



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. 53  
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 March 22, 1979 as supplemented on May 3, 1979 and January 25, 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.

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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. 53, 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

*W. P. Gammill*

William P. Gammill, Acting Assistant  
Director for Operating Reactor Projects  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 13, 1980



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. 50  
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 March 22, 1979 as supplemented on May 3, 1979 and January 25, 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.

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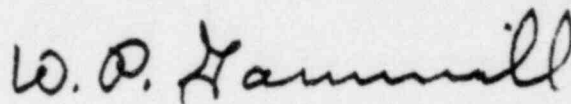
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-48 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as amended through Amendment No. 50, 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



William P. Gammill, Acting Assistant  
Director for Operating Reactor Projects  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 13, 1980

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NO. DPR-39

AMENDMENT NO. 50 TO FACILITY OPERATING LICENSE NO. DPR-48

DOCKET NOS. 50-295 AND 50-304

Revise Appendix A as follows:

Remove Pages

45  
63a

Insert Pages

45  
63a



LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
<p>3.2.2 Power Distribution Limits</p> <p>A. Hot Channel Factor Limits*</p> <p>1.1 At all times, except during physics tests at <math>\leq 75\%</math> rated power**, the hot channel factors defined in the bases must meet the following limits:</p> <p><u>Units 1 and 2</u></p> $F_Q(Z) \leq [F_Q(Z)]_L = \begin{cases} 1.93/P \times K_1(Z), & \text{for } P > .5 \\ 3.86 \times K_1(Z), & \text{for } P \leq .5 \end{cases}$ <p>and <math>F_{\Delta H}^N \leq 1.55 [1 + 0.2(1-P)] \times RBP,</math></p> <p>where:</p> $[F_Q(Z)]_L = F_Q(Z) \text{ limit;}$ <p>1.93 = <math>F_Q</math> constant (LOCA limiting value);</p> <p>P = fraction of rated power at which the core operated during <math>F_Q</math> and <math>F_{\Delta H}^N</math> measurement;</p> <p><math>K_1(Z)</math> = factor from Figure 3.2-9 selected at the core elevation, Z, of the measured <math>F_Q</math>;</p>	<p>4.2.2 Power Distribution</p> <p>A. Hot Channel Factor Limits</p> <p>1.1 Following initial core loading and at a minimum of regular effective full power monthly intervals thereafter, power distribution maps, using the movable detector system, shall be made to confirm that the hot channel factor limits of this specification are satisfied</p> <p>Following initial loading and each subsequent reloading, a power distribution map using the Movable Detector System, shall be made to confirm that power distribution limits are met, in the full power configuration before a unit is operated above 75% of rating.</p>

\*The hot channel factors above are defined for a period not to exceed the predicted minimum time to collapse exposure levels for each fuel region as referenced in the bases.

\*\*During physics tests which may exceed these hot channel factor limits, the reactor may be in this condition for a period of time not to exceed eight hours continuously.

Figure 3.2-9 Hot Channel Factor Normalized  
Operating Envelope for Units 1  
and 2

$F_Q$  Constant (LOCA Limiting Value) = 1.93

