WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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

June 15, 1992
G02-92-143

Docket No. 50-397

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

Gentlemen:

Subject: NUCLEAR PLANT NO. 2, OPERATING LICENSE NO. NPF-21
NRC INSPECTION REPORT 92-09
RESPONSE TO NOTICE OF VIOLATIONS AND
NOTICE OF DEVIATION

The Washington Public Power Supply System hereby replies to the Notice of Violations and Notice of Deviation contained in your letter dated May 15, 1992. Our reply, pursuant to the provisions of Section 2.201, Title 10, Code of Federal Regulations, consists of this letter and Appendices A and B (attached).

In Appendices A and B, the violations and deviation are addressed with an explanation of our position regarding validity, corrective action and date of full compliance.

Very truly yours,

L. L. Grumme, Acting Director
Licensing & Assurance

REF/bk
Attachments

cc: JB Martin - NRC RV
NS Reynolds - Winston & Strawn
WM Dean - NRC
DL Williams - BPA/399
NRC Site Inspector - 901A

APPENDIX A

During an NRC inspection conducted on March 9 - April 19, 1992, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

A. Section 6.12.2 of the Technical Specifications (TS) states, in part, "...areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose greater than 1000 mrems shall be provided with locked doors to prevent unauthorized entry.... For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose of 1000 mrems, that are located in large areas, such as the containment, where no enclosure exists for the purposes of locking, and no enclosure can be reasonable constructed around the individual areas, then that area shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device."

Contrary to the above, on March 18, 1992, an accessible area existed on the 522-foot level of the reactor building in which radiation levels exceeded 1000 mrems per hour, with no enclosure constructed for the purposes of locking, but no flashing light was activated as a warning device.

Validity of Violation

The Supply System acknowledges the validity of this violation. A flashing light had been installed as required per the Technical Specifications in the above described high-high radiation area, i.e., greater than 1000 mrems per hour. However, the light element had failed.

At the time the inoperative flashing light was found, the radiation area had been barricaded and appropriately posted per the Technical Specifications. Two of the three required Technical Specification barriers to prevent inadvertent personnel overexposure were installed and functional. In addition, any personnel having access to this area would have received the appropriate radiation zone training. This training familiarizes personnel with radiation zone warning devices, postings, and barricades. Personnel are also instructed on their responsibilities when confronted with the various radiation zone conditions. There was no inadvertent overexposure of Plant personnel as a result of this condition.

The root cause of this event is Inadequate Preventative Maintenance. The manufacturer's expected lifetime of the light bulb was not factored into the replacement frequency of the bulb. Furthermore, there was no effort to track the number of hours a given light bulb was energized nor to replace the bulb after a given number of hours of operation.

The flashing warning lights for high-high radiation zones were monitored daily by the Health Physics Department. The flashing light could have been inoperative for up to 24 hours. More frequent monitoring would reduce the time the light could be inoperative.

A contributing cause to this event is Equipment Component Design Deficiency. The plastic cover for the light bulb did not allow for convection cooling. Therefore, the bulb operated at a higher temperature than if there was no plastic cover. The expected lifetime of the bulb decreases with the increased operating temperature.

Corrective Steps Taken/Results Achieved

1. As a short term corrective action, two (2) warning flashing light units were installed in each of the required areas. This practice will be discontinued when the "Corrective Actions To Be Taken" have been completed.

2. Modifications were made to the covers of forty (40) new warning flashing lights for high-high radiation zones to allow convection cooling of the light bulb.

3. A policy was instituted to replace the bulbs in all flashing units in operation at an interval not more than 80% of the manufacturer's expected lifetime for the bulb, until an engineered resolution can be implemented.

4. When a warning flashing light unit is removed from service, the bulb is then removed and discarded. This necessitates installation of a new bulb prior to returning the unit to service. This practice will continue until an engineered resolution can be implemented.

Corrective Action to be Taken

1. By August 31, 1992, modifications will be made to the covers of warning flashing lights not already modified to allow convection cooling of the light bulb.

2. By June 30, 1992, Plant procedure PPM 11.2.24.1 will be changed to require that Health Physics personnel inspect warning flashing lights for radiation zones prior to use to ensure the cover has been modified to allow convection cooling of the light bulb.

