



Southern Nuclear Operating Company
the southern electric system

Dave Morey
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Farley Project

October 25, 1996

Docket No.: 50-348
50-364

10 CFR 2.201

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Joseph M. Farley Nuclear Plant
Reply To a Notice Of Violation (VIO)
NRC Inspection Report Numbers 50-348/96-10 and 50-364/96-10

Ladies and Gentlemen:

As requested by your transmittal dated September 27, 1996, this letter responds to VIO 50-348, 364/96-10-01, "Failure to Construct and Maintain An 'As Built' Sample Line In Accordance With Configuration Control Procedures and Drawings"; VIO 50-348, 364/96-10-02, "Failure to Follow a March 14, 1983 Order to Implement And Maintain Commitments for Special Calibration of CHRMs"; VIO 50-348, 364/96-10-03, "Failure to Label Casks of Contaminated Resins In Accordance with 10 CFR 20.1904(a) Requirements"; VIO 50-348, 364/96-10-04, "Failure to Follow Procedures for Proper Personal Dosimetry Use"; and VIO 50-348, 364/96-10-05, "Failure to Have Adequate Procedures for Liquid Effluent Composite Sample Storage."

The Southern Nuclear Operating Company (SNC) responses are provided in five enclosures.

With regard to the liquid effluent release activities related to procedural compliance, Southern Nuclear understands the importance of procedural adherence. Management expectations have been identified to personnel and Southern Nuclear continues to provide these expectations to employees.

A review of previous SNC audits to determine their effectiveness has determined that audits are effective and do identify deficiencies and weaknesses. As an additional level of confidence, personnel from other Southern Company Nuclear facilities will be requested to participate in some of the 1997 radiological protection audits.

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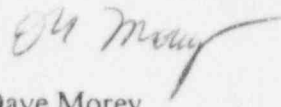
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Confirmation

I affirm that the responses are true and complete to the best of my knowledge, information, and belief.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

A handwritten signature in dark ink, appearing to read "Dave Morey", with a stylized flourish extending from the end.

Dave Morey

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Enclosures:

1. Response to VIO 96-10-01
2. Response to VIO 96-10-02
3. Response to VIO 96-10-03
4. Response to VIO 96-10-04
5. Response to VIO 96-10-05

cc: Mr. S. D. Ebnetter, Region II Administrator
Mr. J. I. Zimmerman, NRR Project Manager
Mr. T. M. Ross, Plant Sr. Resident Inspector

ENCLOSURE 1

VIO 50-348, 364/96-10-01

“Failure to Construct and Maintain An ‘As Built’ Sample Line
In Accordance With Configuration Control Procedures and Drawings”

Enclosure 1

VIO 50-348, 364/96-10-01, "Failure to Construct and Maintain An 'As Built' Sample Line In Accordance With Configuration Control Procedures and Drawings" states:

10 CFR part 50, Appendix B, Criterion V requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Operations Quality Assurance Policy Manual, Section 5.1 Instruction, Procedures and Drawings, states that Southern Nuclear Company - Farley Project will perform safety related activities in accordance with properly approved instructions, procedures and drawings and that contractor and vendor organizations will perform safety-related activities in accordance with properly approved instructions, procedures, and drawings.

Contrary to the above, as of August 10, 1996, properly approved configuration control procedures and drawings were not followed in that the "as built" sample line for the Unit 1 Post Accident Sampling System containment airborne particulate detector was not constructed in accordance with Production Change Notice (PCN) No. B-79-553. Specifically, 90 degree elbows were installed in the filter inlet line.

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

In addition, NRC Inspection Report 50-348/96-07 and 50-364/96-07 states the following:

"A violation was identified for pipe supports which had multiple discrepancies between the field installation and the approved drawings. This violation is considered part of the Notice of Violation issued in IR 96-10 and should be addressed in the SNC response to VIO 50-348, 364/96-10-01.

Admission or Denial

The violation occurred as described in the Notice of Violation.

