



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 53 AND 21 TO

FACILITY OPERATING LICENSES NOS. DPR-51 AND NPF-6

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNITS NOS. 1 & 2

DOCKETS NOS. 50-313 & 50-368

Introduction

By letter dated October 20, 1980, Arkansas Power & Light Company (the licensee or AP&L) requested amendment of the Technical Specifications (TSs), Appendix A, appended to Facility Operating Licenses Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Units Nos. 1 and 2 (ANO-1&2). The amendments would reflect a change in the Administrative Controls TSs for personnel entry into high radiation areas.

Discussion and Evaluation

The current TSs provide for the access and control of personnel in high radiation areas in accordance with 10 CFR Part 20. In areas in which the dose rate is greater than 100 millirem per hour (mr/hr) control of personnel is provided by appropriate posting, locked entrances, and frequent inspection and verification of locked entrances. This method of control unduly restricts access to vital components in areas in which the dose rates may vary from radiation area to high radiation area depending upon the operating mode.

The proposed change would replace the requirement for locked entrances in areas in which the dose rate is greater than 100 mr/hr but less than 1000 mr/hr with administrative control. Such administrative controls include: (1) conspicuously posting and barricading of high radiation areas, (2) special authorization through issuance of Radiation Work Permits or Special Work Permits, and (3) presence of appropriate radiation monitors or (4) accompaniment by a person trained in radiation protection procedures. The capability to lock the entrance would still be maintained.

The proposed change would also provide a clear definitive condition of positive access control for entry into high radiation areas when the radiation levels are in excess of 1000 mr/hr. This action considers the case where it is not reasonable to provide locked enclosures for small areas having radiation levels in excess of 1000 mr/hr. Such areas may be located in much larger areas such as a pressurized water reactor containment. The conditions for entry into such areas require radiation level measurements in the area and delineation of maximum allowable stay-times in addition to the use of barricades, posting and flashing lights as the alternative for locked enclosures.

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Positive exposure control can also be made by continuous surveillance over the activities within the area by personnel qualified in radiation protection.

We find the proposed changes would not reduce the control of personnel in high radiation areas, would conform to the NRC Standard TSs, and are therefore acceptable.

#### Environmental Consideration

We have determined that the amendments do 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 amendments involve 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 these amendments.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 10, 1981