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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 37
License No. DPR-51

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.

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. DPR-51 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 37, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Robert W. Reid

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 13, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 37

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

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. Corresponding overleaf pages are also provided to maintain document completeness.

Appendix "A" Pages

117

119

120

120-a (new)

121

121-a (new)

122 - 124

126 & 127

Appendix "B" Pages

ii & iii

2-5

5-1 - 5-9

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 Figures 6.2-2A, B, C, and D. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable position, 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 facility staff shall be maintained 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 fire protection training shall be maintained and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975 with the exception of frequency of training which shall be six times per year.

6.5 REVIEW AND AUDIT

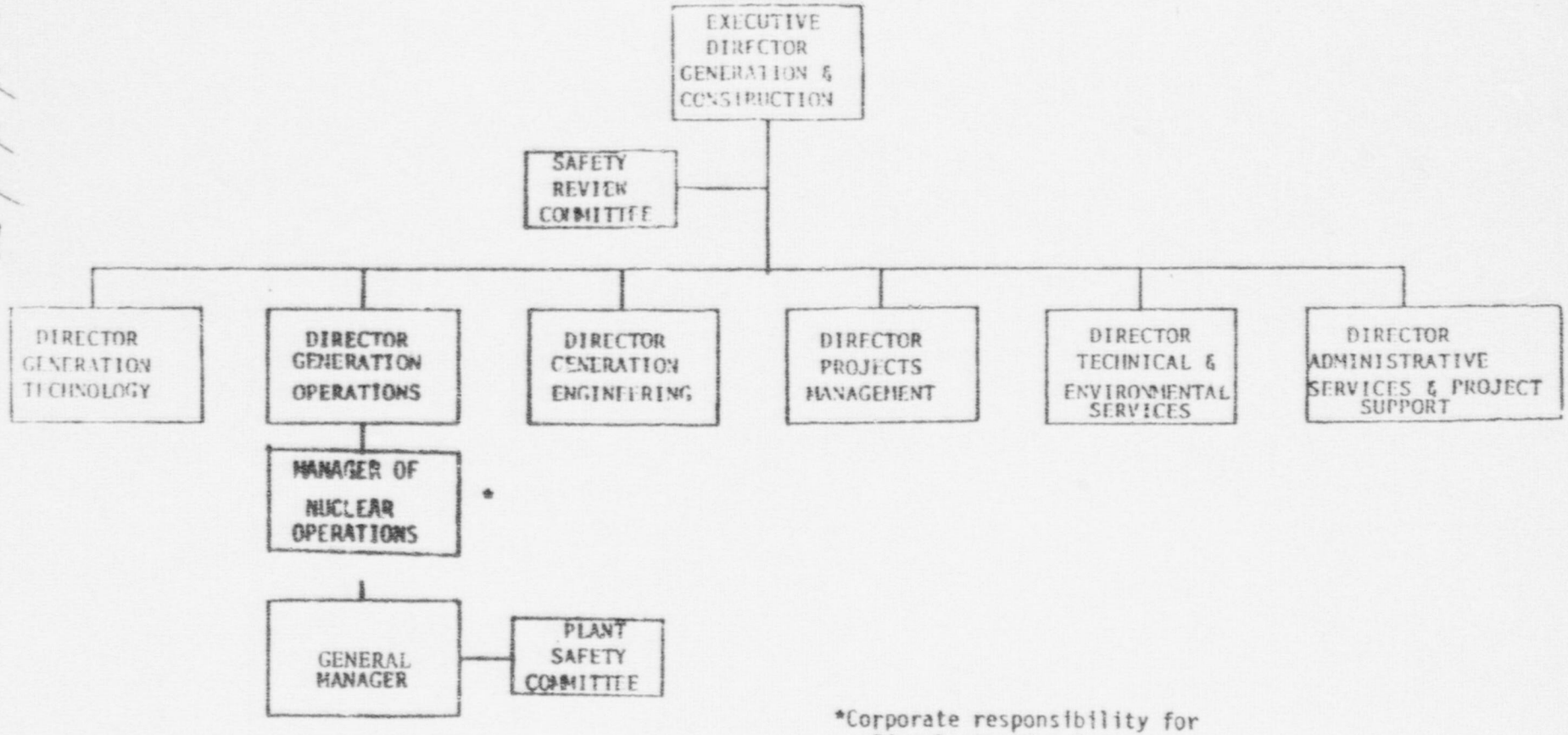
6.5.1 Plant Safety Committee (PSC) Function

