

March 21, 1989

Docket No. 50-313

Mr. T. Gene Campbell
Vice President, Nuclear
Operations
Arkansas Power and Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Campbell:

SUBJECT: ISSUANCE OF AMENDMENT NO. 118 TO FACILITY OPERATING LICENSE
NO. DPR-51 - ARKANSAS NUCLEAR ONE, UNIT 1 (TAC NO. 55696)

The Commission has issued the enclosed Amendment No. 118 to Facility Operating License No. DPR-51 for the Arkansas Nuclear One, Unit No. 1 (ANO-1). This amendment consist of changes to the Technical Specifications (TSs) in response to your application dated November 17, 1986 and a supplement dated January 13, 1989.

The amendment makes changes to the Technical Specification. It provides clarification based on revised reporting requirements affected by 10 CFR Part 50, Sections 50.72 and 50.73, pursuant to Generic Letter No. 83-43.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's next Bi-weekly Federal Register notice.

Sincerely,

/s/

C. Craig Harbuck, Project Manager
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 118 to DPR-51
2. Safety Evaluation

cc w/enclosures:

See next page

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

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See next page

Mr. T. Gene Campbell
Arkansas Power & Light Company

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

ARKANSAS POWER AND LIGHT COMPANY

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 118
License No. DPR-51

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Arkansas Power and Light Company (the licensee) dated November 17, 1986 and a supplement dated January 13, 1989, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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. 118, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jose A. Calvo

Jose A. Calvo, Director
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 21, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 118

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

Revise the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

REMOVE PAGES

11a
27
45f
53d
53f
53i
57
57a
66b
66m
66n
66o
66v
66w
66x
66z
66aa
66bb
66cc
66ff
85a
86
110n
110o1
110ss
110tt
110zz
110bbb
121
124
126
128
142
143
144
145
146
146a
146b

INSERT PAGES

11a
27
45f
53d
53f
53i
57
57a
66b
66m
66n
66o
66v
66w
66x
66z
66aa
66bb
66cc
66ff
85a
86
110n
110o1
110ss
110tt
110zz
110bbb
121
124
126
128
142
143
144
145
146
146a
146b

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
4.16	SHOCK SUPPRESSORS (SNUBBERS)	110e
4.17	FUEL HANDLING AREA VENTILATION SYSTEM SURVEILLANCE	110h
4.18	STEAM GENERATOR TUBING SURVEILLANCE	110j
4.19	FIRE DETECTION INSTRUMENTATION	110p
4.20	FIRE SUPPRESSION WATER SYSTEM	110q
4.21	SPRINKLER SYSTEMS	110t
4.22	CONTROL ROOM AND AUXILIARY CONTROL ROOM HALON SYSTEMS	110u
4.23	FIRE HOSE STATIONS	110v
4.24	PENETRATION FIRE BARRIERS	110w
4.25	REACTOR BUILDING PURGE FILTRATION SYSTEM	110x
4.25	REACTOR BUILDING PURGE VALVES	110z
4.27	DECAY HEAT REMOVAL	110aa
4.28	EXPLOSIVE GAS MIXTURE	110bb
4.29	RADIOACTIVE EFFLUENTS	110cc
4.29.1	<u>Radioactive Liquid Effluents</u>	110cc
4.29.1.1	Concentration	110cc
4.29.1.2	Liquid Holdup Tanks	110gg
4.29.1.3	Liquid Radioactive Effluent Instrumentation	110hh
4.29.2	<u>Radioactive Gaseous Effluents</u>	110jj
4.29.2.1	Dose Rate	110jj
4.29.2.2	Gas Storage Tanks	110mm
4.29.2.3	Radioactive Gaseous Effluent Monitoring Instrumentation	110nn
4.29.3	<u>Dose Calculations for Radioactive Effluents</u>	110rr
4.29.4	<u>Solid Radioactive Waste</u>	110rra
4.30	RADIOLOGICAL ENVIRONMENTAL MONITORING	110ss
4.30.1	<u>Radiological Environmental Monitoring Program Description</u>	110ss
4.30.2	<u>Land Use Census</u>	110zz
4.30.3	<u>Interlaboratory Comparison Program</u>	110bbb
5.	<u>DESIGN FEATURES</u>	111
5.1	SITE	111
5.2	REACTOR BUILDING	112
5.3	REACTOR	114
5.4	NEW AND SPENT FUEL STORAGE FACILITIES	116
6.	<u>ADMINISTRATIVE CONTROLS</u>	117
6.1	RESPONSIBILITY	117
6.2	ORGANIZATION	117
6.3	FACILITY STAFF QUALIFICATIONS	117
6.4	TRAINING	117
6.5	REVIEW AND AUDIT	117
6.6	REPORTABLE EVENT ACTION	126
6.7	SAFETY LIMIT VIOLATION	126
6.8	PROCEDURES	127
6.9	RECORD RETENTION	128
6.10	RADIATION PROTECTION PROGRAM	129
6.11	HIGH RADIATION AREA	129
6.12	REPORTING REQUIREMENTS	140
6.13	ENVIRONMENTAL QUALIFICATION	147
6.14	OFFSITE DOSE CALCULATION MANUAL (ODCM)	148

