CATEGORY 1

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SUBJECT: Responds to NRC 971021 ltr re violations noted in insp rept 50-397/97-16 on 970815.Corrective actions:additional training for operations personnel will be given to review requirements of TS surveillance interval.

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Docket No. 50-397

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

Gentlemen:

Subject: **WNP-2, OPERATING LICENSE NPF-21, NRC INSPECTION REPORT 97-16, RESPONSE TO NOTICE OF VIOLATION**

References:
1) Letter dated October 21, 1997, TP Gwynn (NRC) to JV Parrish (SS), "NRC Inspection Report 50-397/97-16 and Notice of Violation"
2) Letter dated August 15, 1997, PR Bemis (SS) to NRC, "Licensee Event Report No. 97-008-00"

The Supply System's response to the referenced Notice of Violation, pursuant to the provisions of Section 2.201, Title 10, Code of Federal Regulations, is enclosed as Attachment A.

The Supply System acknowledges the common elements of these four violations and will continue to focus management efforts on addressing issues relating to prompt identification and timely resolution of problems.

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

Respectfully,

P.R. Bemis
Vice President, Nuclear Operations
Mail Drop PE23

Attachment

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VIOLATION A

Restatement of Violation

Technical Specification (TS) Surveillance Requirement (SR) 3.4.5.1, states, in part, "Verify reactor coolant system unidentified and total leakage . . . [every] 12 hours. Total leakage is the summation of unidentified leakage and identified leakage.

TS SR 3.0.2 states, in part, "The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met."

Contrary to the above, on September 5, 1997, TS SR 3.4.5.1 a valid surveillance was not completed within 1.25 times the interval specified in the TS Frequency. The surveillance was completed at 3:30 p.m. on September 5, approximately 20 hours following the previous acceptable surveillance (7 p.m. on September 4, 1997). The surveillance was required to be performed no later than 10 a.m. on September 5, 15 hours (12 hours times 1.25) after the previous surveillance.

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

Response to Violation A

The Supply System accepts the violation.

Reason for Violation A

The Supply System agrees with the staff's characterization of this event as given in the Violation and Report Details of Reference 1.

The untimely completion of TS SR 3.4.5.1 was the result of a failure to account for the radiological conditions related to the alternate leakage determination method (bucket test). A delay in declaring FDR-FQ-38 inoperable when its output was not consistent with the drywell identified leakage value quantified by the bucket test created a situation where preparation and performance time for the alternate method was narrowed to three hours. Repeat performance of the bucket test was hampered by high contamination levels in the work area which required usage of the time extension provided by TS SR 3.0.3

The use of TS SR 3.0.3 could have been avoided through timely declaration of FDR-FQ-38 inoperability and adequate communication of the urgency for establishing better Health Physics (HP) controls to support the alternate leakage determination method.

Corrective Actions Taken and Results Achieved

An alternate method of determining drywell identified leakage which does not require HP controls or entry into contaminated areas has been developed and proceduralized. This method uses reactor building sump pump run times for verification that the drywell identified leakage is within Technical Specification limits. This alternate method will allow timely completion of TS SR 3.4.5.1 in the event that primary instrumentation becomes inoperable.

The Operations Manager has discussed this event with the Operations Shift Managers. Licensed SROs have been provided the root cause analysis for this event which highlights where decisions and actions were not conservative, and where communications were less than adequate.

Operations Shift Managers and Control Room Supervisors were notified of expectations for Operations Manager involvement prior to utilizing the provisions of SR 3.0.3, and that control room logs accurately track SR 3.0.3 use.

Corrective Steps That Will Be Taken to Avoid Further Violations

The associated PER, documenting this event and its causes will be discussed in the next operator requalification training by Operations Management. This discussion will specifically address the issue of timely operability determinations.

Additional training for Operations personnel will be given to review the requirements of a Technical Specification surveillance interval, and the use of the surveillance completion time extensions provided by TS SR 3.0.2 and TS SR 3.0.3, using this event as a case study. This training will emphasize the need to make clear log entries which delineate the decisions made and actions taken to maintain compliance with Technical Specifications.

Date of Full Compliance

Full compliance was achieved at approximately 1530 on September 5, 1997, when TS SR 3.4.5.1 was successfully completed.