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

COMPOSITION

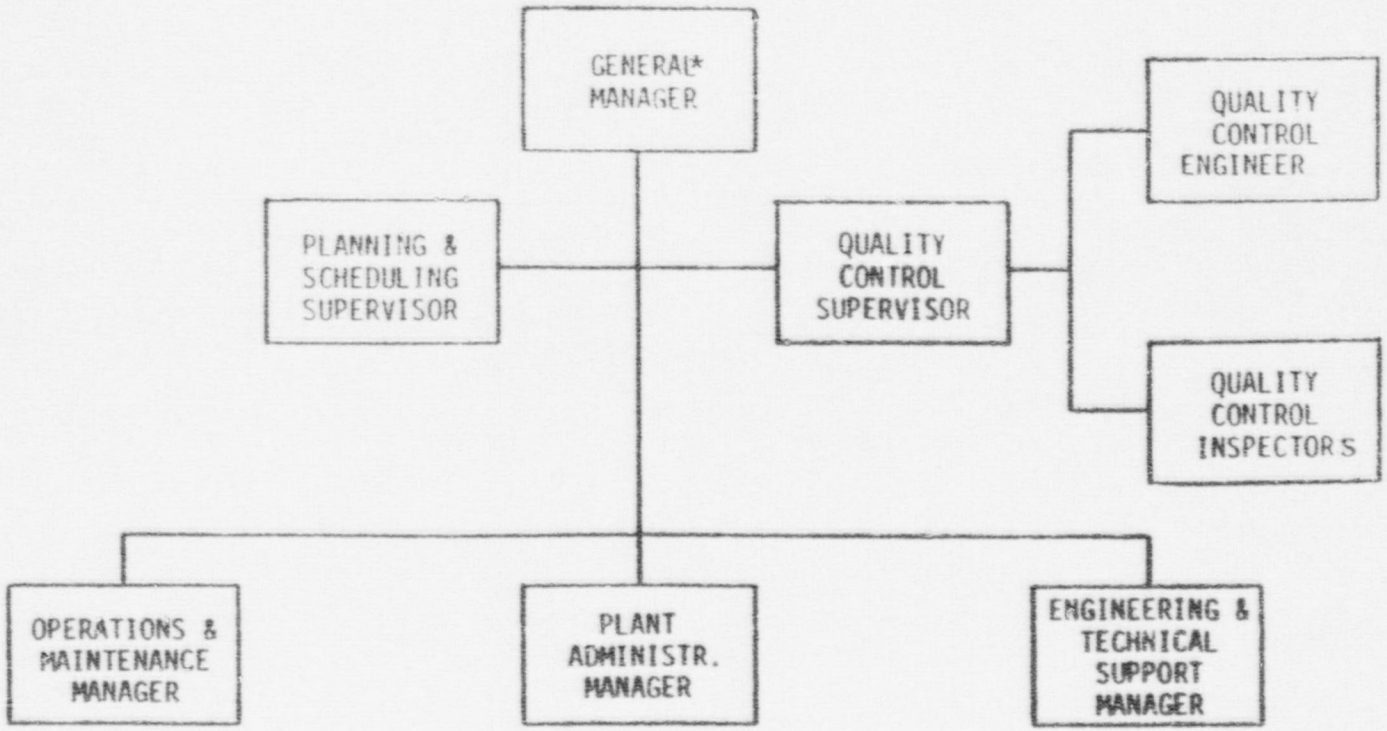
6.5.1.2 The Plant Safety Committee shall be composed of the:

