



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

UNION ELECTRIC COMPANY
CALLAWAY PLANT, UNIT NO. 1
DOCKET NO. 50-483
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 107
License No. NPF-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Callaway Plant, Unit 1 (the facility) Facility Operating License No. NPF-30 filed by the Union Electric Company (the licensee), dated June 21, 1994, as amended by letter dated October 23, 1995, 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, as amended, 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 license 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. NPF-30 is hereby amended to read as follows:

2. Technical Specifications

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 107, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. UE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance. The Technical Specifications are to be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Kristine M. Thomas

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Attachment: Changes to the Technical
Specifications

Date of Issuance: December 26, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 107

FACILITY OPERATING LICENSE NO. NPF-30

DOCKET NO. 50-483

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

<u>REMOVE</u>	<u>INSERT</u>
XIX	XIX
XX	XX
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6-6	6-6
6-7	6-7
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6-9	---
6-10	---
6-11	---
6-12	---
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*Denotes overleaf page

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TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODE 1, 2, 3 or 4	MODE 5 or 6
SS	1	1*
SRO	1	None
RO	2	1
EO	2	1
STA	1**	None

- SS - Shift Supervisor with a Senior Operator license on Unit 1
- SRO - Individual with a Senior Operator license on Unit 1
- RO - Individual with an Operator license on Unit 1
- EO - Equipment Operator
- STA - Shift Technical Advisor

The Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the control room while the unit is in MODE 1, 2, 3, or 4, an individual with a valid Senior Operator license shall be designated to assume the control room command function. During any absence of the Shift Supervisor from the control room while the unit is in MODE 5 or 6, an individual with a valid Senior Operator or Operator license shall be designated to assume the control room command function.

*One SRO, either Shift Supervisor or Operating Supervisor.

**The STA position shall be manned in MODES 1, 2, 3, and 4 unless the Shift Supervisor or the individual with a Senior Operator license meets the qualifications for the STA as required by the NRC.

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6.2.3 INDEPENDENT SAFETY ENGINEERING GROUP (ISEG)

FUNCTION

6.2.3.1 The ISEG shall function to examine plant operating characteristics, NRC issuances, industry advisories, REPORTABLE EVENTS and other sources of plant design and operating experience information, including plants of similar design, which may indicate areas for improving plant safety. The ISEG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities or other means of improving plant safety to the Manager, Quality Assurance and the Manager, Callaway Plant.

COMPOSITION

6.2.3.2 The ISEG shall be composed of at least five, dedicated, full-time engineers located on site. Each shall have a bachelor's degree in engineering or related science and at least 2 years professional level experience in his field.

RESPONSIBILITIES

6.2.3.3 The ISEG shall be responsible for maintaining surveillance of plant activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

RECORDS

6.2.3.4 Records of activities performed by the ISEG shall be prepared, maintained, and forwarded each calendar month to the Manager, Quality Assurance and the Manager, Callaway Plant.

6.2.4 SHIFT TECHNICAL ADVISOR

The Shift Technical Advisor (STA)** shall provide technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering and plant analysis with regard to the safe operation of the unit.

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 with the following exceptions:

6.3.1.1 Shift Supervisors, Operating Supervisors, Reactor Operators, and Shift Technical Advisors shall meet or exceed the qualifications of ANSI/ANS 3.1-1981 as endorsed by Reg. Guide 1.8, Revision 2, with the same exceptions as contained in the current revision to the Operator Licensing Examiner Standards, NUREG-1021, ES-202.

6.3.1.2 The Radiation Protection Manager shall be a supervisor with line responsibility for operational health physics who meets or exceeds the qualifications of USNRC Regulatory Guide 1.8, September 1975, for a Radiation Protection Manager. The Radiation Protection Manager will be designated by the Plant Manager.

*Not responsible for sign-off function.

**The STA position shall be manned in MODES 1, 2, 3 and 4 unless the Shift Supervisor or the individual with a Senior Operator license meets the qualifications for the STA as required by the NRC.

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6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Superintendent, Training.

6.4.2 The training programs for Shift Supervisors, Operating Supervisors, Reactor Operators, and Shift Technical Advisors shall meet or exceed the requirements and recommendations of Section 5 of ANSI/ANS 3.1-1981 as endorsed by Regulatory Guide 1.8, Rev. 2, with the same exceptions as contained in the current revision to the Operator Licensing Examiner Standards, NUREG-1021, ES-202, and 10 CFR Part 55.

6.4.3 All other training programs shall meet or exceed the requirements and recommendations of Section 5 of ANSI/ANS 3.1-1978.

6.4.4 Training shall include familiarization with relevant industry operational experience identified by the ISEG.

6.5 REVIEW AND AUDIT

6.5.1 ON-SITE REVIEW COMMITTEE (ORC)

(This section deleted)

6.5.2 NUCLEAR SAFETY REVIEW BOARD (NSRB)

(This section deleted)

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6.5.3 TECHNICAL REVIEW AND CONTROL

ACTIVITIES

6.5.3.1 Activities which affect nuclear safety shall be conducted as follows:

- a. Procedures required by Specification 6.8 and other procedures which affect plant nuclear safety, and changes thereto, shall be prepared, reviewed and approved. Each such procedure or procedure change shall be reviewed by a qualified individual/group other than the individual/group which prepared the procedure or procedure change, but who may be from the same organization as the individual/group which prepared the procedure or procedure change. Procedures other than Administrative Procedures shall be approved by the appropriate Department Head as designated in writing by the Vice President, Nuclear Operations. The Manager, Callaway Plant, shall approve Administrative Procedures and Radiological Emergency Response Plan implementing procedures. The Manager, Operations Support, shall approve the Security Plan implementing procedures. Temporary changes to procedures which do not change the intent of the approved procedures shall be approved for implementation by two members of the plant staff, at least one of whom holds a Senior Operator license, and documented. The temporary changes shall be approved by the original approval authority within 14 days of implementation. For changes to procedures which may involve a change in intent of the approved procedures, the person authorized above to approve the procedure shall approve the change prior to implementation;
- b. Proposed changes or modifications to plant nuclear safety-related structures, systems and components shall be reviewed as designated by the Manager, Callaway Plant. Each such modification shall be reviewed by a qualified individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modifications. Proposed modifications to plant nuclear safety-related structures, systems and components shall be approved prior to implementation by the Manager, Callaway Plant;
- c. Proposed tests and experiments which affect plant nuclear safety and are not addressed in the Final Safety Analysis Report or Technical Specifications shall be prepared, reviewed, and approved. Each such test or experiment shall be reviewed by a qualified individual/group other than the individual/group which prepared the proposed test or experiment. Proposed tests and experiments shall be approved before implementation by the Manager, Callaway Plant;

ADMINISTRATIVE CONTROLS

ACTIVITIES (Continued)

- d. Individuals responsible for reviews performed in accordance with Specifications 6.5.3.1a., 6.5.3.1b., and 6.5.3.1c., shall be members of the management staff previously designated by the Manager, Operations Support. Each such review shall include a determination of whether or not additional, cross-disciplinary, review is necessary. If deemed necessary, such review shall be performed by qualified personnel of the appropriate discipline;
- e. Each review shall include a determination of whether or not an unreviewed safety question is involved. Pursuant to Section 50.59, 10 CFR, NRC approval of items involving unreviewed safety questions shall be obtained prior to the Manager, Callaway Plant, approval for implementation; and
- f. The Plant Security Plan and Radiological Emergency Response Plan, and implementing procedures, shall be reviewed at least once per 12 months. Recommended changes to the implementing procedures shall be approved in accordance with 6.5.3.1.a. Recommended changes to the Plans shall be reviewed pursuant to the Operational Quality Assurance Manual and approved by the Manager, Callaway Plant. NRC approval shall be obtained as appropriate.

RECORDS

6.5.3.2 Records of the above activities shall be provided to the Manager, Callaway Plant, ORC and/or NSRB as necessary for required reviews.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 of 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the ORC and submitted to the NSRB and the Senior Vice President-Nuclear.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Senior Vice President-Nuclear and the NSRB shall be notified within 24 hours;
- b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the ORC. This report shall describe: (1) applicable circumstances preceding the violation; (2) effects of the violation upon facility components, systems or structures; and (3) corrective action taken to prevent recurrence;

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SAFETY LIMIT VIOLATION (Continued)

- c. The Safety Limit Violation Report shall be submitted to the Commission, the NSRB and the Senior Vice President-Nuclear within 14 days of the violation; and
- d. Critical operation of the unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978;
- b. The emergency operating procedures required to implement the requirements of NUREG-0737 and Supplement 1 to NUREG-0737 as stated in Section 7.1 of Generic Letter No. 82-33;
- c. Plant Security Plan implementation;
- d. Radiological Emergency Response Plan implementation;
- e. PROCESS CONTROL PROGRAM implementation,
- f. OFFSITE DOSE CALCULATION MANUAL implementation,
- g. Quality Assurance Program implementation for effluent and environmental monitoring, and
- h. Fire Protection Program implementation.

6.8.2 Each procedure and administrative policy of Specification 6.8.1 above, and changes thereto, including temporary changes shall be reviewed prior to implementation as set forth in Specification 6.5 above.

6.8.3 The plant Administrative Procedures and changes thereto shall be reviewed in accordance with the Operational Quality Assurance Manual and approved in accordance with Specification 6.5.3.1. The associated implementing procedures and changes thereto shall be reviewed and approved in accordance with Specification 6.5.3.1.

6.8.4 The following programs shall be established, implemented, and maintained:

- a. Reactor Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the recirculation portion of the Containment Spray System, Safety Injection System, Chemical and Volume Control System, and RHR System. The program shall include the following:

- 1) Preventive maintenance and periodic visual inspection requirements, and

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PROCEDURES AND PROGRAMS (Continued)

- 2) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- 1) Training of personnel,
- 2) Procedures for monitoring, and
- 3) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- 1) Identification of a sampling schedule for the critical variables and control points for these variables,
- 2) Identification of the procedures used to measure the values of the critical variables,
- 3) Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- 4) Procedures for the recording and management of data,
- 5) Procedures defining corrective action for all off-control point chemistry conditions, and
- 6) A procedure identifying: (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Post-accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- 1) Training of personnel,
- 2) Procedures for sampling and analysis, and
- 3) Provisions for maintenance of sampling and analysis equipment.