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 ROBINSON, W.R. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Responds to NRC 941130 ltr re violations noted in insp rept 50-400/94-22. Corrective actions: revised plant administrative procedure AP-002, "Plant Conduct of Operations," to include section entitled, "Control of Designated Vehicles."

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NOTES: Application for permit renewal filed. 05000400

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Carolina Power & Light Company
PO Box 165
New Hill NC 27562

William R. Robinson
Vice President
Harris Nuclear Plant

DEC 30 1994

File: HO-941113

Serial: HNP-94-098
10 CFR 2.201

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

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
REPLY TO A NOTICE OF VIOLATION (NRC INSPECTION REPORT NO. 50-400/94-22)

Gentlemen:

Attached is Carolina Power & Light Company's reply to the Notice of Violation described in Enclosure 1 of your letter dated November 30, 1994.

Questions regarding this matter may be referred to Mr. D. C. McCarthy at (919) 362-2100.

Sincerely,

W. R. Robinson

MGW:syh

Attachment

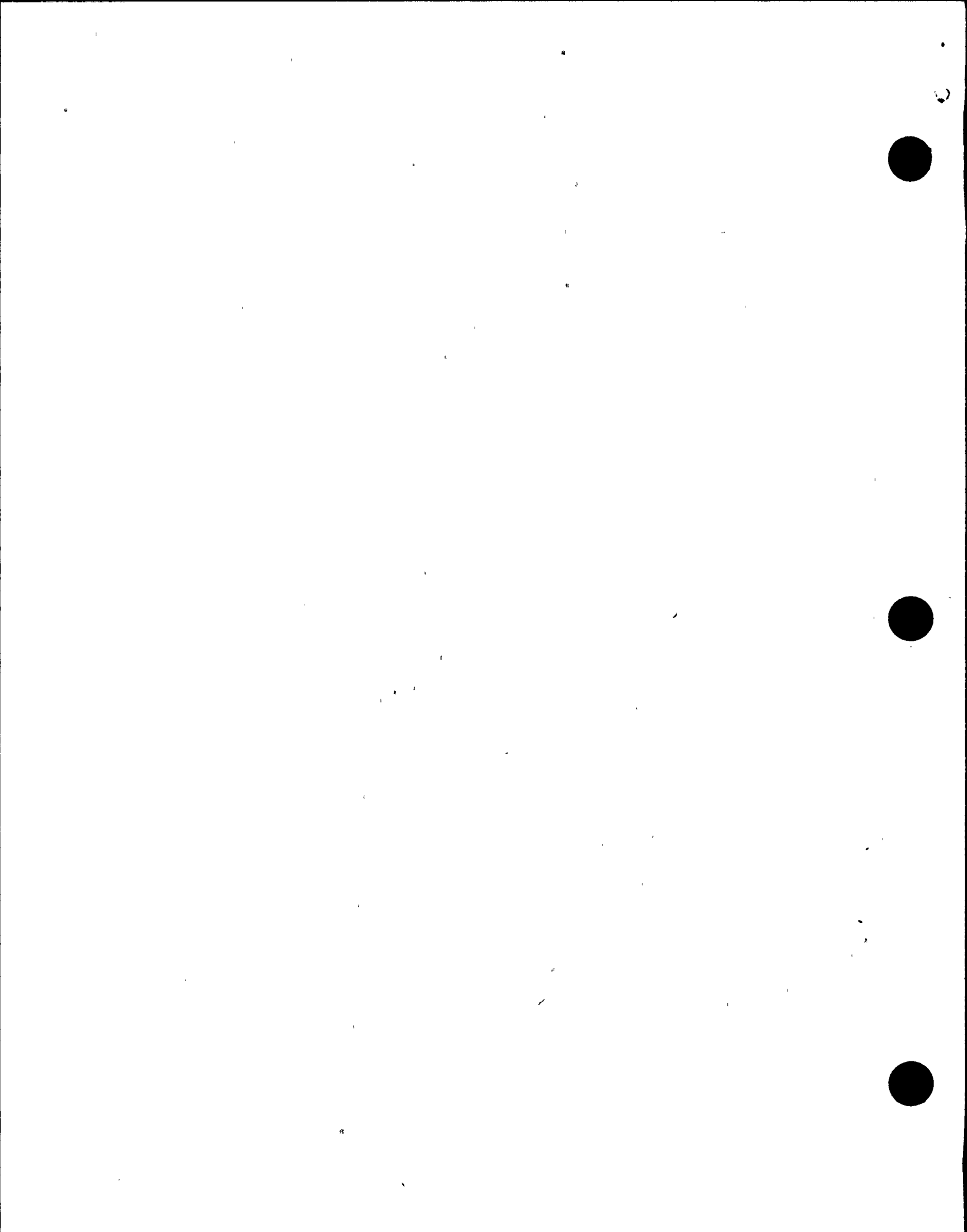
c: Mr. S. D. Ebnetter (NRC-RII)
Mr. S. A. Elrod (NRC-SHNPP)
Mr. N. B. Le (NRR)

