



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

LOUISIANA POWER AND LIGHT COMPANY

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

FACILITY OPERATING LICENSE

License No. NPF-26

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for license filed by the Louisiana Power and Light Company (licensee) 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, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Waterford Steam Electric Station, Unit 3 (facility), has been substantially completed in conformity with - Construction Permit No. CPPR-103 and the application as amended, the provisions of the Act, and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Sections 1.I. and 2.D. below);
 - 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 Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Sections 1.I. and 2.D below);
 - E. The Louisiana Power & Light Company is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

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- G. The issuance of this 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 and other costs, and after considering available alternatives, the issuance of the Facility Operating License No. NPF-26, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70, except that an exemption to the provisions of 10 CFR 70.24 is granted as described in Supplement No. 8 to the Safety Evaluation Report. This exemption is authorized under 10 CFR 70.24(d) and will not endanger life or property or the common defense and security and is otherwise in the public interest.
2. Based on the foregoing, Facility Operating License No. NPF-26 is hereby issued to the Louisiana Power and Light Company (licensee) to read as follows:
- A. This license applies to the Waterford Steam Electric Station, Unit 3, a pressurized water reactor and associated equipment (the facility), owned by Louisiana Power and Light Company (the licensee). The facility is located on the licensee's site in St. Charles Parish, Louisiana and is described in the Louisiana Power and Light Company Final Safety Analysis Report as amended, and the Environmental Report as amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Louisiana Power and Light Company (LP&L):
 - 1. Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use and operate the facility at the designated location in St. Charles Parish, Louisiana in accordance with the procedures and limitations set forth in this license;
 - 2. Pursuant to the Act and 10 CFR Part 70, 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 the Final Safety Analysis Report, as supplemented and amended through Amendment 36;

3. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, 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 CFR Parts 30, 40, and 70, 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; and
 5. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility authorized herein.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I 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 or incorporated below:
1. Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of 3390 megawatts thermal (100% power) in accordance with the conditions specified herein and in Attachment 1 to this license. The preoperational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to power levels not to exceed 5 percent of full power (169 megawatts thermal).
 2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in the attached Appendix A and the Environmental Protection Plan contained in the attached Appendix B, are hereby incorporated in this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 3. Antitrust Conditions

The licensee shall comply with the antitrust conditions in Appendix C to this license.

4. Broad Range Toxic Gas Detectors (Section 2.2.1, SSER 6*)

Prior to startup following the first refueling outage, the licensee shall propose technical specifications for the system for inclusion in Appendix A to this license.

5. Initial Inservice Inspection Program (Section 6.6, SSER 5)

By June 1, 1985, the licensee must submit an initial inservice inspection program for staff review and approval.

6. Environmental Qualification (Section 3.11, SSER 8)

(a) Prior to November 30, 1985, the licensee shall environmentally qualify all electrical equipment according to the provisions of 10 CFR 50.49.

(b) Prior to exceeding 5 percent of rated power the licensee shall provide an aging analysis for all non-metallic components in safety-related mechanical equipment located in a harsh environment.

7. Axial Fuel Growth (Section 4.2, SSER 5)

Prior to entering Startup (Mode 2) after each refueling, the licensee shall either provide a report that demonstrates that the existing fuel element assemblies (FEA) have sufficient available shoulder gap clearance for at least the next cycle of operation, or identify to the NRC and implement a modified FEA design that has adequate shoulder gap clearance for at least the next cycle of operation. This requirement will apply until the NRC concurs that the shoulder gap clearance provided is adequate for the design life of the fuel.

8. Emergency Preparedness (Section 13.3, SSER 8)

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of emergency preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

9. Fire Protection (Section 9.5.1, SSER 8)

- a. The licensee shall maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility through Amendment 36 and as approved in the SER through Supplement 8, subject to provisions b & c below.
- b. The licensee may make no change to features of the approved fire protection program which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change the licensee must submit an application for license amendment pursuant to 10 CFR 50.90.
- c. The licensee may make changes to features of the approved fire protection program which do not decrease the level of fire protection without prior Commission approval, provided:
 - (1) such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59).
 - (2) such changes do not result in failure to complete the fire protection program approved by the Commission prior to license issuance.

The licensee shall maintain, in an auditable form, a current record of all such changes including an analysis of the effects of the change on the fire protection program and shall make such records available to NRC inspectors upon request. All changes to the approved program made without prior Commission approval shall be reported annually to the Director of the Office of Nuclear Reactor Regulation, together with supporting analyses.

- d. The licensee shall provide smoke detectors in the Control Room main control panels, which are installed in accordance with NFPA 72E, prior to startup following the first refueling outage.
- e. The licensee shall complete modifications resulting from its spurious signal analysis prior to startup following the first refueling outage, but in any case not later than June 1, 1987.

