



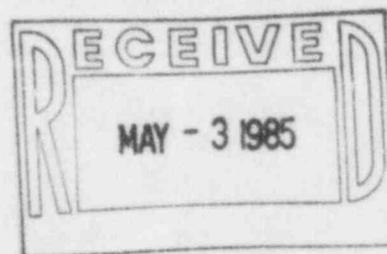
Public Service

Public Service  
Company of Colorado

16805 WCR 19 1/2, Platteville, Colorado 80651

April 26, 1985  
Fort St. Vrain  
Unit No. 1  
P-85144

Regional Administrator  
Attn: Mr. E. H. Johnson  
Region IV  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011



Docket No. 50-267

SUBJECT: Quality Assurance Response  
to NRC Enforcement Meeting  
of April 24, 1985  
REFERENCE: NCR Letter, Johnson to  
Lee, dated 4/19/85  
(G-85145)

Dear Mr. Johnson:

Thank you for providing us with the opportunity to discuss the quality aspects of the control rod drive and orifice assembly (CRDOA) refurbishment program with you and your staff in Arlington, Texas on April 24, 1985.

As stated at that meeting, we believe Fort St. Vrain has a strong QA program supporting the efforts to assure the excellence of the quality aspects of the CRDOA program in which we are engaged.

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85-279

To confirm that the 18 CRDOA's which have been refurbished were completed in accordance with high quality standards, an audit of completed work packages was started on April 18, 1985, and is being conducted using the methodology described below.

#### Subject and Methodology of Audit

As part of the Control Rod Drive Refurbishment, NFSC-G-85-01 Audit, the Fuel Handling Procedure Work Packages (FHPWP) governing the refurbishment of the CRDOA's are being reviewed at this time for proper documentation with emphasis on the QC hold and witness points and for records of task sign-out/sign-in and completion. At this time, three FHPWP's have been partially reviewed, and one FHPWP has been examined in depth.

Based on the final results of this review, the number of additional FHPWP's to be reviewed will be determined to verify that documentation supports the fact that the 18 CRDOA's in core were refurbished to a level of quality as good as or better than the original CRDOA's.

The QC hold and witness points are being examined to assure that the points are signed by QC personnel. If these points are not signed, further investigation is done to determine the reason(s), and resolve the situation.

The task sign-out/sign-in sheets are being reviewed to determine whether full accounting of the steps in each task is accomplished. Each task is to be signed out by the person responsible for accomplishing that task and by the QC inspector on shift, and an indication made of the first step to be performed. At the end of the shift, the responsible person and the QC inspector must sign in each task previously signed out, and indicate the last step completed. When the entire task is completed, the responsible person and the QC inspector must verify and sign that the task is complete. If any of these signatures have been omitted, an investigation is conducted to determine the reasons for the omission.

The investigations performed in the course of these reviews include tracing of Procedure Deviation Reports (PDR's), Non-Conformance Reports (NCR's), and Station Service Requests (SSR's) for written documentation, and/or interviews with the personnel involved in the refurbishment work.

Quality Engineering personnel are also on shift to provide support for the CRD refurbishment program. These engineers review the tasks for assurance that sign-offs are complete and that any anomalies are provided to the Shift Manager for resolution. If resolution cannot be attained, successive orders of management will be involved until resolution is obtained.

#### Preliminary Results of Audit

The preliminary results from the review of QA hold and witness points indicate that the hold and witness points were accomplished, and that this can be determined by a reviewer who is familiar with the FHPWP and attachments, PDR's, and other supporting documentation. In FHPWP-101-42, which was reviewed in depth, there is only one QC hold point that could not be positively identified as having been met. The step containing this hold point (step 4.3) called for the verification of the acceptability of the threads of the slinger nut and the shaft if these were the original parts and were to be reused. According to the supporting attachments to this FHPWP, the workman used a new slinger nut and re-used the original shaft. It is felt that since this situation did not precisely meet the conditions stated in the step, the hold point was N/A'd in error. The successful completion of the subsequent operations verified that this situation did not adversely affect the quality or operation of this CRDOA.

In addition to the audit, specific actions regarding problem areas are discussed below.

#### 1. Personnel Notification

A memo (PPC-85-1697) has been issued to FSV personnel governing Quality Assurance stop work authority. This memo serves to re-emphasize PSC's policy on the stop work authority of quality control personnel. This effort should rectify any ambiguity that may have existed. In addition, a memo (QAC-85-0346) has been issued to QC personnel to specify that hold and witness points that are not applicable during the work operations shall be denoted with an "N/A", signed by the QC individual and a reason provided as to why the point was not applicable. This should eliminate any entries in the procedure that may be confusing.

These memos are included as Attachments 1 and 2.

2. Incorrect Bearing Installation

After a thorough investigation, it was determined that the installation of the bearing (backward) was an isolated instance. The QC inspector made a mistake. The inspector was put on notice that if this happened again, the inspector would be terminated.

3. Nonconformance Reports (NCR's)

The NRC cited Quality Assurance for failing to follow the requirements stated in Administrative Procedure Q-15, Control of Nonconforming Items, in that:

- a) The SQAS (now the QA Services Manager) determines and denotes on the NCR any appropriate inspections that may be required and;
- b) Designates the organization responsible for performing such inspections.

The corrective action initiated to resolve these findings is that appropriate inspections are being denoted in the disposition section of the NCR along with identification of the responsible inspection group.

In addition, QC personnel are required to complete a general Inspection Report when closing out NCR's. For Dimensional Verification, the actual measurements shall be denoted on the form (or an attachment) along with notations of the document used to perform the inspection (e.g., drawing number, revision, applicable notes, etc.).

This was discussed with the NRC Senior Resident Inspector.

4. Hold/Witness Points

FHPWP-100 shall be reviewed by both QA Engineering and Maintenance Quality Control to adequately update Quality Control/Quality Assurance hold and witness points. Currently, each witness point shall be evaluated to determine whether or not it should remain as such or converted to a hold point. It should be noted that the hold point/witness point applies only to the task in which they are located.

Work within a task shall not proceed beyond a QC hold point until that hold point is signed off. Subtasks may be used to further define the work activities and shall be treated in the same manner as the major work tasks.

5. Dimensional Verifications

A. Source Inspections

1) Current Practices

Dimensional inspections are performed during source inspections as deemed necessary for fit, form and function by the QA Engineer preparing the inspection plan. The following source inspections have required or will require extensive dimensional inspections:

- a) Bearing Water Pump P-2103 Assembly
- b) ART Boron Ball Inspection
- c) GLCC Fuel Block/Reflector Block Inspection
- d) Lenox CRD Part Fabrication (to be performed this month)

Source inspections are required by MPRM-11.

2) Future Action

Develop source inspection level 2 procedure to provide detailed instructions for the preparation of source inspection plans. Reference CAR-84-112. This activity is to be completed by May 31, 1985.

B. Quality Control

1) Immediate Action

- a) Qualified MQC inspectors are performing independent verification (hands on) of required dimensional tolerances.
- b) These tolerances/dimensions are being recorded on the QC inspection form.

2) Items Being Proposed

- a) A training program is being developed to train all QC inspectors in precision measurements.
- b) The QC inspection form is being updated/revised to add dimensional tolerances.

- c) The MQC inspection program will be rewritten to reflect the addition of dimensional tolerances and the documentation thereof.

#### C. Receiving Inspection

Dimensional checks are being made during the receiving process, if: a) the purchasing document makes it a requirement; b) the purchasing document utilizes a drawing (part number) as the requirement.

Past practice has been that these checks have not been recorded other than the acceptable block on the Receiving Inspection Report being checked by the inspector (this is in compliance with MRIM-1).

The following steps will be taken to clarify the receiving inspection dimensional checks:

- 1) The receiving inspector will request (from QA Engineering) when applicable, critical dimensions of items to be verified.
- 2) MRIM-1 will be revised to add a dimensional data sheet to record critical dimensions. This revision is expected to be complete by May 15, 1985.
- 3) QC will purchase additional measuring instruments required to implement the above.

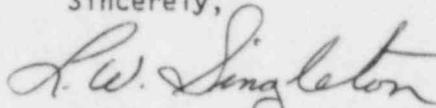
#### Additional Actions

- An additional audit is being planned and will be conducted to review in depth the specific concerns identified by the current audit which is more general in scope, plus any other concerns identified by the auditors.

- If, during the course of the audit, any concerns arise that are not immediately resolvable, QC will develop specific action plans in order to maintain the level of quality required.

If you have any questions concerning this matter, please call me at (303) 785-2225 Ex. 350.

Sincerely,



L. W. Singleton  
Manager, Quality Assurance  
Fort St. Vrain Nuclear  
Generating Station

LWS/MJF:kac

Attachments

# Interoffice Memo



**Public Service™**

Public Service Company of Colorado

PPC-85-1697

DATE: April 22, 1985

TO: All Production and Quality Assurance Personnel, FSV

FROM: J. W. Gahm, Manager, Nuclear Production, FSV  
LeRoy W. Singleton, Manager, Quality Assurance, FSV

ATTN:

SUBJ: QUALITY ASSURANCE STOP WORK AUTHORITY

Serious concern has recently been brought to our attention regarding the responsibilities and independence of the Quality Assurance Division with respect to the Control Rod Drive refurbishment effort. After discussing this problem, it is apparent that the problem is of a more general nature with respect to the stoppage of maintenance work for QC Inspection Points or Hold Tags.

To re-emphasize our long-standing policy, the Quality Assurance Division, and more specifically the Quality Control Inspector, is authorized to stop work on any portion of a job which, in his estimation, would result in a non-conforming condition. When instructed to do so by a QC Inspector, all personnel are to stop work immediately, and work is not to resume on the affected portion of the job until the situation is resolved. Failure to comply with this directive is subject to disciplinary action.

At the time of the stop work order, the QC Inspector is to make every effort to resolve the condition in an as expeditious manner as possible. This may include consultations with QA management personnel. If these discussions do not result in authorization to resume work, the QC Inspector is to immediately contact the Nuclear Production lead man responsible for the job who in turn will contact Nuclear Production management.

The only situation when the above policy does not apply is addressed in Section B.5.1.3.(b) of the FSAR which specifically authorizes the Superintendent of Operations or the Shift Supervisor to override a QA stop work order for conditions in which the "stoppage would cause any violations of the Technical Specifications or other approved documents governing plant operations, or whether there are overriding considerations of safety involved."

The Superintendent of Operations and/or the Shift Supervisor should use, as guidance in this determination, the conditions for performing Emergency Maintenance provided in Administrative Procedure P-7, Section 3.4.2. Documentation of such Emergency Maintenance activities should be processed in accordance with APM P-7, Section 4.2.4.

# Interoffice Memo



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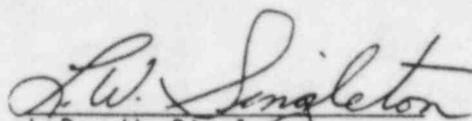
April 22, 1985

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PPC-85-1697

Any questions on this subject should be directed to us.

  
J. W. Gahm

  
LeRoy W. Singleton

JWG:LWS/pb

cc: H. L. Brey  
D. W. Warembourg

# Interoffice Memo



**Public Service™**  
Public Service Company of Colorado

QAC-85-0346

DATE: April 25, 1985  
TO: All QC Inspectors  
FROM: T. F. Orlin, QA Services Manager, FSV  
SUBJ: SIGNING OF HOLD AND/OR WITNESS POINTS

Effective immediately, anytime a QC Hold or Witness Point is determined to be not applicable to the work being performed, the QC Inspector shall mark N/A on the signoff line, note in the margin the reason the step does not apply and sign and date under the reason.

*T. F. Orlin*  
T. F. Orlin

GR/cm