

SAFETY EVALUATION

GRAND GULF NUCLEAR STATION UNIT 1

CONTAINMENT INTEGRATED LEAKAGE RATE TEST

By letter dated February 28, 1986, the licensee (Mississippi Power and Light Company) submitted the summary technical report for the Containment Integrated Leak Rate Test (CILRT) completed on November 4, 1985 at Grand Gulf Nuclear Station Unit 1 (GGNS-1). The licensee stated that the CILRT did not meet the acceptance criteria of Appendix J until certain containment penetrations were isolated. Therefore, the test was defined as a failure. The sources of leakage (i.e., main steam line and spare standby liquid control line isolation valves) were identified and isolated. The isolation of these penetrations reduced the leakage to allow successful completion of the Type A test. Under the provisions of Appendix J, paragraph III.A.6(a), if any Type A test fails to meet Appendix J acceptance criteria, the licensee is required to submit a test schedule applicable to the subsequent Type A tests. The licensee proposes that the schedule for subsequent Type A testing remain as currently specified in Technical Specification 4.6.1.2.a for GGNS-1.

In regard to the potential impact on the success or failure of a periodic Type A test, the staff's position is that when repair or adjustments (RAs) are made to valves prior to the Type A test sequence as a result of excessive leakage or other reasons, local leak tests must be performed on the affected valves to determine the leakage rates before and after the RAs. The "as found" Type A test result should be obtained by adding the difference between the affected valve leakage before and after RAs to the overall measured Type A test result. The periodic Type A test would be called a "failure" if the "as found" Type A test result with appropriate correction from local leak rates exceeds the acceptance criteria of Appendix J.

The licensee has measured the "as left" leakage following post-test normal closure or repair of the affected valves and added it into the Type A test result. The licensee did not attempt to add the valve leakage before the RAs to the "as found" Type A test result since the leakage was indeterminate. The licensee, however, did define the test as a failure. The staff believes that determining the "as found" Type A test result by adding the "as left" valve leakage after RAs to the Type A test measurement is conservative since the licensee in essence assumed "zero" valve leakage after these penetrations were isolated.

Consequently, the licensee submitted CILRT results, as modified and stated in the summary technical report, are acceptable. Furthermore, the staff concurs with the licensee's proposal to use the current schedule for subsequent Type A testing. Appendix J requires more frequent CILRTs only when two successive Type A test failures occur. Only one Type A test failure has occurred which does not constitute a basis for a more frequent CILRT schedule.