August 27, 1992

Docket Nos. 50-254
and 50-265

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

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Dear Mr. Kovach:

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M82665 AND M82666)

The Commission has issued the enclosed Amendment No. 137 to Facility Operating License No. DPR-29 and Amendment No. 133 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 January 21, 1992.

The amendments change an action provision for the High Pressure Coolant Injection and Reactor Core Isolation Cooling Systems. The amendments allow 14 days before shutdown is required upon failure of the high pressure flow test of either of these systems.

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:

Leonard N. Olshan, Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 137 to DPR-29
2. Amendment No. 133 to DPR-30
3. Safety Evaluation

cc w/enclosures:
See next page

DF01
1/1 Consistent w/STS

OFC	LA:PDIII-2	PM:PDIII-2	D:PDIII-2	OGC	NRR/OTSB
NAME	CMOORE	LOLSHAN	RBARRETT	MYoung	CGrimes
DATE	8/24/92	8/24/92	8/27/92	8/20/92	8/13/92

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cc:

Mr. Stephen E. Shelton
Vice President
Iowa-Illinois Gas and
Electric Company
P. O. Box 4350
Davenport, Iowa 52808

Michael I. Miller, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60690

Mr. Richard Bax
Station Manager
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, Illinois 61242

Resident Inspector
U. S. Nuclear Regulatory Commission
22712 206th Avenue North
Cordova, Illinois 61242

Chairman
Rock Island County Board
of Supervisors
1504 3rd Avenue
Rock Island County Office Bldg.
Rock Island, Illinois 61201

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

Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road, Bldg. #4
Glen Ellyn, Illinois 60137

Robert Neumann
Office of Public Counsel
State of Illinois Center
100 W. Randolph
Suite 11-300
Chicago, Illinois 60601

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

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 137
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 January 21, 1992, 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. 137 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard J. Barrett, Director
Project Directorate III-2
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 27, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 137

FACILITY OPERATING LICENSE NO. DPR-29

DOCKET NO. 50-254

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
3.5/4.5-5	3.5/4.5-5
3.5/4.5-7	3.5/4.5-7

4. Containment cooling spray loops are required to be operable when the reactor water temperature is greater than 212°F and prior to reactor startup from a cold condition. Continued reactor operation is permitted provided that a maximum of one drywell spray loop may be inoperable for 30 days when the reactor water temperature is greater than 212°F.

5. If the requirements of 3.5.B cannot be met, an orderly shutdown shall be initiated, and the reactor shall be in a cold shutdown condition within 24 hours.

4. During each 5-year period, an air test shall be performed on the drywell spray headers and nozzles and a water spray test performed on the torus spray header and nozzles.

C. HPCI Subsystem

1. The HPCI subsystem shall be operable whenever the reactor pressure is greater than 150 psig and fuel is in the reactor vessel.

2. During startup following a refuel outage or an outage in which work was performed that directly affects HPCI system operability, if the testing requirements of 4.5.C.3.a cannot be met, continued reactor startup is not permitted. The HPCI subsystem shall be declared inoperable, and the provisions of Specification 3.5.C.4 shall be implemented.

3. Except for the limitations of 3.5.C.2, if the HPCI subsystem is made or found to be inoperable, continued reactor operation is permissible only during the succeeding 14 days unless such subsystem is sooner made operable, provided that during such 14 days the automatic pressure relief subsystems, the core spray subsystems, LPCI mode of the RHR system, and the RCIC system are operable. Otherwise, the provisions of Specification 3.5.C.4 shall be implemented.

C. HPCI Subsystem

Surveillance of HPCI subsystem shall be performed as specified below with the following limitations. For item 4.5.C.3, the plant is allowed 12 hours in which to successfully complete the test once reactor vessel pressure is adequate to perform each test. In addition, the testing required by item 4.5.C.3.a shall be completed prior to exceeding 325 psig reactor vessel pressure. If HPCI is made inoperable to perform overspeed testing, 24 hours is allowed to complete the tests before exceeding 325 psig.

	Item	Frequency
1.	Valve Position	Every 31 days
2.	Flow Rate Test-HPCI Pump shall deliver at least 5000 gpm against a system head corresponding to a reactor vessel pressure of $\geq$ 1150 psig when steam is being supplied to the turbine at 920 to 1005 psig.	Every 92 days

when the reactor is pressurized above 90 psig with irradiated fuel in the reactor vessel, reactor operation is permissible only during the succeeding 7 days unless repairs are made and provided that during such time the HPCI subsystem is operable.

3. If the requirements of Specification 3.5.D cannot be met, an orderly shutdown shall be initiated and the reactor pressure shall be reduced to 90 psig within 24 hours.

