Core Design and Operating Data for Cycles 1 and 2 of Peach Bottom 2

EPRI

Keywords:

BWR Core Design
BWR Benchmark Data
BWR Operating Data
Peach Bottom 2
Reactor Operating History

MASTER

EPRI NP-563
Project 1020-1
Topical Report
June 1978

Prepared by
General Electric Company
San Jose, California

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

ELECTRIC POWER RESEARCH INSTITUTE

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

Core Design and Operating Data for Cycles 1 and 2 of Peach Bottom 2

NP-563
Research Project 1020-1

Topical Report, June 1978

Prepared by

GENERAL ELECTRIC COMPANY
Nuclear Energy Engineering Division
175 Curtner Avenue
San Jose, California 95125

Principal Investigator
N. H. Larsen

Prepared for

Electric Power Research Institute
3412 Hillview Avenue
Palo Alto, California 94304

EPRI Project Manager
Robert N. Whitesel
Nuclear Power Division

85

LEGAL NOTICE

This report was prepared by General Electric (GE) as an account of work done in conjunction with Philadelphia Electric Company (PECo) and sponsored by both the Electric Power Research Institute, Inc. (EPRI) and the General Electric Company. Neither EPRI, members of EPRI, PECO, GE, nor any person acting on behalf of either (a) Makes any warranty or representation, express or implied, with respect to the accuracy, completeness, or usefulness of the information contained in this report, or that the use of any information, apparatus, method, or process disclosed in this report may not infringe privately owned rights, or (b) Assumes any liabilities with respect to the use of, or for damages resulting from the use of, any information, apparatus, method or process disclosed in this report.

FOREWORD

This report is a compilation of reactor design and operating data for Cycles 1 and 2 of the Peach Bottom Unit 2 BWR. It has been prepared to provide reference quality data for use in the qualification of reactor core analysis methods.

More specifically, these data have been collected to facilitate analyses of the pressure transient and stability tests performed at Peach Bottom 2 in April 1977 just prior to the end of Cycle 2. A companion report, "Transient and Stability Tests at Peach Bottom Atomic Power Station Unit 2 at the End of Cycle 2," EPRI NP-564, contains the test data. The project has been aimed at measuring both the stability of a BWR core when subjected to small pressure oscillations and the response of the reactor to large pressure transients. The data from such tests are important not only to the technical base of the licensing of BWR plants, but also as reference data for the qualification of reactor stability and transient computer codes.

BRUCE W. CRAWFORD
Program Manager
Nuclear Energy Engineering Division
General Electric Company

ROBERT N. WHITESEL
Project Manager
Electric Power Research Institute

1

2

3

4

ABSTRACT

This report contains the design and operating data needed to define the fuel characteristics, vessel internal components, nuclear steam supply system components, and reactor operation characteristics for Cycles 1 and 2 of the Peach Bottom 2 reactor. The purpose is to provide reference quality data for use in the qualification of reactor core analysis methods and to provide the basis for the assessment of the irradiation environment during Cycles 1 and 2.

The design data includes fuel assembly description, core component arrangements, control rod descriptions, core loading patterns, reactor internals description, and major piping arrangements. Hydraulic characteristics of the assemblies and the inlet orifices are also provided. Operating data is compiled for 24 steady-state points during Cycle 1 and 13 during Cycle 2. Each state point includes core average exposure, thermal power, pressure, flux, inlet subcooling, control configuration and axial in-core detector readings.

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. DATA	1
A. Reactor Design Data for Cycles 1 and 2 of Peach Bottom 2	1
1. Fuel Assembly Descriptions	1
2. Control Rod Descriptions.....	2
3. Core Descriptions.....	2
4. Vessel Internal Components, Elevation Drawings, etc.....	2
5. Nuclear Steam Supply System Components Outside The Vessel	2
6. Reference Design Data	2
7. Nuclear Instrumentation Data.....	3
8. Thermal Hydraulics	3
B. Operating Data for Cycles 1 and 2 of Peach Bottom 2.....	3
1. Rod Withdrawal Group Designations.....	3
2. Benchmark Operating Data for Cycles 1 and 2	3
a. Core Thermal Power	4
b. Core Inlet Subcooling	4
c. Recirculation Flow	5
3. Operating Data Summary	5

LIST OF TABLES

Table	Title	Page
1	Initial Fuel Description	6
2	Reload Fuel Description	7
3	Fuel Assembly Data	8
4	Assembly Type 1 Density, Length, etc., Data	9
5	Assembly Type 2 Density, Length, etc., Data	9
6	Assembly Type 3 Density, Length, etc., Data	10
7	Assembly Type 4 Density, Length, etc., Data	10
8	Assembly Type 5 Density, Length, etc., Data	11
9	Assembly Type 6 Density, Length, etc., Data	11
10	Fuel Assembly Hardware Weights	12
11	Control Rod Data	13
12	Core Description	14
13	Cycle 1 Bundle Types and Identification	14
14	Cycle 2 Bundle Types and Identification	17
15	Reference Design Information	20
16	Burn Step Information	21

4

4

4

4

LIST OF ILLUSTRATIONS

Figure	Title	Page
1	Bundle Design for Type 1 Initial Fuel.....	23
2	Bundle Design for Type 2 Initial Fuel.....	24
3	Spatial Gd ₂ O ₃ Variation Initial Type 2 Fuel.....	25
4	Bundle Design for Type 3 Initial Fuel.....	26
5	Spatial Gd ₂ O ₃ Variation Initial Type 3 Fuel.....	27
6	Bundle Design for Type 4 8x8 UO ₂ Reload.....	28
7	Bundle Design for Type 5 8x8 UO ₂ Reload.....	29
8	Bundle Design for Type 6 8x8 UO ₂ Reload, LTA.....	30
9	Lead Test Assembly U-235 Enrichment Axial Profile	31
10	Initial Fuel Assembly Lattice.....	32
11	Reload Fuel Assembly Lattice for 100 mil Channels.....	33
12	Reload Fuel Assembly Lattice for 120 mil Channels.....	34
13	Reload Fuel Assembly Lattice for LTA Assemblies	35
14	Fuel Assembly Drawing for Initial Core Fuel.....	36
15	Fuel Assembly Drawing for Initial Core Fuel (Continued).....	37
16	Fuel Assembly Drawing for 8x8 Reload Fuel	38
17	Fuel Assembly Drawing for LTA Reload Fuel.....	39
18	Typical Fuel Rod.....	40
19	Spacer Positioning Rod for Type 3 Initial Fuel.....	41
20	Channel Outline Drawing for Use With Initial Fuel.....	42
21	Channel Outline Drawing for Use With 8x8 Reload Fuel.....	43
22	B ₄ C Control Blade Model (Schematic).....	44
23	Core Orificing and TIP System Arrangement.....	45
24	Elevation of Core Components.....	46
25	Reactor Assembly Drawing	47

LIST OF ILLUSTRATIONS (Continued)

Figure	Title	Page
26	Shroud Drawing	48
27	Top Guide Drawing	49
28	Steam Separator Outline Drawing	50
29	Steam Dryer Drawing	51
30	Feedwater Sparger Outline	52
31	Orificed Fuel Support	53
32	Jet Pump Drawing	54
33	Recirculation Loop Piping	55
34	Primary Steam Piping	56
35	Primary Steam Piping (Continued)	57
36	Primary Steam Piping (Continued)	58
37	Main Steam and Bypass Line Piping	59
38	Main Steam and Bypass Line Piping (Continued)	60
39	Reactor Primary System Weights and Volumes	61
40	Reactor Primary System Weights and Volumes (Continued)	62
41	Recirculation Pump Characteristics at Rated Pump Speed	63
42	Recirculation Pump Characteristics at Various Pump Speeds	64
43	TIP/LPRM In-Core Assembly Cross Section	65
44	Flow Characteristics 7x7 Fuel Assemblies, 20 Btu/lb Subcooling	66
45	Flow Characteristics 7x7 Fuel Assemblies, 30 Btu/lb Subcooling	67
46	Flow Characteristics 8x8 Fuel Assemblies, 20 Btu/lb Subcooling	68
47	Flow Characteristics 8x8 Fuel Assemblies, 30 Btu/lb Subcooling	69
48	1 469 in Orifice Diameter, 20 Btu/lb Subcooling	70
49	1 469 in Orifice Diameter, 30 Btu/lb Subcooling	71
50	2 211 in Orifice Diameter, 20 Btu/lb Subcooling	72

LIST OF ILLUSTRATIONS (Continued)

Figure	Title	Page
51	2.211 in Orifice Diameter, 30 Btu/lb Subcooling.....	73
52	2.211 in Orifice Diameter With Orificed Lower Tie Plate, 20 Btu/lb Subcooling.....	74
53	2.211 in Orifice Diameter With Orificed Lower Tie Plate, 30 Btu/lb Subcooling.....	75
54	Core Bypass Flow for Cycle 1	76
55	Core Bypass Flow for Cycle 2.....	77
56	Peach Bottom 2 Control Rod A Sequence Groups 1-8	78
57	Peach Bottom 2 Control Rod A1 Sequence Groups 9-21	79
58	Peach Bottom 2 Control Rod A2 Sequence Groups 9-21	80
59	Peach Bottom 2 Control Rod B Sequence Groups 1-6.....	81
60	Peach Bottom 2 Control Rod B1 Sequence Groups 7-22.....	82
61	Peach Bottom 2 Control Rod B2 Sequence Groups 7-22.....	83
62	Core Flow Measurement System Schematic Showing One of Four Groups of Jet Pumps.....	84
63	Data Summaries, January 1974.....	85
64	Data Summaries, February 1974.....	86
65	Data Summaries, March 1974	87
66	Data Summaries, April 1974.....	88
67	Data Summaries, May 1974	89
68	Data Summaries, June 1974.....	90
69	Data Summaries, July 1974	91
70	Data Summaries, August 1974	92
71	Data Summaries, September 1974	93
72	Data Summaries, October 1974	94
73	Data Summaries, November 1974.....	95
74	Data Summaries, December 1974.....	96
75	Data Summaries, January 1975.....	97

LIST OF ILLUSTRATIONS (Continued)

Figure	Title	Page
76	Data Summaries, February 1975	98
77	Data Summaries, March 1975	99
78	Data Summaries, April 1975	100
79	Data Summaries, May 1975	101
80	Data Summaries, June 1975	102
81	Data Summaries, July 1975	103
82	Data Summaries, August 1975	104
83	Data Summaries, September 1975	105
84	Data Summaries, October 1975	106
85	Data Summaries, November 1975	107
86	Data Summaries, December 1975	108
87	Data Summaries, January 1976	109
88	Data Summaries, February 1976	110
89	Data Summaries, March 1976	111
90	Data Summaries, June 1976	112
91	Data Summaries, July 1976	113
92	Data Summaries, August 1976	114
93	Data Summaries, September 1976	115
94	Data Summaries, October 1976	116
95	Data Summaries, November 1976	117
96	Data Summaries, December 1976	118
97	Data Summaries, January 1977	119
98	Data Summaries, February 1977	120
99	Data Summaries, March 1977	121
100	Data Summaries, April 1977	122

LIST OF DATA SETS

	Page
Cycle 1 Data.....	123
Data Set 01	123
Reactor Conditions, April 5, 1974	123
Control Configuration, April 5, 1974	123
Axial TIP Distribution, April 5, 1974	123
Data Set 02	125
Reactor Conditions, April 25, 1974	125
Control Configuration, April 25, 1974	125
Axial TIP Distribution, April 25, 1974	125
Data Set 03	127
Reactor Conditions, May 12, 1974	127
Control Configuration, May 12, 1974	127
Data Set 04	128
Reactor Conditions, May 26, 1974	128
Control Configuration, May 26, 1974	128
Axial TIP Distribution, May 26, 1974	128
Data Set 05	130
Reactor Conditions, June 19, 1974	130
Control Configuration, June 19, 1974	130
Axial TIP Distribution, June 19, 1974	130
Data Set 06	132
Reactor Conditions, July 15, 1974	132
Control Configuration, July 15, 1974	132
Data Set 07	133
Reactor Conditions, August 17, 1974	133
Control Configuration, August 17, 1974	133
Data Set 08	134
Reactor Conditions, September 10, 1974	134
Control Configuration, September 10, 1974	134
Axial TIP Distribution, September 10, 1974	134
Data Set 09	136
Reactor Conditions, October 4, 1974	136
Control Configuration, October 4, 1974	136
Axial TIP Distribution, October 4, 1974	136
Data Set 10	138
Reactor Conditions, November 21, 1974	138
Control Configuration, November 21, 1974	138
Axial TIP Distribution, November 21, 1974	138

LIST OF DATA SETS (Continued)

	Page
Data Set 11	140
Reactor Conditions, January 6, 1975	140
Control Configuration, January 6, 1975	140
Axial TIP Distribution, January 6, 1975	140
Data Set 12	142
Reactor Conditions, February 3, 1975	142
Control Configuration, February 3, 1975	142
Axial TIP Distribution, February 3, 1975	142
Data Set 13	144
Reactor Conditions, March 13, 1975	144
Control Configuration, March 13, 1975	144
Axial TIP Distribution, March 13, 1975	144
Data Set 14	146
Reactor Conditions, April 2, 1975	146
Control Configuration, April 2, 1975	146
Axial TIP Distribution, April 2, 1975	146
Data Set 15	148
Reactor Conditions, April 24, 1975	148
Control Configuration, April 24, 1975	148
Axial TIP Distribution, April 24, 1975	148
Data Set 16	150
Reactor Conditions, May 13, 1975	150
Control Configuration, May 13, 1975	150
Axial TIP Distribution, May 13, 1975	150
Data Set 17	152
Reactor Conditions, July 25, 1975	152
Control Configuration, July 25, 1975	152
Data Set 18	153
Reactor Conditions, August 16, 1975	153
Control Configuration, August 16, 1975	153
Data Set 19	154
Reactor Conditions, September 27, 1975	154
Control Configuration, September 27, 1975	154
Data Set 20	155
Reactor Conditions, October 31, 1975	155
Control Configuration, October 31, 1975	155
Axial TIP Distribution, October 31, 1975	155
Data Set 21	157
Reactor Conditions, December 24, 1975	157
Control Configuration, December 24, 1975	157

LIST OF DATA SETS (Continued)

	Page
Data Set 22	158
Reactor Conditions, January 15, 1976	158
Control Configuration, January 15, 1976	158
Axial TIP Distribution, January 15, 1976	158
Data Set 23	160
Reactor Conditions, February 14, 1976	160
Control Configuration, February 14, 1976	160
Axial TIP Distribution, February 14, 1976	160
Data Set 24	162
Reactor Conditions, March 26, 1976	162
Control Configuration, March 26, 1976	162
Axial TIP Distribution, March 26, 1976	162
Cycle 2 Data.....	164
Data Set 25	164
Reactor Conditions, June 28, 1976	164
Control Configuration, June 28, 1976	164
Axial TIP Distribution, June 28, 1976	164
Data Set 26	166
Reactor Conditions, July 14, 1976	166
Control Configuration, July 14, 1976	166
Axial TIP Distribution, July 14, 1976	166
Data Set 27	168
Reactor Conditions, September 1, 1976	168
Control Configuration, September 1, 1976	168
Axial TIP Distribution, September 1, 1976	168
Data Set 28	170
Reactor Conditions, October 8, 1976	170
Control Configuration, October 8, 1976	170
Axial TIP Distribution, October 8, 1976	170
Data Set 29	172
Reactor Conditions, October 28, 1976	172
Control Configuration, October 28, 1976	172
Axial TIP Distribution, October 28, 1976	172
Data Set 30	174
Reactor Conditions, December 16, 1976	174
Control Configuration, December 16, 1976	174
Axial TIP Distribution, December 16, 1976	174
Data Set 31	176
Reactor Conditions, December 28, 1976	176
Control Configuration, December 28, 1976	176
Axial TIP Distribution, December 28, 1976	176

LIST OF DATA SETS (Continued)

	Page
Data Set 32	178
Reactor Conditions, January 19, 1977	178
Control Configuration, January 19, 1977	178
Axial TIP Distribution, January 19, 1977	178
Data Set 33	180
Reactor Conditions, January 26, 1977	180
Control Configuration, January 26, 1977	180
Axial TIP Distribution, January 26, 1977	180
Data Set 34	182
Reactor Conditions, February 2, 1977	182
Control Configuration, February 2, 1977	182
Axial TIP Distribution, February 2, 1977	182
Data Set 35	184
Reactor Conditions, February 23, 1977	184
Control Configuration, February 23, 1977	184
Axial TIP Distribution, February 23, 1977	184
Data Set 36	186
Reactor Conditions, March 11, 1977	186
Control Configuration, March 11, 1977	186
Axial TIP Distribution, March 11, 1977	186
Data Set 37	188
Reactor Conditions, April 3, 1977	188
Control Configuration, April 3, 1977	188
Axial TIP Distribution, April 3, 1977	188

SUMMARY

This report contains the design and operating data needed to define the fuel characteristics, vessel internal components, nuclear steam supply system components, and reactor operation characteristics for Cycles 1 and 2 of the Peach Bottom 2 reactor. The purpose is to provide reference quality data for use in the qualification of reactor core analysis methods and to provide the basis for the assessment of the irradiation environment during Cycles 1 and 2.

The design data includes fuel assembly description, core component arrangements, control rod descriptions, core loading patterns, reactor internals description, and major piping arrangements. Hydraulic characteristics of the assemblies and the inlet orifices are also provided. Operating data is compiled for 24 steady-state points during Cycle 1 and 13 during Cycle 2. Each state point includes core average exposure, thermal power, pressure, flux, inlet subcooling, control configuration and axial in-core detector readings.

I. INTRODUCTION

The design and operating data needed to define the fuel characteristics and reactor operating characteristics for Cycles 1 and 2 of the Peach Bottom 2 reactor are contained in this report. The program was a joint effort of the General Electric Company, the Philadelphia Electric Company, and the Electric Power Research Institute.

The fuel and core design data were extracted from appropriate reports and drawings. Almost all of the operating data provided were obtained directly from process computer output edits of the reactor operation through Cycles 1 and 2.

II. DATA

A. REACTOR DESIGN DATA FOR CYCLES 1 AND 2 OF PEACH BOTTOM 2

1. Fuel Assembly Descriptions

- a Bundle design data for Type 1 initial fuel, Type 2 initial fuel, Type 3 initial fuel, spatial Gd_2O_3 variation in initial fuel, 8x8 reload fuel, and lead test fuel assemblies are included as Figures 1 to 9.
- b Fuel assembly lattice drawings, including detailed dimensions, for initial fuel, reload fuel with 100 and 120 mil channels, and the lead test assemblies are included as Figures 10 through 13. The numbers 100 and 120 refer to the wall thickness of the channel.
- c Tables 1 and 2 summarize fuel rod arrays, fuel rod pitch, rod-to-channel spacing, gap thicknesses, control augmentation characteristics, U weights, channel characteristics, and water/ UO_2 volume ratios for the initial 7x7 assemblies and the reload assemblies.
- d Table 3 provides core loading, assembly pitch, fuel pin pitch, spacer data, average fuel compositions, and fuel weights for all fuel assemblies during Cycles 1 and 2.
- e Tables 4 to 9 include pellet and stack densities, Gd_2O_3 and UO_2 weights, pellet lengths, pellet o d, cladding o d, cladding thickness, and gas plenum lengths for all fuel used during Cycles 1 and 2. All fuel rods were backfilled with helium at 0 to 10 psig at 70°F.
- f Table 10 includes spacer weights, end plug weights, upper and lower tie plate weights, fission gas plenum material weights, the alloy compositions recommended for nuclear analyses, and spacer placement identification.
- g Figures 14 to 17 are assembly detail drawings for initial 7x7 fuel, reload 8x8 fuel, and the lead test assembly (LTA) fuel.
- h A typical fuel rod is shown in Figure 18. A fueled spacer positioning rod for Type 3 initial fuel is shown in Figure 19. The purpose of the spacer positioning rod is to provide a locking tab which fixes the fuel rod spacers in their designed axial position. This is accomplished by an end plug connector that contains a fork design which catches a tab on the spacer. The fuel rod is thus segmented into eight segments for the seven spacers. Fission gas may travel from segment to segment by means of a hole in the center of the connector plugs. For the 8x8 assemblies, the water rod is also the spacer positioning rod. In this case, the positioning mechanism is simply welded to the tube, which is the same as the cladding for the fuel rods. Holes are provided at the bottom and top of the water rod to provide water flow and little or no boiling inside the tube.
- i Figures 20 and 21 are channel outline drawings for 80 and 100 mil channels. The 120 mil thick development channels are similar to those shown.

2. Control Rod Descriptions

- a. Table 11 contains physical data for the control rods including shape, pitch, stroke, control material, etc.
- b. Figure 22 is a schematic drawing of a cross section of a control blade.

3. Core Descriptions

- a. Table 12 identifies the total number of fuel assemblies, number of fuel assembly types, heat transfer surface area, total weight of U in the core, etc., for Cycles 1 and 2.
- b. Table 13 presents the bundle type and identification core loading array for Cycle 1.
- c. Figure 23 is a core plan view showing the core orificing and TIP system arrangement.
- d. Table 14 presents the bundle type and identification core loading array for Cycle 2.

4. Vessel Internal Components, Elevation Drawings, etc.

- a. Figure 24 shows the elevation of the core instrumentation and control blade poison with respect to the active fuel.
- b. An elevation view of the reactor internal components is presented in Figure 25. Figures 26 through 30 are outlines of the various internal components; core shroud, top guide, steam separator, steam dryer, and feedwater sparger.
- c. Figure 31 is an outline of the orificed fuel support piece.
- d. Figure 32 is an outline drawing of the jet pump.

5. Nuclear Steam Supply System Components Outside The Vessel

- a. Figure 33 shows the recirculation loop piping.
- b. Figures 34 to 38 show the primary steam piping and the steam bypass lines.
- c. Portions of the feedwater lines appear on several drawings made by Bechtel, San Francisco, under Job Number 6280. These drawings are identified by Bechtel as M-xxx, where M designates mechanical and xxx is a particular drawing number, beginning with 1. These drawings are not included in this report, but may be obtained from Bechtel.
- d. Other characteristics, such as Main Turbine Stop and Bypass Valve Flow-Pressure relationship for the downstream bypass pressure reducers and the transfer functions representing the speed-torque response of the Feedpump Turbine Drives, are necessary information for analysis of the transient experiments. These data are proprietary to the General Electric Company.

6. Reference Design Data

Table 15 provides reference design information. Figures 39 and 40 are compilations of various weights and volumes of the reactor primary system. Figures 41 and 42 are recirculation pump characteristics for various conditions.

7. Nuclear Instrumentation Data

Peach Bottom 2 is equipped with a system of Travelling In-Core Probe (TIP) detectors and fixed Local Power Range Monitor (LPRM) detectors designed to provide an accurate representation of the spatial distribution of the neutron flux. The TIP detectors travel through a set of 43 vertical tubes which are distributed uniformly throughout the core with the planar density of one detector per four square feet. Figure 23 shows the core location and coordinate identification of the TIP strings. A cross section of a TIP/LPRM assembly is given in Figure 43.

The TIP measures the axial neutron flux distribution in the water gap by use of a 1-in. long U-235 fission chamber attached to a cable and motor which allows the chamber to be positioned at any point along the axial length of up to 10 core positions for each TIP machine. There are five TIP machines in the Peach Bottom 2 reactor. The TIP values reported in the data sets for 6-in. intervals represent the weighted average value of seven measurements made at 1-in. intervals (five interior measurements which are given twice the weighting as the two end points). A total of 145 measurements is made for each core position resulting in 24 values of 6 in. each.

The TIP data are normalized to the common position. The common position normalization is determined experimentally by traveling the common position with each TIP machine. The normalization is determined so that all the TIP machines produce the same readings when operated in the common position. The axially averaged TIP reading for the common position is usually defined to be 100. The TIP data given in the data sets were obtained directly from the process computer. For editing purposes, all values of some data sets have been multiplied by a constant such that all values are less than 100.0. No other adjustments have been made.

8. Thermal Hydraulics

- a. The hydraulic characteristics of 7x7 and 8x8 fuel assemblies are presented in Figures 44 to 47 as functions of active coolant flow, active coolant power and subcooling. These data may be applied over a pressure range of 1035 ± 100 psia. Bundle pressure drop is somewhat insensitive to axial power distribution. The data are based on a distribution peaked at the middle with a peak-to-average value of 1.5. With a bundle flow of 130×10^3 lb/hr, bottom-peaked axial (3/8 point of active fuel length) will yield a pressure drop about 0.66 psi larger. A top-peaked axial yields essentially the same pressure drop as the middle peaked axial.
- b. The pressure drop characteristics of the central and peripheral region orifices are presented as functions of active coolant flow on Figures 48 through 53. The location of the orifice zones is given in Figure 23. It should be noted that all the 8x8 reload fuel had holes drilled in the lower tie plate for bypass flow augmentation, whereas there are no holes in the 7x7 lower tie plates.
- c. The total core bypass flow rates for Cycles 1 and 2 are presented in Figures 54 and 55, respectively. It should be noted that the original core design had holes drilled in the core support for bypass flow augmentation. At 8100 MWd/t core average exposure into Cycle 1 (November, 1975) these holes were plugged, reducing the bypass flow.

B. OPERATING DATA FOR CYCLES 1 AND 2 OF PEACH BOTTOM 2

1. Rod Withdrawal Group Designation

Figures 56 to 61 present the control rod group designations for Cycles 1 and 2.

2. Benchmark Operating Data for Cycles 1 and 2

Data Sets 01 to 24 contain the reactor data for 24 selected operating states during Cycle 1 and Data Sets 25 to 37 contain the reactor data for 13 selected operating states during Cycle 2. Most data sets contain the following data: date, core average exposure, core thermal power, dome pressure, core flow, inlet subcooling, control configuration, and complete axial TIP distribution data for all 43 LPRM string locations. The TIP data are the

commonly normalized TIP readings at 6-inch intervals up the length of the assembly. The TIP data read from the bottom to the top of core; i.e., the first entry is for the bottom 6-in. node. Exposure can be accumulated by using the calculated core power distribution for each of the data sets provided to advance to the next operating state. When a control rod sequence change is encountered between data sets, the exposure may be advanced to the sequence exchange date, and the data set after the exchange used to advance the exposure to the date of the data set immediately following the exchange date. Experience has shown that taking exposure steps finer than 700 MWd/t does not significantly add to the tracking accuracy (see Table 16).

All of these data were taken during steady-state operation. The reactor had been operating for at least 48 hours with essentially constant power, flow, and rod pattern before the data were accumulated.

Core thermal power, inlet subcooling, and recirculation flow rate are important to the reactor data evaluation. The values for these items were taken directly from process computer PI output. The PI output does not contain the detailed data used to calculate the output values and the detailed data are normally not available from the plant data (i.e., special edits must be requested or special readings taken). Therefore, the detailed data cannot be provided. However, the method used by the process computer to compute the values is given here.

a. Core Thermal Power

The core thermal power is obtained from the process computer which performs an energy balance on a system composed of the reactor vessel, recirculation loop piping, and cleanup demineralizer piping. Flows entering the system are the reactor feedwater flow, which is assumed to enter in three branches, and the control rod drive system flow. The only flow assumed to be leaving the system is the primary steam flow. Nonflow power inputs are the fission power (core thermal power) and recirculation pumping power; nonflow power losses are the radiative power loss and the net power transferred across the boundary of the cleanup demineralizer loop. Analytically, the energy balance is:

$$\text{Core Power, MWt} = \frac{W_{fw}(h_s - h_{fw}) + W_{cr}(h_s - h_{cr})}{C_f} + Q_{cu} + Q_r - Q_p$$

- where:
- W_{fw} = feedwater flow rate entering reactor at top of downcomer, Mlb/hr
  - h_s = enthalpy of steam leaving the reactor vessel, Btu/lb
  - h_{fw} = feedwater enthalpy, Btu/lb
  - W_{cr} = control rod drive system flow, Mlb/hr
  - h_{cr} = enthalpy of control rod drive system flow, Btu/lb
  - Q_p = power added to downcomer fluid by recirculation pumps, MW
  - Q_r = radiative power loss, MW
  - Q_{cu} = power removed from downcomer fluid by cleanup demineralizer system, MW
  - C_f = conversion constant=3.413 MBtu/MWh

b. Core Inlet Subcooling

The core inlet subcooling is obtained from the process computer by performing an energy balance on the core downcomer (the volume between the core shroud and the vessel wall, and including the external recirculation and cleanup loops) yielding:

$$W_r h_o = W_{rf} h_f + W_{rs} h_g + W_{fw} h_{fw} + W_{cr} h_{cr} + (Q_p - Q_{cu}) C_f$$

where:

W_T = flow rate entering core inlet plenum, Mlb/hr

h_o = core inlet enthalpy (enthalpy of W_T), BTu/lb

W_{rl} = flow rate of saturated liquid entering downcomer, Mlb/hr

h_f = saturated liquid enthalpy, Btu/lb

W_{rs} = flow rate of saturated steam entering downcomer (i.e., "carryunder"), Mlb/hr

h_g = saturated steam enthalpy, Btu/lb

and other terms are defined as above

The total flow entering the inlet plenum is:

$$W_T = W_{rl} + W_{rs} + W_{fw} + W_{cr}$$

c. Recirculation Flow

The reactor core flow rate is monitored by the process computer by direct measurement of differential pressure across the jet pump diffusers. For illustrative purposes, the 20 jet pumps can be divided into four groups of five each. A typical group is shown in Figure 62. In each group, one jet pump contains a diffuser with two static pressure taps. The remaining four units contain only one pressure tap. The "double tapped units" are calibrated by test prior to installation to determine the relationship between flow and differential pressure over the range of expected operating flow rates. This information is used to perform in-reactor calibration of the "top tap-to-lower plenum" pressure difference of all 20 jet pumps. After this calibration procedure has been completed, the total core flow is measured by electrically analyzing the signals from the single tap-to-lower plenum pressure transducers on all 20 jet pumps. The resulting total core flow rate output signal is displayed on the reactor control board. In addition, the 20 single tap and 4 double tap ΔP signals described above are available in the control room.

3. OPERATING DATA SUMMARY

Figures 63 to 100 present operating data summaries for each month during Cycles 1 and 2. The data presented include daily values of power level, flow, subcooling, and rod notch inventory (rod notches inserted)

Table 1
INITIAL FUEL DESCRIPTION

	Type 1	Type 2	Type 3
Fuel Assembly			
Number of Fuel Assemblies per Batch ..	168	263	333
Fuel Rod Array	7 x 7	7 x 7	7 x 7
Fuel Rod Pitch, in.....	0.738	0.738	0.738
Peripheral-Rod-to-Channel Spacing, in.	0.1435	0.1435	0.1435
1/2 Width of Wide Water Gap, in	0.375	0.375	0.375
1/2 Width of Narrow Water Gap, in	0.188	0.188	0.188
Cladding Length, in	160	160	160
Bundle Average Enrichment (wt % U-235 in Total U).....	1.10	2.50	2.50
Control Augmentation Type	NONE	Fuel Rods Containing Gd ₂ O ₃	Fuel Rods Containing Gd ₂ O ₃
Number.....		4	5
Control Length, in		144(3), 60(1)	144(3), 108(1), 36(1)
Control Material.....		3.0 wt % Gd ₂ O ₃	3.0 wt % Gd ₂ O ₃ (3) 4.0 wt % Gd ₂ O ₃ (2)
Locations.....		In Fuel Lattice	In Fuel Lattice
Weight of U per Fuel Assembly			
lb	432.3	412.4	412.1
kg	196.1	187.1	186.9
Channel			
Outside Dimensions, in.....	5.438 x 5.438	5.438 x 5.438	5.438 x 5.438
Thickness, in.....	0.080	0.080	0.080
Inside Corner Radius, in.....	0.38	0.38	0.38
Material.....	Zr-4	Zr-4	Zr-4
Water-UO ₂ Volume Ratio (cold)	2.43	2.53	2.53

Table 2
RELOAD FUEL DESCRIPTION

Fuel Assembly	Type 4		Type 5	Type 6
Number of Fuel Assemblies per Batch	60	8	116	4
Fuel Rod Array	8 x 8	8 x 8	8 x 8	8 x 8
Fuel Rod Pitch, in	0.640	0.640	0.640	0.640
Peripheral-Rod-to-Channel Spacing, in	0.153	0.153	0.153	0.163
1/2 Width of Wide Water Gap, in	0.355	0.335	0.355	0.355
1/2 Width of Narrow Water Gap, in	0.167	0.147	0.167	0.167
Cladding Length, in	160	160	160	160
Bundle Average Enrichment (wt % U-235 in total U)	2.74	2.74	2.74	2.60
Control Augmentation				
Type	Fuel Rods Containing Gd ₂ O ₃			
Number	5	5	5	5
Control Length, in				
Control Material	3.0% Gd ₂ O ₃	3.0% Gd ₂ O ₃	2.0% Gd ₂ O ₃	2.0% Gd ₂ O ₃
Locations	In Fuel Lattice			
Weight of U per Fuel Assembly				
lb	403.8	403.8	404.2	402.6
kg	183.2	183.2	183.3	182.6
Channel				
Outside Dimensions, in	5.478 x 5.478	5.518 x 5.518	5.478 x 5.478	5.478 x 5.478
Thickness, in	0.100	0.120	0.100	0.100
Inside Corner Radius, in	0.38	0.38	0.38	0.38
Material	Zr-4	Zr-4	Zr-4	Zr-4
Water/UO ₂ Volume Ratio (cold)	2.56	2.51	2.56	2.75

Table 3
FUEL ASSEMBLY DATA

	Initial Load			Reload	Reload	LTA Special
Assembly Type.....	1	2	3	4	5	6
No. of Assemblies, Initial Core.....	168	263	333	0	0	0
No. of Assemblies, Cycle 2.....	0	261	315	68*	116	4
Geometry.....	7 x 7	7 x 7	7 x 7	8 x 8	8 x 8	8 x 8
Assembly Pitch, in.....	6.0	6.0	6.0	6.0	6.0	6.0
Fuel Rod Pitch.....	0.738	0.738	0.738	0.640	0.640	0.640
Fuel Rods per Assembly.....	49	49	49	63	63	62
Instrument Rods per Assembly.....	0	0	0	0	0	0
Water Rods per Assembly.....	0	0	0	0	1	2
Burnable Poison Positions.....	0	4	5	5	5	5
No. of Spacer Grids.....	7	7	7	7	7	7
Inconel per Grid, lb.....	0.102	0.102	0.102	0.102	0.102	0.102
Zr-4 per Grid, lb.....	0.537	0.537	0.537	0.614	0.614	0.614
Spacer Width, in.....	1.625	1.625	1.625	1.625	1.625	1.625
Assembly Average Fuel Composition						
Gd ₂ O ₃ , gm.....	0	441	547	490	328	313
UO ₂ , kg.....	222.44	212.21	212.06	207.78	208.00	207.14
Total Fuel, kg.....	222.44	212.65	212.61	208.27	208.33	207.45

*60 Assemblies channeled with 0.100 inch thick channels, 8 with 0.120 inch thick channels.

Table 4
ASSEMBLY TYPE 1 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 1

Rod Type	Number of Rods	Pellet Density		Stack Density (gm/cc)	Gd ₂ O ₃ (gm)	UO ₂ (gm)	Stack Length (in.)
		UO ₂ (gm/cc)	UO ₂ + Gd ₂ O ₃ (gm/cc)				
1	31	10.42	—	10.34	0	4548	144
2	17	10.42	—	10.34	0	4548	144
2S	1	10.42	—	10.34	0	4140	130

Pellet o.d. = 0.487 inch all rods
 Cladding = Zircaloy-2, 0.563-inch o.d. x 0.032-inch wall, all rods
 Gas Plenum Length = 16.0 inches

Table 5
ASSEMBLY TYPE 2 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 2

Rod Type	Number of Rods	Pellet Density		Stack Density (gm/cc)	Gd ₂ O ₃ (gm)	UO ₂ (gm)	Stack Length (in.)
		UO ₂ (gm/cc)	UO ₂ + Gd ₂ O ₃ (gm/cc)				
1	25	10.42	—	10.32	0	4352	144
1s	1	10.42	—	10.32	0	3935	130
2	12	10.42	—	10.32	0	4352	144
3	6	10.42	—	10.32	0	4352	144
4	1	10.42	—	10.32	0	4352	144
5A	3	—	10.29	10.19	129	4171	144
6B*	1	10.42	10.29	10.27	54	4277	144

Pellet o.d. = 0.477 inch all rods
 Cladding = Zircaloy-2, 0.563-inch o.d. x 0.037-inch wall, all rods
 Gas Plenum Length = 15.8 inches

*Contains two pellet types, see Figures 2 and 3

Table 6
ASSEMBLY TYPE 3 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 3							
Rod Type	Number of Rods	Pellet Density		Stack Density (gm/cc)	Gd ₂ O ₃ (gm)	UO ₂ (gm)	Stack Length (in.)
		UO ₂ (gm/cc)	UO ₂ + Gd ₂ O ₃ (gm/cc)				
1	26	10.42	—	10.32	0	4352	144
2	11	10.42	—	10.32	0	4352	144
3	6	10.42	—	10.32	0	4352	144
4	1	10.42	—	10.32	0	4352	144
5A	2	—	10.29	10.19	129	4171	144
6C	1	—	10.29	10.19	117	3771	130
7E*	1	10.42	10.25	10.28	43	4292	144
8D*	1	10.42	10.25	10.19	129	4172	144

Pellet o.d. = 0.477 inch all rods

Cladding = Zircaloy-2, 0.563-inch o.d. x 0.037-inch wall, all rods

Gas Plenum Length = 15.8 inches

*Contains two pellet types, see Figures 4 and 5.

Table 7
ASSEMBLY TYPE 4 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 4							
Rod Type	Number of Rods	Pellet Density		Stack Density (gm/cc)	Gd ₂ O ₃ (gm)	UO ₂ (gm)	Stack Length (in.)
		UO ₂ (gm/cc)	UO ₂ + Gd ₂ O ₃ (gm/cc)				
1	39	10.42	—	10.32	0	3309	144
2	14	10.42	—	10.32	0	3309	144
3	4	10.42	—	10.32	0	3309	144
4	1	10.42	—	10.32	0	3309	144
5	5	—	10.29	10.19	98	3172	144
WS	1	—	—	—	0	0	—

Pellet o.d. = 0.416 inch all rods

Cladding = Zircaloy-2, 0.493-inch o.d. x 0.034-inch wall, all rods

Gas Plenum Length = 16.0 inches except water rod

Gd₂O₃ in rod type 5 runs full 144 inches

Water rod has holes drilled top and bottom to provide water flow and little or no boiling

Water rod is also spacer positioning rod

Table 8
ASSEMBLY TYPE 5 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 5

Rod Type	Number of Rods	Pellet Density		Stack Density (gm/cc)	Gd ₂ O ₃ (gm)	UO ₂ (gm)	Stack Length (in.)
		UO ₂ (gm/cc)	UO ₂ + Gd ₂ O ₃ (gm/cc)				
1	39	10 42	—	10 32	0	3309	144
2	14	10 42	—	10 32	0	3309	144
3	4	10 42	—	10 32	0	3309	144
4	1	10 42	—	10 32	0	3309	144
5	5	—	10 33	10 23	66	3216	144
WS	1	—	—	—	0	0	—

Pellet o d = 0 416 inch all rods

Cladding = Zircaloy-2, 0 493-inch o d x 0 034-inch wall, all rods

Gas Plenum Length = 16 0 inches except water rod

Gd₂O₃ in rod type 5 runs full 144 inches

Water rod has holes drilled top and bottom to provide water flow and little or no boiling

Water rod is also spacer positioning rod

Table 9
ASSEMBLY TYPE 6 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 6*

Rod Type	Number of Rods	Pellet Density		Stack Density (gm/cc)	Gd ₂ O ₃ (gm)	UO ₂ (gm)	Stack Length (in.)
		UO ₂ (gm/cc)	UO ₂ + Gd ₂ O ₃ (gm/cc)				
1	38	10 42	—	10 32	0	3125	140
2	14	10 42	—	10 32	0	3125	140
3	4	10 42	—	10 32	0	3125	140
4	1	10 42	—	10 32	0	3125	140
5	5	—	10 33	10 23	63	3037	140
WR, WS	2	—	—	—	0	0	—
ENDS	62	10 42	—	10 32	0	223	10

Pellet o d = 0 410 inch all rods

Cladding = Zircaloy-2, 0 483-inch o d x 0.032-inch wall, all fueled rods

Zircaloy-2, 0 591-inch o d x 0 030-inch wall, water rods

Gas Plenum Length = 9 48 inches

Gd₂O₃ in rod type 5 runs full 140 inches

Water rods have holes drilled top and bottom to provide water flow and little or no boiling

WS rod is also spacer positioning rod

*Each fuel rod contains three axial zones see Figures 8 and 9

Table 10
FUEL ASSEMBLY HARDWARE WEIGHTS

	7 x 7 Initial Assemblies		8 x 8 Reload Assemblies		LTA Reload Assemblies	
Spacers	Quantity	Pounds	Quantity	Pounds	Quantity	Pounds
Zircaloy-4	7	3.757	7	4.299	7	4.299
Inconel	112	0.717	112	0.717	112	0.717
End Plugs						
Zircaloy-2	98	3.565	128	4.098	128	5.260
Lower Tie Plate						
Type-304 Stainless Steel	1	9.612	1	10.545	1	10.545
Inconel Finger Springs	4	0.106	4	0.106	4	0.106
Upper Tie Plate Assembly with Hardware						
Type-304 Stainless Steel	1	4.222	1	4.409	1	4.409
Fission Gas Plenum						
Spring, Type-302 Stainless Steel	49	4.073	63	4.151	62	2.425
Getter, Zirconium Alloy	49	0.972	63	1.360	62	1.338

Wt % Alloy Compositions for Nuclear Analyses

Metal	Zircaloy-2	Zircaloy-4	Type-304 Stainless Steel	Inconel-X
Zr	98.30	98.24		
Fe	0.14	0.21	67.34	9.0
Sn	1.40	1.45		
Ni	0.06		9.50	70.0
Cr	0.10	0.10	19.50	16.77
Ti				2.50
Mn			1.50	0.50
C			0.08	0.03
Si			2.00	0.30
S			0.04	
P			0.04	
Al				0.90

Spacer Placement

There are seven spacers in the initial and reload fuel assemblies. Their center positions above the bottom of the active fuel in inches are 18.9, 39.0, 59.2, 79.3, 99.5, 119.6, and 139.7. Each spacer is 1.625 inches long.

Table 11
CONTROL ROD DATA

Movable Control Rods

Shape.....	Cruciform
Pitch, in.....	12.0
Stroke, in.....	144
Control Length, in.....	143.0
Control Material.....	B ₄ C granules in Type-304 stainless steel tubes and sheath
Material Density.....	70% of Theoretical
Number of Control Material	
Tubes per Rod.....	84
Tube Dimensions.....	0.188 in. o.d. by 0.025 in. wall
Control Blade Half Span, in.	4.875
Control Blade Full Thickness, in.....	0.3120
Control Blade Tip Radius, in.....	0.156
Sheath Thickness, in.....	0.056
Central Structure Wing Length, in.....	0.7815
Blank Tubes per Wing.....	None
(Adjacent to Central Structure)	

Control Blade Position

Control blade insertion is calibrated in notches, where one notch equals 3 inches. Position of the control blade is described by the number of notches withdrawn. Thus, 0 notch implies full insertion and 48 notches implies full withdrawal. Total travel of the control blade is 144 inches, the same as the length of the active fuel. At full blade insertion (0 notch), the top of the control material is 1 inch below the top of the active fuel. At full blade withdrawal, the top of the control material is 1 inch below the bottom of the active fuel. Since the physical notches in the control rod drive are 6 inches apart, the control blade notch position is always even. For the control patterns shown, the numbers shown indicate notches withdrawn and no notch number implies a fully withdrawn blade or a notch position of 48 for power operating patterns and a fully inserted blade or a notch position of 00 for cold critical patterns.