3.1.6 Leakage

Specification

- 3.1.6.1 If the total reactor coolant leakage rate exceeds 10 gpm, the reactor shall be shutdown within 24 hours of detection.
- 3.1.6.2 If unidentified reactor coolant leakage (exceeding normal evaporative losses) exceeds 1 gpm or if any reactor coolant leakage is evaluated as unsafe, the reactor shall be shutdown within 24 hours of detection.
- 3.1.6.3 If it is determined that any reactor coolant leakage exists through a non-isolable fault in a reactor coolant system strength boundary (such as the reactor vessel, piping, valve body, etc., except steam generator tubes), the reactor shall be shutdown and a cooldown to the cold shutdown condition shall be initiated within 24 hours of detection.
- 3.1.6.4 Deleted
- 3.1.6.5 Action to evaluate the safety implication of reactor coolant leakage shall be initiated within 4 hours of detection. The nature, as well as the magnitude of the leak, shall be considered in this evaluation. The safety evaluation shall assure that the exposure of offsite personnel to radiation is within the guidelines of 10CFR20.
- 3.1.6.6 If reactor shutdown is required per Specification 3.1.6.1, 3.1.6.2, or 3.1.6.3 the reactor shall not be restarted until the leak is repaired or until the problem is otherwise corrected.
- 3.1.6.7 When the reactor is at power operation, three reactor coolant leak detection systems of different operating principles shall be in operation. One of these systems is sensitive to radioactivity and consists of a radioactive gas detector and an air particulate activity detector. Both of these instruments may be out-of-service simultaneously for a period of no more than 72 hours provided two other means are available to detect leakage and reactor building air samples are taken and analyzed in the laboratory at least once per shift; otherwise, be in at least Hot Standby within the next 6 hours and in Cold Shutdown within the following 30 hours.
- 3.1.6.8 Loss of reactor coolant through reactor coolant pump seals and system valves to connecting systems which

TABLE 3.5.1-1 (Cont'd)

12. With the number of operable channels less than required, either return the indicator to operable status within 24 hours, or verify the block valve closed and power removed within an additional 24 hours. If the block valve cannot be verified closed within the additional 24 hours, de-energize the electromatic relief valve power supply within the following 12 hours.
13. Channels may be bypassed for not greater than 30 seconds during reactor coolant pump starts. If the automatic bypass circuit or its alarm circuit is inoperable, the undervoltage protection shall be restored within 1 hour, otherwise, Note 14 applies.
14. With the number of channels less than required, restore the inoperable channels to operable status within 72 hours or be in hot shutdown within the next 6 hours and in cold shutdown within the following 30 hours.
15. This trip function may be bypassed at up to 10% reactor power.
16. This trip function may be bypassed at up to 45% reactor power.
17. With no channel operable, within 1 hour restore the inoperable channels to operable status, or initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
18. With one channel inoperable, restore the inoperable channel to operable status within 7 days or within the next 6 hours initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
19. This function may be bypassed below 750 psig OTSG pressure. Bypass is automatically removed when pressure exceeds 750 psig.
20. With one channel inoperable, (1) either restore the inoperable channel to operable status within 7 days, or (2) prepare and submit a Special Report to the Commission pursuant to Specification 6.12.5 within 30 days following the event, outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the system to operable status. With both channels inoperable, initiate alternate methods of monitoring the containment radiation level within 72 hours in addition to the actions described above.
21. With one channel inoperable, restore the inoperable channel to operable status within 30 days or be in hot shutdown within 72 hours unless containment entry is required. If containment entry is required, the inoperable channel must be restored by the next refueling outage. If both channels are inoperable, restore the inoperable channels within 30 days or be in hot shutdown within 12 hours.

3.5.5 Fire Detection Instrumentation

Applicability

This specification applies to fire detection instrumentation utilized within fire areas containing safety related equipment or circuitry for the purposes of protecting that safety related equipment or circuitry.

Objective

To provide immediate notification of fires in areas where there exists a potential for a fire to disable safety related systems.

Specification

- 3.5.5.1 A minimum of 50% of the heat/smoke detectors in the locations specified in Table 3.5-5 shall be operable.
- 3.5.5.2 If less than 50% of the fire detectors in any of the locations designated in Table 3.5-5 are operable, within one hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour and restore the equipment to operable status within 14 days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.12.5 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to operable status. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases

The various detectors provide alarms that notify the operators of the existence of a fire in its early stages thus providing early initiation of fire protection. The detectors in the main and auxiliary control rooms also provide automatic fire protection initiation.

The detectors required to be operable in the various areas represent one half of those installed.

Operability of the fire detection instrumentation ensures that operable warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas(s) is required to provide detection capability until the inoperable instrumentation is restored to operability.

3.5.6 Radioactive Liquid Effluent Instrumentation

Applicability: During releases via this pathway.

Objective: To provide instrumentation for radioactive liquid releases.

Specification:

- 3.5.6.1 The radioactive liquid effluent monitoring instrumentation shown in Table 3.5.6-1 shall be operable with their alarm/trip setpoints set to ensure that the limits of specification 3.25.1.1 are not exceeded.
- 3.5.6.2 With alarm/trip setpoints less conservative than required by the above specification, immediately suspend the release of radioactive liquid effluents monitored by the affected channel, until the setpoint is changed to an acceptably conservative value.
- 3.5.6.3 With less than the minimum number of channels operable, take the action shown in Table 3.5.6-1. Return the instruments to operable status within 30 days or, in lieu of any other report, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected.
- 3.5.6.4 Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases. The alarm/trip setpoints for these instruments shall be calculated in accordance with the methods in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20.

3.5.7 Radioactive Gaseous Effluent Instrumentation

Applicability: As shown in Table 3.5.7-1.

Objective: To provide instrumentation for radioactive gaseous releases.

Specification:

- 3.5.7.1 The radioactive gaseous effluent monitoring instrumentation shown in Table 3.5.7-1 shall be operable with their alarm/trip setpoints set to ensure that the limits of Specification 3.25.2.1 are not exceeded.
- 3.5.7.2 With a channel alarm/trip setpoint less conservative than required, declare the channel inoperable.
- 3.5.7.3 With less than the minimum number of channels operable, take the action shown in Table 3.5.7-1. Return the instruments to operable status within 30 days or, in lieu of any other report, explain in the next Semiannual Radioactive Effluent Release Report why the inoperability was not corrected.
- 3.5.7.4 Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases. The alarm/trip setpoints for these instruments shall be calculated in accordance with methods in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20.105.

