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Electric
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VPNPD-90-499
NRC-90-129

10CFR50.12

December 31, 1990

Document Control Desk
U. S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Gentlemen:

DOCKETS 50-266 AND 50-301
FIRE PROTECTION DEDICATED SHUTDOWN CAPABILITY
REQUEST FOR SCHEDULAR EXEMPTION
POINT BEACH NUCLEAR PLANT UNITS 1 AND 2

On July 27, 1988, The Nuclear Regulatory Commission provided a letter and a Safety Evaluation Report (SER) which approved our final design for dedicated shutdown capability as required by 10 CFR 50 Appendix R, Section III.L. Our design consists of modifications to provide the capability to bypass the 4160 volt vital switchgear room for those systems necessary to achieve plant shutdown. Our final design was submitted to you with our letter dated April 27, 1987, and an analysis describing how the proposed modifications meet each of the requirements of Appendix R Section III.L. was provided with our letter dated February 28, 1988. Subsequent to receipt of your SER and approval letter, we provided comments and corrections to the SER in a letter dated November 1, 1988. The NRC noted these corrections and reissued the SER with a letter dated January 11, 1989.

Paragraph (d)(4) of 10 CFR 50.48 specifies that, "Those fire protection features involving dedicated shutdown capability requiring new buildings and systems shall be implemented within 30 months of NRC approval." While it is not clear if the reissuance of the SER for approval of our dedicated shutdown capabilities constituted a new approval date, we have considered the original issue date of the SER, July 27, 1988, as the starting date for this NRC approval. In accordance with the regulations, our dedicated shutdown capability modifications should be implemented by January 27, 1991. Despite our best efforts to complete this project in accordance with that schedule, it appears likely that we will not have completed all elements of our modifications by that date. Accordingly, we are requesting with this letter a schedular exemption to regulation 10 CFR 50.48(d)(4) in accordance with the provisions of 10 CFR 50.12.

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A subsidiary of Wisconsin Energy Corporation

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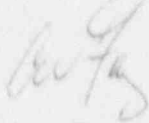
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The regulations at 10 CFR 50.12 (a) state that the Commission may grant exemptions from the requirements of the regulations which are authorized by law and will not present an undue risk to the public health and safety, and are consistent with the common defense and security. Paragraph (a)(2) of that section states that the Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever, "(v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation:". The attachment to this letter presents a discussion of our efforts to complete these modifications on time and the basis for this request. We have included a discussion of several compensatory measures we intend to apply beginning when the 30 month approval period expires and which will continue until our modifications have been implemented.

Therefore, Wisconsin Electric Power Company, licensee for the Point Beach Nuclear Plant Units 1 and 2, hereby requests pursuant to the regulations at 10 CFR 50.12, a temporary exemption to the 30 month schedular requirements of 10 CFR 50.48 (d)(4), to permit implementation of those fire protection features involving dedicated shutdown capability by June 1, 1991. We believe this exemption is one that may be authorized by law, will not present an undue risk to the public health or safety, and is consistent with the common defense and security.

Please notify us of your decision in this matter at your earliest opportunity. Should you have any questions concerning this request or the attached explanatory material, please let us know.

Very truly yours,



C. W. Fay
Vice President
Nuclear Power

Enclosure

Copy to: NRC Resident Inspector
NRC Regional Administrator

**Appendix R Dedicated Shutdown Capability
Schedule Delay Information**

As discussed in the letter forwarding this attachment, Wisconsin Electric Power Company has requested a schedule extension for completion of the modifications to provide a dedicated shutdown capability at our Point Beach Nuclear Plant, Units 1 and 2. This capability is required by 10 CFR 50 Appendix R Section III.L for fire protection purposes. At Point Beach this requirement will be satisfied by the installation of the capability to bypass the 4160 volt vital switchgear room for those systems necessary to achieve remote shutdown. This includes the following provisions:

1. Providing an alternate source of AC power to two Service Water Pumps.
2. Providing an alternate AC power source to a single Charging Pump for each unit.
3. Installing the capability to have an available alternate source of AC power for one Residual Heat Removal (RHR) Pump in each unit.
4. Installing the capability to have an available alternate source of AC power for one Component Cooling Water (CCW) Pump in each unit.
5. Providing an alternate source of AC power to the swing battery charger, D109.

Wisconsin Electric personnel commenced the detailed engineering to accomplish these modifications after receiving NRC approval of our proposed design on July 27, 1988. This effort was to be accomplished on a schedule which would result in completion prior to January 27, 1991. Initial efforts in this area concentrated on refinement of the preliminary design provided to the NRC and the definition of requirements for major pieces of equipment. It should be noted that this refinement included consideration of the desirability of providing alternate AC power supplies to other equipment. This equipment is in addition to that listed above and that which was included in our April 27, 1987 letter to the NRC. We subsequently decided, as part of this modification package, to provide alternate AC power supplies to the following additional equipment:

- a. One of the two common electrically driven Auxiliary Feedwater Pumps
- b. One of two common Instrument Air Compressors
- c. An additional Battery Charger capable of providing DC power to one of the two main plant DC system.
- d. The plant radio system

- e. The normal plant lighting in those areas necessary to accomplish and maintain a cold shutdown condition. Emergency lights in these areas are rated for eight hours of operation.

