



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

November 14, 1980

celi

Dockets Nos. 50-313
and 50-368

Mr. William Cavanaugh, III
Vice President, Generation
and Construction
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Amendments Nos. 47 and 17 to Facility Operating Licenses Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Units Nos. 1 and 2, respectively. These amendments consist of changes to the Technical Specifications in response to your application dated September 29, 1980, as supplemented on October 16, 1980. During our review of your proposed amendments, we found that certain modifications were necessary to meet our requirements. Your staff has agreed to these modifications and they have been incorporated in these amendments.

These amendments modify the ANO-1&2 Appendix A and Appendix B Technical Specifications dealing with the Arkansas Power & Light Company management organizational structure.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

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

Enclosures & cc:
See next page

8011260173

Mr. William Cavanaugh, III

-2-

Enclosures:

1. Amendment No. 47 to DPR-51
2. Amendment No. 17 to NPF-6
3. Safety Evaluation
4. Notice

cc w/enclosures:

Mr. David C. Trimble
Manager, Licensing
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Mr. James P. O'Hanlon
General Manager
Arkansas Nuclear One
P. O. Box 608
Russellville, Arkansas 72801

Mr. William Johnson
U. S. N. R. C.
P. O. Box 2091
Russellville, Arkansas 72801

Mr. Robert B. Borcum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 420, 7735 Old Georgetown Rd.
Bethesda, Maryland 20014

Mr. Nicholas S. Reynolds
Debevoise & Liberman
1100 17th Street, NW
Washington, DC 20036

Arkansas Polytechnic College
Russellville, Arkansas 72801

Honorable Ernie Grant
Acting County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

Mr. Paul F. Levy, Director
Arkansas Department of Energy
3000 Kavanaugh
Little Rock, Arkansas 72205

Director, Criteria and
Standards Division
Office of Radiation Programs
(ANR-460)
U. S. Environmental Protection
Agency
Washington, DC 20460

U. S. Environmental Protection
Agency
Region VI Office
ATTN: EIS COORDINATOR
1201 Elm Street
First International Building
Dallas, Texas 75270

cc w/enclosures & incoming
dtd.: 9/29/80

Director, Bureau of Environ-
mental Health Services
4815 West Markham Street
Little Rock, Arkansas 72201



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. 47
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 29, 1980, 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.

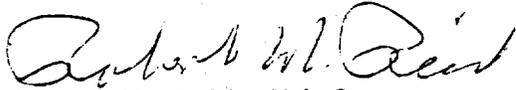
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Facility Operating License No. DPR- 51 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 47 , 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



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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 14, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 47

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.

Appendix "A" Pages

Remove

iv
117
119
120 Figure 6.2-2A
120a Figure 6.2-2B
121 Figure 6.2-2C
121a Figure 6.2-2D
122
123
124
125
126
141
144

Insert

iv
117
119 Figure 6.2-1
120 Figure 6.2-2
121
122
123
124
125
126
141
144

Appendix "B" Pages

5-9

5-9

INTRODUCTION

These Technical Specifications apply to Arkansas Nuclear One, Unit 1 and are in accordance with the requirements of 10 CFR 50, Section 50.36. The bases, which provide technical support or reference the pertinent FSAR section for technical support of the individual specifications, are included for informational purposes and to clarify the intent of the specification. These bases are not part of the Technical Specifications, and they do not constitute limitations or requirements for the licensee.

LIST OF FIGURES

<u>Number</u>	<u>Title</u>	<u>Page</u>
2.1-1	CORE PROTECTION SAFETY LIMIT	9a
2.1-2	CORE PROTECTION SAFETY LIMITS	9b
2.1-3	CORE PROTECTION SAFETY LIMITS	9c
2.3-1	PROTECTION SYSTEM MAXIMUM ALLOWABLE SET POINTS	14a
2.3-2	PROTECTION SYSTEM MAXIMUM ALLOWABLE SET POINTS	14b
3.1.2-1	REACTOR COOLANT SYSTEM HEATUP LIMITATIONS	20a
3.1.2-2	REACTOR COOLANT SYSTEM COOLDOWN LIMIT	20b
3.1.9-1	LIMITING PRESSURE VS. TEMPERATURE FOR CONTROL ROD DRIVE OPERATION WITH 100 STD CC/LITER H ₂ O	33
3.5.4-1	INCORE INSTRUMENTATION SPECIFICATION AXIAL IMBALANCE INDICATION	53a
3.5.4-2	INCORE INSTRUMENTATION SPECIFICATION RADIAL FLUX TILT INDICATION	53b
3.5.4-3	INCORE INSTRUMENTATION SPECIFICATION	53c
6.2-1	MANAGEMENT ORGANIZATION CHART	119
6.2-2	FUNCTIONAL ORGANIZATION FOR PLANT OPERATION	120

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. 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

