



Richard B. Abbott  
Vice President  
Nuclear Engineering

Phone: 315.349.1812  
Fax: 315.349.4417

January 8, 2001  
NMP2L 2008

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

RE: **Nine Mile Point Unit 2**  
**Docket No. 50-410**  
**NPE-69**

**Subject: *Submittal of Core Operating Limits Report, Revision 1, for Cycle 8***

Gentlemen:

Enclosed is a copy of the Core Operating Limits Report (COLR2, Revision 1) for Cycle 8 for Nine Mile Point Unit 2. This report is being submitted to the NRC in compliance with Technical Specification 5.6.5.d.

Very truly yours,

A handwritten signature in cursive script that reads "Richard B. Abbott".

Richard B. Abbott  
Vice President Nuclear Engineering

RBA/TWP/cld

Enclosure

xc: Mr. H. J. Miller, NRC Regional Administrator, Region I  
Ms. M. K. Gamberoni, Section Chief PD-I, Section 1, NRR  
Mr. G. K. Hunegs, NRC Senior Resident Inspector  
Mr. P. S. Tam, Senior Project Manager, NRR  
Records Management

A001



*NINE MILE POINT UNIT 2*

*CORE OPERATING LIMITS REPORT*

Table of Contents

	<u>Page</u>
1.0 AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR).....	1
1.1 Limits for Technical Specification 3.2.1.....	1
2.0 MINIMUM CRITICAL POWER RATIO (ODYN OPTION B).....	9
2.1 Limits for Technical Specification 3.2.2.....	9
3.0 LINEAR HEAT GENERATION RATE (LHGR).....	12
3.1 Limits for Technical Specifications 3.2.3.....	12
4.0 AVERAGE POWER RANGE MONITOR SETPOINTS.....	13
4.1 Limits for Technical Specification Table 3.3.1.1-1 (OPRM Upscale) .....	13
5.0 ROD BLOCK MONITOR (RBM).....	14
5.1 Allowable Value for Technical Specification Table 3.3.2.1-1.....	14
6.0 REFERENCES FOR TECHNICAL SPECIFICATIONS .....	15
7.0 REFERENCES FOR TECHNICAL SPECIFICATION BASES.....	16
8.0 SOURCE DOCUMENTS.....	17

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

1.0 **AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)**

1.1 **Limits for Technical Specification 3.2.1**

The APLHGR(s) for each type of fuel as a function of AVERAGE PLANAR EXPOSURE shall not exceed the limits shown in Tables 1a through 1f.

The limits of Tables 1a through 1g shall be reduced to a value of .78 times the two recirculation loop operation limit when in single recirculation loop operation.

**NOTE:** When hand calculations are required, the APLHGR for fuel types P9CUB349, P9CUB375, P9CUB414, P9CUB413, and P9CUB407-2382 and P9CUB407-2383 as a function of average planar exposure shall not exceed the limits shown in Table 1g during two recirculation loop operation.

Table 1a

NINE MILE POINT UNIT 2

APLHGR VERSUS AVERAGE PLANAR EXPOSURE  
Bundle Type: GE11-P9CUB349-10GZ1-120M-146-T (GE11)

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)				
	Lattice 1941	Lattice 1942	Lattice 1943	Lattice 1944	Lattice 1723 and 1945
0.00	11.41	11.62	11.11	11.35	12.83
0.20	11.46	11.67	11.17	11.40	12.77
1.00	11.58	11.78	11.31	11.53	12.61
2.00	11.75	11.93	11.52	11.72	12.56
3.00	11.93	12.10	11.74	11.93	12.57
4.00	12.09	12.24	11.98	12.15	12.60
5.00	12.25	12.39	12.23	12.38	12.63
6.00	12.42	12.53	12.49	12.63	12.67
7.00	12.59	12.61	12.73	12.84	12.70
8.00	12.73	12.69	12.78	12.90	12.72
9.00	12.83	12.78	12.82	12.92	12.74
10.00	12.89	12.87	12.85	12.93	12.75
12.50	12.84	12.86	12.77	12.80	12.62
15.00	12.48	12.49	12.39	12.40	12.24
17.50	12.12	12.13	12.00	12.00	11.84
20.00	11.76	11.76	11.61	11.61	11.45
25.00	11.03	11.03	10.84	10.84	10.66
30.00	10.31	10.31	10.10	10.10	9.88
35.00	9.59	9.60	9.40	9.41	9.11
40.00	8.89	8.90	8.75	8.75	8.34
45.00	8.20	8.21	8.12	8.13	7.58
50.00	7.51	7.51	7.51	7.52	6.82
55.00	6.81	6.81	6.89	6.90	6.06
55.45	---	---	---	---	5.99
57.39	---	---	6.58	---	
57.45	---	---		6.59	
57.66	---	6.43			
57.71	6.43				

