

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9401280024 DOC.DATE: 94/01/19 NOTARIZED: NO DOCKET #
 FACIL:50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
 AUTH.NAME AUTHOR AFFILIATION
 DIETZ,C.R. Carolina Power & Light Co.
 RECIP.NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Responds to insp rept 50-261/93-28. Corrective actions:
 evaluation of calibr methodology utilized for three
 pressurizer pressure (protection) channels PT-455,PT-456 &
 PT-457 performed.

DISTRIBUTION CODE: IE01D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 7
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID	CODE/NAME	LTR	ENCL		ID	CODE/NAME	LTR	ENCL
	PD2-1	PD	1	1		MOZAFARI, B	1	1	
INTERNAL:	AEOD/DEIB		1	1		AEOD/DSP/ROAB	1	1	
	AEOD/DSP/TPAB		1	1		AEOD/TTC	1	1	
	DEDRO		1	1		NRR/DORS/OEAB	1	1	
	NRR/DRCH/HHFB		1	1		NRR/DRIL/RPEB	1	1	
	NRR/DRSS/PEPB		1	1		NRR/PMAS/ILPB1	1	1	
	NRR/PMAS/ILPB2		1	1		NUDOCS-ABSTRACT	1	1	
	OE DLR		1	1		OGC/HDS2	1	1	
	REG FILE	02	1	1		RES/HFB	1	1	
	RGN2	FILE 01	1	1					
EXTERNAL:	EG&G/BRYCE, J.H.		1	1		NRC PDR	1	1	
	NSIC		1	1					

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTR 22 ENCL 22

R
I
D
S
/
A
D
S
/
A
D
D
S



Carolina Power & Light Company
Robinson Nuclear Plant
PO Box 790
Hartsville SC 29550

Robinson File No.: 13510E
Serial: RNP/94-0100

JAN 19 1994

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
NRC INSPECTION REPORT NO. 50-261/93-28 REPLY TO A NOTICE OF VIOLATION

Gentlemen:

Carolina Power and Light Company hereby provides this reply to the Notice of Violation identified in NRC Inspection Report 50-261/93-28.

The enclosure provides a description of the occurrence, the causal factors and root causes identified for the violation, and a discussion of the corrective actions taken and planned for the occurrence.

Should you have any questions regarding this matter, please contact Mr. W. J. Dorman at (803) 383-1186.

Very truly yours,

Charles R. Dietz
Vice President

RES:lst
Enclosure
c: Mr. S. D. Ebnetter
Mr. W. T. Orders
INPO

9401280024 940119
PDR ADOCK 05000261
G PDR

Highway 151 and SC 23 Hartsville SC

LEO1
1/1

REPLY TO A NOTICE OF VIOLATION

Violation RII-93-28-04-SL4:

Technical Specification 6.5.1.1, Procedures, Tests, and Experiments requires, in part, that written procedures be established, implemented, and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33, Rev. 2, 1978 including the calibration of installed plant instrumentation, and maintenance on safety related equipment.

Maintenance Management Manual Procedure, MMM-006, Calibration Program, is provided to ensure the proper calibration of installed plant instrumentation.

Maintenance Procedure CM-121, Pressurizer Spray Valve Maintenance, PCV-455 A/B, is provided to facilitate maintenance on pressurizer spray valve PCV-455 B.

Maintenance Procedure CM-704, Service Water Pump Motor Maintenance is provided to facilitate maintenance, in part, on the D service water pump.

Contrary to the above;

On September 13, 1993, the licensee failed to follow MMM-006, in that no documented engineering evaluation or other appropriate justification existed to support using a dead weight tester for the calibration of the pressurizer pressure transmitter. The analysis was required since the dead weight tester did not have sufficient accuracy to satisfy the requirements of MMM-006.

