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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-295

ZION STATION UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 71
License No. DPR-39

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

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated June 23, 1981, 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 2.C.(2) of Facility Operating License No. DPR-39 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 71 , 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 30, 1981

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-304

ZION STATION UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 65
License No. DPR-48

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

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated June 23, 1981, 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 2.C.(2) of Facility Operating License No. DPR-48 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 65, 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 30, 1981

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 71 TO FACILITY OPERATING LICENSE NO. DPR-39

AMENDMENT NO. 65 TO FACILITY OPERATING LICENSE NO. DPR-48

Revise Appendix A as follows:

Remove Pages	Insert Pages
247c	247c
----	247d
248	248
iv	iv

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
3.13.9.B	4.13.9.B
b. The residual heat removal loop may be removed from operation for up to one hour per an eight-hour period during the performance of CORE ALTERATIONS.	
10 Water Level - Reactor Vessel	10. Water Level - Reactor Vessel
A. At least 22 feet of water shall be maintained over the top of the reactor pressure vessel flange.	A. The water level shall be determined to be at or above the minimum required depth within two hours prior to the start of fuel movements. At least once every 24 hours throughout movement of fuel assemblies or control rods, the required water depth shall be determined to be at or above the minimum depth.
Applicability:	
During movement of fuel assemblies or control rods* within the reactor pressure vessel while in MODE 6.	
Action:	
With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel assemblies or control rods within the pressure vessel.	
*Except during control rod latching operations wherein the water level shall be 22 feet above the seated fuel assemblies in the reactor core.	

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
3.13.11 Water Level - Storage Pool A. At least 23 feet of water shall be maintained over the top of irradiated fuel assemblies seated in the storage racks. APPLICABILITY: Whenever irradiated fuel assemblies or control rods are being moved in the storage pool. ACTION: With the requirements of the above specification not satisfied, suspend all movement of irradiated fuel assemblies or control rods in the storage pool. 3.13.12 The provisions of Specification 3.0.3 are not applicable to Section 3.13.	4.13.11 Water Level - Storage Pool A. The water level shall be determined to be at or above the minimum required depth within two hours prior to the start of fuel movements. At least once every 24 hours throughout movement of fuel assemblies or control rods, the required water depth shall be determined to be at or above the minimum depth. 4.13.12 Not applicable

The restriction on shutdown margin insures adequate core protection that no inadvertent return to criticality could occur through control rod removal. (1)

Two source range neutron monitors continuously measuring neutron flux during fuel movements provides the operators with immediate redundant indication of an unsafe condition. Whenever changes are not being made in the core geometry, one flux monitor is sufficient. This permits maintenance on the instrumentation.

The fuel handling accident assumes that the first fuel assembly is moved 100 hours after initial reactor shutdown. (2)

Direct communication between the control room and the containment allows for immediate notification of any impending unsafe condition.

The presence of a licensed fuel handling foreman or senior reactor operator at the refueling cavity provides qualified supervision on the refueling operation during changes in core geometry.

The charcoal filters in the ventilation train from the fuel building insure that site boundary doses will be below 10 CFR 100 limits assuming all rods on a dropped fuel assembly break during a postulated fuel assembly break during a postulated fuel drop accident. (3) The containment, fuel building, and radiation monitoring requirements insure the capability to isolate these areas from the environment in the event of an activity release from the fuel.

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(1) FSAR, Section 9.7.2
(2) FSAR, Section 14.2.1.2
(3) FSAR, Section 14.2.1.5

The verification of fuel handling system interlocks prior to refueling operation provides assurance that an unsafe operating condition will not be approved. (1).

The fuel inspection program is intended to provide information on anomalous conditions of the fuel resulting from power operation. The results of the visual examinations and the tests for failed fuel will be reviewed as a basis for determining the requirements for further off-site destructive fuel examinations. FSAR Section 3.2.3.5 provides further discussion of the fuel inspection program.

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that (a) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 140°F as required during REFUELING MODE, and (b) sufficient coolant circulation is maintained through the reactor core to minimize the effect of a boron dilution incident and prevent boron stratification.

The requirement to have two RHR loops OPERABLE when there is less than 22 feet of water above the flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 22 feet of water above the flange a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

A minimum water level of 22 feet over irradiated assemblies ensures that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. A 23 feet depth over fuel in the Spent Fuel Pool corresponds to 22 feet of water over the pressure vessel flange. The control rod latching operations are conducted with at least the minimum water level over seated assemblies.