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PLANT NAME:
Monticello

RJL 6/8/77 (1-P)

ENCLOSURE

Revision to Effluent and Waste Disposal
Semiannual Reports for January 1 - June
30, 1976 and July 1 - December 31, 1976...

Rev 9-15-77
W

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(7-P)

FOR ACTION/INFORMATION

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NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

June 3, 1977

REGULATORY DOCKET FILE COPY



Mr J G Keppler, Director, Region III
Office of Inspection & Enforcement
U S Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Mr Keppler:

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

Revision to Effluent and Waste Disposal Semiannual Reports for
January 1 - June 30, 1976 and
July 1 - December 31, 1976

On August 23, 1976 we submitted the Monticello Effluent and Waste Disposal Semi-annual Report covering the period January 1, 1976 through June 30, 1976. On March 1, 1977 we submitted the Monticello Effluent and Waste Disposal Semiannual Report covering the period July 1, 1976 through December 31, 1976. We have recently discovered an error in the computer program used to calculate the release of individual noble gases from gross activity measurements for these reports.

Attached are corrected pages for the two reports. These pages should be inserted in all copies of the original reports following the instructions provided.

Yours very truly,

L O Mayer, PE
Manager of Nuclear Support Services

LOM/DMM/ak

cc: Dir, IE, USNRC (25)
Dir, MIPC, USNRC (2)
MPCA
Attn: J W Ferman
G Charnoff

Attachment

Revision to Effluent and Waste Disposal
Semiannual Report for July 1 - December 31, 1976

Replace the following pages of the original document with the attached revised pages dated June 3, 1977:

p. 1
3
5
7

MONTICELLO NUCLEAR GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUL - DEC 1976
LICENSE NO. DPR-22

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

SUPPLEMENTAL INFORMATION

1. REGULATORY LIMITS - LEVELS REQUIRING REPORTING TO NRC

A. NOBLE GASES:

$$50*(QTV*NBARV+QTS*NBARS) = 1 \quad \text{AND}$$

$$25*(QTV*MBARV+QTS*MBARS) = 1$$

QTV = NOBLE GAS RELEASE RATE FROM BLDG VENTS(CI/SEC)
QTS = NOBLE GAS RELEASE RATE FROM PLANT STACK(CI/SEC)
NBARV = VENT AVG GAMMA AIR DOSE FACTOR(REM/YR PER CI/SEC)
NBARS = STACK AVG GAMMA AIR DOSE FACTOR(REM/YR PER CI/SEC)
MBARV = VENT AVG BETA AIR DOSE FACTOR(REM/YR PER CI/SEC)
MBARS = STACK AVG BETA AIR DOSE FACTOR(REM/YR PER CI/SEC)

B. IODINES AND PARTICULATES:

$$50*(3.7E05*QV+2.5E04*QS) = 1$$

QV = BUILDING VENT RELEASE RATE OF IODINES AND PARTICULATES
WITH HALF-LIVES GREATER THAN 8 DAYS (CI/SEC)

QS = PLANT STACK RELEASE RATE OF IODINES AND PARTICULATES
WITH HALF-LIVES GREATER THAN 8 DAYS (CI/SEC)

C. LIQUID EFFLUENTS:

CONCENTRATION - 10CFR20, APP B, TABLE II, COL 2,
AND NOTES THERETO

TOTAL QUANTITY - 2.5 CI/QUARTER

2. AVERAGE DOSE FACTORS FOR NOBLE GASES
(REM/YEAR PER CI/SEC):

	VENT RELEASES		STACK RELEASES	
	1ST QTR	2ND QTR	1ST QTR	2ND QTR
KBAR (BODY GAMMA)	5.93E 00	6.05E 00	9.92E-01	1.01E 00
LBAR (SKIN BETA)	4.54E 01	4.43E 01	1.16E 00	1.13E 00
MBAR (AIR BETA)	4.80E 01	4.70E 01	1.28E 00	1.24E 00
NBAR (AIR GAMMA)	6.27E 00	6.39E 00	1.03E 00	1.05E 00

3. AVERAGE ENERGY:

(NOT APPLICABLE)

MONTICELLO NUCLEAR GENERATING PLANT
NORTHERN STATES POWER COMPANY

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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

TABLE 1A GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1ST QTR	2ND QTR	PCNT EST ERROR
A. NOBLE GASES:				
1. TOTAL RELEASE:				
A. ELEVATED RELEASE	CI	2.05E 03	1.50E 03	
B. BUILDING VENT RELEASE	CI	7.94E 02	8.51E 02	
C. TOTAL	CI	2.84E 03	2.35E 03	5.00E 01
2. AVERAGE RELEASE RATE:				
A. ELEVATED RELEASE	UCI/SEC	2.58E 02	1.88E 02	
B. BUILDING VENT RELEASE	UCI/SEC	9.99E 01	1.07E 02	
C. TOTAL	UCI/SEC	3.57E 02	2.95E 02	5.00E 01
3. PERCENT OF QUARTERLY LIMIT		1.28E 01	1.32E 01	
B. IODINES:				
1. TOTAL I-131:				
A. ELEVATED RELEASE	CI	1.32E-02	2.29E-02	
B. BUILDING VENT RELEASE	CI	1.16E-02	1.70E-02	
C. TOTAL	CI	2.48E-02	3.99E-02	5.00E 01
2. AVERAGE I-131 RELEASE RATE:				
A. ELEVATED RELEASE	UCI/SEC	1.66E-03	2.88E-03	
B. BUILDING VENT RELEASE	UCI/SEC	1.45E-03	2.14E-03	
C. TOTAL	UCI/SEC	3.12E-03	5.02E-03	5.00E 01
C. LONG LIVED PARTICULATES AND GROSS ALPHA RELEASES:				
1. TOTAL PARTICULATES:				
A. ELEVATED RELEASE	CI	3.86E-03	4.89E-03	
B. BUILDING VENT RELEASE	CI	3.53E-03	1.75E-02	
C. TOTAL	CI	7.38E-03	2.24E-02	5.00E 01
2. AVERAGE RELEASE RATE:				
A. ELEVATED RELEASE	UCI/SEC	4.85E-04	6.15E-04	
B. BUILDING VENT RELEASE	UCI/SEC	4.44E-04	2.21E-03	
C. TOTAL	UCI/SEC	9.29E-04	2.82E-03	5.00E 01
3. PERCENT OF QUARTERLY LIMIT FOR LONG LIVED IODINES & PARTICULATES		3.78E 00	8.48E 00	

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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

TABLE 1B GASEOUS EFFLUENTS - ELEVATED RELEASE

NUCLIDES RELEASED	UNITS	CONTINUOUS MODE		BATCH MODE	
		1ST QTR	2ND QTR	1ST QTR	2ND QTR
1. NOBLE GASES:					
XE133	CI	1.41E 02	1.05E 02	0.0	0.0
XE135	CI	2.27E 01	1.99E 01	0.0	0.0
KR85M	CI	2.31E 00	1.74E 00	0.0	0.0
KR88	CI	7.94E 00	5.86E 00	0.0	0.0
KR87	CI	1.58E 01	1.15E 01	0.0	0.0
XE138	CI	3.57E 02	2.82E 02	0.0	0.0
KR90	CI	1.07E 01	7.27E 00	0.0	0.0
XE139	CI	3.18E 01	2.16E 01	0.0	0.0
KR89	CI	3.13E 02	2.15E 02	0.0	0.0
XE137	CI	4.08E 02	2.81E 02	0.0	0.0
XE135M	CI	2.37E 01	1.66E 01	0.0	0.0
KR83M	CI	3.09E 00	2.26E 00	0.0	0.0
XE133M	CI	4.37E-01	3.97E-01	0.0	0.0
XE131M	CI	8.95E-01	7.08E-01	0.0	0.0
KR85	CI	7.09E 02	5.27E 02	0.0	0.0
TOTAL FOR PERIOD	CI	2.05E 03	1.50E 03	0.0	0.0
2. IODINES:					
I-131	CI	1.32E-02	2.29E-02	0.0	0.0
I-133	CI	3.16E-02	5.19E-02	0.0	0.0
I-135	CI	<4.15E-03	<2.24E-02	0.0	0.0
TOTAL FOR PERIOD	CI	4.86E-02	9.68E-02	0.0	0.0
TOTAL (WITH MDA VALUES)	CI	<4.89E-02	<9.71E-02	0.0	0.0

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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

TABLE 1C GASEOUS EFFLUENTS - BUILDING VENT RELEASE

NUCLIDES RELEASED	UNITS	CONTINUOUS MODE		BATCH MODE	
		1ST QTR	2ND QTR	1ST QTR	2ND QTR
1. NOBLE GASES:					
XE133	CI	6.25E-01	6.49E-01	0.0	0.0
XE135	CI	1.52E 01	1.94E 01	0.0	0.0
KR85M	CI	1.54E 00	1.70E 00	0.0	0.0
KR68	CI	5.30E 00	5.79E 00	0.0	0.0
KR87	CI	1.05E 01	1.12E 01	0.0	0.0
XE138	CI	2.38E 02	2.76E 02	0.0	0.0
KR90	CI	7.06E 00	7.17E 00	0.0	0.0
XE139	CI	2.10E 01	2.14E 01	0.0	0.0
KR89	CI	2.07E 02	2.12E 02	0.0	0.0
XE137	CI	2.70E 02	2.77E 02	0.0	0.0
XE135M	CI	1.57E 01	1.64E 01	0.0	0.0
KR83M	CI	2.05E 00	2.23E 00	0.0	0.0
XE133M	CI	3.24E-02	4.03E-02	0.0	0.0
XE131M	CI	1.20E-03	1.43E-03	0.0	0.0
KR85	CI	1.14E-02	8.59E-03	0.0	0.0
TOTAL FOR PERIOD	CI	7.94E 02	8.51E 02	0.0	0.0
2. IODINES:					
I-131	CI	1.16E-02	1.70E-02	0.0	0.0
I-133	CI	7.49E-02	2.03E-01	0.0	0.0
I-135	CI	<1.91E-02	<1.19E-01	0.0	0.0
TOTAL FOR PERIOD	CI	1.01E-01	3.35E-01	0.0	0.0
TOTAL (WITH MDA VALUES)	CI	<1.06E-01	<3.39E-01	0.0	0.0