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VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION
P. O. BOX 402
MINERAL, VIRGINIA 29117

10 CFR 50.73

March 14, 1991

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. N-90-011C
NAPS: JHL
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

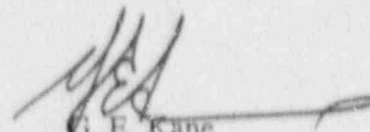
Dear Sirs:

The Virginia Electric and Power Company hereby submits the following Licensee Event Report Revision applicable to North Anna Units 1 and 2.

Report No. 90-009-03

This Report has been reviewed by the Station Nuclear Safety and Operating Committee and will be forwarded to the Corporate Management Safety Review Committee for its review.

Very Truly Yours,



G. E. Kane
Station Manager

Enclosure:

cc: U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Suite 2900
Atlanta, Georgia 30323

Mr. M. S. Lesser
NRC Senior Resident Inspector
North Anna Power Station

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1): NORTH ANNA POWER STATION UNITS 1 & 2										DOCKET NUMBER (2): 0 5 0 0 0 3 3 8 1 OF 0 8										PAGE (3): 1 OF 0 8									
TITLE (4): MISSED PZR HIGH LEVEL REACTOR TRIP RESPONSE TIME SURVEILLANCES DUE TO INADEQUATE LICENSE AMENDMENT REVIEW UPDATED FOR NONCONSERVATIVE RESPONSE TIME TEST METHODS																													
EVENT DATE (5):			LER NUMBER (6):			REPORT DATE (7):			OTHER FACILITIES INVOLVED (8):																				
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES					DOCKET NUMBER(S)															
									NORTH ANNA UNIT 2					0 5 0 0 0 3 3 9															
0 7	1 9	9 0	9 0	0 0 9		0 3	0 3	1 4 9 1						0 5 0 0 0 3 3 9															
OPERATING MODE (9): 1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following): (11)																										
POWER LEVEL (10): 11010			20.402(b)			20.405(c)			50.73(a)(2)(ix)			73.71(b)																	
			20.405(a)(1)(ii)			50.38(a)(1)			50.73(a)(2)(ix)			73.71(c)																	
			20.405(a)(1)(iii)			50.38(a)(2)			50.73(a)(2)(ix)			OTHER (Specify in Abstract below and in Text: NRC Form 366A)																	
			20.405(a)(1)(iv)			50.73(a)(2)(i)			50.73(a)(2)(ix)(A)																				
			20.405(a)(1)(v)			50.73(a)(2)(ii)			50.73(a)(2)(ix)(B)																				
			20.405(a)(1)(vi)			50.73(a)(2)(iii)			50.73(a)(2)(ix)																				
LICENSEE CONTACT FOR T/ & LER (12):																													
NAME: G. E. Kane, Station Manager										TELEPHONE NUMBER:																			
										AREA CODE: 710 3 9 9 4 - 12 1 0 1 1																			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13):																													
CAUSE	SYSTEM	COMPONENT	MANUFAC TURE	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFAC TURE	REPORTABLE TO NRC																			
SUPPLEMENTAL REPORT EXPECTED (14):										EXPECTED SUBMISSION DATE (15):																			
YES (If yes, complete EXPECTED SUBMISSION DATE):										X NO																			

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

At 1622 hours on July 19, 1990, with Unit 1 operating at 100 percent power and Unit 2 operating at 85 percent power (Mode 1, Power Operation), it was discovered that response time testing of the Pressurizer High Level Reactor Trip function had not been performed in accordance with Technical Specification (TS) 3.3.1.1, Table 3.3-2. This event is reportable pursuant to 10 CFR 50.73 (a)(2)(i)(B). The cause of the event was personnel error in implementing an approved TS change. A Temporary Waiver of Compliance was granted July 20, 1990 to allow continued operation without testing until the next refueling outage. Partial response time testing was conducted July 24, 1990. Full response time testing was conducted during the recently completed Unit 1 and 2 refueling outages and the results were well below the TS limit. Accident analyses indicate that certain plant conditions must exist coincident with greater than two second response time in order to fill the Pressurizer before a Reactor Trip. These conditions were not met prior to performing the surveillances. Therefore, the health and safety of the public were not affected during this event.

