

ARKANSAS POWER AND LIGHT COMPANY  
(Arkansas Nuclear One, Unit 1)

Docket No. 50-313

ORDER EXTENDING CONSTRUCTION COMPLETION DATE

Arkansas Power and Light Company is the holder of Provisional Construction Permit No. CPPR-57, issued by the Commission on December 6, 1968, for construction of Arkansas Nuclear One, Unit 1, presently under construction at the Company's site on a peninsula in the Dardanelle Reservoir on the Arkansas River in Pope County, Arkansas.

On October 24, 1973, the Company filed a request for an extension of the completion date because construction has been delayed due to: (1) late delivery of valves, (2) modifications of the emergency core cooling system (ECCS), and (3) reactor coolant pump motor repair. This action involves no significant hazards consideration; good cause has been shown for the delay; and the requested extension is for a reasonable period, the bases for which are set forth in a staff evaluation, dated January 22, 1974.

IT IS HEREBY ORDERED THAT the latest completion date for CPPR-57 is extended from January 1, 1974 to May 1, 1974.

FOR THE ATOMIC ENERGY COMMISSION  
Original signed by:  
Roger S. Boyd  
Roger S. Boyd  
Assistant Deputy Director  
A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Date of Issuance: February 5, 1974

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JAN 22 1974

EVALUATION OF REQUEST FOR EXTENSION OF  
CONSTRUCTION PERMIT NO. CPPR-57  
FOR ARKANSAS NUCLEAR ONE, UNIT 1  
DOCKET NO. 50-313

Introduction

On October 24, 1973, the Arkansas Power & Light Company (the applicant) filed a request for an extension of the completion date for the construction of the Arkansas Nuclear One, Unit 1 plant. The applicant requested a four month extension because of delays in construction and a problem encountered in the early phases of the test program. A summary of pertinent dates is presented in Table I.

Discussion

The applicant stated that the delay in completion is due to three factors, (i) late delivery of valves, (ii) modification of the Emergency Core Cooling System, and (iii) reactor coolant pump motor repair. The staff has evaluated these as discussed below:

1. Late Delivery of Valves

The completion of a number of plant systems has been delayed because of late deliveries of valves. In some cases deliveries were delayed as much as 6 months. These delays were a factor in a previous extension of this construction permit and are beyond the effective control of the applicant. The safety of the plant is not affected by the delay.

2. Modification of the Emergency Core Cooling System (ECCS)

In 1972, during the safety review, the staff identified the vulnerability of this type reactor to a core flooding tank line break. The core would be endangered if certain failures in the ECCS were postulated to occur after such a break. The resolution of staff concerns in this matter was discussed in our Safety Evaluation Report of June 6, 1973. As part of that resolution, the applicant committed to install a set of automatic cross-connect lines in the low pressure injection system of the ECCS. Once the design of this change was established, and found acceptable by the AEC, the applicant had to procure, install, and test the flow limiting venturis and the cross-connect lines to mount them. The work related to this ECCS change caused approximately 2 1/2 months delay in plant construction. This delay is considered justified since the ECCS change was necessary for complete satisfaction of AEC criteria for ECCS.

3. Reactor Coolant Pump Motor Repair

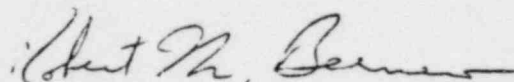
During the preoperational test program, a malfunction led to severe damage of a reactor coolant pump backstop clutch. Conduct of the investigation and the resulting repairs took about 3 months, delaying the start of hot functional testing and fuel loading.

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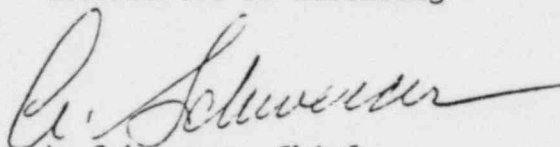
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Conclusion

The staff is cognizant of these problems and concludes that they constitute good cause for delay in the completion of construction. The four month extension requested is a reasonable period. The staff further concludes that the only modification proposed by the applicant to the existing construction permit is an extension of the construction completion date which does not allow any work to be performed that is not already allowed by the existing construction permit. Therefore, the staff finds that this action does not involve any significant hazards consideration and concludes that the construction permit should be extended to May 1, 1974 as requested.



Robert M. Bernero, Project Manager  
Light Water Reactors Branch No. 2-3  
Directorate of Licensing



A. Schwencer, Chief  
Light Water Reactors Branch No. 2-3  
Directorate of Licensing

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TABLE I  
ARKANSAS NUCLEAR ONE, UNIT 1  
CONSTRUCTION PERMIT CPPR-57 SCHEDULE INFORMATION

1. Construction Permit Date of Issuance	12/6/68
2. Expiration Date	1/1/74
3. Request for Extension Received	10/29/73
4. Requested Expiration Date	5/1/74
5. Expected Fuel Loading	3/1/74