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NORTHERN STATES POWER COMPANY

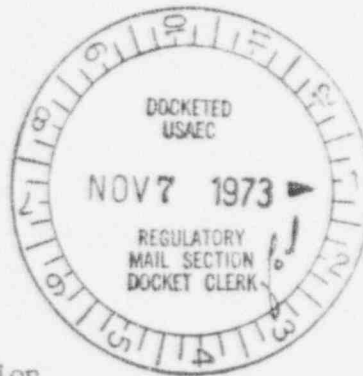
MINNEAPOLIS, MINNESOTA 55401

Regulatory

File Cy.

November 5, 1973

Mr. D J Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing
Office of Regulation
U S Atomic Energy Commission
Washington, D C 20545



Dear Mr. Skovholt:

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

Additional Calculations of the
Fuel Densification Gamma Curve

Your October 26, 1973 letter requested that we provide calculations beyond 15,000 MWD/T exposure for Figures 4-9C1 and 4-9C2 of General Electric Topical Report NEDM-10735, Supplement, 6, 7, and 8.

Calculations were initially done for segment exposures of 15,000 MWD/T and extrapolated to higher exposures. Confirmatory calculations were recently done for segment exposures of 25,000 MWD/T. The MAPLHGR for gamma curve conditions of initial core fuel is calculated at 25,000 MWD/T segment exposure to be 11.5 kw/ft as shown in Figure 4-9C2. For the 20 Monticello Generic B Reload 1 assemblies considered in Figure 4-9C1, the MAPLHGR gamma curve decreased from 11.5 kw/ft at 15,000 MWD/T to 11.4 kw/ft at 25,000 MWD/T segment exposure.

There is no change in either curve in question prior to 15,000 MWD/T. We do not expect any fuel segment to reach that exposure during cycle 2 which terminates in the spring of 1974. The Reload 1 fuel will have significantly less exposure in the peak segment at that time.

We understand that General Electric has transmitted answers on this subject along with replacement figures in a November 2, 1973, letter from Mr. I F Stuart to Mr. V A Moore. Please reference this information in our docket.

Yours very truly,

L. O. Mayer

L O Mayer, PE
Director of Nuclear Support Services

cc: J G Keppler
G Charnoff
Minnesota Pollution Control Agency
Attn. K Dzigan

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