The time period for performing the specific tests listed below is hereby extended by an additional 15 effective full power days. In no event however, will the time period be deemed extended beyond February 6, 1976.

(1) Specification 3.10.2.1

This specification requires that "when operating above 50% power, the movable detector system shall be used to confirm power distribution monthly."

(2) Specification 3.10.2.2 of the technical specifications proposed on September 9, 1974.

This specification requires that "at regular effective full power monthly intervals, "power distribution maps, using the movable detector system, shall be made to confirm that the hot channel factor limits of this specification are satisfied."

(3) Specification 3.11-A

This specification requires that"a minimum of 2 thimbles per quadrant and sufficient movable in-core detectors shall be operable during re-calibration of the excore axial off-set detection system."

(4) Specification 3.11-B

This specification requires that "power shall be limited to 90% of rated power for 4 loop or 65% of rated power for 3 loop operation if re-calibration requirements for excore axial off-set detection system, identified in Table 4.1-1, are not met."

(5) Table 4.1-1

This table requires monthly calibration of the Nuclear Power Range detectors using the movable incore detector system.

During the period of this extension for tests involving use of the incore instrumentation system, the incore thermocouples will be used to determine $F^N_{\Delta H}$ for the core. Temperature maps of the core, obtained using these incore thermocouples, will be made every seven effective full power days while the extension is in effect. The correction factors, as given in Table 1, will be used to determine that the measured $F^N_{\Delta H}$ is within the limits of specification 3.10.2. Past correlations between thermocouple and nuclear hot channel factors using these correction factors are shown in Table 2.

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TABLE 1

Thermocouple Correction Factors (Map 74)

T/C	C.F.	T/C	C.F.
1	1.0600	36	1.2211
2	--	37	1.0819
3	1.2335	38	1.2067
4	1.1221	39	1.2126
5	1.2423	40	1.1367
6	1.1997	41	1.1195
7	1.1850	42	1.1412
8	1.1193	43	1.0411
9	1.1716	44	1.0553
10	1.0614	45	1.1642
11	1.1912	46	1.1335
12	1.1140	47	1.1606
13	1.2103	48	1.1640
14	1.1676	49	1.1447
15	1.2076	50	1.1512
16	1.1367	51	1.1066
17	1.1039	52	1.0383
18	1.0872	53	1.1117
19	--	54	1.1559
20	1.0708	55	1.1047
21	1.1809	56	1.0822
22	1.0780	57	1.0939
23	.8503	58	1.0611
24	1.1320	59	1.0257
25	1.1255	60	1.1428
26	1.0389	61	1.0238
27	1.0880	62	1.1016
28	1.1280	63	1.2421
29	1.1038	64	--
30	1.2255	65	1.1793
31	1.1492		
32	1.1346		
33	.9614		
34	1.4385		
35	1.0237		