On November 8, 1993, maintenance procedure CM-121, Pressurizer Spray Valve Maintenance, PCV-455 A/B, was inadequate to facilitate maintenance on valve PCV-455 B in that it did not represent the valve as installed. Furthermore, the maintenance technician did not follow the procedure.

On September 16, 1993, procedure CM-704, Service Water Pump Motor Maintenance was inadequate to facilitate maintenance on the D service water pump in that it provided erroneous guidance for setting the pump impeller clearance.

REPLY

CP&L acknowledges that the violation occurred as described.

1. The Reason for the Violation

Example 1:

The cause of this violation is attributable to a failure to understand the requirement in MMM-006, Calibration Program, that requires an evaluation to provide justification for using M&TE that has an accuracy less than the endpoint device being calibrated. Additionally, supervision allowed personnel who were not proficient with the use of a dead weight tester to perform the calibrations of the pressurizer pressure transmitters.

The dead weight tester is the most accurate test device available onsite that can be utilized to calibrate the pressurizer pressure transmitters. Personnel understood that its acceptability had earlier been evaluated when in fact no evaluation could be provided when requested.

Example 2:

The cause of this violation is attributable to personnel error. Maintenance procedure CM-121, Pressurizer Spray Valve Maintenance, PCV-455A/B, was developed utilizing the valve vendor's technical manual for this valve and a spare valve located in the Warehouse. The actuator on the valve in the Warehouse was oriented in the same manner as described in the vendor valve manual. The maintenance instructions provided in the technical manual were written to specifically address this orientation. On both pressurizer spray valves installed in the plant, the "as installed" actuator orientation is rotated 90 degrees from the position described in the vendor information, from the valve in the warehouse, and thus from the plant's corrective maintenance procedure.

An additional factor contributing to this violation was a failure of the mechanic and supervisor involved to address problems in the field through changes to approved procedures. When the mechanic was faced with an uncertainty during the rebuild of the valve (the absence of match marks on the stem of the valve), the mechanic stopped the job. He realized that he had lost knowledge of the orientation of the v-notch ball to the valve seat. He notified his supervisor and sought help from the System Engineer. Communications were established with the valve vendor. The valve vendor verbally provided a methodology that could be used to continue with the rebuild of the valve. Instead of incorporating the revised methodology in the existing procedure, the Mechanical Supervisor and technician agreed to continue with the valve's reassembly, utilizing the vendor's instructions.

While the procedure was in fact inadequate, it did not contribute to the improper reassembly of the valve. The valve was assembled improperly due to the lack of match marks on the valve stem. A removal of the valve's bonnet and reestablishing orientation of the v-notch ball relative to the seat, per the instructions provided in the procedure, was the only proper method that could have guaranteed proper reassembly of the valve. Had match marks been available on the valve stem, it then would have been evident that the match marks on the valve in the field did not match what was specified (erroneously) in the procedure.

Example 3:

CM-704, Service Water Pump Motor Maintenance, was inadequate in that it provided an improper method of resetting the pump impeller clearance at the completion of maintenance to the pump motor. During the procedure upgrade project, in order to provide all necessary instructions to complete motor maintenance using a single procedure, instructions for coupling the pump back to the motor were included in CM-704. In the process of adding these instructions to this procedure, the instructions previously referenced in a separate procedure were not incorporated into CM-704 in their entirety.

Previous to this incident, in August of 1993, the deficiency in this procedure had been identified and a procedure change request was submitted to the Maintenance Procedures Group. The revision was to be completed by mid-September as CM-704 was not expected to be used early in the refueling outage. There was no administrative mechanism available at the time, other than deletion or revision of the procedure, to prevent the deficient procedure from being issued to the field. Neither of these were performed at the time that the deficiency was identified. The maintenance on the "D" Service Water Pump Motor was conducted earlier than anticipated during the outage. The deficient procedure was issued to the field and the job improperly performed as a result of the procedure deficiency.