3.7.2

- A. The specifications in 3.7.1 may be modified to allow one of the following conditions to exist after the reactor has been heated above 200F. Except as indicated in the following conditions, if any of these conditions are not met, a hot shutdown shall be initiated within 12 hours. If the condition is not cleared within 24 hours, the reactor shall be brought to cold shutdown within an additional 24 hours.
- B. In the event that one of the offsite power sources specified in 3.7.1.A (1 or 2) is inoperable, reactor operation may continue for up to 24 hours if the availability of the diesel generators is immediately verified.
- C. Either one of the two diesel generators may be inoperable for up to 7 days in any month provided that during such 7 days the operability of the remaining diesel generator is demonstrated immediately and daily thereafter, there are no inoperable ESF components associated with the operable diesel generator, and provided that the two sources of off-site power specified in 3.7.1.A(1) or 3.7.1.A(2) are available.
- D. Any 4160V, 480V, or 120V switchgear, load center, motor control center, or distribution panel in one of the two ESF distribution systems may be inoperable for up to 8 hours, provided that the operability of the diesel generator associated with the operable ESF distribution system is demonstrated immediately and all of the components of the operable distribution system are operable. If the ESF distribution system is not returned to service at the end of the 8 hour period, Specification 3.7.2.A shall apply.
- E. Two station battery chargers may be inoperable for 8 hours, after which Specification 3.7.2.A shall apply.
- F. One of the two station batteries and the associated distribution system may be inoperable for 8 hours provided that there are no inoperable safety related components associated with the remaining station battery which are redundant to the inoperable station battery and the operability of the diesel generator is verified immediately. If the battery is not returned to service at the end of the 8 hour period, Specification 3.7.2.A shall apply.
- G. Two control power sources from the plant to the switchyard and the attendant distribution system may be inoperable for 8 hours, after which Specification 3.7.2.A shall apply.
- H. If the requirements of Specification 3.7.1.G cannot be met, either:
 - (1) place all Startup Transformer No. 2 feeder breakers in "pull-to-lock" within 1 hour, restore the inoperable interlocks to operable status within 30 days, or submit within 30 days a Special Report pursuant to Specification 6.12.5 outlining the cause of the failure, proposed corrective action and schedule for implementation; or (NOTE: The provisions of Specification 3.0.4 are not applicable.)
 - (2) apply the action requirements of Table 3.5.1-1, Note 14.

3.7.3 Deleted

Bases

The electrical system is designed to be electrically self-sufficient and provide adequate, reliable power sources for all electrical equipment during startup, normal operation, safe shutdown and handling of all emergency situations. To prevent the concurrent loss of all auxiliary power, the various sources of power are independent of and isolated from each other.

In the event that the offsite power sources specified in 3.7.1.A (1 or 2) are inoperable, the required capacity of one emergency storage tank plus one day tank (20, 160 gallons) will be sufficient for not less than three and one-half days operation for one diesel generator loaded to full capacity. (ANO-1 FSAR 8.2.2.3) The underground emergency storage tanks are gravity fed from the bulk storage tank and are normally full, while the day tanks are fed from transfer pumps which are capable of being cross connected at their suction and discharges and automatically receive fuel oil when their inventory is less than 180 gallons. Thus, at least a seven day total diesel oil inventory is available onsite for emergency diesel generator operation during complete loss of electric power conditions.

Technical Specification 3.7.2 allows for the temporary modification of the specifications in 3.7.1 provided that backup system(s) are operable with safe reactor operation and combined availability of the engineered safety features ensured.

Technical Specifications 3.7.1.F and 3.7.1.G provide assurance that the Startup Transformer No. 2 loads will not contribute to a sustained degraded grid voltage situation. This will protect ESF equipment from damage caused by sustained undervoltage.

3.12 MISCELLANEOUS RADIOACTIVE MATERIALS SOURCES

Applicability

Applies to byproduct, source, and special nuclear radioactive material sources.

Objective

To assure that leakage from byproduct, source and special nuclear radioactive material sources does not exceed allowable limits.

Specification

- 3.12.1 The source leakage test performed pursuant to Specification 4.14 shall be capable of detecting the presence of 0.005 μCi of radioactive material on the test sample. If the test reveals the presence of 0.005 μCi or more of removable contamination, it shall immediately be withdrawn from use, decontaminated and repaired, or be disposed of in accordance with Commission regulations. Sealed sources are exempt from such leak tests when the source contains 100 μCi or less of beta and/or gamma emitting material or 5 μCi or less of alpha emitting material. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.
- 3.12.2 A Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.12.5 within 90 days if source leakage tests reveal the presence of ≥ 0.005 microcuries of removable contamination.
- 3.12.3 A complete inventory of licensed radioactive materials in possession shall be maintained current at all times.

3.17 Fire Suppression Water System

Applicability

This specification applies to the portions of the fire suppression water system necessary to provide fire protection to safety related equipment.

Objective

To assure that fire suppression is available to safety related equipment.

Specification

- 3.17.1 The fire suppression water system shall be operable at all times with two high pressure pumps, each with a capacity of at least 2500 gpm, with their discharges aligned to the fire suppression header, and with an operable flow path capable of transferring water through distribution piping with operable sectionalizing control valves to the shutoff valve ahead of each hose standpipe and the water flow alarm device on each sprinkler system.
- 3.17.2 With one pump inoperable, restore the inoperable equipment to operable status within seven days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.12.5 within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system.
- 3.17.3 With the fire suppression water system otherwise inoperable:
- a. Establish a backup fire suppression water system within 24 hours; and
 - b. If "a." above cannot be fulfilled, place the reactor in Hot Standby within the next 6 hours and in Cold Shutdown within the following 30 hours. The provisions of Specification 3.0.4 are not applicable.

Bases

The fire pumps supply the only source of water for all fire suppression systems utilizing water. Each pump is individually capable of providing full flow required for proper fire suppression water system operation. The pumps start automatically on low system pressure.

In the event that the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

3.18 FIRE SUPPRESSION SPRINKLER SYSTEM

Applicability

This specification applies to the following fire suppression sprinkler systems protecting safety related areas:

- a. Each of the four reactor building cable penetration areas.
- b. Each of the four cable penetration rooms.
- c. Each of the two emergency diesel generator rooms.
- d. Cable spreading room.
- e. Each of the two diesel generator fuel vaults.
- f. Hallway E1 372 (Zone 98-J).
- g. Condensate demineralizer area.*

Objective

To assure that fire suppression is available to safety related equipment located in the above-listed areas.

Specification

- 3.18.1 The above-listed sprinkler systems shall be operable at all times.
- 3.18.2 With one or more of the above-listed sprinkler systems inoperable, establish a continuous fire watch (or operable smoke and/or heat detection equipment with control room alarm) with backup fire suppression equipment for the applicable area(s) within one hour. Restore the system(s) to operable status within 14 days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.12.5 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system(s) to operable status. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases

Safety related equipment located in various areas is protected by sprinkler systems. The operability of these systems ensures that adequate fire suppression capability is available to confine and extinguish a fire occurring in the applicable areas. In the event a system is inoperable, alternate backup fire fighting equipment or operable detection equipment is required to be made available until the inoperable equipment is restored to service.

*To be implemented no later than July 30, 1979.

3.19 CONTROL ROOM AND AUXILIARY CONTROL ROOM HALON SYSTEMS

Applicability

This specification applies to the Halon systems utilized as the fire suppression system for the control room and auxiliary control room.

Objective

To assure that fire suppression is available to the safety related equipment in the control room and auxiliary control room.

Specification

- 3.19.1 The three control room and auxiliary control room Halon systems shall be operable at all times with the storage tanks having at least 95% of full charge weight and 90% of full charge pressure.
- 3.19.2 With any of the control room and auxiliary control room Halon systems inoperable, establish backup fire suppression equipment for the affected area within one hour. Restore the system(s) to operable status within 14 days, or prepare and submit a Special Report to the Commission pursuant to Specification 6.12.5 within 30 days outlining the actions taken, the cause of the inoperability, and the plans and schedule for restoring the system to operable status. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases

Safety related circuitry located in portions of the control room and auxiliary control room is protected by the Halon systems. The operability of these systems ensures that adequate fire suppression capability is available to confine and extinguish a fire occurring in the control room or the auxiliary control room.

In the event that the system(s) is inoperable, alternate backup fire fighting equipment is required to be made available in the affected area until the inoperable equipment is restored to service.

3.25 RADIOACTIVE EFFLUENTS

3.25.1 Radioactive Liquid Effluents

3.25.1.1 Concentration

Applicability: At all times

Objective: To ensure that the limits of 10 CFR 20 are met.

Specifications:

- 3.25.1.1 A. The concentration of radioactive material released to the discharge canal shall be limited to the concentration specified in 10 CFR Part 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the total concentration released shall be limited to 2×10^{-4} $\mu\text{Ci/ml}$.
- B. With the concentration of radioactive material released exceeding the above limits, immediately initiate action to restore concentration to within limits and provide notification to the Commission within 24 hours. In lieu of any other report, prepare and submit a Special Report within 30 days pursuant to Specification 6.12.5
- C. Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

This specification is provided to ensure that the concentration of radioactive materials released in liquid waste effluents from the site to unrestricted areas will be less than the concentration levels specified in 10 CFR Part 20, Appendix B, Table II. This limitation provides additional assurance that the levels of radioactive materials in bodies of water outside the site will not result in exposures greater than the Section II A design objectives of Appendix I, 10 CFR Part 50, to a member of the public. The concentration limit for noble gases is based upon the assumption that Xe-133 is the controlling radioisotope and its MPC in air (submersion) was converted to an equivalent concentration in water using the methods described in International Commission on Radiological Protection (ICRP) Publication 2.

Radioactive Liquid Effluents

3.25.1.2 Dose

Applicability: At all times

Objective: To ensure that the dose limits of 10 CFR 50, Appendix I, Section IV A, are met.

Specifications:

- 3.25.1.2 A The dose commitment to a member of the public from radioactive material in liquid effluents released from ANO-1 to the discharge canal shall be:
- 1) During any calendar quarter less than or equal to 1.5 mrem to the total body and less than or equal to 5 mrem to any organ, and
 - 2) During any calendar year less than or equal to 3 mrem to the total body and less than or equal to 10 mrem to any organ.
- B. With the calculated dose from the release of radioactive materials in liquid effluents exceeding any of the above limits, in lieu of any other report, prepare and submit a Special Report to the Commission within 30 days, pursuant to Specification 6.12.5.
- C. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

Specification 3.25.1.2 provides assurance that releases of liquid effluents will result in concentrations far below the limits of 10CFR20. The specification provides the required operating flexibility and at the same time assures that the release of radioactive material in liquid effluents will be kept "as low as reasonably achievable".

Radioactive Liquid Effluents

3.25.1.3 Waste Treatment

Applicability: At all times

Objective: To assure that the amount of radioactive material in liquid effluents will be "as low as reasonably achievable."

Specifications.

- 3.25.1.3 A. The appropriate parts of the liquid radwaste treatment system shall be used to reduce the radioactive materials in liquid waste prior to their discharge when it is projected that the cumulative dose during a calendar quarter due to liquid effluent releases would exceed 0.18 mrem to the total body or 0.625 mrem to any organ.
- B. The provisions of this specification do not apply to the laundry tanks due to their incompatibility with the radwaste system.
- C. With radioactive liquid waste being discharged without treatment and in excess of the above limits, in lieu of any other report, prepare and submit a Special Report to the Commission within 30 days per Specification 6.12.5.
- D. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

The requirements that the appropriate portions of this system be used when specified provides assurance that the releases of radioactive materials in liquid effluents will be kept "as low as is reasonably achievable." The specified limits governing the use of appropriate portions of the liquid radwaste treatment system were specified as a suitable fraction of the guide set forth in Section II A of Appendix I, 10 CFR Part 50, for liquid effluents. The values of 0.18 mrem and 0.625 mrem are approximately 25% of the yearly design objectives on a quarterly basis. The yearly design objectives are given in 10 CFR 50, Appendix I, Section II.

3.25.2 Radioactive Gaseous Effluents

3.25.2.1 Dose Rate

Applicability: At all times

Objective: To ensure that the dose rate in unrestricted areas from gaseous effluents will be within the limits of 10 CFR 20.