- f. The licensee shall provide neutron flux indication at LCP-43 which is electrically independent of the control room and cable vault prior to start-up following the first refueling outage, but in any case not later than June 1, 1987.
- g. The licensee shall provide a continuous fire watch in the relay room at the isolation panel from initial criticality until acceptable resolution of adverse effects, if any, of the loss of this panel on safe shutdown.

10. Initial Test Program (Section 14, SER)

The licensee shall conduct the post-fuel-loading initial test program described in Chapter 14 of the FSAR, as amended, without making any major modifications unless such modifications have prior NRC approval. Major modifications are defined as:

- a. elimination of any safety-related test*
- b. modification of objectives, test method, or acceptance criteria for any safety-related test
- c. performance of any safety-related test at a power level different from that stated in the FSAR by more than 5 percent of rated power
- d. failure to satisfactorily complete the entire initial startup test program by the time core burnup equals 120 effective full power days
- e. deviation from initial test program administrative procedures or quality assurance controls described in the FSAR
- f. delays in test program in excess of 30 days (14 days if power level exceeds 50 percent), concurrent with power operation. If continued power operation is desired during a delay, the licensee shall provide justification that adequate testing has been performed and evaluated to demonstrate that the facility can be operated at the planned power level with reasonable assurance that the health and safety of the public will not be endangered.

11. Emergency Response Capabilities (Section 22, SSER 8)

The licensee shall comply with the requirements of Supplement 1 to NUREG-0737 for the conduct of a Detailed Control Room Design Review (DCRDR). Prior to May 1, 1985, the licensee shall submit for staff review and approval the DCRDR Summary Report, including a description of the process used in carrying out the function and task analysis performed as a part of both the DCRDR and the Procedures Generation Package efforts.

*Safety-related tests are those tests which verify the design, construction, and operation of safety-related systems, structures, and equipment.

12. Reactor Coolant System (RCS) Depressurization Capability (Section 5.4.3, SSER 8)

Within six months of issuance of an operating license, the licensee shall submit the results of confirmatory tests regarding the depressurization capability of the auxiliary pressurizer spray (APS) system. This information must demonstrate that the APS system can perform the necessary depressurization to meet the steam generator single-tube rupture accident acceptance criteria (SRP 15.6.3) with loop charging isolation valve failed open. Should the test results fail to demonstrate that the acceptance criteria are met, the licensee must provide for staff review and approval, justification for interim operation, and a schedule for corrective actions.

13. Response to Salem ATWS Event (Section 7.2.9, SSER 8)

The licensee shall submit responses and implement the requirements of Generic Letter 83-28 on a schedule which is consistent with that given in the licensee's letter of May 30, 1984.

14. Spent Fuel Storage Racks (Section 9.1.2 SSER 8)

The licensee shall confirm the presence of the Boraflex at all specified design locations in the spent fuel pool rack array prior to startup following the first refueling outage. The spent fuel storage racks may be used prior to satisfactory completion of the confirmatory tests, provided fuel assemblies are stored only in alternate rows and columns in the racks with center-to-center spacing between fuel assemblies of at least 20.5 inches. No more than one fuel assembly shall be outside an approved shipping container, storage rack or fuel transfer tube in the fuel handling building at any time.

15. Qualification of Personnel (Section 13.1.3, SSER 8)

The licensee shall have on each shift operators who meet the requirements described in Attachment 2. Attachment 2 is hereby incorporated into this license.

16. Coatings Inside of Containment (A-256, SSER 9)

Prior to January 18, 1985, the licensee shall provide for staff review and approval an evaluation of the potential adverse effects of the failure of coatings inside of containment on post accident fluid systems.

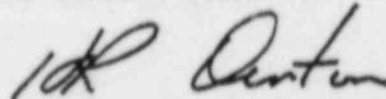
17. Operational QA Enhancement Program (SSER 9)

The items listed below shall be completed on the schedule indicated.

