

Docket Nos. STN 50-454,  
STN 50-455  
STN 50-456  
and STN 50-457

DEC 9 1975

Mr. Byron Lee, Jr.  
Vice President  
Commonwealth Edison Company  
P. O. Box 767  
Chicago, Illinois 60690

Dear Mr. Lee:

Distribution  
✓ Docket File  
NRC PDR  
Local PDR  
LWR 1-1 File  
TIC  
Attorney, ELD  
IE (3)  
NDube  
MJinks (2 encls. per docket)  
RCDeYoung  
JMcGough  
JSaltzman  
JLee  
SKari

W. Iler  
JAngelo  
SKirsliis  
LWR 1-Br. Chiefs  
ACRS (16)  
ATAlston  
BScharf (15)

RWKlecker  
MWilliams  
KGoller  
DSkovholt  
EHughes  
WHaass

Construction Permits Nos. CPPR-130, CPPR-131, CPPR-132, and CPPR-133 are enclosed, together with a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

The construction permits authorize Commonwealth Edison Company to construct four pressurized water reactors, designated as Byron Station, Units 1 and 2 to be located in Ogle County, Illinois and Braidwood Station, Units 1 and 2 to be located in Will County, Illinois.

Sincerely,

Original signed by  
D. B. Vassallo

D. B. Vassallo, Chief  
Light Water Reactors  
Project Branch 1-1  
Division of Reactor Licensing

Enclosures:

1. Construction Permit No. CPPR-130
2. Construction Permit No. CPPR-131
3. Construction Permit No. CPPR-132
4. Construction Permit No. CPPR-133
5. Federal Register Notice

cc: See page 2

*Handwritten signature/initials*

|           |            |            |                    |            |          |               |
|-----------|------------|------------|--------------------|------------|----------|---------------|
| OFFICE →  | RL:LWR 1-1 | RL:LWR 1-1 | OELD               | RL:LWR 1-1 | RL:EP AD | RL:LWR 1-1 AD |
| SURNAME → | JLee:pav   | JAngelo    | <i>[Signature]</i> | DBVassallo | DMurphy  | RCDeYoung     |
| DATE →    | 11/25/75   | 12/1/75    | 12/5/75            | 12/15/75   | 11/26/75 | 12/17/75      |

Mr. Byron Lee, Jr.

-2-

cc: Mr. John W. Rowe  
Isham, Lincoln & Beale  
One First National Plaza  
42nd Floor  
Chicago, Illinois 60690

Mr. William Kortier  
Atomic Power Distribution  
Westinghouse Electric Corporation  
P. O. Box 355  
Pittsburgh, Pennsylvania 15230

Mr. Leroy Stratton  
Bureau of Public Health  
Illinois Department of Public Health  
Springfield, Illinois 62706

Mr. Clarence E. Hoffman, Chairman  
Ogle County Board of Supervisors  
Joliet, Illinois 60434

Mr. Roy Hassert, Chairman  
Will County Board of Supervisors  
Joliet, Illinois 60434

Chief, TIRB (2)  
Technology Assessment Division  
Office of Radiation Programs  
U. S. Environmental Protection Agency  
Room 647A East Tower  
Waterside Mall  
401 M Street, S. W.  
Washington, D. C. 20460

Mr. Gary Williams, Region V  
Federal Activities Branch  
Environmental Protection Agency  
1 N. Wacker Drive, Room 822  
Chicago, Illinois 60606

Ms. Mary Tissue  
1118 Surrey Drive  
Glen Ellyn, Illinois 60137

Mr. Robert Podlasek  
Illinois Commerce Commission  
527 East Capitol Street  
Springfield, Illinois 62706

Mr. Bruce Blanchard, Director  
Environmental Projects Review  
Department of the Interior  
Room 5321  
18th and C Streets, N. W.  
Washington, D. C. 20240

LeBoeuf, Lamb, Leiby and MacRae  
1757 N Street, N. W.  
Washington, D. C. 20038

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-130

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Byron Station, Unit No. 1, will be located on the Applicant's site in Ogle County, Illinois.

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 May 1, 1980, and the latest date for completion is June 1, 1982.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, 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;

- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION



R. S. Boyd, Acting Director  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

Date of Issuance: December 31, 1975

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-130

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Byron Station, Unit No. 1, will be located on the Applicant's site in Ogle County, Illinois.

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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 May 1, 1980, and the latest date for completion is June 1, 1982.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, 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;

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

Original signed by E. G. DeYoung

SEE PREVIOUS YELLOWS FOR CONCURRENCES (CHANGED PER OELD)

R. S. Boyd, Acting Director  
Division of Reactor Licensing

Office of Nuclear Reactor Regulation

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| Date of Issuance: | DBVassallo  | RCDeYoung   | RSBoyd      |             |
| SURNAME >         | 12/15/75    | 12/17/75    | 12/31/75    |             |
| DATE >            |             |             |             |             |

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPF-130

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at ~~3405~~ 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 Byron Station, Unit No. 1, will be located on the Applicant's site in Ogle County, Illinois.

a core power level of 3411

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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 May 1, 1980, and the latest date for completion is June 1, 1982.
- B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.
- 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. The Applicant is subject to the following antitrust condition:  
The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the ~~Company~~ <sup>Applicant</sup> for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.

*Add new paragraph*

- E. This facility is subject to the following conditions for the protection of the environment:

- (1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4.2 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities;

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(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) 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, Division of Reactor Licensing;

(4) If unexpected harmful effects or evidence of irreversible damage is 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; and

(5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the Staff.

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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

(See Previous Concurrences.)

RL:LWR 1-1  
JAngelo

*with changes*  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation  
RL:AD LWR1  
RCDeYoung  
12/ /75

Date of Issuance: 12/ /75

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| OFFICE ➤  | RL:LWR 1-1 | AD:EP   | ELD     | ELD     | RL:LWR 1-1 | PL      |
| SURNAME ➤ | JLee;pav   | DMuller | J.R.    | M.K.    | DBVassallo | RBoyd   |
| DATE ➤    | 12/ /75    | 12/ /75 | 12/ /75 | 12/ /75 | 12/ /75    | 12/ /75 |

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-130

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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 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 and other 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 of the Commission's regulations and all applicable requirements 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 December 6, 1974, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at 3425 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 Byron Station, Unit No. 1, will be located on the Applicant's site in Cogle County, Illinois.

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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 <sup>May</sup> ~~June 1, 1980~~ ~~1979~~, and the latest date for completion is ~~September 1, 1981~~ <sup>June 1, 1982</sup>.

B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.

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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Company for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.

E. This facility is subject to the following conditions for the protection of the environment:

- (1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities;

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

DRL

Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

RSBoyd

12/ /75

|                   |              |                    |          |         |            |           |
|-------------------|--------------|--------------------|----------|---------|------------|-----------|
| Date of Issuance: | LWR 1-1      | EP                 | ELD      | ELD     | LWR 1-1    | AD/LWR 1  |
| OFFICE            | J. DeAngelis | SKiralis/D. Miller | JRutberg |         | DBVassallo | RCDeYoung |
| SURNAME           | 11/25/75     | 11/26/75           | 12/1/75  | 12/ /75 | 12/ /75    | 12/ /75   |
| DATE              |              |                    |          |         |            |           |

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-131

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Byron Station, Unit No. 2, will be located on the Applicant's site in Ogle County, Illinois.

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 November 1, 1981, and the latest date for completion is November 1, 1983.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition:  
The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, 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;

- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

*R. S. Boyd, Jr.*

R. S. Boyd, Acting Director  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

Date of Issuance: December 31, 1975

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-131

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Byron Station, Unit No. 2, will be located on the Applicant's site in Ogle County, Illinois.

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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 November 1, 1981, and the latest date for completion is November 1, 1983.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, 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;

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

Original signed by R. C. DeYoung

R. S. Boyd, Acting Director

SEE PREVIOUS YELLOWS FOR CONCURRENCES (CHANGED PER OLD)

Division of Reactor Licensing

Office of Nuclear Reactor Regulation

|  |                                     |   |                                     |  |  |
|--|-------------------------------------|---|-------------------------------------|--|--|
| Date of Issuance:<br>December 31, 1975 | RL: LMR 1-1<br>RSC: CTS<br>12/15/75 | RL: LMR 1-1<br>RSC: DeYoung<br>12/15/75 | RL: LMR 1-1<br>RSC: for<br>12/15/75 |  |  |
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COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CFP-131

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at ~~2425~~ 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 Byron Station, Unit No. 2, will be located on the Applicant's site in Ogle County, Illinois.

a core power level of 3411

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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 November 1, 1981, and the latest date for completion is November 1, 1983
- B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.
- 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. The Applicant is subject to the following antitrust condition:  
The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the ~~Company~~ <sup>Applicant</sup> for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.

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- E. This facility is subject to the following conditions for the protection of the environment:

- (1) The Applicant shall take the necessary mitigating action, 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;

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- (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) 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, Division of Reactor Licensing;
- (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
- (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, *with modifications as may be approved by the staff*
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

(See Previous Concurrences.)

RL:LWR 1-1  
JAngelo  
12/ /75

*with changes*  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation  
RL:AD LWR L  
RCDeYoung  
12/ /75

| Date of Issuance: |            | AD:EP   |         | ELD     |         | ELD         |         | RL:LWR 1-1 |         | RL      |         |
|-------------------|------------|---------|---------|---------|---------|-------------|---------|------------|---------|---------|---------|
| OFFICE            | RL:LWR 1-1 | DMuller |         | J.R.    |         | [Signature] |         | DBVassallo |         | RBoyd   |         |
| SURNAME           | JLee;pav   |         |         |         |         |             |         |            |         |         |         |
| DATE              | 12/ /75    | 12/ /75 | 12/ /75 | 12/ /75 | 12/ /75 | 12/ /75     | 12/ /75 | 12/ /75    | 12/ /75 | 12/ /75 | 12/ /75 |

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-131

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Byron Station, Unit No. 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 and other 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 of the Commission's regulations and all applicable requirements have been satisfied.
2. Pursuant to Section 163 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 December 6, 1974, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at 3425 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 Byron Station, Unit No. 2, will be located on the Applicant's site in Ogle County, Illinois.

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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 <sup>November</sup> ~~March~~ 1, 1981 ~~1980~~, and the latest date for completion is ~~June 1, 1982~~ <sup>November 1, 1983</sup>.

B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Byron, in Ogle County, Illinois.

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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Company for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.

E. This facility is subject to the following conditions for the protection of the environment:

- (1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities;

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- (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) 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, Division of Reactor Licensing;
- (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
- (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

DRL

Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

RSBoyd

12/ /75

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|-------------------|--------------|------------------|----------|---------|------------|-----------|
| Date of Issuance: | LWR 1-1      | EP               | ELD      | ELD     | LWR 1-1    | AD/LWR 1  |
| OFFICE >          | JLee/JAngelo | SKiralis/DMiller | JRutberg |         | DBVassallo | RCDeYoung |
| SURNAME >         | 11/25/75     | 11/26/75         | 12/1/75  | 12/ /75 | 12/ /75    | 12/ /75   |
| DATE >            |              |                  |          |         |            |           |

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555  
COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-132

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated January 8, 1975, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Braidwood Station, Unit No. 1, will be located on the Applicant's site in Will County, Illinois.

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 November 1, 1980, and the latest date for completion is November 1, 1982.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, 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, with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law;

- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

*R. S. Boyd, Jr.*

R. S. Boyd, Acting Director  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

Date of Issuance: December 31, 1975

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-132

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated January 8, 1975, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Braidwood Station, Unit No. 1, will be located on the Applicant's site in Will County, Illinois.