3. A simulated automatic initiation which opens all pilot valves shall be performed each refueling outage.

4. When it is determined that two valves of the automatic pressure relief subsystem are inoperable, the HPCI shall be demonstrated to be operable immediately.

E. Reactor Core Isolation Cooling System

1. The RCIC system will be operable whenever the reactor pressure is greater than 150 psig and fuel is in the reactor vessel.

2. During startup following a refuel outage or an outage in which work was performed that directly affects the RCIC system operability, if the testing requirements of 4.5.E.3.a cannot be met, continued reactor startup is not permitted. The RCIC system shall be declared inoperable, and the provisions of Specification 3.5.E.4 shall be implemented.

3. Except for the limitations of 3.5.E.2, if the RCIC system is made or found to be inoperable, continued reactor operation is permissible only during the succeeding 14 days unless such system is sooner made operable, provided that during such 14 days the HPCI system is operable. Otherwise, the provisions of Specification 3.5.E.4 shall be implemented.

E. Reactor Core Isolation Cooling System

Surveillance of the RCIC system shall be performed as specified below with the following limitations. For item 4.5.E.3, the plant is allowed 12 hours in which to successfully complete the test once reactor vessel pressure is adequate to perform each test. In addition, the testing required by item 4.5.E.3.a shall be completed prior to exceeding 325 psig reactor vessel pressure. If RCIC is made inoperable to perform overspeed testing, 24 hours is allowed to complete the tests before exceeding 325 psig.

	Item	Frequency
1.	Valve Position	Every 31 days
2.	Flow Rate Test - RCIC Pump shall deliver at least 400 gpm against a system head corresponding to a reactor vessel pressure of $\geq$ 1150 psig when steam is	Every 92 days

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

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 133
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 January 21, 1992, 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. 133 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard J. Barrett, Director
Project Directorate III-2
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 27, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 133

FACILITY OPERATING LICENSE NO. DPR-30

DOCKET NO. 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
3.5/4.5-4a	3.5/4.5-4a
3.5/4.5-6	3.5/4.5-6

C. HPCI Subsystem

1. The HPCI subsystem shall be operable whenever the reactor pressure is greater than 150 psig and fuel is in the reactor vessel.

2. During startup following a refuel outage or an outage in which work was performed that directly affects HPCI system operability, if the testing requirements of 4.5.C.3.a cannot be met, continued reactor startup is not permitted. The HPCI subsystem shall be declared inoperable, and the provisions of Specification 3.5.C.4 shall be implemented.

3. Except for the limitations of 3.5.C.2, if the HPCI subsystem is made or found to be inoperable, continued reactor operation is permissible only during the succeeding 14 days unless such subsystem is sooner made operable, provided that during such 14 days the automatic pressure relief subsystem, the core spray subsystems, LPCI mode of the RHR system, and the RCIC system are operable. Otherwise, the provisions of Specification 3.5.C.4 shall be implemented.

4. If the requirements of Specification 3.5.C.1, 3.5.C.2 or 3.5.C.3 cannot be met, an orderly shutdown shall be initiated, and the reactor pressure shall be reduced to <150 psig within 24 hours.

C. HPCI Subsystem

Surveillance of the HPCI subsystem shall be performed as specified below with the following limitations. For item 4.5.C.3. the plant is allowed 12 hours in which to successfully complete the test once reactor pressure is adequate to perform each test. In addition, the testing required by item 4.5.C.3.a shall be completed prior to exceeding 325 psig reactor vessel pressure. If HPCI is made inoperable to perform overspeed testing, 24 hours is allowed to complete the tests before exceeding 325 psig.

	Item	Frequency
1.	Valve Position	Every 31 days
2.	Flow Rate Test - HPCI pump shall deliver at least 5000 gpm against a system head corresponding to a reactor vessel pressure of ≥1150 psig when steam is being supplied to the turbine at 920 to 1005 psig.	Every 92 days
3.	Flow Rate Test - HPCI pump shall deliver at least 5000 gpm against a system head corresponding to a reactor vessel pressure of: a. ≥ 300 psig when steam is being supplied to the turbine at 250 to 325 psig, and b. ≥ 1150 psig when steam is being supplied to the turbine at 920 to 1005 psig.	During startup following a refuel outage or an outage in which work was performed that directly affects HPCI system operability.
4.	Simulated Automatic Actuation Test	Each refueling outage
5.	Logic System Functional Test	Each refueling outage

E. Reactor Core Isolation Cooling System	E. Reactor Core Isolation Cooling System
	Surveillance of the RCIC system shall be performed as specified below with the following limitations. For item 4.5.E.3. the plant is allowed 12 hours in which to successfully complete the test once reactor vessel pressure is adequate to perform each test. In addition, the testing required by item 4.5.E.3.a shall be completed prior to exceeding 325 psig reactor vessel pressure. If RCIC is made inoperable to perform overspeed testing, 24 hours is allowed to complete the tests before exceeding 325 psig.

	Item	Frequency
1. The RCIC system will be operable whenever the reactor pressure is greater than 150 psig and fuel is in the reactor vessel.	1. Valve Position	Every 31 days
2. During startup following a refuel outage or an outage in which work was performed that directly affects RCIC system operability, if the testing requirements of 4.5.E.3.a cannot be met, continued reactor startup is not permitted. The RCIC system shall be declared inoperable, and the provisions of Specification 3.5.E.4 shall be implemented.	2. Flow Rate Test - RCIC pump shall deliver at least 400 gpm against a system head corresponding to a reactor vessel pressure of ≥1150 psig when steam is being supplied to the turbine at 920 to 1005 psig.	Every 92 days
3. Except for the limitations of 3.5.E.2, if the RCIC system is made or found to be inoperable, continued reactor operation is permitted only during the succeeding 14 days unless such system is sooner made operable, provided that during such 14 days the HPCI system is operable. Otherwise, the provisions of Specification 3.5.E.4 shall be implemented.	3. Flow Rate Test - RCIC pump shall deliver at least 400 gpm against a system head corresponding to a reactor vessel pressure of: a. ≥ 300 psig when steam is being supplied to the turbine at 250 to 325 psig, and b. ≥ 1150 psig when steam is being supplied to the turbine at 920 to 1005 psig.	During startup following a refuel outage or an outage in which work was performed that directly affects RCIC system operability.
4. If the requirements of Specification 3.5.E.1, 3.5.E.2 or 3.5.E.3 cannot be met, an orderly shutdown shall be initiated and the reactor pressure shall be reduced to <150 psig within 24 hours.	4. Simulated Automatic Actuation Test	Each refueling outage
	5. Logic System Functional Test	Each refueling outage

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 137 TO FACILITY OPERATING LICENSE NO. DPR-29

AND AMENDMENT NO. 133 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

By letter dated January 21, 1992, Commonwealth Edison Company (CECo, the licensee) proposed an amendment to the Technical Specifications (TS) for the Quad Cities Nuclear Power Station, Units 1 and 2. The amendment changes an action provision for the High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) systems. The current action provision requires shutdown to a reactor pressure below 150 psig upon failure of either the low pressure or high pressure flow tests for HPCI or RCIC. The amendment still requires shutdown upon failure of the low pressure flow test, but would allow 14 days before shutdown is required upon failure of the high pressure flow test.

2.0 EVALUATION

On March 8, 1991, we issued an amendment that removed the requirement to demonstrate operability of other Emergency Core Cooling Systems when HPCI or RCIC is inoperable. In reviewing the amendment, we compared the proposal to the BWR Standard Technical Specifications (STS), NUREG-0123, Revision 3. Part of our basis for concluding that the amendment was acceptable was that it was similar to the BWR STS or more conservative than the BWR STS. In one area, the amendment issued on March 8, 1991, was more conservative than the BWR STS. The BWR STS would allow 14 days before shutdown is required upon failure of the high pressure flow test of HPCI or RCIC. The March 8, 1991 amendment, upon failure of the same test, requires initiation of an orderly shutdown and reduction of reactor pressure to less than 150 psig within 24 hours. The licensee proposes to allow the same 14 days before shutdown as is allowed in the BWR STS.

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The existing TS does not allow sufficient time to determine the cause of the test failure and implement corrective actions. Furthermore, at the reduced pressure below 150 psig, the ability to determine the cause of the test failure would be greatly hindered.

The proposed TS would allow more time to correct the cause of the test failure, resulting in less unnecessary cycling of the units. During the 14-day period allowed by the proposed TS, the BWR STS and the proposed TS have similar compensatory measures. When HPCI is inoperable, the automatic pressure relief subsystem, core spray subsystem, LPCI mode of residual heat removal (RHR) and RCIC must be operable; and with RCIC inoperable, HPCI must be operable.

Therefore, we find the proposed amendment to be acceptable because: (1) it would reduce unnecessary cycling of the units, (2) it would enhance the ability to determine the cause of the test failure and implement corrective actions, (3) it provides sufficient compensatory measures during the extra time that it allows, and (4) it is consistent with the BWR STS.

3.0 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.

4.0 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 (57 FR 6036). 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: L. Olshan

Date: August 27, 1992