Table 12
CORE DESCRIPTION

	Cycle 1	Cycle 2
Total Number of Fuel Assemblies	764	764
Number of Fuel Assembly Types.....	3	6
Number of Fuel Assemblies of Each Type	See Table 3	See Table 3
Total Number of Control Elements	185	185
Number of Control Element Types.....	1	1
Number of Control Elements of Each Type	185	185
Total Number of In-core Flux Monitors.....	43	43
Heat Transfer Surface Area, ft ²	66,214	68,266
Average Linear Heat Rate, kw/ft.....	7.037	6.574
Total Weight of U in Core, short tons.....	159.2	156.7
Core		
Core Lattice Pitch, in	12.0	12.0
Water/UO ₂ Volume Ratio (cold).....	2.51	2.54

Table 13
CYCLE 1 BUNDLE TYPES AND IDENTIFICATION

PH 001 to PH 168	7 x 7	UO ₂	1.10 wt %	Type 1 Fuel Without Gd ₂ O ₃
PH 169 to PH 431	7 x 7	UO ₂	2.50 wt %	Type 2 With Gd ₂ O ₃ in 4 Rods
PH 432 to PH 764	7 x 7	UO ₂	2.50 wt %	Type 3 With Gd ₂ O ₃ in 5 Rods

Table 13
CYCLE 1 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION															
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															

TYPE 1 AND 2 IN OUTER REGION
TYPE 1 AND 3 IN INNER REGION
SEE FIGURE 22 FOR TYPE 1 LOCATIONS

Table 13
CYCLE 1 BUNDLE TYPES AND IDENTIFICATION (Continued)

		BUNDLE IDENTIFICATION																	
I	J	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
1	PH 229	PH 350	PH 225	PH 347	PH 221	PH 343	PH 216												
2	PH 296	PH 402	PH 292	PH 160	PH 288	PH 393	PH 283	PH 392											
3	PH 194	PH 322	PH 190	PH 319	PH 186	PH 316	PH 182	PH 314	PH 178	PH 375									
4	PH 268	PH 377	PH 108	PH 072	PH 260	PH 427	PH 110	PH 073	PH 254	PH 413									
5	PH 575	PH 561	PH 152	PH 035	PH 586	PH 555	PH 124	PH 039	PH 170	PH 040	PH 175								
6	PH 742	PH 657	PH 739	PH 653	PH 736	PH 649	PH 733	PH 647	PH 246	PH 411	PH 109	PH 389	PH 280						
7	PH 544	PH 515	PH 536	PH 512	PH 509	PH 489	PH 501	PH 529	PH 574	PH 307	PH 172	PH 336	PH 209						
8	PH 717	PH 636	PH 085	PH 060	PH 711	PH 632	PH 087	PH 080	PH 728	PH 760	PH 111	PH 167	PH 277	PH 420					
9	PH 504	PH 474	PH 136	PH 007	PH 496	PH 485	PH 127	PH 004	PH 583	PH 761	PH 142	PH 024	PH 205	PH 365	PH 240				
10	PH 696	PH 612	PH 693	PH 608	PH 690	PH 627	PH 704	PH 643	PH 726	PH 753	PH 750	PH 384	PH 275	PH 419	PH 366				
11	PH 453	PH 439	PH 464	PH 447	PH 467	PH 483	PH 510	PH 523	PH 539	PH 570	PH 581	PH 330	PH 201	PH 361	PH 236				
12	PH 442	PH 600	PH 097	PH 049	PH 686	PH 623	PH 118	PH 058	PH 722	PH 668	PH 113	PH 063	PH 271	PH 157	PH 302				
13	PH 460	PH 437	PH 137	PH 011	PH 459	PH 479	PH 150	PH 010	PH 550	PH 566	PH 146	PH 028	PH 197	PH 357	PH 232				
14	PH 676	PH 596	PH 675	PH 603	PH 684	PH 619	PH 698	PH 639	PH 720	PH 664	PH 744	PH 380	PH 269	PH 408	PH 299				
15	PH 452	PH 436	PH 458	PH 441	PH 470	PH 477	PH 589	PH 517	PH 542	PH 564	PH 573	PH 324	PH 193	PH 353	PH 228				
16	PH 671	PH 595	PH 100	PH 057	PH 680	PH 615	PH 091	PH 054	PH 716	PH 660	PH 115	PH 067	PH 265	PH 159	PH 295				
17	PH 456	PH 435	PH 140	PH 015	PH 462	PH 473	PH 135	PH 012	PH 534	PH 560	PH 154	PH 032	PH 189	PH 164	PH 224				
18	PH 673	PH 594	PH 674	PH 599	PH 678	PH 611	PH 692	PH 635	PH 714	PH 656	PH 738	PH 376	PH 263	PH 400	PH 291				
19	PH 457	PH 446	PH 465	PH 450	PH 492	PH 451	PH 494	PH 491	PH 507	PH 558	PH 584	PH 318	PH 185	PH 346	PH 220				
20	PH 683	PH 606	PH 096	PH 043	PH 689	PH 607	PH 093	PH 041	PH 745	PH 661	PH 117	PH 071	PH 259	PH 161	PH 287				
21	PH 508	PH 482	PH 130	PH 018	PH 497	PH 488	PH 126	PH 016	PH 533	PH 518	PH 123	PH 036	PH 181	PH 162	PH 215				
22	PH 697	PH 622	PH 758	PH 626	PH 703	PH 630	PH 707	PH 631	PH 708	PH 648	PH 732	PH 425	PH 257	PH 391	PH 282				
23	PH 548	PH 522	PH 537	PH 526	PH 545	PH 528	PH 572	PH 552	PH 580	PH 553	PH 169	PH 313	PH 177	PH 342					
24	PH 719	PH 642	PH 089	PH 046	PH 725	PH 646	PH 082	PH 075	PH 731	PH 401	PH 119	PH 076	PH 253						
25	PH 579	PH 569	PH 131	PH 008	PH 587	PH 764	PH 149	PH 021	PH 174	PH 311	PH 125	PH 312	PH 245						
26	PH 743	PH 667	PH 747	PH 751	PH 749	PH 645	PH 710	PH 409	PH 248	PH 421	PH 252								
27	PH 196	PH 329	PH 200	PH 333	PH 204	PH 335	PH 208	PH 339	PH 212	PH 341									
28	PH 268	PH 383	PH 103	PH 062	PH 274	PH 387	PH 101	PH 163	PH 279	PH 390									
29	PH 231	PH 360	PH 235	PH 364	PH 239	PH 371	PH 244	PH 373											
30	PH 298	PH 412	PH 301	PH 418	PH 305	PH 428	PH 374												

TYPE 1 AND 2 IN OUTER REGION
TYPE 1 AND 3 IN INNER REGION
SEE FIGURE 22 FOR TYPE 1 LOCATIONS

CYCLE 2 BUNDLE TYPES AND IDENTIFICATION

PH 169 to PH 431	7 x 7	UO ₂	2.50 wt %	Type 2 With Gd ₂ O ₃ in 4 Rods
PH 432 to PH 764	7 x 7	UO ₂	2.50 wt %	Type 3 With Gd ₂ O ₃ in 5 Rods
LJ3213 to LJ3280	8 x 8	UO ₂	2.74 wt %	Type 4 With 3% Gd ₂ O ₃ in 5 Rods
LJ3098 to LJ3212, LJ3454	8 x 8	UO ₂	2.74 wt %	Type 5 With 2% Gd ₂ O ₃ in 5 Rods
LJLTA1 to LJLTA4	} 8 x 8	UO ₂	2.73 wt %	Type 6 With 2% Gd ₂ O ₃ in 5 Rods
		UO ₂	0.71 wt %	in center, and No Gd ₂ O ₃ in ends

Table 14
CYCLE 2 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															

Table 14
CYCLE 2 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	PH 229	PH 389	PH 178	PH 347	PH 221	PH 343	PH 445								
2	LJ3102	LJ3103	PH 375	LJ3104	PH 216	LJ3105	PH 420	PH 355							
3	PH 194	PH 254	LJ3109	PH 314	LJ3110	PH 182	LJ3111	PH 620	PH 657	PH 292					
4	PH 377	PH 763	PH 711	PH 260	PH 690	PH 402	PH 496	LJ3113	PH 359	PH 413					
5	LJ3214	PH 561	LJ3118	PH 586	LJ3119	PH 555	LJ3120	PH 574	LJ3121	PH 170	PH 649				
6	PH 567	PH 270	PH 739	PH 186	PH 509	PH 319	PH 733	PH 288	PH 529	LJ3123	PH 198	PH 407	PH 353		
7	PH 316	PH 515	LJ3216	PH 653	LJ3128	PH 489	LJ3129	PH 246	LJLTA4	PH 728	LJ3131	PH 294	PH 477		
8	PH 636	PH 717	PH 453	PH 272	PH 504	PH 447	PH 627	PH 411	PH 307	PH 393	PH 583	LJ3133	PH 753	PH 365	
9	LJ3221	PH 474	LJ3222	PH 736	LJ3223	PH 485	LJ3224	PH 647	LJ3137	PH 761	LJ3138	PH 523	LJ3139	PH 362	PH 674
10	PH 696	PH 722	PH 693	PH 608	PH 510	PH 550	PH 629	PH 275	PH 726	PH 172	PH 750	PH 205	PH 408	LJ3141	PH 366
11	PH 467	PH 521	LJ3228	PH 464	LJ3229	PH 483	LJ3230	PH 760	LJ3145	PH 570	LJ3146	PH 539	LJ3147	PH 240	PH 236
12	PH 501	PH 603	PH 600	PH 269	PH 433	PH 459	PH 623	PH 197	PH 581	PH 271	PH 384	PH 330	PH 277	LJ3149	PH 302
13	LJ3236	PH 437	LJ3237	PH 490	LJ3238	PH 632	LJ3239	PH 668	LJ3240	PH 566	LJ3152	PH 643	LJ3153	PH 280	PH 209
14	PH 672	PH 441	PH 650	PH 720	PH 645	PH 573	PH 698	PH 764	PH 673	PH 201	PH 744	PH 380	PH 419	LJ3155	PH 175
15	PH 452	PH 436	LJ3244	PH 479	PH 534	PH 470	LJ3245	PH 589	PH 542	PH 664	LJ3246	PH 564	PH 193	LJ3157	PH 226
16	PH 597	PH 595	LJ3250	PH 458	PH 680	PH 615	LJ3251	PH 692	PH 716	PH 399	LJ3252	PH 461	PH 265	LJ3159	PH 295
17	PH 456	PH 465	PH 435	PH 599	PH 596	PH 660	PH 553	PH 635	PH 171	PH 686	PH 676	PH 745	PH 346	LJ3161	PH 224
18	LJ3258	PH 592	LJ3259	PH 488	LJ3260	PH 611	LJ3261	PH 558	LJ3262	PH 656	LJ3164	PH 507	LJ3165	PH 245	PH 291
19	PH 518	PH 497	PH 658	PH 318	PH 710	PH 425	PH 494	PH 491	PH 584	PH 189	PH 376	PH 707	PH 244	LJ3167	PH 220
20	PH 492	PH 612	LJ3266	PH 528	LJ3267	PH 451	LJ3268	PH 661	LJ3171	PH 683	LJ3172	PH 731	LJ3173	PH 374	PH 299
21	PH 508	PH 719	PH 638	PH 339	PH 607	PH 311	PH 580	PH 230	PH 708	PH 185	PH 533	PH 259	PH 181	LJ3175	PH 287
22	LJ3273	PH 540	LJ3274	PH 587	LJ3275	PH 732	LJ3276	PH 552	LJ3179	PH 648	LJ3180	PH 387	LJ3181	PH 215	PH 184
23	PH 329	PH 274	PH 537	PH 526	PH 545	PH 450	PH 572	PH 313	PH 631	PH 219	PH 169	LJ3183	PH 335	PH 391	
24	PH 263	PH 642	LJ3278	PH 751	LJ3188	PH 646	LJ3189	PH 758	LJLTA1	PH 593	LJ3191	PH 341	PH 622		
25	PH 749	PH 689	PH 196	PH 360	PH 725	PH 231	PH 626	PH 400	PH 685	LJ3193	PH 235	PH 301	PH 257		
26	LJ3280	PH 480	LJ3198	PH 548	LJ3199	PH 383	LJ3200	PH 409	LJ3201	PH 421	PH 614				
27	PH 379	PH 606	PH 200	PH 333	PH 204	PH 212	PH 208	LJ3203	PH 298	PH 279					
28	PH 356	PH 336	LJ3207	PH 177	LJ3208	PH 239	LJ3209	PH 446	PH 569	PH 361					
29	LJ3185	LJ3190	PH 282	LJ3130	PH 390	LJ3454	PH 373	PH 412							
30	PH 418	PH 312	PH 252	PH 253	PH 305	PH 428	PH 747								

Table 15
REFERENCE DESIGN INFORMATION

Rated Core Thermal Power, MW	3293
Rated Core Total Flow Rate, Mlb/hr	102.5
Bypass Flow Rate, Fraction of Total Core Flow	Figures 54 to 55
Fraction of Core Thermal Power Passing Through Fuel Cladding	0.96
Approximate Bypass Coolant Total Power Fraction	0.02
Approximate Active Coolant Total Power Fraction	0.02
Approximate Channel Wall Direct Heating Fraction	0.0075
Design Minimum Critical Power Ratio for 7x7 Assemblies (Cycle 2)	≥1.28
Design Minimum Critical Power Ratio for 8x8 Assemblies (Cycle 2)	≥1.31
Design Overpower for Turbine-Generator System	105% Rated Steam Flow
Turbine Inlet Pressure, psia	965
Rated Reactor Dome Pressure, psia	1020
Rated Steam Flow Rate, Mlb/hr	13.381
Steam Moisture Content, Fraction	0.001
Rated Steam Dryer and Separator Pressure Drop, psi	15
Rated Core Pressure, psia	1035
Core Pressure Drop at Rated Conditions, psi	22
Approximate Core Inlet Pressure, psia	1050
Core Inlet Enthalpy, Btu/lb	521.3
Enthalpy Rise Across Core, Btu/lb (Average)	109.6
Core Support Plate Pressure Drop, psi	18
Core Orifice and Lower Tie Plate Pressure Drop	Figures 48 to 53
Fuel Bundle Pressure Drop	Figures 44 to 47
Reactor Average Exit Quality At Rated Conditions	0.129
Design Hot Channel Active Coolant Exit Quality	0.25
Design Bypass Coolant Exit Quality	0.0
Total Feedwater Flow Rate, Mlb/hr	13.331
Feedwater Temperature, °F	376.1
Control Rod Drive Flow Rate, lb/hr	50000
Control Rod Drive Flow Temperature, °F	80
Cleanup Demineralizer Flow Rate, lb/hr	133300
Cleanup Demineralizer Inlet Temperature, °F	528
Cleanup Demineralizer Outlet Temperature, °F	431
Location of Demineralized Water Return	Feedwater Line
Jet Pump Design M Ratio	1.96
Jet Pump Design N Ratio	0.16
Number of Recirculation Loops	2
Recirculation Pump Type	Centrifugal
Recirculation Pump Rated Flow, Mlb/Hr	17.1
Total Developed Pump Head, ft	710
Recirculation Pump Efficiency, Percent	87
Head Loss From Vessel Recirculation Outlet to Vessel Inlet, ft	59
Head Loss From Vessel Recirculation Inlet to Jet Pump 180° Bend Entrance, ft	11

Table 16
BURN STEP INFORMATION

Exposure Interval (MWd/t)	Control Rod Sequence Cycle 1	Reactor Data From Data Set Number
0 to 230	A	1
230 to 390	A	2
390 to 439	A	2
439 to 648	B	3
648 to 741	A	4
741 to 1010	A	5
1010 to 1251	A	5
1251 to 1585	A	6
1585 to 2080	B	7
2080 to 2555	B	8
2555 to 2630	B	8
2630 to 2920	A	9
2920 to 3120	A	9
3120 to 3542	A	10
3542 to 3724	A	10
3724 to 4364	B	11
4364 to 4525	B	11
4525 to 4697	A	12
4697 to 4880	A	12
4880 to 5262	A	13
5262 to 5352	A	13
5352 to 5640	B	14
5640 to 6106	B	15
6106 to 6470	B	16
6470 to 6530	B	16
6530 to 7000	A	17
7000 to 7300	A	18
7300 to 7712	A	19
7712 to 8100	B	20
8100 to 8430	B	21
8430 to 8766	B	22
8766 to 9190	B	22
9190 to 9295	A	23
9295 to 9520	A	23
9520 to 10100	A	24
Cycle 2		
7974 to 8025	A	25
8025 to 8042	A	25
8042 to 8264	B	26
8264 to 8706	B	26
8706 to 9035	A	27
9035 to 9500	A	27
9500 to 9730	A	28
9730 to 10050	B	29
10050 to 10395	B	29

Table 16
BURN STEP INFORMATION (Continued)

10395 to 10730	A	30
10730 to 11030	A	30
11030 to 11092	A	31
11092 to 11260	B	32
11260 to 11420	B	32
11420 to 11570	B	33
11570 to 11630	B	34
11630 to 11910	B	35
11910 to 12070	B	35
12070 to 12190	A	36
12190 to 12530	A	37
12530 to 12800	A	37

1.10 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

2	1	1 ^T	1	1 ^T	1	1
1	1	1	2	1	1	1
1 ^T	1	2	2	2	2	1 ^T
1	2	2	2 ^S	2	2	1
1 ^T	1	2	2	2	2	1 ^T
1	1	2	2	2	1	1
1	1	1 ^T	1	1 ^T	1	1

ROD TYPE	U-235 (wt%)	Gd ₂ O ₃ (wt%)	NO. OF RODS
1	1.33	0	31
2	0.71	0	18

S = SPACER POSITIONING ROD
T = TIE ROD

Figure 1. Bundle Design for Type 1 Initial Fuel

2.50 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

4	3	3 ^T	2	2 ^T	2	3
3	2	1	1	1	1	2
3 ^T	1	5A	1	1	5A	1 ^T
2	1	1	1 ^S	1	1	1
2 ^T	1	1	1	6B	1	1 ^T
2	1	5A	1	1	1	2
3	2	1 ^T	1	1 ^T	2	2

ROD TYPE	U-235 (wt%)	Gd ₂ O ₃ (wt%)	NO. OF RODS
1	2.93	0	26
2	1.94	0	12
3	1.69	0	6
4	1.33	0	1
5A	2.93	3.0	3
6B	2.93	3.0	1

S = SPACER POSITIONING ROD
T = TIE ROD

Figure 2. Bundle Design for Type 2 Initial Fuel

Figure 3. Spatial Gd_2O_3 Variation Initial Type 2 Fuel Rods

2.50wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

4	3	3 ^T	2	2 ^T	2	3
3	8D	1	1	1	1	2
3 ^T	1	1	1	1	5A	1 ^T
2	1	1	6C ^S	1	1	1
2 ^T	1	1	1	1	1	1 ^T
2	1	5A	1	1	7E	2
3	2	1 ^T	1	1 ^T	2	2

ROD TYPE	U-235 (wt%)	Gd ₂ O ₃ (wt%)	NO. OF RODS
1	2.93	0	26
2	1.94	0	11
3	1.69	0	6
4	1.33	0	1
5A	2.93	3.0	2
6C	2.93	3.0	1
7E	2.93	4.0	1
8D	1.94	4.0	1

S = SPACER POSITIONING ROD
T = TIE ROD

Figure 4. Bundle Design for Type 3 Initial Fuel

WIDE-WIDE CORNER

4	3	T 2	2	2	T 2	2	3
3	2	1	G 5	1	1	1	2
T 2	1	1	1	1	1	G 5	T 1
2	G 5	1	1	1	1	1	1
2	1	1	1	WS	1	1	1
T 2	1	1	1	1	1	1	T 1
2	1	G 5	1	1	1	G 5	1
3	2	T 1	1	1	T 1	1	2

ROD TYPE	ENRICHMENT wt% U-235	Gd ₂ O ₃ wt%	NUMBER OF RODS
1	3.01	0	39
2	2.22	0	14
3	1.87	0	4
4	1.45	0	1
5	3.01	3.0	5
WS	—	0	1

WS — SPACER POSITIONING WATER ROD
T — TIE RODS
G — GADOLINIUM RODS

Figure 6. Bundle Design for Type 4 8x8 UO₂ Reload

WIDE WIDE CORNER

4	3	2 ^T	2	2	2 ^T	2	3
3	2	1	5 ^G	1	1	1	2
2 ^T	1	1	1	1	1	5 ^G	1 ^T
2	5 ^G	1	1	1	1	1	1
2	1	1	1	WS	1	1	1
2 ^T	1	1	1	1	1	1	1 ^T
2	1	5 ^G	1	1	1	5 ^G	1
3	2	1 ^T	1	1	1 ^T	1	2

ROD TYPE	ENRICHMENT wt% U 235	Gd ₂ O ₃ wt%	NUMBER OF RODS
1	3 01	0	39
2	2 22	0	14
3	1 87	0	4
4	1 45	0	1
5	3 01	2 0	5
WS	—	0	1

WS — SPACER POSITIONING WATER ROD
T — TIE RODS
G — GADOLINIUM RODS

Figure 7 Bundle Design for Type 5 8x8 UO₂ Reload

WIDE-WIDE CORNER

4	3	2 ^T	2	2	2 ^T	2	3
3	2	1	5 ^G	1	1	1	2
2 ^T	1	1	1	1	1	5 ^G	1 ^T
2	5 ^G	1	1	WR	1	1	1
2	1	1	WS	1	1	1	1
2 ^T	1	1	1	1	1	1	1 ^T
2	1	5 ^G	1	1	1	5 ^G	1
3	2	1 ^T	1	1	1 ^T	1	2

*NATURAL UO₂ LOCATED IN END ZONES, 62 RODS. SEE FIGURE 9.

ROD TYPE	ENRICHMENT wt% U-235	Gd ₂ O ₃ wt%	NUMBER OF RODS
1	3.01	0	38
2	2.22	0	14
3	1.87	0	4
4	1.45	0	1
5	3.01	2.0	5
WS	—	0	1
WR	—	0	1

WS — SPACER POSITIONING WATER ROD

WR — WATER ROD

T — TIE RODS

G — GADOLINIUM RODS

Figure 8. Bundle Design for Type 6 8x8 UO₂ Reload, LTA

Figure 9. Lead Test Assembly U-235 Enrichment Axial Profile

DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.375		0.080	0.175	0.1435	0.738		
DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.187							0.380	

Figure 10. Initial Fuel Assembly Lattice

DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.355		0.100	0.147	0.153	0.640		

DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.167							0.380	

Figure 11. Reload Fuel Assembly Lattice for 100 mil Channels

DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.335		0.120	0.147	0.153	0.640		

DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.147							0.380	

Figure 12. Reload Fuel Assembly Lattice for 120 mil Channels

DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.355		0.100	0.157	0.158	0.640		
DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.167							0.380	

Figure 13. Reload Fuel Assembly Lattice for LTA Assemblies

Figure 15 Fuel Assembly Drawing for Initial Core Fuel (Continued)

Figure 17 Fuel Assembly Drawing for LTA Reload Fuel

Figure 18 Typical Fuel Rod

Figure 19 Spacer Positioning Rod for Type 3 Initial Fuel

Figure 20 Channel Outline Drawing for Use With Initial Fuel

Figure 21. Channel Outline Drawing for Use With 8x8 Reload Fuel

Figure 22. B₄C Control Blade Model (Schematic)

Figure 23. Core Orificing and TIP System Arrangement

Figure 24. Elevation of Core Components

Figure 26. Shroud Drawing

Figure 27 Top Guide Drawing

Figure 28. Steam Separator Outline Drawing

Figure 29 Steam Dryer Drawing

Figure 30. Feedwater Sparger Outline

Figure 31 Orificed Fuel Support

Figure 33. Recirculation Loop Piping

Figure 35. Primary Steam Piping (Continued)

Figure 37. Main Steam and Bypass Line Piping

Figure 39. Reactor Primary System Weights and Volumes

Figure 40. Reactor Primary System Weights and Volumes (Continued)

Figure 41. Recirculation Pump Characteristics at Rated Pump Speed

Figure 42. Recirculation Pump Characteristics at Various Pump Speeds

Figure 43. TIP/LPRM In-Core Assembly Cross Section

Figure 44. Flow Characteristics 7x7 Fuel Assemblies, 20 Btu/lb Subcooling

Figure 45. Flow Characteristics 7x7 Fuel Assemblies, 30 Btu/lb Subcooling

Figure 46. Flow Characteristics 8x8 Fuel Assemblies, 20 Btu/lb Subcooling

Figure 47. Flow Characteristics 8x8 Fuel Assemblies, 30 Btu/lb Subcooling

Figure 48 1 469 in Orifice Diameter, 20 Btu/lb Subcooling

Figure 49. 1.469 in Orifice Diameter, 30 Btu/lb Subcooling

Figure 50. 2.211 in Orifice Diameter, 20 Btu/lb Subcooling

Figure 51. 2.211 in Orifice Diameter, 30 Btu/lb Subcooling

Figure 52. 2.211 in Orifice Diameter With Orificed Lower Tie Plate, 20 Btu/lb Subcooling

Figure 53. 2.211 in Orifice Diameter With Orificed Lower Tie Plate, 30 Btu/lb Subcooling

Figure 54. Core Bypass Flow for Cycle 1

Figure 55. Core Bypass Flow for Cycle 2

Figure 56. Peach Bottom 2 Control Rod A Sequence Groups 1-8

Figure 57. Peach Bottom 2 Control Rod A1 Sequence Groups 9-21

Figure 58. Peach Bottom 2 Control Rod A2 Sequence Groups 9-21

Figure 59. Peach Bottom 2 Control Rod B Sequence Groups 1-6

Figure 60. Peach Bottom 2 Control Rod B1 Sequence Groups 7-21

Figure 61. Peach Bottom 2 Control Rod B2 Sequence Groups 7-22

Figure 62. Core Flow Measurement System Schematic Showing One of Four Groups of Jet Pumps

Figure 63. Data Summaries, January 1974

Figure 64. Data Summaries, February 1974

Figure 65. Data Summaries, March 1974

Figure 66. Data Summaries, April 1974

Figure 67. Data Summaries, May 1974

Figure 68. Data Summaries, June 1974

Figure 69. Data Summaries, July 1974

Figure 70. Data Summaries, August 1974

Figure 71. Data Summaries, September 1974

Figure 72. Data Summaries, October 1974

Figure 73. Data Summaries, November 1974

Figure 74. Data Summaries, December 1974

Figure 75. Data Summaries, January 1975

Figure 76. Data Summaries, February 1975

Figure 77. Data Summaries, March 1975

Figure 78. Data Summaries, April 1975

Figure 79. Data Summaries, May 1975

Figure 80. Data Summaries, June 1975

Figure 81. Data Summaries, July 1975

Figure 82. Data Summaries, August 1975

Figure 83. Data Summaries, September 1975

Figure 84. Data Summaries, October 1975

Figure 85. Data Summaries, November 1975

Figure 86. Data Summaries, December 1975

Figure 87. Data Summaries, January 1976

Figure 88. Data Summaries, February 1976

Figure 89. Data Summaries, March 1976

Figure 90. Data Summaries, June 1976

Figure 91. Data Summaries, July 1976

Figure 92. Data Summaries, August 1976

Figure 93. Data Summaries, September 1976

Figure 94. Data Summaries, October 1976

Figure 95. Data Summaries, November 1976

Figure 96. Data Summaries, December 1976

Figure 97. Data Summaries, January 1977

Figure 98. Data Summaries, February 1977

Figure 99. Data Summaries, March 1977

Figure 100. Data Summaries, April 1977

CYCLE 1 DATA

DATASET 01, APRIL 5, 1974

Reactor Conditions

Core Average Exposure, 230 MWd/t
 Core Thermal Power, 1835 MWT
 Dome Pressure, P, 973 psia
 Core Flow, 105.9 Mlb/hr
 Inlet Subcooling at P, 14.2 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	8.	48.	38.	48.	8.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	38.	48.	4.	48.	38.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	8.	48.	38.	48.	4.	48.	38.	48.	4.	48.	38.	48.	8.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	4.	48.	38.	48.	10.	48.	38.	48.	4.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	8.	48.	38.	48.	4.	48.	38.	48.	4.	48.	38.	48.	8.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	38.	48.	4.	48.	38.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	8.	48.	38.	48.	8.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
 See Figure 22

16	9	32.0	49.8	57.8	67.6	71.8	72.7	69.4	65.9	59.2	54.4	53.2	55.3
		55.2	54.6	57.5	59.6	55.3	56.0	55.0	50.6	45.4	40.6	27.3	18.8
24	9	27.9	44.0	53.1	63.7	69.0	72.0	71.1	67.2	58.5	55.9	55.4	55.6
		57.6	58.3	63.6	66.6	63.5	63.9	63.0	61.5	57.9	54.2	38.1	26.2
32	9	28.0	43.9	53.4	65.2	74.3	81.3	81.0	79.1	70.3	65.3	64.5	65.2
		66.4	67.3	71.6	74.4	69.3	69.1	69.1	63.0	56.5	51.5	34.9	22.6
40	9	29.2	46.4	55.3	65.4	70.9	72.7	70.8	67.9	59.9	54.5	55.1	55.3
		56.3	56.8	62.1	65.0	59.7	61.7	62.0	58.1	56.3	51.9	35.4	23.8
48	9	24.0	37.2	44.1	53.7	57.7	58.1	57.6	56.4	53.0	50.5	51.3	52.2
		53.4	53.6	52.9	53.6	49.9	49.2	47.1	42.2	36.3	31.5	20.3	12.9
817		36.4	52.9	60.7	70.5	74.5	74.3	72.7	69.1	63.2	59.5	60.1	61.5
		62.2	62.9	66.3	67.3	63.0	63.2	61.2	54.9	49.5	43.1	26.6	17.9
1617		39.3	57.1	67.8	82.6	92.2	95.2	92.9	83.2	68.5	62.3	60.4	58.2
		59.3	63.1	70.1	74.2	70.0	71.4	70.5	64.4	60.7	52.6	33.8	23.2
2417		36.5	56.3	68.3	82.1	90.8	94.9	92.2	82.1	66.0	58.7	56.8	56.4
		56.6	58.9	68.7	71.4	70.7	72.7	72.7	69.6	64.1	58.9	40.0	27.7
3217		38.9	57.1	67.1	79.2	83.0	82.3	76.4	67.7	55.0	49.4	48.0	47.7
		47.8	52.0	59.0	63.1	60.3	63.1	63.6	60.2	56.7	53.1	35.8	24.9
4017		37.5	58.8	71.0	85.5	95.4	99.3	93.4	86.0	72.0	63.4	61.1	59.1
		59.8	63.5	71.0	76.7	72.4	74.3	73.4	67.7	63.7	58.0	38.0	23.4
4817		30.7	49.9	61.6	77.3	87.1	93.0	88.5	82.0	67.5	62.1	60.5	60.6
		60.4	61.8	69.4	73.0	70.1	71.2	68.4	63.5	58.3	52.7	35.3	22.5
5617		17.5	27.1	31.7	37.9	41.3	42.9	43.3	43.3	41.1	39.9	40.1	41.7
		43.1	43.8	43.5	42.2	40.6	40.7	38.0	34.8	30.8	27.1	17.4	11.1
825		32.8	48.2	56.7	67.7	72.4	72.2	71.6	66.7	60.0	56.5	56.4	56.3
		57.9	60.1	64.6	66.1	63.2	64.3	62.9	59.7	56.7	51.2	33.1	22.1
1625		44.2	61.5	72.6	84.9	91.8	91.8	87.5	74.8	62.5	55.9	55.9	55.5
		56.2	62.1	67.9	71.4	70.5	74.2	74.1	67.8	63.8	53.4	33.6	22.2

2425	39.7	61.2	73.0	85.0	90.1	89.6	81.6	72.0	57.2	51.1	49.9	50.0
	51.4	56.5	66.8	73.9	73.1	77.3	79.8	77.4	74.9	70.5	48.7	33.7
3225	40.0	60.9	72.4	87.0	94.4	96.8	89.8	79.4	64.1	56.9	54.6	54.2
	54.4	58.4	68.1	72.8	70.4	73.8	76.4	73.3	69.2	63.7	43.2	28.9
4025	39.5	60.6	71.2	83.6	86.4	85.2	79.4	70.8	56.6	51.1	48.5	48.0
	48.6	53.2	62.6	65.3	64.7	67.9	67.4	64.7	61.4	58.3	39.0	26.3
4825	33.7	52.6	63.3	77.4	85.9	91.2	87.7	80.0	64.2	57.0	55.8	54.7
	55.7	60.2	67.7	70.7	68.0	72.3	70.0	66.4	62.2	56.4	37.5	23.5
5625	16.1	26.1	31.3	39.1	44.1	47.6	48.1	49.0	46.6	46.7	47.9	48.1
	50.1	51.1	51.5	52.1	50.1	51.2	51.3	49.3	47.3	44.1	28.8	17.7
833	35.8	50.4	59.7	72.1	80.6	84.0	84.2	76.9	69.0	64.3	65.3	67.8
	68.0	71.4	74.6	74.8	70.3	70.6	68.5	61.0	56.1	46.8	29.0	18.7
1633	41.9	58.3	68.8	78.6	81.5	77.9	73.9	63.1	51.5	47.1	46.7	47.6
	47.5	54.6	61.0	62.9	61.7	63.7	64.1	60.4	56.9	47.5	30.8	21.6
2433	41.6	60.4	70.6	84.1	91.1	91.6	87.0	75.3	62.1	55.3	53.7	53.4
	52.6	60.0	67.9	73.3	71.9	76.3	77.5	73.6	70.1	60.4	39.1	26.9
3233	45.5	64.2	75.0	85.7	89.1	85.6	78.9	67.4	54.5	49.1	48.1	47.6
	48.1	53.4	62.1	66.9	67.0	72.8	80.1	77.5	75.9	65.0	40.6	28.7
4033	35.6	56.2	68.4	83.2	90.9	92.3	89.1	80.1	65.4	58.2	54.9	53.4
	53.8	55.8	65.2	72.2	70.7	72.1	74.5	70.4	67.2	62.1	42.6	28.3
4833	34.0	52.2	62.4	73.5	79.0	79.5	75.0	67.2	55.0	49.9	49.8	49.7
	50.6	54.5	60.9	64.1	62.6	63.9	63.4	59.7	56.8	52.0	35.2	21.9
5633	19.5	28.3	33.9	43.4	52.7	58.6	62.5	63.9	60.6	59.4	61.5	64.8
	63.8	64.4	64.2	63.4	58.1	57.1	54.9	49.0	43.4	36.7	22.4	15.2
841	35.5	50.8	59.1	69.1	73.6	74.5	72.3	66.6	59.3	56.3	56.0	57.0
	57.4	60.4	65.3	66.1	63.0	63.2	63.4	60.7	57.3	49.3	30.3	20.7
1641	35.9	56.1	68.2	84.3	93.4	99.4	94.5	88.0	71.4	64.2	61.7	61.6
	61.2	64.4	73.1	76.3	72.7	74.9	75.0	70.0	64.1	58.1	38.2	25.5
2441	39.3	57.1	67.7	77.2	81.6	79.7	74.8	65.0	53.4	48.1	46.9	45.7
	46.5	51.6	59.2	63.1	60.0	63.3	62.7	59.7	57.1	50.5	34.6	23.8
3241	40.9	59.9	71.4	84.0	91.5	91.5	86.7	75.9	62.8	55.5	53.8	53.2
	54.7	61.6	69.1	73.3	71.5	75.9	75.3	71.4	66.8	59.0	38.6	26.1
4041	39.5	60.9	72.0	84.7	90.1	88.8	82.4	73.4	59.3	53.7	52.3	52.0
	51.6	58.8	65.5	71.0	67.7	70.2	69.0	65.6	62.2	57.6	38.5	26.3
4841	37.5	55.1	65.9	81.9	88.9	91.3	85.9	77.7	64.9	59.9	58.3	58.0
	57.6	63.5	69.1	72.4	69.3	71.2	69.9	63.2	59.6	52.9	33.4	23.7
5641	20.9	29.6	33.9	40.1	43.7	44.8	46.0	45.7	44.5	43.4	44.2	45.6
	46.2	47.8	46.9	46.6	44.1	44.3	44.0	41.7	40.8	35.2	22.0	15.3
849	23.7	36.8	43.8	51.9	56.7	59.1	58.2	57.6	53.1	49.0	48.8	48.5
	50.3	50.1	50.3	51.0	48.2	48.3	46.0	39.8	35.2	30.3	19.5	12.4
1649	34.7	52.6	63.7	78.3	88.1	91.9	89.8	80.3	67.1	61.2	60.5	61.5
	60.7	64.6	72.6	74.1	70.7	72.8	69.9	63.7	57.8	50.9	31.5	20.1
2449	33.4	51.2	61.5	75.1	83.4	87.6	83.7	75.0	61.3	55.2	54.5	54.7
	54.3	59.5	66.6	70.7	68.9	69.8	70.4	64.7	61.2	54.7	35.1	23.4
3249	37.2	54.9	63.9	75.7	80.0	80.1	75.2	67.0	55.8	52.4	51.2	50.9
	50.7	58.1	63.7	65.5	61.4	65.8	63.7	60.2	57.5	52.6	33.9	24.8
4049	34.7	53.5	65.6	78.9	88.4	94.0	90.4	81.7	67.5	61.1	60.5	60.7
	61.6	65.1	73.8	78.8	77.4	79.7	79.2	75.7	71.4	63.1	41.6	27.3
4849	28.9	44.1	53.4	65.9	75.1	80.5	80.1	75.3	68.2	62.5	62.3	62.6
	63.6	64.4	66.0	68.0	62.9	63.6	60.4	53.6	48.8	42.7	26.2	17.9
1657	17.2	26.1	31.0	37.0	40.0	41.4	41.4	41.7	39.7	38.9	39.8	41.5
	42.1	42.6	42.4	42.8	40.5	40.3	39.1	34.8	31.2	26.4	16.5	10.5
2457	16.9	25.5	30.6	37.1	41.3	44.8	45.8	47.1	45.1	44.7	46.5	47.6
	49.0	50.4	49.6	50.6	46.8	47.2	46.2	43.4	41.3	37.4	23.6	15.9
3257	18.2	27.8	34.0	43.1	52.4	59.2	63.4	65.2	62.7	60.4	61.3	63.8
	65.5	65.1	63.6	63.5	59.1	59.5	55.8	49.3	43.6	37.2	23.1	14.7
4057	18.5	27.9	32.7	39.2	42.9	44.6	45.2	45.5	44.4	43.0	44.9	45.8
	47.3	48.5	48.2	47.4	45.1	46.1	45.5	43.8	41.9	36.7	23.4	14.9

CYCLE 1 DATA

DATASET 02, APRIL 25, 1974

Reactor Conditions

Core Average Exposure, 390 MWd/t

Core Thermal Power, 2603 MWT

Dome Pressure, P, 991 psia

Core Flow, 107.9 Mlb/hr

Inlet Subcooling at P, 18.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	34.	48.	14.	48.	34.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	34.	48.	12.	48.	38.	48.	12.	48.	34.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	34.	48.	14.	48.	38.	48.	14.	48.	38.	48.	14.	48.	34.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	34.	48.	12.	48.	38.	48.	12.	48.	34.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	34.	48.	14.	48.	34.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core

See Figure 22

16	9	33.9	47.2	55.1	64.2	66.2	66.6	69.2	64.3	58.2	55.1	55.9	58.6
		56.4	58.4	58.2	57.6	52.8	53.0	49.5	42.9	38.5	31.4	19.3	13.0
24	9	32.5	44.3	53.7	64.9	73.7	77.1	81.6	76.4	71.7	70.7	71.3	72.3
		69.0	75.3	77.2	75.2	71.9	71.4	66.0	57.4	51.3	41.2	25.8	17.9
32	9	29.8	41.7	49.2	59.2	65.8	68.4	76.3	76.5	72.8	70.1	73.4	74.6
		75.2	77.1	80.8	80.4	76.0	75.9	72.2	61.8	54.9	44.7	28.2	18.2
40	9	34.7	47.4	56.7	68.7	77.0	81.9	83.3	78.1	73.3	69.9	71.2	73.0
		71.9	75.9	75.5	73.7	69.5	68.3	63.9	54.8	49.2	38.0	22.9	16.2
48	9	20.9	33.2	39.2	48.0	52.4	55.5	55.1	55.6	52.1	48.6	50.4	50.1
		51.1	50.0	49.3	50.4	45.0	46.1	42.5	37.6	32.2	27.8	18.0	11.6
817		31.8	46.1	53.9	64.2	69.5	70.8	69.9	68.6	63.5	60.7	62.7	64.2
		63.5	65.0	65.6	66.4	61.2	60.8	58.3	50.2	43.8	38.1	23.6	15.9
1617		32.2	47.4	57.4	69.5	77.9	80.8	78.2	72.3	63.2	59.7	58.5	58.8
		58.5	63.2	69.6	71.4	69.2	70.4	69.6	62.5	57.6	50.1	31.4	20.8
2417		35.8	50.3	59.2	67.7	70.5	71.1	74.1	66.8	58.6	55.7	55.7	55.8
		58.0	64.6	71.6	75.7	76.5	79.3	79.5	72.0	68.3	56.3	34.8	24.4
3217		37.9	51.4	58.9	67.2	69.6	67.1	65.8	56.3	49.3	47.2	47.9	48.5
		50.7	59.5	66.4	70.1	76.0	81.3	80.5	74.4	69.3	55.5	34.0	25.1
4017		31.0	48.2	57.9	68.7	74.5	78.3	78.3	74.6	65.4	60.1	59.8	61.7
		61.6	66.0	73.8	77.3	74.6	77.2	77.1	73.4	66.3	59.6	37.6	23.8
4817		26.1	43.0	53.6	67.5	77.0	81.9	80.0	76.9	65.9	61.7	61.1	61.0
		61.9	61.6	69.6	72.6	68.6	67.8	66.3	60.4	53.2	48.5	31.8	19.7
5617		15.4	24.2	29.5	36.6	40.9	44.4	45.8	47.3	45.2	44.5	46.0	47.6
		47.3	46.2	45.6	45.3	41.3	41.0	37.9	32.8	28.2	23.8	15.0	9.7
825		28.1	42.2	50.0	62.0	72.7	81.4	84.3	81.5	75.3	72.6	73.6	74.1
		76.1	77.4	79.9	81.9	74.2	74.9	71.6	63.0	54.8	47.4	30.6	20.1
1625		36.3	50.6	59.1	67.8	70.8	70.4	73.1	66.0	57.5	54.7	55.4	56.5
		57.7	66.2	74.0	77.6	78.6	82.7	82.8	73.7	70.1	56.4	35.3	24.2

2425	40.1	55.2	65.1	74.7	76.6	74.2	68.8	58.2	50.3	46.0	46.9	49.8
	52.4	63.0	71.4	79.4	84.4	95.2	99.4	94.5	89.0	73.0	44.8	31.1
3225	40.6	55.9	66.5	77.5	83.3	80.5	77.7	64.4	54.8	50.1	50.5	51.0
	53.0	63.3	72.1	76.7	78.5	82.8	84.9	78.4	73.5	60.7	37.7	27.0
4025	33.0	49.6	58.4	69.5	72.5	71.7	67.8	60.6	50.2	46.2	46.5	46.9
	48.2	53.8	63.2	69.8	72.1	79.8	84.9	81.3	76.8	69.6	44.0	27.5
4825	28.1	43.1	52.1	64.3	70.2	73.2	75.0	74.2	63.5	59.7	60.4	60.3
	61.1	65.5	72.6	77.7	76.0	75.7	75.2	70.2	63.7	57.3	37.2	23.8
5625	14.2	23.1	28.8	38.3	47.7	57.3	63.3	69.2	69.1	66.2	66.7	66.2
	67.5	66.3	67.8	67.9	61.9	61.4	58.4	52.3	44.6	39.1	25.0	16.1
833	29.5	42.0	49.9	60.7	66.7	70.9	76.5	77.0	74.4	71.7	73.4	75.1
	73.8	79.1	81.3	81.2	75.4	75.7	71.9	62.1	55.9	46.2	28.6	19.2
1633	33.9	46.6	54.9	64.1	67.3	66.7	64.9	55.6	48.1	44.9	45.4	47.8
	48.4	57.9	65.5	70.8	74.2	80.7	81.2	76.6	70.6	56.2	34.3	23.3
2433	34.6	50.5	60.3	71.9	78.8	79.8	74.7	65.7	55.0	49.7	49.7	50.6
	52.2	60.7	69.7	76.0	77.0	83.3	86.4	81.3	75.4	64.7	41.2	26.7
3233	37.2	53.3	62.9	72.8	77.0	74.3	69.3	59.4	49.8	44.4	44.7	44.8
	47.0	55.2	63.6	73.0	76.1	85.8	88.6	83.4	78.3	67.9	42.7	29.8
4033	29.8	46.9	56.8	69.3	75.7	78.9	75.4	70.7	58.7	52.5	50.2	51.6
	53.7	56.2	67.4	75.7	75.8	81.1	83.5	80.4	76.2	68.2	46.6	29.1
4833	28.2	43.5	51.8	60.9	66.3	68.8	68.4	63.2	55.0	52.4	53.2	54.3
	55.2	59.0	66.9	73.7	75.8	80.5	80.7	75.4	69.1	61.3	40.3	24.7
5633	16.7	24.5	30.0	38.3	44.2	50.6	59.1	65.4	67.7	67.9	69.5	72.7
	71.4	70.6	69.9	68.1	60.4	61.2	56.8	48.4	41.1	34.4	21.0	14.7
841	30.9	44.5	53.4	66.1	75.8	80.3	82.2	78.2	72.5	68.3	70.8	71.4
	71.0	74.0	76.6	76.7	71.3	70.5	66.0	57.4	51.3	42.2	25.5	16.6
1641	29.3	45.6	55.6	67.2	72.1	75.7	76.8	75.7	66.3	62.0	61.0	61.4
	61.9	67.0	73.9	78.9	75.2	77.5	78.2	73.1	67.9	60.1	38.2	24.9
2441	32.0	47.1	56.0	65.0	67.6	67.7	64.2	56.9	48.0	44.6	44.9	45.1
	46.0	52.4	61.0	65.9	66.7	74.1	79.4	75.4	71.2	59.6	39.2	27.0
3241	34.1	49.3	58.3	70.4	75.6	77.7	75.0	66.1	56.1	50.9	50.3	52.1
	53.4	62.0	70.7	77.4	78.7	84.3	85.8	79.2	73.7	63.7	41.2	27.1
4041	32.9	49.8	58.9	68.7	72.3	73.1	70.3	63.3	55.1	50.9	50.9	51.3
	52.3	58.6	67.9	73.4	74.4	80.8	84.5	81.1	74.9	66.0	42.7	29.1
4841	31.7	46.7	56.2	67.4	74.4	77.8	79.1	73.4	65.3	61.3	62.0	64.1
	62.6	67.5	73.6	73.6	70.2	71.1	70.6	63.5	57.1	49.6	32.0	21.5
5641	19.0	28.2	34.1	43.0	52.1	59.9	65.1	66.0	62.8	59.0	59.4	59.7
	60.3	59.3	56.9	56.9	51.7	50.2	45.5	39.4	35.1	29.7	17.8	12.4
849	20.7	31.9	38.3	46.7	51.6	53.9	54.7	52.9	49.4	47.2	46.4	48.1
	48.7	46.9	47.9	48.0	45.2	44.5	41.6	36.2	31.4	26.9	17.0	10.8
1649	28.9	45.0	55.3	68.0	76.7	81.5	78.7	74.1	64.4	60.6	61.2	62.5
	62.9	66.0	72.7	74.9	68.5	69.9	68.4	61.4	54.9	46.3	29.1	18.9
2449	28.2	43.5	51.6	62.2	67.6	71.4	72.8	71.1	61.7	59.1	60.0	60.1
	60.7	66.3	73.9	78.3	74.3	76.2	77.2	70.0	62.6	54.6	34.6	23.0
3249	31.3	45.3	53.2	63.0	67.5	70.0	68.9	64.1	56.0	54.5	55.7	56.7
	56.4	61.4	69.5	75.0	74.7	81.6	80.5	74.0	68.6	60.9	38.1	26.6
4049	29.6	46.2	57.2	69.0	76.9	80.5	82.6	79.8	70.1	66.8	67.2	66.8
	68.0	72.1	81.5	86.4	83.3	82.7	80.5	75.6	68.3	59.4	38.5	25.2
4849	24.8	38.1	46.5	59.3	68.3	72.3	73.1	71.7	64.9	61.8	62.0	62.2
	60.2	62.0	63.3	64.6	59.1	57.9	55.9	49.2	43.2	37.5	23.8	16.2
1657	15.5	23.7	28.4	35.4	40.4	43.4	44.6	46.4	45.5	45.0	45.8	46.1
	46.1	44.8	45.3	46.1	41.8	41.5	38.9	33.4	28.4	24.1	14.8	9.4
2457	15.3	23.6	28.8	37.7	47.3	56.5	63.0	66.7	65.2	63.1	65.9	67.4
	66.2	65.3	65.8	63.8	57.8	56.6	52.6	45.3	38.2	32.4	19.9	12.5
3257	16.0	24.7	30.1	38.7	45.5	51.8	60.5	66.8	68.5	68.0	70.5	73.5
	73.1	73.3	71.2	70.5	62.7	62.4	58.1	48.6	42.4	34.9	21.1	13.6
4057	17.5	26.6	32.3	42.1	52.2	61.2	65.9	69.2	65.8	63.5	64.3	65.0
	63.5	62.8	63.4	62.5	55.8	55.6	52.2	44.3	38.5	31.4	19.5	12.1

CYCLE 1 DATA

DATASET 03, MAY 12, 1974

Reactor Conditions

Core Average Exposure, 648 MWd/t

Core Thermal Power, 2513 MWT

Dome Pressure, P, 1007 psia

Core Flow, 72.1 Mlb/hr

Inlet Subcooling at P, 28.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	40	48	40	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	38	48	32	48	32	48	38	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	38	48	14	48	40	48	40	48	14	48	38	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	30	48	38	48	16	48	16	48	38	48	30	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	38	48	14	48	40	48	40	48	14	48	38	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	38	48	32	48	32	48	38	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	40	48	40	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 04, MAY 26, 1974