3. Maintenance, Operations and Health Physics will develop and implement a program to identify and reduce radiation areas in the Plant. This program shall emphasize flushing, shielding and design changes as necessary to reduce radiation fields. This action will be completed by December 31, 1992.

Date of Full Compliance

WNP-2 was in full compliance March 18, 1992, when the flashing light unit on the 522-foot elevation of the Reactor Building was made operational.

B. 10 CFR Part 50, Appendix B, Criterion XVI states, in part, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected."

Section 16.2.1 of the WPPSS Operational Quality Assurance Program Description, Revision 5, states, "conditions adverse to quality shall be evaluated and the need or corrective actions determined in accordance with established procedures. The procedures shall provide for prompt identification and correction of conditions."

Plant Procedures Manual (PPM) 7.4.1.5.3, Revision 9, "Standby Liquid Control (SLC) Pumps Operability Test," implemented TS and ASME Section XI requirements for the SLC pumps, and prescribed the minimum static level for lubricating oil for the SLC pumps.

Contrary to the above, on April 10, 1991, the licensee identified pump SLC-P-1B to be leaking lubricating oil but, as of March 18, 1992, no corrective action had been taken to ensure the lubricating oil level remained within the band prescribed in PPM 7.4.1.5.3. As of March 18, 1992, the lubricating oil level was below its prescribed minimum level, and the Plant was in Operational Condition 2 (Startup).

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

Validity of Violation

The Supply System acknowledges the validity of this violation. Maintenance Work Requests (MWR) AR3771 and AR3772 were issued on April 12, 1991, to correct leaking oil from the gear casings of SLC-P-1A and SLC-P-1B. Also, deficiency tags were hung on the pumps per Plant procedure PPM 1.3.7. At the time the leaks were identified, there was only a film of oil around each sight glass fitting going into the gear casing. The MWRs were assigned a low priority (Priority 4) with a 1992 Refueling Outage completion date because the condition was documented on the MWRs as a "housekeeping" task. This condition was identified prior to the 1991 Refueling Outage but was not worked.

The oil level on each pump was checked quarterly during pump surveillance testing. Operations personnel were not assigned to monitor the oil level in the SLC pumps more frequently. If oil levels were found low by the Operators prior or subsequent to performing the quarterly surveillance tests, the Operators would have called Maintenance to restore the levels. Documentation of oil addition was not required by procedures. No further action was taken by the Operators because the leaking oil had been identified by deficiency tags. Measures were not implemented to quantify the rate of leakage nor provide more frequent oil level checks to ensure the pump oil levels remained within prescribed levels. If the leakage increased, there is no documentation to indicate when and by how much.

The System Engineer had recognized that there was some oil leakage from the pumps during his system walkdowns, but the levels were always within prescribed limits when he inspected them and the oil collection pads were lightly oiled. Also, no excessive oil consumption was brought to his attention, and the deficiency tags indicated that the problem was recognized and being worked. Consequently, he determined that no further corrective actions were required. However, oil addition data for the pumps were unavailable and the System Engineer did not know when and how much oil was being added. Therefore, he did not have adequate information to assess the severity of the leakage.

The root cause of this condition is that Management Methods Did Not Adequately Enforce Policy. Opportunities were missed to repair the condition in a timely manner and/or evaluate the need to implement interim measures to ensure conditions remained at an acceptable level. A process called Repetitive Task Requests (RTR) was being used to document oil additions. However, weaknesses in documenting oil additions were identified. Specifically, the oil addition on March 18, 1992, to SLC-P-1A was not documented on the RTR log. It is management's expectations that all oil additions to safety related equipment will be documented by this process.

Corrective Steps Taken/Results Achieved

1. Oil was added to SLC-P-1A to bring the level within prescribed limits.

2. The two MWRs described above to correct the leaking oil condition of the SLC pumps were completed by May 29, 1992, and the leakage was reported to have been corrected.

3. The oil level requirements for the SLC pumps were re-assessed based on vendor information and engineering evaluation. New levels were established and Plant procedure PPM 2.4.1, "SLC," was changed accordingly.

4. The Reactor Building Operator Tour Log was changed to include inspection and documentation of both SLC pump oil levels once per shift.

Corrective Action to be Taken

1. By July 31, 1992, this response to the Notice of Violation will be communicated to all Plant Technical Staff System Engineers, Work Control Group, Operations, and Maintenance personnel.

2. Review of the program for tracking and assessing oil additions to plant equipment, and any warranted programmatic improvements, will be completed by September 30, 1992.

Date of Full Compliance

WNP-2 was in full compliance when the Operator Tour Log was changed to require shiftly checks of the SLC pump oil level.

C. Section 6.8.1 of the Technical Specifications states, in part:

"Written procedures shall be established, implemented and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978."

Regulatory Guide 1.33, Appendix A, states in section 9.a that "Maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances."

Licensee maintenance procedure PPM 10.10.2, Revision 14, "Standby Liquid Control Squib Valves Testing and Replacement," provides instructions for firing, removing and replacing the SLC squib valves. Paragraph 10.10.2.27.B.32 of this procedure states, "Retighten hanger U-bolts."

Licensee maintenance procedure PPM 10.2.29, Revision 3, "Installation, Modification, and Inspection of Pipe Supports," describes the proper makeup of seismic restraints.

Contrary to the above, on April 13, 1992, seismic restraint 4452-12 on the safety-related SLC system was loose and was not configured in accordance with PPM 10.2.29 in that it contained excessive gaps between the restraint and the SLC piping.

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

Validity of Violation

The Supply System acknowledges the validity of this violation with regard to seismic restraint 4453-13. It appears seismic restraint 4452-12 was incorrectly referenced in the Notice of Violation. Seismic restraint 4453-13 was found loose as described in the body of the inspection report. The jam nuts, which provide adjustment of the clearance between the pipe and the U-bolt, were not tightened.

On May 21, 1991, during the performance of PPM 7.4.1.5, "Standby Liquid Control Injection Functional Test," squib valve SLC-V-4A was fired. Replacement of the squib valve is done per PPM 10.10.2, "SLC Squib Valve Test and Replacement." To replace the valve, selected hanger U-bolts needed to be loosened or disassembled. Seismic restraint 4453-13 is one of the hangers loosened. However, no detailed instructions were provided in PPM 10.10.2 for the disassembly and reassembly of the hangers and U-bolts, nor did the procedure identify which U-bolts were required to be loosened. In addition, Plant procedure PPM 10.2.29, "Installation, Modification, and Inspection of Pipe Supports," did not address the configuration or clearances of U-bolt type pipe supports.

The root cause of this condition is Omission of Relevant Information in Procedures. Plant procedures PPM 10.10.2 and 10.2.29 did not provide adequate instructions and information regarding loosening, disassembly, reassembly, required clearances, and/or configuration of seismic restraints needed to be loosened or removed for replacement of the squib valves.

Corrective Steps Taken/Results Achieved

PER 292-0292 was initiated April 9, 1992, to document that seismic restraint 4453-13 was loose. An engineering evaluation determined that the loose hanger would not have prevented the SLC System from performing its safety function under all design basis conditions.

Corrective Action to be Taken

1. By April 1, 1993, PPM 10.10.2 will be changed to provide adequate instructions and information regarding loosening and/or disassembly and tightening/reassembly of required seismic restraints for replacement of the squib valves.

2. By August 30, 1992, PPM 10.2.29 will be changed to include more detailed configuration and clearance requirements on U-bolt type pipe supports.

Date of Full Compliance

WNP-2 was in full compliance June 5, 1992, when the jam nuts on seismic restraint 4453-13 were tightened and the support adjusted to the proper clearances.

APPENDIX B

During an NRC inspection conducted on March 9 - April 19, 1992, a deviation from a commitment to the NRC, as stated in the Final Safety Analysis Report (FSAR), was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the deviation is listed below:

A. Section 9.3.5.2 of the FSAR describes the features of the standby liquid control (SLC) system sodium pentaborate storage tank, stating, in part, that "an automatic electrical resistance system provides heat to maintain the system at 80 to 90 degrees to prevent precipitation during storage."

Contrary to the above, on April 10, 1992, the SLC storage tank automatic electrical resistance heaters were found to have setpoints that regulated tank temperature in the band of 77 to 92 degrees.

Validity of Deviation

The Supply System acknowledges the validity of this deviation. The heaters for the SLC storage tank to maintain the sodium pentaborate solution at saturation conditions are controlled by the SLC-TIC-2. The controller is located on the 548-foot elevation of the Reactor Building. The lower and upper setpoint limits of the switch were found set at 77°F and 92°F, respectively. Per the instrument tolerances stated in the Instrument Master Data Sheet (IMDS), the maximum range for the as-found settings could be 76.25°F to 92.75°F. Per the FSAR, the setpoints should have been set at the appropriate limits to control the actual tank temperature between 80°F and 90°F.

Upon review of the IMDS, the specified lower and upper settings for SLC-TIC-2 were 81°F and 91°F, respectively, with a corresponding worst case range of 80.25°F to 91.75°F. The as-found settings were outside of the IMDS specifications.

The root cause of this condition is that the Required Procedures Were Not Used Because of Less Than Adequate Work Practices. The controller settings were outside of the IMDS requirements. Therefore, manipulation of the controller setpoints was done contrary to procedure.

The IMDS worst case upper range of 91.75°F is slightly higher than the FSAR indicated limit of 90°F. However, engineering calculations indicate that the upper limit for these heaters is based on a solution temperature that results in an acceptable rate of decrease in level due to evaporation. A nominal peak solution temperature of 91.75°F is considered acceptable, but the IMDS should reflect the currently documented FSAR limits.

Corrective Steps Taken/Results Achieved

The SLC-TIC-2 setpoints were changed to control the actual tank temperature within the FSAR identified limits.

Corrective Action to be Taken

By July 31, 1992, the IMDS for the SLC-TIC-2 controller setpoints will be changed to ensure the actual tank temperature remains within the FSAR limits.

Date of Full Compliance

WNP-2 was in full compliance April 15, 1992 when the SLC-TIC-2 setpoints were changed to control the actual tank temperature within the FSAR identified limits.

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June 15, 1992
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Docket No. 50-397

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Gentlemen:

Subject: NUCLEAR PLANT NO. 2, OPERATING LICENSE NO. NPF-21
NRC INSPECTION REPORT 92-09
RESPONSE TO NOTICE OF VIOLATIONS AND
NOTICE OF DEVIATION

The Washington Public Power Supply System hereby replies to the Notice of Violations and Notice of Deviation contained in your letter dated May 15, 1992. Our reply, pursuant to the provisions of Section 2.201, Title 10, Code of Federal Regulations, consists of this letter and Appendices A and B (attached).

In Appendices A and B, the violations and deviation are addressed with an explanation of our position regarding validity, corrective action and date of full compliance.

Very truly yours,

SC Bowman for LLG

L. L. Grumme, Acting Director
Licensing & Assurance

REF/bk
Attachments

cc: JB Martin - NRC RV
NS Reynolds - Winston & Strawn
WM Dean - NRC
DL Williams - BPA/399
NRC Site Inspector - 901A

IE01

APPENDIX A

During an NRC inspection conducted on March 9 - April 19, 1992, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

A. Section 6.12.2 of the Technical Specifications (TS) states, in part, "...areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose greater than 1000 mrems shall be provided with locked doors to prevent unauthorized entry.... For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in 1 hour a dose of 1000 mrems, that are located in large areas, such as the containment, where no enclosure exists for the purposes of locking, and no enclosure can be reasonable constructed around the individual areas, then that area shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device."

Contrary to the above, on March 18, 1992, an accessible area existed on the 522-foot level of the reactor building in which radiation levels exceeded 1000 mrems per hour, with no enclosure constructed for the purposes of locking, but no flashing light was activated as a warning device.

Validity of Violation

The Supply System acknowledges the validity of this violation. A flashing light had been installed as required per the Technical Specifications in the above described high-high radiation area, i.e., greater than 1000 mrems per hour. However, the light element had failed.

At the time the inoperative flashing light was found, the radiation area had been barricaded and appropriately posted per the Technical Specifications. Two of the three required Technical Specification barriers to prevent inadvertent personnel overexposure were installed and functional. In addition, any personnel having access to this area would have received the appropriate radiation zone training. This training familiarizes personnel with radiation zone warning devices, postings, and barricades. Personnel are also instructed on their responsibilities when confronted with the various radiation zone conditions. There was no inadvertent overexposure of Plant personnel as a result of this condition.

The root cause of this event is Inadequate Preventative Maintenance. The manufacturer's expected lifetime of the light bulb was not factored into the replacement frequency of the bulb. Furthermore, there was no effort to track the number of hours a given light bulb was energized nor to replace the bulb after a given number of hours of operation.

The flashing warning lights for high-high radiation zones were monitored daily by the Health Physics Department. The flashing light could have been inoperative for up to 24 hours. More frequent monitoring would reduce the time the light could be inoperative.

A contributing cause to this event is Equipment Component Design Deficiency. The plastic cover for the light bulb did not allow for convection cooling. Therefore, the bulb operated at a higher temperature than if there was no plastic cover. The expected lifetime of the bulb decreases with the increased operating temperature.

Corrective Steps Taken/Results Achieved

1. As a short term corrective action, two (2) warning flashing light units were installed in each of the required areas. This practice will be discontinued when the "Corrective Actions To Be Taken" have been completed.

2. Modifications were made to the covers of forty (40) new warning flashing lights for high-high radiation zones to allow convection cooling of the light bulb.

3. A policy was instituted to replace the bulbs in all flashing units in operation at an interval not more than 80% of the manufacturer's expected lifetime for the bulb, until an engineered resolution can be implemented.

4. When a warning flashing light unit is removed from service, the bulb is then removed and discarded. This necessitates installation of a new bulb prior to returning the unit to service. This practice will continue until an engineered resolution can be implemented.

Corrective Action to be Taken

1. By August 31, 1992, modifications will be made to the covers of warning flashing lights not already modified to allow convection cooling of the light bulb.

2. By June 30, 1992, Plant procedure PPM 11.2.24.1 will be changed to require that Health Physics personnel inspect warning flashing lights for radiation zones prior to use to ensure the cover has been modified to allow convection cooling of the light bulb.

3. Maintenance, Operations and Health Physics will develop and implement a program to identify and reduce radiation areas in the Plant. This program shall emphasize flushing, shielding and design changes as necessary to reduce radiation fields. This action will be completed by December 31, 1992.

Date of Full Compliance

WNP-2 was in full compliance March 18, 1992, when the flashing light unit on the 522-foot elevation of the Reactor Building was made operational.

B. 10 CFR Part 50, Appendix B, Criterion XVI states, in part, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected."

Section 16.2.1 of the WPPSS Operational Quality Assurance Program Description, Revision 5, states, "conditions adverse to quality shall be evaluated and the need or corrective actions determined in accordance with established procedures. The procedures shall provide for prompt identification and correction of conditions."

Plant Procedures Manual (PPM) 7.4.1.5.3, Revision 9, "Standby Liquid Control (SLC) Pumps Operability Test," implemented TS and ASME Section XI requirements for the SLC pumps, and prescribed the minimum static level for lubricating oil for the SLC pumps.

Contrary to the above, on April 10, 1991, the licensee identified pump SLC-P-18 to be leaking lubricating oil but, as of March 18, 1992, no corrective action had been taken to ensure the lubricating oil level remained within the band prescribed in PPM 7.4.1.5.3. As of March 18, 1992, the lubricating oil level was below its prescribed minimum level, and the Plant was in Operational Condition 2 (Startup).

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

Validity of Violation

The Supply System acknowledges the validity of this violation. Maintenance Work Requests (MWR) AR3771 and AR3772 were issued on April 12, 1991, to correct leaking oil from the gear casings of SLC-P-1A and SLC-P-1B. Also, deficiency tags were hung on the pumps per Plant procedure PPM 1.3.7. At the time the leaks were identified, there was only a film of oil around each sight glass fitting going into the gear casing. The MWRs were assigned a low priority (Priority 4) with a 1992 Refueling Outage completion date because the condition was documented on the MWRs as a "housekeeping" task. This condition was identified prior to the 1991 Refueling Outage but was not worked.

The oil level on each pump was checked quarterly during pump surveillance testing. Operations personnel were not assigned to monitor the oil level in the SLC pumps more frequently. If oil levels were found low by the Operators prior or subsequent to performing the quarterly surveillance tests, the Operators would have called Maintenance to restore the levels. Documentation of oil addition was not required by procedures. No further action was taken by the Operators because the leaking oil had been identified by deficiency tags. Measures were not implemented to quantify the rate of leakage nor provide more frequent oil level checks to ensure the pump oil levels remained within prescribed levels. If the leakage increased, there is no documentation to indicate when and by how much.

The System Engineer had recognized that there was some oil leakage from the pumps during his system walkdowns, but the levels were always within prescribed limits when he inspected them and the oil collection pads were lightly oiled. Also, no excessive oil consumption was brought to his attention, and the deficiency tags indicated that the problem was recognized and being worked. Consequently, he determined that no further corrective actions were required. However, oil addition data for the pumps were unavailable and the System Engineer did not know when and how much oil was being added. Therefore, he did not have adequate information to assess the severity of the leakage.

The root cause of this condition is that Management Methods Did Not Adequately Enforce Policy. Opportunities were missed to repair the condition in a timely manner and/or evaluate the need to implement interim measures to ensure conditions remained at an acceptable level. A process called Repetitive Task Requests (RTR) was being used to document oil additions. However, weaknesses in documenting oil additions were identified. Specifically, the oil addition on March 18, 1992, to SLC-P-1A was not documented on the RTR log. It is management's expectations that all oil additions to safety related equipment will be documented by this process.

Corrective Steps Taken/Results Achieved

1. Oil was added to SLC-P-1A to bring the level within prescribed limits.

2. The two MWRs described above to correct the leaking oil condition of the SLC pumps were completed by May 29, 1992, and the leakage was reported to have been corrected.

3. The oil level requirements for the SLC pumps were re-assessed based on vendor information and engineering evaluation. New levels were established and Plant procedure PPM 2.4.1, "SLC," was changed accordingly.

4. The Reactor Building Operator Tour Log was changed to include inspection and documentation of both SLC pump oil levels once per shift.

Corrective Action to be Taken

1. By July 31, 1992, this response to the Notice of Violation will be communicated to all Plant Technical Staff System Engineers, Work Control Group, Operations, and Maintenance personnel.

2. Review of the program for tracking and assessing oil additions to plant equipment, and any warranted programmatic improvements, will be completed by September 30, 1992.

Date of Full Compliance

WNP-2 was in full compliance when the Operator Tour Log was changed to require shiftly checks of the SLC pump oil level.

C. Section 6.8.1 of the Technical Specifications states, in part:

"Written procedures shall be established, implemented and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978."

Regulatory Guide 1.33, Appendix A, states in section 9.a that "Maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances."

Licensee maintenance procedure PPM 10.10.2, Revision 14, "Standby Liquid Control Squib Valves Testing and Replacement," provides instructions for firing, removing and replacing the SLC squib valves. Paragraph 10.10.2.27.B.32 of this procedure states, "Retighten hanger U-bolts."

Licensee maintenance procedure PPM 10.2.29, Revision 3, "Installation, Modification, and Inspection of Pipe Supports," describes the proper makeup of seismic restraints.

Contrary to the above, on April 13, 1992, seismic restraint 4452-12 on the safety-related SLC system was loose and was not configured in accordance with PPM 10.2.29 in that it contained excessive gaps between the restraint and the SLC piping.

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

Validity of Violation

The Supply System acknowledges the validity of this violation with regard to seismic restraint 4453-13. It appears seismic restraint 4452-12 was incorrectly referenced in the Notice of Violation. Seismic restraint 4453-13 was found loose as described in the body of the inspection report. The jam nuts, which provide adjustment of the clearance between the pipe and the U-bolt, were not tightened.

On May 21, 1991, during the performance of PPM 7.4.1.5, "Standby Liquid Control Injection Functional Test," squib valve SLC-V-4A was fired. Replacement of the squib valve is done per PPM 10.10.2, "SLC Squib Valve Test and Replacement." To replace the valve, selected hanger U-bolts needed to be loosened or disassembled. Seismic restraint 4453-13 is one of the hangers loosened. However, no detailed instructions were provided in PPM 10.10.2 for the disassembly and reassembly of the hangers and U-bolts, nor did the procedure identify which U-bolts were required to be loosened. In addition, Plant procedure PPM 10.2.29, "Installation, Modification, and Inspection of Pipe Supports," did not address the configuration or clearances of U-bolt type pipe supports.

The root cause of this condition is Omission of Relevant Information in Procedures. Plant procedures PPM 10.10.2 and 10.2.29 did not provide adequate instructions and information regarding loosening, disassembly, reassembly, required clearances, and/or configuration of seismic restraints needed to be loosened or removed for replacement of the squib valves.

Corrective Steps Taken/Results Achieved

PER 292-0292 was initiated April 9, 1992, to document that seismic restraint 4453-13 was loose. An engineering evaluation determined that the loose hanger would not have prevented the SLC System from performing its safety function under all design basis conditions.

Corrective Action to be Taken

1. By April 1, 1993, PPM 10.10.2 will be changed to provide adequate instructions and information regarding loosening and/or disassembly and tightening/reassembly of required seismic restraints for replacement of the squib valves.

2. By August 30, 1992, PPM 10.2.29 will be changed to include more detailed configuration and clearance requirements on U-bolt type pipe supports.

Date of Full Compliance

WNP-2 was in full compliance June 5, 1992, when the jam nuts on seismic restraint 4453-13 were tightened and the support adjusted to the proper clearances.

APPENDIX B

During an NRC inspection conducted on March 9 - April 19, 1992, a deviation from a commitment to the NRC, as stated in the Final Safety Analysis Report (FSAR), was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the deviation is listed below:

A. Section 9.3.5.2 of the FSAR describes the features of the standby liquid control (SLC) system sodium pentaborate storage tank, stating, in part, that "an automatic electrical resistance system provides heat to maintain the system at 80 to 90 degrees to prevent precipitation during storage."

Contrary to the above, on April 10, 1992, the SLC storage tank automatic electrical resistance heaters were found to have setpoints that regulated tank temperature in the band of 77 to 92 degrees.

Validity of Deviation

The Supply System acknowledges the validity of this deviation. The heaters for the SLC storage tank to maintain the sodium pentaborate solution at saturation conditions are controlled by the SLC-TIC-2. The controller is located on the 548-foot elevation of the Reactor Building. The lower and upper setpoint limits of the switch were found set at 77°F and 92°F, respectively. Per the instrument tolerances stated in the Instrument Master Data Sheet (IMDS), the maximum range for the as-found settings could be 76.25°F to 92.75°F. Per the FSAR, the setpoints should have been set at the appropriate limits to control the actual tank temperature between 80°F and 90°F.

Upon review of the IMDS, the specified lower and upper settings for SLC-TIC-2 were 81°F and 91°F, respectively, with a corresponding worst case range of 80.25°F to 91.75°F. The as-found settings were outside of the IMDS specifications.

The root cause of this condition is that the Required Procedures Were Not Used Because of Less Than Adequate Work Practices. The controller settings were outside of the IMDS requirements. Therefore, manipulation of the controller setpoints was done contrary to procedure.

The IMDS worst case upper range of 91.75°F is slightly higher than the FSAR indicated limit of 90°F. However, engineering calculations indicate that the upper limit for these heaters is based on a solution temperature that results in an acceptable rate of decrease in level due to evaporation. A nominal peak solution temperature of 91.75°F is considered acceptable, but the IMDS should reflect the currently documented FSAR limits.

Corrective Steps Taken/Results Achieved

The SLC-TIC-2 setpoints were changed to control the actual tank temperature within the FSAR identified limits.

Corrective Action to be Taken

By July 31, 1992, the IMDS for the SLC-TIC-2 controller setpoints will be changed to ensure the actual tank temperature remains within the FSAR limits.

Date of Full Compliance

WNP-2 was in full compliance April 15, 1992 when the SLC-TIC-2 setpoints were changed to control the actual tank temperature within the FSAR identified limits.