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

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Mr. Thomas J. Kovach Nuclear Licensing Manager Commonwealth Edison Company-Suite 300 OPUS West III 1400 OPUS Place Downers Grove, Illinois 60515

JCa]vo ACRS(10) GPA/PA OC/LFMB

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NRC & Local PDRs

Dear Mr. Kovach:

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. 79470, 79471, 79481 AND 79482)

The Commission has issued the enclosed Amendment No. 41 to Facility Operating License No. NPF-37 and Amendment No. 41 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 29 to Facility Operating License No. NPF-72 and Amendment No. 29 to Facility Operating License No. NPF-77 for the Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments are in response to your application dated November 28, 1990.

These amendments would revise Section 6, Administrative Controls, of the Technical Specifications in three areas: 1) deletes all references to interim minimum shift manning requirements, 2) changes the title Assistant Vice President Quality Programs and Assessment to General Manager Quality Programs and Assessment, and 3) updates the analytical methodologies used to determine core operating limits for a reload cycle.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

> Sincerely, Original Signed By:

Robert M. Pulsifer, Project Manager Project Directorate III-2 Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 41 to NPF-37
- Amendment No. 41 to NPF-66
- 3. Amendment No. 29 to NPF-72 4. Amendment No. 29 to NPF-77
- Safety Evaluation

cc w/enclosures: See next page

OFFIICAL RECORD COPY

DOCUMENT NAME: [AMENDMENT 79437/38,79481/82]

Office: Surname: Date:

RPuls/fer: jar

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NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 41 License No. NPF-37

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 28, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment 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:
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-37 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A as revised through Amendment No. 41 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. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard J. Barrett, Director Project Directorate III-2

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: April 19, 1991



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 41 License No. NPF-66

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 28, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment 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:
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-66 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 41 and revised by Attachment 2 to NPF-66, and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-37, dated February 14, 1985, are hereby incorporated into this license. Attachment 2 contains a revision to Appendix A which is hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard J. Barrett, Director Project Directorate III-2

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: April 19, 1991

ATTACHMENT TO LICENSE AMENDMENT NOS. 41 AND 41

FACILITY OPERATING LICENSE NOS. NPF-37 AND NPF-66

DOCKET NOS. STN 50-454 AND STN 50-455

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

Remove Pages	Insert Pages
6-5	6-5
6-7	6-7
6-8	6-8
6-9	6-9
6-13	6-13
6-14	6-14
6-21	6-21

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION		
	BOTH UNITS IN MODE 1, 2, 3, OR 4	BOTH UNITS IN MODE 5 OR 6 OR DEFUELED	ONE UNIT IN MODE 1, 2, 3 OR 4 AND ONE UNIT IN MODE 5 OR 6 OR DEFUELED
SE	1	1	1
SF	1	None##	7
RO	3#	2#	2#
AO	3#	3#	3#
STA or SCRE	1	None	1

SE - Shift Supervisor (Shift Engineer) with a Senior Operator

SF - Shift Foreman with a Senior Operator license

RO - Individual with an Operator license

AO - Auxiliary Operator

STA - Shift Technical Advisor

SCRE - Station Control Room Engineer with a Senior Operator License

The Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the control room while the Unit is in MODE 1, 2, 3 or 4, an individual with a valid Senior Operator license shall be designated to assume the control room command function. During any absence of the Shift Supervisor from the control room while the Unit is in MODE 5 or 6, an individual with a valid Operator license shall be designated to assume the control room command function.

[#]At least one of the required individuals must be assigned to the designated position for each unit.

