



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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 5
License No. NPF-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Arkansas Power & Light Company (the licensee) dated September 22, 1978, as supplemented October 17, 1978, 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, 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.

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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-6 is hereby amended to read as follows:

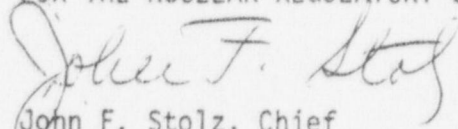
(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 5, are hereby incorporated in the license. Arkansas Power and Light Company shall operate the facility in accordance with the Technical Specifications.

The licensee shall be exempted from compliance with the following Appendix A Technical Specification related to the steam generator low water level trip setpoint while conducting the steam generator feedwater system waterhammer testing during the initial startup and power ascension testing program. The value of the steam generator low water level trip setpoint in Item 8(b) of Technical Specification Table 3.3-4 may be reduced, during this testing only, from a value of greater than or equal to 49.4 percent to greater than or equal to 10.0 percent. The licensee shall be exempted from compliance with Appendix A Technical Specification 3.3.3.6 for the Containment Radiation Monitors during Mode 3 operations.

3. This license amendment becomes effective no later than 90 days after the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Chief
Light Water Reactors Branch #1
Division of Project Management

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 13, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 5

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace the following pages of the Appendices "A" and "B" 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.

Appendix "A"

Pages

6-1
6-2
6-3
6-5
6-6
6-7
6-8
6-13
6-14
6-15

Appendix "B"

Pages

5-1
5-10

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The General Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

OFFSITE

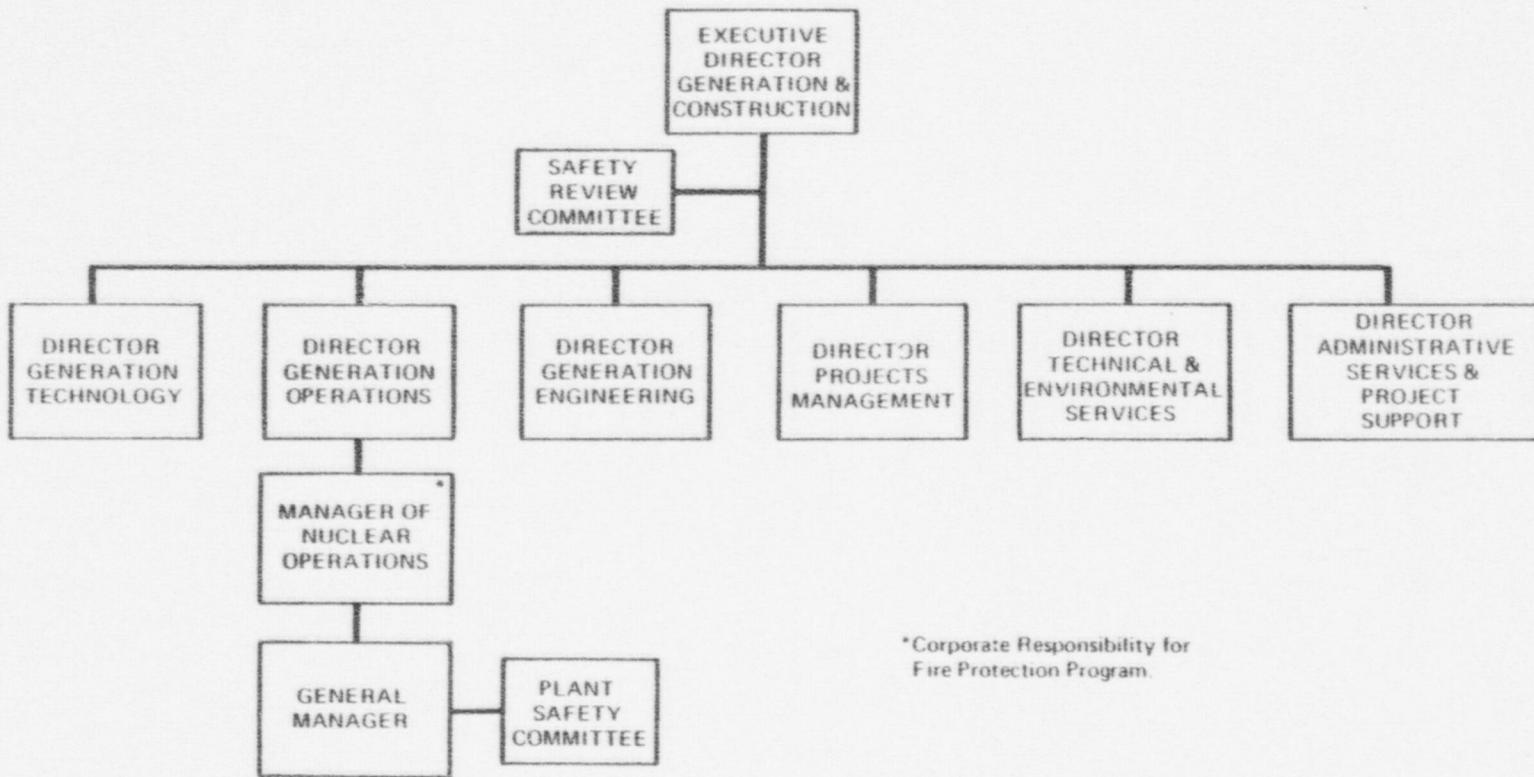
6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2-1.

