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September 10, 1999
NMP2L 1896

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U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

RE: Nine Mile Point Unit 2
Docket No. 50-410
NPF-69

Subject: *Request for Additional Information Regarding Out of Scope Issues of the Improved Technical Specifications (ITS) for the Nine Mile Point Nuclear Station, Unit No. 2 (TAC No. MA3822)*

Gentlemen:

Niagara Mohawk Power Corporation (NMPC) transmitted an Application for Amendment regarding conversion of the Nine Mile Point Unit 2 (NMP2) Current Technical Specifications (CTS) to the ITS by letter dated October 16, 1998 (NMP2L 1830). Subsequently, by letter dated September 2, 1999, the Nuclear Regulatory Commission requested additional information pertaining to our Application for Amendment regarding specific aspects of ITS Sections 3.6, 3.7 and 3.3.

Attached to this letter are the requested NMPC responses.

Very truly yours,

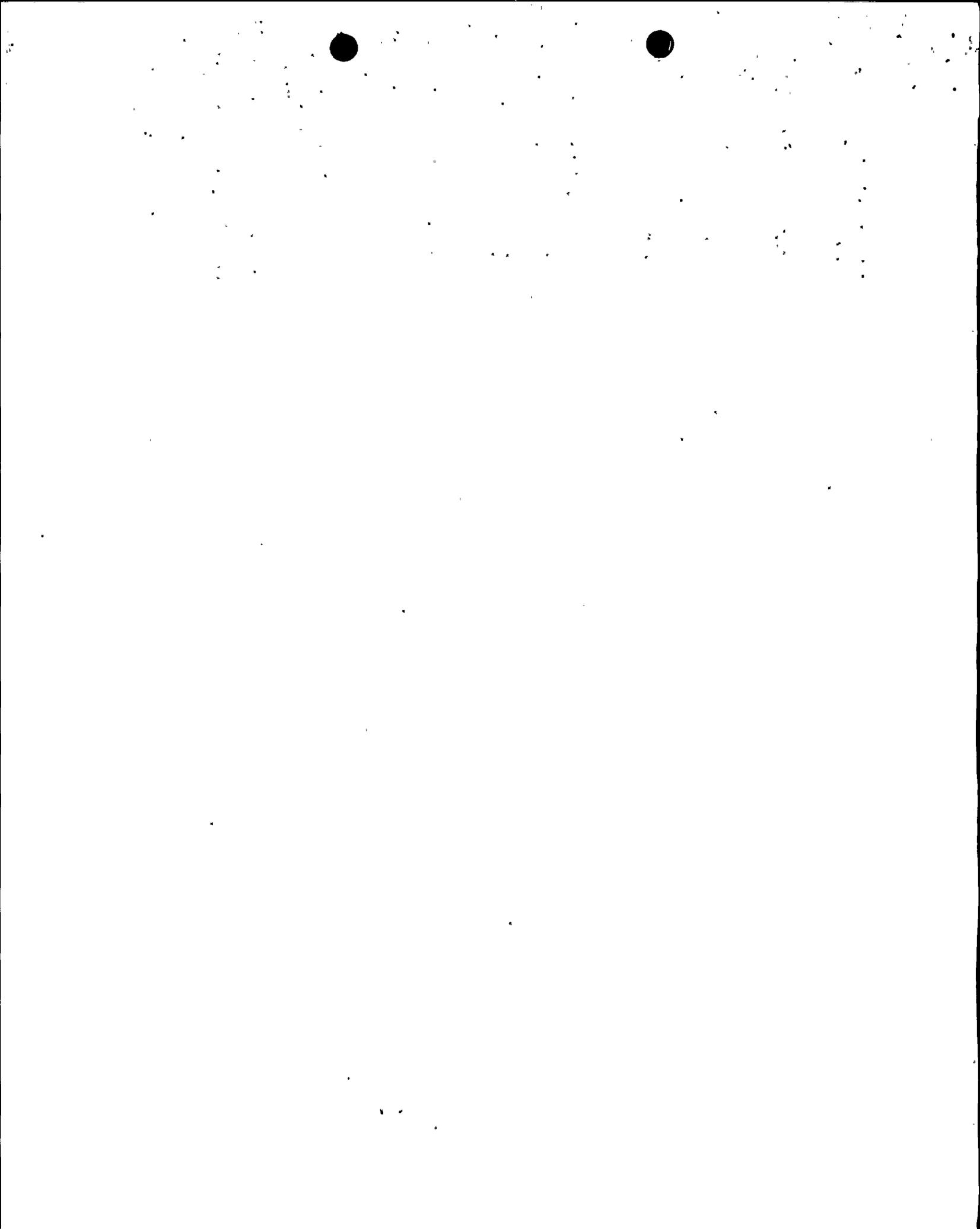
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Attachment

