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Docket No. 50-265

SEP 23 1977

Commonwealth Edison Company  
 ATTN: Mr. R. L. Bolger  
 Assistant Vice President  
 Post Office Box 767  
 Chicago, Illinois 60690

Gentlemen:

The Commission has issued the enclosed Amendment No. 39 to Facility Operating License No. DPR-30 for Unit No. 2 of the Quad-Cities Station. This amendment is in response to your request dated August 17, 1977.

This amendment authorizes operation of the reactor beyond the previously analyzed end-of-cycle scram reactivity conditions and is based upon new analyses.

Copies of the Safety Evaluation and the Notice of Issuance also are enclosed.

Sincerely,  
 Original signed by

*Don K. Davis*

Don K. Davis, Acting Chief  
 Operating Reactors Branch #2  
 Division of Operating Reactors

Enclosures:

1. Amendment No. 39 to License No. DPR-30
2. Safety Evaluation
3. Notice

cc w/enclosures:  
 See next page

9/23/77

4:10 Called K Seyfried, IE to inform of action as of today

4:15 called Mike Turbalek re: to inform of action as of today.

*Pdey Keenan*

OFFICE >	DOR:ORB-2	DOR:ORB-2	DOR:ORB-2	OELD	DOR:ORB-2
SURNAME >	<i>RMDiggs</i>	<i>RBevan:esp</i>	<i>PO'Connor</i>	<i>M. Mulvey</i>	<i>DKDavis</i>
DATE >	9/23/77	9/23/77	9/23/77	9/23/77	9/23/77

cc w/enclosures:  
Mr. D. R. Stichnoth  
President  
Iowa-Illinois Gas and  
Electric Company  
206 East Second Avenue  
Davenport, Iowa 52801

U. S. Environmental Protection  
Agency  
Federal Activities Branch  
Region V Office  
ATTN: EIS COORDINATOR  
230 South Dearborn Street  
Chicago, Illinois 60604

Mr. John W. Rowe  
Isham, Lincoln & Beale  
Counselors at Law  
One First National Plaza, 42nd Floor  
Chicago, Illinois 60603

cc w/enclosures and cy of CECO's  
filing dtd. 8/17/77:  
Department of Public Health  
ATTN: Chief, Division of  
Radiological Health  
535 West Jefferson  
Springfield, Illinois 62706

Anthony Z. Roisman, Esquire  
Sheldon, Harmon & Roisman  
1025 15th Street, N. W., 5th Floor  
Washington, D. C. 20005

Mr. Nick Kalivianakas  
Plant Superintendent  
Quad-Cities Nuclear Power Station  
22710 - 206th Avenue - North  
Cordova, Illinois 61242

Moline Public Library  
504 - 17th Street  
Moline, Illinois 61265

Mr. Marcel DeJaegher, Chairman  
Rock Island County Board  
of Supervisors  
Rock Island County Court House  
Rock Island, Illinois 61201

Chief, Energy Systems  
Analyses Branch (AW-459)  
Office of Radiation Programs  
U. S. Environmental Protection Agency  
Room 645, East Tower  
401 M Street, S. W.  
Washington, D. C. 20460

OFFICE >						
SURNAME >						
DATE >						



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

September 23, 1977

Docket No. 50-265

Commonwealth Edison Company  
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Assistant Vice President  
Post Office Box 767  
Chicago, Illinois 60690

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This amendment authorizes operation of the reactor beyond the previously analyzed end-of-cycle scram reactivity conditions and is based upon new analyses.

Copies of the Safety Evaluation and the Notice of Issuance also are enclosed.

Sincerely,

A handwritten signature in dark ink, appearing to read "Don K. Davis".

Don K. Davis, Acting Chief  
Operating Reactors Branch #2  
Division of Operating Reactors

Enclosures:

1. Amendment No. 39 to License No. DPR-30
2. Safety Evaluation
3. Notice

cc w/enclosures:  
See next page

September 23, 1977

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Washington, D. C. 20460

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230 South Dearborn Street  
Chicago, Illinois 60604

cc w/enclosures and cy of CECO's  
filing dtd. 8/17/77:  
Department of Public Health  
ATTN: Chief, Division of  
Radiological Health  
535 West Jefferson  
Springfield, Illinois 62705



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-265

QUAD CITIES UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 39  
License No. DPR-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated August 17, 1977, 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.