Reactor Conditions

Core Average Exposure, 741 MWd/t
Core Thermal Power, 3164 MWT
Dome Pressure, P, 1009 psia
Core Flow, 107.7 Mlb/hr
Inlet Subcooling at P, 22.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	40.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	38.	48.	38.	48.	38.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	30.	48.	38.	48.	14.	48.	38.	48.	14.	48.	38.	48.	30.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	38.	48.	38.	48.	16.	48.	38.	48.	38.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	30.	48.	38.	48.	14.	48.	38.	48.	14.	48.	38.	48.	30.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	38.	48.	38.	48.	38.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16	9	38.6	53.0	61.3	69.4	70.3	68.8	66.9	63.1	58.5	53.4	54.7	54.4
		52.9	53.9	54.5	53.0	48.7	47.8	44.4	38.8	33.0	27.7	17.0	11.4
24	9	39.5	53.2	63.4	73.8	74.4	75.3	76.4	70.7	69.6	67.9	72.9	76.8
		73.4	74.0	74.6	71.7	67.5	65.7	59.9	50.6	44.1	34.3	21.4	15.7
32	9	37.5	54.7	67.2	84.0	92.9	92.9	90.9	85.4	77.5	74.1	75.5	74.8
		74.1	74.2	77.4	76.2	69.4	67.6	63.5	54.4	46.7	38.2	24.2	15.5
40	9	39.8	53.8	63.7	72.6	75.2	72.4	74.0	70.9	69.6	69.2	71.9	72.0
		70.6	74.4	74.6	71.3	65.4	63.1	59.1	50.1	43.4	33.3	20.0	14.5
48	9	24.2	38.2	46.3	56.7	59.8	58.8	57.2	56.1	51.7	48.3	47.6	49.0
		47.9	46.6	46.9	46.5	42.4	41.0	38.5	33.2	28.3	24.3	15.5	9.7
817		36.1	52.2	60.4	72.1	74.6	73.5	70.6	67.8	62.5	58.2	60.7	62.7
		61.0	61.2	61.8	61.8	55.6	54.9	51.7	44.9	38.4	32.7	19.8	14.1
1617		40.5	60.8	72.7	89.4	97.6	95.5	89.3	81.9	68.2	63.0	60.2	58.2
		55.8	59.7	64.9	67.4	62.0	62.5	61.0	54.5	49.1	42.6	26.8	18.4
2417		46.1	65.5	78.4	92.0	97.5	97.8	92.9	81.2	69.8	62.4	62.9	61.7
		59.4	65.8	70.7	73.6	70.1	71.2	69.2	63.1	56.8	46.8	29.1	20.4
3217		47.7	65.4	78.4	91.9	97.7	95.0	91.8	79.3	68.3	62.1	63.4	63.1
		60.7	65.6	71.7	71.2	70.5	70.1	67.9	60.3	55.8	44.0	27.0	20.1
4017		38.8	60.9	72.5	88.7	97.3	99.4	93.3	85.6	72.0	66.2	62.9	63.2
		61.7	62.0	68.7	72.4	68.8	70.3	67.8	62.2	55.9	50.4	31.9	21.3
4817		32.2	53.7	66.4	84.0	91.3	93.2	86.6	80.1	68.1	61.5	60.5	59.4
		59.2	58.5	64.4	67.8	61.4	60.6	58.6	52.9	46.2	40.6	27.5	16.9
5617		17.4	27.5	32.8	39.3	42.6	43.9	43.9	44.2	43.2	42.9	45.0	46.7
		46.3	45.1	44.3	44.3	38.8	38.2	35.0	29.2	25.1	21.4	13.6	8.5
825		34.1	51.0	61.6	74.7	77.6	77.6	75.3	73.3	72.8	71.4	75.3	76.8
		75.6	74.8	77.1	76.2	70.4	68.0	62.7	54.8	47.4	40.5	25.6	16.7
1625		44.9	63.6	76.5	88.9	95.0	92.1	89.0	78.5	67.7	61.4	61.1	61.1
		59.5	64.9	69.9	72.2	71.2	72.1	71.0	64.8	57.0	47.7	29.0	20.3
2425		48.7	67.1	78.1	88.5	89.5	86.0	80.6	69.1	58.6	54.5	54.5	54.7
		56.0	64.2	71.3	78.5	79.6	86.0	84.9	78.5	71.0	57.7	35.8	25.0

3225	49.5	68.4	80.1	92.3	95.0	93.1	87.2	73.5	63.0	57.1	55.0	55.2
	55.1	64.0	71.8	74.7	74.7	77.2	75.4	68.8	61.7	50.0	31.6	23.2
4025	41.6	63.3	74.9	88.0	90.2	87.8	81.9	74.5	60.5	53.7	51.9	51.2
	50.4	54.4	63.2	67.9	69.4	74.8	76.5	71.3	65.2	57.1	36.4	24.3
4825	35.7	55.6	67.4	84.9	90.6	98.2	92.6	84.9	73.6	67.8	65.1	64.6
	62.3	64.9	70.8	74.3	70.0	67.6	68.1	59.9	53.3	47.0	30.3	20.7
5625	16.8	27.3	33.7	42.5	48.2	52.6	53.6	58.0	59.4	62.3	67.4	68.0
	68.9	66.6	66.4	66.7	59.9	58.1	54.1	48.1	40.0	35.1	22.1	14.1
833	37.4	54.9	67.7	84.6	90.8	92.6	88.4	84.6	77.7	72.6	74.4	75.0
	73.7	74.9	76.5	76.3	68.4	68.3	62.7	54.3	46.5	38.3	23.6	16.5
1633	42.7	60.5	71.8	85.3	92.3	93.9	89.4	79.3	66.3	61.7	61.5	60.4
	59.4	65.6	71.2	73.1	70.3	70.2	68.7	61.3	55.0	43.2	26.9	18.9
2433	41.9	59.9	71.9	84.7	89.2	89.4	82.0	72.8	62.3	54.0	53.8	54.1
	53.7	59.3	67.2	73.9	72.9	76.2	76.1	69.6	64.1	54.9	34.5	22.4
3233	44.5	64.2	75.2	85.8	86.4	83.0	76.4	65.9	55.4	48.6	47.6	47.5
	48.6	56.4	64.6	72.4	73.7	79.9	81.0	74.0	67.5	57.3	36.2	26.1
4033	37.0	58.8	71.4	86.4	93.8	94.8	90.0	83.4	70.7	63.5	59.7	58.4
	57.3	59.0	66.3	73.7	73.1	74.8	74.9	69.6	63.3	56.4	38.7	25.8
4833	36.7	57.0	70.0	86.1	94.7	97.3	94.3	87.7	74.2	68.8	67.4	66.2
	66.3	67.7	74.1	76.2	71.9	70.4	68.8	63.5	55.9	48.5	31.5	20.7
5633	21.1	31.6	40.9	54.5	64.2	67.7	69.6	70.2	68.4	66.3	66.5	67.2
	66.3	64.5	63.9	62.2	53.9	53.5	49.4	41.7	34.7	28.8	17.9	12.0
841	35.2	51.0	60.6	71.3	74.7	75.3	72.5	71.3	67.8	67.8	69.8	73.3
	71.3	72.1	73.9	73.3	66.7	66.1	61.2	53.2	46.8	38.6	23.3	16.0
1641	38.4	58.9	70.9	86.1	95.1	98.3	93.5	85.4	72.3	65.8	63.1	62.5
	61.7	63.0	69.2	72.7	68.3	70.8	68.9	63.0	56.0	49.6	31.3	21.9
2441	41.3	59.2	69.3	82.3	83.6	80.9	74.5	66.0	56.2	50.9	49.8	49.8
	47.5	54.1	59.2	63.1	65.2	70.4	71.1	64.9	60.0	49.6	32.4	22.3
3241	42.9	63.1	73.3	89.2	94.4	96.7	87.1	80.1	67.3	59.8	60.0	59.0
	58.7	64.3	71.5	77.3	74.2	76.2	75.6	69.1	62.3	53.5	34.5	24.0
4041	41.0	63.0	75.1	88.5	91.7	89.0	81.7	73.0	60.8	54.4	52.9	53.3
	53.4	57.4	65.9	70.1	70.6	74.5	75.6	70.8	64.7	55.8	36.1	25.1
4841	39.2	58.3	69.8	85.4	92.2	91.9	88.0	79.9	70.4	64.5	64.2	64.1
	61.5	64.9	69.8	71.5	65.3	66.1	62.3	55.2	48.8	41.1	26.1	17.4
5641	21.9	31.0	35.9	43.2	47.5	49.1	52.0	54.2	56.2	59.9	61.7	62.8
	60.4	59.0	58.0	56.0	49.7	48.3	42.9	35.9	31.4	26.3	15.8	10.4
849	24.8	37.7	45.4	53.7	56.8	56.7	55.5	53.5	49.4	45.8	45.0	44.3
	44.0	44.1	43.6	42.6	39.9	39.1	37.0	31.7	27.1	23.0	14.3	9.9
1649	37.2	55.1	67.9	84.6	90.1	90.1	83.7	75.4	65.6	61.0	60.2	61.5
	59.8	63.1	67.1	68.8	63.0	62.9	58.8	53.2	46.1	38.1	23.6	16.2
2449	37.0	55.2	67.3	80.8	91.1	94.5	88.3	81.5	69.0	64.0	63.7	64.3
	62.5	65.3	71.7	74.0	68.5	69.0	65.3	58.5	52.1	44.6	28.8	19.1
3249	39.3	58.7	71.3	87.5	94.7	96.9	94.5	87.8	76.1	69.3	67.5	68.0
	65.7	69.4	74.4	74.8	69.0	70.6	68.4	62.2	54.6	46.6	30.1	21.2
4049	37.1	57.4	70.3	84.9	93.2	95.4	91.7	84.8	73.6	69.7	68.0	68.6
	68.5	72.6	78.3	79.8	75.2	75.6	72.4	65.6	56.9	48.6	30.8	20.8
4849	30.5	47.1	58.4	74.2	81.7	82.3	78.5	74.1	66.2	59.6	59.0	57.8
	57.0	56.6	59.1	58.1	52.9	52.5	49.5	42.4	37.4	32.3	20.0	13.7
1657	17.8	26.5	31.1	37.4	40.0	41.3	42.5	43.8	42.3	40.8	42.6	43.5
	43.8	44.9	43.4	42.7	38.0	37.6	34.6	29.2	25.3	20.6	12.5	8.2
2457	18.7	27.8	33.8	42.4	47.6	49.7	53.0	55.5	58.1	59.9	62.7	66.8
	64.9	63.5	62.5	59.8	53.5	51.3	47.3	39.0	33.5	27.3	16.7	10.8
3257	20.9	31.7	40.3	54.6	65.4	68.2	70.5	71.8	67.6	66.0	67.1	68.3
	66.9	66.5	64.1	63.0	56.0	54.2	49.7	41.4	35.0	28.8	17.3	11.2
4057	19.5	29.1	33.6	40.7	45.1	47.9	50.5	54.1	56.4	59.2	63.0	63.4
	61.9	62.4	59.6	59.4	53.7	50.7	46.0	39.5	32.8	26.7	16.3	10.4

CYCLE 1 DATA

DATASET 05, JUNE 19, 1974

Reactor Conditions

Core Average Exposure, 1010 MWd/t
 Core Thermal Power, 3261 MWT
 Dome Pressure, P, 1017 psia
 Core Flow, 105.6 Mlb/hr
 Inlet Subcooling at P, 22.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	32.	48.	40.	48.	32.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	34.	48.	28.	48.	38.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	32.	48.	38.	48.	12.	48.	38.	48.	12.	48.	34.	48.	32.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	28.	48.	38.	48.	14.	48.	38.	48.	28.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	32.	48.	34.	48.	12.	48.	38.	48.	12.	48.	38.	48.	32.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	38.	48.	28.	48.	34.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	32.	48.	40.	48.	32.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
 See Figure 22

16	9	41.5	56.5	64.8	74.9	72.8	70.1	67.7	65.4	60.5	55.3	55.2	54.9
		53.1	52.6	53.7	52.4	46.5	45.5	42.8	36.6	31.9	26.1	15.9	10.8
24	9	39.8	54.9	64.6	74.4	78.0	74.4	76.5	75.5	73.0	69.9	72.2	73.5
		70.0	73.6	73.3	71.7	65.7	64.0	58.3	49.6	43.2	33.4	21.1	14.9
32	9	37.5	53.6	65.3	82.1	88.1	88.3	85.5	81.6	75.9	72.9	75.7	76.8
		75.1	76.0	77.2	75.6	70.3	66.2	61.2	52.9	45.3	37.0	22.8	15.1
40	9	40.4	54.6	64.0	72.8	76.3	73.4	76.2	75.6	75.0	71.6	75.5	73.3
		71.0	73.9	74.5	70.5	64.3	61.9	57.3	48.5	42.0	31.8	18.8	14.8
48	9	25.5	40.4	47.8	56.7	61.1	61.3	57.7	57.4	51.4	48.3	47.2	48.1
		46.8	44.9	44.9	44.3	40.0	38.5	36.3	31.4	26.7	22.9	15.1	9.6
		817	38.8	55.5	65.5	75.7	77.4	75.3	73.0	71.0	63.9	62.1	61.9
			61.7	60.6	61.8	60.3	55.3	53.3	49.1	42.7	36.7	30.3	18.8
1617		42.4	63.3	77.3	92.1	99.0	96.6	89.2	82.0	70.3	62.6	62.0	60.4
		59.6	59.9	65.1	67.2	62.6	60.9	58.6	53.3	47.5	40.9	25.9	17.8
2417		46.9	66.9	77.8	90.0	93.6	93.9	90.6	80.0	69.6	62.1	63.1	63.7
		62.5	67.6	72.3	73.0	70.1	69.4	68.3	61.9	56.0	45.6	28.4	20.2
3217		47.4	64.9	73.7	80.6	82.0	78.7	74.6	64.9	60.5	60.1	63.5	65.1
		64.1	71.9	76.2	75.9	71.3	72.4	68.8	60.8	55.2	44.3	27.5	20.6
4017		39.3	61.3	71.8	85.9	88.5	89.0	85.1	83.0	72.9	67.8	65.4	64.7
		64.8	65.5	72.4	72.9	68.7	69.0	67.3	61.8	55.1	48.2	30.5	20.0
4817		33.4	55.8	70.3	86.1	95.0	96.1	89.4	83.5	70.3	64.1	61.3	60.2
		59.2	58.3	64.4	64.7	61.9	58.6	56.7	50.7	44.3	38.5	26.5	16.8
5617		18.7	29.5	35.5	42.5	46.1	47.6	47.2	48.3	46.8	45.0	46.6	45.4
		45.4	44.2	42.9	42.4	37.5	35.8	33.3	28.4	23.8	20.0	12.6	7.9
		825	35.2	51.4	61.3	73.0	76.4	77.8	76.4	78.9	77.1	74.9	76.5
			76.1	76.6	76.6	77.2	70.4	66.6	62.7	54.3	46.6	39.6	24.9
1625		46.4	63.4	70.9	80.5	80.5	79.0	79.1	73.6	66.6	62.4	62.2	64.5
		63.4	68.4	72.9	74.5	72.0	73.6	71.7	63.1	58.0	46.3	28.6	19.6

2425	50.0	69.2	79.5	88.4	88.7	82.9	77.5	66.6	58.1	53.6	53.9	55.2
	55.0	62.2	68.8	72.5	73.3	78.7	79.4	72.8	65.0	52.7	33.6	23.4
3225	51.1	70.2	82.7	93.1	95.7	92.8	87.9	74.3	64.5	57.1	56.2	56.5
	56.6	63.4	69.4	73.6	72.3	75.0	72.8	66.3	61.1	50.1	30.9	22.7
4025	42.5	63.8	74.9	87.9	88.4	86.2	79.3	70.9	59.0	53.8	52.3	52.2
	52.2	54.8	62.7	67.1	65.5	69.2	71.8	69.2	63.9	56.6	35.7	24.4
4825	36.4	56.9	69.1	85.5	94.5	94.6	88.5	82.5	71.7	67.4	65.2	65.8
	65.0	65.7	71.7	75.7	69.9	69.3	66.3	60.5	51.5	46.2	29.5	19.7
5625	17.7	28.7	35.3	43.9	50.2	55.0	57.5	64.4	66.9	66.8	70.2	69.2
	69.0	66.8	66.2	64.3	59.2	56.4	53.6	46.7	38.8	32.9	21.1	13.0
833	38.6	55.4	68.5	83.2	90.2	87.8	86.1	83.1	77.6	75.5	75.7	77.1
	75.2	76.1	78.4	76.1	70.6	67.5	61.9	53.9	45.0	37.4	23.2	15.8
1633	43.1	60.7	71.3	79.1	80.3	78.0	73.7	65.7	58.2	57.5	61.9	64.3
	63.5	69.2	74.8	76.8	72.9	72.8	70.5	61.6	55.4	44.3	27.8	19.2
2433	44.4	63.6	74.2	86.9	90.4	89.2	83.0	74.2	62.2	56.1	55.0	55.4
	54.7	60.5	66.9	72.1	70.6	74.3	74.1	68.1	61.8	52.7	33.3	22.8
3233	47.3	67.5	78.0	87.8	87.6	86.6	77.6	66.0	54.9	50.6	48.9	48.1
	48.9	54.9	61.6	67.5	67.6	75.6	77.0	71.9	65.5	53.8	34.1	14.6
4033	37.4	59.7	71.5	85.6	92.0	91.7	85.8	80.1	67.8	62.4	59.8	59.3
	60.0	61.3	68.0	74.4	72.6	73.1	74.3	68.1	61.4	55.7	36.5	24.3
4833	35.7	54.8	65.6	77.7	80.2	79.3	74.9	71.7	64.8	64.5	66.8	70.5
	70.2	72.0	77.6	80.6	74.2	73.0	70.2	62.8	55.7	48.5	31.3	20.2
5633	21.4	32.3	41.4	54.4	64.4	68.3	70.3	71.5	67.2	64.4	68.1	68.8
	66.6	65.3	63.2	60.6	54.6	52.9	47.5	40.8	34.8	27.9	17.1	11.5
841	37.0	53.1	62.7	74.9	78.0	77.4	76.1	75.9	74.6	71.0	72.4	72.9
	70.6	71.6	72.5	71.9	64.6	63.1	58.7	51.8	44.1	36.9	22.1	14.6
1641	40.4	61.1	73.9	89.1	96.1	99.4	93.6	86.0	72.5	67.0	64.2	65.1
	64.1	65.8	71.6	72.8	67.9	69.3	67.5	60.8	54.5	47.0	30.0	20.3
2441	40.7	59.4	68.5	77.8	79.3	76.0	70.7	63.6	54.8	49.8	50.1	49.7
	49.8	53.9	57.8	63.0	61.1	66.1	66.8	63.0	58.1	47.4	31.0	21.8
3241	43.3	62.7	72.4	85.2	89.7	88.3	81.6	74.1	64.5	58.2	58.4	58.8
	58.9	64.4	71.1	73.6	70.6	74.6	73.6	67.1	59.1	50.9	32.7	23.3
4041	42.8	64.2	74.9	86.8	88.0	86.6	78.7	71.9	61.6	56.4	54.4	54.5
	54.7	58.3	64.1	67.6	67.3	71.7	72.6	67.7	61.1	53.7	33.9	23.6
4841	40.0	59.2	70.5	82.2	85.1	85.2	84.3	80.9	71.9	68.2	67.9	67.5
	65.9	67.2	71.0	72.6	67.5	65.8	63.0	54.2	48.1	40.5	25.8	18.1
5641	21.7	31.2	35.9	42.8	47.7	51.0	56.2	59.6	61.5	60.0	61.7	62.3
	58.2	57.1	55.8	52.6	46.0	45.5	42.1	35.1	30.6	24.7	15.2	10.6
849	26.3	40.5	48.5	57.0	61.2	60.2	58.1	54.6	50.6	46.6	45.2	45.0
	43.9	42.9	43.4	42.3	38.9	38.5	35.6	30.2	26.1	21.9	13.5	8.8
1649	38.3	58.3	72.2	87.7	91.4	89.9	84.2	77.9	67.2	62.2	62.6	62.0
	60.8	64.6	67.6	68.3	62.4	61.6	57.9	51.0	44.4	37.2	22.3	15.0
2449	36.7	54.4	64.5	75.4	77.6	77.0	78.7	75.8	69.4	65.0	67.4	67.0
	66.9	69.9	73.8	76.1	71.1	69.4	67.0	59.4	52.6	43.9	27.9	17.8
3249	39.5	56.9	67.6	79.1	82.5	81.1	76.2	72.0	65.0	65.1	67.0	68.9
	68.0	71.7	77.3	78.4	71.7	70.9	69.6	59.9	54.8	46.4	28.9	21.3
4049	38.6	59.3	71.4	85.9	92.7	95.8	92.6	86.2	74.5	71.1	69.8	69.5
	69.4	70.3	75.9	78.9	73.1	72.0	68.0	61.0	53.9	45.3	28.2	18.5
4849	31.8	49.5	60.8	78.5	84.5	85.1	79.1	75.2	67.4	60.3	58.3	58.0
	57.4	56.4	58.1	57.6	51.4	50.5	48.1	41.5	35.7	30.4	18.8	13.0
1657	18.6	27.6	32.3	39.0	42.5	43.5	44.5	45.4	44.4	44.2	44.7	44.5
	43.0	43.3	41.6	41.5	37.6	36.5	33.7	28.2	24.0	19.6	12.0	7.1
2457	19.0	28.5	33.9	42.1	47.7	51.2	56.1	60.8	63.0	62.2	65.1	64.8
	63.6	62.3	60.0	58.9	51.5	50.1	46.2	38.2	32.5	26.9	16.5	10.8
3257	21.1	32.6	41.6	55.0	65.7	69.3	71.2	71.3	67.9	65.6	68.2	69.5
	67.9	65.6	63.7	62.2	55.7	52.6	48.7	40.3	34.0	28.3	17.1	11.2
4057	20.6	30.8	36.2	44.1	48.1	51.8	56.6	61.6	63.6	63.1	63.8	65.0
	62.0	60.2	57.8	55.6	49.6	48.9	44.8	37.3	31.7	26.1	15.6	10.0

CYCLE 1 DATA

DATASET 06, JULY 15, 1974

Reactor Conditions

Core Average Exposure, 1585 MWd/t

Core Thermal Power, 3280 MWT

Dome Pressure, P, 1033 psia

Core Flow, 97.1 Mlb/hr

Inlet Subcooling at P, 25.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	32	48	40	48	32	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	32	48	20	48	32	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	32	48	32	48	8	48	36	48	8	48	32	48	32	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	40	48	20	48	36	48	10	48	36	48	20	48	40	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	32	48	32	48	8	48	36	48	8	48	32	48	32	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	32	48	20	48	32	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	32	48	40	48	32	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 07, AUGUST 17, 1974

Reactor Conditions

Core Average Exposure, 2080 MWd/t

Core Thermal Power, 3292 MWT

Dome Pressure, P, 1015 psia

Core Flow, 103.1 Mlb/hr

Inlet Subcooling at P, 23.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	26	48	26	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	34	48	30	48	8	48	8	48	30	48	34	48	48
48	48	48	44	48	42	48	48	48	42	48	44	48	48	48
48	48	32	48	8	48	28	48	28	48	8	48	32	48	48
48	48	48	44	48	40	48	44	48	40	48	44	48	48	48
48	48	14	48	32	48	6	48	6	48	32	48	14	48	48
48	48	48	44	48	40	48	44	48	40	48	44	48	48	48
48	48	32	48	8	48	28	48	28	48	8	48	32	48	48
48	48	48	44	48	42	48	48	48	42	48	44	48	48	48
48	48	34	48	30	48	8	48	8	48	30	48	34	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	26	48	26	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 08, SEPTEMBER 10, 1974

Reactor Conditions

Core Average Exposure, 2555 MWd/t
 Core Thermal Power, 3265 MWT
 Dome Pressure, P, 1022 psia
 Core Flow, 101.2 Mlb/hr
 Inlet Subcooling at P, 24.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	26.	48.	26.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	34.	48.	20.	48.	6.	48.	6.	48.	20.	48.	34.	48.	48.
48.	48.	48.	38.	48.	42.	48.	48.	48.	42.	48.	38.	48.	48.	48.
48.	48.	26.	48.	4.	48.	24.	48.	24.	48.	4.	48.	26.	48.	48.
48.	48.	48.	44.	48.	40.	48.	40.	48.	40.	48.	44.	48.	48.	48.
48.	48.	10.	48.	32.	48.	6.	48.	6.	48.	32.	48.	10.	48.	48.
48.	48.	48.	44.	48.	40.	48.	40.	48.	40.	48.	44.	48.	48.	48.
48.	48.	26.	48.	4.	48.	24.	48.	24.	48.	4.	48.	26.	48.	48.
48.	48.	48.	38.	48.	42.	48.	48.	48.	42.	48.	38.	48.	48.	48.
48.	48.	34.	48.	20.	48.	6.	48.	6.	48.	20.	48.	34.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	26.	48.	26.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
 See Figure 22

16	9	34.9	50.9	61.4	71.6	76.9	75.6	74.4	71.9	64.8	57.8	57.3	58.1
		55.3	54.5	56.2	54.4	48.9	47.2	43.7	36.5	31.9	25.9	15.9	10.8
24	9	46.5	64.9	74.0	82.2	79.5	76.8	71.0	66.5	60.9	60.4	67.1	70.7
		70.6	73.4	72.9	69.6	65.4	61.5	56.4	46.5	41.0	31.8	19.7	14.8
32	9	45.6	66.1	75.7	84.9	82.7	76.2	70.0	66.9	61.2	61.1	65.8	73.2
		72.9	75.9	75.7	74.9	67.5	64.6	59.9	50.4	43.3	35.3	21.4	15.0
40	9	47.6	67.3	78.4	92.4	94.9	91.2	90.4	84.2	76.1	70.3	72.6	74.2
		71.7	72.9	73.3	72.3	64.9	62.9	56.2	47.3	40.8	30.4	18.5	14.2
48	9	24.4	38.9	48.5	60.2	65.8	66.5	66.1	65.2	60.8	55.9	55.1	53.4
		53.5	51.6	50.5	49.5	44.9	42.8	39.0	33.2	28.0	23.2	15.1	9.3
817		34.3	50.7	59.1	71.6	77.0	77.0	79.9	79.0	75.5	71.2	71.3	69.4
		67.6	66.2	65.8	65.5	58.3	56.1	51.2	44.2	36.9	30.6	18.8	12.8
1617		29.2	45.8	57.9	75.5	84.8	91.2	87.5	80.3	70.0	63.7	62.4	61.8
		62.9	66.9	72.9	74.6	69.2	66.2	62.0	54.2	47.0	38.6	23.5	17.1
2417		40.8	62.7	80.8	94.2	96.4	88.2	83.2	70.5	62.5	55.9	57.0	56.9
		57.4	62.0	65.9	66.6	62.7	62.7	58.5	51.1	48.2	41.0	25.2	18.8
3217		53.2	75.5	87.7	93.6	90.6	83.1	75.6	65.9	57.5	53.1	54.2	56.1
		55.7	62.0	64.5	66.2	61.4	59.3	56.2	50.9	47.5	38.7	23.9	19.5
4017		31.5	53.0	70.6	90.7	96.6	93.8	86.0	81.0	69.1	62.4	60.7	61.2
		62.0	64.7	74.0	78.5	74.1	72.3	67.8	59.4	51.7	45.7	28.9	19.6
4817		22.1	37.7	49.0	65.9	77.7	87.4	91.1	91.1	83.3	76.0	74.4	72.5
		71.1	68.5	74.5	75.2	69.3	65.2	60.1	53.1	44.7	38.9	25.7	16.0
5617		20.1	31.8	39.2	48.3	52.0	54.1	55.3	55.3	51.5	48.9	49.0	48.1
		48.0	45.0	43.9	43.9	38.8	38.1	33.3	28.6	23.8	20.4	12.3	8.0
825		52.0	76.3	86.8	98.6	95.1	88.7	79.6	75.7	69.8	68.3	67.8	73.0
		72.3	72.4	72.7	71.4	64.8	63.1	58.1	50.5	43.6	36.1	22.6	15.8
1625		38.4	59.9	78.8	91.2	93.1	89.3	84.7	78.5	67.8	62.7	63.3	63.6
		63.2	66.1	68.3	68.9	63.7	63.0	59.5	51.9	47.1	38.5	24.1	17.9

2425	32.2	49.3	66.4	85.3	93.9	90.6	87.2	76.5	67.6	63.1	66.3	71.5
	75.4	83.1	88.5	87.2	82.8	80.6	75.4	65.8	56.8	44.9	28.4	20.6
3225	35.5	53.6	70.6	89.6	97.2	92.2	85.0	74.4	65.3	60.7	64.0	69.2
	70.6	80.1	85.1	83.8	78.7	77.3	71.8	62.3	54.9	44.2	27.1	21.5
4025	29.2	48.6	65.5	87.7	97.3	96.8	89.9	81.4	69.5	64.1	62.9	63.9
	63.1	64.9	69.9	73.0	68.3	66.6	63.5	57.3	50.2	45.3	29.6	20.8
4825	31.5	54.8	72.0	88.7	95.6	92.9	85.1	77.8	69.4	64.0	64.6	69.8
	70.3	70.9	75.9	77.6	70.0	68.1	63.9	57.0	49.6	42.3	27.3	18.3
5625	35.0	54.3	64.8	76.2	78.8	77.0	70.1	70.2	63.5	58.6	59.1	61.1
	59.7	57.2	56.6	58.5	52.8	50.4	46.9	41.1	33.8	28.6	18.2	12.0
833	56.2	80.0	88.0	99.4	97.4	88.7	80.3	74.5	67.6	62.7	62.3	63.1
	60.8	61.7	62.0	60.9	55.7	56.1	54.0	48.3	42.5	35.2	21.6	15.1
1633	37.1	60.2	76.1	88.9	92.0	88.4	86.0	80.3	74.6	68.4	69.4	69.6
	66.6	69.6	73.3	73.3	68.8	67.4	64.4	55.6	48.5	37.8	23.8	17.9
2433	26.7	43.9	59.0	80.0	89.6	90.1	86.0	78.3	68.6	63.1	63.4	63.1
	63.8	66.1	69.5	72.3	68.2	67.5	64.5	58.0	52.3	45.2	28.9	20.4
3233	21.6	37.8	54.2	74.7	90.1	93.6	87.9	82.1	68.2	59.7	57.9	58.1
	59.3	59.7	66.6	71.6	67.1	67.6	64.9	61.2	54.8	50.9	35.3	25.7
4033	25.0	42.4	59.1	79.8	93.1	95.4	91.7	89.1	83.0	76.6	74.0	72.7
	71.0	69.7	74.0	78.6	73.4	71.6	68.5	61.9	53.6	46.7	31.8	20.7
4833	34.7	58.0	74.7	90.0	93.9	90.4	82.5	78.8	68.1	61.5	62.3	63.4
	62.6	64.0	66.8	67.2	63.2	62.8	63.4	58.3	51.5	44.9	28.9	19.2
5633	44.0	63.0	71.6	81.8	83.6	75.8	70.8	67.4	62.9	57.2	55.8	57.1
	54.1	53.0	51.9	50.6	45.7	44.4	41.1	36.0	30.9	25.6	16.0	11.6
841	44.5	64.3	76.4	87.5	88.1	85.5	80.3	76.9	71.3	67.4	71.6	74.6
	72.0	72.3	75.2	74.4	66.5	64.0	58.7	50.2	42.3	34.3	20.2	14.3
1641	26.5	43.3	57.1	75.0	85.0	90.2	88.6	82.8	73.4	67.8	65.4	66.3
	65.6	66.2	70.8	71.6	66.3	64.5	60.6	52.7	46.6	40.4	27.2	18.4
2441	31.6	50.8	66.6	83.8	85.9	82.5	76.7	67.3	56.9	52.9	54.8	58.2
	60.3	67.1	73.0	74.7	66.9	68.1	64.8	57.5	49.5	41.7	26.4	18.9
3241	44.2	65.3	77.7	89.5	90.6	85.1	76.1	68.1	57.5	54.8	56.5	61.6
	65.3	72.0	77.8	80.7	76.7	75.9	70.7	63.2	54.3	46.1	29.0	20.8
4041	28.2	48.2	66.4	87.4	94.3	92.0	85.3	77.6	65.6	58.3	58.0	59.8
	61.0	64.6	71.3	74.3	69.9	67.8	64.5	56.8	49.9	43.9	28.8	20.5
4841	29.7	46.3	58.9	75.7	87.4	89.9	87.2	82.4	72.3	70.4	72.9	75.2
	74.5	76.1	79.6	78.7	69.8	68.1	62.5	53.4	45.0	38.7	23.6	17.5
5641	38.3	54.8	62.4	72.6	72.6	71.3	68.8	64.8	59.2	55.3	55.7	54.5
	52.6	51.6	50.6	49.6	43.1	42.3	38.9	32.8	27.7	23.2	14.1	10.1
849	18.4	28.6	34.8	43.0	48.3	52.7	57.9	61.1	57.9	55.3	53.4	53.2
	50.3	48.1	47.6	46.8	43.4	42.7	38.9	32.8	27.6	22.4	13.9	9.4
1649	36.4	55.8	67.8	81.4	88.2	86.5	82.8	75.8	65.8	62.2	62.4	63.3
	63.5	70.0	75.9	76.7	71.8	68.9	63.6	54.6	46.4	37.8	22.4	15.5
2449	42.1	63.6	74.7	86.1	86.1	84.4	76.8	69.0	60.2	56.3	56.8	57.9
	58.9	61.6	66.6	67.9	61.7	62.1	58.5	51.2	47.4	40.2	25.2	18.3
3249	46.2	66.3	79.2	88.6	89.0	82.5	75.7	69.3	58.9	55.3	57.0	57.5
	58.4	61.1	64.5	64.4	59.1	58.3	56.2	51.2	46.9	41.1	25.6	18.9
4049	39.3	61.5	74.8	89.0	91.8	90.1	83.0	77.4	68.4	61.4	62.6	63.6
	66.1	71.4	78.6	82.8	77.0	74.4	69.0	61.1	51.9	43.6	26.8	18.1
4849	27.4	42.3	52.0	64.8	72.4	75.9	77.4	77.9	73.2	67.4	66.0	64.3
	62.4	61.9	63.5	62.8	55.3	53.8	50.0	43.0	36.2	30.6	18.5	13.5
1657	13.7	20.4	25.9	34.9	43.4	50.0	53.2	52.5	50.3	48.1	48.7	48.2
	46.8	46.3	45.3	45.2	39.3	38.2	35.2	29.6	24.6	19.9	11.8	7.3
2457	21.5	31.8	39.0	47.6	52.2	53.0	54.5	55.3	53.3	53.4	58.3	64.4
	64.5	64.4	62.3	60.1	53.3	50.8	46.9	38.3	32.6	26.3	16.1	11.1
3257	22.5	33.9	39.9	48.2	52.6	53.1	52.8	53.0	51.4	52.9	60.9	68.8
	70.7	71.5	68.8	66.4	57.8	55.4	50.3	42.3	35.1	28.8	17.5	11.8
4057	22.1	34.2	42.4	55.4	65.4	70.9	72.3	72.2	65.4	61.8	62.0	61.9
	60.5	59.7	58.1	57.2	49.4	48.9	46.0	38.1	31.6	25.8	15.3	10.0

CYCLE 1 DATA

DATASET 09, OCTOBER 4, 1974

Reactor Conditions

Core Average Exposure, 2920 MWd/t
 Core Thermal Power, 2856 MWT
 Dome Pressure, P, 1016 psia
 Core Flow, 78.7 Mlb/hr
 Inlet Subcooling at P, 31.2 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	20.	48.	14.	48.	20.	48.	48.	48.	48.	48.
48.	48.	48.	48.	40.	48.	44.	48.	44.	48.	40.	48.	48.	48.	48.
48.	48.	48.	14.	48.	18.	48.	8.	48.	18.	48.	14.	48.	48.	48.
48.	48.	40.	48.	48.	38.	48.	38.	48.	48.	48.	40.	48.	48.	48.
48.	20.	48.	18.	48.	4.	48.	22.	48.	4.	48.	18.	48.	20.	48.
48.	48.	44.	48.	38.	48.	36.	48.	36.	48.	38.	48.	44.	48.	48.
48.	14.	48.	8.	48.	22.	48.	8.	48.	22.	48.	8.	48.	14.	48.
48.	48.	44.	48.	38.	48.	36.	48.	36.	48.	38.	48.	44.	48.	48.
48.	20.	48.	18.	48.	4.	48.	22.	48.	4.	48.	18.	48.	20.	48.
48.	48.	40.	48.	48.	38.	48.	38.	48.	48.	48.	40.	48.	48.	48.
48.	48.	48.	14.	48.	18.	48.	8.	48.	18.	48.	14.	48.	48.	48.
48.	48.	48.	48.	40.	48.	44.	48.	44.	48.	40.	48.	48.	48.	48.
48.	48.	48.	48.	48.	20.	48.	14.	48.	20.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
 See Figure 22

1609	55.0	79.8	97.6	117.3	122.5	115.5	108.2	97.6	85.4	76.5	75.4	76.5
	72.3	75.8	79.6	80.3	78.3	78.4	74.4	63.9	56.3	45.2	28.2	19.8
2409	57.8	86.6	108.6	125.6	126.9	114.5	106.7	95.0	83.8	77.8	78.3	81.2
	83.6	98.6	107.6	111.2	108.1	108.1	102.9	87.9	76.1	59.1	36.6	29.0
3209	56.0	89.2	113.9	132.4	136.3	125.8	114.6	105.3	90.9	83.1	84.4	84.0
	86.1	91.8	98.5	104.0	104.7	109.8	107.5	93.2	83.0	67.3	41.5	27.5
4009	55.6	81.0	106.8	131.2	138.6	130.4	124.9	110.1	96.8	87.9	89.6	92.2
	95.0	107.6	117.7	119.5	114.6	113.7	105.8	89.2	76.8	58.4	35.0	27.9
4809	50.7	74.1	90.0	104.6	109.1	102.4	94.6	87.7	78.7	71.0	70.8	69.8
	67.2	68.3	69.0	70.9	65.5	67.1	63.4	53.8	45.4	36.4	22.0	14.8
0817	51.9	78.9	98.1	123.6	131.2	127.7	120.2	110.8	97.0	86.3	84.7	84.8
	83.2	86.5	90.2	94.6	88.7	89.7	86.9	75.1	63.9	54.5	33.4	21.8
1617	67.1	100.7	120.9	143.0	143.1	134.2	120.1	106.6	90.7	79.5	78.2	77.3
	76.0	82.6	91.2	99.3	101.8	107.4	105.4	93.8	82.5	68.5	42.4	30.8
2417	56.3	84.4	106.3	129.2	141.5	136.9	127.3	111.3	98.4	86.2	86.7	87.3
	89.0	100.4	114.6	120.3	118.6	119.4	114.4	99.8	88.2	72.2	45.4	33.0
3217	52.8	79.7	102.6	125.5	140.0	134.7	130.6	114.2	97.0	87.9	87.3	88.2
	89.1	102.8	108.3	110.8	105.9	108.7	107.0	95.3	87.7	69.9	43.4	35.6
4017	72.2	110.4	132.0	154.1	150.4	143.2	132.1	120.8	99.4	89.4	86.1	86.7
	87.1	96.2	109.9	122.1	119.3	122.1	116.9	103.0	90.1	74.3	45.6	31.8
4817	54.2	85.2	109.5	140.3	148.4	141.9	130.7	114.8	98.3	85.4	83.4	82.1
	80.4	87.3	95.0	102.1	102.2	108.8	103.7	92.3	78.5	66.3	40.0	26.3
5617	36.4	52.5	64.6	79.1	83.5	83.7	82.4	78.9	69.6	66.0	64.8	65.7
	65.0	66.7	67.7	67.4	62.3	62.4	57.3	48.0	41.1	32.7	19.2	13.1
0825	52.1	86.1	110.2	133.0	136.3	126.5	114.7	105.6	94.2	83.8	83.8	84.8
	88.8	98.5	107.3	117.3	112.8	112.5	106.9	95.1	80.0	68.5	42.9	29.1
1625	52.5	78.6	100.0	123.0	132.7	131.8	123.0	109.5	94.8	86.9	85.8	87.1

88.0 99.0111.9119.2118.8123.4116.2103.9 91.5 72.4 44.9 33.5
 2425 44.5 66.9 86.7110.6125.6132.8135.9124.3108.3100.9103.1107.1
 110.6125.6131.4135.0128.3128.3119.5104.4 91.6 75.6 48.5 36.6
 3225 43.1 66.1 88.1111.5126.7135.0136.0123.3107.7100.8101.2105.9
 111.7129.9140.8140.6131.8130.9123.3108.3 95.9 77.0 46.2 37.7
 4025 49.0 77.3100.3125.7141.6148.3139.7123.7103.4 94.0 91.1 92.1
 93.0104.2115.9120.0117.0117.5111.0 99.1 88.0 75.6 48.5 33.8
 4825 52.4 87.9113.5144.2149.6139.9130.1111.9 96.4 85.1 83.2 80.4
 83.1 93.4109.6120.2118.4121.0117.1104.2 92.3 77.6 46.7 31.4
 5625 36.0 53.8 65.7 80.1 87.8 86.2 85.1 81.8 74.0 71.7 72.8 75.0
 77.7 88.6 99.1104.9 99.3 99.4 92.3 78.5 66.2 52.6 30.9 19.7
 0833 58.1 91.7114.9134.8134.6123.5113.2102.5 90.0 81.9 82.2 82.2
 82.0 90.3 96.4103.8106.4109.3104.9 93.4 79.5 64.5 39.8 28.4
 1633 45.3 70.6 90.1114.7125.8129.3123.4109.0 93.0 85.3 82.8 84.1
 86.8 96.0105.4109.0105.6107.7105.1 96.4 87.9 71.0 45.0 32.7
 2433 34.9 54.9 72.0 95.8111.2121.2125.3120.0103.4 95.1 95.6101.6
 105.8121.4132.8134.9129.2130.2125.5110.6 96.4 81.2 50.5 36.5
 3233 36.9 58.0 76.4101.8117.0129.7133.0123.8109.2 97.8 99.5 99.6
 102.1115.4123.7126.3122.5124.2120.5110.5 99.7 83.0 52.4 37.5
 4033 42.1 66.1 85.9113.4133.1137.5136.3123.5109.3 98.2 96.0 98.2
 102.1116.2128.3134.5129.6128.7122.6107.5 94.9 78.7 48.9 35.3
 4833 58.8 93.6121.2146.9145.9136.3126.7111.3 94.4 85.4 87.0 85.8
 86.4 96.4102.7109.4108.4110.8107.4 99.5 91.5 73.6 45.9 34.0
 5633 37.5 55.4 67.2 85.0 89.4 88.4 86.5 81.9 74.5 69.4 70.1 73.0
 72.0 74.6 77.9 83.4 84.9 91.6 86.5 75.3 65.6 54.0 33.1 21.4
 0841 47.2 71.4 94.7121.1130.9129.4120.3110.1 97.7 86.9 85.2 88.2
 88.1 98.9112.0116.8109.5114.6106.5 91.9 78.9 63.9 38.9 26.0
 1641 63.5 96.5117.8141.0143.9137.7124.4113.1 95.2 86.2 83.8 84.1
 85.1 91.9107.1120.3116.6121.2117.5104.0 90.8 77.9 48.8 34.5
 2441 42.2 65.5 84.7108.5120.3123.7120.3106.2 91.1 82.7 81.9 84.2
 83.8 93.9100.9108.1101.9104.1 99.9 89.0 78.8 66.0 43.5 32.6
 3241 40.0 63.0 82.7108.7127.1133.1125.8115.0 98.4 90.8 92.1 95.1
 99.7114.2130.5134.4129.3130.5124.7110.4 94.3 80.9 49.8 36.9
 4041 64.7102.2123.0146.9148.6143.5128.7116.7 98.7 88.9 85.7 85.9
 86.8 96.3107.6115.0113.4111.7109.1 96.7 85.2 69.7 48.6 36.0
 4841 50.3 79.9106.0138.3147.2144.5134.3117.3101.2 91.6 88.5 86.4
 88.1 96.2110.3122.2117.4119.5119.1 98.6 85.3 70.4 43.7 31.0
 5641 35.2 52.6 63.3 79.5 87.0 88.1 89.6 83.8 75.7 69.7 69.8 69.2
 72.2 79.7 84.0 87.2 81.9 81.3 75.1 63.2 55.1 45.5 28.1 19.1
 0849 50.6 69.9 84.3 96.2100.8 94.8 89.6 82.3 71.6 64.8 63.7 63.4
 62.2 63.0 64.2 65.6 63.1 65.0 60.7 51.7 44.8 35.8 21.4 14.5
 1649 54.5 81.0105.7128.9131.9128.3117.9106.0 92.1 83.8 83.3 82.0
 81.4 91.0 99.6105.1107.0112.5108.0 94.5 82.0 65.9 39.8 27.3
 2449 52.0 82.9108.3128.6131.4124.2115.1 99.4 86.0 77.5 79.2 80.0
 83.0 95.1108.2118.6117.2120.1115.0101.4 89.7 72.7 45.6 31.9
 3249 51.0 81.8106.9131.5136.5127.2116.7107.8 92.0 81.7 78.8 82.2
 81.8 89.5 97.7102.4100.7103.3102.7 95.1 88.7 76.5 47.7 33.4
 4049 52.6 81.0106.3133.1143.0140.1126.4114.1 99.2 90.9 90.9 92.2
 93.3107.7122.1132.8130.8133.3127.9112.2 96.4 79.2 48.4 33.7
 4849 45.7 71.7 88.6110.9117.6117.5108.5100.1 87.6 77.0 73.9 73.9
 70.6 73.1 76.8 81.9 81.5 87.0 85.3 74.5 65.4 56.3 34.6 23.7
 1657 32.2 45.6 56.3 66.9 72.5 71.3 72.1 69.6 64.6 60.0 60.0 62.1
 61.3 65.1 67.1 67.1 64.7 63.5 58.3 49.7 42.5 33.3 19.3 13.2
 2457 32.1 47.3 57.9 71.3 76.6 77.3 76.9 73.3 67.7 65.2 66.3 69.3
 72.8 81.7 90.1 94.9 88.7 89.0 83.7 69.2 61.0 49.7 30.4 19.4
 3257 36.4 52.2 63.2 76.9 80.8 81.0 81.0 74.7 72.5 66.9 70.1 73.4
 72.0 78.2 81.7 84.3 88.4 92.7 90.3 76.3 66.6 53.6 30.8 21.2
 4057 36.4 52.0 63.5 79.0 85.4 86.5 87.1 82.1 74.7 71.3 72.0 74.4
 76.1 86.9 91.7 95.9 89.0 88.5 79.7 68.4 58.2 46.7 27.9 18.6

CYCLE 1 DATA

DATASET 10, NOVEMBER 21, 1974

Reactor Conditions

Core Average Exposure, 3542 MWd/t
 Core Thermal Power, 3271 MWT
 Dome Pressure, P, 1035 psia
 Core Flow, 103.8 Mlb/hr
 Inlet Subcooling at P, 24.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	14.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	14.	48.	12.	48.	8.	48.	12.	48.	14.	48.	48.	48.
48.	48.	36.	48.	36.	48.	38.	48.	38.	48.	36.	48.	36.	48.	48.
48.	30.	48.	12.	48.	6.	48.	12.	48.	6.	48.	12.	48.	30.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	14.	48.	8.	48.	12.	48.	10.	48.	12.	48.	8.	48.	14.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	30.	48.	12.	48.	6.	48.	12.	48.	6.	48.	12.	48.	30.	48.
48.	48.	36.	48.	36.	48.	38.	48.	38.	48.	36.	48.	36.	48.	48.
48.	48.	48.	14.	48.	12.	48.	8.	48.	12.	48.	14.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	14.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
 See Figure 22

16	9	26.7	42.8	51.8	63.8	70.1	75.6	77.7	77.1	71.3	67.3	64.2	63.3
		59.7	55.8	56.6	55.2	50.8	50.5	47.8	43.3	37.0	31.9	20.7	12.1
24	9	23.6	36.5	48.3	65.2	78.0	85.4	85.0	86.8	83.9	80.9	79.9	80.4
		76.9	74.6	75.1	73.9	68.3	68.8	64.5	57.3	49.7	40.9	26.8	16.9
32	9	21.6	35.9	49.5	67.6	82.5	90.9	89.9	89.3	81.4	76.8	74.1	74.7
		70.0	67.5	68.1	71.4	69.4	71.6	69.5	62.1	54.3	46.3	30.6	17.7
40	9	24.4	38.4	51.1	67.0	79.3	88.1	91.8	95.1	92.4	91.3	89.4	89.1
		83.8	82.0	78.7	78.7	72.1	71.0	65.9	57.9	49.5	39.8	25.2	16.3
48	9	24.4	40.6	51.1	63.8	69.5	71.1	70.6	69.8	62.5	57.0	54.5	53.2
		52.7	49.0	49.0	49.0	45.6	44.3	41.9	36.8	31.0	26.7	17.7	10.0
817		24.9	42.2	55.4	71.5	81.2	85.9	88.2	90.3	85.5	77.7	75.5	73.5
		70.3	65.1	66.2	66.2	61.2	59.6	56.8	50.9	42.8	37.3	24.8	15.0
1617		20.7	35.9	49.6	66.4	80.8	89.3	91.7	93.1	82.8	74.0	67.9	65.7
		62.3	59.9	64.4	67.3	66.2	70.2	70.8	66.9	56.9	50.0	33.4	21.1
2417		23.6	39.7	54.3	74.4	90.3	97.2	97.7	91.8	80.5	71.2	67.6	63.9
		60.3	60.5	63.2	66.6	65.7	70.1	71.1	67.3	60.4	52.9	34.6	21.6
3217		25.1	40.9	56.0	77.6	92.1	97.0	95.3	89.9	75.6	69.1	65.3	63.1
		59.9	60.8	64.1	65.7	63.1	65.6	67.3	62.9	58.7	50.6	32.4	21.6
4017		21.1	37.5	50.8	68.0	81.3	92.0	94.8	96.4	87.4	77.1	72.8	68.6
		65.7	64.1	66.9	70.5	69.2	73.4	75.3	71.1	62.3	55.2	37.4	21.9
4817		21.7	37.7	50.3	68.1	81.3	88.9	92.2	90.9	82.6	75.2	70.7	69.5
		65.7	62.4	66.5	68.0	69.1	69.2	63.3	53.7	46.5	30.4	17.0	
5617		17.1	27.8	34.7	44.7	51.6	56.1	59.4	60.7	58.2	55.1	54.9	54.6
		51.9	48.4	47.5	46.1	41.5	40.4	37.2	32.3	26.9	23.0	14.4	8.3
825		21.1	36.3	49.3	68.5	83.6	94.4	95.0	96.2	93.2	92.7	91.2	88.7
		86.2	80.1	79.3	80.7	73.6	72.1	69.6	62.7	53.1	46.3	31.2	18.6
1625		23.2	37.4	52.4	72.7	87.3	96.0	93.5	90.3	81.4	73.3	67.7	65.0

