

April 9, 1997

Mr. Thomas C. Bordine  
Manager, Licensing  
Palisades Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT -  
EXEMPTION FROM CERTAIN REQUIREMENTS OF 10 CFR 73.55, REQUIREMENTS  
FOR PHYSICAL PROTECTION OF LICENSED ACTIVITIES IN NUCLEAR POWER  
PLANT REACTORS AGAINST RADIOLOGICAL SABOTAGE, PALISADES PLANT  
(TAC NO. M95185)

Dear Mr. Bordine:

Enclosed is a copy of an "Environmental Assessment and Finding of No  
Significant Impact" for the Palisades Nuclear Plant. The assessment relates  
to your application for exemption dated April 4, 1996, from certain  
requirements of 10 CFR 73.55 relating to the issuance, storage and retrieval  
of badges for personnel who have been granted unescorted access to the  
protected areas of the site. The proposed exemption would enable you to  
implement a hand geometry biometric system for site access control at  
Palisades.

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

Sincerely,

Original signed by

Robert G. Schaaf, Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure: Environmental Assessment

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Consumers Power Company

Palisades Plant

cc:

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Covert, Michigan 49043

February 1997

UNITED STATES NUCLEAR REGULATORY COMMISSION

CONSUMERS POWER COMPANY

DOCKET NO. 50-255

PALISADES PLANT

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from certain requirements of 10 CFR 73.55 for Facility Operating License No. DPR-20, issued to Consumers Power Company, (the licensee), for operation of the Palisades Plant located in Van Buren County, Michigan.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt the licensee from certain requirements of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." The proposed action would allow implementation of a hand geometry biometric system of site access control such that photograph identification badges can be taken off site.

This environmental assessment has been prepared to address potential environmental issues related to the licensee's application of April 4, 1996.

The Need for the Proposed Action:

Pursuant to 10 CFR 73.55, paragraph (a), the licensee shall establish and maintain an onsite physical protection system and security organization.

Paragraph (1) of 10 CFR 73.55(d), "Access Requirements," specifies that "licensee shall control all points of personnel and vehicle access into a protected area." It is specified in 10 CFR 73.55(d)(5) that "A numbered picture badge identification system shall be used for all individuals who are

authorized access to protected areas without escort." It also states that an individual not employed by the licensee (i.e., contractors) may be authorized access to protected areas without escort provided the individual "receives a picture badge upon entrance into the protected area which must be returned upon exit from the protected area...."

Currently, unescorted access into the protected areas of the Palisades Nuclear Plant is controlled through the use of a photograph on a combination badge and keycard (hereafter, referred to as badges). The security officers at the entrance station use the photograph on the badge to visually identify the individual requesting access. The badges for both licensee employees and contractor personnel who have been granted unescorted access are issued upon entrance at the entrance/exit location and are returned upon exit. The badges are stored and retrievable at the entrance/exit location. In accordance with 10 CFR 73.55(d)(5), contractor individuals are not allowed to take badges off site. In accordance with the plant's physical security plans, neither licensee employees nor contractors are allowed to take badges off site.

The licensee proposes to implement an alternative unescorted access control system that would eliminate the need to issue and retrieve badges at the entrance/exit location and would allow all individuals with unescorted access to keep their badges with them when departing the site.

An exemption from certain requirements of 10 CFR 73.55(d)(5) is required to permit contractors to take their badges off site instead of returning them when exiting the site.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed action and concludes that the proposed exemption would not increase the probability or consequences of accidents previously analyzed and the proposed exemption would not affect facility radiation levels or facility radiological effluents. Under the proposed system, each individual who is authorized for unescorted entry into protected areas would have the physical characteristics of his/her hand (hand geometry) registered with his/her badge number in the access control system. When an individual enters the badge into the card reader and places the hand on the measuring surface, the system would record the individual's hand image. The unique characteristics of the extracted hand image would be compared with the previously stored template to verify authorization for entry. Individuals, including licensee employees and contractors, would be allowed to keep their badges with them when they depart the site.

The licensee stated that the hand geometry equipment selected for use will meet the detection probability of 90 percent with a 95-percent confidence level in accordance with Regulatory Guide 5.44, "Perimeter Intrusion Alarm Systems." This detection probability indicates that the false acceptance rate of the proposed hand geometry system will be comparable to that of the current system. Based on a Sandia report entitled "A Performance Evaluation of Biometric Identification Devices" (SAND91--0276 UC--906 Unlimited Release, printed June 1991), and on its experience with the current photo-identification system, the licensee stated that the use of the badges with the hand geometry system would enhance the overall effectiveness of the security program. Since both the badge and hand geometry would be necessary for access

into the protected area, the proposed system would provide for a positive verification process. Potential loss of a badge by an individual, as a result of taking the badge off site, would not enable an unauthorized entry into protected areas. The licensee will implement a process for testing the proposed system to ensure continued overall level of performance equivalent to that specified in the regulation. The Physical Security Plan for Palisades will be revised to include implementation and testing of the hand geometry access control system and to allow licensee employees and contractors to take their badges off site.

All other access processes, including search function capability and access revocation, will remain the same. A security officer responsible for access control will continue to be positioned within a bullet-resistant structure. A numbered picture badge identification system will continue to be used for all individuals who are authorized access to protected areas without escorts. Badges will continue to be displayed by all individuals while inside the protected area. The proposed system is only for individuals with authorized unescorted access and will not be used for individuals requiring escorts.

The change will not increase the probability or consequences of accidents, no changes are being made in the types or amounts of any effluents that may be released off site, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action involves features located entirely within the restricted area as defined in

10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Accordingly, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed action, any alternatives with equal or greater environmental impact need not be evaluated. As an alternative to the proposed action, the NRC staff considered denial of the proposed action. Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for Palisades dated June 1972.

Agencies and Persons Consulted:

In accordance with its stated policy, on March 28, 1997, the NRC staff consulted with the Michigan State official, Dennis Hahn, of the Michigan Department of Environmental Quality, Drinking Water and Radiological Protection Division, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated April 4, 1996, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Van Wylen Library, Hope College, Holland, Michigan 49423. Dated at Rockville, Maryland, this 9th day of April 1997.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert G. Schaaf, Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation