditions relating to the terms and conditions of decommissioning trust agreements. In place of these license conditions, the requirements of 10 CFR 50.75(h)(1) will apply. As stated in 10 CFR 50.75(h)(4), deletion of those license conditions involves no significant hazards consideration.

The transfers and proposed amendments do not involve any change in the design or licensing basis, plant configuration, or operation of the referenced nuclear stations. All Limiting Conditions of Operation, Limiting Safety System

Settings and Safety Limits specified in Technical Specifications remain unchanged. Also, the physical security plans, emergency response plans, operator training and requalification programs, and the quality assurance plans are not substantively or materially changed by the proposed license transfers and amendments.

Therefore, the proposed approval does not: (1) involve an increase in the probability or consequences of an accident previously analyzed; (2) create the possibility of a new or different kind of accident from the accidents previously evaluated; or (3) involve a significant reduction in a margin of safety.

#### 10. Environmental Considerations

This license transfer application and accompanying administrative amendments are exempt from environmental review, because they fall within the categorical exclusion appearing at 10 C.F.R. § 51.22(c)(21), "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," for which neither an Environmental Assessment nor an Environmental Impact Statement is required. Moreover, the proposed license transfer and conforming amendments do not involve any amendment to the license or other change that would directly affect the actual operation of the facilities involved in any substantive way. The proposed transfer and amendments to the license do not involve an increase in the amount, or a change in the types, of any radiological effluents that may be allowed to be released off-site, and do not involve any increase in the amounts or change in the types of any non-radiological effluents that may be released off-site. Further, no increase in the individual or cumulative occupational radiation exposure is expected.

**SALEM NUCLEAR GENERATING STATION UNITS 1 AND 2  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSES DPR-70, DPR-75 and NPF-57  
DOCKET NOS. 50-272, 50-311 and 50-354**

**ATTACHMENT 2  
FACILITY OPERATING LICENSE CHANGES**

- A. Salem Unit 1**
- B. Salem Unit 2**
- C. Hope Creek**

**RELATING TO THE MERGER OF PUBLIC SERVICE ENTERPRISE GROUP  
and EXELON CORPORATION**

**Facility Operating License Changes**

**A. Salem Unit 1**

References to Public Service Enterprise Group or PSEG Nuclear LLC are being replaced with Exelon Generation Company in the following Sections:

<b>License section, page number</b>	<b>Action Description</b>
Heading, page 1	Delete PSEG Nuclear LLC
Paragraph 1.A, page 1	Delete "filed by the Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company, and Atlantic City Electric Company and the application for license amendment dated November 8, 1976, filed by Public Service Electric and Gas Company" and change "comply" to "complies"
Paragraph 1.E, page 1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC (Exelon Generation Company) and change "licensees are" to "licensee is"
Paragraph 1.F, page 2	Change "licensees have" to "licensee has"
Paragraph 2, page 2	Delete "PSEG Nuclear LLC, and" and change "licensees" to "licensee"
Paragraph 2.A, page 2	Delete PSEG Nuclear LLC (in two places) and change to read "owned and operated by the Exelon Generation Company"
Paragraph 2.B(1), page 3	Delete PSEG Nuclear LLC, and the
Paragraphs 2.B(2) through (6), page 3	Change PSEG Nuclear LLC to Exelon Generation Company (in five places)
Paragraphs 2.C(1), (4), (5) and (10), pages 4 and 4b	Change PSEG Nuclear LLC to Exelon Generation Company (in five places)
Paragraph 2.C(11), page 4b	Delete in its entirety
Paragraph 2.C(13), page 4c	Replace \$53,780,652 with [ ] to designate an amount to be determined by the NRC
Paragraphs 2.C(14) and (15), page 4c	Delete in their entirety
Paragraph 2.E, page 5	Change licensees to licensee
Paragraph 2.I.6, page 5a	Change PSEG Nuclear LLC to Exelon Generation Company
Paragraph 2.J, page 5c	Change PSEG Nuclear LLC to Exelon Generation Company



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

~~PSEG NUCLEAR LLC~~  
EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-272

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

FACILITY OPERATING LICENSE

Amendment No. 246  
License No. DPR-70

1. The Nuclear Regulatory Commission (the Commission) having found that:

- A. The application for license ~~filed by the Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company, and Atlantic City Electric Company and the application for license amendment dated November 8, 1976, filed by Public Service Electric and Gas Company~~ complies with the standards and requirements of the Atomic Energy Act (the Act) of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
- B. Construction of the Salem Nuclear Generating Station, Unit No. 1 (facility) has been substantially completed in conformity with Provisional Construction Permit No. CPPR-52 and the application, as amended, the provisions of the Act and regulations of the Commission;
- C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
- D. There is reasonable assurance: (i) that the activities authorized by this amended operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
- E. Exelon Generation Company, LLC (Exelon Generation Company) ~~PSEG Nuclear LLC~~ is technically qualified and the licensee ~~is~~ is financially qualified to engage in the activities authorized by this amended operating license in accordance with the rules and regulations of the Commission;

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- F. The licensee<sup>has</sup> ~~have~~ satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
- G. The issuance of this amended operating license will not be inimical to the common defense and security or to the health and safety of the public;
- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Amendment No. 3 to Facility Operating License No. DPR-70, subject to the conditions for protection of the environment set forth in the Technical Specifications, Appendix B is in accordance with 10 CFR Part 51 (and with former Appendix D to 10 CFR Part 50) of the Commission's regulations and all applicable requirements have been satisfied; and
- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this amended license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70 including 10 CFR Sections 30.33, 40.32, and 70.23 and 70.31.
2. Facility Operating License No. DPR-70, issued to ~~PSEG Nuclear LLC, and Exelon Generation Company, LLC (Exelon Generation Company), (the licensee)~~, is hereby amended in its entirety, to read as follows:
- A. This amended license applies to the Salem Nuclear Generating Station, Unit No. 1, a pressurized water nuclear reactor and associated equipment (the facility), owned ~~by PSEG Nuclear LLC and the Exelon Generation Company, and operated by PSEG Nuclear LLC~~ <sup>and operated</sup>. The facility is located on the applicants' site in Salem County, New Jersey, on the southern end of Artificial Island on the east bank of the Delaware River in Lower Alloways Creek Township, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 10 through 39) and the Environmental Report as supplemented and amended (Amendments 1 through 3).
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses

- (1) ~~PSEG Nuclear LLC and the Exelon Generation Company~~ to possess the facility at the designated location in Salem County, New Jersey, in accordance with the procedures and limitations set forth in this amended license;
- (2) ~~PSEG Nuclear LLC~~, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use and operate the facility;
- (3) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

~~PSEG Nuclear LLC~~ *Exelon Generation Company*

is authorized to operate the facility at a steady state reactor core power level not in excess of 3459 megawatts (one hundred percent of rated core power).

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 243 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Deleted Per Amendment 22, 11-20-79

(4) Less than Four Loop Operation

~~PSEG Nuclear LLC~~ *Exelon Generation Company*

shall not operate the reactor at power levels above P-7 (as defined in Table 3.3-1 of Specification 3.3.1.1 of Appendix A to this license) with less than four (4) reactor coolant loops in operation until safety analyses for less than four loop operation have been submitted by the licensees and approval for less than four loop operation at power levels above P-7 has been granted by the Commission by Amendment of this license.

(5) ~~PSEG Nuclear LLC~~ *Exelon Generation Company*

shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report, and as approved in the NRC Safety Evaluation Report dated November 20, 1979, and in its supplements, subject to the following provision:

~~PSEG Nuclear LLC~~ *Exelon Generation Company*

may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(6) The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to measure the values of the critical parameters;
3. Identification of process sampling points;
4. Procedure for recording and management of data;
5. Procedures defining corrective actions for off control point chemistry conditions; and
6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

(7) Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic inspection requirements, and
2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

(8) Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel;
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

(9) Backup Method for Determining Subcooling Margin

The licensee shall implement a program which will ensure the capability to accurately monitor the Reactor Coolant System subcooling margin. This program shall include the following:

1. Training of personnel, and
2. Procedures for monitoring.

(10) Additional Conditions

Exelon Generation Company

The Additional Conditions contained in Appendix C, as revised through Amendment No. 246, are hereby incorporated into this license. ~~PSEG Nuclear LLC~~ shall operate the facility in accordance with the Additional Conditions.

(11) PSE&G to PSEG Nuclear LLC License Transfer Conditions

- a. PSEG Nuclear LLC shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated February 16, 2000, and the related Safety Evaluation dated February 16, 2000.
- b. The decommissioning trust agreement shall provide that:
  - 1) The use of assets in both the qualified and non-qualified funds shall be limited to expenses related to decommissioning of the unit as defined by the NRC in its regulations and issuances, and as provided in the unit's license and any amendments thereto. However, upon completion of decommissioning, as defined above, the assets may be used for any purpose authorized by law.
  - 2) Investments in the securities or other obligations of PSE&G or affiliates thereof, or their successors or assigns, shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
  - 3) No disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. In addition, no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.
  - 4) The trust agreement shall not be modified in any material respect without prior written notification to the Director, Office of Nuclear Reactor Regulation.
  - 5) The trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.
- c. PSEG Nuclear LLC shall not take any action that would cause PSEG Power LLC or its parent companies to void, cancel, or diminish the commitment to fund an extended plant shutdown as represented in the application for approval of the transfer of this license from PSE&G to PSEG Nuclear LLC.

- (12) Exelon Generation Company shall provide to the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company's consolidated net utility plant, as recorded on Exelon Generation Company's books of account.
- (13) Exelon Generation Company shall have decommissioning trust funds for Salem, Unit 1, in the following minimum amount on the closing date of the license transfer:

Salem, Unit 1

~~\$53,780,652~~ [ ]

- (14) The decommissioning trust agreement for Salem, Unit 1, shall be subject to the following:
- (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
  - (b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
  - (c) The decommissioning trust agreement for Salem, Unit 1, must provide that no disbursements or payments from the trust shall be made by the trustee unless the trustee has first given the Director of the Office of Nuclear Reactor Regulation 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
  - (d) The decommissioning trust agreement must provide that the agreement can not be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.
  - (e) The appropriate section of the decommissioning trust agreement shall state that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission's regulations.
- (15) Exelon Generation Company shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for approval of the transfer of the Salem, Unit 1, license to it and the requirements of the Order approving the transfer, and consistent with the safety evaluation supporting the Order.

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- D. Paragraph 2.D. has been combined with paragraph 2.E. per Amendment No. 86, June 27, 1988.
- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Salem-Hope Creek Nuclear Generating Station Security Plan," with revisions submitted through December 17, 2001; "Salem-Hope Creek Nuclear Generating Station Security Training and Qualification Plan," with revisions submitted through December 17, 2001; and "Salem-Hope Creek Nuclear Generating Station Security Contingency Plan," with revisions submitted through June 2, 1998. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.
- F. In accordance with the requirement imposed by the October 8, 1976, order of the United States Court of Appeals for the District of Columbia Circuit in Natural Resources Defense Council v. Nuclear Regulatory Commission, No. 74-1385 and 74-1586, that the Nuclear Regulatory Commission "shall make any licenses granted between July 21, 1976 and such time when the mandate is issued subject to the outcome of the proceedings herein," the license amendment issued herein shall be subject to the outcome of such proceedings.
- G. Prior to startup following the first regularly scheduled refueling outage, Public Service Electric and Gas Company shall install, to the satisfaction of the Commission, a long-term means of protection against reactor coolant system over-pressurization when water-solid.
- H. This amended license is effective as of the date of its issuance. Facility Operating License No. DPR-70, as amended, shall expire at midnight, August 13, 2016.

I IAEA SAFEGUARDS

1. INCORPORATION OF FACILITY ATTACHMENT:

Pursuant to 10 CFR 75.8, NRC License No. DPR-70 is hereby amended to incorporate by reference Codes 1. through 7. of Facility Attachment No. 13 dated October 1, 1986, to the US/IAEA of Safeguards Agreement.

2. FACILITY ATTACHMENT CODE 2.2

Notification of the changes referred to in Code 2.2 of the facility attachment is the responsibility of the operating facility. They can be notified to the NRC with a Concise Note (DOE/NRC Form 740M) or a letter. Notification is required 70 days prior to the event.

3. FACILITY ATTACHMENT CODE 3.1.3 & 5.1.2 & 5.2.3

The itemized lists of nuclear material to be provided to the IAEA as of cycle shutdown date prior to physical inventory taking are:

1. A complete list of fuel assemblies by ID number at all locations.
2. Reactor and fuel storage maps showing location of fuel by ID number at time of physical inventory taking.
3. A list, by batch, of any other accountable nuclear material, e.g., start-up sources, samples.

