

March 17, 1999

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. M99552 AND M99553)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 185 to Facility Operating License No. DPR-29 and Amendment No. 182 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 August 14, 1998, as supplemented by letters dated October 13, 1998, and December 23, 1998.

The amendments change the Quad Cities Technical Specifications (TS) to reflect the use of Siemens Power Corporation ATRIUM-9B fuel. Specifically, the amendments incorporate the following into the TS: (a) new methodologies that will enhance operational flexibility and reduce the likelihood of future plant derates, (b) administrative changes that eliminate the cycle-specific implementation of ATRIUM-9B fuel and adopt Improved Standard Technical Specification language where appropriate, and (c) changes to the Minimum Critical Power Ratio.

Amendment No. 182 for Quad Cities, Unit 1, was issued on December 3, 1998, as an exigent amendment to accommodate these changes before restart from refueling outage Q1R15. This new amendment deletes the unique Unit 1 pages issued in Amendment No. 182 and provides identical pages for both units to support the common TS for Quad Cities, Units 1 and 2.

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

Sincerely,

ORIG. SIGNED BY  
Robert M. Pulsifer, Project Manager  
Project Directorate III-2  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

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Docket Nos. 50-254, 50-265

- Enclosures: 1. Amendment No. 185 to DPR-29
- 2. Amendment No. 182 to DPR-30
- 3. Safety Evaluation

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Robert M. Pulsifer, Project Manager  
 Project Directorate III-2  
 Division of Licensing Project Management  
 Office of Nuclear Reactor Regulation

Docket Nos. 50-254, 50-265

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 17, 1999

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

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Sincerely,

A handwritten signature in black ink, appearing to read "Robert M. Pulsifer".

Robert M. Pulsifer, Project Manager  
Project Directorate III-2  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-254, 50-265

Enclosures: 1. Amendment No. 185 to DPR-29  
2. Amendment No. 182 to DPR-30  
3. Safety Evaluation

cc w/encls: See next page

O. Kingsley  
Commonwealth Edison Company

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Units 1 and 2

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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. 185  
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 August 14, 1998, as supplemented on October 13, 1998, and December 23, 1998, 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:

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B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 185 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



Robert M. Pulsifer, Project Manager  
Project Directorate III-2  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 17, 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. 182  
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 August 14, 1998, as supplemented on October 13, 1998, and December 23, 1998, 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. 182, 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



Robert M. Pulsifer, Project Manager  
Project Directorate III-2  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 17, 1999

ATTACHMENT TO LICENSE AMENDMENT NOS. 185 AND 182

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.

REMOVE

INSERT

I	I
Ia (Unit 1 only)	---
1-1	1-1
1-1a (Unit 1 only)	---
2-1 (Unit 2 only)	2-1
2-1a (Unit 2 only)	---
2-1b (Unit 1 only)	---
B2-3a (Unit 2 only)	---
3/4.11-1	3/4.11-1
3/4.11-1a (Unit 1 only)	---
6-16a	6-16a
6-16b (Unit 1 only)	---

DEFINITIONS

SECTION

PAGE

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## 1.0 DEFINITIONS

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The following terms are defined so that uniform interpretation of these specifications may be achieved. The defined terms appear in capitalized type and shall be applicable throughout these Technical Specifications.

### ACTION

**ACTION** shall be that part of a Specification which prescribes remedial measures required under designated conditions.

### AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

The **AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)** shall be applicable to a specific planar height and is equal to the sum of the **LINEAR HEAT GENERATION RATE(s)** for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle.

### CHANNEL

A **CHANNEL** shall be an arrangement of a sensor and associated components used to evaluate plant variables and generate a single protective action signal. A **CHANNEL** terminates and loses its identity where single action signals are combined in a **TRIP SYSTEM** or logic system.

### CHANNEL CALIBRATION

A **CHANNEL CALIBRATION** shall be the adjustment, as necessary, of the **CHANNEL** output such that it responds with the necessary range and accuracy to known values of the parameter which the **CHANNEL** monitors. The **CHANNEL CALIBRATION** shall encompass the entire **CHANNEL** including the required sensor and alarm and/or trip functions, and shall include the **CHANNEL FUNCTIONAL TEST**. The **CHANNEL CALIBRATION** may be performed by any series of sequential, overlapping or total **CHANNEL** steps such that the entire **CHANNEL** is calibrated.