Supplying an alternate source of AC power to these additional pieces of equipment, while not required to meet the requirements of 10 CFR 50 Appendix R, will provide additional capability to deal with vital switchgear room fires and several other potential accident situations.

Our detailed design activities also resulted in the determination of requirements for the major items of equipment necessary to complete these modifications. Specifications were prepared for each of these items and purchase orders placed. A listing of these major equipment items and the date of the purchase order for each item follows:

- A 13.8 kV to 480 volt unit substation consisting of a 2500 KVA dry type transformer and 480 volt switchgear containing 19 air circuit breakers. Ordered 11/01/89
- A 480 volt motor control center (MCC). Ordered 01/23/90
- A 480 volt switchboard. Ordered 06/04/90
- Thirty (30) local 480 volt transfer switches. Ordered 03/02/90
- A local control panel for control of loads when supplied from the alternate source. Ordered 06/07/90

At the present time all of the above items, with the exception of the Control Panel, have been delivered. Significant delays were experienced in the equipment procurement process resulting in much longer lead times than originally anticipated by Wisconsin Electric. For example, the purchase order for the Local Transfer Switches was placed on March 2, 1990, with an anticipated delivery of September 15, 1990. Actual delivery of the switches was November 1, 1990.

In parallel with the procurement efforts described above the following additional engineering efforts were taking place:

- Finalization of the control schemes to be utilized for each of the alternate sources.
- Determination of the power and control cable requirements.
- Determination of requirements for electrical cable trays and conduit.

- Specification and purchase of electrical cables and cable trays.
- Completion of detailed design for electrical cable tray and conduit installation.
- Completion of detailed design for electrical cable installation.
- Design of the physical mounting for equipment.

Substantial portions of these engineering efforts were contracted to consultants in order to minimize the potential for schedule delays.

Installation of these plant modifications began in February 1990 with the removal of obsolete water treatment equipment to make room for much of the equipment described above. This was followed by the installation of the mounting provisions for and physical installation of the unit substation. Installation of the supports for the cable trays began in November 1990.

A review of the job status and estimates of the manhours to complete this project was conducted in early November 1990. This review indicated that completion of these modifications by the due date of January 27, 1991, would be extremely difficult. Based upon this review we decided to take several significant actions intended to expedite completion of this project. The actions taken include the following:

1. Remaining design, installation, and startup activities were divided into those which are necessary to provide alternate supplies as described in our April 27, 1987 letter and those which are necessary for additional alternate supplies. Those design, installation, and startup activities necessary to complete the Appendix R related modifications will be scheduled as soon as possible. While this effort will significantly extend the time required to complete the overall project and reduce the efficiency of the installation activities, it is indicative of our desires to complete the NRC required changes as rapidly as possible.
2. The services of an additional consultant have been obtained to assist in the finalization of the electrical conduit and cable design and completion of final electrical connection information.
3. The services of three full time construction supervisors have been contracted to supervise and expedite installation work to be completed by the electrical contractor.

4. The services of one full time startup engineer have been obtained to plan and execute the startup and checkout of the alternate power supply system.
5. Due to a decision to install all of the electrical raceways associated with this project as seismic class I raceways, we found that a significant number of special tray and/or conduit supports will be required as part of the installation process. To reduce the time necessary to design and/or install such raceways we have contracted for the services of several structural engineers to design and analyze cable tray and conduit support changes.
6. Significant increases were made in the electrical contractor's manpower availability in order to support the use of overtime and the addition of a second shift.

Despite these best efforts to support the completion of the Appendix R dedicated shutdown facilities it has become apparent that we will be unable to complete the work necessary to implement these changes by January 27, 1991. Based on the present status of equipment delivery, design, and construction and taking into account the actions described above, we now anticipate completion of the construction, startup, and acceptance of those alternate AC power supplies described in our design description of April 27, 1987, by June 1, 1991.

In the interim between the January 27, 1991, originally scheduled completion date and the revised completion date of June 1, 1991, we will institute the following compensatory measure. Beginning on January 27, 1991, and continuing until these modifications have been implemented, we shall conduct hourly inspection of the 4160 volt vital switchgear room. We shall also initiate administrative controls to insure that no transient combustible materials are introduced to the vital switchgear room unless a fire watch has been stationed. Please note also that this room is already under the protection of a dedicated Halon fire suppression system which is actuated by permanently installed temperature and/or smoke detectors. We believe these existing features and special inspection provisions will assure an absolute minimal risk to the public health and safety during the period of the schedule extension discussed in this request and thus provide an adequate basis for the NRC to grant this 10 CFR 50.12 exemption.