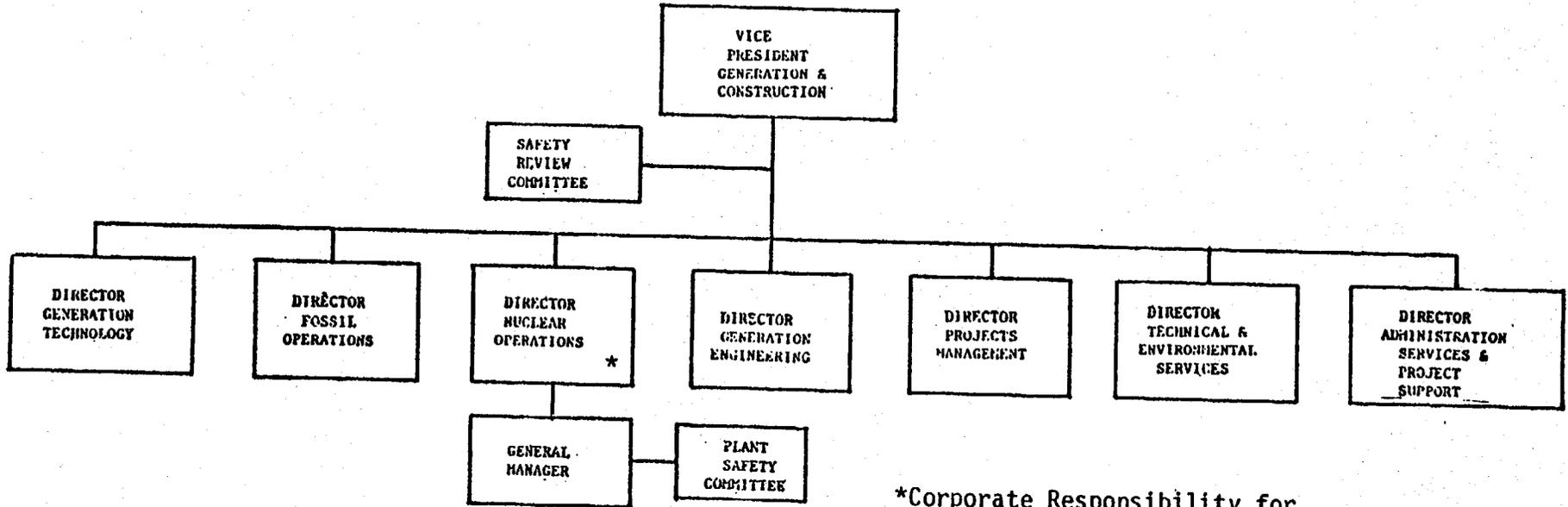
6.5.1 Plant Safety Committee (PSC) Function

- 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:
(See Page 121)

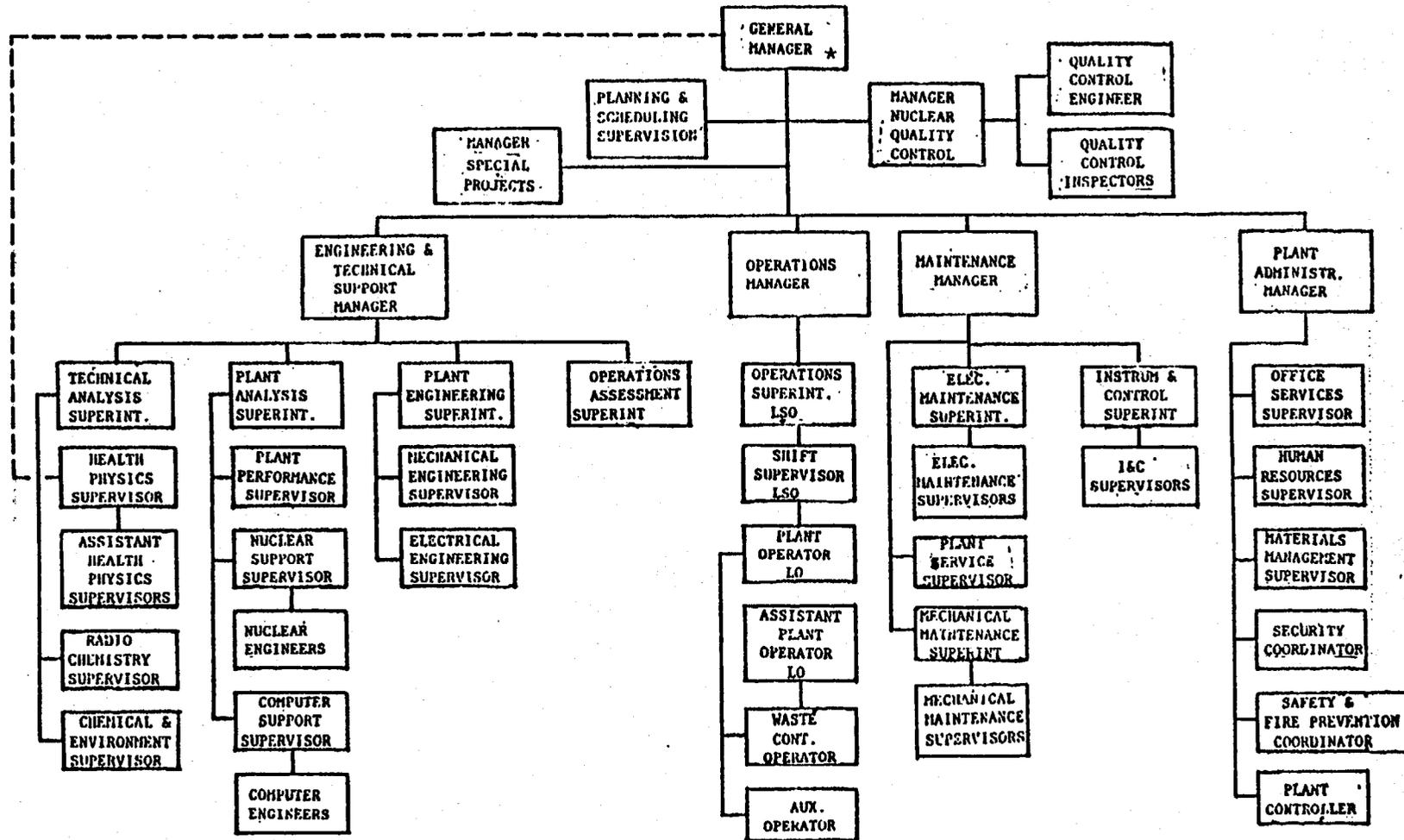
ARKANSAS POWER & LIGHT COMPANY
ARKANSAS NUCLEAR ONE



*Corporate Responsibility for Fire Protection program

Figure 6.2-1 Management Organization Chart

ARKANSAS POWER & LIGHT COMPANY
ARKANSA NUCLEAR ONE



CODE: LSO-SENIOR OPERATOR LICENSE REQUIRED
LO- OPERATOR LICENSE REQUIRED
*ONSITE RESPONSIBILITY FOR FIRE PROTECTION PROGRAM

Figure 6.2-2 Functional Organization for Plant Operation

Chairman: Manager of Special Projects
Member: Operations Manager
Member: Maintenance Manager
Member: Engineering and Technical Support Manager
Member: Administrative Manager
Member: Technical Analysis Superintendent
Member: Plant Analysis Superintendent
Member: Plant Engineering Superintendent
Member: Health Physics Supervisor

The General Manager shall designate in writing the Alternate Chairman in the absence of the Chairman.

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 four 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.

- 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 (e) above constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Director, Nuclear 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.

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, Technical and Environmental Services
 Member: Director, Nuclear Operations
 Member: Director, Generation Technology
 Member: Manager, Quality Assurance
 Member: Arkansas Nuclear One Plant Safety Committee Chairman
 Member: Manager, Technical Analysis
 Member: Arkansas Nuclear One Plant Analysis Superintendent
 Member: Director, Generation Engineering
 Member: Manager, Electrical Engineering
 Member: Manager of System Nuclear Operations *

The Chairman shall designate in writing the alternate chairman in the absence of the SRC 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 at 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 The minimum quorum of the SRC necessary for the performance of the SRC review and audit functions of these technical specifications shall consist of the Chairman or his designated alternate and at least 4 SRC members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the unit.

* Middle South Services

REVIEW

6.5.2.7 The SRC shall review:

- a. The safety evaluations for 1) changes to procedures, equipment or systems, and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.
- b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- d. Proposed changes in Technical Specifications or licenses.
- e. Violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.
- g. Events requiring 24-hour notification to the Commission.
- h. All recognized indications of an unanticipated deficiency in some aspects of design or operation of structures, systems, or components that could affect nuclear safety.
- i. Reports and meeting minutes of the Plant Safety Committee.

AUDITS

6.5.2.8 Audits of facility activities shall be performed under the cognizance of the SRC. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per year.
- b. The performance and retraining of all members of the plant management and operations staff, and the performance, training, and qualifications of new members of the entire plant staff at least once per year.
- c. The results of all actions taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety at least once per six months.

- d. The Facility Emergency Plan and implementing procedures at least once per two years.
- e. The Facility Fire Protection Program and implementing procedures at least once per two years.
- 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 Vice President, Generation & Construction (VP, G&C).
- h. An independent fire protection and loss prevention program inspection and audit shall be performed at least once per 12 months utilizing either qualified off-site licensee personnel or an outside fire protection firm.

AUTHORITY

- 6.5.2.9 The SRC shall report to and advise the Vice President, Generation & Construction (VP,G&C) on those areas of responsibility specified in Sections 6.5.2.7 and 6.5.2.8.

RECORDS

- 6.5.2.10 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 Vice President, Generation & Construction (VP, G&C) within 14 days following each meeting.
 - b. Reports of reviews encompassed by Section 6.5.2.7 above shall be prepared, approved and forwarded to the Vice President, Generation & Construction, (VP,G&C) within 14 days following completion of the review.
 - c. Audit reports encompassed by Section 6.5.2.8 above shall be forwarded to the Vice President, Generation & Construction (VP, G&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 Director, 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:

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.

6.12.2.3 Monthly Operating Report

Routine reports of operating statistics which include:

1. Average Daily Unit Power Level
2. Operating Data Report
3. Unit Shutdowns and Power Reductions
4. Narrative Summary of Operating 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 appropriate Regional Office, by the fifteenth of each month following the calendar month covered by the report.

6.12.3 Reportable Occurrences

Reportable occurrences, including corrective actions and measures to prevent recurrence, shall be reported to the NRC as required below. 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.

6.12.3.1 Prompt Notification With Written Followup

The types of events listed below shall be reported as expeditiously as possible, but within 24-hours, by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Director of the appropriate Regional Office, or his designate no later than the first working day following the event, with a written followup report within two weeks. A copy of the confirmation and the written followup report shall also be sent to the Director, Office of Management and Program Analysis, USNRC. The written 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.

- (h) Errors discovered in the transient or accident analyses or in the methods used for such analyses as described in the safety analysis report or in the bases for the Technical Specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.
- (i) Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the safety analysis report or Technical Specifications bases; or discovery during plant life of conditions not specifically considered in the safety analysis report or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

NOTE: This item is intended to provide for reporting of potentially generic problems.

6.12.3.2 Thirty Day Written Reports

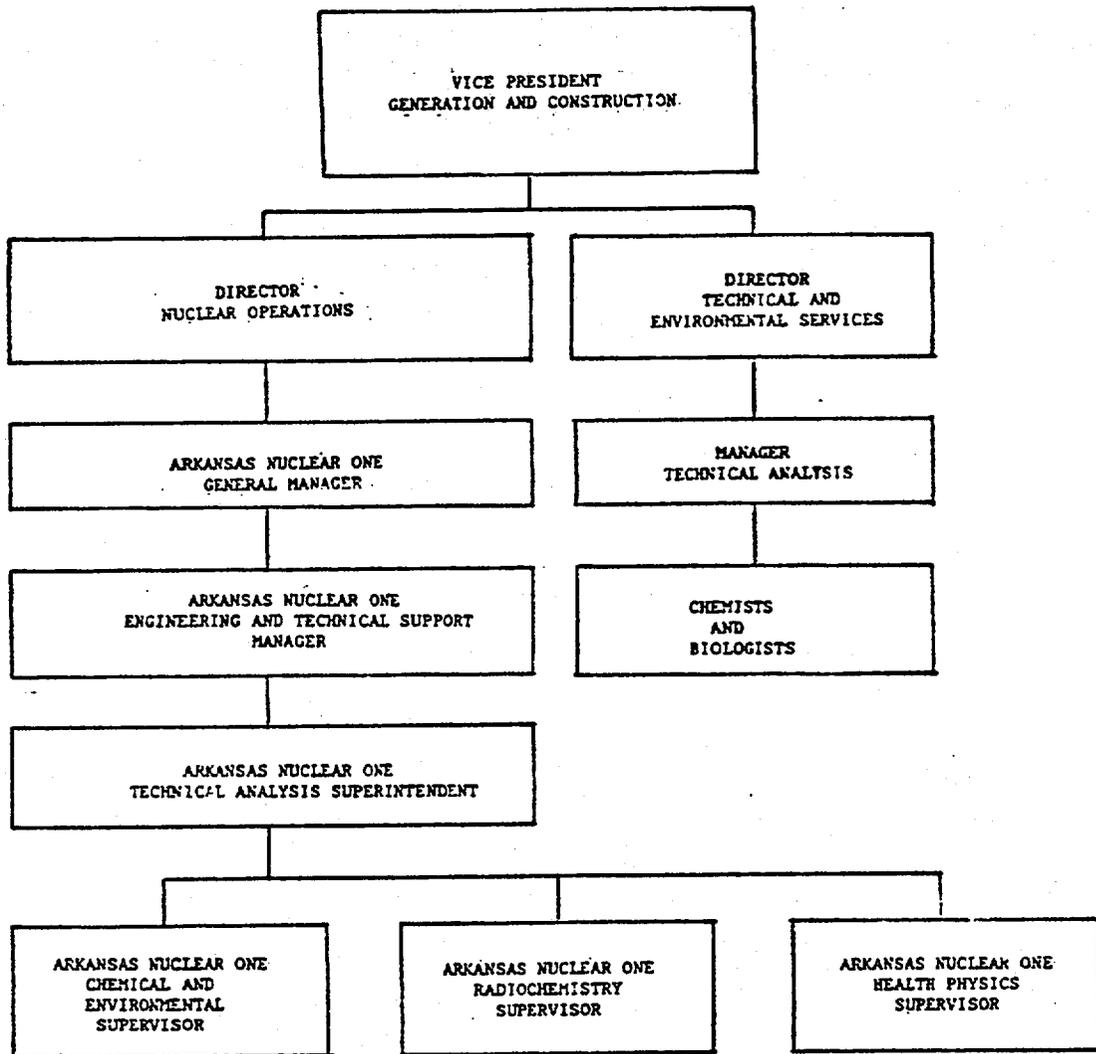
The reportable occurrences discussed below shall be the subject of written reports to the Director of the appropriate Regional Office within thirty days of occurrence of the event. A copy of the written report shall also be sent to the Director, Office of Management and Program Analysis. The written 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) Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the Technical Specifications but which do not prevent the fulfillment of the functional requirements of affected systems.
- (b) Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

