



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE - UNIT 1

DOCKET NO. 50-313

Introduction

By letter dated January 13, 1977, the Arkansas Power & Light Company (AP&L) proposed a license amendment to modify the Arkansas Nuclear One, Unit 1 (ANO-1) technical specification scheduling of post-operational inspections of primary nozzle-to-vessel welds. The proposed changes would allow more flexible scheduling of inspections and would more closely conform to the requirements of Section XI of the ASME Boiler and Pressure Vessel Code (hereinafter referred to as Section XI).

Discussion and Evaluation

The winter 1971 Addenda to Section XI revised Section XI Paragraph IS-242, which specifies the inspection program governing primary nozzle-to-vessel welds, to read as follows:

IS-242 Inspection Program

It is intended that the inservice examinations be performed during normal plant outages such as refueling shutdowns or maintenance shutdowns occurring during the inspection interval. Except as specified in IS-251 for examination categories A, B, E-2, I-2, J-2, L-1, L-2, M-1, and M-2, at least 25 percent of the required examinations shall have been completed by the expiration of one-third of the inspection interval (with credit for no more than 33-1/3 percent if additional examinations are completed) and at least 50 percent shall have been completed by the expiration of two-thirds of the inspection interval (with credit for no more than 66-2/3 percent). The remaining required examinations shall be completed by the end of the inspection interval.

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The primary nozzle-to-vessel welds, which are classified as Table IS-251 examination category D, "Pressure-Containing Nozzles in Vessels", are to be inspected in accordance with the above paragraph. However, the present ANO-1 Technical Specification 4.2.2 is more rigid and specifically requires inspection of one reactor coolant inlet nozzle after approximately 3-1/3 years operation, both reactor coolant outlet nozzles after approximately 6-2/3 years, and one core flood nozzle after 3-1/3 years operation. Such rigidity is not required, especially since paragraph IS-242, quoted above, notes that inspections are intended to be performed during normal plant outages. The present specification could require scheduling special outages to conform to the inspection intervals whereas the revised wording would allow the flexibility intended by IS-242 such that the required inspections could be performed prior to the 3-1/3 and 6-2/3 year intervals.

Therefore, because the proposed wording: (1) will not revise the inspection method or acceptance criteria of inspection results; (2) does not modify the requirement for inspection within the specified inspection interval (10 years), and; (3) provides desired operational flexibility without sacrificing the health and safety of the public; we conclude that the proposed change is acceptable.

The bases to Technical Specification 4.2 have been changed to reflect AP&L's adoption of revisions to Section XI through the 1972 Summer Addenda. This includes the aforementioned change to Paragraph IS-242 and is, therefore, acceptable.

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.

Conclusions

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability of consequences of accidents previously considered and does not involve a significant decrease in a safety margin, 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: March 15, 1977