



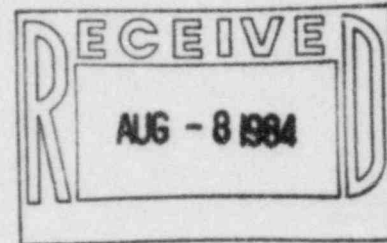
# Public Service Company of Colorado

16805 WCR 19 1/2, Platteville, Colorado 80651

50-267

August 3, 1984  
Fort St. Vrain  
Unit No. 1  
P-84255

Mr. E. H. Johnson, Chief  
Reactor Project Branch 1, Region IV  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive  
Arlington, TX 76011



SUBJECT: I & E Inspection Report 84-14

REFERENCE: 1) NRC Letter dated  
July 6, 1984, G-84232  
2) NRC Letter dated  
July 11, 1984, G-84241

Dear Mr. Johnson:

This letter is in response to the Notice of Violations and Deviation received as a result of inspections conducted at Fort St. Vrain during the period May 1-31, 1984. The inspection results are also under other considerations via Reference 2. Those issues will be handled separately from this response.

The following response to the items contained in the Notice of Violations and Deviation is hereby submitted:

## NOTICE OF VIOLATION

### Failure to Follow Procedures

10 CFR 50, Appendix B, Criterion V, states, in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, . . . ."

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The licensee's Final Safety Analysis Report, Section B.5.2, "Quality Assurance Programs," states,

"B.5.2.2      Program Procedures

"Procedures fully describing the Quality Assurance Program are maintained in the FSV Administrative Procedures Manual. The "Q"-series procedures serve as the Quality Assurance Manual and conform to the requirements of 10 CFR 50, Appendix B, by providing an individual procedure to describe the FSV program for each of the 18 Criteria. Compliance with the FSV Administrative Procedures Manual is mandatory for all personnel assigned to nuclear production activities affecting quality of safety-related items. Detailed procedures are provided, where required, by procedures subordinate to the FSV Administrative Procedures Manual (see Subsection B.5.2.10)."

Technical Specification 7.4.a, "Procedures, Administrative Controls," states in part, that, ". . . written procedures shall be established, implemented, and maintained. . . ."

1. Administrative Procedure P-2, "Equipment Clearances and Operation Deviations," Issue 9, dated May 24, 1984, states in part,

"3.3 Operation Deviations are used whenever compliance with established operational procedures is not possible. ODR's serve to document, authorize, control and restore deviation situations to normal. System Status cards are shown in Attachment P-2B."

Standard Operating Procedure SOP 46, "Reactor Plant Cooling Water System," Issue 32, dated May 2, 1984, states, in part,

"1.2.8 Each surge tank (T-4601, Loop 1, and T-4602, Loop 2) will be supplied a nitrogen cover gas maintained at 2 psig by PCV-4617 and PCV-4618 in an effort to reduce 46 system corrosion."

Contrary to the above, on May 22, 1984, the SRI determined that the nitrogen blanketing subsystem for the System 46 surge tanks had been in a deviation situation without Operations' knowledge as a result of an ODR not being used when compliance with SOP 46 was not possible.

This is a Severity Level IV Violation. (Supplement 1.D)  
(50-267/8414-01)

- (1) The corrective steps which have been taken and the results achieved:

The nitrogen pressurization system used to provide a cover gas on the System 46 surge tanks is a secondary method of corrosion control for the PCRV liner cooling system which normally uses hydrazine as an oxygen scavenger. Upon notification by the SRI that the system was not in service, and that an ODR had not been written to the SOP, an ODR was written and the system was tagged out. The N<sub>2</sub> system will only provide a cover gas for the surge tanks when there is little or no helium inleakage to the system. In this particular situation, the N<sub>2</sub> system would not have been supplying cover gas due to helium inleakage. The nitrogen pressurization system was correctly placed out of service upon valving out the system and issuing the ODR.

- (2) Corrective steps which will be taken to avoid further violations:

Our investigation did not reveal any reason for the N<sub>2</sub> system to be disconnected nor were we able to establish an approximate time frame for its removal from service. The Reactor Equipment Operator's Log does not contain a specific requirement to check the N<sub>2</sub> cover gas compressed gas cylinders. The log will be revised to contain specific reference to these cylinders by September 30, 1984.

- (3) The date when full compliance will be achieved:

The N<sub>2</sub> is presently in service. The Reactor Equipment Operator's Log will be revised by September 30, 1984.

2. Administrative Procedure P-8, "Fire Fighting and Prevention," Issue 10, dated November 16, 1983, states, in part,

- "c) Flammable items, such as some Anti-C clothing and wiping rags must be kept in a non-combustible bin or container until required; and placed in approved waste storage upon disposal.
- "d) Records, drawings, equipment manuals, and similar items must be stored in suitable cabinets (non-combustible) when not in use. Quantities in use must be kept to reasonable minimums. Plastic-laminated drawings may be located throughout the Plant as required for personnel information."

Maintenance Procedure MP 11-9, "Detensioning PCRV Tendons," Issue 1, dated April 25, 1984, states, in part,

"3.4 HOUSEKEEPING

"3.4.1 ANSI Zone V for all work not controlled by RWP.

\* \* \*

"3.4.3 Combustible material, i.e., parts containers, wipes, rags, etc., shall be contained in covered flame proof containers.

"3.4.4 All combustible material, as it is used, shall be disposed of in covered flame proof containers."

Contrary to the above, on May 22, 1984, the SRI identified areas inside the reactor building where: unused combustible material was not stored in covered flame proof containers, used combustible material was not kept in non-combustible bins or containers, equipment manuals (procedures) were not stored in suitable cabinets, and work areas were not controlled in accordance with ANSI Zone V requirements.

This is a Severity Level IV Violation. (Supplement 1.D)  
(50-267/8414-02)



- (1) The corrective steps which have been taken and the results achieved:

An extensive housekeeping effort has been made and continues throughout the Fort St. Vrain plant to clean up the plant after the recent refueling outage. Small flame proof containers have been issued to the PSC Maintenance and outside contractor staff to control transient combustibles on a shift-by-shift basis. All Maintenance Supervisors conducted shop meetings or made individual contact with Maintenance personnel to instruct them on methods of controlling combustible materials and good housekeeping practice.

Maintenance Supervisors have increased their frequency of job site inspections and include housekeeping practice in their job briefings. These recently established controls have produced effective results to date and will be monitored by management to insure compliance and effectiveness.

- (2) Corrective steps which will be taken to avoid further violations:

First line Supervisors in the Maintenance, Results and Operations Departments have been assigned responsibility for housekeeping and control of combustible materials used by their staff. In addition, the fill connection for the hydraulic power units has been moved to grade level in the Turbine Building to further reduce bulk combustibles in the Reactor Building.

- (3) The date when full compliance will be achieved:

July 30, 1984.

3. Overall Plant Operating Procedure OPOP I, "General Plant Requirements," Issue 58, dated May 17, 1984, states, in part,

"C.4 OPOP I.C. Master Check List

"Shift Supervisor

"The following check list is to be signed off as the previous sections of this OPOP have been completed by you . . . ."

\* \* \*

"OPOP I.C. plant status review completed and permission granted to increase power < 2%.

S.S. Signature    Date    Time"

Contrary to the above, on May 24, 1984, the SRI determined that reactor power was greater than 2% and the OPOP I.C. Master Check List had not been completed.

This is a Severity Level V Violation. (Supplement 1.E)  
(50-267/8414-03)

- (1) The corrective steps which have been taken and the results achieved:

The OPOP in question had just been rewritten prior to this violation to provide better clarity and direction and was in use for the first time during the rise-to-power start-up after the refueling outage. The personnel involved had reviewed the new revision but failed to complete the "Shift Supervisor" signature block required to raise power above 2% which is required to ascend above 2% power. Both the Shift Supervisor and Senior Reactor Operator involved have been admonished for their omission and a memo to the effect was placed in their personnel files.

- (2) Corrective steps which will be taken to avoid further violations:

Both personnel were admonished for their omission and were warned that any further failures to follow procedure would result in disciplinary action.

- (3) The date when full compliance will be achieved:

The OPOP I.C Master Check List was completed on May 24, 1984.

