PRELIMINARY STAFF REPORT ON LER 82-007/0IT-0
FOR POINT BEACH, UNIT 1

In answer to question 1, there was one other tube sleeved during the demonstration sleeving program which had explosive plugs removed from the hot and cold legs. This tube was sleeved in both the hot and cold legs.

In answer to question 2, the Staff has reviewed the information contained in the subject LER just recently received by the Staff and has had telephone conversations with the Licensee Wisconsin Electric Power Company concerning the information. It is the Staff's preliminary finding that there is no danger to the public health and safety in light of the information presented in the LER.

The tube discovered to be leaking on the cold leg side was leaking at a rate of 20 drops per minute. This is equivalent to about 15 gallons per day. This is approximately 6% of the total allowable leakage of 250 gallons per day (gpd) for the Unit 1 steam generator as allowed by the Confirmatory Orders for Modification of License issued in November, 1979 for Point Beach Unit 1. This total leakage limit of 250 gpd is twice as restrictive as the allowable total primary to secondary leakage limit for the Point Beach Unit 2 and other PWR steam generators.

Though the Licensee has not identified the cause, type or location of the defect which caused the leak, it may well have been due to the plug removal process used during the sleeving outage. Hydrostatic testing has not revealed a similar leakage problem on the other tube from which explosive plugs were removed.

The Licensee has plugged the leaking tube R25C27 from which explosive plugs were removed. Even assuming that the remaining tube from which explosive plugs were removed was to leak due to damage from the plug removal process, the leak would take place well within the tube sheet (total length about 22 inches) since explosive plugs are only about 6-8 inches long.

Appendix A of the Staff's November 30, 1979 Safety Evaluation Report attached to the November, 1979 Confirmatory Orders for Modification of License for Point Beach Unit 1 calculates tube leakage from defects within the tubesheet for both the LOCA and MSLB conditions. The maximum calculated primary to secondary leakage for MSLB accident conditions is 9.5 gpm for a defect located 10 inches below the top of the tubesheet due to the narrow .008" gap between the tube and tubesheet wall. A defect associated with this explosive plug removal would presumably be further from the top of the tubesheet and the leakage rate would be further constrained. The maximum calculated in-leakage for the case of a nominal crevice gap of .008 inches was 5.5 gpm for LOCA accident conditions assuming a differential pressure of 800 psid. This leakage rate will not have any

effect on ECCS performance. The necessary in-leakage identified in Appendix A of the Staff's SER to induce a steam binding effect which would retard ECCS performance is 1300 gpm.

Though the Staff does not have any immediate safety concerns regarding the one sleeved tube in Unit 1 from which explosive plugs were removed, it does note that the Licensee was not able to locate the leaking flaw with eddy current testing. Nor did previous inspection results show that a potential problem area existed. Therefore, the staff would expect further assurance from the Licensee that explosive plugs could be removed without causing or contributing to tube defects prior to approving sleeving of tubes that had been previously plugged with explosive plugs.

However, the Licensee has in fact indicated that it does not intend to attempt explosive plug removal in the future.

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