

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT 1

DOCKET NO. 50-313

INTRODUCTION

By letter dated October 15, 1984, Arkansas Power and Light Company (AP&L or the licensee) requested amendment to the Technical Specifications (TSs) appended to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit 1 (ANO-1). The proposed changes would reflect, in the Technical Specifications (TSs), the actual number of instrument channels for the detection of pressurizer level, which will be available following modifications to upgrade these instruments during the sixth refueling outage.

DISCUSSION

At present two pressurizer level indications are provided in the control room through the use of non-nuclear instrumentation power. The level indicators are temperature compensated through the use of a dual element RTD located in a single well in the pressurizer. Uncompensated level is provided by three-level transmitters (powered from non-nuclear instrumentation) whose inputs come from three separate taps in the pressurizer. One level indicator is capable of being fed level and temperature signals from any of the three level and the two temperature transmitters. The second level indicator is fed level and temperature signals only from one level and one temperature transmitter. Although the existing transmitters are not independent, TS Table 3.5.1-1 currently describes this as a three channel system.

The existing system will be replaced with two independent channels of temperature compensated level indication. The new pressure transmitters and RTDs are environmentally qualified and are powered from a Class 1E power source. The proposed TS change to Table 3.5.1-1 is necessary so that the table will accurately reflect the number of instrument channels to monitor the pressurizer level.

EVALUATION

The proposed change does not affect the minimum number of channels required to be operable or the minimum degree of redundancy required by the TSs. This is in compliance with the Babcock & Wilcox Standard Technical Specifications, reflects the recommendation for installed post-accident monitoring instrumentation outlined in R.G. 1.97 and is, therefore, acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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.

Dated: December 20, 1984 Principal Contributors: N. Trehan and G. Vissing