Amendment No. 16, 30, 34, 37



*Corporate responsibility for Fire Protection Program

FIGURE 6.2-1

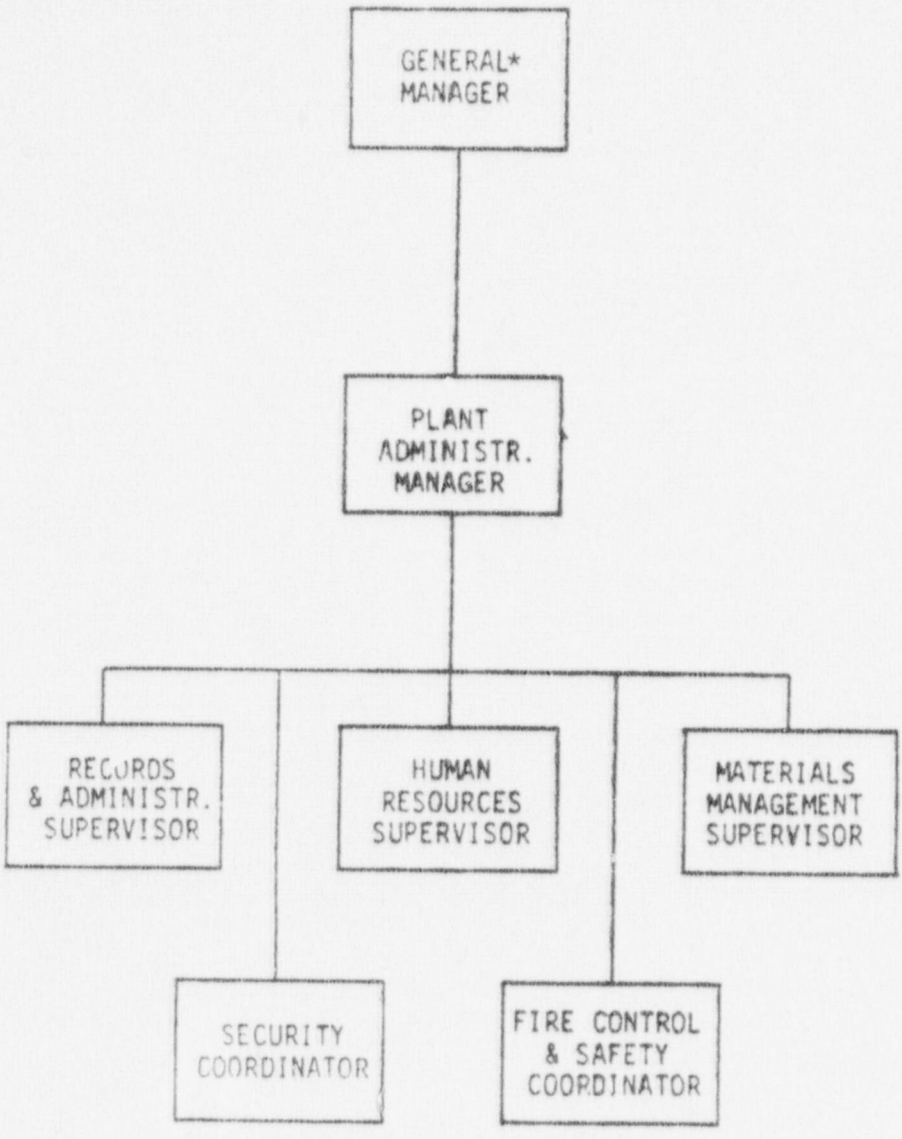


\+ - Senior Operator License Required

\# - Operator License Required

* - Onsite Responsibility for Fire Protection Program

Figure 6.2-2A



Amendment No. 37

Figure 6.2-2B

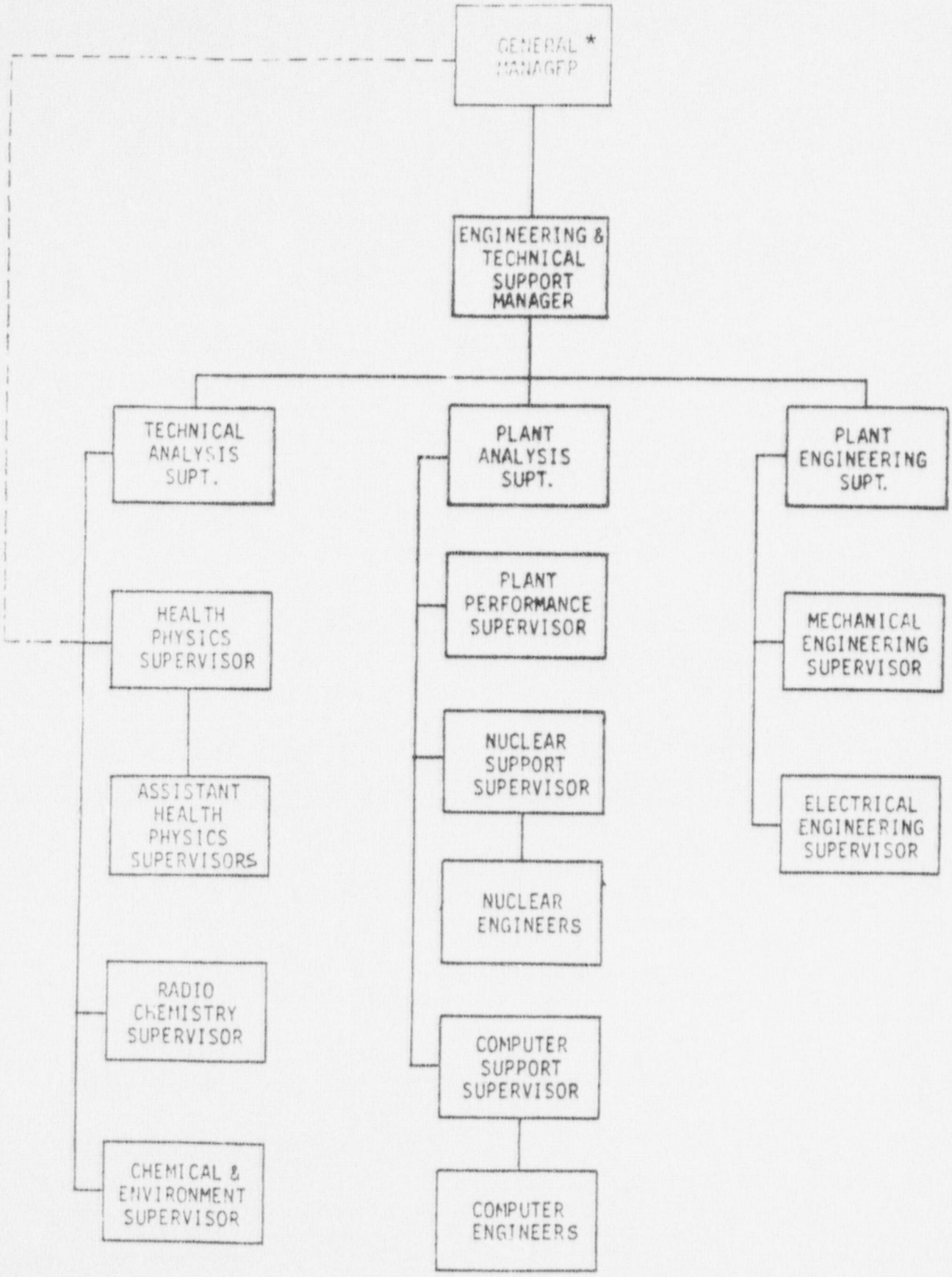


Figure 6.2-2C

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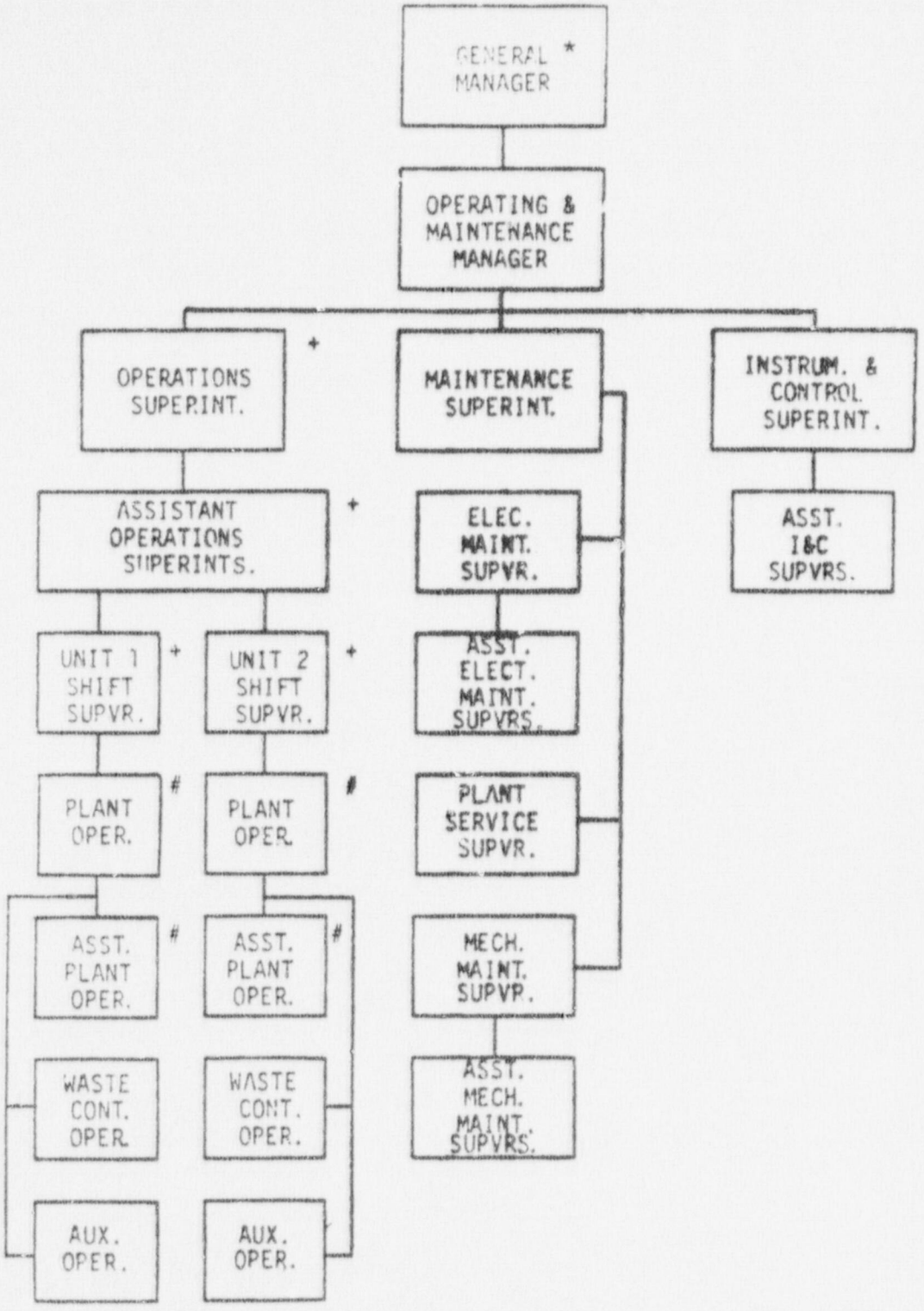

Figure 6.2-2D

Amendment No. 371

g. Review of facility operations to detect potential nuclear safety hazards.

h. Performance of special reviews, investigations and reports thereon as requested by the General Manager.

i. Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the General Manager.

j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the General Manager.

AUTHORITY

6.5.1.7.1 The Plant Safety Committee shall:

a. Recommend to the General Manager written 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 (c) above constitutes an unreviewed safety question.

6.5.1.7.2 In the event of a disagreement between the recommendations of the Plant Safety Committee and the actions contemplated by the General Manager, the course determined by the General Manager to be more conservative will be followed. Records of the disagreement will be sent for review to the Director, Generation Operations, or Manager, Nuclear Operations and the Chairman of the Safety Review Committee by the General Manager on the next working day.

RECORDS

6.5.1.8 The Plant Safety Committee shall maintain written minutes of each meeting and copies shall be provided to the Chairman of the Safety Review Committee by the General Manager.

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

Chairman:	Operations and Maintenance Manager
Member:	Technical Analysis Superintendent
Member:	Instrumentation and Controls Superintendent
Member:	Operations Superintendent
Member:	Maintenance 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.

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 A quorum of the PSC shall consist of the chairman 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 revisions thereto, 2) any other proposed procedures or revisions 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 the Appendix "A" Technical Specifications.

d. Review of all proposed changes or modifications to plant 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.

f. Review of those Reportable Occurrences requiring 24 hour notification of the Commission.

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. environmental considerations

i. other appropriate fields required by the unique characteristics of the nuclear power plant.

