Docket Files

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

April 24, 1989

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

Mr. Henry E. Bliss
Nuclear Licensing Manager
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Bliss:

The Commission has issued the enclosed Amendment No. 27 to Facility Operating License No. NPF-37 and Amendment No. 27 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 16 to Facility Operating License No. NPF-72, and Amendment No. 16 to Facility Operating License No. NPF-77 for Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated February 17, 1989.

These amendments approved changes that remove the organizational figures from the Technical Specifications, change several position titles, clarify the distribution requirements for Onsite Reviews and correct several typographical and editorial errors.

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

Sincerely,

Stephen P. Sands

Stephen P. Sands, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Leonard N. Olshan

Leonard N. Olshan, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:
1. Amendment No. 27 to NPF-37
2. Amendment No. 27 to NPF-66
3. Amendment No. 16 to NPF-72
4. Amendment No. 16 to NPF-77
5. Safety Evaluation

cc: w/enclosures
See next page

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April 24, 1989

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

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-454

BYRON STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
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 February 17, 1989, 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 Specification 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 27 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

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 24, 1989

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-455

BYRON STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
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 February 17, 1989, 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-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 27 and revised by Attachment 2 to NPF-60, and the Environmental Protection Plan contained in Appendix B, both of which are 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

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 24, 1989

ATTACHMENT TO LICENSE AMENDMENT NOS. 27 AND 27

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

DOCKET NOS. 50-454 AND 50-455

Revise Appendix A as follows:

Remove Pages	Insert Pages
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6-2	6-2
	6-2a
6-3	6-3
6-4	6-4
6-6	6-6
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6.1 RESPONSIBILITY

6.1.1 The Station Manager, Byron Station, shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Engineer (or during his absence from the control room, a designated individual) shall be responsible for the control room command function. A management directive to this effect, signed by the Vice President PWR Operations shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

6.2.1 ONSITE AND OFFSITE ORGANIZATIONS

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Quality Assurance Manual or the Management Plan for Nuclear Operations, Section 3 Organizational Authority, Activities; Section 6 Interdepartmental Relationships.

b. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.

c. The Senior Vice President-Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.

d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.2.2 UNIT STAFF

The unit staff shall be subject to the following:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1; and

b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room;

c. A Radiation Protection Technician,* qualified in radiation protection procedures, shall be on site when fuel is in the reactor;

d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;

e. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., licensed Senior Operators, licensed Operators, health physics personnel, equipment operators, and key maintenance personnel.

   The amount of overtime worked by Unit staff members performing safety-related functions shall be limited in accordance with the NRC Policy Statement on working hours (Generic Letter No. 82-12);

f. The Assistant Superintendent Operating shall hold a Senior Reactor Operator License.

6.2.3 ONSITE NUCLEAR SAFETY GROUP (ONSG)

FUNCTION

6.2.3.1 The ONSG serves as an independent safety engineering group and shall function to examine plant operating characteristics, NRC issuances, industry advisories, REPORTABLE EVENTS and other sources of plant design and operating experience information, including plants of similar design, which may indicate areas for improving plant safety. The ONSG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities or other means of improving plant safety to the Safety Assessment Manager, and the Station Manager, Byron Station.

COMPOSITION

6.2.3.2 The ONSG shall be composed of at least three, dedicated, full-time engineers located on site.

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*The Radiation Protection Technician may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

6.2.3 ONSITE NUCLEAR SAFETY GROUP (ONSG) (Continued)

RESPONSIBILITIES

6.2.3.3 The ONSG shall be responsible for maintaining surveillance of plant activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

RECORDS

6.2.3.4 Records of activities performed by the ONSG shall be prepared, maintained, and forwarded each calendar month to the Safety Assessment Manager, and the Station Manager, Byron Station.

6.2.4 SHIFT TECHNICAL ADVISOR

The Station Control Room Engineer (SCRE) may serve as the Shift Technical Advisor (STA) during abnormal operating or accident conditions. During these conditions the SCRE or other on duty STA shall provide technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the unit.

To assure capability for performance of all STA functions:

(1) The shift foreman (SRO) shall participate in the SCRE shift relief turnover.