FACILITY STAFF

6.2.2 The Facility organization shall be as shown on Figure 6.2-2 and:

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor.
- c. At least two licensed Operators shall be present in the control room during reactor start-up, scheduled reactor shutdown and during recovery from reactor trips.
- d. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor.
- e. All CORE ALTERATIONS shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- f. A site Fire Brigade of at least 5 members shall be maintained onsite at all times. The Fire Brigade shall not include 3 members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.

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*Corporate Responsibility for
Fire Protection Program.

Figure 6.2-1 Management Organization Chart

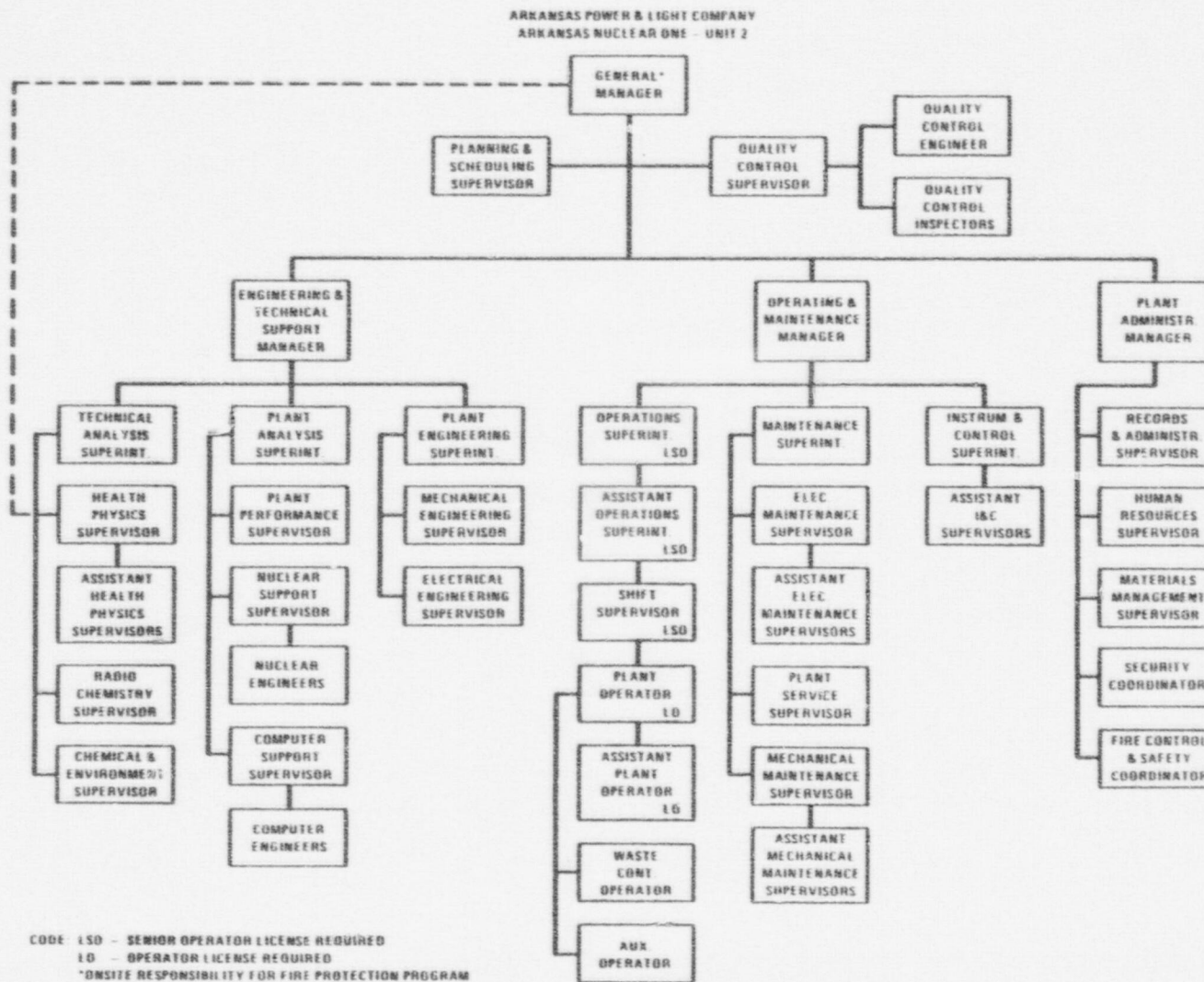


Figure 6.2-2 Functional Organization for Plant Operation

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION#

LICENSE CATEGORY	APPLICABLE MODES	
	1, 2, 3 & 4	5 & 6
SOL	1	1*
OL	2	1
Non-Licensed	2	1

*Does not include the licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising CORE ALTERATIONS.

#Shift crew composition may be less than the minimum requirements 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.

ADMINISTRATIVE CONTROLS

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Health Physics Supervisor who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the General Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the General Manager and shall meet or exceed the requirements of Section 27 of the NFPA Code - 1975, except for Fire Brigade training sessions which shall be held at least quarterly.

6.5 REVIEW AND AUDIT

6.5.1 PLANT SAFETY COMMITTEE (PSC)

FUNCTION

6.5.1.1 The Plant Safety Committee shall function to advise the General Manager on all matters related to nuclear safety.

COMPOSITION

6.5.1.2 The Plant Safety Committee shall be composed of the:

Chairman:	Operations and Maintenance Manager
Member:	Operations Superintendent
Member:	Technical Analysis Superintendent
Member:	Maintenance Superintendent
Member:	Instrumentation & Controls Superintendent
Member:	Plant Analysis Superintendent
Member:	Health Physics Supervisor

The General Manager shall appoint in writing an acting chairman in the absence of the Operations and Maintenance Manager.

ADMINISTRATIVE CONTROLS

ALTERNATES

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

MEETING FREQUENCY

6.5.1.4 The PSC shall meet at least once per calendar month and as convened by the PSC Chairman or his designated alternate.

QUORUM

6.5.1.5 The minimum quorum of the PSC necessary for the performance of the PSC responsibility and authority provisions of these technical specifications shall consist of the Chairman or his designated alternate and three members including alternates.

