

UNITED STATES OF AMERICA  
 NUCLEAR REGULATORY COMMISSION

In the Matter of  
 (NIAGARA MOHAWK POWER CORPORATION) )  
 (Nine Mile Point Nuclear Power ) Docket No. 50-220  
 Station, Unit No. 1) )

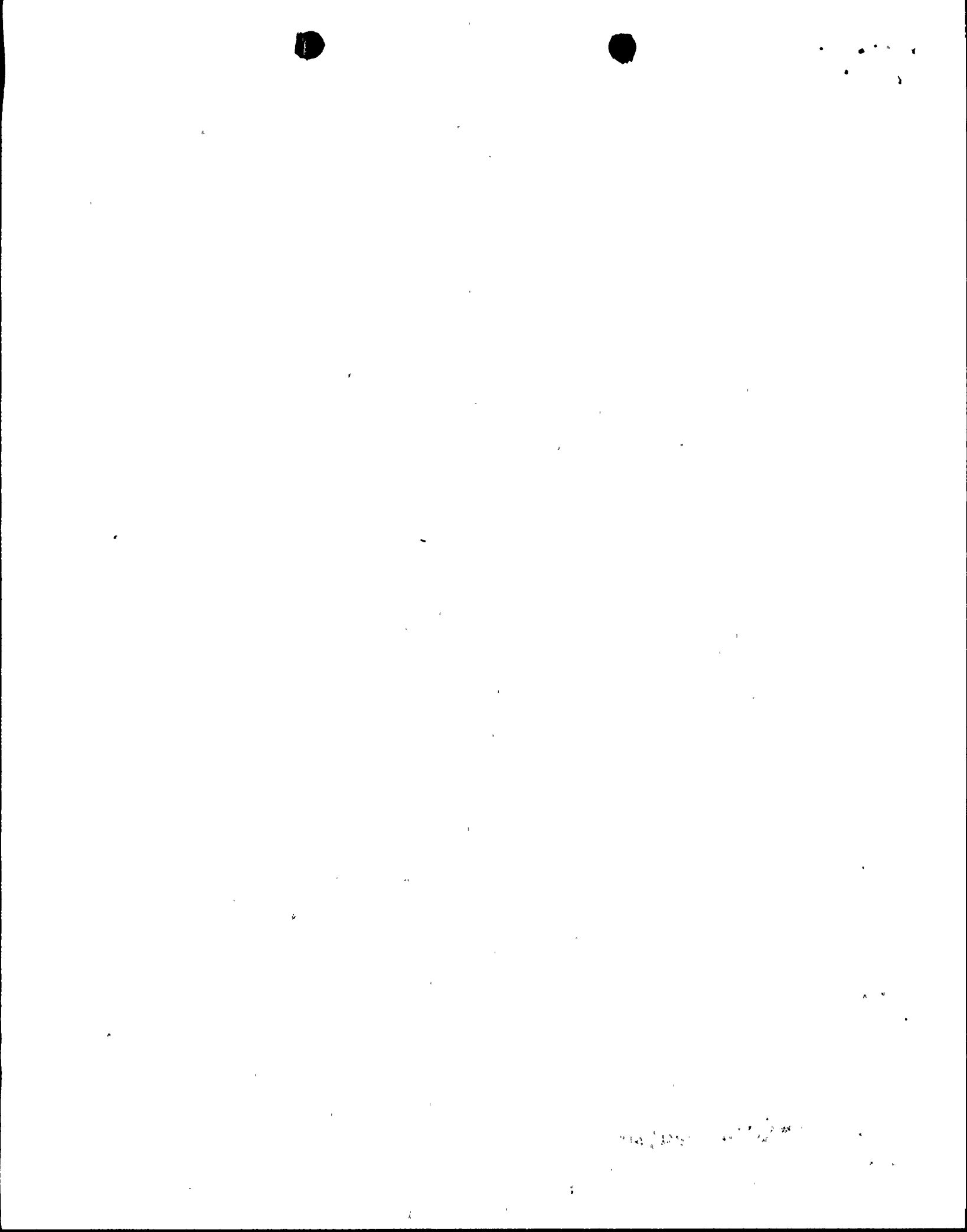
CONFIRMATORY ORDER

I.

