

Omaha Public Power District
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402/636-2000

November 27, 1995
LIC-95-0219

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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References: 1. Docket No. 50-285
2. Letter from NRC (T. P. Gwynn) to OPPD (T. L. Patterson) dated October 19, 1995

SUBJECT: NRC Inspection Report No. 50-285/95-11, Reply to a Notice of Violation

The subject report transmitted a Notice of Violation (NOV) resulting from an NRC inspection conducted August 7-25, 1995 at the Fort Calhoun Station (FCS). Attachment 1 is the Omaha Public Power District (OPPD) response to this NOV.

There are two parts to this violation. In the first part, it is contended that OPPD implemented a change to the plant design basis using a Substitute Replacement Item (SRI) Engineering Change Notice (ECN) and that a 10 CFR 50.59 safety evaluation was not completed for this change. In the second part, it is contended that seven plant modifications involving the SRI ECN process, were implemented without the performance of 10 CFR 50.59 safety evaluations for the installation and testing phases of the modifications.

Following the receipt of this Notice of Violation, OPPD reviewed the referenced ECNs. After completing this review, OPPD has concluded that of the seven referenced SRI ECNs, none required a new installation and/or test procedure which would have required the preparation of a supporting 10 CFR 50.59 safety evaluation. This review is detailed in Attachment 2. Additionally, included in Attachment 3 is a matrix which is a "Quick Overview" of the information supplied in Attachment 2.

Accordingly, OPPD contests the portion of the violation related to SRI ECNs which were implemented without performance of 10 CFR 50.59 safety evaluations for the installation and testing phases. This issue was discussed in a telephone conversation with members of the NRC staff on November 13, 1995. These discussions included Messrs. T. Stetka, S. Bloom, R. Kopriva and C. Vandenburg of the NRC and Messrs. G. Cavanaugh, A. Richard, R. Eurich and J. Friedrichsen of OPPD.

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Also discussed with your staff was the NRC understanding of the SRI ECN process at FCS. As a result of the Engineering and Technical Support Team Inspection, we have reviewed our SRI ECN process with involvement from our Nuclear Safety Review Group. Additionally, the FCS Quality Assurance Group provided their recent assessment of the SRI ECN process. Based on these reviews, OPPD has concluded that the procedure, PED-GEI-60, "Substitute Replacement Item Evaluations," does comply with current NRC regulations. However, OPPD is adding some procedural clarifications to make the process more user friendly. OPPD will share the results of these assessments if the NRC wishes to review the program. This could be accomplished during Mr. Stetka's impending visit to FCS.

If you should have any questions, please contact me.

Sincerely,



T. L. Patterson
Division Manager
Nuclear Operations Division

TLP/grc

Attachment (3)

c: Winston and Strawn
L. J. Callan, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector

REPLY TO A NOTICE OF VIOLATION

Omaha Public Power District
Fort Calhoun Station

Docket: 50-285
License: DPR-40

During an NRC inspection conducted on August 7-25, 1995, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (60 FR 34381; June 30, 1995), the violation is listed below:

Title 10, CFR 50.59(a)(1) allows licensees to make changes to the facility as described in the final safety analysis report without prior commission approval unless the proposed change involves an unreviewed safety question. Title 10, CFR 50.59(b)(1) requires the licensee to maintain records of changes to the facility and that these records must include a written safety evaluation which provides the basis for the determination that the change does not involve an unreviewed safety evaluation.

Production Engineering Division Procedure PED-GEI-60, "Substitute Replacement Item Evaluations," Step 4.3, required that the substitute replacement process only be used to implement modifications if the modification does not involve a change to the plant's design basis. Step 4.3 also required that 10 CFR 50.59 safety evaluations be performed for the installation and testing phases of a plant modification.

Contrary to the above, on August 25, 1995, a plant modification (Engineering Change Notice 91-306) was implemented using the substitute replacement process even though the modification involved a change to the plant's design basis. In addition, seven plant modifications (Engineering Change Notices 93-152, 93-237, 93-379, 93-488, 93-600 93-631 95-129) that used the substitute replacement process, were implemented without the performance of 10 CFR 50.59 safety evaluations for the installation and testing phases of the modification.

This is a Severity Level IV Violation (Supplement I). (285/9511-01)

OPPD Response

There are two parts to this violation. In the first part, it is contended that OPPD implemented a change to the plant design basis using a Substitute Replacement Item (SRI) Engineering Change Notice (ECN) and that a 10 CFR 50.59 safety evaluation was not completed for this change.

In the second part, it is contended that seven plant modifications involving the SRI ECN process, were implemented without the performance of 10 CFR 50.59 safety evaluations for the installation and testing phases of the modifications.

The first part of the Reply to a Notice of Violation will be addressed under Part I, below. The second part of the Reply to a Notice of Violation will be addressed under Part II. In Part II, OPPD contends that a violation of NRC requirements did not occur. Therefore, OPPD is contesting that portion of the violation and is providing a basis for disputing the violation.

PART I

A. The Reason for the Violation

The reason for this violation is that the preparer and reviewer were non-conservative in their judgement in using a SRI ECN in lieu of a full scope modification.

In January 1992, OPPD prepared an equivalency evaluation for Diesel Generator replacement radiator fans in accordance with PED-GEI-60, "Substitute Replacement Item Evaluations." As a result of the Engineering and Technical Support Team Inspection, we reviewed our SRI ECN process with involvement from our Nuclear Safety Review Group. Additionally, the FCS Quality Assurance Group provided their assessments of the SRI ECN process. As a result of these assessments, OPPD contends that the inappropriate assignment of this modification to the SRI ECN process was an isolated incident.

Following the review concerning the scope of this SRI ECN, OPPD has determined that the replacement fans affected the performance of the diesel generators. In retrospect, the scope of ECN 91-306 was beyond the intended scope of changes typically covered under SRI ECNs and should have been completed under a modification.

B. Corrective Steps Which Have Been Taken and the Results Achieved

- 1) Design Engineering staff responsible for SRI ECNs within Design Engineering Nuclear were provided a briefing on the details of this violation in a staff meeting. This discussion focused on examples of what is acceptable to complete under an SRI ECN and what should be completed under a modification. This briefing was completed on September 1, 1995.

- 2) Design Engineering completed an evaluation of ECN 91-306. The purpose of this evaluation was to ensure that the changes ultimately made as a result of ECN 91-306 were properly reviewed and considered is if they had been completed under a full modification. This evaluation was completed on November 27, 1995.
- 3) The preparer and reviewers of ECN 91-306 were counseled on their lack of conservatism associated with performing this work under an SRI ECN and not under a full scope modification. This was completed on November 27, 1995.
- 4) Supervisors and Managers within Design Engineering Nuclear have been provided an additional briefing. This briefing included information to ensure that changes beyond the extent of what the SRI ECN process is intended to complete are performed under a "Full Scope" modification. This briefing was completed on November 27, 1995.

C. Corrective Steps Which Will be Taken to Avoid Further Violations

All corrective actions have been completed and no further corrective actions are needed as a result of this portion of the violation.

D. Date When Full Compliance Will Be Achieved

OPPD is currently in full compliance.

PART II

A. Basis for Disputing the Violation

This portion of the alleged violation involved the following SRI ECNs:

ECN 93-152, Diesel Generator Starting Air Drain Lines and Valves
ECN 93-237, Replace HCV-265 Valve Stem with Longer Stem
ECN 93-379, Wide Range Nuclear Inst. Channel 'D' Power Supply Replacement
ECN 93-488, Substitute Replacement for Disc in MS-292
ECN 93-600, Alternate Materials for HPSI Isolation Valves
ECN 93-631, Emergency Feedwater Storage Tank Level Indication
ECN 95-129, Repair Parts for HCV-2908-0

OPPD completed an investigation concerning the alleged violation involving these ECNs. OPPD contests that a violation occurred as stated in the Notice of Violation. The following response was discussed with the NRC

Region IV Staff on November 13, 1995. The details are as follows:

Production Engineering Division (PED) PED-QP-2, "Plant Configuration Changes," is the governing document which controls changes at Fort Calhoun Station. PED-GEI-60, "Substitute Replacement Item Evaluations," is a lower tier document which governs the evaluation of substitute replacement items. PED-GEI-60 was developed in accordance with ANSI N18.7-1976, Section 5.2.13, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," as endorsed by USNRC Regulatory Guide 1.33, Revision 2 dated February 1978, "Quality Assurance Program Requirements (Operational)."

The NRC Inspection and Enforcement Manual, Part 9900, "10 CFR Guidance," states, in part:

Maintenance activities which do not result in a change to a system (permanent or temporary), or which replace components with replacement parts procured to the same (or equivalent) purchase specification, do not require a written safety evaluation to meet 10CFR50.59 requirements.

The Equivalency Evaluation performed per PED-GEI-60 demonstrates that Substitute Replacement Items are being procured to an equivalent specification and therefore confirms that no unreviewed safety question or effects on Technical Specifications exists.

The intent of PED-GEI-60 and PED-QP-2 is to ensure that a 10 CFR 50.59 safety evaluation is completed when necessary. The safety evaluation becomes necessary when "approved" installation and/or test "procedures" are prepared for SRIs. If "approved plant procedures" are required to install and/or test a SRI and one that could be used does not exist, a new procedure and supporting 10 CFR 50.59 safety evaluation would be prepared, reviewed and approved.

After the SRI ECN is approved, implementation of the SRI essentially becomes a maintenance task and is completed under the Maintenance Work Order (MWO) process. It is important to note that most maintenance tasks, including installation of SRI ECNs, do not require an approved station procedure and supporting 10 CFR 50.59 safety evaluation consistent with the guidance discussed above.

The intent of the statements in PED-GEI-60 is to perform a 10 CFR 50.59 safety evaluation based on the guidance provided in PED-QP-2. PED-QP-2 states that a 10 CFR 50.59 safety evaluation may be required for the

installation and/or testing of the replacement item. Typically, a 10 CFR 50.59 safety evaluation will be required if installation or testing of an ECN will place the plant in an unapproved configuration. This guidance is a logical progression since in the design phase of an SRI ECN, it is determined if the replacement item is equivalent. The installation and testing of that item is then, generally, covered by the MWO process.

Following the receipt of this Notice of Violation, OPPD reviewed the referenced ECNs. After completing this review, OPPD has verified that of the seven referenced SRI ECNs, none required a new installation or test procedure (requiring preparation of a supporting 10 CFR 50.59 safety evaluation). This review is detailed in Attachment 2. Also, Attachment 3 is a matrix depicting an overview of the seven ECNs discussed in the NOV.

It is, therefore, OPPD's contention that a violation has not occurred. The NRC's perception that a violation existed may have resulted from unclear procedural statements and unfamiliarity with OPPD's controlling procedures for SRI ECNs.

OPPD previously identified the confusing wording within the SRI ECN process and documented the need to clarify when a 10 CFR 50.59 safety evaluation is required. This was self identified during Quality Assurance surveillance E95-3 and tracked under internal commitment number 950695. As a result, PED-QP-2 is currently undergoing revision. This will result in improved consistency between the procedures.

**OPPD EVALUATION OF SUBSTITUTE REPLACEMENT ITEM
ENGINEERING CHANGE NOTICES ASSOCIATED WITH
LEVEL IV VIOLATION 9511-01**

This evaluation was completed to investigate the Substitute Replacement Item (SRI) Engineering Change Notices (ECN) which were identified in Notice of Violation (NOV) 9511-01.

The results of this evaluation are detailed below. However, the evaluation revealed that, as stated in the Basis for Disputing the Violation (Attachment 1), no 10 CFR 50.59 safety evaluations were required to have been performed on the SRI ECNs noted in the NOV.

In review of the noted SRI ECNs, ECN 95-129 did not match the title provided in the NOV. Therefore, OPPD chose to provide information for both SRI ECNs, 95-120 and 95-129.

The results of the evaluation are as follows:

SRI ECN: 93-152, "Diesel Generator Starting Air Drain Lines and Valves"

Scope: Replacement of carbon steel drain piping and valves from each DG air start receiver with stainless steel. This was necessary due to corrosion.

DEN Complete: 04/08/93

SE (System Engineer) Sign: 04/19/93

MWO: Eight MWOs were generated (one for each drain line and valve): 931083, 931085, 931086 931087, 931088, 931089, 931090, 931091.

Construction Completed: 09/23/93

Installation: Detailed Work Instructions (DWI) provided guidance for the work associated with the installation.

Testing: Perform post maintenance testing on affected thread connections per ECN 93-152, page 5. (Snoop leak check at normal temperature and pressure)

Conclusion: Piping and valve replacement was covered by "skill-of-the-craft" using a DWI. The leak check following the installation is also considered to be "skill-of-the-craft." No unapproved configuration changes were required to install and test the ECN. Therefore, no 10 CFR 50.59 safety evaluation was required.

SRI ECN: 93-237, "Replace HCV-265 Valve Stem with Longer Stem"

Scope: Replace existing valve stem on HCV-265 with a stem 2" longer. The longer stem was necessary to permit installation of torque/thrust cell for testing.

DEN Complete: 06/28/93

SE Sign: 08/02/93

MWO: Two MWOs were generated. 931991 was generated to fabricate the stem. 913356 was generated to disassemble valve and inspect stem and seat for damage.

Construction Completed: 11/17/93

Installation: The valve repair was completed using procedure PE-RR-VX-0430S.

Testing: The testing was specified in MWO 913356. A leak check was performed using EM-RR-VX-0404. Applicable sections of OP-ST-CH-3001 were completed to verify operability upon completion of the work.

Conclusion: Existing PRC approved procedures covered valve maintenance and post maintenance testing. No unapproved configuration changes were required to install and test the ECN. Therefore, no new 10 CFR 50.59 safety evaluation was required.

SRI ECN: 93-379, "Wide Range NI Ch. 'D' Power Supply Replacement"

Scope: This SRI ECN addressed two items. The first item was the replacement of the 15V power supply. The second item was the installation of high voltage shoulder washers. The second item in the ECN was completed. The first item was not completed. This occurred because MR-FC-94-004 was generated to replace the entire channel. Thus, that portion of the SRI ECN is no longer needed since the power supply will be replaced under the modification.

DEN Complete: 11/12/93, Rev. 1

SE Sign: 11/12/93, Rev. 1

MWO: MWO 924935 was generated to complete this work.

Construction Completed: Shoulder washers were installed and testing completed 11/21/93. The SRI ECN has not been completed. See the Scope above.

Installation: Shoulder washers were installed using a DWI for the second item in the ECN. No installation was completed for the first item.

Testing: Procedure IC-CP-01-0004 was used to complete testing.

Conclusion: No unapproved configuration changes were required to install and test the ECN. Replacement of the shoulder washers is considered skill of the craft. Existing PRC-approved procedure was used for post maintenance testing. Therefore, no new 10 CFR 50.59 safety evaluations were required.

ECN: 93-488, "SRI Part for Disc in MS-292"

Scope: The disc for MS-292 was found damaged. Exact replacement is no longer available. The manufacturer has provided acceptable replacement to complete this SRI ECN.

DEN Complete: 10/20/93

SE Sign: 10/20/93

MWO: 932589 was generated to complete this SRI ECN.

Construction Completed: 11/22/93

Installation: Maintenance procedures, PE-RR-MS-0400 and PE-RR-MS-0401 were used to complete the installation.

Testing: The craft performed a leak check of the flange at normal operating temperature and pressure.

Conclusion: Existing PRC-approved procedures covered valve maintenance and testing. Leak checking is considered to be "skill-of-the-craft." No unapproved configuration changes were required to install and test the ECN. Therefore, no new 10 CFR 50.59 safety evaluation was required.

ECN: 93-600, "Alternate Material for HPSI Isolation Valves"

Scope: Approve alternate material specification and material for Safety Injection valve parts. Revise drawings with alternate materials and update part numbers.

DEN Complete: 04/14/94

SE Sign: 06/06/95

MWO: NA

Construction Completed: NA

Installation: NA

Testing: NA

Conclusion: No new procedures required. Existing PRC-approved procedures will cover valve maintenance and post maintenance testing when maintenance is performed. No unapproved configuration changes were required to install and test the ECN. Therefore, no new 10 CFR 50.59 safety evaluation was required.

ECN: 93-631, "Emergency Feedwater Storage Tank Level Indicator"

Scope: Replaced existing Foxboro transmitters with a like-for-like item (Weed transmitters).

DEN Complete: 03/29/94

SE Sign: 04/05/94

MWO: Two MWOs were generated. MWO 940939 was generated to complete work on LT-1183. MWO 940938 was generated to complete work on LT-1188.

Construction Completed: 04/14/94

Installation: Applicable portions of approved procedures IC-RR-IX-0803, IC-RR-IX-0801 and EM-RR-EX-0100 were used to complete the installation in the SRI ECN.

Testing: Approved procedure IC-CP-01-1183 was used for testing following installation of this ECN.

Conclusion: No new procedures required. The replacement was completed with a like-for-like transmitter. Existing PRC-approved procedures covered transmitter replacement and testing. No unapproved configuration changes were required to install and test the ECN. Therefore, no new 10 CFR 50.59 safety evaluation was required.

ECN: 95-120, "Repair Parts for (Valve) HCV-2908-0"

Scope: Fabricate front and rear piston rods and tie rods from stock material to be used as repair parts for HCV-2908-0. Replacement parts were not available.

DEN Complete: 03/25/95

SE Sign: 03/27/95

MWO: Two MWOs were generated. MWO 940670 was generated to disassemble and inspect operator. MWO 951071 was generated to fabricate the front and rear piston rods.

Construction Completed: 04/05/95

Installation: Approved Procedure MM-RR-VX-0454S was used for inspection and repair of the operator.

Testing: The valve and operator were stroked using a DWI.

Conclusion: The piston rods were replaced under the SRI ECN and valve was stroked and returned to service under the MWO process. No unapproved configuration changes were required to install and test the ECN. Therefore, no new 10 CFR 50.59 safety evaluation was required.

ECN: 95-129, "Strut RWH-66 Replacement"

Scope: Replace a 9' length section of 1-1/2" Schedule 40 pipe with the same length of 2" Schedule 80 pipe.

DEN Complete: 03/30/95

SE Sign: 04/01/95

MWO: MWO 951193 was generated to replace the pipe strut.

Construction Completed: 04/04/95

Installation: A DWI was used to complete the installation.

Testing: NA

Conclusion: No new procedures were required. A DWI was used to describe fabrication of the replacement strut. Fabrication and replacement of the strut is considered skill-of-the-craft. No unapproved configuration changes were required to install and test the ECN. Therefore, no new 10 CFR 50.59 safety evaluation was required.

LIC-95-0219, ATTACHMENT 3, SRI ECN EVALUATION MATRIX

ECN NUMBER	SCOPE	IS THE ITEM BEING REPLACED CONSIDERED TO BE A SUBSTITUTE REPLACEMENT PER PED-GEI-60? (YES/NO)	DOES THE ACTIVITY QUALIFY AS A MAINTENANCE ACTIVITY PER REF. 1? (YES/NO)	DOES THE INSTALLATION ACTIVITY REQUIRE THE NECESSITY OF A NEW APPROVED PROCEDURE? (YES/NO)	DOES THE TESTING ACTIVITY REQUIRE THE NECESSITY OF A NEW APPROVED PROCEDURE? (YES/NO)	PER THE REQUIREMENTS OF 10 CFR 50.59, IS A SAFETY EVALUATION REQUIRED TO BE COMPLETED? (YES/NO)
93-152	Replacement of carbon steel drain piping and valves from each DG air start receiver with stainless steel. This was necessary due to corrosion.	Yes	Yes	No	No	No
93-237	Replace existing valve stem on HCV-265 with a stem 2" longer. The longer stem was necessary to permit installation of torque/thrust cell for testing	Yes	Yes	No	No	No
93-379	This SRI ECN addressed two items. The first item was the replacement of the 15V power supply. The second item was the installation of high voltage shoulder washers. The second item in the ECN was completed. The first item was not completed.	Yes	Yes	No	No	No
93-488	The disc for MS-292 was found damaged. Exact replacement is no longer available. The manufacturer has provided acceptable replacement to complete this SRI ECN.	Yes	Yes	No	No	No

LIC-95-0219, ATTACHMENT 3, SRI ECN EVALUATION MATRIX

ECN NUMBER	SCOPE	IS THE ITEM BEING REPLACED CONSIDERED TO BE A SUBSTITUTE REPLACEMENT PER PED-GEI-60? (YES/NO)	DOES THE ACTIVITY QUALIFY AS A MAINTENANCE ACTIVITY PER REF. 1? (YES/NO)	DOES THE INSTALLATION ACTIVITY REQUIRE THE NECESSITY OF A NEW APPROVED PROCEDURE? (YES/NO)	DOES THE TESTING ACTIVITY REQUIRE THE NECESSITY OF A NEW APPROVED PROCEDURE? (YES/NO)	PER THE REQUIREMENTS OF 10 CFR 50.59, IS A SAFETY EVALUATION REQUIRED TO BE COMPLETED? (YES/NO)
93-600	Approve alternate material specification and material for Safety Injection valve parts. Revise drawings with alternate materials and update part numbers.	Yes	Yes	No	No	No
93-631	Replaced existing Foxboro transmitters with a like-for-like item (Wee2 transmitters).	Yes	Yes	No	No	No
95-120	Fabricate front and rear piston rods and tie rods from stock material to be used as repair parts for HCV-2908-0. Replacement parts were not available.	Yes	Yes	No	No	No
95-129	Replace 9 foot length section of 1-1/2" Schedule 40 pipe with the same length of 2" schedule 80 pipe.	Yes	Yes	No	No	No

References: 1. NRC Inspection Manual, Part 9900, 10 CFR Guidance, 10 CFR 50.59, Section D.5