	62.3	62.4	65.4	68.9	67.0	72.5	75.1	70.1	62.6	55.1	35.5	22.4
2425	22.9	37.6	51.2	68.0	79.4	87.7	91.9	91.6	82.4	74.6	71.8	70.6
	68.0	70.5	74.8	76.6	75.4	77.8	78.2	72.8	66.7	59.1	39.2	24.8
3225	22.6	37.6	51.3	67.5	77.7	83.8	88.3	88.2	78.5	70.4	67.2	64.9
	62.7	65.0	69.4	72.6	71.7	78.2	80.5	74.8	68.1	58.2	37.9	24.3
4025	21.2	36.4	51.3	71.3	89.1	97.1	96.0	94.1	81.8	73.6	67.6	64.7
	62.3	61.8	65.5	69.4	67.4	69.6	71.1	67.2	61.7	57.7	38.9	24.6
4825	18.7	33.2	47.5	66.2	85.7	97.1	97.1	96.8	84.9	77.6	72.8	71.0
	67.5	65.3	67.7	71.3	69.5	72.2	74.1	70.2	61.2	54.1	37.1	21.5
5625	15.1	25.4	33.1	44.6	52.7	58.4	64.7	68.7	70.5	73.2	76.4	76.6
	73.4	69.0	67.9	66.6	61.4	59.6	56.2	49.1	40.5	35.2	22.4	13.1
833	22.4	37.6	50.3	68.9	83.4	92.1	91.8	90.9	84.1	79.2	75.2	72.9
	71.3	67.9	70.4	71.2	70.2	71.9	70.0	62.5	53.7	46.8	30.7	18.2
1633	21.0	36.1	50.4	70.8	86.5	95.8	94.1	88.6	79.0	69.4	63.8	61.6
	58.7	59.1	63.5	65.4	62.6	65.7	66.7	64.6	59.8	52.2	34.2	21.0
2433	18.1	31.2	43.4	58.1	69.7	77.5	83.0	84.9	77.6	70.5	65.6	65.0
	62.8	60.9	67.0	71.0	70.7	76.9	80.1	77.1	69.9	62.1	41.1	26.0
3233	19.5	33.2	44.9	60.8	72.1	78.9	85.8	86.8	78.5	70.3	66.3	64.1
	61.9	62.2	67.3	71.2	70.6	76.4	81.1	78.2	71.2	62.7	41.7	25.8
4033	19.8	34.2	48.1	67.9	84.0	94.5	93.2	91.8	81.3	72.3	68.0	64.2
	61.5	59.3	64.1	67.8	67.1	73.2	76.9	73.7	65.1	58.6	40.1	23.7
4833	20.8	35.8	50.6	70.2	88.3	96.0	95.5	92.6	83.0	75.3	72.5	69.5
	65.0	65.6	68.3	70.4	67.7	69.6	69.5	67.0	60.1	53.9	35.1	20.6
5633	16.2	26.5	36.0	47.2	57.1	62.3	65.1	66.6	62.6	60.0	59.7	60.3
	57.7	54.9	54.6	56.1	52.2	56.2	55.0	49.5	41.5	35.4	23.4	13.8
841	21.0	35.1	46.6	62.1	74.7	85.5	91.0	94.6	91.8	90.2	89.1	87.1
	83.1	78.2	79.4	79.4	74.1	71.4	67.3	60.2	50.9	43.9	27.8	16.9
1641	19.1	33.5	47.5	65.2	80.3	88.9	95.2	96.7	84.4	76.8	70.3	68.4
	65.7	62.2	66.6	69.1	68.4	71.9	74.6	71.7	62.7	55.7	38.8	23.1
2441	19.0	33.4	46.6	64.9	82.3	91.1	89.7	85.9	75.2	66.8	62.6	60.9
	58.1	57.1	62.8	66.4	62.1	65.4	66.6	62.8	57.7	52.6	36.2	22.1
3241	20.4	35.5	50.1	67.8	83.7	92.8	91.9	87.8	78.4	69.5	65.8	63.2
	60.9	60.7	65.3	70.9	70.0	74.3	79.2	74.9	66.4	59.0	40.1	24.4
4041	19.2	34.6	49.3	67.1	80.6	93.3	96.5	97.2	85.7	75.1	68.7	67.1
	65.6	64.6	69.1	73.4	72.0	73.1	73.8	70.3	62.8	58.0	41.4	25.4
4841	19.6	33.7	46.9	63.3	78.0	91.5	97.5	99.4	89.8	83.3	79.8	76.6
	72.5	69.0	71.0	73.2	70.2	72.6	72.5	66.6	58.0	50.7	33.5	20.7
5641	17.1	28.7	36.9	47.6	55.5	61.3	65.6	69.6	71.2	71.0	71.4	68.2
	64.6	60.8	59.5	58.8	51.6	49.0	46.4	40.7	34.1	29.2	19.3	10.6
849	26.8	40.3	49.7	61.0	67.5	67.8	66.2	64.0	57.3	52.6	51.4	50.7
	47.8	45.9	44.9	44.7	42.4	42.4	40.0	35.4	29.7	24.9	15.5	9.1
1649	23.8	37.9	50.6	65.0	75.6	82.3	86.9	84.7	76.9	71.6	69.2	67.9
	64.8	65.8	67.5	70.1	68.6	71.8	70.9	62.5	53.9	45.6	28.7	16.9
2449	20.2	33.5	46.4	63.6	78.5	88.0	88.1	85.4	77.4	71.0	68.6	67.0
	65.8	64.5	67.6	70.4	67.9	71.4	72.8	67.5	60.3	51.0	32.6	20.8
3249	19.1	33.8	47.1	65.7	82.5	92.2	95.0	92.7	81.1	73.2	69.1	68.3
	66.6	64.5	68.1	69.6	66.6	68.0	69.9	66.7	61.1	54.2	36.2	22.8
4049	20.3	33.5	45.7	62.4	76.9	86.9	91.8	92.5	85.6	82.2	78.8	75.9
	74.0	72.1	75.4	78.6	76.3	79.5	80.1	74.0	64.3	55.2	36.1	20.9
4849	20.6	35.7	47.6	61.3	72.3	76.4	76.2	77.0	70.6	63.6	60.3	57.5
	55.2	51.7	53.7	55.0	55.3	56.4	56.8	51.5	44.0	38.6	25.9	15.5
1657	15.9	24.8	31.0	39.1	45.4	48.6	51.8	54.5	53.5	51.6	51.6	50.9
	49.8	47.4	47.0	46.0	41.6	41.2	38.6	32.8	27.7	23.2	14.6	8.2
2457	14.8	23.4	29.9	39.3	46.8	52.4	57.8	62.0	65.3	68.2	69.8	68.9
	65.9	62.9	60.7	59.9	55.1	53.9	50.4	44.0	37.4	31.9	20.5	12.0
3257	16.1	25.3	33.0	43.4	51.8	56.2	58.8	61.6	60.6	56.5	58.4	58.6
	57.3	55.1	54.9	56.3	54.2	57.1	56.2	49.2	42.7	35.8	22.5	13.0
4057	17.2	27.5	35.8	45.3	54.2	59.2	65.9	70.8	72.0	72.8	74.8	73.0
	69.6	64.3	62.4	61.8	55.6	53.9	50.1	43.8	36.4	31.2	19.8	11.4

CYCLE 1 DATA

DATASET 11, JANUARY 6, 1975

Reactor Conditions

Core Average Exposure, 4364 MWd/t

Core Thermal Power, 3280 MWT

Dome Pressure, P, 1027 psia

Core Flow, 104.1 Mlb/hr

Inlet Subcooling at P, 23.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	16.	48.	6.	48.	16.	48.	36.	48.	48.
48.	48.	48.	48.	30.	48.	38.	48.	38.	48.	30.	48.	48.	48.	48.
48.	36.	48.	8.	48.	6.	48.	16.	48.	6.	48.	8.	48.	36.	48.
48.	48.	24.	48.	36.	48.	34.	48.	34.	48.	36.	48.	24.	48.	48.
48.	32.	48.	6.	48.	10.	48.	12.	48.	10.	48.	6.	48.	32.	48.
48.	48.	10.	48.	36.	48.	36.	48.	36.	48.	36.	48.	10.	48.	48.
48.	32.	48.	6.	48.	10.	48.	12.	48.	10.	48.	6.	48.	32.	48.
48.	48.	24.	48.	36.	48.	34.	48.	34.	48.	36.	48.	24.	48.	48.
48.	36.	48.	8.	48.	6.	48.	16.	48.	6.	48.	8.	48.	36.	48.
48.	48.	48.	48.	30.	48.	38.	48.	38.	48.	30.	48.	48.	48.	48.
48.	48.	48.	36.	48.	16.	48.	6.	48.	16.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core

See Figure 22

16	9	17.3	29.3	39.4	55.0	69.8	81.8	89.0	89.8	84.8	79.2	75.0	72.5
		67.1	62.3	61.7	61.3	54.2	52.5	49.1	41.9	35.7	30.3	19.5	11.3
24	9	22.8	36.1	47.7	62.7	70.7	71.6	73.6	74.2	71.4	71.8	75.9	76.9
		74.4	73.5	74.2	77.5	73.9	73.2	68.7	58.1	49.1	40.5	26.0	17.2
32	9	21.4	36.1	47.7	63.1	72.0	74.3	75.4	77.6	73.2	76.4	80.9	83.7
		82.1	79.2	78.9	78.4	71.5	69.7	64.5	56.5	49.4	43.0	28.8	17.0
40	9	23.4	37.9	50.7	70.6	84.4	91.6	94.6	96.2	91.5	87.0	85.0	84.3
		81.0	80.2	80.2	82.4	76.9	75.9	70.7	59.5	49.6	39.7	24.5	15.8
48	9	16.6	28.7	38.1	51.5	63.6	75.0	79.6	82.6	78.1	73.0	68.9	66.5
		62.4	57.7	57.3	54.8	48.3	46.2	42.8	36.7	30.0	25.3	16.9	9.0
817		26.8	45.7	59.5	74.6	84.7	91.0	90.0	94.2	88.9	84.9	80.3	77.8
		75.4	68.9	68.4	66.8	59.7	55.7	52.1	46.0	38.1	33.1	22.5	13.0
1617		22.0	38.7	53.3	67.4	77.2	82.4	82.4	86.3	83.9	85.2	83.5	81.1
		77.7	71.7	71.6	72.6	65.7	63.1	60.3	56.2	49.5	45.0	31.1	19.8
2417		22.2	37.7	51.6	70.4	84.4	93.2	94.9	96.2	89.4	81.4	78.5	77.6
		73.5	72.2	76.2	78.3	72.9	73.7	71.3	64.3	56.4	50.2	33.3	21.3
3217		24.4	40.1	54.3	73.6	88.1	95.5	96.3	93.8	84.7	77.5	76.2	75.2
		71.3	72.6	77.7	82.9	81.6	81.9	78.7	70.0	59.1	49.1	31.8	21.9
4017		20.1	36.5	50.0	65.1	76.4	82.2	84.9	89.5	88.2	87.2	87.4	86.5
		82.7	78.5	80.9	82.1	76.2	73.6	70.4	64.9	56.8	51.4	35.7	21.2
4817		29.5	51.9	68.1	84.8	92.7	95.5	91.8	91.4	87.4	81.2	78.2	77.0
		73.6	69.8	71.4	69.9	63.0	60.2	56.3	52.0	46.1	40.6	28.1	15.8
5617		13.0	21.7	28.4	37.4	46.9	56.2	63.9	67.8	64.8	62.1	61.4	59.5
		55.9	52.2	50.0	47.3	41.2	39.3	35.7	30.3	25.2	21.5	13.5	7.7
825		20.6	35.6	48.2	62.6	73.1	78.7	82.0	90.2	90.5	90.0	87.7	91.3
		92.7	87.9	87.3	85.5	76.5	70.7	66.9	57.9	48.2	41.6	28.9	16.5
1625		21.4	35.4	48.2	64.2	75.5	85.6	87.7	91.7	84.7	78.8	74.0	72.4

	69.5	68.7	69.1	70.2	65.5	65.0	63.6	59.7	53.4	47.8	31.5	20.2
2425	21.7	36.2	48.8	65.0	76.8	86.1	93.4	97.8	93.5	86.1	84.3	82.0
	78.1	77.5	80.3	82.6	78.7	81.1	81.8	77.6	68.5	58.5	38.0	25.1
3225	22.4	37.4	50.4	67.3	79.1	87.9	92.9	97.6	91.3	83.5	80.5	77.6
	73.9	74.1	77.8	81.1	78.6	84.2	85.8	78.9	68.9	58.7	37.2	25.1
4025	19.1	34.1	48.2	64.9	79.0	89.8	96.7	99.2	90.6	84.2	79.2	76.8
	73.2	70.2	72.8	74.5	71.7	71.6	73.3	71.6	64.5	57.4	39.7	23.4
4825	16.8	30.3	42.2	55.8	68.2	73.7	75.4	76.5	72.0	68.1	67.4	71.7
	73.8	74.0	76.6	76.2	70.0	67.4	64.6	60.1	52.4	47.9	34.2	19.2
5625	14.2	24.0	31.4	41.8	51.7	59.8	66.6	77.2	80.6	83.2	82.8	82.0
	78.2	73.1	71.0	68.5	60.6	57.4	53.7	45.5	37.5	32.4	20.6	11.2
833	21.2	35.6	47.3	60.9	68.2	72.9	76.5	84.3	84.3	83.5	84.8	84.3
	79.2	74.4	74.4	71.8	63.9	63.0	60.3	55.1	47.8	41.6	27.7	16.2
1633	19.4	33.1	45.0	61.1	72.9	82.0	87.5	89.1	80.7	73.3	70.5	67.0
	64.5	61.7	64.6	65.4	60.8	61.0	60.5	56.2	51.3	45.8	30.7	19.8
2433	18.5	32.2	44.8	60.9	74.3	85.9	92.6	96.4	89.2	82.8	77.5	74.4
	70.3	67.3	70.4	73.6	71.5	74.8	77.1	75.2	67.9	60.1	40.4	23.7
3233	19.7	34.0	47.4	64.5	79.0	92.0	97.9	99.3	91.0	82.2	76.7	73.9
	68.8	68.3	71.3	75.7	75.7	82.6	85.2	81.8	71.6	62.4	40.7	26.2
4033	18.6	32.8	45.6	61.5	75.1	87.2	94.2	98.2	91.4	83.9	79.5	75.1
	70.8	67.1	69.4	72.2	68.7	71.1	73.1	71.1	63.6	57.0	39.1	22.4
4833	18.2	31.0	42.1	56.0	65.1	71.4	74.1	75.1	69.9	67.1	65.9	65.0
	64.2	63.2	64.5	65.2	59.8	60.6	61.6	58.5	54.4	50.4	34.5	19.3
5633	14.6	24.8	33.3	43.5	53.0	58.5	65.8	76.2	78.9	77.5	78.9	78.6
	74.8	66.9	65.4	62.8	55.0	52.9	49.7	42.6	36.1	31.0	20.5	11.5
841	22.8	37.8	51.4	66.7	78.0	87.0	90.0	94.2	90.5	85.8	84.0	87.2
	86.8	83.2	83.6	83.3	73.2	69.0	64.1	55.6	46.1	38.8	25.1	14.5
1641	19.2	33.3	47.2	63.3	75.2	85.7	91.8	94.5	88.6	82.1	78.3	77.5
	75.0	70.5	72.6	72.8	67.1	65.5	64.2	60.9	54.4	49.8	34.6	21.0
2441	18.3	32.1	44.2	58.9	71.1	78.3	84.9	88.5	84.7	77.4	73.0	73.0
	68.1	66.6	70.2	72.9	69.1	70.1	69.2	63.9	57.4	51.5	35.4	21.5
3241	19.2	33.3	46.2	61.0	72.4	79.3	85.3	90.8	88.7	81.6	77.1	75.8
	73.8	73.6	79.4	86.7	86.8	90.4	88.0	79.1	67.2	58.1	39.4	23.9
4041	18.1	32.4	45.9	58.8	74.0	84.0	91.0	95.5	89.2	83.2	80.1	78.1
	75.6	72.6	76.0	77.5	73.2	72.0	70.2	65.6	57.9	54.1	38.9	23.4
4841	19.4	34.2	47.4	62.2	72.2	78.5	77.9	80.3	74.4	71.5	70.0	73.6
	74.0	73.2	74.9	74.5	66.4	63.8	61.1	55.4	49.2	44.4	30.7	18.5
5641	15.9	26.8	34.6	46.3	58.0	70.2	79.8	84.3	80.8	75.4	71.2	68.4
	66.0	59.9	59.0	56.5	49.4	47.7	43.9	37.7	31.2	26.7	17.8	10.2
849	28.7	44.9	56.1	70.4	75.0	76.5	75.2	72.7	67.3	60.7	58.6	56.0
	52.3	49.5	48.4	47.3	41.3	40.3	38.1	32.4	27.1	22.9	14.4	8.3
1649	23.1	37.4	50.0	66.0	77.6	87.5	93.9	97.0	97.5	93.5	94.4	93.0
	88.3	84.9	84.2	83.6	76.4	73.0	67.3	59.4	49.4	40.7	25.7	15.8
2449	21.1	34.7	47.3	65.0	79.1	85.7	87.0	84.8	81.0	75.8	75.3	75.6
	73.2	73.1	77.3	84.1	80.4	81.3	77.0	67.6	58.4	48.8	31.6	19.3
3249	18.4	32.1	45.2	63.7	79.4	90.7	91.1	93.3	84.7	78.8	75.7	76.6
	73.5	72.5	76.8	79.1	73.5	73.4	70.8	64.5	57.1	50.7	34.1	20.4
4049	20.6	34.4	47.2	63.3	74.9	79.9	84.2	88.8	87.9	89.9	91.7	89.6
	86.3	83.9	87.8	91.8	88.1	87.7	83.4	73.3	61.9	51.9	33.7	20.2
4849	22.1	38.6	51.3	66.3	77.6	85.4	89.2	92.3	87.5	81.5	77.4	76.1
	71.4	65.0	65.3	63.5	56.6	53.7	50.9	44.5	37.3	32.5	21.9	12.6
1657	9.6	15.6	21.9	31.4	43.4	54.0	60.4	64.7	63.1	58.4	57.7	56.6
	53.3	50.9	49.8	47.7	43.5	42.9	38.9	32.5	27.9	23.3	14.5	8.0
2457	14.2	22.9	29.6	40.1	47.6	53.5	58.3	62.7	63.3	67.0	72.1	73.7
	70.9	67.5	66.5	65.9	58.4	56.4	52.9	44.7	37.2	31.3	20.3	11.6
3257	15.5	25.2	32.9	42.8	50.2	55.5	59.8	62.6	63.0	66.8	76.1	78.3
	76.3	72.9	71.9	69.3	61.1	59.2	55.4	47.2	39.0	33.5	21.6	12.2
4057	16.0	26.7	36.4	51.8	66.8	77.0	81.3	85.0	79.3	74.6	73.2	71.8
	68.1	64.7	62.0	61.2	55.6	55.4	51.4	43.6	35.9	30.6	19.2	11.0

CYCLE 1 DATA

DATASET 12, FEBRUARY 3, 1975

Reactor Conditions

Core Average Exposure, 4697 MWd/t
 Core Thermal Power, 3277 MWT
 Dome Pressure, P, 1029 psia
 Core Flow, 104.0 Mlb/hr
 Inlet Subcooling at P, 23.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	12.	48.	10.	48.	6.	48.	10.	48.	12.	48.	48.	48.
48.	48.	36.	48.	32.	48.	34.	48.	34.	48.	32.	48.	36.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	38.	48.	34.	48.	34.	48.	34.	48.	34.	48.	38.	48.	48.
48.	14.	48.	6.	48.	10.	48.	10.	48.	10.	48.	6.	48.	14.	48.
48.	48.	38.	48.	34.	48.	34.	48.	34.	48.	34.	48.	38.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	36.	48.	32.	48.	34.	48.	34.	48.	32.	48.	36.	48.	48.
48.	48.	48.	12.	48.	10.	48.	6.	48.	10.	48.	12.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core

See Figure 22

16	9	27.9	45.4	55.6	69.8	73.1	76.8	75.1	77.5	72.3	65.4	63.6	62.1
		59.5	55.8	55.6	55.3	50.1	48.1	46.1	40.2	34.7	29.4	19.2	11.5
24	9	24.7	39.3	51.5	68.3	78.4	86.1	85.6	85.1	78.7	74.3	75.6	77.6
		76.7	75.6	76.4	74.9	68.7	67.2	63.0	55.3	46.1	38.6	24.6	16.7
32	9	23.0	38.2	53.0	70.7	83.1	90.7	92.3	92.5	84.9	78.0	78.3	76.2
		73.3	69.3	70.6	72.4	69.3	69.6	67.7	59.4	50.7	42.9	28.0	16.6
40	9	25.9	41.5	53.5	69.4	78.8	86.1	89.9	91.0	86.9	81.6	83.2	86.7
		85.7	83.6	82.0	80.8	72.6	71.0	66.3	56.4	48.1	38.7	24.2	16.2
48	9	26.4	43.2	54.8	68.9	72.6	74.0	70.9	68.5	63.1	58.6	57.9	56.1
		52.9	47.8	47.7	48.1	43.4	42.0	39.7	34.8	29.6	25.2	17.0	9.2
	817	26.2	45.6	59.1	73.3	81.2	84.5	84.1	87.5	82.7	77.2	72.7	72.7
		70.5	65.6	66.1	65.2	59.9	57.6	54.9	49.1	41.1	35.5	24.1	13.8
1617		20.4	36.0	48.5	62.7	72.2	78.6	81.7	88.8	88.6	85.0	81.3	78.6
		74.0	68.4	68.7	68.2	64.0	64.8	66.0	62.0	53.8	47.0	31.3	18.8
2417		22.2	37.4	50.4	64.9	75.8	83.3	92.0	97.4	92.9	85.4	83.4	80.0
		75.0	70.7	70.6	71.2	65.3	65.0	65.1	61.6	55.0	48.0	31.4	20.3
3217		23.4	38.5	52.1	67.2	77.6	83.8	92.9	97.2	92.4	86.1	82.9	79.1
		74.0	71.3	70.6	70.2	64.1	63.4	61.8	55.8	51.1	43.9	28.8	20.6
4017		19.2	35.0	46.7	60.8	70.2	78.9	83.1	91.4	92.9	91.6	88.6	85.9
		80.4	74.6	75.4	75.4	70.2	69.4	70.0	67.1	58.8	52.1	36.2	20.8
4817		21.8	38.2	51.7	66.9	76.5	83.9	89.7	93.4	88.8	82.5	78.7	77.2
		72.9	68.5	68.5	69.0	64.6	65.8	65.4	60.3	51.0	44.0	29.4	16.8
5617		17.8	29.5	37.7	48.3	55.0	58.8	59.9	60.7	56.5	53.5	52.6	53.0
		50.2	48.4	47.5	46.4	41.3	40.1	36.6	31.5	26.2	22.4	14.2	7.9
	825	22.0	38.9	53.2	70.1	85.1	93.0	94.0	95.5	87.2	83.2	82.6	83.8
		84.7	82.6	83.9	83.7	76.7	73.7	69.7	61.7	51.1	44.1	29.5	17.9
1625		22.0	35.9	48.3	62.3	71.4	78.7	84.2	90.7	88.1	84.8	82.9	79.8

	74.1	71.0	71.7	70.7	66.0	67.7	68.2	63.4	56.4	48.8	31.8	20.5
2425	21.4	34.9	47.0	62.5	73.1	83.0	91.2	99.3	96.9	92.2	90.7	87.9
	82.9	79.2	78.8	78.6	73.2	72.0	70.0	64.2	58.8	51.3	34.1	22.7
3225	21.8	36.4	49.1	64.5	76.0	83.4	91.0	98.3	94.0	89.3	86.8	81.2
	75.2	72.7	74.5	73.7	68.4	70.3	70.5	65.6	59.2	51.3	32.9	22.9
4025	18.3	32.7	45.2	60.4	71.2	81.0	87.1	96.3	93.8	89.5	85.2	81.1
	76.8	72.1	73.6	74.1	69.1	68.0	66.9	63.0	56.2	51.9	36.1	22.6
4825	17.7	32.6	47.1	65.0	80.3	92.6	93.9	97.2	88.8	84.5	82.4	78.4
	74.4	70.8	72.4	73.0	69.4	69.6	69.0	65.2	57.0	50.3	34.2	19.7
5625	15.5	26.4	35.2	46.6	54.7	61.0	64.1	65.7	62.6	61.0	61.0	63.9
	67.3	68.0	67.8	67.7	62.1	60.6	56.7	48.9	40.5	34.4	22.2	12.3
833	23.2	39.9	53.9	70.5	82.1	91.3	91.1	92.4	85.8	80.2	77.6	76.6
	74.0	70.8	71.4	73.4	70.4	71.7	68.0	59.9	50.6	43.1	28.5	17.0
1633	19.7	34.0	46.2	61.6	70.3	78.3	85.7	91.0	87.4	82.1	78.2	74.3
	71.3	68.2	68.4	68.1	63.6	62.9	61.3	56.4	51.2	44.7	29.7	19.5
2433	17.3	29.9	41.4	56.0	65.9	74.2	82.9	92.5	91.3	87.4	81.5	79.3
	74.2	70.1	70.4	71.4	67.3	67.7	68.6	66.5	59.6	53.8	36.2	21.7
3233	18.5	32.1	44.1	59.8	71.0	81.0	90.0	96.9	91.8	87.6	83.4	79.0
	74.9	70.1	70.8	72.9	67.9	70.0	71.6	69.1	62.0	56.1	37.0	22.9
4033	18.0	31.4	43.7	57.7	69.0	77.0	86.0	96.3	95.3	88.5	85.9	81.4
	75.7	70.5	71.3	72.3	67.8	68.4	68.7	65.6	59.1	52.6	35.9	21.3
4833	20.4	35.3	49.4	67.9	82.5	92.5	96.1	96.5	91.0	83.2	80.8	78.0
	74.3	71.7	73.0	74.3	68.2	68.2	65.9	59.8	53.2	47.1	31.6	18.7
5633	16.6	28.5	37.9	49.5	58.3	62.7	63.5	64.8	61.3	57.5	56.6	56.0
	55.0	53.1	52.6	55.2	52.3	55.0	53.6	47.1	39.5	33.8	22.5	12.8
841	22.5	38.7	51.4	67.1	77.3	84.6	88.3	92.3	87.1	82.5	81.1	83.4
	83.2	80.2	82.3	82.2	75.7	71.7	67.7	59.5	50.2	41.8	26.8	15.9
1641	18.6	32.3	45.1	59.9	72.1	78.8	82.8	90.4	89.7	88.7	85.1	83.1
	77.8	72.5	73.4	73.8	69.3	67.7	68.5	66.1	58.3	52.3	35.8	21.8
2441	17.8	31.1	43.2	56.4	66.3	75.7	82.5	89.8	87.9	82.4	78.8	75.7
	70.6	66.9	67.8	68.1	61.5	62.3	61.1	57.1	51.4	46.9	32.3	19.9
3241	18.2	31.8	44.1	58.4	69.6	77.5	85.4	92.9	92.4	86.2	82.4	80.4
	76.3	71.7	73.3	72.8	68.2	68.0	69.4	65.9	58.3	51.6	35.4	21.5
4041	17.2	30.9	42.9	56.1	66.8	76.1	80.8	89.8	91.3	88.6	85.4	82.4
	79.3	74.9	76.6	76.8	72.0	70.6	68.8	63.9	58.1	52.6	37.3	22.3
4841	18.9	33.2	46.0	60.5	74.3	84.9	91.7	96.2	90.9	87.1	84.6	80.9
	77.8	73.0	74.3	75.0	68.0	67.4	67.4	62.7	54.0	47.3	31.8	19.8
5641	18.2	30.3	39.6	50.9	59.4	64.4	65.7	66.1	62.2	58.8	59.9	60.7
	61.2	59.1	59.1	57.0	50.9	48.8	45.5	39.9	33.5	28.9	19.4	11.1
849	29.4	44.9	55.3	65.6	70.2	68.4	66.9	64.6	59.9	55.2	53.1	50.5
	46.7	44.8	44.3	42.7	40.7	40.3	38.5	33.2	28.8	23.9	14.8	8.7
1649	24.7	39.7	51.8	68.0	77.1	82.6	86.6	87.9	83.5	78.5	77.7	75.1
	70.9	68.8	68.3	68.9	63.9	65.9	66.1	59.3	50.5	42.7	26.9	16.2
2449	20.7	34.6	46.9	63.6	77.2	86.6	89.5	89.8	83.6	77.4	76.8	74.6
	71.8	69.3	70.7	71.4	65.8	66.6	66.7	60.7	54.3	46.6	30.2	18.6
3249	18.8	32.7	45.9	64.3	81.7	91.4	93.8	97.4	89.4	83.4	79.9	75.9
	71.4	69.5	70.4	70.8	65.4	64.2	63.4	58.2	51.3	46.3	31.8	19.7
4049	20.5	34.5	46.7	62.5	75.1	87.0	92.7	96.9	93.1	89.3	86.7	85.6
	81.8	78.7	79.3	81.1	74.8	74.6	73.8	68.7	59.8	51.1	33.2	19.9
4849	21.6	37.4	49.5	62.9	70.3	74.0	74.9	74.6	69.5	65.3	61.7	60.7
	57.0	52.5	52.5	53.3	49.3	50.6	51.1	47.2	40.1	35.5	24.0	13.6
1657	17.2	26.8	34.1	42.2	49.2	53.1	53.9	55.4	53.6	51.0	50.5	49.9
	47.7	46.0	46.2	46.7	41.9	39.6	37.0	32.0	26.9	22.6	14.2	7.9
2457	15.8	25.1	32.9	42.9	51.3	55.7	59.0	60.4	58.6	56.0	57.8	61.2
	62.2	61.7	62.8	62.2	55.2	54.5	51.3	43.8	36.4	30.7	20.1	11.1
3257	17.2	27.9	36.8	48.5	57.1	60.7	64.6	64.3	60.5	56.4	57.4	57.8
	56.5	54.7	55.1	56.0	53.9	56.0	55.3	47.7	41.2	34.4	21.9	12.6
4057	18.5	29.8	38.9	50.5	59.6	64.0	66.9	67.0	63.6	59.6	61.3	63.3
	64.3	64.0	63.9	62.7	55.4	54.2	51.4	43.6	35.6	30.3	18.9	10.7

CYCLE 1 DATA

DATASET 13, MARCH 13, 1975

Reactor Conditions

Core Average Exposure, 5262 MWd/t

Core Thermal Power, 3293 MWT

Dome Pressure, P, 1033 psia

Core Flow, 103.1 Mlb/hr

Inlet Subcooling at P, 24.2 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	12.	48.	10.	48.	8.	48.	10.	48.	12.	48.	48.	48.
48.	48.	36.	48.	34.	48.	38.	48.	38.	48.	34.	48.	36.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	14.	48.	8.	48.	10.	48.	12.	48.	10.	48.	8.	48.	14.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	36.	48.	34.	48.	38.	48.	38.	48.	34.	48.	36.	48.	48.
48.	48.	48.	12.	48.	10.	48.	8.	48.	10.	48.	12.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core

See Figure 22

16	9	27.7	44.7	54.5	65.3	69.0	71.4	71.1	73.0	69.3	64.4	62.1	61.7
		59.6	54.6	55.2	53.7	48.7	48.4	45.3	39.3	34.0	29.5	19.2	10.9
24	9	25.3	39.3	51.1	67.1	76.9	82.1	81.6	81.9	77.1	74.0	74.0	75.8
		75.3	73.0	73.5	72.9	66.9	65.5	61.3	54.2	46.2	38.2	25.1	16.2
32	9	23.3	39.8	52.7	67.7	80.5	87.2	87.1	90.8	84.5	79.4	75.8	74.7
		71.0	67.6	68.4	70.2	66.4	67.8	66.5	59.4	50.8	43.0	28.8	16.8
40	9	25.7	40.9	52.5	65.1	73.5	80.7	84.1	87.3	84.6	80.4	81.4	84.5
		83.5	79.7	79.5	78.7	70.9	68.9	64.8	56.0	46.5	38.3	23.7	15.8
48	9	25.1	41.9	52.1	64.6	69.7	70.0	66.3	64.8	61.5	58.3	57.1	55.6
		51.4	47.2	46.7	46.8	42.0	41.5	40.0	35.0	29.4	25.3	17.0	9.2
	817	26.3	44.4	56.5	68.6	75.4	78.5	79.1	82.4	78.8	75.1	72.3	70.9
		69.7	63.0	63.8	64.1	59.1	56.1	54.0	47.9	40.4	34.5	23.3	13.4
1617		20.3	35.1	47.5	61.1	69.9	77.4	82.1	90.9	89.0	83.0	80.9	77.5
		72.4	66.1	66.0	65.4	61.3	62.9	63.2	59.5	51.1	45.2	30.5	18.7
2417		23.6	40.1	54.0	70.0	82.8	93.1	94.7	97.8	93.3	86.9	82.1	78.8
		72.2	69.4	68.8	67.8	62.3	62.9	63.0	59.8	53.6	46.9	30.9	19.6
3217		24.6	40.8	55.0	73.1	86.5	94.0	96.9	99.3	91.6	84.8	81.5	76.5
		72.0	67.7	66.6	65.3	60.8	60.0	59.8	55.6	51.1	44.5	29.3	20.2
4017		19.6	35.2	47.6	61.2	70.9	79.0	86.7	97.3	96.7	91.3	88.0	86.0
		80.5	73.2	72.3	71.1	67.0	67.2	67.2	64.7	56.8	50.8	35.1	20.5
4817		21.2	37.4	49.4	62.3	72.7	79.2	84.7	90.7	88.7	82.9	80.4	77.1
		72.6	68.1	68.9	69.1	64.1	65.3	65.6	59.7	50.8	43.9	29.6	17.3
5617		17.3	28.8	37.2	46.8	53.3	55.8	57.7	58.5	56.0	52.1	52.0	51.8
		49.2	47.0	46.6	45.4	40.5	39.4	36.0	31.3	26.2	22.3	14.3	8.1
	825	21.9	38.3	53.0	69.7	80.7	88.5	90.0	91.4	87.0	82.2	79.5	82.3
		84.3	81.1	81.0	81.3	75.0	71.8	68.3	60.8	51.1	43.5	29.6	17.7
1625		23.1	37.5	50.5	66.4	76.7	84.6	87.7	91.5	88.4	83.5	79.6	76.9

	71.2	68.3	67.3	67.0	62.3	64.2	64.9	61.3	55.0	47.6	31.3	19.6
2425	22.9	37.3	50.7	65.9	75.1	83.6	90.0	97.4	97.6	92.9	90.3	85.5
	80.9	76.6	75.9	74.3	68.7	68.6	66.8	60.7	55.1	48.5	32.4	21.9
3225	23.1	38.5	51.9	66.0	75.3	82.6	90.3	95.8	93.9	88.4	86.6	82.6
	75.3	71.8	71.4	71.3	65.4	67.1	67.7	62.9	56.6	49.4	31.9	21.5
4025	19.7	35.1	48.8	66.9	80.6	91.2	94.0	97.9	93.5	89.8	84.1	80.8
	75.8	69.9	70.7	70.5	66.0	64.3	63.3	60.3	54.2	49.9	35.0	21.6
4825	18.4	33.7	47.5	64.4	79.6	89.1	90.4	93.8	90.5	83.5	78.7	77.6
	73.7	68.9	70.6	71.3	68.0	66.5	67.8	64.3	56.1	49.3	33.5	19.2
5625	15.3	26.2	33.9	45.8	53.1	58.8	61.6	60.7	59.4	58.1	59.4	61.2
	65.5	64.6	65.6	65.9	61.2	57.8	55.1	48.6	39.4	33.8	22.1	12.5
833	23.3	39.4	51.9	67.9	78.5	86.4	85.7	87.2	83.3	79.0	76.6	75.5
	72.5	69.1	69.1	71.8	68.7	70.0	67.4	60.4	51.0	43.4	28.2	17.7
1633	20.9	36.2	49.6	66.2	79.4	87.4	88.9	89.8	84.0	77.6	75.1	72.5
	67.8	64.0	64.6	64.7	59.6	59.3	59.6	56.6	51.4	45.0	29.6	18.9
2433	18.6	32.2	44.2	57.0	67.5	75.1	81.2	89.8	89.7	86.4	81.8	78.8
	73.8	68.5	67.2	68.2	63.8	65.4	65.7	63.3	56.7	50.9	34.4	20.8
3233	21.7	36.1	47.8	62.0	71.6	79.8	88.9	94.1	92.2	87.2	84.5	79.6
	73.7	69.6	69.7	70.0	66.5	70.3	72.4	67.7	59.1	50.7	33.0	21.8
4033	19.6	34.8	48.1	64.8	79.7	89.0	92.2	97.3	92.4	88.5	82.8	79.9
	73.7	67.6	66.8	67.6	63.4	63.8	64.5	62.1	55.5	50.4	34.7	20.8
4833	20.8	36.1	50.4	68.0	81.6	91.1	92.4	93.9	90.0	84.7	81.5	77.7
	73.7	70.7	70.2	71.7	66.6	66.5	65.6	61.7	55.0	48.4	32.3	18.8
5633	17.0	28.8	38.3	49.6	59.3	62.6	63.7	63.0	60.2	55.0	54.6	54.4
	53.2	50.8	52.0	53.4	51.1	53.6	52.1	45.8	39.5	33.5	22.7	13.0
841	22.5	38.1	49.8	63.5	73.2	79.0	82.2	85.5	81.1	79.3	78.2	79.6
	81.4	78.1	78.9	79.5	72.8	70.6	66.3	58.6	49.0	41.6	26.2	16.4
1641	19.1	33.3	46.0	59.8	72.3	79.0	84.7	95.4	92.5	88.7	83.8	81.9
	76.8	70.2	70.2	69.6	65.2	64.8	65.0	61.6	55.6	49.4	34.5	21.2
2441	18.7	32.7	45.6	61.7	73.8	83.0	86.3	88.4	84.3	78.3	76.0	72.0
	66.9	62.0	62.0	61.6	57.5	56.7	57.1	52.5	47.8	43.8	30.4	19.0
3241	20.3	35.6	49.5	65.6	79.1	89.5	92.1	95.4	90.5	85.4	81.5	78.0
	73.2	68.7	68.7	68.8	64.0	64.6	65.3	61.9	55.6	49.3	33.7	20.6
4041	18.2	33.0	46.4	59.9	71.4	81.0	86.6	95.8	95.2	90.7	84.9	82.6
	78.0	72.3	72.4	73.5	67.8	67.0	64.6	60.9	54.3	50.1	35.2	21.5
4841	18.9	32.9	45.3	59.0	70.5	79.4	86.9	93.5	89.1	83.0	83.0	80.3
	77.1	71.3	72.3	70.6	65.2	65.9	64.1	59.5	51.7	45.2	30.5	18.3
5641	18.3	30.5	39.2	49.3	57.8	63.0	63.3	63.7	58.6	56.1	55.5	58.6
	59.8	57.3	57.4	55.5	49.9	47.1	45.4	38.8	32.8	28.4	18.6	11.1
849	28.5	42.8	52.1	63.1	67.1	65.4	62.3	61.2	56.3	51.0	50.7	48.9
	46.2	44.2	43.2	42.6	39.7	39.2	37.3	32.3	27.8	23.1	14.6	8.4
1649	24.3	38.9	51.4	64.1	72.5	77.1	81.8	85.9	81.1	77.9	77.2	75.4
	69.8	66.3	66.3	66.7	62.6	63.9	63.2	57.2	49.8	41.6	26.0	16.2
2449	21.4	34.9	47.3	63.1	76.8	84.1	85.2	87.7	82.1	77.2	76.2	73.7
	69.6	68.0	67.7	68.2	63.4	64.0	63.1	59.2	52.6	45.5	29.7	18.3
3249	19.1	33.4	47.4	64.2	78.4	88.1	90.4	93.5	87.5	82.5	77.3	73.6
	69.5	65.5	67.4	67.1	61.8	62.0	61.7	58.5	52.8	46.7	31.7	19.5
4049	20.4	34.7	46.8	61.6	71.3	82.9	90.2	94.9	91.3	88.0	86.4	83.9
	80.5	77.2	76.5	76.9	72.6	72.7	72.6	67.3	58.5	50.3	32.9	19.7
4849	20.9	36.3	47.8	60.1	67.5	70.3	68.9	69.8	68.0	64.0	59.9	58.9
	55.4	50.5	51.5	51.9	48.0	50.0	49.9	45.7	39.3	34.4	23.4	13.4
1657	16.6	26.0	33.5	41.8	47.8	50.7	52.5	53.4	52.1	49.4	48.7	50.0
	48.0	45.9	45.3	45.0	40.4	38.7	36.4	31.8	26.2	22.0	14.0	7.9
2457	15.7	25.1	32.4	42.7	49.9	53.6	56.7	59.5	56.4	54.1	55.1	57.9
	59.4	59.1	58.0	58.2	52.3	51.7	48.9	41.9	35.4	30.6	19.7	11.1
3257	17.5	28.4	36.9	48.0	56.5	60.6	62.2	62.8	58.8	56.1	55.3	54.9
	53.2	51.3	52.7	52.6	50.9	53.9	53.6	46.5	39.7	34.2	21.4	12.6
4057	18.6	30.3	38.7	49.6	58.3	63.2	62.9	65.2	62.5	59.1	59.8	61.2
	63.6	62.1	61.5	60.3	53.9	52.7	49.2	41.8	35.0	29.7	18.9	10.7

CYCLE 1 DATA

DATASET 14, APRIL 2, 1975

Reactor Conditions

Core Average Exposure, 5640 MWd/t

Core Thermal Power, 3283 MWT

Dome Pressure, P, 1028 psia

Core Flow, 106.1 Mlb/hr

Inlet Subcooling at P, 23.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	36.	48.	8.	48.	8.	48.	18.	48.	8.	48.	8.	48.	36.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	10.	48.	38.	48.	36.	48.	36.	48.	38.	48.	10.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	36.	48.	8.	48.	8.	48.	18.	48.	8.	48.	8.	48.	36.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core

See Figure 22

16	9	16.8	27.9	36.9	49.8	60.8	70.3	76.1	80.4	77.1	72.3	72.4	71.0
		66.5	62.0	60.5	59.5	53.1	52.3	49.0	42.3	35.8	30.2	19.7	11.6
24	9	23.3	36.4	46.7	60.4	65.7	68.2	69.7	73.6	74.2	74.6	76.8	78.4
		76.3	71.7	70.7	71.5	68.4	70.7	67.4	59.7	49.8	42.1	27.5	17.9
32	9	22.1	36.4	47.9	59.7	66.7	71.2	71.5	73.6	74.5	77.6	83.5	84.2
		81.7	77.2	76.8	76.3	68.7	68.0	65.1	60.4	51.9	46.2	30.9	18.8
40	9	22.4	36.4	48.3	63.3	75.5	83.3	85.3	89.1	87.5	83.7	86.4	84.9
		79.3	77.0	75.8	77.4	73.8	74.3	71.2	61.3	51.3	41.9	25.8	16.9
48	9	15.7	26.4	35.2	46.8	56.3	66.7	72.1	76.1	74.2	70.0	67.4	65.8
		62.2	59.8	57.4	55.3	48.6	46.6	43.1	36.9	30.6	26.2	17.5	9.6
	817	25.7	43.7	55.3	67.8	74.6	79.2	81.2	84.2	83.2	79.8	77.1	77.7
		74.0	67.0	67.4	67.6	61.1	57.9	54.7	48.0	40.2	34.2	23.0	13.6
1617		20.4	35.9	47.1	58.5	67.4	70.9	73.1	78.6	79.7	81.5	83.9	87.7
		82.2	76.7	75.6	73.5	66.6	64.0	62.2	57.7	50.8	46.2	31.8	18.9
2417		21.3	35.6	46.1	60.3	73.0	83.0	88.3	95.5	92.5	88.6	89.6	86.8
		80.4	78.4	78.7	78.9	72.9	72.5	71.2	66.0	58.3	50.9	33.2	22.2
3217		22.6	36.8	49.3	64.7	77.2	85.0	91.8	95.8	92.8	86.9	85.5	84.4
		81.2	80.0	84.9	87.6	82.7	82.8	78.2	69.1	60.4	49.8	32.1	22.3
4017		18.4	33.0	44.2	56.4	66.0	71.4	75.7	82.6	84.3	85.4	90.8	93.7
		89.4	83.8	82.7	81.8	75.9	74.1	72.0	67.8	60.8	54.2	37.7	22.3
4817		27.4	47.8	61.3	74.3	80.3	82.0	82.6	87.2	85.5	82.0	82.3	80.2
		79.0	72.3	73.2	72.9	66.2	63.1	59.6	55.0	47.8	42.4	29.2	16.8
5617		12.3	20.4	26.6	35.0	43.2	51.1	58.2	63.3	62.9	60.8	59.0	57.2
		54.3	50.1	49.2	47.7	42.6	40.5	37.2	31.9	26.0	22.4	14.2	7.9
	825	20.2	35.2	47.1	57.8	65.8	71.2	73.4	79.5	81.3	82.4	87.6	86.4
		84.8	80.7	84.2	85.0	77.9	73.6	69.9	61.8	51.2	43.9	30.0	17.6
1625		20.2	33.0	43.3	55.5	65.3	73.3	79.2	86.7	84.8	82.4	80.3	79.4

