FEBRUARY 1 0 1978

Docket No. 50-305

Wisconsin Public Service Corporation
ATTN: Mr. E. W. James
     Senior Vice President
Post Office Box 1200
Green Bay, Wisconsin 54305

Gentlemen:

By letter dated January 16, 1978, you responded to our request for
appropriate bases to justify continued operation of your plant beyond
30 days. This request was in regard to our concern over the adequacy
of your ECCS evaluation model. We have begun our review of your
submittal and find that we need additional information in order to
complete our review.

Please provide the information identified in the attachment to this
letter as soon as possible but no later than February 15, 1978.

                       Sincerely,

                       Original Signed By

                       A. Schwencer, Chief
                       Operating Reactors Branch #1
                       Division of Operating Reactors

Enclosure:
Request for Additional
   Information

cc w/encl:
See next page

A 3
GD

| OFFICE▶ | DOR:ORB#1 | DOR:ORB#1 | DOR:ORB#1 | | | | |
|---------|-----------|-----------|-----------|--|--|--|--|
| SURNAME▶ | DNeighbors:lb | MGrotenhuis | ASchwencer | | | | |
| DATE▶ | 2/10/78 | 2/10/78 | 2/10/78 | | | | |

cc:  Steven E. Keane, Esquire
     Foley, Sammond & Lardner
     777 East Wisconsin Avenue
     Milwaukee, Wisconsin  53202

     Bruce W. Churchill, Esquire
     Shaw, Pittman, Potts & Trowbridge
     1800 M Street, NW.
     Washington, D. C.   20036

     Kewaunee Public Library
     314 Milwaukee Street
     Kewaunee, Wisconsin  54216

The following additional information is required in order to complete the staff evaluation of the January 16, 1978 letters from the two-loop plant owner-operators.

1.  Provide the Westinghouse design FLECHT correlation used in the analysis including all input parameters.

2.  Provide the input values for pressure, injection rates, flooding rates and decay heat as a function of time used in the analysis and provide references for the sources of this data.

3.  Provide the carryover rate fraction as a function of time for a typical two-loop plant reflood.

4.  Provide the heat transfer coefficient and the steam generation in the unquenched portion of the core due to botton reflood water.

5.  Provide a list of the sources of metal heat in the upper plenum along with the mass and stored energy of each.

6.  Provide a description of the heat release model employed in the upper plenum, including the assumed heat transfer coefficient, surface area and specific heat.

7.  Provide a calculation of the change in peak clad temperature for each two-loop plant using the Westinghouse proposed model with proposed changes 4 and 5 eliminated for both 100% ANS decay heat and 120% ANS for decay heat.

8.  Provide the appropriate changes in $F_q$ and/or power levels, if necessary, for each two-loop plant to assure that the results of each of the above calculations (item 7) meet the peak clad temperature criterion of 2200°F.