

July 11, 1980

Office of Inspection and Enforcement
Region I
Attn: Mr. Boyce H. Grier, Director
U. S. Nuclear Regulatory Commission
631 Park Avenue.
King of Prussia, PA 19406

Re: Nine Mile Point Unit 1
Docket No. 50-220
DPR-63

Dear Mr. Grier:

Your July 3, 1980 Inspection and Enforcement Bulletin 80-17 requested information regarding the control rod scram system at Nine Mile Point Unit 1. The attachment to this letter addresses Items 4, 6 and 7 of that Bulletin. The remaining outstanding items of the Bulletin will be addressed in accordance with the schedules outlined in the Bulletin.

The information contained in the attachment to this letter demonstrates that continued operation of Nine Mile Point Unit 1 does not present an undue safety hazard to the public.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION



T. E. Lempges
Vice President - Nuclear Generation

SWW:ja
Attachment
cc: NRC Office of Inspection and Enforcement
Division of Reactor Operations Inspection
Washington, D. C. 20555

8008010 216



STATE OF NEW YORK)
COUNTY OF ONONDAGA) SS:

THOMAS E. LEMPGES, being duly sworn, says:

I am Vice President, Nuclear Generation of Niagara Mohawk Power Corporation. I have read the foregoing letter and the fact contained in the letter and attachment are true to the best of my knowledge, information and belief.

Thomas E. Lempges

Thomas E. Lempges

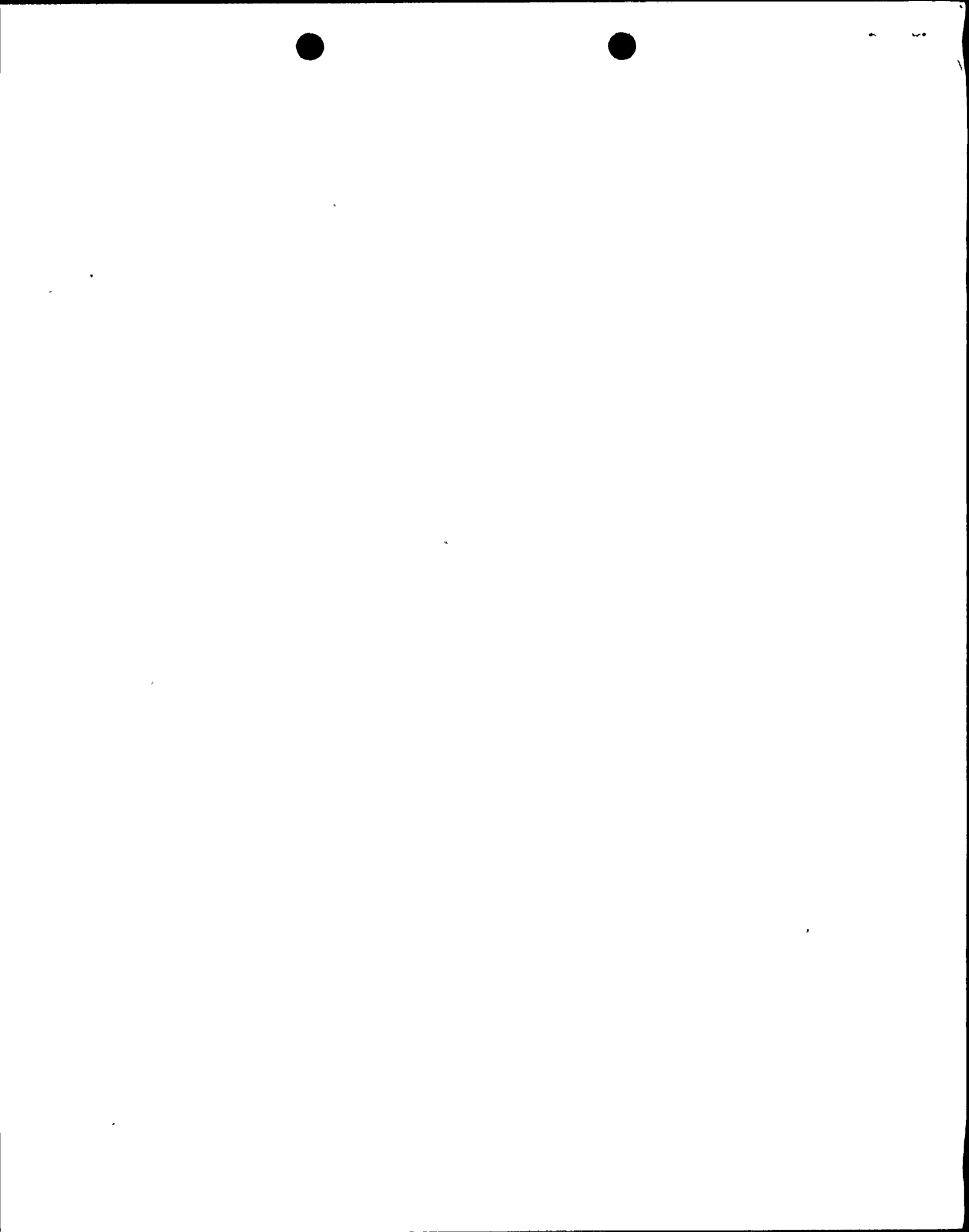
Sworn to before me on this
11th day of July, 1980

