DUKE POWER COMPANY
OCONEE UNIT 1

Report No.: AO-269/74-9

Report Date: May 23, 1974

Occurrence Date: May 13, 1974

Facility: Oconee Unit 1, Seneca, South Carolina

Identification of Occurrence: Release of gaseous waste with the waste gas monitor and the stack monitor inoperable.

Conditions Prior to Occurrence: Cold shutdown

Description of Occurrence:

On May 13, 1974, preparations were made to release from waste gas tank A. The content of the tank was sampled, and a release rate of 30.3 cfm was determined. Following the procedure for gaseous waste releases, an operator calibrated the waste gas monitor RIA-38 and the stack monitor RIA-45. After establishing the appropriate calibration, the operator failed to return the monitors to their normal operational condition. After approximately 75 minutes of release, it was noticed that the monitors were still in their calibration position; they were immediately placed in operation.

Designation of Apparent Cause of Occurrence:

The apparent cause of this occurrence was operator error.

Analysis of Occurrence:

Gaseous releases pass through two stack monitors, RIA-45 and RIA-46. The dynamic range of these monitors is designed to cover both normal and abnormal releases; one is used to annunciate a high radiation level and the other automatically terminates the release. Monitor RIA-45 is interlocked to automatically terminate a release on high radiation level. This monitor was in the calibration position and therefore would not have automatically actuated. However, RIA-46, which is used to annunciate a high radiation level, was fully operable. If the release had resulted in a high radiation level, the alarm would have alerted the operator to stop the release.

The sample taken from the A waste gas tank indicated that no release limit was exceeded. Sample results were as follows:

Particulate - 6.4×10^{-13} μCi/ml
Gaseous - 0.1118 μCi/ml
Iodine - 1.15×10^{-6} μCi/ml

7912160038

The occurrence caused no significant impact on the environment and did not affect the health and safety of the public.

Corrective Action:

To prevent recurrence of this or similar incidents, the following corrective action will be taken:

1. The requirement to verify that all monitors have been returned to the normal position will be added to waste release procedures.

2. The procedure for releasing gaseous waste has been modified to require verification by the operator making the release that all procedural steps have been completed prior to the release. This verification will be documented on the Gaseous Waste Release Form which must be completed prior to any gaseous waste release. The shift supervisor also documents that he has reviewed the Gaseous Waste Release Form and is satisfied that the release can be properly made.