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November 4, 1982

Dennis M Crutchfield, Chief Operating Reactors Branch No 5 Nuclear Reactor Regulation US Nuclear Regulatory Commission Washington, DC 20555

DOCKET 50-155 - LICENSE DPR-6 -BIG ROCK POINT PLANT - REACTOR PHYSICS METHODOLOGY REPORT UPDATE

By letter dated April 15, 1982, Consumers Power Company submitted Revision 1 to the Big Rock Point Physics Methodology Report of October 30, 1978. Consumers Power Company subsequently identified an error in the calculation of the Minimum Critical Heat Flux Ratio (MCHFR) uncertainty factor and submitted a correction (Revision 2) to the report on May 18, 1982. Acceptability of our physics methodology was provided by your letter and Safety Evaluation Report dated September 16, 1982.

Consumers Power Company has calculated a Minimum Critical Power Ratio (MCPR) uncertainty factor for inclusion as Section 4.9 of the report. As indicated in Revision 1 to the original report submitted April 15, 1982, Consumers Power Company will be submitting a technical specification change request to replace the technical specification limit MCHFR with MCPR. The NRC has previously referenced the utilization of MCPR as established by the Exxon Nuclear Corporation in their report XN-75-34, "The XN-2 Critical Power Correlation", Rev 1 in correspondence dated August 3, 1977, and September 16, 1982.

Consumers Power Company has identified an error in the tabulation of the local peaking uncertainty factor as shown in the Table in Section 5.0. The local peaking uncertainty factor of 5.6491% as identified in Revision 1 to the report did not include the accuracy of the CASMO-PDQ7F system. The accuracy of the CASMO-PDQ7 system is 3.18713% and is statistically combined with 5.6491% to give a corrected local peaking uncertainty factor of 6.4861%. This table has also been updated to only show uncertainties in the parameters.

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The attachment (Revision 3) incorporates the above changes and additions. Insert Revision 3 of the Big Rock Point Physics Methodology Report after removing the cover sheet, table of contents, page 8, and pages 48 to 50 of Revisions 1 and 2 from our previous submittals.

Thomas C Bordine

Staff Licensing Engineer

CC Administrator, Region III, USNRC NRC Resident Inspector-Big Rock Point

Attachment