



**Wisconsin Electric** POWER COMPANY

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April 15, 1983

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

Attention: Mr. D. G. Eisenhower, Director  
Division of Licensing

Gentlemen:

DOCKET NOS. 50-266 AND 50-301  
RESPONSE TO GENERIC LETTER NO. 82-33  
UPDATE TO SCHEDULE REQUIREMENTS FOR  
EMERGENCY RESPONSE CAPABILITY  
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

This submittal provides a description of our plans for phased implementation and integration of our emergency response activities as requested in Mr. D. G. Eisenhower's letter dated December 17, 1982, Generic Letter No. 82-33 entitled "Supplement 1 to NUREG-0737 - Requirements for Emergency Response Capability".

Included in our attachment to this letter is a background description of our implementation of the requirements addressed by the Supplement. The attachment also modifies and updates our implementation status and proposed schedule for meeting the requirements for Emergency Response Capability.

It should be noted that Wisconsin Electric, from the beginning, has pursued a balanced and orderly approach in attempting to implement NUREG-0737 requirements. All of the previous schedules submitted to you concerning NUREG-0737 have reflected the complete integration of activities required in the TMI backfit work. The commitment dates discussed in the attachment represent a realistic best effort implementation schedule which we presently believe we can meet. As noted at various places in these discussions, these commitment dates assume interim implementation steps can be reached on schedule, and no allowances have been included for unforeseen delays.

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ADD:

W. Paulson

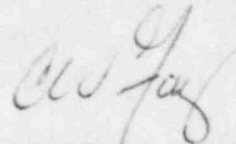
Mr. H. R. Denton

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April 15, 1983

We trust this information provides the necessary written justification and implementation schedule you require. Should you have any questions, please contact us.

Very truly yours,



Vice President-Nuclear Power

C. W. Fay

Attachment

Copy to NRC Resident Inspector

Subscribed and sworn to before me  
this 18th day of April 1983.

Patricia M. Schlichting  
Notary Public, State of Wisconsin

My Commission expires May 4, 1986.

ATTACHMENT  
WISCONSIN ELECTRIC POWER COMPANY  
POINT BEACH NUCLEAR PLANT

RESPONSE TO GENERIC LETTER 82-33

4. SAFETY PARAMETER DISPLAY SYSTEM (SPDS)

A. Background

Wisconsin Electric Power Company has been working on the design, procurement, and manufacture of the SPDS for Point Beach for over three years. The SPDS we plan to implement is referred to as the Safety Assessment System (SAS). When the initial requirements for the SPDS were issued by the NRC in 1979, Wisconsin Electric in conjunction with other utilities from the Westinghouse Owners Group surveyed the industry in early 1980 and determined that no available system met the requirements. Wisconsin Electric worked with several utilities to develop the design of a system, and by December 1980 a contractor was hired to develop a demonstration system. A total of twelve U.S. and foreign utilities were involved in this project. The demonstration Safety Assessment System project was completed on May 20, 1982. In parallel with the SAS project, Wisconsin Electric developed a specification for a replacement plant computer system which would integrate the requirements of the SPDS, some aspects of Regulatory Guide 1.97 instrumentation, and emergency response facility plant data requirements. The SAS was made a part of the plant replacement computer system. The computer system specification was issued in November 1980, and in September 1981 a contract was signed with Electronic Associates, Inc. (EAI) for a Safety Assessment System and Plant Process Computer System.

The present schedule, as of an April 7, 1983 meeting, set the delivery date of the computer system as October 1983. It can be expected that the delivery date may slip a few more months before the project is completed. It is expected that by about six months after delivery,

the new computer system will be installed and operational. However, some instruments that are part of the computer system must be connected during an outage. These instruments would not be operational in the computer system until the next outage. An example of these instruments is the core exit thermocouples. Based on an October 1983 delivery, we can expect the new computer system to be operational during April 1984, with the exception of these instruments.