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PDR ADDCK 05000400
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**REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORT NO. 50-400/94-22**

Reported Violation A:

10 CFR 50, Appendix B, Criterion XVI requires that measures shall be established to assure conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, and nonconformances are properly identified and corrected.

The licensee's Corporate Quality Assurance Manual, Section 12, requires that significant conditions adverse to quality be identified and that corrective actions be determined which will preclude repetition of the condition.

Contrary to the above, on June 13, 1994, and again on September 13, 1994, adequate corrective actions were not established to preclude the inadequate control of designated vehicles in the protected area.

This is a Severity Level IV violation (Supplement III).

Denial or Admission:

The violation is admitted.

Reason for the Violation:

The incident which occurred on June 13, 1994 was evaluated by an Event Review Team which determined that the method for controlling keys to designated vehicles was not clearly defined nor consistently applied. The event which took place on September 13, 1994 occurred despite the corrective measures which had been implemented and the controls which were in place. The reason for the September 13, 1994 violation was attributed to personnel error by a single individual who failed to comply with the training he had received on the control of designated vehicles.

Corrective Steps Taken and Results Achieved:

1. Plant Administrative Procedure AP-002, "Plant Conduct of Operations" was revised to include a section entitled "Control of Designated Vehicles." This procedure also includes, as an attachment, a "Designated Vehicle Key Checkout Log" form, which is used for issuance of keys to plant designated vehicles. This procedure states, in part, that designated vehicles are to be positively controlled while within the Protected Area and that the keys must be removed from the vehicle and the ignition locked or the vehicle immobilized when the vehicle is unattended.

2. Plant personnel were required to sign a letter from the Site Vice President, dated June 22, 1994, acknowledging the requirements for the control of Designated Vehicles.
3. The plant departure form was revised to include a prompt for departing contract personnel to return assigned keys.
4. The "Designated/Undesignated Vehicle Entry/Exit Log" was revised to ensure that vehicle drivers preparing to enter the Protected Area are reminded to remove keys from the ignition when the vehicle is left unattended.
5. The Designated Vehicle List was revised resulting in a reduction in the number of plant designated vehicles.
6. The individuals involved in the two incidents cited in the Inspection Report received appropriate disciplinary measures.
7. Plant Access Training was revised on October 10, 1994, to include the requirement to remove keys from designated vehicles when left unattended inside the Protected Area.
8. Tags are being placed on the keys for designated vehicles to remind the vehicle operator to remove the key prior to departing the vehicle.

The corrective measures addressed above are resulting in a heightened awareness by plant personnel regarding their responsibilities associated with the control of designated vehicles. Corrective measures 1 - 4 above were accomplished prior to the incident which occurred on September 13, 1994. The individual responsible for the September 13, 1994 incident had signed the letter described in corrective measure 2 above and stated that he was aware of his responsibilities but, that he just failed to remove the key upon his departure from the vehicle.

Corrective Steps Taken to Prevent Further Violations:

The corrective measures taken in response to the incident which occurred on June 13, 1994 and the addition of the information in Plant Access Training are considered sufficient to address this matter. The reduction of Plant Designated Vehicles has resulted in less vehicular traffic and has also reduced the number of personnel who operate vehicles within the Protected Area.