	75.1	70.9	69.9	70.7	64.9	64.9	63.2	57.6	52.9	47.7	31.8	20.4
2425	20.5	33.7	44.5	59.4	69.0	78.3	89.7	98.5	98.9	97.5	96.2	92.5
	87.5	83.9	83.6	81.6	75.1	75.0	73.0	67.9	61.5	53.6	35.7	23.4
3225	21.4	36.0	47.9	61.6	72.0	81.7	92.0	98.7	98.9	96.3	94.5	89.6
	84.4	80.1	81.2	82.1	76.8	79.5	80.1	72.4	63.5	55.1	35.6	23.6
4025	18.3	32.7	45.0	58.9	70.5	82.2	88.4	97.9	95.7	92.6	88.6	85.8
	81.2	75.7	76.2	76.3	70.4	69.2	67.6	64.9	58.4	54.1	37.0	22.7
4825	16.1	29.2	39.4	50.4	58.9	63.2	65.5	67.9	68.9	69.5	68.2	67.7
	66.9	66.9	72.0	75.8	71.5	70.8	70.0	64.4	56.4	51.3	36.1	20.7
5625	13.6	23.0	30.7	39.7	48.1	54.9	59.8	64.2	68.5	72.1	75.1	74.7
	70.9	67.6	67.2	67.5	61.7	58.9	55.2	48.5	39.8	33.9	22.4	12.4
833	21.2	35.5	45.3	56.5	60.9	64.6	65.7	71.3	77.3	79.5	82.7	83.0
	79.4	73.5	73.6	72.2	65.8	64.3	61.9	57.4	49.4	43.0	28.5	16.6
1633	19.1	32.3	43.7	58.3	69.1	78.1	83.2	85.8	81.7	77.6	76.4	73.8
	68.0	64.6	65.0	64.0	58.6	58.7	56.5	52.3	47.9	43.3	28.8	19.1
2433	18.0	30.8	42.8	57.1	69.0	78.6	85.8	93.4	94.0	90.2	88.1	84.0
	79.2	72.8	72.2	71.4	66.6	67.2	66.3	63.6	58.0	52.8	36.5	22.0
3233	19.1	32.4	44.3	59.6	71.5	83.2	91.8	99.3	96.0	91.1	86.7	83.3
	78.7	73.0	73.3	74.5	71.6	75.0	76.8	72.3	64.0	57.5	37.4	23.3
4033	18.3	32.4	44.5	59.9	74.0	84.2	90.6	98.0	94.7	90.1	86.5	83.9
	78.1	71.0	71.0	70.3	65.1	63.8	63.6	60.4	55.4	50.5	35.6	21.5
4833	17.9	29.7	39.9	52.0	59.3	64.4	67.4	70.3	70.4	69.4	69.9	68.5
	65.8	62.7	63.7	64.4	59.5	59.9	60.6	57.8	53.7	48.7	32.7	19.3
5633	15.4	26.1	34.4	44.4	52.8	57.9	61.1	67.0	71.0	73.7	76.8	76.2
	74.4	69.3	66.4	64.7	58.3	55.7	52.5	46.0	38.5	33.2	21.9	13.0
841	21.5	36.8	48.8	61.2	69.3	76.1	80.7	86.1	83.8	80.2	80.6	80.5
	76.5	75.7	79.7	81.4	75.7	73.8	70.1	61.0	51.7	43.3	27.8	16.3
1641	18.2	31.5	43.6	56.1	67.5	76.5	84.0	89.8	87.8	85.7	84.4	83.8
	79.6	74.3	74.6	73.9	67.4	65.8	64.9	61.3	54.9	50.3	35.0	21.4
2441	17.3	30.1	41.3	52.9	62.4	70.5	78.2	87.3	87.0	83.5	81.5	79.9
	75.0	69.9	71.9	72.0	67.5	67.1	66.3	62.3	56.9	49.8	33.7	20.7
3241	18.2	31.6	42.4	54.6	63.6	70.7	79.7	90.6	90.0	89.5	87.2	86.1
	82.6	79.3	85.5	91.3	86.7	86.2	83.0	75.1	64.3	54.9	36.9	22.9
4041	16.5	30.2	41.3	53.2	64.0	74.7	82.7	92.5	91.6	88.3	85.8	86.0
	82.3	77.7	78.2	77.8	71.6	69.4	68.9	65.5	58.8	54.0	38.5	23.3
4841	19.2	33.8	45.3	56.6	64.8	69.2	71.5	77.4	75.7	72.7	73.4	73.0
	70.2	69.3	74.3	75.6	69.4	66.8	64.4	58.7	51.2	46.3	31.6	18.5
5641	15.9	26.8	35.6	46.5	57.1	67.4	72.9	77.4	74.5	71.6	68.0	66.7
	63.4	58.7	57.4	56.3	50.6	47.8	45.3	38.5	32.5	27.9	18.8	10.8
849	27.7	43.6	53.5	64.1	67.7	67.8	67.9	67.9	63.3	58.2	58.1	56.4
	52.0	48.5	47.3	46.8	43.1	42.0	38.7	32.8	28.1	23.4	14.6	8.5
1649	22.1	35.2	45.2	59.5	67.5	77.0	85.1	90.5	89.2	93.3	97.1	97.0
	92.8	87.4	85.6	84.5	77.0	74.4	68.8	60.4	51.4	42.2	26.7	16.6
2449	20.5	33.6	44.9	58.7	70.8	78.5	81.8	85.6	82.5	81.3	81.8	81.0
	76.8	74.6	75.5	78.7	76.5	78.1	76.7	68.5	59.2	50.2	32.3	20.2
3249	17.6	30.3	42.3	56.6	71.1	82.0	85.7	91.1	89.2	84.3	83.3	81.9
	77.8	74.9	76.9	76.6	72.3	72.1	71.5	66.6	59.6	52.7	35.7	21.0
4049	19.8	33.1	43.7	56.6	66.3	71.6	75.8	81.8	83.2	88.2	93.5	95.0
	90.8	87.3	87.1	89.0	84.6	85.9	83.9	75.7	64.1	54.6	35.0	21.4
4849	21.5	37.5	48.6	59.9	67.8	74.1	78.7	83.1	82.6	80.0	77.9	78.3
	72.8	66.6	66.1	65.5	59.5	56.1	52.5	46.5	39.2	34.4	23.2	13.8
1657	9.4	15.5	20.9	30.7	42.1	52.2	58.5	63.7	61.0	58.6	58.0	57.6
	54.0	50.4	49.2	48.2	42.9	42.6	39.2	32.6	27.9	23.3	14.8	8.0
2457	14.9	23.7	31.3	41.8	50.4	55.4	59.4	62.7	64.8	66.7	71.1	70.5
	66.1	63.6	61.8	60.5	54.9	53.7	50.8	43.9	37.4	31.7	20.9	12.0
3257	16.6	26.9	34.7	44.9	52.4	56.0	60.4	63.4	64.4	66.0	72.0	74.8
	71.2	67.8	66.2	64.9	58.5	57.0	53.9	46.6	40.2	34.2	22.1	13.0
4057	16.6	28.0	37.8	52.5	65.9	76.5	80.8	80.8	76.6	72.9	71.0	70.5
	64.4	60.7	59.2	58.7	53.6	52.4	49.5	42.5	35.8	30.5	19.1	11.1

CYCLE 1 DATA

DATASET 15, APRIL 24, 1975

Reactor Conditions

Core Average Exposure, 6106 MWd/t
 Core Thermal Power, 3215 MWT
 Dome Pressure, P, 1025 psia
 Core Flow, 106.1 Mlb/hr
 Inlet Subcooling at P, 22.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	36.	48.	10.	48.	8.	48.	18.	48.	8.	48.	10.	48.	36.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	12.	48.	38.	48.	36.	48.	36.	48.	38.	48.	12.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	36.	48.	10.	48.	8.	48.	18.	48.	8.	48.	10.	48.	36.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

16	9	16.5	27.8	35.4	46.1	57.9	68.8	73.5	78.2	77.4	75.2	75.0	72.9
		69.5	63.1	61.9	61.2	55.0	54.0	51.5	44.1	37.5	32.3	20.8	13.1
24	9	22.9	35.0	45.5	57.4	64.7	64.5	68.6	72.9	72.9	73.5	78.3	80.4
		75.8	72.7	71.9	71.8	69.5	70.9	69.1	60.2	51.2	42.6	27.9	18.8
32	9	21.2	35.3	45.4	56.8	62.7	66.7	69.4	74.1	75.9	77.8	83.5	85.3
		82.5	77.5	76.3	76.4	69.8	68.9	66.4	61.2	54.2	47.1	31.5	18.2
40	9	21.6	34.5	45.2	60.3	70.3	79.8	85.1	88.1	87.6	86.2	85.5	85.5
		80.9	77.0	77.6	77.9	74.8	76.3	72.3	63.1	53.1	42.8	26.4	18.0
48	9	14.6	25.1	32.8	43.6	52.9	62.8	69.4	73.2	73.8	70.6	68.1	66.3
		63.9	59.3	57.5	55.7	50.8	48.7	45.7	39.6	32.5	27.7	18.4	10.6
817		24.4	41.0	52.5	62.5	69.1	73.0	76.3	83.8	82.4	80.3	79.2	78.8
		74.8	69.8	70.3	69.9	63.9	61.4	58.2	52.2	43.6	37.7	25.6	15.0
1617		19.3	32.9	43.6	54.3	61.3	68.0	72.2	76.3	79.5	83.1	87.2	88.0
		85.9	79.4	78.1	77.5	68.9	68.8	67.6	64.4	56.2	50.3	34.3	20.4
2417		19.7	33.6	43.5	56.6	68.3	77.2	86.1	93.5	91.2	90.5	89.0	89.0
		83.8	80.7	80.0	81.1	74.7	74.2	72.3	66.7	60.4	52.5	34.7	22.0
3217		21.0	34.6	45.5	60.7	72.3	80.4	88.0	95.5	91.9	89.6	88.8	88.5
		83.5	82.6	86.8	88.3	83.5	82.8	79.7	69.6	61.3	50.8	32.5	23.7
4017		17.2	30.7	40.5	51.5	59.8	66.5	73.1	80.0	82.9	87.0	92.8	96.6
		92.8	85.1	85.5	83.6	77.6	76.2	75.0	70.7	63.1	56.5	39.4	22.9
4817		25.4	44.3	56.2	68.3	74.2	76.8	78.1	82.0	84.3	83.4	83.4	83.4
		80.5	75.7	76.4	76.2	68.9	68.4	66.1	61.3	53.4	46.4	31.6	17.9
5617		11.5	19.5	25.0	32.8	41.1	49.4	56.9	61.3	60.9	60.4	59.9	58.2
		54.0	51.5	50.4	49.5	44.1	42.6	39.4	34.1	28.1	24.3	15.5	8.7
825		19.4	33.8	44.6	55.1	62.3	67.2	69.8	76.6	81.2	82.8	87.2	89.1
		86.4	82.2	87.3	88.2	81.5	78.8	74.6	64.7	55.3	47.2	31.7	18.8
1625		19.1	31.7	41.0	52.2	62.4	72.2	77.3	87.8	86.7	85.3	85.3	82.1

	78.1	74.4	73.7	74.0	67.8	66.7	66.4	60.1	55.0	49.8	33.1	21.0
2425	19.3	31.6	41.8	53.9	64.4	74.1	85.8	97.6	99.3	98.2	99.0	97.3
	90.6	86.1	84.4	83.0	76.0	76.2	73.4	69.0	62.6	54.9	36.0	23.7
3225	20.2	33.3	44.2	56.3	66.6	76.5	87.5	96.1	97.5	97.5	95.9	93.8
	87.0	83.5	82.7	82.2	76.8	80.0	79.3	72.2	64.0	54.7	35.1	22.4
4025	17.1	30.4	41.6	55.4	65.2	76.2	85.8	95.1	95.4	94.9	92.3	91.3
	83.8	78.2	78.5	77.8	72.0	70.9	70.4	66.5	60.0	55.1	37.4	23.1
4825	15.3	27.2	36.9	47.2	54.0	59.4	62.5	67.7	69.1	68.5	68.4	68.8
	68.7	69.1	73.5	77.8	73.1	72.2	70.2	64.5	58.2	53.1	37.4	21.9
5625	12.9	22.3	29.6	38.8	45.4	51.9	57.9	62.7	66.9	70.1	75.0	75.0
	71.2	67.9	68.1	68.7	62.0	60.4	56.4	49.4	40.9	35.0	22.9	12.5
833	20.3	34.0	43.3	53.1	58.2	60.5	63.8	70.9	75.8	81.2	82.5	83.8
	80.3	75.2	76.0	75.5	70.7	71.1	70.3	63.1	53.5	46.2	30.6	17.9
1633	18.0	30.5	40.0	53.0	64.6	74.0	80.4	84.3	81.5	77.7	77.5	74.7
	71.9	66.8	66.9	66.4	61.7	60.8	59.6	55.1	50.5	45.5	30.8	19.6
2433	16.9	29.9	40.2	52.8	64.0	74.4	84.5	93.2	93.8	92.1	91.6	88.6
	81.8	75.7	74.7	74.1	68.5	68.0	68.1	64.6	59.5	54.1	36.8	22.9
3233	16.4	29.2	40.6	53.4	65.7	77.7	86.8	96.4	95.7	94.6	91.7	89.4
	83.1	76.0	75.4	75.5	71.9	73.9	75.7	73.4	64.0	57.6	40.2	24.0
4033	17.2	30.6	41.7	55.9	67.5	79.9	87.6	94.2	94.0	91.8	91.2	87.6
	79.8	72.9	73.7	71.7	66.8	65.6	65.8	62.1	56.8	52.2	35.9	21.7
4833	17.1	28.4	37.3	47.9	55.6	61.1	65.3	69.4	70.6	69.7	71.8	71.4
	67.9	65.3	67.1	67.2	64.6	68.4	67.4	63.3	56.8	51.3	34.1	20.5
5633	14.2	23.9	31.9	41.4	48.3	54.6	58.2	64.2	67.8	70.6	75.6	75.8
	73.6	68.3	66.8	64.8	58.5	57.8	54.9	46.7	40.1	34.2	22.6	12.9
841	21.3	35.8	46.6	58.2	65.9	74.5	79.1	83.3	82.9	81.5	81.3	81.4
	78.4	78.5	81.2	84.0	77.0	76.3	71.7	63.5	53.4	44.6	28.5	17.1
1641	17.1	29.7	40.9	52.4	62.9	71.4	79.6	87.8	88.6	87.5	86.4	86.8
	83.5	77.2	77.2	76.8	71.4	70.3	70.6	68.0	59.9	54.5	37.3	23.2
2441	16.4	28.4	37.4	48.7	57.9	66.7	74.5	84.9	85.0	84.0	83.0	81.3
	76.4	72.7	72.0	71.9	67.3	68.4	66.6	63.7	57.4	51.2	34.6	21.1
3241	16.9	29.4	39.1	51.1	59.6	68.0	77.7	89.8	91.9	91.3	89.4	90.4
	85.6	82.1	86.4	90.9	87.7	86.7	84.6	75.4	65.6	56.0	37.5	23.5
4041	15.8	27.9	38.4	48.4	59.2	69.9	79.4	88.2	92.8	91.7	91.3	89.2
	85.9	79.9	79.7	79.2	74.0	72.5	72.0	69.0	61.6	55.8	39.5	23.4
4841	18.4	31.5	41.3	51.6	58.2	63.3	67.1	71.3	72.6	72.9	72.8	72.7
	70.9	70.3	74.4	75.9	70.5	70.8	70.1	64.4	55.9	49.3	33.2	19.5
5641	15.6	26.0	34.1	44.8	55.2	65.5	69.7	76.8	73.4	68.9	67.1	66.7
	61.9	57.5	57.3	56.4	50.6	49.7	46.7	40.4	34.0	28.7	19.1	11.4
849	26.3	40.3	49.9	60.6	63.8	65.5	65.7	67.8	63.0	58.6	58.8	56.7
	53.4	50.2	49.8	48.9	44.7	44.0	41.0	35.2	29.7	24.8	15.6	9.1
1649	20.7	33.8	42.9	53.9	62.9	72.2	79.4	89.0	90.5	92.7	98.4	98.2
	93.1	90.0	88.8	86.0	78.2	77.0	72.8	63.1	53.8	44.2	27.9	17.7
2449	19.5	31.7	42.5	55.8	67.0	74.2	79.0	84.3	82.8	81.7	83.5	82.6
	78.9	76.9	77.5	79.9	76.9	79.1	77.6	70.0	60.5	51.4	33.3	21.2
3249	16.6	29.0	39.4	53.2	65.9	75.5	81.4	87.7	87.5	85.9	84.6	83.2
	79.2	75.4	76.4	77.1	72.5	71.7	71.0	67.2	60.1	52.4	35.3	21.2
4049	18.8	31.1	41.4	53.1	62.0	68.5	74.1	79.7	83.3	88.2	95.6	95.7
	93.7	87.6	88.6	89.8	85.5	88.2	85.6	77.0	65.5	55.4	35.9	21.8
4849	19.4	33.7	44.2	54.0	62.4	67.7	73.1	78.6	78.8	75.8	76.4	77.2
	74.2	68.0	68.1	65.3	59.7	57.9	55.3	49.5	40.9	35.7	24.6	14.5
1657	9.1	15.0	20.5	29.8	40.8	50.7	58.3	61.9	61.0	58.6	59.2	56.8
	53.4	51.2	50.6	48.7	43.6	42.9	39.8	34.7	28.9	23.9	15.2	8.4
2457	14.5	23.4	30.5	40.9	49.7	54.0	58.3	61.2	63.0	65.7	70.2	69.1
	65.6	61.8	60.8	59.9	54.8	54.3	51.6	44.7	38.0	32.7	21.4	12.1
3257	16.2	26.1	34.0	44.4	51.6	56.2	58.2	61.9	62.6	66.3	71.1	73.0
	70.7	67.5	64.8	64.9	57.7	56.7	54.6	47.4	40.5	34.7	22.4	13.3
4057	16.4	27.3	37.4	51.6	64.9	73.0	79.2	81.3	77.9	72.1	71.1	69.6
	64.8	60.9	60.8	59.3	54.0	54.2	51.3	44.4	37.3	31.6	19.9	11.7

CYCLE 1 DATA

DATASET 16, MAY 13, 1975

Reactor Conditions

Core Average Exposure, 6470 MWd/t
 Core Thermal Power, 3172 MWT
 Dome Pressure, P, 1025 psia
 Core Flow, 105.4 Mlb/hr
 Inlet Subcooling at P, 22.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	30.	48.	30.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	32.	48.	38.	48.	38.	48.	32.	48.	48.	48.	48.
48.	36.	48.	12.	48.	8.	48.	20.	48.	8.	48.	12.	48.	36.	48.
48.	48.	20.	48.	36.	48.	36.	48.	36.	48.	36.	48.	20.	48.	48.
48.	32.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	32.	48.
48.	48.	14.	48.	40.	48.	36.	48.	36.	48.	40.	48.	14.	48.	48.
48.	32.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	32.	48.
48.	48.	20.	48.	36.	48.	36.	48.	36.	48.	36.	48.	20.	48.	48.
48.	36.	48.	12.	48.	8.	48.	20.	48.	8.	48.	12.	48.	36.	48.
48.	48.	48.	48.	32.	48.	38.	48.	38.	48.	32.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	30.	48.	30.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

16	9	15.7	26.4	34.3	45.9	56.5	66.9	73.0	80.1	77.4	75.0	74.5	71.2
		66.0	61.3	59.6	59.8	54.0	52.9	50.8	44.0	37.2	31.4	20.7	12.4
24	9	21.9	34.1	43.8	55.2	62.4	64.9	67.1	72.4	76.2	78.5	79.2	78.2
		72.2	68.0	67.9	68.0	65.3	67.7	65.8	57.9	49.2	41.1	26.7	18.6
32	9	20.8	34.2	43.9	55.4	61.6	64.6	68.9	77.0	82.4	85.2	85.6	85.5
		78.7	73.8	72.9	72.6	66.9	65.7	62.9	58.6	52.4	45.7	30.2	18.8
40	9	21.1	34.3	44.1	57.5	68.4	78.7	83.6	89.6	88.9	85.7	86.3	84.3
		79.1	75.1	74.3	75.7	71.8	73.7	71.2	62.0	51.7	41.7	25.8	18.1
48	9	14.2	24.0	31.6	42.2	51.4	61.1	66.6	71.2	71.3	69.6	68.6	67.0
		63.9	58.9	57.5	54.2	50.2	48.6	45.9	39.5	32.8	28.0	18.4	9.6
817		22.9	39.1	49.1	59.0	64.2	69.8	75.1	81.5	80.2	78.0	76.6	76.7
		72.5	68.6	68.6	68.8	64.0	61.7	59.4	52.9	43.6	38.0	25.8	14.6
1617		18.4	31.9	41.4	51.8	59.2	66.3	72.0	79.5	87.4	88.2	87.6	87.1
		82.0	75.7	75.3	72.7	69.0	70.1	70.0	64.9	55.6	49.0	32.8	20.0
2417		19.4	32.2	41.6	53.8	65.6	76.6	81.9	92.1	92.8	89.9	91.6	86.1
		83.0	80.1	79.2	78.6	72.7	72.0	70.3	64.1	57.8	50.9	33.2	22.3
3217		20.7	33.0	43.5	58.2	70.1	79.1	85.1	91.6	92.2	90.2	89.5	87.1
		85.0	85.6	88.1	88.4	81.4	79.5	75.0	66.7	57.7	48.6	31.0	23.0
4017		16.5	29.9	39.6	50.2	57.8	66.1	74.0	85.6	93.4	95.8	95.8	95.0
		90.7	83.2	81.7	81.1	76.3	75.4	74.2	69.5	62.2	55.6	38.6	21.7
4817		25.0	42.2	54.2	64.2	70.0	75.7	78.1	83.0	84.2	84.7	83.7	83.8
		80.3	75.0	75.7	76.1	71.7	72.6	70.7	65.6	55.3	47.7	31.8	17.7
5617		11.4	18.7	24.1	31.7	40.3	48.1	55.1	60.4	61.6	59.7	58.9	57.7
		55.6	51.8	50.3	49.2	43.7	42.5	39.8	34.6	28.3	24.4	15.7	8.6
825		18.7	32.3	43.0	52.8	59.8	65.1	69.7	79.2	84.2	84.1	83.8	85.3
		83.4	79.7	82.9	84.7	80.5	77.1	74.4	65.9	55.0	47.2	31.6	18.3
1625		19.0	31.4	40.2	50.8	59.7	67.5	75.1	82.6	84.1	83.0	83.0	80.9

	76.4	72.8	72.0	72.5	66.7	66.9	65.9	60.3	55.0	49.2	32.6	20.5
2425	19.2	31.6	41.5	53.8	64.7	77.1	86.7	96.8	96.9	95.4	96.0	93.3
	89.7	83.9	82.2	80.1	74.2	73.0	71.3	66.1	60.0	52.4	34.6	23.2
3225	19.9	33.0	43.9	57.0	68.8	78.9	89.6	95.0	95.2	92.4	95.0	91.7
	85.7	82.5	80.4	80.8	74.8	77.6	76.3	69.2	61.6	52.6	33.6	23.0
4025	17.3	30.8	41.8	54.7	65.7	75.6	84.6	93.6	94.3	93.2	91.8	89.6
	84.8	78.8	78.4	77.3	72.3	69.8	69.6	66.0	59.9	54.8	37.3	22.1
4825	15.0	27.0	36.4	45.9	51.8	57.3	61.4	66.5	68.7	68.6	68.5	68.1
	68.4	68.4	72.6	77.0	74.0	74.3	72.4	66.6	59.0	53.1	36.9	21.0
5625	13.1	22.4	30.0	38.9	46.7	53.2	59.3	67.0	71.7	71.2	72.9	71.0
	68.2	65.7	66.3	66.9	61.9	60.4	56.9	48.5	40.8	35.1	23.1	12.8
833	19.5	32.6	42.3	50.8	55.8	61.1	65.4	75.3	79.3	81.4	80.9	81.8
	77.6	72.1	73.8	74.7	72.5	73.7	71.7	62.7	53.8	46.2	30.4	18.5
1633	18.3	31.4	42.3	56.6	66.9	72.5	75.2	78.7	77.0	75.1	74.5	73.9
	68.7	66.1	65.1	65.0	60.2	59.8	59.3	54.1	49.4	44.3	29.9	19.3
2433	17.1	29.8	40.3	52.5	63.1	72.9	79.6	89.7	89.8	89.7	88.4	86.8
	81.1	73.7	73.2	72.1	66.6	65.6	65.3	62.5	57.7	52.3	35.9	21.7
3233	17.8	31.3	41.8	54.3	66.5	77.7	87.2	94.6	94.9	92.3	90.9	88.4
	82.1	75.2	74.3	73.5	69.3	71.5	73.3	69.2	61.4	54.2	35.7	23.0
4033	17.8	32.2	44.6	60.3	72.3	79.1	83.4	89.4	92.0	89.2	88.4	85.3
	79.1	72.0	70.9	71.5	65.8	65.0	64.0	60.5	55.3	51.2	35.5	21.0
4833	17.2	28.9	38.3	49.0	54.4	59.6	63.5	70.7	70.1	69.3	70.7	69.7
	67.0	65.2	66.5	70.1	68.3	71.4	71.2	63.9	57.2	50.9	34.3	20.1
5633	14.6	24.5	32.6	42.7	50.1	55.4	60.6	67.7	71.9	72.5	74.0	72.3
	68.9	64.2	64.0	63.5	57.6	55.9	53.9	47.5	39.5	34.3	22.6	13.0
841	20.6	34.6	43.9	55.9	63.7	69.9	76.6	81.7	80.5	80.0	79.8	79.5
	77.1	75.6	79.1	83.3	77.6	76.3	73.3	64.4	53.8	45.4	28.8	16.9
1641	16.8	29.3	39.6	50.7	60.4	69.1	77.6	86.3	88.0	86.4	87.5	85.9
	81.9	75.7	76.8	76.2	72.0	73.4	74.6	70.4	61.4	54.4	37.7	22.9
2441	15.9	27.6	37.1	48.0	57.8	68.7	77.2	84.3	83.7	81.4	82.3	79.5
	75.4	70.4	70.7	70.5	65.3	65.3	63.6	59.9	54.8	48.6	33.0	20.5
3241	16.8	29.1	39.7	51.1	60.0	69.9	80.4	89.3	89.9	88.8	89.3	88.7
	86.4	85.5	88.0	91.3	84.9	83.3	79.5	72.0	61.4	53.7	35.7	22.2
4041	15.6	27.4	36.7	47.7	57.2	68.5	77.9	86.8	89.2	88.6	88.5	87.6
	83.5	78.5	77.3	76.7	71.8	71.8	70.3	66.5	59.8	54.6	38.3	22.6
4841	17.7	30.4	39.2	49.0	55.3	61.4	64.9	68.9	70.7	71.0	71.6	71.0
	69.6	68.0	72.1	75.2	72.0	73.9	74.5	66.7	57.3	49.6	33.1	19.3
5641	15.2	25.5	33.7	44.1	53.8	62.5	69.7	75.5	71.4	68.9	64.6	63.4
	61.7	56.4	55.7	56.7	51.3	49.6	48.0	41.6	34.9	29.9	20.2	11.2
849	25.5	39.1	47.1	56.7	60.7	62.7	63.2	63.9	61.3	57.9	57.0	56.0
	52.1	50.2	48.4	48.0	44.5	44.6	41.8	36.0	30.3	25.5	16.1	9.3
1649	19.9	32.4	41.3	52.3	62.0	70.9	84.6	94.5	99.2	99.3	99.2	98.0
	91.4	86.4	83.7	84.3	76.2	75.6	71.9	62.4	53.1	43.9	27.5	17.1
2449	19.1	31.3	41.5	54.7	64.4	72.8	78.8	84.6	83.6	83.8	84.0	83.3
	78.3	75.1	74.8	76.5	73.6	76.7	75.2	67.1	58.7	49.7	32.4	20.5
3249	16.5	28.0	38.7	51.7	64.1	74.2	79.7	87.2	87.3	86.0	84.9	83.4
	78.6	76.1	75.1	75.9	70.2	70.8	68.8	64.7	57.7	50.8	33.7	20.1
4049	18.6	30.7	40.8	51.9	60.4	67.8	76.3	88.0	94.1	97.3	98.4	96.0
	91.0	85.7	84.0	86.7	82.6	85.0	82.3	74.6	63.5	54.4	35.0	21.0
4849	19.0	33.0	43.4	51.9	59.2	67.8	71.5	78.6	78.8	78.4	77.1	75.2
	70.4	65.1	64.9	64.4	59.3	56.9	55.3	48.8	41.1	35.6	23.7	13.8
1657	9.0	14.8	20.2	29.3	40.2	49.0	56.2	59.7	59.9	59.2	57.9	55.3
	53.6	49.5	48.6	48.1	43.9	42.4	40.2	34.3	28.8	23.5	15.3	8.5
2457	14.6	23.3	30.4	41.4	50.0	56.0	59.9	64.7	67.7	68.6	70.5	68.3
	62.3	58.7	57.8	56.7	51.5	52.3	49.0	42.9	36.9	31.1	20.4	12.1
3257	16.4	26.3	34.7	45.0	52.3	57.1	60.6	64.8	68.0	71.4	73.1	71.6
	67.6	63.3	61.6	60.4	55.4	54.1	51.1	45.6	39.0	33.7	21.5	12.8
4057	16.3	27.4	37.3	51.8	64.6	73.8	76.7	78.2	77.1	73.3	71.3	68.4
	63.8	59.5	59.0	56.9	52.1	52.1	50.0	43.9	36.5	30.6	19.3	11.3

CYCLE 1 DATA

DATASET 17, JULY 25, 1975

Reactor Conditions

Core Average Exposure, 7000 MWd/t

Core Thermal Power, 1649 MWT

Dome Pressure, P, 986 psia

Core Flow, 50.1 Mlb/hr

Inlet Subcooling at P, 29.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	12	48	12	48	12	48	48	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	8	48	8	48	4	48	8	48	8	48	48	48
48	48	40	48	44	48	40	48	40	48	44	48	40	48	48
48	12	48	8	48	0	48	4	48	0	48	8	48	12	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	12	48	4	48	4	48	6	48	4	48	4	48	12	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	12	48	8	48	0	48	4	48	0	48	8	48	12	48
48	48	40	48	44	48	40	48	40	48	44	48	40	48	48
48	48	48	8	48	8	48	4	48	8	48	8	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	48	48	12	48	12	48	12	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 18, AUGUST 16, 1975

Reactor Conditions

Core Average Exposure, 7300 MWd/t

Core Thermal Power, 1855 MWT

Dome Pressure, P, 995 psia

Core Flow, 39.9 Mlb/hr

Inlet Subcooling at P, 41.5 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	16	48	22	48	16	48	48	48	48	48
48	48	48	48	42	48	44	48	44	48	42	48	48	48	48
48	48	48	20	48	10	48	6	48	10	48	20	48	48	48
48	48	42	48	44	48	40	48	40	48	44	48	42	48	48
48	16	48	10	48	8	48	12	48	8	48	10	48	16	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	22	48	6	48	12	48	16	48	12	48	6	48	22	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	16	48	10	48	8	48	12	48	8	48	10	48	16	48
48	48	42	48	44	48	40	48	40	48	44	48	42	48	48
48	48	48	20	48	10	48	6	48	10	48	20	48	48	48
48	48	48	48	42	48	44	48	44	48	42	48	48	48	48
48	48	48	48	48	16	48	22	48	16	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 19, SEPTEMBER 27, 1975

Reactor Conditions

Core Average Exposure, 7712 MWd/t

Core Thermal Power, 1882 MWT

Dome Pressure, P, 1014 psia

Core Flow, 40.4 Mlb/hr

Inlet Subcooling at P, 42.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	18	48	26	48	18	48	48	48	48	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	48	48	28	48	10	48	10	48	10	48	28	48	48	48
48	48	44	48	44	48	44	48	44	48	44	48	44	48	48
48	18	48	10	48	8	48	12	48	8	48	10	48	18	48
48	48	44	48	44	48	42	48	42	48	44	48	44	48	48
48	26	48	10	48	12	48	22	48	12	48	10	48	26	48
48	48	44	48	44	48	42	48	42	48	44	48	44	48	48
48	18	48	10	48	8	48	12	48	8	48	10	48	18	48
48	48	44	48	44	48	44	48	44	48	44	48	44	48	48
48	48	48	28	48	10	48	10	48	10	48	28	48	48	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	48	48	48	48	18	48	26	48	18	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 20, OCTOBER 31, 1975

Reactor Conditions

Core Average Exposure, 8100 MWd/t
 Core Thermal Power, 1858 MWT
 Dome Pressure, P, 1001 psia
 Core Flow, 40.9 Mlb/hr
 Inlet Subcooling at P, 40.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	38.	48.	38.	48.	48.	48.	48.	48.	48.
48.	48.	48.	34.	48.	24.	48.	10.	48.	24.	48.	34.	48.	48.	48.
48.	48.	48.	48.	46.	48.	48.	48.	48.	48.	46.	48.	48.	48.	48.
48.	34.	48.	12.	48.	12.	48.	10.	48.	12.	48.	12.	48.	34.	48.
48.	48.	48.	48.	42.	48.	42.	48.	42.	48.	42.	48.	48.	48.	48.
48.	24.	48.	8.	48.	16.	48.	10.	48.	16.	48.	8.	48.	24.	48.
48.	48.	48.	48.	48.	48.	44.	48.	44.	48.	48.	48.	48.	48.	48.
48.	24.	48.	8.	48.	16.	48.	10.	48.	16.	48.	8.	48.	24.	48.
48.	48.	48.	48.	42.	48.	42.	48.	42.	48.	42.	48.	48.	48.	48.
48.	34.	48.	12.	48.	12.	48.	10.	48.	12.	48.	12.	48.	34.	48.
48.	48.	48.	48.	46.	48.	48.	48.	48.	48.	46.	48.	48.	48.	48.
48.	48.	48.	34.	48.	24.	48.	10.	48.	24.	48.	34.	48.	48.	48.
48.	48.	48.	48.	48.	48.	38.	48.	38.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core

See Figure 22

16	9	49.4	70.9	76.3	77.9	72.5	69.8	70.0	71.9	70.4	69.0	70.0	68.8
		66.7	65.0	63.9	61.9	57.7	56.9	53.5	46.8	41.1	34.3	22.4	14.3
24	9	49.3	68.5	74.6	81.2	83.6	83.5	81.2	82.0	77.4	74.6	75.2	76.9
		76.0	75.5	74.3	72.9	68.1	67.3	63.3	56.1	49.8	42.4	27.7	21.7
32	9	43.2	64.1	72.4	82.1	86.4	88.2	89.2	90.1	86.0	82.0	80.1	77.5
		74.6	71.5	70.0	69.9	65.2	67.2	65.1	61.5	55.9	48.3	32.2	21.6
40	9	61.3	84.3	90.9	94.6	89.3	83.1	79.9	80.4	78.7	79.2	83.2	85.7
		87.2	87.7	86.0	84.4	78.4	76.8	71.7	62.9	54.2	44.2	27.3	21.1
48	9	27.5	41.8	48.6	54.0	56.3	57.5	61.2	67.3	68.9	68.7	68.8	67.5
		64.4	61.9	58.9	57.4	53.6	51.2	48.0	41.9	35.9	30.3	19.8	11.3
817		38.8	59.2	66.5	70.4	70.7	68.2	68.9	76.2	78.2	78.2	78.7	77.3
		74.5	71.4	70.3	69.3	65.3	64.6	61.5	55.3	47.6	41.5	27.4	16.0
1617		46.9	75.0	86.4	92.5	90.2	84.4	78.7	79.7	77.4	77.4	78.4	77.4
		75.4	71.1	69.9	69.5	67.9	70.4	71.2	66.1	59.3	52.6	35.2	22.5
2417		60.9	89.7	95.4	98.6	90.3	84.0	78.1	79.3	76.9	76.2	78.6	78.3
		75.7	75.1	73.7	73.7	71.8	76.6	75.2	70.5	63.3	55.2	36.7	25.9
3217		62.7	85.7	92.3	94.3	87.5	81.1	77.0	78.5	75.5	76.0	77.3	75.7
		72.1	70.3	68.9	68.8	66.6	69.4	70.1	66.9	62.7	52.8	34.8	26.8
4017		47.8	78.8	89.7	94.4	90.6	85.9	81.2	83.5	80.6	80.7	81.7	82.6
		80.9	78.8	78.7	79.0	77.3	79.8	80.4	74.7	67.3	59.4	40.3	24.7
4817		46.8	73.2	81.0	85.2	82.3	79.1	76.5	78.5	77.7	78.9	79.5	79.5
		76.4	73.3	73.2	73.0	69.0	72.4	71.4	67.0	59.2	51.5	34.1	20.3
5617		19.0	29.4	34.8	40.7	44.3	46.9	52.6	58.8	60.0	60.2	61.1	59.6
		56.2	54.7	52.0	51.3	46.8	45.7	41.4	36.0	31.2	25.8	16.4	9.7
825		53.4	83.3	93.6	97.0	92.7	86.2	79.8	81.0	78.8	77.7	79.5	83.8
		85.5	84.5	82.9	81.5	76.5	75.3	70.1	63.8	55.6	49.1	33.6	19.8
1625		48.4	72.2	82.7	90.8	87.2	79.8	75.6	75.1	73.2	73.3	74.6	74.7
		72.2	70.7	69.2	70.7	69.4	72.4	71.9	68.1	64.0	56.5	37.5	24.6

2425	44.7	68.8	83.4	94.9	94.1	88.8	84.4	81.6	79.6	79.7	82.3	82.7
	81.5	81.7	82.0	89.3	90.9	93.8	90.4	82.2	72.7	61.1	39.6	29.2
3225	44.9	70.5	85.8	98.3	94.8	88.3	83.3	79.9	78.0	78.0	77.8	77.0
	74.7	73.9	73.4	75.3	72.8	75.1	75.6	73.4	68.0	58.6	38.3	28.7
4025	42.5	68.5	84.1	95.8	93.9	87.3	80.9	79.8	77.2	76.6	79.1	78.8
	76.5	75.1	78.4	84.3	85.3	88.7	86.6	80.0	71.5	63.4	42.0	27.7
4825	53.3	83.9	95.2	99.2	92.1	83.4	76.1	74.2	71.4	70.2	70.7	71.2
	70.2	67.7	68.7	69.4	67.6	68.4	67.6	65.7	60.7	55.0	37.6	23.7
5625	31.0	48.3	56.6	63.7	64.1	62.6	59.8	59.5	56.7	56.5	59.9	63.5
	66.4	67.5	67.3	67.5	63.4	62.1	57.3	49.8	43.3	36.9	23.8	14.1
833	57.9	85.9	93.8	95.0	88.3	82.5	74.9	75.7	72.2	72.4	76.7	80.7
	83.9	84.1	82.3	82.2	77.0	76.2	71.1	63.5	55.7	49.0	32.1	20.4
1633	57.2	84.0	89.4	93.5	85.3	79.2	72.0	70.0	67.0	67.2	69.0	69.2
	67.3	66.9	66.7	67.5	65.9	67.0	66.3	62.9	59.4	51.9	34.9	23.3
2433	45.0	73.4	88.4	96.4	92.1	83.9	75.7	75.3	72.8	73.6	74.2	74.2
	72.8	72.4	74.1	79.5	82.2	85.4	83.6	77.9	69.7	62.5	42.1	26.1
3233	45.3	73.7	89.6	99.3	95.3	88.1	81.6	79.5	75.9	75.3	76.1	75.4
	72.3	71.2	71.3	73.2	72.2	74.8	76.9	74.0	68.6	61.6	40.6	26.2
4033	53.6	86.1	96.3	99.3	92.6	82.7	76.3	75.3	73.7	73.7	74.0	74.0
	72.2	71.7	73.1	79.9	83.3	86.6	83.2	77.0	68.2	60.2	40.5	25.8
4833	63.1	91.5	97.3	98.3	90.0	82.0	77.5	76.8	75.1	75.1	76.9	77.8
	76.8	76.0	75.1	74.8	70.4	70.9	68.2	64.3	60.2	53.3	34.9	23.7
5633	33.6	53.1	63.5	69.7	68.8	64.9	60.2	59.2	56.0	55.6	58.8	63.3
	66.3	67.2	66.8	65.9	61.6	60.9	56.5	50.5	43.2	36.7	23.9	14.7
841	52.2	78.0	84.6	89.1	86.2	83.6	82.1	86.3	84.9	84.7	86.0	85.0
	83.5	80.5	79.9	79.7	75.3	74.8	71.6	64.7	56.4	47.9	30.5	18.7
1641	39.6	64.1	80.3	92.0	92.7	89.4	82.3	80.7	78.7	77.6	78.5	79.3
	77.8	74.1	73.6	74.7	73.6	76.7	78.4	74.4	66.3	59.7	41.2	25.2
2441	37.8	61.5	75.0	85.6	85.4	79.5	73.5	72.2	69.5	67.5	68.3	67.3
	66.0	63.6	64.2	66.0	65.8	70.2	72.2	69.1	62.4	55.2	37.0	23.1
3241	39.6	63.5	77.1	87.6	86.2	81.0	75.9	74.9	73.3	72.4	74.2	73.2
	71.5	69.8	69.2	70.7	68.9	72.8	73.5	71.2	65.9	58.9	40.2	26.7
4041	38.6	64.0	79.3	90.2	90.9	85.8	79.4	78.6	75.8	75.0	75.8	77.3
	75.7	74.1	74.1	76.3	75.8	81.2	82.5	77.9	69.9	62.5	42.7	26.9
4841	51.0	79.3	88.8	91.9	87.6	81.5	76.1	77.2	75.2	75.5	77.1	75.7
	74.0	70.1	69.1	68.4	66.1	70.2	68.8	64.9	57.6	50.6	34.4	20.9
5641	30.7	48.0	57.0	63.8	64.2	64.5	64.8	67.6	67.6	65.1	64.8	62.8
	60.8	58.8	56.5	56.3	52.2	51.0	47.1	41.5	35.7	30.4	20.3	12.1
849	38.9	54.2	59.5	63.9	63.4	61.6	61.9	62.1	60.2	60.1	60.3	58.1
	55.5	53.3	51.9	51.1	48.9	48.6	45.0	39.4	33.9	27.9	17.5	10.8
1649	51.6	76.5	84.4	89.4	85.3	82.5	82.2	86.3	88.4	87.0	90.0	89.9
	88.0	86.7	84.9	83.4	78.7	78.4	74.1	65.7	57.2	48.3	30.5	18.9
2449	61.0	86.3	89.8	92.1	83.9	78.0	73.7	72.3	70.3	70.4	75.2	78.5
	79.5	81.2	80.0	79.7	75.5	76.9	73.0	65.8	58.6	50.4	32.8	22.9
3249	52.9	79.6	87.9	90.4	84.2	78.2	73.9	74.3	71.8	71.2	71.8	71.6
	70.3	67.8	66.9	67.8	64.7	67.9	68.2	65.7	60.1	53.3	35.7	22.4
4049	53.4	82.5	90.9	96.2	90.1	83.6	78.7	79.5	79.5	80.7	84.9	89.1
	92.9	93.4	92.2	93.7	88.1	88.0	83.6	75.7	65.9	56.9	37.0	22.8
4849	35.8	57.4	64.1	67.4	66.3	65.0	64.3	69.7	71.2	70.0	70.0	69.4
	66.9	64.0	63.2	61.9	59.2	58.6	55.5	50.6	44.7	38.3	25.7	15.2
1657	29.9	45.5	53.7	60.0	61.3	59.2	56.9	56.0	54.4	53.4	53.6	53.1
	51.2	49.5	48.6	48.8	45.4	44.5	41.0	35.7	30.6	25.6	16.5	9.7
2457	34.3	51.8	62.6	75.4	81.0	81.6	79.1	77.3	71.4	66.4	64.2	62.3
	58.3	57.2	55.9	55.1	51.9	51.2	47.4	42.0	37.4	31.3	20.4	13.2
3257	33.9	54.1	66.0	78.8	84.2	85.4	83.2	81.3	73.9	67.6	65.0	61.8
	58.4	55.8	55.0	55.1	51.1	51.7	49.2	44.6	39.6	34.1	22.2	14.0
4057	50.1	76.0	86.2	93.4	87.8	81.2	76.0	73.1	69.5	65.7	64.6	63.0
	60.7	59.5	57.7	57.8	54.0	53.4	49.6	43.5	37.7	31.7	20.2	12.2

CYCLE 1 DATA

DATASET 21, DECEMBER 24, 1975

Reactor Conditions

Core Average Exposure, 8430 MWd/t

Core Thermal Power, 3285 MWT

Dome Pressure, P, 1023 psia

Core Flow, 107.1 Mlb/hr

Inlet Subcooling at P, 22.0 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	48	38	48	38	48	48	48	48	48	48
48	48	48	38	48	32	48	20	48	32	48	38	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	36	48	30	48	12	48	32	48	12	48	30	48	36	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	32	48	12	48	20	48	18	48	20	48	12	48	32	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	32	48	12	48	20	48	18	48	20	48	12	48	32	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	36	48	30	48	12	48	32	48	12	48	30	48	36	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	38	48	32	48	20	48	32	48	38	48	48	48
48	48	48	48	48	48	38	48	38	48	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 22, JANUARY 15, 1976

Reactor Conditions

Core Average Exposure, 8766 MWd/t

Core Thermal Power, 3292 MWT

Dome Pressure, P, 1024 psia

Core Flow, 101 2 Mlb/hr

Inlet Subcooling at P, 24 6 Btu/lb

Control Configuration

Legend 48, Full Out, O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	44.	48.	44.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	34.	48.	36.	48.	42.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	42.	48.	38.	48.	18.	48.	40.	48.	18.	48.	38.	48.	42.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	20.	48.	34.	48.	18.	48.	34.	48.	20.	48.	38.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	20.	48.	34.	48.	18.	48.	34.	48.	20.	48.	38.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	42.	48.	38.	48.	18.	48.	40.	48.	18.	48.	38.	48.	42.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	34.	48.	36.	48.	42.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	44.	48.	44.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	69.	3104.	8117.	5128.	7124.	8119.	5109.	2106.	2103.	1	99.8	97.7	93.0	
	88.1	81.6	80.3	76.2	67.2	65.8	62.0	53.8	46.5	39.6	26.5	16.8		
2409	76.	5112.	6131.	4141.	1141.	4138.	5139.	4140.	5132.	1125.	1120.	1113.	5	
	103.3	93.8	89.9	87.6	75.4	72.9	68.0	59.1	50.6	43.7	29.3	23.3		
3209	70.	3109.	8129.	9143.	5139.	3137.	5137.	4144.	7140.	5133.	9125.	9120.	4	
	109.6	98.9	94.0	91.0	78.8	74.4	70.1	60.6	52.0	45.3	30.5	21.4		
4009	83.	8118.	6125.	8135.	8134.	4133.	8135.	0135.	5128.	8119.	4118.	6113.	9	
	103.7	96.0	92.5	88.2	77.8	74.1	70.1	59.9	51.6	43.6	28.4	22.9		
4809	39.	8	64.4	80.9	99.3	105.	4105.	8101.	4101.	2	98.0	95.1	91.2	
	85.7	79.6	76.5	73.8	66.0	64.2	59.2	51.6	43.3	37.3	24.7	13.3		
0817	55.	9	89.	1107.	3125.	2130.	8128.	7120.	3119.	3112.	8110.	4105.	6103.	2
	100.1	90.3	89.6	86.8	77.3	74.1	71.6	62.7	53.6	47.8	32.6	19.0		
1617	72.	6112.	6127.	0138.	2146.	3147.	8141.	9142.	5138.	7135.	1131.	4128.	0	
	121.	7109.	8108.	9106.	2	93.3	88.1	82.0	71.5	59.1	52.6	36.4	23.5	
2417	84.	9121.	6130.	7135.	6129.	1124.	1122.	1126.	1123.	0117.	1116.	0114.	6	
	109.	1104.	6107.	4107.	5	96.5	92.6	85.9	74.0	63.1	54.7	37.0	26.7	
3217	88.	9122.	1134.	2146.	1145.	8140.	8138.	0139.	2137.	2131.	3130.	9129.	3	
	118.	5110.	7106.	1102.	1	89.7	85.5	78.8	67.7	58.5	50.0	33.1	29.0	
4017	72.	2112.	2125.	6132.	3130.	1126.	4123.	4125.	5122.	3117.	6115.	2114.	8	
	109.	4102.	2105.	1107.	2	97.1	91.3	84.4	74.6	61.6	55.1	38.8	25.3	
4817	63.	2100.	6117.	2130.	3138.	2143.	5143.	0142.	0137.	1129.	8128.	5126.	5	
	117.	2107.	0103.	6100.	3	87.6	83.1	77.3	68.4	57.1	50.6	35.4	21.5	
5617	30.	2	50.6	68.5	85.4	92.8	92.8	89.7	90.3	84.1	79.0	80.8	78.4	
	72.9	67.9	65.0	63.1	57.1	55.1	50.6	44.3	37.6	32.3	20.6	11.5		
0825	67.	7104.	8122.	4135.	5143.	4145.	2139.	7144.	6130.	9127.	3120.	3118.	8	
	107.8	99.	9100.	2	97.8	87.3	81.1	77.8	68.4	57.6	51.2	36.9	22.7	
1625	80.	9114.	6123.	5129.	5124.	4117.	0113.	1117.	0115.	9115.	0118.	7118.	4	
	115.	8114.	3115.	8115.	3102.	6	98.0	92.6	79.1	65.8	56.9	38.1	26.4	

