

# CATEGORY 1

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 BEMIS, P.R.      Washington Public Power Supply System  
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SUBJECT: Responds to NRC 980209 ltr re violations noted in insp rept  
 50-397/97-13. Corrective actions: performed followup  
 assessment of operability which determined RCIC sys to be  
 operable but nonconforming & upgraded RCIC components.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • Richland, Washington 99352-0968

March 10, 1998  
GO2-98-051

Docket No. 50-397

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

Gentlemen:

Subject: **WNP-2, OPERATING LICENSE NPF-21,  
RESPONSE TO APPARENT VIOLATIONS,  
INSPECTION REPORT 50-397/97-13**

- References:
- 1) Letter dated February 9, 1998, AT Howell (NRC) to JV Parrish (SS), "NRC Inspection Report 50-397/97-13, Notice of Violation and Exercise of Enforcement Discretion"
  - 2) Letter dated December 23, 1997, PR Bemis (SS) to NRC, "Clarification of RCIC System Safety Classification - Response to 96-TIA-005 and Amended Response to NRC Inspection Report 96-11 Staff Comment on RCIC"

The Supply System's response to the two apparent violations (EA 97-573) discussed in Reference 1, pursuant to the provisions of Section 2.201, Title 10, Code of Federal Regulations, is enclosed as Attachment A.

The Supply System acknowledges that the issues regarding the safety classification of the Reactor Core Isolation Cooling (RCIC) System are important, and has chosen to respond by this letter to the apparent violations noted in Reference 1, rather than requesting a predecisional enforcement conference. This is primarily due to the thoroughness of the NRC inspection report in that it reflects the Supply System's response to 96-TIA-005 (Reference 2), and includes pertinent facts related to the apparent violations.

The Supply System agrees with the NRC's characterization of the two apparent violations. The failure to perform an adequate safety evaluation in accordance with 10 CFR 50.59, in support of the downgrade of the RCIC System safety classification, resulted from the misapplication of generic technical guidance. In turn, this safety evaluation was relied upon to support the reduction in inservice testing (IST) program requirements which resulted in the second apparent violation.

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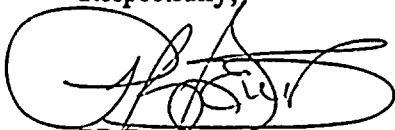
RESPONSE TO APPARENT VIOLATIONS, INSPECTION REPORT 50-397/97-13

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When addressing the potential severity level of the apparent violations, and the possibility for exercising enforcement discretion, the Supply System requests that the NRC consider that the Industry's as well as the Supply System's process for performing safety evaluations has greatly improved in the 13 years since this incident occurred. Furthermore, the reclassification plan and schedule to restore the RCIC System to safety-related status has been aggressive and is essentially complete. The NRC noted in Reference 1 that the plan and schedule were "thorough and timely." The Supply System has concluded that the downgrade in RCIC System classification resulted in a minimal impact on system reliability. Additional discussion on these issues is provided in Attachment A.

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

Respectfully,



PR Bemis

Vice President, Nuclear Operations  
Mail Drop PE23

Attachment

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

STATE OF WASHINGTON )  
COUNTY OF BENTON )

Subject: Response to Apparent Violations,  
Inspection Report 50-397/97-13

I, P. R. BEMIS, being duly sworn, subscribe to and say that I am the Vice President, Nuclear Operations for the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.


DATE 3/10/98, 1998



P. R. Bemis  
Vice President, Nuclear Operations

On this date personally appeared before me P. R. BEMIS, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 10 day of March 1998.



Notary Public in and for the  
STATE OF WASHINGTON

Residing at Kennewick, WA

My Commission Expires 4/28/98

## NRC INSPECTION REPORT 97-13, RESPONSE TO APPARENT VIOLATIONS

Attachment A

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### APPARENT VIOLATION A

#### Restatement of Apparent Violation

The first apparent violation involved the failure to perform an adequate safety evaluation in accordance with the requirements of 10 CFR 50.59. The violation involved the downgrading of the Reactor Core Isolation Cooling (RCIC) System from a safety-related system to a non safety-related system without NRC approval. This downgrading may have increased the probability of occurrence of a malfunction of equipment important to safety previously evaluated in the Final Safety Analysis Report (FSAR) and increased the possibility for a malfunction of a different type than any evaluated previously in the FSAR. Therefore, this downgrade apparently constituted an unreviewed safety question in accordance with the requirements of 10 CFR 50.59.

#### Response to Apparent Violation A

The Supply System agrees with the NRC's characterization of this event as given in the apparent violation and the report details of Reference 1. Generic technical guidance (NEDO 24708A) provided by the Supply System's Nuclear Steam Supply Systems (NSSS) vendor, and approved by the NRC, was used to justify the downgrade. However, prior NRC approval for use of the guidance in a manner different from its original purpose was not requested by the Supply System.

#### Reason for Apparent Violation A

In 1985, a 50.59 safety evaluation was written to support two changes: 1) a change in the safety classification of the RCIC System from safety-related to non-safety related, and 2) the removal of the RCIC System from the WNP-2 Technical Specifications. The containment isolation and reactor coolant pressure boundary functions of RCIC remained classified as safety-related. The safety evaluation referenced a NEDO document which identified the Automatic Depressurization System (ADS), in conjunction with low pressure injection, as an acceptable backup to the High Pressure Core Spray (HPCS) System. However, the Supply System inappropriately assumed from the generic guidance that this also allowed the RCIC System to be removed as a HPCS backup for all design basis accident scenarios. In addition, just prior to issuing the safety evaluation to change the safety classification of the RCIC System, the Supply System had received approval of an amendment to the Technical Specifications that allowed ADS to act as a backup to the HPCS System for accident scenarios requiring actuation of Emergency Core Cooling Systems. Based on the use of ADS as the backup, the Supply System in 1985 did not view the change in safety classification as an unreviewed safety question. The misapplication of generic technical guidance in support of the downgrade of the RCIC System safety classification resulted in a failure to identify an unreviewed safety question.

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On May 2, 1989, the NRC informed the Supply System that the application for amendment to the Technical Specifications regarding deletion of the RCIC System was denied based on operating experience and probabilistic risk assessment considerations. The denial of the amendment was interpreted by the Supply System to apply only to the removal of RCIC from the Technical Specifications, and not the downgrade of RCIC to non-safety related status.

Although the Supply System informed the NRC at the time of the Technical Specification submittal of our intent to downgrade RCIC, we now acknowledge that the RCIC System should not have been downgraded without explicit NRC approval. As noted in Reference 2, the FSAR specified that RCIC served as the original backup to the HPCS for the control rod drop accident (CRDA). Though this backup is not considered in the quantitative analysis for this accident, nor is it available under all core conditions due to insufficient steam supply, it was included in the original FSAR and acknowledged in the NRC Safety Evaluation Report.

While the effort to restore the RCIC System to conformance with safety-related requirements was extensive (over 6000 man-hours at a cost of nearly \$400,000), the actual impact to the RCIC System in terms of hardware and testing upgrade was very small. Due to the continued application of augmented quality requirements, the continued purchase of a large percentage of parts as safety-related, and Technical Specification testing that has always been performed, the Supply System has concluded that the downgrade in RCIC System classification resulted in minimal impact on system reliability during the downgrade period. Technical Specification requirements have always applied to the RCIC System.

The risk associated with not having the RCIC System fully qualified to safety-related status in order to mitigate a design basis CRDA is considered small. In the CRDA analysis, Nuclear Instrumentation and Reactor Protection Systems are primarily responsible for mitigation of the accident. The heat addition to the core during the CRDA is not significant. The actual CRDA analysis does not model HPCS or RCIC operation and only qualitatively mentions their availability after the CRDA. The most limiting CRDA scenario would not rely on RCIC due to insufficient steam to drive the RCIC turbine.

The Supply System has undertaken an aggressive project to promptly restore the safety-related status of the RCIC System since the recognition of this issue. These actions are now complete with the exception of two rupture discs on the RCIC turbine exhaust line that will be replaced during the upcoming refueling outage. The Supply System's Quality Assurance organization has also independently reviewed the results of the upgrade project with no findings.

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### Corrective Actions Taken and Results Achieved

A Followup Assessment of Operability (FAO) was performed and the RCIC System was determined to be operable but nonconforming.

All pertinent RCIC components have been upgraded as necessary, with the exception of two rupture discs on the RCIC turbine exhaust line that will be replaced during the upcoming refueling outage, to support returning the RCIC System to full conformance with safety-related requirements. The rupture discs are being upgraded from ASME Section VIII to Section III criteria.

### Corrective Steps That Will Be Taken to Avoid Further Apparent Violations

A thorough review of other safety evaluations and associated changes to the facility since initial startup is nearly complete. This review is being performed to determine if the inappropriate use of generic guidance may have occurred, thereby resulting in the need for a license amendment.

Plant procedure PPM 1.3.43, Licensing Basis Impact Determinations, will be revised to clarify guidance for use and interpretation of generic documents applicable to WNP-2.

Lessons learned from this apparent violation will be provided as feedback training to 10 CFR 50.59 safety evaluation preparers and reviewers, as well as the Plant Operations Committee and the Corporate Nuclear Safety Review Board.

### Date When Full Compliance Will Be Achieved

Full compliance will be achieved before WNP-2 resumes power operation following the Spring 1998 refueling outage, when the two RCIC rupture discs will be replaced, thus completing the RCIC System safety-related classification upgrade.

## APPARENT VIOLATION B

### Restatement of Apparent Violation

The second apparent violation involved the failure to maintain the acceptance criteria for the opening stroke-time testing of six RCIC System valves and the failure to maintain inservice testing of valve RCIC-V-45 as required by 10 CFR 50.55a(f). These failures appear to be the result of the RCIC System downgrading activities.

### Response to Apparent Violation B

The Supply System agrees with the NRC's characterization of this event as "a result of the RCIC System downgrading activities."

## NRC INSPECTION REPORT 97-13, RESPONSE TO APPARENT VIOLATIONS

Attachment A

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### Reason for Apparent Violation B

The failure to maintain the acceptance criteria for the opening stroke-time testing of six RCIC System valves, and the failure to maintain inservice testing criteria for opening and closing of valve RCIC-V-45, occurred in December, 1994. At that time WNP-2 revised the IST program for the second 10-year interval to the 1989 Edition of ASME Section XI. This action changed the program by deleting the acceptance criteria for valves because of the RCIC System classification downgrade effort. The reduction in the IST program was based on the downgrade of the RCIC System to non-safety related status, as the component functions were no longer considered safety-related.

### Corrective Actions Taken and Results Achieved

As a result of the RCIC reclassification effort, changes to the IST program, including testing acceptance criteria, were made to reflect changes in the safety classification of RCIC components. This included the establishment of "open" and "close" test acceptance criteria as applicable for the RCIC valves noted in the apparent violation.

### Corrective Steps That Will Be Taken to Avoid Further Apparent Violations

The change in the IST program noted in this apparent violation was a direct result of the errors made which resulted in the RCIC downgrade apparent violation. Thus, the corrective steps being taken for the first apparent violation are also appropriate to help prevent future non-conservative changes in the IST program.

### Date When Full Compliance Was Achieved

Full compliance was achieved on December 18, 1997, when changes were approved and incorporated into the IST program to properly reflect the safety classification upgrade of RCIC components.