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Northern States Power Company Minneapolis, Minnesota 55401 E. C. Ward		11-03-72	11-06-72	X			
TO:		ORIG	CC	OTHER	FILE		
Daniel R. Muller		3 signed	40		SENT AEC PDR	X	
					SENT LOCAL PDR	X	
CLASS:	INPUT	NO CYS REC'D		DOCKET NO:			
U/PROP INFO		43		50-263			

DESCRIPTION:
Ltr re our 9-28-72 ltr trans the following:

ENCLOSURES:
Info Pertaining To The Environmental Impact Review notarized 10-3-72...consists of Requested Info Needed To Augment Monticello Environmental Statement In Response To Court Order Of 7-28-72.

ACKNOWLEDGED **Do Not Remove**

PLANT NAMES: Monticello

(43 cys encl rec'd)

FOR ACTION/INFORMATION				11-06-72	rht
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GIAMBUSSO	PAWLICKI	BALLARD		A/T IND	
BOYD-L(BWR)	SHAO	FINE	LIC ASST.	BRATTMAN	
DEYOUNG-L(PWR)	KNUTH		SERVICE L	SALTZMAN	
✓ SKOVHOLT-L	STELLO	ENVIRO	MASON L		
P. COLLINS	MOORE	MULLER	WILSON L	PLANS	
REG OPR	HOUSTON	DICKER	MAIGRET L	MCDONALD	
✓ FILE & REGION (2)	TEDESCO	KNIGHTON	SMITH L	DUBE	
MORRIS	LONG	YOUNGBLOOD	GEARIN L		
STELLE	LAINAS	PROJ LEADER	✓ DIGGS L	INFO	
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		REGAN			

EXTERNAL DISTRIBUTION

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1-DTIE(ABERNATHY)	1-R. CARROLL-OC, GT-B227	1-GERALD LELLOUCHE
1-NSIC(BUCHANAN)	✓ 1-R. CATLIN, A-170-GT	BROOKHAVEN NAT. LAB
1-ASLB-YORE/SAYRE	1-CONSULANT'S	1-AGMED(WALTER KOESTER,
WOODWARD/H. ST.	NEWMARK/BLUME/AGABIAN	Rm C-427, GT)
16-CYS ACRS HOLDING		1-RD...MULLER...F-309GT



NORTHERN STATES POWER COMPANY

November 3, 1972

Regulatory

File Cy.

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



Dear Mr Muller:

MONTICELLO NUCLEAR GENERATING PLANT E-5979
AEC Docket Number 50-263

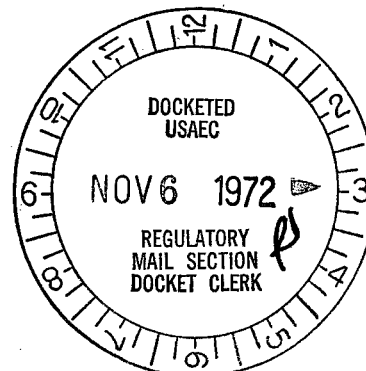
Enclosed are three signed originals and 40 conformed copies of information needed to augment your environmental impact review of the Monticello Plant.

This information is in response to your letter dated September 28, 1972.

Yours very truly,

E C Ward, Director
Engineering Vice Presidential Staff

Enclosure



6060
fw

UNITED STATES ATOMIC ENERGY COMMISSION

NORTHERN STATES POWER COMPANY

Monticello Nuclear Generating Plant

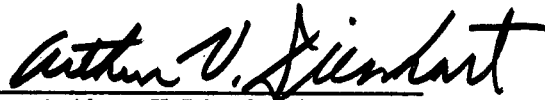
Docket No. 50-263

INFORMATION PERTAINING TO THE ENVIRONMENTAL IMPACT REVIEW

Northern States Power Company, a corporation organized under the laws of the State of Minnesota, hereby submits this information pertaining to the Monticello Environmental Impact Review as requested by Mr Daniel R Muller, Assistant Director for Environmental Projects, Directorate of Licensing, U S Atomic Energy Commission.

NORTHERN STATES POWER COMPANY

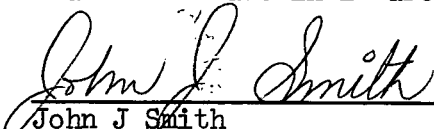
By



Arthur V Dienhart

Vice President - Engineering

On this 3 day of November, 1972, before me, a notary public in and for said County, personally appeared Arthur V Dienhart, Vice President - Engineering, and being first duly sworn acknowledged that he is authorized to execute this document in behalf of Northern States Power Company, that he knows the contents thereof and that to the best of his knowledge, information and belief, the statements made in it are true and that it is not interposed for delay.

