



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 150 TO FACILITY OPERATING LICENSE NO. NPF-21  
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

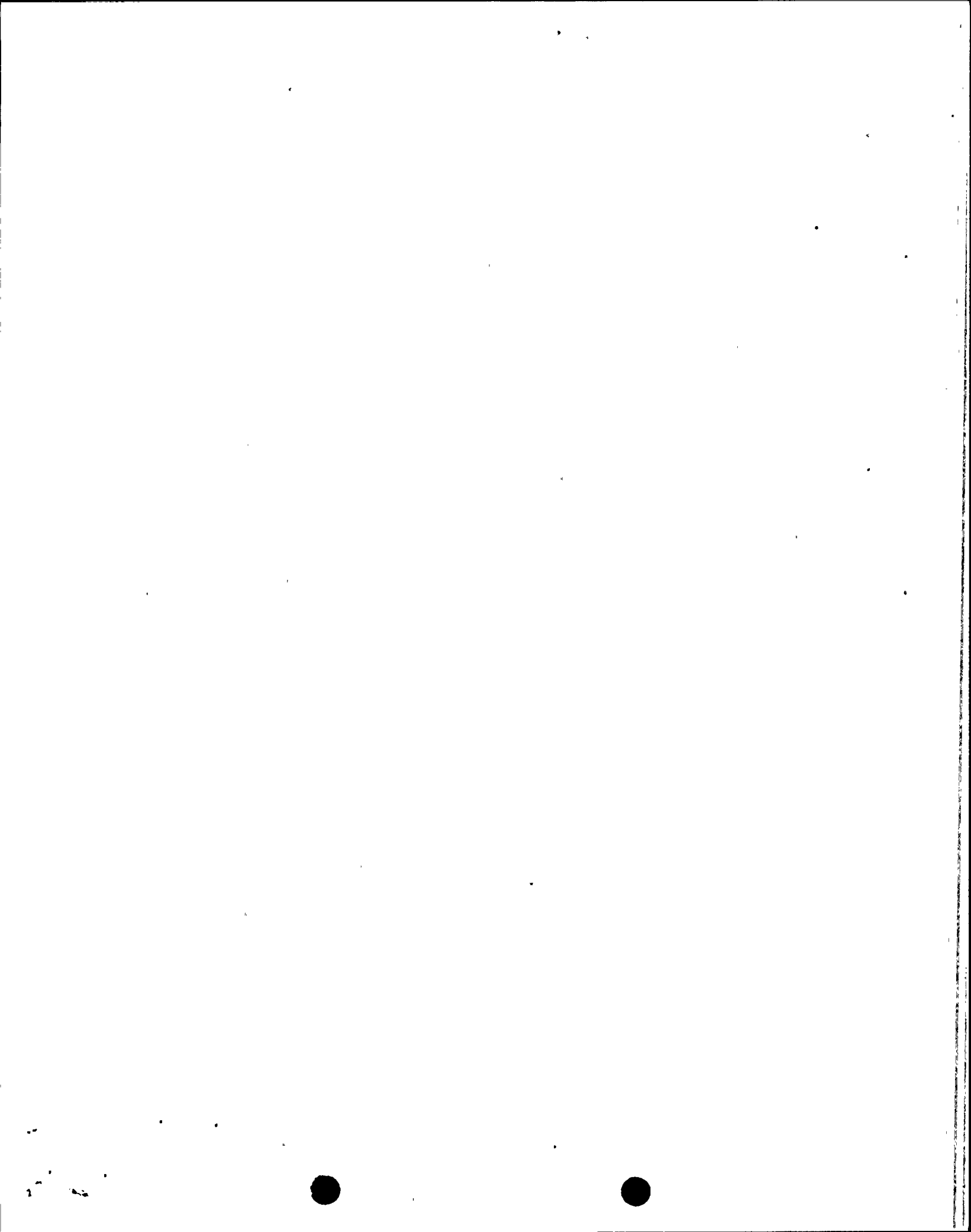
1.0 INTRODUCTION

By letter dated March 22, 1997, as supplemented by letters dated April 2, and April 3, 1997, Washington Public Power Supply System (WPPSS or licensee), requested an amendment to its Technical Specifications (TS) appended to Facility Operating License No. NPF-21 relating to instrument response time testing for Washington Nuclear Project No. 2 (WNP-2). Additional information was provided in letters dated April 9, April 15, and May 14, 1997 and by telefax on May 19, 1997. The April 9, April 15, and May 14, 1997 letters, and the May 19, 1997 telefax provide additional information in support of the licensee's request but did not change the scope of the request as noticed in the Public Notice published in the Tri-City Herald on April 11, 1997.

The proposed TS modifications will eliminate response time testing (RTT) requirements for selected sensors and specified instrumentation loops for (1) the reactor protection system (RPS), (2) the isolation system, and (3) the emergency core cooling system (ECCS). The licensee's submittal followed a March 20, 1997, request for enforcement discretion which was granted on March 21, 1997, as documented by letter dated March 24, 1997, and was requested under exigent circumstances.

2.0 BACKGROUND

The Boiling Water Reactor Owner's Group (BWROG), with WPPSS' participation performed an analysis to assess the impact of elimination of RTT for selected instrument loops. This analysis was documented as Licensing Topical Report NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," and was submitted for NRC approval in January 1994. The NRC approved NEDO-32291 in a generic Safety Evaluation Report (SER) dated December 28, 1994, and approved subsequent revisions to NEDO-32291 in a supplemental SER dated May 31, 1995. The generic SER included Tables 1 and 2, which respectively list the make/model of instruments/devices, and systems which were evaluated in NEDO-32291 for RTT elimination. The generic SER states, "The BWROG concluded that the RTT requirements for the devices identified in Table 1 can be removed from the TSS when the devices are used in systems listed in Table 2." In addition to approving elimination of RTT for selected instrumentation, the generic SER stipulated certain conditions that



individual plant licensees must meet when implementing the NEDO-32291 guidelines on a plant specific basis. The forwarding letter to the BWROG indicated that licensees could reference NEDO-32291 in license amendment applications and must confirm the applicability of NEDO-32291 to their facilities and confirm that the SER conditions were met.

### 3.0 PROPOSED CHANGES AND EVALUATION

#### 3.1 Technical Specification Changes

WPPSS proposed elimination of the following selected response time testing requirements from the WNP-2 TS:

1. Reactor Protection System instrumentation - Sensors for Reactor Vessel Steam Dome Pressure-High and Reactor Vessel Water Level - Low, Level 3;
2. Isolation Actuation System instrumentation - Sensors for Reactor Vessel Low Water Level-Level 1 and Main Steam Line Flow-High, and;
3. Emergency Core Cooling System Actuation instrumentation.

As approved by the staff, NEDO-32291 indicated that response time testing can be eliminated for the following based on other TS testing which is sufficient to detect instrumentation response degradation:

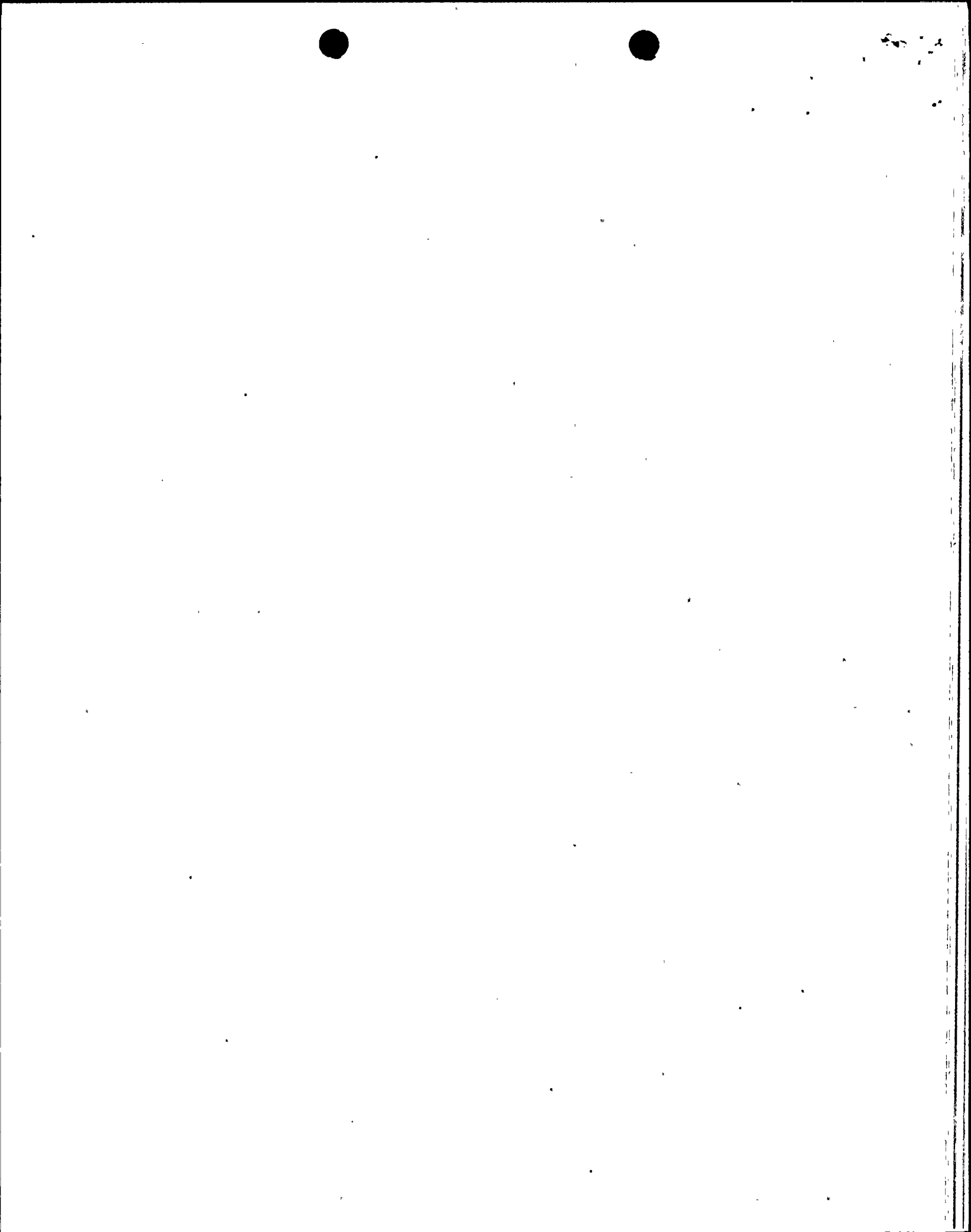
1. All emergency core cooling system instrument loops;
2. All isolation system actuation instrument loops except for main steam line isolation valves (MSIVs);
3. Sensors for selected reactor protection system actuation; and
4. Sensors for MSIV closure actuation.

The specific sections of the WNP-2 TS to be changed are as follows:

- (a) Section 3.3.1.1, Reactor Protection System Instrumentation, Surveillance Requirement (SR) 3.3.1.1.15, Reactor Protection System Response Time.

Proposed Change: Under "Notes", re-number footnote 2 as footnote 3. Add a new footnote 2, stating: "Channel Sensors for functions 3 and 4 are excluded."

Evaluation: Functions 3 and 4 are the Reactor Vessel Steam Dome Pressure - High and Reactor Vessel Water Level - Low, Level 3. This footnote will eliminate the need for WNP-2 to perform response time testing on the sensors for those channels. The remainder of the channel will continue to be tested for response time. To determine the



instrument channel response time, a value obtained from the equipment manufacturer will be added to the measured response time of the remainder of the channel to obtain a total response time value. In those instances where equipment manufacturers' response time data is not available, an expected response time based upon historic data of past response time tests may be used. This change is consistent with the approved NEDO-32291.

- (b) Section 3.3.5.1, Emergency Core Cooling System Instrumentation, SR 3.3.5.1.7, ECCS Response Time.

Proposed Change: In Table 3.3.5.1-1, SR 3.3.5.1.7 will be deleted from the following functions:

1. Low Pressure Coolant Injection-A (LPCI) and Low Pressure Core Spray (LPCS) Subsystems
  - a. Reactor Vessel Water Level - Low Low Low, Level 1
  - b. Drywell Pressure - High
2. LPCI B and LPCI C Subsystem
  - a. Reactor Vessel Water Level - Low Low Low, Level 1
  - b. Drywell Pressure - High
3. High Pressure Core Spray (HPCS) System
  - a. Reactor Vessel Water Level - Low Low, Level 2
  - b. Drywell Pressure - High

Under (d) below, a new surveillance requirement for each ECCS injection/spray subsystem will be added.

Evaluation: Deletion of this requirement will eliminate the requirement for a measurement of the instrument channel response time. The ECCS response time testing requirement is being moved to new SR 3.5.1.8. See the discussion on SR 3.5.1.8 in section (d) below. For the ECCS functions, the entire instrumentation channel is exempted from response time testing, but the non-instrumentation portion of ECCS still requires response time testing. This change is consistent with the approved NEDO-32291.

- (c) Section 3.3.6.14, Primary Isolation Instrumentation, SR 3.3.6.1.7

Proposed Change: Add a note stating: "Channel sensors for Functions 1.a, 1.b, and 1.c are excluded."

Evaluation: The functions which will be affected, according to Table 3.3.6.1-1, are:

1. Main Steam Line Isolation
  - a. Reactor Vessel Water Level - Low Low, Level 2
  - b. Main Steam Line Pressure - Low



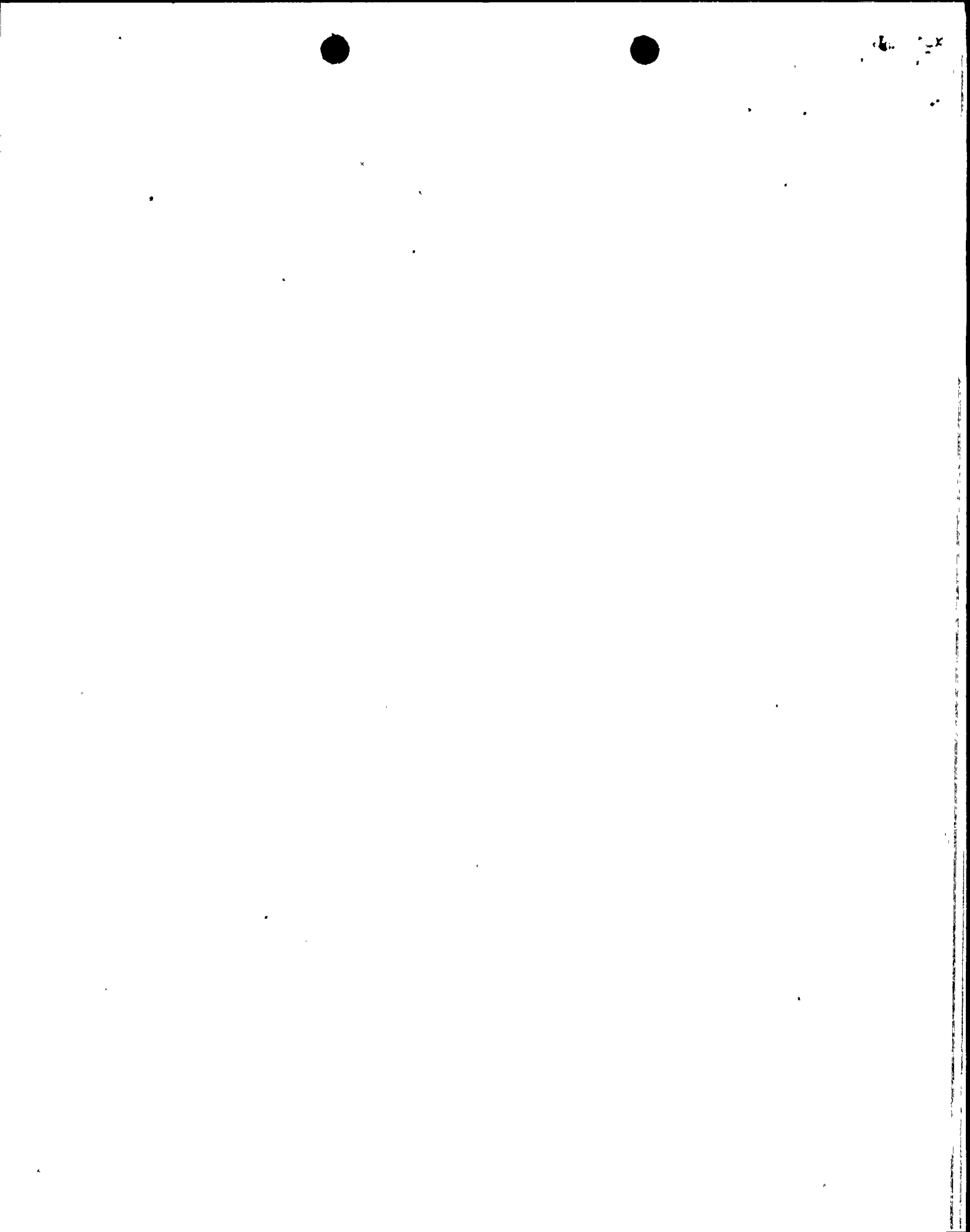
c. Main Steam Line Flow - High

This footnote will allow WNP-2 to eliminate the requirement for a separate measurement of the sensor response time. The remainder of the channel will continue to be tested for response time. To determine the instrument channel response time, a value obtained from the equipment manufacturer will be added to the measured response time of the remainder of the channel to obtain a total response time value. In those instances where equipment manufacturers' response time data is not available, an expected response time based upon historic data of past response time tests may be used. This change is consistent with the approved NEDO-32291.

- (d) Section 3.3.5.1, Emergency Core Cooling System Instrumentation, SR 3.3.5.1.8, ECCS Response Time.

Proposed Change: Add a new surveillance: "Verify the ECCS RESPONSE TIME for each ECCS injection/spray subsystem is within limits." This surveillance will have a note stating: "ECCS actuation instrumentation is excluded."

Evaluation: This footnote will allow WNP-2 to use manufacturers' response time data and eliminate the requirement for a measurement of the instrument channel response time. For the ECCS functions, the entire channel instrumentation is exempted from response time testing. The remaining non-instrumentation portion of the channel will continue to be tested for response time. To determine the total channel response time, a value for the instrumentation portion of the channel obtained from the various equipment manufacturers will be added to the measured response time of the remainder of the channel to obtain a total response time value. In those instances where equipment manufacturers' response time data is not available, an expected response time based upon historic data of past response time tests may be used. The previous SR 3.3.5.1.7 was required to be met when the supported system was required to be operable. The new requirement 3.3.5.1.8 is to be met when the plant is in MODES 1, 2, and 3, but not in MODES 4 and 5. The licensee stated, on page 3 of the March 22, 1997 submittal that "The basis for this change is that there are no design basis events which credit ECCS during MODES 4 and 5. The response time tests which are typically performed during shutdown condition would identify operability problems that may exist. In addition, due to the pressure and temperature limitations of MODES 4 and 5, the probability of an accident is reduced, as is the need for ECCS to respond within the times established for MODES 1, 2, and 3." The staff has determined that this relaxation is acceptable since there are no required response times in the accident analyses for these systems in Modes 4 and 5. This change is consistent with the approved NEDO-32291.





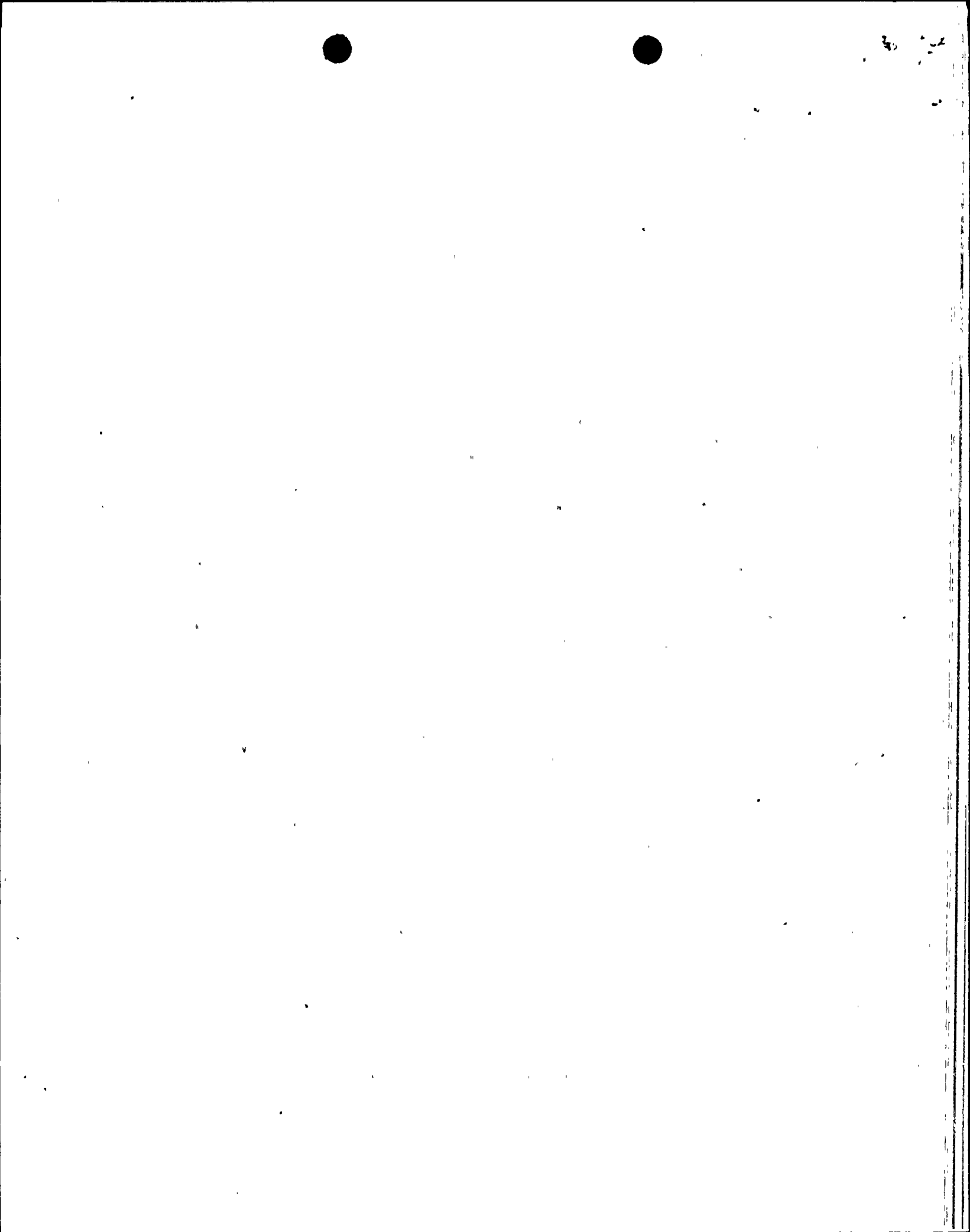
### 3.2 Additional Instruments

The licensee has requested that two additional instruments, not specifically requested for elimination of RTT in NEDO-32291 and also not listed in Table 1 of the staff SER be approved for RTT elimination. These instruments are the Barksdale model P1H-M340SS-V pressure switches and the ASEA (now ABB) model RXMK1 auxiliary relays. The licensee believes the WNP-2 specific evaluations demonstrate that response time testing may be eliminated for these instruments.