RESPONSIBILITIES

6.5.1.6 The Plant Safety Committee shall be responsible for:

- a. Review of 1) all procedures required by Specification 6.8 and changes thereto, 2) any other proposed procedures or changes thereto as determined by the General Manager to affect nuclear safety.
- b. Review of all proposed tests and experiments that affect nuclear safety.
- c. Review of all proposed changes to Appendix "A" Technical Specifications.
- d. Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety.
- e. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the General Manager and to the Chairman of the Safety Review Committee.

ADMINISTRATIVE CONTROLS

- f. Review of events requiring 24 hour written notification to the Commission.
- g. Review of facility operations to detect potential nuclear safety hazards.
- h. Performance of special reviews, investigations or analyses and reports thereon as requested by the General Manager or the Safety Review Committee.
- i. Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the Safety Review Committee.
- j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the Safety Review Committee.

AUTHORITY

6.5.1.7 The Plant Safety Committee shall:

- a. Recommend in writing to the General Manager approval or disapproval of items considered under 6.5.1.6(a) through (d) above.
- b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6(a) through (e) above constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Director, Generation Operations and the Safety Review Committee of disagreement between the PSC and the General Manager; however, the General Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 The Plant Safety Committee shall maintain written minutes of each PSC meeting that, at a minimum, document the results of all PSC activities performed under the responsibility and authority provisions of these technical specifications. Copies shall be provided to the General Manager and Chairman of the Safety Review Committee.

ADMINISTRATIVE CONTROLS

6.5.2 SAFETY REVIEW COMMITTEE (SRC)

FUNCTION

6.5.2.1 The Safety Review Committee 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
- d. metallurgy
- e. instrumentation and control
- f. radiological safety
- g. mechanical and electrical engineering
- h. quality assurance practices

COMPOSITION

6.5.2.2 The SRC shall be composed of the:

Chairman:	Director, Generation Operations
Member:	Director, Generation Technology
Member:	Director, Technical and Environmental Services
Member:	Manager of Safety
Member:	Arkansas Nuclear One General Manager
Member:	Manager, Technical Analysis
Member:	Arkansas Nuclear One Plant Analysis Superintendent
Member:	Director, Generation Engineering
Member:	Radiation and Health Physics Consultant*
Member:	Nuclear Safety Consultant*

*The Radiation and Health Physics Consultant and the Nuclear Safety Consultant shall have an academic degree in engineering or physical science field; and in addition, each shall have a minimum of five years technical experience, of which a minimum of three years shall be in their respective field of expertise.

ADMINISTRATIVE CONTROLS

6.7 SAFETY LIMIT VIOLATION

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

- a. The unit shall be placed in at least HOT STANDBY within one hour.
- b. The Safety Limit violation shall be reported to the Commission, the Manager, Nuclear Operations and to the SRC within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PSC. 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.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the SRC and the Manager, Nuclear Operations within 14 days of the violation.

6.8 PROCEDURES

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. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Program implementation.

6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed by the PSC and approved by the General Manager prior to implementation and reviewed periodically as set forth in administrative procedures.

ADMINISTRATIVE CONTROLS

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered.
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.
- c. The change is documented, reviewed by the PSC and approved by the General Manager within 14 days of implementation.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ADMINISTRATIVE CONTROLS

ANNUAL REPORTS^{1/}

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

6.9.1.5 Reports required on an annual basis shall include:

- a. A tabulation on an annual basis for the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions,^{2/} e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.
- b. The complete results of steam generator tube inservice inspections performed during the report period (reference Specification 4.4.5.5.b).

^{1/} A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

^{2/} This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

ADMINISTRATIVE CONTROLS

MONTHLY OPERATING REPORT

6.9.1.6 Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Director, Office of Management and Program Analysis, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Office of Inspection and Enforcement, no later than the 15th of each month following the calendar month covered by the report.

REPORTABLE OCCURRENCES

6.9.1.7 The REPORTABLE OCCURRENCES of Specifications 6.9.1.8 and 6.9.1.9 below, including corrective actions and measures to prevent recurrence, shall be reported to the NRC. Supplemental reports may be required to fully describe final resolution of occurrence. In case of corrected or supplemental reports, a licensee event report shall be completed and reference shall be made to the original report date.

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP

6.9.1.8 The types of events listed below shall be reported within 24 hours by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Director of the Regional Office, or his designate no later than the first working day following the event, with a written followup report within 14 days. The written followup report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Failure of the reactor protection system or other systems subject to limiting safety system settings to initiate the required protective function by the time a monitored parameter reaches the setpoint specified as the limiting safety system setting in the technical specifications or failure to complete the required protective function.
- b. Operation of the unit or affected systems when any parameter or operation subject to a limiting condition for operation is less conservative than the least conservative aspect of the limiting condition for operation established in the technical specifications.
- c. Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment.

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

Corporate responsibility for implementation of the Environmental Technical Specifications, and for assuring that station operations are controlled to provide protection for the environment has been assigned to the Executive Director of Generation and Construction.

The ANO General Manager, through the Engineering and Technical Support Manager, and Technical Analysis Superintendent shall be responsible for compliance with the Environmental Technical Specifications at the plant level.

The Manager of Technical Analysis shall be responsible for radiological analysis of environmental samples.

5.2 Organization

Figure 5-1 shows the organization chart at both plant and corporate levels relative to environmental matters.

5.3 Review

5.3.1 Plant Safety Committee

The Plant Safety Committee (PSC) shall be responsible for review of the following:

- a. Proposed changes to the Environmental Technical Specifications and the evaluated impact of the changes.
- b. Proposed written procedures, as described in Specification 5.5, and proposed changes thereto which affect the plant's environmental impact.

- c. Proposed changes or modifications to plant systems or equipment which would affect the plant's environmental impact.
- d. Results of the Environmental Monitoring Programs.
- e. Investigation of all reported instances of violations of Environmental Technical Specifications. Where investigation warrants, instances shall be evaluated and recommendations formulated to prevent recurrence.

5.3.2 Safety Review Committee

The Safety Review Committee (SRC) shall be responsible for review of the following:

- a. The environmental evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under Section 5.7.3, to verify that such actions did not constitute an unreviewed environmental question.
- b. Proposed changes to procedures, equipment or systems which involve an unreviewed environmental question as defined in Section 5.7.3.B.
- c. Proposed changes to the Environmental Technical Specifications and the evaluated impact of the changes.
- d. Results of the Environmental Monitoring Programs.
- e. Investigation of all reported instances of violations of Environmental Technical Specifications.

- a. Records and drawing changes reflecting plant design modifications made to systems and equipment as described in Specification 5.6.3.
- b. Records of environmental surveillance data.
- c. Records to demonstrate compliance with the limiting conditions for operation in Section 2.