VIOLATION B

Restatement of Violation

10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, deficiencies, and deviations, are promptly identified and corrected.

Contrary to the above, from July 16-18, 1997, the licensee failed to take prompt corrective actions for a condition adverse to quality. Specifically, on July 16, 1997, a system engineer identified a broken lockwire on a pressure control valve associated with the safety-related nitrogen supply to Subsystem B of the automatic depressurization system. However, the

licensee failed to verify the setpoint of the valve until two days later. The setpoint was determined to be below that to support long term operation of the Subsystem B automatic depressurization system valves.

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

Response to Violation B

The Supply System accepts the violation.

Reason for Violation B

The Supply System agrees with the staff's characterization of this event as given in the Violation and Report Details of Reference 1. Additionally, this event was reported to the staff in LER 97-008. To provide further detail concerning the events leading to the delay in entering the applicable Technical Specification Action Statement (TSAS) and resetting the pressure control valve, the following information is provided.

On July 16, immediately after finding the seal wire pulled loose from its lead seal on CIA-PCV-2B, the system engineer informed the Shift Manager of his finding and they discussed the purpose of the seal wire, the requirement for the seal wire, and the actions necessary to replace the seal wire. A review of the system operating procedure revealed no requirement for the seal wire. During their discussion they agreed that there was no apparent way to determine the PCV setting without isolating the CIA header because the normal supply to the header, Containment Nitrogen (CN), was in service at the time. They then determined that a work request and work order were needed to check/reset the PCV and replace the seal wire. A work request was written for this activity at about 1600 hours the same day.

On July 17 the system engineer's efforts were focused on finding an alternate method for determining the PCV setpoint without isolating the header and entering a TSAS. At approximately 1330 hours the system engineer noted by examination of a model of the PCV that a locking nut is used to secure the valve stem position once the valve is set. The PCV was inspected and the lock nut found to be loosened, indicating that the setpoint had likely been changed. Since CIA-PCV-2B has a wide range of settings allowed by the Automatic Depressurization System (ADS) calculations, the valve was not immediately declared inoperable. It was determined that, in addition to the work order, a troubleshooting plan was required for the activity of isolating the header and determining the PCV setting. Efforts for the remainder of July 17 and 18 were focused on preparing the troubleshooting plan, coordinating the Voluntary Entry into a TSAS (VET), and planning and scheduling of the work activity. It was determined that the 12-hour action statement for having more than two ADS valves inoperable, TSAS 3.5.1.G, applied due to the temporary isolation of the safety-related nitrogen supply to the B subsystem ADS valves.

At approximately 1600 hours on July 18 the Control Room briefing began for the trouble shooting plan and the VET. At approximately 1745 hours the setting on the PCV was determined to be 63 psig and was immediately restored to the required setpoint of 180 psig.

The Supply System staff determined that the 63 psig setting rendered the backup compressed nitrogen (safety-related) supply to the B subsystem ADS valves inoperable for the long-term ADS function. The safety significance of the event was determined to be low due to the fact that the CN system (non safety-related) was supplying nitrogen and the ADS accumulators would maintain a short-term supply if the CN system pressure was lost. The cause of misadjustment of CIA-PCV-2B is unknown.

With respect to the delay in entering the associated TSAS and resetting the valve, based on the evidence available on July 16, there was no reason to suspect the PCV setpoint had been changed. However, discovery of the loosened lock nut by the system engineer on July 17 does represent evidence that the PCV setting had potentially been changed. The Shift Manager should have been informed at the time of the new discovery, and discussions of the potential for entry into the applicable TSAS should have been initiated. Armed with this new information, the pace and intensity of the subsequent troubleshooting efforts should have been commensurate with the 12 hour completion time of the TSAS.

Corrective Actions Taken and Results Achieved

A Problem Evaluation Request was initiated for this event.

Information concerning this event has been communicated to plant employees.

Guidance has been added to the appropriate plant procedure to specify that if there is a reason to suspect a plant component is improperly configured, prompt corrective action will be taken to verify the proper configuration.

The system engineer involved in this event has been counseled to promptly identify plant problems.

Corrective Steps That Will Be Taken to Avoid Further Violations

The lessons learned from this event will be communicated to personnel in the Operations and Engineering organizations.

