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Docket No. 50-305

Mr. C. W. Giesler, Vice President
Nuclear Power
Wisconsin Public Service Corporation
Post Office Box 1200
Green Bay, Wisconsin 54305

Dear Mr. Giesler:

The Commission has issued the enclosed Exemption to the schedular requirements for the alternative shutdown system as set forth in 10 CFR Part 50 §48(c)(4). The Exemption extends the time requirement for completion of the system from the spring 1983 refueling outage to the spring 1984 refueling outage.

Our letter dated December 22, 1981 approved your alternative shutdown system subject to three exceptions. By letter dated January 22, 1982 you submitted a response containing your commitment to the NRC recommended resolution of the three exceptions. Your submittals also requested that the implementation schedule for the alternative shutdown system be extended from the spring 1983 refueling outage to the spring 1984 refueling outage. In addition your submittals provided background and support for your request. In a meeting with the staff on June 23, 1982, additional information was provided which was formally submitted on August 4, 1982. We have concluded that your request for an extension constitutes a request for an exemption to 10 CFR Part 50 pursuant to 10 CFR Part 50 §50.12 and have responded accordingly.

The Exemption is being forwarded to the Office of The Federal Register for publication.

Sincerely,
Original signed by
Darrell G. Eisenhut

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Enclosure:
Exemption

cc w/encl:
See next page

ORB #5
TWambach
9/15/82

OELD
W. Shields
10/5/82

OFFICE	DL:ORB#1	DL:ORB#1	DL:ORB#1	DL:OR	DE:D	DL:D	NRR
SURNAME	CParrish	MGrotenhuis:ms	SAVarga	GCLainas	RLowmer	DEisenhut	HRDenton
DATE	9/15/82	9/15/82	9/16/82	9/14/82	9/20/82	10/5/82	9/ /82

Mr. C. W. Giesler
Wisconsin Public Service Corporation

cc: Steven E. Keane, Esquire
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Mr. Donald L. Quistroff, Chairman
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7590-01

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	Docket No. 50-305
WISCONSIN PUBLIC SERVICE CORPORATION	)	
	)	
(Kewaunee Nuclear Power Plant)	)	

EXEMPTION

I.

The Wisconsin Public Service Corporation (the licensee) holds Operating License No. DPR-43, which authorizes operation of the Kewaunee Nuclear Power Plant (the facility). This license provides, among other things, that it is subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

The facility is a pressurized water reactor located in Kewaunee County, Wisconsin.

II.

Section III.L of Appendix R to 10 CFR Part 50 requires, among other things, that alternative or dedicated shutdown capability provided for a specific fire area shall be able to (a) achieve and maintain subcritical reactivity conditions in the reactor; (b) maintain reactor coolant inventory; (c) achieve and maintain hot standby conditions for a PWR; (d) achieve cold shutdown conditions within 72 hours; and (e) maintain cold shutdown conditions thereafter.

By letter dated December 22, 1981, the NRC staff transmitted a Fire Protection Safety Evaluation Report to the licensee for the facility informing the licensee that their proposed design for fire protection of safe shutdown capability was in compliance with Items III.G.3 and III.L of Appendix R

with three exceptions. To complete compliance, the licensee was required to commit to resolution of these exceptions. The licensee responded on January 22, 1982 and made such a commitment.

The December 22, 1981 letter also informed the licensee that the proposed design was an "alternative" system which was to be installed according to the schedule in 10 CFR 50.48(c)(4). This regulation requires implementation before startup after the earliest of the following events commencing 180 days or more after NRC approval:

1) The first refueling outage

2) Another planned outage that lasts for at least 60 days

3) An unplanned outage that lasts for at least 120 days

Our review of the licensee submittals indicates that the modifications proposed are of an extensive nature, numerous, and require a significant amount of new equipment. The licensee felt that the system modifications were extensive enough to be considered a dedicated system. The staff disagreed in that regard but did agree that the system was acceptable as an alternative shutdown system and that it met the requirements of Appendix R to 10 CFR 50.

In the submittal dated January 22, 1982 the licensee provided the justifications for the schedule proposed and requested that the implementation date specified in 10 CFR 50.48(c)(4) for the proposed fire protection modification at the Kewaunee Nuclear Power Plant be extended until the end of the refueling outage scheduled for the spring of 1984.

Prior to the issuance of Appendix R, the Kewaunee facility had been reviewed against the criteria of Appendix A to the Branch Technical Position 9.5-1 (BTP 9.5-1). The BTP 9.5-1 was developed to resolve the lessons learned from the fire at the Browns Ferry Nuclear Plant. It is broader in scope than Appendix R, formed the nucleus of the criteria developed further in Appendix R and in its present, revised form constitutes the section of the Standard Review Plan used for the review of applications for construction permits and operating licenses of new plants. The review was completed by the NRC staff and its fire protection consultants and a Fire Protection Safety Evaluation (FPSE) was issued on December 12, 1978. A few items remained unresolved. Further discourse between the licensee and the NRC staff resulted in resolution of these items as documented in a supplement to the FPSE issued on February 13, 1981. The FPSE and its supplement supported the issuance of an amendment to the operating license of the Kewaunee facility on December 12, 1978 which required modifications to be made to plant physical features, systems, and administrative controls to meet the criteria of Appendix A to BTP 9.5-1. All of these modifications have been completed.

