date. The leakage rates range from a low of 13.3 scfh to a high of 3454 scfh. The Oyster Creek leakage rate was listed as 33 scfh. Oyster Creek did not have multiple failure dates as did 7 of the 10 plants and had less severe leakage than 79 of the 92 valves reported as exceeding LLRT limits.

The licensee stated further that since 1981 Oyster Creek has had four LLRT failures. The first two failures were in 1982 with leak rates of 22.9 scfh and in excess of 120 scfh. These valves which failed the LLRT are in series, therefore, the leakage out of the main steam lines would have been limited to 22.9 scfh. The other two failures were during the Cycle 10 refueling outage (1984) and the leak rates were 16.34 scfh and 17.21 scfh. However, in each case, the second valve in series had a leak rate of less than the Oyster Creek Technical Specification limit of 12.08 scfh.

During the NRC Region I Inspection 50-219/86-04, the Oyster Creek MSIV leakage test results and maintenance history were reviewed by the Region to determine the extent of leakage experienced at Oyster Creek and the effectiveness of the licensee's maintenance program. During this inspection, the Region determined that MSIV leakage has not been excessive, generally less than 100 scfh. Available test data showed that on only one occasion, in 1982, did one valve leak in excess of 100 scfh. Leakage data from five outages was reviewed for the period 1977 through the 1983-84 outage and shows that on only two occasions did two valves in series not meet their acceptance criteria. This was in 1978 and 1982. Here the maximum leakage through any single penetration would have been 14.13 and 22.9 scfh which is only slightly greater than 12.08 scfh which is the allowable valve leakage criterion of the Technical Specification.

Also, based on the review of MSIV maintenance data, the Region determined that the preventive and corrective maintenance being performed has been effective in maintaining the valves' performance. The licensee's maintenance program for these valves includes input from both General Electric and the valve manufacturer, Atwood and Morrill. The licensee's preventive maintenance program for MSIVs calls for the four valves to be repacked each refueling outage. The MSIVs are rebuilt if the leakage through the valve exceeds the LLRT limit. The licensee is continuing discussions with General Electric and the valve manufacturer to ensure that repair methods are kept up to date.

III. CONCLUSION

Based on the above, the staff concludes that the licensee has developed, implemented and is keeping up to date a maintenance program adequate to maintain the MSIVs in an acceptable condition. Therefore, the staff concludes that the issue in IPSAR Section 4.38 is satisfactorily resolved.