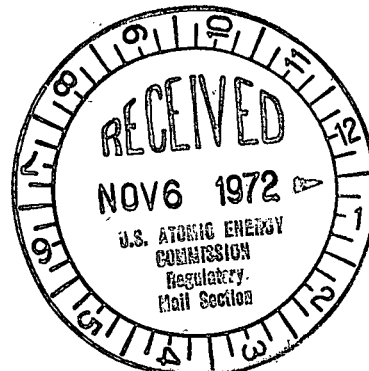

John J Smith

Notary Public, Hennepin County, Minnesota

JOHN J. SMITH

Notary Public, Hennepin County, Minnesota

My Commission Expires March 3, 1976



REQUESTED INFORMATION NEEDED TO AUGMENT
MONTICELLO ENVIRONMENTAL STATEMENT
IN RESPONSE TO COURT ORDER
OF July 28, 1972

MONTICELLO NUCLEAR GENERATING PLANT E-5979
AEC Docket Number 50-263

The information provided herein, applicable to the Monticello Nuclear Generating Plant environmental impact review, is in response to a letter dated September 28, 1972 from Mr Daniel R Muller, Assistant Director of Environmental Projects, Directorate of Licensing, U S Atomic Energy Commission to Mr Arthur V Dienhart, Vice President - Engineering, Northern States Power Company.

Responses to all seven items listed in referenced letter are as follows:

- 1 (a) If a decision had been made to build a coal-fired power plant in early 1970 to replace the Monticello Nuclear Generating Plant under construction at that time, the design basis for the rate of release of pollutants up the stack would have reflected these three factors:
 - 1) In the past NSP has equipped its plants with the best available particulate control equipment. A large fossil plant would have been similarly equipped, probably utilizing electrostatic precipitators.
 - 2) Sulfur oxide emission control would have been limited to the sulfur content of the fuel. A large fossil plant would probably have been designed to burn low sulfur western coal.
 - 3) Because of the lack of positive regulatory guidelines and available technology, nitrogen oxide emission control would not have been a design factor.
- 1 (b) Replacement of the Monticello Nuclear Generating Plant with a similarly sized fossil plant in early 1970 would have cost NSP an estimated 270 million dollars. This total plant cost includes: estimated reactor plant equipment and construction losses; nuclear fuel penalties; costs to dismantle those portions of the nuclear plant not necessary to the fossil plant; differential costs to purchase power during the interim period; and costs of additional equipment, materials and construction activity needed to build the fossil plant.

- 1 (c) The annual operating and maintenance cost for such a fossil plant is estimated at $2\frac{1}{4}$ million dollars. This figure includes payroll, maintenance expenses and general supplies.
- 1 (d) The estimated annual fuel costs for the fossil plant would be 15 million dollars.
- 2 In early 1970 the percent annual increase in demand forecasted through 1976 was:

1971 over 1970	8 1/4%
1972 over 1971	8 1/4%
1973 over 1972	8 1/4%
1974 over 1973	8 3/4%
1975 over 1974	8 1/2%
1976 over 1975	8 1/4%

- 3 The escalation of construction costs occurring during the 18-month period January 1, 1970 to July 1, 1971 is estimated at 19%. The estimate assumes that the entire cost of the project is delayed for the 18-month period.
- 4 The reserve requirement for NSP in early 1970 was 12%.
- 5 In early 1970 the estimated annual fuel, operating and maintenance costs for the Monticello Nuclear Generating Plant for a typical year after startup was about 8 million dollars. A cost breakdown is estimated as follows:

Payroll	\$1,000,000
Miscellaneous Supplies & Maintenance Materials	1,000,000
Annual Fuel Costs	6,000,000

- 6 Based on the 1970 MARCA R-362 Report to the FPC and adjustments to these figures resulting from projected delays in the construction of certain generating plants underway at that time, surpluses which possibly would have been available for purchase on a committed basis to replace the Monticello capacity were:

1970	(Power was Purchased)
1971	42 Mw
1972	-203 Mw*

1973	-772 Mw*
1974	-186 Mw*
1975	-273 Mw*
1976	23 Mw

*Negative value indicates MARCA pool below its reserve requirement for designated amount.

- 7 Scheduled additions to the generating capacity of NSP as of early 1970 were:

<u>Estimated In-Service Date</u>	<u>Type of Plant</u>	<u>Capacity</u>
May 1, 1970	Key City Peaking	70 MWe
November 1, 1970	Monticello Nuclear	533 MWe
May 1, 1970	Inver Hills Peaking	313 MWe
October 1, 1972	Prairie Island Nuclear Unit #1	530 MWe
May 1, 1974	Prairie Island Nuclear Unit #2	530 MWe
1975	(Additional Peaking)	200 MWe
1976	Sherburne County Fossil Unit #1	680 MWe
1977	Sherburne County Fossil Unit #2	680 MWe