CONSUMERS POWER COMPANY
Docket 50-255
Request for Change to the Technical Specifications
License DPR-20

For the reasons hereinafter set forth, it is requested that the Technical Specifications contained in the Provisional Operating License DPR-20, Docket 50-255, issued to Consumers Power Company on October 16, 1972, for the Palisades Plant be changed as described in Section I below:

I. Changes

A. Add Specifications 4.7.2c and 4.7.2d to read as follows:

"4.7.2.c At least once per refueling cycle, during shutdown, each station battery shall be demonstrated operable by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 2 hours when the battery is subjected to a battery service test."

"4.7.2d At least once every three refueling cycles, during shutdown, each station battery shall be demonstrated operable by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. The performance discharge test shall be performed in lieu of the battery service test."

B. Change the existing basis for Specification 4.7 by modifying the sixth sentence, moving the last sentence, and by adding additional basis statements.

Modify the sixth sentence and move the last sentence as follows:

"....Starting on complete loss of off-site power will be verified by simulated loss-of-power tests during refueling shutdowns. The emergency diesel generator limit of 750 amperes at 2400 volts corresponds to the manufacturer's nameplate kVa and kW rating of these machines."

Add additional basis statements as follows:

"....The surveillance specified for every month and for every three months is that which has been demonstrated over the years to provide an indication of a cell becoming unserviceable long before it fails. The surveillance specified for each refueling cycle and for every three refueling cycles will provide an adequate demonstration of battery capacity . The battery service test will verify that the battery capacity is adequate to deliver the design requirements of its connected emergency direct current (dc) load.

The battery discharge test will verify that the battery capacity is at least 80% of the manufacturer's original rating in addition to verifying that the battery capacity is adequate to deliver the design requirements of its associated emergency dc loads. Results of these tests reflect all factors which determine battery capability."

Technical Specifications pages, revised as indicated above, are attached. The proposed changes are shown by a hash mark (/) in the right-hand margin.

II. Discussion

By letter dated May 22, 1981, the NRC submitted its safety evaluation of SEP Topic VIII-3.A, "Station Battery Capacity Test Requirements." The NRC noted in its evaluation that the Palisades Plant did not conform to current licensing standards in that the Plant Technical Specifications do not require periodic station battery service and discharge tests. The NRC proposed that a battery service test be performed once every 18 months and that a battery discharge test be performed once every 60 months.

In partial response to the NRC Safety Evaluation, Consumers Power Company committed, by letter dated March 31, 1982, to implement a station battery service and discharge testing program that met the requirements of IEEE Std 450-1975. The proposed test frequency of once each refueling cycle (approximately 18 months) for the service test, and once every three refueling cycles for the discharge test met the intent of the the safety evaluation, while precluding the necessity of a plant shutdown solely for the purpose of performing the station battery service and discharge tests. By letter dated October 29, 1982 (NUREG 0820) the NRC accepted the proposed testing program and noted that Consumers Power Company also agreed to submit a Technical Specifications Change Request to incorporate the testing requirements into the Palisades Technical Specifications.

The attached Technical Specification Change Request fulfills our commitment to incorporate a station battery service and discharge test into the Palisades Technical Specifications. The proposed Technical Specifications will require a battery service test once every refueling outage and a battery discharge test once every three refueling outages.

The requirements of this proposed change request are similar to the changes proposed by our May 13, 1985 submittal, with the exception that both a battery service test and a battery discharge test would not be required to be performed during the same outage. The requirement to perform both tests during the same outage has been eliminated since the performance of both a service and discharge test during the same outage could shorten the battery life. In addition, since the discharge test is the more stringent of the two tests, performance of the discharge test provides adequate verification that the battery is capable of maintaining the associated emergency dc loads. These loads consist of the 125 volt direct current (dc) and 120 volt preferred alternating

current (ac) systems which supply power to the 4 RPS channels and other vital plant instrumentation and control systems including annunciators. During a loss of power event, the batteries also supply power to the emergency lighting system and primary coolant pump oil lift pumps in addition to intermittent dc power for breaker operation.

The proposed changes adhere to the manufacturer's (C&D Power Systems) recommendations and to the applicable industry standards (IEEE 450-1987) for batteries of this type. In addition, this proposed Technical Specifications change is similar to a change previously granted to Millstone Nuclear Power Station Unit No. 2 by Amendment No. 108. The Safety Evaluation for this amendment is dated December 24, 1985.

The additional changes proposed for the Basis statement relate to the Emergency Diesel Generators. The modification of the sixth sentence removes an ambiguity regarding when the loss-of-power tests are to be conducted. Moving the last sentence is editorial in nature in that it places all of the Basis statements for the Diesel Generators within a single paragraph.

Analysis of No Significant Hazards Consideration

The proposed battery service test will verify that the station battery capacity is adequate to supply and maintain the design requirements of its connected emergency dc loads for two hours; thus, assuring the ability to shut the plant down in case of an emergency. The battery discharge test is designed to ensure that the station battery capacity is at least 80% of the manufacturer's design rating. The addition of requirements for a service test and discharge test increase the margin of safety in that they assure the station batteries will be available to fulfill their design function during an accident.

The proposed changes are in accordance with the recommendations of Regulatory Guide 1.129 "Maintenance Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," February 1978, adheres to the requirements and recommendations of IEEE Standard 450-1987 and has received NRC review as part of the Systematic Evaluation Program Topic VIII.3.A. In addition, the proposed tests would be conducted during refueling outages while the plant is in cold shutdown. Therefore, since the proposed changes provide additional testing requirements beyond those already required by the Plant Technical Specifications, and would be performed during a period when the plant is in an inherently stable condition, the proposed changes will not result in an increase in the probability or consequences of a previously analyzed accident, nor will they result in the creation of a new or different kind of accident.

III. Conclusion

The Palisades Plant Review Committee has reviewed this Technical Specification Change Request and has determined that this change does not involve an unreviewed safety question and therefore involves no significant hazards consideration. This change has also been reviewed under the cognizance of the Nuclear Safety Board. A copy of this Technical Specification Change Request has been sent to the State of Michigan official designated to receive such Amendments to the Operating License.

CONSUMERS POWER COMPANY

By _____
F W Buckman, Senior Vice President
Energy Supply

Sworn and subscribed to before me this 2nd day of February 1988.

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Elaine E Buehrer, Notary Public
Jackson County, Michigan
My commission expires October 31, 1989