

APPENDIX A

Washington Public Power Supply System  
P. O. Box 968  
Richland, Washington 99352

Construction Permit No. CPPR-93

6/17/80 attached  
to this letter  
in PDR

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NOTICE OF VIOLATION

Based on the results of NRC investigation conducted between November 27, 1979 and February 28, 1980, it appears that certain of your activities were not conducted in full compliance with conditions of your NRC Facility License No. CPPR-93.

10 CFR 50, Appendix B, Criterion VII, states, in part, that "Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents...The effectiveness of the control of quality by contractors and subcontractors shall be assessed by the applicant or designee at intervals consistent with the importance, complexity, and quantity of the product or services."

One of the measures to control quality of contractor products is delineated in Paragraph D.2.5 of the WPPSS Quality Assurance Program documented in the PSAR which states, in part, that "...All project contractors for nuclear related portions of the plant will be required to have a Quality Assurance Program which shall be in accordance with the requirements of Appendix B, 10 CFR 50...." Further, Paragraph D.2.3 of the PSAR describes three levels of control in the Quality Assurance Program. The first level requires manufacturers and site contractors to have a quality control program and inspections which demonstrate the final end product has the specified degree of quality. The second level, performed by the Architect-Engineer/Construction Manager (Burns & Roe), requires quality assurance surveillance of individual manufacturer's and site contractor's quality control and inspection programs to insure that the design and quality requirements are in fact being met. The third level is performed by the WPPSS Supervising QA Engineer, assisted by Burns & Roe, as appropriate. This level includes reviews of specifications and other requirement documents furnished by the contractors to insure that the necessary quality requirements have been incorporated in these documents and audits of manufacturing and construction activities to insure that the quality programs of the contractors are actually functioning as required.

The implementation of the above measures failed to assure that the pertinent requirements of 10 CFR 50, Appendix B, were met by contractors as indicated below.

I. Items of Noncompliance Relating to the Sacrificial Shield Wall

- A. 10 CFR 50, Appendix B, Criterion V, states 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

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Paragraph D.2.5.5 of the WPPSS Quality Assurance Program documented in the PSAR states, 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...."

1. The erection of the reactor building sacrificial shield wall is prescribed, in part, by drawing No. 2808-5836, Revision 2, Note NN, which states, in part, "...Each segment shall now be attached to the lower SSW by welding columns to inner and outer column splice plates and slot welding bottom segment ring beam to top of box ring beam...also remove temporary shims before welding...."

Contrary to the above requirements, on June 14, 1978, assembly of the sacrificial shield wall in the reactor building was completed with temporary shims in place at the interface of the bottom segment ring beam and the top of the box ring beam. These shims prevent several slot welds from joining the ring beams.

This Violation resulted in the as built structure being incapable of performing its intended safety function during design basis earthquake conditions and certain postulated pipe break accidents (Civil Penalty - \$5000.00).

2. The fabrication, erection, and testing of the sacrificial shield is prescribed in part by WPPSS Contract Specification No. 2808-215. Appendix D of this specification, entitled "Technical Documentation and Procedure Requirements" states, in part, that "...Document (including test procedures) is to be submitted for approval and must be approved or approved as noted by owner before affected work can proceed..."

Contrary to the above requirements, ultrasonic testing of the weld joints listed below were performed before an owner-approved procedure was provided.

<u>Component</u>		<u>Weld Joint</u>	<u>Date</u>
Ring beam	113b	Joints 23, 24	June 17, 1976
	113c	Joints 31, 32	
	114c	Joints 23, 24	
Box Column	29b	Joints 21-28	June 16, 1976
	29a	Joints 1-8	
Weld Maps	W45	Joints 9-10	July 24, 1976
	W21	Joints 1-6, 8-10, 12, 13	
	W22	Joints 1-4, 6-8, 10, 11 12, 13, 167	

<u>Component</u>		<u>Weld Joint</u>	<u>Date</u>
Weld Map	W22	Joints 15, 16, 22, 132 140, 30, 168, 155, 32, 33, 35, 37, 166	July 24, 1976
Electro-Slag Joints	X-100 X-102		June 2, 1976

The contractor's first approved ultrasonic test procedure (Quality Control Procedure 8.0, Rev. 1, "Ultrasonic Testing") was approved by the owner (owner's agent) on September 27, 1976. This nonconforming condition was not identified nor were the weld joints retested after an approved procedure was provided.

This is an Infraction (Civil Penalty - \$3000.00).

3. The fabrication of the sacrificial shield wall is prescribed in part, by WPPSS Contract Specification No. 2808-215. This document specifies that welding shall be in accordance with the AWS Structural Welding Code D.1.1-1974.

Paragraph 3.7.2.4 of the Structural Welding Code states, in part, that for the repair of cracks in welds or base metal, "...Ascertain the extent of the crack by use of acid etching, magnetic particle testing or other equally positive means: remove the crack and sound metal 2 inches beyond each end of the crack, and reweld...."

Contrary to the above requirements, repair instructions and completion signatures dispositioning "Incomplete/Rejection Tags" Nos. 5256, 5325, 5412, 6055, 6056, 6058, 6059, 5443, 5444, 5445, 5446, and 5447 demonstrate that the repairs made to cracks in shield wall subassemblies during the period of April 1976 to April 1977 were made without using acid etching, magnetic particle testing, or other positive means to define the cracks, and sound metal 2 inches beyond each end of the cracks was not removed as required by the code.

This is an Infraction (Civil Penalty - \$3000.00).

4. The fabrication of the sacrificial shield wall is prescribed in part, by WPPSS Contract Specification No. 2808-215. This document specifies that welding shall be in accordance with the AWS Structural Welding Code D.1.1-1974.

Paragraph 3.4.3 of the Structural Welding Code states, in part, that "...The contractor shall develop weld sequences which... will produce members and structures meeting the quality requirements specified. These sequences and any revision necessary in the course of the work shall be sent for information and comment to the engineer...."

Contrary to the above requirements, as of December 7, 1979 the weld sequences developed by the contractor and used during fabrication of the shield were not submitted to the engineer (Burns & Roe, Inc.). These weld sequences are delineated in a document, entitled, "Sacrificial Shield Wall Assembly Procedure" which was an informal document, not signed or controlled by the contractor.

This is an Infraction (Civil Penalty - \$3000.00).

5. The fabrication, erection, and testing of the sacrificial shield wall is prescribed in part by WPPSS Contract Specification No. 2808-215 which requires that nondestructive testing personnel be qualified in accordance with the requirements of the American Society for Nondestructive Testing Recommended Practice No. SNT-TC-1A (Third Edition).

SNT-TC-1A specifies that individuals who read and interpret indications (test results) shall be certified NDT Level II or III and that the certification is not transferable between employers. For certification, as a NDT Level II, an individual must be administered a general written examination (covering basic test principles); a specific written examination (covering equipment, operating procedures, and techniques); and a practical examination (to demonstrate operation of equipment and analysis of resultant information). The practical examination should include at least 10 different check points. Further, an individual certified as a NDT Level III shall be responsible for conducting and grading examinations of NDT Level I and II personnel.

Contrary to the above requirements:

- a. An individual, who was never qualified by the contractor, performed nondestructive ultrasonic testing on the sacrificial shield wall plates Nos. b56 and f56 on June 2, 1976.
- b. An individual performed ultrasonic testing (UT) on the sacrificial shield wall ring beam 113b, welds 23/24 on June 17, 1976; ring beam 1146, welds 15/16 on June 17, 1976; sub-assembly 56b for segment 22A, welds 212 to 235 on June 17, 1976; box column 29b, welds 21 to 28 on June 16, 1976; ring 3 dwg 56, welds 100 and 102 on June 2, 1976; ring 8, pc 252c, weld 115 on August 4, 1977, and others without having taken a practical examination which was in accordance with SNT-TC-1A. Specifically, no check points were defined or applied to the examination as required by SNT-TC-1A, and the examination document did not demonstrate that an individual certified as a NDT Level III conducted or graded the examination.

This is an Infraction (Civil Penalty - \$3000.00).



- B. 10 CFR 50, Appendix B, Criterion V, states 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Paragraph D.2.5.5 of the WPPSS Quality Assurance Program documented in the PSAR states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances...The activity may be prescribed in job specifications, work instructions, shop construction drawings, job tickets, planning sheets, operating or procedure manuals, test procedures, or any other type of written form, provided that the activity is adequately described. Quantitative criteria, such as dimensions, tolerances, and operating limits...shall be specified...."

WPPSS Contract Specification No. 2808-215 for the sacrificial shield wall specifies that work shall be done in accordance with the AWS Structural Welding Code D.1.1-1974. Paragraph 3.7.3 of this code, states, in part, that "...Members distorted by welding shall be straightened by mechanical means or by carefully supervised application of a limited amount of localized heat. The temperature of the heated areas as measured by approved methods shall not exceed...1200F...."

Contrary to the above requirements, no documented instructions, procedures, or drawings were provided to control the application of localized heat during the straightening of each segment of sacrificial shield wall ring beam No. 3 and segment 2A of ring beam No. 2, and other shield wall components as documented on Manufacturing Order Nos. 000904, 000913, 000916, 1193, 1666 and others during 1976. Control of the maximum temperatures in the heated areas was not assured nor is there documentation of the methods used to measure the temperature or the actual temperatures reached during this activity. Temperature control during the heat straightening process is important in assuring that the as built physical properties of the material.

This is an Infraction (Civil Penalty - \$3000.00).

- C. 10 CFR 50, Appendix B, Criterion XVII, states that "Sufficient records shall be maintained to furnish evidence of activities affecting quality. The records shall include at least the following: operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. The records shall also include closely related data such as qualifications of personnel, procedures, and equipment. Inspection and test records shall, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. Records shall be identifiable and retrievable. Consistent with applicable regulatory requirements, the applicant shall establish requirements concerning record retention, such as duration, location and assigned responsibility."

Paragraph D.3.4.17 of the WPPSS Quality Assurance Program as documented in the PSAR states in part, that "Sufficient records will be prepared as work is performed to furnish documentary evidence of the quality of items and of activities affecting quality...The Records include, as a minimum, the results of reviews, inspections, tests, audits, monitoring of work performance...Inspection and test records will, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. Required records will be identifiable and retrievable..."

Contrary to the above requirements:

- a. On January 24, 1980, quality records were not retrievable which identify the individuals who performed many of the visual inspections on the shield wall, as indicated by the following examples:

- (1) Shield wall manufacturing orders for pieces a<sup>15</sup>, 15c, d<sup>15</sup>, g<sup>14</sup>, t, 13, 15V and b<sup>15</sup> (no serial numbers had been recorded on these manufacturing orders) documented inspections performed by inspector No. 7 between January 15, 1976 and March 1, 1976. The contractor has no records available to provide the identity of this individual.
- (2) Shield wall Manufacturing Orders 000515, 000631, 1606, 1249, 1263, and 1569 document inspections by inspector No. 4 in May and June 1976. The contractor has no records available to provide the identity of this individual.
- (3) Shield wall Manufacturing Orders 2000, 2002, 2020, 1866 and 1945 document inspections by inspector No. 6 in August 1976. The contractor has no records available to provide the identity of this individual.

The lack of the above records does not enable verification that the inspections were performed by qualified personnel.

- b. On January 23, 1980, information contained in quality records was inconsistent and did not accurately reflect activities performed on the shield wall as indicated by the following examples:

- (1) Shield wall ultrasonic test report for piece No. 113/78 is not dated and results of testing are not indicated.
- (2) Shield wall Manufacturing Order No. 000917 indicates that welds 1-4 on drawing 75 were performed using welding procedure No. 0001-13-06 (the electroslag welding process); the weld map for these welds indicates the welds were made using procedure No. 0001-01-10 (the shielded metal arc welding process).

- (3) Two shield wall weld maps Nos. W256 exist. One map indicates welding electrode serial Nos. A383ER/029092 were used to make welds 4, 5 and 6; the second map indicates electrodes Nos. A383ER/036084 were used to make the same welds.

The above noted omissions and inconsistencies resulted in records which do not provide assurance that these activities were satisfactorily performed.

This is a Deficiency (Civil Penalty - \$1000.00).

## II. Items of Noncompliance Relating to Pipe Whip Restraints

- A. 10 CFR 50, Appendix B, Criterion V, states 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Paragraph D.2.5.5 of the WPPSS Quality Assurance Program documented in the PSAR states, 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..."

1. The fabrication of safety related pipe whip restraints is prescribed in part by WPPSS Contract Specification No. 2808-90. Division 5, Section 5A, "Technical Specifications for Pipe Whip Restraints," Paragraph 3.8.2, of the contract specification states, in part, that "...Contractor shall submit to owner...all quality assurance procedures required...Contractor shall not proceed with the affected work until its...procedures have been approved by the owner."

Contrary to the above requirements, ultrasonic testing was performed on pipe whip restraints Nos. PWS 30-5, PWS 27-17, and PWS 6-1 in September and October 1976 before owner-approved procedures were provided. Contractor procedures for this work (QCP 8.0, Revision 0, "Nondestructive Testing Procedure for Ultrasonic Inspection;" QCP 8.2, Revision 0, "Qualification and Certification Procedure for Nondestructive Test Personnel;" and QCP 8.4, Revision 0, "Nondestructive Test Qualification Criteria") were approved by the owner (owner's agent) on November 8, 1976. This nonconforming condition was not identified nor were the weld joints retested after an approved procedure was provided.

This is an Infraction (Civil Penalty - \$3000.00).

2. The testing of safety related pipe whip restraints is prescribed in part by Contractor Procedure No. QCP 8.0, Revision 0, "Non-destructive Testing Procedure for Ultrasonic Inspection." Paragraph 4.4 of this Procedure, states, in part, that "...Before the angle beam examination, the area of the base material through which sound will travel in angle beam examination shall be completely scanned with a straight beam search unit to detect any reflectors which might affect the interpretation of angle beam results...."

Contrary to the above requirements, information was unavailable to indicate that straight beam examination was accomplished during ultrasonic examination of safety related pipe whip restraints Nos. PWS 315-5, 315-6, 315-7 and 315-8. The ultrasonic test records for these restraints, dated June 21, 1978, indicate that only angle beam examination was performed.

This is an infraction (Civil Penalty - \$3000.00).

3. The fabrication and testing of safety related pipe whip restraints is prescribed in part by WPPSS Contract Specification No. 2808-90 which requires that nondestructive testing personnel be qualified in accordance with the requirements of the American Society for Nondestructive Testing Recommended Practice No. SNT-TC-1A (Third Edition).

SNT-TC-1A specifies that individuals who read and interpret indications (test results) shall be certified NDT Level II or III and that the certification is not transferable between employers. For certification as a NDT Level II, an individual must be administered a general written examination (covering basic test principles); a specific written examination (covering equipment, operating procedures, and techniques); and a practical examination (to demonstrate operation of equipment and analysis of resultant information).

Contrary to the above requirements:

- a. An individual, who was never qualified by the contractor, performed the required nondestructive magnetic particle testing on pipe whip restraints Nos. PWS 27-1, 27-5, 28-1, 28-2, 31-4, 32-3 and 33-4. Quality records for these tests are dated August 17, 1976, August 17, 1976, August 17, 1976, August 17, 1976, August 19, 1976, August 19, 1976 and August 25, 1976, respectively.



- b. An individual, who had not taken a "specific" written examination for magnetic particle testing as required by SNT-TC-1A, performed the required magnetic particle testing on pipe whip restraints PWS 36-8 on August 4, 1976, PWS 36-12 and PWS 36-13 on August 11, 1976, and others.

This is an Infraction (Civil Penalty - \$3000.00).

- B. 10 CFR 50, Appendix B, Criterion V, states 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Paragraph D.2.5.5 of the WPPSS Quality Assurance Program documented in the PSAR states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances...The activity may be prescribed in job specifications, work instructions, shop construction drawings, job tickets, planning sheets, operating or procedure manuals, test procedures, or any other type of written form, provided that the activity is adequately described. Quantitative criteria, such as dimensions, tolerances, and operating limits...shall be specified...."

WPPSS Contract Specification No. 2808-90 for safety related pipe whip restraints specifies that work shall be done in accordance with the AWS Structural Welding Code D.1.1-1974. Paragraph 3.7.3 of this code, states, in part, that "...Members distorted by welding shall be straightened by mechanical means or by carefully supervised application of a limited amount of localized heat. The temperature of the heated areas as measured by approved methods shall not exceed...1200F...."

Contrary to the above requirements, no documented instructions, procedures, or drawings were provided to control the application of localized heat during the straightening of pipe whip restraint subassemblies as documented on Manufacturing Order Nos. 0710, 0726, 0730, 0735 and 0736 during August and September 1976. Control of the maximum temperatures of the heated areas was not assured nor is there documentation of the methods used to measure the temperatures or the actual temperatures reached during the activity. Temperature control during the heat straightening process is important in assuring the as built physical properties of the material.

This is an Infraction (Civil Penalty - \$3000.00).

- C. 10 CFR 50, Appendix B, Criterion XVII, states that "Sufficient records shall be maintained to furnish evidence of activities affecting quality. The records shall include at least the following: operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. The records shall also include closely related data such as qualifications of personnel, procedures, and equipment. Inspection and test records shall, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. Records shall be identifiable and retrievable. Consistent with applicable regulatory requirements, the applicant shall establish requirements concerning record retention, such as duration, location, and assigned responsibility."

Paragraph D.3.4.17 of the WPPSS Quality Assurance Program as documented in the PSAR states in part, that "Sufficient records will be prepared as work is performed to furnish documentary evidence of the quality of items and of activities affecting quality...The Records include, as a minimum, the results of reviews, inspections, tests, audits, monitoring of work performance...Inspection and test records will, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. Required records will be identifiable and retrievable..."

Contrary to the above requirements:

- a. On January 24, 1980, quality records were not retrievable which identify the individuals who performed many of the visual inspections on pipe whip restraints as indicated by the following examples:
- (1) Pipe whip restraint Manufacturing Order No. 0457 for PWS 53-15 documents inspections performed by inspector No. 6 on August 13, 1976. The contractor has no records available to provide the identity of this individual.
  - (2) Manufacturing Orders 0213 and 0686 for restraints PWS 53-1 and 54-14 document inspections performed by an inspector No. 9 on July 21-22, 1976. The contractor has no records available to provide the identity of this individual.

The lack of the above records does not enable verification that the inspections were performed by qualified personnel.

- b. On January 23, 1980, information contained in quality records was inconsistent and did not accurately reflect activities performed on safety-related pipe whip restraints as indicated by the following examples:

- (1) Magnetic particle test reports for PWS 36-23, 52-8, 36-1, 35-5B, 34-5B, and 32-7 contain data and inspection results written by one inspector and bear the photocopied signature of a different inspector (the two individuals reported that they did not collaborate on the inspections involved).
- (2) Ultrasonic test reports for restraints Nos. PWS 1-1 and 2-1 reported that the ultrasonic testing was performed on October 5, 1976 after post weld heat treatment (PWHT); the manufacturing orders for the same restraints recorded PWHT as occurring on October 6, 1976.
- c. Manufacturing Order No. 0750 for restraint No. PWS 53-14 documents that inspector No. 5 performed magnetic particle testing on the restraint on September 24, 1976, whereas the test report for that restraint bears the photocopies signature of a different inspector.
- d. Magnetic particle inspection report for restraint PWS 36-9 reports that the testing was performed on welds 6 and 7 on August 4, 1976; however, the record bears the photocopied signature of an inspector who was not hired until August 16, 1976.

The above noted inconsistencies has resulted in records which do not provide assurance that these activities were satisfactorily performed.

This is a Deficiency (Civil Penalty - \$1000.00).

### III. Items of Noncompliance Relating to Recent Construction Activities

- A. 10 CFR 50, Appendix B, Criterion V, states 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. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Paragraph D.2.5.5 of the WPPSS Quality Assurance Program documented in the PSAR states, 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...."

1. The control of welding filler material, a quality affecting activity, is prescribed for the prime site piping contractor (Contract Specification No. 2808-215) in his Work Procedure No. 1, Revision 20, "Issuing and Control of Weld Filler Material". Paragraph 5.8 of this procedure, states, in part, that "...Portable rod ovens shall be connected to a reliable electric source during the shift. The pink copy of the Form NF-69 must remain with the rod until the rod is consumed or restocked...."

Contrary to the above requirements:

- a. On February 25, 1980 in reactor building room 3C at elevation 548, the subject contractor had a portable rod oven containing Type E-7018 low hydrogen weld rod which was open and not connected to a power source. The weld rod was at ambient temperature, and the welder was not in the area.
- b. During a previous inspection on January 16, 1980, two unused coated electrodes and one partial length coated electrode were lying loose, unattended and not contained in a portable oven at elevation 540 in the reactor containment building. Welding in this area was under the control of the subject contractor. The filler material withdrawal form NF-69 was not in the vicinity of the electrodes.
- c. On January 17, 1980, six unused Type 7018 coated electrodes were similarly lying loose at elevation 560 in the reactor containment building. The filler metal withdrawal Form NF-69 was not in the vicinity of the electrodes.

This is an Infraction. (Civil Penalty - \$3000.00).

2. The fabrication and inspection of safety related pipe hangers is prescribed in part by the prime site piping contractor's instructions delineated in Quality Control Procedure Number 24, Revision 8 (entitled "Hanger Inspection - Traceable Systems", QCP-24) and Project Directive No. 75, Revision 4, (entitled "Hanger Engineering Standards", PD-75). Paragraph 10.2(A) of QCP-24 states, in part, "Visually inspect all welds...Weld size less than shown on as-built is unacceptable...." Paragraph 7.5 of PD-75 states, in part, that "The configuration of supports shall be in accordance with the as-built hanger detail..." Paragraph 10.1.2 reiterates that "Unacceptable conditions are weld size less than shown on as-built...."

Contrary to the above requirements, on February 26, 1980, safety related pipe hanger No. HPCS-48 had received quality control inspection by the subject contractor and was considered acceptable, yet the hanger had one fillet weld that was 1/16 inch under-size, and a rigid strut and its mounting bracket were oriented 90 degrees from the configuration shown on the as-built drawing.

This is an Infraction (Civil Penalty - \$3000.00).

3. The requirements for designating inspection requirements and documenting inspections for safety related pipe supports are prescribed in part by the prime site piping contractor's instructions delineated in Project Directive Number 75, Revision 4 (entitled "Hanger Engineering Standards", PD-75) and Quality Control Procedure Number 24, Revision 8 (entitled "Hanger Inspection - Traceable Systems",



QCP-24). Paragraph 5.3 of PD-75 states, in part, that "Engineering shall indicate the NDE...and visual inspection required for traceable systems." Table 1, page 5A, of the same document specifies magnetic particle (MT) or liquid penetrant (PT) examination of ASME Section III, Class II, attachment welds to pressure parts. Paragraph 10.2(A) of QCP-24 states, in part, "Visually inspect all welds..." Further, paragraph 10.3 of QCP-24 states, in part, that "If the welds are acceptable...initial, stamp and date the applicable box on the NF-6A. Assure that all NDE requirements and any A.I. 'Hold' point have been satisfied...."

Contrary to the above requirements, on February 26, 1980, for pipe support No. LPCS-12, engineering had not indicated the NDE and visual inspection requirements for lug weld number 6 on pipe support LPCS-12 nor had a quality control inspector initialed, stamped, or dated the applicable inspection box on the NF-6A form for this weld (other quality records, however, indicated that some NDE had been performed on the weld).

This is a Deficiency (Civil Penalty - \$1000.00).

4. The requirements for protecting safety related instrument tubing are prescribed, in part, by the prime site electrical contractor's Procedure CP208 which states under General Maintenance Requirements that, "...covers, caps, plugs and other closures shall be maintained intact...." This procedure goes on to state "...dust coverings, shrouds, local sealing, heating methods and mechanical cleaning shall be employed to keep the structure as clean and dry as possible...."

Contrary to the above requirements, on February 28, 1980 safety-related instrument rack No. H22-P005 had three sections of tubing which had been disconnected with the ends left open, exposing the internals of the system.

This is an Infraction. The failure to properly cover, cap, or plug safety-related instrument tubing was cited previously as an item of noncompliance in IE Inspection Report No. 50-397/79-16. (Civil Penalty - \$4000.00).

This Notice of Violation is sent pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. The Washington Public Power Supply System is hereby required to submit to this office within twenty days of the receipt of this Notice, a written statement or explanation in reply, including for each item of noncompliance (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved.

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-397/80-02 04 *in PDR*  
Docket No. 50-397 License No. CPPR-93  
Licensee: Washington Public Power Supply System  
P. O. Box 968  
Richland, Washington 99352

Facility Name: Washington Nuclear Project No. 2 (WNP-2)

Investigation at: WNP-2 Site, Benton County, WA; Seattle, WA and environs;  
Tigard, Oregon

Investigation conducted: November 27-30; December 5-7, 12-14, 1979; Jan. 9-11,  
22-25, 29-Feb. 1, Feb. 11-14, 25-28, 1980.

Inspectors: ☒ *46-3722* *W* W. Bishop, Reactor Inspector Date Signed  
☒ D. P. Haist, Reactor Inspector Date Signed  
W. J. Wagner, Reactor Inspector Date Signed  
☒ Owen C. Shackleton Jr., Investigator Date Signed

Approved By: ☒ Ronald C. Haynes, Chief, Projects Section Date Signed  
Reactor Construction and Engineering Branch

Summary:

Investigation conducted between November 27, 1979 and February 28, 1980  
Report No. 50-397/80-02)

Areas Investigated: Non-routine, unannounced investigation by regional based inspectors and an investigator of reported photocopying of inspectors signatures on pipe whip inspection records and other record irregularities. The investigation subsequently expanded to the sacrificial shield wall and included examinations of personnel qualifications, records and records generation practices, fabrication and inspection procedures, completed work activities.

The investigation involved 294 hours by three NRC inspectors and an NRC investigator.

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Cover page only  
of 27 pages

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