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**REQUEST FOR ADDITIONAL INFORMATION (RAI)
IMPROVED TECHNICAL SPECIFICATIONS (ITS)
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION UNIT NO. 2**



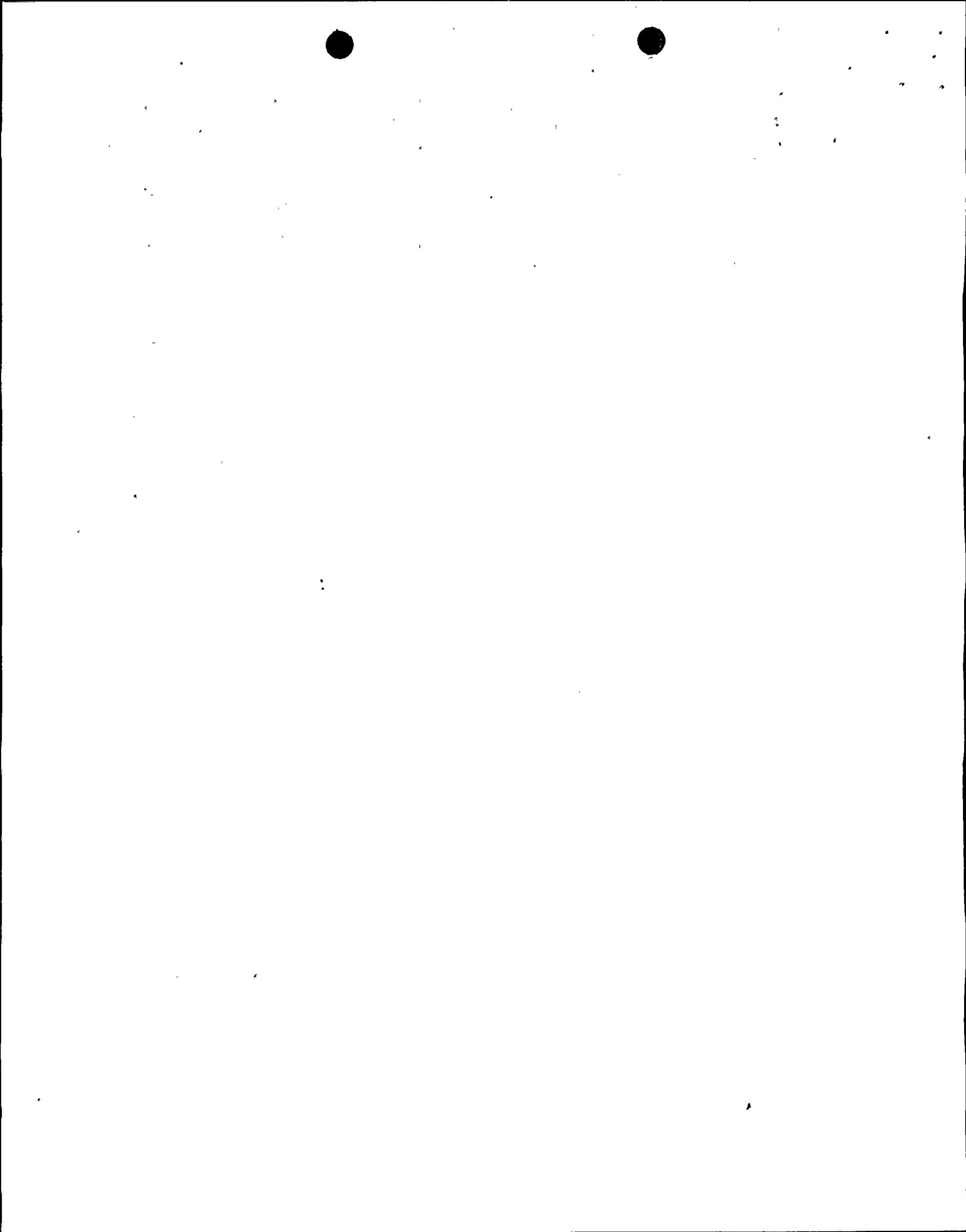
1. *ITS 3.6.1.3- The licensee proposed to delete CTS 4.6.3.4 requirement that each excess flow check valve (EFCV) must check flow. The proposed SR 3.6.1.3.9 now requires the EFCVs to actuate to their isolation position. The accident analysis assumed the maximum allowed through the broken line and not the actual leakage. It is indicated that the proposed change will not impact the method of testing the EFCVs.*

If the method of testing the EFCVs is not being changed, why is the above requirement to check flow being deleted? What is being gained; please explain.

NMPC Response:

Nine Mile Point Unit 2 (NMP2) replaced the requirement that each EFCV checks flow with a requirement to verify that each EFCV actuates to the isolation position on an actual or simulated instrument line break signal to be consistent with a similar test for all other automatic Primary Containment Isolation Valves (PCIVs), (Improved Standard Technical Specifications (ISTS) Surveillance Requirement (SR) 3.6.1.3.8). As stated in the Discussion of Change (DOC) justifying this change, the Instrument Line Break Analysis in the NMP2 Updated Safety Analysis Report (USAR) Section 15.6.2 assumes both the EFCV and the manual block valve to be unavailable, i.e., fail to close; the accident is terminated by cooling down the plant. Therefore, since actual leakage is not an assumption of the accident analysis (the leakage is assumed to be the maximum flow through the broken line), the leakage limit (i.e., checks flow) does not appear to be necessary in the Improved Technical Specifications (ITS). NMP2 also notes that four of the last six Boiling Water Reactor (BWR) ITS amendments issued (Washington Public Power Supply System Unit 2, Cooper Nuclear Station, Browns Ferry Nuclear Units 1, 2 and 3 and Brunswick Units 1 and 2) were issued with the EFCV Surveillance written in this manner. Therefore, since the NMP2 proposed EFCV Surveillance is consistent with the majority of the most recently approved (1997 to current date) BWR ITS amendments, and that leakage through the EFCV is not an assumption in the applicable safety analysis, NMP2 believes that the EFCV Surveillance should be issued as provided in the ITS submittal.

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2. *ITS 3.6.1.6 and ITS 3.6.2.4- CTS 3.6.2.2 requires the drywell and the suppression pool spray mode of the RHR System to be capable of recirculating water from the suppression pool through the RHR heat exchangers to the drywell and suppression pool spray spargers. ITS 3.6.1.6 and ITS 3.6.2.4 relocates the details of what constitutes Operable drywell and suppression pool spray subsystems to the Bases. The requirement to circulate water through the heat exchangers has not been included. Please indicate how the heat will be removed from the containment in the spray mode if the requirement to circulate water through the heat exchanger is not included.*



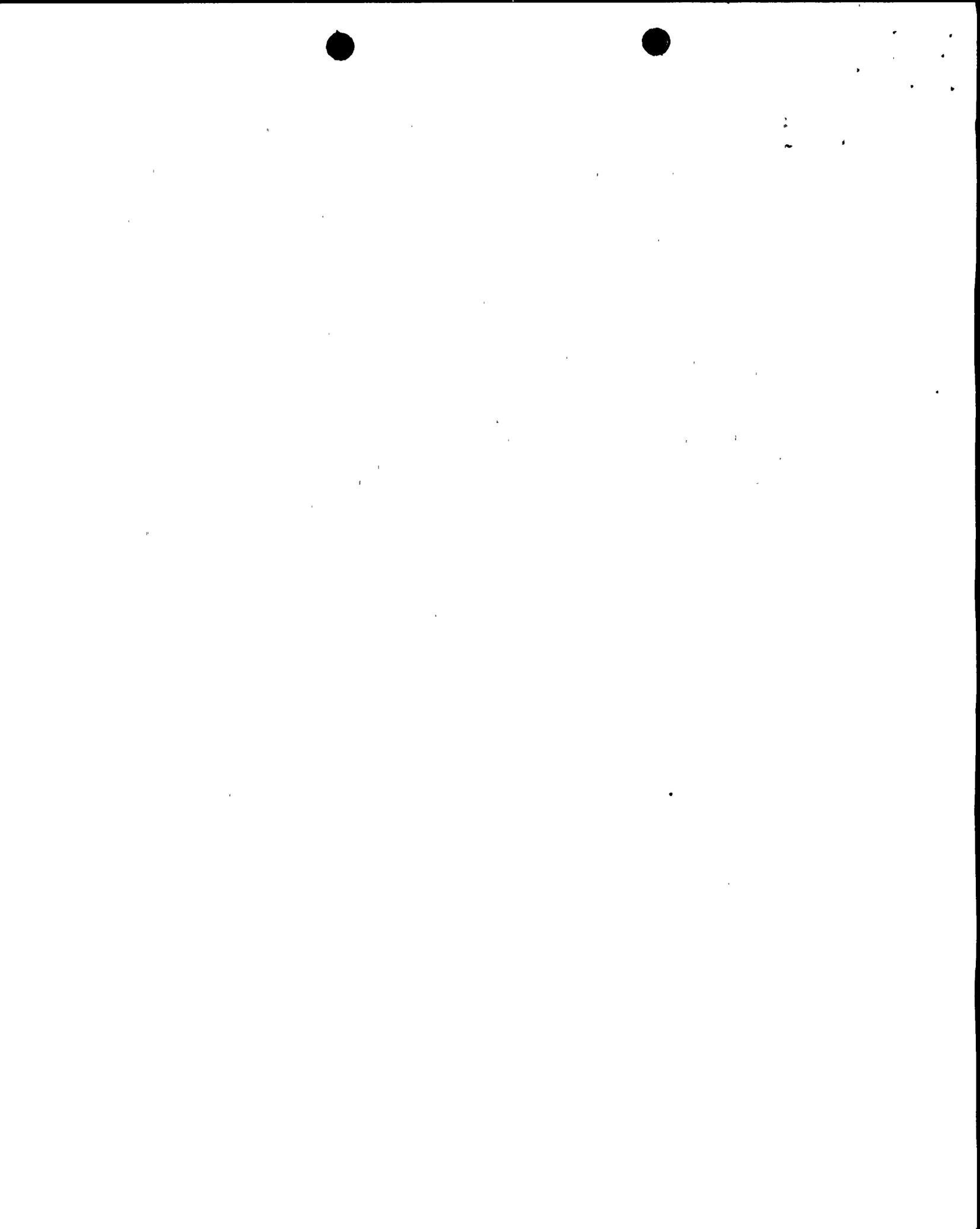
NMPC Response:

As stated in ITS 3.6.1.6 DOC L.1, the drywell sprays are required to reduce pressure in the drywell and provide mixing of the atmosphere, not cool the primary containment atmosphere. The analysis for the drywell spray does not credit cooling of the suppression pool water to perform the pressure mitigation and atmosphere mixing functions. Furthermore, as stated in ITS 3.6.2.4 DOC L.1, the suppression pool sprays are required to reduce pressure in the suppression pool airspace, which will reduce pressure in the drywell, as well as reducing the pressure buildup caused by bypass leakage paths. The suppression pool cooling mode, which is governed by ITS 3.6.2.3, ensures heat can be removed from the primary containment, as assumed in the accident analysis. If a Residual Heat Removal (RHR) subsystem is placed in the drywell spray mode and all flow is diverted to the drywell spray mode, the remaining suppression pool cooling subsystem can be maintained in the suppression pool cooling mode to provide the necessary cooling function. Alternately, if the remaining suppression pool cooling subsystem cannot be maintained in the suppression pool cooling mode (e.g., due to the need to maintain the subsystem in the low pressure coolant injection mode or due to an inoperability in the subsystem), this is not a concern since the time an RHR subsystem would need to be in the drywell spray mode is short. Additionally, if suppression pool spray is used (which is the spray mode required by the emergency operating procedures to be used first), plant procedures allow the associated RHR subsystem to be operated in the suppression pool cooling mode if heat needs to be removed from the suppression pool. Thus, during suppression pool spray operation, suppression pool cooling is maintained, if needed.

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3. *ITS SR 3.7.2.3 and SR 3.7.2.4 require that the control room outdoor air special filter train (CROAFT) be tested every 24 months. The licensee justified the test interval extension from 18 months to 24 months, based on historical maintenance and surveillance data. These data are not sufficient to justify the test interval extension. Please provide a technical evaluation that demonstrates that the impact on this change is minimal.*

NMPC Response:

The NRC provided a DOC to NMP2 from a previous BWR ITS submittal as an example that the NRC believed contained sufficient technical justification for the test interval change (Brunswick Nuclear Plant, Units 1 and 2). NMP2 has reviewed this example and believes the justification provided in the NMP2 DOC contains the necessary technical information to approve the change, consistent with other similar 18 to 24 month changes. However, NMP2 will modify the DOC accordingly to contain the additional clarifying information provided in the Brunswick DOC.

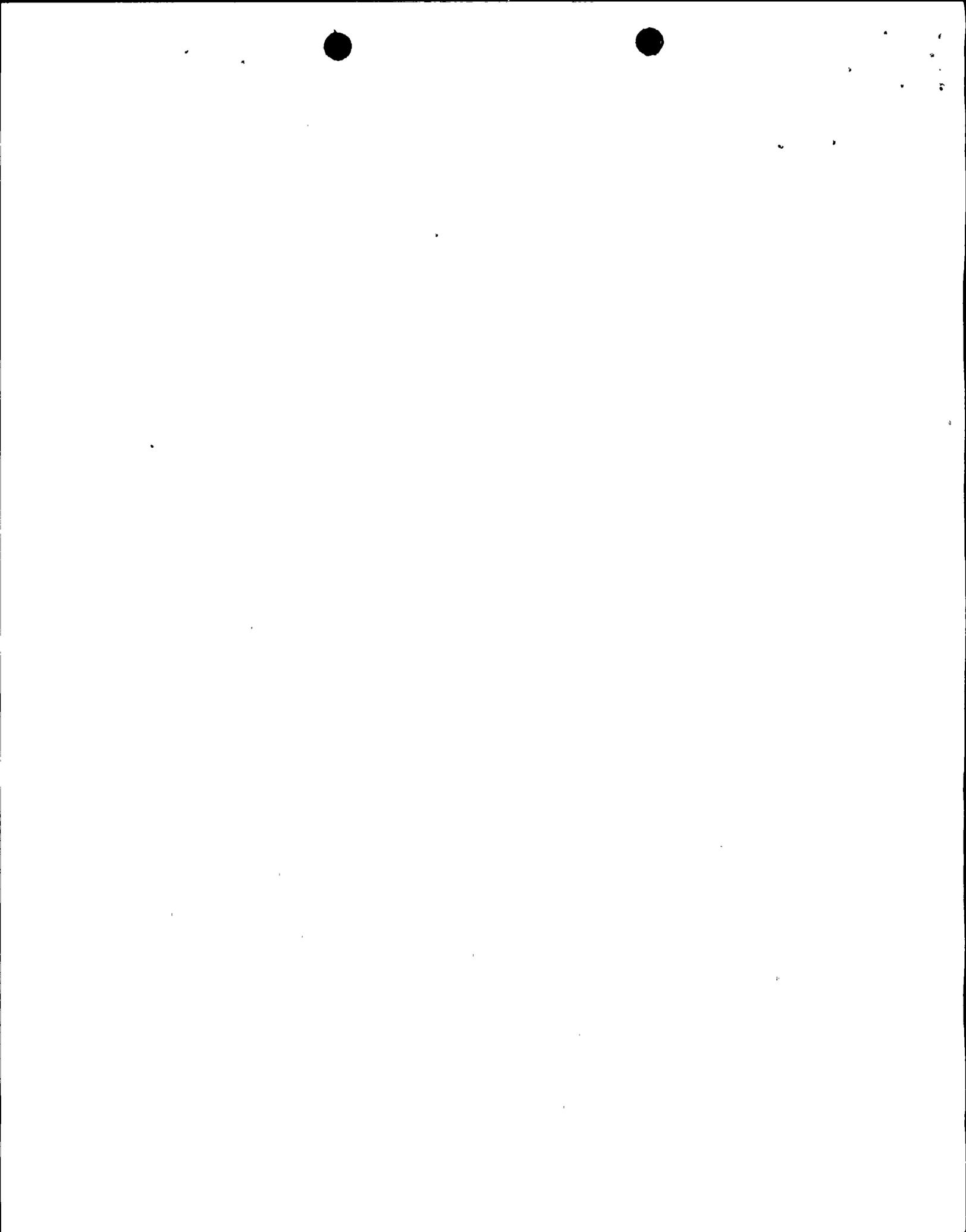


4. *The licensee's proposed deletion of staggered testing requirement in ITS SR 3.7.2.1 for the CREF subsystem is not justified because CTS 4.7.3.b has this test requirement. Alternating the CREF subsystems on a staggered test basis is to discover undetectable CREF subsystem failures. Please provide your technical bases for concluding that this test requirement can be deleted.*

NMPC Response:

NMP2 noted that this RAI was issued as part of the RAI letter concerning 24 month and beyond scope issues. However, this RAI is not related to either of these issues; the subject SR is not extending an 18 month Surveillance Frequency to 24 months nor was it identified as a beyond scope issue in Attachment 3 of the NMP2 ITS submittal letter (NMP2 letter to the NRC dated October 16, 1998). NMP2 deleted the staggered testing requirement in CTS 4.7.3.b to conform to NUREG-1434, Rev. 1, the ISTS. As stated in ITS 3.7.2 DOC L.3, the actual test frequency (31 days) is not being changed. Therefore, since both subsystems are being tested, all detectable subsystem failures will be identified. If there is an undetectable failure in a subsystem, then a staggered test requirement will have no impact on the ability to detect this type of failure (since it is undetectable). NMP2 has also reviewed the two most recent BWR submittals and the associated NRC Safety Evaluation Reports (SERs) for those BWR plants that deleted this same requirement (Susquehanna Steam Electric Station, Units 1 and 2, and Washington Public Power Supply System Unit 2) and believes that the NMP2 DOC (ITS 3.7.2 DOC L.3) provides more technical justification than is provided in either of the two submittals or the associated NRC SERs. Therefore, NMP2 believes the DOC provides an adequate technical basis for the deletion of the staggered testing requirements.

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5. *The NRC staff in their safety evaluation on NEDO-31400 identified three conditions that needed to be addressed by each licensee in their plant-specific applications to remove the main steam line radiation monitor (MSLRM) scram function and main steam isolation valve (MSIV) isolation function. Condition 2 was that the application for such a change should provide sufficient evidence (implemented or proposed operating procedures, or equivalent commitments) to provide reasonable assurance that increased significant levels of radioactivity in the main steam lines will be controlled expeditiously to limit both occupational doses and environmental releases. In the submittal for this proposed change, the response addressing Condition 2 indicated that Nine Mile Point, Unit 2 (NMP2) has procedures in place which address the actions required in the event of high radiation in the main steam line. It was further stated that if the request was approved, these procedures would be enhanced to incorporate the considerations of this Technical Specification (ITS 3.3.1.1). The staff does not understand the licensee's response to Condition 2. If the procedures covering this situation are already in place, then why are revisions required? The licensee should clarify this response, provide the procedure numbers that will contain the actions addressing high radiation in the MSL*



and summarize the actions to be taken by the operators using such procedures in the event of high radiation.

NMPC Response:

The reference to procedures being in place referred to NMP2 procedure N2-SOP-17, "Fuel Failure or High Activity in Rx Coolant or Offgas," which includes immediate actions to: "Notify Chemistry AND Radiation Protection Departments of increasing radiation levels." With Main Steam Line Radiation High, subsequent actions include steps to "Request Chemistry Department to obtain (a) sample of Reactor Coolant to determine coolant activity" and to "Verify (a) Reactor Coolant sample (was) taken."

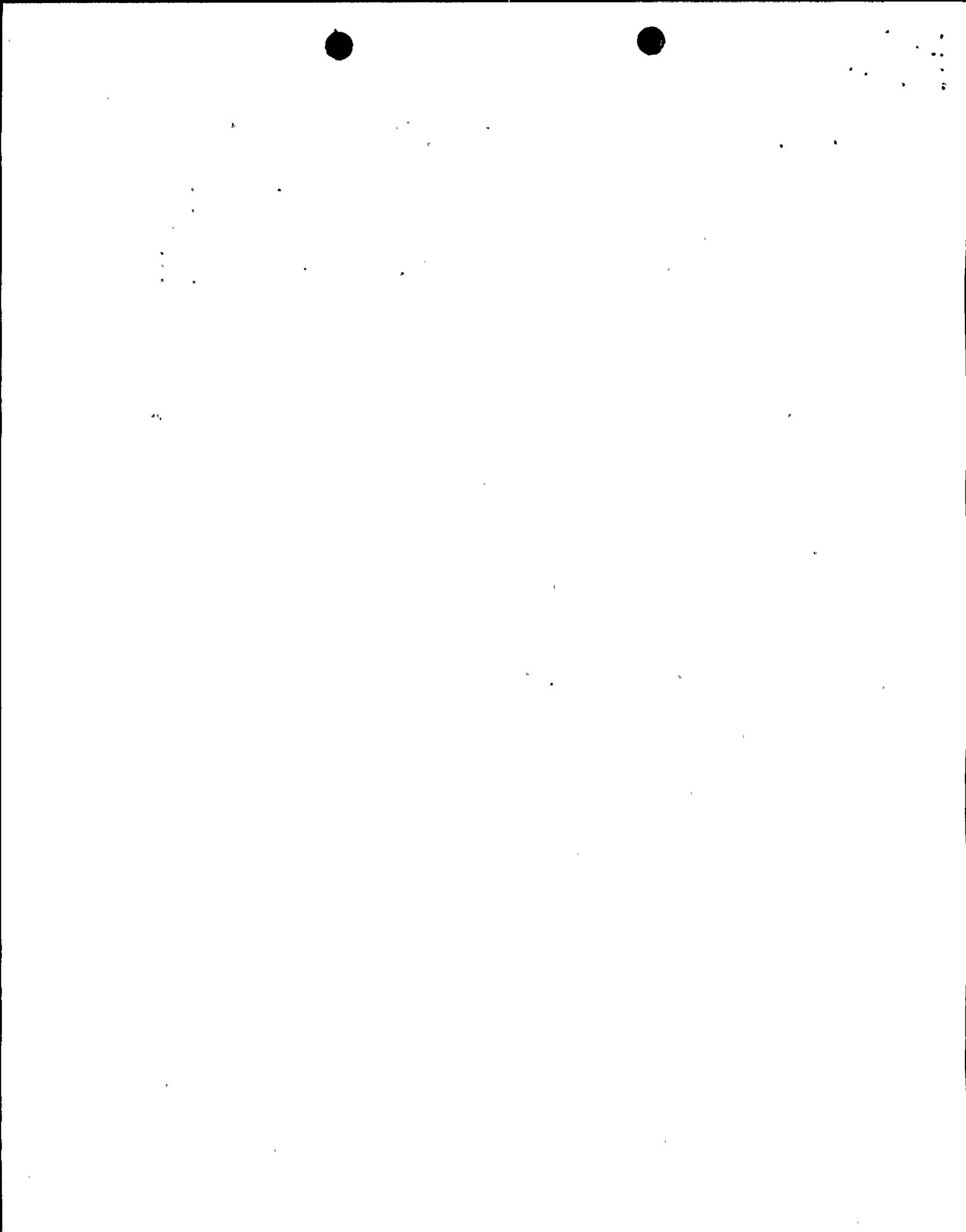
Deletion of the MSLRM would require, as part of the plant modification process, re-evaluation of N2-SOP-17 and appropriate revisions as necessary. In addition, other procedures such as annunciator response, maintenance and other operations procedures would also need to be reviewed and revised as necessary.

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6. *The NRC staff in their safety evaluation on NEDO-31400 identified three conditions that needed to be addressed by each licensee in their plant-specific applications to remove the MSLRM scram function and MSIV isolation function. Condition 3 was that the application for such a change should standardize the MSLRM and the offgas radiation monitor alarm setpoint at 1.5 times the nominal ¹⁶N background dose rate at the monitor locations and commit to promptly sample the reactor coolant to determine possible contamination levels in the plant reactor coolant and the need for additional corrective actions if the MSLRM or offgas radiation monitors or both exceed their alarm setpoints. It was stated in the submittal that the MSLRM is set to alarm at 1.5 times the ¹⁶N background dose rate at the monitor. It was also stated that NMP2 currently controls the offgas monitor setpoints as part of their Offsite Dose Assessment Manual. However, the licensee did not commit to promptly sampling the reactor coolant if either the MSLRM and/or the offgas radiation monitor exceeded their alarm setpoint nor did the licensee commit to have the offgas radiation monitor setpoint at 1.5 times the nominal ¹⁶N background. Please provide adequate justification for the deviations from Condition 3 noted above.*

NMPC Response:

Procedure N2-SOP-17, "Fuel Failure or High Activity in Rx Coolant or Offgas" applies to both the MSLRMs and the offgas monitors. It requires a reactor coolant sample to be obtained if either a MSLRM or a valid offgas monitor alarm is received. In the case of an offgas monitor alarm, an offgas sample is taken first.

