

DCS MS-016

JUL 21 1982

Docket No. 50-368

Mr. William Cavanaugh, III
Senior Vice President, Energy
Supply
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Amendment No. 33 to Facility Operating License No. NPF-6 for Arkansas Nuclear One, Unit 2. The amendment consists of changes to the Technical Specifications in response to your application dated May 3, 1982, as supplemented May 20, 1982.

The amendment allows plant operation with loop resistance temperature detector response times exceeding six seconds provided that appropriate penalty factors are inserted into the Core Protection Calculator System.

Although your technical specifications are adequately clear on this point, we wish to remind you that plant operation with non-conservative penalty factors for known RTD response times is reportable pursuant to Technical Specification 6.9.1.8.b. In pursuing the resolution to the RTD response time degradation problem, and until it is resolved, the penalty factors should be conservatively applied so as to avoid operation with an inappropriate RTD response time input.

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

Sincerely,

Original signed by

Charles M. Trammell, III
Project Manager
Operating Reactors Branch #3
Division of Licensing

[Handwritten signature]
note 7/19/82
copy to original FR notice and Amendment

B208030092 B20721
PDR ADOCK 05000368
P PDR

- Enclosures:
1. Amendment No. 33 to NPF-6
 2. Safety Evaluation
 3. Notice of Issuance

*See previous page for concurrence and distribution.

OFFICE	cc w/enclosures See next page	ORB#3:DL*	ORB#1:DL*	CPB*	ORB#3:DL <i>[Signature]</i>	AD:OR:DL <i>[Signature]</i>	QELD <i>[Signature]</i>
SURNAME	PMKreutzer	CTrammell/pn	CBerlinger	MacLark	IMNovak	Jones	<i>[Signature]</i>
DATE	7/14/82	7/14/82	7/16/82	7/19/82	7/15/82	7/19/82	<i>[Signature]</i>

Docket No. 50-368

DISTRIBUTION:

✓ Docket File	OELD
NRC PDR	I&E (2)
L PDR	TBarnhardt (4)
NSIC	LSchneider
SECY	DBrinkman
ORB#3 Rdg	ACRS (10)
DEisenhut	CMiles
RDiggs	JHeltemes
PMKreutzer (3)	Gray File (+4)
CMTrammell	ASLAB
RAClark	JStevens

Mr. William Cavanaugh, III
 Senior Vice President, Energy
 Supply
 Arkansas Power & Light Company
 P. O. Box 551
 Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Amendment No. to Facility Operating License No. NPF-6 for Arkansas Nuclear One, Unit 2. The amendment consists of changes to the Technical Specifications in response to your application dated May 3, 1982, as supplemented May 20, 1982.

The amendment allows plant operation with loop resistance temperature detector response times exceeding six seconds provided that appropriate penalty factors are inserted into the Core Protection Calculator System.

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

Sincerely,

Charles M. Trammell, III
 Project Manager
 Operating Reactors Branch #3
 Division of Licensing

Enclosures:

1. Amendment No. to NPF-6
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
 See next page

C. Berlinger
 7/16/82

OFFICE	ORB#3:DL	ORB#3:DL	ORB#3:DL	AD:OR:DL	OELD		
SURNAME	PMKreutzer	Trammell/pn	RAClark	TMNovak			
DATE	7/14/82	7/14/82	7/ /82	7/ /82	7/ /82		



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

DISTRIBUTION:
Docket File
ORB#3 Rdg
PMKreutzer

Docket No. 50-368

Docketing and Service Section
Office of the Secretary of the Commission

SUBJECT: ARKANSAS POWER & LIGHT COMPANY, Arkansas Nuclear One, Unit 2

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s); Time for Submission of Views on Antitrust Matters.
- Notice of Availability of Applicant's Environmental Report.
- Notice of Proposed Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).
- Other: Amendment No. 33.
Referenced documents have been provided PDR.

Division of Licensing
Office of Nuclear Reactor Regulation

Enclosure:
As Stated

OFFICE →	ORB#3:DL					
SURNAME →	PMKreutzer/ph					
DATE →	7/23/82					

Arkansas Power & Light Company

cc:

Mr. John Marshall
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. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220
7910 Woodmont Avenue
Bethesda, Maryland 20814

Nicholas S. Reynolds, Esq.
c/o DeBevoise & Liberman
1200 Seventeenth Street, N.W.
Washington, D. C. 20036

Arkansas Polytechnic College
Russellville, Arkansas 72801

Mr. Charles B. Brinkman
Manager - Washington Nuclear
Operations
C-E Power Systems
4853 Cordell Avenue, Suite A-1
Bethesda, Maryland 20014

Regional Administrator
Nuclear Regulatory Commission, Region IV
Office of Executive Director for Operations
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Mr. W. Johnson
U.S. NRC
P. O. Box 2090
Russellville, Arkansas 72801

U.S. Environmental Protection Agency
Region VI Office
ATTN: Regional Radiation
Representative
1201 Elm Street
Dallas, Texas 75270

cc w/enclosure(s) and incoming
dated: 5/3/82, 5/20/82

S. L. Smith, Operations Officer
Arkansas Nuclear Planning &
Response Program
P. O. Box 1749
Russellville, Arkansas 72801



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. 33
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 May 3, 1982, as supplemented May 20, 1982, 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 Patricia J. Noonan

8208030099 820721
PDR ADOCK 05000368
PDR
P

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. 33, 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



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

Attachment:
Changes to the
Technical Specifications

Date of Issuance: July 21, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 33

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Corresponding overleaf pages are provided to maintain document completeness.

Remove Pages

IX
3/4 3-6a
-
-
B 3/4 3-1/2

Insert Pages

IX
3/4 3-6a
3/4 3-6b
3/4 3-6c
B 3/4 3-1

INDEX

BASES

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.0 APPLICABILITY</u>	B 3/4 0-1
<u>3/4.1 REACTIVITY CONTROL SYSTEMS</u>	
3/4.1.1 BORATION CONTROL	B 3/4 1-1
3/4.1.2 BORATION SYSTEMS	B 3/4 1-2
3/4.1.3 MOVABLE CONTROL ASSEMBLIES	B 3/4 1-3
<u>3/4.2 POWER DISTRIBUTION LIMITS</u>	
3/4.2.1 LINEAR HEAT RATE	B 3/4 2-1
3/4.2.2 RADIAL PEAKING FACTORS	B 3/4 2-2
3/4.2.3 AZIMUTHAL POWER TILT	B 3/4 2-2
3/4.2.4 DNBR MARGIN	B 3/4 2-3
3/4.2.5 RCS FLOW RATE	B 3/4 2-4
3/4.2.6 REACTOR COOLANT COLD LEG TEMPERATURE	B 3/4 2-4
3/4.2.7 AXIAL SHAPE INDEX	B 3/4 2-4
3/4.2.8 PRESSURIZER PRESSURE	B 3/4 2-4
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 PROTECTIVE INSTRUMENTATION	B 3/4 3-1
3/4.3.2 ENGINEERED SAFETY FEATURE INSTRUMENTATION	B 3/4 3-1
3/4.3.3 MONITORING INSTRUMENTATION	B 3/4 3-2
3/4.3.4 TURBINE OVERSPEED PROTECTION	B 3/4 3-3

INDEX

BASES

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.4 REACTOR COOLANT SYSTEM</u>	
3/4.4.1 REACTOR COOLANT LOOPS AND COOLANT CIRCULATION	B 3/4 4-1
3/4.4.2 and 3/4.4.3 SAFETY VALVES	B 3/4 4-1
3/4.4.4 PRESSURIZER	B 3/4 4-2
3/4.4.5 STEAM GENERATORS	B 3/4 4-2
3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE	B 3/4 4-3
3/4.4.7 CHEMISTRY	B 3/4 4-4
3/4.4.8 SPECIFIC ACTIVITY	B 3/4 4-4
3/4.4.9 PRESSURE/TEMPERATURE LIMITS	B 3/4 4-5
3/4.4.10 STRUCTURAL INTEGRITY	B 3/4 4-11
<u>3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)</u>	
3/4.5.1 SAFETY INJECTION TANKS	B 3/4 5-1
3/4.5.2 and 3/4.5.3 ECCS SUBSYSTEMS	B 3/4 5-1
3/4.5.4 REFUELING WATER TANK (RWT)	B 3/4 5-2
<u>3/4.6 CONTAINMENT SYSTEMS</u>	
3/4.6.1 PRIMARY CONTAINMENT	B 3/4 6-1
3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS	B 3/4 6-3
3/4.6.3 CONTAINMENT ISOLATION VALVES	B 3/4 6-4
3/4.6.4 COMBUSTIBLE GAS CONTROL	B 3/4 6-4

TABLE 3.3-2 (Continued)

REACTOR PROTECTIVE INSTRUMENTATION RESPONSE TIMES

<u>FUNCTIONAL UNIT</u>	<u>RESPONSE TIME</u>
10. DNBR - Low	
a. Neutron Flux Power from Excore Neutron Detectors	< 0.39 seconds*
b. CEA Positions	< 1.09 seconds**
c. Cold Leg Temperature	< 3.79 seconds##
d. Hot Leg Temperature	< 1.54 seconds##
e. Primary Coolant Pump Shaft Speed	< 0.80 seconds#
f. Reactor Coolant Pressure from Pressurizer	< 3.19 seconds
11. Steam Generator Level - High	Not Applicable

* Neutron detectors are exempt from response time testing. Response time of the neutron flux signal portion of the channel shall be measured from detector output or input of first electronic component in channel.

** Response time shall be measured from the onset of a single CEA drop.

Response time shall be measured from the onset of a 2 out of 4 Reactor Coolant Pump coastdown.

Based on a resistance temperature detector (RTD) response time of < 6.0 seconds where the RTD response time is equivalent to the time interval required for the RTD output to achieve 63.2% of its total change when subjected to a step change in RTD temperature.

If the effective RTD time constant for a CPC channel exceeds 6.0 seconds, the DNBR and LPD penalties for the affected channel(s) shall be increased by the amount indicated on Figure 3.3-1, and the Power Operating Limit on DNB will be decreased by the amount shown in Table 3.3-3.

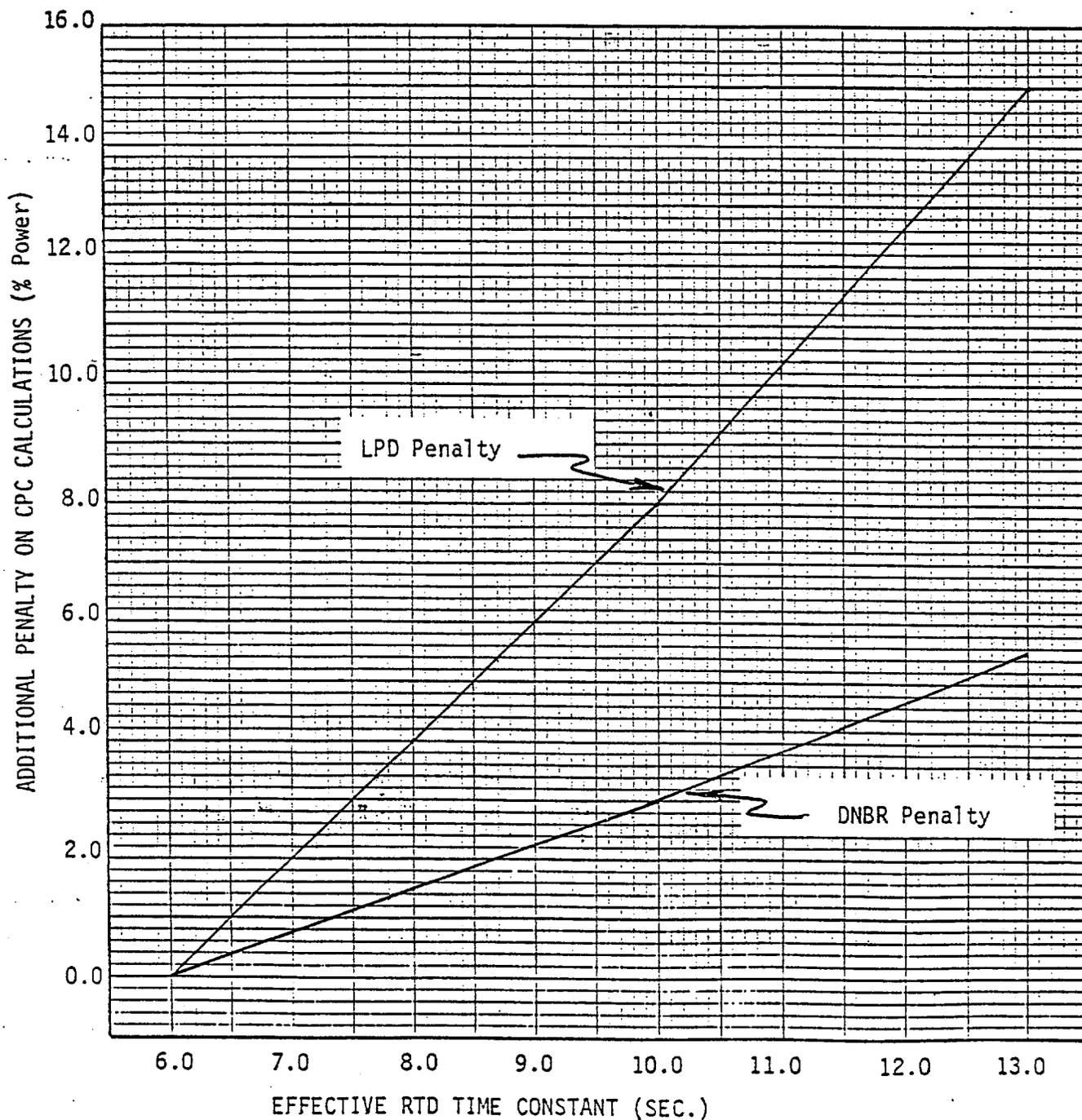
TABLE 3.3-3

DNBR POWER OPERATING LIMIT ADJUSTMENTS

<u>Effective RTD Time Constant (Seconds)</u>	<u>Penalty (% Power)</u>
≤ 6.0	0
$6.0 < \tau \leq 8.0$	4
$8.0 < \tau \leq 10.0$	5
$10.0 < \tau \leq 13.0$	9

FIGURE 3.3-1

CPC PENALTY VS. EFFECTIVE RTD TIME CONSTANT



3/4.3 INSTRUMENTATION

BASES

3/4.3.1 and 3/4.3.2 PROTECTIVE AND ENGINEERED SAFETY FEATURES (ESF) INSTRUMENTATION

The OPERABILITY of the protective and ESF instrumentation systems and bypasses ensure that 1) the associated ESF action and/or reactor trip will be initiated when the parameter monitored by each channel or combination thereof reaches its setpoint, 2) the specified coincidence logic is maintained, 3) sufficient redundancy is maintained to permit a channel to be out of service for testing or maintenance, and 4) sufficient system functional capability is available for protective and ESF purposes from diverse parameters.

The OPERABILITY of these systems is required to provide the overall reliability, redundancy and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of each of these systems is consistent with the assumptions used in the accident analyses.

The surveillance requirements specified for these systems ensure that the overall system functional capability is maintained comparable to the original design standards. The periodic surveillance tests performed at the minimum frequencies are sufficient to demonstrate this capability.

The measurement of response time at the specified frequencies provides assurance that the protective and ESF action function associated with each channel is completed within the time limit assumed in the accident analyses. No credit was taken in the analyses for those channels with response times indicated as not applicable.

Response time may be demonstrated by any series of sequential, overlapping or total channel test measurements provided that such tests demonstrate the total channel response time as defined. Sensor response time verification may be demonstrated by either 1) in place, onsite or offsite test measurements or 2) utilizing replacement sensors with certified response times.

The RTD response time for the Core Protection Calculator System (CPCS) is expressed as an effective time constant. The effective time constant is determined based on the utilization within the CPCS calculations. For hot leg temperatures, the effective time constant to be used in Figure 3.3-1 for a given CPC channel is determined from the mean time constant for averaged pairs of hot leg RTD inputs to the channel. This is done because the CPCS utilizes the mean hot leg temperature in its DNBR and LPD calculations. For cold leg temperatures, the effective time constant to be used in Figure 3.3-1 may be considered to be the smaller time constant of the two cold leg RTD inputs for a given channel. This is due to the fact that the CPC utilizes either the maximum cold leg temperature or the minimum cold leg temperature in its various DNBR and LPD calculations for conservatism. However, for asymmetric steam generator protection, the maximum time constant of the two cold leg RTDs input to a given channel must be used in Table 3.3-3 since the CPC utilizes both cold leg RTD inputs in this calculation.

3/4.3 INSTRUMENTATION

BASES

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION

The OPERABILITY of the radiation monitoring channels ensures that 1) the radiation levels are continually measured in the areas served by the individual channels and 2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded.

3/4.3.3.2 INCORE DETECTORS

The OPERABILITY of the incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the reactor core.

3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix "A" of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

3/4.3.3.4 METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public and is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February 1972.

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 33 TO FACILITY OPERATING LICENSE NO. NPF-6

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT 2

DOCKET NO. 50-368

1.0 Introduction

By letter dated May 3, 1982 (Ref. 1), Arkansas Power and Light Company proposed a Technical Specification change for ANO-2 to allow continuing plant operation with the effective RTD response time constant exceeding 6 seconds. This is done by imposing penalty factors in the Core Protection Calculators, CPCS and Core Operating Limit Supervisory System (COLSS) to ensure that the trip functions will not be degraded if the RTD response times degrade beyond the value (6 seconds) assumed in the current software of the CPCS. The licensee has provided in Figure 3.3-1 and Table 3.3-3 of the revised Technical Specifications the corresponding power penalty factors to be applied for DNBR and LPD calculations in CPCS and Power Operating Limit (POL) penalty for COLSS. The staff evaluations of the proposed TS change follow.

2.0 Staff Evaluation

The current CPC software design has a built-in assumption of RTD response time constant of 6 seconds which is a maximum response time allowable in the Technical Specifications. When the reactor coolant RTDs degrade to the point where the response times exceed the time constant assumed in the CPC software design, the signals transmitted to the CPC channels lag the signals the CPC would receive with the assumed delay time. This results in CPC calculating non-conservative values of the reactor coolant system temperature conditions and, in turn, non-conservative DNBR and LPD for certain transients. To compensate for the non-conservatism when RTD time constants exceed the built-in values, penalty factors will be applied to the CPC addressable constants to ensure that the CPC trip functions will not be degraded.

DESIGNATED ORIGINAL

Certified By

Patricia J. Noonan

8208030102 820721
PDR ADDCK 05000368
P PDR

In response to the staff questions, the licensee, by letter dated May 20, 1982 (Ref. 2), submitted CEN-206(A)-P (Ref. 3) describing the method of assessing the RTD response time impact. The staff has reviewed the report and found that the method of assessing the penalties to be applied to CPCS and COLSS to account for the RTD degradation is acceptable.

In order to determine the values of penalty factors associated with the degree of RTD degradation, all the design basis events were analyzed by the licensee. However, it was determined that the limiting events for the anticipated operational occurrences were the loss of load, single CEA withdrawal and asymmetrical steam generator transient events. These three events were used to determine the required penalties associated with CPC DNBR and local power density (LPD) calculations and the required overpower margin (ROPM) penalty in the Core Operational Limit Supervisory System (COLSS).

The CPC DNBR calculation is affected by the core inlet temperature measurement. The impact of degraded RTD response characteristics on the core inlet temperature calculated by the CPCS is evaluated with the loss of load event. The evaluation was performed incorporating RTD response time of 8, 10 and 13 seconds in the analysis. The results indicate that an increase in the CPC power uncertainty penalties of 1.5%, 3.0% and 5.0% will assure conservative CPC DNBR calculations for RTD response times of 8, 10 and 13 seconds, respectively. These penalties are shown in Figure 3.3-1 of the revised TS and will be applied to the CPC addressable constants BERRO and BERR2, which are uncertainty bias factors for total thermal power and reaction flux power, respectively, used in the CPC DNBR calculations algorithm. In other words, rather than changing the CPC software for degraded RTD, a penalty factor corresponding to the degraded RTD response time can be applied to the addressable constants BERRO and BERR2 to achieve the same DNBR calculation with the built-in 6 second RTD response time. The staff concludes this approach acceptable.