### CHANNEL CHECK

A **CHANNEL CHECK** shall be the qualitative assessment of **CHANNEL** behavior during operation by observation. This determination shall include, where possible, comparison of the **CHANNEL** indication and/or status with other indications and/or status derived from independent instrument **CHANNEL(s)** measuring the same parameter.

**2.0 SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS**

---

**2.1 SAFETY LIMITS****THERMAL POWER, Low Pressure or Low Flow**

2.1.A THERMAL POWER shall not exceed 25% of RATED THERMAL POWER with the reactor vessel steam dome pressure less than 785 psig or core flow less than 10% of rated flow.

**APPLICABILITY:** OPERATIONAL MODE(s) 1 and 2.

**ACTION:**

With THERMAL POWER exceeding 25% of RATED THERMAL POWER and the reactor vessel steam dome pressure less than 785 psig or core flow less than 10% of rated flow, be in at least HOT SHUTDOWN within 2 hours and comply with the requirements of Specification 6.7.

**THERMAL POWER, High Pressure and High Flow**

2.1.B The MINIMUM CRITICAL POWER RATIO (MCPR) shall not be less than 1.11 with the reactor vessel steam dome pressure greater than or equal to 785 psig and core flow greater than or equal to 10% of rated flow. During single recirculation loop operation, this MCPR limit shall be increased by 0.01.

**APPLICABILITY:** OPERATIONAL MODE(s) 1 and 2.

**ACTION:**

With MCPR less than the above applicable limit and the reactor vessel steam dome pressure greater than or equal to 785 psig and core flow greater than or equal to 10% of rated flow, be in at least HOT SHUTDOWN within 2 hours and comply with the requirements of Specification 6.7.

**3.11 - LIMITING CONDITIONS FOR OPERATION**

**4.11 - SURVEILLANCE REQUIREMENTS**

---

**A. AVERAGE PLANAR LINEAR HEAT GENERATION RATE**

All AVERAGE PLANAR LINEAR HEAT GENERATION RATES (APLHGR) shall not exceed the limits specified in the CORE OPERATING LIMITS REPORT.

**APPLICABILITY:**

OPERATIONAL MODE 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.

**ACTION:**

With an APLHGR exceeding the limits specified in the CORE OPERATING LIMITS REPORT:

1. Initiate corrective ACTION within 15 minutes, and
2. Restore APLHGR to within the required limit within 2 hours.

With the provisions of the ACTION above not met, reduce THERMAL POWER to less than 25% of RATED THERMAL POWER within the next 4 hours.

---

**A. AVERAGE PLANAR LINEAR HEAT GENERATION RATE**

The APLHGRs shall be verified to be equal to or less than the limits specified in the CORE OPERATING LIMITS REPORT.

1. At least once per 24 hours,
2. Within 12 hours after completion of a THERMAL POWER increase of at least 15% of RATED THERMAL POWER, and
3. Initially and at least once per 12 hours when the reactor is operating with a LIMITING CONTROL ROD PATTERN for APLHGR.
4. The provisions of Specification 4.0.D are not applicable.

