

UNITED STATES ATOMIC ENERGY COMMISSION WASHINGTON. D.C. 20545

PHILADELPHIA ELECTRIC COMPANY DOCKET NO. 50-352 LIMERICK GENERATING STATION UNIT 1 CONSTRUCTION PERMIT

Construction Permit No. CPPR-106

- 1. The Atomic Energy Commission (the Commission) having found that:
 - A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;
 - B. The Philadelphia Electric Company (the applicant) has described the proposed design of the Limerick Generating Station, Unit 1 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design and has identified the major features or components incorporated therein for the protection of the health and safety of the public;
 - C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;
 - D. Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;
 - E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of nstruction of the proposed facility and (ii)

8202010285 820128 PDR ADOCK 05000352 G PDR taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;

- F. The applicant is technically qualified to design and construct the proposed facility;
- G. The applicant is financially qualified to design and construct the proposed facility;
- H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
- I. After weighing the environmental, economic, technical and other benefits of the facility against environmental costs and considering available alternatives, the issuance of a construction permit (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 of said Appendix D have been satisfied.
- 2. Pursuant to Sectic 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated June 14, 1974, the Atomic Energy Commission (the Commission) hereby issues a construction permit to the applicant for a utilization facility designed to operate at 3293 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the applicant and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Limerick Generating Station, Unit 1, will be located on the applicant's site on the Schuylkill River, near Pottstown, in Limerick Township, Montgomery County, Pennsylvania.
- 3. This premit shall be deemed to contain and be subject to the conditions specified in Sections 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulation, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:

- A. The earliest date for the completion of the facility is April 1, 1979, and the latest date for completion is October 1, 1979.
- B. The facility shall be constructed and located at the site as described in the application, on the Schuylkill River, near Pottstown, in Limerick Township, Montgomery County, Pennsylvania.
- C. This construction permit authorizes the applicant to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.
- D. In view of the fact that the Attorney General has not recommended an antitrust hearing in this matter, that no antitrust issues have been raised by another in a manner according with the Commission's Rules of Practice, and that no finding has been made that an antitrust hearing is otherwise required (10 CFR, Part 2, Section 2.104(d)), antitrust review of the application for this construction permit under Section 105c of the Atomic Energy Act of 1954, as amended, has been completed and a hearing thereon determined to be unncecssary.
- E. This facility is subject to the following additional conditions for the protection of the environment:
 - All work in connection with this project shall be carried on under the provisions of Permit 4671202, authorized by the Department of Environmental Resources, Commonwealth of Pennsylvania under the Act of June 25, 1913, as amended.
 - (2) A control program shall be established by the applicant to provide for a periodic review of all construction activities to assure that those activities conform to the environmental conditions set forth in this permit.
 - (3) At least two weeks before engaging in a construction activity which 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, the applicant shall provide written notification to the Director of Licensing.

- (4) If unexpected harmful effects or evidence of irreversible damage are detected during facility construction; the applicant shall provide an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
- (5) The facility shall be designed such that the total residual chlorine concentration in the discharge prior to entry into the river is not greater than 0.1 ppm in any case.
- (6) The environmental report submitted in support of an operating license for the station shall include the following:
 - A monitoring program to identify and measure the releases of radioactive substances.
 - (ii) A program for the collection, classification and enumeration of all fish trapped on the intake screens.
 - (iii) A program for the measurement at the discharge structure of concentrations of chlorine (free and total residual) and heavy metals (iron, copper, zinc, cadmium, cobalt, nickel, chromium and manganese) and any chemical added to maintain water quality in the cooling tower.
- (7) The pre-operational environmental monitoring program described in the Environmental Report, Construction Permit Stage (Revised), shall be verified by a comprehensive report to the Staff which defines an appropriate data base for the existing environment. This report shall be provided by January 1, 1975.
- (8) The applicant will take those measures necessary to assure the availability of compensating water storage capacity at the time of initial power operation if such is permitted by the Delaware River Basin Commission pursuant to DRBC Docket No. D-69-210CP. A schedule identifying significant milestone dates to achieve this objective, assuming the Tocks Island project is not available, shall be developed in coordination with the Delaware River Basin Commission and submitted to the Director of Licensing within six months after the issuance of a construction permit for the station:

Provided, however, that if and when the Delaware River Basin Commission has permitted applicant to construct supplemental storage reservoir and has allocated sufficient water to be utilized in connection therewith for normal plant operations at

full power, and after the required comprehensive basin review has been completed as required by Section 3.8 of the Compact of the DREC, for the supplemental storage reservoir and the Point Pleasant diversion project, then the Atomic Energy Commission shall prepare Draft and Final Environmental Impact Statements and shall provide a hearing of the scope required by the Rules of Practice of the Commission and by the Administrative Procedure Act to consider the significant environmental impact within the scope of NEPA requirements, of the construction and operation of such supplemental storage reservoir, and the Point Pleasant diversion project to the extent that its facilities are used for Limerick Generating Station, the said hearing and determination of the significant environmental impact to occur before applicant shall commence construction of the said storage reservoir, or the Point Pleasant facilities which will be used for Limerick Generating Station.