(2) During the shift, the shift engineer and the shift foreman (SRO) shall be made aware of any significant changes in plant status in a timely manner by the SCRE.

(3) During the shift, the shift engineer and the shift foreman (SRO) shall remain abreast of the current plant status. The shift foreman (SRO) shall return to the control room two or three times per shift, where practicable, to confer with the SCRE regarding plant status. Where not practicable to return to the control room, the shift foreman (SRO) shall periodically check with the SCRE for a plant status update. The shift foreman (SRO) shall not abandon duties original to reactor operation, unless specifically ordered by the shift engineer.

*Not responsible for sign-off function.

FIGURE 6.2-1
(THIS FIGURE NOT USED)

FIGURE 6.2-2
(THIS FIGURE NOT USED)

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971, except for the Health Physics Supervisor or Lead Health Physicist, who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, for a Radiation Protection Manager. The licensed Operators and Senior Operators shall also meet or exceed the minimum qualifications of the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Production Training Department and shall meet or exceed the requirements and recommendations of Section 5 of ANSI/ANS 3.1-1978 and Appendix A of 10 CFR Part 55 and the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, and shall include familiarization with relevant industry operational experience from the program managed by Quality Programs and Assessment.

6.5 REVIEW INVESTIGATION AND AUDIT

The Review and Investigative Function and the Audit Function of activities affecting quality during facility operations shall be constituted and have the responsibilities and authorities outlined below.

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

OFFSITE (Continued)

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, Assistant Vice President (AVP) 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;

2) Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59;

3) 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

OFFSITE (Continued)

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

b. Station Audit Function

The station audit function shall be the responsibility of the AVP 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 AVP 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:

1) 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;

3) 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;

4) 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;

9) 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;

OFFSITE (Continued)

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, AVP 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 AVP Quality Programs and Assessment reports to the Senior Vice President - Nuclear Operations. The AVP 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.

OFFSITE (Continued)

h) Instrumentation and Control

Engineering graduate or equivalent with at least 5 years of experience in instrumentation and control design and/or operation.

i) Metallurgy

Engineering graduate or equivalent with at least 5 years of experience in the metallurgical field.

3) The Superintendent of the Offsite Review and Investigative Function shall have experience and training which satisfy ANSI N18.1-1971 requirements for plant managers.

ONSITE

6.5.2 The Onsite Review and Investigative Function shall be supervised by the Station Manager.

a. Onsite Review and Investigative Function

The Station Manager shall: (1) provide directions for the Review and Investigative Function and appoint the Technical Staff Supervisor, or other comparably qualified individual as the senior participant to provide appropriate directions; (2) approve participants for this function; (3) assure that at least two participants who collectively possess background and qualifications in the subject matter under review are selected 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) report all findings of noncompliance with NRC requirements, and provide recommendations and (6) submit to the Offsite Review and Investigative Function for concurrence in a timely manner, those items described in Specification 6.5.1a which have been approved by the Onsite Review and Investigative Function.

b. Responsibility

The responsibilities of the personnel performing this function are:

1) Review of: (1) station specific portions of all procedures required by Specification 6.8.1 and changes thereto, (2) all programs required by Specification 6.8.4 and changes thereto, and (3) any other proposed procedures or changes thereto as determined by the Station Manager to affect nuclear safety;

2) Review of all proposed tests and experiments that affect nuclear safety;

ONSITE (Continued)

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;

8) 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 AVP 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; 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

ONSITE (Continued)

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 AVP Quality Programs and Assessment, unless otherwise specified.

2) 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:

1) 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.

ONSITE (Continued)

2) Personnel performing the Onsite Review and Investigative Function shall meet minimum acceptable levels as described in ANSI N18.1-1971, Sections 4.2 and 4.4.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the Onsite Review and Investigative Function and the results of this review shall be submitted to the Offsite Review and Investigative Function and the Vice President PWR Operations.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Vice President PWR Operations and the Offsite Review and Investigative Function shall be notified within 24 hours;

b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the Onsite Review and Investigative Function. This report shall describe: (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence;

c. The Safety Limit Violation Report shall be submitted to the Commission, the Offsite Review and Investigative Function and the Vice President PWR Operations within 14 days of the violation; and

d. Critical operation of the Unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978,

HIGH RADIATION AREA (Continued)

source or from any surface which the radiation penetrates shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates equal to or less than 1000 mR/h, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area; or

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them; or

c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the Radiation Work Permit.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels greater than 1000 mR/h at 45 cm (18 in.) from the radiation source or from any surface which the radiation penetrates shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Foreman on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area. During emergency situations which involve personnel injury or actions taken to prevent major equipment damage, continuous surveillance and radiation monitoring of the work area by a qualified individual may be substituted for the routine RWP procedure.