B. Submittal

A description and a safety analysis describing the basis for selection of parameters of the new Safety Assessment System and its functionality will be provided to the NRC by September 30, 1983. This submittal will include the results of a 50.59 review to determine if a technical specification change is required and if an unreviewed safety question exists. The schedule identified above assumes the 50.59 review will not identify the existence of any unreviewed safety questions.

5. DETAILED CONTROL ROOM DESIGN REVIEW

A. Background

As described in other sections of this submittal, upgraded Emergency Operating Procedures (EOPs), the SPDS, emergency response facilities, and Regulatory Guide 1.97 instrumentation are expected to be in place and operational by July 1984.

The design and integration of those items into the control room used good human engineering principles throughout the backfit process. It is appropriate that the Detailed Control Room Design Review should use the upgraded version of the EOPs in the control room after all of the modifications have been made so the benefits of these modifications can be assessed to determine if any additional improvements are needed.

Using this strategy, we plan to perform a Detailed Control Room Design Review during the second half of 1984. The program will include the

establishment of a multidisciplinary review team, use of function and task analyses, comparison of the display and control requirements with a control room inventory, performance of a control room survey for conformance with human factors principles, use of operator feedback, assessment of identified discrepancies, and the verification that selected improvements have accomplished the desired objectives.

B. Submittals

Wisconsin Electric will submit to the NRC a program plan for control room design review by May 31, 1984. A summary report of the completed review outlining the proposed control room changes will be submitted three months after the review is completed. Assuming the review is completed by the end of 1984, a report would be submitted to the NRC in April 1985.

Any modifications to the control room which are proposed as a result of this study will be reviewed first to determine whether they are nuclear safety related. If the modification is determined to be nuclear safety related, then a 10 CFR 50.59 review will be performed. Only when these modifications result in a Technical Specification change or when an unreviewed safety question is identified is it necessary to wait for a Safety Evaluation Report from the NRC before the modification is implemented. The modifications that are recommended as a result of the Detailed Control Room Design Review will be implemented at the earliest possible date, consistent with outage needs and the availability of required material.

6. REGULATORY GUIDE 1.97 - APPLICATION TO EMERGENCY RESPONSE FACILITIES

A. Background

In order to efficiently implement Regulatory Guide 1.97 requirements in a manner consistent with all of the other TMI backfit items, we found it necessary to perform an evaluation for each Type A, B, C, D, and E variables and their requirements in early 1981. The items that



needed to be modified to meet the requirements of Regulatory Guide 1.97 were integrated into the overall backfit program. Those requirements that we judged to be unnecessary or unreasonable to implement or backfit in an operating plant were reported to the NRC in our letter on Emergency Response Facilities to Mr. H. R. Denton dated June 1, 1981. We are awaiting a reply from the NRC on the acceptability of the positions we have proposed on Regulatory Guide 1.97 as described in this June 1, 1981 letter.

B. Submittal

By September 1, 1983, Wisconsin Electric will submit a report to the NRC describing how it meets the requirements of Type A, B, C, D, and E variables as described in Regulatory Guide 1.97. The instruments that have already been or will be upgraded will be identified. The schedule for completion of this effort will be described. Since we started this effort in 1981 and integrated it with the other TMI backfit items, we expect to have most of the modifications completed by the end of 1983. Our September 1, 1983 report will address items completed, items to which we take exception, and meteorological measurements.

