

EVALUATION OF REQUEST FOR EXTENSION OF
CONSTRUCTION PERMIT NO. CPPR-103
FOR THE WATERFORD STEAM ELECTRIC STATION, UNIT NO. 3
DOCKET NO. 50-382

INTRODUCTION

Construction Permit No. CPPR-103 was issued to Louisiana Power & Light Company (LP&L) on November 14, 1974 authorizing construction of the Waterford Steam Electric Station, Unit No. 3. The latest date for completion of construction, as stated in the permit, is December 31, 1979. On June 23, 1977, LP&L filed a request for extension of the latest date for completion of construction to August 1, 1982. Our letter of February 23, 1978 to LP&L requested additional information to justify the extension. Subsequently, LP&L submitted a letter dated September 5, 1978 in response to our request.

The Commission's Regulations (10 CFR Section 50.55(b)) permit extension of the completion date upon a showing of good cause. A showing of good cause may be made if the factors causing the delay are beyond the control of the permit holder.

The permit holder has attributed the delay to several factors. We have evaluated these factors and have found good cause shown, for the reasons stated below, for extending the latest completion date to June 1, 1982.

EVALUATION

LP&L stated in its letters that the reasons for the delay in completion of construction are (1) delay in receipt of the construction permit due primarily to time spent in resolving antitrust issues, (2) engineering development, (3) additional quality assurance requirements; (4) lower than expected productivity of construction subcontractors, and (5) temporary reductions in construction work force. The following discussion provides details concerning the reasons for the delay.

The applicant submitted Amendment No. 46 to the Application on January 23, 1974. This amendment included revised construction completion dates which were based on the assumption that issuance of a construction permit was imminent. The construction permit was not issued, however, until November 14, 1974 when such issuance was authorized by the Atomic Safety and Licensing Board. We conclude that ten months of the overall delay can be reasonably attributed to the delay in issuance of the construction permit.

LP&L had begun site-preparation work prior to issuance of the construction permit, as permitted under the Commission's regulations in effect at the time. However, this work was discontinued and the site was demobilized when uncertainty arose

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regarding the resolution of antitrust matters. Remobilization and site preparation work were re-commenced when the construction permit was issued. This delay in completion of site preparation work caused a 10.5-month delay in the start of concrete work. We conclude that 10 1/2 months of the overall delay in construction completion can reasonably be attributed to the delay in completion of site preparation work.

The three engineering changes that contributed to the delay are as follows. First, the reactor pressure vessel support and cavity were redesigned to account for asymmetric blowdown loads resulting from a postulated loss-of-coolant accident at the reactor vessel nozzle. Consideration of this matter was raised by the NRC staff after the Waterford 3 construction permit was issued. This caused an estimated ten months delay with an associated minimum impact on the construction critical path of approximately two months.

Second, the electrical and instrumentation and control cable trays were redesigned and re-routed, and additional embedded conduit and barriers were provided, in order to meet staff requirements concerning fire protection. The minimum impact of this effort on the critical path is estimated to be 1.0 to 1.5 months. LP&L also attributes a cumulative delay of approximately three months to the fact that the production of the concrete construction craftsmen was lower than anticipated. The rate of concrete placement was adversely affected by the revisions in the number and location of embedded plates to support new cable tray routings and piping supports.

Third, LP&L changed its criteria regarding the dynamic effects of pipe rupture. This change was made following issuance of new guidance by the staff in 1975. The minimum impact of this effort is estimated to be 1.5 months on the critical path.

We are aware of the impact of the new design criteria that have been applied to the three areas noted above. We conclude that eight months of the overall delay in construction completion can reasonably be attributed to changed design criteria for reactor pressure vessel supports, for fire protection, and for dynamic effects of pipe rupture.

In its September 5, 1978 letter, LP&L discussed additional impacts on the construction schedule. However, the applicant did not establish the extent, in time, of the delays attributable to these impacts. We are therefore, unable to conclude a reasonably attributable delay to them.

We have reviewed the information provided in LP&L's letters and we conclude that a 29-month cumulative delay in construction completion can reasonably be attributed to the factors that LP&L has discussed and that this delay has been caused by factors beyond LP&L's control. We, therefore, conclude that a June 1, 1982 completion date for this facility is reasonable.

SIGNIFICANT HAZARDS CONSIDERATION

We find that, because the request is merely for an extension of time to complete work already reviewed and approved, no significant hazard consideration is involved in granting the request. Therefore, prior notice of this action is not required.

CONCLUSION

For the reasons stated herein, the staff concludes that issuance of an Order extending the latest construction completion date for construction of the Waterford Steam Electric Station Unit 3, Construction Permit No. CPPR-103, to June 1, 1982, is warranted.

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