1. Barksdale model P1H-M340SS-V pressure switch The licensee has stated the Barksdale pressure switch, used in the reactor core isolation cooling system to isolate the system when reactor pressure has been reduced to the point where it can no longer support RCIC turbine operation and to provide long term secondary containment leakage control, are safety-related, Quality Class I and provide highly reliable operation. The licensee also stated in Attachment 1 of the March 22, 1997 submittal, that these pressure switches are not credited within any WNP-2 accident analysis, and therefore a specific pressure switch response time is not necessary to maintain the results of the current accident analyses. These pressure switches are routinely tested as part of channel calibration, channel functional tests, and logic system functional tests.

The staff has determined while the licensee did not provide a failure modes and effects analysis (FMEA) in sufficient detail to justify the elimination of RTT on that basis, however, since these pressure switches are not credited in any WNP-2 accident analysis, there is no reason to continue RTT for these switches. In other applications where the pressure switch is credited with operation during an accident, additional detail would be required to justify elimination of RTT.

2. ASEA RXMK1 auxiliary relays The licensee has stated that the ASEA relay model has a secondary containment isolation function in the reactor building ventilation exhaust. The licensee has also stated that only ASEA relay model RXMH2 was evaluated and approved by the NEDO-32291 analysis. The model RXMK1 is of the same model series as the RXMH2 which was evaluated by the NEDO-32291 analysis. Manufacturer's data indicates that the model RXMK1 is a faster operating relay than the RXMH2 relay as identified by pick-up and drop out times. The RXMK1 is approximately a half-size model of the RXMH2 and accordingly houses half the contacts and contains half the case mass. The manufacturer's relay parts list indicates that both models use numerous identical parts. A review of the manufacturer's component inspection procedures indicate identical or consistent relay inspections and/or testing practices for both models.



The seismic qualification envelopes both models with the same test. Both passed the minimum contact chatter tests. The two models have been environmentally qualified by separate tests.

A review of NPRDS data indicates no reported failures of the RXMK1 relay type. One failure of the NRC approved model RXMH2 was reported at one of the Turkey Point plants. This failure resulted from a displaced contact. This failure mode is possible with the RXMK1. However, a review of WNP-2 operating experience data indicates no reported failures of the E-RLY-CRAX, CRAY, CRBX, or CRBY relays (Model RXMK1 relays). The low failure rate, coupled with other types of surveillances that are performed, provide assurance of continued functionality.

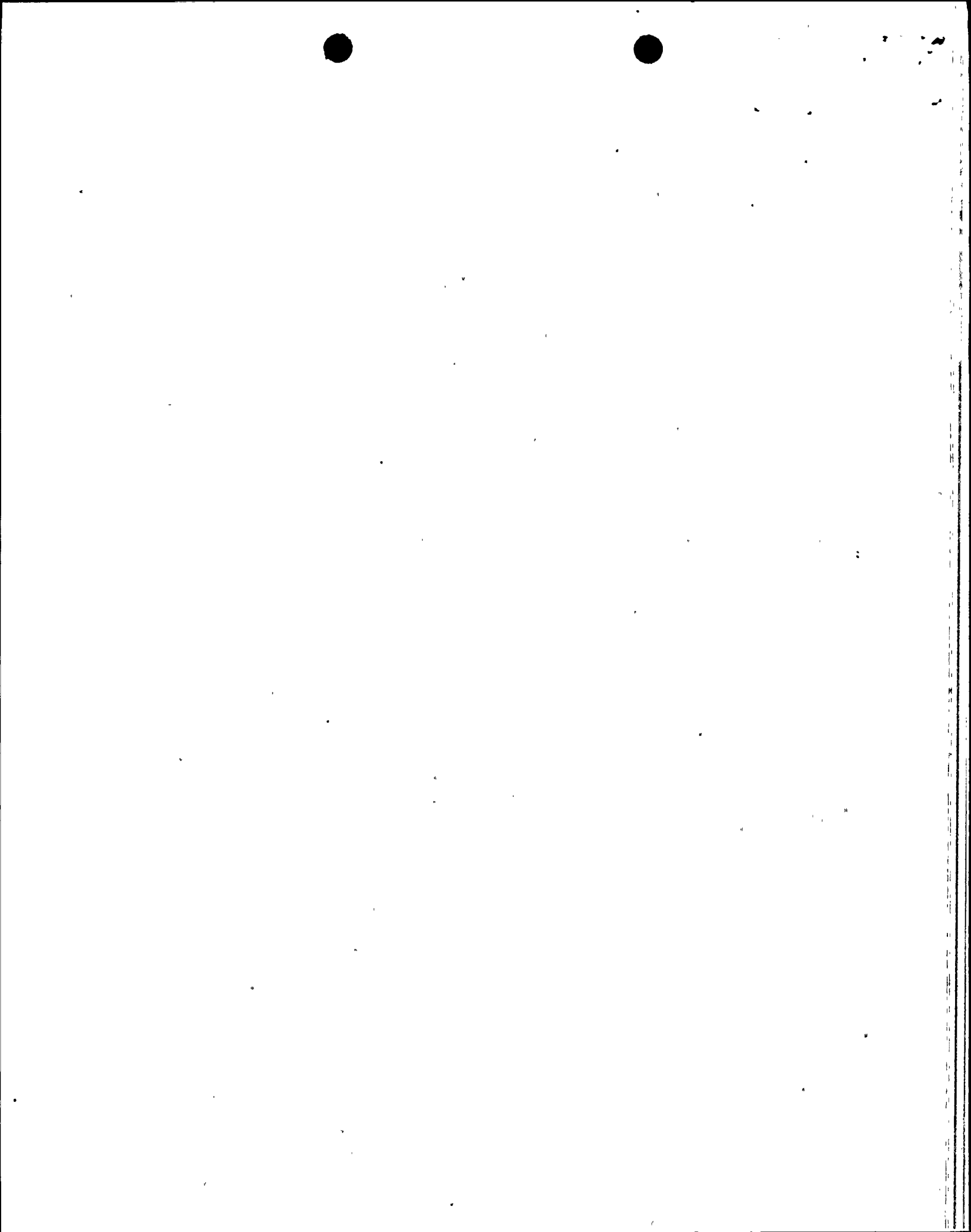
Elimination of the RTT for these components is consistent with the analysis and review scope of the NEDO-32291 analysis.

### 3.3 Use of Assumed Response Times Other Than Manufacturers' Design Response Times

For those channels whose sensor response time tests have been eliminated, but for which relay response time testing is still required, an assumed administrative value for sensor response time is required. The same is true for systems in which the entire instrumentation channel is exempted from RTT, but where there is still a requirement to show that a protective function will occur within a stated time. When there is a need to determine a channel response time, for those instruments which have been eliminated, the assumed administrative value, instead of measured values will be added to measured values of the remainder of the system. In these cases, use of manufacturers' design response time for the instruments in question is appropriate and should be used.

The licensee has stated that in some instances, manufacturers' design response time data is not available. In those instances, the licensee has proposed using a response time value based upon actual values measured during past response time tests at WNP-2. The licensee provided the historical data and calculations in the April 15, 1997 submittal.

In order to determine an assumed administrative value for instrument response time, WNP-2 reviewed the operational history (i.e., the measured response times). This data was evaluated to determine statistical mean and standard deviation of the previously measured response time values. An assumed administrative value was chosen which would be compatible with a one-sided statistical tolerance limits so that 95 percent of the reading would fall within the limits, with a 95 percent confidence level. The staff has determined that since this is an NRC approved method for calculating setpoint values, and is statistically valid for determining an upper bounding value, this methodology is an appropriate method for calculating response time based upon historical operating data.



As an example, the 95/95 value for Barksdale BIT is 0.058 seconds, with a mean value of 0.015 seconds, and a standard deviation of 0.020 seconds. For the purpose of establishing an administrative value, this number was rounded up to 0.95 seconds. The response time test acceptance criterion is the remaining portion of the allowable channel response time (in this example, 1.0 seconds less 950 milliseconds, or 50 milliseconds). Should the response time test results for the remainder of the channel exceed this value, the channel would be declared inoperable and the appropriate Technical Specification LCO Action Statement would be entered.

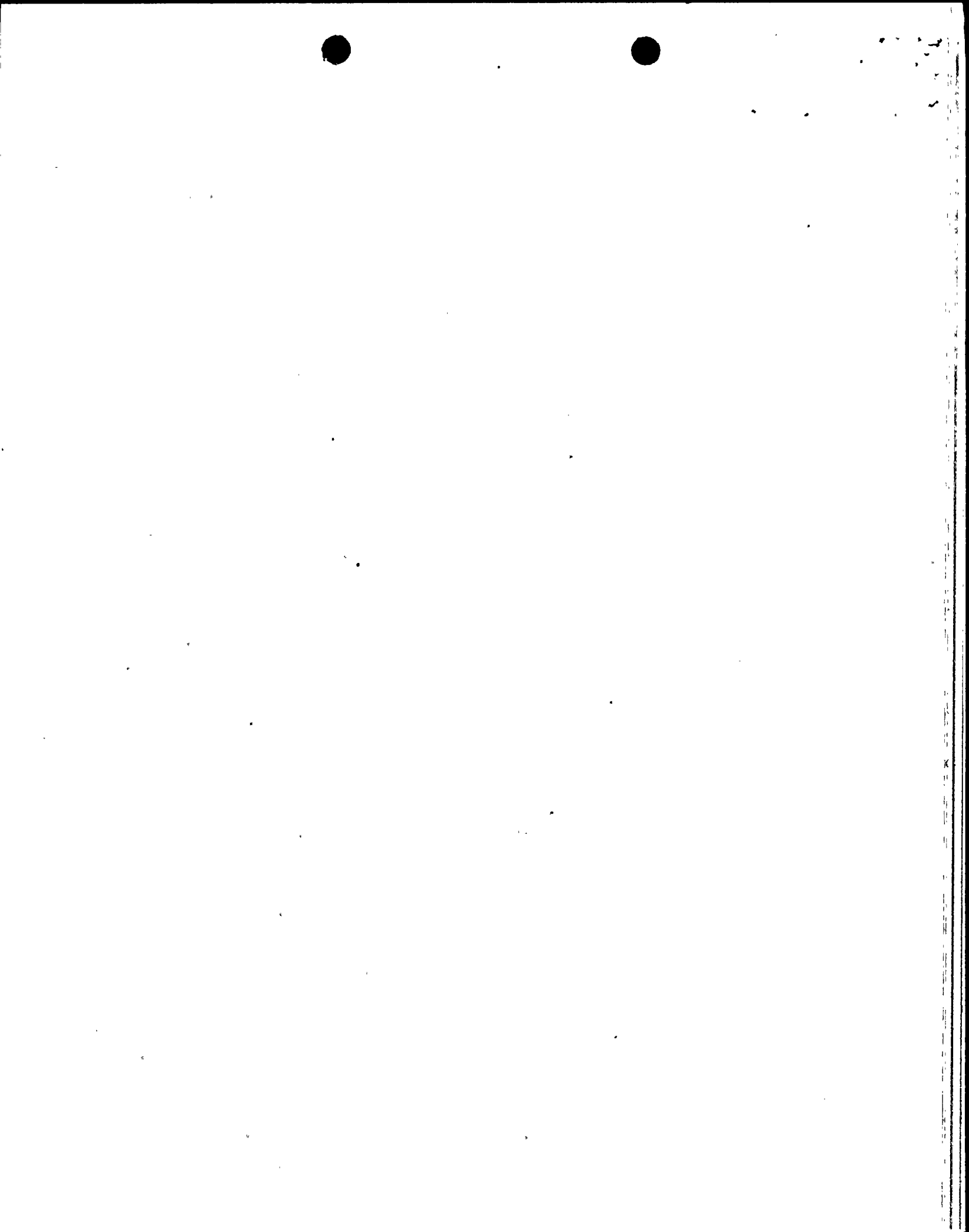
These calculations can be verified by the methodology shown in "Applying Statistics", NUREG-1475, Table T-11b: "One sided tolerance limit factor for a normal distribution". These verifications are shown below where time values are in seconds.

Sensor	SOR 103AS-BB203
Mean	0.566
Std Dev (standard deviation)	0.117
Sample Size	10
One sided tolerance limit factor (95/95 Multiplier IAW NUREG-1475)	2.911
One sided tolerance limit ( $T_{upper}$ )	0.907
WNP-2 Assumed Value	0.950

Sensor	Barksdale BIT-M12SS-GE
Mean	0.015
Std Dev	0.02
Sample Size	32
One sided tolerance limit factor (95/95 Multiplier IAW NUREG-1475)	2.202
One sided tolerance limit ( $T_{upper}$ )	0.0584
WNP-2 Assumed Value	0.95

Sensor	Barton 288A-159C
Mean	0.061
Std Dev	0.041
Sample Size	35
One sided tolerance limit factor (95/95 Multiplier IAW NUREG-1475)	2.167
One sided tolerance limit ( $T_{upper}$ )	149.9
WNP-2 Assumed Value	0.450

Sensor	SOR 29N6-B45
Mean	0.083
Std Dev	0.060
Sample Size	11
One sided tolerance limit factor (95/95 Multiplier IAW NUREG-1475)	2.825
One sided tolerance limit ( $T_{upper}$ )	0.2534
WNP-2 Assumed Value	0.500



Sensor	Barton 288A-145C
Mean	0.459
Std Dev	0.068
Sample Size	25
One sided tolerance limit factor (95/95 Multiplier IAW NUREG-1475)	2.29
One sided tolerance limit ( $T_{upper}$ )	0.615
WNP-2 Assumed Value	1.00

It is noted by the staff that the two Barton 288A models have different bellows sizes, and therefore, have different response characteristics. Future use of these numbers should take the model numbers into consideration, since not all Barton 288A transmitters have similar response time values.

The staff concurs that the methodology used by the licensee has statistical validity, and is an acceptable methodology for determining an administrative value to be used in those cases where manufacturers' data is not available.

#### 3.4 Verification of NEDO-32291 Plant-Specific Conditions

The staff stipulated several conditions in the generic SER approving NEDO-32291 which must be met by each individual licensee before the NEDO-32291 guidance could be implemented. Individual licensees could then reference NEDO-32291 in plant specific TS change applications and demonstrate the applicability of NEDO-32291 for their facility(ies) and how these conditions were (would be) met. From the WPPSS submittals, the staff verified that the licensee has met the applicable conditions as follows:

Condition 1: Confirm the applicability of the generic analyses to the plant.

Licensee's Response: The licensee stated in the April 15, 1997 response to the request for additional information, that "As a part of the implementation activities for Reference 1 [NEDO-32291] the Supply System performed reviews to ensure that the conclusions reached in Reference 1, as reviewed and approved by the staff in Reference 2 [December 28, 1994, Safety Evaluation Report (SER)], remained valid for WNP-2.

The staff concurs with this response.

Condition 2: The licensee's revision request shall be submitted as shown in Appendix I of the BWROG Licensing Topical Report, NEDO-32291.

Licensee's Response: The licensee's March 22, 1997 submittal and the April 15, 1997 response to the staff's request for additional information satisfies this condition.





Condition 3: The licensee shall state that they are following the recommendations from EPRI NP-7243 and, therefore, shall perform the following actions:

- (a) Prior to installation of a new transmitter/switch or following refurbishment of a transmitter/switch (e.g., sensor cell or variable damping components), a hydraulic RTT shall be performed to determine an initial sensor-specific response time value.

Licensee Response: WNP-2 work processes have been revised to ensure appropriate response time testing is performed prior to installation.

The staff concurs that this response meets the above conditions.

- (b) For transmitters and switches that use capillary tubes, capillary tube testing shall be performed after initial installation and after any maintenance or modification activity that could damage the capillary tubes.

Licensee Response: WNP-2 does not use transmitters or switches that use capillary tubes in applications that require response time testing. Future use of instrumentation using capillary tubes for selected instrument application will be restricted. Therefore, this recommendation is not applicable to WNP-2.

The staff concurs that this recommendation is not applicable to WNP-2.

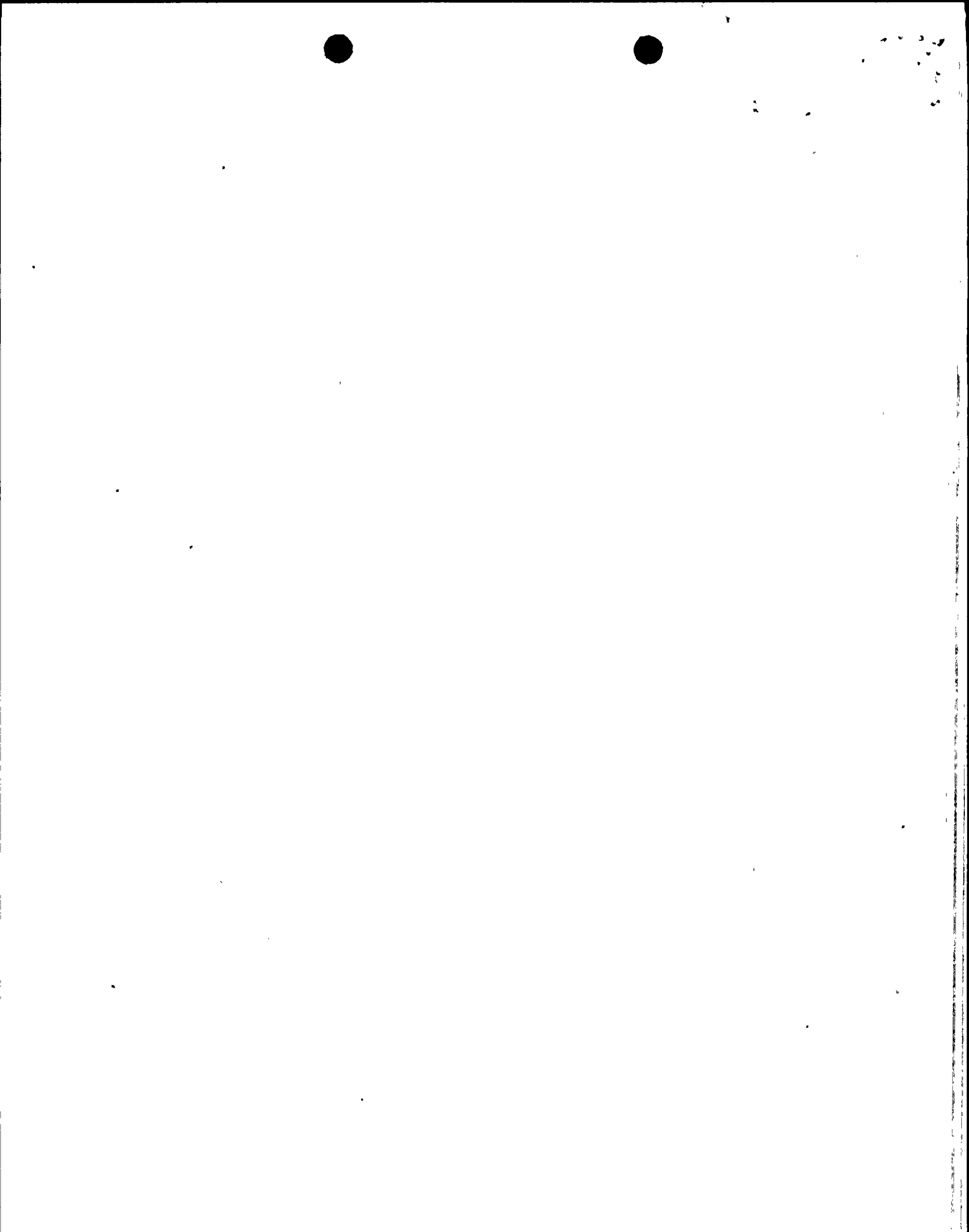
Condition 4: The licensee must confirm the following:

- (a) That calibration is being done with equipment designed to provide a step function or fast ramp in the process variable.

Licensee Response: Each applicable calibration procedure was revised to include steps that direct the technician to insert a fast ramp or step function that begins just outside the setpoint and continues to a value well past the setpoint.

The staff concurs that this response meets the above condition.

- (b) That provisions have been made to ensure that operators and technicians, through an appropriate training program, are aware of the consequences of instrument response time degradation, and that applicable procedures have been reviewed and revised as necessary to assure that technicians monitor for response time degradation during the performance of calibrations and functional tests.



Licensee Response: This training has been completed and applicable calibration procedures have been revised, as necessary, to assure monitoring for response time degradation.

The staff concurs that this response meets the above conditions.

- (c) That surveillance testing procedures have been reviewed and revised if necessary, to ensure calibrations and functional tests are being performed in a manner that allows simultaneous monitoring of both the input and output response of units under test.

Licensee Response: Applicable calibration procedures have been revised to require the technicians, at different locations, to be in direct communication to verify the response of the instrumentation or associated logic.

The staff concurs that this response meets the above conditions.

- (d) That for any request involving the elimination of RTT for Rosemount pressure transmitters, the licensee is in compliance with the guidelines of Supplement 1 to Bulletin 90-01, "Loss of Fill-Oil in Transmitters Manufactured by Rosemount."

Licensee Response: Compliance with the guidelines of Supplement 1 to NRC Bulletin 90-01 was reviewed and documented in Reference 4 of Attachment 1 to the March 22, 1997, submittal by the licensee, "Letter JW Clifford (NRC) to JV Parrish, Response to NRC Bulletin 90-01, Supplement 1, "Loss of Fill-Oil in Transmitters Manufactured by Rosemount," dated August 3, 1994." The Reference 4 evaluation concluded that the Supply System's responses to NRC Bulletin 90-01, and Supplement 1 conform to the requested actions of NRC Bulletin 90-01, Supplement 1.

The staff concurs that this response meets the above conditions.

- (e) That for those instruments where the manufacturer recommends periodic RTT as well as calibration to ensure correct functioning, the licensee has ensured that elimination of RTT is nevertheless acceptable for the particular application involved.

Licensee Response: The Supply System has reviewed the vendor information for the Reference 1 [December 28, 1994, SER], Table 1 components and confirmed that none of the manufacturers require periodic response time testing for their instrumentation or logic components.

The staff concurs that this response meets the above conditions.



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Based upon the above review, the staff has determined that the licensee has implemented the provisions of the generic SER for RTT elimination in accordance with NEDO-32291, with one note of clarification. The Barksdale model P1H-M340SS-V pressure switch is approved for elimination of RTT only in those cases where no credit is taken for its operation in any accident analysis, and, therefore, a specific pressure switch response time is not necessary to maintain the results of the current accident analyses. The licensee has stated that this is the case for use of Barksdale model P1H pressure switches at WNP-2. Therefore, the staff has determined that the proposed WNP-2 TS modifications for selected instrument RTT elimination are acceptable.

#### 4.0 CHANGE IN EXIGENT CIRCUMSTANCES

In its March 22, 1997, application and April 3, 1997 supplement, the licensee described the exigent circumstances associated with this license amendment request. In part, the licensee stated:

"...Cold shutdown conditions would have been required to perform the response time testing to resolve the violation of the Technical Specifications. WNP-2 was placed in cold shutdown following the discretion requested by letter dated March 20, 1997, from J. V. Parrish to the NRC. The Supply System continues to believe the methodology used to verify response times requested in this submittal is preferable to measuring of response times because personnel will absorb less dose and the plant will experience a higher availability of safety systems during the shutdown. Because the violation was only recently identified and the method currently used assures continued operability of the instrumentation, the Supply System is requesting this amendment under exigent circumstances."

Additionally, the staff noted that the NRC enforcement policy contained in NUREG-1600, "General Statement of Policy and Procedures for NRC Enforcement Actions," dated July 1995, states that the issuance of enforcement discretion would be for the brief period of time necessary to process an emergency or exigent Technical Specification change. As this Technical Specification change was related to the March 20, 1997, enforcement discretion requested by the licensee, the staff determined that this amendment was further justified as meeting exigent circumstances in accordance with the Policy Statement. These considerations were provided in the Public Notice for this proposed action published in the Tri-City Herald on April 11, 1997. The staff also included a proposed no significant hazards consideration determination.

Subsequent to this publication, the staff determined it was unable to complete the review in time to support the licensee's requested April 18, 1997, issuance date due to additional information required to complete the review. The licensee, therefore, completed necessary surveillances to allow fuel movement, thus eliminating the exigency. However, in accordance with the



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Policy Statement, the staff considers this amendment request to continue to be exigent as specified in the Policy Statement and, therefore, has made a final no significant hazards consideration determination.

#### 5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has made a final determination that the amendment involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92(c), this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The staff has evaluated the proposed changes against the above standards as required by 10 CFR 50.91(a) and has concluded that:

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The purpose of the proposed license change is to eliminate response time testing requirements for selected instrumentation in the reactor protection system (RPS), primary containment isolation actuation, and emergency core cooling system (ECCS). However, because of the continued application of other existing technical specification required testing such as channel calibrations, channel checks, channel functional tests (CFTs), and logic system functional tests (LSFTs), the response time of these systems will be maintained within the limits assumed in plant safety analyses and required for successful mitigation of an initiating event. The proposed license change does not affect the capability of the associated systems to perform their intended functions within the required response time, nor do the proposed changes affect the operation of any equipment.

The GE Nuclear Energy, BWR Owners' Group Licensing Topical Report, NEDO-32291-A, "Systems Analysis for the Elimination of Selected Response Time Testing Requirements," October 1995 evaluation demonstrates that response time testing is redundant to the other technical specification required testing listed in the preceding paragraph. This evaluation was reviewed and approved by the staff. These other tests, in conjunction with actions taken in response to NRC Bulletin 90-01, "Loss of Fill-Oil in Transmitters Manufactured by Rosemount," and Supplement 1, are sufficient to identify failure modes or degradations in instrument response time and ensure operation of the associated systems within acceptable limits. Furthermore, all known failure modes that are detected by response time testing are also detected by other technical specification tests.





In addition, two categories of components were included in this change in testing methodology which were not identified in the table of components in NEDO-32291-A. These components are used within the logic circuits addressed in NEDO-32291-A.

These components have been reviewed for similarity to the items contained within the NEDO-32291-A component tables and have been found to be similar to other equipment referenced in the table. These components are also subject to periodic functional testing by CFTs and LSFTs. The licensee verified instrument response of these components using the alternate methodology for instrument verification described in NEDO-32291-A.

The two categories of components referenced above which are not included in the NEDO-32291-A component list have no postulated functions or affects which may cause an accident. These devices are tested periodically to verify functionality. Sufficient time margin is available in the station accident analysis to account for the amount of time delay allowed by the NEDO-32291 methodology.

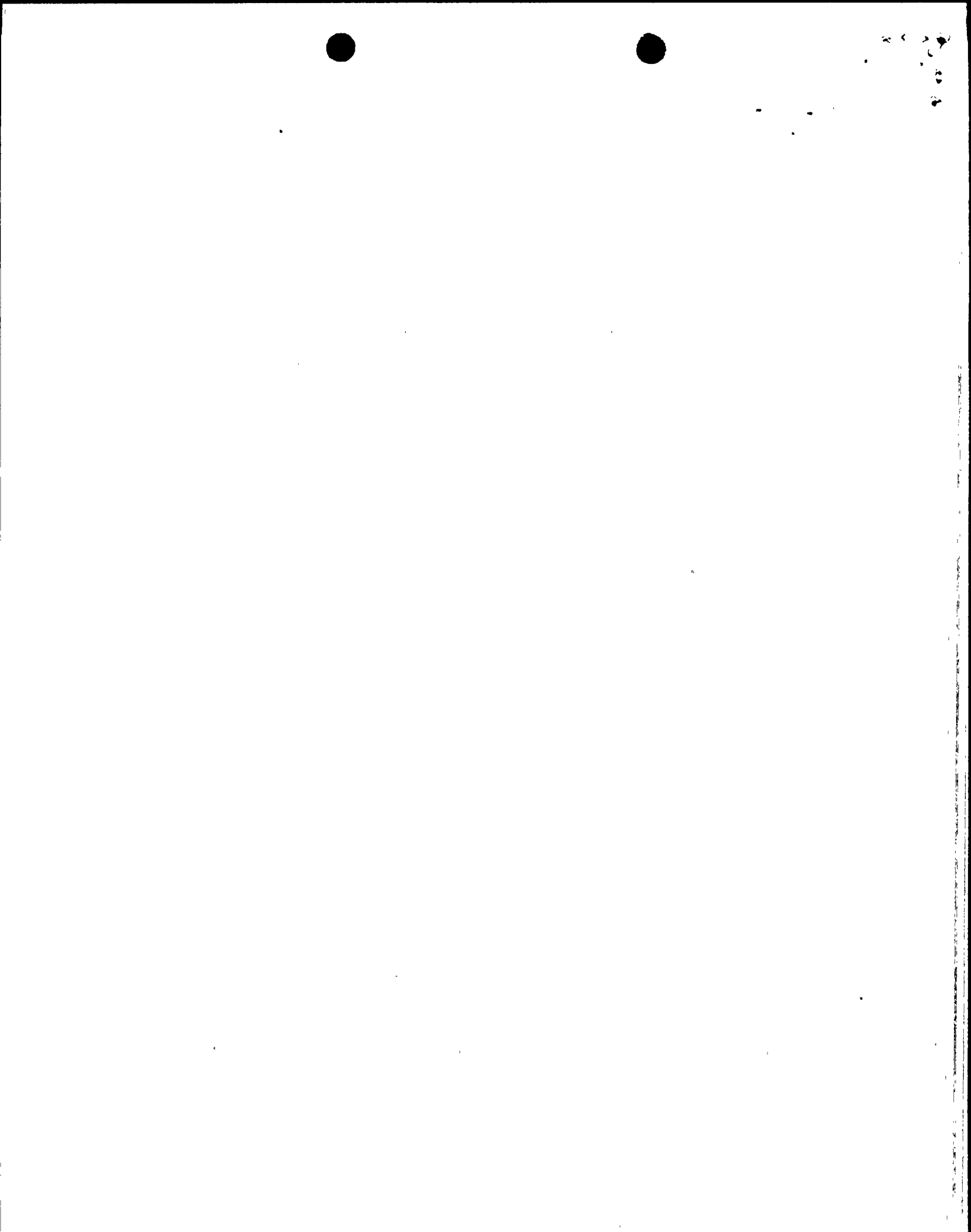
For the changes dealing with moving the surveillance requirement for ECCS RESPONSE TIME testing from the instrumentation section to the system section of the technical specifications, no change in testing requirements (other than the elimination of the instrument loops implemented as part of the NEDO-32291-A change) has been introduced.

The relaxation in applicability does not increase the probability or consequences of an accident previously evaluated, since there are no design basis events which credit ECCS during MODES 4 and 5.

Therefore, the proposed amendment request does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment applies, in part, to the testing requirement for the components identified and does not result in any physical change to these or other components or their operation. The changes do not affect the capability of the associated systems to perform their intended function within the acceptable limits assumed in plant safety analyses and required for successful mitigation of an initiating event. The proposed amendment does not change the way in which any plant systems are operated or create the possibility of a new or different kind of accident. As a result, no new failure modes are introduced.



The proposed amendment also deletes the applicability of response time testing for ECCS systems during MODES 4 and 5. This change in testing requirements does not change the way in which any plant systems are operated or create the possibility of a new or different kind of accident. As a result, no new failure modes are introduced.

The two categories of components referenced above which are not included in NEDO-32291-A component list have no postulated functions or affects which may contribute to the initiation of an accident.

The proposed amendment represents reliance on a different, and previously staff approved, method to verify selected components remain fully functional. It also requests a reduction in test requirements for ECCS in MODES 4 and 5. These changes will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed change does not involve a significant reduction in a margin of safety.

The current response times are based on the maximum allowable values assumed in the plant safety analyses. These analyses conservatively establish the margin of safety. As described above, the reliance on an alternate methodology for instrument response verification will not affect the capability of the associated systems to perform their intended function within the allowed response time used as the basis for the plant safety analyses.

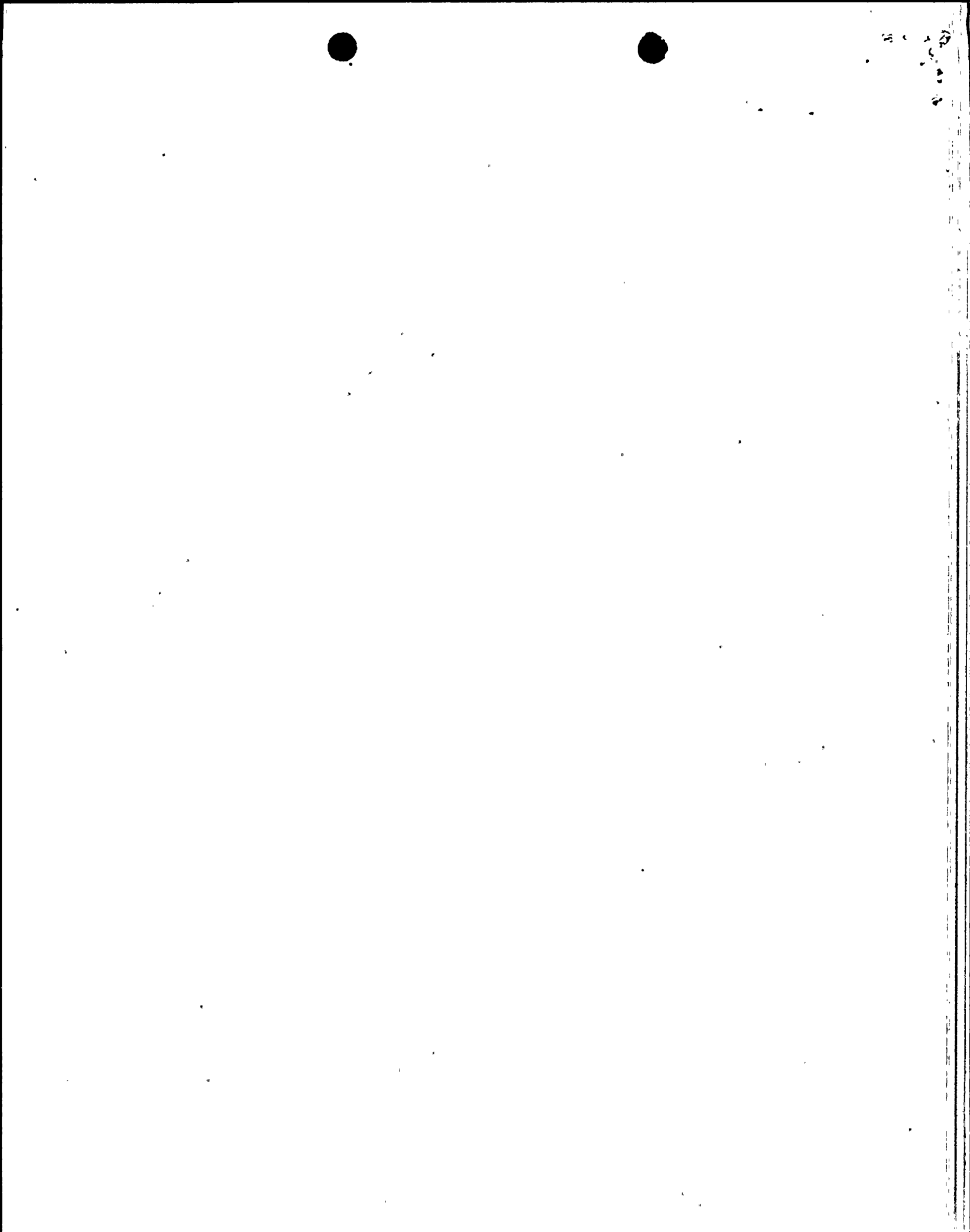
The two categories of components referenced above which are not included in the NEDO-32291-A component list are qualitatively tested periodically by channel calibrations, CFTs and LSFTs. This testing verifies the proper function and response of these components. Adequate time margins have been verified to be available within the applicable analyses which enable qualitative assessment of the proper performance of these devices.

Deleting the requirement to verify response times for ECCS during MODES 4 and 5 will not affect the capability of the associated systems to perform their intended function within the allowed response time used as the basis for the plant safety analyses.

Plant and system response to an initiating event will remain in compliance with the assumptions of the safety analyses, and therefore the margin of safety is not affected.

## 6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment. The State official had no comments.



## 7.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final no significant hazards consideration determination with respect to these amendments. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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11.5.11