FEBRUARY 1 1980

Docket Nos. 50-237
50-249
and 50-254

Mr. D. Louis Peoples
Director of Nuclear Licensing
Commonwealth Edison Company
P. O. Box 767
Chicago, Illinois 60690

Dear Mr. Peoples:

The Commission has issued the enclosed Amendments Nos. 46 and 40 to Provisional Operating License No. DPR-19 and Facility Operating License No. DPR-25 for Dresden Station Units Nos. 2 and 3, and Amendment No. 55 to Facility Operating License No. DPR-29 for Quad Cities Station Unit No. 1. These amendments are in response to your letter dated January 24, 1980, supplemented by your letter of January 28, 1980.

These amendments reduce the required number of operable ADS valves from five to four, and set reduced MAPLHGR limits (already administratively applied) to ensure conservative peak clad temperatures with only the four electromatic ADS valves operable.

The Target Rock ADS valve at each unit will be modified to ensure its capability to withstand the design basis seismic event, and the accumulator check valve will be tested for proper performance in accordance with GE written recommendations. These modifications and tests will assure that the 5-valve ADS system will be properly qualified to perform in a seismic event. These actions will be accomplished at the earliest practical opportunity, but in no case later than the next refueling outage for each unit. Quad Cities Unit No. 2, now refueling, will not startup until the above described actions are completed.

Changes have been made to your submittal and have been discussed with and agreed to by your staff.

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OFFICE ▶						
SURNAME ▶						
DATE ▶						

NRC FORM 318 (9-76) NRCM 0240 ☆U.S. GOVERNMENT PRINTING OFFICE: 1979-289-369

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

Sincerely,

W. Gammill

for Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:
1. Amendment No. 46 to DPR-19
2. Amendment No. 40 to DPR-25
3. Amendment No. 55 to DPR-29
4. Safety Evaluation
5. Notice

cc w/enclosures:
see next page

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cc:

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Electric Company
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P. O. Box 706
Morris, Illinois 60450

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

Illinois Department of Public Health
ATTN: Chief, Division of Nuclear
Safety
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Springfield, Illinois 62761

Mr. William Waters
Chairman, Board of Supervisors
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Grundy County Courthouse
Morris, Illinois 60450

Director, Technical Assessment Division
Office of Radiation Programs (AW-459)
US EPA
Crystal Mall #2
Arlington, Virginia 20460

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

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-237

DRESDEN STATION UNIT NO. 2

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 46
License No. DPR-19

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated January 24, 1980, as supplemented January 28, 1980, 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:

(1) Changing paragraph 3.B as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 46, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(2) Adding paragraph 3.J.

3.G. Operating MAPLHGR limit for all fuel types shall be restricted to 86.8% of those given in Section 3.5 of the Technical Specifications. This restriction shall apply until all five ADS valves are operable.

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

FOR THE NUCLEAR REGULATORY COMMISSION

W. P. Hamill

for Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 1, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 46

PROVISIONAL OPERATING LICENSE NO. DPR-19

DOCKET NO. 50-237

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page.

Remove	Insert
78	78

3.5 LIMITING CONDITION FOR OPERATION

D. Automatic Pressure Relief Subsystems

1. Except as specified in 3.5.D.2 and 3 below, the Automatic Pressure Relief Subsystem shall be operable whenever the reactor pressure is greater than 90 psig and irradiated fuel is in the reactor vessel.

2. From and after the date that one of the five relief valves of the automatic pressure relief subsystem is made or found to be inoperable when the reactor is pressurized above 90 psig with irradiated fuel in the reactor vessel, reactor operation is permissible only during the succeeding seven days unless repairs are made and provided that during such time the HPCI Subsystem is operable.

3. From and after the date that more than one of five relief valves of the automatic pressure relief subsystem made or found to be inoperable when the reactor is pressurized above 90 psig with irradiated fuel in the reactor vessel, reactor operation is permissible only during the succeeding 24 hours unless repairs are made and provided that during such time the HPCI Subsystem is operable.

3.a. Plant operation shall be in accordance with 3.5.D.2 and 3.5.D.3 above except that for the current operating cycle 7, four of the five relief valves of the ADS are required to be operable. In subsequent operating cycles, operation shall be in accordance with 3.5.D.2 and 3.5.D.3.

Amendment No. 28, 46

4.5 SURVEILLANCE REQUIREMENT

D. Surveillance of the Automatic Pressure Relief Subsystem shall be performed as follows:

1. During each operating cycle the following shall be performed:

   a. A simulated automatic initiation which opens all pilot valves, and

   b. With the reactor at pressure each relief valve shall be manually opened. Relief valve opening shall be verified by a compensating turbine bypass valve or control valve closure.

   c. A logic system functional test shall be performed each refueling outage.

