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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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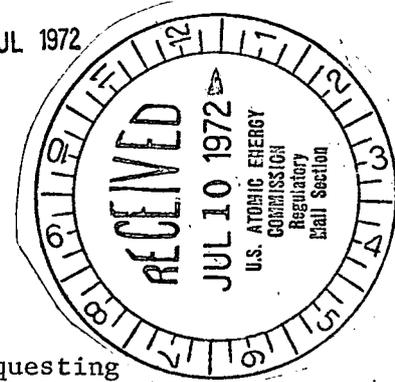
FEDERAL POWER COMMISSION
WASHINGTON, D.C. 20426

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:

This is in reference to your letter of May 26, 1972, requesting comments on the AEC Draft Environmental Statement for the Monticello Nuclear Generating Plant of the Northern States Power Company, Docket No. 50-263" dated May 1972.

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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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Bureau of Power staff, including Power System Statements and Regional Reliability Council reports made in accordance with FPC Order 383-2. The staff of the Bureau of Power generally bases its evaluation of the need for a specific bulk power system facility upon the load-supply situation for the critical peak load period immediately following the availability of the facility. However, the useful lives of such facilities are generally 30 years or longer, and they will continue to serve the utility's needs during their service lives.

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The Need for the Facilities

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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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1973	478	364	9.1	114	-181		659
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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1972	1,560	1,919	14.8	-	1,374	10.6	186
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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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The Upper Mississippi Valley Power Pool has estimated reserves of 11.5 to 13.3 percent of peak load during the 1972-1976 period with the Monticello unit in operation. Loss of this unit reduces these reserves to a range of 3.5 to 5.8 percent of peak load.

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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Alternatives and Costs

The Monticello Nuclear Generating Plant is completed and has been in commercial operation since June 30, 1971. The alternatives to be considered in this instance are those which could serve as alternative sources of power if a shutdown of Monticello should be ordered. Such alternatives are limited to firm power purchases outside the MARCA regional area since regional planned reserves are generally less than the minimum criterion necessary for meeting the stated reliability standard. At this time purchases from outside the region might be exceedingly difficult or impossible to arrange because of similar deficiencies in generating capability in many other areas.

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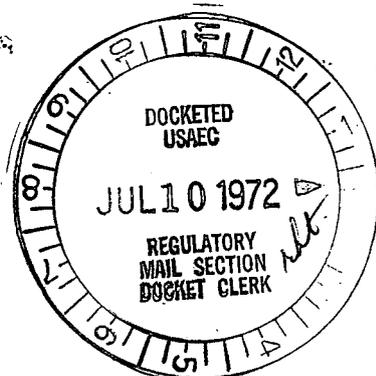
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The staff of the Bureau of Power concludes that the electric power output of the Monticello Nuclear Generating Plant is needed to meet the Applicant's projected loads and to provide its reserve margin capacity in accordance with its stated criteria during the 1972-1976 period.

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Chief, Bureau of Power



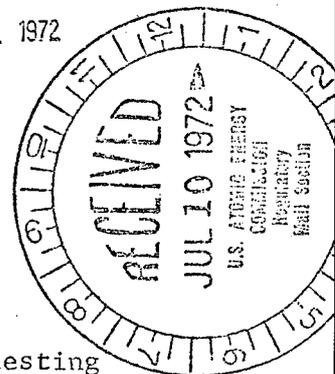
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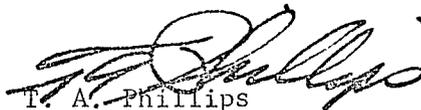
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