Specifications:

3.25.2.1 A. The dose rate in unrestricted areas (see Figure 5.1-1) due to radioactive materials released in gaseous effluents from the site shall be:

- 1) For noble gases: Less than or equal to 500 mrem/yr to the total body and less than or equal to 3000 mrem/yr to the skin.
- 2) For iodine-131, for tritium and for all radionuclides in particulate form with half lives greater than 8 days: Less than or equal to 1500 mrem/yr to any organ.

During periods of reactor building purging the dose rate may be averaged over a one hour interval.

- B. With the dose rate(s) exceeding the above limits, without delay restore the release rate to within the above limit(s)
- C. Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

This specification is provided to ensure that, at any time, the dose rate due to gaseous effluents from all units on the site will be within the limits of 10 CFR 20 for unrestricted areas.

This specification applies to the release of gaseous effluents from all reactors at the site.

Radioactive Gaseous Effluents

3.25.2.2 Dose - Noble Gases

Applicability: At all times

Objective: To ensure that the design objective doses of 10 CFR 50, Appendix I, Section IV A, are not exceeded.

Specifications:

- 3.25.2.2. A. The dose due to noble gases released in gaseous effluents from ANO-1 to unrestricted areas (see Figure 5.1-1) shall be:
- 1) During any calendar quarter, less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation, and
 - 2) During any calendar year, less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation.
- B. With the calculated dose from radioactive noble gases in gaseous effluents exceeding any of the above limits, in lieu of any other report, prepare and submit a Special Report to the Commission within 30 days, pursuant to Specification 6.12.5.
- C. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

Specification 3.25.2.2 implements the design guides specified in 10 CFR 50, Appendix I, Section II, and the limiting condition for operation as set forth in Section IV A of Appendix I.

The specifications provide the required operating flexibility and at the same time implement the guides set forth in Section IV A, Appendix I, to assure that the releases of radioactive material in gaseous effluents will be kept "as low as is reasonably achievable."

These limits provide reasonable assurance that radioactive material discharged in gaseous effluents will not result in the exposure of an individual in an unrestricted area, to annual average concentrations exceeding the limits specified in Appendix B, Table II of 10 CFR Part 20 [10 CFR Part 20.106(b)]. For individuals who may at times be within the exclusion area boundary, the occupancy of the individual will be sufficiently low to compensate for any increase in the atmospheric diffusion factor above that for the exclusion area boundary.

Radioactive Gaseous Effluents

3.25.2.3 Dose - Iodine-131, Tritium, and Radionuclides in Particulate Form

Applicability: At all times

Objective: To ensure that the dose limits of 10 CFR 50, Appendix I, Section IV A, are met.

Specifications:

- 3.25.2.3 A. The dose to a member of the public from iodine-131, from tritium, and from all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from ANO-1 to unrestricted areas (see Figure 5.1-1) shall be:
- 1) During any calendar quarter, less than or equal to 7.5 mrems to any organ, and
 - 2) During any calendar year, less than or equal to 15 mrems to any organ.
- B. With the calculated dose from the release of iodine-131, tritium and radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents exceeding any of the above limits, in lieu of any other report, prepare and submit a Special Report to the Commission within 30 days, pursuant to Specification 6.12.5.
- C. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

Specification 3.25.2.3 implements the design guides set forth in 10 CFR 50, Appendix I, Section 11 C, and the limiting conditions for operation as set forth in Appendix I, Section IV A.

The specifications provide the required operating flexibility and at the same time implement the guides set forth in Section IV A of Appendix I to assure that the releases of radioactive materials in gaseous effluents will be kept "as low as reasonably achievable".

Radioactive Gaseous Effluents

3.25.2.4 Gaseous Radwaste Treatment

Applicability: At all times

Objective: To assure that the amount of radioactive material in gaseous effluents is "as low as reasonably achievable."

Specifications:

- 3.25.2.4 A. Ventilation exhaust treatment systems shall be used to reduce radioactive materials in gaseous waste prior to discharge when the projected doses due to gaseous effluent releases from ANO-1 to unrestricted areas (see Figure 5.1-1) would exceed 0.625 mrad for gamma radiation and 1.25 mrad for beta radiation over a calendar quarter; or when the projected doses due to iodine-131, tritium, and radionuclides in particulate form with half-lives greater than 8 days would exceed 1.0 mrem to any organ over a calendar quarter.
- B. When degasifying the reactor coolant system, the gaseous radwaste treatment system shall be utilized to process the degassing effluent to reduce the concentration of radioactive materials prior to discharge when the projected doses due to gaseous effluent releases from ANO-1 to unrestricted areas (see Figure 5.1-1) would exceed 0.625 mrad for gamma radiation and 1.25 mrad for beta radiation over a calendar quarter.
- C. With gaseous waste being discharged without treatment and in excess of the above limits, in lieu of any other report, prepare and submit to the Commission within 30 days a Special Report, per Specification 6.12.5.
- D. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

Bases:

The requirement that the appropriate portions of these systems be used when specified provides reasonable assurance that the releases of radioactive materials in gaseous effluents will be kept "as low as reasonably achievable." The specified limits governing the use of appropriate portions of the systems were specified as a suitable fraction of the guide set forth in Sections II B and II C of Appendix I, 10 CFR Part 50, for gaseous effluents. The values 0.625 mrad, 1.25 mrad, and 1.0 mrem are approximately 25% of the yearly design objectives on a quarterly basis. The yearly design objectives are given in Specifications 3.25.2.2 and 3.25.2.3.

3.25.4 Solid Radioactive Waste

Applicability: At all times

Objective: To ensure solid radwaste is processed in accordance with the Process Control Program to meet shipping and burial ground requirements.

Specifications:

3.25.4.1 With the provisions of the Process Control Program not satisfied, suspend shipments of defectively processed or defectively packaged solid radioactive waste from the site.