2. When it is determined that one relief valve of the automatic pressure relief subsystem is inoperable, the HPCI shall be demonstrated to be operable immediately and weekly thereafter

3. When it is determined that more than one relief valve of the automatic pressure relief subsystem is inoperable, the HPCI subsystem shall be demonstrated to be operable immediately

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-249

DRESDEN STATION UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 40
License No. DPR-25

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated January 24, 1980, as supplemented January 28, 1980, 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:

(1) Changing paragraph 3.B as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 40, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(2) Adding paragraph 3.I.

3.G Operating MAPLHGR limit for all fuel types shall be restricted to 95.4% of those given in Section 3.5 of the Technical Specifications. This restriction shall apply until all five ADS valves are operable.

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

FOR THE NUCLEAR REGULATORY COMMISSION

W. P. Hammill

for Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 1, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 40

FACILITY OPERATING LICENSE NO. DPR-25

DOCKET NO. 50-249

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page.

Remove	Insert
78	78

3.5 LIMITING CONDITION FOR OPERATION

D. Automatic Pressure Relief Subsystems

1. Except as specified in 3.5.D.2 and 3 below, the Automatic Pressure Relief Subsystem shall be operable whenever the reactor pressure is greater than 90 psig and irradiated fuel is in the reactor vessel.

2. From and after the date that one of the five relief valves of the automatic pressure relief subsystem is made or found to be inoperable when the reactor is pressurized above 90 psig with irradiated fuel in the reactor vessel, reactor operation is permissible only during the succeeding seven days unless repairs are made and provided that during such time the HPCI Subsystem is operable.

3. From and after the date that more than one of five relief valves of the automatic pressure relief subsystem made or found to be inoperable when the reactor is pressurized above 90 psig with irradiated fuel in the reactor vessel, reactor operation is permissible only during the succeeding 24 hours unless repairs are made and provided that during such time the HPCI Subsystem is operable.

3.a. Plant operation shall be in accordance with 3.5.D.2 and 3.5.D.3 above except that for the current operating cycle 6, four of the five relief valves of the ADS are required to be operable. In subsequent operating cycles, operation shall be in accordance with 3.5.D.2 and 3.5.D.3.

4.5 SURVEILLANCE REQUIREMENT

D. Surveillance of the Automatic Pressure Relief Subsystem shall be performed as follows:

1. During each operating cycle the following shall be performed:

   a. A simulated automatic initiation which opens all pilot valves, and

   b. With the reactor at pressure each relief valve shall be manually opened. Relief valve opening shall be verified by a compensating turbine bypass valve or control valve closure.

   c. A logic system functional test shall be performed each refueling outage.

2. When it is determined that one relief valve of the automatic pressure relief subsystem is inoperable, the HPCI shall be demonstrated to be operable immediately and weekly thereafter

3. When it is determined that more than one relief valve of the automatic pressure relief subsystem is inoperable, the HPCI subsystem shall be demonstrated to be operable immediately

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 STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55
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 24, 1980, as supplemented January 28, 1980, 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:

(1) Changing paragraph 3.B as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 55, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(2) Adding paragraph 3.G.

3.G. Operating MAPLHGR limit for all fuel types shall be restricted to 86.8% of those given in Section 3.5 of the Technical Specifications. This restriction shall apply until all five ADS valves are operable.

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

FOR THE NUCLEAR REGULATORY COMMISSION

W. P. Hammill

for Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 1, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 55

FACILITY OPERATING LICENSE NO. DPR-29

DOCKET NO. 50-254

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page.

Remove	Insert
3.5/4.5-5	3.5/4.5-5

provided that during such 7 days all active components of the automatic pressure relief subsystems, the core spray subsystems, LPCI mode of the RHR system, and the RCIC system are operable.

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

D. Automatic Pressure Relief Subsystems

1. The automatic pressure relief subsystem shall be operable whenever the reactor pressure is greater than 90 psig, irradiated fuel is in the reactor vessel and prior to reactor startup from a cold condition.

2. From and after the date that one of the five relief valves of the automatic pressure relief subsystem is made or found to be inoperable 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.

2.a Plant operation shall be in accordance with 3.5.D.2 above except that, for the current operating cycle 5, four of the five relief valves of the ADS are required to be operable. In subsequent operating cycles, operation shall be in accordance with 3.5.D.2.

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.

operable immediately. The automatic pressure relief and RCIC systems shall be demonstrated to be operable daily thereafter.

D. Automatic Pressure Relief Subsystems

Surveillance of the automatic pressure relief subsystems shall be performed as follows:

1. The following surveillance shall be carried out on a six-month surveillance interval:

   a. A simulated automatic initiation which opens all pilot valves.

   b. With the reactor at pressure each relief valve shall be manually opened. Relief valve opening shall be verified by a compensating turbine bypass valve or control valve closure.

