



Washington Public Power Supply System
A JOINT OPERATING AGENCY

P. O. Box 968 3000 GEO. WASHINGTON WAY RICHLAND, WASHINGTON 99352



May 15, 1981
G02-81-99

Nuclear Regulatory Commission
Region V, Office of Inspection and Enforcement
Suite 202, Walnut Creek Plaza
1990 North California Boulevard
Walnut Creek, California 94596



Attention: Mr. R. H. Engelken, Director

Gentlemen:

Subject: WPPSS NUCLEAR PROJECT NO. 2
DOCKET NO. 50-397
FOURTH PROGRESS REPORT - 10CFR50.54(f)

- Reference:
- 1) G02-80-153, N.O. Strand to USNRC, "WPPSS Nuclear Project No. 2, Docket No. 50-397, EA-80-20, Notice of Violation and Additional Information - 10CFR50.54(f)," dated July 17, 1980.
 - 2) G02-80-259, R. G. Matlock to USNRC, "WPPSS Nuclear Project No. 2, Docket No. 50-397, WNP-2 Management System Description," dated November 12, 1980.
 - 3) G02-81-56, "WPPSS Nuclear Project No. 2, Docket No. 50-397, Third Progress Report - 10CFR50.54(f)," dated March 12, 1981.

This is the fourth bi-monthly Progress Report on the actions we have taken in regard to our commitments in References 1 and 2.

Substantial progress has been made in the Restart Program during this reporting period. Fourteen (14) activities were released for restart and the Task Force reviews of the remaining eleven (11) are nearing the completion stages. I fully expect most of the planned restart activities to be completed before June 1, 1981. Details of our progress on a contractor basis are more fully described in Attachment 1.

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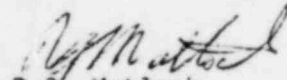
Mr. R.H. Engelken
Page 2
WPPSS Nuclear Project No. 2
Docket No. 50-397
Fourth Progress Report - 10CFR50.54(f)

Planning for the Reverification Program activity continues. A quality verification program is evolving which addresses the adequacy of past work and the supporting documentation. The program utilizes resources of the Supply System and the Systems Completion Contractor, and provides an overall integrated plan for examining documentation and hardware. Documentation reviews are currently underway and hardware reinspections are expected to begin in the next reporting period. A formal presentation of this Reverification Program to Region V personnel is anticipated during the next reporting period.

Coincident with the completion of the Restart Program, the bulk of the management systems work assigned to Task Force III is also nearing completion. However, the management systems overview activity will continue throughout the completion of the Reverification Program to disseminate additional lessons learned from this activity. Details of Task Force III activities are contained in Attachment 2.

Should you have any questions regarding the nature or content of the review program or the report, please feel free to contact me at your convenience.

Very truly yours,



R.G. Matlock
Program Director, WNP-2

- Attachments: 1) Review of Completed Safety-Related Work -
Progress Report
- 2) Assure The Management Systems Used
To Control Continuing Work Are Adequate -
Progress Report

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ATTACHMENT 1

TASK FORCE II

REVIEW OF COMPLETED SAFETY-RELATED WORK
PROGRESS REPORT

A. INTRODUCTION

This attachment is keyed to the underlined statements in Attachment I of the Supply System response (G02-80-153) to the USNRC 10CFR50.54(f) letter (EA-80-20). Statements from the response letter are repeated (underlined and keyed to response letter paragraph) and these are followed by our progress response. The response statements have been arranged into four groups: 1) Management Practices and Controls; 2) Task II-Phase 2; 3) Schedule; and 4) Restart Activities, Task II-Phase 1, to allow meaningful progress reporting, eliminate redundancy, and reduce referencing to other sections of the report.

B. MANAGEMENT PRACTICES AND CONTROLS

- C-1 Review of records, installation and hardware will be accomplished under Owner direction and control.
- C-2 The review shall be integrated with on-going plans and management systems to assure proper feedback to on-going work and to adjust the review in response to knowledge acquired.
- C-3 This program will have priority over on-going work. The Project construction work pace will be adjusted accordingly.
- C-4 The basis for key decisions will be documented.
- E-2-2 Determine whether other inspection or evaluation programs have satisfied or will satisfy the requirements of this program.

No major changes were made to the above elements during this reporting period.

C. TASK II - PHASE 2

- B-1 Determine whether the Quality Assurance Program was adequate in the past to assure completed safety-related work was properly performed.
- B-2 Identify the need for repairs or further actions.
- E.2.3 Record Review.
- E.2.4 Receipt Inspection.
- E.2.5 Installation Reinspections.
- E.2.6 Deficiencies.

Deficiencies identified during the performance of record review, reinspection of installation and reinspection of received material shall be documented.

An analysis of the number and types of deficiencies identified shall be performed to determine the root cause of the problem and appropriate corrective action initiated. Relevant information will be communicated to all Projects.

The Supply System has re-examined the above commitments, as well as the concerns they were designed to address, to determine the effect of the planned transition from bulk construction to systems-oriented construction. As a result, a quality verification program is being prepared which considers the previous commitments outlined in G02-80-153, and describes the review of past work for each of the following three activities:

a) Systems Completion

Verification reviews of documentation and sample reinspections of hardware, which are to be accomplished on a Startup-System basis.

b) Prepurchase and Inactive Site Contracts

Similar reviews and reinspections, which are to be completed on a contract-by-contract basis, and which will be coordinated to meet systems-completion construction schedules.

c) Special Tasks

Similar reviews and reinspections as appropriate for specialized activities which do not lend themselves to a) or b). These include such tasks as deficiency document reviews for correctness of disposition and receiving reinspection.

The detail planning for the quality verification program is nearing completion and this activity is anticipated to begin in the next reporting period.

D. SCHEDULE

E.2.1 Determine the criticality and priority of items for review and/or reinspection.

Attachment I-A is the latest schedule for the Restart Program. Two commodity additions were made during this reporting period, bringing the total to thirty-one (31) activities. Contract 210 (Peter Kiewit Sons) was added to cover miscellaneous civil activities and the remaining Sacrificial Shield Wall Weld repairs were identified as a separate commodity item.

The schedule for the quality verification program (Task II-Phase 2) is under development.

E. RESTART ACTIVITIES, TASK II-PHASE 1

General

There were no changes made to the approved Restart Program Plan during this reporting period. Attachment 2-C in Progress Report Number 3 is the current plan.

E-1 Identify all contractors, subcontractors, and pre-purchased equipment contractors performing safety-related work, the status of their work, and the status of final documentation review.

Contractors and subcontractors performing safety-related work have been identified and the status of their work is being reviewed on a commodity basis to support the restart schedule (Attachment 1-A).

Specific progress toward restart of the major contractors is presented in the following sections.

1. Contract 220 - Johnson Controls

Progress Report Number 3 reported the completion of the restart program activities for this contractor.

2. Contract 216 - Waldinger Corporation

The final documentation packages were completed and the contractor was conditionally released to restart work on all assigned commodities on March 13, 1981, except for work covered by the MCC-Powers subcontractor.

3. Contract 215 - Wright-Schuchart-Harbor-Boecon-Geri

The restart program final documentation packages were released on April 28, 1981 for review by Project Quality Assurance, the Independent Review Team, and the Resident NRC Inspector.

The commodities covered by these data packages are:

- o Remanufacture and Repair of Pipe Whip Restraints
- o Large and Small Bore Hangers, Concrete Inserts, and Installation of Pipe Whip Restraints
- o Large and Small Bore Pipe except CRD Piping
- o Repair of SSW Accessible External Welds to AWS D1.1 Visual Acceptance Standards

The commodities not included in these documentation packages are:

● WBG Prime Work

1. Cathodic Protection
2. Structural Steel
3. Mechanical Equipment Installation
4. Instruments
5. Civil Work - Currently being assigned to PKS, except grouting, and includes excavation, compacting, rebar placing, cadwelding, concrete placing.
6. Spent Fuel Racks
7. Heat Tracing

● WBG Subcontractor Work

1. Brand Insulation - Reflective and Calcium Silicate on RPV, piping, and equipment.
2. Chemtrol - Watertight boots (all work presently installed QC II, but PED has been issued to upgrade to QC I.)
3. GE/I&SE - CRD System (Pipe, Hangers, and Equipment), CRD Handling Crane, Refueling Crane, RPV Internals.
4. Concrete Coring - Concrete Drilling

Of the 117 procedures identified for Contract 215, 105 have been submitted and are in the final approval process, this total also includes one subcontractor. (NIX Testing)

As a result of review of NRC concerns and findings, it became evident that a more systematic verification of closure of these items was required. A team has been established under PQA to review each open NRC item to assure adequate resolution prior to restart of affected commodities.

4. Contract 213A - Pittsburgh-Des Moines

The final documentation packages were completed and the contractor was released to restart work on the remaining commodities on April 1, 1981. The release for the weld pad commodity was reported in Progress Report Number 3.

5. Contract 218 - Fischbach/Lord

Final documentation packages for the remaining commodities assigned to Fischbach/Lord were completed and the contractor was released to restart construction work activities on April 2, 1981. Release of Receiving Inspection was covered in Progress Report Number 3.

6. Contract 234 - O.B. Cannon

The Concrete Substrate Coating final documentation package was completed and the contractor was released to restart work on this commodity on February 6, 1981. The Task Force review led to a joint rewriting of O.B. Cannon's Quality Assurance Program and Construction Procedures to comply with the specification, standards and applicable codes. Through this joint effort the procedures were developed, reviewed, and commented on by Task Force II.

The Steel Substrate Coating final documentation package was completed and the contractor was released to restart work on this commodity on April 20, 1981.

7. Contract 219 - O.B. Cannon

The Special Coating's final documentation package was completed and the contractor was released to restart work on April 14, 1981. The Task Force review led to a joint rewriting of O.B. Cannon's Quality Assurance Program and Construction Procedures to comply with the specification, standards and applicable codes. Through this joint effort the procedures were developed, reviewed, and commented on by Task Force II.

There are now twenty-four (24) approved procedures which include a Quality Assurance/Quality Control Program and Construction Procedures for the application of special coatings to concrete/steel substrates. The one remaining procedure, pertaining to the application of special coating to concrete substrate (system SPC-05) will be reviewed and approved prior to restart of those activities.

8. Contract 217 - Sentry

Task Force identified forty-six (46) procedures to be reviewed. Procedure review was completed on all procedures and comments have been acceptably resolved for forty-four (44) procedures. The two (2) remaining procedures are currently in the final revision process and are punch listed.

The final documentation package was completed on May 1, 1981 and it has been submitted to Project Quality Assurance for review.

9. Contract 210 - Peter Kiewit Sons

The 210 contractor, Peter Kiewit Sons, has been added to the Level III Restart Schedule. Twenty-seven (27) procedures have been identified as being required to begin Class I work. The Task Force has completed initial review of 16 of the required 27 procedures. Contractor is currently revising these 16 procedures to incorporate Task Force comments.

The contractor is also upgrading his QA Manual. The projected restart date for Contract 210 is May 8, 1981.

E-2.6.2 Deficiencies in meeting the requirements of 10CFR50.55(e) and/or Part 21 shall be reported to the NRC in accordance with approved procedures. Others shall be summarized in the bi-monthly report to the NRC Region V Office.

The Task Force II, Phase I, Restart Program review findings through April 30, 1981 date are shown in Attachment 1-B.

The Software Findings Analysis and the Hardware Findings Analysis described on pages 3, 4 and 5 of Attachment 2-D of Progress Report Number 3 have not been included in this report. The procedure reviews continued to generate similar findings for each contractor and therefore the Progress Report Number 3 analysis is representative of the results of this activity. Overall, over 600 procedures were evaluated and over 1800 significant comments are compiled in the applicable final documentation packages.

The Hardware inspections were discontinued in December 1980 and this information will be updated with the commencement of the Quality Verification Program activities.

LEVEL III / RESTART SAFETY RELATED WORK

ACTIVITY DESCRIPTION	CONTRACT #	STATUS DATE AS OF												IMPACT	ACTIONS*			
		1993	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV			DEC		
WELD PADS-CONTAINMENT	213A																	
METWELL GRIND & WELD CLEANUP	213A																	
MSRY COLLARS & QUENCHERS	213A																	
BWR PIPE	213A																	
FP/CFR/DR HGRD & PIPE	213A																	
DOWNCOMERS	213A																	
PERMEATION ACTIVITIES	213A																	
CHECK SEAL	213A																	
CATV. & TRDRP	213A																	
SITE FABRICATION	213A																	
GIRDMELD REPAIR	215																	
L.B. HANGERS & CONC. INSERTS	215																	
PWP-REPAIR & INSTALL	215																	
L.B. & S.B. PIPE	215																	
SUPPL. & STRUC. STEEL	215																	
MAJ. EQUIP. RECON.	215																	
CAD PIPE & TA'	215																	
INSURMENTS	215																	
INSULATION	215																	
WELD REPAIR (SSW)	215																	
L.P.-S.B. HANGERS/PIPEREQIP	216																	
EGT. & TUBING & SUPPORTS	216 PC																	
SPRINKLERS	217																	
RECEIPTS INSPECTION	218																	
RACEWAY, CABLE, TERM. EQUIP., ETC	218																	
COATINGS	219																	
P. & PIPING	220																	
INSUR. RACKS	220																	
LOCAL INSTR.	220																	
SP.C. COATINGS - CONCRETE	234																	
SPEL. COATINGS - STEEL	234																	
P. & S.	210																	

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NOTES
* THIS COMMITTEE IS NOT FULLY SUPPORTED BY LEVEL V DETAIL.
PREPARED BY: *Handwritten name*

POOR ORIGINAL

RESTART PROGRAM - REVIEW STATUS

ATTACHMENT 1-B
Page 1 of 1

COMMODITY TITLE CONTRACTOR	PROCEDURE REVIEWS			PERSONNEL QUALIFICATIONS			DEFICIENCY REVIEWS		
	I D E N T	C O M P L E T E	R E M A I N	I D E N T	C O M P L E T E	R E M A I N	I D E N T	C O M P L E T E	R E M A I N
GIRTH WELD REPAIR WBG	23	23	0	22	22	0	387	387	0
PDM	72	72	0	29	29	0	290	290	0
LARGE BORE HANGERS, AND PWR-REFAB WBG + LARGE & SMALL BORE PIPING REPAIR OF SSW ACCESSIBLE EXTERNAL WELDS	117	105	12	N/A			501	501	0
SPECIAL COATINGS O.B. CANNON (219 & 234)	59	48	11	13	13	0	112	112	0
ALL FISCHBACH/LORD	117	93	24	10	10	0	88	88	0
P.I. PIPING JOHNSON CONTROLS	63	63	0	15	15	0	166	166	0
WALDINGER 216	129	119	10	26	26	0	99	99	0
SENTRY AUTOMATIC 217 SPRINKLERS	46	44	2	N/A			39	39	0
PETER KIEWIT 210	27	0	27	N/A			In Progress		
TOTAL	653	567	86	151	151	0	1682	1682	0

ATTACHMENT 2

TASK FORCE III

ASSURE THE MANAGEMENT SYSTEMS USED TO CONTROL CONTINUING WORK ARE ADEQUATE - PROGRESS REPORT

COMMITMENT:

- 1) Focus on improving methods throughout the organization to systematically identify and correct underlying causes of problems in a timely manner.
- 2) Perform analysis of results from "Resolution of Concerns/Problems" (Task Force I) and "Reverification" (Task Force II) for application to any necessary changes to management controls for WNP-2 Project and contractors' organizations. Consider management system changes made over the past two years and determine the need for additional improvements.
- 3) Perform reviews of various, previously performed consultant studies regarding quality assurance improvements for WNP-2 Project.
- 4) Transmit knowledge gained in reviewing past work at WNP-2 to the other Supply System projects to permit evaluations of their management control systems.

GENERAL

The commitment objectives to strengthen overall management control systems at the WNP-2 Project and to disseminate the significant lessons learned to other Supply System projects was described in Progress Report Number 3.

Six (6) Lessons Learned Bulletins have been issued through April 1981. About one third of the twenty-one issues disseminated to all Supply System Nuclear Projects have originated from the experiences at WNP-2 Project.

With the Restart Program nearing completion, the bulk of the managements systems work related to the control of continuing work is nearing completion. However, the Lessons Learned activity and the application of knowledge from and to the Reverification Program will continue. These activities will continue to be reported as a Task Force III activity.

PROGRESS

Progress is reported against the commitments and topics described in Progress Report No. 3 (Reference 3)

1. Improving Methods

A. Major Mechanical Contractor

The Supply System performed another evaluation and spot check of the WBG Management System on April 21-24, 1981. This review found that the system was being used, that internal audits were adequately uncovering both system and performance deficiencies and that internal corrective actions were effectively dealing with both issues. Procedural clarification and finalization activities are continuing on some of the essential activity controls. However, the management control system is considered adequate to control continuing work activities pending completion of the issues now under resolution by the Restart Program.

No further reviews or evaluations by Task Force III are planned. The WBG Management Control System is now a controlled document approved by the Supply System and subject to the normal project internal/external audit/surveillance controls.

B. Other Contractors

These activities were reported in Progress Report Number 3 and are considered complete from a Task Force viewpoint.

C. Project Improvement

1. The need for a WNP-2 Project Master Flow Chart describing major project management - contractor interfaces and the supporting sub-flow charts is being reassessed.

This activity is still in progress.

2. Analysis of Results

A special task has been initiated to extract lessons and knowledge learned from the Task Force II, Phase 1 work activities. This information will feed into both the Re-verification Program planning and into the Lessons Learned activity. The review of final documentation packages is now in process.

3. Consultant Studies

Completed in Progress Report Number 3.

4. Transmit Knowledge Gained

This is a continuous activity. Progress Report Number 3 reported on the methods established to meet this commitment.

D. Management System Modifications

This section has been added to report modifications to the statements in Reference 2.

1. WBG Management System Modifications

- a. Paragraph 2.1 of Attachment 2 to Reference 2 required craft personnel to be tested to all work procedures. This requirement was clarified to require training of all craft and non-manual personnel and testing of all non-manuals. Craft testing to individual work procedure is required only where there are specific prescribed requirements in the approved training program; e.g. welding, NDE, etc.
- b. Paragraph 3.7.3 of Attachment 3 to Reference 2 required the originator of an inspection report (IR) to receive a copy of the dispositioned report. Procedures were established to assure that the IR originator does receive a copy of each voided or otherwise unacceptable IR. Copies of all dispositioned IR's are available to any inspector at all times. This provision meets the original intent of the above commitment.