Bonnie E. Phillips

Notary Public

BONNIE E. PHILLIPS

Notary Public in the State of New York
Qualified in Onon. Co. No. 34-8357300
My Commission Expires 12/30, 1982



NIAGARA MOHAWK POWER CORPORATION
RESPONSE TO INSPECTION AND ENFORCEMENT BULLETIN 80-17
FOR
NINE MILE POINT UNIT 1



Item 4

Within 10 days, complete a review of emergency operating procedures by the licensee and the NSSS vendor to assure that, for scram, operator actions include: (Items 4.a through 4.c below)

Response

Currently there are a number of procedures in effect at Nine Mile Point Unit 1 which outline actions to be taken when control rods fail to insert as required. These Special Operating Procedures are a part of the Station Operating Procedures and detail operator actions to be taken under certain prescribed circumstances. However, since these procedures do not specifically address the conditions of I. E. Bulletin 80-17 and the actions to be taken specified by items 4.a through 4.e, Standing Order NMPSO-23 dated July 9, 1980 has been issued in which the items of the Bulletin are specifically addressed. Details of this Standing Order are given below. Presently, a review of the requirements of the Bulletin and other Special Operating Procedures already in effect is underway in order that the Standing Order may be incorporated into these procedures. Also, a general review of all Station Operating Procedures dealing with failure of controls rods to insert is being conducted in order to simplify operator recognitions of and responses to these events.

Item 4a

Place the reactor mode switch in a position other than "RUN."

Response

Nine Mile Point Nuclear Station Unit #1 Standing Order NMPSO-23, dated July 9, 1980, entitled "Failure of Control Rods to Scram," requires that the reactor mode switch be placed in the "Refuel" position.

Item 4b

Determine whether either of the two conditions below exist:

- (1) Five (5) or more adjacent rods not inserted below the 06 position.
- (2) Thirty (30) or more rods not inserted below the 06 position.

Response

The above-mentioned Standing Order does require a determination of whether or not 4.b.(1) or 4.b.(2) conditions exist. The order, however, takes a more conservative approach since it requires implementation if two (2) or more adjacent control rods fail to insert below the 06 position rather than the five (5) required in 4.b.(1).

Item 4.c

If either condition 4.b.(1) or 4.b.(2) exists:

- (1) Trip the recirculation pumps.
- (2) Insert rods manually. If rods cannot be inserted manually, alternately reset the RPS and scram the reactor until all rods are fully inserted.
- (3) Vent the scram air header.



Item 4.c (cont.)

- (4) Manually open or bypass the scram instrument volume drain and vent valves, if possible.

Response

The pre-mentioned Standing Order requires that if either 4.b.(1) (as revised more conservatively) or 4.b.(2) exists steps 4.c.(1), (2), (3), (4) be taken by the operators. It is noted that once the scram air header is isolated and vented, the scram discharge volume vent and drain valves cannot be opened.

Item 4.d

If, at any time, either condition 4.b.(1) or 4.b.(2) exists and either RPV water level cannot be maintained or suppression pool water temperature cannot be maintained below the suppression pool water temperature scram limit, initiate the SLCS.

Response

Again, the pre-mentioned Standing Order requires initiation of the Standby Liquid Control System if either condition 4.b.(1) or 4.b.(2) exists and either the RPV level cannot be maintained or the torus water temperature cannot be maintained $\leq 110^{\circ}\text{F}$.

Item 4.e

Review the Browns Ferry occurrence with all license operators and train them in the procedures to recognize and mitigate the event. Verify that preliminary training of operators is completed within 10 days of the date of this Bulletin and that full training is completed within 30 days of the date of this Bulletin.

