



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-39

COMMONWEALTH EDISON COMPANY

ZION STATION, UNIT 1

DOCKET NO. 50-295

Introduction

By telecon dated June 25, 1982, as confirmed by letter of the same date, the Commonwealth Edison Company (the licensee) requested a one-time change to the Zion Station, Unit No. 1 Technical Specifications to allow one safety injection pump to be inoperable during the period of June 25 through July 2, 1982. This change (and the dates of June 26 through July 3, 1982) were authorized by telephone on June 26, 1982 and confirmed by letter dated June 28, 1982. The amendment was issued on an expedited basis to maintain the plant at steady-state condition and avoid a shutdown transient shown by our evaluation to be unnecessary but required by Technical Specifications unless amended.

Evaluation

The Zion Station, Unit No. 1 Emergency Core Cooling System (ECCS) includes two centrifugal charging pumps for high pressure injection, two safety injection pumps for intermediate pressure injection, and two residual heat removal pumps for low pressure injection. The one-time temporary change to the Technical Specifications would allow one of the intermediate pressure pumps to be out of service for seven days.

Following the current refueling outage, the licensee found that the 1A safety injection pump had suffered damage to the pump intermode and casing. The repair will require extensive machining and replacement of parts not readily available. An additional seven days for repairs was required to return the pump to service.

The licensee has requested the change to allow the reactor to be taken critical for the performance of zero power physics tests and turbine balancing. These are required before the Unit No. 1 can be placed back in service. In order not to delay restart, the tests and balancing will be accomplished concurrent with the 1A safety injection pump repair.

The licensee has justified this mode of operation on the basis that decay heat production will be at a minimum during this time period due to the current 133 plus days refueling outage. In addition, power levels will be restricted to 5% or less during this period with the majority of the time spent below the point of nuclear heat generation (less than 1% power). The remaining ECCS pumps will be operable and are capable of providing sufficient injection flow. We agree with the licensee that the remaining pumps are sufficient under the conditions of minimum decay heat and restricted heat generation during the tests and turbine balancing and the change is therefore, acceptable.

Environmental Consideration

We have determined that this 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 this 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.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant reduction in a margin of safety, 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: July 30, 1982