

March 14, 1983

Mr. H. R. Denton, Director Office of Nuclear Reactor Regulation U. S. NUCLEAR REGULATORY COMMISSION Washington, D. C. 20555

Attention: Mr. R. A. Clark, Chief Operating Reactors Branch 3

Gentlemen:

DOCKET NOS. 50-266 AND 50-301 ELECTRIC POWER DISTRIBUTION SYSTEM POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

We have been advised by Mr. T. Colburn of your staff that after reviewing responses dated October 12, 1979 and June 1, 1981 to requests for additional information regarding the electrical distribution system at the Point Beach Nuclear Plant, it has been determined that Wisconsin Electric has not adequately addressed whether the Point Beach off-site power distribution system meets the intent of 10 CFR Part 50, Appendix A, General Design Criteria (GDC) 17. Specifically, GDC 17 states that electric power from the transmission network to the on-site electric distribution system shall be supplied by two physically independent circuits designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions.

In our previous responses we advised that the electrical distribution system at the Point Beach Nuclear Plant is described in Chapter 8 of the Final Safety Analysis Report. As you know, the Point Beach Nuclear Plant was designed and constructed prior to the effective date of the final rule promulgating 10 CFR Part 50, Appendix A. The proposed GDC concerning electrical distribution at the time Point Beach was designed and constructed was proposed Criteria 39 which specified that the on-site and off-site power systems shall each, independently, provide the capacity to permit

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the functioning required of the engineered safety features assuming a failure of a single active component in each power system. The off-site power distribution system also satisfies the GDC 17 requirements except for the provision that the physical separation of the independent off-site circuits should be located to minimize the potential for simultaneous failure as a result of postulated operating, accident, or environmental conditions. Both the low voltage station auxiliary transformers, which feed power to the A03 and A04 switching busses, which in turn supply off-site power to the engineered safeguards busses, and the power supply from the plant switchyard to these transformers are located in relatively close physical proximity. Certain operational or environmental occurrences, such as a tornado, could potentially disrupt both these circuits simultaneously, therefore, we cannot state that the provisions of GDC 17 are fully satisfied by the Point Beach electrical system design.

As discussed in our letter to you dated October 29, 1982, we have previously considered the potential consequence of a loss of both the low voltage station auxiliary transformers. As discussed in the Point Beach Final Safety Analysis Report, no credit is taken for these transformers as a safety-related power supply. Safety-related sources of emergency power are supplied by the two on-site emergency diesel generator sets. We have, therefore, concluded, and the NRC safety analysis for the Point Beach Nuclear Plant written at the time of issuance of the Facility Operating Licenses concluded, that the AC auxiliary power system at the Point Beach Nuclear Plant has adequate capacity and physical and electrical separation and the off-site and on-site power distribution systems are acceptable.

Very truly yours,

a Jay

Vice President-Nuclear Power

C. W. Fay

Copy to NRC Resident Inspector