^{##}At least one licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling must be present during Core Alterations on either unit, who has no other concurrent responsibilities.

and investigative function, (5) approve and report in a timely manner all findings of non-compliance with NRC requirements to the Station Manager, Vice President PWR Operations, Manager of QA/NS, General Manager Quality Programs and Assessment, and the Senior Vice President - Nuclear Operations. During periods when the Superintendent of Offsite Review and Investigative Function is unavailable, he shall designate this responsibility to an established alternate, who satisfies the formal training and experience for the Superintendent of the Offsite Review and Investigative Function. The responsibilities of the personnel performing this function are stated below. The Offsite Review and Investigative Function shall review:

- 1) The safety evaluations for: (1) changes to procedures, equipment, or systems as described in the safety analysis report, and (2) tests or experiments completed under the provision of 10 CFR 50.59 to verify that such actions did not constitute an unreviewed safety question. Proposed changes to the Quality Assurance Program description shall be reviewed and approved by the Manager of QA/NS;
- Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59;
- Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59;
- 4) Proposed changes in Technical Specifications or this Operating License;
- 5) Noncompliance with Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures, or instructions having nuclear safety significance;
- 6) Significant operating abnormalities or deviation from normal and expected performance of plant equipment that affect nuclear safety as referred to it by the Onsite Review and Investigative Function;
- 7) All REPORTABLE EVENTS;
- 8) All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems, or components;
- 9) Review and report findings and recommendations regarding all changes to the Generating Stations Emergency Plan prior to implementation of such change; and

- 10) Review and report findings and recommendations regarding all items referred by the Technical Staff Supervisor, Station Manager, Vice President PWR Operations and General Manager Quality Programs and Assessment.
- b. Station Audit Function

The station audit function shall be the responsibility of the General Manager Quality Programs and Assessment independent of PWR operations. Such responsibility is delegated to the Nuclear Quality Programs Manager.

The Nuclear Quality Programs Manager, or designated corporate staff or supervision approved by the General Manager Quality Programs and Assessment shall approve the audit agenda and checklists, the findings and the report of each audit. Audits shall be performed in accordance with the Company Quality Assurance Program and Procedures. Audits shall be performed to assure that safety-related functions are covered within the period designated below:

- The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months;
- 2) The adherence to procedure, training, and qualification of the station staff at least once per 12 months;
- The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or methods of operation that affect nuclear safety at least once per 6 months;
- The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, at least once per 24 months;
- 5) The Facility Emergency Plan and implementing procedures at least once per 12 months;
- 6) The Facility Security Plan and implementing procedures at least once per 12 months;
- 7) Onsite and offsite reviews;
- 8) The Facility Fire Protection programmatic controls including the implementing procedures at least once per 24 months by qualified QA personnel;
- Phe fire protection equipment and program implementation at least once per 12 months utilizing either a qualified offsite licensee fire protection engineer or an outside independent fire protection consultant. An outside independent fire protection consultant shall be used at least every third year;

- 10) The Radiological Environmental Monitoring Program and the results thereof at least once per 12 months;
- 11) The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months;
- 12) The PROCESS CONTROL PROGRAM and implementing procedures for solidification of radioactive wastes at least once per 24 months; and
- 13) The performance of activities required by the Company Quality Assurance Program for effluent and environmental monitoring at least once per 12 months.

Report all findings of noncompliance with NRC requirements and recommendations and results of each audit to the Station Manager, Manager of QA/NS, the Vice President PWR Operations, General Manager Quality Programs and Assessment, the Senior Vice President - Nuclear Operations, and the Chief Operating Officer.

c. Authority

The Manager of QA/NS reports to the Chief Executive Officer. The Manager of QA/NS has the authority to order unit shutdown or request any other action which he deems necessary to avoid unsafe plant conditions.

The General Manager Quality Programs and Assessment reports to the Senior Vice President - Nuclear Operations. The General Manager Quality Programs and Assessment has the authority to recommend unit shutdown or request any other action which he deems necessary to avoid unsafe plant conditions. All such disagreements shall be reported immediately to the Manager of QA/NS and the Chief Operating Officer.

