

# CATEGORY 1

REGULATOR INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9704010084      DOC. DATE: 97/03/20      NOTARIZED: NO      DOCKET #  
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Power      05000397  
 AUTH. NAME:      AUTHOR AFFILIATION  
 PARRISH, J.V.      Washington Public Power Supply System  
 RECIPIENT NAME:      RECIPIENT AFFILIATION  
                                  Document Control Branch (Document Control Desk)

SUBJECT: Forwards request for enforcement discretion to TS response time testing requirements.

DISTRIBUTION CODE: A001D      COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 8+3  
 TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	ENCL
	PD4-2 LA	1	1	PD4-2 PD	1	1
	COLBURN, T	1	1			
INTERNAL:	ACRS	1	1	<u>FILE CENTER</u> 01	1	1
	NRR/DE/ECGB/A	1	1	<del>NRR/DE/EMGB</del>	1	1
	NRR/DRCH/HICB	1	1	NRR/DSSA/SPLB	1	1
	NRR/DSSA/SRXB	1	1	NUDOCS-ABSTRACT	1	1
	OGC/HDS3	1	0			
EXTERNAL:	NOAC	1	1	NRC PDR	1	1

NOTE TO ALL "RIDS" RECIPIENTS:  
 PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

TOTAL NUMBER OF COPIES REQUIRED: LTR 14 ENCL 13

C  
A  
T  
E  
G  
O  
R  
Y  
  
1  
  
D  
O  
C  
U  
M  
E  
N  
T



WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352-0968 • (509) 372-5000

March 20, 1997  
GO2-97-056

Docket No. 50-397

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

Gentlemen:

Subject: **WNP-2, OPERATING LICENSE NPF-21  
REQUEST FOR ENFORCEMENT DISCRETION TO TECHNICAL  
SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

- References:
- 1) Letter GO2-94-160, JV Parrish (SS) to NRC, "Request for Amendment to the Technical Specifications, Relocation of Technical Specification Tables for Instrument Response Time Limits," dated July 12, 1994.
  - 2) Letter JW Clifford (NRC) to JV Parrish (SS), "Issuance of Amendment for the Washington Nuclear Power Supply System Nuclear Project No. 2 (TAC NO. M89907)," dated June 26, 1995.
  - 3) Generic Letter 93-08, "Relocation of Technical Specification Tables of Instrument Response Time Limits," December 29, 1993.
  - 4) GE Nuclear Energy, BWR Owners' Group Licensing Topical Report, NEDO-32291-A, "System Analysis for the Elimination of Selected Response Time Testing Requirements," October, 1995.
  - 5) Letter BA Boger (NRC) to RA Pinelli, "BWR Owners Group Licensing Topical Report NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," January 1994.
  - 6) Letter GO2-95-265, JV Parrish (SS) to NRC, "Request For Amendment To Technical Specifications," dated December 8, 1995.
  - 7) Letter TP Gwynn (NRC) to JV Parrish (SS), "Response Time Measurement in Accordance with Technical Specification Surveillance Requirements," March 20, 1997.

9704010084 970320  
PDR ADCK 05000397  
P PDR



A001 1/1

11

12



## **REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

The Supply System hereby requests enforcement discretion from requirements for Technical Specification response time testing (RTT) surveillance requirements for Reactor Protection System (RPS) Instrumentation (SR 3.3.1.1.15), Primary Containment Isolation Actuation Instrumentation (SR 3.3.6.1.7), and Emergency Core Cooling System (ECCS) Actuation Instrumentation (SR 3.3.5.1.7). In particular, the Supply System requests a one time exemption for completion of the response time testing surveillance requirements to the next refueling outage, scheduled to start no later than April 18, 1997, or approval of a Technical Specification Amendment on this subject, whichever comes first.

By separate cover, the Supply System is submitting a request for a Technical Specification Amendment which will permit implementation of the response time verification consistent with Reference 4. Approval of that request will eliminate the need for enforcement discretion.

Due to the short time period available to prepare this request for enforcement discretion, the Supply System has not had the opportunity to review in detail the staff's positions presented in Reference 7 for the basis that a non-compliance with the Technical Specifications has occurred. As such, the Supply System makes no statement regarding agreement or disagreement with the position presented by the staff.

The Supply System addresses below each of the 12 criteria called out in NRC Inspection Manual Part 9900.

**1. The Technical Specification or other license conditions that will be violated.**

Based on the staff's conclusions as documented in Reference 7, the surveillances which were not completed within the frequency interval in the Technical Specifications include Reactor Protection System (RPS) Instrumentation (SR 3.3.1.1.15), Primary Containment Isolation Actuation Instrumentation (SR 3.3.6.1.7), and Emergency Core Cooling System (ECCS) Actuation Instrumentation (SR 3.3.5.1.7).

**2. The circumstances surrounding the situation, including root causes, the need for prompt action, and identification of any relevant historical events.**

Reference 7 has provided notification of the staff's conclusion that during Refueling Outage R11, WNP-2 did not demonstrate that response time limits were met for all required functions in that sensor response was not included in the response time measurement for all required functions. In fact, this condition applies to not only the sensor but also the rest of the instrument loop.

The circumstances surrounding this situation are as follows. Reference 1 requested, and Reference 2 authorized, relocation of RPS, Isolation Actuation, and ECCS instrumentation RTT tables from the Technical Specifications to the Final Safety Analysis Report (FSAR) consistent with Reference 3 recommendations. Consequently, implementation of the Reference 4 methodology for RTT surveillance implementation requirements was not perceived as a change to the Technical Specifications and was implemented in accordance with 10CFR50.59.



## **REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

The RTT tables were relocated to the FSAR and subsequently to the Licensee Controlled Specifications (LCS). The LCS contains technical requirements that must be controlled and met by the Supply System that do not meet the criteria for inclusion in the WNP-2 Technical Specifications. However, the LCS are considered by the Supply System to be part of the FSAR. LCS changes must be reviewed in accordance with the requirements of 10CFR50.59.

Subsequently, the Supply System reviewed and assessed the implementation requirements for the Reference 4 methodology. In March, 1996, the Supply System opted for implementation of the Reference 4 RTT methodology via the 10CFR50.59 review process and established that the method did not constitute either a change to the Technical Specifications or a change in the facility or procedures described in the safety analysis report, or involve tests or experiments not described in the safety analysis report which involve an unreviewed safety question. Consistent with Reference 4 guidelines, the Supply System retained in individual specifications, surveillance requirements for demonstration of instrumentation system response time, within its limit, on an 18 month interval. Consistent with the Reference 4 guidelines and staff SER, the Supply System concluded that the revised methodology met this requirement.

Two categories of components were included in this shift in testing methodology which were not identified in the table of components in Reference 4. These components are used within the logic circuits addressed in Reference 4. These components were omitted from lists provided to General Electric in support of preparation of the Reference 4 tables.

These components have been reviewed for similarity to the items contained within the Reference 4 component tables and have been found to be similar to other equipment referenced in the table which is manufactured by the same vendor. These components are also subject to periodic functional testing by CFTs and LSFTs. The Supply System conducted response time testing of these components at an appropriate interval using the alternate methodology described in Reference 4.

The decision to implement the changes in the method used to verify response times has been subjected to further review and scrutiny and was the subject of Special Inspection 96-22 in September, 1996. As a result of the inspection, the staff has concluded that the implementation of changes described in Reference 4 represent a change to the Technical Specifications and the changes therefore required approval by the NRC prior to implementation.

Given the fact that a Technical Specification noncompliance exists as determined by the staff, the root cause of this situation appears to be a misapplication of 10CFR50.59 in the application of the BWR Owner's Group revised response time verification methodology (Reference 4).

The need for prompt action is required because failure to satisfy the response time testing specified in Reactor Protection System (RPS) Instrumentation (SR 3.3.1.1.15), Primary Containment Isolation Actuation Instrumentation (SR 3.3.6.1.7), and Emergency Core Cooling System (ECCS) Actuation Instrumentation (SR 3.3.5.1.7) requires that the applicable systems be declared inoperable. This would involve instruments for RPS, Isolation Actuation, and ECCS systems, and would require that the plant be taken to cold shutdown. The Supply System





**REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

believes there is less risk in relying on the existing qualitative response time testing than in testing at power or forcing an unnecessary plant challenge by taking the plant to cold shutdown to resolve this process issue.

3. **The safety basis for the request, including an evaluation of the safety significance and potential consequences of the proposed course of action. This evaluation should include at least a qualitative risk assessment derived from the licensee's PRA.**

Qualitative response time testing has been completed in accordance with Reference 4 for those instruments for which enforcement discretion is being requested.

One of the categories of components not included in the Reference 4 component tables is Barksdale switches. The equipment actuated by these pressure switches (motor operated valves) have no specified required accident mitigation operating closure time limits. Therefore, pressure switch response time is not necessary to maintain the results of the current accident analysis..

The second category of components not included in the Reference 4 component table are smaller versions of a similar model (ASEA relay) included on the Reference 4 component list.

These components are also subject to periodic functional testing by CFTs and LSFTs. No failure mechanism has been identified that results in response time degradation for these components.

The Supply System believes that the RPS, Isolation Actuation, and ECCS Actuation Instrumentation are capable of performing their intended functions within designed response times and has verified response of these components using the alternate methodology in Reference 4. Accordingly, the Supply System believes that there is no safety significance and no potential adverse consequences associated with the proposed course of action, nor is there any impact on the WNP-2 Probabilistic Safety Assessment (PSA) core damage frequency estimate.

4. **The basis for the licensee's conclusion that the noncompliance will not be of potential detriment to the public health and safety and that neither an unreviewed safety question nor a significant hazard consideration is involved.**

The apparent noncompliance has resulted from a process issue, rather than an instrument functionality issue. The RPS, Isolation Actuation, and ECCS Actuation Instrumentation are capable of performing their intended function. Accordingly, no potential detriment to the public health and safety exists.

In accordance with 10CFR50.91, the Supply System has evaluated this issue and, based on previous staff review and approval of Reference 4, has concluded that the requested Notice of Enforcement Discretion does not involve a significant hazards consideration. This determination has been performed using the criteria set forth in 10CFR50.92.

Qualitative response time testing has been completed in accordance with Reference 4 for those instruments for which enforcement discretion is being requested.



**REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

Both of the categories of components referenced above which are not included in the Reference 4 component list are tested routinely in CFTs and LSFTs. In addition, procedure modifications are in place which require the testing technicians to monitor the response times qualitatively. All qualitative testing has been satisfactorily completed.

Reference 4 specifies the available analysis response times for qualitative testing. Station specific analyses have validated these conclusions for WNP-2. There is no safety significance associated with the use of this alternate response time testing methodology. This conclusion is endorsed by the staff in the SER for Reference 4.

The following evaluation is provided for the three categories of no significant hazards consideration standards:

**Operation of WNP-2 in accordance with the enforcement discretion will not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The Reference 4 evaluation demonstrates that quantitative response time testing is redundant to the other Technical Specification requirements. Qualitative tests are sufficient to identify failure modes or degradations in instrument response time and ensure operation of the associated systems within acceptance limits. There are no known failure modes that can be detected by response time testing that cannot also be detected by the other Technical Specification tests.

The two categories of components referenced above which are not included in the Reference 4 component list have no postulated functions or affects which may cause an accident. These devices are tested periodically to verify the functionality of these components. Sufficient time margin is available in the station accident analysis to account for the amount of time delay allowed by the technicians to verify proper function during this periodic testing.

Therefore, the requested enforcement discretion does not involve a significant increase in the probability or consequences of an accident previously evaluated.

**Operation of WNP-2 in accordance with the enforcement discretion will not create the possibility of a new or different kind of accident from any accident previously evaluated.**

As discussed above, the proposed enforcement discretion does not affect the capability of the associated systems to perform their intended function within the acceptance limits assumed in plant safety analyses and required for successful mitigation of an initiating event. This does not change the way in which any plant systems are operated or create the possibility of a new or different kind of accident.

The two categories of components referenced above which are not included in the Reference 4 component list have no postulated functions or affects which may contribute to the initiation of an accident. The function or lack of function will not result in any unusual or unanalyzed events.

## **REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

This represents reliance on a different, and previously staff approved, method to verify selected components remain fully functional and will not create the possibility of a new or different kind of accident from any accident previously evaluated.

**Operation of WNP-2 in accordance with the proposed enforcement discretion will not involve a significant reduction in the margin of safety.**

The current Technical Specification 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 testing methodology (Reference 4) 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 Reference 4 component list are qualitatively tested periodically by 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.

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.

The Supply System has concluded that there is no unreviewed safety question based on the 10CFR50.59 evaluation which was generated for the implementation of Reference 4.

- 5. The basis for the licensee's conclusion that the noncompliance will not involve adverse consequences to the environment.**

Based on the No Significant Hazard Evaluation presented above, this enforcement discretion does not result in a significant hazards consideration. In addition, the enforcement discretion does not create a potential for a significant change in the types, or a significant increase in the amount of any effluents that may be released offsite, nor does the proposed enforcement discretion involve a significant increase in individual or cumulative occupational radiation exposure.

- 6. Any proposed compensatory measure.**

The potential noncompliance has resulted from a process issue, rather than an instrument functionality issue. The RPS, Isolation Actuation, and ECCS Actuation Instrumentation are capable of performing their intended functions based on implementation of the Reference 4 alternate testing methodology.

Continued qualitative testing will provide an adequate level of testing to verify the proper function and response of these components. Similar testing is also routinely performed for the two categories of components referenced above which are not included in the Reference 4 component list. No additional compensatory measures are required.



**REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME TESTING REQUIREMENTS**

**7. The justification for the duration of the noncompliance.**

The next refueling outage is scheduled to begin April 18, 1997. As described, this noncompliance results from a process issue. The instrumentation has been verified functional in accordance with either the qualitative Reference 4 guidance, or the previous quantitative methodology in use prior to Reference 4 implementation.

The basis for Reference 4 methodology relies, in part, on the reliability, known failure modes, and the performance of other surveillance tests for the instrumentation. Other surveillance requirements that support operability include channel functional tests, channel calibration tests, and logic system functional tests. These surveillances are current and thereby an independent verification of instrument channel and logic system operability exists.

Based on this evaluation, reasonable assurance exists to support continued safe operation through April 18, 1997.

**8. A statement that the request has been approved by the facility organization that normally reviews safety issues (Plant Onsite Review Committee).**

The request for enforcement discretion has been reviewed and approved by the WNP-2 Plant Operations Committee. In accordance with 10CFR50.91, the State of Washington has been provided a copy of this letter.

**9. The request must specifically address how one of the NOED criteria for appropriate plant conditions specified in Section B is satisfied.**

WNP-2 is presently operating. This enforcement discretion meets criterion 1(a) of section B of Part 9900. Failure to satisfy the response time testing specified in Reactor Protection System (RPS) Instrumentation (SR 3.3.1.1.15), Primary Containment Isolation Actuation Instrumentation (SR 3.3.6.1.7), and Emergency Core Cooling System (ECCS) Actuation Instrumentation (SR 3.3.5.1.7) requires that the applicable systems be declared inoperable. This would involve instruments for RPS, Isolation Actuation, and ECCS systems, and would require that the plant be taken to cold shutdown. The Supply System believes there is less risk in relying on the existing qualitative response time testing than in testing at power or forcing an unnecessary plant challenge by taking the plant to cold shutdown to resolve this process issue.

Accordingly, this enforcement discretion also meets criterion 1(b) of section B of Part 9900. The enforcement discretion is to allow reliance on qualitative or quantitative response time testing for RPS, Isolation Actuation, and ECCS instrumentation. If performed at power, some of the testing would require overly intrusive testing, inconsistent with the guidelines provided in IEEE 338, "IEEE Standard Criteria for the Periodic Testing of Nuclear Power Generating Station Class IE Power and Protection Systems," and Regulatory Guide 1.118, "Periodic Testing of Electric Power and Protection Systems."

**REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION RESPONSE TIME  
TESTING REQUIREMENTS**

**10. If a follow-up licensee amendment is required, the NOED request must include marked up TS pages showing the proposed TS changes. The actual license amendment request must follow within 48 hours.**

Attachment 1 contains marked up TS pages for the Technical Specifications. The actual license amendment request will follow within 48 hours.

**11. A statement that prior adoption of approved line item improvements to the TS or the ITS would not have obviated the need for the NOED request.**

No line item improvement exists which would have obviated the need for this NOED request, nor does the implementation of the Improved Technical Specifications (ITS), in accordance with the guidance in NUREG 1434, resolve this issue.

**12. Any other information the NRC staff deems necessary before making a decision to exercise enforcement discretion.**

The Supply System knows of no additional information that is necessary for processing of this request.

Should you have any questions or desire additional information regarding this matter, please call me or Lourdes Fernandez at (509) 377-4147.

Respectfully,



JV Parrish  
Chief Executive Officer  
Mail Drop 1023

Attachments:

- 1) Proposed Technical Specification pages

cc: EW Merschoff - NRC RIV  
KE Perkins, Jr. - NRC RIV, Walnut Creek Field Office  
PD Robinson - Winston & Strawn  
TG Colburn - NRR  
NRC Sr. Resident Inspector - 927N  
DL Williams - BPA/399  
R Wallis - EFSEC