2425 87.4123.0131.1136.7132.2128.5129.1139.7142.5139.8142.1141.8
 133.8125.2121.2118.5104.5 99.6 91.5 77.6 66.1 57.3 39.1 29.4
 3225 90.3128.9137.5142.5136.2128.7122.4123.8122.4120.1123.4123.5
 117.4114.4117.6118.0103.7 98.9 89.9 76.6 65.7 56.2 37.7 30.2
 4025 76.4117.9129.7134.6130.0125.4124.3136.1135.7140.3139.9139.9
 133.4123.7122.9122.1109.3101.9 94.1 81.8 68.6 60.3 41.3 27.3
 4825 71.4113.8131.1138.3136.1128.7122.6123.9116.5112.5111.7112.2
 108.8106.3111.5113.7103.0 96.6 90.8 79.2 66.5 57.8 40.2 24.8
 5625 41.8 66.9 82.7 98.6106.5113.2109.0111.2100.9 93.4 89.8 87.5
 80.0 74.4 73.9 73.3 65.2 63.8 60.7 53.1 43.9 40.5 27.1 15.2
 0833 71.7105.3117.4133.0135.8136.4129.3132.9127.3118.2114.7112.7
 107.2 98.6 98.0 96.4 86.5 82.6 78.2 67.7 57.1 50.3 34.1 22.9
 1633 73.1104.6110.6114.9107.8103.3 98.6103.5101.7100.0103.8104.3
 102.5102.7108.4109.3 96.9 92.4 86.1 74.5 62.4 53.7 37.9 26.0
 2433 75.3113.8126.2131.1124.4119.7116.8128.9134.9134.1137.9136.5
 129.5118.1116.8114.1100.2 94.8 89.0 77.3 65.3 57.6 40.5 27.2
 3233 78.7116.1124.7131.8124.2116.7111.8115.3113.9114.5117.2117.9
 112.2108.5111.6115.5104.5 99.3 91.7 78.7 66.6 59.0 41.4 28.4
 4033 77.5116.9126.0131.1125.1120.7125.9137.5141.9143.7144.6143.0
 136.1124.8123.7121.6107.6 99.9 92.3 79.0 66.8 58.2 40.7 26.5
 4833 76.8110.6121.6127.3121.9116.0109.8112.5111.7107.9108.6109.4
 108.3107.8113.8113.2101.6 96.3 88.6 75.9 63.4 54.1 37.0 25.9
 5633 46.2 74.6 91.4108.4117.4124.6121.5120.3113.3103.8 99.7 96.4
 92.2 83.8 81.6 77.2 68.8 67.5 63.2 55.4 46.9 41.3 28.4 16.5
 0841 74.1114.1138.3157.6161.4152.6142.4138.2130.2123.3121.0117.5
 112.0101.3101.0 98.5 88.7 85.1 80.2 70.8 60.4 52.7 34.8 21.9
 1641 70.2108.0126.1136.4139.4143.0138.6139.5133.4130.0125.1126.6
 121.3112.1112.6109.7100.2 94.9 87.9 77.0 64.4 57.0 40.8 26.3
 2441 74.1112.5123.3129.0123.6114.7108.1110.4108.6105.8105.7105.5
 101.6 96.1 99.1101.7 91.7 89.5 83.5 73.5 62.1 54.4 37.9 24.5
 3241 78.5117.0131.0143.9142.8138.7127.7129.9129.8124.6124.7125.7
 120.5111.8109.5107.7 96.6 90.5 83.3 73.4 61.4 54.7 39.0 26.6
 4041 71.4111.5126.5132.3129.6124.8117.9122.3118.5117.6119.9119.4
 116.4109.9112.9117.6107.5102.4 94.8 82.5 68.6 60.4 42.3 27.1
 4841 72.7111.1125.3136.5142.2139.9132.4133.0128.3123.4122.0117.9
 112.2101.6100.7 98.7 87.7 83.9 78.9 69.4 59.1 52.5 36.5 23.0
 5641 48.0 79.1100.4121.6126.7122.6111.9110.9102.8 95.6 89.9 88.7
 81.6 75.3 73.3 71.6 63.2 61.3 58.0 50.4 43.1 37.5 25.5 14.8
 0849 53.9 80.7 92.0102.4102.5 98.6 95.5 96.2 91.2 87.2 86.2 84.6
 78.5 74.2 72.1 69.7 62.8 61.7 56.3 48.8 41.7 34.5 22.3 12.5
 1649 78.2116.7135.0150.0149.1141.0133.2131.2124.2118.5118.4115.8
 107.2 99.9 98.4 94.7 82.5 79.8 73.3 64.1 55.1 47.2 31.5 21.2
 2449 82.9120.1130.3137.0135.2132.5131.0137.3132.3124.5122.6121.4
 112.2101.7 98.9 96.7 86.3 82.8 77.5 66.9 57.0 49.7 33.6 22.7
 3249 77.5114.4129.0138.6136.6132.7133.2144.1143.0137.8136.7133.0
 122.2109.4106.0102.0 89.6 85.5 80.3 69.8 59.9 51.7 35.4 23.0
 4049 79.7119.2131.9141.0138.9139.8142.1144.2139.1134.1130.7128.2
 120.5110.0109.0107.3 94.8 88.7 83.0 73.8 62.8 53.9 37.2 24.0
 4849 54.5 89.5109.6125.0128.3123.5114.5114.7109.4104.8103.1102.6
 97.3 88.6 86.8 84.9 76.2 72.0 68.8 61.5 51.3 45.3 31.4 19.6
 1657 43.8 68.1 79.9 90.1 93.3 90.2 84.9 83.7 80.7 76.5 76.0 73.6
 68.8 64.4 62.4 61.0 55.0 53.9 49.7 43.4 36.2 31.0 20.1 10.9
 2457 59.3 95.4117.7133.1131.0122.2111.1106.8 99.4 91.9 88.1 84.9
 76.8 70.3 66.8 64.6 57.5 55.2 53.4 46.2 39.7 35.1 23.9 14.4
 3257 66.2108.6127.8143.8134.6122.2111.6109.2102.7 94.4 90.8 86.6
 78.5 71.9 69.2 67.7 58.9 57.5 55.5 48.1 41.5 36.2 24.2 15.1
 4057 73.0112.6129.2140.1134.0124.6113.2114.7108.0100.9 97.5 95.3
 87.8 80.3 77.5 75.4 66.0 64.8 60.1 52.1 43.6 38.0 24.9 14.1

CYCLE 1 DATA

DATASET 23, FEBRUARY 14, 1976

Reactor Conditions

Core Average Exposure, 9295 MWd/t
 Core Thermal Power, 3255 MWT
 Dome Pressure, P, 1025 psia
 Core Flow, 106.7 Mlb/hr
 Inlet Subcooling at P, 22.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	36	48	36	48	36	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	38	48	36	48	32	48	20	48	32	48	36	48	38	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	38	48	36	48	20	48	26	48	20	48	36	48	38	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	38	48	36	48	32	48	20	48	32	48	36	48	38	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	36	48	36	48	36	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	48	38	48	38	48	38	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

16	9	43.9	63.3	68.6	73.3	73.2	70.3	68.0	69.3	67.3	64.8	63.7	63.0
		58.8	53.3	51.4	50.5	43.7	41.4	39.5	34.9	30.2	26.6	17.4	10.7
24	9	45.2	62.8	70.7	79.5	84.0	88.7	88.7	93.1	88.3	80.6	78.9	74.5
		67.7	61.1	58.3	55.5	48.6	46.8	43.6	37.4	32.8	28.4	19.1	14.9
32	9	40.0	59.2	67.3	76.9	84.3	91.4	93.1	97.2	92.2	88.2	84.4	79.1
		70.6	64.3	60.8	58.7	50.8	48.2	44.6	38.9	33.2	29.8	20.2	13.4
40	9	42.8	60.0	67.0	76.4	80.8	85.7	88.5	89.1	85.4	81.1	79.1	76.2
		69.1	63.8	60.9	57.0	49.7	48.6	45.4	38.9	33.6	28.5	19.1	14.2
48	9	29.0	45.2	52.3	58.2	61.0	60.9	60.2	62.0	61.1	59.8	60.1	57.6
		55.2	50.7	49.3	46.9	42.8	40.6	38.2	33.1	28.4	24.2	16.0	8.6
817		37.5	57.1	64.5	70.7	72.9	74.0	72.0	74.1	71.9	70.6	69.1	69.1
		65.8	59.1	57.4	54.4	49.6	47.0	45.4	40.2	34.1	30.3	21.0	12.3
1617		38.0	58.1	68.9	80.2	90.2	93.3	93.3	97.1	95.9	93.0	92.4	90.8
		85.0	75.0	72.8	69.0	59.9	54.5	50.1	44.1	36.6	32.2	22.9	14.7
2417		41.5	58.7	64.7	71.3	74.6	82.4	88.8	96.5	95.5	92.6	93.5	90.7
		83.1	76.3	72.2	68.9	59.0	56.4	51.4	43.9	37.4	32.7	22.2	16.4
3217		42.0	57.7	62.9	69.6	73.4	78.9	86.6	93.5	94.5	91.5	92.1	88.4
		81.5	75.3	71.8	67.2	57.6	54.8	50.6	43.4	37.0	32.0	21.6	17.2
4017		36.8	56.8	66.5	73.6	77.6	83.6	91.3	98.1	97.6	94.9	94.1	91.5
		86.0	75.6	72.3	68.2	59.3	54.4	50.4	43.8	36.8	33.1	23.5	15.1
4817		36.1	56.8	66.3	78.0	85.1	86.2	87.8	92.1	88.8	88.3	85.9	82.9
		79.2	69.5	66.4	63.7	55.1	51.5	48.7	42.7	35.8	31.9	22.5	13.8
5617		23.0	35.8	42.7	48.6	51.9	52.3	51.4	53.5	51.8	51.8	51.8	49.9
		46.5	43.8	41.8	40.2	35.9	35.0	32.8	28.2	24.2	20.5	13.3	7.4
825		35.0	52.5	61.8	72.4	82.6	90.6	91.6	96.7	94.1	87.9	86.3	83.8
		76.9	67.5	65.0	62.4	54.5	49.8	46.6	41.3	35.2	31.7	22.6	14.1
1625		41.7	60.1	66.0	71.9	75.9	80.5	89.2	95.3	95.4	95.2	96.7	94.1
		85.3	77.3	72.7	68.8	59.8	56.9	53.0	45.7	38.2	32.9	22.0	15.6

2425	43.1	61.3	66.1	71.1	70.7	71.3	76.5	86.7	91.6	94.6	98.5	98.0
	92.7	87.0	82.5	78.1	68.3	63.7	58.0	48.9	41.8	36.2	25.1	18.3
3225	44.1	62.4	66.7	70.1	70.3	68.9	70.7	74.9	77.4	80.8	85.8	87.1
	84.4	83.6	83.7	80.5	68.1	63.9	58.1	48.2	41.1	36.0	24.3	18.2
4025	39.0	59.5	67.0	72.9	73.5	73.7	77.3	88.3	93.4	97.7	99.1	98.4
	93.4	84.0	82.6	79.1	68.1	62.9	58.1	50.2	42.1	36.7	25.3	17.1
4825	37.3	58.9	68.5	75.6	82.7	88.7	93.2	99.4	98.2	95.3	91.9	89.5
	84.4	75.4	71.6	67.7	60.1	55.4	52.2	45.8	38.3	34.1	23.9	14.9
5625	22.8	36.2	43.4	53.5	60.1	66.6	69.6	71.2	65.9	61.8	60.2	58.1
	54.4	49.3	47.8	47.4	41.2	39.8	38.0	33.2	28.4	24.9	17.3	9.8
833	38.1	56.5	64.4	75.1	83.6	89.2	91.9	93.0	91.2	86.4	84.2	81.4
	75.2	66.6	63.4	61.8	53.6	50.6	46.8	40.8	34.5	30.3	21.0	13.7
1633	37.2	53.4	59.4	65.4	68.7	74.3	79.7	86.4	86.3	85.9	85.5	83.8
	77.2	68.9	68.0	64.9	56.2	53.7	49.8	42.5	36.1	31.3	21.9	15.6
2433	37.9	57.1	64.0	67.1	66.2	64.8	63.7	68.2	71.8	74.6	78.6	82.2
	80.8	77.9	79.0	77.4	67.0	63.9	58.9	50.9	42.6	37.8	26.7	17.7
3233	39.8	58.5	64.5	68.5	67.2	65.9	65.5	69.3	72.4	76.6	86.5	92.0
	90.8	85.1	83.7	80.4	68.2	64.6	58.2	50.2	42.4	37.0	26.5	17.6
4033	40.0	61.1	68.1	71.2	71.5	71.7	75.1	81.0	84.5	84.5	86.7	86.6
	85.0	80.6	80.8	80.5	70.4	65.1	59.4	51.3	42.7	37.4	25.9	16.5
4833	41.2	59.8	66.9	74.8	78.2	86.5	91.8	96.2	97.1	94.1	93.2	91.0
	84.8	74.8	72.1	67.7	57.9	54.2	49.8	43.1	36.0	31.0	21.3	14.9
5633	25.5	41.4	51.4	61.0	69.8	76.3	78.2	81.7	75.5	71.9	69.2	66.2
	61.7	54.4	53.0	50.3	43.5	41.7	39.3	34.3	28.8	25.8	17.7	10.1
841	37.1	56.9	65.3	75.0	84.4	89.8	90.7	91.8	88.9	86.1	84.7	81.4
	75.5	68.1	66.1	63.5	56.0	52.7	50.3	44.3	37.5	33.3	22.7	13.8
1641	36.5	56.8	66.9	73.5	79.7	85.4	91.0	98.3	97.7	96.7	95.2	93.7
	87.5	78.5	75.1	70.9	62.8	57.9	53.9	47.4	39.4	34.7	25.1	16.9
2441	36.9	56.0	61.1	65.9	66.6	67.6	69.9	77.1	82.5	84.0	86.0	84.6
	79.5	71.3	69.1	67.2	57.8	54.3	51.0	44.4	37.5	33.1	23.2	14.9
3241	37.9	56.3	63.0	66.7	67.2	67.5	68.9	74.1	76.0	77.1	79.5	80.9
	79.1	75.8	77.2	75.3	65.8	61.3	55.8	47.5	39.7	35.9	25.7	17.0
4041	36.4	57.1	65.4	71.7	74.9	76.7	79.7	90.7	95.6	97.8	99.2	98.8
	93.5	83.5	79.4	75.6	65.7	60.4	55.8	48.0	39.9	35.3	25.0	16.7
4841	38.0	58.4	66.8	74.2	79.3	82.9	88.3	93.2	90.5	89.4	87.6	84.3
	78.8	68.3	65.4	63.4	54.8	52.1	49.0	42.6	36.4	32.1	23.0	14.9
5641	25.7	41.0	49.6	58.3	66.6	70.3	73.5	72.5	69.1	66.0	63.1	61.6
	56.2	51.1	49.2	47.4	41.9	40.2	38.0	32.9	27.9	24.9	17.1	9.6
849	31.8	45.3	51.0	56.8	57.8	59.8	59.0	61.0	59.4	58.0	58.2	55.6
	51.6	48.2	46.8	45.4	41.5	40.2	37.3	31.7	26.8	22.8	14.8	8.1
1649	43.1	62.9	71.4	82.4	88.1	87.4	86.9	86.1	84.5	81.3	81.5	79.7
	74.6	67.9	65.2	62.0	53.7	50.9	47.3	41.5	35.2	31.0	20.7	13.1
2449	45.0	63.9	69.4	76.4	78.9	83.3	89.2	94.5	91.8	88.6	87.5	84.6
	77.5	70.5	66.7	64.6	55.5	52.8	48.8	42.1	35.8	31.0	21.2	14.9
3249	39.5	59.4	67.4	75.4	79.5	85.0	89.9	97.1	96.5	92.6	90.3	87.9
	80.5	71.9	68.6	65.5	57.3	54.1	50.6	44.3	37.8	33.1	22.9	14.8
4049	40.8	60.9	69.4	77.2	82.2	87.8	93.1	97.2	98.3	94.2	91.2	89.5
	84.4	75.5	72.0	69.6	60.0	55.9	52.8	46.4	38.8	34.3	23.7	15.3
4849	29.3	47.4	57.3	65.0	70.9	73.5	71.9	73.8	71.6	69.9	69.0	69.6
	65.1	59.0	57.1	54.7	49.2	46.8	44.1	38.9	33.1	29.6	20.8	11.7
1657	23.7	36.1	42.5	49.1	51.8	52.2	51.9	53.9	52.5	51.2	52.0	49.9
	46.4	42.6	42.0	40.7	36.5	35.1	32.8	28.7	24.4	20.9	13.6	7.2
2457	25.1	39.4	47.9	58.8	66.3	70.7	71.1	74.7	70.6	66.1	63.1	58.9
	53.6	48.2	46.3	44.8	39.7	38.6	36.2	31.8	27.3	24.1	16.4	9.3
3257	29.0	45.1	53.4	61.7	67.0	72.5	75.2	75.6	72.1	65.1	63.2	60.2
	55.1	49.9	47.7	45.3	40.5	39.4	37.5	32.9	28.5	24.9	16.5	10.1
4057	28.9	44.3	52.2	61.0	67.2	72.1	76.9	79.5	76.6	71.6	70.4	67.2
	62.2	56.5	54.6	52.3	45.9	44.2	41.5	35.7	30.3	25.8	16.8	9.9

CYCLE 1 DATA

DATASET 24, MARCH 26, 1976

Reactor Conditions

Core Average Exposure, 10100 MWd/t

Core Thermal Power, 3001 MWT

Dome Pressure, P, 1014 psia

Core Flow, 108.4 Mlb/hr

Inlet Subcooling at P, 24.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	40.	48.	40.	48.	40.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	40.	48.	36.	48.	42.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	36.	48.	36.	48.	26.	48.	36.	48.	36.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	40.	48.	26.	48.	32.	48.	26.	48.	40.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	36.	48.	36.	48.	26.	48.	36.	48.	36.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	40.	48.	36.	48.	42.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	40.	48.	40.	48.	40.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core

See Figure 22

16	9	34.0	48.7	53.4	57.7	59.7	59.3	59.6	60.9	60.8	60.0	59.7	59.6
		56.4	52.5	51.5	50.1	43.8	43.0	41.3	36.6	32.0	27.9	18.7	11.2
24	9	35.5	50.6	58.2	68.7	74.8	77.9	80.4	80.9	78.3	73.8	73.5	69.9
		64.5	58.0	57.4	55.9	49.0	48.2	44.7	38.7	33.7	29.4	20.1	15.5
32	9	32.6	48.1	56.4	67.2	76.6	80.8	84.2	89.7	83.9	79.8	79.2	74.6
		68.8	62.2	60.6	58.8	50.5	48.6	45.4	40.4	34.7	30.8	21.3	14.1
40	9	32.5	45.9	52.1	61.3	67.9	71.8	76.3	78.8	76.7	73.4	72.8	70.8
		65.5	62.0	59.2	55.9	49.3	48.6	46.1	40.3	35.0	29.9	19.5	15.1
48	9	22.5	34.9	39.9	45.3	48.1	49.0	49.9	53.1	54.9	55.7	58.0	57.2
		54.0	50.8	48.9	48.4	42.9	42.0	39.9	34.7	29.9	26.1	17.1	9.2
	817	28.9	43.9	50.4	54.8	58.4	59.1	60.0	63.8	64.8	63.5	64.0	64.9
		62.6	58.0	56.6	54.5	50.1	48.9	46.5	41.7	36.3	32.8	22.2	13.1
1617		29.3	46.4	55.9	64.4	72.4	77.7	79.6	85.7	85.6	83.8	85.8	84.7
		80.1	71.3	70.8	67.6	59.4	55.5	51.6	44.9	37.9	34.3	24.0	15.3
2417		31.7	45.8	50.3	56.1	61.5	71.2	79.2	88.5	88.6	88.0	88.3	87.0
		80.9	72.5	71.3	66.6	58.4	55.5	51.2	43.9	38.2	34.0	22.6	16.6
3217		33.0	46.7	52.8	62.8	69.4	73.1	80.0	85.9	85.5	85.8	87.8	86.2
		77.9	73.2	69.9	66.2	56.3	54.3	49.5	42.9	37.6	32.2	21.6	18.2
4017		27.9	44.3	50.8	57.1	62.6	71.1	79.8	88.9	89.4	88.5	88.7	87.5
		82.5	73.9	72.1	68.2	59.7	55.9	52.4	46.1	38.5	34.8	24.7	15.7
4817		28.6	45.5	54.1	63.9	68.8	71.9	75.3	81.0	80.6	79.0	80.3	80.0
		76.4	68.8	66.6	64.6	57.2	54.5	51.3	44.5	38.3	34.5	24.3	14.1
5617		18.4	29.0	34.5	39.0	41.2	42.4	42.9	45.4	45.3	45.9	47.5	47.6
		45.6	43.3	42.0	41.6	38.0	36.9	34.4	30.2	25.9	22.4	14.6	7.9
	825	26.9	41.8	50.3	60.3	70.0	75.3	79.6	84.1	82.9	80.3	79.9	78.0
		71.3	64.9	63.3	61.4	55.0	51.5	48.2	43.4	36.9	33.7	24.6	15.0
1625		32.0	46.1	51.3	57.0	63.0	69.9	78.8	86.8	88.6	87.9	89.7	87.6
		82.0	74.5	70.5	66.9	58.9	55.6	52.3	45.5	38.5	33.4	23.1	15.7

2425	32.8	46.1	51.2	56.8	61.5	69.1	78.8	88.0	90.0	92.4	99.4	96.9
	92.2	85.4	79.7	75.2	65.2	61.8	56.3	47.1	40.5	35.2	24.1	18.2
3225	33.0	46.6	51.0	55.6	58.1	61.0	66.6	74.4	79.3	85.4	94.1	97.3
	91.9	86.6	82.0	74.3	63.1	59.3	53.4	45.5	39.4	33.9	23.2	18.2
4025	30.1	46.0	52.4	57.8	62.8	70.0	78.8	88.3	91.4	93.9	96.7	96.4
	91.7	83.4	81.4	77.3	66.9	62.8	57.9	50.1	42.2	37.3	25.5	16.8
4825	29.5	46.5	54.5	61.5	68.4	76.1	82.0	88.4	89.4	86.7	89.5	85.5
	80.9	71.5	69.6	68.3	60.0	56.2	53.3	47.1	39.6	34.7	24.5	14.8
5625	19.5	31.0	38.4	47.3	54.1	58.2	59.8	61.6	59.0	57.2	56.3	54.3
	51.0	48.4	48.5	46.7	42.8	40.9	39.7	34.5	29.5	26.7	18.0	9.9
833	30.1	45.6	54.5	65.7	74.2	79.8	80.4	84.2	80.2	78.1	77.9	76.9
	72.0	65.2	63.4	61.2	54.1	51.2	48.2	42.3	35.8	32.1	22.1	14.1
1633	29.0	42.9	49.3	57.7	65.4	70.2	74.1	79.2	80.0	77.9	79.8	79.0
	74.3	67.1	65.5	62.8	54.7	52.4	49.0	43.1	36.4	31.7	22.4	15.4
2433	28.2	42.2	48.0	51.6	53.9	56.1	59.5	67.5	72.0	77.0	85.3	88.7
	87.2	80.8	76.5	71.4	61.6	57.8	53.6	46.2	39.3	34.7	24.7	16.1
3233	28.5	43.6	49.5	52.8	55.2	58.8	64.4	75.3	84.0	89.9	96.4	97.8
	93.7	84.3	80.1	76.8	65.5	60.7	55.4	48.3	40.2	36.3	26.2	17.0
4033	27.9	47.2	53.1	57.7	61.1	63.8	68.9	77.0	81.6	86.5	93.9	96.8
	94.1	85.6	83.6	78.8	68.3	62.4	58.2	49.7	41.9	37.1	26.0	17.0
4833	33.1	48.8	57.5	67.8	75.1	79.5	81.4	88.2	87.2	86.6	85.5	85.7
	79.5	72.8	69.3	66.7	57.7	54.2	50.6	43.5	37.2	32.3	22.1	15.3
5633	21.5	34.6	43.5	53.0	61.7	66.1	67.5	69.1	66.0	64.9	64.3	61.2
	57.3	52.3	50.7	49.8	44.4	42.5	40.3	35.8	30.4	27.4	19.2	11.5
1641	28.3	43.5	51.0	57.9	63.9	70.1	78.2	87.9	88.5	87.9	87.5	87.3
	84.1	75.5	72.3	70.4	61.4	57.2	54.0	47.8	40.3	36.3	26.4	16.6
2441	28.3	43.6	49.1	53.8	58.0	64.7	71.8	79.4	81.6	81.8	83.4	82.9
	77.3	70.3	67.7	64.9	55.3	52.9	49.8	43.4	37.5	33.0	23.4	15.5
3241	29.3	43.7	49.1	54.5	57.4	59.5	63.3	70.7	74.9	77.6	85.5	89.8
	86.9	79.0	76.8	72.9	63.3	59.1	53.4	46.3	39.5	35.3	25.4	16.6
4041	27.9	43.4	50.6	55.3	61.1	69.7	78.0	87.7	91.1	91.7	92.7	93.5
	88.6	80.3	77.6	72.5	63.9	59.3	55.5	47.7	40.2	35.9	26.4	16.4
4841	29.8	45.9	52.5	58.4	63.9	69.2	75.5	82.4	83.2	82.3	82.9	80.5
	75.0	67.1	65.6	62.9	55.2	52.7	49.8	44.1	38.1	34.8	24.2	15.1
5641	21.3	34.1	41.8	50.6	57.1	61.0	62.4	64.4	62.0	60.6	59.6	58.2
	54.6	49.9	48.8	47.8	42.5	41.5	39.1	34.9	30.2	26.9	18.7	10.5
849	24.6	35.7	40.1	44.6	46.7	48.6	50.1	52.5	52.8	53.6	55.3	53.5
	50.9	48.2	46.8	46.0	42.1	41.7	38.7	33.8	29.1	24.6	15.8	8.6
1649	33.7	50.5	58.6	67.9	71.7	73.0	75.2	78.6	77.1	76.4	76.2	76.0
	71.4	65.9	64.0	62.0	54.4	52.8	50.1	43.1	37.6	32.9	22.3	14.3
2449	34.9	49.8	56.0	62.2	66.7	72.9	79.9	84.8	84.8	81.3	83.0	80.4
	73.7	69.3	66.4	63.7	55.8	54.0	50.0	42.8	37.0	32.6	22.2	15.4
3249	32.2	48.4	56.5	66.6	76.0	80.1	83.0	88.6	88.2	84.3	84.0	82.8
	76.6	69.4	67.8	65.3	56.7	54.4	51.2	44.9	38.5	34.2	24.0	15.0
4049	32.0	48.4	54.7	61.7	66.6	73.9	81.7	89.0	86.5	85.6	85.7	84.0
	80.4	73.1	70.9	68.5	59.9	56.8	54.3	47.5	40.6	35.9	25.1	15.7
4849	23.6	38.4	46.9	53.7	57.8	59.1	60.8	64.1	64.4	64.2	64.9	65.4
	62.2	57.9	57.3	55.5	49.5	48.1	46.3	40.7	34.6	31.3	22.3	13.3
841	28.3	44.1	52.0	61.4	70.6	75.5	76.6	80.9	79.2	77.7	76.2	75.3
	71.9	65.5	64.3	62.8	56.1	53.9	51.0	45.8	39.4	34.6	23.5	14.2
1657	19.4	29.8	35.2	40.0	42.7	43.0	44.5	46.1	46.8	46.7	48.6	48.5
	45.3	42.7	42.5	41.1	38.0	37.0	34.9	30.3	26.1	22.4	14.5	7.9
2457	21.9	34.6	43.1	53.8	61.3	64.1	64.4	64.7	61.6	59.3	58.9	55.2
	52.4	48.7	46.3	44.5	39.9	39.1	37.7	33.1	29.0	25.8	17.7	10.3
3257	25.3	39.5	47.1	56.3	61.9	64.0	65.2	66.4	63.5	59.3	57.7	56.2
	52.2	48.2	46.4	45.3	40.1	40.3	38.4	33.8	29.8	26.5	17.7	10.6
4057	22.8	35.6	43.3	52.3	58.6	61.4	64.0	66.5	65.6	64.0	63.8	62.5
	58.5	54.0	52.6	50.6	45.0	44.7	41.5	36.8	31.4	27.2	17.8	9.9

CYCLE 2 DATA

DATASET 25, JUNE 28, 1976

Reactor Conditions

Core Average Exposure, 8025 MWd/t

Core Thermal Power, 2650 MWT

Dome Pressure, P, 1017 psia

Core Flow, 88.4 Mlb/hr

Inlet Subcooling at P, 24.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	40	48	40	48	40	48	48	48	48	48
48	48	48	48	20	48	12	48	12	48	20	48	48	48	48
48	48	48	42	48	38	48	36	48	38	48	42	48	48	48
48	48	20	48	10	48	8	48	8	48	10	48	20	48	48
48	40	48	38	48	44	48	48	48	44	48	38	48	40	48
48	48	12	48	8	48	6	48	6	48	8	48	12	48	48
48	40	48	36	48	48	48	32	48	48	48	36	48	40	48
48	48	12	48	8	48	6	48	6	48	8	48	12	48	48
48	40	48	38	48	44	48	48	48	44	48	38	48	40	48
48	48	20	48	10	48	8	48	8	48	10	48	20	48	48
48	48	48	42	48	38	48	36	48	38	48	42	48	48	48
48	48	48	48	20	48	12	48	12	48	20	48	48	48	48
48	48	48	48	48	40	48	40	48	40	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	46.6	74.1	90.7	106.0	109.5	107.8	104.0	104.5	98.1	94.9	94.3	97.3
	98.7	99.6	108.7	113.0	106.5	108.6	107.3	96.7	82.7	66.3	51.1	27.9
2409	43.1	67.1	85.6	108.2	123.5	127.8	125.9	131.5	121.7	112.6	109.6	108.1
	105.3	99.8	102.2	106.3	100.6	109.0	113.3	105.9	94.5	77.7	60.7	35.8
3209	44.5	70.7	86.6	109.6	128.1	135.5	136.3	136.7	130.4	126.0	125.7	122.9
	114.3	108.7	113.5	114.5	110.8	119.9	122.7	113.7	103.4	92.1	61.6	39.5
4009	31.2	58.1	80.0	101.3	122.4	127.3	127.2	131.2	131.0	120.1	117.4	117.3
	116.6	115.8	125.3	132.6	132.4	128.0	129.8	124.4	106.7	90.1	69.7	48.1
4809	55.3	86.9	102.1	116.2	123.4	120.6	115.0	115.0	109.3	108.3	108.8	112.9
	108.7	106.9	110.0	112.7	106.1	106.3	97.9	85.6	72.5	62.3	40.9	23.1
0817	42.4	71.5	90.6	105.2	115.5	114.6	111.9	111.4	108.9	106.2	105.9	107.4
	108.8	108.4	118.7	125.4	120.5	122.2	118.0	109.4	91.9	75.6	56.9	33.7
1617	45.5	70.5	89.7	112.5	124.4	126.0	127.8	131.3	124.8	125.1	123.4	124.2
	124.1	120.8	125.6	132.9	124.9	131.1	133.1	124.6	112.3	91.1	69.2	43.3
2417	47.5	69.0	81.3	95.3	107.2	122.9	128.6	130.8	125.5	122.7	126.9	122.1
	114.0	110.4	109.6	110.3	108.2	111.5	117.4	113.4	110.1	101.6	69.0	51.1
3217	49.9	69.2	78.6	90.2	99.3	108.3	119.9	129.1	124.1	122.5	122.4	120.0
	111.3	110.4	107.9	110.3	105.8	115.1	119.2	117.0	114.3	101.5	67.9	51.0
4017	36.0	61.2	76.2	91.6	107.6	121.0	124.6	136.1	131.4	127.0	124.1	126.0
	122.8	114.0	116.7	118.8	115.5	118.1	125.4	125.8	115.2	99.9	77.8	48.7
4817	48.1	81.6	101.1	126.6	136.1	142.0	145.3	143.1	135.2	130.6	132.7	132.1
	129.4	131.9	138.7	144.6	135.2	138.0	134.3	122.9	107.6	96.3	67.6	40.2
5617	45.7	71.3	85.8	99.0	106.5	104.5	102.4	101.9	95.3	91.4	91.9	90.1
	87.2	84.3	87.2	89.9	82.6	83.9	78.7	69.3	60.3	53.2	35.1	20.9
0825	40.2	66.2	85.2	109.7	130.3	144.8	146.2	149.2	139.3	132.0	132.6	131.2
	123.4	115.7	118.3	117.5	115.2	122.5	129.1	121.8	108.2	98.8	69.4	42.2
1625	42.8	64.7	76.6	91.2	105.3	115.7	125.8	133.8	134.1	130.1	131.3	130.2
	120.9	115.8	116.6	118.5	112.9	118.2	120.7	116.3	108.1	89.8	70.3	45.5

2425 59.4 89.5104.9114.6117.1114.5113.1115.5111.3110.3111.5109.4
 103.9 99.6 98.7 99.1 92.8 99.8100.1 95.1 94.1 79.5 61.7 46.2
 3225 73.2102.5111.4119.6120.0117.3115.4118.3116.0114.6114.6111.4
 104.5104.2101.4100.9 95.2 99.0 99.5 94.9 94.0 88.7 61.2 48.5
 4025 42.5 73.8 95.9110.6117.5117.4115.6121.1116.6111.1111.1110.2
 106.2 99.6100.9101.1 97.0 99.9104.2103.2100.5 92.6 74.7 48.0
 4825 37.9 62.3 78.2 92.5110.9126.4135.8141.0139.8133.5135.8131.6
 125.3119.2122.0123.3121.0128.3136.3131.8117.8 94.2 74.6 42.0
 5625 37.9 67.9 91.6121.2141.2146.7140.3145.3131.5126.6121.0118.3
 114.5105.9108.3107.6100.5102.5 99.8 91.9 78.5 64.2 47.7 28.9
 0833 43.2 69.6 88.6110.0129.2136.0139.1140.1133.6122.6121.8119.1
 113.5108.9108.4112.0106.5117.2123.1113.8102.3 93.3 63.2 40.4
 1633 39.8 60.0 69.4 80.0 90.4102.8115.3124.2124.3121.5121.0115.3
 107.7102.7102.0104.1 98.7105.9109.0107.3102.2 86.6 68.1 44.6
 2433 56.9 91.1105.7114.8113.7112.0109.2110.0108.2106.0106.9106.1
 101.8 94.9 93.9 94.5 88.9 92.5 93.6 91.7 88.6 78.9 65.6 41.6
 3233 53.2 81.5 90.4 98.2100.5101.3104.6116.6123.1124.4129.3127.9
 121.5110.5109.7106.8 98.0 99.6101.3 97.5 94.9 93.8 70.2 45.6
 4033 57.3 93.7110.6120.6127.8127.8124.7130.4126.7124.9125.8125.2
 119.6111.2109.6109.5103.9105.0107.1108.3105.2 93.9 77.3 49.3
 4833 37.4 59.8 74.7 86.7 99.4114.1126.8137.3132.9132.7133.4125.1
 114.9111.2109.8110.3107.2115.3124.9122.0112.1 95.9 76.4 46.2
 5633 42.3 71.8 93.7119.2140.9140.4133.7133.9125.5115.2109.8108.5
 99.8 94.5 96.1 96.2 90.5 91.6 90.1 82.4 73.4 60.0 44.8 26.0
 0841 45.9 73.5 91.4115.6134.0142.1143.4143.1135.9128.8130.5127.4
 126.8127.2137.7142.9136.8138.9134.2119.9103.2 90.1 61.4 37.2
 1641 49.1 70.2 83.7101.6116.7124.2132.8131.5127.0125.2127.9123.2
 117.3115.7116.7115.6115.4121.4123.4115.9109.9 87.3 65.9 49.1
 2441 46.8 77.1 97.0112.7120.5121.3120.9122.6119.0118.7119.1118.1
 111.6103.6104.4106.0102.2105.6110.1109.3104.8 90.8 72.2 46.0
 3241 61.1 94.3108.1116.8118.5116.7113.5118.0119.1115.4117.2116.9
 113.9105.8105.7106.3 99.8102.9107.9107.1104.8101.5 75.7 47.7
 4041 50.4 79.5 97.5114.7121.3123.2125.0127.7122.3119.8118.9116.2
 111.8109.2106.6109.1103.7112.3119.0114.8107.3 88.5 68.4 46.4
 4841 45.0 69.6 86.2104.4119.5128.9135.4136.1131.5127.5124.1123.3
 125.5128.3137.9141.4139.1142.6138.2127.3114.9 91.1 68.3 40.5
 5641 43.7 74.1 98.0123.8146.8156.1152.8152.6144.9128.4126.7122.2
 121.4114.1116.6117.4109.7110.8106.7 95.8 80.4 70.4 48.2 27.1
 0849 66.0 92.6107.6119.8120.9116.6117.5113.2108.5104.8106.9104.6
 101.5104.2105.4103.6 99.3 98.1 90.5 76.6 64.8 49.5 34.0 22.4
 1649 57.6 84.3103.2118.9123.2123.0117.2117.4110.8109.0109.9111.0
 110.0120.2128.4131.3127.5128.1123.8108.8 96.8 76.1 56.8 40.1
 2449 45.0 65.9 78.4 95.4110.7118.4127.1127.2124.4120.5119.8118.0
 112.1112.0115.4118.0115.7124.2125.8117.6106.2 85.4 64.1 44.7
 3249 38.9 61.9 73.8 85.9 97.4110.1122.7132.7133.6129.3127.9126.7
 119.7112.8116.5118.9115.5127.8137.0137.7124.9116.7 81.6 50.7
 4049 53.1 75.4 88.9106.9120.1124.7128.8129.4120.5114.9118.7120.0
 114.9123.2125.2129.7124.9129.7128.4115.7103.1 80.1 59.5 44.1
 4849 54.7 91.1114.9136.3143.9138.7124.6122.4114.1105.7106.7110.6
 110.1105.5111.7117.1110.8110.5108.1 98.6 84.3 71.5 54.1 32.8
 1657 50.7 74.9 87.2 98.3103.7102.9 97.9 96.5 90.8 86.2 87.2 85.6
 82.8 84.9 84.7 87.2 82.2 82.8 78.2 67.6 59.6 50.3 31.7 18.3
 2457 50.7 78.4100.2127.7139.1138.6137.7134.4123.4117.1115.2112.7
 104.4103.0101.1101.4 96.0 98.4 95.5 83.2 73.5 55.2 39.5 23.6
 3257 52.4 81.5101.1126.9136.0135.7129.7126.0120.1111.9110.1103.1
 97.8 93.7 92.5 95.3 89.8 93.7 91.2 83.0 73.6 64.7 41.5 26.5
 4057 52.0 80.4101.5129.1142.0143.5139.7139.5130.9126.1126.0123.5
 118.8117.5118.7119.3112.9113.1108.0 92.4 79.5 66.9 41.0 23.9

CYCLE 2 DATA

DATASET 26, JULY 14, 1976

Reactor Conditions

Core Average Exposure, 8264 MWd/t

Core Thermal Power, 3262 MWT

Dome Pressure, P, 1013 psia

Core Flow, 101.2 Mlb/hr

Inlet Subcooling at P, 23.91 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	48	34	48	34	48	48	48	48	48	48
48	48	48	38	48	38	48	42	48	38	48	38	48	48	48
48	48	48	48	22	48	12	48	12	48	22	48	48	48	48
48	38	48	38	48	38	48	40	48	38	48	38	48	38	48
48	48	22	48	10	48	10	48	10	48	10	48	22	48	48
48	40	48	40	48	48	48	44	48	48	48	40	48	40	48
48	48	22	48	14	48	14	48	14	48	14	48	22	48	48
48	40	48	40	48	48	48	44	48	48	48	40	48	40	48
48	48	22	48	10	48	10	48	10	48	10	48	22	48	48
48	38	48	38	48	38	48	40	48	38	48	38	48	38	48
48	48	48	48	22	48	12	48	12	48	22	48	48	48	48
48	48	48	38	48	38	48	42	48	38	48	38	48	48	48
48	48	48	48	48	48	34	48	34	48	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	41.7	67.3	81.9	96.2	104.9	112.6	111.9	115.6	113.2	106.5	107.0	106.1
	102.1	95.0	95.4	94.5	85.8	85.6	81.9	72.2	62.4	49.9	38.6	21.8
2409	39.8	63.0	77.1	91.9	104.7	117.6	126.1	140.7	138.3	130.3	125.5	124.1
	115.2	103.4	104.4	104.8	95.6	93.9	91.7	83.1	72.1	57.7	45.5	30.4
3209	43.3	66.3	85.6	103.9	117.1	127.1	139.2	151.7	147.4	143.8	143.7	138.6
	128.4	119.1	118.4	117.1	104.9	105.2	100.6	89.8	78.0	68.2	46.5	31.0
4009	38.4	69.7	92.9	106.4	123.7	136.5	136.7	139.7	138.7	133.5	124.6	127.9
	123.8	115.0	117.3	114.0	111.4	102.1	99.7	94.2	80.1	66.4	51.3	35.4
4809	34.1	54.8	66.5	82.8	97.8	110.3	115.4	120.7	115.0	112.5	115.1	112.9
	106.9	100.9	101.0	98.0	88.5	86.2	79.5	68.7	58.5	49.2	32.4	17.8
0817	34.3	57.5	74.4	89.1	104.8	116.1	118.1	126.8	121.3	117.6	119.2	118.7
	114.6	107.1	110.8	111.9	103.1	99.3	95.8	86.6	74.3	58.8	44.2	27.4
1617	36.5	55.5	66.0	81.5	99.2	108.3	117.6	127.4	122.8	122.8	122.2	129.0
	133.8	133.7	138.2	139.3	127.0	125.8	120.2	105.8	92.3	72.5	55.0	36.8
2417	36.3	54.0	65.7	81.2	96.0	107.0	114.4	119.1	117.9	114.9	117.7	117.2
	109.3	106.1	105.1	106.4	103.4	113.5	116.2	106.1	99.8	89.2	59.9	42.4
3217	39.6	58.7	71.9	88.8	100.1	106.8	114.5	115.4	114.7	110.6	113.9	109.6
	101.9	100.5	101.5	102.5	102.4	114.5	116.7	109.5	102.1	85.6	58.1	46.1
4017	30.4	50.1	61.3	75.3	91.5	102.7	111.3	123.1	122.4	119.8	122.1	123.4
	127.9	125.7	125.1	128.1	120.7	121.5	120.8	110.5	96.8	81.3	62.4	39.4
4817	48.1	76.9	91.6	110.3	129.1	141.4	147.7	150.5	148.3	138.5	138.7	140.5
	135.1	128.6	129.4	126.7	115.5	113.2	108.2	96.8	83.3	73.6	50.9	31.1
5617	27.3	42.3	52.8	67.1	80.8	92.3	97.0	101.4	98.4	94.1	94.7	90.9
	87.2	82.4	80.4	80.6	73.4	71.5	67.2	58.3	48.8	42.8	27.9	16.0
0825	34.2	55.6	72.6	93.1	112.0	123.6	126.6	131.6	124.3	123.2	126.2	128.8
	131.8	130.9	135.0	135.2	124.9	122.9	118.4	105.4	90.4	80.7	56.2	35.1
1625	37.5	57.9	70.9	85.8	97.9	105.8	113.3	122.0	118.9	116.9	123.1	123.1
	117.4	117.3	118.1	120.4	114.2	118.6	119.3	111.3	99.5	78.6	60.9	39.4

2425 53.0 76.2 85.4 93.3 96.1 97.9 99.3 99.3 97.9 97.0 98.9 97.5
 95.0 93.8 95.4 99.0 97.3105.6111.8107.2 99.5 79.8 60.6 43.6
 3225 50.7 77.2 89.5102.7104.1103.8106.2105.3101.3100.6103.7100.6
 95.8 94.6 97.0101.3 98.4109.2114.5107.8101.5 89.8 60.3 47.8
 4025 43.2 70.1 82.8 92.4 98.0100.2 99.5101.7101.7 98.4101.0 98.8
 96.0 93.2 95.8 99.3 97.3102.2108.5107.9 98.0 85.5 66.8 43.8
 4825 33.8 55.6 70.7 88.5104.2114.3116.1125.6121.7120.1122.2128.3
 132.7135.3141.5140.6130.9129.6125.2112.8 98.0 77.9 60.0 36.0
 5625 31.1 54.8 73.9 97.0117.0125.1121.9128.3119.7112.8111.5111.0
 111.0105.4105.8107.9 97.7 94.0 90.4 79.4 65.7 53.0 39.7 22.7
 0833 37.8 59.9 76.8 97.6114.1118.7121.7123.7119.5111.8115.9121.2
 126.0129.4131.5135.9123.2121.6115.1100.9 85.7 74.5 50.8 32.0
 1633 37.1 56.5 67.6 81.8 96.3103.8106.2109.0103.9105.8106.1106.4
 103.6100.7106.6113.2109.8116.1116.5106.9 94.5 76.8 60.1 38.5
 2433 52.9 83.0 95.4104.5105.2 99.7 97.4 97.0 95.4 91.6 93.4 94.0
 92.3 86.5 92.5 98.8 99.7111.7116.9111.8100.1 83.0 64.8 40.8
 3233 50.9 82.0 98.0111.1113.1109.6107.7110.9106.8104.5105.8103.8
 102.1 97.1100.5105.8108.8118.9123.4118.1107.1 97.7 70.8 46.0
 4033 50.7 81.3 97.6104.6108.4108.3105.7110.4109.2108.4109.7109.7
 108.1104.2106.7113.2116.0123.9125.4119.0106.3 91.2 71.9 45.8
 4833 34.2 56.7 71.4 86.6102.3111.2113.9116.3117.3114.7115.9121.7
 126.7125.1129.6131.8123.5122.0120.0111.0 92.6 77.1 60.8 39.1
 5633 35.4 59.8 78.3 99.0113.9120.8115.9116.9111.2102.9105.3103.2
 100.9 95.8 99.0 99.6 90.5 88.1 83.3 73.7 62.9 50.0 38.4 21.5
 0841 39.7 64.0 79.6 99.2115.5129.1133.5137.5133.9129.0128.4130.1
 132.9133.2137.3136.2127.3122.8115.5100.0 83.7 73.3 49.2 28.6
 1641 40.4 58.2 70.4 85.6101.4110.6121.9122.6121.8118.7120.5118.4
 113.8114.5113.8114.8106.9110.2111.8101.9 92.3 71.9 54.6 41.6
 2441 33.3 52.3 64.8 76.2 87.9100.3104.9111.9109.7109.4110.6107.3
 104.6100.3102.6104.7101.4107.0113.8111.0101.9 85.4 67.3 43.0
 3241 35.5 56.6 69.5 82.7 95.5101.1107.7112.8111.2109.9110.3111.8
 107.6102.0104.2106.2101.2108.0115.1113.1104.8 97.5 71.8 46.2
 4041 36.2 54.1 63.4 76.5 88.8100.8109.3117.7115.9114.0114.9116.3
 112.7108.4109.7110.3104.0109.4113.5106.6 98.4 80.0 61.2 41.5
 4841 37.2 58.3 68.9 85.7102.5115.6124.3131.2125.3120.6122.8124.6
 128.6130.5135.5135.7125.8126.5122.1109.4 94.7 73.9 57.3 34.4
 5641 31.4 53.8 71.9 91.5112.6125.9134.7138.5134.7124.0121.7118.8
 118.9110.3111.4110.5101.4 97.8 92.8 80.7 68.4 58.4 40.1 22.2
 0849 52.7 75.7 88.9102.5107.8111.9117.0115.4108.1108.1108.6105.2
 100.4 96.7 93.4 91.5 83.5 81.2 73.0 61.6 51.7 39.2 27.0 17.6
 1649 48.0 69.1 78.4 92.0106.6115.1118.5118.5113.5112.4116.3116.1
 113.4118.7118.0119.4106.8108.1102.8 89.7 76.5 59.8 43.7 30.7
 2449 43.1 62.1 75.0 93.2107.1115.4124.7128.3122.1117.2118.4114.5
 109.6108.0107.1108.7101.3106.5106.9 96.2 86.2 67.0 50.8 37.2
 3249 37.4 62.0 79.5 99.1113.0119.6124.0129.9128.8125.2123.6122.3
 116.5108.6109.8110.9106.0111.3119.8113.5100.3 91.9 65.3 40.6
 4049 46.7 66.8 80.0 96.6110.4118.9130.6129.2123.8116.7119.4121.7
 118.4120.2118.6119.5110.2112.1106.7 94.2 81.9 63.9 48.0 35.9
 4849 41.7 65.9 83.4 98.1111.4120.8121.4126.3120.7116.6113.4111.9
 109.8103.0101.8104.0 96.5 92.7 90.0 80.4 68.1 55.9 43.6 25.7
 1657 49.1 71.5 83.8 95.5100.0 97.8 96.6 97.3 92.5 88.8 87.9 85.7
 80.2 77.8 76.4 73.7 67.6 66.7 62.4 53.2 45.2 38.2 24.3 15.0
 2457 50.6 74.5 88.8104.9109.8113.8121.8128.9123.9118.1118.7113.4
 104.3 98.4 96.0 93.1 84.6 83.4 78.3 66.3 57.2 42.6 31.0 18.6
 3257 46.6 70.3 82.9 95.2102.0107.1113.8122.2120.1113.0117.3110.3
 99.3 93.2 93.3 89.9 81.8 80.2 77.1 67.9 57.6 49.7 32.3 20.4
 4057 62.2 93.4109.2130.6130.6135.1129.1133.0131.0124.1121.7118.9
 110.6106.2105.5103.6 93.4 91.2 84.6 72.3 61.3 50.4 31.6 19.5