3.25 4.2 The provisions of Specifications 3.0.3 and 3.0.4 are not applicable. |

Bases: This specification implements the requirements of 10CFR50.36a and General Design Criterion 60 of Appendix A to 10CFR50.

Should the inspection of one of the wires reveal any significant physical change (pitting or loss of area), additional wires shall be removed from the applicable surveillance tendons and inspected to determine the extent and cause change. The sheathing filler will be sampled and inspected for changes in physical appearance. (See Applicable Acceptance Criteria in Section 4.4.2.1.3)

4.4.2.1.3 Acceptance Criteria

The Reactor Building Post Tensioning System shall be considered acceptable if the following acceptance criteria are met.

1. Each surveillance tendon has a normalized left-off force equaling or exceeding its expected prestress force for the time of the test. See Figures 4.4.2-1, -2, and -3. If the normalized lift-off force of any one tendon in a group lies between the expected prestress force and the lower bound prestress force, an adjacent tendon on each side shall be checked for lift-off force. If both of these tendons are found acceptable, the surveillance program may proceed considering the single deficiency as unique and acceptable. If either of the adjacent tendons is found unacceptable, it shall be considered evidence of possible abnormal degradation of the containment structure. (See TS 6.12.5)

If the normalized lift-off force of any single tendon lies below the lower bound prestress force, the occurrence should be considered evidence of possible abnormal degradation of the containment structure. (See TS 6.12.5)

2. The wires removed from three detensioned surveillance tendons (one dome, one vertical and one hoop) shall be inspected for corrosion, cracks, or other damage over the entire length of the wire. The presence of abnormal corrosion, cracks, or other damage shall be considered evidence of possible abnormal degradation of the containment structure. (See TS 6.12.5)

A minimum of three (3) wire samples cut from each removed wire (one from each end and one at mid length) shall be subjected to a tensile test. Failure of any one of these wire samples to meet a minimum ultimate tensile strength of 240 ksi shall be considered evidence of possible abnormal degradation of the containment structure. (See TS 6.12.5)

3. Sheathing Filler material samples from each surveillance shall be considered acceptable provided the results of the tests performed on the samples fall within the following limits.

1. Water Soluble Chlorides	less than	10 ppm
2. Water Soluble Nitrates	less than	10 ppm
3. Water Soluble Sulfides	less than	10 ppm
4. Water Content	less than	10% Dry Weight

4.4.2.2 Inspection Intervals and Reports

The inspection intervals, measured from the date of the initial structural test, shall be one year, three years, five years, and every five years thereafter. Tendon surveillance may be conducted during reactor operation provided design conditions regarding loss of adjacent tendons are satisfied at all times.

A quantitative, analytical Special Report covering results of each inspection shall be submitted within 90 days after completion of the tests and inspections, pursuant to Technical Specification 6.12.5, and shall especially address the following conditions, should they develop:

- (1) Broken wires.
- (2) The force-time trend line for any tendon, when extrapolated, that extends beyond either the upper or lower bounds of the predicted design band.
- (3) Unexpected changes in tendon conditions or sheathing filler properties.

4.4.2.3 End Anchorage Concrete Surveillance

- a. The end anchorages of the surveillance tendons and adjacent concrete surface will be inspected.
- b. The inspection interval will be one-half year and one year after the structural integrity test.
- c. The selected inspection location shall include:
 - (1) Four (4) locations on one buttress (hoop tendon anchorage).
 - (2) Two (2) locations on the top of the ring girder (vertical tendon anchorage).
 - (3) One (1) location on the ring girder (dome tendon anchorage).

4.18.6 Reports

Following each inservice inspection of steam generator tubes, the complete results of the inspection shall be reported to the NRC. This report, to be submitted within 45 days of inspection completion, shall include:

- a. Number and extent of tubes inspected;
- b. Location and percent of wall-thickness penetration for each indication of an imperfection; and
- c. Identification of tubes plugged and tubes sleeved.

This report shall be in addition to a Special Report (per Specification 6.12.5) required for the results of steam generator tube inspections which fall into Category C-3 as denoted in Table 4.18-2. The Commission shall be notified of the results of steam generator tube inspections which fall into Category C-3 prior to resumption of plant operation.

Bases

The surveillance requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83, Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes in the event that there is evidence of mechanical damage or progressive degradation due to design, manufacturing errors, or inservice conditions that lead to corrosion. Inservice inspection of steam generator tubing also provides a means of characterizing the nature and cause of any tube degradation so that corrective measures can be taken.

TABLE 4.18-2

STEAM GENERATOR TUBE INSPECTION^{2, 3}

1ST SAMPLE INSPECTION			2ND SAMPLE INSPECTION			3RD SAMPLE INSPECTION	
Sample Size	Result	Action Required	Result	Action Required	Result	Action Required	
A minimum of S Tubes per S.G. ¹	C-1	None	N/A	N/A	N/A	N/A	
	C-2	Plug or sleeve defective tubes and inspect additional 2S tubes in this S.G.	C-1	None	N/A	N/A	
			C-2	Plug or sleeve defective tubes and inspect additional 4S tubes in this S.G.	C-2	Plug or sleeve defective tubes	
			C-3	Perform action for C-3 result of first sample.	C-3	Perform action for C-3 result of first sample	
			N/A	N/A	N/A	N/A	
	C-3	Inspect all tubes in this S.G. plug or sleeve defective tubes and inspect 2S tubes in other S.G. Special Report to NRC pursuant to 6.12.45	Other S.G. is C-1	None	N/A	N/A	
			Other S.G. is C-2	Perform action for C-2 results of second sample.	N/A	N/A	
Other S.G. is C-3			Inspect all tubes in each S.G. and plug or sleeve defective tubes. Special Report to NRC and NRC approval of remedial action.	N/A	N/A		

NOTES: ¹ $S = \frac{3N}{n}$ Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection.

²For tubes inspected pursuant to 4.18.3.a.3: No action is required for C-1 results. For C-2 results in one or both steam generators plug or sleeve defective tubes. For C-3 results in one or both steam generators, plug or sleeve defective tubes and request NRC approval of remedial action and provide a Special Report.

