

Docket No. 50-352

AUG 08 1985

Mr. Edward G. Bauer, Jr.  
Vice President and General Counsel  
Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

SUBJECT: ISSUANCE OF FACILITY OPERATING LICENSE NPF-39 FOR THE LIMERICK  
GENERATING STATION, UNIT 1

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Facility Operating License NPF-39, together with Technical Specifications and an Environmental Protection Plan for the Limerick Generating Station, Unit 1. License No. NPF-39 authorizes operation of the Limerick Generating Station, Unit 1, at reactor power levels not in excess of 3293 megawatts thermal (100% rated power).

Enclosed is a copy of a related notice, the original of which has been forwarded to the Office of the Federal Register for publication.

Two signed copies of Amendment No. 2 to Indemnity Agreement No. B-101 which covers the activities authorized under License No. NPF-39 are also enclosed. Please sign both copies and return one copy to this office.

An assessment of the effect of license duration on matters discussed in the Final Environmental Statement for Limerick Generating Station, Unit 1 is contained in Enclosure 4.

Sincerely,

Original signed by:

Hugh L. Thompson, Jr., Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License NPF-39
2. Federal Register Notice
3. Amendment No. 2 to Indemnity Agreement No. B-101
4. Assessment of the Effect of License Duration on Matters Discussed in the FES

cc w/enclosures:  
See next page

LB#2/DL/LA  
Elyton  
08/26/85

LB#2/DL/PM  
EMartin:lb  
08/25/85

JSaPzman  
08/27/85

OELD  
7-31  
08/27/85

LB#2/DL/BC  
WButler  
08/25/85

AD/LL  
THovak  
08/26/85

D/DL  
FMIaglia  
08/27/85

D/DL  
HThompson  
08/27/85

D/NRP  
DEsenhart  
08/27/85

D/NRP  
TWenton  
08/27/85

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PDR ADOCK 05000352  
PDR

- H. This license is effective as of the date of issuance and shall expire at midnight on October 26, 2024

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

*D.G. Eisenbut*

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachments/Appendices:

1. Attachments 1-2
2. Appendix A - Technical Specifications (NUREG-1149)
3. Appendix B - Environmental Protection Plan

Date of Issuance: **AUG 08 1985**

LB#2/DL/LA  
EH  
08/25/85

LB#2/DL/PM  
RE Martin:lb  
08/25/85

*me*  
US  
08/25/85

*no legal objection.  
note change to ADP.8.*  
OELD  
07-31-85  
08/25/85

*LB*  
LB#2/DL/BC  
WButler  
08/25/85

*let to*  
AD/L/DL  
TM Noyak  
08/25/85

D/DL *HA R*  
FMiraglia  
08/8/85

D/DL *Hy*  
HThompson  
08/8/85

D/NRP  
DEisenbut  
08/8/85

D/NRP  
DEisenbut  
08/8/85

Dated at Bethesda, Maryland, this 8<sup>th</sup> day of August 1985.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

LA:DL:LB #2  
EH:ton:1b  
08/26/85

DD:LB #2  
R Martin  
08/25/85

*BH Wagner*  
OELD  
07-31-85  
08/1/85

*WB.*  
DL:LB #2  
WButler  
08/25/85

DISTRIBUTION FOR LIMERICK OPERATING LICENSE

\*Docket No. 50-352

\*NRC PDR

\*Local PDR

\*PRC System

\*NSIC

LB#2 R/F

\*E. Hylton

\*R. Martin

T. Novak

W. Butler

J. Saltzman, SP

\*B. Vogler, OELD

\*A. Hodgdon, OELD

C. Miles, OPA

H. Denton

J. Rutberg, OELD

A. Toalston, SAB

W. Miller, LFMB

\*E. Jordan

\*L. Harmon, I&E

\*E. Butcher

Inez Bailey

\*T. Barnhart (4)