4. FACILITY ATTACHMENT CODE 3.2.2

Please refer to NRC letter dated May 27, 1986, to Mr. C.A. McNeill from Steven A. Varga which spells out timeliness and procedures for notification under this code.

5. FACILITY ATTACHMENT CODE 5.1.1 & 6.1.1

The statement "when calculated" means at least as often as required on page 2 of NUREG/BR-0006 Revision 2 or more often, at your option, if you calculate burn up more than every six months.

6. FACILITY ATTACHMENT CODE 6.1.1 & 6.1.2

The phrase "as specified in relevant paragraphs of Code 10" is a requirement on the U.S. All of the paragraphs in the US/IAEA Agreement that require a report from the U.S. to the IAEA based on source data from an operating facility have been incorporated into NUREG's BR-0006 and 0007 so that the NRC may collect the needed data for transmittal to the IAEA. ~~PSEG Nuclear LLC~~ <sup>Exelon Generation Company</sup> should follow these NUREGs precisely in reporting inventory changes. A complete response to the reporting instructions in the NUREGs will satisfy the requirements specified in Code 10.

7. FACILITY ATTACHMENT CODE 6.2.2

The phrase "precise forecasts" means best estimates. These required concise notes should be dispatched to the NRC at least 40 days in advance of a projected 6 month operational programming.

8. FACILITY ATTACHMENT CODE 6.3.1 & 6.3.2

See response to Code 6.1.1 and 6.1.2 above.

9. FACILITY ATTACHMENT CODE 7.9

The specific facility health and safety rules and regulations to be observed by the Agency's (IAEA) inspectors, as specified in Paragraph 54 of the design information as of October 10, 1986, provided by the U.S.A. mean:

Agency inspectors who have previously visited the facility will be informed as necessary at the time of entry into the facility of health and safety rules and ad hoc rules as might be required in view of a special situation that has occurred at the facility since the inspector's last visit to the facility. The briefing will be of a short duration, not to exceed 30 minutes, covering topics deemed relevant by the licensee.

Agency inspectors who have not previously visited the facility will be informed as necessary at the time of entry into the facility of health and safety rules and ad hoc rules as might be required in view of a special situation that has occurred at the facility. The briefing will be of an appropriate duration, not to exceed three hours, and consist of topics deemed relevant by the licensee.

In either case, the licensee should take into account the Agency inspector's prior training, expertise and experience. In neither case shall the Agency inspector be subject to any form of evaluation or testing by facility representatives or representatives of the U.S. Government.

For health and safety reasons, Agency inspectors will be escorted by qualified facility personnel at times deemed appropriate by the licensee.

10. TERMINATION.

Pursuant to the provisions of 10 CFR 75.41, the Commission will inform the licensee, in writing, when its installation is no longer subject to Article 39(b) of the principal text of the US/IAEA Safeguards Agreement. The IAEA Safeguards License Conditions incorporating Code 7. of the Facility Attachment as part of NRC License DPR-70 will be terminated as of the date of such notice from the Commission. However, since the IAEA may elect to maintain the licensee's installation under Article 2(a) of the Protocol, provisions equivalent to Codes 1. through 6. of the Facility Attachment (with possible appropriate modifications) may still apply, and accordingly all other IAEA Safeguards License Conditions to NRC License No. DPR-70 will remain in effect until the Commission notifies the licensee otherwise. If this option is not selected by the IAEA, the Commission will then notify the licensee that all License Conditions pertaining to the US/IAEA Safeguards Agreement are terminated.

J. RELOCATED TECHNICAL SPECIFICATIONS

*Exelon Generation Company*

~~PSEC Nuclear LLC~~ shall relocate certain technical specification requirements to licensee-controlled documents as described below. The location of these requirements shall be retained by the licensee.

- a. This license condition approves the relocation of certain technical specification requirements to licensee-controlled documents (UFSAR), as described in the licensee's applications with the staff's safety evaluation approval and Amendment No. as noted below:

<u>Licensee's Applications</u>	<u>Safety Evaluations</u>	<u>Amendment Nos.</u>
September 25, 1996	January 0, 1997	189

Implementation shall include the relocation of technical specifications requirements to the appropriate licensee-controlled document as identified in the licensee's application.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by Roger S. Boyd

Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Attachments:

- 1. Incomplete Preoperational Tests, Startup Tests, and Other Items Which Must Be Completed
- 2. Page Changes to Technical Specifications, Appendix A

Date of Issuance: December 1, 1976

**Facility Operating License Changes**

**B. Salem Unit 2**

References to Public Service Enterprise Group or PSEG Nuclear LLC are being replaced with Exelon Generation Company in the following Sections:

<b>License section, page number</b>	<b>Action Description</b>
Heading, page 1	Delete PSEG Nuclear LLC
Paragraph 1.A, page 1	Delete "filed by Public Service Electric and Gas Company for itself and the Philadelphia Electric Company, Delmarva Power and Light Company, and Atlantic City Electric Company"
Paragraph 1.E, page 1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC (Exelon Generation Company)
Paragraphs 1.F and 1.G, page 2	Change licensees are to licensee is
Paragraph 2, page 2	Delete "PSEG Nuclear LLC, and the", add a comma after Exelon Generation Company and change licensees to licensee
Paragraph 2.A, page 2	Change licensees to licensee
Paragraph 2.B(1), page 2	Delete PSEG Nuclear LLC, and the
Paragraphs 2.B(2) through (6), page 3	Change PSEG Nuclear LLC to Exelon Generation Company (in five places)
Paragraph 2.C(1), page 3	Change PSEG Nuclear LLC to Exelon Generation Company
Paragraph 2.C(2), page 4	Change PSE&G to Exelon Generation Company
Paragraphs 2.C(10) and (26), pages 7 and 21	Change PSEG Nuclear LLC to Exelon Generation Company (in three places)
Paragraph 2.C(27), pages 21 and 22	Delete in its entirety
Paragraph 2.C(29), page 22	Replace \$45,059,302 with [ ] to designate an amount to be determined by the NRC
Paragraphs 2.C(30) and (31), page 22a	Delete in their entirety
Paragraph 2.E, page 23	Change licensees to licensee
Paragraph 2.G, page 23	Change PSEG Nuclear LLC to Exelon Generation Company (in two places)
Paragraphs 2.H and 2.I, page 24	Change PSEG Nuclear LLC to Exelon Generation Company
Paragraphs 2.J and 2.K, page 24	Change licensees to licensee
Paragraph 2.N, page 25	Change PSEG Nuclear LLC to Exelon Generation Company



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

~~PSEC NUCLEAR LLC~~  
EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-311

SALEM NUCLEAR GENERATING STATION, UNIT NO. 2  
FACILITY OPERATING LICENSE

Amendment No. 227  
License No. DPR-75

1. The Nuclear Regulatory Commission (the Commission) having found that:

- A. ~~The application for license filed by Public Service Electric and Gas Company for itself and the Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company;~~ ~~Company;~~ complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
- B. Construction of the Salem Nuclear Generating Station, Unit No. 2 (facility) has been substantially completed in conformity with Construction Permit No. CPPR-53 and the application, as amended, the provisions of the Act and the regulations of the Commission;
- C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
- D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
- E. ~~PSEC Nuclear LLC~~ Exelon Generation Company, LLC (Exelon Generation Company) is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

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- F. The licensee ~~are~~<sup>is</sup> financially qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
- G. The licensee ~~have~~<sup>has</sup> satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
- H. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;
- I. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. DPR-75 subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 50 Appendix D of the Commission's regulations and all applicable requirements have been satisfied; and
- J. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Pursuant to approval by the Nuclear Regulatory Commission at meetings on January 14, 1981, April 28, 1981, and May 19, 1981, the License for Fuel-Loading and Low-Power Testing issued on April 18, 1980 is superseded by Facility Operating License No. DPR-75 hereby issued to ~~PSEG Nuclear LLC, and the~~ Exelon Generation Company, LLC (Exelon Generation Company), (the licensee), to read as follows:

- A. This license applies to the Salem Nuclear Generating Station, Unit No. 2, a pressurized water nuclear reactor and associated equipment (the facility), owned by the licensee. The facility is located on the southern end of Artificial Island on the east bank of the Delaware River in Lower Alloways Creek Township in Salem County, New Jersey and is described in the Final Safety Analysis Report as supplemented and amended and the Environmental Report as supplemented and amended.
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
  - (1) ~~PSEG Nuclear LLC, and the~~ Exelon Generation Company to possess the facility at the designated location in Salem County, New Jersey, in accordance with the procedures and limitations set forth in the license;

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- (2) Exelon Generation Company  
~~PSEG Nuclear LLC~~, pursuant to Section 104b of the Act and 10 CFR part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, use and operate the facility at the designated location in Salem County, New Jersey, in accordance with the limitations set forth in this license;
- (3) Exelon Generation Company  
~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Exelon Generation Company  
~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source or special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration and as fission detectors in amounts as required;
- (5) Exelon Generation Company  
~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) Exelon Generation Company  
~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

- (1) Maximum Power Level

Exelon Generation Company  
~~PSEG Nuclear LLC~~ is authorized to operate the facility at steady state reactor core power levels not in excess of 3459 megawatts (thermal).

# Exelon Generation Company

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B attached hereto are hereby incorporated into this license. PSE&G shall operate the facility in accordance with the Technical Specifications.

(3) Special Low Power Test Program

PSE&G shall complete the training portion of the Special Low Power Test Program in accordance with PSE&G's letter dated September 5, 1980 and in accordance with the Commission's Safety Evaluation Report "Special Low Power Test Program", dated August 22, 1980 (See Amendment No. 2 to OPR-75 for the Salem Nuclear Generating Station, Unit No. 2) prior to operating the facility at a power level above five percent.

Within 31 days following completion of the power ascension testing program outlined in Chapter 13 of the Final Safety Analysis Report, PSE&G shall perform a boron mixing and cooldown test using decay heat and Natural Circulation. PSE&G shall submit the test procedure to the NRC for review and approval prior to performance of the test. The results of this test shall be submitted to the NRC prior to starting up following the first refueling outage.

(4) Initial Test Program

PSE&G shall conduct the post-fuel-loading initial test program (set forth in Chapter 13 of the Final Safety Analysis Report, as amended) without making any major modifications of this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- (a) Elimination of any test identified in Chapter 13 of the Final Safety Analysis Report, as amended, as essential;
- (b) Modification of test objectives, methods or acceptance criteria for any test identified in Chapter 13 of the Final Safety Analysis Report, as amended, as essential;
- (c) Performance of any test at a power level different by more than five percent of rated power from those described; and

- (d) Failure to complete all tests included in the described program (planned or scheduled for power levels up to the authorized power level) prior to exceeding a core burnup of 120 effective full power days.

(5) Instrument Trip Setpoints

PSE&G shall submit for NRC review within six months of the date of issuance of this operating license the following values for each Reactor Protection System and Engineered Safety Features instrumentation channel:

- (a) the Technical Specification allowable value (the Technical Specification trip setpoint plus the instrument drift assumed in the accident analysis);
- (b) the instrument drift assumed to occur during the interval between Technical Specification surveillance tests;
- (c) the components of the cumulative instrument bias; and
- (d) the maximum margin between the Technical Specification trip setpoint and the trip value assumed in the accident analysis.

(6) SMII-6 Open Items List

~~Prior to exceeding five percent rated thermal power, PSE&G will resolve to the satisfaction of the NRC's Office of Inspection and Enforcement all remaining construction and testing deficiencies in the SMII-6 Open Items List designated for completion prior to the commencement of power range testing. All listed items deferred beyond the commencement of power range testing will be subject to review by NRC Region I inspectors.~~

(7) Compliance With Regulatory Guide 1.97

By June 1, 1983, PSE&G shall implement to the satisfaction of the NRC the provisions of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," as modified by PSE&G's commitments to NUREG-0528 and NUREG-0737.

(8) Snubbers

- (a) Within 4 months after issuance of the license, PSE&G shall provide a Technical Specification listing of mechanical snubbers. In the interim, PSE&G will conduct a comprehensive mechanical snubber inspection program implemented by plant instructions.
- (b) The functional testing of hydraulic and mechanical snubbers in accordance with Technical Specification 3.7.9 shall commence with the first refueling outage. The initial functional testing shall be completed prior to resuming power operation following the first refueling outage.

