



ARKANSAS POWER & LIGHT COMPANY

FIRST COMMERCIAL BUILDING/P.O. BOX 551/LITTLE ROCK, ARKANSAS 72203/(501) 371-4422

August 22, 1984

JOHN M. GRIFFIN
Senior Vice President
Energy Supply

ØCANØ884Ø1

Director of Nuclear Reactor Regulation
ATTN: Mr. J. F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Arkansas Nuclear One - Units 1 & 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
NUREG 0737 Technical Specifications -
Generic Letter 83-37

Gentlemen:

AP&L has been involved in several recent conversations with members of your staff concerning AP&L's submittal of proposed Technical Specifications for several NUREG 0737 items (ØCANØ384Ø1). The proposed changes were in response to NRC Generic Letter 83-37 (ØCNA1183Ø6). The NRC requested several changes to the specifications as submitted by AP&L.

As a result of the discussions, AP&L agreed to make the following changes:

1. The range of the Containment Radiation Monitors now correctly indicates 10^7 R/hr.
2. The specifications now indicate two (2) channels of containment radiation monitors are required. The action statements indicate the special report is to be filed if one (or two) channel is inoperable; however, the alternate method of monitoring containment radiation levels is to be implemented only if both channels are inoperable.
3. The specifications now indicate two (2) channels of containment pressure and containment water level monitors are required. The action statements indicate 30 days are available to restore one inoperable channel unless containment entry is required, in which case it must be restored by the next refueling outage. If both channels are inoperable, the specifications still indicate that 30 days is the time limit.
4. The proposed specification regarding post accident sampling now indicates the specific types of sampling covered.

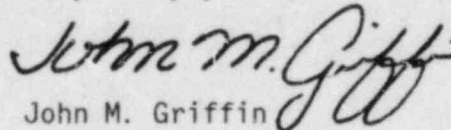
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We believe these changes are sufficient to satisfy the concerns previously raised. The affected pages have been revised and are attached. Please replace the appropriate pages from the previous submittal.

In accordance with 10CFR50.92(c), we have determined the attached changes to the proposed amendment to have no Significant Hazards Consideration (SHC). The basis for our determination has not changed from the previous submittal; therefore, we consider the previous SHC to be applicable to these changes as well.

Very truly yours,

A handwritten signature in cursive script that reads "John M. Griffin". The signature is written in dark ink and is positioned above the printed name.

John M. Griffin

JMG/CHT/ac

Attachments

cc: Mr. E. Frank Wilson

STATE OF ARKANSAS)
)
COUNTY OF PULASKI) SS

I, John M. Griffin, being duly sworn, subscribe to and say that I am Sr. Vice President of Energy Supply for Arkansas Power & Light Company; that I have full authority to execute this oath; that I have read the document numbered ØCANØ884Ø1 and know the contents thereof; and that to the best of my knowledge, information and belief the statements in it are true.

John M. Griffin
JOHN M. GRIFFIN

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 24th day of August, 1984.

Karen Cone
Notary Public

My Commission Expires:

2-1-91

- 3.5.1.7 The Decay Heat Removal System isolation valve closure setpoints shall be equal to or less than 340 psig for one valve and equal to or less than 400 psig for the second valve in the suction line. The relief valve setting for the DHR system shall be equal to or less than 450 psig.
- 3.5.1.8 The degraded voltage monitoring relay settings shall be as follows:
- a. The 4.16 KV emergency bus undervoltage relay setpoints shall be >3115 VAC but <3177 VAC.
 - b. The 460 V emergency bus undervoltage relay setpoints shall be >423 VAC but <431 VAC with a time delay setpoint of 8 seconds \pm 1 second.
- 3.5.1.9 The following Reactor Trip circuitry shall be operable as indicated:
1. Reactor trip upon loss of Main Feedwater shall be operable (as determined by Specification 4.1.a, items 2 and 36 of Table 4.1-2) at greater than 5% reactor power. (May be bypassed up to 10% reactor power.)
 2. Reactor trip upon Turbine Trip shall be operable (as determined by Specification 4.1.a, items 2 and 42) at greater than 5% reactor power. (May be bypassed up to 20% reactor power.)
 3. If the requirements of Specifications 3.5.1.9.1 or 3.5.1.9.2 cannot be met, restore the inoperable trip within 12 hours or bring the plant to a hot shutdown condition.
- 3.5.1.10 The control room ventilation chlorine detection system instrumentation shall be operable & capable of actuating control room isolation and filtration systems, with alarm/trip setpoints adjusted to actuate at a chlorine concentration of \leq 5ppm.
- 3.5.1.11 The Containment High Range Radiation Monitoring instrumentation shall be operable with a minimum measurement range from 1 to 10^7 R/hr.