- a. Prior to completion of Phase III of the Waterford 3 startup test program, the licensee shall conduct a comprehensive audit of the Operational QA Program, that will include a summary QA document of the Operational QA Program, the definition of responsibilities and interfaces, and guidance on the location of information on QA matters at all levels of concern.
 - b. Prior to completion of Phase III of the Waterford 3 startup test program, the licensee shall supplement its existing QA training program to incorporate specific discussion of QA problems experienced during construction and how this experience applies to operational activities.
 - c. Prior to completion of Phase III of the Waterford 3 startup test program, the licensee shall address each of the recommendations in the Task Force Support Group (TFSG) Limited Scope Audit Report of LP&L Operational Quality Assurance Program, dated December 4, 1984.
 - d. Prior to completion of Phase III of the Waterford 3 startup test program, the licensee shall complete corrective actions related to the 23 NRC issues as identified in the LP&L responses.
- D. The facility requires an exemption from certain requirements of Appendix J to 10 CFR Part 50. This exemption is described in the Office of Nuclear Reactor Regulation's Safety Evaluation Report, Supplement No. 8 (Section 6.2.6). This exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. This exemption is, therefore, hereby granted pursuant to 10 CFR 50.12. With the granting of this exemption, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. The licensee shall fully implement and maintain in effect all the provisions of the Commission-approved physical security, guard training and qualification and safeguards contingency plans, including amendments made pursuant to the authority of 10 CFR Section 50.54(p). The approved plans, which contain Safeguards Information as described in 10 CFR Section 73.21, are entitled "Physical Security Plan, Waterford Steam Electric Station Unit No. 3", Revision 6, dated July 6, 1981, Revision 7 dated February 23, 1983, Revision 8 dated April 10, 1984 (transmittal letter dated April 11, 1984); "Waterford 3 Steam Electric Station Safeguards Contingency Plan," dated February 1, 1980 as revised July 1, 1980, Revision 2 dated March 14, 1983 and Revision 3, dated January 16, 1984; transmittal letter dated January 12, 1984; "Waterford Steam Electric Station Unit No. 3 Security Training & Qualification Plan" dated February 1, 1980, as revised by pages submitted by letter dated April 23, 1981, Revision 2 dated December 19, 1983, transmittal letter dated December 16, 1983.
- F. The licensee shall report any violations of the requirements contained in Section 2, Items C.(1), C.(3) through C.(15) of this license. Initial notification shall be made within twenty-four (24) hours in accordance with the provisions of 10 CFR 50.72 with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73 (b), (c) and (e).
- G. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- H. This license is effective as the date of issuance and shall expire at midnight on December 18, 2024.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Attachment 1
2. Attachment 2
3. Appendix A (Technical Specifications) (NUREG-0983)
4. Appendix B (Environmental Protection Plan)
5. Appendix C (Antitrust Conditions)

Date of Issuance: DEC 18 1984

ATTACHMENT 1

WATERFORD STEAM ELECTRIC STATION
OPERATING LICENSE NPF-26

This attachment identifies items which must be completed to the Commission's satisfaction in accordance with operational modes as identified below.

- A. The following items must be completed prior to proceeding to Operational Mode 2 (initial criticality).
1. The licensee shall submit a final report for the following significant construction deficiencies:
 - SCD-037 Temperature Detectors (RTDs) Failure
 - SCD-080 Unsatisfactory Stroking of EFW Pump Turbine Steam Supply Shut-Off Valves
 - SCD-093 Charging and Letdown Containment Isolation Valve Deficiency
 2. The licensee shall complete loading and testing of the air cleaning systems for the auxiliary and containment buildings. (8211-09)
 3. The licensee will complete rework on masonry wall S-24. (CAT Findings 6.2 and 6.3)
- B. The following items must be completed prior to proceeding to Operational Mode 1 (power operation).
1. The licensee shall evaluate the emergency load testing using maximum and minimum voltages. (8323-04)
 2. The licensee shall develop a suitable method for verifying the postaccident sampling capability or provide representative samples. (8405-02)
 3. The licensee shall provide verification of representative sampling of the particulate and iodine grab sampling portion of the high range effluent monitor for the main ventilation stack. (8405-03)
- C. The following item must be completed prior to startup following the first refueling outage.
- Continuous, direct position indication in the control room for the containment isolation valves for instrument line penetrations 53 and 65.

ATTACHMENT 2

Waterford Steam Electric Station
Operating License NPF-26Operating Staff Experience Requirements

LP&L shall have a licensed senior operator on each shift who has had at least six months of hot operating experience on a pressurized water reactor, including at least six weeks at power levels greater than 20% of full power, and who has had startup and shutdown experience. For those shifts where such an individual is not available on the plant staff, an advisor shall be provided who has had at least four years of power plant experience, including two years of nuclear plant experience, and who has had at least one year of experience on shift as a licensed senior operator at a similar type facility. Use of advisors who were licensed only at the RO level will be evaluated on a case-by-case basis. Advisors shall be trained on plant procedures, technical specifications and plant systems, and shall be examined on these topics at a level sufficient to assure familiarity with the plant. For each shift, the remainder of the shift crew shall be trained in the role of the advisors. The training of the advisors and remainder of the shift crew shall be completed at least one week prior to exceeding 5% power. Prior to exceeding 5% power, LP&L shall certify to the NRC the names of the advisors who have been examined and have been determined to be competent to provide advice to the operating shifts. These advisors, or fully trained and qualified replacements, shall be retained until the experience levels identified in the first sentence above have been achieved. The names of any replacement advisors shall be certified by LP&L prior to these individuals being placed on shift. The NRC shall be notified at least 30 days prior to the date LP&L proposes to release the advisors from further service.