

UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of
WISCONSIN ELECTRIC POWER COMPANY
Point Beach Nuclear Plant
Unit Nos. 1 and 2

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Docket Nos. 50-266
and 50-301

EXEMPTION

I.

The Wisconsin Electric Power Company (WEPCO, the licensee) is the holder of Facility Operating License Nos. DPR-24 and DPR-27, which authorize operation of the Point Beach Nuclear Plant, Unit Nos. 1 and 2 (the facilities), at a steady state power level not to exceed 1518 megawatts thermal per unit. The facilities are pressurized water reactors located in Manitowoc County, Wisconsin. These licenses provide, among other things, that the facilities are subject to all rules, regulations, and Orders of the Commission now or hereafter in effect.

II.

On November 19, 1980, the Commission published a revised Section 50.48 and a new Appendix R to 10 CFR Part 50 regarding fire protection features of nuclear power plants. The revised Section 50.48 and Appendix R became effective on February 17, 1981. Section III of Appendix R contains 15 subsections lettered A through O, each of which specifies requirements for a particular aspect of the fire protection features at a nuclear power plant.

One of the subsections, III.G, is the subject of the licensee's exemption request. Specifically, Subsection III.G, Part 3.b requires in part the

installation of a fixed fire suppression system in plant areas in which redundant trains of systems required for hot shutdown are located.

III.

By letter dated June 11, 1986, supplemented by letter dated October 10, 1986, the licensee submitted a request for exemption from the requirements of Section III.G.3 of Appendix R to 10 CFR Part 50 for the Component Cooling Water Heat Exchanger and Boric Acid Tank Room (Fire Zone 237), and the Computer and Instrument Rack Room (Fire Zone 336). The implementation of TMI-related modifications required the rerouting of several redundant safe shutdown instrument cables from the monitor tank area through the Component Cooling Water Heat Exchanger and Boric Acid Tank Room (Fire Zone 237) and the Computer and Instrument Rack Room (Fire Zone 336) to the Control Room. Neither Fire Zone 237 nor Fire Zone 336 has a fixed fire suppression system. This installation is not in compliance with 10 CFR Part 50, Appendix R, Section III.G.3.b, which requires a fixed fire suppression system in areas through which redundant trains of systems required for hot shutdown pass.

The underlying purpose of the rule is to maintain the capability of redundant trains located in the same area, to bring the plants to hot shutdown in the event of a fire in the area, by assuring prompt extinguishing of the fire by the fixed fire suppression system. The licensee has stated that even though Fire Zones 237 and 336 do not have fixed fire suppression systems installed, each fire zone is provided with numerous smoke detectors suitably located within the fire zone to detect fires, and each fire zone is in close proximity to hose reel stations for fire extinguishing. Additionally, the licensee has stated that should the redundant instrument cables transversing

these fire zones be destroyed by fire, alternate shutdown capability independent of these fire zones is available.

Section 10 CFR 50.12(a) requires that special circumstances be present before the Commission will consider granting an exemption. Special circumstances were identified by the licensee in its October 10, 1986 letter. Specifically, the licensee stated that application of the regulation would not serve the underlying purpose of the rule. The underlying purpose of the rule is to maintain the capability of redundant trains located in the same area, to bring the plants to hot shutdown in the event of a fire in the same area, by assuring prompt extinguishing of the fire by the fixed fire suppression system. Although fixed fire suppression is not installed in the areas of concern, the licensee has stated that in the event the cables are destroyed by fire, other means, independent of these areas, can be used to shut down the plant. Section 4.3.2 of the licensee's October 26, 1983 letter describes how this alternate shutdown capability is achieved. Specifically, transfer switches were installed to transfer indication of plant parameters from the control room to the charging pump and auxiliary feed pump areas. Therefore, if a fire destroys the safe shutdown cables in the zones which are the subject of this exemption, indication can be transferred to alternate areas. In addition to this alternate shutdown capability, the fire zones in question are equipped with various fire protection systems. Fire Zone 237 is provided with six photoelectric smoke detectors. Two 1½-inch hose reel stations are located outside the fire zone near the west wall entrances. Additionally, portable fire extinguishers suitable for the hazards present in the fire zone are available. Fire Zone 336 is provided with eight photoelectric smoke detectors.

Hose reel stations are located at the foot of the stairway on the 46-foot elevation for manual fire suppression capability. Additionally, portable fire extinguishers suitable for the hazards present in the fire zone are available. For these reasons, the staff concludes that the existing alternate shutdown capability and fire protection systems provide reasonable assurance that a fire in Fire Zones 237 and 336 will not prevent safe shutdown of the plant. Therefore, application of the regulation does not serve the underlying purpose of the rule.

Based on the above, the staff concludes that the existing fire protection features, together with the alternate shutdown capability available for Fire Zones 237 and 336, provide a level of fire protection equivalent to the requirements of Section III.G.3.b of Appendix R to 10 CFR Part 50.

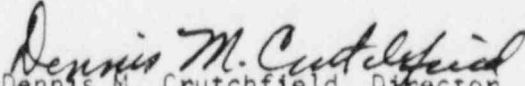
IV.

Accordingly, the Commission has determined, pursuant to 10 CFR 50.12(a), that: (1) the exemption as described in Section III is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security; and (2) special circumstances are present for the exemption in that application of the regulation in this particular circumstance is not necessary to achieve the underlying purposes of Appendix R to 10 CFR Part 50. Therefore, the Commission grants the exemption from the requirements of Section III.G.3.b of Appendix R to 10 CFR Part 50 to the extent discussed in Section III above.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the environment (53 FR 11923, April 11, 1988).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


Dennis M. Crutchfield, Director
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 23rd day of May, 1988