AUG 1 2 1981

Docket Nos. 50-266 and 50-301

> Mr. Sol Burstein Executive Vice President Wisconsin Electric Power Company 231 West Michigan Street Milwaukee, Wisconsin 53201

DISTRIBUTION Docket File NRC PDR L PFR NSIC TERA ORB#3 Rdg D. Eisenhut OELD 1&E-3 R.A. Clark T. Colburn P.M. Kreutzer ACRS-10 J. Heltemes Gray Files

DCS MS-016

Dear Mr. Burstein:

On April 21, 1980 we forwarded to you our Safety Evaluation Report (SER) on the modifications to the instrumentation power supply for Point Beach Nuclear Plant Units 1 and 2 as contained in your submittals of April 30, May 2 and May 21, 1979. The staff condluded in our SER that the modifications to the design of the vital instrument power supply identified in your submittals provided additional assurance that a loss of offsite power would not cause the diesel generators to be overloaded and was therefore an acceptable interim fix. However, a remaining staff concern was that the proposed modifications did not provide protection against single failure causing the spurious starting of all emergency loads in both units. By letter dated April 21, 1980, we forwarded our SER and requested that you provide additional information to correct this deficiency and that you provide your schedule for completion including any changes needed in the Technical Specifications. You responded to our request by letters dated May 29, 1980 and November 3, 1980 with your proposed modifications indicating your intent to complete the modifications by January 1, 1981.

We have completed our evaluation of your responses and find your proposed modifications to the Point Beach Units 1 and 2 instrument bus power supplies to be acceptable. A detailed analysis is contained in the enclosed Safety Evaluation Report (SER).

If not completed, you are requested to submit within 30 days of receipt of this letter, a schedule Consistent with completing the proposed modifications at the earliest possible date. You are also requested to submit within 90 days receipt of this letter, your proposal for any necessary Technica P. / P. Specification changes associated with these modifications.

Sincerely,

Robert A. Clark, Chief Operating Beactors Branch # Division of Licensing

Enclosure: As stated

OFFICE	cc.:	See next	pag	OPB#3:DL PMkreutzer	ORB#3:DL TColburn/ep	RACIark		
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Wisconsin Electric Power Company

cc:

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U. S. Environmental Protection Agency Federal Activities Branch Region V Office ATTN: EIS COORDINATOR 230 S. Dearborn Street Chicago, Illinois 60604

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SAFETY EVALUATION REPORT INSTRUMENT BUS MODIFICATIONS POINT BEACH NUCLEAR PLANT, UNITS] AND 2

1.0 INTRODUCTION

Wisconsin Electric Power Company, the licensee, requested approval for modification to the design of vital instrument bus power supplies in its letter of May 29, 1980. The purpose of the modification is to correct an unacceptable power supply arrangement discovered during the safety evaluation of plant changes resulting from IE Bulletin No. 79-06A, dated April 4, 1979. The safety evaluation of April 21, 1979, indicated that the existing instrument bus design did not provide protection against single failures causing a spurious starting of all emergency loads in both units which would overload the shared emergency diesel generators. The licensee provided additional information describing the proposed modifications in its letter dated November 3, 1980. The purpose of the review is to determine if the proposed design rectifies the single failure inadequacy discovered in the earlier safety evaluation.

2.0 DISCUSSION AND EVALUATION

The modification to the instrument bus power supplies consists of the addition of two batteries, three battery chargers, six static inverters, and associated distribution buses and wiring to supply power to the white (1Y03 and 2Y03) and yellow (1Y04 and 2Y04) instrument buses of both units (see Figure 1). These modifications essentially duplicate the existing power supply arrangement for the red (1Y01 and 2Y02) and blue (1Y02 and 2Y02) instrument buses.

Under the proposed design, each instrument bus would be powered by one of two static inverters receiving power from a DC bus. Redundant instrument buses (white and yellow) would be powered from independent and redundant DC buses. The DC buses would each be powered by a battery bank or a battery charger. A third, shared battery charger would be capable of serving either DC bus but would be interlocked to prevent the redundant DC buses from being connected.

The proposed modification in combination with the existing power supply design for the red and blue instrument buses results in an instrument bus system which can be operated without offsite power. The design is such that the worst case single failure in conjunction with a loss of offsite power and a LOCA in one unit, would result in the failure of only one instrument bus per unit. Such failure could not result in a spurious starting of all emergency loads in both units.

3.0 Conclusion

Based on the above, the staff concludes that the proposed modifications to the Point Beach Nuclear Plant, Units 1 and 2, instrument bus power supplies result in an instrument bus system which is capable of operation without offsite power. Additionally, the four instrument buses per unit are redundant and independent such that no single failure in conjunction with a loss of offsite power and a LOCA in one unit would result in a spurious starting of all emergency loads in both units. Accordingly, the staff finds the modifications to be acceptable.