

NSP

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

Regulatory

File Cy.

August 34, 1972

Mr. A Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D C 20545



Dear Mr. Giambusso:

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

Report of a Change in the Transient Analysis
As Described in the FSAR

We are recently in receipt of a reanalysis of the transients discussed in the FSAR based on the end of cycle conditions. Results of the transient analysis are found to differ from those presented in the FSAR. We are, therefore, reporting this in accordance with the provisions of Section 6.6.C.2 of Appendix A, Technical Specifications, of Provisional Operating License DPR-22.

The change in the transient response results from exposure effects on the relationship between control rod worth and length of rod inserted in the core. The end result is a slower rate of reactivity insertion for the first half of the control rod stroke during a reactor scram. This phenomenon is based solely on the spatial distribution of reactivity depletion in the core; experience to date shows that the mechanical scram time of control rods has remained essentially unchanged. The analysis for the end of cycle conditions was performed based on control rod scram insertion times taking credit for a slightly faster initial insertion rate than currently allowed by our Technical Specifications. Results of the analysis predict that the reactor responds safely for all assumed transients.

Safe operation of the Monticello reactor continues in light of the new transient analysis. We are approximately in the middle of our first cycle; the need for the new analysis is based on end of cycle conditions. To date, the measured scram times of our control rods are approximately half of those presently allowed by the Technical Specifications and likewise those used for the new transient analysis.

We will submit a report of the analysis along with proposed changes to our Technical Specifications in the near future. It appears that no changes in plant equipment or operational requirements are needed as a result of the new transient analysis.

Yours very truly,

L. O. Mayer

L O Mayer, P.E.
Director of Nuclear Support Services

LOM/MHV/br

cc: B H Grier
9102120683 720814
PDR ADDCK 05000263
P PDR

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 4561

FILE

FROM: Northern States Power Co. Minneapolis, Minn. 55401 L.O. Mayer	DATE OF DOC: 8-14-72	DATE REC'D 8-17-72	LTR X	MEMO	RPT	OTHER
TO: Mr. A. Giambusso	ORIG 1 signed	CC 39	OTHER	SENT AEC PDR <input checked="" type="checkbox"/> SENT LOCAL PDR <input checked="" type="checkbox"/>		
CLASS: <input checked="" type="radio"/> PROP INFO	INPUT	NO CYS REC'D 40	DOCKET NO: 50-263			

DESCRIPTION: Ltr submitted as a report of a change in the Transient Analysis as described in the FSAR.....

ENCLOSURES:

PLANT NAMES: Monticello Plant

**DO NOT REMOVE
ACKNOWLEDGED**

FOR ACTION/INFORMATION

DL 8-18-72

BUTLER(L) W/ Copies	KNIEL(L) W/ Copies	VASSALLO(L) W/ Copies	ZIEMANN(L) W/ 6 Copies	KNIGHTON(ENVIRO) W/ Copies
CLARK(L) W/ Copies	SCHWENCER(L) W/ Copies	H. DENTON W/ Copies	CHITWOOD(FM) W/ Copies	W/ Copies
GOLLER(L) W/ Copies	STOLZ(L) W/ Copies	SCHEMEL(L) W/ Copies	DICKER(ENVIRO) W/ Copies	W/ Copies

INTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> REG FILE	<input checked="" type="checkbox"/> TECH REVIEW	<input checked="" type="checkbox"/> VOLLMER	HARLESS	WADE
<input checked="" type="checkbox"/> AEC PDR	<input checked="" type="checkbox"/> HENDRIE	<input checked="" type="checkbox"/> DENTON(1)		SHAFFER
<input checked="" type="checkbox"/> OGC, ROOM P-506A	<input checked="" type="checkbox"/> SCHROEDER	GRIMES	F & M	BROWN
<input checked="" type="checkbox"/> MUNIZING/STAFF	<input checked="" type="checkbox"/> ACCARY	GAMMILL	SMILLI	
<input checked="" type="checkbox"/> CASE	LANGE	KASTNER	NUSSBAUMER	A/T IND
GIAMBUSSO	PAWLICKI	BALLARD		ERAITMAN
BOYD-L(BWR)	SHAO	FINE	LIC ASST.	SALTZMAN
DEYOUNG-L(PWR)	<input checked="" type="checkbox"/> ENVIRO	ENVIRO	SERVICE	
SKOVHOLT-L	<input checked="" type="checkbox"/> STELLO	MULLER	MASON	PLANS
P. COLLINS	<input checked="" type="checkbox"/> MOORE	DICKER	WILSON	MCDONALD
<input checked="" type="checkbox"/> REG OPR	<input checked="" type="checkbox"/> THOMPSON	KNIGHTON	KARI	DUBE
<input checked="" type="checkbox"/> FILE & REGION (2)	<input checked="" type="checkbox"/> TEDESCO	YOUNGBLOOD	SMITH	
<input checked="" type="checkbox"/> MORRIS	<input checked="" type="checkbox"/> LONG	PROJECT LEADER	GEARIN	C. MILES
<input checked="" type="checkbox"/> STEELE	<input checked="" type="checkbox"/> LAINAS		DIGGS	
	BENAROYA		TEETS	

EXTERNAL DISTRIBUTION

1-LOCAL PDR Minneapolis, Minn
1-DTIE(LAUGHLIN)
1-NSIC(BUCHANAN)
1-ASLR-YORE/SAYRE
WOOLWARD/H. ST.
16-CYS ACRS HOLDING

(1)(5)(9)-NATIONAL LAB'S
ANL/ORNL/PNL
1-R. CARROLL-OC, GT-B327
1-R. CATLIN, A-170-GT
1-CONSULTANT'S
NEWMARK/BLUME/AGABIAN

1-PDR-SAN/LA/NY
1-GERALD LELLUCHE
BROOKS/AVEN NAT. LAB
1-BOLAND, IDAHO FALLS,
IDAHO(50-331 Only)
1-RD..MULLER..F-309GT