\*J. Partlow

\*B. Grimes

\*W/Technical Specifications



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

AUG 08 1985

Docket No. 50-352

Mr. Edward G. Bauer, Jr.  
Vice President and General Counsel  
Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

SUBJECT: ISSUANCE OF FACILITY OPERATING LICENSE NPF-39 FOR THE LIMERICK  
GENERATING STATION, UNIT 1

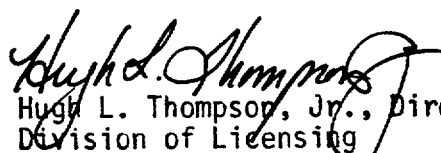
The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Facility Operating License NPF-39, together with Technical Specifications and an Environmental Protection Plan for the Limerick Generating Station, Unit 1. License No. NPF-39 authorizes operation of the Limerick Generating Station, Unit 1, at reactor power levels not in excess of 3293 megawatts thermal (100% rated power).

Enclosed is a copy of a related notice, the original of which has been forwarded to the Office of the Federal Register for publication.

Two signed copies of Amendment No. 2 to Indemnity Agreement No. B-101 which covers the activities authorized under License No. NPF-39 are also enclosed. Please sign both copies and return one copy to this office.

An assessment of the effect of license duration on matters discussed in the Final Environmental Statement for Limerick Generating Station, Unit 1 is contained in Enclosure 4.

Sincerely,

  
Hugh L. Thompson, Jr., Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License NPF-39
2. Federal Register Notice
3. Amendment No. 2 to Indemnity Agreement No. B-101
4. Assessment of the Effect of License Duration on Matters Discussed in the FES

cc w/enclosures:  
See next page

Mr. Edward G. Bauer, Jr  
Philadelphia Electric Company

Limerick Generating Station  
Units 1 & 2

cc:

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1625 N. Front Street  
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Air & Water Pollution Patrol  
61 Forest Avenue  
Ambler, Pennsylvania 19002

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County Solicitor  
County of Montgomery  
Courthouse  
Norristown, Pennsylvania 19404

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Senior Vice President  
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Philadelphia, Pennsylvania 19101

Mr. Karl Abraham  
Public Affairs Officer  
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King of Prussia, PA 19806

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
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Third and Locust Streets  
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Philadelphia Electric Company  
Units 1 and 2

- 2 -

Limerick Generating Station

cc:

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Philadelphia, Pennsylvania 19106

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Management Agency  
Basement, Transportation &  
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Harrisburg, Pennsylvania 17120

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Friends of the Earth  
of the Delaware Valley  
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Moylan, Pennsylvania 19065

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Norristown, Pennsylvania 19402

Kathryn S. Lewis, Esq.  
Municipal Services Bldg.  
15th and JFK Blvd.  
Philadelphia, Pennsylvania 19102

Helen F. Hoyt, Chairman  
Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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Assistant Consumer Advocate  
Office of Consumer Advocate  
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Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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Community Legal Services, Inc.  
Law Center North Central - Bevery Bldg.  
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Philadelphia, Pennsylvania 19140

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Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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Philadelphia, Pennsylvania 19101

Mr. Spence W. Perry, Esq.  
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Washington, D. C. 20472

Timothy R. S. Campbell, Director  
Department of Emergency Services  
14 East Biddle Street  
West Chester, Pennsylvania 19380

Philadelphia Electric Company  
Units 1 and 2

- 3 -

Limerick Generating Station

cc:

Chairman Board of Supervisors of  
Limerick Township  
646 West Ridge Pike  
Limerick, Pennsylvania 19468

Governor's Office of State  
Planning and Development  
ATTN: Coordinator, Pennsylvania  
State Clearinghouse  
P. O. Box 1323  
Harrisburg, Pennsylvania 17102

Dept. of Environmental Resources  
ATTN: Director, Office Radiologic  
Health  
P. O. Box 2063  
Harrisburg, Pennsylvania 17105