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

In his absence, the Chairman shall appoint an Acting Chairman.

ALTERNATES

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

CONSULTANTS

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

MEETING FREQUENCY

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

QUORUM

6.5.2.6 A quorum of SRC shall consist of the Chairman or his designated alternate and four members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the facility.

f. The Facility Security Plan and implementing procedures at least once per two years.

g. Any other area of facility operation considered appropriate by the SRC or the Executive Director, Generation & Construction (EDG&C).

6.5.2.9 Special Inspections and Audits

A. 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.

AUTHORITY

6.5.2.10 The SRC shall report to and advise the Executive Director, Generation and Construction (EDG&C) within 30 days following each meeting.

RECORDS

6.5.2.11 Records of SRC activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each SRC meeting shall be prepared, approved and forwarded to the Executive Director, Generation & Construction (EDG&C) within 30 days following each meeting.

b. Reports of reviews encompassed by Section 6.5.2.7.e, f, g and h above, shall be prepared, approved and forwarded to the Executive Director, Generation & Construction, (EDG&C) within 30 days following completion of the review.

c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Executive Director, Generation & Construction (EDG&C) and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken for Reportable Occurrences:

a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Specification 6.12.

b. Each Reportable Occurrence requiring 24 hour notification to the Commission shall be reviewed by the PSC and submitted to the SRC and the Manager, Nuclear Operations by the General Manager.

6.7 SAFETY LIMIT VIOLATION

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

a. The facility shall be placed in at least hot shutdown within one hour.

b. The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.36 and Specification 6.12.3.1

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, November, 1972.

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.

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 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.

Effective January 19, 1975, activities under the U. S. Atomic Energy Commission regulatory program were assumed by the U. S. Nuclear Regulatory Commission in accordance with the Energy Reorganization Act of 1974. Any references to the Atomic Energy Commission (AEC) contained herein should be interpreted as Nuclear Regulatory Commission (NRC).

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2.2 Hydraulic

2.2.1 Intake Velocity

A study will be undertaken as described in Section 4.1.2 to determine means of limiting fish impingement on the traveling water screens.

2.2.2 Discharge Velocity

Not Applicable.

2.2.3 Flow Rate Restrictions

Not Applicable.

2.2.4 Reservior Drawdown

Not Applicable.

2.3 Chemical

Objective (General)

To protect the local biota from lethal and sublethal effects or chemical discharges. To assure that the most sensitive use of the receiving medium by human populations is protected. To minimize degradation of the quality of the receiving medium.

Specification (General)

All plant chemical discharges except that from the plant sanitary system shall be diluted by the plant circulating water during release to assure that the stated objective can be achieved. No release of demineralizer waste shall be made without a dilution equivalent to one-half (approximately 383,000 gpm) the full flow of the Unit 1 circulating water pumps.

Any limitation on the quality of plant effluents and requirements for monitoring the same imposed under conditions of the Federal Water Pollution Control Act shall be a part of these Technical Specifications. All reports to State or Federal agencies regarding compliance with any such limitation shall also be provided to NRC as described in Specification 5.4. 1

2.3.1 Biocides

Specification

a. Chlorine (Circulating Water System)

Chlorination of condenser cooling water shall be intermittent (1 to 2 hours each day or as may be necessary). Total available chlorine residual in the plant effluent shall be less than 0.1 mg/l. If the total available chlorine residual in the discharge canal exceeds 0.1 mg/l, the chlorine feed rate shall be reduced to a rate at which this specification can be met.

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.

5.4 State and Federal Permits and Certificates

Copies of reports to federal and state agencies regarding compliance of limitation on quality of liquid effluent from ANO-1 shall be sent to Director of Regional Inspection and Enforcement Office (cc Director, NRR).

5.5 Procedures

Detailed written procedures shall be prepared and followed for all activities performed by Arkansas Power and Light involved in carrying out the sampling, instrument calibration, analysis, and actions to be taken when limits are approached or exceeded. Testing frequency of any alarms shall be included. These frequencies shall be determined from experience with similar instruments in similar environments and from manufacturers' technical manuals.

Plant standard operating procedures shall include provisions to ensure the plant and all its systems and components are operated in compliance with the limiting conditions for operations established as part of the environmental technical specifications.

5.6 Station Reporting Requirements

5.6.1 Routine Reports

Annual Environmental Operating Report

A single report on the environmental monitoring programs conducted in association with ANO-1 (Docket No. 50-313) and ANO-2 (Docket No. 50-368) operations for the previous calendar year shall be submitted to the NRC by May 1 of each year. The report shall include summaries, analyses, interpretations, and, where appropriate, statistical evaluation of the results of the environmental monitoring and an assessment of the observed impacts of the station operation on the environment. If harmful effects or evidence of irreversible damage are suggested by the monitoring or special [illegible], the licensee shall provide a more detailed analysis [illegible] data and a proposed course of action to alleviate the problem.

The Annual Report shall also include a summary of:

1) All ETS noncompliances and the corrective actions taken to remedy them.
2) Changes made to state and federal permits and certificates.
3) Changes made to the procedures or design described in accordance with Subsection 5.7.3.
4) Changes in ETS.

5.6.2 Nonroutine Reports

A report shall be submitted in the event that a "Limiting Condition for Operation" (Section 2), is exceeded, a report level as specified in Section 3 or 4 is reached, or if an unusual event involving a significant environmental impact occurs. Reports shall be submitted under one of the report schedules described below.

5.6.2.a Prompt Report

Those events specified as prompt report occurrences shall be reported within 24 hours by telephone, telegraph, or facsimile transmission to the NRC followed by a written report to the NRC within 30 days.

5.6.2.b Thirty Day Report

Non-routine events not requiring a prompt report as described in Subsection 5.6.2.a, shall be reported to NRC within 30 days of their occurrence.

5.6.2.c Content of Non-routine Reports

Written 30-day reports and, to the extent possible, the preliminary telephone, telegraph, or facsimile reports shall a) describe, analyze, and evaluate the occurrence, including extent and magnitude of the impact, (b) describe the cause of occurrence, and (c) indicate the corrective action (including any significant changes made in procedures) taken to preclude repetition of the occurrence and to prevent similar occurrences involving similar components or systems.

5.7 Changes

5.7.1 Changes in Environmental Technical Specifications

Request for changes in environmental technical specifications shall be submitted to the NRC for review and authorization per 10 CFR 50.90. The request shall include an evaluation of the environmental impact of the proposed changes and a supporting justification.

5.7.2 Changes in Permits and Certifications

Changes or additions to required federal, state, local, and regional authority permits and certificates for the protection of the environment that pertain to the requirements of these ETS shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any of the water quality requirements, limits or values stipulated in any certification or permit issued pursuant to Section 401 or 402 of PL 92-500 which is also the subject of an ETS reporting requirement under Section 2, or 4 of this ETS, NRC shall be notified within 30 days. If the proposed change is initiated by the licensee, the notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit or value being sought.

5.7.3 Changes in Procedures, Station Design or Operation

A. The licensee may 1) make changes in the station design and operation, 2) make changes in the procedures described in Subsection 5.5, and 3) conduct tests and experiments not described in accordance with Subsection 5.5, without prior C[illegible]pproval, unless the proposed change, test or ex[illegible]nvolves a change in the objectives of the ETS, or a[illegible]wed environmental question of substantive impact.

B. A prop[illegible]nge, test or experiment shall be deemed to involve a[illegible]eviewed environmental question if it concerns 1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental impact statement as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements thereto, environmental impact appraisals, or in initial or final adjudicatory decisions; or 2) a significant change in effluents or power level as specified in 10 CFR 51.5(b)(2); or 3) a matter not previously reviewed and evaluated in the documents specified in 1) of this section which may have a significant adverse environmental impact.