In addition, our review of the facility against the criteria of Appendix A to BTP 9.5-1 concluded that adequate instrumentation and procedures were provided for use in effecting safe shutdown independent of equipment and cabling in the relay and control room. This capability will be available during the period of exemption. Requirements of Section III.L of Appendix R to 10 CFR 50 includes additional measures such as the separation of cables and equipment. Some of these will be completed by the refueling outage of 1983,

others will not, however, the shutdown capability approved for the Appendix A to BTP 9.5-1 review will be available during the exemption period. Therefore, the Kewaunee facility has been upgraded to a high degree of fire protection already and the extensive modification involved in this request for additional time is to incorporate the differences between what was previously approved and the specific requirements of Sections III.G and III.L to Appendix R of 10 CFR 50.

In a submittal dated August 4, 1982, the licensee confirmed information which had been presented to the staff in a meeting June 23, 1982. This letter presented a detailed schedule of the work to be completed, and the complexity of the schedule. It also shows the effects of the enforcement of the NRC schedule, the most noticeable of which is the five and one half month additional down time required for the NRC required schedule.

As a showing of good faith effort the licensee has provided a preliminary schedule of additional improvements to safety which are part of the approved alternative shutdown system. Those proposed to be completed before startup from the Spring 1983 refueling outage even though the exemption is granted include the following:

Containment Fire Suppression Spray

Separation of Diesel Generator Support Components (oil cooling, electrical)

Containment Radiant Energy Shields

Separation of Pressurizer Heater Power

Auxiliary Building Fire Wall

One Train of Instrument Air Tubing Separated

Those proposed to be completed during the exemption period, the time between the Spring 1983 refueling outage and the Spring 1984 refueling outage, and those which can safely be done while the plant is operating, are as follows:

Residual Heat Removal Pumps Backup Power Available

Screen House Power Separated

Turbine Building Fire Wall

Charging Pumps Power Separated

Auxiliary Feedwater Pumps Power Separated

Safety Injection Pumps Power Separated

Containment Fan Coil Units Power Separated

Remaining items for the Spring 1984 refueling outage are:

Component Cooling Water Pumps Power Separated

Dedicated Shutdown Panel Wired and Tested

It can be seen that work on the alternative shutdown system will proceed during the exemption period and that safety will be improved over and above the current alternate shutdown capability assured by meeting Appendix A to BTP 9.5-1.

The August 4, 1982 submittal also documents the considerations of the impact on the plant during the modifications for the alternative shutdown. Many items have extensive lead times, in particular, the dedicated shutdown panel (optimistically estimated to be 10 months). The procurement times of various components are shown by the schedule to be a critical factor. About 71 of the 136 components need the panel installed in order to complete the termination and perform final check out. Measures such as shop overtime and bonus payments are being taken to accelerate the procurement schedules or at least assure that they can be met.

The effect of interdependence of other work such as the 10 year inservice inspection program tests and the containment integrated leak rate tests on other portions of the shutdown systems has been considered by the licensee. Other plant modifications which affect the same plant areas, cables and equipment must be prepared for installation during the same outage as those for Appendix R. Work on certain equipment can only be accomplished during specific modes of operation, such as cooldown or shutdown. Although a complicating factor, these items have been worked into the implementation schedule.

There is a constraint on the number of contract people that can actually be properly managed by licensee personnel or for that matter, the number that can actually work in the confined areas involved at any one time. Increase

of labor force can be only a limited help and that has been considered by the licensee. There is a limit on the amount of work that can be safely undertaken at any given time considering the reviews and approvals which are necessary.

Finally, there is significant amount of time required for updating drawings and procedures and subsequently providing time for the operators and other plant staff to comprehend the changes.

The above considerations documented by the licensee are a visible showing of a good faith effort being made. Indeed, the fact that this licensee is the first to have an alternative shutdown system approved (December 1981) with a schedule this far advanced is evidence of the previous good faith efforts they have made. A large number of other licensees have submitted design descriptions for an alternative shutdown system on July 1, 1982. Given the time for review and approval by the NRC, the completion of modifications at most of those plants in accordance with 10 CFR 50.48(c)(4) will not occur prior to the time requested in this exemption. This licensee's good faith effort also shows with regard to regulatory requirements in general. The recent NRC Systematic Assessment of Licensing Performance evaluation of the day-to-day operation of the plant is further evidence of the quality of operation and management of this plant.

We have reviewed the licensee submittals, in particular, the improvements in safety realized with the proposed schedule, as outlined in attachment 1 of the submittal dated August 4, 1982. In this submittal the licensee documented the information presented at a meeting with the staff on June 23, 1982, which includes, among other things, an implementation schedule for the alternative shutdown system required by Appendix R to 10 CFR 50.

Based on the above considerations, we find that the licensee has completed a substantial part of the fire protection features at the Kewaunee plant in conformance with the requirements of the Fire Protection Rule and is applying significant effort to complete the remaining modifications necessary for strict conformance with Sections III.G and III.L. We find that because of the already-completed upgrading of these facilities, there is no undue risk to the health and safety of the public involved with continued operation until the completion of this implementation during the Spring 1984 refueling outage.

III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest and therefore grants an exemption from the schedular requirements of 10 CFR 50.48(c)(4) until prior to startup from the second refueling outage commencing more than 180 days after December 1981, the date of approval for the modifications.

The NRC staff has determined that the granting of this exemption will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with this action.

For further details with respect to this action see (1) the licensee's request dated January 22, 1982, as supplemented August 4, 1982, and (2) NRC approval dated December 22, 1981, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D. C. and at the Kewaunee Public Library, 822 Juneau Street, Kewaunee, Wisconsin 54216.

FOR THE NUCLEAR REGULATORY COMMISSION

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 7th day of October 1982