

UNITED STATES NUCLEAR REGULATORY COMMISSION

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNIT NOS. 1 AND 2

BRAIDWOOD STATION, UNIT NOS. 1 AND 2

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License Nos. NPF-37 and NPF-66, issued to Commonwealth Edison Company (CECo, the licensee), for operation of the Byron Station, Unit Nos. 1 and 2, located in Ogle County, Illinois, and Facility Operating License Nos. NPF-72 and NPF-77, issued to the licensee, for operation of the Braidwood Station, Unit Nos. 1 and 2, located in Will County, Illinois.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action

The proposed amendment would allow the discontinuance of performing the venting surveillance required by Technical Specification (TS) 4.5.2 for Emergency Core Cooling System (ECCS) piping inside containment. TS 4.5.2 currently states, in part, that each ECCS subsystem shall be demonstrated operable, at least once per 31 days, by verifying that the ECCS piping is full of water by venting the ECCS pump casings and accessible discharge piping high points.

The proposed action is in accordance with the licensee's request dated March 17, 1989, as supplemented by letters dated August 25, 1989, March 12, 1990, and June 10, 1991.

The Need for the Proposed Action

The proposed amendment to TS 4.5.2 clarifies which ECCS piping vent valve locations require venting by stating that only venting of the ECCS pump casings and the discharge piping high points outside of containment will be performed at least once per 31 days. This change discontinues the requirement to perform venting surveillances at the seven (7) high point vent valve locations inside containment in Unit 1 at the Byron and Braidwood Stations. (These valves are not installed inside Unit 2 at each station.) This proposed change will reduce substantial radiation exposure to those individuals who would otherwise be performing the surveillance inside containment while the reactor is at power. This reduction in radiation exposure is in accordance with as low as reasonably achievable (ALARA) guidelines while maintaining the intended safety function of the ECCS equipment.

The operational experience of venting ECCS discharge lines at Unit 1 of Byron and Braidwood Stations indicated insignificant or nil amount of air in those pipes. Venting performed at least once per 31 days on the suction side of the ECCS pumps, at the pump casings, and at the discharge piping high points located outside of containment has provided sufficient venting to remove any entrapped air in the ECCS system. Also, CECO's engineering analysis has determined that in the unlikely event of an air void entering the discharge side of the ECCS pumps, the piping has the capability to withstand a water hammer event caused by the maximum credible air void. This was reviewed and found acceptable by the staff.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revision to the TS and concludes that the proposed changes would not change the types, or

allow an increase in the amounts, of effluents that may be released offsite. Nor would they result in an increase in individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

With regard to potential nonradiological impacts, the proposed change to the TS involves a modification to the existing surveillance requirements for venting of ECCS discharge piping. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statements for Byron Station, Unit Nos. 1 and 2, dated April 1982, and for Braidwood Station, Unit Nos. 1 and 2, dated June 1984.

Agencies and Persons Consulted

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

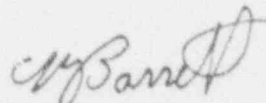
FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated March 17, 1989, and supplements dated August 25, 1989, March 12, 1990, and June 10, 1991, which are available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington D.C. and at: for Byron, the Byron Public Library, 109 N. Franklin, P. O. Box 434, Byron, Illinois 61010; for Braidwood, the Wilmington Township Public Library, 201 S. Kankakee Street, Wilmington, Illinois 60481. Dated at Rockville, Maryland, this 4th day of June 1992.

FOR THE NUCLEAR REGULATORY COMMISSION



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