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U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: Catawba Nuclear Station
McGuire Nuclear Station
Oconee Nuclear Station
Docket Nos. 50-413, 50-414
Docket Nos. 50-369, 50-370
Docket Nos. 50-269, 50-270, 50-287

Reference: NRC/OIE Inspection Report
50-413/86-44, 50-413/86-47
50-369/86-32, 50-370/86-32
50-269/86-32, 50-270/86-32, 50-287/86-32

Gentlemen:

Pursuant to 10CFR2.201 , please find attached a response to the violations which were identified in the above referenced Inspection Reports.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

JBD/169/jgm

Attachment

IE01
1/1

xc: Mr. W.T. Orders
NRC Resident Inspector
McGuire Nuclear Station

Mr. P.H. Skinner
NRC Resident Inspector
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NRC Resident Inspector
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DUKE POWER COMPANY
RESPONSE TO VIOLATION IN INSPECTION REPORTS

A. Violation 50-369, 370/86-32-01, Severity Level V

McGuire Nuclear Station Technical Specification 6.8.1 requires that written procedures be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

MNS Procedure OP/1/B/6400/01A requires that Operations verify with Health Physics that the Turbine Building Sump (TBS) is clean prior to realignment of TBS effluents from the Condenser Cooling Water (RC) radioactive waste discharge system to the Conventional Wastewater (WC) discharge system.

Contrary tho the above, on May 6, 1986, MNS Operations realigned TBS effluent discharge from the RC to WC system prior to verifying that the required health physics sample analyses had been performed and the TBS effluents met requirements for release tc the WC system. This resulted in the release of TBS effluents containing tritium to the WC system.

RESPONSE:

1. Admission or denial of the alleged violation:

   Duke Power admits the violation occurred as stated.

2. Reasons for violation:

   Procedure OP/1/B/6400/01A requires that Operations contact HP prior to realignment to WC to verify the sump is clean. The requirement for two clean samples is contained in HP procedure HP/0/B/1003/02. The operators erroneously thought that all required sampling was complete. The premature realignment stems from miscommunication between Operations and involved Health Physics personnel.

3. Corrective steps which have been taken and the results achieved

   All involved personnel were counseled on the requirement for two acceptable samples.

4. Corrective steps which will be taken to avoid further violations

   OP/1/B/6400/01A will be revised to explicitly require HP's permission to realign to WC after known activity in the TBS.

5. Date when full compliance will be achieved

   Full compliance will be achieved by 02/01/87.

A. Violation 50-369, 370/86-32-02, Severity Level IV

10CFR50.59(a)(1) states that the holder of a license authorizing operation of a production or utilization facility may make changes in the facility as described in the safety analysis report without prior Commission approval, unless the proposed change, test or experiment involves an unreviewed safety question. Furthermore, a proposed change shall be deemed to involve an unreviewed safety question if a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created.

MNS Technical Specification 6.5.2.8 states that the Nuclear Safety Review Board (NSRB) shall review safety evaluations for changes to procedures, equipment or systems, to verify that such actions did not constitute an unreviewed safety question.

Contrary to the above, a safety analysis report was not prepared and evaluated by the NSRB for functional changes to the Auxiliary Building Laboratory Room 954 made at approximately the time of McGuire Nuclear Station Unit 1 startup. The Auxiliary Building Laboratory Room 954 function was changed from that of an environmental laboratory which processed nonradiological samples to a health physics shift laboratory which processed radiological samples. Use of Room 954 laboratory for processing and/or disposal of radioactive liquid samples resulted in the contamination of the MNS Domestic (sanitary) Waste Treatment (WT) system and subsequent unmonitored release of radioactive liquid effluents to unrestricted areas.

RESPONSE:

1. Admission or denial of the alleged violation:

   Duke Power admits the violation did occur as stated with respect to the lack of a safety evaluation being performed once tritium was discovered in the waste treatment (WT) system. However, Duke Power denies that a change was made to Room 954 which would have required a 50.59 evaluation.

2. Reasons for violation:

   The change in name of the lab in question, Room 954, did not violate 10CFR50.59(a)(1) since its function never changed. Only the name or title by which the laboratory was called changed. Therefore, a safety analysis would not have been required under T.S. 6.5.2.8.

   From its initial use, the lab was designated for the preparation of certain "potentially contaminated" Health Physics samples. Prior to unit startup, the samples were, of course, non-contaminated and were treated as "potentially contaminated". After unit startup, the samples were contaminated, but the types of samples being prepared in that lab were the same then as before startup.

   The error was made when the preoperational drain test results were not factored into the use of the lab sink. Based on the test results, the sink should have been labeled but was not.

However, after the discovery of tritium in the WT system, an immediate safety evaluation was not performed as required by 10CFR50.59 due to an oversight by station personnel.

3. Corrective steps which have been taken and the results achieved

Since the problem has been identified, Room 954 drains have been posted and rendered inoperable to prevent inadvertent use.

4. Corrective steps which will be taken to avoid further violations

No additional corrective steps are considered necessary.

5. Date when full compliance will be achieved

McGuire was in full compliance as of October 17, 1986.