NOTE:

Routine surveillance testing, instrument calibration, or preventative maintenance which require system configurations as described in items (a) and (b) above need not be reported except where test results themselves reveal a degraded mode as described above.

- (c) Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems.



ARKANSAS POWER & LIGHT CO.
ARKANSAS NUCLEAR ONE

ENVIRONMENTAL SURVEILLANCE
ORGANIZATION CHART

FIGURE NO.
5-1



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. 17
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 29, 1980, 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. 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. 17, 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



Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 14, 1980

ATTACHMENT TO LICENSE AMENDMENT NO.17

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

6-2

6-3

6-5

6-6

6-7

6-8

6-12

6-13

Appendix "B"

Pages

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

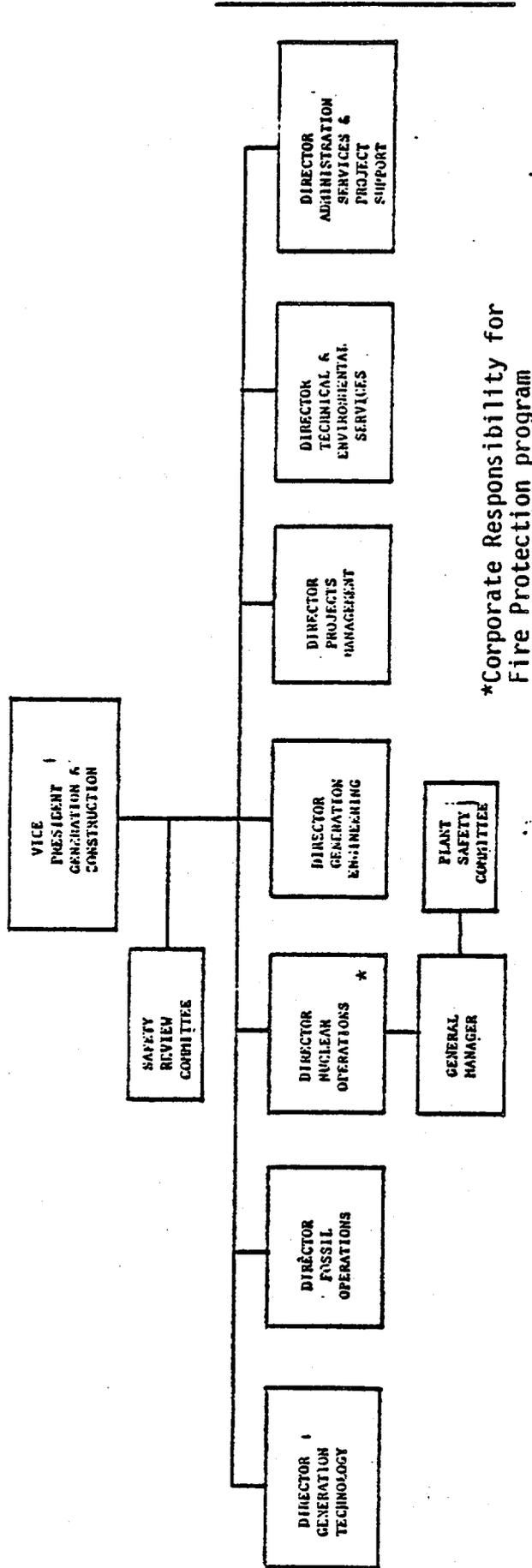
OFFSITE

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:

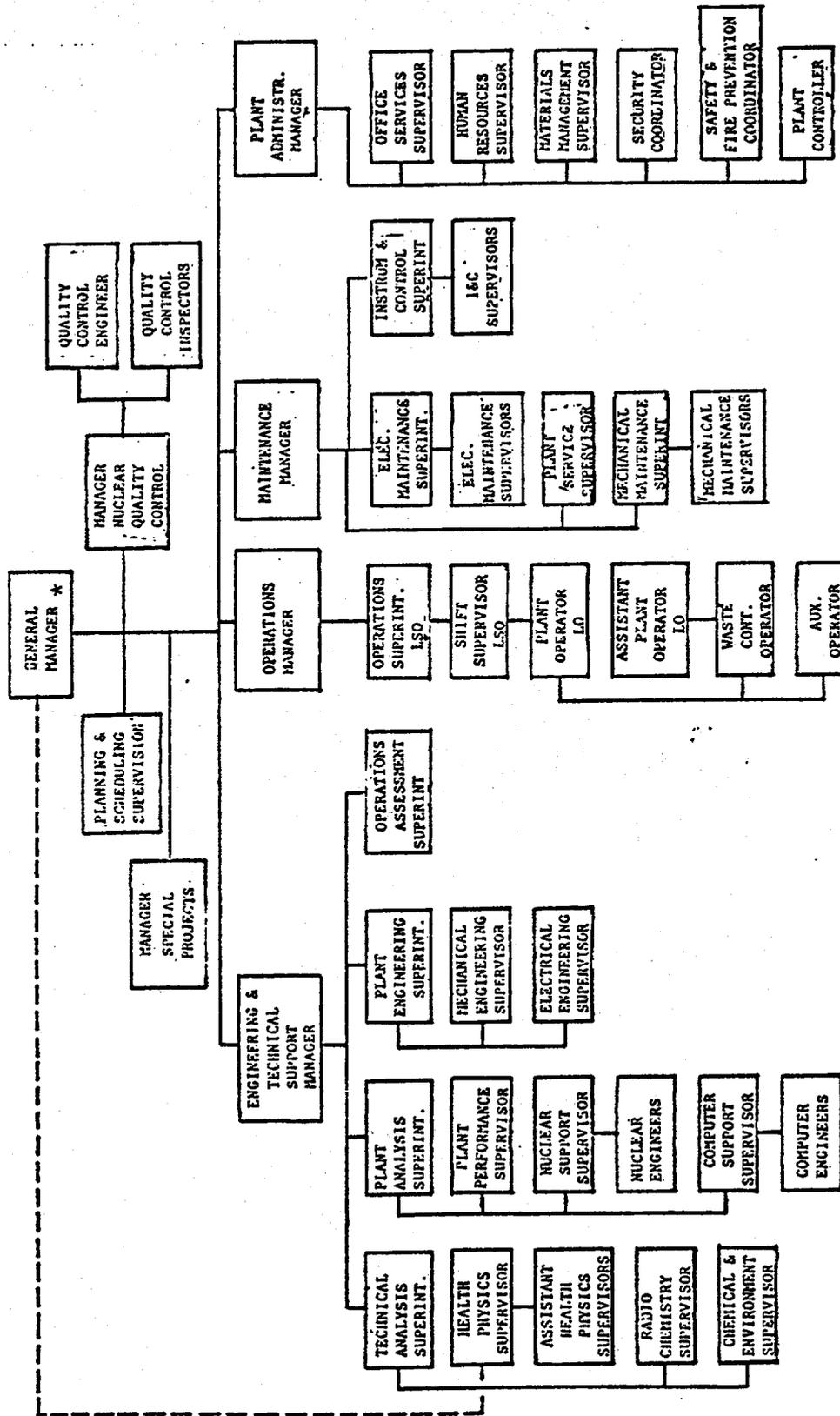
- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Operator shall be in the control room when fuel is in the reactor.
- c. At least two licensed Operators shall be present in the control room during reactor start-up, 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.



*Corporate Responsibility for
 Fire Protection program

Figure 6.2-1 Management Organization Chart

ARKANSAS POWER & LIGHT COMPANY
 ARKANSAS NUCLEAR ONE



CODE: LSO-SENIOR OPERATOR LICENSE REQUIRED
 LO- OPERATOR LICENSE REQUIRED
 *ONSITE RESPONSIBILITY FOR FIRE PROTECTION PROGRAM

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 Plant Manager on all matters related to nuclear safety.

COMPOSITION

6.5.1.2 The Plant Safety Committee shall be composed of the:

Chairman: Manager of Special Projects
Member: Operations Manager
Member: Maintenance Manager
Member: Engineering and Technical Support Manager
Member: Administrative Manager
Member: Technical Analysis Superintendent
Member: Plant Analysis Superintendent
Member: Plant Engineering Superintendent
Member: Health Physics Supervisor
Member: Nuclear Software Expert*

The General Manager shall designate in writing the Alternate Chairman in the absence of the PSC Chairman.

