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PDR

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THRU: D. L. Ziemann, Chief, ORB #2, L

D.L. Ziemann

ADDITIONAL CALCULATIONS OF THE MAXIMUM ALLOWABLE AVERAGE PLANAR LINEAR HEAT GENERATION RATE CURVE FOR THE MONTICELLO REACTOR (NORTHERN STATES POWER COMPANY)

In response to our letter of October 26, 1973, Northern States Power Company (NSP) has provided, in a letter dated November 5, 1973, the results of calculations of the maximum allowable average planar linear heat generation rate (MAPLHGR) for fuel segment exposures beyond 15,000 MWd/t. The curves of MAPLHGR provided in General Electric Topical Report NEDM-10735, Supplements 6, 7, and 8 were based on calculations to fuel segment exposures of 15,000 MWd/t. The results of the calculations to 25,000 MWd/t show that for the fuel initially loaded into the reactor, no changes to the MAPLHGR currently in effect are required. For the 20 fuel assemblies of reload 1, the MAPLHGR at 15,000 MWd/t was not changed as a result of the additional calculations. The reload 1 fuel will not reach a fuel segment exposure of 15,000 MWd/t prior to the termination of fuel cycle 2 in the spring of 1974.

On the basis of the above, the current MAPLHGR limits of the Monticello Technical Specifications are adequate until the start of fuel cycle 3. Since General Electric plans to submit a new fuel densification model in December 1973 which will likely result in changes to the MAPLHGR limits and since MAPLHGR limits will be required for reload 2 fuel prior to the start of fuel cycle 3, it is concluded that no changes to the current MAPLHGR technical specifications for the Monticello reactor are required at this time.

for James J. Shea

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