DOCKET NO. 50-352 LIMERICK GENERATING STATION, UNIT NO. 1 NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the Nuclear Regulatory Commission (the Commission), has issued Facility Operating License No. NPF-27 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 with a condition currently limiting operation to five percent of rated power (165 megawatts thermal). Authorization to operate beyond five percent of rated power will require specific Commission approval.

The Limerick Generating Station, Unit No. 1, is a boiling water nuclear reactor located 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).

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-27 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 Commission's Safety Evaluation Report, dated
August 1983, Supplement No. 1 dated December 1983, Supplement No. 2 dated
October 1984, and Supplement No. 3 dated October 1984; (4) the Final
Safety Analysis Report and Amendments thereto; (5) the Environmental Report and supplements thereto; and (6) the Final Environmental Statement dated
April 1984.

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-27 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, and 3 (NUREG-0991) and the Final Environmental
Statement (NUREG-0974) may be purchased at current rates from the National

Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing to the U.S. Nuclear Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO deposit account holders may call (301) 492-9530.

Dated at Bethesda, Maryland, this 26th day of October 1984.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief Licensing Branch No. 2

Division of Licensing



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

October 26, 1984

Docket No. 50-352

AMENDMENT TO INDEMNITY AGREEMENT NO. B-101 AMENDMENT NO. 1

Effective OCT 2 6 1984 , Indemnity Agreement No. B-101, between Philadelphia Electric Company and the Nuclear Regulatory Commission, dated April 3, 1984, is hereby amended as follows:

Item 2a. of the Attachment to the Indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 2 - Amount of financial protection

\$1,000,000 a.

(From 12:01 a.m., April 3, 1984 to 12 midnight OCT 2 5 1984

inclusive)

\$160,000,000*

(From 12:01 a.m., OCT 26 1984

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 OCT 2 5 1984

inclusive)

NPF-27

(From 12:01 a.m., OCT 26 1984

^{*} and, as of A gust 1, 1977, the amount available as secondary financial protection.

Item 5 of the Attachment to the indemnity agreement is amended by adding the following:

Nuclear Energy Liability Policy (Facility Form) No. MF-113 issued by Mutual Atomic Energy Liability Underwriters.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Jerome Sal	tzman, /	Assistant	Director
State and	License	e Kelation	ns
Office of	State Pr	rógrams	

Acc	cepted			_, 1984
Ву				
9	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 .ssue 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.
- 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 5.9.2 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 by 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 off-setting 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.