ENCLOSURE 1

SUPPLEMENTAL SAFETY EVALUATION REPORT
DETAILED CONTROL ROOM DESIGN REVIEW FOR
MCGUIRE NUCLEAR STATION, UNITS 1 AND 2
DOCKET NOS. 50-369 AND 50-370

Introduction

By letter dated May 3, 1985, Duke Power transmitted a supplemental response to the NRC supplemental Safety Evaluation Report (SER), dated March 1, 1985. Duke Power's submittal is accepted with the added commitment to provide the NRC Region II, 60 days prior to each refueling outage, a list of Human Engineering Deficiency (HED) Modifications scheduled for completion during that outage.

Discussion and Evaluation

Duke Power's supplemental response addressed two areas of concern expressed by the NRC supplemental Safety Evaluation Report (SER). The first is HED M-1-0152 and the second is the HED modifications implementation schedule.

1. HED M-1-0152 concerns the replacement of several key lock switches with non-keylock type switches. The licensee proposed not to replace the Pressurizer Power Operated Relief Valve (PORV) mode selector switch, which is a key locked switch listed in HED M-1-0152. In evaluating this proposal, the staff reviewed Duke Power's supplemental submittal; McGuire FSAR Section 7.6.17, Reactor Coolant System Overpressure Protection System For Low Pressure/Temperature, Water Solid Conditions; and instrumentation and control system logic diagrams. Duke Power's review team concluded that the switch replacement was not cost-effective nor did it provide any particular benefit to being a non-key locked switch for the following reasons:

   a. The mode selector switch is not used in a time critical, fast response operation, nor is it used for emergency response.

   b. The PORV and PORV Block Valve control switches are available for operator response when required.

   c. While the keylock feature is not required for security purposes, it does effectively shape code this switch from the adjacent PORV and PORV Block Valve switches.

   d. While keylock switches should not be used solely for shape coding (NUREG-0700, 6.4.4.3.a), in this instance the use of a keylock switch is a very minor HED and, in addition, with the key remaining in the switch (since there is no security requirement), the switch is effectively a non-key rotary switch.

   The staff concludes there is sufficient information and justification to accept Duke's proposal to keep the PORV mode selector switch as a key locked switch.

2. The second area of concern is McGuire's HED modifications implementation schedule. The staff reviewed Duke Power's supplemental response, each remaining HED modification to determine relative safety significance, and conducted a telephone conference call with Duke Power's corporate office. In the supplemental response, the licensee has committed to completing all HEDs by the end of the fourth refueling outage for McGuire Units 1 and 2. Additonally, via a telephone conversation on July 1, 1985, (between R. Gill, Duke Power Corporate Office and H. Christensen, Region II staff) the licensee committed to provide the NRC Region II, 60 days prior to each refueling outage, a list of HED modifications scheduled to be completed during that outage. The staff has conducted a review of the remaining identified HED modifications and has determined that the schedule proposed and the commitments made will insure an orderly modification process while allowing the NRC to adequately follow the licensee's progress.

Conclusion

Duke Power has adequately addressed the remaining items contained in the staff's March 1, 1985, Supplemental SER. The proposed McGuire Implementation Schedule as described in the licensee's submittal of May 3, 1985, is satisfactory for implementing the HEDs requiring corrective action.