

DES MS-016

APR 13 1984

Docket No. 50-368

Mr. John M. Griffin, Senior Vice President  
Energy Supply  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

Dear Mr. Griffin:

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<del>Docket File</del>	JNGrace
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OELD	OPA, CMiles
SECY	RDiggs
LHarmon	
EJordan	

The Commission has issued the enclosed Amendment No. 55 to Facility Operating License No. NPF-6 for Arkansas Nuclear One, Unit No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated October 23, 1979, supplemented by letters dated July 19, 1982, December 20, 1982 and September 15, 1983.

The amendment revises the TS pertaining to seismic instrumentation. Specifically, the channel functional test interval of the Triaxial Response-Spectrum Recorders is changed from a semi-annual basis to at least once every 18 months.

A copy of the Safety Evaluation is enclosed. The notice of issuance will be included in the Commission's next monthly Federal Register Notice.

Sincerely,

**Original** signed by:

Robert S. Lee, Project Manager  
Operating Reactors Branch #3  
Division of Licensing

Enclosure:

1. Amendment No. 55 to NPF-6
2. Safety Evaluation

cc w/enclosure:  
See next page

\*See previous concurrence page

ORB#3:DL  
PMKreutzer  
3/13/84

ORB#3:DL\*  
RSLee:dd  
3/27/84

ORB#3:DL\*  
JRMiller  
3/29/84

OELD\*  
4/3/84

AD:OR:DL\*  
GCLainas  
4/10/84

Docket No. 50-368

Mr. John M. Griffin, Vice President  
Nuclear Operations  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

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ORB#3:DL  
PKreutzer  
3/ /84

ORB#3:DL  
RSLee  
3/27/84

ORB#3:DL  
JRMiller  
3/ /84

OELD No legal objection  
3/ /84  
AD:OR:DL  
GCLatnas  
3/10/84

See Typo at p 5 OK  
Corrected  
Bob Lee 4/13/84

Arkansas Power & Light Company

cc:

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Region VI Office  
ATTN: Regional Radiation  
Representative  
1201 Elm Street  
Dallas, Texas 75270

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Director, Division of Environmental  
Health Protection  
Arkansas Department of Health  
4815 West Markman Street  
Little Rock, Arkansas 72201



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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55  
License No. MPF-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Arkansas Power & Light Company (the licensee) dated October 23, 1979 as supplemented July 19, 1982, December 20, 1982 and September 15, 1983 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.

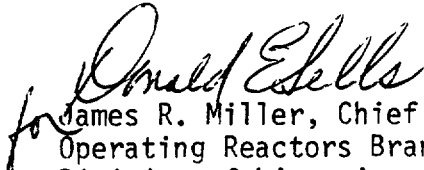
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-6 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 55, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
James R. Miller, Chief  
Operating Reactors Branch #3  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 13, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 55

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains vertical lines indicating the areas of change. The corresponding overleaf page is provided to maintain document completeness.

Page

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TABLE 3.3-7

SEISMIC MONITORING INSTRUMENTATION

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>MEASUREMENT RANGE</u>	<u>MINIMUM INSTRUMENT OPERABLE</u>
1. Triaxial Time-History Accelerographs		
a. ACS-8001, Unit 1 Containment Base Slab, Elev. 335'*	0.01-1.0g	1
b. ACS-8002, Unit 1 Top of Containment, Elev. 531'6"	0.01-1.0g	1
2. Triaxial Peak Accelerographs		
a. 2XR-8347, Containment Base Slab, Elev. 336'6"	0.01-1.0g	1
b. 2XR-8348, Primary Shield O/S Reactor Cavity, Elev. 366'3"	0.05-1.0g	1
c. 2XR-8349, Top of Containment, Elev. 531'6"	0.05-1.0g	1
3. Triaxial Response-Spectrum Recorders		
a. 2XR-8350, Containment Base Slab, Elev. 335'6" (O/S Containment)	2-25.4 Hz	1

\*With Unit 1 control room indication/or alarm

TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
1. Triaxial Time-History Accelerographs			
a. ACS-8001, Unit 1 Containment Base Slab, Elev, 335'**	M* M*	R R	SA SA
b. ACS-8002, Unit 1 Top of Containment Elev. 531'6"	M*	R	SA
2. Triaxial Peak Accelerographs			
a. 2XR-8347, Containment Base Slab, Elev. 336'6"	NA	R	NA
b. 2XR-8348, Primary Shield O/S Reactor Cavity, Elev, 366'3"	NA	R	NA
c. 2XR-8349, Top of Containment, Elev. 531'6"	NA	R	NA
3. Triaxial Response-Spectrum Recorders			
a. 2XR-8350, Containment Base Slab, Elev, 335'6" (O/S Containment)	NA	R	R

\* Except seismic trigger

\*\* With Unit 1 control room indication





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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF-6  
ARKANSAS POWER & LIGHT COMPANY  
ARKANSAS NUCLEAR ONE, UNIT 2  
DOCKET NO. 50-368

Introduction

By letter dated October 23, 1979, supplemented by letters dated July 19, 1982, December 20, 1982 and September 15, 1983, Arkansas Power & Light Company (AP&L) requested an amendment to Facility Operating License No. NPF-6 for operation of Arkansas Nuclear One, Unit 2. Specifically, AP&L requested that the channel functional test interval for the 2XR-8350 Triaxial Response-Spectrum Recorder be changed from semi-annual basis to at least once every 18 months. This recorder is located on the Containment Base Slab at elevation 335 feet 6 inches. The instrument is the model PSR 1200 recorder manufactured by Engdahl Enterprises of Costa Mesa, California. Engdahl Enterprises has furnished the response spectrum recorders for a number of nuclear power plants both domestic and foreign. This recorder uses a vibrating reed to mark a scratch plate for twelve different frequencies as a method of measuring the response spectra. This instrument provides the licensee with a direct response spectra for comparison with the design response spectra to determine the level of excitation in the event of an earthquake. This instrument complements another type of instrument, the time-history accelerogram, at the same location and would be used for quick determination of the earthquake level. This data would be used to determine whether the design bases or safe shutdown earthquake has or has not been exceeded.

DISCUSSION

The staff has reviewed the following information:

1. Technical Specification 3.3.3.3, 4.3.3.3.1 and 4.3.3.3.2
2. Manufacturers Information for the Engdahl Enterprises
3. Arkansas Power & Light Company Procedure Number 2304.58 Peak Shock Recorder Surveillance, Rev. 2
4. LLL Report UCID-19470 Technical Evaluation Report on the Specification Changes on the Surveillance Requirements for the Response-Spectrum Recorder at Arkansas Nuclear One, Unit 2
5. Discussions with Engdahl Enterprises.

Based on discussions with Engdahl Enterprises, a frequent interval of calibration of the instrument would not improve the instrument reliability and accuracy, but would actually degrade its performance by the over testing. Additionally, the provisions of ANSI 2.2-1978 Earthquake Instrumentation Criteria for Nuclear Power Plants require channel calibration on passive instruments to be at 18 months or refueling, whichever occurs first. The revised draft revision of Regulatory Guide 1.12 endorses the ANSI 2.2 standard and accepts the calibration intervals of 18 months or refueling. The staff expects the revised regulatory guide to be accepted with calibration interval of 18 months or refueling, whichever occurs first.

### Findings

The staff finds that the proposed modification to the technical specification for channel functional test of the non-annunciating response spectrum recorder is acceptable.

### Environmental Consideration

We have determined that the amendment does 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 amendment involves 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 this amendment.

### Conclusion

We have 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: April 13, 1984

Principal Contributor:  
H. Polk