On September 14, 1990, while reviewing response time test procedures, two potentially nonconservative testing methods were discovered. On September 27, 1990, a third such method was discovered. In each case, a component was not included in the tested portion of an instrument circuit. The cause was personnel error in that TS requirements were not interpreted in the most conservative manner possible. Test procedures were revised as an enhancement and completed to confirm that response times were well within the TS limits. Remaining applicable test procedures will be revised before their next scheduled completion dates. One of these followup events was determined to be reportable pursuant to 10CFR50.73(a)(2)(i)(B).

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 800 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630) U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545. AND TO THE PAPERWORK REDUCTION PROJECT (3180-0104) OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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TEXT IF more space is required, use additional NRC Form 300A's (17)

1.0 Description of the Event

At 1622 hours on July 19, 1990, with Unit 1 operating at 100 percent power and Unit 2 operating at 85 percent power (Mode 1, Power Operation), the Shift Supervisor was informed that response time testing of the Pressurizer High Level Reactor Trip channel (EIIS System Identifiers AB for Reactor Coolant System and JC for Plant Protection System, Component Identifiers PZR for Pressurizer, LE for Level Primary Element, and LT for Level Transmitter) had not been performed in accordance with Technical Specifications (TS). As part of a Procedures Upgrade Program review, it was determined that Pressurizer High Level Reactor Trip response time testing requirements had not been incorporated into applicable surveillance procedures. TS 3.3.1.1 requires that the response time test for one pressurizer level channel be performed at least once every 18 months such that all three channels are tested at least once every 54 months. In addition, Table 3.3-2 of TS requires that the response time test for each channel be less than or equal to two seconds. This event is reportable pursuant to 10 CFR 50.73 (a) (2) (i) (B) for a condition prohibited by TS 4.0.3 and 3.3.1.1.

The NRC issued License Amendment 112 on January 3, 1989 for the remainder of the operating cycle of North Anna Unit 1. On June 30, 1989, the NRC issued License Amendment 100 which was for all future operating cycles of Unit 2 and which extended License Amendment 112 for all future cycles of Unit 1. The amendments added the requirement to response time test the Pressurizer High Level Reactor Trip channels and added the requirement that the channels respond in less than or equal to two seconds in order to protect against overfilling the Pressurizer prior to a Reactor Trip. Such testing is normally performed during a refueling outage because testing at power would significantly increase the risk of an unnecessary reactor trip.

North Anna Unit 1 was operating in a power coastdown (Mode 1) when Amendment 112 was received. From February 25, 1989 to July 16, 1989, Unit 1 was in a refueling outage. During this time, the Unit 1 Pressurizer High Level Reactor Trip channels were not response time tested due to personnel error in failing to completely implement an approved TS change. North Anna Unit 2 was operating at 100 percent power when License Amendment 100 was received on June 30, 1989 and continued operating until August 20, 1990, when it entered a refueling outage.

Three related events have occurred during the revision of response time testing procedures associated with the Reactor Protection System (EIIS System Identifier JC). All Solid State Protection System (EIIS System Identifier JG) Periodic Test procedures were being reviewed for upgrade to a new format and to improve Human Factors and graphics. It was discovered during this procedure review that the testing methods for three instruments on both Units 1 and 2 were potentially nonconservative. Each of these three subsequent events were reviewed by the Station Nuclear Safety and Operating Committee (SNSOC). One was determined to be reportable pursuant to 10CFR50.73(a)(2)(i)(B).

On September 14, 1990, it was discovered that the Source Range preamplifiers (EIIS System Identifier IG, Component Identifier AMP) were not included in the response time testing circuits for the Source Range Neutron Flux Reactor Trip (SRNFRT) (EIIS System Identifiers JC for Plant Protection System and IG for Incore/Excore Monitoring System) on both Units 1 and 2. This method of testing is potentially nonconservative.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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NORTH ANNA POWER STATION UNITS 1 AND 2	01600033890	0	09	03	03	OF 08

TEXT (If more space is required, use additional NRC Form 305A's) (17)

1.0 Description of the Event (Continued)

The two Source Range Neutron Flux Detector (EIIIS System Identifier IG, Component Identifier DET) channels per unit provide redundant monitoring of the neutron flux levels during shutdown and during the initial phase of reactor startup.

TS Table 3.3-2 exempts neutron detectors from response time testing. However, it requires that the response time of the neutron flux signal portion of the channel be measured from either detector output or from input. The first electronic component in the channel. Although not physically 1 to the Source Range detectors, the preamplifiers are located inside the detector. Furthermore, the detectors cannot operate without the preamplifier. Therefore, each preamplifier could be considered part of its detector. Therefore, the preamplifier circuitry consists of resistance-capacitance networks for signal filtering and operational amplifier/transistors for signal amplification. Because each preamplifier contains these electronic components, it could be considered the first electronic component of the circuit. Until now, at North Anna the preamplifier has been considered part of the detector and therefore not included in the tested portion of the circuit.

TS Table 3.3-2 requires the total response time for the Source Range Neutron Flux Reactor Trip to be less than or equal to 0.500 seconds. As indicated in procedures 1/2-PT-36.8, Reactor Protection Total Response Time Verification, the expected response time for the Reactor Trip Undervoltage (UV) circuit of the Source Range Neutron Flux Reactor Trip circuitry is 0.167 seconds. Therefore, the maximum time allowed for the electronic circuitry response time is 0.333 seconds. Review of the Reactor Protection System and Engineered Safety Feature Response Time Testing procedures completed since December 12, 1985 indicates the longest electronic circuitry response time experienced without the preamplifier has been 0.210 seconds. This leaves a worst case margin of 0.123 seconds for the preamplifier response time.

The response time testing procedure for the Source Range Neutron Flux Reactor Trips was revised to include the preamplifiers in the circuits to be tested. The test procedure was satisfactorily performed during the Unit 1 and 2 refueling outages. As expected, each response time was within the maximum limit of 0.500 seconds. The addition of the preamplifier to the test circuit is considered an enhancement.

The Station Nuclear Safety and Operating Committee (SNSOC) determined this preamplifier event to be not reportable. Remaining procedures will be similarly revised prior to their next scheduled start date.

Also on September 14, 1990, it was likewise discovered that the isolation amplifiers (EIIIS System Identifier IG, Component Identifier AMP) were not included in the testing circuits for the Power Range Neutron Detectors (EIIIS System Identifier IG, Component Identifier DET), which provide signals to the Reactor Coolant System (RCS) Overtemperature Delta Temperature Reactor Trips (OTDTRT).

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555 AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

1.0 Description of the Event (Continued)

The isolation amplifiers are used to amplify the input voltage to the Power Range Detector circuitry and to isolate the Power Range circuitry in the event of a fault at the output terminals of the isolation amplifiers. Only three out of the four Power Range detectors feed signals into the three Overtemperature Delta Temperature circuitry channels.

Like the Source Range preamplifier, the Power Range isolation amplifier had not been considered the first electronic component in the circuit. If considered to be the first electronic component, the isolation amplifier would be required by TS to be included in the portion of the circuit tested.

The isolation amplifiers are located in the Power Range drawers which are in the Main Control Room. In the past, Overtemperature Delta Temperature Reactor Trip response time tests have been performed with signals being simulated at the protection cabinets which are located in the rack rooms.

TS Table 3.3-2 requires the total response time for the Overtemperature Delta Temperature Reactor Trip to be less than or equal to 4.000 seconds. The expected total response time is listed as 2.267 seconds in 1/2-PT-36.8. Review of the Reactor Protection System and Engineered Safety Feature Response Time Testing procedures completed since December 12, 1985 indicates the longest electronic response time experienced is 0.192 seconds. This leaves a margin of 0.808 seconds for the isolation amplifiers.

The response times of all the Power Range isolation amplifiers for Units 1 and 2 were measured by revising and performing the Instrument Calibration Procedures ICP-NI-1/2-N-41/42/43. The strip charts recording the test indicated the response time is essentially zero for all the isolation amplifiers. The addition of the isolation amplifiers to the test circuit is considered an enhancement.

Even though the isolation amplifiers response times were essentially zero, the SNSOC subsequently determined this isolation amplifier event to be reportable pursuant to 10CFR50.73(a)(2)(i)(B) for operation outside of TS because the isolation amplifiers are not physically part of the Power Range detectors nor are they required for the Power Range detectors to function. Thus they must be considered as the first electronic component in the circuit and must be tested in accordance with TS Table 3.3-2.

On September 27, 1990, it was likewise discovered that the time function lag and lead/lag cards of the Reactor Coolant System Overtemperature Delta Temperature Reactor Trip circuit were removed and jumpered out during response time testing. The output of a lag card is proportional to the integral of the input and lags behind the input thus providing a means of eliminating short duration noise signals. A lead/lag amplifier card uses signal differentiation and integration to create an output signal which leads or gets ahead of an input transient thus reducing the total time for the Reactor Trip UV coils to respond. A lead/lag card also eliminates short duration noise signals.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-630) U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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TEXT (If more space is required, use additional NRC Form 366A's (1/7))

1.0 Description of the Event (Continued)

The cards specific to the Overtemperature Delta Temperature Reactor Trip are a 2 second lag card and a 25 second/4 second lead/lag card. The cards have been altered in the past for response time testing by removing the lag card and rearranging the circuit board jumpers to remove the time functions of the lead/lag card so that it only leads. The time response test procedure reflected this alteration in that the time response requirement of the procedure is 2 seconds less than the 4 second response time required by TS. Thus the 2 second difference made by the cards has been accounted for in the procedure.

The potential problem with this alteration is that removing the time function and merely accounting for the time does not confirm its function. In order to remain conservative, that additional time should be operationally reflected in the test circuit rather than accounted for procedurally. This addition of the lag and lead/lag functions into the response time test circuit is considered an enhancement as it confirms operability and calibration in addition to the eighteen-month channel calibration.

The response time testing procedure for the Overtemperature Delta Temperature circuitry was revised to include the time function cards in the circuit to be tested. The test procedure was satisfactorily performed during the Unit 1 and 2 refueling outages. As expected, the response time was well within the TS requirement.

Before now the intent of TS response time requirements was considered not to include any variable dynamic response of a circuit. Two other time response tests are conducted on systems with time related function cards that do not remove the time functions of these cards. They are for the Low Pressurizer Pressure Reactor Trip and the High Steamline Flow (coincident with Low Steamline Pressure) Engineered Safety Feature Actuation. Response time testing will now consistently include variable dynamic response. The Station Nuclear Safety and Operating Committee determined this lag and lead/lag card event not reportable.

2.0 Significant Safety Consequences and Implications

With regard to the Pressurizer High Level Reactor Trip, the analyses supporting Amendments 112 and 100 determined that Pressurizer High Level channel response time must be less than or equal to two seconds in order to prevent overfilling the Pressurizer. Liquid relief from the Pressurizer Power Operated Relief Valves (PORV) or safety relief valves could result in the malfunction of those valves. This in turn could cause a more severe event such as a small Loss of Coolant Accident (LOCA). The analyses showed that filling the Pressurizer is a potential concern only if power level is less than approximately sixty-percent, two of the three pressurizer high level trip channels have total channel response times greater than two seconds, and the integrated reactivity insertions are large.

The UFSAR takes credit for Pressurizer High Level Reactor Trip only for the rod withdrawal at power event. The amount of reactivity insertion required to fill the Pressurizer exceeded either the reactivity of the control banks at their insertion limits or the reactivity from a boron dilution event.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 800 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3160-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

2.0 Significant Safety Consequences and Implications (Continued)

Since response time testing became a TS requirement, the Pressurizer High Level alarm and Reactor Trip signals have passed the monthly Pressurizer Level channel functional tests. Pressurizer Level channels were calibrated during the last refueling outages. In addition, partial response time testing was conducted July 24, 1990 using noise analysis methodology. Results for the transmitters, the most time consuming portion of the channels, were between 0.040 and 0.130 seconds, well below the TS requirement of less than or equal to 2.000 seconds.

Full circuit testing of the Pressurizer High Level Reactor Trip channels was completed for Unit 1 and 2. Each total response time was within the TS requirement of less than or equal to 2.000 seconds.

Because partial circuit testing on Unit 1 and full circuit testing on Unit 2 were well within TS requirements, the failure to perform the time response surveillances did not affect the health and safety of the general public at any time during this event.

With regard to the Source Range Neutron Flux Reactor Trip preamplifiers, because response time tests were performed with the preamplifiers during the Unit 1 and 2 refueling outages and the TS limit of 0.500 seconds was met, there is no significant safety consequence to the preamplifiers not having been included in the response time test circuits.

With regard to the Power Range Neutron Detector isolation amplifiers, because component response time tests for both Units 1 and 2 were performed on the isolation amplifiers and the response times were essentially zero, there is no significant safety consequence to the isolation amplifiers not having been included in the response time test circuits.

With regard to the Overtemperature Delta Temperature Reactor Trip lag and lead/lag cards, because response time tests performed with the cards in the circuit demonstrated the TS limit of 4.000 seconds was met, there was no significant safety consequence to the cards not having been included in the response time test circuits.

The empirical results of having revised and completed selected test procedures for at least one channel of each of the three latter cases supports the conclusion that there is no safety significance of not including these components in the tested circuits. Test results from the channels completed show that in each case the response time of the neglected component was very small, the total response time was not increased significantly, and the total response time was not greater than that allowed by TS.

3.0 Cause of the Event

The missed Pressurizer Level response time testing event was caused by personnel error in implementing an approved TS change.

The three subsequent events of circuit components not being included in response time tests were caused by personnel error in that TS requirements were not interpreted in the most conservative manner possible.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-430), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

4.0 Immediate Corrective Actions

With regard to the missed response time testing of the Pressurizer Level, the action statement requirements of TS 3.3.1.1 were entered after a twenty-four hour period as allowed by TS 4.0.3. A Waiver of Compliance was submitted to the NRC on July 20, 1990 to allow continued operation of North Anna Units 1 and 2 until response time testing could be performed during the next refueling outages. The request was verbally approved by the NRC on July 20, 1990 and confirmed by letter dated July 25, 1990 upon condition that an emergency TS change be submitted to justify and revise the dates for implementing the surveillance requirement. This was submitted to the NRC on July 23, 1990 and approved as Amendments 132 and 116 by letter dated July 31, 1990.

With regard to the instruments in the three followup events, 2-PT-36.4.2, Reactor Protection System and Engineered Safety Feature Circuitry Response Time Testing for the second cycle of three channels, was revised on October 10, 1990 to enhance the testing methods for both channels of the Source Range Neutron Flux Reactor Trip and for one out of three channels of the Overtemperature Delta Temperature Reactor Trip by adding the preamplifiers as well as the time function cards to the test circuit. Both of the two Source Range channels and one of the three Overtemperature Delta Temperature channels are regularly scheduled for each outage. This procedure was completed on October 21, 1990. As expected, the response times were well within the maximum limits specified in the procedures.

2-PT-36.8, Reactor Trip Response Time, was revised to change the response times to accommodate the addition of the neglected components and completed satisfactorily on October 24, 1990. This procedure adds up the sensor, circuitry, and Undervoltage coil parts of a reactor trip signal to ensure that the total response time meets TS requirements.

The response times of Isolation Amplifiers of 1/2-NI-41/42/43 were measured by revising the Instrument Calibration Procedures ICP-NI-1/2-N-41/42/43. When the test was performed, the stripcharts indicated the response time is essentially zero for all Isolation Amplifiers.

5.0 Additional Corrective Actions

With regard to the missed response time testing of the Pressurizer Level, the transmitters for all six channels were partially response time tested on July 24, 1990 while both Units were on line using noise analysis techniques and responded between 0.040 and 0.130 seconds, well below the TS requirement.

Full circuit testing of the Pressurizer High Level Reactor Trip channels was completed for Unit 1 and 2. Each total response time was within the TS requirement of less than or equal to 2.000 seconds.

With regard to the three followup events, procedures not already revised will be revised to include the preamplifiers, the isolation amplifiers, and the time function cards in the response time test before the next scheduled test of each channel. Additionally, 1-PT-36.8 will be revised to be conservative and uniform with the Unit 2 procedure already revised. These corrective actions are considered enhancements.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 605 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20549, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0164), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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TEXT (If more space is required, use additional NRC Form 365A's) (17)

6.0 Actions to Prevent Recurrence

Administrative Procedure 6.11, Technical Specification Revisions, has been changed to include a checklist to identify all documents that require revision when a Technical Specification change is made.

An independent assessment of the TS implementation program was initiated and completed. Recommended improvements will be evaluated for implementation.

7.0 Similar Events

Licensee Event Report (LER) N1/2-88-026-00 documents a missed TS surveillance due to inadequate license amendment review resulting in a violation of TS 3/4.3.3.11 discovered on October 21, 1988.