

March 15, 2000

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

**DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT
ENVIRONMENTAL ASSESSMENT INFORMATION TO SUPPORT PRIMARY
COOLANT PUMP OIL COLLECTION SYSTEM EXEMPTION REQUEST**

In a letter dated August 13, 1999, Consumers Energy Company requested an exemption from the requirements of 10 CFR 50, Appendix R, as they relate to primary coolant pump oil collection systems. Responses to reviewer questions were provided in a letter dated November 3, 1999. Subsequently Consumers Energy has been requested to provide additional information to facilitate preparation of an Environmental Assessment in support of the exemption. This letter responds to that request.

Attachment 1 provides a discussion of the environmental impact from granting the requested exemption. We trust that this information will meet the NRC staff's needs.

SUMMARY OF COMMITMENTS

This letter contains no new commitments and no revisions to existing commitments.



Daniel G. Malone
Acting Director, Licensing

CC Administrator, Region III, USNRC
Project Manager, NRR, USNRC
NRC Resident Inspector - Palisades

Attachment

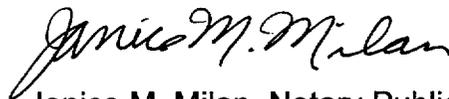
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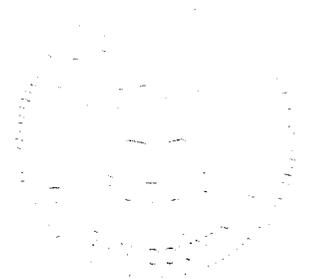
CONSUMERS ENERGY COMPANY

To the best of my knowledge, the contents of this document entitled "Environmental Assessment Information to Support Primary Coolant Pump Oil Collection System Exemption Request", are truthful and complete.

By 
Daniel G. Malone
Acting Director, Licensing

Sworn and subscribed to before me this 15th day of March, 2000.


Janice M. Milan, Notary Public
Allegan County, Michigan
(Acting in Van Buren County, Michigan)
My commission expires September 6, 2003



ATTACHMENT

**CONSUMERS ENERGY COMPANY
PALISADES PLANT
DOCKET 50-255**

March 15, 2000

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COOLANT PUMP OIL COLLECTION SYSTEM EXEMPTION REQUEST**

3 Pages

ENVIRONMENTAL ASSESSMENT INFORMATION TO SUPPORT PRIMARY COOLANT PUMP OIL COLLECTION SYSTEM EXEMPTION REQUEST

Identification of the Proposed Action

The proposed action would exempt the Palisades Plant from the requirements of 10 CFR Part 50, Appendix R, Section III.O, with respect to the required size of the Primary Coolant Pump (PCP) oil collection system tanks. Section III.O requires that oil leakage be collected and drained to a vented closed container that can hold the entire lubricating oil system inventory. The PCP oil collection tanks for the "A", "B", and "C" PCPs at Palisades do not have the capacity to contain the entire oil inventory of their respective PCP motor's lubrication system if both the upper and lower motor bearing lubrication systems were to fail simultaneously. The proposed exemption would allow the avoidance of unnecessary radiation dose and the expenditure of resources that would be needed to modify or replace the oil collection tanks to meet literally the 10 CFR 50, Appendix R, section III.O requirement.

The underlying purpose of 10 CFR 50 Appendix R, Section III.O is to collect in a safe location any oil discharged due to random oil system leakage in order to prevent the oil from becoming a fire hazard. For lubricating oil systems such as those at Palisades which are capable (with reasonable assurance) of withstanding a safe shutdown earthquake, the rule does not require collection of all oil following a rupture or catastrophic failure of a lubricating oil system. The proposed exemption request is predicated on the ability of the existing Palisades oil collection systems to collect operational leakage, and on the seismic ruggedness of the existing oil collection systems and the PCPs. These factors satisfy the underlying purpose of the rule. The proposed action is in accordance with Consumers Energy's application for exemption dated August 13, 1999, as supplemented by letter dated November 3, 1999.

The Need for the Proposed Action

The proposed action is needed for the Palisades Plant to avoid the burden of full literal compliance with the regulation. Literal compliance with the regulation would require installation of larger motor oil collection tanks inside containment for Primary Coolant Pumps "A", "B", and "C". As noted above, the underlying purpose of the rule is met without incurring the burden of installing larger collection tanks.

Environmental Impacts of the Proposed Action

The oil collection tanks for the "A", "B", and "C" primary coolant pumps have a nominal capacity of 79 gallons. The amount of lubricating oil in each pump motor is nominally 87 gallons in the upper bearing lubricating oil system and 18 gallons in the lower bearing

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lubricating oil system, for a total of 105 gallons. The upper and lower lubricating oil systems are independent from each other.

The operating levels in the upper and lower lubricating oil reservoirs must be maintained above a minimum level to keep the bearings properly lubricated during motor operation. Approximately 20 gallons of oil represent the operating level range for the upper reservoir, and approximately 5 gallons of oil represent the lower reservoir operating level range. Any significant leakage or change in leakage trends would be identified through regular monitoring by control room operators and by oil level alarms. Prudent action would be taken to shut down a PCP if oil leakage caused either reservoir to reach a low operating level which threatened motor bearing damage. Stopping the PCP and its oil lift pump would depressurize the leaking lubricating oil system. The cause of the oil leakage would be investigated, repaired, and the collection tank would be pumped out prior to returning the pump to operation. Additionally, prudent operator action would be taken to shut down a PCP if the lubricating oil level were to drop at a rate causing concern over safe PCP operation. Stopping a PCP during reactor operation would result in immediate reactor shutdown. Therefore, oil spillage due to overflowing an existing collection tank is not considered a credible event.

In the highly unlikely event that operators allowed leakage in a PCP upper oil system to drain the entire system without taking action to stop the pump, approximately eight gallons of oil could overflow the oil collection tank onto the floor in containment. Approximately 26 gallons could overflow onto the floor in the incredible event that both the upper and lower oil systems were to develop gross leakage simultaneously with no operator action.

Lubricating oil that may overflow an oil collection tank would remain inside the containment building and would not be released to the environment. A portion of the spilled oil could migrate down to lower floor elevations and eventually into the containment sump. The motor oil has a flash point of over 400°F and the containment atmosphere is nominally 80 to 100°F when the PCPs are in operation. There would be no interaction with hot pipes, hot equipment surfaces, or electrical ignition sources in the tank areas or in the migration paths to the sump. The oil would not become a fire hazard, as it would drain to a safe location.

Cleanup of an oil spill would result in the generation of minor amounts of waste materials which would require disposal, and a small amount of radiation exposure to plant workers. The waste material and radiation exposure that could result from cleanup, however, would be an essentially negligible change from the waste materials and radiation exposure resulting from routine lubricating oil system activities associated with

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normal plant operation and maintenance. Routine activities which generate waste oil and cleanup materials include periodic PCP oil changes, pumpdown of oil collection tanks, PCP oil system piping and equipment repairs, and cleaning of equipment and floors.

The proposed action will not increase the probability or consequences of accidents, no changes are being made in the types of effluents that may be released off site, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action. With regard to potential non-radiological impacts, the proposed action does not involve any historic sites. The proposed action does not affect non-radiological plant effluents and has no other environmental impacts.

Accordingly, there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action

Since there is no significant environmental impact associated with the proposed action to approve an exemption to 10 CFR 50, Appendix R, section III.O, any alternatives with equal or greater environmental impact need not be evaluated. Denial of the proposed action would result in no change in the current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources

The proposed action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Palisades Plant dated June 1972 and Final Addendum dated February 1978.