CYCLE 2 DATA

DATASET 27, SEPTEMBER 1, 1976

Reactor Conditions

Core Average Exposure, 9035 MWd/t

Core Thermal Power, 3276 MWT

Dome Pressure, P, 1027 psia

Core Flow, 104.5 Mlb/hr

Inlet Subcooling at P, 23.59 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	28	48	20	48	20	48	28	48	48	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	28	48	10	48	10	48	10	48	10	48	28	48	48
48	38	48	40	48	48	48	48	48	48	48	40	48	38	48
48	48	20	48	10	48	14	48	14	48	10	48	20	48	48
48	40	48	38	48	48	48	42	48	48	48	38	48	40	48
48	48	20	48	10	48	14	48	14	48	10	48	20	48	48
48	38	48	40	48	48	48	48	48	48	48	40	48	38	48
48	48	28	48	10	48	10	48	10	48	10	48	28	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	48	48	28	48	20	48	20	48	28	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	38.3	62.3	74.6	89.1	98.1	98.2	97.2	101.5	104.5	107.5	112.8	117.0		
	116.1	105.0	104.7	104.1	92.3	90.1	85.8	77.5	66.7	53.4	40.6	23.2		
2409	35.2	56.1	69.6	84.8	100.2	112.4	111.7	120.7	117.1	114.2	112.4	111.9		
	110.1	109.5	115.5	118.3	108.5	106.9	102.9	93.5	78.9	63.5	49.9	31.2		
3209	37.2	56.8	70.9	92.0	109.0	115.8	123.9	125.3	121.3	117.3	121.4	117.0		
	117.0	122.2	130.5	135.3	122.2	120.0	116.0	99.5	85.6	75.6	51.1	35.0		
4009	26.0	46.7	63.4	76.7	93.8	109.1	116.0	122.1	125.8	124.6	129.7	138.6		
	140.0	130.3	129.4	128.8	123.4	113.8	111.7	103.0	86.1	73.6	55.7	39.0		
4809	44.7	69.5	82.3	96.6	98.4	100.5	99.9	106.7	108.4	107.3	110.9	113.0		
	108.7	101.5	100.2	97.5	88.6	86.2	79.5	69.2	58.3	50.2	34.5	20.3		
0817	35.2	58.7	74.7	88.5	99.1	102.4	104.9	113.4	113.2	116.9	128.4	132.8		
	128.8	119.7	117.6	116.6	105.8	102.7	98.9	89.5	75.1	60.8	45.4	27.6		
1617	36.7	56.1	69.1	86.4	102.4	113.9	120.3	126.8	130.4	128.0	134.6	136.3		
	129.1	123.2	123.4	122.9	112.0	114.3	112.7	103.9	93.4	74.2	56.7	37.6		
2417	41.2	60.1	72.4	88.9	100.5	109.2	112.4	116.8	115.7	115.1	117.4	116.6		
	113.4	109.2	111.1	110.9	105.2	110.1	113.8	107.7	98.9	89.5	60.8	46.3		
3217	42.0	59.0	67.6	79.2	90.2	98.4	107.6	110.4	111.3	110.0	113.5	112.2		
	105.9	108.1	111.1	110.8	108.5	115.7	119.2	111.3	105.1	91.4	62.0	45.8		
4017	35.0	54.6	67.9	82.3	95.8	104.3	109.5	119.1	117.7	117.7	122.2	122.3		
	116.4	110.6	109.4	108.7	102.3	104.9	108.7	106.2	97.1	83.0	66.9	44.1		
4817	41.0	63.0	75.7	96.3	112.3	120.5	125.4	134.0	133.1	141.2	150.7	150.8		
	144.6	134.0	130.9	126.4	115.2	111.4	107.7	96.9	84.9	76.9	54.8	35.9		
5617	40.2	59.7	71.7	83.2	89.2	91.5	95.5	95.6	93.8	91.4	91.7	90.1		
	87.6	82.3	79.6	78.9	70.9	69.7	65.2	56.8	48.9	43.0	29.0	18.9		
0825	33.1	52.4	66.8	82.9	102.5	118.4	124.0	134.7	131.4	131.0	132.5	131.7		
	130.5	127.4	133.1	137.0	126.3	122.9	117.2	105.5	90.7	79.8	56.9	34.1		
1625	37.8	56.0	68.5	82.0	95.4	103.1	110.4	119.0	117.7	118.1	123.8	122.2		
	117.9	115.3	115.1	114.8	108.9	114.9	115.8	108.4	97.8	78.8	60.8	41.0		

2425 59.4 83.1 89.8 96.2 97.7 96.0 95.6 97.0 94.4 94.8 97.7 97.2
 93.5 93.1 97.6101.8104.2116.2120.0109.8101.6 80.5 60.5 44.7
 3225 63.4 88.2 96.0103.9102.3101.2102.7101.2100.8 99.6102.8101.1
 97.2 99.2103.8110.5114.3123.6127.3114.4105.2 92.1 61.7 51.9
 4025 47.1 72.6 84.2 92.4 95.5 96.9 97.5 98.2 96.4 95.7 96.2 99.2
 96.3 91.6 94.0 96.1 94.6100.3105.6105.5 98.4 86.8 70.3 45.9
 4825 33.9 53.9 67.3 84.0100.0110.8118.2125.2126.6127.9128.5130.9
 128.1128.1134.0135.9127.5127.2123.7111.5 99.1 79.8 62.7 41.8
 5625 35.9 58.8 78.1 96.5115.8128.1130.6130.5123.6116.2115.1114.8
 110.9103.0106.7105.0 97.0 92.8 89.3 79.7 65.8 54.2 41.1 25.8
 0833 35.9 56.5 72.5 92.5109.1116.3122.2126.1118.6115.8117.7119.4
 117.2120.7128.0132.1122.7122.6116.5100.4 86.8 75.8 51.9 33.2
 1633 33.6 50.3 58.9 70.7 81.0 92.5100.7110.2106.9104.7105.1105.0
 100.7 97.4100.8105.7101.0105.7107.4102.1 93.7 77.9 60.7 40.1
 2433 50.0 77.2 91.2 97.3 98.4 95.9 91.1 95.4 92.1 91.4 91.4 92.5
 92.2 88.4 92.0 99.7102.9113.8119.4113.6101.3 85.1 66.6 41.5
 3233 47.6 74.0 88.2 98.8105.8105.7103.5107.3104.5103.9105.9105.4
 104.4100.8104.4112.4114.7126.5131.0122.1109.4102.0 73.5 48.6
 4033 49.2 76.3 88.6 95.3 98.6100.2101.4103.8103.6103.0106.5108.7
 105.0101.2104.0107.8105.1110.4114.4114.7104.8 90.2 73.7 50.1
 4833 32.6 51.5 61.4 74.0 86.3 98.8108.3113.4116.7113.5116.2116.1
 115.8114.3121.5126.5120.9119.4117.1107.9 93.5 80.0 64.6 43.2
 5633 36.7 61.4 81.7104.6120.9125.7119.8119.8118.2107.4103.1103.1
 99.2 93.0 98.0 97.0 90.5 90.3 85.2 75.5 64.5 51.2 38.8 23.6
 0841 37.5 60.1 72.9 88.5106.6122.9129.9136.8139.3143.8150.2156.5
 151.0139.5139.3138.9124.3120.9115.7100.5 83.7 72.5 49.2 30.6
 1641 42.2 61.4 74.4 91.4105.8110.0119.3120.8120.7119.5123.3120.4
 111.9112.2109.5108.8102.7108.8108.9100.6 92.6 74.1 55.8 44.8
 2441 48.8 75.7 87.6 96.3101.6100.0 98.8100.1100.0101.0102.5103.6
 99.5 95.6 99.4101.8100.6107.7113.5111.4102.7 85.2 67.8 43.0
 3241 53.8 83.3 94.5 99.0101.0102.6100.6102.4103.8104.0106.8109.9
 108.8103.0105.6113.0110.1114.9122.3122.4109.8100.8 75.3 50.2
 4041 52.6 76.5 87.7 97.6102.0105.3106.9109.2108.1108.4110.9109.7
 103.1103.1100.8103.6 99.5106.0110.5104.7 97.5 79.1 60.9 41.6
 4841 36.5 57.0 71.9 90.8104.4116.0122.7127.9130.9132.9142.9144.2
 140.5133.0134.5134.2122.1122.1119.3107.0 93.1 73.2 56.3 35.5
 5641 36.4 60.6 81.1101.1120.1130.4138.4138.7138.5128.1125.8124.8
 121.7114.1112.2110.5100.8 97.5 93.8 82.5 69.1 59.4 40.4 24.0
 0849 55.6 78.3 91.6105.4108.4109.7113.1114.9114.9113.2116.4113.8
 104.9104.3100.3 95.3 87.4 84.8 76.7 63.6 54.2 40.7 27.8 18.7
 1649 45.5 65.5 80.2 95.9105.1107.7113.6120.4119.8122.0132.8132.9
 124.3120.5120.8117.3107.7106.6102.4 90.3 78.4 61.3 45.4 34.3
 2449 39.1 57.7 70.3 89.1102.2107.1115.8119.4114.4118.1118.7119.8
 117.8124.5130.2131.3120.2121.4115.4103.5 90.5 70.5 53.3 39.8
 3249 32.6 51.7 63.7 74.6 87.9100.2108.9118.3115.8115.1116.5119.2
 121.2123.4134.3141.1133.6134.5132.7121.8106.0 96.2 68.5 43.5
 4049 42.5 61.9 75.7 95.9107.2114.2119.5122.0122.0130.2135.1139.3
 128.1124.9121.7121.8112.1112.7109.0 95.0 84.3 65.0 49.5 38.0
 4849 42.7 69.6 89.2106.2119.5115.7116.7121.7117.6114.2114.8116.7
 114.2103.6103.4103.6 96.6 93.1 88.8 81.0 68.4 57.0 43.7 27.0
 1657 42.9 63.7 75.6 88.0 92.8 93.3 94.7 94.9 93.6 90.6 93.5 93.2
 88.3 84.0 82.6 82.0 74.1 72.8 67.2 58.1 49.1 41.1 26.2 16.2
 2457 44.8 70.1 84.3106.8119.5126.0128.5126.4119.7113.8113.2109.7
 103.4102.0100.7 99.7 91.6 90.7 83.8 71.6 62.2 45.7 32.4 21.7
 3257 46.1 72.3 89.9111.4123.0125.1122.9118.8110.3104.2102.4100.1
 95.9 94.4 94.7 95.3 88.2 87.3 83.2 73.0 63.4 54.0 34.3 22.3
 4057 43.9 68.3 82.9105.1120.5130.1133.2138.2134.0129.2129.9124.2
 119.4115.4114.4112.4102.7100.6 93.8 78.7 65.9 54.9 34.1 21.0

CYCLE 2 DATA

DATASET 28, OCTOBER 8, 1976

Reactor Conditions

Core Average Exposure, 9730 MWd/t
 Core Thermal Power, 3275 MWT
 Dome Pressure, P, 1022 psia
 Core Flow, 101.5 Mlb/hr
 Inlet Subcooling at P, 24.3 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	28	48	18	48	18	48	28	48	48	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	28	48	10	48	14	48	14	48	10	48	28	48	48
48	38	48	40	48	48	48	48	48	48	40	48	38	48	48
48	48	18	48	14	48	18	48	18	48	14	48	18	48	48
48	40	48	38	48	48	48	42	48	48	48	38	48	40	48
48	48	18	48	14	48	18	48	18	48	14	48	18	48	48
48	38	48	40	48	48	48	48	48	48	40	48	38	48	48
48	48	28	48	10	48	14	48	14	48	10	48	28	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	48	48	28	48	18	48	18	48	28	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	38.6	62.7	75.1	90.7	97.2	96.3	94.4	99.6	100.6	100.5	109.8	112.2
	108.5	100.2	99.6	96.8	88.1	86.2	82.9	74.6	64.0	51.3	39.5	23.3
2409	35.3	54.0	68.0	85.5	96.4	106.3	113.2	117.4	111.7	106.3	106.4	106.2
	100.5	97.8	103.3	108.9	103.7	102.6	99.3	89.4	77.7	62.4	48.6	30.3
3209	37.7	58.0	70.8	90.2	104.6	116.4	119.9	121.3	116.4	111.5	110.5	110.0
	108.2	107.5	114.5	126.2	117.4	116.9	111.6	97.3	84.4	72.6	50.1	35.4
4009	26.7	48.2	64.0	77.7	95.5	109.0	115.2	124.7	122.9	123.2	128.3	132.7
	130.9	121.8	124.2	121.8	115.8	107.9	104.7	99.0	82.6	69.6	54.0	38.4
4809	52.7	79.4	91.3	105.0	107.8	105.0	108.9	111.8	109.5	111.6	112.5	112.2
	106.4	102.7	98.8	95.9	86.9	82.5	75.9	65.0	55.3	45.2	28.6	20.1
0817	35.6	60.4	76.0	88.9	99.5	105.1	110.3	1108.4	110.1	110.8	118.8	124.5
	121.7	111.8	111.8	110.8	102.4	96.8	94.8	83.8	70.8	58.4	43.3	26.0
1617	34.5	52.9	64.0	81.5	97.5	107.5	111.5	121.8	119.3	119.4	125.5	126.4
	122.0	115.8	117.3	117.4	107.4	108.3	108.6	99.9	90.3	70.7	54.1	36.6
2417	37.1	54.5	64.7	79.5	92.4	99.4	105.7	111.6	108.1	108.4	113.2	110.4
	106.4	105.3	108.4	112.9	114.0	122.0	122.0	108.2	96.5	88.2	58.6	43.3
3217	37.9	53.6	61.1	70.9	82.5	90.2	99.6	106.1	103.7	103.6	110.5	108.0
	104.7	106.9	110.8	118.7	121.9	130.0	129.9	114.6	103.8	86.9	58.5	47.7
4017	34.2	53.4	64.1	80.6	95.1	102.9	106.7	114.9	114.7	113.4	119.0	119.3
	112.9	108.1	108.4	108.7	102.3	107.4	109.7	102.0	93.8	76.2	59.1	41.1
4817	43.3	66.7	82.1	99.6	114.6	122.7	129.0	130.7	133.0	136.7	143.9	140.5
	134.7	129.2	124.1	120.5	109.1	109.0	104.0	90.8	80.6	69.9	46.7	35.0
5617	45.1	67.1	77.8	88.6	95.4	95.1	95.9	94.6	93.5	89.9	89.9	87.5
	82.9	78.9	76.6	74.4	67.5	66.1	61.4	53.3	45.9	38.5	24.1	17.6
0825	32.6	51.7	65.5	82.0	100.5	113.8	122.0	130.8	127.0	121.8	122.2	122.6
	118.9	113.9	118.7	123.7	118.5	118.0	114.8	101.4	86.7	76.7	54.8	32.9
1625	33.8	50.7	62.0	75.0	87.1	94.5	102.4	108.8	110.0	111.5	115.9	115.9
	112.0	109.9	113.3	119.5	117.4	127.6	124.1	110.2	95.9	77.9	59.8	39.9

2425 51.5 71.8 79.2 84.6 86.5 85.8 87.9 91.4 91.4 90.9 96.3 98.6
 98.1105.3115.4123.6123.1128.0124.9109.8 99.1 77.8 58.7 44.7
 3225 54.5 75.7 81.5 88.6 90.9 89.4 93.0 94.2 96.4 96.6101.1100.9
 103.0114.9123.2134.1129.3135.8131.6113.3101.0 86.4 57.9 47.1
 4025 45.9 68.4 77.3 86.0 87.1 87.9 90.5 94.7 92.4 91.4 94.9 96.8
 95.6 94.3 99.9107.2110.1118.7119.3108.3 98.1 79.7 62.2 41.7
 4825 34.7 53.4 65.4 83.3 96.5106.5115.0119.3120.5119.1120.8119.5
 114.3116.1123.3129.5123.4125.9120.4105.7 93.5 72.6 55.2 39.7
 5625 40.5 69.9 89.8108.9123.5128.3127.1125.4119.0113.0109.5106.1
 103.7 97.7 97.7100.1 90.5 89.8 83.5 71.9 62.8 47.8 34.8 21.0
 0833 35.4 56.1 71.0 88.7105.3110.6115.5117.1115.6109.0108.5108.4
 105.7105.8111.9120.7114.9117.0112.4 97.4 83.2 73.4 50.0 32.5
 1633 29.6 44.3 52.4 62.0 74.2 83.8 92.3 97.1 96.1 95.8 98.9 98.8
 96.4 95.2101.1108.3108.9118.0118.3106.1 92.6 75.9 59.9 38.1
 2433 42.9 66.7 76.2 83.7 85.3 85.3 81.9 88.2 86.5 88.2 91.2 95.7
 96.8 97.6109.2122.7122.9128.1126.0114.0 98.5 80.6 63.8 39.2
 3233 46.4 67.5 78.1 87.0 91.7 93.0 96.1 99.3 99.3102.1107.2111.3
 111.4117.9129.4138.5134.5136.3130.7116.3102.9 91.1 62.7 49.0
 4033 48.4 70.9 79.5 87.0 90.9 92.2 94.6101.4101.9103.7106.9108.4
 107.6109.5117.5123.9124.3133.1131.2118.6103.9 84.6 66.1 46.8
 4833 33.6 50.3 60.0 72.9 83.9 93.1100.9107.3106.5107.7109.6106.2
 103.2103.2113.2118.8117.2119.5118.6103.4 91.6 73.7 56.9 42.8
 5633 39.0 65.7 86.3107.2122.0124.8120.0118.8108.1 99.8 97.1 97.8
 89.3 84.5 87.9 90.8 83.7 83.6 80.5 71.1 61.3 49.2 37.2 22.6
 0841 37.5 59.4 74.4 90.2106.6119.7124.7131.4130.5134.7143.1145.4
 138.0130.6130.5128.4116.4115.1109.9 93.3 79.8 69.5 47.3 30.3
 1641 39.1 55.9 68.2 85.4 96.3102.1109.5113.3115.3115.3116.7115.5
 109.2106.8107.9107.5101.0108.9108.6 98.5 90.9 71.7 53.8 42.9
 2441 43.0 66.2 76.7 85.1 89.8 90.3 90.9 94.7 94.9 95.3 99.5102.1
 100.3 99.6104.0112.9114.5122.9126.6116.7101.3 83.6 65.1 39.7
 3241 44.5 68.1 77.9 84.1 87.2 87.7 90.5 95.2 95.5 99.3101.2104.3
 107.7106.3112.3121.8124.1132.7134.7122.6104.7 95.9 70.1 46.0
 4041 46.5 68.7 77.9 87.9 93.5 95.5 98.8102.3102.4102.8107.1105.9
 103.2101.9103.8109.1104.6111.0113.4103.9 95.8 76.8 58.7 40.3
 4841 35.7 55.6 68.9 86.9102.3113.5117.9124.6124.7126.8135.0137.1
 132.2127.6126.2128.1119.2119.6116.6103.1 90.2 71.2 54.2 33.7
 5641 37.4 66.2 85.4105.6125.0135.4136.5139.7131.9120.0120.9119.1
 113.3103.9103.5102.8 95.1 92.1 87.9 76.3 64.1 55.4 37.8 21.1
 0849 57.0 80.4 91.8104.4106.5107.8110.6111.4109.4106.8109.9106.4
 99.7 98.1 94.5 89.8 83.2 78.8 70.1 60.1 51.0 39.1 26.9 18.1
 1649 44.3 64.8 76.0 93.2103.0104.0106.3110.8113.0117.0123.9125.5
 118.1115.3112.6110.9101.8101.8 97.1 85.5 75.4 58.6 43.2 32.9
 2449 36.7 53.4 64.6 82.5 95.0101.8106.0109.3107.5109.7110.4112.5
 110.3109.9116.5122.5115.4117.9114.5 99.0 87.0 68.4 51.0 38.3
 3249 29.9 47.5 58.1 68.4 81.2 92.1 98.4107.8109.1107.8109.3109.3
 110.5110.6119.1130.3129.0132.6132.3121.9103.7 93.2 66.8 39.5
 4049 41.3 60.5 73.1 91.3106.7113.0115.2117.0120.5123.3130.9129.9
 119.4116.6116.8114.2106.3107.5102.5 90.8 80.3 62.4 47.6 38.6
 4849 45.3 73.3 94.1110.6124.7119.8115.9117.6115.3112.2109.4111.0
 105.1 99.9 98.5 97.7 90.2 87.8 83.7 76.1 64.4 53.7 42.4 26.2
 1657 44.9 65.9 78.6 90.4 92.0 93.2 92.2 92.8 90.4 88.1 90.2 88.9
 81.3 80.2 77.5 76.6 70.2 68.1 62.9 53.7 46.3 39.5 25.3 15.7
 2457 47.6 71.7 88.0109.2120.8123.7124.4121.2112.0105.7104.1102.5
 94.2 92.9 91.2 90.6 83.6 84.3 80.2 67.8 58.1 43.0 31.5 19.6
 3257 49.0 74.6 91.6115.2122.6119.5116.5113.7108.0 96.8 95.5 90.7
 86.2 82.9 85.4 86.2 79.7 80.6 78.1 68.2 58.7 51.0 32.5 21.9
 4057 46.1 71.7 88.3111.1125.4131.1128.4130.9128.9122.4120.2117.1
 112.0106.9105.2105.0 94.4 93.4 87.0 73.0 61.7 51.1 32.3 20.0

CYCLE 2 DATA

DATASET 29, OCTOBER 28, 1976

Reactor Conditions

Core Average Exposure, 10050 MWd/t
 Core Thermal Power, 3293 MWT
 Dome Pressure, P, 1023 psia
 Core Flow, 99.9 Mlb/hr
 Inlet Subcooling at P, 24.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	36	48	36	48	42	48	48	48	48
48	48	48	34	48	26	48	12	48	26	48	34	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	36	48	18	48	12	48	32	48	12	48	18	48	36	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	32	48	10	48	30	48	12	48	30	48	10	48	32	48
48	48	48	48	44	48	48	48	48	48	44	48	48	48	48
48	32	48	10	48	30	48	12	48	30	48	10	48	32	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	36	48	18	48	12	48	32	48	12	48	18	48	36	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	34	48	26	48	12	48	26	48	34	48	48	48
48	48	48	48	42	48	36	48	36	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	38.4	63.1	80.5	100.3	110.0	112.9	116.2	121.1	121.1	116.5	115.4	113.8		
	109.2	99.4	98.0	96.0	84.7	84.2	80.4	72.0	62.0	49.6	38.1	21.6		
2409	47.2	73.0	84.9	95.2	102.4	107.0	112.2	117.4	118.7	114.1	118.3	119.9		
	117.2	111.8	109.8	106.6	96.4	95.3	91.0	83.0	72.1	58.3	45.6	28.4		
3209	51.4	74.7	83.2	90.8	98.4	105.3	115.4	122.2	116.8	118.1	119.1	117.0		
	112.1	105.9	104.0	103.8	97.1	101.0	99.5	89.1	78.4	68.4	47.0	32.2		
4009	37.1	65.7	90.6	106.8	122.2	125.3	122.5	124.4	124.9	122.5	124.0	131.2		
	132.8	123.0	121.7	119.3	111.4	103.7	99.8	92.4	77.5	65.6	51.4	34.6		
4809	40.7	61.7	72.0	84.9	92.4	97.2	111.4	118.9	122.8	120.3	121.0	116.8		
	108.8	103.4	98.5	97.5	87.6	83.6	76.6	65.6	55.9	45.6	28.7	18.8		
0817	42.7	72.3	91.5	105.2	118.2	122.0	127.9	136.7	130.9	124.5	121.0	121.0		
	114.3	103.6	103.7	105.7	97.1	93.9	89.9	80.6	67.5	55.0	41.2	25.7		
1617	72.1	102.0	111.8	121.5	120.8	118.7	112.7	118.7	116.2	111.1	114.4	116.7		
	111.9	111.4	114.6	123.8	117.0	117.6	111.8	98.7	84.8	66.8	51.0	33.5		
2417	80.3	110.2	116.9	124.2	119.5	112.3	107.3	111.2	110.1	110.4	116.7	117.8		
	110.9	107.5	106.1	105.9	100.2	105.8	105.9	95.3	86.2	78.3	51.8	40.5		
3217	82.8	110.6	114.1	117.4	111.2	105.4	107.7	117.1	123.8	123.0	128.4	126.4		
	118.8	115.6	114.7	113.5	105.4	108.4	105.7	95.5	85.7	72.3	48.8	41.4		
4017	73.5	108.1	114.7	121.6	121.3	116.1	110.7	113.2	110.8	109.1	113.8	113.5		
	109.9	104.1	104.9	104.5	99.9	105.4	106.5	95.8	85.8	67.8	53.3	36.8		
4817	71.2	103.5	115.5	127.0	129.1	131.0	129.8	129.7	127.7	119.9	118.2	117.1		
	110.4	108.9	112.2	116.2	107.9	108.6	104.7	88.9	78.7	67.4	45.3	33.7		
5617	36.5	55.0	64.7	77.0	89.6	99.2	107.6	111.0	107.3	103.1	98.8	92.0		
	83.7	81.5	76.1	73.2	67.2	65.9	60.5	51.8	45.9	38.3	23.6	16.8		
0825	44.2	68.3	86.0	105.0	120.3	129.5	136.6	148.6	150.5	152.2	149.4	142.3		
	135.5	121.5	118.7	114.5	102.9	100.9	97.9	87.9	76.0	67.9	49.1	29.7		
1625	63.9	95.0	104.9	112.2	113.2	110.6	109.8	114.3	112.5	113.7	116.0	116.8		
	112.7	105.3	105.1	105.3	98.5	100.7	99.8	92.3	84.3	67.8	52.9	34.0		

2425 68.1 94.0101.0105.7102.5 97.7 98.5104.8111.0116.7123.6124.8
 119.4114.4113.9111.9104.0104.6101.9 90.3 80.8 65.2 50.2 37.9
 3225 75.5102.3107.3111.3106.6104.4104.0110.0110.5112.4118.1115.0
 110.9109.1107.9107.7101.5106.9106.5 96.8 86.8 76.3 51.5 40.3
 4025 64.2 93.7102.0106.6105.6103.0101.4105.9110.2115.7119.5118.2
 114.4107.7108.9110.5102.5102.7100.4 91.2 80.5 66.4 52.5 35.8
 4825 55.2 82.3 95.6109.6122.2125.1128.3130.6127.7124.5124.5120.9
 113.1107.9105.6104.6 95.6 99.0 99.5 92.6 83.2 66.0 49.5 34.8
 5625 46.3 75.5 94.6111.8118.5119.1120.9126.2127.7122.9123.8120.9
 112.4103.0101.9 95.1 86.4 83.1 78.1 67.7 56.8 44.3 32.6 19.0
 0633 63.3 94.6106.0119.6123.2122.3122.4132.2135.1132.4131.9131.6
 122.9112.9109.8106.7 96.9 94.9 91.3 81.4 69.4 61.7 43.3 27.4
 1633 51.3 79.6 93.8103.8106.6104.2102.8106.3104.1103.8103.2102.1
 99.6 91.8 90.4 93.0 84.8 86.7 88.8 84.0 78.0 64.8 51.2 33.1
 2433 58.1 88.6 99.9104.8104.8102.7 97.6104.3109.5118.8124.0127.5
 122.5114.0114.5113.0104.5104.3103.0 92.9 81.2 66.9 53.3 34.3
 3233 69.0101.4109.8113.0110.4106.4104.7110.2110.3112.5117.7119.3
 115.2106.0106.8107.3 99.7103.2106.0100.0 89.5 83.2 59.2 39.5
 4033 56.0 87.1100.0108.8112.7110.7113.5121.5128.1132.4142.5141.0
 137.6127.7124.9122.6114.3112.8107.0 94.9 84.8 68.6 54.2 40.5
 4833 67.6 96.4107.0115.1114.0112.9111.5114.4115.0112.3114.1110.0
 102.3 96.5 93.6 91.7 84.4 87.6 89.3 83.2 76.4 62.8 49.5 38.5
 5633 47.5 76.5 93.3106.2110.7108.9107.2112.3117.0116.0111.8110.1
 101.2 92.2 91.1 88.4 78.2 77.1 73.0 64.0 55.0 44.0 33.3 19.9
 0841 50.1 78.2 97.6118.1139.0153.1158.8163.0156.2150.5145.0142.6
 132.1119.9119.0118.1106.5102.8 98.4 84.9 71.5 62.7 43.3 26.7
 1641 75.1102.7112.0121.0119.9115.4112.6111.1108.9106.2108.4105.7
 99.2102.1106.7111.1104.2106.3103.0 90.6 80.3 64.3 48.8 39.1
 2441 63.2 94.1104.6110.3108.2103.5 99.2102.2103.8105.5109.2110.6
 108.0103.3103.4104.9 99.5103.6107.0 98.1 86.1 71.9 56.0 36.0
 3241 68.0100.3109.0112.3109.2104.7102.7113.8120.7127.1130.4131.6
 128.8120.7121.7120.2111.6110.4107.4 98.5 85.4 77.9 58.2 38.1
 4041 73.3104.2111.6118.1116.0110.4109.1108.7109.2107.9111.7110.6
 106.5103.5104.6105.2 99.9104.7105.2 95.7 83.9 68.8 52.8 37.8
 4841 51.8 78.7 94.0113.9125.1130.4129.5132.1126.2118.6117.9114.4
 112.1106.9112.0118.6110.3112.0109.4 97.2 82.4 66.2 51.9 32.3
 5641 40.3 67.9 90.1109.9125.6136.0141.9146.3144.1132.4131.3123.6
 115.0103.8101.1101.1 88.8 85.9 81.5 72.2 59.2 51.4 35.3 20.6
 0849 62.4 88.5100.8113.5116.6117.5118.5119.9115.7111.9109.4105.7
 95.9 93.8 90.8 87.5 79.3 76.7 69.3 58.5 49.7 38.1 26.3 17.3
 1649 76.0105.7113.6121.1117.8115.1114.6120.3121.9118.5117.4120.3
 112.1108.5109.3109.8100.1 99.2 94.9 82.2 72.3 55.8 41.8 30.5
 2449 78.3105.4110.8118.7117.0110.0106.9108.7110.8111.2117.9124.3
 120.0117.9118.3114.6103.0103.1100.0 87.2 77.4 61.0 46.0 35.0
 3249 66.7 98.8110.4111.4108.0106.1103.1110.3108.2110.2114.5115.8
 114.6107.3108.8110.7103.7107.2111.0103.1 89.9 83.1 59.9 36.8
 4049 84.5114.3124.5131.7129.4117.8118.9118.6114.8116.3124.6126.1
 118.1117.9114.6113.2104.6104.2 97.7 86.5 76.5 59.4 44.4 36.3
 4849 55.1 88.6106.2115.0119.1116.6115.2121.2120.1113.6109.5111.0
 103.5 94.9 95.1 95.0 88.5 85.2 83.4 74.9 63.7 52.5 40.5 25.8
 1657 35.5 57.8 75.7 94.4102.1104.6104.6106.7101.5 94.4 94.9 91.8
 85.5 80.7 79.4 77.5 69.6 67.9 62.9 53.0 45.5 38.4 24.7 14.9
 2457 54.5 82.4 98.2117.9121.4122.4122.2125.0117.5111.7109.9108.2
 98.2 93.7 91.1 88.9 80.2 79.3 74.0 63.7 55.2 41.5 30.5 19.1
 3257 55.8 82.2 95.7110.6113.0114.7119.2121.2110.0101.9101.3 99.5
 89.9 84.4 84.4 83.2 73.8 74.4 72.5 63.0 54.9 48.2 30.7 20.4
 4057 54.1 87.3112.4140.7143.2139.5137.2138.0128.8123.1121.9121.0
 113.3106.8104.9104.9 92.0 89.6 82.8 69.4 59.5 49.8 31.2 18.5

CYCLE 2 DATA

DATASET 30, DECEMBER 16, 1976

Reactor Conditions

Core Average Exposure, 10730 MWd/t
 Core Thermal Power, 3256 MWT
 Dome Pressure, P, 1021 psia
 Core Flow, 102.3 Mlb/hr
 Inlet Subcooling at P, 23.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28	48
48	48	44	48	48	48	48	48	48	48	48	48	44	48	48
48	36	48	10	48	28	48	14	48	28	48	10	48	36	48
48	48	44	48	48	48	48	48	48	48	48	48	44	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	49.5	80.6	99.7	118.1	128.1	128.8	117.9	117.1	113.2	105.6	102.7	101.6		
	95.9	87.5	85.7	83.8	75.9	73.4	72.1	64.7	55.6	45.6	35.3	21.3		
2409	49.3	81.8	101.0	114.0	117.8	116.2	109.6	112.4	110.4	112.3	115.3	115.6		
	109.4	100.1	98.0	96.0	86.9	85.2	82.5	75.4	64.6	53.1	42.2	26.4		
3209	56.5	86.4	104.0	120.1	123.8	126.3	133.2	134.7	128.1	127.3	128.2	122.4		
	114.9	107.0	107.5	104.1	92.5	92.1	87.8	77.2	68.1	61.3	41.6	28.1		
4009	34.9	62.9	85.1	99.1	116.3	124.4	118.0	119.9	120.2	118.1	118.2	123.4		
	119.6	110.3	108.4	106.3	102.6	92.8	91.1	85.6	71.6	62.1	48.6	34.6		
4809	65.5	97.1	109.5	123.2	122.6	119.0	116.6	116.2	111.8	107.3	105.2	104.8		
	96.7	90.9	88.2	85.2	75.1	73.9	68.5	59.1	50.5	42.3	26.5	17.3		
0817	45.9	75.6	97.4	119.3	135.4	133.5	123.8	124.4	121.0	115.2	111.4	114.1		
	108.2	97.9	98.2	99.2	89.8	86.2	83.3	74.4	61.5	51.2	38.9	24.5		
1617	62.0	89.7	101.7	113.8	121.8	127.3	128.6	136.3	132.7	128.9	128.0	128.0		
	123.4	111.9	112.0	111.8	102.5	100.9	97.0	87.2	75.1	59.2	45.6	31.0		
2417	68.3	97.1	104.5	114.0	112.4	108.9	107.7	108.7	107.1	107.8	111.6	111.4		
	106.4	100.8	98.6	96.4	92.0	96.6	97.6	88.9	80.4	70.6	49.2	34.7		
3217	70.3	95.5	103.6	109.9	107.3	101.9	102.2	104.2	102.9	104.0	107.6	106.7		
	101.7	99.1	96.9	96.0	89.6	92.8	94.1	86.2	80.5	70.6	47.7	38.9		
4017	61.7	92.0	102.5	113.1	114.7	114.6	113.9	115.5	112.7	110.9	114.9	114.2		
	109.3	100.2	99.5	99.7	91.7	96.8	98.1	89.9	80.1	64.5	51.2	33.6		
4817	59.2	88.7	104.7	125.8	138.7	144.4	148.1	150.3	141.7	132.5	131.7	127.7		
	119.0	112.1	109.0	104.4	96.0	95.3	90.8	80.4	71.8	62.6	41.9	30.8		
5617	57.8	85.9	97.1	105.7	106.0	102.6	97.3	96.9	90.4	86.4	84.9	81.9		
	75.0	71.8	69.9	66.6	60.7	59.6	55.8	47.6	41.7	35.7	22.5	16.4		
0825	48.1	77.4	99.4	114.9	123.9	123.5	120.1	124.7	120.6	124.4	128.9	131.7		
	126.3	113.8	112.4	108.3	99.1	97.0	94.7	84.7	72.4	66.6	48.6	28.0		
1625	63.5	92.6	102.1	109.5	108.5	105.8	106.0	109.5	108.6	110.3	116.0	115.9		
	108.6	105.0	101.7	101.6	94.5	99.0	98.6	88.7	79.2	63.8	50.0	35.3		

2425 63.6 88.5 95.3 99.5 96.8 95.1 92.9 101.9 104.7 113.8 125.7 131.1
 126.6 123.1 120.1 116.9 104.6 103.7 98.1 86.0 75.4 61.3 47.6 34.9
 3225 68.8 94.5 100.8 106.2 102.9 100.4 102.1 106.4 111.7 120.0 132.1 136.5
 130.6 130.2 125.6 124.2 110.6 107.7 102.6 89.4 78.6 69.2 45.9 38.0
 4025 61.6 91.3 98.1 105.1 101.3 98.2 97.0 101.0 103.1 108.8 119.0 123.8
 119.3 112.6 112.7 112.1 101.7 101.0 97.1 87.1 76.9 64.7 50.2 33.3
 4825 58.0 90.5 109.3 123.1 123.7 121.1 119.7 120.3 113.8 113.2 114.9 114.1
 105.5 101.1 100.3 98.4 91.2 97.9 98.1 88.8 81.1 63.1 48.9 33.9
 5625 53.5 87.4 107.3 121.9 122.8 114.6 105.7 106.0 101.7 101.9 110.2 112.0
 105.2 99.4 98.2 95.2 84.1 80.4 75.4 66.3 56.6 43.9 32.1 18.7
 0833 53.6 87.0 104.6 122.0 128.9 133.1 133.1 134.7 131.9 122.8 123.3 122.8
 114.6 105.4 102.6 101.2 92.2 91.4 86.6 77.3 66.7 60.3 42.0 27.7
 1633 58.8 84.9 94.1 99.4 99.7 97.3 95.4 98.2 97.3 98.4 98.7 98.6
 96.9 91.7 90.2 90.3 83.0 84.7 85.4 81.9 74.0 61.8 48.8 32.1
 2433 55.2 83.6 94.5 99.7 99.5 95.7 92.2 95.5 101.0 108.2 119.2 126.2
 125.2 118.9 117.9 116.6 105.9 103.4 100.3 90.0 77.6 62.6 49.7 32.0
 3233 64.4 95.2 103.8 107.1 105.1 103.1 100.9 107.3 110.0 113.3 121.7 125.4
 123.4 114.9 117.6 116.1 109.0 109.5 106.8 96.2 83.0 76.2 54.9 35.6
 4033 65.6 94.4 102.1 109.4 108.2 105.5 105.1 111.6 116.3 122.4 136.4 139.9
 135.8 129.8 126.5 126.2 115.4 111.4 105.5 92.4 81.6 66.5 52.5 38.3
 4833 58.8 88.3 102.7 114.3 117.0 115.2 111.5 113.7 108.8 107.1 107.7 106.0
 99.7 92.7 93.4 89.6 83.5 85.5 87.4 80.6 73.6 60.8 48.2 35.7
 5633 50.4 84.2 103.2 117.2 117.5 118.3 112.9 113.5 111.3 104.1 100.9 98.1
 95.0 84.8 86.1 82.5 75.1 72.4 67.9 60.5 52.3 42.5 32.0 19.9
 0841 51.2 80.2 98.9 118.6 130.8 135.5 132.0 134.1 128.9 129.0 135.1 134.8
 126.7 116.6 113.9 111.1 99.8 97.9 92.8 80.2 69.1 61.0 41.9 25.9
 1641 72.5 98.0 108.1 117.2 118.1 116.6 116.2 115.8 113.3 111.2 113.4 109.2
 102.6 100.0 97.5 97.1 90.3 95.8 94.2 84.1 74.8 60.3 46.0 37.2
 2441 59.9 90.1 100.1 106.3 105.8 101.7 98.3 99.0 103.6 110.0 121.4 128.5
 125.7 117.8 117.7 108.1 106.1 102.2 92.5 79.8 65.9 51.8 33.7
 3241 61.6 91.3 102.3 106.4 104.1 99.1 97.0 102.0 107.0 114.6 126.4 134.8
 134.4 124.5 124.5 122.9 111.9 107.9 104.2 93.6 80.7 74.5 54.9 35.8
 4041 68.3 97.6 106.9 113.1 110.1 108.7 108.6 108.6 109.5 115.4 125.4 128.1
 122.1 116.1 115.5 113.5 102.2 102.3 97.7 85.6 76.0 62.3 47.8 33.1
 4841 52.4 81.0 97.8 116.9 127.6 128.4 128.6 130.7 121.4 117.7 119.8 115.4
 108.7 101.5 101.8 101.4 96.0 99.3 98.7 90.6 80.8 63.4 48.6 31.7
 5641 48.1 81.0 100.0 118.3 123.6 120.1 112.8 109.7 107.7 108.2 112.8 116.3
 110.4 101.5 101.3 97.2 87.5 83.7 80.4 68.9 58.0 50.9 35.1 20.1
 0849 72.3 98.9 110.7 121.9 121.6 119.5 115.1 114.3 107.9 103.3 101.9 98.5
 90.8 87.1 83.7 78.6 70.8 68.7 62.5 52.2 45.3 35.1 23.8 17.2
 1649 62.4 85.5 99.2 115.9 122.3 125.7 128.4 126.9 121.6 114.8 113.9 112.0
 102.4 96.9 97.2 95.5 86.0 87.7 84.6 73.1 65.3 50.7 37.9 28.9
 2449 61.2 89.7 105.4 118.0 118.7 112.1 106.7 108.2 105.6 101.5 104.3 102.4
 97.0 94.3 94.1 93.1 85.8 90.9 91.1 82.3 73.9 58.2 44.0 33.8
 3249 53.2 86.1 103.9 112.7 114.1 114.4 112.4 113.7 110.9 108.2 108.4 108.4
 104.5 97.3 98.1 97.9 91.3 92.0 95.7 92.6 82.8 77.0 56.2 35.7
 4049 63.7 90.4 103.8 120.3 125.7 126.0 121.5 121.0 115.7 107.3 109.6 106.2
 99.4 93.8 92.1 90.5 86.1 89.0 90.0 79.5 71.3 56.7 42.6 33.5
 4849 58.4 94.3 115.4 127.7 133.5 133.3 125.5 125.4 117.1 109.8 104.4 103.7
 99.4 89.0 87.1 87.1 79.6 77.4 74.7 67.7 57.4 48.4 37.7 25.8
 1657 57.4 82.8 96.1 104.0 102.8 98.2 93.9 91.0 87.5 83.6 84.6 83.2
 77.5 73.8 71.3 70.0 62.7 60.5 57.0 48.4 41.8 35.8 23.0 13.9
 2457 62.7 92.3 104.1 116.6 116.4 107.1 104.0 100.5 97.3 98.2 104.1 105.8
 95.1 91.4 89.3 85.5 75.9 73.2 69.6 60.5 52.0 38.7 28.5 18.4
 3257 63.3 93.9 105.3 118.3 117.7 115.2 112.1 111.1 104.9 99.3 98.4 94.6
 87.2 82.4 80.5 77.8 69.9 69.2 65.3 58.0 50.8 43.7 28.4 18.6
 4057 59.9 91.2 106.7 121.6 118.5 111.0 108.2 108.5 106.7 107.4 117.2 118.5
 109.3 105.7 103.2 99.3 89.1 85.9 79.3 66.8 56.2 47.8 29.7 18.3

CYCLE 2 DATA

DATASET 31, DECEMBER 28, 1976

Reactor Conditions

Core Average Exposure, 11030 MWd/t
 Core Thermal Power, 3285 MWT
 Dome Pressure, P, 1018 psia
 Core Flow, 106.5 Mlb/hr
 Inlet Subcooling at P, 23.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48
48	48	40	48	48	48	48	48	48	48	48	40	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28
48	48	44	48	48	48	48	48	48	48	48	44	48	48
48	36	48	10	48	28	48	14	48	28	48	10	48	36
48	48	44	48	48	48	48	48	48	48	48	44	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28
48	48	40	48	48	48	48	48	48	48	48	40	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	49.4	82.1	100.6	119.2	126.6	123.4	117.4	116.5	112.8	106.4	102.9	102.5
	97.5	87.8	86.7	85.6	77.0	75.1	73.9	66.8	56.9	46.9	36.4	21.4
2409	49.5	81.0	99.2	113.6	118.1	117.2	110.0	113.3	111.3	111.8	115.1	117.7
	112.3	101.3	99.4	97.3	87.9	86.4	84.5	77.1	66.6	54.8	43.2	27.0
3209	55.7	86.3	104.7	118.2	122.4	127.7	130.7	132.7	127.6	126.2	126.7	124.2
	117.3	108.8	107.3	106.2	93.3	93.0	88.6	78.2	68.5	61.0	41.9	28.8
4009	34.5	62.7	85.2	98.1	116.3	122.3	119.3	117.3	117.5	116.6	116.5	122.1
	122.0	110.8	108.3	107.7	103.6	94.5	92.8	86.9	74.1	63.5	50.2	36.0
4809	65.5	95.2	107.3	123.3	122.7	118.1	115.4	112.5	110.6	107.9	106.3	104.6
	97.0	91.6	90.1	86.7	76.8	75.5	69.5	59.6	51.7	42.9	27.2	17.7
0817	46.8	77.9	98.1	118.7	134.1	135.4	126.0	128.5	123.3	117.2	112.1	116.1
	111.7	101.9	101.9	101.3	92.9	89.7	86.2	76.3	65.6	53.0	40.2	24.7
1617	62.6	91.3	103.0	115.4	119.8	127.0	129.5	139.4	135.1	132.0	132.8	132.7
	124.0	115.3	114.3	115.3	105.1	103.9	99.9	88.0	77.1	60.6	46.8	32.2
2417	66.9	96.1	106.1	112.3	112.2	108.4	110.0	111.9	109.6	108.4	112.7	114.7
	108.6	102.6	101.3	101.8	95.1	98.9	100.9	91.1	80.8	72.7	50.1	35.0
3217	68.3	93.7	101.5	107.9	104.7	100.9	102.2	101.6	103.2	102.3	108.9	109.1
	101.8	97.5	96.9	95.4	89.0	91.7	93.5	86.9	80.5	71.6	47.9	38.8
4017	59.9	89.7	98.6	111.0	112.6	113.1	113.6	117.4	114.4	112.3	114.2	114.9
	109.1	101.2	100.3	99.5	93.2	96.5	98.3	89.8	80.4	65.5	51.2	34.6
4817	58.4	87.2	101.7	122.5	135.0	142.0	147.2	146.4	140.2	133.6	133.5	128.8
	119.2	112.8	111.4	106.7	96.7	96.8	93.6	82.6	73.3	64.3	43.0	30.8
5617	58.5	84.8	95.7	104.8	105.0	97.7	97.6	95.3	90.5	84.3	85.1	82.6
	75.8	73.3	70.6	68.8	61.2	60.7	57.5	48.9	43.1	37.1	23.8	16.3
0825	48.6	78.4	97.7	116.0	122.9	123.5	118.0	123.0	124.7	124.0	128.8	130.8
	127.0	116.6	112.3	109.8	100.4	97.9	96.1	86.9	74.0	67.1	48.8	29.2
1625	62.2	89.4	98.9	107.3	107.2	105.2	105.0	109.2	110.0	111.8	114.2	116.7
	111.8	104.7	104.2	104.0	95.8	99.5	100.4	90.9	80.3	65.7	51.0	33.3

