Wisconsin Electric POWER COMPANY
231 WEST MICHIGAN, MILWAUKEE, WISCONSIN 53201

August 27, 1974

Mr. Edson G. Case, Deputy Director
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Case:

DOCKET NO. 50-266
FAILURE OF LO-LO STEAM GENERATOR BISTABLE TO TRIP
POINT BEACH NUCLEAR PLANT

This letter is to report the details of an abnormal occurrence at the Point Beach Nuclear Plant Unit No. 1, Facility Operating License No. DPR-24, as defined by Section 15.1.a.D of the Technical Specifications. This written report, filed in accordance with Section 15.6.6.A.2 of the Technical Specifications, follows a verbal notification of the event to Mr. Dwane Boyd, Region III, Directorate of Regulatory Operations, on August 15, 1974, per Section 15.6.A.1 of the Point Beach Nuclear Plant Technical Specifications.

On August 15, 1974, at approximately 10:30 A.M. during the monthly surveillance test, ICP 2.1, Protection Analog Test, the Unit 1 "B" steam generator level channel 472, lo-lo level bistable would not trip when tested. The bistable was replaced with a spare which was then tested satisfactorily prior to placing it into service.

In a followup bench test of the failed bistable, it was discovered that a silicon controlled rectifier, SCR, had failed in the unit, preventing the bistable from tripping. The SCR was replaced and the bistable then tested satisfactorily. The bistable was then placed back into service and the temporarily installed spare was removed.

The bistable in question is one channel of a two out of three logic on the "B" steam generator. The logic's purpose is to initiate a reactor trip upon an actual lo-lo level and to start a motor-driven auxiliary feed pump to reestablish the steam generator liquid level and water inventory in the same steam generator.

The overall results of the surveillance test verified

50-266 ltrqiury 9069

that all other bistables in the reactor protection system operated correctly. Had a lo-lo level actually occurred in the "B" steam generator, the remaining two bistables were fully capable of functioning to initiate a reactor trip and startup of a motor-driven auxiliary feed pump. Additionally, the "B" steam generator lo level trips, which in conjunction with steam flow/feed flow mismatch also initiate a reactor trip, all functioned satisfactorily. The "A" steam generator reactor protection system bistables all operated correctly when tested. Finally, in the unlikely event of these automatic signals failing to trip the reactor or start an auxiliary feed pump, manual tripping of the reactor and manual starting of pumps were available at all times as a backup operator action.

Accordingly, the failure of the "B" steam generator lo-lo level, channel 472, bistable did not, in our evaluation, create a hazard to the health and safety of the public.

As a followup action on this failure, the portion of surveillance test ICP 2.1 dealing with channel 472 was rerun on August 22, 1974, to confirm its continued reliability. No problems were found in this retest.

The previously successful operating and test history of this bistable indicates the failure was an isolated case. No increase in test frequency is planned. Normal monthly surveillance tests will be continued.

Very truly yours,

Sol Burstein

Sol Burstein

Executive Vice President

cc: Mr. James G. Keppler, Regional Director
Directorate of Regulatory Operations, Region III