Response

Preliminary training consisting of a review of the Browns Ferry occurrence and Nine Mile Point Unit #1 Standing Order NMPSO-23, dated July 9, 1980, will be accomplished by all licensed operators currently performing shift duties and all licensed staff personnel within ten days of the date of the Bulletin. The remaining licensed operators will receive the appropriate preliminary training during their first shift duty assignment.

Full training as required by 4.e consisting of live instruction will be completed within 30 days as required by the Bulletin.



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Item 4c (cont.)

- (4) Manually open or bypass the scram instrument volume drain and vent valves, if possible.

Response

The pre-mentioned Standing Order requires that if either 4.b.(1) (as revised more conservatively) or 4.b.(2) exists steps 4.c.(1), (2), (3), (4) be taken by the operators. It is noted that once the scram air header is isolated and vented, the scram discharge volume vent and drain valves cannot be opened.

Item 4d

If, at any time, either condition 4.b.(1) or 4.b.(2) exists and either RPV water level cannot be maintained or suppression pool water temperature cannot be maintained below the suppression pool water temperature scram limit, initiate the SLCS.

Response

Again, the pre-mentioned Standing Order requires initiation of the Standby Liquid Control System if either condition 4.b.(1) or 4.b.(2) exists and either the RPV level cannot be maintained or the torus water temperature cannot be maintained $\leq 110^{\circ}\text{F}$.