(9) Environmental Qualification (Section 3.11, Supplement 5)\*

PSE&G shall take the following remedial actions, or alternative actions acceptable to the NRC, with regard to the environmental qualification requirements for Class IE equipment:

- (a) No later than June 30, 1982, the wide-range resistance temperature detectors for the reactor coolant system shall be qualified for radiation exposure for the 40-year plant life and appropriate exposure condition due to design basis accidents. Pending completion of such qualification and acceptance by the NRC, PSE&G shall replace each of these detectors at each refueling outage.
- (b) Prior to completion of the first refueling outage or June 30, 1982, whichever is earliest, PSE&G shall replace the Scotchcast No. 9 resin seals, used at the electrical connection interface on the NAMCO limit switches, with Conax Electric Conduction Seal Assemblies.
- (c) By no later than June 30, 1982, all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December 1979.

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\*References are to the appropriate sections of the Safety Evaluation Report (NUREG-0517) and its supplements.

- (d) Complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified to document complete compliance by June 30, 1982.
- (e) Within 90 days of receipt of the equipment qualification safety evaluation, the licensee shall either (i) provide missing documentation identified in Sections 3 and 4 of the equipment qualification safety evaluation which will demonstrate compliance of the applicable equipment with NUREG-0588, or (ii) commit to corrective actions which will result in documentation of compliance of applicable equipment with NUREG-0588 not later than June 30, 1982.

(10) Fire Protection

Exelon Generation Company

~~PSEG Nuclear LLC~~ shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report, as approved in the NRC Safety Evaluation Report, dated November 20, 1979, and in its supplements, and in the NRC Safety Evaluation dated January 7, 2004, subject to the following provision:

Exelon Generation Company

~~PSEG Nuclear LLC~~ may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- 8-9-10 -

PAGES 8, 9, AND 10 ARE INTENTIONALLY BLANK

Amendment No. ~~X~~, 25, 117

(11) Containment Isolation (Section 6.2.3, Supplements 4 and 5)

Within 90 days after issuance of the license, PSE&G shall demonstrate to the satisfaction of the NRC that the present containment isolation provisions for the main feedwater lines comply with the requirements of General Design Criterion 57 under all postulated accident conditions, or propose a design change that will achieve compliance. If necessary, the design change shall be implemented during the first refueling outage.

(12) Main Condenser (Section 14.0, Supplement 4)

Prior to exceeding 50 percent power, PSE&G shall complete the preoperational testing of the remaining three of six circulators to be tested in the main condenser for the circulating water system.

(13) River Traffic Accidents (Section 2.2.1, Supplement 1)

PSE&G shall also report for the Salem facility any information reported for the Hope Creek facility relating to circumstances which suggest that the risk from flammable gas clouds (resulting from river traffic accidents on the Delaware River) varies significantly from that previously considered.

**(14) Waterhammer Test (Appendix C, A-1, Supplement 4 and Section 22.2, II.E.1.1, Supplement 5)**

Prior to exceeding 90 percent power, PSE&G shall perform a test program to show that unacceptable waterhammer damage will not result from anticipated feedwater transients to the steam generator. Prior to performing the test program, PSE&G shall obtain NRC approval of the test procedures.

**(15) Prior to resuming power operation following the first refueling outage:**

**(a) Control Rod Guide Thimble (Section 4.2.2, Supplement 4)**

PSE&G shall submit the details of the inspection program for control rod guide thimble tube wall wear for NRC approval.

**(c) Pressure Isolation Valves (Section 5.3.2, Supplement 5)**

PSE&G shall install leak test connections on the pressure isolation valves; until installation of the leak test connections, PSE&G may substitute multiple valve leak tests for Technical Specification 3.4.7.2.f, such that the cumulative leakage from two valves in parallel lines shall not exceed two gallons per minute, and the cumulative leakage from three valves in parallel lines shall not exceed three gallons per minute.

**(d) Diesel Generator Reliability (Section 8.3.4, Supplement 5)**

PSE&G shall implement the following design and procedural modifications with respect to diesel generator reliability:

- (1) Complete a formal training program for all the mechanical and electrical maintenance and quality control personnel, including supervisors, who are responsible for the maintenance and availability of the diesel generators. The depth and quality of this training program shall be at least equivalent to that of training programs normally conducted by major diesel engine manufacturers.

(ii) Develop operating procedures that require loading the diesel engine to a minimum of 25 percent of full load for one hour after eight hours of continuous no load operation or as recommended by the engine manufacturer.

(e) Containment Sump Model Test (Appendix C, A-43, Supplement 4)

PSE&G shall submit the confirmatory results of the containment sump model test program, along with a description of any sump modifications resulting from the tests.

(f) Under-Voltage Protection (Section 8.4.1, Supplement 4)

PSE&G shall install a second level of undervoltage protection for the emergency buses.

(g) Reactor Containment Electrical Penetrations (Section 8.4.3., Supplement 4)

PSE&G shall add a fuse in series with the primary device of each one of 12 circuits fed from 230 volt ac motor control centers to provide backup protection for reactor containment electrical penetrations. Each fuse shall be located in an independent compartment in the control center of the present primary device.

(16) Loss of Non-Class 1E Instrumentation and Control Power Bus During Operation (Section 7.9, Supplement 5)

PSE&G shall implement the design modifications identified in the PSE&G letter dated July 31, 1980 prior to resuming power operation following the first refueling outage.

(17) Turbine Inspection (Section 3.5.1, Supplement 5)

Prior to resuming power operation following the second refueling outage, PSE&G shall subject the low pressure turbines to an inservice inspection. The inspection shall consist of visual and volumetric examinations. The visual examination shall be applied to 100 percent of all the accessible surface of the rotors, discs and blading. The volumetric examination shall use an ultrasonic technique to fully examine the bore and keyway region of the discs in each low pressure turbine.

The inspection results and evaluation of this inservice inspection shall be reported to the NRC and shall be accepted by the NRC prior to startup following the second refueling outage.

(18) Vibration Dynamics Effects Test (Section 3.9.1, SER)

PSE&G shall conduct a preoperational vibration dynamic effects test program for all ASME 1, 2 and 3 piping systems and piping restraints during startup test programs and initial operation.

(19) Differential Pressure Baseline Data (Part II, Section I.G, Supplement 4)

PSE&G shall obtain baseline data regarding differential pressure across the elbow pressure taps in each reactor coolant loop for various pump combinations during startup and initial operation.

(20) Engineered Safety Feature Reset Controls (Section 7.10, Supplement 5)

In conformance with IE Bulletin 80-06, PSE&G shall correct the reset actions for the two sets of valves identified in the PSE&G letter dated June 13, 1980, as corrected by the PSE&G letter dated July 18, 1980, prior to operating the facility at a power level above five percent. PSE&G shall also perform the additional testing required by IE Bulletin 80-06 prior to operation above five percent power.

(21) Sump Performance (Section 6.3.3, Supplement 5)

- (a) Prior to resuming power operation following the first refueling outage, PSE&G shall provide a detailed survey of insulation materials.
- (b) Prior to operation above five percent power, control room operators shall be trained in the recognition and mitigation of LPI performance degradation.

(22) Radiation Protection Organization (Section 12.0, Supplement 5)

PSE&G shall complete the reorganization actions and programs associated with radiation protection no later than November 1, 1981.

(23) Category I Masonry Walls (Section 3.8.3, Supplement 5)

- (a) Prior to operation above five percent power, PSE&G shall submit the information requested in the NRC letter dated January 8, 1981.
- (b) Prior to startup following the first refueling, PSE&G shall resolve the difference between the staff criteria and the criteria used by PSE&G to the satisfaction of the NRC and implement the required fixes that might result from such a resolution.

(24) TMI Action Plan Conditions (Section 22.2, Supplement 5)

Unless otherwise noted, each of the following conditions references the appropriate section of Supplement No. 5 to the Safety Evaluation Report (NUREG-0517) for the Salem Nuclear Generation Station, Unit 2, dated January 1981 and shall be completed to the satisfaction of the NRC by the times indicated.

(a) DELETED

(b) Short-Term Accident Analysis and Procedure Revision (Section 22.2, I.C.1 and I.C.8)

The operators shall be briefed on the revisions to the emergency operation instruction within 30 effective full power days of operation.

(c) Auxiliary Feedwater System Reliability Evaluation  
(Section 22.2, II.E.1.1)

- (i) PSE&G shall install auxiliary feedwater storage tank level indications and alarms in accordance with the PSE&G letter of May 5, 1980 prior to startup after the first refueling.
- (ii) PSE&G shall perform a 48-hour endurance test on all auxiliary feedwater system pumps prior to operation at 100 percent power. PSE&G shall provide a report on the results of these tests to NRC within 60 days of completion of the tests.
- (iii) PSE&G shall resolve to NRC's satisfaction the issue concerning time available for operator action to prevent pump damage prior to operation above five percent power.

(d) Upgrade Emergency Preparedness (Section 22.2, III.A.1.1 and Section 22.3, III.A.2)

- (i) No later than 90 days from the date of issuance of this license, PSE&G shall report to the NRC the status of any items related to emergency preparedness identified by FEMA or the NRC as requiring further action.
- (ii) PSE&G shall provide meteorological and dose assessment remote interrogation capability to meet the criteria of Appendix 2, MUREG-0654, Revision 1 as follows:
  - (a) a functional description of upgraded capabilities by January 1, 1982, (b) installation of hardware and software by July 1, 1982 provided that NRC approval is received by four months prior to that time and (c) full operational capability by October 1, 1982.

- (iii) PSE&G shall provide substantiation that the back-up source of meteorological information from the NWS Office, Greater Wilmington Airport adequately characterizes the site conditions with respect to wind direction and wind speed by July 1, 1981.
- (iv) PSE&G shall provide substantiation that uncertainties associated with plume trajectory prediction, associated with the occurrence of sea-land breeze circulations within the plume exposure pathway zone, are compatible with the planned recommendations for protective actions that would be based upon such projections by July 1, 1981.

(e) Primary Coolant Sources Outside Containment (Section 22.2, III.D.1.1)

- (i) For those systems in which leakage is measured during shutdown, PSE&G shall make and report leak rate measurements prior to initial startup.
- (ii) For those systems in which leakage is measured during operations, PSE&G will make and report leak rate measurements within 60 effective full-power days of plant operation.

(25) TMI Action Plan Dated Conditions (Section 22.3, Supplement 5)

Each of the following conditions references the appropriate section of Supplement No. 5 to the Safety Evaluation Report (NUREG-0517) for the Salem Nuclear Generating Station, dated January 1981, and shall be completed to the satisfaction of the NRC by the times indicated.

(a) Short-Term Accident Analysis and Procedure Revision (Section 22.3, I.C.1)

PSE&G shall implement the requirements of item I.C.1 specified in NUREG-0737, "Clarification of TMI Action Plan Requirements," no later than the implementation dates established in NUREG-0737.

(b) Reactor Coolant System Vents (Section 22.3, II.B.1)

PSE&G shall submit procedural guidelines for and a description of the reactor coolant system vents by July 1, 1981. The reactor coolant system vents shall be installed no later than July 1, 1982.

(c) Plant Shielding (Section 22.3, II.B.2)

PSE&G shall complete modifications to assure adequate access to vital areas and protection of safety equipment following an accident resulting in a degraded core not later than January 1, 1982.

(d) Deleted

(e) Relief, Safety and Block Valve Test Requirements (Section 22.3, II.D.1)

PSE&G shall qualify the reactor coolant system relief, safety and block valves under expected operating conditions for design basis transients and accidents in accordance with the plant-specific requirements and schedules established in NUREG-0737, "Clarification of TMI Action Plan Requirements."

(f) Auxiliary Feedwater Initiation and Indication (Section 22.3, II.E.1.2)

PSE&G shall upgrade, as necessary, automatic initiation of the auxiliary feedwater system and indication of auxiliary feedwater flow to each steam generator to safety grade quality no later than July 1, 1981.

(g) Containment Isolation Dependability (Section 22.3, I.E.4.2)

- (i) PSE&G shall reduce the containment setpoint pressure that initiates containment isolation for nonessential penetrations to the minimum compatible with normal operating conditions no later than July 1, 1981.
- (ii) PSE&G shall install a high radiation isolation signal on the containment purge and vent isolation valves no later than July 1, 1981.