For individual high radiation areas accessible to personnel with radiation levels of greater than 1000 mR/h that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded (by a more substantial obstacle than rope), conspicuously posted, and a flashing light shall be activated as a warning device.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 The PCP shall be approved by the Commission prior to implementation.

6.13.2 Licensee-initiated changes to the PCP:

a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:

1) Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;

2) A determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and

3) Documentation of the fact that the change has been reviewed and found acceptable by the Onsite Review and Investigative Function.

b. Shall become effective upon review and acceptance by the Onsite Review and Investigative Function in accordance with Specification 6.5.2.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 Licensee-initiated changes to the ODCM:

a. Shall be submitted to the Commission by inclusion in the Monthly Operating Report pursuant to Specification 6.9.1.8 within 90 days of the date the change(s) was made effective. This submittal shall contain:

1) Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered, dated and containing the revision number, together with appropriate analyses or evaluations justifying the change(s);

2) A determination that the change will not reduce the accuracy or reliability of dose calculations or Setpoint determinations; and

3) Documentation of the fact that the change has been reviewed and found acceptable by the Onsite Review and Investigative Function.

b. Shall become effective upon review and acceptance by the Onsite Review and Investigative Function in accordance with Specification 6.5.2.

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-456

BRAIDWOOD STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16
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 February 17, 1989, 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 Specification 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) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 16 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

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 24, 1989

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-457

BRAIDWOOD STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16
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 February 17, 1989, 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 Specification 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) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 16 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 of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 24, 1989

ATTACHMENT TO LICENSE AMENDMENT NOS. 16 AND 16

FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77

DOCKET NOS. 50-456 AND 50-457

Revise Appendix A as follows:

Remove Pages	Insert Pages
xx	xx
6-1	6-1
6-2	6-2
	6-2a
6-3	6-3
6-4	6-4
6-6	6-6
6-7	6-7
6-8	6-8
6-9	6-9
6-12	6-12
6-13	6-13
6-14	6-14
6-15	6-15
6-24	6-24
6-25	6-25

SECTION	PAGE
6.1 RESPONSIBILITY	6-1
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
TABLE 6.2-1a MINIMUM SHIFT CREW COMPOSITION	6-5a
6.3 UNIT STAFF QUALIFICATIONS	6-6
6.4 TRAINING	6-6
6.5 REVIEW INVESTIGATION AND AUDIT	6-6
6.5.1 OFFSITE	6-7
Offsite Review and Investigative Function	6-7
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6.5.2 ONSITE	6-12
Onsite Review and Investigative Functions	6-12
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6.6 REPORTABLE EVENT ACTION	6-15

6.1 RESPONSIBILITY

6.1.1 The Station Manager, Braidwood Station, shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Engineer (or during his absence from the control room, a designated individual) shall be responsible for the control room command function. A management directive to this effect, signed by the Vice President PWR Operations shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

6.2.1 ONSITE AND OFFSITE ORGANIZATIONS

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Quality Assurance Manual or the Management Plan for Nuclear Operations, Section 3 Organizational Authority, Activities; Section 6 Interdepartmental Relationships.

b. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.

c. The Senior Vice President-Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.

d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.2.2 UNIT STAFF

The unit staff shall be subject to the following:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1; and

UNIT STAFF (Continued)

b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room;

c. A Radiation Protection Technician,* qualified in radiation protection procedures, shall be on site when fuel is in the reactor;

d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;

e. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., licensed Senior Operators, licensed Operators, health physics personnel, equipment operators, and key maintenance personnel.