C. Violation 50-369, 370/86-32-03, Severity Level IV

10CFR20.201b, requires a licensee to perform such surveys as (1) may be necessary to demonstrate compliance with 10CFR20.106 which limits the release of radioactivity in unrestricted areas to the concentrations in Appendix B, Table II and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

Contrary to the above, from February 1982 to June 1986, McGuire Nuclear Station did not conduct adequate radiological surveys of potentially contaminated liquid effluents released through the Domestic Wastewater Treatment (WT) system to demonstrate compliance with 10CFR20.106 limits.

RESPONSE:

1. Admission or denial of the alleged violation:

Duke Power admits the violation did occur as stated for the period beginning in June 1984 through June 1986.

2. Reasons for violation:

The violation resulted from an oversight in which counting instrumentation being utilized for radioactivity surveys of the Sanitary Waste Treatment (WT) system was changed. McGuire implemented a radiological monitoring program in December 1980 that included tritium (H-3) and gross beta analyses on the WT system. In November 1981, H-3 analyses were excluded from the monitoring program since the gross beta analyses also encompassed H-3 energy levels. Therefore, the gross beta analyses would indicate the presence of beta emitting isotopes including H-3. However, in June 1984, the instrumentation was changed in a manner in which the gross beta analyses no longer included energy levels for H-3 detection. These changes now required separate analyses for gross beta nd H-3. McGuire personnel responsible for the monitoring program were not aware of these instrumentation changes and failed to modify the program to include H-3 until June 1986.

3. Corrective steps which have been taken and the results achieved

In May 1986, McGuire's Conventional Wastewater Treatment (WC) system become contaminated with H-3. The omission of H-3 detection in the gross beta analyses was discovered during this event by personnel responsible for the monitoring program. McGuire immediately incorporated H-3, gross beta, and gamma isotopic analyses into the monitoring program to ensure adequate surveys. In September 1986, H-3 was detected in the WT system. The primary source of the contamination has been identified and secured.

4. Corrective steps which will be taken to avoid further violations

No additional corrective steps are considered necessary.

5. Date when full compliance will be achieved

McGuire was in full compliance as of July, 1986.

D. Violation 50-369, 370/86-32-08, Severity Level V

McGuire Nuclear Station Technical Specification 6.9.1.6 requires the Annual Radiological Environmental Operating Reports to include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, with operational controls as appropriate, and with previous environmental surveillance reports.

Contrary to the above, the MNS Annual Radiological Environmental Operating Report for the calendar year 1985, dated April 30, 1986, did not contain a summary comparing radiological environmental surveillance data for the report period to preoperational studies.

RESPONSE:

1. Admission or denial of the alleged violation:

Duke Power admits the violation occurred as stated.

2. Reasons for violation:

The violation occurred due to oversight by the personnel responsible for the report.

3. Corrective steps which have been taken and the results achieved

The personnel involved have been counseled and made aware of the requirements.

4. Corrective steps which will be taken to avoid further violations
No further actions are considered necessary.

5. Date when full compliance will be achieved

Full compliance will be achieved upon submittal of the next Annual Radiological Environmental Operating Report, by May 1, 1987.

E. Violation 50-269, 270, 287/86-32-02, Severity Level V

Oconee Nuclear Station (ONS) Technical Specification 6.6.1.5 requires the Annual Radiological Environmental Operating Reports to include summaries, interpretations, and statistical evaluation of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment.

Contrary to the above, the ONS Annual Radiological Environmental Operating Report for the calendar year 1985, dated April 30, 1986, did not contain summaries or interpretations of the results of the radiological environmental surveillance activities for the report period, nor was there an assessment of the observed impacts of the plant operation on the environment.

RESPONSE:

1. Admission or denial of the alleged violation:

Duke Power admits part of the violation in that the Oconee Annual Radiological Environment Operating Report for the calendar year 1985 did not contain an assessment of the observed impacts of the plant operation on the environment, however, the report did contain a summary of the results of the radiological environmental surveillance activities for the report period. The appropriate page from the report is attached thus that portion of the violation is denied.

2. Reasons for violation:

The portion of the violation being admitted is due to oversight by the personnel responsible for the report.

3. Corrective steps which have been taken and the results achieved

The personnel involved have been counseled and made aware of the requirements.

4. Corrective steps which will be taken to avoid further violations

No further actions are considered necessary.

5. Date when full compliance will be achieved

Full compliance will be achieved upon submittal of the next Annual Radiological Environmental Operating Report, by May 1, 1987.

Comparison of Environmental and Liquid Waste Release Data

The annual summary sheets (Exhibit 1) identify fish (Cs-134, Cs-137) and drinking water (H-3) as the two pathways having significant activity in the environment.

Dose calculations were performed per Reg. Guide 1.109 using the Exhibit 1 data for Cs-134 and Cs-137. The results of these calculations show a liver dose of 1.9 mrem/yr for teens and adults. The same calculations were also done using Liquid Waste Release data for 1985 with a result of 0.31 mrem/yr. The reason for the difference between these two doses is demonstrated by Exhibit 2 which shows release of radiocesium by year and also by accumulation over the operating life of the station. This graph shows that the majority of radiocesium released by Oconee was released prior to 1978. This suggests that much of the activity found in fish may be due to old radiocesium released prior to 1985. The calculation based on liquid releases does not take account of old releases.

Calculations performed for H-3 activity in drinking water show a dose of 0.145 mrem/yr for actual environmental data and 0.187 mrem/yr for Liquid Waste Release data.

Review of all other sampling media and locations show no significant activity and therefore no significant offsite dose. (Exhibit 1)