(h) Additional Accident Monitoring Instrumentation (Section 22.3, I.F.1)

PSE&G shall install and demonstrate the operability of instruments for continuous indication in the control room of the following variables. Each item shall be completed by the specified date in the condition:

- (i) Containment pressure from minus five psig to three times the design pressure of the containment no later than January 1, 1982;
- (ii) Containment water level from (i) the bottom to the top of the containment sump, and (ii) the bottom of the containment to an elevation equivalent to a 600,000 gallon capacity no later than July 1, 1981;
- (iii) Containment atmosphere hydrogen concentration from 0 to 10 volume percent no later than January 1, 1982;

2.C(25)(h)(iv)

Containment gamma radiation up to  $10^7$  rad/hr. at the first outage of sufficient duration but no later than prior to startup following the first refueling outage; and

- (v) Noble gas effluent from each potential release point from normal concentrations up to  $10^5$  uCi/cc (Xe-133) no later than prior to startup following the first refueling outage.

PSE&G shall provide the capability to continuously sample gaseous effluents and analyze these samples no later than prior to startup following the first refueling outage.

Until the above installation is completed, PSE&G shall use interim monitoring procedures and equipment.

PSE&G shall provide the capability to continuously sample gaseous effluents and analyze these samples no later than January 1, 1982.

Until the above installation is completed, PSE&G shall use interim monitoring procedures and equipment.

(i) Inadequate Core Cooling Instruments (Section 22.3, II.F.2)

PSE&G shall install and demonstrate the operability of additional instruments or controls needed to supplement installed equipment in order to provide unambiguous, easy-to-interpret indication of inadequate core cooling at the first outage of sufficient duration but no later than prior to startup following the first refueling outage.

(j) Thermal Mechanical Report (Section 22.3, II.K.2.13)

PSE&G shall submit a detailed analysis of the thermal-mechanical conditions in the reactor vessel during recovery from small breaks with an extended loss of all feedwater no later than January 1, 1982.

(k) Analysis of Voiding Potential (Section 22.3, II.K.2.17)

PSE&G shall analyze the potential for voiding in the reactor coolant system (RCS) during anticipated transients. PSE&G shall submit this analysis no later than January 1, 1982.

(l) Sequential Auxiliary Feedwater Flow Analysis (Section 22.3, II.K.2.19)

PSE&G shall provide a benchmark analysis of sequential auxiliary feedwater (AFW) flow to the steam generators following a loss of main feedwater no later than January 1, 1982.

(m) Effect of Loss of Alternating-Current Power on Pump Seals (Section 22.3, II.K.3.25)

PSE&G shall determine, by analysis or experiment, the consequences of a loss of cooling water to the reactor coolant pump seals. PSE&G shall submit the results of the evaluation and proposed modifications no later than January 1, 1982.

- (n) Revised Small-Break Loss-of-Coolant-Accident Methods  
(Section 22.3, II.K.3.30)

PSE&G shall comply with the requirements of this position as specified in NUREG-0737, "Clarification of TMI Action Plan Requirements."

- (o) Compliance With 10 CFR Part 50.46 (Section 22.3, II.K.3.31)

PSE&G shall perform plant-specific calculations using NRC-approved models for small-break loss-of-coolant accidents (LOCAs) to show compliance with 10 CFR Part 50.46. PSE&G shall submit these calculations by January 1, 1983, or one year after NRC approval of LOCA analysis models, whichever is later, only if model changes have been made.

- (p) Emergency Support Facilities (Section 22.3 III.A.1.2)

PSE&G shall maintain in effect an interim Technical Support Center and an interim Emergency Operations Facility until such time as the final facilities are complete.

- (26) Additional Conditions

*Exelon Generation Company*

The Additional Conditions contained in Appendix C, as revised through Amendment No. 227, are hereby incorporated into this license. ~~PSEG Nuclear LLC~~ shall operate the facility in accordance with the Additional Conditions.

- (27) PSE&G to PSEG Nuclear LLC License Transfer Conditions

- a. PSEG Nuclear LLC shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated February 16, 2000, and the related Safety Evaluation dated February 16, 2000.
- b. The decommissioning trust agreement shall provide that:
- 1) The use of assets in both the qualified and non-qualified funds shall be limited to expenses related to decommissioning of the unit as defined by the NRC in its regulations and issuances, and as provided in the unit's license and any amendments thereto. However, upon completion of decommissioning, as defined above, the assets may be used for any purpose authorized by law.

- 2) Investments in the securities or other obligations of PSE&G or affiliates thereof, or their successors or assigns, shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
- 3) No disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. In addition, no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.
- 4) The trust agreement shall not be modified in any material respect without prior written notification to the Director, Office of Nuclear Reactor Regulation.
- 5) The trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.

c. PSEG Nuclear LLC shall not take any action that would cause PSEG Power LLC or its parent companies to void, cancel, or diminish the commitment to fund an extended plant shutdown as represented in the application for approval of the transfer of this license from PSE&G to PSEG Nuclear LLC.

(28) Exelon Generation Company shall provide to the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company's consolidated net utility plant, as recorded on Exelon Generation Company's books of account.

(29) Exelon Generation Company shall have decommissioning trust funds for Salem, Unit 2, in the following minimum amount on the closing date of the license transfer to it:

Salem, Unit 2

~~\$45,059,303~~ [

]

(30) The decommissioning trust agreement for Salem, Unit 2, shall be subject to the following:

- (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
- (b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
- (c) The decommissioning trust agreement for Salem, Unit 2, must provide that no disbursements or payments from the trust shall be made by the trustee unless the trustee has first given the Director, Office of Nuclear Reactor Regulation, 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
- (d) The decommissioning trust agreement must provide that the agreement can not be amended in any material respect without prior written consent of the Director, Office of Nuclear Reactor Regulation.
- (e) The appropriate section of the decommissioning trust agreement shall state that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission's regulations.

(31) Exelon Generation Company shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for approval of the transfer of its ownership interest in Salem, Unit 2, license and the requirements of the Order approving the transfer, and consistent with the safety evaluation supporting the Order.

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- D. An exemption from certain requirements of Appendix J to 10 CFR Part 50 is described in the Office of Nuclear Reactor Regulation's Safety Evaluation Report, Supplement No. 4. This exemption was authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. The exemption, therefore, remains in effect. The granting of the exemption was authorized with the issuance of the License for Fuel-Loading and Low-Power Testing, dated April 18, 1980. The facility will operate, to the extent authorized herein, in conformity with the application as amended, the provisions of the Act, and the regulations of the Commission.
- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54 (p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Salem-Hope Creek Nuclear Generating Station Security Plan," with revisions submitted through December 17, 2001; "Salem-Hope Creek Nuclear Generating Station Security Training and Qualification Plan," with revisions submitted through December 17, 2001; and "Salem-Hope Creek Nuclear Generating Station Security Contingency Plan," with revisions submitted through June 2, 1998. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.
- F. A temporary exemption from General Design Criterion 57 found in Appendix A to 10 CFR Part 50 is described in the Office of Nuclear Reactor Regulation's Safety Evaluation Report, Supplement No. 5, Section 6.2.3.1. This exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. The exemption, therefore, is hereby granted and shall remain in effect through the first refueling outage as discussed in Section 6.2.3.1 of Supplement 5 to the Safety Evaluation Report. The granting of the exemption is authorized with the issuance of the Facility Operating License, dated May 20, 1981. The facility will operate, to the extent authorized herein, in conformity with the application as amended, the provisions of the Act, and the regulations of the Commission.
- G. This license is subject to the following additional condition for the protection of the environment:

*Exelon Generation Company*

Before engaging in additional construction or operational activities which may result in an environmental impact that was not evaluated by the Commission, ~~PSEG Nuclear LLC~~ shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the Final Environmental Statement or any addendum thereto, ~~PSEG Nuclear LLC~~ shall provide a written evaluation of such activities and obtain prior approval from the Director of Nuclear Reactor Regulation.

*Exelon Generation Company*

H. If ~~BSEC Nuclear LLC~~ plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the Salem Nuclear Generating Station, the NRC shall be notified in writing regardless of whether the change affects the amount of radioactivity in effluents.

*Exelon Generation Company*

I. ~~BSEC Nuclear LLC~~ shall report any violations of the requirements contained in Section 2, Items C.(3) through C.(25), E., F., and G of this license within 24 hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the Director of the Regional Office, or his designee, no later than the first working day following the violation, with a written-followup report within 14 days.

J. The licensee~~X~~ shall immediately notify the Commission of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

K. The licensee~~X~~ shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended to cover public liability claims.

L. The licensee is authorized to defer certain eighteen-month surveillance items from the dates required by Technical Specifications 4.0.2(a) and 4.7.10.2(c). These surveillances shall be completed prior to startup following the first refueling outage. The provisions of Technical Specifications 4.0.2(b) and 4.7.10.2(c) are not changed. The affected items are identified in the Safety Evaluation accompanying Amendment No. 14 issued October 22, 1982 and this license change.

M. This license is effective as of the date of the issuance and shall expire at midnight April 18, 2020.

N. Relocated Technical Specifications

Exelon Generation Company

~~DCES Nuclear LLC~~ shall relocate certain technical specification requirements to licensee-controlled documents as described below. The location of these requirements shall be retained by the licensee.

- a. This license condition approves the relocation of certain technical specification requirements to licensee-controlled documents (UFSAR), as described in the licensee's applications with the staff's safety evaluation approval and Amendment No. as noted below:

<u>Licensee's Application</u>	<u>Safety Evaluations</u>	<u>Amendment Nos.</u>
September 25, 1996	January 30, 1997	172

Implementation shall include the relocation of technical specifications requirements to the appropriate licensee-controlled document as identified in the licensee's application.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by Edson G. Case

Edson G. Case, Acting Director  
Office of Nuclear Reactor Regulation

Attachment:  
Appendices A & B

Date of Issuance: May 20, 1981

### Facility Operating License Changes

#### C. Hope Creek

References to Public Service Enterprise Group or PSEG Nuclear LLC are being replaced with Exelon Generation Company in the following Sections:

<b>License section, page number</b>	<b>Action Description</b>
Heading, page 1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
Paragraph 1.A, page 1	Delete "filed by the Public Service Electric & Gas Company, acting on behalf of itself and Atlantic City Electric Company (the licensees)"
Paragraph 1.E, page 1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC (Exelon Generation Company)
Paragraph 2, page 2	Change PSEG Nuclear LLC to Exelon Generation Company, LLC (Exelon Generation Company)
Paragraph 2.A, page 2	Change PSEG Nuclear LLC to Exelon Generation Company (in two places)
Paragraphs 2.B(1), (3), (4), (5) and (6), pages 2 and 3	Change PSEG Nuclear LLC to Exelon Generation Company (in five places)
Paragraphs 2.C(1), (2), (5), (7), (8) and (14), pages 3 through 6	Change PSEG Nuclear LLC to Exelon Generation Company (in seven places)
Paragraph 2.C(15), pages 6 and 7	Delete in its entirety
Paragraph 2.F, page 8	Change PSEG Nuclear LLC to Exelon Generation Company



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

EXELON GENERATION COMPANY, LLC

~~PSEG NUCLEAR LLC~~  
DOCKET NO. 50-354  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE

License No. NPF-57

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for a license ~~filed by the Public Service Electric & Gas Company, acting on behalf of itself and Atlantic City Electric Company (the licensee)~~ <sup>Exelon Generation Company, LLC (Exelon Generation Company)</sup> complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Hope Creek Generating Station (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-120 and the application, as amended, the provisions of the Act and the regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);
  - E. ~~PSEG Nuclear LLC~~ <sup>Exelon Generation Company, LLC (Exelon Generation Company)</sup> is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
  - F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

PSE&G  
CONTROL  
COPY # SAT-LIC-50

Amendment No. ~~129~~, 135

- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-57, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Based on the foregoing findings and approval by the Nuclear Regulatory Commission at a meeting on July 21, 1986, ~~the license for Fuel Loading and Low Power Testing, License No. NPF-50, issued on April 11, 1986, is superseded by Facility Operating License NPF-57 hereby issued to PSEC Nuclear LLC (the licensee), to read as follows:~~ *(Exelon Generation Company, LLC (Exelon Generation Company))*

*Exelon Generation Company*

A. This license applies to the Hope Creek Generating Station, a boiling water nuclear reactor, and associated equipment (the facility) owned by ~~PSEC Nuclear LLC~~. The facility is located on the licensee's site on the east bank of the Delaware River in Lower Alloways Creek Township, Salem County, New Jersey. The facility is located approximately eight miles southwest of Salem, New Jersey and is described in the ~~PSEC Nuclear LLC~~ Final Safety Analysis Report, as supplemented and amended, and in the Environmental Report, as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:

*Exelon Generation Company*

- (1) ~~PSEC Nuclear LLC~~, pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use and operate the facility at the above designated location in Salem County, New Jersey, in accordance with the procedures and limitations set forth in this license;
- (2) Deleted

*Exelon Generation Company*

- (3) ~~PSEC Nuclear LLC~~, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

Exelon Generation Company<sup>3</sup>

- (4) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

Exelon Generation Company

- (5) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

Exelon Generation Company

- (6) ~~PSEG Nuclear LLC~~, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Exelon Generation Company

~~PSEG Nuclear LLC~~ is authorized to operate the facility at reactor core power levels not in excess of 3339 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

Exelon Generation Company

The Technical Specifications contained in Appendix A, as revised through Amendment No. , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into the license. ~~PSEG Nuclear LLC~~ shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Inservice Testing of Pumps and Valves (Section 3.9.6, SSER No. 4)\*

This License Condition was satisfied as documented in the letter from W. R. Butler (NRC) to C. A. McNeill, Jr. (PSE&G) dated December 7, 1987. Accordingly, this condition has been deleted.