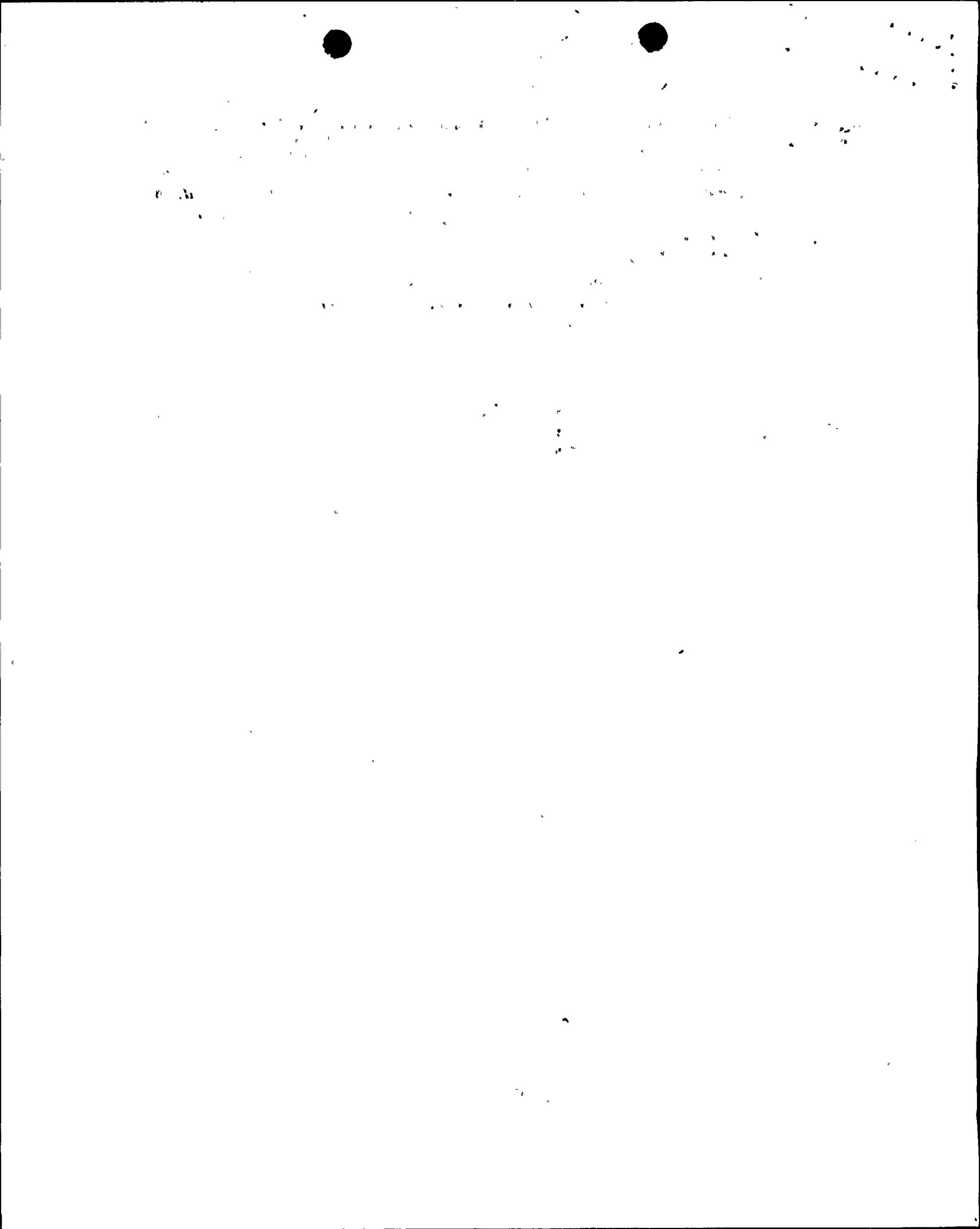
The offgas monitors are offline monitors with delay times that preclude the affects of N-16 background. Therefore, per the Offsite Dose Calculation Manual (ODCM), the alert alarm setpoint is 1.5 times normal full power background..



7. *Do the NMP2 operating procedures allow continued bypassing of the offgas treatment system until late in the power ascension? If they do, then the offgas pretreatment and post-treatment radiation monitors should be utilized to isolate the offgas treatment line and/or the offgas process line before the acceptable release rates are exceeded. As noted in NEDO-31400A, the pretreatment monitor is typically included in the TS with the requirements for periodic calibration and functional testing. If this condition applies at Nine Mile Point, then some additional TS changes may need to be made to incorporate one or more of these monitors into the TS. Please note that according to NEDO-31400A plants that do not have the capability to bypass the treatment system, do not have the additional requirement of automatic isolation of the process line.*

NMPC Response:

Currently, procedures allow continued bypassing of the offgas treatment system until late in the power ascension. NMP2 performed an evaluation that determined that offsite and control room doses, in the event a control rod drop accident occurs with the charcoal delay beds bypassed, are bounded by the current licensing bases limits. Therefore, NMP2 does not believe any additional TS changes need to be made.



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