TABLE 2

Comparison of Thermocouple and Nuclear Hot Channel Factors

	MAP 72			MAP 73		
** T/C	* T/C $F_{\Delta H}$	** N $F_{\Delta H}$	*** % Diff.	* T/C $F_{\Delta H}$	** N $F_{\Delta H}$	*** % Diff.
1	.731	.817	-10.5	.814	.817	-.3
2	--	--	--	--	--	--
3	.851	.916	-7.1	.911	.913	-.2
4	.476	.555	-14.2	.529	.541	-2.2
5	1.179	1.148	2.7	1.111	1.127	-1.4
6	.751	.859	-12.6	.817	.845	-3.2
7	.995	1.143	-12.9	1.113	1.149	-3.0
8	1.021	1.173	-12.9	1.029	1.173	-12.2
9	1.102	1.179	-6.5	1.129	1.192	+5.3
10	.998	1.078	-7.4	1.023	1.058	-3.3
11	.949	1.105	-14.1	1.011	1.106	-8.6
12	1.059	1.108	-4.4	1.078	1.072	+.6
13	.751	.807	-6.9	.794	.803	-1.2
14	.676	.810	-16.5	.704	.783	-10.1
15	1.092	1.170	-6.7	1.132	1.155	-1.9
16	1.005	1.051	-4.3	1.048	1.060	-1.2
17	1.007	1.077	-6.5	.996	1.082	-8.0
18	1.053	1.109	-5.0	1.074	1.091	-1.6
19	--	--	--	--	--	--
20	1.012	1.081	-6.4	.987	1.084	-8.9
21	1.120	1.163	-3.7	1.143	1.146	-.3
22	.610	.661	-7.7	.663	.696	-4.8
23	.519	.589	-11.8	.538	.605	-11.1
24	1.113	1.147	-2.9	1.118	1.147	-2.5
25	1.058	1.136	-6.8	1.082	1.124	-3.7
26	1.020	1.057	-3.5	.999	1.093	-8.6
27	1.063	1.070	-.6	1.057	1.069	-1.1
28	.990	1.037	-4.5	1.002	1.048	-4.4
29	1.052	1.091	-3.6	--	--	--
30	.505	.549	-8.0	.531	.546	-2.6
31	.900	.976	-7.8	.952	.978	-2.6
32	.516	.544	-5.1	.499	.554	-10.0
33	.720	.750	-4.0	.753	.748	+.7
34	.515	.589	-12.6	.567	.597	-5.1
35	.881	.922	-4.4	.919	.956	-3.8

* $F_{\Delta H}^{T/C} = F_{\Delta H}$ (Thermocouple Map) x Correction Factor (Table 1)

** $F_{\Delta H}^{N} = F_{\Delta H}$ (Moveable Detector Map)

*** $\% \text{ Diff.} = \dfrac{F_{\Delta H}^{T/C} - F_{\Delta H}^{N}}{F_{\Delta H}^{N}}$

** See Fig. 3 For T/C Locations

TABLE 2 (Continued)

T/C	T/C $F_{\Delta H}$	$F_{\Delta H}^{N}$	% Diff.	T/C $F_{\Delta H}$	$F_{\Delta H}^{N}$	% Diff.
36	.921	1.012	-8.9	.983	.963	+2.0
37	.966	1.021	-5.3	.999	1.049	-4.8
38	1.151	1.227	-6.1	1.153	1.199	-3.9
39	1.122	1.170	-4.1	1.159	1.152	- .6
40	1.074	1.168	-8.0	1.107	1.170	-5.4
41	.921	.990	-6.9	.945	1.005	-5.9
42	1.110	1.121	-.9	1.136	1.102	+3.1
43	1.026	1.088	-5.6	1.053	1.105	-4.7
44	.937	1.005	-6.7	.950	1.004	-5.5
45	1.120	1.185	-5.4	1.152	1.151	+ .1
46	1.078	1.162	-7.2	1.092	1.155	-5.5
47	1.104	1.177	-6.2	1.111	1.165	-4.6
48	1.123	1.153	-2.6	1.161	1.143	+1.6
49	1.109	1.191	-6.8	1.124	1.176	-4.5
50	1.098	1.142	-3.8	1.107	1.139	-2.8
51	.938	.995	-5.7	.978	.960	+1.9
52	1.032	1.088	-5.1	1.054	1.081	-2.5
53	1.125	1.156	-2.6	1.098	1.147	-4.3
54	1.112	1.129	-1.5	1.151	1.123	-2.5
55	.937	.994	-5.7	.992	1.013	-2.1
56	1.022	1.098	-6.9	1.025	1.085	-5.5
57	1.069	1.075	-.5	1.078	1.096	-1.7
58	1.057	1.104	-4.2	1.052	1.089	-3.4
59	.946	.968	-2.2	.947	1.000	-5.2
60	.522	.555	-5.9	.554	.559	- .9
61	.991	1.030	-3.7	.993	1.035	-4.1
62	.983	1.056	-6.9	1.018	1.058	-3.8
63	.894	.851	+5.0	.888	.852	+4.2
64	--	--	--	--	--	--
65	.672	.682	-1.5	.667	.704	-5.3
		Average	-6.1		Average	-3.2

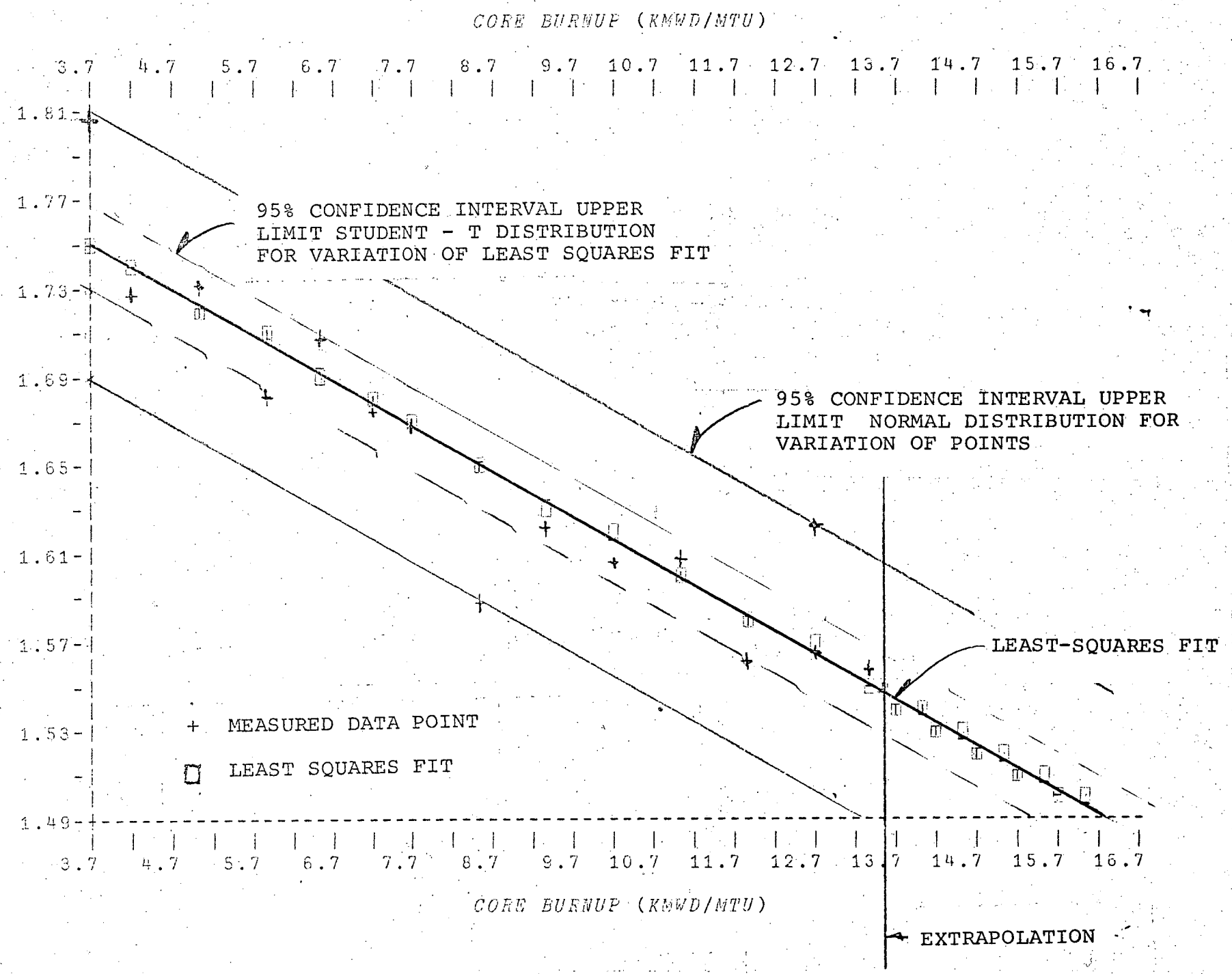
CORE BURNUP (KMWD/MTU)
3.7 4.7 5.7 6.7 7.7 8.7 9.7 10.7 11.7 12.7 13.7 14.7 15.7 16.7
1.81
1.77
1.73
1.69
1.65
1.61
1.57
1.53
1.49
95% CONFIDENCE INTERVAL UPPER LIMIT STUDENT - T DISTRIBUTION FOR VARIATION OF LEAST SQUARES FIT
95% CONFIDENCE INTERVAL UPPER LIMIT NORMAL DISTRIBUTION FOR VARIATION OF POINTS
LEAST-SQUARES FIT
+ MEASURED DATA POINT
LEAST SQUARES FIT
EXTRAPOLATION

FIGURE 1

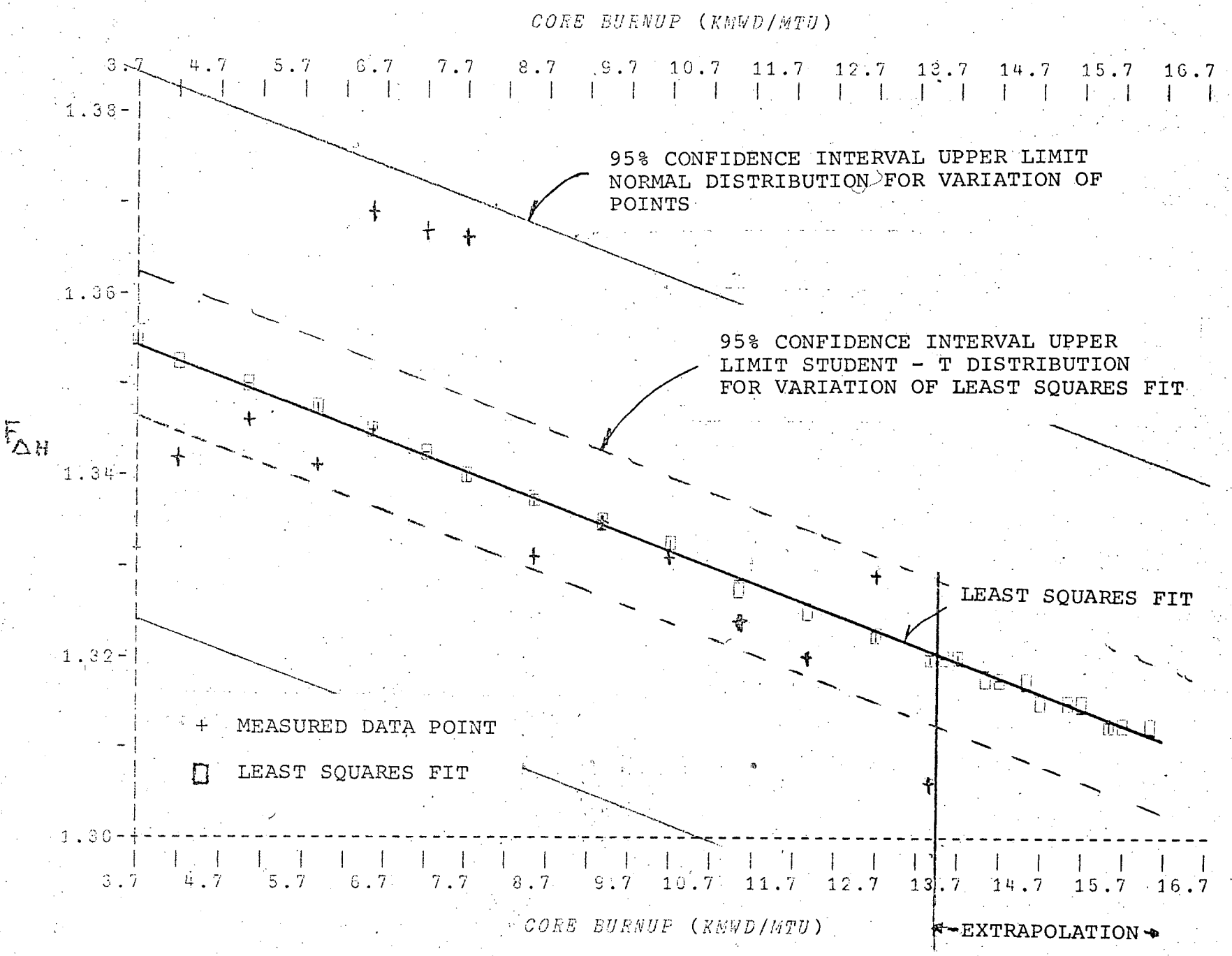
CORE BURNUP (KMWD/MTU)
3.7
4.7
5.7
6.7
7.7
8.7
9.7
10.7
11.7
12.7
13.7
14.7
15.7
16.7
1.38
1.36
1.34
1.32
1.30
$F_{\Delta H}$
95% CONFIDENCE INTERVAL UPPER LIMIT NORMAL DISTRIBUTION FOR VARIATION OF POINTS
95% CONFIDENCE INTERVAL UPPER LIMIT STUDENT - T DISTRIBUTION FOR VARIATION OF LEAST SQUARES FIT
LEAST SQUARES FIT
+ MEASURED DATA POINT
LEAST SQUARES FIT
CORE BURNUP (KMWD/MTU)
EXTRAPOLATION

FIGURE 2

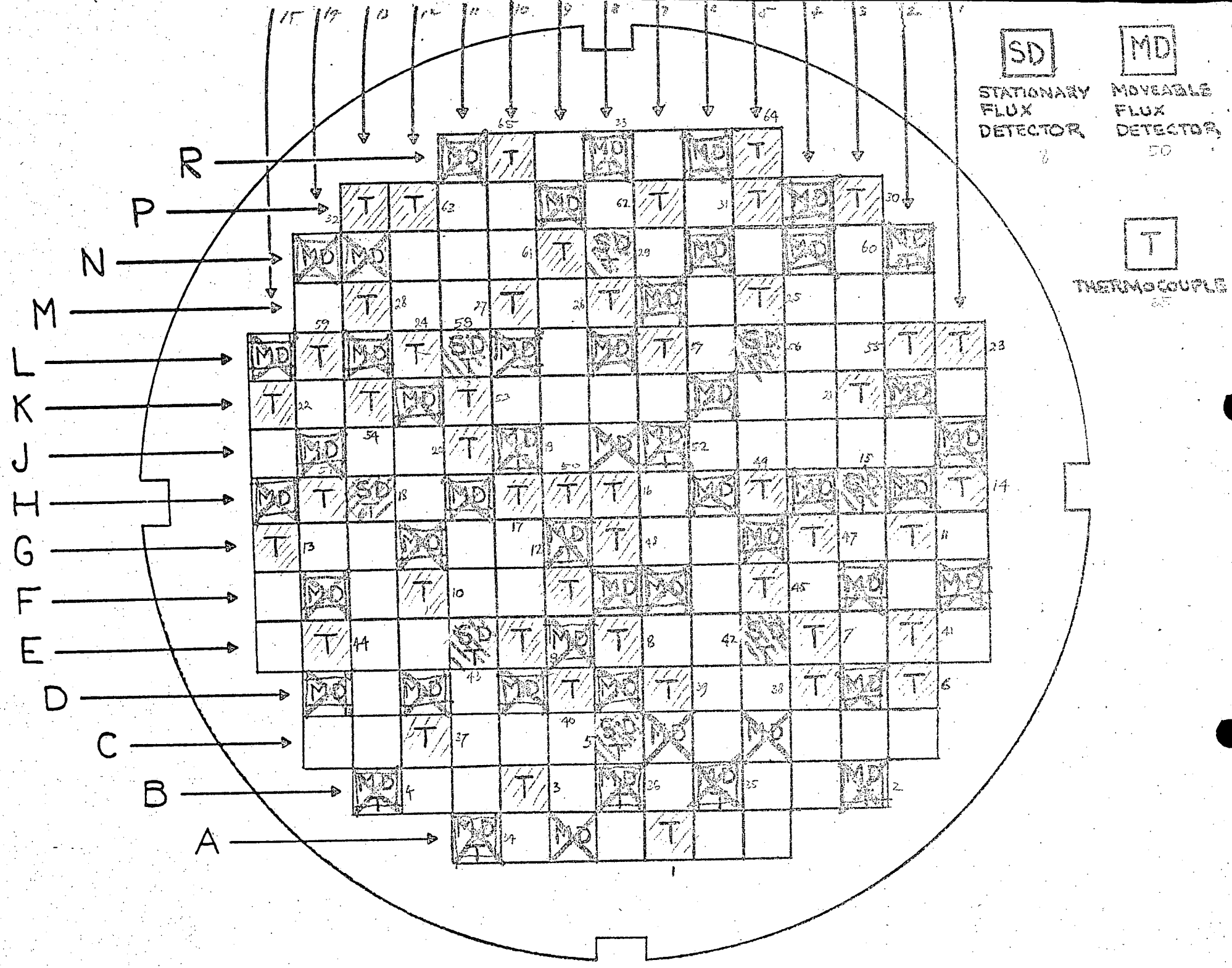

FIGURE NO. 3 IN CORE INSTRUMENTATION LOCATION

ATTACHMENT B

APPLICATION FOR AMENDMENT TO
OPERATING LICENSE

Safety Evaluation

Consolidated Edison Company of New York, Inc.
Indian Point Unit No. 2
Docket No. 50-247
Facility Operating License No. DPR-26

January 9, 1976

Safety Evaluation

This application for Amendment to Facility Operating License No. DPR-26 would temporarily reduce the testing frequency for those tests involving the use of the movable incore instrumentation system by 15 effective full power days. The request is occasioned by the necessary performance of certain maintenance on the incore instrumentation system. This system is needed to perform monthly excore calibration and core flux mapping required by the Technical Specifications. The next such monthly test and calibration is scheduled to be performed by January 15, 1976. Temporary postponement of this calibration and flux mapping would be authorized by this amendment, but under no circumstances would the testing be performed later than February 6, 1976.

The temporary change of the frequency for these tests is consistent with the frequencies which are normally permitted for the performance of similar tests, calibrations and sampling of safety equipment and parameters. A tolerance band, which is usually equal to approximately 50% of the normal testing frequency, defines the maximum time between other such tests required by the Technical Specifications. The safeguards equipment tests specified in Tables 4.1-2 and 4.1-3 of the Technical Specifications define such an extension on the nominal testing frequency.

While the temporary extension of the time for performance of these tests involving the use of the incore instrumentation system is in effect, incore thermocouples will be used to determine that the measured $F^N_{\Delta H}$ is within the limits required by section 3.10.2.2 of the existing technical specifications and section 3.10.2.1 of the license amendment proposed on September 6, 1974. A temperature map of the core will be taken every seven effective full power days using these thermocouples. Values for $F^N_{\Delta H}$ will be derived from these measured temperatures using correction factors that have been derived from past incore flux maps and incore thermocouple measurements. These correction factors are given in Table 1 of Attachment A to this application for amendment.

Values for F^N_Q and $F^N_{\Delta H}$ determined during the last monthly core flux mapping on December 9, 1975 were substantially less than the limits set for these parameters by Section 3.10 of the Technical Specifications. The margins between these measured values and the required values were about 33% of the Technical Specification limit for F^N_Q and about 21% of the Technical Speci-

fication limit for $F^N_{\Delta H}$. Because the requested extension in the testing frequency represents such a small time interval, these measured values for the hot channel factors are not expected to vary significantly from the values determined on December 9, 1975. The measured values for F^N_Q and $F^N_{\Delta H}$ have also decreased with increased fuel burnup, as indicated by Figures 1 and 2 of Attachment A to this application for amendment. This decreasing trend should continue, increasing the margins between the measured values and the specified limits for these hot channel factors.

The proposed extension does not in any way alter the safety analyses performed for Indian Point Unit No. 2. The proposed extension has been reviewed by the Station Nuclear Safety Committee and by the Consolidated Edison Nuclear Facilities Safety Committee. Both committees concur that this extension does not represent a significant hazards consideration and will not cause any change in the types or increase in the amount of effluents or any change in the authorized power level of the facility.