\*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(4) Inservice Inspection (Section 6.6, SER; Sections 5.2.4.3 and 6.6.3, SSER No. 5)

- a. PSE&G shall submit an inservice inspection program in accordance with 10 CFR 50.55a(g)(4) for staff review by October 11, 1986.
- b. Pursuant to 10 CFR 50.55a(a)(3) and for the reasons set forth in Sections 5.2.4.3 and 6.6.3 of SSER No. 5, the relief identified in the PSE&G submittal dated November 18, 1985, as revised by the submittal dated January 20, 1986, requesting relief from certain requirements of 10 CFR 50.55a(g) for the preservice inspection program, is granted.

(5) Solid State Logic Modules

Exelon Generation Company

~~PSEG Nuclear LLC~~ shall continue, for the life of the plant, a reliability program to monitor the performance of the Bailey 862 SSLMs installed at Hope Creek Generating Station. This program should obtain reliability data, failure characteristics, and root cause of failure of both safety-related and non-safety-related Bailey 862 SSLMs. The results of the reliability program shall be maintained on-site and made available to the NRC upon request.

(6) Fuel Storage and Handling (Section 9.1, SSER No. 5)

- a. No more than a total of three (3) fuel assemblies shall be out of approved shipping containers or fuel assembly storage racks or the reactor at any one time.
- b. The above three (3) fuel assemblies as a group shall maintain a minimum edge-to-edge spacing of twelve (12) inches from the shipping container array and the storage rack array.
- c. Fresh Fuel assemblies, when stored in their shipping containers, shall be stacked no more than three (3) containers high.

(7) Fire Protection (Section 9.5.1.8, SSER No. 5; Section 9.5.1, SSER No. 6)

Exelon Generation Company

~~PSEG Nuclear LLC~~ shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility through Amendment No. 15 and as described in its submittal dated May 13, 1986, and as approved in the SER dated October 1984 (and Supplements 1 through 6) subject to the following provision:

Exelon Generation Company

~~PSEG Nuclear LLC~~ may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (8) Solid Waste Process Control Program (Section 11.4.2, SER; Section 11.4, SSER No. 4)

Exelon Generation Company

~~PSEG Nuclear~~ shall obtain NRC approval of the Class B and C solid waste process control program prior to processing Class B and C solid wastes.

- (9) Emergency Planning (Section 13.3, SSER No. 5)

~~In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.~~

- (10) Initial Startup Test Program (Section 14, SSER No. 5)

Any changes to the Initial Startup Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

- (11) Partial Feedwater Heating (Section 15.1, SER; Section 15.1, SSER No. 5; Section 15.1, SSER No. 6)

The facility shall not be operated with reduced feedwater temperature for the purpose of extending the normal fuel cycle. After the first operating cycle, the facility shall not be operated with a feedwater heating capacity that would result in a rated power feedwater temperature less than 400°F unless analyses supporting such operation are submitted by the licensee and approved by the staff.

- (12) Detailed Control Room Design Review (Section 18.1, SSER No. 5)

- a. PSE&G shall submit for staff review Detailed Control Room Design Review Summary Reports II and III on a schedule consistent with, and with contents as specified in, its letter of January 9, 1986.
- b. Prior to exceeding five percent power, PSE&G shall provide temporary zone markings on safety-related instruments in the control room.

(13) Safety Parameter Display System (Section 18.2, SSER No. 5)

Prior to the earlier of 90 days after restart from the first refueling outage or July 12, 1988, PSE&G shall add the following parameters to the SPDS and have them operational:

- a. Primary containment radiation
- b. Primary containment isolation status
- c. Combustible gas concentration in primary containment
- d. Source range neutron flux

(14) Additional Conditions

The Additional <sup>Exelon Generation Company</sup> Conditions contained in Appendix C, as revised through Amendment No. 135, are hereby incorporated into this license. ~~PSEG Nuclear LLC~~ shall operate the facility in accordance with the Additional Conditions.

(15) PSE&G to PSEG Nuclear LLC License Transfer Conditions

- a. PSEG Nuclear LLC shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated February 16, 2000, and the related Safety Evaluation dated February 16, 2000.
- b. The decommissioning trust agreement shall provide that:
  - 1) The use of assets in both the qualified and non-qualified funds shall be limited to expenses related to decommissioning of the unit as defined by the NRC in its regulations and issuances, and as provided in the unit's license and any amendments thereto. However, upon completion of decommissioning, as defined above, the assets may be used for any purpose authorized by law.
  - 2) Investments in the securities or other obligations of PSE&G or affiliates thereof, or their successors or assigns, shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
  - 3) No disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. In addition, no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.

- 4) The trust agreement shall not be modified in any material respect without prior written notification to the Director, Office of Nuclear Reactor Regulation.
- 5) The trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.

c. PSEG Nuclear LLC shall not take any action that would cause PSEG Power LLC or its parent companies to void, cancel, or diminish the commitment to fund an extended plant shutdown as represented in the application for approval of the transfer of this license from PSE&G to PSEG Nuclear LLC.

D. The facility requires exemptions from certain requirements of 10 CFR Part 50 and 10 CFR Part 70. An exemption from the criticality alarm requirements of 10 CFR 70.24 was granted in Special Nuclear Material License No. 1953, dated August 21, 1985. This exemption is described in Section 9.1 of Supplement No. 5 to the SER. This previously granted exemption is continued in this operating license. An exemption from certain requirements of Appendix A to 10 CFR Part 50, is described in Supplement No. 5 to the SER. This exemption is a schedular exemption to the requirements of General Design Criterion 64, permitting delaying functionality of the Turbine Building Circulating Water System-Radiation Monitoring System until 5 percent power for local indication, and until 120 days after fuel load for control room indication (Appendix R of SSER 5). Exemptions from certain requirements of Appendix J to 10 CFR Part 50, are described in Supplement No. 5 to the SER. These include an exemption from the requirement of Appendix J, exempting main steam isolation valve leak-rate testing at 1.10 Pa (Section 6.2.6 of SSER 5); an exemption from Appendix J, exempting Type C testing on traversing incore probe system shear valves (Section 6.2.6 of SSER 5); an exemption from Appendix J, exempting Type C testing for instrument lines and lines containing excess flow check valves (Section 6.2.6 of SSER 5); and an exemption from Appendix J, exempting Type C testing of thermal relief valves (Section 6.2.6 of SSER 5). These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. These exemptions are hereby granted. The special circumstances regarding each exemption are identified in the referenced section of the safety evaluation report and the supplements thereto. These exemptions are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Salem-Hope Creek Nuclear Generating Station Security Plan," with revisions submitted through December 17, 2001; "Salem-Hope Creek Nuclear Generating Station Security Training and Qualification Plan," with revisions submitted through December 17, 2001; and "Salem-Hope Creek Nuclear Generating Station Security Contingency Plan," with revisions submitted through June 2, 1998. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.
- F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, ~~PSFC Nuclear LLC~~ <sup>Exelon Generation Company</sup> shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written followup within thirty days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).
- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- H. This license is effective as of the date of issuance and shall expire at midnight on April 11, 2026.

FOR THE NUCLEAR REGULATORY COMMISSION

- original signed by H.R. Denton -

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Enclosures:

1. Appendix A - Technical Specifications (NUREG-1202)
2. Appendix B - Environmental Protection Plan

Date of Issuance: July 25, 1986

**SALEM NUCLEAR GENERATING STATION UNITS 1 AND 2  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSES DPR-70, DPR-75 and NPF-57  
DOCKET NOS. 50-272, 50-311 and 50-354**

**ATTACHMENT 3  
TECHNICAL SPECIFICATION CHANGES**

- A. Salem Unit 1**
- B. Salem Unit 2**
- C. Hope Creek**

**RELATING TO THE MERGER OF PUBLIC SERVICE ENTERPRISE GROUP  
and EXELON CORPORATION**

### Technical Specification Changes

#### A. Salem Unit 1

References to Public Service Enterprise Group or PSEG Nuclear are being replaced with Exelon Generation Company, LLC in the following Sections:

<b>Technical Specification section, page number</b>	<b>Action Description</b>
Definition 1.16, page 1-4	Change PSE&G to Exelon Generation Company, LLC
Bases 3/4.9.3, page B 3/4 9-1b	Change PSEG to Exelon Generation Company, LLC
6.17, page 6-30	Change PSEG to Exelon Generation Company, LLC
Appendix B cover sheet	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
Appendix B, section 4.2.1, page 4-1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
Appendix C, heading, page 1	Delete "PSEG Nuclear LLC, and the"

## DEFINITIONS

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- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- c. Reactor coolant system leakage through a steam generator to the secondary system.

### MEMBER(S) OF THE PUBLIC

Exelon Generation Company, LLC

1.16 MEMBER(S) OF THE PUBLIC shall be all those persons who are not occupationally associated with the plant. This category does not include employees of ~~DSM~~, its contractors, or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant.

### OFFSITE DOSE CALCULATION MANUAL (ODCM)

1.17 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent controls and Radiological Environmental Monitoring programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.7 and 6.9.1.8 respectively.

### OPERABLE - OPERABILITY

1.18 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, a normal and an emergency electrical power source, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

### OPERATIONAL MODE - MODE

1.19 An OPERATIONAL MODE (ie., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level and average reactor coolant temperature specified in Table 1.1.

The minimum requirement for reactor subcriticality also ensures that the decay time is consistent with that assumed in the Spent Fuel Pool cooling analysis. Delaware River water average temperature between October 15<sup>th</sup> and May 15<sup>th</sup> is determined from historical data taken over 30 years. The use of 30 years of data to select maximum temperature is consistent with Reg. Guide 1.27, "Ultimate Heat Sink for Nuclear Power Plants".

*Exelon Generation Company, LLC*

A core offload has the potential to occur during both applicability time frames. In order not to exceed the analyzed Spent Fuel Pool cooling capability to maintain the water temperature below 180°F, two decay time limits are provided. In addition, ~~PSEG~~ has developed and implemented a Spent Fuel Pool Integrated Decay Heat Management Program as part of the Salem Outage Risk Assessment. This program requires a pre-outage assessment of the Spent Fuel Pool heat loads and heatup rates to assure available Spent Fuel Pool cooling capability prior to offloading fuel.

#### 3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

During movement of irradiated fuel assemblies within containment the requirements for containment building penetration closure capability and OPERABILITY ensure that a release of fission product radioactivity within containment will not exceed the guidelines and dose calculations described in Reg. Guide 1.183, Alternative Radiological Source Term for Evaluating Design Basis Accidents at Nuclear Power Reactors. In MODE 6, the potential for containment pressurization as a result of an accident is not likely. Therefore, the requirements to isolate the containment from the outside atmosphere can be less stringent. The LCO requirements during movement of irradiated fuel assemblies within containment are referred to as "containment closure" rather than containment OPERABILITY. For the containment to be OPERABLE, CONTAINMENT INTEGRITY must be maintained. Containment closure means that all potential containment atmosphere release paths are closed or capable of being closed. Closure restrictions include the administrative controls to allow the opening of both airlock doors and the equipment hatch during fuel movement provided that: 1) the equipment inside door or an equivalent closure device installed is capable of being closed with four bolts within 1 hour by a designated personnel; 2) the airlock door is capable of being closed within 1 hour by a designated personnel, 3) either the Containment Purge System or the Auxiliary Building Ventilation System taking suction from the containment atmosphere are operating and 4) the plant is in Mode 6 with at least 23 feet of water above the reactor pressure vessel flange.

Administrative requirements are established for the responsibilities and appropriate actions of the designated personnel in the event of a Fuel Handling Accident inside containment. These requirements include the responsibility to be able to communicate with the control room, to ensure that the equipment hatch is capable of being closed, and to close the equipment hatch and personnel airlocks within 1 hour in the event of a fuel handling accident inside containment. These administrative controls ensure containment closure will be established in accordance with and not to exceed the dose calculations performed using guidelines of Regulatory Guide 1.183.

## ADMINISTRATIVE CONTROLS

- c. A detailed description of the equipment, components and processes involved and the interfaces with other plant systems;
  - d. An evaluation of the change, which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;
  - e. An evaluation of the change, which shows the expected maximum exposures to individual in the unrestricted area and to the general population that differ from those previously estimated in the license application and amendments thereto;
  - f. A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;
  - g. An estimate of the exposure to plant operating personnel as a result of the change; and
  - h. Documentation of the fact that the change was reviewed and found acceptable by the (SORC).
2. Shall become effective upon review and acceptance by the SORC.

### 6.16 ENVIRONMENTAL QUALIFICATION

6.16.1 All safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December 1979. Copies of these documents are attached to Order for Modification of License No. DPR-70 dated October 24, 1980.

6.16.2 Complete and auditable records shall be available and maintained at a central location which describe the environmental qualification method used for all safety related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

### 6.17 TECHNICAL SPECIFICATION (TS) BASES CONTROL PROGRAM

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. ~~PSEC~~ **Exelon Generation Company, LLC** may make changes to the Bases without prior NRC approval provided the changes do not require either of the following:
  1. A change in the TS incorporated in the License, or
  2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.

APPENDIX B

TO

FACILITY OPERATING LICENSE NO. DPR-70

SALEM GENERATING STATION UNIT 1

DOCKET NO. 50-272

AND

FACILITY OPERATING LICENSE NO. DPR-75

SALEM GENERATING STATION UNIT 2

DOCKET NO. 50-311

*Exelon Generation Company,*

~~DCEG-NUCLEAR~~ LLC

ENVIRONMENTAL PROTECTION PLAN

(NONRADIOLOGICAL)

#### 4.0 Environmental Conditions

##### 4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and reported to the NRC within 24 hours followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; fish kills or impingement events on the intake screens; increase in nuisance organisms or conditions; unanticipated or emergency discharge of waste water or chemical substances.

No routine monitoring programs are required to implement this condition.

##### 4.2 Environmental Monitoring

###### 4.2.1 Aquatic Monitoring

The certifications and permits required under the Clean Water Act provide mechanisms for protecting water quality and, indirectly, aquatic biota. The Nuclear Regulatory Commission (NRC) will rely on the decisions made by the State of New Jersey under the authority of the Clean Water Act and, in the case of sea turtles and shortnose sturgeon, decisions made by the National Marine Fisheries Service (NMFS) under the authority of the Endangered Species Act, for any requirements pertaining to aquatic monitoring.

In accordance with Section 7(a) of the Endangered Species Act, on May 14, 1993, the National Marine Fisheries Service issued a Section 7 Consultation Biological Opinion related to the operation of Salem Unit 1 and 2 Generating Stations. This Section 7 Consultation entitled, "Reinitiation of a consultation in accordance with Section 7(a) of the Endangered Species Act regarding continued operation of the Salem and Hope Creek Nuclear Generating Stations on the eastern shore of the Delaware River in New Jersey," concluded that "...continued operation is not likely to jeopardize the continued existence of listed species."

###### Exelon Generation Company

~~DSEC Nuclear~~ LLC shall adhere to the specific requirements within the Incidental Take Statement, to the Biological Opinion. Changes to the incidental take statement must be preceded by consultation between the NRC, as the authorizing agency, and NMFS.

The Conservation Recommendation, to the Biological Opinion suggests conservation recommendations for implementation by Salem Generating Station. The Station shall implement these recommendations to the satisfaction of the NRC and National Marine Fisheries Service.

APPENDIX C  
ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. DPR-70

~~PSFC Nuclear LLC, and the~~ Exelon Generation Company, LLC, shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
192	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated January 11, 1996, as supplemented by letters dated February 26, May 22, June 27, July 12, December 23, 1996, and March 17, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from March 21, 1997.
194	The licensee is authorized to upgrade the initiation circuitry for the power operated relief valves, as described in the licensee's application dated January 31, 1997, as supplemented by letters dated March 14, April 6, and April 28, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented prior to entry into Mode 3 from the current outage for Salem Unit 1.
196	<p>Containment Fan Cooler Units</p> <p>The licensee shall complete all modifications associated with the amendment request concerning Containment Fan Cooler Units (CFCU) response time dated October 25, 1996, as described in the letters supplementing the amendment request dated December 11, 1996, January 28, March 27, April 24, June 3, and June 12, 1997, prior to entry into Mode 3 following refueling outage 12. All modifications made in support of this amendment request and described in the referenced submittals shall be in conformance with the existing design basis for Salem Unit 1, and programmatic controls for tank monitoring instrumentation shall be as described in the letter dated April 24, 1997. Post modification testing and confirmatory analyses shall be as described in the letter dated March 27, 1997. Future changes to the design described in these submittals may be made in accordance with the provisions of 10 CFR 50.59. Further, the administrative controls associated with CFCU operability and containment integrity described in the letters dated March 27, and April 24, 1997 shall not be relaxed or changed without prior staff review until such time as the license has been amended to include the administrative controls as technical specification requirements.</p>	The amendment shall be implemented prior to entry into Mode 3 from the current outage for Salem Unit 1.
198	The licensee shall perform an evaluation of the containment liner anchorage by November 30, 1997, for the loading induced on the containment liner during a Main Steam Line Break event to confirm the assumptions provided in the Preliminary Safety Analysis Report and Updated Final Safety Analysis Report.	The amendment shall be implemented within 30 days from July 17, 1997.

### Technical Specification Changes

#### B. Salem Unit 2

References to Public Service Enterprise Group or PSEG Nuclear are being replaced with Exelon Generation Company, LLC in the following Sections:

<b>Technical Specification section, page number</b>	<b>Action Description</b>
Definition 1.16, page 1-4	Change PSE&G to Exelon Generation Company, LLC
Bases 3/4.9.3, page B 3/4 9-1c	Change PSEG to Exelon Generation Company, LLC
6.16, page 6-30	Change PSEG to Exelon Generation Company, LLC
Appendix B cover sheet	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
Appendix B, section 4.2.1, page 4-1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
Appendix C, heading, page 1	Delete "PSEG Nuclear LLC, and the" and add a comma prior to LLC

## DEFINITIONS

- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- c. Reactor coolant system leakage through a steam generator to the secondary system.

### MEMBER(S) OF THE PUBLIC

Exelon Generation Company, LLC

1.16 MEMBER(S) OF THE PUBLIC shall be all those persons who are not occupationally associated with the plant. This category does not include employees of PSEG, its contractors, or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant.

### OFFSITE DOSE CALCULATION MANUAL (ODCM)

1.17 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent controls and Radiological Environmental Monitoring programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.7 and 6.9.1.8 respectively.

### OPERABLE - OPERABILITY

1.18 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, a normal and an emergency electrical power source, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

### OPERATIONAL MODE - MODE

1.19 An OPERATIONAL MODE (ie., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level and average reactor coolant temperature specified in Table 1.1.

The minimum requirement for reactor subcriticality also ensures that the decay time is consistent with that assumed in the Spent Fuel Pool cooling analysis. Delaware River water average temperature between October 15<sup>th</sup> and May 15<sup>th</sup> is determined from historical data taken over 30 years. The use of 30 years of data to select maximum temperature is consistent with Reg. Guide 1.27, "Ultimate Heat Sink for Nuclear Power Plants".

*Exelon Generation Company, LLC*

A core offload has the potential to occur during both applicability time frames. In order not to exceed the analyzed Spent Fuel Pool cooling capability to maintain the water temperature below 180°F, two decay time limits are provided. In addition, ~~PSEG~~ has developed and implemented a Spent Fuel Pool Integrated Decay Heat Management Program as part of the Salem Outage Risk Assessment. This program requires a pre-outage assessment of the Spent Fuel Pool heat loads and heatup rates to assure available Spent Fuel Pool cooling capability prior to offloading fuel.

#### 3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

During movement of irradiated fuel assemblies within containment the requirements for containment building penetration closure capability and OPERABILITY ensure that a release of fission product radioactivity within containment will not exceed the guidelines and dose calculations described in Reg Guide 1.183, Alternative Radiological Source Term for Evaluating Design Basis Accidents at Nuclear Power Plants. In MODE 6, the potential for containment pressurization as a result of an accident is not likely. Therefore, the requirements to isolate the containment from the outside atmosphere can be less stringent. The LCO requirements during movement of irradiated fuel assemblies within containment are referred to as "containment closure" rather than containment OPERABILITY. For the containment to be OPERABLE, CONTAINMENT INTEGRITY must be maintained. Containment closure means that all potential release paths are closed or capable of being closed. Closure restrictions include the administrative controls to allow the opening of both airlock doors and the equipment hatch during fuel movement provided that: 1) the equipment inside door or an equivalent closure device installed is capable of being closed with four bolts within 1 hour by a designated personnel; 2) the airlock doors are capable of being closed within 1 hour by designated personnel, 3) either the Containment Purge System or the Auxiliary Building Ventilation System taking suction from the containment atmosphere are operating and 4) the plant is in Mode 6 with at least 23 feet of water above the reactor pressure vessel flange.

Administrative requirements are established for the responsibilities and appropriate actions of the designated personnel in the event of a Fuel Handling Accident inside containment. These requirements include the responsibility to be able to communicate with the control room, to ensure that the equipment hatch is capable of being closed, and to close the equipment hatch and personnel airlocks within 1 hour in the event of a fuel handling accident inside containment. These administrative controls ensure containment closure will be established in accordance with and not to exceed the dose calculations performed using guidelines of Regulatory Guide 1.183.

- c. A detailed description of the equipment, components and processes involved and the interfaces with other plant systems;
  - d. An evaluation of the change, which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;
  - e. An evaluation of the change, which shows the expected maximum exposures to individual in the unrestricted area and to the general population that differ from those previously estimated in the license application and amendments thereto;
  - f. A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;
  - g. An estimate of the exposure to plant operating personnel as a result of the change; and
  - h. Documentation of the fact that the change was reviewed and found acceptable by the (SORC).
2. Shall become effective upon review and acceptance by the SORC.

6.16 TECHNICAL SPECIFICATION (TS) BASES CONTROL PROGRAM

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. ~~PSEG~~ **Exelon Generation Company, LLC** may make changes to the Bases without prior NRC approval provided the changes do not require either of the following:
  - 1. A change in the TS incorporated in the License, or
  - 2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. Proposed changes to the Bases that require either condition of Specification 6.16.b above shall be reviewed and approved by the NRC prior to implementation.
- d. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).
- e. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.

APPENDIX B

TO

FACILITY OPERATING LICENSE NO. DPR-70  
SALEM GENERATING STATION UNIT 1  
DOCKET NO. 50-272

AND

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

*Exelon Generation Company,*

~~PSEC NUCLEAR LLC~~

ENVIRONMENTAL PROTECTION PLAN

(NONRADIOLOGICAL)

#### 4.0 Environmental Conditions

##### 4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and reported to the NRC within 24 hours followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; fish kills or impingement events on the intake screens; increase in nuisance organisms or conditions; unanticipated or emergency discharge of waste water or chemical substances.

No routine monitoring programs are required to implement this condition.

##### 4.2 Environmental Monitoring

###### 4.2.1 Aquatic Monitoring

The certifications and permits required under the Clean Water Act provide mechanisms for protecting water quality and, indirectly, aquatic biota. The Nuclear Regulatory Commission (NRC) will rely on the decisions made by the State of New Jersey under the authority of the Clean Water Act and, in the case of sea turtles and shortnose sturgeon, decisions made by the National Marine Fisheries Service (NMFS) under the authority of the Endangered Species Act, for any requirements pertaining to aquatic monitoring.

In accordance with Section 7(a) of the Endangered Species Act, on May 14, 1993, the National Marine Fisheries Service issued a Section 7 Consultation Biological Opinion related to the operation of Salem Unit 1 and 2 Generating Stations. This Section 7 Consultation entitled, "Reinitiation of a consultation in accordance with Section 7(a) of the Endangered Species Act regarding continued operation of the Salem and Hope Creek Nuclear Generating Stations on the eastern shore of the Delaware River in New Jersey," concluded that "...continued operation is not likely to jeopardize the continued existence of listed species."

Exelon Generation Company,  
~~DCES Nuclear~~ LLC shall adhere to the specific requirements within the Incidental Take Statement, to the Biological Opinion. Changes to the incidental take statement must be preceded by consultation between the NRC, as the authorizing agency, and NMFS.

The Conservation Recommendations, to the Biological Opinion suggests conservation recommendations for implementation by Salem Generating Station. The Station shall implement these recommendations to the satisfaction of the NRC and National Marine Fisheries Service.

APPENDIX C  
ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. DPR-75

~~PSFC Nuclear LLC, and the Exelon Generation Company, LLC~~ shall comply with the following conditions on the schedules noted below:

Amendment Number	Additional Condition	Implementation Date
175	The licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated January 11, 1996, as supplemented by letters dated February 26, May 22, June 27, July 12, December 23, 1996, and March 17, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from March 21, 1997.
177	The licensee is authorized to upgrade the initiation circuitry for the power operated relief valves, as described in the licensee's application dated January 31, 1997, as supplemented by letters dated March 14, April 8, and April 28, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented prior to entry into Mode 3 from the current outage for Salem Unit 2.
179	<p>Containment Fan Cooler Units</p> <p>The licensee shall complete all modifications associated with the amendment request concerning Containment Fan Cooler Units (CFCU) response time dated October 25, 1996, as described in the letters supplementing the amendment request dated December 11, 1996, January 28, March 27, April 24, June 3, and June 12, 1997, prior to entry into Mode 3 following refueling outage 12. All modifications made in support of this amendment request and described in the referenced submittals shall be in conformance with the existing design basis for Salem Unit 1, and programmatic controls for tank monitoring instrumentation shall be as described in the letter dated April 24, 1997. Post modification testing and confirmatory analyses shall be as described in the letter dated March 27, 1997. Future changes to the design described in these submittals may be made in accordance with the provisions of 10 CFR 50.59. Further, the administrative controls associated with CFCU operability and containment integrity described in the letters dated March 27, and April 24, 1997 shall not be relaxed or changed without prior staff review until such time as the license has been amended to include the administrative controls as technical specification requirements.</p>	The amendment shall be implemented prior to entry into Mode 3 from the current outage for Salem Unit 2.
181	The licensee shall perform an evaluation of the containment liner anchorage by November 30, 1997, for the loading induced on the containment liner during a Main Steam Line Break event to confirm the assumptions provided in the Preliminary Safety Analysis Report and Updated Final Safety Analysis Report.	The amendment shall be implemented within 30 days from July 17, 1997.

### Technical Specification Changes

#### C. Hope Creek

References to Public Service Enterprise Group or PSEG Nuclear are being replaced with Exelon Generation Company, LLC in the following Sections:

Technical Specification section, page number	Action Description
3.7.1.3, page 3/4 7-5	Change PSE&G to Exelon Generation Company, LLC
3/4.7.3, page 3/4 7-9	Change PSE&G to Exelon Generation Company, LLC (in five places)
Bases 3/4.8, page B 3/4 8-2	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
6.9.1.9, page 6-20	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
6.15, page 6-26	Change PSEG to Exelon Generation Company, LLC
Appendix B cover sheet	Change PSEG Nuclear LLC to Exelon Generation Company, LLC
Appendix B, section 4.2.2, page 4-2	Change PSE&G to Exelon Generation Company, LLC (in two places)
Appendix C, heading, page 1	Change PSEG Nuclear LLC to Exelon Generation Company, LLC

PLANT SYSTEMS

ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

=====

3.7.1.3 The ultimate heat sink (Delaware River) shall be OPERABLE with:

- a. A minimum river water level at or above elevation -9'0 Mean Sea Level, USGS datum (80'0 ~~PSE&C~~ datum), and  
*(Exelon Generation Company) LLC*
- b. An average river water temperature of less than or equal to 85.0°F.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5 and \*.

ACTION:

With the river water temperature in excess of 85.0°F, continued plant operation is permitted provided that both emergency discharge valves are open and emergency discharge pathways are available. With the river water temperature in excess of 88.0°F, continued plant operation is permitted provided that all of the following additional conditions are satisfied: ultimate heat sink temperature is at or below 89.0°F, all SSWS pumps are OPERABLE, all SACS pumps are OPERABLE, all EDGs are OPERABLE and the SACS loops have no cross-connected loads (unless they are automatically isolated during a LOP and/or LOCA); otherwise, with the requirements of the above specification not satisfied:

- a. In OPERATIONAL CONDITIONS 1, 2 or 3, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. In OPERATIONAL CONDITIONS 4 or 5, declare the SACS system and the station service water system inoperable and take the ACTION required by Specification 3.7.1.1 and 3.7.1.2.
- c. In Operational Condition \*, declare the plant service water system inoperable and take the ACTION required by Specification 3.7.1.2. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

=====

4.7.1.3 The ultimate heat sink shall be determined OPERABLE:

- a. By verifying the river water level to be greater than or equal to the minimum limit at least once per 24 hours.
- b. By verifying river water temperature to be within its limit:
  - 1) at least once per 24 hours when the river water temperature is less than or equal to 82°F.
  - 2) at least once per 2 hours when the river water temperature is greater than 82°F.

\* When handling recently irradiated fuel in the secondary containment.

PLANT SYSTEMS

3/4.7.3 FLOOD PROTECTION

LIMITING CONDITION FOR OPERATION

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3.7.3 Flood protection shall be provided for all safety related systems, components and structures when the water level of the Delaware River reaches 6.0 feet Mean Sea Level (MSL) USGS datum (95.0 feet ~~PSE&G~~ datum) at the Service Water Intake Structure. *Exelon Generation Company, LLC*

APPLICABILITY: At all times.

ACTION:

- Exelon Generation Company, LLC*
- a. With severe storm warnings from the National Weather Service which may impact Artificial Island in effect or with the water level at the service water intake structure above elevation 6.0 feet MSL USGS datum (95.0 feet ~~PSE&G~~ datum), initiate and complete:
    - 1. The closing of all service water intake structure watertight perimeter flood doors identified in Table 3.7.3-1 within 1 hour, or declare affected service water system components inoperable and take the actions required by LCO 3.7.1.2;
    - and -
    - 2. The closing of all power block watertight perimeter flood doors identified in Table 3.7.3-1 within 1.5 hours.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Once closed, all access through the doors shall be administratively controlled.

- b. With the water level at the service water intake structure above elevation 10.5 feet MSL USGS datum (99.5 feet ~~PSE&G~~ datum), be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. *Exelon Generation Company, LLC*

SURVEILLANCE REQUIREMENTS

=====

4.7.3 The water level at the service water intake structure shall be determined to be within the limit by:

- a. Measurement at least once per 24 hours when the water level is below elevation 6.0 MSL USGS datum (95.0 feet ~~PSE&G~~ datum), and *Exelon Generation Company, LLC*
- b. Measurement at least once per 4 hours when severe storm warnings from the National Weather Service which may impact Artificial Island are in effect.
- c. Measurement at least once per hour when the water level is equal to or above elevation 6.0 MSL USGS datum (95.0 feet ~~PSE&G~~ datum). *Exelon Generation Company, LLC*

ELECTRICAL POWER SYSTEMS

BASES

Exelon Generation Company,

A.C. SOURCES, D.C. SOURCES and ONSITE POWER DISTRIBUTION SYSTEMS (Continued)

The minimum voltage and frequency stated in the Surveillance Requirements (SRs) are those necessary to ensure the EDG can accept Design Basis Accident loading while maintaining acceptable voltage and frequency levels. Stable operation at the nominal voltage and frequency values is also essential to establishing EDG OPERABILITY, but a time constraint is not imposed. This is because a typical EDG will experience a period of voltage and frequency oscillations prior to reaching steady state operation if these oscillations are not dampened out by load application. This period may extend beyond the 10 second acceptance criteria and could be a cause for failing the SR (for example if a significant negative trend develops). In lieu of a time constraint in the SR, ~~PSEG Nuclear~~ LLC will monitor and trend the actual time to reach steady state operation as a means of ensuring there is no voltage regulator or governor degradation which could cause an EDG to become inoperable.

The surveillance requirements for demonstrating the OPERABILITY of the unit batteries are in accordance with the recommendations of Regulatory Guide 1.129 "Maintenance Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," February 1978 and IEEE Std 450-1980, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage on float charge, connection resistance values and the performance of battery service and discharge tests ensures the effectiveness of the charging system, the ability to handle high discharge rates and compares the battery capacity at that time with the rated capacity.

Table 4.8.2.1-1 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and .015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than .020 below the manufacturer's full charge specific gravity with an average specific gravity of all the connected cells not more than .010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

MONTHLY OPERATING REPORTS

6.9.1.8 Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with a copy to the USNRC Administrator, Region 1, no later than the 15th of each month following the calendar month covered by the report.

CORE OPERATING LIMITS REPORT

*Exelon Generation Company,*

6.9.1.9 Core operating limits shall be established and documented in the ~~PS&S Nuclear~~ LLC generated CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following Technical Specifications:

- 3/4.2.1 AVERAGE PLANAR LINEAR HEAT GENERATION RATE
- 3/4.2.3 MINIMUM CRITICAL POWER RATIO
- 3/4.2.4 LINEAR HEAT GENERATION RATE
- 3/4.3.11 OSCILLATION POWER RANGE MONITOR (OPRM)

The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by NRC as applicable in the following documents:

1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel (GESTAR-II)"
2. CENPD-397-P-A, "Improved Flow Measurement Accuracy Using Crossflow Ultrasonic Flow Measurement Technology"
3. NEDO-32465-A, Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Applications, August 1996

The CORE OPERATING LIMITS REPORT will contain the complete identification for each of the TS referenced topical reports used to prepare the CORE OPERATING LIMITS REPORT (i.e., report number title, revision, date, and any supplements).

The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.

The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

ADMINISTRATIVE CONTROLS

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6.15 TECHNICAL SPECIFICATION (TS) BASES CONTROL PROGRAM

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. *Exelon Generation Company, LLC* ~~PSES~~ may make changes to the Bases without prior NRC approval provided the changes do not require either of the following:
  1. A change in the TS incorporated in the License, or
  2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. Proposed changes to the Bases that require either condition of Specification 6.15.b above shall be reviewed and approved by the NRC prior to implementation.
- d. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).
- e. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the UFSAR.

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-57

HOPE CREEK GENERATING STATION

Exelon Generation Company,

~~PSEG NUCLEAR LLC~~

DOCKET NO. 50-354

ENVIRONMENTAL PROTECTION PLAN

(NONRADIOLOGICAL)

4.2.2 Terrestrial Ecology Monitoring

*Exelon Generation Company, LLC*

~~PSE&E~~ has completed the implementation of the Salt Drift Monitoring Program to assess the impacts of cooling tower salt drift on the environment in the HCGS vicinity. This study was completed by the submission of two reports: "Pre-operational Summary Report for Hope Creek Generating Station Salt Drift Monitoring Program, August 1984-December 1986" and "Operational Summary Report for Hope Creek Generating Station Salt Drift Monitoring Program, January 1987-March 1989". The pre-operational report was submitted to the NRC on April 30, 1987 (NLR-E87144) as an Appendix to the 1986 Annual Environmental Operating Report. The operational report was submitted to the NRC on October 10, 1989 (NLR-N89201).

The "Operational Summary Report" contained information that fulfilled the requirements of a final report, and therefore will be considered the "Final Report". This report discusses salt deposition data, native vegetation studies, comparison of estimated salt drift and deposition with actual data, environmental effects of salt drift and pre- and post-operational data comparison.

The study indicated that only minor, localized effects of cooling tower drift deposition are occurring. Higher deposition rates potentially attributable to the cooling tower were measured at only one location, which is on station property at a distance of 0.4 km southeast of the cooling tower. The salt deposition rate at this site is 113 mg/m<sup>2</sup>/month, which is well below the deposition levels that have been reported to cause vegetative damage of 10,000 mg/m<sup>2</sup>/year. Hope Creek Generating Station is surrounded by extensive areas of tidal salt marsh and the nearest uplands are located approximately three miles to the east, therefore no significant adverse impacts will occur as a result of cooling tower operation.

*Exelon Generation Company*

~~PSE&E~~ has satisfied the commitments under this requirement. No further monitoring is required.

APPENDIX C

ADDITIONAL CONDITIONS  
OPERATING LICENSE NO. NPF-57

**Exelon Generation Company,**

DCEG Nuclear LLC shall comply with the following conditions on the schedules noted below:

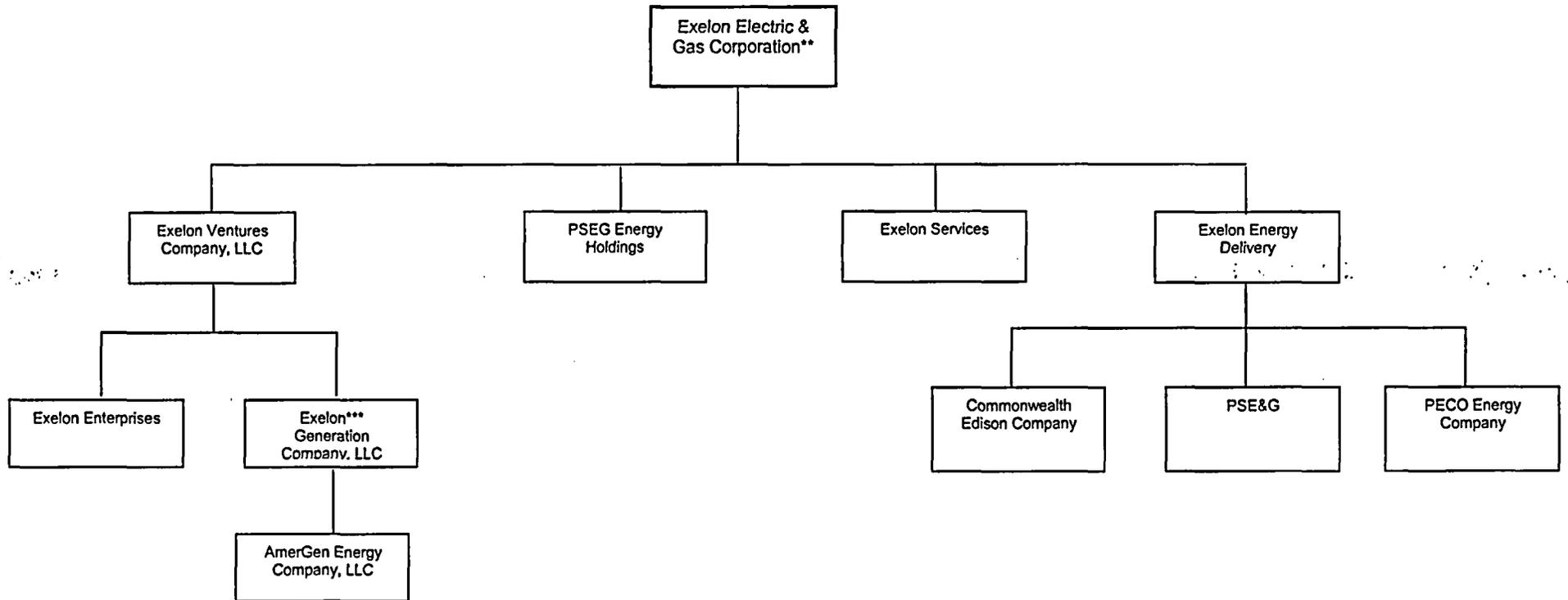
Amendment Number	Additional Condition	Implementation Date
97	The Licensee is authorized to relocate certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated January 11, 1996, as supplemented by letters dated February 26, May 22, June 27, July 12, December 23, 1996, and March 17, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from March 21, 1997
103	The licensee shall relocate the list of "Motor Operated Valves - Thermal Overload Protection (BYPASSED)" from the Technical Specifications (Table 3.8.4.2-1) to the Updated Final Safety Analysis Report, as described in the licensee's application dated July 7, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from September 16, 1977.
105	The licensee shall use the Banked Pattern Withdrawal System or an improved version such as the Reduced Notch Worth Procedure as described in the licensee's application dated June 19, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from September 30, 1997.
110	The licensee shall relocate the suppression chamber water volume, as contained in Technical Specifications 3.5.3.a, 3.5.3.b, 3.6.2.1.a.1 and 5.2.1 to the Updated Final Safety Analysis Report, as described in the licensee's application dated August 20, 1997, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from November 6, 1977
114	The licensee is authorized to perform single cell charging of connected cells in OPERABLE class 1E batteries as described in the licensee's application dated September 8, 1998, as supplemented by letter dated December 8, 1998, and evaluated in the staff's safety evaluation attached to this amendment.	The amendment shall be implemented within 60 days from February 9, 1999.

**SALEM NUCLEAR GENERATING STATION UNITS 1 AND 2  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSES DPR-70, DPR-75 and NPF-57  
DOCKET NOS. 50-272, 50-311 and 50-354**

**ATTACHMENT 4  
PROPOSED EXELON ELECTRIC AND GAS CORPORATE STRUCTURE  
and  
EXELON GENERATION NUCLEAR ORGANIZATION CHART**

**RELATING TO THE MERGER OF PUBLIC SERVICE ENTERPRISE GROUP  
and EXELON CORPORATION**

# Exelon Electric & Gas – Post Merger\*

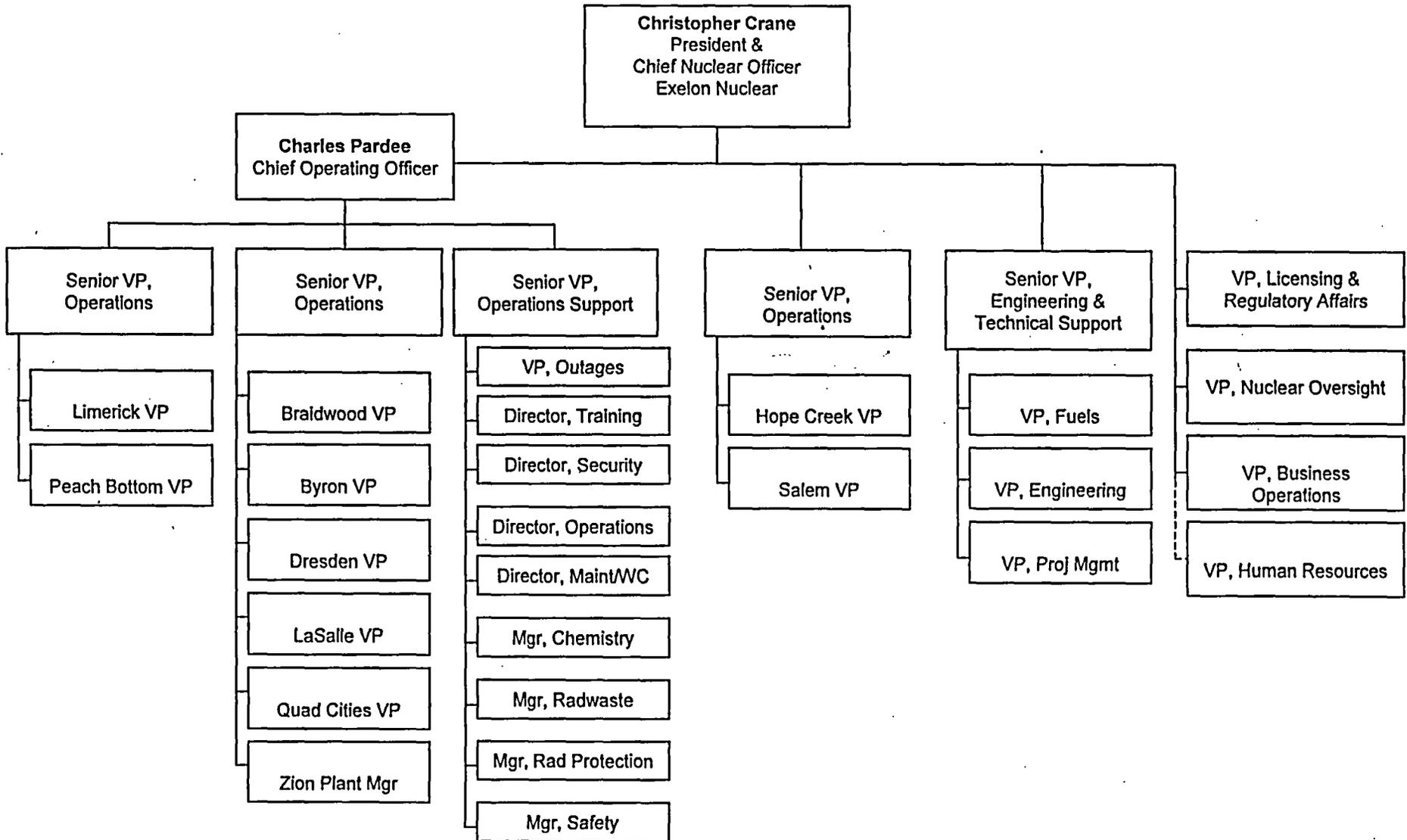


\* Entity names may change at the time of restructuring, but such name changes will not alter the structure as depicted above.

\*\* Other direct subsidiaries of Exelon and PSEG are not shown as we anticipate the merger will not affect their relative placement in the corporate structure.

\*\*\* Entity that owns the nuclear generating assets of Exelon and will own the nuclear generating assets of PSEG Nuclear.

# Exelon Nuclear Organization



**SALEM NUCLEAR GENERATING STATION UNITS 1 AND 2  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSES DPR-70, DPR-75 and NPF-57  
DOCKET NOS. 50-272, 50-311 and 50-354**

**ATTACHMENT 5 (NON-PROPRIETARY)**

**EXELON GENERATION COMPANY PROJECTED INCOME STATEMENT  
and  
EXELON GENERATION AND PSEG POWER CONSOLIDATION KEY  
ASSUMPTIONS  
and  
EXELON GENERATION COMPANY CONSOLIDATED BALANCE SHEET**

**RELATING TO THE MERGER OF PUBLIC SERVICE ENTERPRISE GROUP  
and EXELON CORPORATION**

**EXELON GENERATION COMPANY**  
**Projected Income Statement (with Purchase Accounting) (\$M)**

	2006	2007	2008	2009	2010
<b>Operating Revenues</b>					
<b>Operating Expenses</b>					
Purchased Power					
Fuel					
Operation & Maintenance					
Depreciation & Amortization					
Administrative & Other					
Decommissioning Expense					
Decommissioning Recoveries					
<u>    Total Operating Expenses</u>			<i>redacted</i>		
<b>Operating Income (Loss)</b>					
<b>Other Income (Deductions)</b>					
<b>Income before Income Taxes</b>					
<b>Income Taxes</b>					
<b>Net Income (Loss)</b>					

Note 1: Projected Income Statement does not reflect the effect of our market power mitigation plan to divest 5,500 MW of capacity, as such plan has not yet been finalized. Even with the mitigation plan in effect, change to the Projected Income Statement will not be material.

Note 2: Detailed long range planning for Exelon Generation covered the period from 2006 to 2009; projected Net Income in 2010 is the same as 2009 based on the assumption of no projected growth.

**EXELON GENERATION AND PSEG POWER CONSOLIDATION**  
**Key Assumptions**

	2006	2007	2008	2009	2010
<b>Generation (GWh)</b>					
Fossil & Hydro					
Nuclear					
Subtotal			<i>redacted</i>		
<b>Purchases from Other Suppliers</b>					
<b>Total Supply (GWh)</b>					
<b>Market Sales (GWh)</b>					
<b>Average Market Price (\$/MWh)</b>					
<b>Scheduled Nuclear Refueling Outages</b>					

**Exelon Generation Company**  
**Consolidated Balance Sheet as of 9/30/04**  
**(\$M)**

	Generation Historical (unaudited)	Power Historical (unaudited) (a)	Pro Forma Adjustments	Generation Pro Forma
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**ASSETS**

Cash and Cash equivalents  
 Restricted cash and investments  
 Accounts receivable, net  
 Mark-to-market derivative assets  
 Inventories  
 Deferred income taxes  
 Other

**TOTAL CURRENT ASSETS**

Property, plant and equipment, net

Nuclear decommissioning trust funds  
 Investments  
 Goodwill  
 Mark-to-market derivative assets  
 Deferred debits and other assets

**TOTAL ASSETS**

*redacted*

**LIABILITIES AND MEMBER'S EQUITY**

Long-term debt due within one year  
 Accounts payable  
 Mark-to-market derivative liabilities  
 Accrued expenses  
 Other

**TOTAL CURRENT LIABILITIES**

Long-term debt  
 Deferred credits and other liabilities:  
 Deferred income taxes  
 Unamortized investment tax credits  
 Asset retirement obligations  
 Pension and post-retirement benefit obligations

Spent nuclear fuel obligation  
 Payables to affiliates  
 Mark-to-market derivative liabilities  
 Other

**TOTAL DEFERRED CREDITS AND OTHER LIABILITIES**

Minority interest of consolidated subsidiaries

**MEMBER'S EQUITY**

Membership interest

Undistributed earnings

Accumulated other comprehensive loss

**TOTAL MEMBER'S EQUITY**

**TOTAL LIABILITIES AND MEMBER'S EQUITY**

**NOTES TO UNAUDITED PRO FORMA BALANCE SHEET - CONDENSED - *redacted***