



ARKANSAS POWER & LIGHT COMPANY  
POST OFFICE BOX 551 LITTLE ROCK, ARKANSAS 72203 (501) 371-4000

August 15, 1980

1-080-11

Director of Nuclear Reactor Regulation  
ATTN: Mr. Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Subject: Arkansas Nuclear One - Unit 1  
Interim Reliability Evaluation Program  
(File: 0800.1)

Gentlemen:

In accordance with our letter of July 31, 1980, below are responses to Information Needs Nos. 6 and 9, as requested in your letter of May 23, 1980.

- (6) Proposed modifications to the plant which are in progress or have been committed to by the licensee.

Attached, for your information, is a listing of plant modifications we currently plan to make. It should be emphasized that, although we are planning to make those modifications prior to startup after our upcoming refueling outage, it is possible that some of these modifications may be delayed or never implemented. Therefore, do not take this to be a commitment by AP&L to make these modifications.

- (9) An estimate of the minimum ECC and containment ESF system which can realistically prevent core melting for a range of break sizes or containment failure.

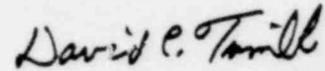
The most comprehensive summary of systems which can prevent core melting is given in the FSAR. Other sources of information include the operator guidelines developed to detect inadequate core cooling (submitted December 13, 1979 to R. W. Reid) and the B&W report entitled "Evaluation of Transient Behavior and Small Reactor Coolant System Breaks in the 177 Fuel Assembly Plant,"

8009020042

August 15, 1980

dated May 7, 1979 as referenced in our May 16, 1979 letter to Mr. Reid.

Very truly yours,



David C. Trimble  
Manager, Licensing

DCT:MAS:ms

Attachment

cc: Mr. R. M. Bernero  
U. S. Nuclear Regulatory Commission  
5650 Nicholson Lane, NL 5650  
Rockville, Maryland 20555

1. Upgrade  $T_H$  inputs for  $T_{Sat}$  meters
2. Plant shielding modification - automatically isolate letdown
3. Safety grade automatic initiation of EFW
4. Safety grade EFW flow indication
5. Post-accident sampling facility
6. In-containment high range radiation monitors
7. Containment pressure monitor
8. Containment water level monitor
9. Containment hydrogen monitor
10. RCS venting on hot legs
11. Redundant EFW suction pressure switches and alarm
12. High range effluent monitor
13. Safety grade anticipatory reactor trip on turbine trip or loss of both MFW pumps
14. Turbine-generator fire protection - addition of CO<sub>2</sub> system
15. Separation of power cables in manhole
16. Maintain negative pressure in the Gas Collection Header (GCH)
17. Rework vacuum degasifier to avoid water carryover
18. Reroute GCH to avoid low spots
19. Provide means to flush GCH without overpressurization of isolated tanks
20. Add waste gas surge tank level indication
21. Modify Waste Gas System (WGS) so high pressure system venting does not rupture surge tank rupture disc
22. Add redundant vacuum degasifier level indication
23. Provide waste gas decoy tank discharge to containment
24. Add continuous vents to P-43 A&B to allow automatic operation
25. Add additional N<sub>2</sub> storage
26. Cool 1000 KV transformer in turbine building
27. Steam generator drain to condenser
28. Decoy heat cooler trouble alarm
29. Penetration room low vacuum alarm
30. Modify RCP Seals and Leak-off System
31. Remote Hot Leg Level Indication
32. EFW Pump Recirculation Upgrade
33. Vital Power to Main Feedwater Block Valve
34. Vital power to atmospheric dump valves