Mr. Oliver D. Kingsley, President **Nuclear Generation Group** Commonwealth Edison Company **Executive Towers West III** 1400 Opus Place, Suite 500 Downers Grove, IL 60515

SUBJECT:

ISSUANCE OF AMENDMENTS (TAC NOS. MA5978 AND MA5979)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 190 to Facility Operating License No. DPR-29 and Amendment No. 187 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2. respectively. The amendments are in response to your application dated June 29, 1999.

The amendments increase the notch testing surveillance interval of partially withdrawn control rods in Technical Specification Surveillance Requirement 3/4.3.C, "Reactivity Control - Control Rod Operability," from an interval of once in 7 days to once in 31 days. The change is consistent with the content of the Improved Standard Technical Specifications (NUREG-1433) Revision 1).

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, Section 2 Project Directorate III Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosures:

1. Amendment No. 190 to DPR-29

2. Amendment No. 187 to DPR-30

3. Safety Evaluation

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O. Kingsley Commonwealth Edison Company

CC:

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Illinois Department of Nuclear Safety Office of Nuclear Facility Safety 1035 Outer Park Drive Springfield, Illinois 62704

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 190 License No. DPR-29

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated June 29, 1999, 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 3.B. of Facility Operating License No. DPR-29 is hereby amended to read as follows:

B. **Technical Specifications**

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 190 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

This license amendment is effective as of the date of its issuance and shall be 3. implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Anthony J. Mendiola, Chief, Section 2
Project Directorate III

Division of Licensing Project Management Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 23, 1999



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 187 License No. DPR-30

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated June 29, 1999, 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 3.B. of Facility Operating License No. DPR-30 is hereby amended to read as follows:

B. **Technical Specifications**

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 187 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Anthony J. Mendiola, Chief, Section 2
Project Directorate III

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Division of Licensing Project Management

Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical **Specifications**

Date of Issuance: September 23, 1999

ATTACHMENT TO LICENSE AMENDMENT NOS. 190 AND 187

FACILITY OPERATING LICENSE NOS. DPR-29 AND DPR-30

DOCKET NOS. 50-254 AND 50-265

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.

<u>REMOVE</u> <u>INSERT</u> 3/4.3-3

3.3 - LIMITING CONDITIONS FOR OPERATION

C. Control Rod OPERABILITY

All control rods shall be OPERABI F.

APPLICABILITY:

OPERATIONAL MODE(s) 1 and 2.

ACTION:

- With one control rod inoperable due to being immovable as a result of excessive friction or mechanical interference, or known to be unscrammable:
 - a. Within one hour:
 - Verify that the inoperable control rod, if withdrawn, is separated from all other inoperable withdrawn control rods by at least two control cells in all directions.
 - 2) Disarm the associated directional control valves^(a) either:
 - a) Electrically, or
 - b) Hydraulically by closing the drive water and exhaust water isolation valves.
 - With the provisions of ACTION 1.a above not met, be in at least HOT SHUTDOWN within the next 12 hours.

4.3 - SURVEILLANCE REQUIREMENTS

C. Control Rod OPERABILITY

- When above the low power setpoint of the RWM, all withdrawn control rods not required to have their directional control valves disarmed electrically or hydraulically shall be demonstrated OPERABLE by moving each control rod at least one notch:
 - At least once per 7 days^(b) for each fully withdrawn control rod, and at least once per 31 days^(b) for each partially withdrawn control rod, and
 - Within 24 hours when any control rod is immovable as a result of excessive friction or mechanical interference, or known to be unscrammable.
- 2. All control rods shall be demonstrated OPERABLE by performance of Surveillance Requirements 4.3.D, 4.3.F, 4.3.G, 4.3.H and 4.3.I.

a May be rearmed intermittently, under administrative control, to permit testing associated with restoring the control rod to OPERABLE status.

b Not required to be performed until 7 days (for fully withdrawn) or 31 days (for partially withdrawn) after the control rod is withdrawn and above the low power setpoint of the RWM.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 190 TO FACILITY OPERATING LICENSE NO. DPR-29 AND AMENDMENT NO. 187 TO FACILITY OPERATING LICENSE NO. DPR-30 COMMONWEALTH EDISON COMPANY

AND

MIDAMERICAN ENERGY COMPANY QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 DOCKET NOS. 50-254 AND 50-265

1.0 <u>INTRODUCTION</u>

By letter dated June 29, 1999, the Commonwealth Edison Company (ComEd, the licensee) submitted a request for changes to the Quad Cities Nuclear Power Station, Units 1 and 2, Technical Specifications (TSs). The requested amendment revises Surveillance Requirement (SR) 4.3.C.1 for control rod testing to increase the "notch" testing surveillance interval for partially withdrawn control rods from once per 7 days to once per 31 days. The change is consistent with the content of the Improved Standard Technical Specifications (iSTS) (NUREG-1433, Revision 1).

2.0 **EVALUATION**

SR 4.3.C.1 currently requires the following:

When above the low power setpoint of the RWM [Rod Worth Minimizer], all withdrawn control rods not required to have their directional control valves disarmed electronically or hydraulically shall be demonstrated OPERABLE by moving each control rod at least one notch:

a. At least once per 7 days, and

The proposed change replaces SR 4.3.C.1.a with the following:

a. At least once per 7 days^(b) for each fully withdrawn control rod, and at least once per 31 days^(b) for each partially withdrawn control rod, and

A footnote, shown below, applicable to SR 4.3.C.1 is added to clarify the applicability of the requirement:

9910040072 990923 PDR ADDCK 05000254 PDR b Not required to be performed until 7 days (for fully withdrawn) or 31 days (for partially withdrawn) after the control rod is withdrawn and above the low power setpoint of the RWM.

Control rod insertion capability is demonstrated by inserting each partially or fully withdrawn control rod at least one notch and observing that the control rod moves. The control rod may then be returned to its original position. This ensures the control rod is not stuck and is free to insert on a scram signal. These surveillances are not required when THERMAL POWER is less than or equal to the actual low power setpoint of the RWM since the notch movement may not be compatible with the requirements of the control rod insert/withdraw sequence and the RWM. The 7-day frequency of SR 4.3.C.1 is based on operating experience related to the changes in control rod drive (CRD) performance and the ease of performing notch testing for fully withdrawn control rods. Partially withdrawn control rods are tested at a 31-day frequency, based on the potential power reduction required to allow the control rod movement, and considering the large testing sample of SR 4.3.C.1. Furthermore, the 31-day frequency takes into account operating experience related to changes in CRD performance. At any time, if a control rod is immovable, a determination of that control rod's trippability (OPERABILITY) must be made and appropriate action taken.

The above less restrictive requirements have been reviewed by the staff and have been found to be acceptable. The changes do not present a significant safety question in the operation of the plant because (1) at full power a large percentage of control rods (typically 80 - 90%) are fully withdrawn and will continue to be exercised each week. This is a significant sample size when looking for an unexpected random event, (2) the TS will continue to require at least 10 percent of the control rods on a rotating basis be scram time tested whether inserted, or partially withdrawn (current TS 4.3.D), and (3) operating experience has shown stuck control rods to be an extremely rare event while operating. The TS requirements that remain are consistent with current licensing practices, operating experience and plant accident and transient analyses, and provide reasonable assurance that the public health and safety will be protected. Therefore, this change is acceptable.

3.0 <u>STATE CONSULTATION</u>

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

4.0 <u>ENVIRONMENTAL CONSIDERATION</u>

The amendments change a surveillance requirement. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (64 FR 40905). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). 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

The Commission has 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: Robert M. Pulsifer

Date: September 23, 1999