



SUPPLEMENTARY INFORMATION

1. Report No.: 50-302/77/116E
2. Facility: Crystal River Unit #3
3. Report Date: 26 September 1977
4. Occurrence Date: 18 September 1977

5. Identification of Occurrence:

An unmonitored radioactive release to the atmosphere contrary to Technical Specification 3.3.2.1, Tables 3.3-3 and 3.3-4.

6. Conditions Prior to Occurrence:

Mode 1 operation, Reactor Building purge in progress.

7. Description of Occurrence:

At 1850 on 15 September 1977 a weekly Reactor Building purge was initiated and was continuous to 0800 18 September 1977 when it was discovered that the vacuum pump for the Reactor Building purge monitor RM-A1 had failed at 0509 18 September 1977. This constituted an unmonitored radioactive release to the atmosphere for a period of 2 hours and 51 minutes at a release rate of 35 microcuries per second. Upon discovery of the inoperable vacuum pump the purge was terminated immediately and a maintenance Work Request was initiated for repair of RM-A1 vacuum pump.

8. Designation of Apparent Cause:

The cause of the occurrence was due to the failure of the RM-A1 alarm indicator in the Control Center to annunciate vacuum pump failure, and personnel not responding to computer alarm of "RB Purge Duct high radiation level".

9. Analysis of Occurrence:

The health and safety of the plant and public were not affected as no Environmental Technica? Specification limit was exceeded and the release rate represented .005% of the maximum allowable instantaneous release rate.

10. Corrective Action:

A request to Production Engineering has been initiated for an investigation, evaluation and recommendation of positive action to be taken to ensure vacuum pump failure annunciation and purge termination. Corrective action to preclude recurrence will be taken upon receipt of recommendations. OP-417 Section on Containment Equalization will be revised to ensure operability of RM-A1 vacuum pump.

11. Failure Data:

This constitutes the third occurrence of an unmonitored purge to this date, but it is the first occurrence of vacuum pump failure while purge was in progress. Refer to IERs 77-74E dated 26 July 1977 and 77-105E dated 12 September 1977.