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

ARKANSAS POWER AND LIGHT COMPANY

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 66
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 December 1, 1981, 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.

DESIGNATED ORIGINAL

Certified By D. Vassallo

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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 66 , 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 its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 29, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 66

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

Replace the following page of the Appendix B Technical Specifications with the enclosed page. The revised page is identified by Amendment Number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

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b. The release rate of I-131 and particulates with half-lives greater than eight days shall not exceed 8% of the values specified in 2.4.2.3.b when averaged over a calendar quarter.

5. During release of radioactive gaseous wastes from the gaseous waste discharge header to the plant ventilation exhaust plenum, the following conditions shall be met:

   a. The gaseous radioactivity monitor, iodine and the particulate samplers in the plant vents shall be operating; and

   b. Automatic isolation devices capable of limiting gaseous release rates to within the values specified in 2.4.2.3.a shall be operating.

6. Radioactive gaseous wastes collected in the gas decay tanks shall be held up a minimum equivalent decay time of 45 days, except when the calculated activity concentration of each identified radioisotope of the site boundary is less than 1% of the MPC specified in 10 CFR Part 20, Appendix B, Table II, based on a χ/Q of 1.5×10^{-5}.

7. Purging of the reactor building shall be governed by the following conditions:

   a. Reactor building purge shall be through the high efficiency particulate filters and charcoal filters until the activity concentration is below the occupational limit inside the reactor building, at which time bypass may be initiated; and

   b. Reactor building purge shall be through the high efficiency particulate filters and charcoal filters whenever irradiated fuel is being handled or any objects are being handled over irradiated fuel in the reactor building.

8. Gases discharged through the unit vent shall be continuously monitored and recorded for gross (β,γ) activity.

   Whenever these monitors are inoperable, appropriate grab samples shall be taken and analyzed each shift. The monitor shall not be inoperable for more than 7 days.

Monitoring Requirement

1. Radioactive gaseous waste sampling and analysis shall be performed in accordance with Table 2-2.

2. All waste gas monitors shall be calibrated at least quarterly by means of a known radioactive source. Each monitor shall have an instrument channel test at least monthly and when discharging checked at least daily.

3. During power operation, the condenser vacuum pump discharge shall be continuously monitored for gross radiogas activity. The monitor shall not be inoperable for more than 7 days. Whenever this monitor is inoperable, grab samples shall be taken and analyzed for gross radioactivity daily.

4. Records shall be maintained and reports of the sampling and analysis results shall be submitted in accordance with 10CFR50.36a.

5. The Waste Gas Decay Tank effluent monitor shall be tested prior to any release of radioactive gas from a decay tank and shall be calibrated at refueling intervals.

Bases:

It is expected that the releases of radioactive materials and gaseous wastes will be kept within the design objective levels and will not exceed on an instantaneous basis the dose rate limits specified in 10CFR20.

These levels provide reasonable assurance that the resulting annual exposure from noble gases to the whole body or any organ on an individual will not exceed 10 mrem per year. At the same time the Licensee is permitted the flexibility of operation, compatible with considerations of health and safety, to assure that the public is provided a dependable source of power under unusual operating conditions which may temporarily result in releases higher than the design objective levels but still within the concentration limits specified in 10CFR20. It is expected that using this operational flexibility under unusual operating conditions, the Licensee shall exert every effort to keep levels of radioactive materials and gaseous wastes as low as practicable and that annual releases will not exceed a small fraction of the annual average concentration limits specified in 10CFR20. These efforts shall include consideration of meteorlogical conditions during releases.

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

ARKANSAS POWER AND LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 34
License No. NPF-6

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Arkansas Power and Light Company (the licensee) dated December 1, 1981, 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.

DESIGNATED ORIGINAL

Certified By D. Hoover

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.

Technical Specifications

The Technical Specifications contained in Appendix B, as revised through Amendment No. 75 , 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 its date of 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: July 29, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 34

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace the following pages of the Appendix 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.

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3. During power operation, the condenser vacuum pump discharge shall be continuously monitored for gross radiogas activity. The monitor shall not be inoperable for more than 7 days. Whenever this monitor is inoperable, grab samples shall be taken and analyzed for gross (β, γ) radioactivity daily.

4. Records shall be maintained and reports of the sampling and analysis results shall be submitted in accordance with 10CFR50.36a.

5. The Waste Gas Decay Tank effluent monitor shall be tested prior to any release of radioactive gas from a decay tank and shall be calibrated at least once every 18 months.

Bases:

It is expected that the releases of radioactive materials and gaseous wastes will be kept within the design objective levels and will not exceed on an instantaneous basis the dose rate limits specified in 10CFR20.

These levels provide reasonable assurance that the resulting annual exposure from noble gases to the whole body or any organ of an individual will not exceed 10 mrem per year. At that same time the Licensee is permitted the flexibility of operation, compatible with considerations of health and safety, to assure that the public is provided a dependable

source of power under unusual operating conditions which may temporarily result in releases higher than the design objective levels but still within the concentration limits specified in 10 CFR 20. It is expected that using this operational flexibility under unusual operating conditions, the Licensee shall exert every effort to keep levels of radioactive materials and gaseous wastes as low as reasonably achievable and that annual releases will not exceed a small fraction of the annual average concentration limits specified in 10 CFR 20. These efforts shall include consideration of meteorological conditions during releases.

The noble gas release rates stated in the objectives are based on a X/Q value from the annual meteorological data. The dispersion factor used, 4.0×10^{-6} sec/m^3 at 1046 meters, is conservative and the release rate is controlled to a small fraction of 10 CFR 20 requirements at the exclusion area boundary (.02 of 10 CFR 20 = 10 mrem per year). The dispersion factor is taken from annual meteorological data taken at the ANO site (see ANO-2 FSAR Section 2.3.5) and is based on the majority of the gaseous activity released from the site will be released from the waste gas decay tanks and reactor building purges, within the time frame of 8 to 24 hours.

3.0 ENVIRONMENTAL SURVEILLANCE

3.1 Surveillance for ANO

The surveillance program associated with ANO-1 (Docket No. 50-313) operation provides an examination of the adequatic ecosystem of Lake Dardanelle in the Vicinity of the plant as well as providing information on air, precipitation, ground water, soil, vegetation and milk by radiological analysis of samples in the area of the plant. That program will provide adequate information for ANO-2 operation and shall be carried out at all times that the ANO-2 Environmental Technical Specifications apply.

3.2 Additional Environmental Surveillance for Unit 2

3.2.1 Dilution of ANO-2 Discharges During ANO-1 Outages

Objective:

To assure that waste streams from Unit 2 are diluted before entering the discharge embayment on Dardanelle Reservoir.

Environmental Monitoring Requirements When Unit 2 is making discharges during Unit 1 outages, the licensee will record the number of Unit 1 circulating pumps in operation. Unit 2 releases and Unit 1 circulating water pump operation during Unit 1 outages shall be summarized, and reported in accordance with Subsection 5.6.1.

Action:

A non-routine report, as specified in Subsection 5.6.2.b, shall be made if less than two Unit 1 circulating water pumps are operated while Unit 2 releases or discharges are occurring.

Bases:

Unit 2 circulating water is concentrated by evaporation to a concentration factor ranging from 3 to 14 (FES p. 5-2). In order to minimize impact of the blowdown during Unit 1 outages, and to minimize impact of other low volume discharges and of waste heat from Unit 2 during such outages, a minimum dilution flow equivalent to one-half (approximately 383,000 gpm) the full-flow of the Unit 1 circulating water pumps should be maintained during all Unit 2 releases or discharges (FES p.5-2).

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3.3 Aerial Remote Sensing

Objective

Vegetation communities of the site and vicinity shall be aerially photographed annually to detect and assess the significance of damage, or lack thereof, as related to cooling tower drift dispersions.

Environmental Monitoring Requirements

Photography shall be done by aerial overflight. Aerial photography shall be conducted once per year during late summer or early fall. Timing of aerial photography and ground truthing should be selected to coincide with periods of maximum predicted drift deposition damage, preferably from August 15 to September 15, meteorological conditions permitting. This surveillance program shall commence at initial criticality of Unit 2 and shall continue for two years.