**ADMINISTRATIVE CONTROLS**

- (14) ANFB Critical Power Correlation, ANF-1125(P)(A) and Supplements 1 and 2, Advanced Nuclear Fuels Corporation, April 1990.
  - (15) Advanced Nuclear Fuels Corporation Critical Power Methodology for Boiling Water Reactors/Advanced Nuclear Fuels Corporation Critical Power Methodology for Boiling Water Reactors: Methodology for Analysis of Assembly Channel Bowing Effects/NRC Correspondence, ANF-524(P)(A), Revision 2, Supplement 1 Revision 2, Supplement 2, Advanced Nuclear Fuels Corporation, November 1990.
  - (16) COTRANSA 2: A Computer Program for Boiling Water Reactor Transient Analyses, ANF-913(P)(A) Volume 1 Revision 1 and Volume 1 Supplements 2, 3, and 4, Advanced Nuclear Fuels Corporation, August 1990.
  - (17) Advanced Nuclear Fuels Corporation Methodology for Boiling Water Reactors EXEM BWR Evaluation Model, ANF-91-048(P)(A), Advanced Nuclear Fuels Corporation, January 1993.
  - (18) Commonwealth Edison Topical Report NFSR-0091, "Benchmark of CASMO/MICROBURN BWR Nuclear Design Methods," Revision 0, Supplements 1 and 2, December 1991, March 1992, and May 1992, respectively; SER letter dated March 22, 1993.
  - (19) ANFB Critical Power Correlation Application for Coresident Fuel, EMF-1125(P)(A), Supplement 1, Appendix C, Siemens Power Corporation, August 1997.
  - (20) ANFB Critical Power Correlation Determination of ATRIUM-9B Additive Constant Uncertainties, ANF-1125(P)(A), Supplement 1, Appendix E, Siemens Power Corporation, September 1998.
- c. The core 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 CORE 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.

**6.9.B Special Reports**

Special reports shall be submitted to the Regional Administrator of the NRC Regional Office within the time period specified for each report.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 185 TO FACILITY OPERATING LICENSE NO. DPR-29  
AMENDMENT NO. 182 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 INTRODUCTION

By letter dated August 14, 1998 (Reference 1), Commonwealth Edison Company (ComEd, the licensee) requested changes to the Technical Specifications (TS) for Quad Cities Nuclear Power Station, Units 1 and 2. Additional information was submitted by letters dated October 13, 1998 (Reference 2) and December 23, 1998 (Reference 8). The proposed changes are due to the transition to Siemens Power Corporation (SPC) ATRIUM-9B fuel. The key items are:

1. incorporation of SPC's new methodologies that would enhance operational flexibility and reduce the likelihood of future plant derates,
2. administrative changes that eliminate both the cycle-specific implementation of ATRIUM-9B fuel and adopt Improved Technical Specification language where appropriate, and
3. changes to the Quad Cities Minimum Critical Power Ratio (MCPR) safety limits.

Amendment No. 182 for Quad Cities, Unit 1, was issued on December 3, 1998, as an exigent amendment to accommodate these changes before restart from refueling outage Q1R15. This new amendment deletes the unique Unit 1 pages issued in Amendment No. 182 and provides identical pages for both units to support the common TS for Quad Cities, Units 1 and 2.

2.0 EVALUATION

The requested TS changes can be categorized into five different topics:

1. addition of SPC Generic Methodology for Application of Advanced Nuclear Fuel for Boiling Water Reactors (ANFB) Critical Power Correlation to Non-SPC Fuel - EMF-1125(P)(A), Supplement 1, Appendix C, dated August 1997 (Reference 3);

2. addition of SPC Topical for ATRIUM-9B fuel - ANF-1125(P)(A), Supplement 1, Appendix E, September, 1998 (Reference 4);
3. change to MCPR safety limit;
4. removal of footnotes limiting operation with ATRIUM-9B fuel reloads; and
5. revision to thermal limit descriptions.

Currently, Quad Cities Units 1 and 2, are undergoing a transition from General Electric (GE) to SPC fuel, including the associated methodologies. Due to the transition to SPC fuel it was necessary for SPC to provide a methodology for application of their ANFB critical power correlation to the coresident GE fuel. This topical report has been reviewed and approved by the NRC (Reference 3) and is applicable to Quad Cities. The approval of this report listed two conditions. By letter dated July 21, 1998 (Reference 5), ComEd provided the information to address the conditions. This information was reviewed and NRC responded by letter dated August 18, 1998 (Reference 6), that the data provided satisfies the safety evaluation (SE) conditions. By letter dated December 23, 1998, ComEd reaffirmed their commitment to comply to these conditions. Thus, the addition of SPC Generic Methodology for Application of ANFB Critical Power Correlation to Non-SPC Fuel - EMF-1125(P)(A), Supplement 1, Appendix C, is acceptable. The addition of this methodology will ensure that values of cycle-specific parameters are determined such that all applicable limits of the safety analysis are met.