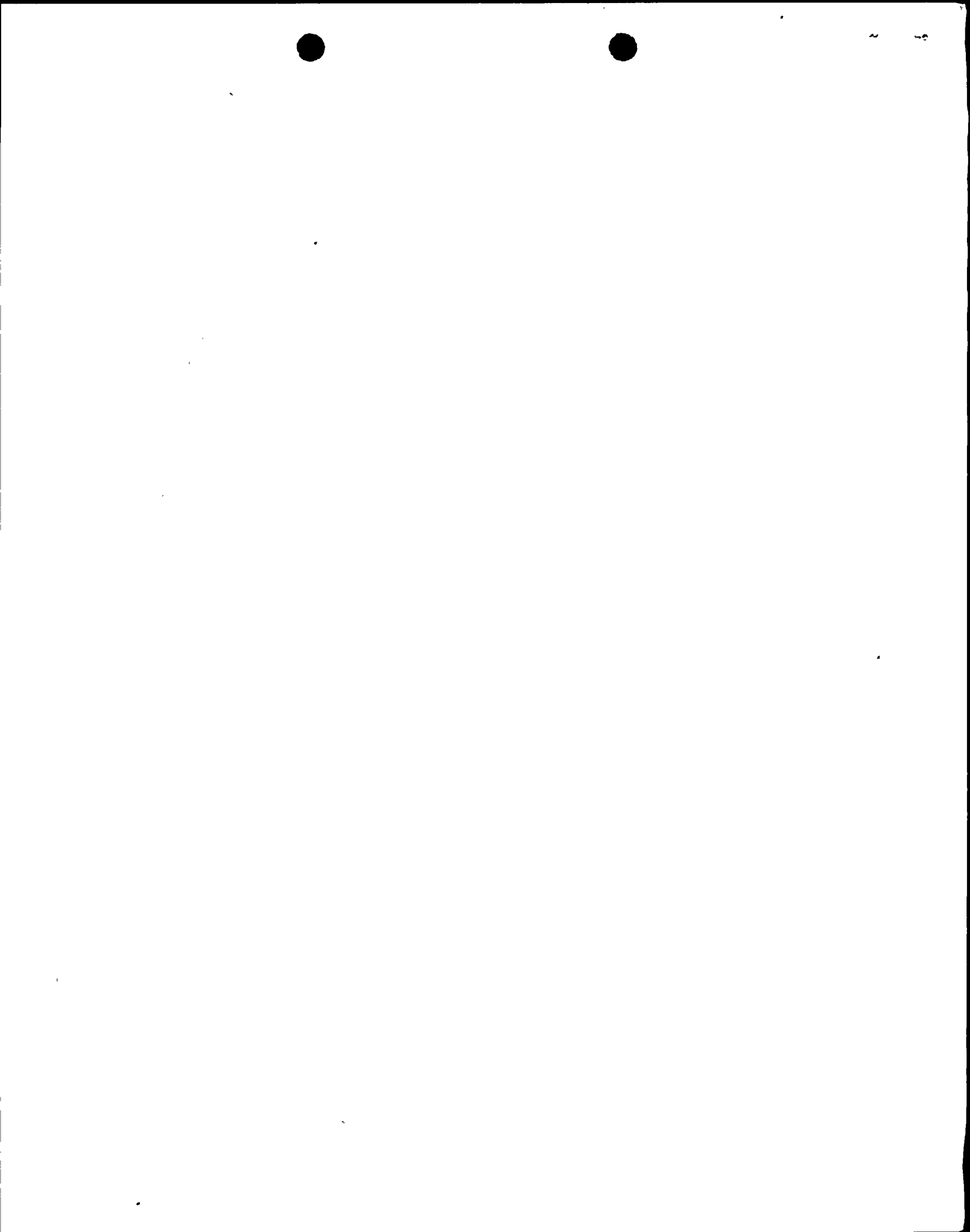
Item 4e

Review the Browns Ferry occurrence with all licenses operators and train them in the procedures to recognize and mitigate the event. Verify that preliminary training of operators is completed within 10 days of the date of this Bulletin and that full training is completed within 30 days of the date of this Bulletin.

Response

Preliminary training consisting of a review of the Browns Ferry occurrence and Nine Mile Point Unit #1 Standing Order NMPSO-23, dated July 9, 1980, will be accomplished by all licensed operators currently performing shift duties and all licensed staff personnel within ten days of the date of the Bulletin. The remaining licensed operators will receive the appropriate preliminary training during their first shift duty assignment.

Full training as required by 4.e consisting of live instruction will be completed within 30 days as required by the Bulletin.



Item 6

In order to mitigate the consequences of an ATWS event, enhanced operability of HPCI, RCIC, SLCS, RPT/RHR/pool cooling and main steam bypass is essential. Accordingly, the following actions are requested: (Items 6a through 6c below).

Item 6.a

Prompt notification (within 24 hours) of any of the above systems when it is less than fully operable and when it is restored to service. Operability of both pumps in the SLCS is required for full operability. Surveillance tests and preventive maintenance less than 24 hours need not be reported.

Response

Niagara Mohawk will comply with the prompt notification (within 24 hours) requirement outlined in item 6a.

Item 6.b

Operate all the available suppression pool cooling whenever the suppression pool exceeds the normal operating temperature limit.

Response

Niagara Mohawk will operate all available suppression pool cooling whenever the suppression pool exceeds the normal operating temperature limit.

Item 6.c

Perform a 50.59 review to increase SLCS flow to the maximum consistent with safety (2 pumps, unless unsafe).

Response

Niagara Mohawk has performed a preliminary analysis of the ability of the standby liquid control system (SLCS) to operate under increased flow conditions (two pumps operating simultaneously). The results of this preliminary review indicate that operation of the SLCS with both pumps is possible. However, more detailed analyses and testing would be required prior to modifying the system for two pump operation. Areas requiring additional analyses and testing include:

- Analyses to assure real benefit with increased flow when consideration is given to mixing characteristics
- Testing of the vibrational effects of two pump operability on the SLCS
- Testing of the pump discharge accumulators to assure adequate dampening of the positive displacement pump surges.



If directed by the NRC by October 31, 1980, Niagara Mohawk will complete the above analysis and testing during the spring 1981 refueling outage. If operation in this mode is acceptable, Niagara Mohawk will then provide a schedule for modifying system operations accordingly. As a minimum, a redesign of the SLCS selector switch in the control room is required (currently, the system selector switch precludes operation of two pumps simultaneously).

Item 7

For plants without ATWS related RPT, perform an analysis of the net safety of derating such that, in the event of an ATWS, calculated peak pressures do not exceed service Level "C" limit (approximately 1,500 psig) by taking into consideration the heat removal capability of safety valves, isolation condenser, bypass to the main condenser and other available heat removal systems.

Response

The analysis requested in Item 7 was performed for Cycle 6 at Nine Mile Point Unit 1 and previously submitted to the Nuclear Regulatory Commission in our Reload 7 licensing submittal (Reference 1). As shown in Section 12 of Reference 1, the calculated peak pressure during a postulated MSIV closure with failure to scram is 1315 psig.

Reference 1 - Letter to the Director, NRR, from LeBoeuf, Lamb, Leiby & McRae (Counsel for Niagara Mohawk Power Corporation) dated November 21, 1978.

