



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 109 TO FACILITY OPERATING LICENSE NO. DPR-29  
AND AMENDMENT NO. 105 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 dated January 29, 1988, Commonwealth Edison Company (CECo, the licensee) submitted an application to amend the Technical Specifications (TS) of the Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. This application proposed to delete the upper tolerance of the Reactor Low-Low Level Trip Setpoint and correct associated Limiting Condition for Operation (LCO) Bases.

2.0 EVALUATION

TS 2.1.D and Table 3.2-2 presently prescribe the trip level setting for Reactor Low-Low Water Level (i.e. safety limit setpoint for initiating core and containment cooling systems) as  $\geq 84$  inches above the top of active fuel, with a tolerance of plus 4 inches to minus zero. CECo has proposed to delete the setpoint tolerance because of difficulties in maintaining the setpoint calibration within the prescribed range. This kind of change is consistent with the general philosophy of TS for establishing setpoints in terms of limiting values rather than absolutes. Limiting TS setpoint values allow the licensee to develop appropriate instrument specific settings that accommodate drift and calibration uncertainties while assuring the limiting value will not be exceeded. Examples of other comparable TS setpoints which do not have established tolerances are the reactor low water level scram, main steam low-pressure isolation, high drywell pressure containment isolation, reactor low-low water level containment isolation, etc.

In essence, deletion of this setpoint tolerance will only eliminate the upper bounding limit of reactor vessel water level for initiating Emergency Core Cooling Systems (ECCS). The TS Bases do not assign any safety significance to an upper bounding tolerance. In fact, applicable Limiting Safety System Setting Bases state that "To raise the ECCS initiation setpoint would be in a safe direction." Although, the

primary purpose of an upper limit would be to prevent spurious actuations during normal operations or normally expected transients. In this instance the identified tolerance is overly prescriptive, from an instrument calibration standpoint, and does not have any specific safety significance. And, in any case, QCNPS surveillance procedures will provide guidance for controlling the Reactor Low-Low Water Level setpoint to assure the limiting value is not exceeded and sufficient margin remains to preclude inadvertent or spurious actuations. For these reasons, and those above, the proposed change to delete the +4/-0 tolerance for the Reactor Low-Low Water Level trip setpoint is acceptable.

CECo's application also proposed to revise portions of the TS Section 3.2 LCO Bases for consistency with the aforementioned setpoint change and to correct a typographical error. The words "high" and "low" were misplaced in a sentence which explain the Reactor Low-Low Water Level setting; CECo's application would interchange them into the proper narrative sequence. These TS changes are administrative in nature and therefore acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendment involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these 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 nor environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance 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 issuance of these amendments will not be inimical to the common defense and security nor the the health and safety of the public.

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Dated: June 23, 1988