³No more than ten thousand (10,000) sleeves may be installed in both ANO-1 steam generators combined.

Amendment No. 24, 41, 88, 106, 118

11001

4.30 RADIOLOGICAL ENVIRONMENTAL MONITORING

4.30.1 Radiological Environmental Monitoring Program Description

Applicability: Applies at all times.

Objective: To provide information on the radiological effects of station operation on the environment.

Specifications:

- 4.30.1.1 The radiological environmental monitoring samples shall be collected pursuant to Table 4.30-1 and shall be analyzed pursuant to the requirements of Tables 4.30-1 and 4.30.2. The sample locations shall be shown in table 4-1 in the ODCM.
- 4.30.1.2 a. With the radiological environmental monitoring program not being conducted as specified in Table 4.30-1, prepare and submit to the Commission in the Annual Radiological Environmental Report a description of the reasons for not conducting the program as required and the plans for preventing a recurrence. (Deviations are permitted from the required sampling schedule if specimens are not obtainable due to hazardous conditions, seasonal unavailability, or to malfunction of sampling equipment. If the latter, every effort shall be made to complete corrective action prior to the end of the next sampling period.)
- b. With the level of radioactivity as the result of plan effluents in an environmental sampling medium at one or more of the locations specified in Table 4.30-1 exceeding the limits of Table 4.30-3 when averaged over any calendar quarter, prepare and submit to the Commission, within 30 days from the end of the affected quarter, a Special Report which includes an evaluation of any release conditions, environmental factors or other aspects which caused the limits of Table 4.30-3 to be exceeded, and defines the actions taken to reduce radioactive effluents so that the potential annual dose to a member of the public is less than the calendar year limits of Specifications 3.25.1.2 and 3.25.2.2. When more than one of the radionuclides in Table 4.30-3 are detected in the sampling medium, this Special Report shall be submitted if:

$$\frac{\text{Concentration (1)}}{\text{reporting level (1)}} + \frac{\text{Concentration (2)}}{\text{reporting level (2)}} + \dots \geq 1.0$$

When radionuclides other than those in Table 4.30-3 are detected and are the result of plant effluents, this Special Report shall be submitted if the potential annual dose to a member of the public is equal to or greater than the calendar

year limits of Specifications 3.25.1.2 and 3.25.2.2. This Special Report is not required if the measured level of radioactivity was not the result of plant effluents, however, in such an event, the condition shall be reported and described in the Annual Radiological Environmental Report.

- c. With milk or fresh leafy vegetable samples unavailable from any of the sample locations required by Table 4.29-1, identify locations for obtaining replacement samples and add them to the radiological environmental monitoring program within 30 days. The specific locations from which samples were unavailable may then be deleted from the monitoring program. Identify the causes of the unavailability of samples and identify the new location(s) for obtaining replacement samples in the next Semiannual Radioactive Effluent Release Report and also include in the report a revised table for the ODCM reflecting the new location(s).
- d. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

4.30.1.3 The results of analyses performed on the radiological environmental monitoring samples shall be summarized in the Annual Radiological Environmental Report.

Bases:

The radiological monitoring program required by this specification provides measurements of radiation and of radioactive materials in those exposure pathways and for those radionuclides which lead to the highest potential radiation exposures of individuals resulting from the station operation. This monitoring program thereby supplements the radiological effluents monitoring program by verifying that the measurable concentrations of radioactive materials and levels of radiation are not higher than expected on the basis of the effluent measurements and modeling of the environmental exposure pathways. The initially specified monitoring program will be effective for at least the first three years of commercial operation. Following this period, program changes may be initiated based on operational experience.

The detection capabilities required by Table 4.30-2 are state-of-the-art for routine environmental measurements in industrial laboratories. The LLD's for drinking water meet the requirements of 40 CFR 141.

Radiological Environmental Monitoring

4.30.2 Land Use Census

Applicability: Applies at all times

Objectives: This specification will identify changes in use of the unrestricted areas.

Specifications:

- 4.30.2.1 A land use census shall be conducted and shall identify the location of the nearest milk animal, the nearest residence, and the nearest garden* of greater than 500 square feet producing fresh leafy vegetables in each of the 16 meteorological sectors within a distance of five miles from the ANO-1 reactor building.
- 4.30.2.2 The land use census shall be conducted at least once per 12 months between the dates of June 1 and October 1, by door-to-door survey, aerial survey, or by consulting local agricultural authorities.
- 4.30.2.3 a. With a land use census identifying a location(s) which yields a calculated dose commitment due to I-131, tritium, and radionuclides in particulate form greater than the values currently being calculated in Unit 1 Specification 4.29.3 and Unit 2 Specification 4.11.2.3 submit location description in the Semiannual Radioactive Effluent Release Report per Specification 6.12.2.6.
- b. With a land use census identifying a location(s) which yields a calculated dose commitment (via the same exposure pathway) greater than at a location from which samples are currently being obtained in accordance with Specification 4.30.1.1, identify the new location in the Semiannual Radioactive Effluent Release Report per Specification 6.12.2.6. The new location shall be added to the radiological environmental monitoring program within 30 days, if possible. The sampling location having the lowest calculated dose commitment (via the same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted.
- 4.30.2.4 The results of the land use census shall be included in the Annual Radiological Environmental Report.
- 4.30.2.5 The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

*Broad leaf vegetation sampling may be performed at the site boundary in the direction sector with the highest D/Q in lieu of the garden census.

Radiological Environmental Monitoring

4.30.3 Interlaboratory Comparison Program

Applicability: Applies to the off-site radiochemistry laboratory.

Objective: To provide independent checks on the accuracy of the measurements of radioactive material in environmental samples.

Specifications:

- 4.30.3.1 Analyses shall be performed on radioactive materials supplied as part of Interlaboratory Comparison Program which has been approved by NRC.
- 4.30.3.2 With analyses not being performed as required above, report the corrective actions taken to prevent a recurrence to the Commission in the Annual Radiological Environmental Report.
- 4.30.3.3 The results of analyses performed as part of the above required Interlaboratory Comparison Program shall be included in the Annual Radiological Environmental Report pursuant to Specification 6.12.2.5.
- 4.30.3.4 The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Bases:

The requirement for participation in an Interlaboratory Comparison Program is provided to ensure that independent checks on the precision and accuracy of the measurements of radioactive material in environmental sample matrices are performed as part of a quality assurance program for environmental monitoring in order to demonstrate that the results are reasonably valid.

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 Executive Director, ANO Site Operations 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 Executive Director, ANO Site Operations and to the Chairman of the Safety Review Committee.
 - f. Review of REPORTABLE EVENTS.

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 deviation from normal and expected performance of unit equipment that affect nuclear safety.
- g. All REPORTABLE EVENTS pursuant to Specification 6.6.2.
- 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.
- j. Changes to Offsite Dose Calculation Manual and Process Control Program.

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 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 result of actions taken to correct deficiencies occurring in unit equipment, structures, systems or methods of operation that affect nuclear safety at least once per 6 months.

6.6 REPORTABLE EVENT ACTION

6.6.1 A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 to 10 CFR Part 50.

6.6.2 The following actions shall be taken for REPORTABLE EVENTS:

- a. A report shall be submitted to the Commission pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the PSC, and the results of this review shall be submitted to the SRC and the Vice President, Nuclear Operations by the Director, Site Nuclear Operations.

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 pursuant to 10 CFR 50.72 and a report submitted pursuant to the requirements of 10 CFR 50.36 and Specification 6.6.

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.
- g. New and spent fuel storage.
- h. Offsite Dose Calculation Manual and Process Control Program implementation at the site.
- i. Post accident sampling (includes sampling of reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and the containment atmosphere).

6.9 RECORD RETENTION

- 6.9.1 The following records shall be retained for at least five years:
- a. Records and logs of facility operation covering time interval at each power level.
 - b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
 - c. REPORTABLE EVENTS.
 - d. Records of surveillance activities, inspections and calibrations required by the Appendix A Technical Specifications.
 - e. Records of reactor tests and experiments.
 - f. Records of changes made to procedures required by Specification 6.8.1.
 - g. Records of radioactive shipments.
 - h. Test results, in units of microcuries, for leak tests performed on licensed sealed sources.
 - i. Results of annual physical inventory verifying accountability of licensed sources on record.
- 6.9.2 The following records shall be retained for the duration of the Facility Operating License:
- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
 - b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
 - c. Records of facility radiation and contamination surveys.
 - d. Records of radiation exposure for all individuals entering radiation control areas.
 - e. Records of gaseous and liquid radioactive material released to the environs.
 - f. Records of transient or operational cycles for those facility components designed for a limited number of transients or cycles.
 - g. Records of training and qualification for current members of the plant staff.

6.12.3 Deleted.

6.12.3.1 Deleted

6.12.3.2 Deleted

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6.12.5 Special Reports

Special reports shall be submitted to the Administrator of the appropriate Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification.

- a. Tendon Surveillance, Specification 4.4.2.2
- b. Inoperable Containment Radiation Monitors, Specification 3.5.1, Table 3.5.1-1.
- c. Radioactive Effluents, Specifications 3.25.1, 3.25.2, 3.25.3, and 3.25.4.

This report shall include the following:

- 1) Description of occurrence.
 - 2) Identify the cause(s) for exceeding the limit(s)
 - 3) Explain corrective action(s) taken to mitigate occurrence.
 - 4) Define action(s) taken to prevent recurrence.
 - 5) Summary of consequence(s) of occurrence.
 - 6) Describe levels exceeding 40CFR190 in accordance with 10CFR20.405(c), as applicable.
- d. Steam Generator Tubing Surveillance - Category C-3 Results, Specification 4.18.
 - e. Miscellaneous Radioactive Materials Source Leakage Tests, Specification 3.12.2.
 - f. Radiological Environmental Monitoring Sample Analysis, Specification 4.30.1.
 - g. An unplanned offsite release during any one hour period of 1) more than 1 curie of radioactive material in liquid effluents, 2) more than 150 curies of noble gas in gaseous effluents, or 3) more than 0.05 curies of radioiodine in gaseous effluents. The report of an unplanned offsite release of radioactive material shall be submitted within 30 days of the occurrence and shall include the following information:
 - 1. A description of the event and equipment involved.
 - 2. Cause(s) for the unplanned release.
 - 3. Actions taken to prevent recurrence
 - 4. Consequences of the unplanned release.

- h. Inoperable Fire Detection Instrumentation, Specification 3.5.5.2.
- i. Inoperable Fire Suppression Systems, Specifications 3.17.2, 3.18.2, and 3.19.2.
- j. Degraded Auxiliary Electrical Systems, Specification 3.7.2.H.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 118 TO

FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS POWER AND LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT NO. 1

DOCKET NO. 50-313

INTRODUCTION

By letter dated November 17, 1986, Arkansas Power and Light Company (AP&L or the licensee) requested an amendment to the Technical Specifications (TSs) appended to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit 1 (ANO-1). The proposed amendment would incorporate reporting requirements affected by 10 CFR Part 50, Sections 50.72 and 50.73, pursuant to Generic Letter No. 83-43 dated December 1983. Section 50.72 modifies the immediate notification requirements for operating nuclear power reactors and Section 50.73 provides for a revised Licensee Event Report System.

EVALUATION

This amendment request was reviewed against the staff positions contained in Generic Letter 83-43 and was found to be in conformance with that guidance. Appropriate changes in the "Administrative control", and "Definitions" sections were made as well as in those sections of the Technical Specifications which address reporting requirements affected by the 10 CFR Sections 50.72 and 50.73 revisions. Since the amendment incorporates the NRC provided guidance, is in compliance with the revised regulations, and since it makes changes which are administrative in nature, we find the amendment to be acceptable.

ENVIRONMENTAL CONSIDERATION

The amendment involves a change in the installation of use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposures. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 21, 1989

Principal Contributor: Chester Poslusny, Jr.