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

Table 1b

NINE MILE POINT UNIT 2

APLHGR VERSUS AVERAGE PLANAR EXPOSURE  
Bundle Type: GE11-P9CUB375-12GZ-120T-146-T (GE11)

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)					
	Lattice 2275	Lattice 2270	Lattice 2271	Lattice 2272	Lattice 2273	Lattice 2274
0.00	12.78	11.34	11.57	11.12	11.37	13.38
0.20	12.72	11.39	11.61	11.18	11.42	13.35
1.00	12.55	11.49	11.68	11.29	11.52	13.26
2.00	12.49	11.63	11.76	11.46	11.67	13.23
3.00	12.49	11.78	11.85	11.64	11.84	13.24
4.00	12.52	11.94	11.94	11.83	11.97	13.27
5.00	12.55	12.02	12.03	12.02	12.07	13.29
6.00	12.58	12.11	12.12	12.13	12.17	13.32
7.00	12.60	12.20	12.21	12.24	12.27	13.34
8.00	12.63	12.30	12.31	12.36	12.38	13.35
9.00	12.64	12.39	12.41	12.48	12.49	13.36
10.00	12.65	12.49	12.52	12.61	12.61	13.37
12.50	12.51	12.52	12.55	12.71	12.70	13.33
15.00	12.12	12.37	12.38	12.55	12.55	12.94
17.50	11.73	12.09	12.10	12.26	12.26	12.54
20.00	11.33	11.73	11.74	11.93	11.93	12.15
25.00	10.54	11.00	11.01	11.21	11.22	11.36
30.00	9.76	10.28	10.29	10.44	10.46	10.59
35.00	8.99	9.56	9.57	9.70	9.71	9.82
40.00	8.22	8.85	8.85	8.98	8.99	9.06
45.00	7.46	8.14	8.15	8.28	8.29	8.30
50.00	6.70	7.45	7.45	7.61	7.61	7.54
54.96	5.94	---	---	---	---	---
55.00	---	6.75	6.74	6.94	6.94	6.79
57.43	---	---	6.40	---	---	---
57.56	---	6.39	---	---	---	---
58.27	---	---	---	---	6.50	---
58.32	---	---	---	---	---	6.28
58.41	---	---	---	6.48	---	---

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

Table 1c

NINE MILE POINT UNIT 2

APLHGR VERSUS AVERAGE PLANAR EXPOSURE  
Bundle Type: GE11-P9CUB413-12GZ-120T-146-T (GE11)

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)			
	Lattice 2275	Lattice 2545	Lattice 2549	Lattice 2274
0.00	12.78	11.43	11.45	13.38
0.20	12.72	11.46	11.49	13.35
1.00	12.55	11.53	11.57	13.26
2.00	12.49	11.61	11.68	13.23
3.00	12.49	11.69	11.78	13.24
4.00	12.52	11.77	11.89	13.27
5.00	12.55	11.86	12.01	13.29
6.00	12.58	11.94	12.12	13.32
7.00	12.60	12.03	12.24	13.34
8.00	12.63	12.11	12.36	13.35
9.00	12.64	12.20	12.48	13.36
10.00	12.65	12.29	12.60	13.37
12.50	12.51	12.26	12.65	13.33
15.00	12.12	12.11	12.44	12.94
17.50	11.73	11.90	12.13	12.54
20.00	11.33	11.61	11.80	12.15
25.00	10.54	10.98	11.09	11.36
30.00	9.76	10.36	10.28	10.59
35.00	8.99	9.75	9.51	9.82
40.00	8.22	9.12	8.79	9.06
45.00	7.46	8.42	8.11	8.30
50.00	6.70	7.75	7.47	7.54
54.96	5.94	---	---	---
55.00	---	7.09	6.84	6.79
58.06	---	6.64	---	---
58.32	---	---	---	6.28
58.66	---	---	6.46	---