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

PHILADELPHIA ELECTRIC COMPANY  
DOCKET NO 50-352  
LIMERICK GENERATING STATION, UNIT 1  
FACILITY OPERATING LICENSE

License No. NPF-39

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for license filed by Philadelphia Electric Company (the licensee) 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 Limerick Generating Station, Unit 1 (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-106 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. The licensee 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;

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 this Facility Operating License No. NPF-39, 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, the Partial Initial Decisions issued by the Atomic Safety and Licensing Board dated March 8, 1983, August 29, 1984, May 2, 1985 and July 22, 1985, and the Decision of the Appeal Board dated September 26, 1984, regarding this facility, and approval by the Nuclear Regulatory Commission in its Memorandum and Order dated August 8, 1985, the license for Fuel Loading and Low Power Testing, License No. NPF-27, issued on October 26, 1984, is superseded by Facility Operating License NPF-39 hereby issued to the Philadelphia Electric Company (the licensee), to read as follows:

A. This license applies to the Limerick Generating Station, Unit 1, a boiling water nuclear reactor and associated equipment, owned by Philadelphia Electric Company. The facility is located on the licensee's site in Montgomery and Chester Counties, Pennsylvania on the banks of the Schuylkill River approximately 1.7 miles southeast of the city limits of Pottstown, Pennsylvania and 21 miles northwest of the city limits of Philadelphia, Pennsylvania, and is described in the licensee's Final Safety Analysis Report, as supplemented and amended, and in the licensee's Environmental Report-Operating License Stage, as supplemented and amended.

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

(1) Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Montgomery and Chester Counties, Pennsylvania, in accordance with the procedures and limitations set forth in this license;

(2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and to 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;

- (3) 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;
  - (4) 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
  - (5) 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 (except as exempted from compliance in Section 2.D. below) 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

The licensee is authorized to operate the facility at reactor core power levels not in excess of 3293 megawatts thermal (100% rated power) in accordance with the conditions specified herein and in Attachment 1 to this license. The items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.
  - (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Fire Protection (Section 9.5, SSER-2)\*

- a. The licensee shall maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility through Revision 34 and as approved in the SER through Supplement 2, and in the Fire Protection Evaluation Report through Revision 6, subject to provisions b and c below.
- b. The licensee shall make no change to features of the approved fire protection program which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change the licensee must submit an application for license amendment pursuant to 10 CFR 50.90.
- c. The licensee may make changes to features of the approved fire protection program which do not decrease the level of fire protection without prior Commission approval after such features have been installed as approved, provided such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59). However, the licensee shall maintain, in an auditable form, a current record of all such changes including an evaluation of the effects of the change on the fire protection program and shall make such records available to NRC inspectors upon request. All changes to the approved program made without prior Commission approval shall be reported to the Director of the Office of Nuclear Regulation, together with supporting analyses, annually.
- d. The licensee shall provide a stairway for fire brigade access from the turbine building to the Unit 1 cable spreading room via the Unit 2 cable spreading room and the static inverter room prior to startup following the first refueling outage.

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\*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) Qualification of Personnel (Section 13.1.2.2, SER and SSER-3 and SSER-4)

The licensee shall have on each shift operators that meet the requirements described in Attachment 2.

- (5) Emergency Response Capabilities (Generic Letter 82-33, Supplement 1 to NUREG-0737) Safety Parameter Display System (Section 18.2, SER and SSER-3 and SSER-5)

The licensee shall have the Safety Parameter Display System operable within 30 days after the completion of the 100-Hour Warranty Run.

- (6) Post - Fuel Loading Initial Test Program (Section 14, SER and SSER-5)

Any changes to the Initial 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.

- (7) Inservice Inspection Program (Section 5.2.4.3 and 6.6.3, SER and SSER-3)

The licensee shall submit the inservice inspection program by October 26, 1985 for NRC staff review and approval.

- (8) Salem ATWS Event, Generic Letter 83-28 (Section 15.8, SSER-2)

The licensee shall implement its commitments applicable to Generic Letter 83-28 on a schedule which is consistent with that given in its November 10, 1983, May 8, 1984 and June 7, 1984 letters.