Additionally, the individual responsible for the September 13, 1994 incident briefed the maintenance staff on how the incident occurred, what it meant to him personally, and how it could have been avoided by utilizing "STAR" (Stop, Think, Act, Review) self checking principles.

A Harris Nuclear Plant employee "Stand Down" meeting was held on December 9, 1994 to discuss this and other recent issues of management concern in order to improve overall awareness and to stress individual accountability to prevent future occurrences.

The requirements related to the control of unattended designated vehicles within the Protected Area will continue to be periodically addressed using plant information programs such as the



plant newspaper, the video information system, etc. as considered appropriate by plant management.

Date When Full Compliance Will Be Achieved:

Full compliance will be achieved by January 16, 1995, with the completion of the corrective steps stated above.

Reported Violation B:

Technical Specification 6.8.1.a required written procedures to be established, implemented, and maintained covering the procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

1. Regulatory Guide 1.33, Appendix A, Item 1.1 listed the plant fire protection program. This requirement was further implemented by AP-302, Revision 0, Fire Protection Housekeeping and Temporary Storage, which required in step 5.2.3 that material to be left in the power block over a shift change be logged and approved. In addition, FPP-007, Revision 4, Control of Flammable Liquids, required in step 5.3.3 that flammable liquids shall only be contained in a safety can or approved closed container defined in an appendix to the procedure.

Contrary to the above, on September 29, 1994, a liter of alcohol was left unattended over a shift change in the steam tunnel, a part of the power block, without being logged and approved, and was contained in a glass bottle, which was not an approved container.

2. Regulatory Guide 1.33, Appendix A, paragraph 9.a, recommended that maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Licensee procedure MPT-I0019, Target Rock Valve Inspection and Refurbishment, Revision 4, Change 4/7, addressed valves qualified for use in a harsh post-accident environment. Procedure step 7.7.6, stated to install the cover and fasteners and tighten the fasteners [locknuts] snug tight. Snug tight was defined in Procedure MMM-010, Revision 3, Change 3/2 as ". . . when the fastener or nut cannot be further turned under the full effort of a single person using an ordinary wrench."

Contrary to the above, procedure MPT-I0019 was inappropriate to the circumstances (inadequate) in that when tightening the fasteners snug tight it resulted in permanent distortion of the target rock valve cover flanges to a configuration outside the tested valve design envelope, placing equipment qualified for a harsh environment in an indeterminate condition.

3. Regulatory Guide 1.33, Appendix A, paragraph 8.b, required implementing procedures for each surveillance test, inspection, or calibration listed in technical specifications.

Procedure MST-E0010, 1E Battery Weekly Test, implemented portions of Technical Specification 4.8.2. Procedure MST-E0010, step 7.0.4 required that if any AS FOUND data exceeded the allowable range, notify the shift supervisor immediately and have the shift supervisor sign off on the data sheet.

Contrary to the above, on September 21, 1994, when the cell temperature for 1A battery pilot cell #37 was 86 degrees Fahrenheit and above the allowable range of > 70 and < 85 degrees Fahrenheit, the temperature was recorded but the shift supervisor was not notified and the signature space for the notification was marked N/A [not applicable].

This is a Severity Level IV violation (Supplement I).

Denial or Admission:

Violation Examples 1, 2 and 3 are admitted.

Reason for the Violation:

Example 1

During the course of corrective maintenance performed on main steam power operated relief valve 1MS-58 in the main steam tunnel, isopropyl alcohol stored in a glass container was used to clean hydraulic tubing. The work process was being performed under a 72 hour Limiting Condition for Operations (LCO) and was worked around the clock, i.e. work was being turned over from shift to shift. During the process parts became unavailable, the job was worked intermittently, and the alcohol was left unattended. Procedure FPP-007 requires that flammable or combustible liquid be contained in a safety can or approved closed container for use in the field. The glass container was not an approved container. The individuals involved failed to adhere to established procedural requirements.

Procedure FPP-007 also states that once work is completed, or at the end of each working day, unless work is being continued into the next shift, flammable and combustible liquids, including aerosols, should be returned to storage areas or cabinets. Procedure AP-302 on the other hand states that all transient combustible material that is required to remain inside the power block longer than one (1) shift, shall be logged using the Transient Combustible Temporary Storage Permit. These conflicting requirements were discovered during the investigation of this violation.

Example 2

Procedure MPT-I0019 did not provide specific instructions for tightening the electrical enclosure cover bolts. A review of the Target Rock vendor manual indicated that no specific instructions were provided detailing torque requirements of the electrical enclosure cover bolts other than

utilizing good mechanical practice.

Example 3

While MST-E0010 Section 7.0, Step 4 stated " Shift Supervisor Notified If Any As Found Surveillance Requirements Exceeded The Allowable Range Or Failed To Respond As Required" and provided a signature block for the Shift Supervisor, in contrast Section 7.1 contained a note stating "If the Allowable Limit is exceeded, the Shift Supervisor must be notified immediately and the Electrical Supervisor must be notified as soon as possible. If any Allowable Range is exceeded, notify the Electrical Supervisor as soon as possible."

The allowable range parameters contained in MST-E0010 are not Technical Specification limits. The allowable range was intended as an administrative limit providing guidance to the technicians to notify their supervisor to determine if further actions may be needed. This was the understanding of the technicians involved; therefore, the shift supervisor's signature space (Sect. 7.0, Step 4) was marked N/A. There was no follow up to resolve the conflicting instructions contained in MST-E0010.

A similar incident occurred on December 8, 1994, and was noted by the inspectors. In this incident while performing MST-E0010 on the 1B battery, the cell voltage was recorded as 2.156 VDC which was less than the stated Allowable Range of ≥ 2.16 but within the Allowable Limit of ≥ 2.13 . In this case the shift supervisor's signature block was also marked N/A.

An Event Review Team chartered to look at several battery related issues had identified the need to correct MST-E0010 prior to the second incident noted by the inspector. The change was being processed along with a major upgrade of this procedure which was approved on December 13, 1994.

Corrective Steps Taken and Results Achieved:

Example 1

The alcohol was immediately removed from the power block and Adverse Condition & Feedback Report (ACFR) 94-2956 was initiated.

Example 2

At the request of CP&L, information was obtained from Target Rock Corporation which indicates that when installing the standard electrical enclosure cover, a small amount of cover flange distortion around the bolt holes is acceptable as is the cover gasket to be extruded in the vicinity of the bolt holes due to the local cover flange distortion. Target Rock Corporation also indicated that during performance of qualification testing the electrical enclosure covers were installed using good mechanical practice.

An inspection for distortion of cover flanges was performed for twenty (20) Target Rock solenoid valves. None of the valves inspected exhibited distorted covers to the point of invalidating their environmental qualification. Two of the valves that were inspected visually



exhibited more distortion than the others, and as a conservative measure Work Request & Authorizations (WR&As) were initiated to replace the covers on these two valves.

WR&As 94-ANDX1 and 94-ANDW1 replaced the cover and gaskets for valves 1SP-42 and 1SP-62 on October 30, 1994. An inspection of the cover gaskets removed indicates that the cover made a seal around the entire circumference of the gaskets. This determination was made by observing the indentation left in the gasket by the cover flange which indicates that the valve covers were providing an adequate seal. Therefore, the environmental qualification for the subject valves was not compromised.

At the request of CP&L, Target Rock has provided more specific instructions for tightening the electrical enclosure cover bolts.

Example 3

Procedure MST-E0010 was revised on December 13, 1994, which included the removal of the administrative limits (allowable range) for battery performance data collected.

Corrective Steps Taken to Prevent Further Violations:

Example 1

A review of Procedure AP-302 and ACFR 94-2956 documenting this violation was included in fourth quarter 1994 mechanical maintenance training.

Procedure FPP-007 was reviewed by maintenance and fire protection personnel and will be revised to be consistent with other procedure requirements. This action will be completed by January 13, 1995.

A Harris Nuclear Plant employee "Stand Down" meeting was held on December 9, 1994 to discuss this and other recent issues of management concern in order to improve overall awareness and to stress individual accountability to prevent future occurrences.

Example 2

The Target Rock instructions will be incorporated into maintenance procedure MPT-I0019. This action will be completed by February 28, 1995.

Example 3

The individuals involved in these incidents have been counselled. The violation was used as an example demonstrating the need to follow procedures and to correct procedures when conflicting requirements exist. This action was completed on December 16, 1994.

A Harris Nuclear Plant employee "Stand Down" meeting was held on December 9, 1994 to discuss this and other recent issues of management concern in order to improve overall awareness and to stress individual accountability to prevent future occurrences.



Date When Full Compliance Will Be Achieved:

Example 1

Full compliance will be achieved by January 13, 1995, upon approval of the revision to procedure FPP-007 as described above.

Example 2

Full compliance will be achieved by February 28, 1995, upon approval of the revision to procedure MPT-I0019 as described above.

Example 3

Full compliance was achieved on December 16, 1994, with the completion of the corrective steps stated above.

Reported Violation C:

10 CFR 50, Appendix B, Criterion III requires, in part that measures be established to assure that regulatory requirements and design bases are correctly translated into design documents. Also, these measures shall include provisions to assure that appropriate quality standards are specified and included in design documents and that deviations from such standards are controlled. Additionally, the design control measures shall provide for verifying or checking the adequacy of design.

The licensee's Corporate Quality Assurance Manual, Section 3.0, sets forth minimum requirements for control of design activities affecting systems, components, and structures. It states, in part, that deviations between plant design documents and actual configuration shall be dispositioned in accordance with Sections 3, 11, or 12. Those sections of the Corporate Quality Assurance Manual outline activities for design, maintenance, and correcting conditions adverse to quality, respectively.

Contrary to the above, as of October 1994, several design deficiencies existed on safety-related small-bore pipe supports which were not identified/corrected by the licensee.

This is a Severity Level IV violation (Supplement I).

Denial or Admission:

The violation is admitted.

Reason for the Violation:

The existing design deficiencies that were identified on these small bore safety related pipe

supports consisted of out-of-tolerance angularity between the pipe strut paddle and the pipe clamp/welded beam attachment, pipe clamps with insufficient clearance between clamp ends, disengaged spherical bearings on pipe strut paddles, and beveled washers being installed backwards. Additionally design deficiencies were identified on small bore non-safety related pipe supports consisting of clevis hangers that did not adequately support the associated piping, non-standard material being utilized on U-bolt supports, and temporary hangers being left in place on the associated piping. These violations can, in part, be attributed to current procedure requirements that could allow the rework/modification of pipe hangers to be completed without a final hanger inspection being conducted by an individual trained in the inspection requirements per procedure MAP-003, Training of Harris Plant Outage and Modifications Section Personnel. The lack of precautions in several site and mechanical maintenance procedures concerning climbing, rigging, and temporary loading on pipe hanger component parts is also a contributor.

Corrective Steps Taken and Results Achieved:

Immediate corrective actions taken were to investigate and document the operability evaluations for the pipe hangers identified in the walkdown, both safety and non-safety related. This action was documented under engineering evaluations Engineering Service Request (ESR) 94-00331, ESR 94-00345, ESR 94-00364, and ESR 94-00387. As noted in the Inspection Report, in each case, the pipe hangers were determined to be either acceptable as-is or to be acceptable for short term operability. Work Request & Authorizations (WR&As) have been initiated to correct those pipe hangers found to be outside the installation tolerances.

Corrective Steps Taken to Prevent Further Violations:

Plant procedures associated with hangers have been identified for revision in order to strengthen the requirements for post installation hanger inspections and to prevent the realignment of pipe hanger components during plant operations. These procedures will be revised by March 1, 1995.

In addition, the System Inspection Guidelines utilized for periodic walkdowns by Plant System Engineers, noted in Attachment 2 of TMM-117, System Engineer Walkdown and Assessment Procedure will be revised to include these types of pipe hanger discrepancies for observation and inspection consideration.

A periodic Q.C. field surveillance program will be established with training provided by the Civil Engineering Unit.

Date When Full Compliance Will Be Achieved:

The procedure revisions noted above will be completed by March 1, 1995. The periodic Q.C. field surveillance program will be established by February 24, 1995. WR&A's for the identified pipe hangers that require rework will be completed by the end of the next refueling outage, currently scheduled to begin in September 1995.



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