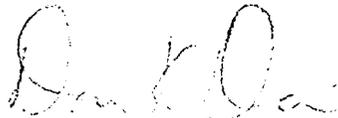
2. Accordingly, Facility Operating License No. DPR-30, as amended, is hereby further amended by revising in its entirety Paragraph 3.C. thereof to read as follows:

3.C. Restrictions

Reactor power level shall be limited to maintain pressure margin to the safety valve set points during the worst case pressurization transient. The magnitude of the power limitation, if any, and the point in the cycle at which it shall be applied is specified in the Reload No. 2 licensing submittal for Quad-Cities Unit 2 (NEDO-21313). The plant shall be operated within the limits described therein until the end of full power reactivity has been reached. Subsequent operation to 40% power in the coastdown mode is then permitted based on the Dresden 2 Cycle 5 Extended Operation analysis described in the June 6, 1977 letter from R. L. Bolger to E. G. Case. All coastdown operation will be at 100% core flow.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Don K. Davis, Acting Chief  
Operating Reactors Branch #2  
Division of Operating Reactors

Date of Issuance: September 23, 1977



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. DPR-30  
COMMONWEALTH EDISON COMPANY  
QUAD CITIES UNIT NO. 2  
DOCKET NO. 50-265

EVALUATION

By application dated August 17, 1977, Commonwealth Edison Company (CECo) requested authorization, with appropriate restrictions, for reactor power operation beyond the previously analyzed end-of-cycle (EOC) scram reactivity conditions. The proposed operating plans specified EOC all rods out coastdowns from 98% power to 40% power for Quad Cities 2. Previous analyses have consistently shown that the end of cycle operating limits as determined by the turbine trip without bypass transient are not exceeded during the EOC all rods out coastdown at 100% flow. These analyses have shown that the reduction in power during the coastdown more than compensates for the degradation in scram reactivity insertion in determining the pressure and MCPR limits of the transient. The pressure margin and the MCPR are greater than or equal to the values determined at the nominal EOC conditions. The Dresden 2 EOC 5 coastdown analysis verifies these results for coastdown to 40% power.

The maximum burnup to be achieved by any fuel assembly during the coastdown shall be less than the fuel design burnup criteria. This further assures that fuel integrity limits and the consequences of previously postulated accidents are not exceeded.

Therefore, operation of Quad Cities 2 Cycle 5 at 100% power out to the scram derate point, coastdown to reduced power point (98%) and operation at this reduced power level to rods all out, followed by a rods all out coastdown to 40% power will not exceed the pressure and MCPR limits normally calculated for the EOC conditions. Specifically, operation in the proposed coastdown mode will have the same or increased thermal and pressure safety margins as that for the previously reviewed and approved operation.

### ENVIRONMENTAL CONSIDERATION

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendment.

### CONCLUSIONS

We have concluded that the proposed amendment to the Quad Cities 2 license for operation beyond the previously approved end-of-cycle is acceptable. The review found that the proposed operational model will maintain the previously approved safety margins. Therefore, the proposed coastdown operation is acceptable.

We have also concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: September 23, 1977

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-265

COMMONWEALTH EDISON COMPANY AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 39 to Facility Operating License No. DPR-30, issued to Commonwealth Edison Company (acting for itself and on behalf of the Iowa-Illinois Gas and Electric Company) (the licensee), for operation of Quad Cities Unit No. 2 (the facility) located in Rock Island County, Illinois. The amendment is effective as of its date of issuance.

The amendment authorized operation of the reactor beyond the previously analyzed end-of-cycle scram reactivity conditions in accordance with Commonwealth Edison's request dated August 17, 1977.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission had made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

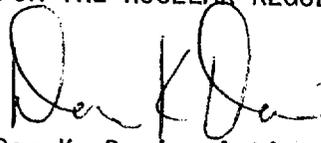
The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative

declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated August 17, 1977, (2) Amendment No. 39 to License No. DPR-30, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Moline Public Library, 504 - 17th Street, Moline, Illinois 60265. A single copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 23rd day of September, 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



Don K. Davis, Acting Chief  
Operating Reactors Branch #2  
Division of Operating Reactors