* See page 6-5a

ADMINISTRATIVE CONTROLS

*If one of the above members of the Plant Safety Committee meets the qualification requirements for this position, the requirement to have this member is satisfied. This membership may be filled by two appropriately qualified individuals who shall ballot with a single combined vote. Generic qualifications for this membership shall be as follows:

One Individual

The Nuclear Software Expert shall have as a minimum a Bachelor's degree in Science or Engineering, Nuclear preferred (in accordance with ANSI N18.1). In addition, he shall have a minimum of four years of technical experience, of which a minimum of two years shall be in Nuclear Engineering and a minimum of two years shall be in Software Engineering. (Software Engineering is that branch of science and technology which deals with the design and use of software. Software Engineering is a discipline directed to the production and modification of computer programs that are correct, efficient, flexible, maintainable, and understandable, in reasonable time spans, and at reasonable costs). The two years of technical experience in Software Engineering may be general software experience not necessarily related to the software of the Core Protection Calculator System. One of these two years of experience shall be with certified computer programs.

Two Individuals

One of the individuals shall meet the requirements of the Nuclear Engineering portion of the above. The second individual shall have a Bachelor of Science degree (digital computer speciality) and meet the Software Engineering requirements of the above.

The membership (the Nuclear Software Expert or the Digital Computer Specialist) shall be knowledgeable of the Core Protection Calculator System with regard to:

- a. The software modules, their interactions with each other and with the data base.
- b. The relationship between operator's module inputs and the trip variables.
- c. The relationship between sensor input signals and the trip variable.
- d. The design basis of the Core Protection Calculator System.
- e. The approved software change procedure and documentation requirements of a software change.
- f. The security of the computer memory and access procedures to the memory.

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 PCS 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 four 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 General Manager and the Safety Review Committee.
- j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the General Manager and 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, Nuclear 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, Technical and Environmental Services
Member:	Director, Nuclear Operations
Member:	Director, Generation Technology
Member:	Manager, Quality Assurance
Member:	Arkansas Nuclear One Plant Safety Committee Chairman
Member:	Manager, Technical Analysis
Member:	Arkansas Nuclear One Plant Analysis Superintendent
Member:	Director, Generation Engineering
Member:	Manager, Electrical Engineering
Member:	Manager of System Nuclear Operations*

The Chairman shall designate in writing the alternate chairman in the absence of the SRC Chairman.

* Middle South Services

ADMINISTRATIVE CONTROLS

AUDITS

6.5.2.8 Audits of unit activities shall be performed under the cognizance of the SRC. These audits shall encompass:

- a. The conformance of unit 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 unit staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in unit 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 and implementing procedures at least once per 24 months.
- f. The Facility Security Plan and implementing procedures at least once per 24 months.
- g. Any other area of unit operation considered appropriate by the SRC or the Vice President, Generation & Construction (VP, G&C).
- 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.

AUTHORITY

6.5.2.9 The SRC shall report to and advise the Vice President, Generation & Construction (VP, G&C) on those areas of responsibility specified in Sections 6.5.2.7 and 6.5.2.8.

ADMINISTRATIVE CONTROLS

RECORDS

6.5.2.10 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 Vice President, Generation & Construction (VP, G&C) within 14 days following each meeting.
- b. Reports of reviews encompassed by Section 6.5.2.7 above, shall be prepared, approved and forwarded to the Vice President, Generation & Construction (VP, G&C) within 14 days following completion of the review.
- c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Vice President, Generation & Construction (VP, G&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 6.9.
- b. Each REPORTABLE OCCURRENCE requiring 24 hour notification to the Commission shall be reviewed by the PSC and submitted to the SRC and the Director, Nuclear Operations.

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 Director, 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 Director, 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