2. The Corrective Steps That Have Been Taken and the Results Achieved

The Corrective Steps that have been taken are as follows:

Example 1:

An evaluation of the calibration methodology utilized for the three Pressurizer Pressure (Protection) channels, PT-455, PT-456, and PT-457 has been performed. This evaluation has provided justification for utilization of the dead weight tester to calibrate these pressure transmitters.

As discussed in the Notice of Violation, the dead weight tester was improperly used to calibrate the pressurizer pressure transmitters. CP&L Craft Resources personnel utilizing this test equipment were not proficient in its use due to their infrequent use of this test equipment. While the Craft Resources personnel had been trained in the use of dead weight testers, they had not used them for a number of years. As a result of this unfamiliarity, a review of other calibrations conducted by this crew utilizing dead weight testers was conducted. No other calibrations performed by these personnel were found to have required the use of a dead weight tester.

The Pressurizer Pressure Protection Transmitters, PT-455, PT-456, and PT-457 were subsequently recalibrated. Because "as found" calibration data had been lost due to the improper calibration, CP&L committed to performing a calibration check during a mid-cycle outage. The intent of this mid-cycle calibration check was to determine if the transmitters had developed problems with excessive drift. The plant was returned to service. During the most recent shutdown, the calibration of the three transmitters was checked. PT-455 and PT-457 were found to have drifted excessively. Both of these transmitters were subsequently replaced.

Example 2:

Procedure CM-121, Pressurizer Spray Valve Maintenance, PCV-455 A/B, has been revised to require verification of match marks prior to proceeding with valve disassembly and reassembly during maintenance. Also, the procedure now reflects the "as installed" orientation of the actuator on the valve body.

PCV-455B was subsequently rebuilt and successfully post-maintenance-tested utilizing the revised procedure.

Example 3:

A revision to CM-704 has been completed to correct the deficiencies noted.

Guidance has been developed for placing a procedure "on hold" and removing it from plant libraries. This will prevent procedures previously identified as deficient from being issued to Craft or Operations personnel for use in the field.

The existing backlog of procedure changes has been reviewed and no other similar examples of inadequate procedures were found.

3. The Corrective Steps That Will Be Taken to Avoid Further Violations

Example 1:

Nuclear Craft Resources Maintenance (NCR) personnel will undertake the necessary training to improve their skills in the use of the dead weight tester. NCR I&C crews will receive refresher training on the use of a dead weight tester. The NCR qualification program will be revised to require formal on-the-job training and task performance evaluation involving use of a dead weight tester. Additionally, this incident will be reviewed with all the NCR I&C crews as well as the plant I&C maintenance crews.

Maintenance Management Manual Procedure MMM-006, Calibration Program, will be revised to reference the evaluation that was performed. This evaluation will be part of plant permanent records and placed in the records vault.

Example 2:

The Maintenance Procedure, MMM-003, Appendix A, Post Maintenance Testing Requirements, will be revised to require flow rate measurements through PCV-455B after completion of maintenance. This will satisfy post-maintenance testing requirements and provide assurances that the valve will function as designed.

CP&L acknowledges the need to improve in the area of vendor provided information. To this end, the Technical Manual/Vendor Recommendation Review Program, PLP-038, will be revised. This procedure will be revised by April 30, 1994.

The site is revising its methodology for post-revision validation of procedures in AP-022, Document Change Procedure, to include several methods of validation depending upon the nature of the change. These methods may include requirements for validation of new procedures, new/unproven techniques or activities, or changes in the sequence/method of performance of the activities.

Example 3:

All Maintenance Procedures, where both a motor and a pump procedure affect the same component, will be reviewed to ensure that instructions intended to accomplish the same task, ie., coupling and resetting of pump impeller clearances, are not in conflict.

4. The Date When Full Compliance Will Be Achieved

Full compliance, with the exception of the revision of PLP-038, will be achieved with the completion of the corrective actions stated above by March 31, 1994. PLP-038 will be revised by June 15, 1994.