

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

# PORTLAND GENERAL ELECTRIC COMPANY

# THE CITY OF EUGENE, OREGON

#### PACIFIC POWER AND LIGHT COMPANY

# DOCKET NO. 50-344

#### TROJAN NUCLEAR PLANT

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 151 License No. NPF-1

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

- A. The application for amendment by Portland General Electric Company, et al., (the licensee) dated March 1, 1988, as supplemented August 5, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 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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- 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. NPF-1 is hereby amended to read as follows:
  - (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.151 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, except where otherwise stated in specific license conditions.

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

FOR THE NUCLEAR REGULATORY COMMISSION

George Knighton Director

George W. Knighton, Director Project Directorate V Division of Reactor Projects - III, IV, V and Special Projects

Attachment: Changes to the Technical Specifications

Date of Issuance: March 17, 1989

# ATTACHMENT TO LICENSE AMENDMENT NO. 151 TO FACILITY OPERATING LICENSE NO. NPF-1

# DOCKET NO. 50-344

Revise Appendix A as follows:

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Remove Pages	Insert Pages
5-4	5-4
5-5	5-5

#### DESIGN FEATURES

#### DESIGN PRESSURE AND TEMPERATURE

5.2.2 The reactor containment building is designed and shall be maintained for a maximum internal pressure of 60 psig and a temperature of 288°F.

#### PENETRATIONS

5.2.3 Penetrations through the reactor containment building are designed and shall be maintained in accordance with the original design provisions contained in Section 6.2.4 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

#### 5.3 REACTOR CORE

#### FUEL ASSEMBLIES

5.3.1 The reactor core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4. Each fuel rod shall have a nominal active fuel length of 144 inches. The initial core loading shall have a maximum enrichment of 3.15 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and of low enrichment.

#### CONTROL ROD ASSEMBLIES

5.3.2 The reactor core shall contain 53 full length control rod assemblies. The full length control rod assemblies shall contain a nominal 142 inches of absorber material. The nominal values of absorber material shall be 80 percent silver, 15 percent indium and 5 percent cadmium. All control rods shall be clad with stainless steel tubing. Eight part length control rod assemblies originally installed in the core contained a nominal 36 inches of absorber material at their lower ends. The part length control rod assemblies have been removed and are stored in the spent fuel pool.

#### 5.4 REACTOR COOLANT SYSTEM

#### DESIGN PRESSURE AND TEMPERATURE

2pp.

5.4.1 The Reactor Coolant System is designed and shall be maintained:

TROJAN-UNIT 1

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#### DESIGN FEATURES

- a. In accordance with the code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

#### VOLUME

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5.4.2 The total water and steam volume of the Reactor Coolant System is 12,900  $\pm$  100 cubic feet at a nominal Tayg of 584.7°F.

# 5.5 EMERGENCY CORE COOLING SYSTEMS

5.5.1 The emergency core cooling systems are designed and shall be maintained in accordance with the original design provisions contained in Section 6.3 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirements.

5.6 FUEL STORAGE

#### CRITICALITY

5.6.1.1 The fuel storage racks for new fuel are designed and shall be maintained with a nominal 21-inch center-to-center distance between fuel assemblies placed in the storage racks to ensure a K<sub>eff</sub> of  $\leq$ 0.95 with the storage pit filled with unborated water, and with new fuel containing not more than 57.0 grams of U-235 per axial centimeter of active fuel assembly (4.5 wt% enrichment).

5.6.1.2 The storage racks for spent fuel are designed and shall be maintained with a nominal 10.5-inch center-to-center distance between fuel assemblies placed in the storage racks to ensure a Keff of  $\leq 0.95$  with the storage pool filled with unborated water and with new fuel containing not more than 57.0 grams of U-235 per axial centimeter of active fuel assembly (4.5 wt% enrichment). The criticality analysis includes a conservative allowance for uncertainties as described in Section 3.1 of PGE-1037.