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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 November 1, 1980, and the latest date for completion is November 1, 1982.
- B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
- 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
- E. This facility is subject to the following conditions for the protection of the environment:
- (1) The Applicant shall take the necessary mitigating action, 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, with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law;

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

Original signed by R. G. DeYoung

SEE PREVIOUS YELLOWS FOR CONCURRENCES (CHANGED PER OLD)

R. S. Boyd, Acting Director  
Division of Reactor Licensing

Office of Nuclear Reactor Regulation

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| OFFICE  | DATE of Issuance  | RL: LWR 1-1 | RL: LWR 1-1 | RA: [Signature] |  |  |
| SURNAME | December 31, 1975 | See: CTS    | RC DeYoung  | MS Boyd         |  |  |
| DATE    |                   | 12/1/75     | 12/1/75     | 12/1/75         |  |  |

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-132

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated January 8, 1975, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at ~~3425~~ 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 Braidwood Station, Unit No. 1, will be located on the Applicant's site in Will County, Illinois.

a core power level of 3411

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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 November 1, 1980, and the latest date for completion is November 1, 1982.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the ~~Company~~<sup>Applicant</sup> for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - Add new ¶* E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities, with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law;

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, *with modifications as may be approved by the staff.*
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

(See Previous Concurrences.)

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JAngelo  
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Division of Reactor Licensing  
Office of Nuclear Reactor Regulation  
RL:AD LWR 1  
RCDeYoung  
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| OFFICE           | RL:LWR 1-1 | AD:EP   | ELD     | ELD     | RL:LWR 1-1 | RL      |         |
| SURNAME          | JLee;pav   | DMuller | J.R.    | WR      | DBVassallo | RBoyd   |         |
| DATE             | 12/ /75    | 12/ /75 | 12/ /75 | 12/ /75 | 12/ /75    | 12/ /75 | 12/ /75 |

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-132

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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 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 and other 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 of the Commission's regulations and all applicable requirements 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 January 8, 1975, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at 3425 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 Braidwood Station, Unit No. 1, will be located on the Applicant's site in Will County, Illinois.

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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 ~~October 1, 1980~~<sup>November 1, 1979</sup>, and the latest date for completion is ~~March 1, 1981~~<sup>November 1, 1982</sup>.
- B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
- 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Company for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
- E. This facility is subject to the following conditions for the protection of the environment:
- (1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities;

with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

DRL

Division of Reactor Licensing  
Office of Nuclear Reactor Regulation RSBoyd

Date of Issuance:

12/ /75

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|-----------|--------------|-----------------|----------|---------|------------|-----------|
| OFFICE >  | LWR 1-1      | EP              | ELD      | ELD     | LWR 1-1    | AD/LWR 1  |
| SURNAME > | JLae/JAngelo | SKiralis/Muller | JRutberg |         | DBVassallo | RCDeYoung |
| DATE >    | 11/25/75     | 11/26/75        | 12/1/75  | 12/ /75 | 12/ /75    | 12/ /75   |

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-133

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated January 8, 1975, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Braidwood Station, Unit No. 2, will be located on the Applicant's site in Will County, Illinois.

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 November 1, 1981, and the latest date for completion is November 1, 1983.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, 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, with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law;

- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION



R. S. Boyd, Acting Director  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

Date of Issuance: December 31, 1975

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-133

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated January 8, 1975, October 29, 1975 and December 31, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at a core power level of 3411 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 Braidwood Station, Unit No. 2, will be located on the Applicant's site in Will County, Illinois.

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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 November 1, 1981, and the latest date for completion is November 1, 1983.
- B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
- 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
- E. This facility is subject to the following conditions for the protection of the environment:
  - (1) The Applicant shall take the necessary mitigating action, 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, with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law;

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- (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) 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, Division of Reactor Licensing;
- (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
- (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

Original signed by R. G. DeYoung

R. S. Boyd, Acting Director

Division of Reactor Licensing

Office of Nuclear Reactor Regulation

SEE PREVIOUS YELLOWS FOR CONCURRENCES (CHANGED PER QELD)

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|-------------------|--------------|-------------|-------------|--|--|
| DATE of Issuance: | DE: LWR 1-1  | RL: LWR 1-1 | RL: LWR 1-1 |  |  |
| December 31, 1975 | DE: CTS      | RC: DEYOUNG | RS: BOYD    |  |  |
| SURNAME >         | DE: Vassallo | RC: DEYOUNG | RS: BOYD    |  |  |
| DATE >            | 12/15/75     | 12/15/75    | 12/15/75    |  |  |

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-133

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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;

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- 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 and other 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 of the Commission's regulations and all applicable requirements 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 Decisions of the Atomic Safety and Licensing Board, dated January 8, 1975, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at ~~3425~~ 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 Braidwood Station, Unit No. 2, will be located on the Applicant's site in Will County, Illinois.

2 core power level of 3411

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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 November 1, 1981, and the latest date for completion is November 1, 1983.
  - B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.
  - 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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the <sup>Applicant</sup>~~Company~~ for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.
  - E. This facility is subject to the following conditions for the protection of the environment:
    - (1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4<sup>5</sup> of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities, with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law;

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- (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) 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, Division of Reactor Licensing;
- (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
- (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed, with modifications as may be approved by the staff.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

(See Previous Concurrences.)

RL: LWR 1-1  
JAngelo  
12/ /75

Division of Reactor Licensing  
Office of Nuclear Reactor Regulation  
RCDeYoung  
12/ /75

| Date of Issuance: |             |         |         |         |         |             |         |
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| OFFICE            | RL: LWR 1-1 | AD: EP  | L       | ELD     | ELD     | RL: LWR 1-1 | RL      |
| SURNAME           | JLee; pav   | DMuller | J.R.    |         |         | DBVassallo  | RBoyd   |
| DATE              | 12/ /75     | 12/ /75 | 12/ /75 | 12/ /75 | 12/ /75 | 12/ /75     | 12/ /75 |

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-133

1. The Nuclear Regulatory 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 Commonwealth Edison Company (the Applicant) has described the proposed design of the Braidwood Station, Unit No. 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 and other 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 of the Commission's regulations and all applicable requirements 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 January 8, 1975, October 29, 1975 and December , 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction permit to the Applicant for a utilization facility designed to operate at 3425 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 Braidwood Station, Unit No. 2, will be located on the Applicant's site in Will County, Illinois.

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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 <sup>November</sup> ~~October~~ 1, 1981 ~~1980~~, and the latest date for completion is <sup>November</sup> ~~October~~ 1, 1983 ~~1982~~.

B. The facility shall be constructed and located at the site as described in the application, in North Central Illinois, near the town of Braidwood, in Will County, Illinois.

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. The Applicant is subject to the following antitrust condition: The Applicant will afford an opportunity to participate in the LaSalle County Station, Units 1 and 2, for the term of the license, or any extension or renewal thereof, to those municipal electric systems which have indicated an interest in such participation by December 31, 1973, through a reasonable ownership interest in such unit(s) or through contractual purchases of unit power subject to reasonable terms and conditions and on a basis that will fully compensate the Applicant for its costs (including a reasonable return on investment). Such opportunity to participate shall include arrangements for reasonable reserve protection and associated transmission service by the Applicant, on a basis that will fully compensate the Company for its costs (including a reasonable return on investment). The municipal systems must enter into executory agreements to accomplish the foregoing no later than December 31, 1974.

E. This facility is subject to the following conditions for the protection of the environment:

(1) The Applicant shall take the necessary mitigating action, including those summarized in Section 4 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities;

with the exception that burning of landscape waste from site clearing is permitted in accordance with Illinois State law

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- (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) 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, Division of Reactor Licensing;
  - (4) If unexpected harmful effects or evidence of irreversible damage is 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; and
  - (5) In addition to the preoperational monitoring program described in Section 6.1 of the Environmental Report, with amendments, the staff recommendations included in Section 6.1 of the Final Environmental Statement shall be followed.
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 51 of the Commission's regulations and all applicable requirements were satisfied; and
    - (d) the Applicant submits proof of financial protection and executes 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 NUCLEAR REGULATORY COMMISSION

DRL

Division of Reactor Licensing  
Office of Nuclear Reactor Regulation

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| OFFICE >          | LWR 1-1       | EP                | ELD      | SLD     | LWR 1-1    | AD/LWR 1  |  |
| SURNAME >         | JLara/JAngelo | SKyralis/DWMiller | JRutberg |         | DBVassallo | RCDeYoung |  |
| DATE >            | 11/25/75      | 11/26/75          | 12/1/75  | 12/ /75 | 12/ /75    | 12/ /75   |  |

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. STN 50-454, STN 50-455, STN 50-456 AND STN 50-457

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNITS 1 AND 2 AND BRAIDWOOD STATION, UNITS 1 AND 2

NOTICE OF ISSUANCE OF CONSTRUCTION PERMITS

Notice is hereby given that, pursuant to the Initial Decisions of the Atomic Safety and Licensing Board, dated December 6, 1974, January 8, 1975, October 29, 1975, and December 31, 1975, the Nuclear Regulatory Commission (the Commission) has issued Construction Permits Nos. CPPR-130, CPPR-131, CPPR-132, and CPPR-133 to the Commonwealth Edison Company for construction of four pressurized water nuclear reactors. The proposed reactors, known as the Byron Station, Units 1 and 2, and the Braidwood Station, Units 1 and 2, are each designed for a rated power of 3411 megawatts thermal with a net electrical output of 1120 megawatts. The Byron Station is located in Ogle County, Illinois, and the Braidwood Station is located in Will County, Illinois.

The Initial Decisions are subject to review by an Atomic Safety and Licensing Appeal Board prior to their becoming final. Any decision or action taken by an Atomic Safety and Licensing Appeal Board in connection with the Initial Decisions may be reviewed by the Commission.

The Commission has made appropriate findings as required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the construction permits. The application for the construction permits complies with the standards and requirements of the Act and the Commission's rules

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| and regulations. |  |  |  |  |  |  |
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The construction permits are effective as of their date of issuance. The completion dates for the facilities are as follows:

|             | <u>Earliest</u>  | <u>Latest</u>    |
|-------------|------------------|------------------|
| Byron 1     | May 1, 1980      | June 1, 1982     |
| Byron 2     | November 1, 1981 | November 1, 1983 |
| Braidwood 1 | November 1, 1980 | November 1, 1982 |
| Braidwood 2 | November 1, 1981 | November 1, 1983 |

Each permit shall expire on the latest date for completion of the facility for which it is issued.

A copy of (1) the Initial Decisions, dated December 6, 1974, January 8, 1975, October 29, 1975, and December 31, 1975; (2) Construction Permits Nos. CPPR-130, CPPR-131, CPPR-132, and CPPR-133; (3) the report of the Advisory Committee on Reactor Safeguards, dated May 13, 1975; (4) the Office of Nuclear Reactor Regulation's Safety Evaluation Report dated April 4, 1975, and Supplements 1 and 2 thereto dated August 1, 1975, and October 17, 1975, respectively; (5) the Preliminary Safety Analysis Report and amendments thereto; (6) the applicant's Environmental Reports, both dated September 1973 and supplements thereto; (7) the Draft Environmental Statement for the Byron Station dated February 1974; (8) the Draft Environmental Statement for the Braidwood Station dated April 1974; (9) the Final Environmental Statement for the Byron Station dated July 1974; and (10) the Final Environmental Statement for the Braidwood Station dated July 1974, are available for public inspection at the Commission's Public Document Room at 1717 H Street, N. W., Washington, D. C. In addition, the above documents are available at the Byron Public Library, 3rd and

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| OFFICE  | Washington Streets, Byron, Illinois (the Local Public Document Room for |  |  |  |
| SURNAME | the Byron Station) and at the Wilmington Township Public Library,       |  |  |  |
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201 South Kankakee Street, Wilmington, Illinois (the Local Public Document Room for the Braidwood Station). A copy of the construction permits and the Final Environmental Statements may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Licensing.

Copies of the Safety Evaluation Report and Supplements 1 and 2 thereto (Document No. NUREG-75/023) may be purchased, at current rates, from the National Technical Information Service, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, this 31st day of December, 1975.

FOR THE NUCLEAR REGULATORY COMMISSION

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D. B. Vassallo, Chief  
Light Water Reactors  
Project Branch 1-1  
Division of Reactor Licensing

*with changes*

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| SURNAME > | J Lee: sjh | J Angelo | <i>[Signature]</i> | DBVassallo |  |
| DATE >    | 11/29/75   | 12/1/75  | 12/8/75            | 12/15/75   |  |