Date of Full Compliance

Full compliance was achieved on July 18, 1997, when CIA-PCV-2B setpoint was reset to its required setpoint and the CIA supply to ADS subsystem B was restored and LCO 3.5.1 Action G exited.

VIOLATION C

Restatement of Violation

10 CFR Part 50, Appendix B, Criterion V, requires, in part, that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings." Plant Procedures Manual 1.3.12, Revision 24, dated January 6, 1997, requires, in part, Problem Evaluation Requests (PERs) to be written for the following conditions:

- o "Conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances."

- o "Structures, systems or component malfunction, damage, or degradation considered sudden or unexpected, or outside the anticipated performance of the item. This situation needs further analysis other than only initiating a work request to remedy the condition..."

Contrary to the above, as of August 17, 1997, the licensee failed to follow procedures for documentation in a PER of a degraded and failed condition. Specifically,

1. Between July 10 and August 10, 1997, Hydraulic Control Unit HCU-4619 experienced six low accumulator pressure alarms, indicating that the accumulator was in a degraded condition outside of its anticipated performance. However, no PER was written until the unit failed on August 11, 1997.

2. On July 21, 1997, the safety-related containment hydrogen monitor (CMS-SR-14) failed and was declared inoperable, but no PER was initiated.

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

Response to Violation C

The Supply System accepts the violation.

Reason for Violation C

The Supply System agrees with the staff's characterization of examples 1 and 2 of this violation as given in the Violation of Reference 1.

Regarding example 1, the six HCU accumulator low pressure alarms, within a one month time period, meet the criteria in the plant procedures for writing a PER based on a negative trend. In this case, the system engineer relied on the control room HCU Alarm log to track the number of HCU alarms. However, he did not realize that Control Room Operators (CROs)

regarded this log as informal and redundant to the logging of HCU alarms in the electronic Control Room Log. Therefore, CROs did not routinely record alarms in the HCU Alarm log.

The reason a PER was not written for this negative trend is that the system engineer was using incomplete data to trend HCU accumulator problems and was not aware of the total number of alarms received for this accumulator.

Regarding example 2, the containment hydrogen monitor was declared inoperable and the appropriate LCO entered without a PER being written as required by plant procedures. In this case, the control room staff and the system engineer did not refer to the applicable procedural guidance for initiating PERs upon entering an LCO or when a failure of a component that affects system operability is discovered during a surveillance.

In the Report Details, five other examples were given where PERs were not written for non-safety related equipment conditions reflected in the Control Room Log. Investigation revealed that in all five cases the personnel involved had properly initiated and documented corrective actions for the conditions by either initiating work requests, verifying the condition was covered by a previous PER, or by verifying the equipment condition did not meet the PER initiation criteria. Therefore, PERs were not required in these cases.

However, the Supply System agrees with statements in the Report Details that our documentation of conditions adverse to quality is impacted by an inadequate understanding of the PER initiation criteria by some plant personnel.

Corrective Actions Taken and Results Achieved

Problem Evaluation Requests were initiated for examples 1 and 2.

Corrective Steps That Will Be Taken to Avoid Further Violations

A consistent understanding of the criteria and management expectations for initiation of PERs will be recommunicated to the plant staff and the Engineering organization through training. The training will also include actions to take when there is uncertainty regarding the need to initiate a PER.

System Engineering will evaluate the available sources for obtaining trend data to assure accuracy and applicability.

The electronic Control Room Log will be established as the source for tracking HCU alarms.

Date of Full Compliance

Full compliance was achieved when PERs were initiated for the equipment conditions identified in example 1 and 2 of the Violation on August 11, 1997 and September 22, 1997 respectively.

VIOLATION D

Restatement of Violation

10 CFR 20.1501 requires that each licensee make or cause to be made surveys that may be necessary for the licensee to comply with the regulations in Part 20 and that are reasonable under the circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive material, and the potential radiological hazards that could be present.

Pursuant to 10 CFR 20.1003, survey means an evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, or presence of radioactive material or other sources of radiation.

Contrary to the above, between July 29 and September 11, 1997, the licensee failed to make surveys necessary for compliance with 10 CFR 20.1902 and 20.1201. Specifically,

1. On July 29, 1997, the licensee did not make surveys to assure compliance with 10 CFR 20.1902, which requires posting of areas accessible to individuals in which radiation levels could result in an individual receiving a dose equivalent in excess of 0.1 rem in 1 hour at 30 cm from the radiation source or from any surface that the radiation penetrates, as high radiation areas. Specifically, two individuals entered an area around a condensate filter/demineralizer that was posted as a radiation area. However, changes in plant conditions had resulted in radiation levels 30 cm from the filter/demineralizer greater than 0.1 rem/hr.

2. On September 4, 1997, the licensee did not make surveys to assure compliance with 10 CFR 20.1201, which limits occupational dose to adults, including dose to the skin and committed dose equivalent. Specifically, an equipment operator entered a contamination area and breached a known contaminated system without surveys being made to assess the radiological hazards of the evolution. As a result, the individual received a small uptake of Cobalt-60 and skin contamination.

3. On September 11, 1997, the licensee did not make surveys to assure compliance with 10 CFR 20.1201, which limits occupational dose to adults, including dose to the skin. Specifically, four individuals performed work on a potentially contaminated pump-motor coupling without surveys being made to verify the radiological conditions of the work area. As a result, all four individuals received low levels of skin contamination.

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

Response to Violation D

The Supply System accepts the violation.

Reason for Violation D, Example 1

The Supply System agrees with the staff's characterization of this event as given in the Violation of Reference 1. The Supply System's root cause analysis confirmed that communications between Operations and HP personnel concerning the in-service state of the condensate demineralizer were incomplete, as was communication between the HP duty technician and the HP field technician at the time the personnel contaminations occurred. In addition, the root cause of this event was determined to be inadequate procedural controls to ensure the associated condensate demineralizer pit floor plug is set in place prior to placing a condensate demineralizer in service. These controls would prevent entry into an in-service condensate demineralizer pit by plant personnel without the necessary updating of the applicable radiological surveys. Investigation revealed the sequence of activities for returning a condensate demineralizer to service after maintenance is not set forth in any existing plant procedure.

Corrective Actions Taken and Results Achieved, Example 1

A radiological survey of the affected condensate demineralizer pit was completed and the area was immediately posted as a high radiation area.

The HP field technician involved in the event led a discussion with HP department personnel which focused on the missed opportunities for good communication during this event. HP supervision has discussed this event with both the HP duty technician and the field technician

Corrective Steps That Will Be Taken to Avoid Further Violations, Example 1

Appropriate procedural controls will be put in place to specify the condensate demineralizer pit floor plugs be set in place prior to placing a condensate demineralizer in service, or the radiological controls established for the condensate demineralizer pit area will be upgraded as necessary.

Performance expectations for use of three-way communication by HP operations personnel will be developed and implemented.

Date of Full Compliance, Example 1

Full compliance was achieved at 0845 on July 29, 1997, when a radiological survey was completed and the subject condensate demineralizer pit was posted as a high radiation area.

Reason for Violation D, Examples 2 and 3

The Supply System agrees with the staff's characterization of examples 2 and 3 as given in the Violation and Report Details of Reference 1.

In both events described in examples 2 and 3, ineffective communication between HP and other plant organizations, and a lack of ownership and the limited involvement of HP personnel with plant activities, resulted in inadequate surveys and insufficient radiological controls.

Corrective Actions Taken and Results Achieved, Examples 2 and 3

Operations management has established and communicated the expectation that Operations shift personnel will contact HP personnel when changing plant conditions that could affect plant radiological conditions.

Expectations have been established and communicated that workers are required to notify HP personnel prior to starting work in radiological areas.

Expectations have been established and communicated that HP Supervisors routinely monitor field work performance and verify adequacy of existing in-plant radiological controls.

The plant Radiation Protection Manager is implementing programmatic changes to the Radiation Protection Program to improve our performance in this area. Elements of that plan are listed above as corrective actions for examples 2 and 3 of this violation. The effectiveness of these corrective actions will be assessed after a period of 90 days.

Corrective Steps That Will Be Taken to Avoid Further Violations, Examples 2 and 3

HP management will develop performance measures, as appropriate, to reinforce the behavioral improvements specified in the above corrective actions.

Date of Full Compliance, Examples 2 and 3

Full compliance was achieved when HP performed radiological surveys for the plant areas identified in example 2 and 3, at 0645 on September 4, 1997, and at 1300 on September 11, 1997, respectively.