2. A logic system functional test shall be performed each refueling outage.

3. When it is determined that one relief valve of the automatic pressure relief subsystem is inoperable, the HPCI shall be demonstrated to be operable immediately and weekly thereafter.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 46 TO PROVISIONAL OPERATING LICENSE NO. DPR-19

AMENDMENT NO. 40 TO FACILITY OPERATING LICENSE NO. DPR-25

AND

AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. DPR-29

COMMONWEALTH EDISON COMPANY

DRESDEN NUCLEAR POWER STATION, UNIT NOS. 2 AND 3

QUAD CITIES STATION, UNIT NO. 1

DOCKET NOS. 50-237, 50-249 AND 50-254

Introduction

By letters dated January 24 and January 28, 1980, Commonwealth Edison Company (CECo), the licensee, proposed to amend Appendix A, Technical Specifications, for Operating Licenses DPR-19, DPR-25 and DPR-29 for Dresden Units 2 and 3 and Quad Cities Unit 1, respectively. In their review of IE Bulletin 80-01, the licensee raised several questions on the seismic design of the Automatic Depressurization System (ADS). Therefore, the licensee has proposed more restrictive Technical Specifications until these seismic questions on ADS are resolved. Quad Cities Unit 2 will be modified before restart from the current refueling outage, and Dresden Unit 1 does not have ADS.

This addresses all the licensee's plants which are to respond to IE Bulletin 80-01. All responses to this bulletin are currently being addressed by the Office of Inspection and Enforcement.

Discussion and Evaluation

ADS is a redundant part of the emergency core cooling system (ECCS) and is designed to depressurize the reactor coolant system for the small break loss of coolant accident (LOCA) in the event of a failure of the High Pressure Coolant Injection (HPCI) system.

IE Bulletin 80-01 required that the licensee review the seismic qualification of ADS air supply system. At each of the Dresden and Quad Cities Units (except Dresden 1), one out of the five ADS valves is a Target-Rock valve which uses an air supply system. In order to provide conservative Technical Specifications while the seismic review is performed, the licensee has performed a reanalysis of the small break LOCA with the air supplied ADS valve assumed inoperable.

From this reanalysis, the licensee has proposed reduction in maximum average planar linear heat generation rate (MAPLHGR) Technical Specification limits for all fuel types. The reanalysis was plant specific for breaks of 0.1 ft^2 and smaller in the recirculation suction line. Breaks in this size range are those most affected by the loss of ADS capacity. The analysis assumed one core spray (CS) and two low pressure coolant injection (LPCI) pumps would be available together with four of the ADS valves. This established a conservative small break spectrum analysis which assumed a DC power source failure as the limiting single failure. The analysis was performed for only the limiting fuel type and exposure value. These assumptions were verified by sensitivity studies.

This analysis is consistent and conservative with respect to currently accepted ECCS methodology. The results of this analysis show that the peak clad temperatures remain below the Appendix K limit of 2200°F when MAPLHGR limits are reduced to 86.8% for Dresden 2 and Quad Cities 1 and to 95.4% for Dresden 3, of those given in Section 3.5 of the Technical Specifications for each unit.

On the above bases, we conclude that the proposed amendments to plant Technical Specifications are acceptable.

Environmental Considerations

We have determined that these amendments do 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 determinations, we have further concluded that these amendments involve an action which is insignificant from the standpoint of environmental impact, and pursuant to 10 CFR Section 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 these amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 1, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-237, 50-249 AND 50-254

COMMONWEALTH EDISON COMPANY
AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 46 and 40 to Facility Operating Licenses Nos. DPR-19 and DPR-25, issued to Commonwealth Edison Company, which revised the license and Technical Specifications for operation of the Dresden Nuclear Power Station, Units Nos. 2 and 3, located in Grundy County, Illinois. The Commission has also issued Amendment No. 55 to Facility Operating License No. DPR-29 issued to Commonwealth Edison Company and Iowa-Illinois Gas and Electric Company, which revised the Technical Specifications for operation of the Quad Cities Nuclear Power Station, Unit No. 1, located in Rock Island County, Illinois. The amendments become effective as of the date of issuance.

These amendments reduce the required number of operable ADS valves from five to four, and set reduced MAPLHGR limits (already administratively applied) to ensure conservative peak clad temperatures with only the four electromatic ADS valves operable.

The application for the amendments 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 has 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 amendments. Prior

public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4) an environmental impact statement, negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated January 24, 1980, (2) Amendment No. 46 to License No. DPR-19, Amendment No. 40 to License No. DPR-25 and Amendment No. 55 to License No. DPR-29, 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 Morris Public Library, 604 Liberty Street, Morris, Illinois, for Dresden 2 and 3, and at the Moline Public Library 504 - 17th Street, Moline, Illinois, for Quad Cities 1. A 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 1 st day of February 1980

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors