

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

OCT 17 1986

Docket No. STN 50-456

Mr. Dennis L. Farrar Director of Nuclear Licensing Commonwealth Edison Company P.O. Box 767 Chicago, Illinois 60690

Dear Mr. Farrar:

SUBJECT: ISSUANCE OF FACILITY OPERATING LICENSE NPF-59 -BRAIDWOOD STATION, UNIT 1

The U. S. Nuclear Regulatory Commission (NRC) has issued the enclosed Facility Operating License NPF-59, together with Technical Specifications and Environmental Protection Plan for Braidwood Station, Unit 1. License No. NPF-59 authorizes fuel loading and precritical testing of Braidwood Station, Unit 1.

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

Two copies of Amendment No. 1 to Indemnity Agreement No. B-102 which covers the activities authorized under License No. NPF-59 are also enclosed. Please return one signed copy to this office.

Safety Evaluation Report Supplement No. 2 (SSER 2) was prepared in support of issuing the enclosed license. Enclosed is a pre-printed copy of SSER 2. Twenty (20) bound copies of SSER 2 will be sent to you in the near future.

Sincerely,

Thomas M. Novak, Acting Director Division of PWR Licensing-A Office of Nuclear Reactor Regulation

Enclosures:

- 1. Facility Operating License NPF-59
- 2. Federal Register Notice

8610300368 8610

- 3. Amendment No. 1 to Indemnity Agreement No. B-102
- 4. Supplement No. 2 to the Safety Evaluation Report

cc: w/enclosures: See next page Mr. Dennis L. Farrar Commonwealth Edison Company

cc: Mr. William Kortier Atomic Power Distribution Westinghouse Electric Corporation Post Office Box 355 Pittsburgh, Pennsylvania 15230

Joseph Gallo, Esq. Isham, Lincoln & Beale 1150 Connecticut Ave., N. W. Suite 1100 Washington, D. C. 20036

C. Allen Bock, Esq. Post Offices Box 342 Urbana, Illinois 61801

Thomas J. Gordon, Esq. Waaler, Evans & Gordon 2503 S. Neil Champaign, Illinois 61820

Ms. Bridget Little Rorem Appleseed Coordinator 117 North Linden Street Essex, Illinois 60935

Mr. Edward R. Crass Nuclear Safeguards and Licensing Division Sargent & Lundy Engineers 55 East Monroe Street Chicago, Illinois 60603

U. S. Nuclear Regulatory Commission Resident Inspectors Office RR#1, Box 79 Braceville, Illinois 60407

Regional Administrator, Region III U. S. Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, Illinois 60137 Braidwood Station Units 1 and 2

Ms. Lorraine Creek Route 1, Box 182 Manteno, Illinois 60950

Douglass Cassel, Esq. 109 N. Dearborn Street Chicago, Illinois 60602

Elena Z. Kezelis, Esq. Isham, Lincoln & Beale Three First National Plaza Suite 5200 Chicago, Illinois 60602

Mr. Charles D. Jones, Director
Illinois Emergency Services
and Disaster Agency
110 East Adams Street
Springfield, Illinois 62706

George L. Edgar Newman & Holtzinger, P.C. 1615 L Street, N.W. Washington, D.C. 20036

Michael Miller, Esq. Isham, Lincoln & Beale One First National Plaza 42nd Floor Chicago, Illinois 60602

Mr. Michael C. Parker, Chief Division of Engineering Illinois Department of Nuclear Safety 1035 Outer Park Drive Springfield, Illinois 62704

Braidwood Station (other) Units 1 and 2

Mr. Dennis L. Farrar Commonwealth Edison Company

cc: Attorney General 500 South 2nd Street Springfield, Illinois ~62701

Mr. Michael C. Parker, Chief Division of Engineering Illinois Department of Nuclear Safety 1035 Outer Park Drive Springfield, Illinois 62704

EIS Review Coorindator EPA Region V 230 S. Dearborn Street Chicago, Illinois 60604

Chairman Will County Board of Supervisors Will County Courthouse Joliet, Illinois 60434



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

COMMONWEALTH EDISON COMPANY DOCKET NO. STN 50-456 BRAIDWOOD STATION, UNIT 1 FACILITY OPERATING LICENSE

License No. NPF-59

- The Nuclear Regulatory Commission (the Commission or the NRC) has found 1. that for purposes of loading fuel and conducting precritical testing:
 - The application for a license filed by Commonwealth Edison Company Α. (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made:
 - Construction of Braidwood Station, Unit 1 (the facility) has been Β. substantially completed in conformity with Construction Permit No. CPPR-132 and the application, as amended, the provisions of the Act and the regulations of the Commission;
 - The facility will operate in conformity with the application, as С. amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - There is reasonable assurance: (i) that the activities authorized by D. this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will . be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);
 - Commonwealth Edison Company is technically qualified to engage in Ε. the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - Commonwealth Edison Company has satisfied the applicable provisions F. of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

8610300382 861017 PDR ADDCK 05000456

PDR

- G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-59, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
- Based on the foregoing findings regarding this facility, Facility Operating License No. NPF-59 is hereby issued to Commonwealth Edison Company (the licensee) to read as follows:
 - A. This license applies to Braidwood Station, Unit 1, a pressurized water reactor, and associated equipment (the facility) owned by Commonwealth Edison Company. The facility is located in north eastern Illinois, 3 miles southwest of the Kankakee River, 20 miles south-southwest of the town of Joliet, and 60 miles southwest of Chicago, Illinois. The facility is within Reed Township, Will County, Illinois and is described in the Byron/Braidwood Stations' Final Safety Analysis Report, as supplemented and amended, and in the Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - Commonwealth Edison Company (CECo), pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use and operate the facility at the above designated location in Will County, Illinois, in accordance with the procedures and limitations set forth in this license;
 - (2) CECo, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (3) CECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- (4) CECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) CECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - (1) Maximum Power Level

The licensee is authorized to load fuel and conduct preoperational tests and startup tests in accordance with the conditions specified herein and other items identified in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to fuel loading and precritical operations.

(2) Technical Specifications and Environmental Protection Plan

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

(3) Fire Protection (Section 9.5.1, SSER 2)*

The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report, as supplemented and amended, and as approved in the SER dated November 1983 and its supplements, subject to the following provision:

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

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

(4) Emergency Planning

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

(5) Initial Startup Test Program

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

(6) Detailed Control Room Design Review (DCRDR) (Section 18.2, SSER 2)

The licensee shall submit the final summary report for the DCRDR by December 1, 1986.

(7) Regulatory Guide 1.97, Revision 2 Compliance

The licensee shall submit by March 1, 1987, a preliminary report describing how the requirements of Regulatory Guide 1.97, Revision 2 have been or will be met. The licensee shall submit by September 1, 1987, the final report and a schedule for implementation (assuming the NRC approves the DCRDR by March 1, 1987).

(8) <u>TMI Item II.F.1: Iodine/Particulate Sampling (Section</u> <u>11.5.2, SSER 2)</u>

Prior to startup following the first refueling outage, the licensee shall demonstrate that the operating iodine/particulate sampling system will perform its intended function.

(9) <u>Emergency Diesel Engine Auxiliary Support Systems (Section</u> 9.5.4.1, SSER 1)

Prior to startup following the first refueling outage, the controls and monitoring instrumentation on the local control panels shall be dynamically qualified for their location or shall be installed on a free standing floor mounted panel in such a manner (including the use of vibration isolation mounts as necessary) that there is reasonable assurance that any induced vibrations will not result in cyclic fatigue failure for the expected life of the instrument.

(10) Inadvertent Boron Dilution

The licensee shall maintain a boron concentration of at least 2000 ppm in the reactor coolant and makeup water during fuel loading and precriticality testing. The licensee shall take the following special measures to verify that the sources of unborated water will be isolated from the reactor coolant system (RCS) and that the boron concentration level in the RCS will be maintained at a level of at least 2000 ppm:

- a. Grab samples will be manually taken from the reactor coolant and makeup water systems and analyzed at least once per shift to verify that the boron concentration is at least 2000 ppm.
- b. The makeup water system will be sampled and analyzed each time any water is added to the RCS to verify that the boron concentration is at least 2000 ppm.
- c. The appropriate valves listed in Attachment 2 will be mechanically locked closed with chains and padlocks to prevent unborated water or borated water at concentration levels less than 2000 ppm from flowing into the RCS.
- d. Certain valves (e.g. the demineralizer sluice water inlet and outlet isolation valves) will be locked closed except for the infrequent occasions when an activity required by plant chemistry requires these valves to be opened for a short time interval (e.g. replacement of demineralizer resin). In order to preclude inadvertent dilution at these times, an independent confirmation of valve positions will be made by a separate person knowledgeable of the systems being used each time the valves are manipulated.
- e. Each time valves are manipulated and water is added to the RCS, the licensee shall sample the RCS both before and after the addition of the water to determine the level of boron concentration of the water in the RCS and to ensure that the level is at or above 2000 ppm.

(11) Fresh Fuel Storage

Until the core is loaded or the spent fuel pool is filled with water, the following conditions shall be imposed on fresh fuel storage in spent fuel racks:

a. Fuel assemblies shall be stored in such a manner that water would drain freely from the assemblies in the event of flooding and subsequent draining of the fuel storage area.

- b. New fuel assemblies may be stored in the Spent Fuel Storage Pool subject to the following additional conditions:
 - 1. The maximum U-235 enrichment shall be 3.22 w/o.

- 2. The fuel assemblies shall be stored in a checkerboard pattern.
- c. No more than two fuel assemblies shall be out of their shipping containers, storage locations, or reactor vessel at any given time.
- d. The minimum edge-to-edge distance between the fuel assembly outside its shipping container, storage rack, or reactor vessel, and all other fuel assemblies shall be 12 inches.
- (12) Inservice Inspection Program (Section 5.2.4, 6.6.3, SSER 2)

The licensee shall submit the inservice inspection program which conforms to the ASME code in effect 12 months prior to the date of this license, in accordance with 10 CFR Section 50.55a(g)(4), for NRC staff review and approval within twelve months from the date of this license.

The facility requires exemptions from certain requirements of D. Appendices Å and J to 10 CFR Part 50. These include (a) an exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J, the testing of containment air locks at times when containment integrity is not required (SER Section 6.2.6); and (b) an exemption from GDC-13 and GDC-17 of Appendix A, the requirement that instrumentation be provided to monitor variables and systems over their anticipated ranges, and the requirement that provisions be included to minimize the probability of losing electric power (SSER 1, Section 9.5.4.1). These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. These exemptions are hereby granted. The special circumstances regarding each exemption are identified in the referenced section of the safety evaluation report and the supplements thereto. These exemptions are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC materials license No. SNM-1938, issued October 8, 1985, and relieved the licensee from the requirement of having a criticality alarm system. Therefore, the licensee is exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

- The licensee shall fully implement and maintain in effect all provisions of the physical security, guard training and qualification, Ε. and safeguards contingency plans previously approved by the Commission and all amendments and revisions to such plans made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Braidwood Station Physical Security Plan, Security Personnel Training and Qualification Plan,* and Safeguards Contingency Plan*" with revisions submitted through May 27, 1986.
- Except as otherwise provided in the Technical Specifications or F. Environmental Protection Plan, the licensee shall report any violations of the requirments contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written followup within thirty days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).
- The licensee shall have and maintain financial protection of such G. type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- This license is effective as of the date of issuance and shall Η. expire at midnight on Oct. 17, 2026.

FOR THE NUCLEAR REGULATORY COMMISSION

Varden

Richard H. Vollmer, Acting Director Office of Nuclear Reactor Regulation

Attachments:

- 1. Work Items to be completed
- 2. Isolation Valves
- 3. Appendix A Technical Specifications (NUREG-1223)
- 4. Appendix B Environmental Protection Plan

Date of Issuance: OCT 17 1985

*The Security Personnel Training and Qualification Plan and the Safeguards Contingency Plan are Appendices to the Security Plan. As requested by CECo letter dated April 22, 1983, Revision 6 is to be considered "the initial formal submittal."

ATTACHMENT 1

This attachment identifies specific items which must be completed to the Commission's satisfaction in accordance with the operational modes as identified below.

.