The Niagara Mohawk Power Corporation (the licensee) is the holder of Facility Operating License No. DPR-63 which authorizes the licensee to operate the Nine Mile Point Nuclear Power Station, Unit No. 1 (the facility), at power levels not in excess of 1850 megawatts thermal. The facility is a boiling water reactor located at the licensee's site in Oswego County, New York.

II.

During a routine shutdown of Browns Ferry Unit No. 3 on June 28, 1980, 76 of 185 control rods failed to fully insert in response to a manual scram from approximately 30% power. All rods were subsequently inserted within 15 minutes and no reactor damage or hazard to the public occurred. However, the event did cause an in-depth review of the current BWR Control Rod Drive Systems which identified design deficiencies requiring both short and long-term corrective measures. These measures were set forth in the "Generic Safety Evaluation Report BWR Scram Discharge System", dated December 1, 1980, prepared by the NRC staff.

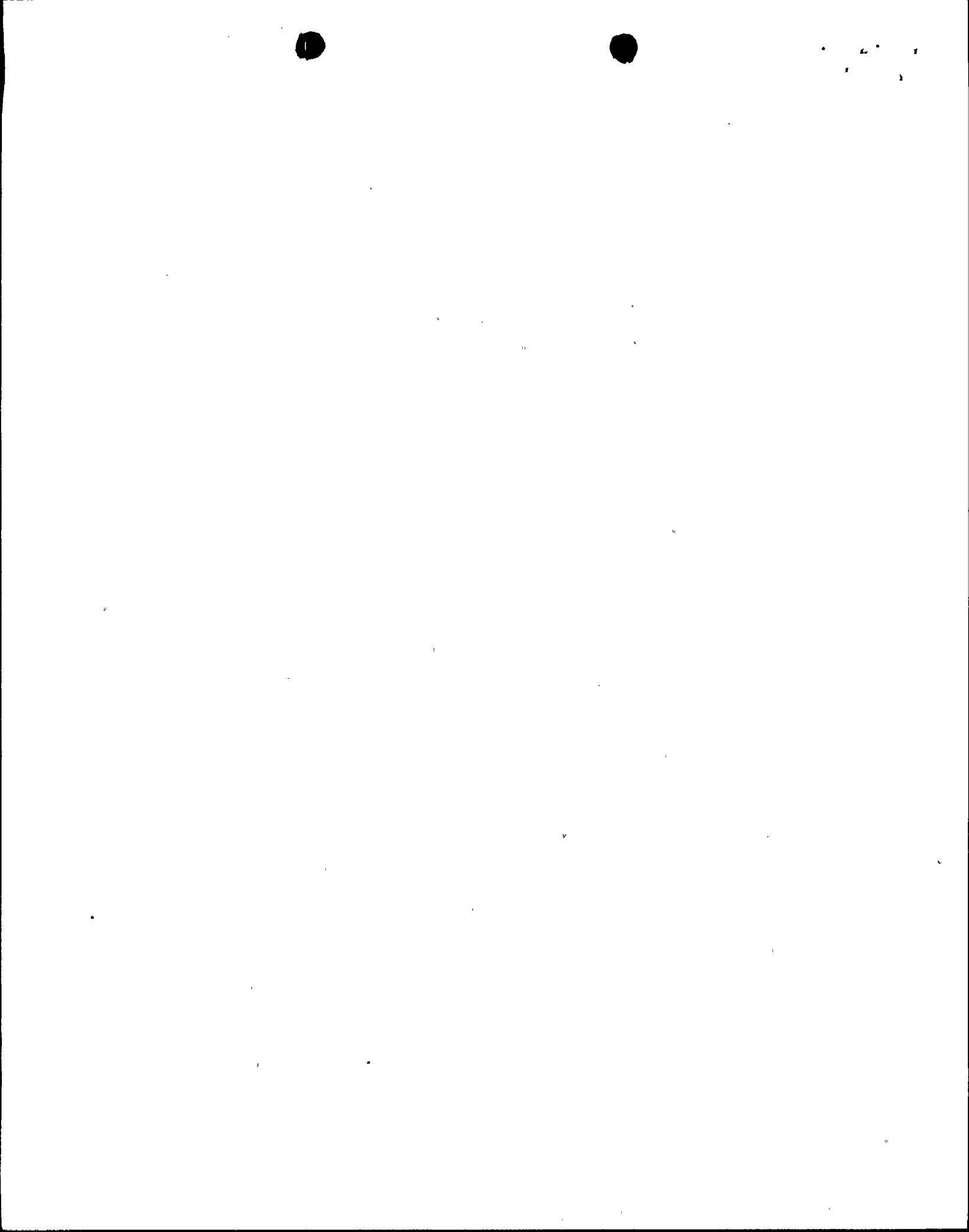


To provide reasonable assurance of safe operation pending implementation of long-term corrective measures, the short-term corrective measures have been implemented by IE Bulletin 80-17 (with supplements) and Orders issued on January 9, 1981.