- (9) The applicant shall take the necessary mitigating actions, including those summarized in Section 4.5 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities. A program of control over all activities which can cause a significant adverse environmental impact shall be established. The program shall provide for a periodic review of all construction activities to assure that these activities conform to the environmental conditions of the construction permit and are not resulting in significant adverse environmental impact.
- 4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the applicant submits to the Commission the complete final safety analysis report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D were satisfied; and (d) the applicant submits proof of financial protection and the execution of an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

EOR THE ATOMIC ENERGY COMMISSION S 5 Ciambusso, Deputy_Director A.

for Reactor Projects Directorate of Licensing

Date of Issuance: JUN 1 9 1974



UNITED STATES ATOMIC ENERGY COMMISSION WASHINGTON, D.C. 20545

PHILADELPHIA ELECTRIC COMPANY DOCKET NO. 50-353 LIMERICK GENERATING STATION UNIT 2 CONSTRUCTION PERMIT

Construction Permit No. CPPR-107

- 1. The Atomic Energy Commission (the Commission) having found that:
 - A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;
 - B. The Philadelphia Electric Company (the applicant) has described the proposed design of the Linerick Generating Station, Unit 2 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design and has identified the major features or components incorporated therein for the protection of the health and safety of the public;
 - C. Such further technical or design information as may be required to . complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;
 - D. Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;
 - E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility and (ii)

taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;

- F. The applicant is technically qualified to design and construct the proposed facility;
- G. The applicant is financially qualified to design and construct the proposed facility;
- H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
- I. After weighing the environmental, economic, technical and other benefits of the facility against environmental costs and considering available alternatives, the issuance of a construction permit (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 of said Appendix D have been satisfied.
- 2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated June 14, 1974, the Atomic Energy Commission (the Commission) hereby issues a construction permit to the applicant for a utilization facility designed to operate at 3293 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the applicant and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Limerick Generating Station, Unit 2, will be located on the applicant's site on the Schuylkill River, near Pottstown. in Limerick Township, Montgomery County, Pennsylvania.
- 3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:

- A. The earliest date for the completion of the facility is September 1, 1980, and the latest date for completion is March 1, 1981.
- B. The facility shall be constructed and located at the site as described in the application, on the Schuylkill River, near Pottstown, in Limerick Township, Montgomery County, Pennsylvania.
- C. This construction permit authorizes the applicant to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.
- D. In view of the fact that the Attorney General has not recommended an antitrust hearing in this matter, that no antitrust issues have been raised by another in a manner according with the Commission's Rules of Practice, and that no finding has been made that an antitrust hearing is otherwise required (10 CFR Part 2, Section 2.104 (d)), antitrust review of the application for this construction permit under Section 105c of the Atomic Energy Act of 1954, as amended, has been completed and a hearing thereon determined to be unnecessary.
- E. This facility is subject to the following additional conditions for the protection of the environment.
 - All work in connection with this project shall be carried on under the provisions of Permit 4671202, authorized by the Department of Environmental Resources, Commonwealth of Pennsylvania under the Act of June 25, 1913, as amended.
 - (2) A control program shall be established by the applicant to provide for a periodic review of all construction activities to assure that those activities conform to the environmental conditions set forth in this permit.
 - (3) At least two weeks before engaging in a construction activity which 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, the applicant shall provide written notification to the Director of Licensing.

- (4) If unexpected harmful effects or evidence of irreversible damage are detected during facility construction; the applicant shall provide an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
- (5) The facility shall be designed such that the total residual chlorine concentration in the discharge prior to entry into the river is not greater than 0.1 ppm in any case.
- (6) The environmental report submitted in support of an operating license for the station shall include the following:
 - A monitoring program to identify and measure the releases of radioactive substances.
 - (ii) A program for the collection, classification and enumeration of all fish trapped on the intake screens.
 - (iii) A program for the measurement at the discharge structure of concentrations of chlorine (free and total residual) and heavy metals (iron, copper, zinc, cadmium, cobalt, nickel, chromium and manganese) and any chemical added to maintain water quality in the cooling tower.
- (7) The pre-operational environmental monitoring program described in the Environmental Report, Construction Permit Stage (Revised), shall be verified by a comprehensive report to the Staff which defines an appropriate data base for the existing environment. This report shall be provided by January 1, 1975.
- (8) The applicant will take those measures necessary to assure the availability of compensating water storage capacity at the time of initial power operation if such is permitted by the Delaware River Basin Commission pursuant to DRBC Docket No. D-69-210CP. A schedule identifying significant milestone dates to achieve this objective, assuming the Tocks Island project is not available, shall be developed in coordination with the Delaware River Basin Commission and submitted to the Director of Licensing within six months after the issuance of a construction permit for the station:

Provided, however, that if and when the Delaware River Basin Commission has permitted applicant to construct supplemental storage reservoir and has allocated sufficient water to be utilized in connection therewith for normal plant operations at

full power, and after the required comprehensive basin review has been completed as required by Section 3.8 of the Compact of the DRBC, for the supplemental storage reservoir and the Point Pleasant diversion project, then the Atomic Energy Commission shall prepare Draft and Final Environmental Impact Statements and shall provide a hearing of the scope required by the Rules of Practice of the Commission and by the Administrative Procedure Act to consider the significant environmental impact within the scope of NEPA requirements, of the construction and operation of such supplemental storage reservoir, and the Point Pleasant diversion project to the extent that its facilities are used for Limerick Generating Station, the said hearing and determination of the significant environmental impact to occur before applicant shall commence construction of the said storage reservoir, or the Point Pleasant facilities which will be used for Limerick Generating Station.

- (9) The applicant shall take the necessary mitigating actions, including those summarized in Section 4.5 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities. A program of control over all activities which can cause a significant adverse environmental impact shall be established. The program shall provide for a periodic review of all construction activities to assure that these activities conform to the environmental conditions of the construction permit and are not resulting in significant adverse environmental impact.
- 4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the applicant submits to the Commission the complete final safety analysis report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D were satisfied; and (d) the applicant submits proof of financial protection and the execution of an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE ATOMIC ENERGY COMMISSION Lowlon

A. Giambusso, Deputy Director for Reactor Projects Directorate of Licensing

Date of Issuance: JUN 1 9 1974