Table 3.5.1-1 (Cont'd)

OTHER SAFETY RELATED SYSTEMS

	1	2	3	4	5
<u>Functional Unit</u>	<u>No. of channels</u>	<u>No. of channels for system trip</u>	<u>Min. operable channels</u>	<u>Min. degree of redundancy</u>	<u>Operator Action if conditions of column 3 or 4 cannot be met</u>
11. Containment High Range Radiation Monitoring	2	N/A	2	0	Note 19
12. Containment Pressure - High Range	2	N/A	2	0	Note 20
13. Containment Water Level - Wide Range	2	N/A	2	0	Note 20

Table 3.5.1-1 (Cont'd)

Notes Cont'd

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 20% 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 systems in the recirculation mode of operation.
19. 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 6.12.4 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.
20. 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.

- a. The facility shall be placed in at least hot shutdown within one hour.
- b. The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of 10 CFR 50.36 and Specification 6.12.3.1.

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. Post accident sampling (includes sampling of reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and the containment atmosphere).
- 6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed by the PSC and approved by the ANO General Manager prior to implementation and reviewed periodically as set forth in administrative procedures.
- 6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:
 - a. The intent of the original procedure is not altered.
 - b. The change is approved by two members of the plant staff, at least one of whom holds a Senior Reactor Operator's License of the unit affected.
 - c. The change is documented, reviewed by the PSC and approved by the ANO General Manager within 14 days of implementation.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ALARM/TRIP SETPOINT</u>	<u>MEASUREMENT RANGE</u>	<u>ACTION</u>
1. AREA MONITORS					
a. Spent Fuel Pool Area Monitor	1	*	$\leq 1.5 \times 10^{-2}$ R/hr	$10^{-4} - 10^1$ R/hr	13
b. Containment High Range	2	1, 2, 3 & 4	N/A	$1 - 10^7$ R/hr	18
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity					
a) Purge & Exhaust Isolation	1	ALL MODES	$\leq 2 \times$ background	$10 - 10^6$ cpm	16
b) RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^6$ cpm	14
ii. Particulate Activity					
a) RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	$10 - 10^6$ cpm	14
b. Control Room Ventilation Intake Duct Monitor	1	ALL MODES	$\leq 2 \times$ background	$10 - 10^6$ cpm	17

* With fuel in the spent fuel pool or building.

TABLE 3.3-6 (Continued)

TABLE NOTATION

- ACTION 13 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at least once per 24 hours.
- ACTION 14 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.
- ACTION 16 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.
- ACTION 17 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
- ACTION 18 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, (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 6.9.2 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.

TABLE 3.3-10

POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Containment Pressure (Normal Design Range)	2
2. Containment Pressure (High Range) *	2
3. Pressurizer Pressure	2
4. Pressurizer Water Level	2
5. Steam Generator Pressure	2/steam generator
6. Steam Generator Water Level	2/steam generator
7. Refueling Water Tank Water Level	2
8. Containment Water Level - Wide Range *	2
9. Emergency Feedwater Flow Rate	1/steam generator
10. Reactor Coolant System Subcooling Margin Monitor	1
11. Pressurizer Safety Valve Acoustic Position Indication	1
12. Pressurizer Safety Valve Tail Pipe Temperature	1

*If only one channel is inoperable and containment entry is required to restore the inoperable channel, the channel need not be restored until the following refueling outage.

ADMINISTRATIVE CONTROLS

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The unit shall be placed in at least HOT STANDBY within one hour.
- b. The Safety Limit violation shall be reported to the Commission, the Vice President, Nuclear Operations and to the SRC within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PSC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the SRC and the Vice-President, Nuclear Operations within 14 days of the violation.

6.8 PROCEDURES

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Reg. Guide 1.33, Revision 2, February 1978.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Program implementation.
- g. Modification of Core Protection Calculator (CPC) Addressable Constants.

NOTE: Modification of the CPC addressable constants based on information obtained through the Plant Computer - CPC data link shall not be made without prior approval of the Plant Safety Committee.

- h. New and spent fuel storage.
- i. Post accident sampling (includes sampling of reactor coolant, radioactive iodines and particulates in plant gaseous effluent, and the containment atmosphere.)

ADMINISTRATIVE CONTROLS

6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed by the PSC and approved by the ANO General Manager prior to implementation and reviewed periodically as set forth in administrative procedures.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered.
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.
- c. The change is documented, reviewed by the PSC and approved by the ANO General Manager within 14 days of implementation.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

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

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.