   The amount of overtime worked by Unit staff members performing safety-related functions shall be limited in accordance with the NRC Policy Statement on working hours (Generic Letter No. 82-12);

f. The Assistant Superintendent Operating shall hold a Senior Reactor Operator License.

6.2.3 ONSITE NUCLEAR SAFETY GROUP (ONSG)

FUNCTION

6.2.3.1 The ONSG serves as an independent safety engineering group and shall function to examine plant operating characteristics, NRC issuances, industry advisories, REPORTABLE EVENTS and other sources of plant design and operating experience information, including plants of similar design, which may indicate areas for improving plant safety. The ONSG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities or other means of improving plant safety to the Safety Assessment Manager, and the Station Manager, Braidwood Station.

COMPOSITION

6.2.3.2 The ONSG shall be composed of at least four, dedicated, full-time engineers located on site.

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*The Radiation Protection Technician may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

6.2.3 ONSITE NUCLEAR SAFETY GROUP (ONSG) (Continued)

RESPONSIBILITIES

6.2.3.3 The ONSG shall be responsible for maintaining surveillance of plant activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

RECORDS

6.2.3.4 Records of activities performed by the ONSG shall be prepared, maintained, and forwarded each calendar month to the Safety Assessment Manager, and the Station Manager, Braidwood Station.

6.2.4 SHIFT TECHNICAL ADVISOR

The Station Control Room Engineer (SCRE) may serve as the Shift Technical Advisor (STA) during abnormal operating or accident conditions. During these conditions the SCRE or other on duty STA shall provide technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the unit.

*Not responsible for sign-off function.

FIGURE 6.2-1

(THIS FIGURE NOT USED)

FIGURE 6.2-2

(THIS FIGURE NOT USED)

6.2.4 SHIFT TECHNICAL ADVISOR (Continued)

To assure capability for performance of all STA functions:

(1) The shift foreman (SRO) shall participate in the SCRE shift relief turnover.

(2) During the shift, the shift engineer and the shift foreman (SRO) shall be made aware of any significant changes in plant status in a timely manner by the SCRE.

(3) During the shift, the shift engineer and the shift foreman (SRO) shall remain abreast of the current plant status. The shift foreman (SRO) shall return to the control room two or three times per shift, where practicable, to confer with the SCRE regarding plant status. Where not practicable to return to the control room, the shift foreman (SRO) shall periodically check with the SCRE for a plant status update. The shift foreman (SRO) shall not abandon duties original to reactor operation, unless specifically ordered by the shift engineer.

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971, except for the Health Physics Supervisor or Lead Health Physicist, who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, for a Radiation Protection Manager. The licensed Operators and Senior Operators shall also meet or exceed the minimum qualifications of the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Production Training Department and shall meet or exceed the requirements and recommendations of Section 5 of ANSI/ANS 3.1-1978 and Appendix A of 10 CFR Part 55 and the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, and shall include familiarization with relevant industry operational experience from the program managed by Quality Programs and Assessment.

6.5 REVIEW INVESTIGATION AND AUDIT

The Review and Investigative Function and the Audit Function of activities affecting quality during facility operations shall be constituted and have the responsibilities and authorities outlined below.

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, Assistant Vice President (AVP) 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:

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;

2) Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59;

3) 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;

OFFSITE (Continued)

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 AVP Quality Programs and Assessment.

b. Station Audit Function

The station audit function shall be the responsibility of the AVP 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 AVP 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:

1) 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;

3) 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;

4) 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;

OFFSITE (Continued)

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;

9) 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, AVP 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 AVP Quality Programs and Assessment reports to the Senior Vice President - Nuclear Operations. The AVP 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.

OFFSITE (Continued)

h) Instrumentation and Control

Engineering graduate or equivalent with at least 5 years of experience in instrumentation and control design and/or operation.

i) Metallurgy

Engineering graduate or equivalent with at least 5 years of experience in the metallurgical field.

3) The Superintendent of the Offsite Review and Investigative Function shall have experience and training which satisfy ANSI N18.1-1971 requirements for plant managers.

