

WISCONSIN ELECTRIC POWER COMPANY

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-301

RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-27

1. The Nuclear Regulatory Commission (NRC or the Commission), having previously made the findings set forth in License DPR-27 issued on March 8, 1973, has now found that:
  - A. The application to renew operating License No. DPR-27 filed by Nuclear Management Company, LLC (NMC) 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 1, and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Point Beach Nuclear Plant Unit 2 (the facility) has been substantially completed, in conformity with Provisional Construction Permit No. CPPR-47, the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1); and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;
  - D. The facility will operate in conformity with the application as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - E. There is reasonable assurance (1) that the activities authorized by the renewed operating license can be conducted without endangering the health and safety of the public, and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission;

- F. NMC is technically qualified and Wisconsin Electric Power Company<sup>1</sup> is financially qualified to engage in the activities authorized by this renewed operating license in accordance with the rules and regulations of the Commission;
  - G. The Wisconsin Electric Power Company and NMC has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements" of the Commission's regulations;
  - H. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public; and
  - I. In accordance with the requirements of 10 CFR Part 51 (formerly Appendix D to Part 50), the renewed operating license should be issued subject to conditions for protection of the environment set forth in the Technical Specifications incorporated herein.
- 2. This renewed operating license applies to the Point Beach Nuclear Plant Unit 2, a closed cycle, pressurized, light water moderated and cooled reactor, and associated steam generators and electric generating equipment (the facility). The facility is located on the Point Beach site, in the Town of Two Creeks, Manitowoc County, Wisconsin, and is described in the Final Safety Analysis Report (FSAR), as supplemented and amended.
  - 3. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - A. Pursuant to Section 104b of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Wisconsin Electric Power Company to possess, and NMC to use and operate the facility at the designated location on the Point Beach site in accordance with the procedures and limitations set forth in this renewed operating license;
    - B. Pursuant to the Act and 10 CFR Part 70, NMC to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in Final Facility Description and Safety Analysis Report, as supplemented and amended as of March 17, 1976;

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<sup>1</sup> On December 31, 1977, Wisconsin Electric Power Company and Wisconsin Michigan Power Company (formerly the licensees) merged with Wisconsin Electric Power Company surviving the merger. Effective on the date of the merger, Wisconsin Electric Power Company remained as the licensee. Nuclear Management Company, LLC, hereinafter referred to as NMC, succeeds Wisconsin Electric Power Company as operator of the Point Beach Nuclear Plant, Unit 2. Consequently, NMC is authorized to act as agent for Wisconsin Electric Power Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- C. 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 source for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - D. Pursuant to the Act and 10 CFR Parts 30, 40 and 70, NMC to receive, possess and use in amounts as required any byproduct, source of special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - E. Pursuant to the Act and 10 CFR Parts 30 and 70, NMC to possess such byproduct and special nuclear materials as may be produced by the operation of the facility, but not to separate such materials retained within the fuel cladding.
4. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and 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 below:
- A. Maximum Power Levels

NMC is authorized to operate the facility at reactor core power levels not in excess of 1540 megawatts thermal.
  - B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 227, are hereby incorporated in the renewed operating license. NMC shall operate the facility in accordance with Technical Specifications.
  - C. Spent Fuel Pool Modification

The licensee<sup>2</sup> is authorized to modify the spent fuel storage pool to increase its storage capacity from 351 to 1502 assemblies as described in licensee's application dated March 21, 1978, as supplemented and amended. In the event that the on-site verification check for poison material in the poison assemblies discloses any missing boron plates, the NRC shall be notified and an on-site test on every poison assembly shall be performed.

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<sup>2</sup> Reference to the licensee in License Conditions 4.C and 4.E refers to Wisconsin Electric Power Company and is maintained for historical purposes.

D. Physical Protection

NMC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans, including 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). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Nuclear Management Company Point Beach Nuclear Plant Physical Security Plan, (Revision 0)," submitted by letter dated October 18, 2004.

E. Safety Injection Logic

The licensee is authorized to modify the safety injection actuation logic and actuation power supplies and related changes as described in licensee's application for amendment dated April 27, 1979, as supplemented May 7, 1979. In the interim period until the power supply modification has been completed, should any DC powered safety injection actuation channel be in a failed condition for greater than one hour, the unit shall thereafter be shut down using normal procedures and placed in a block-permissive condition for safety injection actuation.

F. NMC shall implement and maintain in effect all provisions of the approved fire protection program as described in the FSAR for the facility and as approved in the Safety Evaluation Report dated August 2, 1979 (and Supplements dated October 21, 1980, January 22, 1981, and July 27, 1988) and the safety evaluation issued January 8, 1997, for Technical Specifications Amendment No. 174, subject to the following provision:

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.

G. Secondary Water Chemistry Monitoring Program

NMC shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
  2. Identification of the procedures used to quantify parameters that are critical to control points;
  3. Identification of process sampling points;
  4. Procedure for the recording and management of data;
  5. Procedures defining corrective actions for off control point chemistry condition;
- and

6. A procedure for identifying the authority responsible for the interpretation of the data, and the sequence and timing of administrative events required to initiate corrective action.
  
- H. The FSAR supplement, dated February 25, 2004, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the FSAR required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, NMC may make changes to the programs and activities described in the supplement without prior Commission approval, provided that NMC evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
  
- I. The FSAR supplement, dated February 25, 2004, as revised, describes certain future activities to be completed prior to the period of extended operation. NMC shall complete these activities no later than March 8, 2013, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
  
- J. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.
  
- K. Additional Conditions  
  
The additional conditions contained in Appendix C, as revised through Amendment No. 206, are hereby incorporated into this license. NMC shall operate the facility in accordance with the additional conditions.
  
5. The issuance of this renewed operating license is without prejudice to subsequent licensing action which may be taken by the Commission with regard to the ongoing rulemaking hearing on the Interim Acceptance Criteria for Emergency Core Cooling Systems (Docket No. RM 50-1).

6. This renewed operating license is effective as of the date of issuance, and shall expire at midnight on March 8, 2033.

FOR THE NUCLEAR REGULATORY COMMISSION

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R. W. Borchardt, Deputy Director  
Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A - Technical Specifications
2. Appendix B - Environmental Technical Specifications
3. Appendix C - Additional Conditions

Date of Issuance: December 22, 2005