- 3) Review of all proposed changes to the Technical Specifications;
- 4) Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety;
- 5) Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence;
- 6) Review of all REPORTABLE EVENTS;
- 7) Performance of special reviews and investigations and reports thereon as requested by the Superintendent of the Offsite Review and Investigative Function;
- Review of the Station Security Plan and implementing procedures and submittal of recommended changes to the Station Security Plan to the Director of Corporate Security and the General Manager Quality Programs and Assessment in lieu of distribution in accordance with Specification 6.5.2d.1;
- 9) Review of the Emergency Plan and station implementing procedures and identification of recommended changes;
- Review of Unit operations to detect potential hazards to nuclear safety;
- 11) Review of any accidental, unplanned, or uncontrolled radioactive release including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence;
- 12) Review of changes to the PROCESS CONTROL PROGRAM, the OFFSITE DOSE CALCULATION MANUAL, and the Radwaste Treatment Systems; and
- 13) Review of the Fire Protection Program and implementing instructions and identification of recommended changes.

c. Authority

The Technical Staff Supervisor is responsible to the Station Manager and shall make recommendations in a timely manner in all areas of review, investigation, and quality control phases of plant maintenance, operation, and administrative procedures relating to facility operations and shall have the authority to request the action necessary to ensure compliance with rules, regulations, and procedures when in his opinion such action is necessary. The Station Manager shall follow such recommendations or select a course

of action that is more conservative regarding safe operation of the facility. All such disagreements shall be reported immediately to the Vice President PWR Operations and the Superintendent of the Offsite Review and Investigative Function.

d. Records

- 1) Reports, reviews, investigations, and recommendations prepared and performed for Specification 6.5.2b shall be documented with copies to the Vice President PWR Operations, the Superintendent of the Offsite Review and Investigative Function, and the General Manager Quality Programs and Assessment, unless otherwise specified.
- Copies of all records and documentation shall be kept on file at the station.

e. Procedures

Written administrative procedures shall be prepared and maintained for conduct of the Onsite Review and Investigative Function. These procedures shall include the following:

- Content and method of submission and presentation to the Station Manager, Vice President PWR Operations, and the Superintendent of the Offsite Review and Investigative Function,
- 2) Use of committees,
- 3) Review and approval.
- 4) Detailed listing of items to be reviewed,
- 5) Procedures for administration of the quality control activities, and
- 6) Assignment of responsibilities.

f. Personnel

- 1) The personnel performing the Onsite Review and Investigative Function, in addition to the Station Manager, shall consist of persons having expertise in:
 - a) Nuclear power plant technology,
 - b) Reactor operations,
 - c) Reactor engineering,
 - d) Chemistry
 - e) Radiological controls.
 - f) Instrumentation and control, and
 - g) Mechanical and electrical systems.

REPORTING REQUIREMENTS (Continued)

"Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis following the format of Appendix B thereof. For solid wastes, the format for Table 3 in Appendix B shall be supplemented with three additional categories: class of solid wastes (as defined by 10 CFR Part 61), type of container (e.g., LSA, Type A, Type B, Large Quantity), and SOLIDIFICATION agent or absorbent (e.g., cement, urea formaldehyde).

The Semiannual Radioactive Effluent Release Reports shall include a list and description of unplanned releases from the site to UNRESTRICTED AREAS of radioactive materials in gaseous and liquid effluents made during the reporting period.

The Semiannual Radioactive Effluent Release Reports shall include any changes made during the reporting period to the PCP, pursuant to Specifications 6.13, as well as any major changes to Liquid, Gaseous or Solid Radwaste Treatment Systems, pursuant to Specification 6.15.

The Semiannual Radioactive Effluent Release Reports shall also include the following: an explanation as to why the inoperability of liquid or gaseous effluent monitoring instrumentation was not corrected within the time specified in Specifications 3.3.3.9 or 3.3.3.10, respectively; and description of the events leading to liquid holdup tanks or gas storage tanks exceeding the limits of Specification 3.11.1.4 or 3.11.2.6, respectively.

MONTHLY OPERATING REPORT

6.9.1.8 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or RCS safety valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the NRC Regional Office, no later than the 15th of each month following the calendar month covered by the report.

OPERATING LIMITS REPORT

6.9.1.9 Operating limits shall be established and documented in the OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle. The analytical methods used to determine the operating limits shall be those previously reviewed and approved by the NRC in Topical Reports: 1) WCAP 9272-P-A "Westinghouse Reload Safety Evaluations Methodology" dated July 1985, 2) WCAP-8385 "Power Distribution Control and Load Following Procedures" dated September 1974, 3) NFSR-0016 "Benchmark of PWR Nuclear Design Methods" dated July 1983, and/or 4) NFSR-0081 "Benchmark of PWR Nuclear Design Methods Using the Phoenix-P and ANC Computer Codes" dated July 1990. The operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 29 License No. NPF-72

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 28, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment 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:
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-72 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A as revised through Amendment No. 29 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. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard J. Barrett, Director Project Directorate III-2

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: April 19, 1991



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 29 License No. NPF-77

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 28, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment 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;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-77 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A as revised through Amendment No. 29 and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-72, dated July 2, 1987, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date if its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard J. Barrett, Director Project Directorate III-2

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: April 19, 1991

ATTACHMENT TO LICENSE AMENDMENT NOS. 29 AND 29 FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77

DOCKET NOS. STN 50-456 AND STN 50-457

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

Remove Pages	Insert Pages
xx	xx ,
6-5	6-5
6-5a	6-5a
6-7	6-7
6-8	6-8
6-9	6-9
6-13	6-13
6-14	6-14
6-21	6-21

ADMINISTRATIVE CONTROLS

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6.2 ORGANIZATION	6-1
FIGURE 6.2-1 (THIS FIGURE NOT USED)	6-3
FIGURE 6.2-2 (THIS FIGURE NOT USED)	6-4
TABLE 6.2-1 MINIMUM SHIFT CREW COMPOSITION	6-5
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6.3 UNIT STAFF QUALIFICATIONS	6-6
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6.5.1 OFFSITE	6-7
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6.6 REPORTABLE EVENT ACTION	6-15

TABLE 6.2-1 MINIMUM SHIFT CREW COMPOSITION

POSITION		NUMBER	OF INDIVIDUALS	REQUIRED TO FILL POSITION
	BOTH UNITS		BOTH UNITS IN MODE 5 OR 6	ONE UNIT IN MODE 1, 2, 3 OR 4
	OR 4	, J,	OR DEFUELED	AND ONE UNIT IN MODE 5 OR 6 OR DEFUELED
SE	1		1	1
SF	1		None##	1
RO	3#		2 [#]	3 [#]
AO	3#		3 [#]	3 [#]
STA or				, •
SCRE	1		None	1

SE - Shift Supervisor (Shift Engineer) with a Senior Operator

SF - Shift Foreman with a Senior Operator license

RO - Individual with an Operator license

AO - Auxiliary Operator

STA - Shift Technical Advisor

SCRE - Station Control Room Engineer with a Senior Operator License

The Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the control room while the Unit is in MODE 1, 2, 3 or 4, an individual with a valid Senior Operator license shall be designated to assume the control room command function. During any absence of the Shift Supervisor from the control room while the Unit is in MODE 5 or 6, an individual with a valid Operator license shall be designated to assume the control room command function.

[#]At least one of the required individuals must be assigned to the designated position for each unit.

^{##}At least one licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling must be present during Core Alterations on either unit, who has no other concurrent responsibilities.

TABLE 6.2-1a

(THIS TABLE HAS BEEN DELETED)

6.5 REVIEW INVESTIGATION AND AUDIT (Continued)

OFFSITE

6.5.1 The Superintendent of the Offsite Review and Investigative Function shall be appointed by the Manager of Quality Assurance/Nuclear Safety (QA/NS) responsible for nuclear activities. The corporate audit function shall be the responsibility of the Manager of QA/NS and shall be independent of operations.

The Manager of QA/NS reports directly to the Chief Executive Officer and has the responsibility to set Corporate Policy for both the areas of Quality Assurance and Nuclear Safety. Policy is promulgated through a central policy committee directed by the Manager of QA/NS. The Manager of QA/NS has the responsibility for the performance of periodic audits of each nuclear station and corporate department to determine that QA/NS policy is, being carried out.

- a. Offsite Review and Investigative Function
 - The Superintendent of the Offsite Review and Investigative Function shall: (1) provide directions for the review and investigative function and appoint a senior participant to provide appropriate direction, (2) select each participant for this function, (3) select a complement of more than one participant who collectively possess background and qualifications in the subject matter under review to provide comprehensive interdisciplinary review coverage under this function, (4) independently review and approve the findings and recommendations developed by personnel performing the review and investigative function, (5) approve and report in a timely manner all findings of non-compliance with NRC requirements to the Station Manager, Vice President PWR Operations, Manager of QA/NS, General Manager Quality Programs and Assessment, and the Senior Vice President -Nuclear Operations. During periods when the Superintendent of the Offsite Review and Investigative Function is unavailable, he shall designate this responsibility to an established alternate, who satisfies the formal training and experience for the Superintendent of the Offsite Review and Investigative Function. The responsibilities of the personnel performing this function are stated below. The Offsite Review and Investigative Function shall review:
 - The safety evaluations for: (1) changes to procedures, equipment, or systems as described in the safety analysis report, and (2) tests or experiments completed under the provision of 10 CFR 50.59 to verify that such actions did not constitute an unreviewed safety question. Proposed changes to the Quality Assurance Program description shall be reviewed and approved by the Manager of QA/NS;
 - Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59;
 - Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59;
 - 4) Proposed changes in Technical Specifications or this Operating License;

- 5) Noncompliance with Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures, or instructions having nuclear safety significance:
- Significant operating abnormalities or deviation from normal and expected performance of plant equipment that affect nuclear safety as referred to it by the Onsite Review and Investigative Function;
- 7) All REPORTABLE EVENTS:
- 8) All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems, or components;
- Review and report findings and recommendations regarding all changes to the Generating Stations Emergency Plan prior to implementation of such change; and
- 10) Review and report findings and recommendations regarding all items referred by the Technical Staff Supervisor, Station Manager, Vice President PWR Operations, and General Manager Quality Programs and Assessment.

b. Station Audit Function

The station audit function shall be the responsibility of the General Manager Quality Programs and Assessment independent of the PWR Operations. Such responsibility is delegated to the Nuclear Quality Programs Manager.

The Nuclear Quality Programs Manager or designated Corporate Staff or Supervision approved by the General Manager Quality Programs and Assessment shall approve the audit agenda and checklists, the findings and the report of each audit. Audits shall be performed in accordance with the Company Quality Assurance Program and Procedures. Audits shall be performed to assure that safety-related functions are covered within the period designated below:

- The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months;
- The adherence to procedure, training, and qualification of the station staff at least once per 12 months;
- The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or methods of operation that affect nuclear safety at least once per 6 months;
- The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, at least once per 24 months;

- 5) The Facility Emergency Plan and implementing procedures at least once per 12 months;
- 6) The Facility Security Plan and implementing procedures at least once per 12 months;
- 7) Onsite and offsite reviews:
- 8) The Facility Fire Protection programmatic controls including the implementing procedures at least once per 24 months by qualified QA personnel;
- The fire protection equipment and program implementation at least once per 12 months utilizing either a qualified offsite licensee fire protection engineer or an outside independent fire protection consultant. An outside independent fire protection consultant shall be used at least every third year;
- 10) The Radiological Environmental Monitoring Program and the results thereof at least once per 12 months;
- 11) The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months;
- 12) The PROCESS CONTROL PROGRAM and implementing procedures for solidification of radioactive wastes at least once per 24 months; and
- 13) The performance of activities required by the Company Quality Assurance Program for effluent and environmental monitoring at least once per 12 months.

Report all findings of noncompliance with NRC requirements and recommendations and results of each audit to the Station Manager, Manager of QA/NS, the Vice President PWR Operations, General Manager Quality Programs and Assessment, the Senior Vice President - Nuclear Operations, and the Chief Operating Officer.

c. Authority

The Manager of QA/NS reports to the Chief Executive Officer. The Manager of QA/NS has the authority to order unit shutdown or request any other action which he deems necessary to avoid unsafe plant conditions.

The General Manager Quality Programs and Assessment reports to the Senior Vice President - Nuclear Operations. The General Manager Quality Programs and Assessment has the authority to recommend unit shutdown or request any other action which he deems necessary to avoid unsafe plant conditions. All such disagreements shall be reported immediately to the Manager of QA/NS and the Chief Operating Officer.

- 3) Review of all proposed changes to the Technical Specifications;
- 4) Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety;
- 5) Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence;
- 6) Review of all REPORTABLE EVENTS:
- 7) Performance of special reviews and investigations and reports thereon as requested by the Superintendent of the Offsite Review and Investigative Function;
- Review of the Station Security Plan and implementing procedures and submittal of recommended Security Plan changes to the Director of Corporate Security and the General Manager Quality Programs and Assessment in lieu of distribution in accordance with Specification 6.5.2d.1;
- 9) Review of the Emergency Plan and station implementing procedures and identification of recommended changes;
- 10) Review of Unit operations to detect potential hazards to nuclear safety;
- 11) Review of any accidental, unplanned, or uncontrolled radioactive release including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence:
- 12) Review of changes to the PROCESS CONTROL PROGRAM, the OFFSITE DOSE CALCULATION MANUAL, and the Radwaste Treatment Systems;
- 13) Review of the Fire Protection Program and implementing instructions and identification of recommended changes.

c. Authority

The Technical Staff Supervisor is responsible to the Station Manager and shall make recommendations in a timely manner in all areas of review, investigation, and quality control phases of plant maintenance, operation, and administrative procedures relating to facility operations and shall have the authority to request the action necessary to ensure compliance with rules, regulations, and procedures when in his opinion such action is necessary. The Station Manager shall follow such recommendations or select a course of action that

is more conservative regarding safe operation of the facility. All such disagreements shall be reported immediately to the Vice President PWR Operations and the Superintendent of the Offsite Review and Investigative Function.

d. Records

- 1) Reports, reviews, investigations, and recommendations prepared and performed for Specification 6.5.2b shall be documented with copies to the Vice President PWR Operations, the Superintendent of the Offsite Review and Investigative Function, and the General Manager Quality Programs and Assessment, unless otherwise specified.
- Copies of all records and documentation shall be kept on file at the station.

e. Procedures

Written administrative procedures shall be prepared and maintained for conduct of the Onsite Review and Investigative Function. These procedures shall include the following:

- Content and method of submission and presentation to the Station Manager, Vice President PWR Operations and the Superintendent of the Offsite Review and Investigative Function,
- 2) Use of committees.
- 3) Review and approval,
- 4) Detailed listing of items to be reviewed,
- 5) Procedures for administration of the quality control activities, and
- 6) Assignment of responsibilities.

f. Personnel

- 1) The personnel performing the Onsite Review and Investigative Function, in addition to the Station Manager, shall consist of persons having expertise in:
 - a) Nuclear power plant technology,
 - b) Reactor operations,
 - c) Reactor engineering,
 - d) Chemistry
 - e) Radiological controls,
 - f) Instrumentation and control, and
 - g) Mechanical and electrical systems.

REPORTING REQUIREMENTS (Continued)

"Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis following the format of Appendix B thereof. For solid wastes, the format for Table 3 in Appendix B shall be supplemented with three additional categories: class of solid wastes (as defined by 10 CFR Part 61), type of container (e.g., LSA, Type A, Type B, Large Quantity), and SOLIDIFICATION agent or absorbent (e.g., cement, urea formaldehyde).

The Semiannual Radioactive Effluent Release Reports shall include a list and description of unplanned releases from the site to UNRESTRICTED AREAS of radioactive materials in gaseous and liquid effluents made during the reporting period.

The Semiannual Radioactive Effluent Release Reports shall include any changes made during the reporting period to the PCP, pursuant to Specifications 6.13, as well as any major changes to Liquid, Gaseous or Solid Radwaste Treatment Systems, pursuant to Specification 6.15.

The Semiannual Radioactive Effluent Release Reports shall also include the following: an explanation as to why the inoperability of liquid or gaseous effluent monitoring instrumentation was not corrected within the time specified in Specifications 3.3.3.9 or 3.3.3.10, respectively; and description of the events leading to liquid holdup tanks or gas storage tanks exceeding the limits of Specification 3.11.1.4 or 3.11.2.6, respectively.

MONTHLY OPERATING REPORT

6.9.1.8 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or RCS safety valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the NRC Regional Office, no later than the 15th of each month following the calendar month covered by the report.

OPERATING LIMITS REPORT

6.9.1.9 Operating limits shall be established and documented in the OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle. The analytical methods used to determine the operating limits shall be those previously reviewed and approved by the NRC in Topical Reports: 1) WCAP 9272-P-A "Westinghouse Reload Safety Evaluations Methodology" dated July 1985, 2) WCAP-8385 "Power Distribution Control and Load Following Procedures" dated September 1974, 3) NFSR-0016 "Benchmark of PWR Nuclear Design Methods dated July 1983, and/or 4) NFSR-0081 "Benchmark of PWR Nuclear Design Methods Using the PHOENIX-P and ANC Computer Codes" dated July 1990. The operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met. The OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 41 TO FACILITY OPERATING LICENSE NO. NPF-37.

AMENDMENT NO. 41 TO FACILITY OPERATING LICENSE NO. NPF-66,

AMENDMENT NO. 29 TO FACILITY OPERATING LICENSE NO. NPF-72,

AND AMENDMENT NO. 29 TO FACILITY OPERATING LICENSE NO. NPF-77

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNIT NOS. 1 AND 2

BRAIDWOOD STATION, UNIT NOS. 1 AND 2

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

1.0 INTRODUCTION

By letter dated November 28, 1990, Commonwealth Edison Company (CECo) proposed an amendment to the Technical Specifications for both Byron Station, Unit Nos. 1 and 2 and Braidwood Station, Unit Nos. 1 and 2. The proposed amendment: 1) deletes all references to interim minimum shift manning requirements, 2) changes the title Assistant Vice President Quality Programs and Assessment to General Manager Quality Programs and Assessment, and 3) updates the analytical methodologies used to determine core operating limits for a reload cycle.

2.0 EVALUATION

The first change deletes a reference to Table 6.2-1a, "Minimum Shift Crew Composition" for a single licensed unit, from Table 6.2-1 and it deletes Table 6.2-1a from the Braidwood Technical Specifications. This is an administrative change to reflect that both Byron and Braidwood Stations are two unit stations. Table 6.2-1 replaced Table 6.2-1a when the second units were licensed.

The second change is another administrative change where the title "Assistant Vice President Quality Programs and Assessment" is changed to "General Manager Quality Programs and Assessment."

The third change updates the analytical methodologies referenced in Section 6.9.1.9, which are used to determine the core operating limits for a reload cycle. The change adds two previously approved Topical Reports; (1) WCAP 9272-P-A, "Westinghouse Reload Safety Evaluations Methodology" and (2) WCAP 8385, "Power Distribution Control and Load Following Procedures."

Also being added is Topical Report, NFSR-0081, "Benchmark of PWR Nuclear Design Methods using the PHOENIX-P and ANC Computer Codes" recently approved by a Safety Evaluation (SE) dated March 11, 1991.

All of these changes are administrative in nature and do not involve changes to plant equipment, actual minimum shift manning, or personnel functions. The changes modify reporting requirements and administrative procedures, and there is no adverse impact on safety. Accordingly, the staff finds the proposed changes acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of this amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: R.M. Pulsifer

Date: April 19, 1991