The Generic Safety Evaluation Report (SER) dated December 1, 1980, endorsed the criteria and technical bases that were developed by a BWR Owners Subgroup for use in implementing permanent system modifications to correct identified deficiencies. These criteria were designated as either functional, safety, operating, design, or surveillance, and when taken as a whole, comprise an adequate set of criteria to resolve the issues raised during the Browns Ferry event investigation.

The SER further described an acceptable means of compliance with each criterion. Pre-implementation approval of permanent modifications using the methods described in the SER for compliance with the criteria will not be required. Alternate methods of compliance will require specific NRC approval in advance of implementation.

In addition to the criteria proposed by the BWR Owners Subgroup, the SER added a criterion to address the potential for common cause failures of the scram level instrumentation. An acceptable means of complying with this criterion was the addition of diversity in the design. The addition of diverse instrumentation on the Scram Discharge Instrumented Volume will minimize recurrence of known common cause failures and thus improve system reliability.



Therefore, we have concluded that diverse instrumentation should be provided as required in the SER, with one exception: Alternative 2(d)(ii) has been deleted as a possible means of providing diversity, due to its reliance on prompt operator action. The use of level sensors employing different operating principles, or the use of level sensors made by a different manufacturer, continues to be an acceptable means of providing diverse instrumentation.

On October 1, 1980, letters were sent to all BWR licensees requesting a commitment to reevaluate the present scram system and modify it as necessary to meet the design and performance criteria developed by the BWR Owners Subgroup. The letter also requested a schedule for implementation.

### III.

Because the implementation of modifications to meet the criteria proposed by the BWR Owners Subgroup and endorsed by the NRC staff will restore the margins of safety in the BWR scram system, we have determined that these modifications should be completed on an expeditious schedule. In response to our letter of October 1, 1980 and additional discussions with the NRC staff, the licensee committed, by letters dated October 15, 1980, April 1, 1981, October 9, 1981 and December 15, 1982 to install the long term modifications before reactor operation in Cycle 8. These commitments were confirmed in a June 8, 1983 telephone conversation with the licensee's staff. In view of the foregoing, we have determined that these commitments are required in the interest of public health and safety and should, therefore, be confirmed by an immediately effective order.



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## IV.

Accordingly, pursuant to sections 103, 161i, and 182 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT:

1. The licensee shall install the long term BWR scram discharge system modifications in conformance with the staff's Generic SER, which incorporates the BWR Owners Subgroup criteria, before reactor operation in Cycle 8 or, in the alternative, the licensee shall place and maintain the facility in a cold shutdown or refueling mode of operation until such modifications are made. Extensions of time for installation may be granted for good cause shown by the licensee. The modifications shall include diverse instrumentation as provided in the SER with the exception that alternative 2(d)(ii) will not be accepted.

2. For those cases in which a different method of complying with the criteria than that described in the SER is chosen, the licensee shall submit the design details and supporting analyses for approval to the Director, Division of Licensing, Washington, D. C. 20555 with a copy to the Regional Administrator of the appropriate NRC regional office, at least 3 months prior to the required implementation date.

3. Technical Specification changes required for operation with the modified system shall be submitted at least 3 months prior to the required implementation date.



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V.

The licensee may request a hearing on this Order within 25 days of the date of publication of this Order in the Federal Register. A request for hearing shall be submitted to the Director, Division of Licensing, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A copy of the request shall also be sent to the Executive Legal Director at the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is requested by the licensee, the Commission will issue an order designating the time and place of any such hearing. If a hearing is held, the issue to be considered at such a hearing shall be whether the licensee should comply with the conditions set forth in Section IV of this Order.

The request for information made in this Order was approved by OMB under clearance number 3150-0083 which expires on December 31, 1983. Comments on burden and duplication may be directed to the Office of Management and Budget, Reports Management, Room 3208, New Executive Office Building, Washington, D.C.

This Order is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 24th day of June 1983.



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