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

Table 1d

NINE MILE POINT UNIT 2

APLHGR VERSUS AVERAGE PLANAR EXPOSURE  
Bundle Type: GE11-P9CUB414-13GZ-120T-146-T (GE11)

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)				
	Lattice 2275	Lattice 2545	Lattice 2546	Lattice 2547	Lattice 2548
0.00	12.78	11.43	11.25	11.41	13.40
0.20	12.72	11.46	11.30	11.45	13.39
1.00	12.55	11.53	11.39	11.52	13.30
2.00	12.49	11.61	11.50	11.61	13.27
3.00	12.49	11.69	11.62	11.71	13.28
4.00	12.52	11.77	11.74	11.80	13.30
5.00	12.55	11.86	11.87	11.90	13.33
6.00	12.58	11.94	11.99	12.01	13.35
7.00	12.60	12.03	12.10	12.11	13.37
8.00	12.63	12.11	12.21	12.22	13.38
9.00	12.64	12.20	12.32	12.33	13.39
10.00	12.65	12.29	12.44	12.44	13.40
12.50	12.51	12.26	12.48	12.49	13.36
15.00	12.12	12.11	12.36	12.36	12.97
17.50	11.73	11.90	12.11	12.12	12.57
20.00	11.33	11.61	11.79	11.80	12.17
25.00	10.54	10.97	11.08	11.08	11.39
30.00	9.76	10.22	10.28	10.28	10.62
35.00	8.99	9.47	9.51	9.51	9.85
40.00	8.22	8.72	8.79	8.79	9.09
45.00	7.46	7.97	8.11	8.11	8.33
50.00	6.70	7.23	7.46	7.43	7.57
54.96	5.94	---	---	---	---
55.00	---	6.49	6.84	6.71	6.81
57.19	---	6.17	---	---	---
58.28	---	---	---	6.24	---
58.42	---	---	---	---	6.29
58.58	---	---	6.47	---	---

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

Table 1e

NINE MILE POINT UNIT 2

APLHGR VERSUS AVERAGE PLANAR EXPOSURE  
Bundle Type: GE11-P9CUB407-14GZ-120T-146-T-2382 (GE11)

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)				
	Lattice 2887	Lattice 2888	Lattice 2889	Lattice 2890	Lattice 2891
0.00	12.76	10.97	11.19	11.10	13.38
0.20	12.69	11.02	11.23	11.14	13.35
1.00	12.52	11.10	11.30	11.23	13.26
2.00	12.46	11.19	11.39	11.33	13.23
3.00	12.46	11.29	11.48	11.44	13.24
4.00	12.49	11.38	11.57	11.54	13.27
5.00	12.52	11.48	11.66	11.64	13.29
6.00	12.55	11.58	11.75	11.75	13.32
7.00	12.58	11.69	11.84	11.86	13.34
8.00	12.60	11.79	11.93	11.97	13.36
9.00	12.62	11.90	12.03	12.09	13.37
10.00	12.63	12.00	12.13	12.21	13.37
12.50	12.48	11.96	12.10	12.25	13.33
15.00	12.09	11.84	11.98	12.17	12.94
17.50	11.70	11.71	11.80	11.96	12.54
20.00	11.30	11.49	11.52	11.65	12.14
25.00	10.51	10.89	10.90	11.00	11.36
30.00	9.73	10.27	10.28	10.36	10.58
35.00	8.95	9.65	9.66	9.64	9.82
40.00	8.19	9.02	9.03	8.93	9.05
45.00	7.43	8.38	8.39	8.24	8.29
50.00	6.66	7.70	7.71	7.58	7.53
54.80	5.93	---	---	---	---
55.00	---	6.99	7.01	6.93	6.77
57.55	---	6.62	---	---	---
57.64	---	---	6.62	---	---
57.97	---	---	---	6.62	---
58.26	---	---	---	---	6.28

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

Table 1f

NINE MILE POINT UNIT 2

APLHGR VERSUS AVERAGE PLANAR EXPOSURE  
Bundle Type: GE11-P9CUB407-14GZ-120T-146-T-2383 (GE11)

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)				
	Lattice 2887	Lattice 2888	Lattice 2892	Lattice 2893	Lattice 2891
0.00	12.76	10.97	11.03	10.93	13.38
0.20	12.69	11.02	11.08	10.98	13.35
1.00	12.52	11.10	11.17	11.08	13.26
2.00	12.46	11.19	11.28	11.21	13.23
3.00	12.46	11.29	11.40	11.35	13.24
4.00	12.49	11.38	11.51	11.49	13.27
5.00	12.52	11.48	11.63	11.62	13.29
6.00	12.55	11.58	11.74	11.74	13.32
7.00	12.58	11.69	11.84	11.86	13.34
8.00	12.60	11.79	11.94	11.98	13.36
9.00	12.62	11.90	12.03	12.10	13.37
10.00	12.63	12.00	12.13	12.22	13.37
12.50	12.48	11.96	12.10	12.26	13.33
15.00	12.09	11.84	11.98	12.17	12.94
17.50	11.70	11.71	11.79	11.95	12.54
20.00	11.30	11.49	11.51	11.65	12.14
25.00	10.51	10.89	10.89	11.00	11.36
30.00	9.73	10.27	10.28	10.36	10.58
35.00	8.95	9.65	9.66	9.64	9.82
40.00	8.19	9.02	9.03	8.92	9.05
45.00	7.43	8.38	8.38	8.24	8.29
50.00	6.66	7.70	7.71	7.58	7.53
54.80	5.93	---	---	---	---
55.00	---	6.99	7.00	6.93	6.77
57.55	---	6.62	---	---	---
57.62	---	---	6.62	---	---
57.96	---	---	---	6.62	---
58.26	---	---	---	---	6.28

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

Table 1g

NINE MILE POINT UNIT 2

MOST LIMITING APLHGR VERSUS AVERAGE PLANAR EXPOSURE

Average Planar Exposure, GWd/ST	APLHGR Limits (kw/ft)					
	P9CUB349 (GE11)	P9CUB375 (GE11)	P9CUB413 (GE11)	P9CUB414 (GE11)	P9CUB407- 2382 (GE11)	P9CUB407- 2383 (GE11)
0.00	11.11	11.12	11.43	11.25	10.97	10.93
0.20	11.17	11.18	11.46	11.30	11.02	10.98
1.00	11.31	11.29	11.53	11.39	11.10	11.08
2.00	11.52	11.46	11.61	11.50	11.19	11.19
3.00	11.74	11.64	11.69	11.62	11.29	11.29
4.00	11.98	11.83	11.77	11.74	11.38	11.38
5.00	12.23	12.02	11.86	11.86	11.48	11.48
6.00	12.42	12.11	11.94	11.94	11.58	11.58
7.00	12.59	12.20	12.03	12.03	11.69	11.69
8.00	12.69	12.30	12.11	12.11	11.79	11.79
9.00	12.78	12.39	12.20	12.20	11.90	11.90
10.00	12.85	12.49	12.29	12.29	12.00	12.00
12.50	12.77	12.52	12.26	12.26	11.96	11.96
15.00	12.39	12.37	12.11	12.11	11.84	11.84
17.50	12.00	12.09	11.90	11.90	11.71	11.71
20.00	11.61	11.73	11.61	11.61	11.49	11.49
25.00	10.84	11.00	10.98	10.97	10.89	10.89
30.00	10.10	10.28	10.28	10.22	10.27	10.27
35.00	9.40	9.56	9.51	9.47	9.64	9.64
40.00	8.75	8.85	8.79	8.72	8.93	8.92
45.00	8.12	8.14	8.11	7.97	8.24	8.24
50.00	7.51	7.45	7.47	7.23	7.58	7.58
55.00	6.81	6.74	6.84	6.49	6.93	6.93
57.19	---	---	---	6.17	---	---
57.39	6.47	---	---	---	---	---
57.43	---	6.40	---	---	---	---
57.55	---	---	---	---	6.62	6.62
58.06	---	---	6.52	---	---	---

NOTE: A "-" indicates that there is no entry for this box and the limit can be determined by linearly interpolating between the previous and next point in each column. APLHGRs are interpolated between exposure points for which explicit values are given. The exposure for the last APLHGR listed for a lattice is the maximum allowed nodal exposure for that lattice.

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

2.0 MINIMUM CRITICAL POWER RATIO (ODYN OPTION B)

2.1 Limits for Technical Specification 3.2.2

The Minimum Critical Power Ratio (MCPR) shall be equal to or greater than the appropriate MCPR limit from Figure 3a times the K(f) shown in Figure 3b with tau (or “τ”) defined as follows:

$$\tau = (\tau_{ave} - \tau_B) / (\tau_A - \tau_B)$$

where:

$\tau_A = 0.866$  seconds, control rod average scram insertion time limit to notch 39 per Specification 3.1.4.

$$\tau_B = .672 + 1.65 * [ N_1 / \sum_{i=1}^n N_i ]^{1/2} * .016$$

$$\tau_{ave} = \left( \sum_{i=1}^n N_i \tau_i \right) / \left( \sum_{i=1}^n N_i \right)$$

n = number of surveillance tests performed in cycle

$N_i$  = number of active control rods measured in the  $i^{th}$  surveillance test

$\tau_i$  = average scram time to notch 39 of all rods measured in the  $i^{th}$  surveillance test

$N_1$  = total number of active rods measured in Specification 3.1.4.

**NOTE:**

The MCPR Operating Limits in Figure 3a are based on a 1.09 Safety Limit MCPR (SLMCPR) for two recirculation loop operation and a 1.10 Safety Limit MCPR for single loop operation.

$\tau = 1.0$  prior to performance of the initial scram time measurements for the cycle.

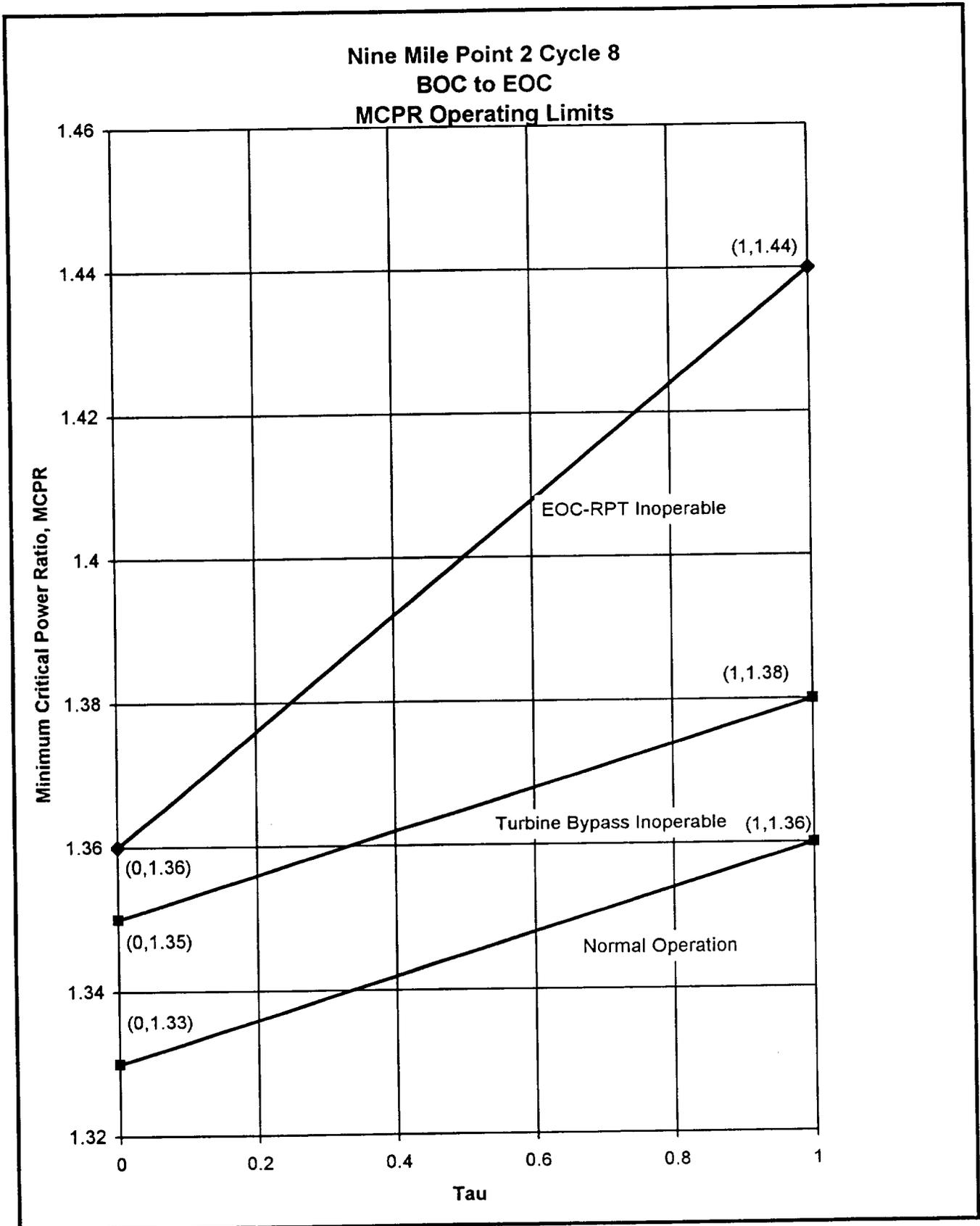
The Operating Limit MCPR values for Turbine Bypass Out of Service and EOC-RPT Out of Service are higher (more limiting) than for the standard normal operation case, and are therefore specifically identified in Figure 3a. The OLMCPR values for all other analyzed EOOS transient events are bounded by the Normal Operation limits.

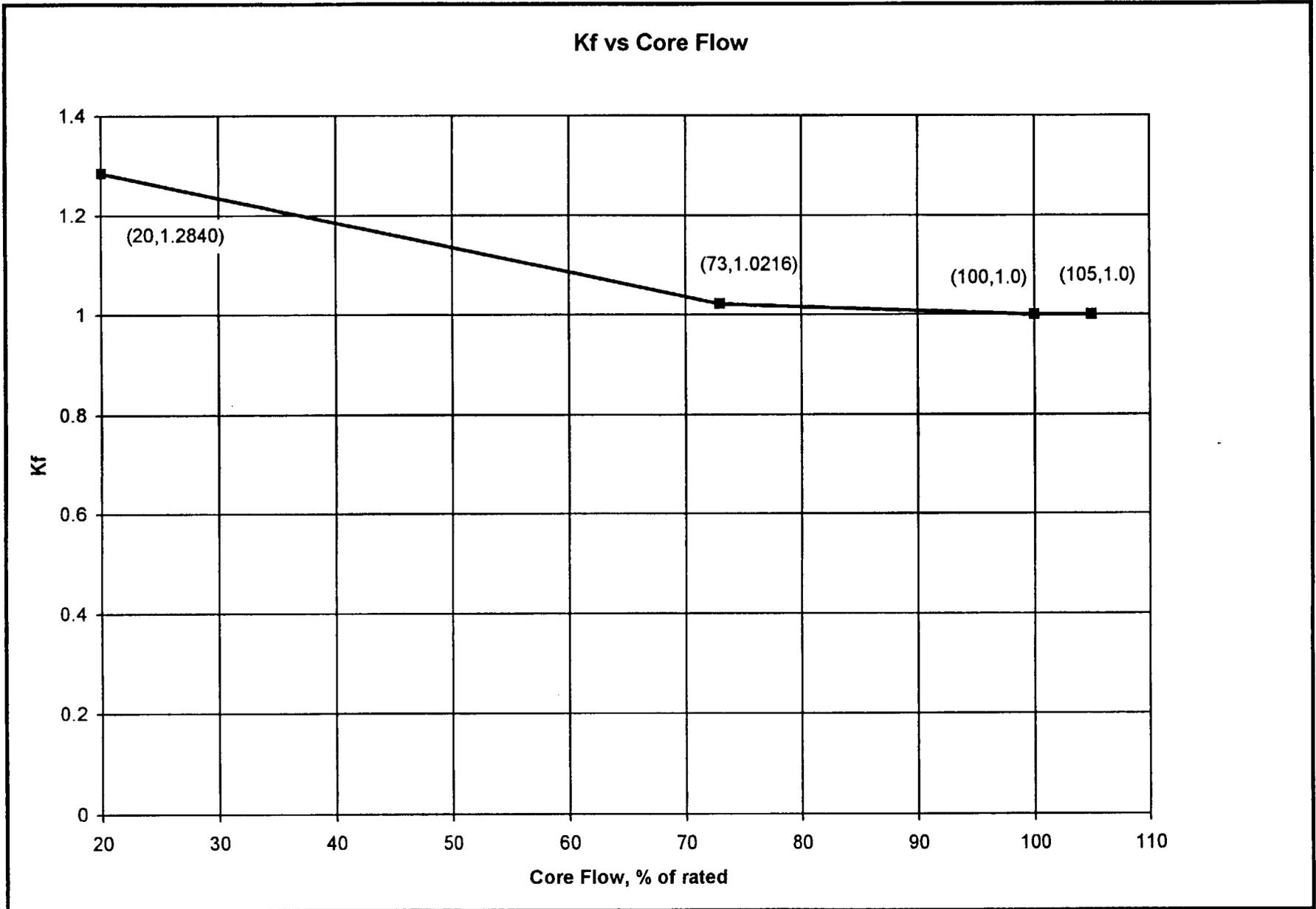
With a backup pressure regulator out of service, conservative thermal limits have been established as follows:

For thermal power < 90% of rated thermal power, maintain MFLCPR ≤ fraction of rated thermal power.

MFLCPR is the operating limit MCPR multiplied by the K(f) shown in figure 3b divided by the actual MCPR.

For thermal power ≥ 90% of rated thermal power normal thermal limits apply.





**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

3.0 LINEAR HEAT GENERATION RATE (LHGR)

3.1 Limits for Technical Specification 3.2.3

The LHGR shall not exceed the limits in the table below.

<u>Fuel Type</u>	<u>LHGR Limits</u>
P9CUB349 (GE11)	14.4 KW/FT
P9CUB375 (GE11)	14.4 KW/FT
P9CUB413 (GE11)	14.4 KW/FT
P9CUB414 (GE11)	14.4 KW/FT
P9CUB407-2382 (GE11)	14.4 KW/FT
P9CUB407-2383 (GE11)	14.4 KW/FT

**NOTE:** With a backup pressure regulator out of service conservative thermal limits had been established as follows:

For thermal power < 90% of rated thermal power, maintain  
 $MFLPD \leq$  fraction of rated thermal power.

MFLPD is the ratio of the actual maximum LHGR and the LHGR  
limit.

For thermal power  $\geq$  90% of rated thermal power, normal thermal  
limits apply.

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

4.0 AVERAGE POWER RANGE MONITOR SETPOINTS

4.1 Limits for Technical Specification Table 3.3.1.1-1 (OPRM Upscale)

ALLOWABLE VALUE  $\leq 1.15$

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

5.0 ROD BLOCK MONITOR (RBM)

5.1 Allowable Value for Technical Specification Table 3.3.2.1-1

<u>Function</u>	<u>Allowable Value</u>
RBM Upscale	$\leq 0.66 (W - \Delta W) + 47\%$ with a maximum of 113%

**NOTE:** W = Loop Recirculation Flow as a percentage of the loop recirculation flow which produces a rated core flow of 108.5 MLB/HR.  $\Delta W$  is defined as the difference in indicated drive flow (in percent of drive flow which produces rated core flow) between two loop and single loop operation at the same core flow.  $\Delta W = 0$  for two loop operation.  $\Delta W = 5\%$  for single loop operation.

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

6.0 **REFERENCES FOR TECHNICAL SPECIFICATION**

**Technical Specification 5.6.5.b.1:**

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

**Technical Specification 5.6.5.b.2:**

The GESTR-LOCA and SAFER Models for the Evaluation of the Loss-of-Coolant Accident, Volume III, SAFER/GESTR Application Methodology, NEDE-23785-1-PA, Revision 1, October 1984.

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

7.0 **REFERENCES FOR TECHNICAL SPECIFICATION BASES**

2.1.1 BASES REFERENCE 3:

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

2.1.1 BASES REFERENCE 4:

Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2, Reload 7, Cycle 8, J11-03614SRLR, Rev. 0, January 2000.

3.1.1 BASES REFERENCE 7:

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

3.1.6 BASES REFERENCE 1:

Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2, Reload 7, Cycle 8, J11-03614SRLR, Rev. 0, January 2000.

3.2.1 BASES REFERENCE 1:

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

3.2.2 BASES REFERENCE 2:

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

3.2.2 BASES REFERENCE 3:

Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2, Reload 7, Cycle 8, J11-03614SRLR, Rev. 0, January 2000.

3.2.3 BASES REFERENCE 1:

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

3.2.3 BASES REFERENCE 2:

Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2, Reload 7, Cycle 8, J11-03614SRLR, Rev. 0, January 2000.

3.2.4 BASES REFERENCE 3:

General Electric Standard Application for Reactor Fuel, NEDE 24011-P-A-13 and NEDE 24011-P-A-13-US (August 1996) as amended by Amendment 25.

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

8.0 SOURCE DOCUMENTS

The Core Operating Limits contained in this report were obtained from the following documents:

CORE OPERATING LIMIT

REFERENCE

Section 1.0 - APLHGR LIMITS

Tables 1a and 1g

Lattice Dependent MAPLHGR Report for NMP2 Reload 4, Cycle 5, 24A5174AA, Rev 0, April 1995

“Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2, Reload 4, Cycle 5, 24A5174, Rev 1, June 1996

Tables 1b and 1g

Lattice Dependent MAPLHGR Report for NMP2 Reload 5, Cycle 6, J11-02854MAP, Rev 0, July 1996

“Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2, Reload 5, Cycle 6”, J11-02854SRLR, Rev 0, July 1996

Tables 1c, 1d and 1g

Lattice Dependent MAPLHGR Report for NMP2 Reload 6, Cycle 7, J11-03211MAP, Rev 0, February 1998

“Supplemental Reload Licensing Report for Nine Mile Point Nuclear Power Station Unit 2, Reload 6, Cycle 7” J11-03211SRLR, Rev 0, February 1998

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

8.0 SOURCE DOCUMENTS (Cont)

CORE OPERATING LIMIT

REFERENCE

Section 1.0 - APLHGR LIMITS (continued)

Table 1e, 1f, and 1g

Lattice dependent MAPLHGR Report for NMP2 Reload 7, Cycle 8, J11-03614MAP Rev 0, January 2000

“Supplemental Reload Licensing Report to Nine Mile Point Power Station Unit 2, Reload 7, Cycle 8” J11-03614SRLR Rev 0, January 2000

and corresponding single loop multiplier

“Supplemental Reload Licensing Report for Nine Mile Power Station Unit 2, Reload 7, Cycle 8” J11-03614SRLR Rev 0, January 2000

Section 2.0 - MCPR LIMITS

Figures 2a and 2b

“Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2 Reload 7, Cycle 8, J11-03614SRLR, Rev 0, January 2000

Tau equation

GNF Engineering Report for Nine Mile Point Nuclear Station Unit 2 Reload 7, Cycle 8, J11-03614-ER, January 2000

Pressure Regulator Out of Service

“Supplemental Reload Licensing Report for Nine Mile Point Station Unit 2, Reload 7, Cycle 8, J11-03614SRLR, Rev 0, January 2000

Section 3.0 - LHGR LIMITS

Limits for Technical Specification  
3.2.3

“Supplemental Reload Licensing Report for Nine Mile Point Nuclear Station Unit 2 Reload 7 Cycle 8, J11-03614SRLR, Rev 0, January 2000

**NINE MILE POINT UNIT 2**  
**CORE OPERATING LIMITS REPORT**

8.0 SOURCE DOCUMENTS (Cont)

CORE OPERATING LIMIT

REFERENCE

Section 4.0 - APRM SETPOINTS

Limits for Technical Specification  
Table 3.3.1.1-1 (OPRM Upscale)

“Supplemental Reload Licensing  
Report for Nine Mile Point Station  
Unit 2, Reload 7, Cycle 8” J11-03614 SRLR  
Rev 0, January 2000

Section 5.0 - RBM SETPOINTS

Allowable Value for Technical  
Specification Table 3.3.2.1-1

GE Engineering Report for Nine Mile Point  
Nuclear Station Unit 2 Reload 2 Cycle 3,  
NFD92-016 January 1992