C. The licensee shall maintain records of changes in procedures and in the facility design or operation made pursuant to this Subsection, to the extent that such changes constitute changes

in procedures as described in accordance with Subsection 5.5. The licensee shall also maintain records of tests and experiments carried out pursuant to paragraph "A" of this Subsection. These records shall include a written evaluation which provides the bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question of substantive impact or constitute a change in the objectives of these ETS. The licensee shall furnish to the Commission, annually or at such shorter intervals as may be specified in the license, a report containing descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

5.8 Records Retention

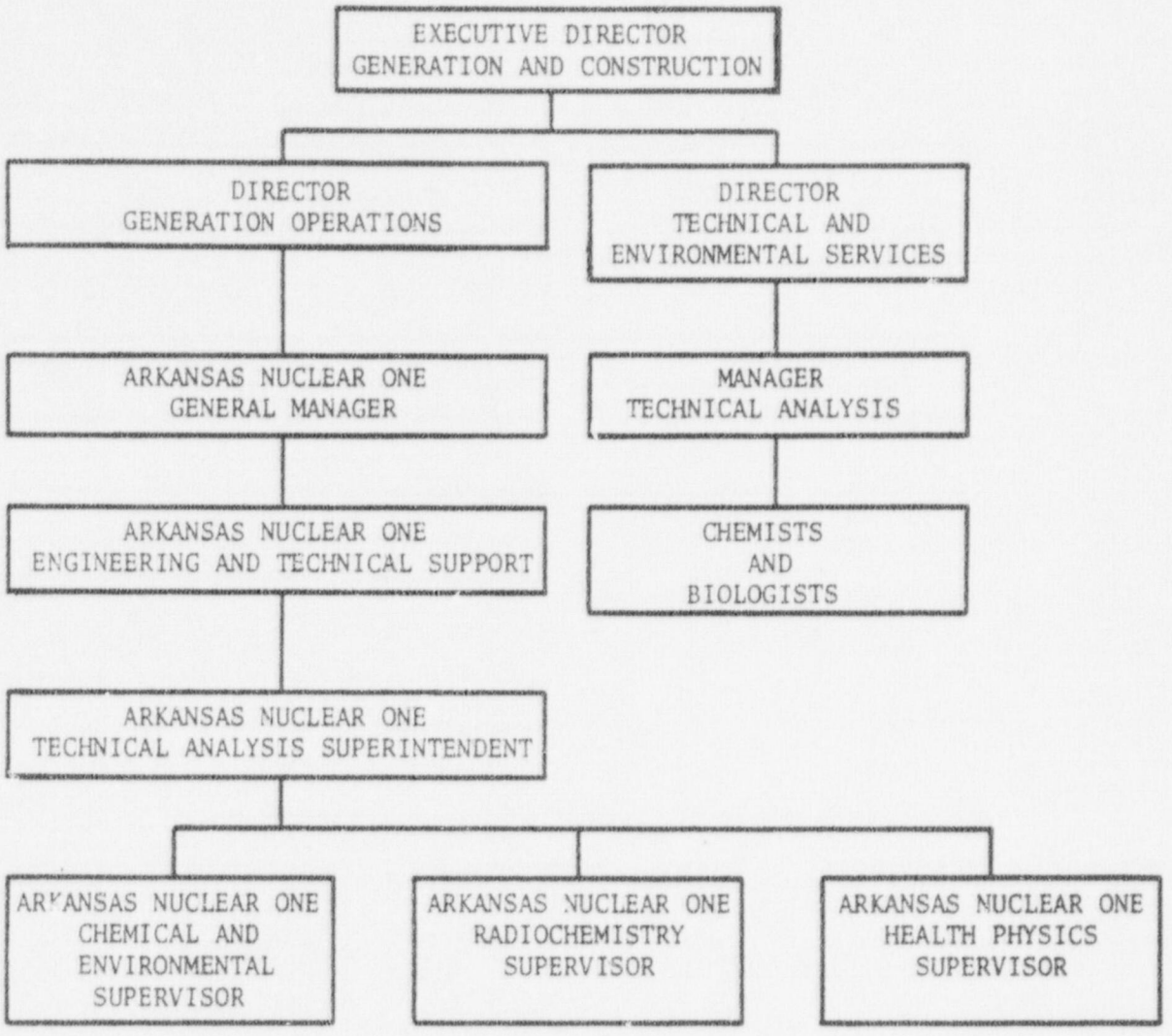
5.8.1 Records and logs relative to the following areas shall be retained for the life of the plant:

a. Records and drawing changes reflecting plant design modifications made to systems and equipment as described in Specification 5.7.3.

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.



ARKANSAS POWER & LIGHT CO. ARKANSAS NUCLEAR ONE	ENVIRONMENTAL SURVEILLANCE ORGANIZATION CHART	FIG. NO. 5-1