

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# WISCONSIN PUBLIC SERVICE CORPORATION WISCONSIN POWER AND LIGHT COMPANY NUCLEAR MANAGEMENT COMPANY

**DOCKET NO. 50-305** 

KEWAUNEE NUCLEAR POWER PLANT

#### FACILITY OPERATING LICENSE AS AMENDED

License No. DPR-43

- 1. The Atomic Energy Commission (the Commission) having found that:
  - A. The application for license filed by Wisconsin Public Service Corporation and Wisconsin Power and Light Company (the licensees) 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 and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Kewaunee Nuclear Power Plant (facility) has been substantially completed in conformity with Provisional Construction Permit No. CPPR-50, as amended, and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
  - E. The Nuclear Management Company, LLC (NMC) is technically qualified and the licensees are financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission:

- F. The licensees and NMC have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
- G. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;
- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Facility Operating License No. DPR-43, subject to the condition for protection of the environment set forth herein, is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied; and
- I. The receipt, possession, and use of byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Part 30 and 70, including 10 CFR Section 30.33, 70.23 and 70.31.
- 2. Facility Operating License No. DPR-43 is hereby issued to NMC, Wisconsin Public Service Corporation and Wisconsin Power and Light Company, to read as follows:
  - A. This license applies to the Kewaunee Nuclear Power Plant, a pressurized water nuclear reactor and associated equipment (the facility), owned by Wisconsin Public Service Corporation and Wisconsin Power and Light Company. The facility is located in Kewaunee County, Wisconsin, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 7 through 31) and the Environmental Report as supplemented and amended.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", Wisconsin Public Service Corporation and Wisconsin Power and Light Company to possess, and the NMC to use and operate the facility at the designated location in Kewaunee County, Wisconsin, in accordance with the procedures and limitations set forth in this license;

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, NMC to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation, and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFP Parts 30, 40, and 70, NMC to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or associated with radioactive apparatus or components:
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility".
- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR, Chapter 1: Part 20, Section 30.34 of Part 30 Section 40.41 of Part 40, Section 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
  - (1) <u>Maximum Power Level</u>

The NMC is authorized to operate the facility at steady state reactor core power levels not in excess of 1650 megawatts (thermal).

(2) Technical Specifications

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

(3) Fire Protection

The NMC shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the KNPP Fire Plan, and as referenced in the Updated Safety Analysis Report, and as approved in the Safety Evaluation Reports, dated November 25, 1977, and December 12, 1978 (and supplement dated February 13, 1981) subject to the following provision:

The NMC may make changes to the approved Fire Protection Program without prior approval of the Commission, only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

# (4) <u>Physical Protection</u>

The NMC shall fully implement and maintain in effect all provisions of the Commission-approved "Kewaunee Nuclear Power Plant Security Manual", Rev. 1, approved by the NRC on December 15,1989; the "Kewaunee Nuclear Power Plant Security Force Training and Qualification Manual", Rev. 7, approved by the NRC on November 17, 1987; and the "Kewaunee Nuclear Power Plant Security Contingency Plan", Rev. 1, approved by the NRC on September 1, 1983. These manuals include amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p).

#### (5) Fuel Burnup

The maximum rod average burnup for any rod shall be limited to 60 GWD/MTU until completion of an NRC environmental assessment supporting an increased limit.

# (6) Steam Generator Upper Lateral Supports

The design of the steam generator upper lateral supports may be modified by reducing the number of snubbers from four (4) to one (1) per steam generator.

#### (7) <u>License Transfer</u>

(A) WPSC shall take all necessary steps to ensure that the decommissioning trusts are maintained in accordance with the application for approval of the transfer of MG&E's ownership interest in KNPP to WPSC and the requirements of the Order approving the transfer, and consistent with the safety evaluation supporting the Order. Additionally, if the MG&E nonqualified fund is not transferred to WPSC, WPSC, or NMC acting on WPSC's behalf, shall explicitly include the status of the MG&E nonqualified fund in all future decommissioning funding status reports that WPSC, or NMC, submit in accordance with 10 CFR 50.75(f)(1).

- (B) On the closing date of the transfer of MG&E's interests in KNPP to WPSC, MG&E shall transfer to WPSC all of MG&E's accumulated qualified decommissioning trust funds for KNPP. Immediately following such transfer, the amounts for radiological decommissioning of KNPP in WPSC's decommissioning trusts must, with respect to the interests in KNPP that WPSC would then hold, be at a level no less than the formula amounts under 10 CFR Section 50,75.
- D. The NMC shall comply with applicable effluent limitations and other limitations and monitoring requirements, if any, specified pursuant to Section 401(d) of the Federal Water Pollution Control Act Amendments of 1972.
- E. This license is effective as of the date of issuance, and shall expire at midnight on December 21, 2013.

#### FOR THE ATOMIC ENERGY COMMISSION

Original Signed by

A. Giambusso, Deputy Director for Reactor Projects Directorate of Licensing

Attachment:

Appendices A and B - Technical Specifications

Date of Issuance: December 21, 1973

# 5.0 DESIGN FEATURES

# 5.1 SITE

# **APPLICABILITY**

Applies to the location and extent of the reactor site.

# OBJECTIVE

To define those aspects of the site which affect the overall safety of the installation.

# SPECIFICATION

The Kewaunee Nuclear Power Plant is located on property owned by Wisconsin Public Service Corporation and Wisconsin Power and Light Company at a site on the west shore of Lake Michigan, approximately 30 miles east-southeast of the city of Green Bay, Wisconsin.

The minimum distance from the center line of the reactor containment to the site exclusion radius as defined in 10 CFR 100.3 is 1200 meters.