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June 11, 1980

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Director, Nuclear Reactor Regulation Att Mr Dennis M Crutchfield, Chief Operating Projects Branch No 5 US Nuclear Regulatory Commission Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT - COMMITMENT TO ADDITIONAL TMI-2 RELATED REQUIREMENTS FOR OPERATING REACTORS

NRC letter dated May 7, 1980 requested that Consumers Power Company commit to meet the requirements and associated schedules for additional requirements resulting from review of the TMI-2 accident. This letter provides the requested commitment.

Consumers Power Company will meet the requirements and schedules specified in the NRC letter as they pertain to the Palisades Plant with the following exceptions:

- 1. Item I.A.1.3 Shift Manning (Personnel Requirements) These requirements have not yet been promulgated by NRC. Consumers Power Company reserves judgment on our ability to comply with these requirements until they can be reviewed.
- 2. Item I.A.1.3 Shift Manning (Overtime Procedures) This item involves union and licensed personnel problems that need to be resolved before a commitment can be made.
- 3. Item II.K.3.29 Study To Demonstrate Performance With Non-Condensibles -The various modes of two-phase flow natural circulation which may play a role in plant response following a small break LOCA were evaluated in CEN-114P, "Review of Small Break Transients in Combustion Engineering Nuclear Steam Supply Systems," July 1979. This evaluation also included the effects of non-condensible gases on steam generator heat transfer and fluid flow. Experimental verification of the CE two-phase flow natural circulation models has been provided through pre- and post-test predictions of LOFT Test L3-1 (re: letter from Liebler (CE Owners Group) to Ross dated February 28, 1980). Further verification may be required as

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a result of the small break LOCA review required in response to Item II.K.3.30. NUREG-0635, "Generic Evaluation of Feedwater Transients and Small Break LOCAs in CE Designed Operating Plants," contains the Bulletins and Orders Task Force review of the evaluations reported in CEN-114P. The B&OTF concludes that the CE evaluation of the effects of non-condensibles is acceptable. No further evaluation is planned.

Item II.K.3.30 - Revised Small Break LOCA Methods To Show Compliance With 10 CFR 50, Appendix K - Consumers Power Company will address this item with Combustion Engineering on the schedule provided in Enclosure 1 of the May 7, 1980 NRC letter. We do not, however, feel that it would be useful for our fuel vendor (Exxon Nuclear Company) to submit revised small break LOCA methods for Palisades. Previous analysis by our reactor vendor has shown that the small break LOCA is definitely nonlimiting and that core thermal power limits - the sole LOCA analysis area in which our fuel vendor has been involved - are completely defined by the large break LOCA.

Further, it is well known that fuel characteristics are of very secondary importance in determining the plant response to a small break LOCA; the most important parameters being the licensed core power level, the performance characteristics of the ECCS, the normal primary coolant loop operating temperature, and the elevation of the core with respect to the hot and cold legs. In the unlikely circumstance that small break LOCA should become limiting, either due to the discovery of previously unknown phenomena or as a result of requirements for additional licensing conservatisms, it would of course then become necessary for our fuel vendor to provide suitable documentation for its methods.

5. Item II.K.3.31 - Plant Specific Calculations To Show Compliance With 10 CFR 50.46 - Consumers Power Company will address this item on the schedule provided in Enclosure 1 of the May 7, 1980 NRC letter. At this time, it is our belief that small break LOCA is not a limiting event from the point of view of the fuel. Therefore, we expect that this requirement will be satisfied through bounding analyses of specific plant groupings by our reactor vendor.

Roger W Huston Senior Licensing Engineer

CC JGKeppler, USNRC NRC Resident Inspector-Palisades 2