The preoperational testing exceptions identified in the September 19, 1986, letter from Dennis Farrar to Harold R. Denton shall be completed in accordance with the scheduled commitments contained in that letter.

				-
VZ	LVES ISOLA	TING	ATTACHMENT	ED WATER SOURCES TO RCS
Valve EPN	P&ID/Loc	ation	Type	<u>Status</u>
1CV111B	M64-4	B4	Air Operated	Always Locked Closed
1CV8439	M64-4	C4	Manual	Always Locked Closed
1CV8453	M64-4	D2	Manual	Always Locked Closed
1CV8441	M64-4	Bl	Manual	Always Locked Closed
OA B010	M65-5A	D3	Manual	Always Locked Closed
1CV8523A	M64-6	C6	Manual	Locked Closed Except When Sluicing Demineralizer Resin
1CV8515	M64-6	B5	Manual	Locked Closed Except When Sluicing Demineralizer Resin
1CV8523B	M64-6	С3	Manual	Locked Closed Except When Sluicing Demineralizer Resin
1078428	M64-4	D5	Manual	Always Locked Closed

•

-

-

•

ATTACHMENT 2 (Cont.) VALVES ISOLATING OTHER UNBORATED WATER SOURCES

I. INDIRECT SOURCES OF UNBORATED WATER TO REACTOR COOLANT SYSTEM

Valve EPN	P&ID/Loc	<u>ation</u>	Type	Status
1518936	M61-1B	E7	Manual	Always Locked Closed
1518931	M61-1B	D7	Manual	Locked Closed When RWST is Making Up to RCS
1CV8434	M64-4	D4	Manual	Locked Closed When RWST is Making Up to RCS
OAB8494	M 65-5A	F3	Manual	Locked Closed When Boric Acid Batch Tank is Discharging
2AB8629B	M65-1B	A3	Manual	Always Locked Closed
0AB009B	M65-2A	E6	Manual	Always Locked Closed
0AB8557B	M65-2A	E4	Manual	Always Locked Closed
OAB023B	M65-2A	E3	Manual	Always Locked Closed
0AB8563A	M65-2B	D4	Manual	Always Locked Closed
2AB023	M65-2C	C8	Manual	Always Locked Closed
2AB8551	M65-2C	D8	Manual	Always Locked Closed
2CV8553	M65-2C	D7	Manual	Always Locked Closed
2AB022	M65-2C	C 7	Manual	Always Locked Closed
2PS142	M140-5	E8	Manual	Always Locked Closed
1AB8629A	M65-1B	AЗ	Manual	Locked Closed <u>Except</u> During OB HUT Makeup to RCS
1CV8553	M65-2C	D7	Manual	Locked Closed During OB HUT Makeup to RCS
1AB8551	M65-2C	D7	Manual	Locked Closed During OB HUT Makeup to RCS

ATTACHMENT 2 (Cont.)

II. OTHER CONSERVATIVE ACTIONS

Valve EPN	P&ID/Loc	ation	Type	Status
1BR7053	M64-6	B8	Manual	Always Locked Closed
1BR7054	M64-6	B7	Air Operated	Always Locked Closed
2AB8468	M65-5A	B 6	Manual	Always Locked Closed
2AB8465	M65-5A	B4	Manual	Always Locked Closed
1RH004C	M62	F '5	Manual	Locked Closed Except When Shell Side Vent is Locked Closed
1RH004D	M62	C6	Manual	Locked Closed Except When Shell Side Vent is Locked Closed
1CV008A	M64-4	B8	Manual	Locked Closed Except When Shell Side Vent is Locked Closed
1CV032A	M64–5	B2	Manual	Locked Closed Except When Shell Side Vent is Locked Closed
1CV032B	M64-5	D2	Manual	Locked Closed Except When Shell Side Vent is Locked Closed
1CV8527A	M64-6	B6	Manual	Locked Closed Except When Sluicing Demineralizer Resin
1CV8521	M64-6	A 5	Manual	Locked Closed Except When Sluicing Demineralizer Resin
1CV8527B	M64-6	B 4	Manual	Locked Closed Except When Sluicing Demineralizer Resin
0AB8618A	M65-3	E3	Manual	Always Locked Closed
OAB8618B	M65-6	E3	Manual	Always Locked Closed

APPENDIX B

1000

TO FACILITY OPERATING LICENSE NO. NPF-59

COMMONWEALTH EDISON COMPANY

BRAIDWOOD STATION UNITS 1 & 2

DOCKET NOS. 50-456 AND 50-457

.

ENVIRONMENTAL PROTECTION PLAN (NONRADIOLOGICAL)

8610300391 861017 PDR ADOCK 05000456 P PDR

BRAIDWOOD STATION

~_____

-

× 20

.

UNITS 1 and 2

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

TABLE OF CONTENTS

Sect	ion	Pa	ge
1.0	Objectives of the Environmental Protection Plan		1-1
2.0	Environmental Protection Issues	•	2-1
2.1	Aquatic Issues		2-1
2.2	Terrestrial Issues	•	2-1
3.0	Consistency Requirements	•	3-1
3.1	Plant Design and Operation	•	3-1
3.2	Reporting Related to the NPDES Permit and		
	State Certification		3 - 2
3.3	Changes Required for Compliance with Other		
	Environmental Regulations	•	3 - 3
4.0	Environmental Conditions	•	4-1
4.1	Unusual or Important Environmental Events	•	4-1
5.0	Administrative Procedures	•	5-1
5.1	Review and Audit	•	5-1
5.2	Records Retention	•	5-1
5.3	Changes in Environmental Protection Plan	•	5-1
5.4	Plant Reporting Requirements	•	5-2

ż

1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the nuclear facility. The principal objectives of the EPP are as follows:

- Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement - Operating License Stage (FES-OL) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmenal effects of facility construction and operation and of-actions taken to control those effects.

Environmental concerns identified in the FES-OL which relate to water quality matters are regulated by way of the licensee's NPDES permit.

1-1

Environmental Protection Issues

In the FES-OL dated June, 1984, the staff considered the environmental impacts associated with the operation of the two unit Braidwood Station. No environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

2.1 Aquatic Issues

No specific aquatic issues were raised by the staff in the FES-OL.

Aquatic matters are addressed by the effluent limitations, monitoring requirements and the Section 316(b) demonstration requirement contained in the effective NPDES permit issued by the Illinois Environmental Protection Agency. The NRC will rely on this agency for regulation of matters involving water quality and aquatic biota.

2.2 Terrestrial Issues

No specific terrestrial issues were raised by the staff in the FES-OL.

2.1

2.0

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP*. Changes in station design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in additional construction or operational activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

3-1

^{*} This provision does not relieve the licensee of the requirements of 10 CFR 50.59.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include written evaluations which provide bases for the determination that the change, test or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of the Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

3.2 Reporting Related to the NPDES Permit and State Certification

Changes to, or renewals of, the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change or renewal is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

3-2

The licensee shall notify the NRC of changes to the effective NPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NPDES Permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, and local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1

Unusual or Important Environmental Events

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

No routine monitoring programs are required to implement this condition.

Administrative Procedures

5.1 _ Review and Audit

5.0

The licensee shall provide for review and audit of compliance with the EPP. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review and audit function and results of the audit activities shall be maintained and made available for inspection.

5.2 Records Retention

Records and logs relative to the environmental aspects of station operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to station structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the station. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes in Environmental Protection Plan

Requests for changes in the EPP shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation

5-1

of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the EPP.

5.4 Plant Reporting Requirements

5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license. The Annual Environmental Operating Report shall include:

- (1) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental question.
- (2) A list of nonroutine reports submitted in accordance with Subsection 5.4.2.
- (3) A list of EPP noncompliances and the corrective actions taken to remedy them.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing results shall be submitted as soon as possible in a supplementary report.

5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 day of occurrence of a nonroutine event. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact, and plant operating characteristics, (b) describe the

5.3

probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report at the same time it is submitted to the other agency.

5.4

7590-01

COMMONWEALTH EDISON COMPANY BRAIDWOOD STATION, UNIT NO. 1 DOCKET NO. 50-456 NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission or NRC), has issued Facility Operating License No. NPF-59 to Commonwealth Edison Company (the licensee) which authorized fuel loading and pre-critical testing for the Braidwood Station, Unit No. 1 (the facility). The license was issued with Technical Specifications (Appendix A) and the Environmental Protection Plan (Appendix B).

Braidwood Station, Unit No. 1 is a pressurized water reactor located in Will County, Illinois, about 20 miles south-southwest of Joliet, Illinois in Reed Township. The license is effective as of the date of issuance.

The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I which are set forth in the License. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the Federal Register on December 15, 1978 (43 FR 58659).

8610300395

7590-01

- 2 -

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement and the Assessment of the Effect of License Duration on Matters Discussed in the Final Environmental Statement for the Braidwood Station, Units 1 and 2 (dated June 1984) since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

For further details with respect to this action, see (1) Facility Operating License No. NPF-59, with Technical Specifications and the Environmental Protection Plan; (2) the report of the Advisory Committee on Reactor Safeguards, dated February 11, 1985; (3) the Commission's Safety Evaluation Report, dated November 1983, (NUREG-1002), and Supplements 1 through 2; (4) the Final Safety Analysis Report and Amendments thereto; (5) the Environmental Report and supplements thereto; (6) and the Final Environmental Statement, dated June 1984, (NUREG-1026).

These items are available for inspection at the Commission's Public Document Room located at 1717 H Street, N.W. Washington, D.C. 20555 and in the Wilmington Township Public Library , 201 S. Kanakee Street, Wilmington, Illinois 60481. A copy of Facility Operating License NPF-59 may be obtained upon request addressed to th U.S. Nuclear Regulatory Commission, Washington D.C. 20555, Attention: Director, Division of PWR Licensing-A. Copies of the Safety Evaluation Report

7590-01

and Supplements 1 through 2 (NUREG-1002) and the Final Environmental Statement (NUREG-1026) may be purchased at current rates from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing to the Superintendent of Documents, U.S. Government Printing Office, Post Office Box 37082, Washington, D.C. 20013-7082.

- 3 -

Dated at Bethesda, Maryland this 17th day of Oclober 1986.

FOR THE NUCLEAR REGULATORY COMMISSION

Project Directorat Division of PWR Licensing-A



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

Docket No. 50-456

AMENDMENT TO INDEMNITY AGREEMENT NO. B-102 AMENDMENT NO. 1

Effective October 17, 1986 Edison Company and the Nuclear Regulatory Commission, dated October 8, 1985, is hereby amended as follows:

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

Item 2 - Amount of financial protection

a.	\$1,000,000	(From 12:01 a.m	n., October 8, 1985 to
		inclusive)	Uctober 16, 1966

\$160,000,000* (From 12:01 a.m., October 17, 1986

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

Item 3 - Licensee number or numbers

 SNM-1938
 (From 12:01 a.m., October 28, 1985 to 12 midnight, October 16, 1986 inclusive)

 NPF-59
 (From 12:01 a.m., October 17, 1986

*and, as of August 1, 1977, the amount available as secondary financial protection.

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

Nuclear Energy Liability Policy (Facility Form) No. MF-128 issued by Mutual Atomic Energy Liability Underwriters

FOR THE U. S. NUCLEAR REGULATORY COMMISSION

Darrel A. Nash, Acting Assistant Director State and Licensee Relations Office of State Programs

Accepted _____, 1986

By

COMMONWEALTH EDSION COMPANY

SUBJECT:	ISSUANCE OF F	ACILITY	OPERATING	LICENSE	NO.	NPF-59
	FOR BRAIDWOOD	STATION	, UNIT 1			

INTERNAL DISTRIBUTION

4 Docket Files* NRC PDR* Local PDR* PD#5 R/F JStevens (2)* MRushbrook (5)* TNovak* JSaltzman, SP IDinitz,SP **OPR HDenton** WLamb, P&RAB RDiggs JPart1ow BGrimes* EJordan* LHarmon TBarnhart IBailey* S. Treby, OGC* JRutberg/B. Vogler, OGC JScinto, OGC ACRS (10) C. Miles, PA J. Marnella Rodriguez, RM/AFO L. Solander, PPAS C. James Holloway, Jr., D/LFMB, ADM * with Technical Specifications