4. Administrative Procedure Q-11, "Test Control," Issue 3, dated December 29, 1981, states, in part,

"3.0 GENERAL REQUIRMENTS

"Testing practices employed on safety-related items are required to assure that:

\* \* \*

"b) All testing is performed in accordance with written procedures incorporating requirements, and acceptance limits specified by design or other appropriate documents.

"c) The program provides for, as appropriate, proof tests, pre-operational tests, and operational tests."

Surveillance SR 5.2.16f-RX, "PCRV Auxiliary System Penetration Check Valve Test," Issue 3, dated March 23, 1984, states, in part,

"5.3 Removal and Installation.

"5.3.1 MQC Hold Point \_\_\_\_\_

"Using Procedure MP 11-3 (for refueling penetrations) or Foreign Prints (for HTFA penetrations) remove the check valve(s) from the penetration. Install the tested replacement check valve(s).

"MQC Witness Point \_\_\_\_\_

"NOTE: MQC to verify correct direction flow of check valve(s)."

Maintenance Procedure MP 11-3, "Repair/Replacement of Reactor Penetration Purge Flow and RSD In Line Check Valves," Issue 8, dated March 2, 1984, states, in part,

"4.2.9 Replace check valve with a new or cleaned one.

"Note: Inspection required. Account for all parts installed.

"MQC Witness Point \_\_\_\_\_"

Contrary to the above on May 2, 1984, the SRI determined: that SR 5.2.16f-RX and MP 11-3 had not been adequately followed since three penetration check valves had been installed backwards even though the procedures had been signed off and the check valves contained bench marks identifying correct flow direction, and that SR 5.2.16f-RX did not contain appropriate proof tests since the incorrectly installed check valves were identified as a result of the failure to pressurize the reserve shutdown (RSD) hoppers during performance of SR 5.1.2ad-Q which tests the RSD hopper high pressure alarms and does not test all the penetrations check valves installed by SR 5.2.16f-RX.

This is a Severity Level IV Violation. (Supplement 1.D)  
(50-267/8414-04)

- (1) The corrective steps which have been taken and the results achieved:

Maintenance Procedure MP 11-3 was revised at the time of the event to more explicitly define the orientation of the check valves upon installation. MQC Hold and Witness Points have been incorporated to insure that work is stopped before check valve installation, and that the installation is independently observed.

Surveillance SR 5.2.16f-RX did not contain adequate acceptance criteria or proof tests to preclude the problem from occurring. Surveillance SR 5.2.16f-RX is being totally rewritten to include MQC Hold and Witness Points and adequate proof testing as an acceptance criteria.



Surveillance SR 5.1.2ad-Q was performed to verify correct positioning of all RSD hopper check valves. Special test T-221 was performed to verify correct positioning of all CRD purge helium lines and the HFTA in-line check valves. Incorrectly installed check valves were repositioned. Proof testing on those repositioned valves was then again performed to verify correct installation.

The MQC inspector has been admonished.

- (2) Corrective steps which will be taken to avoid further violations:

SR 5.2.16f-RX (PCRVR Auxiliary System Check Valve Test) will be completely rewritten. Incorporated into the test will be adequate MQC Hold Points to stop work from proceeding and allow MQC to verify proper directional installation of individual check valves. Proof testing upon completion of installation will also be incorporated. This proof test will verify proper directional flow of check valves which were replaced.

For ease of performance of the above mentioned proof test, the feasibility of developing a special test rig will be evaluated. This evaluation will be completed by January 1, 1985.

- (3) The date when full compliance will be achieved:

Surveillance SR 5.2.15f-RX will be rewritten and the test rig evaluation will be completed by January 1, 1985, or prior to replacement of additional check valves, whichever comes first.

5. Administrative Procedure Q-5, "Instructions, Procedures, and Drawings," Issue 3, dated August 31, 1983, states, in part,

"3.0 GENERAL REQUIREMENTS

"Practices employed on the FSV Project are required to assure that:

- "3.1 Documented instructions, procedures or drawings are provided to prescribe activities affecting quality.

"3.2 Activities affecting quality are performed in accordance with such documents."

Contrary to the above, on May 29, 1984, the SRI determined that the current process of performing/controlling control work permits (CWP), procedure/inspection/test/reports (PITR), and deviation reports (DR), which are activities affecting quality, are not prescribed by instructions/procedures and are, therefore, not performed in accordance with such documents.

This is a Severity Level V Violation. (Supplement 1.E)  
(50-267/8414-12)

- (1) The corrective steps which have been taken and the results achieved:

The investigation into this violation has identified two basic short comings.

- A. There is not sufficient detail regarding the instruction for Process Inspection Test Records (PITRs) and Deviation Reports (DRs).
- B. There is currently no one with the overall responsibility for insuring a Construction Records Package is complete prior to turning it over to Records Storage.

Memo NFG-84-0125 was issued to CWP preparers and construction coordinators to clarify the relationship between CWP PITR signoffs and deviation reports (DRs). This clarification is as follows:

1. The responsible organization for a particular step is designated on the PITR form.
2. If a PITR has a dual responsibility denoted, it is the responsibility of the primary CWP assignee (Site Contractor or PSC) to coordinate the PITR activity and signoff.
3. If a DR affects PITR step, the PITR must be marked up as would other drawings in the CWP. This markup will be inserted in the original CWP via the DR by the work coordinator.

This will alleviate any coordination problems regarding Pitr signoffs and will make the Records Storage packages easier to review.

- (2) Corrective steps which will be taken to avoid further violations:

Administrative Procedure G-9 and the CWP are currently undergoing thorough review and rewrite process with a scheduled completion date of January, 1985. This will include such specifics as:

- A. Designate an individual to be responsible for the review of completed work packages to insure that they are complete.
- B. Designate the original DR as the working copy to be signed off during the construction activity. Currently, the original DR is immediately sent to Record Storage and the signoffs are performed on a xerox copy. This gives the impression (during a records search) that there may be work steps that have never been completed.
- C. Include the clarification provided by NFG-84-0125 described above.
- D. Describe in detail the CWP flow paths and responsibilities for jobs that are worked by PSC and those worked by the Site Contractor.

- (3) The date when full compliance will be achieved:

Full compliance will be achieved by January 1985.

NOTICE OF DEVIATION

Deviation from Commitment

PSC letter P-83368, dated November 10, 1983, in response to violations contained in NRC Inspection Report 83-24, states, in part,

- "(2) Corrective steps which will be taken to avoid further violations:

"Administrative Procedures will be revised as necessary to account for the weaknesses identified through the Quality Assurance monitoring program completed on November 9, 1983, as well as those identified in the Notice of Violation . . . ."

- "(3) The date when full compliance will be achieved:

"The above referenced Administrative Procedures will be revised by December 31, 1983."

PSC letter P-84016, dated January 10, 1984, as follow up to P-83368, states, in part,

" . . . Full compliance is now expected to be achieved by January 31, 1984."

Administrative Procedure G-9, "Controlled Work Procedures," Issue 3, dated January 30, 1984, was the result of this commitment which contained a newly revised Attachment G-9A, "Controlled Work Procedure Form," as an attempt to avoid further violations.

In deviation from the above, on May 14, 1984, during a review of controlled work permits (CWP) currently being worked (CWPs 83-219 and 83-220), the SRI determined that the "old" CWP form was still in use. (50-267/8414-05)

- (1) The corrective steps which have been taken and the results achieved:

DCAR-176 was issued to update the CWP manual to include the new form. In May 1984, an effort was undertaken to recover all CWPs not approved by the Supt. of Operations so that a new CWP form could be attached.



- (2) Corrective steps which will be taken to avoid further deviations:

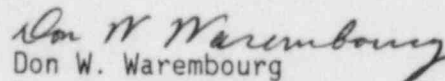
A memo will be issued to people in the CWP cycle to insure that they were aware of the May 1984 effort to locate unapproved CWPs utilizing the old form, to insure that all such CWPs have had the CWP form replaced.

- (3) The date when full compliance will be achieved:

August 31, 1984.

Should you have any further questions, please contact Mr. L. Milton McBride, (303) 571-7436, ext. 201.

Very truly yours,

  
Don W. Warembourg  
Manager, Nuclear Production  
Fort St. Vrain Nuclear  
Generating Station

DWW/djc