



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE NO. DPR-29  
AND AMENDMENT NO. 140 TO FACILITY OPERATING LICENSE NO. DPR-30

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

By letter of October 21, 1993, Commonwealth Edison Company (CECo or the licensee) requested an amendment to Facility Operating Licenses, DPR-29 and DPR-30 for Quad Cities Units 1 and 2. The proposed amendment would modify the Technical Specifications (TS) to incorporate the line-item TS improvements that were identified by the staff of the U.S. Nuclear Regulatory Commission (NRC) as reported in NUREG-1366, "Improvements to Technical Specification Surveillance Requirements," December 1992. The TS improvements were based on an NRC study of surveillance requirements and included information provided by licensee personnel that plan, manage, and perform surveillances. The study included insights from a qualitative risk assessment of surveillance requirements based on the standard technical specifications for Westinghouse plants and the TS for the Edwin I. Hatch Nuclear Plant, Unit 2. The staff examined operational data from licensee event reports, the nuclear plant reliability data system (NPRDS), and other sources to assess the effect of TS surveillance requirements on plant operation. The staff evaluated the effect of longer surveillance intervals to reduce the possibility for plant transients, wear on equipment, personnel radiation exposure, and burden on personnel resources. Finally, the staff considered surveillance activities for which the safety benefits are small and not justified when compared to the effects of these activities on the safety of personnel and the plant. The NRC staff issued guidance on the proposed TS changes to all holders of operating licenses or construction permits for nuclear power reactors in Generic Letter (GL) 93-05, dated September 27, 1993.

2.0 EVALUATION

The licensee proposed the modifications to the TS surveillance requirements as discussed below.

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The current Quad Cities, Units 1 and 2 TS Section 3.5/4.5 requires immediate and daily operation of the redundant equipment when a Core Spray subsystem; Containment Cooling subsystem or pump; or the Low Pressure Coolant Injection (LPCI) mode of the Residual Heat Removal (RHR) system or a pump in the LPCI mode of the RHR system; are found to be inoperable. The Containment Cooling subsystem includes the residual heat removal service water (RHRSW) and RHR pumps. Therefore, the maintenance activities being performed on the RHRSW pumps require the licensee to start and operate each of the remaining RHRSW pumps and the RHR pumps on a daily basis. This daily starting and operation of the pumps during an RHRSW pump outage provides unnecessary challenges to the pumps and pump seals. To eliminate unnecessary testing, the licensee proposed a revision to the present TSs. The proposed revision would remove the requirements for performing the test to demonstrate the operability of alternate trains, systems, or subsystems when one train, system, or subsystem is inoperable. The bases section would also change to reflect the removal of operability requirements.

The proposed TS modifications are consistent with the guidance provided in GL 93-05. This guidance is based on the NRC staff findings and recommendations stated in NUREG-1366. The staff concludes that the proposed TS changes do not adversely affect plant safety and will result in a net benefit to the safe operation of the facility, and, therefore, are acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendments. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The NRC staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (58 FR 59747). Accordingly, the amendments meet 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 the amendments.

### 5.0 CONCLUSION

The Commission has 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, (2) such

activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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