7. UPGRADED EMERGENCY OPERATING PROCEDURES

A. Background

Emergency Operating Procedures (EOPs) have received special attention as a result of the TMI accident. Wisconsin Electric made changes to the PBNP EOPs immediately after TMI as required by the NRC. Working with the Westinghouse Owners Group and using the guidelines resulting from this effort, the PBNP EOPs were completely rewritten in 1981. At the present time, we are proceeding with another complete rewrite of the EOPs using the Basic Version of the Westinghouse Owners Group Emergency Response Guidelines. After Revision 1 of the Emergency Response Guidelines is issued during the summer of 1983, it is our intention to modify the EOPs so that they are consistent with Revision 1. This EOP procedure writing effort should be completed by October 15,

1983. Once the procedures are written, they will be verified for clarity, correctness, and technical content. This verification process should be completed by December 1, 1983. Following verification, the procedures will be validated for usability and technical accuracy. The validation process should be completed by February 1, 1984. Any changes resulting from the verification and validation process will have to be included in the procedures before final approval is given around April 1, 1984. Operator training on these revised procedures is scheduled to start on March 11, 1984 and should be completed by June 3, 1984. If this schedule can be maintained, the upgraded Emergency Operating Procedures can be implemented for use in the control room on June 4, 1984. It is emphasized that this schedule is predicated upon timely receipt of Revision 1 of the Emergency Response Guidelines. Any delay in promulgation of that document will result in a corresponding delay in our implementation of upgraded EOPs.

The upgraded procedures and training will be conducted using all of the new TMI backfit items, e.g., reactor vessel level system, Safety Assessment System, new R.G. 1.97 instruments, final subcooling instrumentation, RCS gas vent system, and containment hydrogen monitors. This will provide integration of the new instrumentation and systems with the upgraded procedures and will permit these systems to be properly covered by training. The result will be an integrated, finished effort which should be achieved by July 1984.

#### B. Submittals

Wisconsin Electric plans to use the Emergency Response Guidelines prepared by the Westinghouse Owners Group. The Owners Group has in the past, and will in the future, submit the guidelines to the NRC for review.

Wisconsin Electric will submit to the NRC a procedures generation package by December 11, 1983. The procedures generation package will include a description of the method used for developing the Emergency Operating Procedures for Point Beach. The description will show how

generic Emergency Response Guidelines and plant specific requirements are merged to result in the EOPs. The plant specific items are too numerous to send to the NRC but will be available for audit at the plant site. Also included in the procedures generation package will be the PBNP EOP Writers Guide, a description of the EOP verification and validation program, and a description of the procedures training program for the licensed plant operators.

## 8. EMERGENCY RESPONSE FACILITIES

Wisconsin Electric Power Company has completed the majority of the upgrades required by this section. Most portions have been described by the submittal of the PBNP Emergency Plan and the PBNP Emergency Plan Implementing Procedures. A general overview of our Emergency Response Facilities was provided in our June 1, 1981 letter from Mr. S. Burstein to Mr. H. R. Denton. The discussion below is generally restricted to those items for which additional completion work is necessary:

### A. Emergency Buildings/Centers

#### 1. Technical Support Center (TSC)

##### a. Building

Completed.

##### b. Emergency Power

Provisions are being made to obtain emergency power for the TSC from the diesel-generator unit which provides emergency power to the gas turbine controls. The cabling has already been installed, and procurement of the necessary 480 v. switchgear will begin shortly. It is expected that with reasonable delivery time for the required switchgear that this installation can be completed by December 31, 1983.



c. TSC Instrumentation

Interim instrumentation has been provided as described in our June 1, 1981 submittal. Final instrumentation is an integral part of the entire computer system replacement as described above in the section on SPDS. Accordingly, completion of final TSC instrumentation is on the same schedule as the plant process computer. A complete description of the plant data collection, storage, analysis, and display system will be provided by September 30, 1983.

2. Operations Support Center (OSC)

Facility completed.