Reason for Violation

A. The event discussed in Inspection report 50-348/364-96-10

The inadvertent installation of an elbow in radiation monitor RE-67 tubing was the result of personnel error. The installed elbow did not reflect design requirements and although no record exists to support its installation it is believed to have been installed to repair galled tubing or to facilitate sample bomb removal. A review of other radiation monitors installed indicates that this is an isolated occurrence.

B. The event discussed in Inspection report 50-348/364-96-07

This violation related to inadequate as-built configuration control was a result of personnel errors. Each of the events described in the report were reviewed in order to assess any commonality and to formulate appropriate corrective actions. The approach used was to assign primary and/or secondary causes to each item. The causes were then charted to look for trends or recurring themes. The results of this process indicated that although each event could be grouped in a very general category of configuration control, a more appropriate depiction shows the events to be divided into three basic areas.

- Design package preparation or revision errors for supports greater than 2 inch pipe
- Initial installation errors
- Failure to update drawings to reflect "as-built" conditions

The above three categories envelope all of the errors involved.

Corrective Steps Taken and Results Achieved

A. RE-67 sample tubing was replaced with the specified radius bend tubing.

B. For each hanger support item where the as-built configuration was in question, evaluations were performed to determine that the as-built configuration met the design basis codes and standards. In all cases, these evaluations indicated the installed configuration met the applicable codes and standards and therefore the discrepancies did not impact the components ability to perform its intended function.

Enclosure 1

Corrective Steps That Will Be Taken to Avoid Further Violation

A. The event discussed in Inspection report 50-348/364-96-10

Appropriate personnel will be informed concerning the requirements for proper radius bends for radiation monitor sample tubing. Engineering will conduct a design review of radiation monitor sample bomb tubing to determine if an improved design is feasible.

B. The event discussed in Inspection report 50-348/364-96-07

Supports for greater than 2 inch pipe that are being modified during the current unit 2 outage will be evaluated to determine if any load increases. Any such supports will be as-built verified to ensure that all applicable codes and standards continue to be met.

Appropriate personnel will be informed concerning design control configuration requirements and management expectations.

The site maintenance manager has re-emphasized management expectations concerning welding documentation to the maintenance personnel directly responsible for welding at FNP.

Long Term Action:

Additional long term corrective actions are being planned. Southern Nuclear Operating Company (SNC) is developing a corrective action plan to address the programmatic aspects of this violation response. SNC will provide this plan as a supplemental response to this violation within 60 days.

Date of Full Compliance

Full compliance will be achieved by January 24, 1997.

Long Term Action:

This date will be provide in our supplemental response.

ENCLOSURE 2

VIO 50-348, 364/96-10-02

"Failure to Follow a March 14, 1983 Order to Implement And
Maintain Commitments for Special Calibration of CHRMs"

Enclosure 2

VIO 50-348, 364/96-10-02, "Failure to Follow a March 14, 1983 Order to Implement and Maintain Commitments for Special Calibration of CHRMs" states:

10 CFR 50.54(h) requires, in part, the license to be subject to the provisions of the Act now or hereafter in effect, and to all rules, regulations and orders of the Commission.

By letter dated March 14, 1983, an Order to implement and maintain license commitments for post-TMI related items was issued. The Order referenced commitments documented in letters dated April 16, 1982, and June 4, 1982, issued in response to NRC Generic Letters 82-05 and 82-10, and specified, in part, that Three Mile Island (TMI) Action Item II.F.1-3 was complete.

NUREG 0737, Clarification of TMI Action Plan Requirements, Table II.F.1-3 Containment High Range Monitor, specifies, in part, a monitor range of 1 Roentgen per hour (R/hr) to 10^7 R/hr, and that *in situ* calibration by electronic signal substitution is acceptable for all range decades above 10 R/hr.

Contrary to the above, as of August 12, 1996, the licensee failed to implement and maintain the March 14, 1983 Order, in that, *in situ* special calibration by electronic signal substitution for all range decades above 10 R/hr were not conducted for the installed containment high range monitors.

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

Admission or Denial

The violation occurred as described in the Notice of Violation

Reason for Violation

The cause of this violation was procedural inadequacy in that the implementing procedure did not specify electronic calibration for each decade above 10 R/hr. The FNP calibration procedures developed to fulfill the requirements of NUREG 0737 were written based on the vendor guidance at the time. These procedures perform an isotopic calibration check as well as other electronic calibrations. However, the calibration procedures failed to implement electronic calibration for *each* decade above 10 R/hr.

Enclosure 2

The electronic calibration for each decade above 10 R/hr will be performed at least by the next scheduled surveillance.

Corrective Steps Taken and Results Achieved

Procedures for calibration of containment high range monitors will be revised to provide electronic calibration points for each decade above 10R/hr.

Date of Full Compliance

June 1, 1997

ENCLOSURE 3

VIO 50-348, 364/96-10-03

“Failure to Label Casks of Contaminated Resins
In Accordance with 10 CFR 20.1904(a) Requirements”

Enclosure 3

VIO 50-348, 364/96-10-03, "Failure to Label Casks of Contaminated Resins in Accordance with 10 CFR 20.1904(a) Requirements" states:

10 CFR 20.1904(a) requires, in part, that each container of licensed material bears a durable, clearly visible label bearing the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL." The label must provide sufficient information (such as nuclides present, estimates of quantities of radioactivities, radiation levels, kinds of materials) to permit individuals handling or using the containers, or working in the vicinity of the containers, to take precautions to avoid or minimize exposure.

Contrary to the above, as of August 26, 1996, the licensee failed to label properly, two SurPac Casks located outside of the Radiologically Controlled Area and which contained resins having radionuclide materials exceeding the quantities listed in Appendix C to 10 CFR §§ 20.1001-20.2401. The labels did not provide radiation levels or estimate activities, did not indicate time and dates for radiological surveys conducted, and did not identify the kinds of materials present. Similar labels were affixed to empty SurPac Casks within the same general area

This is a Severity Level IV violation (Supplement IV)

Admission or Denial

The violation occurred as described in the Notice of Violation

Reason for Violation

Procedural inadequacy in that the procedure for labeling of licensed radioactive material was not based on the quantity of licensed radioactive material.

Additional Information

In 1992 FNP received a violation citing an inadequate labeling procedure. The corrective actions for this violation resulted in a labeling procedure which utilized at least in part container dose rates as a determiner of the amount of information required on radioactive material labels. In 1992 FNP-0-RCP-57 was revised with this guidance focusing on the minimization of exposure statement in the regulation. It was reasoned that with containers of sufficiently low dose rates a label stating "Caution, Radioactive Material" would be sufficient labeling information to minimize exposure since the exposure potential would be small. The subsequent violations mentioned in the report both cited failure to follow procedure as the basis for the violation. This appeared to reinforce the belief that the procedure itself was satisfactory.

Enclosure 3

The current violation differs from the previous violations in that it leads to a conclusion the procedure was improperly revised in 1992 utilizing dose rate measurements as a basis for determining labeling detail. Based on current review of the regulations and discussions with the NRC it has now been concluded this approach is not appropriate and the labeling requirements should be based on quantity of licensed material alone without regard to dose rate information.

Corrective Steps Taken and Results Achieved

The 'surpacs' in question were labeled with additional information. The information included the container dose rates, the contents, and date of survey.

Management expectations concerning container labeling have been verbally communicated to site HP personnel. Container labels in the RCA have been revised to contain dose rate, contents, contamination level (where appropriate), date, and technician's name.

Corrective Steps That Will Be Taken to Avoid Further Violation

FNP-0-RCP-57 will be revised. Containers which contain or could contain quantities of licensed radioactive material above regulatory limits will be properly labeled.

Following development of the procedure Health Physics personnel will be trained on the revised labeling program

Date of Full Compliance

December 31, 1996

ENCLOSURE 4

VIO 50-348, 364/96-10-04

"Failure to Follow Procedures for Proper Personal Dosimetry Use"

Enclosure 4

VIO 50-348, 364/96-10-04, "Failure to Follow Procedures for Proper Personal Dosimetry Use" states:

Technical Specification (TS) 6.11 requires, in part, that procedures for personnel radiation protection be prepared consistent with the requirements of 10 CFR Part 20 and be approved, maintained and adhered to for all operations involving personnel radiation exposure.

Procedure FNP-O-M-001, Health Physics Manual, Rev. 12, effective July 14, 1996, § 5.4 requires dosimetry devices to be worn on the front of the body between the neck and waist inclusive. The Thermoluminescent Dosimeter (TLD) and Digital Alarming Dosimeter (DAD) should be worn near each other on the body.

Contrary to the above, during the week of August 26, 1996, numerous individuals within Radiologically Controlled Areas of the Unit 1 and Unit 2 Auxiliary Buildings and the Low Level Radioactive Waste building were observed with personal dosimetry not being worn on the front of the body between the neck and waist, and with the TLD and DAD separated from each other.

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

Admission or Denial

The violation occurred as described in the Notice of Violation

Reason for Violation

Personnel Error in that individuals were not adhering to the requirement in the Health Physics Manual and addressed in Radiation Worker Training (RWT).

Corrective Steps Taken and Results Achieved

Management requested each group to discuss with personnel regarding correct positioning of dosimetry.

This event was discussed at a plant information meeting.

Health Physics personnel were instructed to increase their awareness of personnel dosimetry configurations and assist in correction of discrepancies identified.

Increased personnel monitoring for proper use of TLDs and DADs by HP representatives is occurring during the present Unit 2 outage.

Accumulated dose for the first two quarters of 1996 comparing Electronic Reading Dosimeters versus TLDs indicated doses to be consistent.

Corrective Steps That Will Be Taken to Avoid Further Violation

A periodic observation program will be established by Health Physics. Personnel will be observed regarding their dosimetry configuration. Corrective actions will be initiated as required based on the results of this program

Date of Full Compliance

December 1, 1996

ENCLOSURE 5

VIO 50-348, 364/96-10-05

“Failure to Have Adequate Procedures for
Liquid Effluent Composite Sample Storage”

Enclosure 5

VIO 50-348, 364/96-10-05, "Failure to Have Adequate Procedures for Liquid Effluent Composite Sample Storage" states:

TS 6.8.1(i) requires, in part, that written procedures be established, implemented and maintained covering programs for effluent and environmental monitoring, using the guidance in Regulatory Guide (RG) 4.15, February 1979.

RG 4.15 specifies, in part, that procedures for storage of samples be designed to maintain the integrity of the sample from time of collection to time of analysis.

Contrary to the above, as of August 12, 1996, the licensee failed to have an adequate procedure to maintain iron-55 (Fe-55), strontium (Sr)-89, and Sr-90 concentrations in solution for composite samples collected and stored to assure representative liquid effluent stream measurements.

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

Admission or Denial

The violation occurred as described in the Notice of Violation

Reason for Violation

Procedural inadequacy in that the procedure did not contain adequate guidance to ensure proper preservation of composite samples.

Additional Information

After a review of standard chemical methods/references, consultation with subject matter experts in the industry, and the practices of our sister nuclear plants regarding sampling and preservation of liquid composite samples, it was concluded our procedures should be changed.

Corrective Steps Taken and Results Achieved

Action was taken to provide for proper preservation of all composite liquid effluent samples that had been collected and awaiting analysis at that time.

Corrective Steps That Will Be Taken to Avoid Further Violation

FNP-0-CCP-47, Preparation of Composite Effluent Samples, was revised to address appropriate sample preservation.

A review was performed to identify other procedures which could be affected by the potential for sample plate out. Based on this review FNP-0-STP-793.0, River Water Samples was also revised to provide for sample preservation.

A preliminary review was performed as to the impact of not preserving samples. This review concluded that lack of sample preservation has not resulted in approaching any release limits.

A more detailed study will be completed to quantify the affect of non-preservation of affected samples. The results of this study will be documented. This information will also be included in appropriate reports.

Date of Full Compliance

February 15, 1997