

NOTICE OF VIOLATION

Washington Public Power Supply System  
Washington Nuclear Project-2

Docket No. 50-397  
License No. NPF-21  
EA 97-138

During an NRC inspection completed November 18, 1997, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. WNP-2 Technical Specification 4.3.1.3 (WNP-2 License Amendment No. 139) requires that the REACTOR PROTECTION SYSTEM RESPONSE TIME of each reactor trip functional unit shall be demonstrated to be within its limit at least once per 18 months.

WNP-2 Technical Specification 1.36, (WNP-2 License Amendment No. 137) defines REACTOR PROTECTION SYSTEM RESPONSE TIME to be the time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until deenergization of scram pilot valve solenoids. The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

Contrary to the above, as of March 20, 1997, the licensee had not demonstrated that each reactor trip functional unit was within its response time limit at least once per 18 months, because the sensor was not included in the demonstration of response time. Specifically, the licensee performed measurements in 1996 which were not in accordance with the above technical specification requirements, in that the measurements did not include the time interval for sensor response in the REACTOR PROTECTION SYSTEM RESPONSE TIME measurement. Instead, the licensee qualitatively confirmed sensor response to an input, which did not demonstrate that the response time limits required by the technical specifications were met. The affected reactor trip functional units are: Reactor Vessel Steam Dome Pressure - High; and Reactor Vessel Water Level - Low, Level 3. (01013)

- B. WNP-2 Technical Specification 4.3.2.3, (WNP-2 License Amendment No. 139) requires that the ISOLATION SYSTEM RESPONSE TIME of each isolation trip function shall be demonstrated to be within its limit at least once per 18 months.

WNP-2 Technical Specification 1.19, (WNP-2 License Amendment No. 98) defines ISOLATION SYSTEM RESPONSE TIME to be the time interval from when the monitored parameter exceeds its isolation actuation setpoint at the channel sensor until the isolation valves travel to their required positions. The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

Contrary to the above, as of March 20, 1997, the licensee had not demonstrated that each isolation trip function was within its response time limit at least once per 18 months, because the sensor and related instruments were not included in the demonstration of response time. Specifically, the licensee performed measurements

in 1996 which were not in accordance with the above technical specification requirements, in that the measurements did not include the time interval for sensor and related instrument response in the ISOLATION SYSTEM RESPONSE TIME measurement. Instead, the licensee qualitatively confirmed sensor and related instrument response to an input, which did not demonstrate that the response time limits required by the technical specifications were met. The affected Primary Containment Isolation trip functions are: Reactor Vessel Water Level - Low Low, Level 2; Drywell Pressure -High; Main Steam Line Pressure - Low; and Main Steam Line Flow - High. The affected Secondary Containment System Isolation trip functions are: Reactor Building Vent Exhaust Plenum Radiation - High; Drywell Pressure - High; and Reactor Vessel Water Level - Low Low, Level 2. The affected Reactor Water Cleanup System Isolation trip functions are:  $\Delta$  Flow - High; and Reactor Vessel Water Level - Low Low, Level 2. The affected Reactor Core Isolation Cooling System Isolation trip functions are: RCIC Steam Line Flow - High and RCIC Steam Supply Pressure - Low. The affected RHR System Shutdown Cooling Mode Isolation trip function is Reactor Vessel Water Level - Low, Level 3. (01023)

- C. WNP-2 Technical Specification 4.3.3.3, (WNP-2 License Amendment No. 139) requires that the ECCS RESPONSE TIME of each ECCS trip function shall be demonstrated to be within its limit at least once per 18 months.

WNP-2 Technical Specification 1.12, (WNP-2 License Amendment No. 94) defines EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME to be the time interval from when the monitored parameter exceeds its ECCS actuation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function, i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc. Times shall include diesel generator starting and sequence loading delays where applicable. The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

Contrary to the above, as of March 20, 1997, the licensee had not demonstrated that each ECCS trip function was within its response time limit at least once per 18 months, because the actuation instrumentation was not included in the demonstration of response time. Specifically, the licensee performed measurements in 1996 which were not in accordance with the above technical specification requirements, in that the measurements did not include the time interval for actuation instrumentation response in the ECCS RESPONSE TIME measurement. Instead, the licensee qualitatively confirmed actuation instrumentation response to an input, which did not demonstrate that the response time limits required by the technical specifications were met. The affected ECCS trip functions are: Low Pressure Core Spray System; Low Pressure Coolant Injection Mode of RHR System - Pumps A and B; Low Pressure Coolant Injection Mode of RHR System - Pump C; and High Pressure Core Spray System. (01033)

- D. 10 CFR 50.59 states, in part, that a licensee may make changes in procedures as described in the safety analysis report without prior Commission approval, unless the proposed change involves a change in the technical specifications.

On June 26, 1995, the NRC approved the relocation of the instrument response time limit tables from the WNP-2 Technical Specifications to the FSAR in License Amendment No. 139.

WNP-2 Technical Specifications 4.3.1.3, 4.3.2.3, and 4.3.3.3 (WNP-2 License Amendment No. 139) require that the REACTOR PROTECTION SYSTEM RESPONSE TIME, ISOLATION SYSTEM RESPONSE TIME and ECCS RESPONSE TIME, respectively, of each reactor trip, isolation, and ECCS trip function be demonstrated to be within its limit at least once per 18 months.

WNP-2 Technical Specifications 1.36, 1.19, and 1.12, (WNP-2 License Amendment No. 137, 98, and 94, respectively) define REACTOR PROTECTION SYSTEM RESPONSE TIME, ISOLATION SYSTEM RESPONSE TIME, and EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME to be the time interval from when the monitored parameter exceeds its actuation setpoint at the channel sensor until appropriate equipment actuations are completed (e.g., deenergization of scram pilot valve solenoids, isolation valve travel to required positions, or required ECCS equipment response such as pump discharge pressures reaching required values).

Contrary to the above, in April 1996, the licensee made changes to procedures as described in the safety analysis report without seeking prior Commission approval, and the changes had the effect of changing Technical Specification requirements. Specifically, the licensee changed surveillance procedures which implemented the provisions of tables in the FSAR and the WNP-2 Technical Specifications 4.3.1.3, 4.3.2.3, and 4.3.3.3, and performed response time measurements in 1996 which were not in accordance with the above technical specification requirements. The testing did not include the time interval for instrumentation response in the RESPONSE TIME measurement for the functions described in Violations A, B, and C, above. (01043)

These violations represent a Severity Level III problem (Supplement I).

- E. 10 CFR 50, Appendix B, Criterion V requires, in part, that activities affecting quality shall be prescribed by procedures of a type appropriate to the circumstances, and shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above, as of March 20, 1997:

- Licensee work orders for replacement of six safety-related drywell pressure switches in April, May, and November 1996, were not appropriate to the circumstances in that a hydraulic response time test was not required in order to determine an initial, specific sensor response time value, as required

by licensee safety evaluation, Control Number SE 96-17. The affected work orders are: YR15, completed April 19, 1996, for the replacement of pressure switches MS-PS-47A and C; YR19, completed May 19, 1996, for replacement of pressure switches MS-PS-47B and C; DPV7, completed November 26, 1996, for replacement of pressure switch MS-PS-47B; and DPV8, completed November 27, 1996, for replacement of pressure switch MS-PS-47C.

- Licensee procedures for verification of response times for numerous safety-related instrument channels associated with the Reactor Protection, Isolation, and Emergency Core Cooling Systems, did not include appropriate quantitative or qualitative acceptance criteria for determining that important functions had been satisfactorily accomplished. Specifically, the procedures only indicated, "Confirm instrument channel response time is acceptable." Procedures without acceptance criteria included, but were not limited to: Surveillance Procedure 7.4.3.3.1.51, "HPCS Initiation Vessel Water Level 2 (A & C) - CFT/CC," dated May 24, 1996; Surveillance Procedure 7.4.3.2.1.22A, "Main Steam Line HI Flow Channel A - CFT/CC," dated May 23, 1996; Surveillance Procedure 7.4.3.2.1.20, "RCIC Isolation on Steam Line High Flow DIV 1 CFT/CC," dated May 9, 1996; Surveillance Procedure 7.4.3.2.1, "DIV 1 Channel A Isolation Actuation on Reactor Level 2 - CFT/CC," dated May 24, 1996; and Surveillance Procedure 7.4.3.2.2, "DIV 1 Channel C Isolation Actuation on Reactor Level 2 - CFT/CC," dated May 24, 1996. (02014)

This is a Severity Level IV violation (Supplement I).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in the Supply System's letter dated January 20, 1998, and NRC Inspection Report No. 50-397/96-22. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

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Under the authority of Section 182 of the Act, 42 U.S.C. 2232, any response you choose to submit shall be submitted under oath or affirmation.

Because your response, if you choose to submit one, will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Arlington, Texas  
this 20th day of February 1998