Consumers Power Company

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October 22, 1985

Director,
Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
TECHNICAL SPECIFICATION CHANGE REQUEST - CONTAINMENT
HIGH RADIATION CHANNEL SURVEILLANCE METHOD

Attached are three (3) originals and thirty-seven (37) conformed copies of a request for change to the Palisades Technical Specifications. The containment high radiation monitors are to be replaced with environmentally qualified monitors during the upcoming refueling outage. The new monitors will not have an internal radiation source used for a monthly operability check of the system. An alternate surveillance, an electronic circuit check is proposed for the new monitors.

A check in the amount of $150.00 is enclosed as required by 10CFR170.21.

Kenneth W Berry

Kenneth W Berry
Director, Nuclear Licensing

CC Administrator, Region III, USNRC
NRC Resident Inspector - Palisades

Attachment

OC1085-0306-NL04

Recd w/check for $150.00

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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:

Change Technical Specifications Table 4.1.2, Item 5 under Channel Description, Containment High Radiation Channels, Surveillance Method c, to read as follows:

"c. Electronic circuit check of signal amplifier to verify proper indicator operation"

II. Discussion

The Containment Radiation Monitoring System is being replaced as part of the Environmental Qualification upgrade program during the 1985 Refueling Outage with a system developed by General Atomic. The replacement system does not incorporate an "internal radiation check source" in each detector as the presently installed system does. The radiation check source is used, on a monthly basis, to check instrument operation. Without the radiation check source the surveillance method will no longer be applicable. The change of detector type was necessary in order to provide an environmentally qualified system for these containment isolation channels.

The replacement system incorporates two alternate functions which are considered to be an acceptable alternative to the use of a radiation check source. These are: a) a circuit failure alarm, and b) an electronic circuit check. The failure alarm circuit continuously monitors for and alarms on a loss of power, loss of high voltage or loss of signal from the detector. The electronic circuit check feature is used to simulate a two decade increase in radiation level signal arriving at the signal amplifier resulting in an upscale reading. This circuit does not verify continuity from the detector. However the electronic circuit check in company with the loss of signal failure monitor provide a high level of assurance that the system is operating properly.

Analysis of No Significant Hazards Consideration

The proposed Technical Specification Change does not involve a significant increase in the probability or consequences of an accident

previously evaluated. The containment high radiation isolation monitors are to be changed out with environmentally qualified monitors. The feature that allows verification of instrument operation using a remote-operated integral radiation check source will not be incorporated into the new monitors. However, the new monitors will have continuous circuit failure monitoring which is annunciated and an electronic circuit check of the circuit amplifier as noted in the discussion. Like the present monitors, calibration with a known external radiation source will be done at least once per 18 months for the purpose of verifying correct detector response. The daily comparison check of the four containment high radiation indicators coupled with the circuit failure monitoring feature along with the monthly electronic circuit check feature provides a high level of assurance the new radiation monitoring system will be operating properly and provide the 2 out of 4 logic required for a containment isolation signal.

The new monitor system will not create the possibility of a new or different kind of accident from any accident previously evaluated, as the change in methods of conducting the surveillance does not affect any accident analysis. The new monitors will provide the same function as the old monitors and the change in surveillance methods has no effect on the margin of safety that is defined in the basis for any of the Technical Specifications.

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 _____
R B DeWitt, Vice President
Nuclear Operations

Sworn and subscribed to before me this 22nd day of October 1985.

_____
Helen I. Dempski, Notary Public
Jackson County, Michigan
My commission expires October 12, 1987.

TSOP1085-0306-NL04