ONSITE

6.5.2 The Onsite Review and Investigative Function shall be supervised by the Station Manager.

a. Onsite Review and Investigative Function

The Station Manager shall: (1) provide directions for the Review and Investigative Function and appoint the Technical Staff Supervisor, or other comparably qualified individual as the senior participant to provide appropriate directions; (2) approve participants for this function; (3) assure that at least two participants who collectively possess background and qualifications in the subject matter under review are selected 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) report all findings of noncompliance with NRC requirements, and provide recommendations; and (6) submit to the Offsite Review and Investigative Function for concurrence in a timely manner, those items described in Specification 6.5.1a which have been approved by the Onsite Review and Investigative Function.

b. Responsibility

The responsibilities of the personnel performing this function are:

1) Review of: (1) station specific portions of all procedures required by Specification 6.8.1 and changes thereto, (2) all programs required by Specification 6.8.4 and changes thereto, and (3) any other proposed procedures or changes thereto as determined by the Station Manager to affect nuclear safety;

2) Review of all proposed tests and experiments that affect nuclear safety;

ONSITE (Continued)

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;

8) Review of the Station Security Plan and implementing procedures and submittal of recommended Security Plan changes to the Director of Corporate Security and the AVP 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

ONSITE (Continued)

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 AVP Quality Programs and Assessment, unless otherwise specified.

2) 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:

1) 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.

ONSITE (Continued)

2) Personnel performing the Onsite Review and Investigative Function shall meet minimum acceptable levels as described in ANSI N18.1-1971, Sections 4.2 and 4.4.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the Onsite Review and Investigative Function and the results of this review shall be submitted to the Offsite Review and Investigative Function and the Vice President PWR Operations.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Vice President PWR Operations and the Offsite Review and Investigative Function shall be notified within 24 hours;

b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the Onsite Review and Investigative Function. This report shall describe: (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence;

c. The Safety Limit Violation Report shall be submitted to the Commission, the Offsite Review and Investigative Function and the Vice President PWR Operations within 14 days of the violation; and

d. Critical operation of the Unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978,

HIGH RADIATION AREA (Continued)

source or from any surface which the radiation penetrates shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates equal to or less than 1000 mR/h, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area; or

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them; or

c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the Radiation Work Permit.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels greater than 1000 mR/h at 45 cm (18 in.) from the radiation source or from any surface which the radiation penetrates shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Foreman on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area. During emergency situations which involve personnel injury or actions taken to prevent major equipment damage, continuous surveillance and radiation monitoring of the work area by a qualified individual may be substituted for the routine RWP procedure.

For individual high radiation areas accessible to personnel with radiation levels of greater than 1000 mR/h that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded (by a more substantial obstacle than rope), conspicuously posted, and a flashing light shall be activated as a warning device.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 The PCP shall be approved by the Commission prior to implementation.

6.13.2 Licensee-initiated changes to the PCP:

a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:

1) Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;

2) A determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and

3) Documentation of the fact that the change has been reviewed and found acceptable by the Onsite Review and Investigative Function.

b. Shall become effective upon review and acceptance by the Onsite Review and Investigative Function in accordance with Specification 6.5.2.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 Licensee-initiated changes to the ODCM:

a. Shall be submitted to the Commission by inclusion in the Monthly Operating Report pursuant to Specification 6.9.1.8 within 90 days of the date the change(s) was made effective. This submittal shall contain:

1) Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered, dated and containing the revision number, together with appropriate analyses or evaluations justifying the change(s);

2) A determination that the change will not reduce the accuracy or reliability of dose calculations or Setpoint determinations; and

3) Documentation of the fact that the change has been reviewed and found acceptable by the Onsite Review and Investigative Function.

b. Shall become effective upon review and acceptance by the Onsite Review and Investigative Function in accordance with Specification 6.5.2.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 27 TO FACILITY OPERATING LICENSES