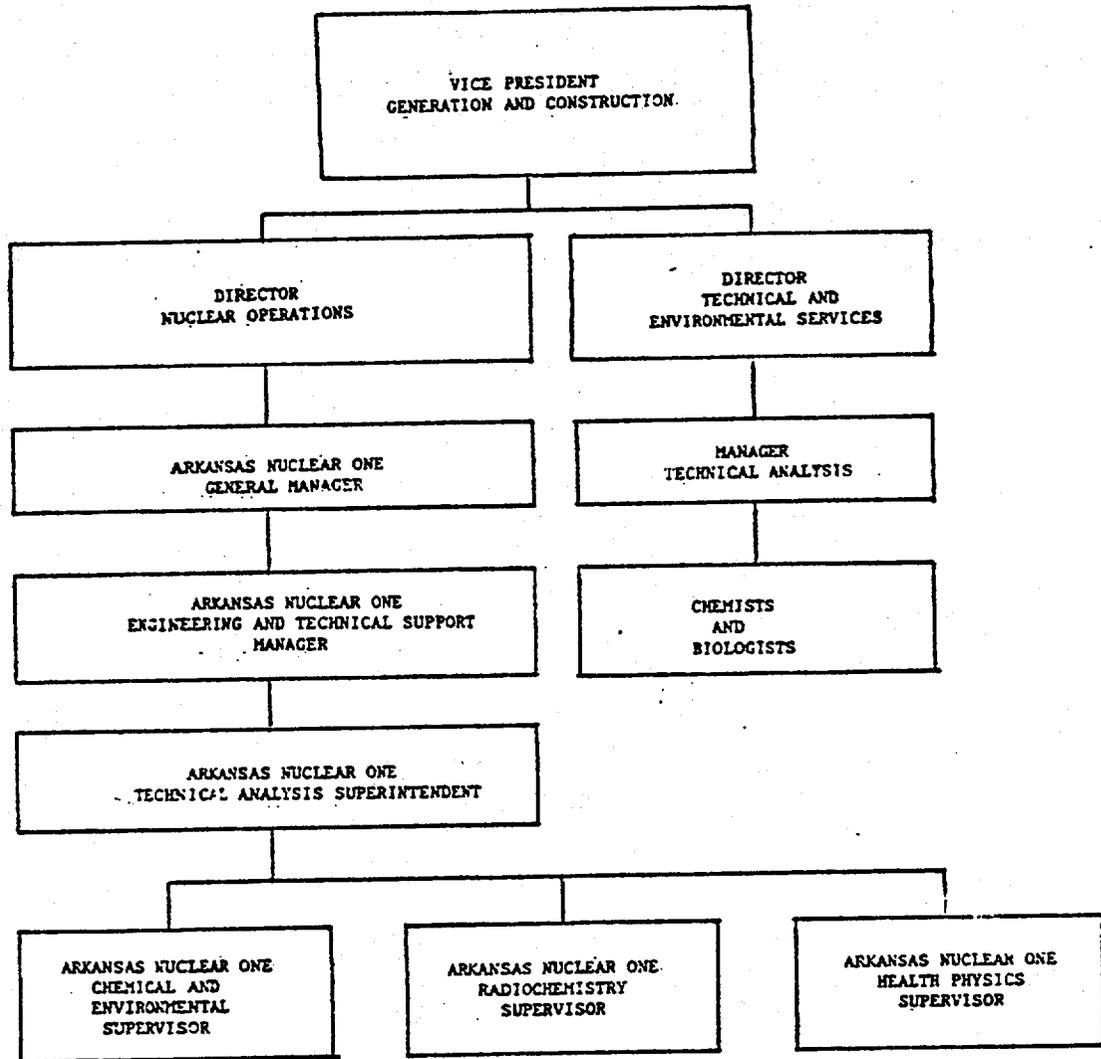
6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

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.



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



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 47 AND 17 TO

FACILITY OPERATING LICENSES NOS. DPR-51 AND NPF-6

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNITS NOS. 1 & 2

DOCKETS NOS. 50-313 & 50-368

Introduction

By letter dated September 29, 1980 and supplemented on October 16, 1980, Arkansas Power & Light Company (the licensee or AP&L) requested amendment of the Technical Specifications (TS), Appendices A and B, appended to Facility Operating Licenses Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Units Nos. 1 and 2 (ANO-1&2). The amendments would reflect a change in the licensee's management organization structure.

Evaluation

We have reviewed and discussed with the AP&L staff the proposed changes to the ANO-1&2 Administrative Control Sections of the TS. We have made modifications to the proposed changes which have been agreed to by the AP&L staff. The position of Director, Generation Operations would be divided into Director, Fossil Operations and Director, Nuclear Operations to provide improved management resources to nuclear operations.

The membership of the Plant Safety Committee (PSC) would be revised, resulting in a net gain of at least two members. In addition, the new position of Manager of Special Projects would be the Chairman of the PSC.

The membership of the Safety Review Committee (SRC) would be revised to include several newly created positions and to include the Chairman of the PSC. The proposed deletion of the ANO General Manager from the SRC would be compensated by the proposed addition of one member (the PSC Chairman who would also be the Manager of Special Projects) who reports directly to the General Manager.

Several proposed miscellaneous and minor changes to the TS for ANO-1 would make the ANO-1 TS in the Administrative Control Sections consistent with the ANO-2 TS.

We find the proposed changes to be administrative in nature; they do not decrease the margin of safety and are acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: November 14, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKETS NOS. 50-313 AND 50-368ARKANSAS POWER & LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendments Nos. 47 and 17 to Facility Operating Licenses Nos. DPR-51 and NPF-6, issued to Arkansas Power & Light Company (the licensee), which revised the Technical Specifications for operation of Arkansas Nuclear One, Units Nos. 1 and 2 (ANO-1&2) located in Pope County, Arkansas. The amendments are effective as of the date of issuance.

The amendments modify the ANO-1&2 Appendices A and B Technical Specifications dealing with Arkansas Power & Light Company management organization structure.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §1.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the licensee's application dated September 29, 1980, as supplemented on October 16, 1980, (2) Amendment No. 47 to License No. DPR-51 and Amendment No. 17 to License No. NPF-6, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Arkansas Polytechnic College, Russellville, Arkansas. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 14th day of November 1980.

FOR THE NUCLEAR REGULATORY COMMISSION


Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing