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Docket Nos. 50-237
and 50-249

MAY 11 1976

Commonwealth Edison Company
ATTN: Mr. R. L. Bolger
Assistant Vice President
Post Office Box 767
Chicago, Illinois 60600

Gentlemen:

The Commission has issued the enclosed Amendment Nos. 18 and 16 to Facility Operating License Nos. DPR-19 and DPR-25 for the Dresden Nuclear Power Station Unit Nos. 2 and 3, respectively. These amendments consist of changes in the Technical Specifications in accordance with your request dated April 12, 1976, and your related filing dated March 12, 1976.

The amendments consist of changes in the Technical Specifications that modify the use of existing isolation valves which serve as part of the new nitrogen recirculation system.

Copies of the related Safety Evaluation and the Federal Register Notice also are enclosed.

Sincerely,

Original Signed by:
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Enclosures:

1. Amendment No. 18 to DPR-19
2. Amendment No. 16 to DPR-25
3. Safety Evaluation
4. Federal Register Notice

*CE was notified of
ISSUANCE of this change
on 5/25/76 RE
... added ...
... 3 ...*

DRZ

*LOR 5/25/76
A. S. ...
5/25/76*

OFFICE >	DOR:ORB-2	DOR:ORB-2	OELD	DOR:ORB-2	DOR:AD/OT
SURNAME >	RMDiggs	RDSilver:esp	ASWANSOEN	DLZiemann	DGEisenhut
DATE >	5/19/76	5/20/76	5/18/76	5/24/76	5/17/76

MAY 24 1976

cc

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Morris Public Library
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Morris, Illinois 60451

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

cc w/enclosures and cy of CECO's
filings dtd. 3/12/76 and 4/12/76:
Mr Leroy Stratton
Bureau of Radiological Health
Illinois Department of Public Health
Springfield, Illinois 62706



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-237

DRESDEN NUCLEAR POWER STATION UNIT 2

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 18
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 April 12, 1976, and a related filing dated March 12, 1976, comply 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 J;
 - 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.
3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION
Original Signed by:
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the
Technical Specifications

Date of Issuance:

MAY 21 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY OPERATING LICENSE NO. DPR-19

DOCKET NO. 50-237

Replace the existing page 123 of the Technical Specifications with the attached revised page. Changes on this page are shown by a marginal line.

TABLE 3.7.1

PRIMARY CONTAINMENT ISOLATION

Isolation Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec)	Normal Position	Action on Initiating Signal
		Inboard	Outboard			
	1 Main Steam Line Isolation	4	4	3 < T < 5	0	GC
	1 Main Steam Line Drain	1		< 35	C	SC
	1 Main Steam Line Drain		1	< 35	C	SC
Note 1	1 Recirculation Loop Sample Line	1	1	< 5	0	SC
	1 Isolation Condenser Vent to main steam line	1		< 5	0	GC
	1 Isolation Condenser Vent to main steam line		1	< 5	0	GC
	2 Drywell floor drain		2	< 20	0	GC
	2 Drywell Equipment drain		2	< 20	0	GC
	2 Drywell Vent		2	< 10	C	SC
	2 Drywell Vent Relief		1	< 15	C	SC
	2 Drywell Inert and purge #1601-21		1	< 10	C	SC
	2 Drywell N ₂ Makeup #1601-59	1		< 15	0	GC
	2 Drywell and Suppression Chamber N ₂ Makeup #1601-57		1	< 15	0	GC
	2 Drywell and Suppression Chamber Inert #1601-55		1	< 15	0	GC
	2 Suppression Chamber N ₂ Makeup #1601-58		1	< 15	C	SC
	2 Suppression Chamber inert and purge #1601-56		1	< 10	0	GC
	2 Drywell and Suppression chamber vent from reactor building #1601-22		1	< 10	C	SC
	2 Drywell vent to standby gas treatment system		1	< 10	C	SC
	2 Suppression chamber vent		1	< 10	C	SC
	2 Suppression chamber vent relief		1	< 15	C	SC
Note 1	2 Drywell air sampling system		10	5	0	GC
	2 Drywell Pneumatic Supply Isolation		2	< 10	0	GC
	3 Cleanup demineralizer System	1		< 30	0	GC
	3 Cleanup demineralizer System		2	< 30	0	GC
	3 Shutdown cooling system	2		< 40	C	SC
	3 Shutdown cooling system		1	< 40	C	SC
	3 Shutdown cooling system		1	< 40	C	SC
	3 Reactor head cooling line		1	< 15	C	SC
	4 HPCI Turbine Steam supply	1		< 25	0	GC
	4 HPCI Turbine Steam supply		1	< 25	0	GC
	5 Isolation condenser steam supply	1		< 30	0	GC
	5 Isolation condenser steam supply		1	< 30	0	GC
	5 Isolation condenser condensate return	1		< 30	0	GC
	5 Isolation condenser condensate return		1	< 30	C	SC

Note 1: Valve can be reopened after isolation for sampling.



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-249

DRESDEN NUCLEAR POWER STATION UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16
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 April 12, 1976, and a related filing dated March 12, 1976, comply 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.
3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by:
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Attachment:
Changes to the
Technical Specifications

Date of Issuance: 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 16

FACILITY OPERATING LICENSE NO. DPR-25

DOCKET NO. 50-249

Replace the existing page 123 of the Technical Specifications with the attached revised page. Changes on this page are shown by a marginal line.

TABLE 3.7.1

PRIMARY CONTAINMENT ISOLATION

Isolation Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec)	Normal Position	Action on Initiating Signal
		Inboard	Outboard			
	1 Main Steam Line Isolation	4	4	3 < T < 5	0	GC
	1 Main Steam Line Drain	1		< 35	C	SC
	1 Main Steam Line Drain		1	< 35	C	SC
Note 1	1 Recirculation Loop Sample Line	1	1	< 5	0	SC
	1 Isolation Condenser Vent to main steam line	1		< 5	0	GC
	1 Isolation Condenser Vent to main steam line		1	< 5	0	GC
	2 Drywell floor drain		2	< 20	0	GC
	2 Drywell Equipment drain		2	< 20	0	GC
	2 Drywell Vent		2	< 10	C	SC
	2 Drywell Vent Relief		1	< 15	C	SC
	2 Drywell Inert and purge #1601-21		1	< 10	C	SC
	2 Drywell N ₂ Makeup #1601-59	1		< 15	0	GC
	2 Drywell and Suppression Chamber N ₂ Makeup #1601-57		1	< 15	0	GC
	2 Drywell and Suppression Chamber Inert #1601-55		1	< 15	0	GC
	2 Suppression Chamber N ₂ Makeup #1601-58		1	< 15	C	SC
	2 Suppression Chamber inert and purge #1601-56		1	< 10	0	GC
	2 Drywell and Suppression chamber vent from reactor building #1601-22		1	< 10	C	SC
	2 Drywell vent to standby gas treatment system		1	< 10	C	SC
	2 Suppression chamber vent		1	< 10	C	SC
	2 Suppression chamber vent relief		1	< 15	C	SC
Note 1	2 Drywell air sampling system		10	5	0	GC
	2 Drywell Pneumatic Supply Isolation		2	< 10	0	GC
	3 Cleanup demineralizer System	1		< 30	0	GC
	3 Cleanup demineralizer System		2	< 30	0	GC
	3 Shutdown cooling system	2		< 40	C	SC
	3 Shutdown cooling system		1	< 40	C	SC
	3 Shutdown cooling system		1	< 40	C	SC
	3 Reactor head cooling line		1	< 15	C	SC
	4 HPCI Turbine Steam supply	1		< 25	0	GC
	4 HPCI Turbine Steam supply		1	< 25	0	GC
	5 Isolation condenser steam supply	1		< 30	0	GC
	5 Isolation condenser steam supply		1	< 30	0	GC
	5 Isolation condenser condensate return	1		< 30	0	GC
	5 Isolation condenser condensate return		1	< 30	C	SC

Note 1: Valve can be reopened after isolation for sampling.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 18 AND 16 TO FACILITY LICENSE

NOS. DPR-19 AND DPR-25

COMMONWEALTH EDISON COMPANY

DRESDEN NUCLEAR POWER STATION UNITS 2 AND 3

DOCKET NOS. 50-237 AND 50-249

INTRODUCTION

By letter dated April 12, 1976, and an earlier filing dated March 12, 1976, the Commonwealth Edison Company (CECo) requested an amendment to Operating License Nos. DPR-19 and DPR-25 for the Dresden Nuclear Power Station Unit Nos. 2 and 3. The request involves revisions to the Technical Specifications with regard to the modification of usage of existing automatic isolation valves associated with the installation of a nitrogen recirculation system.

BACKGROUND

As a result of recent structural analyses performed in conjunction with a generic review of pressure-suppression pool dynamic loads for the General Electric BWR Mark I containments, it was determined that if pool dynamic loads resulting from a postulated loss-of-coolant accident (LOCA) are considered, the margin of safety in the containment design for Unit Nos. 2 and 3 of the Dresden Nuclear Power Station is lower than originally intended. Subsequently, the Commonwealth Edison Company (the licensee) agreed to institute a "differential pressure control system" to mitigate the pool dynamic loads and thereby restore the margin of safety in the containment design. The differential pressure control system would establish a positive differential pressure between the drywell and torus regions of the containment. This would reduce the height of the water leg in the downcomers and subsequently would reduce the LOCA hydrodynamic loads.

To control combustible gases following a postulated loss-of-coolant accident, the drywell atmosphere is inerted with nitrogen during normal operation. The inclusion of a positive differential pressure between the drywell and torus results in a loss of nitrogen from the drywell to the torus airspace from leakage through the vacuum breakers on the vent headers. To minimize the loss of nitrogen from the system, the licensee has proposed a recirculation system which would collect the nitrogen in the torus and return it to the drywell.

DISCUSSION AND EVALUATION

The recirculation system provides a connection between the existing suppression chamber purge line and the drywell make-up line. The recirculation line takes suction from the suppression chamber purge line and branches into two parallel flow paths, each containing two shutoff valves, a blower, and a check valve. The parallel lines rejoin and discharge into the nitrogen make-up line. The existing automatic isolation valves on the suppression chamber purge line and the drywell make-up line would be changed from a normally closed position to a normally open position to provide the flow path from the torus airspace to the drywell.

We have reviewed the proposed recirculation system for Dresden Unit Nos. 2 and 3 with regard to both containment isolation capability and potential adverse effects on a postulated loss-of-coolant accident. The outboard isolation valves, AO-1601-55, AO-1601-56 and MO-1601-57 are automatic valves which are normally open and will close upon the receipt of a Group 2 isolation signal or the loss of the instrument bus associated with the outboard isolation valves. Valves AO-1601-55 and 1601-56 also close on loss of instrument air. The inboard isolation valve, AO-1601-59, receives power from a separate instrument bus, and similarly will close upon loss of its instrument bus, on loss of instrument air or upon receipt of a Group 2 isolation signal. The position of these valves will be indicated in the control room, and the valves will be leak tested in accordance with Appendix J to 10 CFR 50.

A recirculation system could have an effect on the consequences of a postulated loss-of-coolant accident by allowing steam bypass of the pressure-suppression pool by direct communication of the drywell and the suppression chamber airspace. However, one section of the recirculation line is a one inch diameter pipe. The low mass flow rate associated with this size line in conjunction with the redundant capability to isolate both the suppression chamber purge line and the nitrogen make-up line will result in a negligible amount of steam bypass. In addition, there will be a swing-disc check valve, located down stream of each blower, which would prevent reverse flow from the drywell and further lessen the chance of steam bypass. Therefore, the proposed design assures that the installation would have a negligible effect on a loss-of-coolant accident.

The purpose of the recirculation system is to conserve nitrogen that would otherwise be lost because of leakage from the drywell. The leakage and loss of nitrogen is not a safety issue since sufficient nitrogen makeup to maintain containment inerting requirements could be provided by the installed nitrogen make-up system and Technical Specifications on containment leak rate provide assurance that the licensee will maintain any leakage to acceptable levels.

The licensee's proposed change would be modified for the purpose of more clearly identifying the valves involved in the recirculation system. These modifications have been discussed with the licensee.

ENVIRONMENTAL CONSIDERATION

We have determined that the 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 determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration, or environmental appraisal need not be prepared in connection with the issuance of these amendments.

CONCLUSION

We have concluded, based on the considerations discussed above that: (1) because the changes 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 changes 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.

Date: May 24, 1976

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-237 AND 50-249

COMMONWEALTH EDISON COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 18 and 16 to Facility Operating License Nos. DPR-19 and DPR-25 (respectively), issued to Commonwealth Edison Company, which revised Technical Specifications for operation of the Dresden Nuclear Power Station Unit Nos. 2 and 3 (the facilities) located in Grundy County, Illinois. These amendments are effective as of their date of issuance.

These amendments modify the use of existing isolation valves which serve as part of the new nitrogen recirculating system.

The application for these 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 §51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of the amendments.

For further details with respect to this action, see (1) the application for amendment dated April 12, 1976, and a related filing dated March 12, 1976, (2) Amendment Nos. 18 and 16 to License Nos. DPR-19 and DPR-25, respectively, 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 at 604 Liberty Street in Morris, Illinois 60451.

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 *24th* day of *May, 1976*.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by:
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

The licensee's proposed change would be modified for the purpose of more clearly identifying the valves involved in the recirculation system. These modifications have been discussed with the licensee.

ENVIRONMENTAL CONSIDERATION

We have determined that the 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 determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration, or environmental appraisal need not be prepared in connection with the issuance of these amendments.

CONCLUSION

We have concluded, based on the considerations discussed above that: (1) because the changes 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 changes 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.

Date:

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The purpose of the nitrogen makeup system is to compensate nitrogen that would otherwise be lost because of leakage from the digester. The leakage and loss of nitrogen is not a safety issue since sufficient nitrogen makeup to maintain containment inerting requirements could be provided by the installed nitrogen makeup system and technical specifications on containment leak rate provide assurance that the system will maintain any leakage to acceptable levels.