

SAFETY EVALUATION REPORT
E. I. HATCH NUCLEAR POWER PLANT, UNITS 1 AND 2
LICENSEE RESPONSE TO I&E BULLETIN 80-06,
ENGINEERED SAFETY FEATURES (ESF) RESET CONTROLS

INTRODUCTION

Instances have been reported at operating nuclear power plants where it had been found that following the reset of an ESF actuated signal, certain equipment (e.g., ventilation dampers, motors, and valves) would return to its normal mode, which could compromise the protective actions of the affected systems. As a result, on March 13, 1980, the NRC issued I&E Bulletin 80-06 requesting certain actions to be taken by licensees for all PWR and BWR facilities with operating licenses.

EVALUATION

Our evaluation is partially based on a report, (EGG 1183-4201), prepared for us by EG&G, Inc., San Ramon, California. It provides their technical evaluation of the licensee's response to I&E Bulletin 80-06 in accordance with NRC-provided guidance.

EG&G reported the licensee's conclusion that all safety-related equipment remains in its emergency mode upon reset of the ESF actuating signals with two exceptions: (1) the automatic depressurization system (ADS) valves and (2) the hydrogen and oxygen analyzer system (HOAS) containment isolation valves. The licensee offered justifications in lieu of modifications to this equipment. EG&G did not evaluate these justifications. The licensee committed to complete verification testing on the systems reviewed by the

end of each unit's refueling outage; the expected completion dates for testing were February 1981, for Unit 2 and June 1981, for Unit 1. Therefore, EG&G found that the plant satisfies the requirements of I&E Bulletin 80-06, with the exception of the ADS and HOAS systems.

Reset of the ADS places it in a standby mode, ready to be initiated as required, rather than in the emergency mode as suggested in the Bulletin. We have reviewed the licensee's justification for not modifying the ADS valves to reset in the emergency mode, and find it acceptable on the basis that the ADS system is actuated under specific conditions, at a time of low reactor coolant inventory, and has been analyzed for blowdown rate and loss of reactor coolant inventory. Implementing manual resetting of each individual ADS valve would have an adverse effect on the blow down rate and the total loss of reactor coolant inventory.

We find the licensee's justification for not modifying the HOAS containment isolation valves acceptable on the basis that the system is designed to the same pressure and temperature ratings as the primary containment and performs the singular function of monitoring H_2 and O_2 concentrations immediately after an accident. The reset of the ESF actuation signal reopens the primary containment isolation valves for the HOAS system to meet the design intent of the system.

CONCLUSION

Based on the information and documents provided by the licensee, and on our review of the contractor's report, we conclude that the licensee has satisfied the concerns of I&E Bulletin 80-06, subject to verification by I&E of the successful test completion. Therefore, we conclude that the ESF reset controls for the E. I. Hatch Nuclear Power Plant, Units 1 and 2, are in compliance with applicable NRC criteria.