3. Emergency Operations Facility (EOF)

a. Buildings

At Point Beach, the EOF and its functions are separated into two facilities, the Emergency Support Center (ESC) and the Site Boundary Control Center (SBCC). The Emergency Support Manager and the Rad, Con Waste Manager (and their functions) are assigned to the ESC, while the SBCC serves as a health physics and security control point and as mobilization headquarters for field monitoring teams. The interim ESC is the on-site Energy Information Center, and the interim SBCC is a small wooden building of about 900 ft<sup>2</sup> located near the site boundary. The permanent SBCC is 6300 ft<sup>2</sup> and is located at the site boundary. Construction is expected to be complete by September 1, 1983, and installation of communications equipment is expected to be complete by December 31, 1983. An entire description of our ESC and SBCC was provided by our July 15, 1982 letter from Mr. S. Burstein to Mr. H. R. Denton and our September 30, 1982 letter from Mr. C. W. Fay to Mr. H. R. Denton. In those letters we requested Commission

approval to locate the ESC portion of the facility at our corporate headquarters in Milwaukee, Wisconsin. Completion of our SBCC/ESC provisions is therefore contingent upon receipt of a Commission decision on this matter.

b. Instrumentation

Interim data communication to the SBCC and ESC is restricted to voice communication via telephone from the TSC. The final data transmission system via CRT terminals proposed to be provided in both the SBCC and the ESC is an integrated part of the entire plant process computer upgrade, and the schedule for completion is tied to computer installation as discussed above.

B. Communications

1. Telephone Systems

All telephone systems (NRC, NAWAS, corporate, and commercial) are essentially complete. However, telephone relocations and installations for the ESC and SBCC are contingent upon completion of those facilities. Telephone installation for the SBCC is presently estimated to be completed by December 31, 1983. Corporate and commercial telephone is already available in the proposed ESC; expansion of these capabilities is contingent upon Commission approval of the ESC location.

2. Radio Systems

An extensive upgrade of plant radio communications capabilities is in progress as described in our December 23, 1982 letter from Mr. C. W. Fay to Mr. J. G. Keppler (Region III). The new system will assure adequate communication with field survey teams and will enhance staff augmentation capabilities. The new system will be operational no later than September 20, 1983.

C. Staffing

Wisconsin Electric proposed an alternate means of staffing to Table B-1 as described in our May 19, 1982 letter from Mr. C. W. Fay to Mr. J. G. Keppler. We are still awaiting an NRC decision on this matter.

D. Meteorology and Dose Assessment

Our plans and schedule for meeting meteorological and dose assessment requirements were provided in our December 29, 1981 letter from Mr. C. W. Fay to Mr. H. R. Denton.

1. Hardware

a. Primary Tower

New instrumentation has been installed at the 10 meter level and is functional with readouts in the control room. Instrumentation at the 45 meter level will be installed at approximately the same time as the backup tower described below. Integration of real time data processing is tied to completion of the new plant process computer.

b. Backup Tower

While we currently meet the requirements for availability, the design requirements for reliability necessitate the installation of a backup tower. All equipment is on site and installation will be complete by August 15, 1983.

c. Lake-Breeze Effects Tower

A vendor has been retained to develop the software required for real time processing of meteorological data. A part of this task is to develop an appropriate treatment of lake-

breeze phenomenon and to determine whether a separate lake-breeze tower is required. If such a tower is determined to be necessary, it will be installed on a schedule consistent with completion of the software as described below.

2. Software

An interim meteorological and dose assessment program has been developed to facilitate dose estimation in the event of an emergency. The program has the capability of utilizing either plant or field radiological data and can accommodate historical corrections as better data becomes available. While the program can be run from the TSC, ESC, or any other corporate location having a computer terminal, manual entry of meteorological and radiological data is required. As mentioned above, a vendor has been retained to develop the additional software required for real time meteorological processing, integration of backup and supplementary towers, and interfacing with the plant radiological monitoring system. The software and associated hardware interconnections are integrated with the new plant process computer. Accordingly, completion is tied to installation of the new computer as discussed in the section on SPDS, above.

3. Submittal

A full description of the new meteorological and dose assessment software and hardware will be provided by April 1, 1984. Because of the inherent integration of this system with the new computer, full operation of the system is tied to the computer installation and operation as discussed earlier.