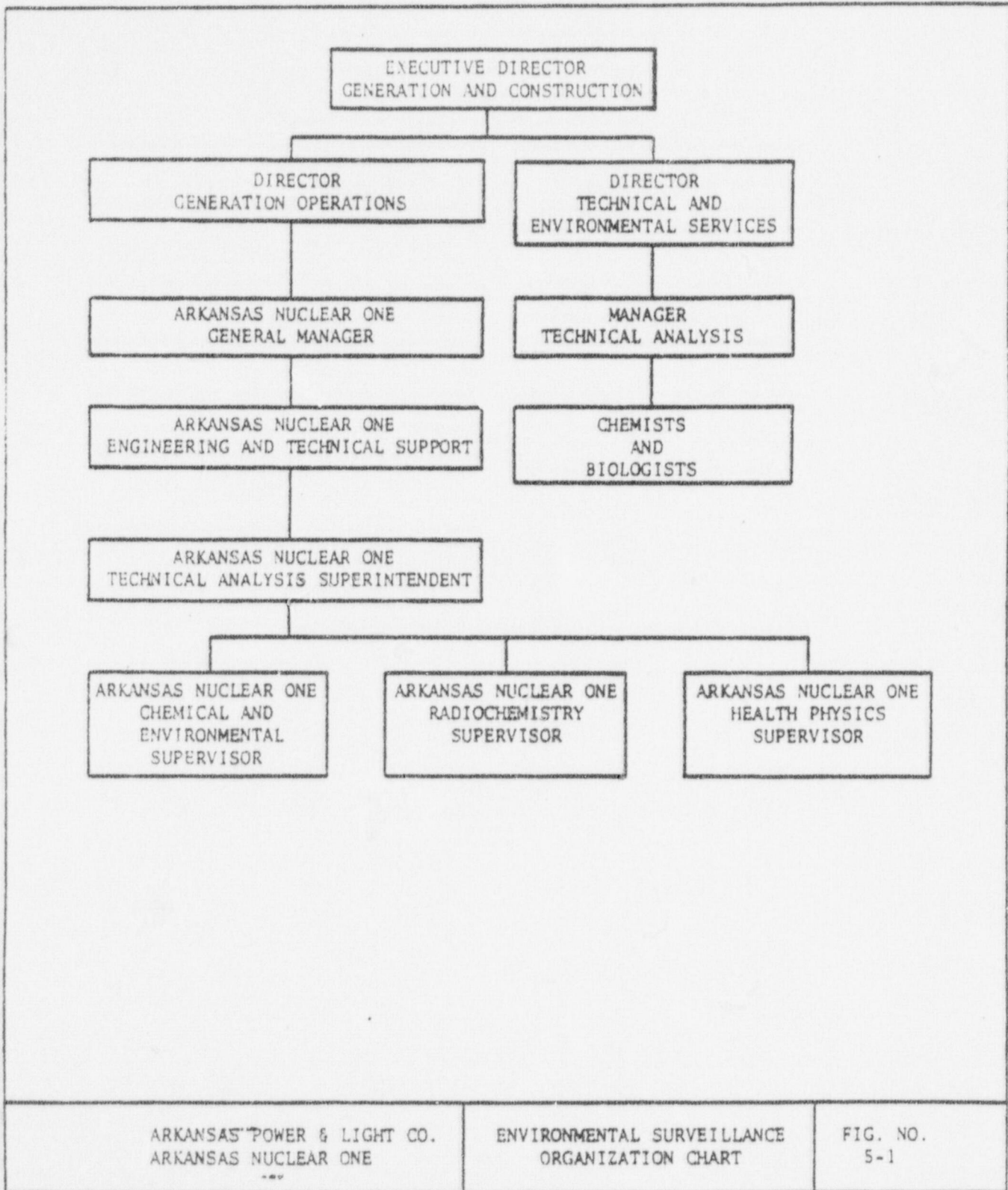
5.8.2 All other records and logs relating to the environmental technical specifications shall be retained for five years.

5.9 Special Requirements

The ANO-2 transmission line rights-of-way have low growing species of cedar, sumac, oak and shrubs as a screen and to assist with erosion control.

Planting of grass and clover shall be carried out to further prevent erosion. Further plantings of game food and clover shall be made in cooperation with landowners and the Arkansas Game and Fish Commission. No herbicides shall be used for land management on transmission line right-of-way.

The grounds in the immediate vicinity of the plant building shall be landscaped. Remaining portions of the plant site shall be allowed to remain in their present wild state with the exception of the area on which the visitors center will be located. This area is located approximately 0.7 miles north east of the Containment on a hill overlooking the plant.



ARKANSAS POWER & LIGHT CO.
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ENVIRONMENTAL SURVEILLANCE
ORGANIZATION CHART

FIG. NO.
5-1