NOS. NPF-37 AND NPF-66

BYRON STATION, UNITS 1 AND 2

DOCKET NOS. 50-454 AND 50-455

AND

SUPPORTING AMENDMENT NO. 16 TO FACILITY OPERATING LICENSES

NOS. NPF-72 AND NPF-77

BRAIDWOOD STATION UNITS 1 AND 2

DOCKET NOS. 50-456 AND 50-457

1.0 INTRODUCTION

By letter dated February 17, 1989, Commonwealth Edison Company proposed changes to Technical Specifications (TS) Sections 6.1 through 6.7 and Section 6.13. The proposed changes would remove Figure 6.2-1, Offsite Organization, and Figure 6.2-2, Unit Organization, and replace, them with a narrative description of the offsite and onsite organizations functional requirements in TS 6.2.1 and unit staff qualifications in 6.2.2. Guidance for these proposed changes to the TS was provided to licensees and applicants by Generic Letter 88-06, dated March 22, 1988. In addition, the proposed changes would change several position titles, responsibilities, and lines of authority to reflect a major reorganization, clarify the distribution requirements for Onsite Reviews, and correct several typographical and editorial errors.

2.0 BACKGROUND

Consistent with the guidance provided in the Standard Technical Specifications, Specifications 6.2.1 and 6.2.2 of the administrative control requirements have referenced offsite and unit (onsite) organization charts that are provided as figures to these sections. On a plant specific basis, these organization charts have been provided by applicants and included in the TS issued with the operating license. Subsequent restructuring of either the offsite or unit organizations, following the issuance of an operating license, has required licensees to submit a license amendment for NRC approval to reflect the desired changes in these organizations. As a consequence, organizational changes have necessitated the need to request an amendment of the operating license.

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Removal of organization charts is a line item improvement that was proposed on a lead-plant basis for the Shearon Harris plant and was endorsed by the Westinghouse Owners Group. This change was reviewed as part of the NRC's program for improvements in TS. The objectives of that program were established by the Commission's Interim Policy Statement on Technical Specification Improvements. The staff concluded that removal of organization charts from TS will provide greater flexibility for licensees to implement changes in both the onsite and offsite organizational structure, consistent with Commission policy.

In addition to CECo's intent to delete organization charts, the licensee proposed to revise significant aspects of TS Section 6. This revision would reflect changes in the CECo organization and update station and corporate position titles, description, responsibilities, and lines of authority. The purpose of the organization change was to improve communication channels and eliminate redundant levels of management.

3.0 EVALUATION

The licensee's proposed changes to its TS are in accordance with the guidance provided by Generic Letter 88-06 and addressed the items listed below.

(1) Specifications 6.2.1 and 6.2.2 were revised to delete the references to Figures 6.2-1 and 6.2-2 that were removed from the TS.

(2) Functional requirements of the offsite and onsite organizations were defined and added to Specification 6.2.1, and they are consistent with the guidance provided in Generic Letter 88-06. The specification notes that implementation of these requirements is documented in the Quality Assurance Manual or the Management Plan for Nuclear Operations, Section 3 Organizational Authority, Activities; Section 6 Interdepartmental Relationships.

(3) The senior reactor operator license qualified position of Assistant Superintendent Operating was added to Specification 6.2.2. Therefore, this requirement that was identified on the organization chart for the unit staff will be retained. Other senior reactor operator and reactor operator license qualified positions of the unit staff were already identified in areas of the TS other than Figure 6.2-2.

(4) Consistent with requirements to document the offsite and onsite organization relationships in the form of organization charts, the licensee has confirmed that this documentation currently exists in the Quality Assurance Manual or the Management Plan for Nuclear Operations.

On the basis of its review of the above items, the staff concludes that the licensee has provided an acceptable response to these items as addressed in the NRC guidance on removing organization charts from the administrative control requirements of the TS. Furthermore, the staff finds that these changes are consistent with the staff's generic finding on the acceptability of such changes as noted in Generic Letter 88-06.

In addition to deleting organization charts, changes in on-site and off-site company position titles, responsibilities, description, and lines of authority identified throughout TS Section 6 were made to reflect a major CECo reorganization. Station and corporate positions affecting nuclear operations and management are being reorganized to enhance plant safety by improving channels of communication and authority. The NRC staff concludes that the proposed TS amendments retain all portions of organizational characteristics which are important to safety, and that the re-organizational changes should not adversely impact safe operation and management of the stations. The independence between operations and quality assurance is still maintained. Consequently, these amendments are acceptable.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments relate to changes in recordkeeping, or administrative procedures or requirements. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. 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 these amendments.

5.0 CONCLUSION

On the basis of the considerations discussed above, the staff concludes 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: April 24, 1989