SPC Topical for ATRIUM-9B fuel - ANF-1125(P)(A), Supplement 1, Appendix E, was recently reviewed and approved by NRC (Reference 4) and is applicable to Quad Cities. The restrictions on the additive constant uncertainty from Appendix E are equal to or less restrictive than those used for the analysis of Quad Cities, Unit 1, Cycle 16. The approval of this report (Reference 4) listed three conditions. By letter dated December 23, 1998 (Reference 8), ComEd provided the information addressing these issues by committing to comply to these conditions. Thus, the addition of SPC Topical for ATRIUM-9B fuel - ANF-1125(P)(A), Supplement 1, Appendix E, is acceptable. The addition of this methodology will ensure that values of cycle-specific parameters are determined such that all applicable limits of the safety analysis are met.

The change to the MCPR safety limit was due to the change to SPC fuel. Using the SPC ANFB critical power correlation methodology and the ATRIUM-9B additive constant uncertainty resulting from the approval of Appendix E (Reference 4) which is applicable to Quad Cities, the MCPR safety limit for Quad Cities, Unit 1 is 1.11 as applied in letter dated December 3, 1998 (Reference 7). This bounds Cycle 16 operation for Unit 1. Establishing a 1.11 MCPR safety limit will establish a consistent safety limit for both Units 1 and 2. The applicability of the MCPR safety limit will be confirmed on a cycle-by-cycle basis. The value of 1.11 is anticipated to bound the actual MCPR safety limit for future Quad Cities SPC reloads. Since the MCPR safety limit of 1.11 is calculated with an approved methodology and uses the approved additive constant uncertainty from Appendix E, the change to this value will ensure that 99.9 percent of the fuel avoids transition boiling and is acceptable.

The removal of footnotes limiting operation with ATRIUM-9B fuel reloads is due to the fact that they are no longer needed, since the methodology for ATRIUM-9B fuel has been approved. Thus, this change is acceptable.

The change to revise the thermal limit descriptions is to generalize the definitions of the Average Planar Linear Heat Generation Rate (APLHGR) limits to allow either bundle average or average planar exposure based APLHGR limits, consistent with the loss-of-coolant accident (LOCA) analysis of record. This generalization of the definition of APLHGR is consistent with the Improved Standard Technical Specifications (NUREG 1433/1434, Revision 1) wording. Both maximum average planar linear heat-generation rate (MAPLHGRs) (bundle average exposure based and planar average exposure based) are acceptable for Appendix K of 10 CFR Part 50. Thus, this change is acceptable.

Based on the staff evaluation as discussed in 2.0 above, the staff concludes that the proposed TS changes are acceptable for Quad Cities, Unit 1 and 2.

### 3.0 TECHNICAL SPECIFICATION CHANGES

TSs - Page I and 1-1- Table of Contents and TS Section 1-Delete item in Table of Contents for definition of Average Planar Exposure and delete definition of Average Planar Exposure in TS Section 1. This is acceptable because the Average Planar Exposure is no longer used.

TS - Page 1a and 1-1a for Unit 1 - Delete these pages. The reason for these pages was the issuance of the Unit 1 exigent Amendment No. 182, dated December 3, 1998 (Reference 7). Since this amendment authorizes the same change for Unit 2, the proposed change deletes the unique Unit 1 pages issued in Amendment No. 182 and provides an identical page for both units to support the Quad Cities, Units 1 and 2, common TS. Therefore, this change is acceptable.

TS 2.1.B - Page 2-1- Change the MCPR to 1.11 (from 1.07 and 1.10, respectively). This change results from the use of ATRIUM 9B fuel and is, therefore, acceptable.

TS - Page 2-1a - Delete this page. The reason for this page was the footnote stating that the page was applicable to Unit 2, Cycle 15, only. The footnote is no longer needed since a cycle-specific limitation on the MCPR safety limit is not necessary, and thus, it is acceptable to delete the page.

TS - Page 2-1b - Delete this page. The reason for this page was the issuance of the Unit 1 exigent Amendment No. 182, dated December 3, 1998 (Reference 7). Since this amendment authorizes the same change for Unit 2, the proposed change deletes the unique Unit 1 page issued in Amendment No. 182 and provides an identical page for both units to support the Quad Cities, Units 1 and 2, common TS. Therefore, this change is acceptable.

TS - Page 3/4.11-1 - The description of the APLHGR Limiting Condition for Operation (LCO) is changed to not specify that the APLHGR should be a function of average planar exposure. This change is acceptable because the APLHGR is based on the bundle average exposure consistent with the LOCA analysis.

TS - Page 3/4.11 -1a - Delete this page. The reason for this page was the issuance of the Unit 1 exigent Amendment No. 182, dated December 3, 1998 (Reference 7). Since this amendment authorizes the same change for Unit 2, the proposed change deletes the unique Unit 1 page incorporated by Amendment No. 182 and provides an identical page for both units to support the Quad Cities, Units 1 and 2, common TS and is, therefore, acceptable.

TS 6.9 - Page 6 -16a - Removal of the Cycle 15 specific footnote and the Cycle 15 specific methodology and addition of the topical reports EMF-1125(P)(A), Supplement 1, Appendix C, dated August 1997 and ANF-1125(P), Supplement 1, Appendix E, dated September 1998, to the list of references. These changes are needed for use of the ATRIUM-9B fuel and reflect the use of NRC-approved methodologies which are not limited to Cycle 15. The addition of these methodologies will ensure that values for cycle-specific parameters are determined such that all applicable limits of the safety analysis are met. Page 6 - 16b has been deleted because it is identical to the new page 6 - 16a which is applicable to Units 1 and 2. Therefore, these changes are acceptable.

Changes to the Bases Section 2.1 - Eliminating Cycle 15 specific footnotes and methodologies for Unit 2. These changes are necessary to make the bases for Unit 2 consistent with the removal of the cycle - specific limitation in the TSs. Bases page B2-3 is reissued to reflect that the page is again applicable to Units 1 and 2. Bases page B2-3a has been deleted. Therefore, these bases changes are acceptable.

Based on this staff evaluation as discussed 2.0 and 3.0 above, the staff concludes that the proposed TS changes are acceptable for Quad Cities, Unit 1 and 2.

#### 4.0 STATE CONSULTATION

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.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (63 FR 59588). The amendments also change recordkeeping or reporting requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (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.

**6.0 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.

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Date: March 17, 1999

## 7.0 REFERENCES

1. Letter from R.M. Krich, Commonwealth Edison Company, to NRC, dated August 14, 1998.
2. Letter from R.M. Krich, Commonwealth Edison Company, to NRC, dated October 13, 1998.
3. EMF-1125(P)(A), Supplement 1, Appendix C, "ANFB Critical Power Correlation Application for Coresident Fuel," August 1997, and NRC SE, "Acceptance for Referencing of Licensing Topical Report EMF-1125(P), Supplement 1, Appendix C, "ANFB Critical Power Correlation Application for Co-Resident Fuel," J.E. Lyons to R.A. Copeland, May 9, 1997.
4. ANF-1125(P), Supplement 1, Appendix E, "ANFB Critical Power Correlation Determination of ATRIUM-9B Additive Constant Uncertainties," September 1998 and NRC SE, "Acceptance for Referencing of Licensing Topical Report ANF-1125(P), Supplement 1, Appendix E, Critical Power Correlation Determination of ATRIUM-9B Additive Constant Uncertainties," T. H. Essig to H.D. Curet, September 23, 1998.
5. Letter from J.P. Dimmest, Commonwealth Edison Company, to NRC, dated July 21, 1998.
6. Letter from R.M. Pulsifer, NRC, to O.D. Kingsley, Commonwealth Edison Company, dated August 18, 1998.
7. Letter from R. M. Pulsifer, NRC, to O.D. Kingsley, Commonwealth Edison Company, dated December 3, 1998, "Issuance of Amendment - Quad Cities Nuclear Power Station, Unit 1 (TAC No. M99552).
8. Letter from R. M. Krich, Commonwealth Edison Company, to NRC, dated December 23, 1998.