Docket No. 50-255 Serial No. PAL-89-030

> Mr. Kenneth W. Berry Director, Nuclear Licensing Consumers Power Company 1945 West Parnall Road Jackson, Michigan 49201

Dear Mr. Berry:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT -

PALISADES PLANT - (TAC 71058)

Enclosed for your information is a copy of an "Environmental Assessment and Finding of No Significant Impact." This assessment relates to your application dated September 15, 1988, and supplemented by letter dated June 23, 1989, for a license amendment to permit manual operation of containment isolation valves associated with Penetration 33. The change also would add a table listing containment penetrations and penetration isolation requirements, and new Section 4.5.6 relating to surveillance requirements for containment isolation valves.

This assessment has been forwarded to the Office of the Federal Register for publication.

Sincerely.

Albert W. De Agazio, Sr. Project Manager Project Directorate III-1 Division of Reactor Projects - III, IV, V & Special Projects Office of Nuclear Reactor Regulation

Enclosure: As stated

cc w/enclosure: See next page

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# UNITED STATES NUCLEAR REGULATORY COMMISSION

washington, d. c. 20555 August 22, 1989

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Project Directorate III-1

Division of Reactor Projects - III,

IV, V & Special Projects

Office of Nuclear Reactor Regulation

Enclosure: As stated

cc w/enclosure: See next page Mr. Kenneth W. Berry Consumers Power Company

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#### U. S. NUCLEAR REGULATORY COMMISSION

#### CONSUMERS POWER COMPANY

#### PALISADES PLANT

#### DOCKET NO. 50-255

#### ENVIRONMENTAL ASSESSMENT AND

#### FINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Provisional Operating License No. DPR-20 issued to the Consumers Power Company (the licensee), for operation of the Palisades Plant, located in Van Buren County, Michigan.

### ENVIRONMENTAL ASSESSMENT

# Identification of Proposed Action

The proposed amendment involves revising the Palisades Plant Technical Specifications (TS) relating to containment integrity. Specifically, the proposed amendment, submitted by application dated September 15, 1988, and supplemented by letter dated June 23, 1989, would revise Technical Specification Sections 1.4, 3.6.1, and 3.6.5, and would add a new Section 4.5.6. The proposed amendment also would add a new Table 3.6.1 to identify all containment penetrations and isolation valves.

# The Need for the Proposed Action:

The changes proposed are needed to (1) allow for manual operation of certain containment isolation valves for the purpose of sampling the Safety Injection Tanks for boron while the reactor is at power, (2) provide consistency with the Standard Technical Specifications with respect to containment isolation valve requirements, and (3) reflect the present containment vent pathway.

# Environmental Impacts of the Proposed Action:

TS Section 4.2, Table 4.2.1.5, Minimum Frequencies for Sampling Tests, requires monthly sampling of the Safety Injection Tanks for boron concentration. To obtain the required sample, it is necessary to open the manual isolation valves associated with the Safety Injection Tank drain line and route the flow to the sample tap at the Nuclear Steam Sampling System. However, the current TS Section 3.6.1, Containment Integrity, does not allow the opening of manual containment isolation valves except when the plant is in the cold shutdown condition. The proposed amendment would allow these valves to be opened while the plant is operating for the purpose of obtaining the required sample. The potential impact of this change is that a release of radioactive material could occur while the valves are opened for sampling. For a release to occur, however, the following conditions would have to exist concurrently:

- 1. An accident which results in core damage and release of fission products to the reactor coolant.
- 2. A pathway for fission products to reach the environment from the reactor coolant via a failure of two check valves between the Reactor Coolant System and the Safety Injection Tank discharge piping, and
- 3. The required safety injection tank sampling in progress with the manual containment isolation valves open.

An alternate accident scenario for a release to occur would be the following conditions concurrently:

1. An accident which results in core damage and release of fission products to the containment from the reactor coolant.

- 2. A pathway for fission products to reach the environment from the containment via a failure of the Safety Injection Tank drain line so as to create communication of the containment atmosphere with the environment, and
- 3. The required safety injection tank sampling in progress with the manual containment isolation valves open.

The first alternative scenario is beyond the design basis for the plant in that two check valves must fail for the pathway to exist. The plant design basis is that only a single active or passive component is assumed to fail during the course of the accident.

The Final Safety Analysis Report offsite dose calculations are based on Standard Review Plan assumptions for the maximum hypothetical accident. Those assumptions do not consider failure of lines penetrating containment. Therefore, the alternate scenario for activity release discussed above, which would require such a line failure, is beyond the plant design basis.

The proposed amendment would change the definition of "Containment Integrity" to reflect the addition of Table 3.6.1 and TS Section 4.5.2. Table 3.6.1 lists all containment penetrations and the penetration isolation requirements. TS Section 4.5.2 adds surveillance requirements for the containment valves. Neither the definition change, the added table listing penetration isolation requirements, nor the added surveillance requirements affect the installation or manner of operation of any plant equipment beyond permitting opening of the manual valves discussed above.

The Commission has completed its evaluation of the environmental impact of the proposed amendment and has determined that there would be no increase in

any radiological plant effluents released offsite during normal (non-accident) operation.

The Commission has also determined that the probability of accidents has not been increased by the proposed changes, and that post-accident radiological releases would not be greater than determined previously. The proposed changes do not increase individual or cumulative occupational radiation exposure.

Therefore, the Commission concludes that this action would result in no significant radiological environmental impact.

With regard to potential non-radiological impacts, the proposed changes to requirements with respect to the use of a facility component and a change to a surveillance requirement involves systems located within the restricted area as defined in 10 CFR Part 20. The changes do not affect non-radiological plant effluents and have no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on June 20, 1989 (54 FR 25920). No request for hearing or petition for leave to intervene was filed following this notice.

# Alternative to the Proposed Action:

Since the Commission has concluded that the environmental effects of the proposed action are not significant, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce the environmental impacts attributable to this facility.

Denial of the action would prevent sampling the safety injection tanks from outside the containment. Although an alternate sampling scheme is possible, entry into containment would be required and would result in substantially increased occupational radiation exposure.

# Alternative Use of Resources:

This action does not involve the use of resources not previously considered in the Final Environmental Statement dated February 1978 related to operation of the Palisades Plant.

## Agencies and Persons Contacted:

The Commission's staff reviewed the licensee's request and did not consult other agencies or persons.

## FINDING OF NO SIGNIFICANT IMPACT

Based upon the foregoing environmental assessment, we conclude 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 amendment.

For further details with respect to this action, see the application for amendment dated September 15, 1988, and letter dated June 23, 1989, which are available for public inspection at the Commission's Public Document Room, 2120 L Street, NW., Washington, DC, and at the Van Zoeren Library, Hope College, Holland, Michigan 49423.

Dated at Rockville, Maryland, this 22nd day of August 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

Albert De Agazio, Acting Director

Project Directorate III-1

Division of Reactor Projects - III,

IV, V & Special Projects

Office of Nuclear Reactor Regulation