



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

ALABAMA POWER COMPANY

DOCKET NO. 50-348

JOSEPH M. FARLEY NUCLEAR PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 7
License No. NPF-2

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Alabama Power Company (the licensee) dated April 26, 1978, complies with the standards and the 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, 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 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.
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-2 is hereby amended to read as follows:

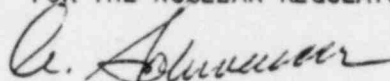
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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 7, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors, Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 13, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 7

FACILITY OPERATING LICENSE NO. NPF-2

DOCKET NO. 50-348

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

Remove

3/4 4-2
3/4 4-14
3/4 7-23
6-8
6-9

Replace

3/4 4-2
3/4 4-14
3/4 7-23
6-8
6-9

3/4.4 REACTOR COOLANT SYSTEM

REACTOR COOLANT LOOPS

LIMITING CONDITION FOR OPERATION

3.4.1. All reactor coolant loops shall be in operation.

APPLICABILITY: As noted below, but excluding MODE 6.*

ACTION:

Above P-7, comply with either of the following ACTIONS:

- a. With one reactor coolant loop and associated pump not in operation, STARTUP and/or continued POWER OPERATION may proceed provided THERMAL POWER is restricted to less than 36% of RATED THERMAL POWER and the following ESF instrumentation channels associated with the loop not in operation, are placed in their tripped condition within 1 hour:
 1. T_{avg} -- Low-Low channel used in the coincidence circuit with Steam Flow - High for Steam Line Isolation.
 2. Steam Line Pressure - Low for Safety Injection.
 3. Steam Flow-High Channel used for MSIV Isolation.
 4. Differential Pressure Between Steam Lines - High channel used for Safety Injection (trip all bistables which indicate low active loop steam pressure with respect to the idle loop steam pressure).
- b. With one reactor coolant loop and associated pump not in operation, subsequent STARTUP and POWER OPERATION above 36% of RATED THERMAL POWER may proceed provided:
 1. The following actions have been completed with the reactor in at least HOT STANDBY.
 - a) Reduce the overtemperature ΔT trip setpoint to the value specified in Specification 2.2.1 for 2 loop operation.

*See Special Test Exception 3.10.4.

REACTOR COOLANT SYSTEM

ACTION (Continued)

- b) Place the following reactor trip system and ESF instrumentation channels, associated with the loop not in operation, in their tripped conditions:
- 1) Overpower ΔT channel.
 - 2) Overtemperature ΔT channel.
 - 3) T_{avg} -- Low-Low channel used in the coincidence circuit with Steam Flow - High for Steam Line Isolation.
 - 4) Steam Line Pressure - Low channel used for Safety Injection.
 - 5) Steam Flow-High channel used for MSIV Isolation.
 - 6) Differential Pressure Between Steam Lines - High channel used for Safety Injection (trip all bistables which indicate low active loop steam pressure with respect to the idle loop steam pressure).
- c) Change the P-8 interlock setpoint from the value specified in Table 3.3-1 to $\leq 66\%$ of RATED THERMAL POWER.

2. THERMAL POWER is restricted to $\leq 61\%$ of RATED THERMAL POWER.

Below P-7:

- a. With $K_{eff} \geq 1.0$, operation may proceed provided at least two reactor coolant loops and associated pumps are in operation.
- b. With $K_{eff} < 1.0$, operation may proceed provided at least one reactor coolant loop is in operation with an associated reactor coolant or residual heat removal pump.*
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

*All reactor coolant pumps and residual heat removal pumps may be deenergized for up to one (1) hour provided no operations are permitted which could cause dilution or reactor coolant system boron concentration.

TABLE 4.4-2

STEAM GENERATOR TUBE INSPECTION

| 1ST SAMPLE INSPECTION | | | 2ND SAMPLE INSPECTION | | 3RD SAMPLE INSPECTION | |
|--------------------------------|--------|--|---|--|-----------------------|----------------------|
| Sample Size | Result | Action Required | Result | Action Required | Result | Action Required |
| A minimum of S Tubes per S. G. | C-1 | None | N/A | N/A | N/A | N/A |
| | C-2 | Plug defective tubes and inspect additional 2S tubes in this S. G. | C-1 | None | N/A | N/A |
| | | | C-2 | Plug defective tubes and inspect additional 4S tubes in this S. G. | C-1 | None |
| | | | | | C-2 | Plug defective tubes |
| | | | C-3 | Perform action for C-3 result of first sample | N/A | N/A |
| | C-3 | Inspect all tubes in this S. G., plug defective tubes and inspect 2S tubes in each other S. G. Prompt notification to NRC pursuant to specification 6.9.1 | All other S. G.s are C-1 | None | N/A | N/A |
| | | | Some S. G.s C-2 but no additional S. G. are C-3 | Perform action for C-2 result of second sample | N/A | N/A |
| | | | Additional S. G. is C-3 | Inspect all tubes in each S. G. and plug defective tubes. Prompt notification to NRC pursuant to specification 6.9.1 | N/A | N/A |

$S = 3 \frac{N}{n} \%$ Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection

REACTOR COOLANT SYSTEM

3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE

LEAKAGE DETECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.6.1 The following Reactor Coolant System leakage detection systems shall be OPERABLE:

- a. The containment atmosphere particulate radioactivity monitoring system (R-11), and
- b. A containment air cooler condensate level monitoring system or, the containment atmosphere gaseous radioactivity monitoring system (R-12).

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one of the above required leakage detection systems inoperable, operation may continue for up to 7 days provided:
 1. One of the two above required leakage detection systems are OPERABLE, and
 2. Appropriate grab samples are obtained and analyzed at least once per 24 hours:

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

PLANT SYSTEMS

3/4.7.8 ECCS PUMP ROOM EXHAUST AIR FILTRATION
(PENETRATION ROOM FILTRATION SYSTEM)

LIMITING CONDITION FOR OPERATION

3.7.8.1 Two independent penetration room filtration systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one penetration room filtration system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.8.1 Each penetration room filtration system shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
 1. Initiating, from the control room, flow through the HEPA filter and charcoal adsorber train and verifying that the train operates for at least 15 minutes.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communication with the system by:
 1. Verifying that with the system operating at a flow rate of 5000 cfm \pm 10% and exhausting through the HEPA filters and charcoal adsorbers, the total bypass flow of the system to the facility vent, including leakage through the system diverting valves, is \leq 1% when the system is tested by admitting cold DOP at the system intake.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Position C.5.c and C.5.d of Regulatory Guide 1.52, Revision 1, July 1976, and the system flow rate is 5000 cfm \pm 10%.
 3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 1, July 1976, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 1, July 1976.
 4. Verifying a system flow rate of 5000 cfm \pm 10% during system operation when tested in accordance with ANSI N510-1975.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 1, July 1976, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 1, July 1976.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 5000 cfm \pm 10%.
 2. Verifying that the filter train starts on a Phase B Actuation Test Signal.
 3. Verifying that the heaters dissipate 25 \pm 2.5 kw when tested in accordance with ANSI N510-1975.

ADMINISTRATIVE CONTROLS

- j. The plant Security Plan.
- k. The Emergency Plan.
- l. Facility operations to detect potential nuclear safety hazards.
- m. Performance of special reviews, investigations or analyses and reports thereon as requested by the Chairman of the Nuclear Operations Review Board.

AUTHORITY

6.5.1.7 The PORC shall:

- a. Recommend to the Plant Manager written approval or disapproval of items considered under 6.5.1.6(a) through (e) and (j) and (k) above.
- b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6(a), (c) and (d) above constitutes an unreviewed safety question.
- c. Make recommendations to the Plant Manager in writing that actions reviewed under 6.5.1.6(b) above did not constitute an unreviewed safety question.

RECORDS

6.5.1.8 The PORC shall maintain written minutes of each meeting and copies shall be provided to the Vice President-Power Supply and Chairman of the Nuclear Operations Review Board.

6.5.2 NUCLEAR OPERATIONS REVIEW BOARD NORB

FUNCTION

6.5.2.1 The NORB shall function to provide independent review and audit of designated activities in the areas of:

- a. Nuclear power plant operations
- b. Nuclear engineering
- c. Chemistry and radiochemistry

ADMINISTRATIVE CONTROLS

- d. Metallurgy
- e. Instrumentation and control
- f. Radiological safety
- g. Mechanical and electrical engineering
- h. Quality assurance practices

COMPOSITION

6.5.2.2 The NORB shall be composed of at least five persons including;

| | |
|--------------------------|--------------------------------------|
| Chairman: | Senior Vice President |
| Vice Chairman: | Vice President-Production |
| Alternate Vice Chairman: | Vice President-Power Supply Services |
| Secretary: | Manager-Operations Quality Assurance |
| Member: | Manager-Nuclear Generation |

and other appointed personnel having an academic degree in an engineering or physical science field and a minimum of five years technical experience, of which a minimum of three years shall be in one or more of the areas given in 6.5.2.1.

ALTERNATES

6.5.2.3 All alternate members shall be appointed in writing by the NORB Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in NORB activities at any one time.

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the NORB Chairman to provide expert advice to the NORB.

MEETING FREQUENCY

6.5.2.5 The NORB shall meet at least once per calendar quarter during the initial year of facility operation following fuel loading and at least once per six months thereafter.

ADMINISTRATIVE CONTROLS

QUORUM

6.5.2.6 A quorum shall consist of the Chairman or Vice Chairman or Alternate Vice Chairman plus enough voting members to constitute a majority of the NORB. No more than a minority of the quorum shall have line responsibility for operation of the facility. For the purpose of a quorum those considered to have line responsibility will include the Manager - Nuclear Generation, Plant Manager and personnel reporting to the Plant Manager.

REVIEW

6.5.2.7 The NORB shall review:

- a. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- b. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- c. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance or abnormal degradation of systems designed to contain radioactive material.
- d. Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- e. All written reports concerning events requiring 24 hour notification to the Commission.
- f. All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety related structures, systems, or components.
- g. Reports and meetings minutes of the PORC.
- h. Proposed changes to Technical Specifications or this Operating License.
- i. The safety evaluations for proposed 1) procedures 2) changes to procedures, equipment or systems and 3) test or experiments completed under the provision of Section 50.59 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

ADMINISTRATIVE CONTROLS

AUDITS

6.5.2.8 The following audits shall be conducted under the direction of APCO's Manager - Operations Quality Assurance:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire facility staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.
- d. The performance of activities required by the operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Facility Emergency Plan at least once per 24 months.
- f. The Facility Security Plan at least once per 24 months.
- g. Any other area of facility operation considered appropriate by the NORB or the Senior Vice President.
- h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant at least once per 36 months.
- k. At each scheduled NORB meeting the Manager - Operations Quality Assurance shall make a summary report of these activities.

AUTHORITY

6.5.2.9 The NORB shall report to and advise the Senior Vice President on those areas of responsibility specified in Sections 6.5.2.7 and 6.5.2.8.

RECORDS

6.5.2.10 Records of NORB activities shall be prepared, approved and distributed as indicated below: