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FROM: Federal Power Commission Washington, D. C. 20426 T. A. Phillips	DATE OF DOC: 7-7-72	DATE REC'D 7-10-72	LTR X	MEMO	RPT	OTHER
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DESCRIPTION:  
Ltr re our 5-26-72 ltr...furnishing comments on the draft environmental statement for Monticello Nuclear Generating Plant.

ENCLOSURES:

**ACKNOWLEDGED**

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PLANT NAMES: Monticello

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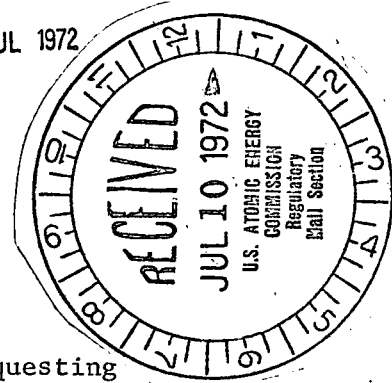
FEDERAL POWER COMMISSION  
WASHINGTON, D.C. 20426

50-263

IN REPLY REFER TO:  
FWR-ER

Mr. Daniel R. Muller  
Assistant Director for Environmental  
Projects  
Directorate of Licensing  
U. S. Atomic Energy Commission  
Washington, D. C. 20545

7 JUL 1972



Dear Mr. Muller:

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The Monticello Nuclear Generating Plant was placed in commercial service on June 30, 1971, and has been operating at 545 megawatts under the Provisional Operating License No. DPR-22, issued to the Northern States Power Company on January 19, 1971.

The Federal Power Commission's Bureau of Power has commented on the need for the continued operation of the Monticello unit in a letter dated January 25, 1972, and those comments were included by reference in the AEC Draft Environmental Statement. Since submission of those comments, the Applicant has submitted Supplement 1, dated April 4, 1972 to the Environmental Report for the Monticello Nuclear Generating Plant, which provides additional data on the Applicant's system and the Mid-Continent Area Reliability Council (MARCA) system of which the Applicant is a member.

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#### The Need for the Facilities

The Applicant has illustrated its continuing need for the output of the Monticello unit through its forecasted load requirements in the years 1972 to 1976, the first five full years of projected commercial operation of the unit. Table X-1, page X-3, of the Draft Environmental Statement shows the annual growth of load at the summer peak during the period 1962 to 1971 which resolves to an annual rate of growth of 8.1 percent. The forecasted peak demand and generating capability for the Applicant's system for the period 1972 to 1976 contained in Table X-1 agree with the projections contained in the MARCA ten-year regional forecast.

The predicted reserve margin data for 1972-1976 for the Applicant's system, the Upper Mississippi Valley Power Pool in which the Applicant is one of the twelve member electric utilities and rural electric cooperatives, and the MARCA region are shown in the following tabulations.

Mr. Daniel R. Muller

Northern States Power Company System

<u>Year</u>	<u>Monticello Operative (545 MW)</u>				<u>Monticello Shutdown</u>		
	<u>Needed Reserve (MW)</u>	<u>Reserve Margin (MW)</u>	<u>Percent of Peak Load</u>	<u>Reserve Margin Deficiency (MW)</u>	<u>Reserve Margin (MW)</u>	<u>Percent of Peak Load</u>	<u>Reserve Margin Deficiency (MW)</u>
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1974	650 <u>1/</u>	558	12.9	92	13	0.03	637
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1/ MARCA Reserve Criterion increased from 12 to 15 percent of peak load because of changing system conditions and their effects on outage probability.

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1976	1,269	1,015	12.0	254	470	5.6	799

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Mid-Continent Area Reliability Coordination Agreement

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The Applicant states that the reserve margin criterion used on its system is that prescribed by MARCA, the regional council, which is currently 12 percent of the annual peak load. The regional council plans to increase the reserve margin criterion to 14-15 percent of annual peak load in 1974 because of reliability considerations and outage probabilities affecting the individual systems and the participating power pools within the region. The staff of the Bureau of Power has utilized for its analysis a criterion of 12 percent for the years 1972 and 1973 and a criterion of 15 percent for the year 1974 and beyond.

The tabular data for the Northern States Power Company, the Upper Mississippi Valley Power Pool and the Mid-Continent Areas Reliability Council region show the effects of the 545 megawatts of capacity of the Monticello unit. On the Applicant's system, the Monticello unit will make up essentially all of the system's reserves during the 1972-1976 period. After 1972, the Applicant's system will not meet the reserve criterion and deficiencies of reserve capacity exist each year with the Monticello unit and future scheduled capacity in operation. The future scheduled capacity includes two new 530-megawatt nuclear units, Prairie Island Unit No. 1 in the summer of 1973 and Prairie Island Unit No. 2 in the summer of 1974. In anticipation of possible delays in meeting these scheduled dates, the Applicant has planned gas-turbine peaking capacity of 267 megawatts in 1973 and 136 megawatts in 1974.

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Based upon the projected load growth and reserve margin criteria, the adequacy and reliability of electric service on the Applicant's system in the 1972-1976 period, as well as that of the pool of which it is a part, is dependent not only upon the continued operation of the Monticello unit, but also upon the timely commercial operation of other nuclear units under construction. Any delay of these planned units in meeting their scheduled commercial operating dates will reduce the planned reserve margins of the systems and the pool involved, and reduce the ability of the MARCA region systems to withstand normally encountered daily operating contingencies.

#### Transmission Facilities

The Monticello unit is integrated into the Applicant's bulk power system by two 345-kilovolt lines each thirty miles long, serving the Coon Creek and Parkers Lake Substations. Both substations are located on the 345-kilovolt transmission loop serving the Minneapolis-St. Paul metropolitan area.

The Applicant considered an alternate route for the two 345-kilovolt lines sharing a single right-of-way. However, the chosen plan using separate rights-of-way for these lines provides improved reliability. The overhead lines are supported by double-circuited steel towers near the plant and on wood poles for the remainder of the routes. The routes pass through rural and agricultural lands and avoid municipalities, parks, recreational and natural areas. Selective clearing and minimal disturbance of vegetation on the rights-of-way have been utilized to preserve the natural appearance of the terrain. Brush control using hand-sprayed USDI-approved chemicals is employed on the rights-of-way.

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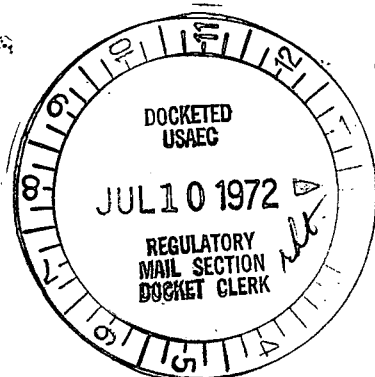
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Chief, Bureau of Power



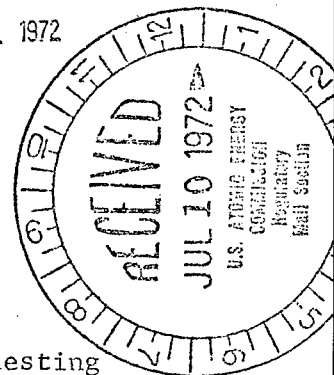
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