

30 JUL 1986

MEMORANDUM FOR: Elinor Adensam, Director, BWR Project Directorate No. 3,
NRR

FROM: Stewart D. Ebnetter, Director, Division of Reactor Safety,
Region I

SUBJECT: NINE MILE POINT UNIT 2 - POWER ASCENSION TEST PROGRAM

References: Letters C. Mangan to E. Adensam (NMP2L-0724 and NMP2L-0725)
both dated May 30, 1986

This memorandum provides Region I evaluation of the Nine Mile Point 2 power ascension test program reduction and the initial plant fuel loading sequence as described in the reference letters. Evaluation of the test program reduction is provided in the attachment.

Regarding the initial fuel loading sequence, Region I is concerned regarding the relaxation of the technical specification for the minimum number of source range monitors to be continuously indicating during the partial core shutdown margin demonstration from two to one. This is unacceptable due to lack of any other confirmatory indication (i.e., from another SRM) that the single SRM is providing valid results. Therefore, the offset spiral loading is considered acceptable provided that during the partial core shutdown margin two continuously indicating (neutronically coupled to the partially loaded core) source range monitors are required. This was discussed between D. Florek (RI) and H. Richings (NRR) in a telecon on June 24, 1986. In a followup telecon on June 25, 1986 between H. Richings and D. Florek, the Region was informed that the licensee agreed with the Region's comment and two SRMs will be continuously indicating during shutdown margin demonstrations.

Should you require additional information please contact D. Florek (FTS 488-1185) or P. Eselgroth (FTS 488-1194).

Original Signed By:

Stewart D. Ebnetter, Director
Division of Reactor Safety

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ATTACHMENT 1

REGION I EVALUATION OF NINE MILE POINT UNIT 2
POWER ASCENSION TEST REDUCTIONS

ITEM	DESCRIPTION	EVALUATION
5.1	Reduce number of CRD/HOT friction tests	This proposal is similar to those found acceptable at other BWRs. Accept the proposal.
5.2	Defer rated pressure and temperature rod scrams for all but 4 rods until full core scrams resulting from the loss of offsite power and shutdown from outside the control room test.	RG-1.68 App. A.4.0 indicates scram time testing at rated temperature should be performed under low power (<5%). Deferring scram testing requires reliance on a safety system that hasn't been fully tested at a time it is required to operate. This is not consistent with RG-1.68 B.4. The consequences of failure to scram (ATWS) does not justify relaxing the requirement. Deny the proposal.
8.0	Defer control rod sequence exchange until post commercial operation.	The licensee utilizes NMP-1 experience to justify deferring the test. Due to the differences in plant design and technological bases (BWR-2 vs. BWR-5, higher power density and average heat flux) it does not appear appropriate to defer the test. Performing rod seq. exchange at a time when more margin for error exists to prove the procedure and methodology and gain operating experience is more the intent of RG-1.68. Deny the proposal. Note: Had NMP-2 been essentially identical to NMP-1, this proposal would have been acceptable.
21.0	Delete control rod movement tests at TC-4 and TC-5	This was found acceptable at Hope Creek. Accept the proposal.

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| 22.0 | A. Delete pressure regulator test at TC-4. | RG-1.68 requires core performance testing in the permissible range of power to flow conditions. This test demonstrates reactor response to pressure changes in a mode that demonstrates core stability. Deny the proposal. |
| 22.0 | B. Delete automatic load following tests. | If this is not a permissible mode of operation, accept the proposal. |
| | C. Delete backup pressure regulator takeover in TC-5. | Backup regulator testing in TC-2, 3 & 6 is sufficient to cover TC-5. Accept the proposal. |
| 23.1 | Delete feedwater control system testing in TC-4 and provide modified criteria. | RG-1.68 requires core performance testing in the permissible range of power to flow conditions. This testing in TC-4 will introduce core power changes based on subcooling and demonstrate core stability. Deny the proposal. The proposal for modified criteria is acceptable based on overall feedwater response to plant transients. |
| 26.0 | Replace relief valve start up testing during heatup and between TC-2 and 3 with testing at TC-1. | This is similar to proposals accepted for Hope Creek. Accept the proposal. |
| 27.0 | Delete the turbine trip test at TC-3 and change the generator load reject test at TC-1 or 2 to a turbine trip test. | This is similar to the proposal found acceptable for Hope Creek. |
| 30.5 | Simplify recirculation system cavitation tests. | This proposal is similar to that accepted by Hope Creek. Accept the proposal. |
| 71.0 | Defer obtaining RHR heat exchanger data in the shutdown cooling mode until after commercial operation. | Data to confirm RHR heat exchanger heat transfer ability should be obtained, during power ascension. Deny the proposal. |

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| 22.0 | B. Delete automatic load following tests. | If this is not a permissible mode of operation, accept the proposal. |
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TC-4	Delete TC-4, however natural circulation testing will be performed as a part of TC-5.	The licensee does not propose to delete natural circulation testing only delete the specific test condition name, this is administrative. The deletion of tests on pressure regulator (22) and feedwater (23.1) was not accepted for Hope Creek & since NMP-2 operates at a higher power level than Hope Creek (3323 vs 3293 MWT) should not be accepted as described above. The method the license proposes to conduct the test, in accordance with SIL-380, is appropriate to monitor and recover from the test. Provisionally accept the proposal.
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