The impact on the power used in the determination of LPD by CPC was evaluated with the single CEA withdrawal event. The results indicate that the LPD penalty should be increased by 4%, 10% and 15% for RTD response times of 8, 10 and 13 seconds, respectively. This penalty factor is shown in Figure 3.3-1 of the revised TS and will be applied to the CPC addressable constant BERR4, which is the uncertainty bias factor on power used in the local power density algorithm. This is found acceptable.

In the current CPCs, the asymmetric steam generator trip function monitors the temperature difference between cold legs and initiates a reactor trip when the monitored temperature difference between cold legs exceeds 14°F. In order to determine the additional required overpower margin (ROPM) needed to assure that the fixed asymmetric steam generator trip set point provides adequate protection, an analysis was performed for the instantaneous closure of a single main steam isolation valve event. The results show that additional 4%, 5% and 9% ROPM are required for RTD response times of 8, 10 and 13 seconds, respectively. This ROPM penalty factor is shown in Table 3.3-3 of the revised TS and will be either applied to the POL in the COLSS, or, with COLSS out of service, applied to the CPC channels being used for monitoring the DNBR LCO. The staff has found this to be acceptable.

As indicated in Table 1 of the letter dated April 2, 1982 (Ref. 4), the licensee has been experiencing RTD response time degradation, and is conducting frequent (monthly) testing to closely follow the problem. The licensee plans to change one channel to a new model of RTDs at the August refueling, and is searching for an improved thermal couplant for the thermowells to improve performance. NRC Region IV will continue to follow the licensee's corrective action program in this matter.

3.0 Summary

The staff has reviewed the proposed Technical Specification change to allow continuing plant operation with effective RTD time constant exceeding 6 seconds. The penalty factors associated with the degraded RTD response time shown in Figure 3.3-1 and Table 3.3-3 of the revised TS are acceptable for applying to the CPC addressable constant BERR0, BERR2 for DNBR calculation, and BERR4 for LPD calculation and POL for the COLSS trip setpoint.

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) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, the amendment does 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: July 21, 1982

Principal Contributors:

Y. Hsii
C. Trammell

References

1. Letter, W. Cavanaugh, III to R. A. Clark, "Arkansas Nuclear One, Unit 2, Docket Number 50-368, License Number NPF-6, Technical Specification Change Request for RTD Response Time (File: 2-15104), dated May 3, 1982.
2. Letter, J. R. Marshall to J. T. Collins, "ANO-2, Docket Number 50-368, License Number NPF-6, Response to Questions on Proposed Change to Technical Specification 3.3.1.1", dated May 20, 1982.
3. CEN-206 (A)-P, "Method of Assessing ANO-2 RTD Response Time Impact, Docket Number 50-368", dated April 1982.
4. Letter, J. R. Marshall to J. T. Collins, "ANO-2 Docket Number 50-368, License Number NPF-6 Information Update Relative to R. O. 50-368/82-001/OIT-0 (RTD Response Time Degradation)", dated April 2, 1982.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-368ARKANSAS POWER & LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

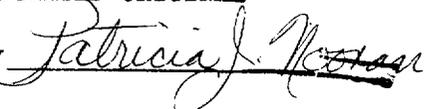
The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 33 to Facility Operating License No. NPF-6 issued to Arkansas Power & Light Company (the licensee), which revised the Technical Specifications for operation of Arkansas Nuclear One, Unit 2 (the facility), located in Pope County, Arkansas. The amendment is effective as of the date of issuance.

The amendment allows plant operation with loop resistance temperature detector response times exceeding six seconds provided that appropriate penalty factors are inserted into the Core Protection Calculator System.

The application for the amendment 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 amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

DESIGNATED ORIGINAL

Certified By



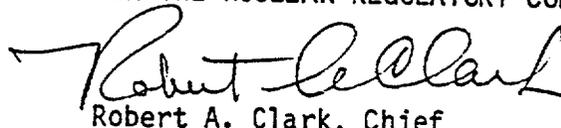
- 2 -

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated May 3, 1982, as supplemented May 20, 1982, (2) Amendment No. 33 to Facility Operating License No. NPF-6, and (3) the Commission's related Safety Evaluation. These items are available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C. 20555 and at the Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801. 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 21st day of July, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION


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