- (9) Turbine System Maintenance Program (Section 3.5.1.3, SER)

The licensee shall submit a turbine system maintenance program by October 26, 1987. Prior to review and approval of that program by the NRC staff, the licensee shall volumetrically inspect all low pressure turbine rotors at the second refueling outage and every other (alternate) refueling outage thereafter.

(10) Reactor Enclosure Cooling Water and Chilled Water Isolation Valves (Section 6.2.4.2, SER and SSER-3)

The licensee shall, prior to startup following the first refueling outage, provide automatic and diverse isolation signals to the reactor enclosure cooling water inboard and outboard isolation valves in the supply and return lines to the recirculation pumps and the drywell chilled water outboard isolation valves in the supply and return lines.

(11) Hydrogen Recombiner Isolation (Section 6.2.4.2, SER and SSER-1 and SSER-3)

The licensee shall, prior to startup following the first refueling outage, install and test an additional automatic isolation valve in each of the hydrogen recombiner lines penetrating the primary containment.

(12) Remote Shutdown System (Sections 7.1.4.4, 7.4.2.3, SER and Section 7.4.2.3, SSER-3 and SSER-5)

The licensee shall, prior to startup following the first refueling outage, have completed modifications to the existing remote shutdown system to provide a redundant safety-related method of achieving safe shutdown conditions without lifting leads or adding jumpers.

The modifications to be completed shall be those described in the licensee's letters dated April 18 and 22, 1985 which allow for the operation of the B RHR pump, the B RHR SW pump and the B ESW pump from the respective pump breaker compartments by the installation of transfer switches. The licensee shall perform necessary tests prior to startup following the first refueling outage to demonstrate the operability of the modified system.

(13) Operation with Partial Feedwater Heating at End-of-Cycle (Section 15.0, SER)

The facility shall not be operated with partial feedwater heating for the purpose of extending the normal fuel cycle.

(14) Refueling Floor Volume Connection to Standby Gas Treatment System (Section 6.2.3, SSER-2 and SSER-3)

Prior to any movement of irradiated fuel within the refueling floor volume the licensee shall complete and test all modifications required to connect the refueling floor volume to standby gas treatment system. During the interim period, the licensee shall not remove the reactor pressure vessel head prior to the NRC staff review and approval.

(15) Emergency Planning

Procedures Subject to 44 CFR Part 350

In the event 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.

- D. The facility requires exemptions from certain requirements of 10 CFR Part 50. These include (a) exemption from General Design Criteria (GDC) 61 of Appendix A, operation of that portion of the standby gas treatment system (SGTS) that serves the refueling area until the first refueling (Section 6.2.3 of SSER-2 and SSER-3), (b) exemption from GDC-56 of Appendix A, the requirement for additional automatic containment isolation valves for the hydrogen recombiner lines and the requirement for automatic isolation of existing isolation valves in the Drywell Chilled Water (DCW) and the Reactor Enclosure Cooling Water (RECW) systems until prior to startup following the first refueling outage (Section 6.2.4.2 of the SER, SSER-1 and SSER-3), (c) exemption from GDC-19 of Appendix A, as related to the requirement for redundant remote shutdown capability (Section 7.4.2.3 of SSER-3 and SSER-5), (d) exemption from the requirement of paragraph III.D.2.(b)(ii) of Appendix J, the testing of containment air locks at times when the containment integrity is not required (Section 6.2.6.1 of the SER and SSER-3), (e) exemption from the requirements of paragraphs II.H.4. and III.C.2 of Appendix J, the leak rate testing of the Main Steam Isolation Valves (MSIVs) at the peak calculated containment pressure, Pa, and exemption from the requirements of paragraph III.C.3 of Appendix J that the measured MSIV leak rates be included in the summation for the local leak rate test (Section 6.2.6 of SSER-3), (f) exemption from the requirement of paragraphs II.H.1 and III.C.2 of Appendix J, the local leak rate testing of the Traversing Incore Probe Shear Valves (Section 6.2.6 of the SER and SSER-3), (g) a one-time exemption from the requirement of Appendix J to perform local leak

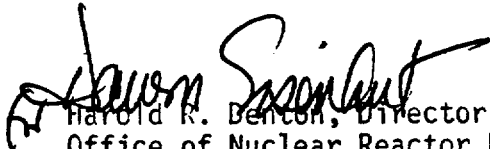
rate testing on seven Residual Heat Removal Relief Valves (Section 6.2.6 of SSER-3) (h) exemption from requirement of 10 CFR Part 50.44, the inerting of containment six months after initial criticality (Section 6.2.5 of SSER-5) and (i) exemption from the requirements of 10 CFR Part 50, Appendix E, Section IV.F.1 for the conduct of a full participation emergency preparedness exercise within one year before the issuance of a full power operating license (Section 13.3 of SSER-6). These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore these exemptions are hereby granted pursuant to 10 CFR 50.12 and 50.47(c). With the granting of 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 all amendments and revisions made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p), which are part of the license. These plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Limerick Generating Station Physical Security Plan," "Limerick Generating Station Plant Security Personnel Training and Qualification Plan," and "Limerick Generating Station Safeguards Contingency Plan."
- F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, the licensee 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 licensee 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 October 26, 2024

FOR THE NUCLEAR REGULATORY COMMISSION

  
Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachments/Appendices:

1. - Attachments 1-2
2. Appendix A - Technical Specifications (NUREG-1149)
3. Appendix B - Environmental Protection Plan

Date of Issuance: **AUG 08 1985**

ATTACHMENT 1  
To-NPF 39

The attachment identifies items which must be completed to the satisfaction of the staff in accordance with the operational modes or conditions identified below.

1. OUTSTANDING ITEM TO BE ACCOMPLISHED PRIOR TO INITIALLY INERTING THE CONTAINMENT AS REQUIRED BY TECHNICAL SPECIFICATIONS 3/4.6.6.3 AND 3/4.10.5

Complete the modifications to the liquid nitrogen vaporization facility and the containment inerting system described in the licensee's letter dated September 26, 1984 or alternate modifications determined acceptable following an evaluation per 10 CFR 50.59 (IE Bulletin 84-01)

In the event alternate modifications are used, describe these modifications and their supporting bases in a report to NRC Region I within thirty days of their implementation.

2. OUTSTANDING ITEMS TO BE CORRECTED BY THE FIRST REFUELING OUTAGE

- a. Seal the conduits to instruments in the pipe tunnel. (Inspection Report 50-352/84-27, Item 04)
- b. Complete the actions for Construction Deficiency Report (84-00-10 "Water accumulation in diesel fuel oil tanks.")

ATTACHMENT 2  
To NPF-39

This attachment identifies the shift operating staff experience requirements.

At all times the plant is in an operating condition other than cold shutdown or refueling, the licensee shall have a licensed senior operator on each shift who has had at least six months of hot operating experience on a same type plant, including at least six weeks at power levels greater than 20% of full power, and who has had startup and shutdown experience. For those shifts where such an individual is not available on the plant staff, an advisor shall be provided who has had at least four years of power plant experience, including two years of nuclear plant experience, and who has had at least one year of experience on shift as a licensed senior operator at a similar type facility. Advisors, as a minimum, shall be trained on plant procedures, technical specifications and plant systems, and shall be examined on these topics at a level sufficient to assure familiarity with the plant. These advisors or suitably qualified replacements shall be retained until at least one of the senior operators on each shift has the required experience. The NRC shall be notified at least 30 days prior to the release of any special assigned advisors.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-352LIMERICK GENERATING STATION, UNIT NO. 1NOTICE OF ISSUANCE OF FACILITYOPERATING LICENSE

Notice is hereby given that pursuant to the approval given in a Memorandum and Order dated August 8, 1985, the Nuclear Regulatory Commission (the Commission), has issued Facility Operating License No. NPF-39 to the Philadelphia Electric Company, (the licensee) which authorizes operation of the Limerick Generating Station, Unit No. 1 (the facility), by Philadelphia Electric Company at reactor core power levels not in excess of 3293 megawatts thermal in accordance with the provisions of the License, the Technical Specifications and the Environmental Protection Plan. On October 26, 1984, the Commission issued Facility Operating License No. NPF-27, which authorized operation of the Limerick Generating Station, Unit No. 1. Facility Operating License No. NPF-39 supersedes Facility Operating License No. NPF-27.

The Limerick Generating Station, Unit No. 1, is a boiling water nuclear reactor located on the licensee's site in Montgomery and Chester Counties, Pennsylvania on the banks of the Schuylkill River approximately 1.7 miles southeast of the city limits of Pottstown, Pennsylvania and 21 miles northwest of the city limits of Philadelphia, Pennsylvania.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the License. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the Federal Register on August 21, 1981 (46 F.R. 42557 - 42558).

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P PDR

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

For further details in respect to this action, see (1) Facility Operating License NPF-39 complete with Technical Specifications and the Environmental Protection Plan; (2) the interim report of the Advisory Committee on Reactor Safeguards, dated October 18, 1983; (3) the subsequent report of the Advisory Committee on Reactor Safeguards dated November 6, 1984; (4) the Commission's Safety Evaluation Report, dated August 1983, Supplement No. 1 dated December 1983, Supplement No. 2 dated October 1984, Supplement No. 3 dated October 1984, Supplement No. 4 dated May 1985, Supplement No. 5 dated July 1985 and Supplement No. 6 dated August 1985; (5) the Final Safety Analysis Report and Amendments thereto; (6) the Final Environmental Report and supplements thereto; (7) the Final Environmental Statement dated April 1984; and (8) the Commission Memorandum and Order dated August 8, 1985.

These items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. 20555, and at the Pottstown Public Library, 500 High Street, Pottstown, Pennsylvania, 19464. A copy of Facility Operating License NPF-39 may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing. Copies of the Safety Evaluation Report and its Supplements 1, 2, 3, 4, 5 and 6 (NUREG-0991) and the Final Environmental Statement (NUREG-0974) may be purchased by calling 301-492-9530 or by writing to the Publication Services Section, Division of Technical Information and Document Control, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, or may be purchased from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, this 8<sup>th</sup> day of August 1985.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Walter R. Butler".

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing



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

AUG 08 1985

Docket No. 50-352

AMENDMENT TO INDEMNITY AGREEMENT NO. B-101  
AMENDMENT NO. 2

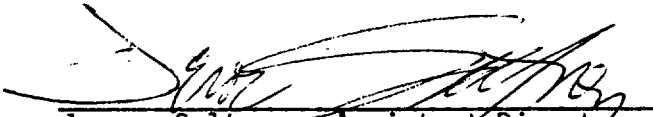
Effective AUG 08 1985, Indemnity Agreement No. B-101, between Philadelphia Electric Company and the Nuclear Regulatory Commission, dated April 3, 1984, as amended, is hereby further amended as follows:

Item 3 of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 3 - License number or numbers

SNM-1926	(From 12:01 a.m., April 3, 1984, to 12 midnight October 25, 1984 inclusive)
NPF-27	(From 12:01 a.m., October 26, 1984, to 12 midnight AUG 07 1985 inclusive)
NPF-39	(From 12:01 a.m., AUG 08 1985 )

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

  
Jerome Saltzman, Assistant Director  
State and Licensee Relations  
Office of State Programs

Accepted \_\_\_\_\_

By \_\_\_\_\_  
PHILADELPHIA ELECTRIC COMPANY



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

AUG 08 1985

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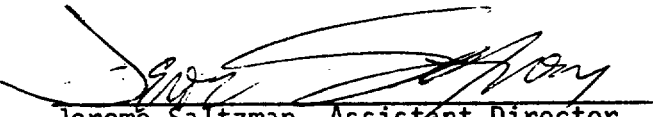
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FOR THE U.S. NUCLEAR REGULATORY COMMISSION

  
Jerome Saltzman, Assistant Director  
State and Licensee Relations  
Office of State Programs

Accepted \_\_\_\_\_

By \_\_\_\_\_  
PHILADELPHIA ELECTRIC COMPANY





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

ASSESSMENT OF THE EFFECT ON LICENSE DURATION ON MATTERS DISCUSSED  
IN THE FINAL ENVIRONMENTAL STATEMENT FOR THE LIMERICK GENERATING STATION  
UNITS 1 AND 2 (DATED APRIL 1984)

INTRODUCTION

The Final Environmental Statement (FES) for the operation of the Limerick Generating Station, Unit Nos. 1 and 2 was published in April 1984. It has been past practice to issue operating licenses for a period of 40 years from the date of the construction permit. For Limerick, the CP was issued in June 1974, thus, approximately 30 years of operating life would be available.

By letters dated March 17, 1981 and September 20, 1984, Philadelphia Electric Company requested that the operating license for Limerick Generating Station, Units 1 and 2 have a duration of 40 years from the date of issuance.

DISCUSSION

The staff has reviewed the Limerick FES to determine which aspects considered in the FES are affected by the duration of the operating license. In general, the FES assesses various impacts associated with operation of the facility in terms of annual impacts and balances these against the anticipated annual energy production benefits. Thus, the overall assessment and conclusions would not be dependent on specific operating life. There are, however, two areas in the FES for which a specific operating life was assumed:

1. Radiological assessments are based on a 20-year plant midlife.
2. Uranium fuel cycle impacts are based on one initial core load and annual refuelings.

In addition there is a third area which is affected by the duration of the operating life which was not specifically addressed in the FES.

3. Uranium availability is evaluated through 30 years of operation.

Radiological assessments were evaluated based on a 40 year operating period (20-year plant midlife) in Section 5.9.3.1 of the FES. Therefore only the uranium fuel cycle impacts and uranium availability needed to be assessed to determine whether the use of a 40-year operating period rather than a 30-year operating period would significantly affect our assessment concerning these areas.

### EVALUATION:

The staff's appraisal of the significance of the use of 40 years of operation rather than 30 as it affects these two areas is presented in the following discussions:

Uranium Fuel Cycle Impacts - The impacts of the uranium fuel cycle are based on 30 years of operation of a model LWR. The fuel requirements for the model LWR were assumed to be one initial core load and 29 annual refuelings (approximately 1/3 core). The annual fuel requirement for the model LWR averaged out over a 40-year operating life (1 initial core and 39 refuelings of approximately 1/3 core) would be reduced slightly as compared to the annual fuel requirement averaged for a 30-year operating life.

The net result would be an approximately 1.5% reduction in the annual fuel requirement for the model LWR. This small reduction in fuel requirements would not lead to significant changes in the impacts of the uranium fuel cycle. The staff does not believe that there would be any changes to Limerick FES Table 5.12 (S-3) that would be necessary in order to consider 40 years of operation. If anything, the values in Table 5.12 becomes more conservative when a 40-year period of operation is considered.

Uranium Resources - A 33% increase in the Limerick operating life (to 40 years) would still be within the projected uranium resources since the cancellation of many reactors will result in an offsetting reduction in demand. Furthermore, the increase in operating life assumption to 40-years will reduce the need for replacement generating capacity, including nuclear, at the end of 30 years.

### CONCLUSION

The staff has evaluated the environmental impact of these areas which are dependent on a specific operating life for the Limerick plant. We have concluded, based on the reasons discussed above, that the impacts associated with a 40-year operating license duration are not significantly different from those associated with a 30-year operating license duration and are not significantly different from those assessed in the Limerick FES.