2425 60.7 86.0 92.2 97.3 95.9 94.2 93.4 101.7 107.2 116.5 126.5 132.6
 128.7 124.1 122.7 117.2 106.2 104.4 99.1 86.7 77.3 61.6 48.0 34.0
 3225 67.5 91.9 96.0 104.7 102.7 99.9 101.7 108.0 113.3 124.6 136.0 138.7
 131.7 130.7 128.3 124.9 111.2 110.1 104.3 90.6 79.3 69.3 47.4 37.0
 4025 60.2 88.0 97.4 101.5 100.1 98.3 97.6 101.9 103.5 109.1 118.4 122.6
 120.7 115.6 114.6 112.5 103.7 103.0 98.5 89.3 79.2 65.4 51.4 34.3
 4825 56.8 89.7 107.1 121.1 123.0 119.9 120.4 122.2 117.8 115.7 115.0 116.0
 107.5 102.1 100.6 100.7 93.4 97.0 98.7 89.8 82.4 65.3 49.9 34.6
 5625 54.5 89.6 111.4 123.9 120.1 111.7 104.9 108.8 99.3 103.8 109.1 113.4
 107.0 99.2 99.1 96.8 84.9 82.5 78.4 67.1 58.0 45.6 32.8 19.0
 0833 50.9 82.9 106.3 121.6 127.3 134.2 131.8 135.7 130.2 125.7 123.2 123.6
 115.7 105.8 104.9 104.3 93.5 92.0 90.0 78.3 67.9 61.4 42.9 27.2
 1633 57.0 82.5 92.0 97.3 98.5 98.1 97.0 100.2 99.4 98.4 101.0 100.1
 96.8 92.2 90.8 91.1 83.9 86.3 86.4 81.5 74.9 62.3 49.1 31.7
 2433 54.2 82.9 93.5 98.1 98.7 95.6 93.3 98.6 103.1 111.0 102.0 103.0
 128.9 120.3 121.1 117.3 107.7 105.3 101.5 90.2 77.7 63.2 50.2 32.1
 3233 62.1 90.7 100.2 103.8 103.8 101.2 102.0 107.3 110.3 114.9 121.5 127.9
 123.7 116.2 119.6 115.9 109.4 111.2 108.8 96.5 83.9 76.6 54.8 37.7
 4033 62.8 89.8 98.8 104.0 104.7 103.9 103.4 110.1 114.0 122.5 134.0 137.9
 134.8 129.2 126.9 123.1 113.6 110.3 104.4 92.5 80.9 65.8 52.0 37.9
 4833 56.4 88.3 101.4 112.3 115.5 114.3 113.4 114.1 111.3 110.0 110.8 106.8
 102.3 94.8 92.5 92.0 86.1 86.4 88.1 82.8 74.4 62.4 49.6 34.7
 5633 51.3 86.2 104.2 119.6 120.2 117.2 112.3 115.4 109.7 108.2 101.9 101.4
 97.5 85.1 86.0 83.7 76.8 74.7 70.5 63.5 53.5 44.4 33.5 20.0
 0841 50.9 79.2 95.9 115.6 129.2 134.5 130.5 132.0 125.5 128.3 135.0 133.1
 127.2 116.3 116.2 111.9 100.6 96.8 93.4 83.4 70.8 63.0 43.8 26.7
 1641 68.4 94.8 104.3 115.2 117.9 114.2 114.8 117.3 113.1 111.5 112.9 110.1
 104.5 98.1 97.8 96.0 91.3 95.4 95.4 85.9 77.0 61.4 47.3 36.9
 2441 58.7 87.3 98.0 104.7 104.8 102.1 97.9 102.3 104.8 111.6 123.5 127.2
 126.6 118.7 119.2 118.1 108.3 107.0 103.8 93.8 80.5 67.4 53.4 33.7
 3241 59.9 89.0 99.0 104.6 103.1 99.8 98.9 104.1 108.4 117.8 128.2 136.8
 134.9 126.0 125.5 125.4 112.9 109.1 106.2 95.2 81.4 75.4 56.0 36.5
 4041 65.9 93.4 103.4 111.0 109.6 106.8 105.5 109.2 111.2 114.2 128.7 130.8
 123.6 118.6 115.2 116.3 104.2 103.1 99.5 88.4 77.5 63.6 48.5 32.8
 4841 52.9 80.2 96.0 114.2 124.7 128.7 127.3 128.0 124.2 116.2 116.8 116.6
 111.0 101.5 103.2 102.7 95.9 99.8 101.5 92.1 82.3 66.3 50.1 32.3
 5641 48.4 82.3 101.0 120.4 124.5 119.5 111.9 108.6 107.6 109.7 115.1 117.5
 115.0 104.8 104.3 100.0 89.5 87.8 82.1 72.1 58.9 53.3 36.8 21.3
 0849 70.1 96.2 109.8 120.0 119.0 118.2 114.1 113.8 107.6 103.2 102.3 99.6
 92.0 87.7 84.5 80.5 72.9 69.5 63.5 54.7 47.3 36.1 25.6 16.7
 1649 59.6 85.1 98.5 115.9 124.3 125.4 127.8 126.5 121.9 115.4 117.1 111.5
 105.8 99.3 97.6 95.8 88.3 88.6 85.4 76.0 66.5 52.1 39.8 28.8
 2449 58.3 87.0 103.4 117.8 117.6 113.1 111.6 111.9 106.4 102.9 105.5 104.8
 99.4 94.6 93.0 94.1 87.0 90.5 92.5 82.9 75.4 60.4 46.3 32.1
 3249 51.8 83.9 100.7 111.4 116.3 111.5 107.6 111.9 110.7 109.0 110.4 109.0
 106.1 99.8 99.7 100.4 93.3 94.8 96.6 94.5 84.7 79.1 58.3 36.6
 4049 60.5 86.3 101.3 120.2 125.1 123.2 122.9 119.2 113.4 107.5 111.5 106.4
 98.9 93.8 93.7 92.7 85.9 90.6 92.6 81.8 73.1 58.3 44.2 34.5
 4849 59.1 94.1 114.7 127.2 130.4 130.9 122.3 123.2 117.2 110.3 105.7 104.3
 97.8 88.6 87.7 87.9 79.9 77.3 75.2 68.7 58.1 48.7 38.6 24.4
 1657 55.9 81.6 94.2 106.3 103.4 99.2 94.1 94.3 89.8 84.2 85.0 84.8
 78.5 74.5 73.1 70.8 64.4 61.9 58.4 50.3 43.1 37.4 24.4 14.3
 2457 61.7 92.8 105.7 118.8 114.9 107.1 102.2 100.6 98.3 97.4 105.2 106.1
 98.9 93.7 90.1 85.1 76.3 75.8 71.3 61.3 53.2 40.7 29.5 18.7
 3257 62.5 95.9 106.8 118.1 116.4 116.7 112.5 114.2 105.8 98.9 99.4 96.3
 90.1 83.8 81.1 78.9 70.9 70.5 67.2 58.7 51.6 44.6 29.1 18.1
 4057 57.6 88.4 105.0 116.1 116.4 111.4 109.1 108.7 108.1 108.9 118.8 119.5
 113.0 106.8 104.4 101.6 90.6 87.7 81.2 69.1 59.5 49.5 31.9 18.5

CYCLE 2 DATA

DATASET 32, JANUARY 19, 1977

Reactor Conditions

Core Average Exposure, 11260 MWd/t

Core Thermal Power, 3276 MWT

Dome Pressure, P, 1019 psia

Core Flow, 101.1 Mlb/hr

Inlet Subcooling at P, 24.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	36	48	6	48	6	48	36	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core

See Figure 22

1609	45.9	77.8	102.0	121.2	131.7	130.6	127.6	131.1	127.4	117.2	113.9	114.1		
	106.3	96.4	95.2	94.0	88.0	84.4	83.0	74.4	63.4	52.1	40.6	23.3		
2409	57.4	95.9	116.4	133.3	134.8	130.4	126.1	132.0	139.3	136.7	136.2	136.2		
	128.5	117.7	115.9	114.2	102.6	99.4	94.7	83.1	71.1	57.4	45.7	29.1		
3209	63.8	97.0	116.1	128.9	130.3	126.2	129.2	138.6	146.7	148.5	152.1	153.2		
	145.7	134.3	133.2	129.8	113.7	108.5	101.3	87.9	75.2	65.5	45.0	31.5		
4009	42.9	79.5	111.5	129.0	143.0	145.6	138.7	148.5	146.4	137.7	136.0	136.8		
	130.9	120.8	119.3	117.0	111.4	103.4	101.6	94.3	79.0	67.5	52.9	36.5		
4809	50.6	82.6	103.4	121.3	127.5	129.0	126.9	125.4	120.4	116.8	116.0	113.3		
	105.8	101.3	98.3	94.4	86.0	84.2	79.1	66.8	58.1	48.3	30.5	20.4		
0817	35.1	61.5	83.4	109.2	137.0	150.2	146.0	150.6	146.3	136.5	133.8	134.0		
	126.9	114.5	117.0	114.1	103.2	98.8	94.3	84.6	68.9	56.8	42.8	26.4		
1617	58.4	92.7	112.6	128.7	133.8	132.3	128.4	132.3	128.2	125.4	126.6	124.5		
	118.0	114.5	116.1	122.0	114.2	115.0	110.2	97.3	84.6	66.1	51.4	33.8		
2417	64.3	96.9	114.8	128.4	132.1	131.3	128.6	132.4	130.3	130.9	140.6	148.6		
	143.4	134.7	134.2	129.6	117.2	115.4	107.6	94.0	81.2	73.1	49.3	37.0		
3217	76.6	105.2	119.7	125.6	125.2	122.8	124.5	127.8	125.9	132.3	144.2	147.4		
	138.4	135.5	132.4	127.2	114.1	110.8	105.0	91.1	80.6	68.5	46.2	39.0		
4017	56.4	91.8	110.7	125.9	128.5	125.9	124.1	126.4	122.5	122.4	124.9	125.3		
	118.9	112.3	111.9	115.8	109.2	112.2	108.1	96.2	85.2	68.5	53.8	35.8		
4817	62.3	100.1	123.1	145.5	155.5	158.6	155.7	152.9	148.2	140.8	142.4	139.4		
	130.0	124.3	120.3	119.2	107.0	106.2	100.7	88.5	77.8	68.0	45.3	33.8		
5617	39.8	61.6	79.5	103.1	115.7	121.1	120.9	117.0	111.7	102.7	101.8	98.6		
	88.1	83.5	80.6	77.9	69.6	68.7	63.3	53.6	46.8	40.0	24.8	18.3		
0825	49.1	77.1	93.7	112.1	126.8	133.3	138.3	147.1	145.6	147.6	155.2	158.7		
	153.2	139.4	132.4	129.4	114.5	107.9	104.8	92.6	76.7	68.9	49.2	30.2		
1625	71.6	105.1	116.8	126.6	126.6	125.5	127.7	132.2	132.2	132.6	138.6	133.9		
	127.9	118.2	115.5	112.8	100.0	98.6	92.9	84.6	76.3	63.6	49.8	33.4		

2425 66.8 95.4105.0115.5120.1127.5131.8140.3135.5131.5134.2131.0
 121.4113.7112.4108.7 95.4 94.1 89.3 78.8 71.9 58.7 46.0 32.9
 3225 76.3106.2115.8127.2133.3139.5147.2149.8147.5143.6145.0139.2
 129.4124.3120.3115.2101.8 99.0 92.4 80.4 72.7 64.1 44.0 35.8
 4025 65.5 98.0110.0117.6119.6120.0120.4125.9123.7119.0120.1117.1
 110.8103.9101.0101.0 90.5 89.3 87.1 81.1 74.8 64.4 50.7 35.8
 4825 74.5108.5120.4130.9133.7130.8133.3137.1139.3146.8154.4153.1
 146.0137.6131.7129.1112.8110.0105.9 90.5 79.2 61.8 47.9 35.1
 5625 56.8 95.2117.3137.8149.1150.5146.3140.1134.7128.0125.6125.3
 118.4110.3107.6104.5 91.6 86.8 81.4 70.4 60.2 45.9 33.5 20.6
 0833 53.3 80.0 93.3107.2119.5128.0131.9137.7136.9140.9150.3152.6
 147.0132.7130.2126.0111.4107.1 98.4 85.0 71.3 66.4 44.0 29.2
 1633 67.9 96.6105.8113.5117.8124.4130.6139.5137.4133.2134.6132.8
 124.0113.8110.8108.7 97.0 94.5 89.2 79.3 69.8 57.1 45.4 31.1
 2433 61.5 94.0106.1115.3117.7118.1114.6119.6119.3114.9114.7115.1
 108.7100.0 97.3 94.3 86.3 84.1 81.2 73.8 67.7 58.4 49.6 30.5
 3233 69.9102.1113.4120.5122.7125.0125.1129.0126.9126.8126.3124.1
 117.5107.4104.5100.5 90.4 87.3 83.4 75.3 69.3 68.9 51.0 33.4
 4033 69.7100.1111.6118.7125.0133.3143.0152.5149.6145.4147.0144.5
 138.1126.4123.1117.8107.1102.1 96.3 85.4 75.8 63.0 49.9 36.1
 4833 74.0103.6112.4120.1120.9122.1124.4129.4131.5139.4149.8150.3
 141.3130.9123.9119.4105.9102.8 96.5 84.9 73.1 59.3 46.9 35.9
 5633 55.2 91.0111.5131.2138.6139.7135.3135.1129.5122.3119.2116.3
 112.2101.2100.0 98.0 86.4 82.8 76.8 66.9 57.1 45.5 34.9 20.6
 0841 55.6 90.1109.2132.9148.2155.9151.6153.4150.5148.6156.2153.9
 146.0134.1131.4128.7113.9106.3101.5 86.5 73.4 64.4 44.5 27.3
 1641 69.9102.6119.7134.4135.4130.6129.4128.4123.5119.8123.4119.9
 111.6107.7106.0102.9 94.3 95.5 91.0 83.9 77.8 62.6 47.5 39.0
 2441 54.4 86.7106.7122.1129.9135.9138.1144.2146.3144.5146.5143.4
 139.2127.1126.6125.7113.4109.2104.1 93.9 80.1 66.7 52.9 32.6
 3241 64.3 96.6110.6120.2124.1129.1136.4148.3148.5151.0150.8152.6
 148.5136.8134.7131.3121.5111.0105.2 92.9 78.6 71.7 52.8 35.2
 4041 58.2 88.7106.3120.7124.8127.3125.5129.9128.0123.3126.6123.3
 116.6112.1109.3108.2 97.3 96.4 93.3 85.3 77.9 64.6 50.0 34.9
 4841 57.1 92.1115.0133.1141.9140.0136.7139.3135.4138.6145.2147.1
 140.7131.2128.9127.5115.1112.9108.7 94.2 81.8 66.5 50.6 31.8
 5641 49.7 86.6116.1142.7162.6162.4153.4151.5143.9133.7131.0128.3
 121.0110.5107.0106.3 94.5 90.0 83.1 73.8 60.5 52.3 36.8 20.5
 0849 49.0 70.4 85.4107.1122.5131.3135.1135.0126.8120.0119.8114.3
 104.9100.3 96.3 92.2 82.4 79.2 72.4 60.8 52.8 40.3 27.5 19.6
 1649 70.6104.7120.7134.1132.9126.8123.8118.6115.6110.8112.2109.5
 103.1100.0102.4106.6102.0102.9 99.3 86.5 74.2 59.6 43.8 32.7
 2449 75.5108.9124.6141.0137.4129.1121.9124.6126.8126.9135.4142.2
 137.2133.8132.2128.6114.2109.9102.5 88.9 77.0 59.8 44.5 34.9
 3249 61.0 97.3116.3126.8127.1124.4121.2127.9130.3133.4143.1153.1
 153.6145.7145.4140.5127.3120.4113.6103.2 87.6 79.8 57.3 36.1
 4049 75.9110.8130.1140.6139.8132.8130.6129.9122.8117.2120.2118.3
 109.1105.7108.4111.1104.6105.2100.2 87.3 76.5 60.6 45.2 36.8
 4849 46.7 82.6109.7130.6140.9141.3137.6139.8126.9121.1113.7113.6
 107.1 95.8 97.1 98.6 91.9 88.6 86.0 77.5 65.7 56.4 43.6 28.5
 1657 41.5 62.8 74.3 87.2 96.0103.4112.7118.4110.2103.7103.3 99.3
 90.0 86.3 82.9 81.9 72.3 70.3 66.0 55.8 48.3 41.2 26.4 16.7
 2457 73.4107.1120.9130.2123.1117.7118.2124.6129.6122.3125.0121.8
 110.2103.6100.4 95.4 84.7 81.5 77.2 66.1 56.0 42.1 30.4 20.4
 3257 75.3109.6123.0132.0123.6115.1111.7117.6120.3116.7118.3116.4
 106.6 98.9 95.9 92.9 81.6 80.0 75.7 65.2 56.7 48.5 31.2 21.0
 4057 65.8101.0119.4139.6143.3144.9145.3149.9146.2136.9136.9131.1
 121.8114.3113.8110.2 98.2 94.8 86.1 74.1 62.8 51.6 33.2 20.6

CYCLE 2 DATA

DATASET 33, JANUARY 26, 1977

Reactor Conditions

Core Average Exposure, 11420 MWd/t
 Core Thermal Power, 3273 MWT
 Dome Pressure, P, 1019 psia
 Core Flow, 104.0 Mlb/hr
 Inlet Subcooling at P, 23.6 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40
48	48	28	48	8	48	36	48	36	48	8	48	28	48
48	38	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	36	48	6	48	6	48	36	48	28	48
48	38	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40
48	48	38	48	16	48	26	48	26	48	16	48	38	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	44.7	78.3	102.4	118.7	129.2	130.5	128.0	129.0	126.9	117.9	115.8	114.0	
106.7	98.3	97.5	97.6	87.7	87.1	85.7	76.6	65.7	53.9	41.7	25.0		
2409	56.8	94.5	115.2	130.3	1126.7	127.0	136.3	141.7	140.9	139.0	139.0		
132.1	119.8	118.7	116.3	104.3	101.3	95.7	85.7	72.9	59.4	47.0	29.2		
3209	61.3	96.4	115.6	132.2	127.5	131.4	130.8	141.9	146.5	145.6	151.6	151.2	
147.0	137.8	137.0	131.0	116.7	109.6	104.0	90.5	76.9	68.1	45.9	31.5		
4009	41.6	79.6	110.7	127.7	140.1	142.5	143.9	144.6	145.1	142.2	135.3	136.7	
133.7	122.3	119.1	119.8	114.5	104.7	103.3	96.3	81.7	69.3	54.2	38.7		
4809	48.3	80.4	100.4	119.5	124.8	126.8	124.9	125.4	122.8	118.1	116.9	113.4	
107.4	104.0	99.2	97.2	88.9	86.4	80.3	68.8	59.8	49.5	31.1	20.0		
0817	34.6	60.9	81.6	106.8	132.3	144.9	146.5	149.6	139.7	136.2	134.0	134.8	
129.0	118.0	117.5	117.5	106.2	100.9	96.9	86.7	71.7	58.7	44.5	27.5		
1617	56.8	89.2	107.9	128.3	131.8	130.9	128.2	133.0	128.3	124.0	124.9	126.5	
121.2	117.5	119.7	124.3	117.7	117.7	112.5	99.8	86.7	67.7	52.8	34.8		
2417	62.4	94.7	111.5	125.9	129.6	130.7	130.1	132.6	131.7	133.9	141.9	152.3	
145.3	135.7	138.1	131.8	118.5	117.9	110.7	96.4	83.7	73.7	50.6	37.5		
3217	74.3	103.5	113.4	124.7	124.9	122.7	123.7	127.1	127.5	137.2	144.1	151.2	
144.3	136.6	133.7	129.4	116.1	113.3	107.1	93.0	81.5	70.0	47.2	40.1		
4017	55.0	90.4	106.5	121.7	126.6	124.7	123.3	125.3	125.3	121.4	123.8	125.0	
121.6	113.6	113.6	118.6	111.1	114.1	109.9	97.3	86.0	70.3	54.8	35.4		
4817	60.3	97.3	120.3	143.3	153.7	155.4	154.0	153.9	149.5	142.3	145.3	142.8	
131.8	124.9	123.6	121.7	110.1	108.1	102.8	91.2	79.6	69.9	47.0	35.5		
5617	38.6	59.2	78.2	99.7	113.4	117.6	118.0	115.6	110.3	104.0	103.0	98.2	
90.9	85.6	81.6	79.3	71.5	68.5	64.4	54.8	48.7	40.8	25.9	18.4		
0825	48.1	75.9	91.9	111.0	123.8	133.9	138.8	145.5	145.5	148.9	159.2	162.8	
153.4	139.8	138.4	131.5	118.5	113.0	107.1	94.2	80.8	72.3	51.7	31.8		
1625	68.4	100.2	113.0	120.3	125.8	123.7	125.1	130.8	135.9	133.1	135.6	135.2	
131.5	120.6	117.1	114.2	100.6	99.4	94.7	87.3	78.7	64.9	51.3	33.6		

2425 65.5 92.7103.2113.2118.9126.3130.5138.3138.8134.4134.9131.7
 123.4116.7115.1110.3 97.7 96.5 92.3 81.6 73.2 60.1 47.3 34.7
 3225 74.0102.1111.8123.8130.4136.3144.7152.0150.8142.0143.1140.3
 130.0123.8120.9115.3101.9100.2 94.0 82.3 73.1 65.0 44.8 35.8
 4025 63.5 94.5105.9115.9118.4119.5119.5124.1122.1120.6120.1118.5
 111.5105.2103.5100.4 91.2 90.3 88.1 82.6 75.7 64.7 51.2 35.4
 4825 70.8102.5114.6125.6128.9128.5132.7135.4140.4143.3154.9154.5
 146.8135.5132.5128.7112.9111.9105.1 92.5 82.0 63.7 49.2 34.9
 5625 56.3 94.1118.9135.3144.2148.4139.9138.7136.6127.6125.8124.5
 117.7109.6108.2104.5 93.6 88.1 83.4 70.5 61.8 48.0 34.8 19.4
 0833 52.3 78.3 91.8105.3118.1126.0131.4137.8139.3143.4152.4155.8
 149.1137.3132.2128.2113.8109.4102.1 86.8 74.2 66.4 45.8 29.8
 1633 65.2 94.2103.6112.4116.8123.4132.4140.4139.0136.7136.0135.3
 124.3116.2113.2110.3 98.7 96.1 91.6 81.0 71.3 58.1 46.4 32.0
 2433 58.8 91.5104.1111.6115.1114.6114.8118.4117.1116.2117.4116.7
 108.9100.7 98.4 96.8 87.8 85.6 82.0 75.7 68.9 59.8 49.0 31.3
 3233 66.9 98.6109.5117.9120.8122.5122.2127.6127.0127.5128.1125.5
 118.1109.2106.6102.5 92.0 88.8 84.1 77.0 70.8 69.6 52.6 34.4
 4033 66.5 96.5106.9115.9123.2130.5138.4150.0150.2146.5147.3143.2
 138.5126.5123.4120.2107.6104.4 97.6 85.9 76.7 64.2 50.2 37.0
 4833 70.0 98.5106.4115.9117.9117.0120.2128.5130.5138.7147.2146.6
 139.6130.0124.5120.2105.7104.5 97.1 85.1 74.6 60.7 47.8 36.2
 5633 53.2 89.1110.2126.0134.9136.8133.6135.5128.1121.9118.6118.2
 110.5101.8102.1 99.0 86.6 83.5 78.2 67.7 59.2 46.7 36.0 21.6
 0841 54.0 87.8107.3130.4144.8151.3150.4153.6149.6149.1157.6158.0
 148.9137.2134.1131.4116.3111.8103.5 90.0 75.7 66.5 46.3 27.7
 1641 65.2 95.4113.1129.7131.6127.8126.8127.8124.6120.8124.5121.1
 114.4108.9106.7104.7 96.5 97.2 94.5 86.0 79.6 64.7 49.6 38.5
 2441 51.8 83.0102.6116.3125.6130.5134.2144.6144.0142.6143.5145.2
 138.6128.8127.0125.3112.7109.3104.2 93.4 80.4 66.5 52.7 33.9
 3241 61.2 94.1107.4117.0122.4128.1135.1149.6150.8148.6149.9153.3
 149.0137.1136.8134.9117.7111.6105.4 93.5 79.4 72.9 54.1 35.1
 4041 55.6 88.1103.6117.8124.1124.0126.7129.6126.4124.8126.5125.4
 118.4112.6110.7110.4 98.7 97.2 95.5 87.3 79.5 65.9 51.8 34.8
 4841 55.4 89.1110.2129.8138.2137.9136.9136.7135.9138.2145.4146.6
 140.1132.8130.7130.6116.7114.4109.2 97.0 83.4 65.5 51.6 33.6
 5641 48.7 84.4109.8138.6159.1157.8153.0147.8142.7132.4133.4128.3
 120.7112.7108.3106.5 95.7 91.6 86.3 74.2 62.0 54.2 37.4 21.4
 0849 45.3 66.9 81.9101.4116.4124.9131.7130.5124.7121.0119.1114.0
 105.1100.8 98.1 93.7 83.2 81.5 74.4 62.5 54.3 41.4 29.1 19.3
 1649 66.2 99.5116.0129.7128.8126.4118.3119.2116.0111.8112.3110.4
 103.4102.0104.2108.1103.6106.2101.8 89.0 78.1 61.3 46.0 32.4
 2449 68.7102.2119.9135.0131.5124.3121.3124.7127.2127.8136.2141.5
 137.8135.5131.6130.1114.3110.5104.9 90.1 78.7 61.8 47.2 33.5
 3249 58.5 93.8110.7123.0122.9120.5120.0127.7130.4132.8143.1155.3
 153.7145.6144.5141.4126.7121.0115.2104.5 87.2 79.4 57.4 36.5
 4049 71.3108.5126.0143.2140.3132.1129.7128.9123.1115.3123.1120.6
 111.5108.8110.8114.6107.6109.8104.1 90.6 79.2 61.4 48.1 36.5
 4849 46.2 79.1107.0128.3141.3141.3137.0138.1125.6121.4114.5111.8
 107.2 98.5 98.0 99.2 92.8 90.5 86.4 78.9 67.3 55.9 44.0 28.6
 1657 39.6 60.5 73.1 84.9 92.1102.0110.6113.9109.4105.0102.6 99.8
 91.4 87.3 84.4 82.0 73.2 71.8 67.3 57.9 49.5 42.7 27.4 16.9
 2457 68.8102.1117.9129.7127.6120.5116.9124.7125.9123.6124.4121.3
 111.2104.6102.3 97.9 86.7 84.1 79.0 68.3 58.7 44.2 32.8 19.3
 3257 72.3105.6119.1129.9126.0117.3111.0118.5119.1117.7116.5116.3
 108.8100.1 97.7 93.9 82.3 81.8 76.5 67.4 58.1 49.9 32.8 20.2
 4057 63.4 99.8118.9134.9140.3142.4145.2150.8143.3139.2134.6129.6
 121.8115.2112.4110.8 98.8 95.3 89.0 74.0 63.5 53.0 33.6 20.3

CYCLE 2 DATA

DATASET 34, FEBRUARY 2, 1977

Reactor Conditions

Core Average Exposure, 11570 MWd/t
 Core Thermal Power, 3260 MWT
 Dome Pressure, P, 1018 psia
 Core Flow, 106.0 Mlb/hr
 Inlet Subcooling at P, 23.0 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	36	48	6	48	6	48	36	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	44.5	77.8	100.1	116.2	126.7	127.2	124.3	130.1	122.2	118.1	114.2	113.9		
	106.5	99.0	97.3	95.3	88.9	87.2	85.6	77.6	66.6	54.2	42.0	24.3		
2409	57.0	92.0	114.1	129.7	131.4	128.2	126.4	135.6	137.6	138.5	139.9	137.9		
	131.6	120.4	117.5	117.5	103.4	100.3	96.4	86.4	73.7	59.8	47.0	30.1		
3209	61.5	95.2	112.2	127.3	129.6	125.3	130.5	139.8	145.8	150.3	153.4	152.3		
	146.0	137.6	135.3	132.8	115.2	112.8	103.6	90.6	77.3	68.0	46.7	31.3		
4009	41.1	77.6	107.8	124.3	137.9	141.6	138.8	142.8	144.5	142.2	134.9	136.6		
	133.2	121.5	120.6	120.2	116.7	105.1	103.6	95.8	82.2	69.3	55.0	39.8		
4809	48.1	78.4	99.3	118.2	125.1	124.8	123.5	124.9	118.8	119.7	120.1	114.2		
	107.1	104.5	101.2	96.3	88.3	88.6	81.2	70.0	60.8	50.3	32.0	21.1		
0817	33.8	59.6	81.2	103.7	125.6	142.1	144.1	147.5	139.3	138.4	132.8	132.7		
	130.5	118.1	118.1	118.7	107.4	102.3	98.6	86.8	72.6	60.4	45.5	29.7		
1617	55.3	89.7	106.9	123.8	132.0	129.2	125.9	130.1	127.6	122.9	127.5	125.1		
	122.1	117.2	120.0	125.7	118.5	119.1	114.3	101.3	87.3	68.6	52.3	36.4		
2417	61.4	93.3	111.6	124.3	127.9	126.9	129.0	134.6	133.7	134.6	144.0	149.7		
	144.8	139.1	134.5	133.0	119.5	117.8	110.9	95.9	83.7	74.4	50.5	38.1		
3217	73.6	101.4	111.3	121.8	123.4	122.2	126.4	128.8	130.2	134.0	146.1	151.9		
	142.3	137.8	135.0	130.5	114.9	114.5	107.7	93.1	83.1	70.9	47.9	39.1		
4017	54.8	87.1	103.8	119.0	122.9	122.7	121.9	124.7	123.6	120.6	126.0	125.7		
	119.8	113.2	113.9	116.1	110.9	113.8	108.7	97.0	86.7	69.9	54.3	37.0		
4817	58.5	94.3	118.4	139.0	148.8	154.2	155.3	152.5	146.6	142.8	145.3	141.2		
	133.3	125.5	123.6	122.4	109.8	108.9	104.1	91.1	80.9	70.9	47.6	35.5		
5617	38.1	58.9	75.0	95.7	112.7	113.4	117.1	113.2	110.0	104.8	100.5	98.4		
	88.5	85.6	83.4	78.8	71.3	70.6	65.4	55.6	48.9	41.6	26.3	19.0		
0825	47.8	74.3	90.6	106.5	121.0	132.6	135.5	147.1	146.9	147.6	160.0	160.7		
	154.9	142.7	138.1	131.7	119.0	114.7	108.6	95.1	80.9	72.1	52.8	32.6		
1625	68.3	99.4	110.3	121.4	122.6	124.8	128.3	135.0	130.8	134.5	138.6	139.1		
	130.5	122.2	117.8	116.8	102.4	100.5	96.6	87.1	79.7	66.2	51.3	34.7		

2425 63.3 90.5100.7111.5116.3125.8132.9138.2136.2134.8135.4133.5
 124.1116.6114.3109.8 97.1 96.2 92.1 81.4 73.2 60.2 47.4 34.7
 3225 72.4100.9108.8122.5130.6135.8145.6151.5147.6144.6147.0139.7
 131.1124.7121.8117.8103.2 99.7 95.3 82.3 73.3 65.5 45.1 36.2
 4025 61.4 91.8103.9113.0117.1117.0119.8123.2121.6117.0119.8118.9
 113.2104.9104.5101.4 92.3 90.7 88.3 81.6 75.8 65.1 52.3 35.7
 4825 69.2101.1113.0124.1126.3125.9128.7134.4135.8143.7154.2152.3
 144.7138.2134.1127.8114.9112.3103.9 92.3 79.5 64.1 48.9 36.2
 5625 54.9 91.9113.7132.8141.7143.1139.5140.3131.0128.5127.1125.0
 118.5110.3109.5106.8 92.5 89.8 83.3 73.4 61.4 47.9 35.7 19.9
 0833 52.0 77.0 90.5100.4114.6127.4130.3136.1135.9144.4150.1153.9
 150.1137.4133.7130.1114.2109.2101.8 88.6 74.7 66.5 46.0 29.5
 1633 63.4 92.2101.3110.6116.1121.7131.3141.0140.3134.8137.5134.1
 128.4116.9112.8111.1 98.3 96.8 92.3 81.3 72.4 59.2 47.0 31.6
 2433 58.2 88.1101.4109.1113.6114.5114.1121.2119.9114.7115.1115.3
 110.8101.6100.0 97.2 87.6 86.2 84.1 75.7 69.8 60.0 49.1 31.6
 3233 65.5 97.4107.5114.6117.8120.6122.4128.3127.6126.7129.1127.9
 119.3119.5117.2102.9 92.9 90.1 84.3 77.4 72.3 69.9 53.0 34.5
 4033 65.2 94.3104.6114.6121.1128.4140.5150.8150.1148.0146.0144.1
 138.9129.9124.6121.2109.4104.5 98.5 86.7 77.3 64.5 51.4 37.0
 4833 68.5 96.2104.0112.9116.8117.9120.9125.8128.5138.3145.7146.5
 141.3129.5125.7120.3107.0102.3 98.3 85.3 74.7 60.6 48.4 37.4
 5633 53.9 88.2108.9123.7133.6133.2133.2136.3130.5122.4119.1116.8
 113.3104.0103.0100.0 88.5 85.6 80.7 69.7 59.2 48.0 36.9 22.2
 0841 53.8 85.0105.7127.6142.3147.4148.1153.8147.7149.2157.8159.3
 149.2138.1136.9131.6117.7113.3104.0 90.6 77.0 68.4 46.9 29.3
 1641 64.4 94.9111.9127.4131.4127.4128.3127.3123.5123.8126.2123.1
 114.5110.4109.3107.0 97.8 98.0 94.6 86.4 81.3 65.4 50.6 39.7
 2441 50.8 81.5100.1115.1124.1131.1135.4144.7145.5143.5146.2146.1
 140.3129.3129.1126.6112.9109.7106.0 94.6 81.0 68.1 53.3 35.0
 3241 61.3 92.6104.9114.7121.5127.0134.0146.4147.4149.1150.3156.0
 151.0141.1138.2132.5118.3112.6107.0 94.7 80.5 73.6 54.9 35.8
 4041 54.9 84.9102.7115.9120.8123.8128.2130.4129.3127.3127.1125.8
 119.8114.3111.9111.0100.2 99.0 96.1 87.2 80.5 67.2 52.0 36.9
 4841 55.1 87.8109.0127.4134.4136.6133.1137.4135.8138.4148.0148.1
 143.8133.1133.7130.2118.3117.5110.6 99.3 86.2 67.0 52.6 32.3
 5641 48.2 83.7110.2137.2155.4159.2152.3153.6145.1133.9132.7130.6
 123.8111.6111.1109.0 97.2 93.9 87.6 76.5 63.5 56.5 39.3 22.6
 0849 44.6 66.1 80.4 99.3115.6125.5131.4129.8125.4122.0120.9115.4
 107.0103.1 99.8 93.4 85.0 82.0 76.7 65.1 56.0 43.1 29.9 19.5
 1649 64.3 97.5113.1125.4126.3122.5118.5121.4115.0111.3112.7111.7
 104.6102.8104.4109.2104.4108.6105.0 89.3 79.3 62.0 47.0 32.8
 2449 68.7101.9118.7134.3132.4125.7123.1127.2127.1128.5138.6144.7
 140.5133.8134.2131.4116.4114.6106.5 93.0 80.3 63.2 48.1 34.6
 3249 58.2 90.4109.7120.2124.1119.3119.6126.6130.1133.8143.8155.0
 156.8147.0144.9143.4128.4121.6116.3105.7 90.5 80.7 58.5 36.8
 4049 71.4108.7124.1135.4137.7133.3129.5130.8123.5120.1120.7118.4
 111.4109.3111.8115.2110.2110.3105.6 90.7 80.0 64.6 48.7 38.2
 4849 45.5 78.4105.8124.9137.4139.6138.1137.5128.9120.4114.4115.2
 108.8100.3101.7100.0 93.6 91.4 88.6 81.1 68.9 58.1 45.1 28.7
 1657 38.9 59.5 71.4 83.6 90.7101.5109.3113.9109.8105.3103.2100.3
 92.1 88.1 86.8 83.8 74.1 73.3 68.3 58.6 51.3 44.0 28.1 17.0
 2457 69.1102.7117.0127.7125.1119.6119.1126.7128.7124.4123.8121.8
 113.5105.4103.1 98.8 87.3 84.9 80.1 69.5 59.7 45.0 33.3 20.3
 3257 71.7106.8119.1129.7123.1114.6110.5117.9121.1116.6120.6116.7
 109.0101.9 98.1 93.7 84.5 82.6 78.0 67.4 58.9 51.2 33.1 21.0
 4057 65.0100.1118.2131.7137.7138.9145.3148.6143.0135.9134.8135.2
 122.9116.8113.7110.9 98.9 97.4 89.2 76.0 64.3 53.9 33.9 20.5

CYCLE 2 DATA

DATASET 35, FEBRUARY 23, 1977

Reactor Conditions

Core Average Exposure, 11910 MWd/t
 Core Thermal Power, 3258 MWT
 Dome Pressure, P, 1026 psia
 Core Flow, 105.1 Mlb/hr
 Inlet Subcooling at P, 23.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	28	48	28	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	10	48	36	48	36	48	10	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	34	48	36	48	12	48	12	48	36	48	34	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	10	48	36	48	36	48	10	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	28	48	28	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	41.3	72.4	91.5	104.5	113.3	116.2	118.8	118.8	116.2	112.7	109.1	108.8		
	102.0	93.5	93.9	93.5	87.1	86.5	83.9	76.0	66.4	53.7	41.9	24.4		
2409	51.4	85.6	104.4	117.1	120.4	119.0	117.5	126.0	131.2	134.1	133.7	133.0		
	125.1	116.3	114.1	111.5	99.8	97.2	94.4	84.1	71.7	58.7	46.8	29.1		
3209	57.2	86.9	102.9	117.7	115.8	120.5	121.2	131.6	136.6	141.3	147.5	144.8		
	140.3	129.4	128.5	126.1	111.0	108.2	100.9	88.3	75.4	66.9	45.3	31.3		
4009	37.6	72.3	99.3	114.3	126.7	127.4	128.4	133.5	135.6	131.0	127.1	128.7		
	127.4	116.8	116.5	115.3	111.5	101.9	101.9	95.4	80.6	69.2	54.7	38.0		
4809	43.8	72.2	89.9	106.6	113.0	116.1	116.6	115.6	114.4	110.3	112.6	109.1		
	104.3	99.0	98.6	97.7	86.9	86.6	81.9	70.0	61.4	51.6	32.3	21.6		
0817	31.4	54.0	74.4	93.4	116.6	128.6	130.8	137.8	128.1	124.7	126.6	128.9		
	122.4	113.3	114.2	114.0	104.7	100.6	97.0	85.4	71.5	59.0	45.1	28.0		
1617	51.2	80.3	97.1	114.5	117.8	118.6	118.1	122.8	117.7	118.8	121.5	120.6		
	118.4	112.4	117.1	121.4	115.3	115.9	112.7	99.6	86.4	68.8	51.7	35.3		
2417	56.1	85.4	102.8	115.7	120.4	121.9	125.0	130.0	131.2	137.5	145.8	150.3		
	142.4	133.9	129.6	128.4	116.4	114.2	106.7	94.6	82.3	73.2	49.7	36.7		
3217	67.6	94.1	102.5	114.3	115.3	115.9	118.8	128.5	131.3	136.3	145.4	147.6		
	138.2	132.5	128.1	122.4	111.7	111.2	104.4	91.8	81.0	70.6	46.9	40.9		
4017	50.4	80.3	96.0	109.8	116.9	115.6	113.6	120.2	119.8	116.6	121.2	120.5		
	115.6	109.4	110.6	113.5	108.6	111.9	108.7	97.8	86.9	69.9	54.2	36.6		
4817	54.4	87.5	105.5	126.5	136.8	141.7	142.9	144.7	139.4	133.8	137.7	136.1		
	128.4	122.5	121.0	118.4	109.5	109.1	104.5	92.1	81.6	71.7	48.2	37.9		
5617	35.6	54.3	69.6	90.1	100.8	104.8	104.3	106.9	101.5	98.0	98.2	94.9		
	87.0	83.9	80.8	78.5	70.4	70.1	65.6	56.6	49.8	42.5	26.8	18.9		
0825	44.4	68.8	84.1	100.2	113.0	123.9	127.5	138.2	138.3	141.0	150.8	153.0		
	144.8	129.9	129.2	125.5	111.4	108.6	104.9	91.0	79.2	70.8	51.1	32.6		
1625	62.7	92.2	102.6	112.2	115.9	119.7	121.2	128.2	129.7	127.8	130.3	129.6		
	123.3	115.1	111.8	111.5	100.1	101.5	100.5	90.2	81.8	65.8	52.2	34.5		

2425 59.3 84.6 92.5 103.9 109.4 114.7 126.5 133.5 130.4 126.4 131.2 126.5
 119.8 113.3 112.2 109.1 98.7 99.7 97.3 86.1 78.0 63.0 49.2 36.8
 3225 67.1 93.6 103.2 114.3 120.6 127.2 134.0 140.6 138.3 137.4 135.3 135.1
 126.7 121.1 119.2 116.3 104.3 104.2 100.5 88.0 78.5 68.4 47.2 39.6
 4025 57.9 87.6 98.6 107.5 111.1 110.9 115.3 121.7 117.5 114.2 116.5 113.9
 109.3 102.1 101.9 100.3 93.1 93.9 94.4 89.1 81.7 67.8 53.8 36.2
 4825 65.6 93.9 106.1 119.0 121.2 122.7 124.7 135.5 137.7 139.6 150.7 146.6
 138.2 130.5 128.2 123.8 112.0 109.0 104.4 92.8 81.9 64.6 49.4 35.3
 5625 52.7 87.4 107.5 125.5 132.4 136.1 130.9 133.3 127.6 117.7 116.5 116.9
 112.6 107.0 103.2 102.9 90.5 88.1 83.2 71.6 59.9 47.8 35.2 20.8
 0833 48.6 71.3 83.4 98.6 112.2 126.3 141.5 154.0 156.5 150.5 147.7 147.6
 137.1 125.9 121.3 119.5 106.9 103.9 97.1 84.6 72.7 64.1 44.5 30.4
 1633 58.2 84.7 93.4 101.9 110.0 118.4 129.8 137.5 136.3 132.2 130.6 127.4
 120.9 109.2 108.9 105.5 95.1 94.6 92.5 80.9 71.7 58.6 47.6 31.8
 2433 53.6 81.2 94.2 101.1 105.6 107.3 107.8 113.9 113.5 111.3 110.1 109.2
 105.4 98.5 98.1 97.6 91.6 96.3 99.3 92.8 81.9 67.0 53.7 34.2
 3233 61.5 89.4 99.5 107.5 110.2 112.2 115.8 122.3 120.4 120.4 122.7 120.1
 115.8 108.1 106.0 105.6 98.1 100.4 104.0 97.2 86.1 80.5 58.3 37.9
 4033 60.7 88.0 97.3 107.6 115.0 125.3 133.1 145.0 142.2 142.3 142.4 138.7
 132.1 125.3 122.3 120.2 111.6 108.1 104.3 94.1 83.2 67.4 53.8 39.2
 4833 62.9 88.3 95.5 108.3 112.7 118.6 130.8 141.4 144.3 140.2 142.7 141.4
 131.4 120.8 117.6 113.7 101.9 99.4 96.2 84.0 72.9 60.6 47.9 35.6
 5633 51.3 84.3 101.2 116.3 123.4 128.6 129.0 132.9 125.7 119.8 114.1 112.3
 104.9 98.4 96.4 94.8 84.8 81.3 77.1 67.9 58.2 46.5 35.2 21.9
 0841 50.0 79.3 96.9 115.7 130.6 135.6 136.8 141.0 138.5 140.9 147.0 148.6
 141.2 132.1 126.5 125.2 113.6 110.0 103.5 89.7 75.7 67.4 46.5 28.5
 1641 59.7 88.4 103.3 119.1 121.1 119.1 120.3 120.7 120.9 117.7 121.3 117.7
 108.7 105.7 106.1 104.6 96.0 99.4 101.9 92.0 84.5 68.3 51.7 38.2
 2441 47.4 75.4 92.9 106.9 115.8 123.0 131.7 141.5 138.7 137.1 142.3 141.0
 136.2 125.4 124.0 123.9 112.7 110.4 106.0 95.9 82.8 68.0 54.1 35.2
 3241 56.6 84.5 96.8 104.7 112.8 120.8 127.9 141.9 142.7 145.0 148.3 148.8
 144.9 133.1 132.2 130.2 115.6 110.9 106.0 94.8 81.2 74.2 54.6 36.6
 4041 52.0 79.5 95.5 108.6 113.4 116.3 119.9 123.1 121.1 119.3 123.6 122.1
 113.6 110.7 107.9 108.0 99.8 101.3 100.3 91.1 84.2 67.0 52.1 36.5
 4841 52.1 82.8 101.9 117.3 124.6 125.5 126.7 129.4 127.6 131.9 135.3 140.4
 136.5 128.6 126.0 125.7 114.6 114.9 108.7 99.8 85.8 68.1 52.7 32.8
 5641 45.8 79.8 102.4 126.0 144.0 148.6 140.9 141.3 133.7 127.0 125.2 123.3
 117.3 107.9 106.7 104.8 95.4 92.3 86.9 77.0 63.3 56.7 39.2 21.5
 0849 40.5 59.9 71.7 87.9 102.2 113.3 118.4 120.0 116.0 113.3 114.9 109.5
 102.6 100.5 96.5 92.0 83.8 82.1 75.1 64.5 55.9 43.0 29.5 19.6
 1649 58.7 87.9 104.1 116.4 115.9 112.6 111.1 113.5 109.8 106.0 108.3 109.3
 102.2 99.5 103.4 107.5 102.7 106.9 102.0 89.8 80.2 62.5 46.3 34.8
 2449 66.1 97.5 109.1 121.9 121.7 117.2 113.4 121.0 124.8 131.0 138.7 141.6
 134.1 129.7 129.8 124.0 111.6 109.7 103.4 90.0 78.8 61.0 46.4 36.5
 3249 52.1 82.9 100.1 112.7 116.1 113.2 116.1 125.6 129.1 138.0 150.4 154.0
 148.7 139.0 139.8 135.9 122.1 117.0 112.2 100.6 86.1 78.9 56.9 36.6
 4049 66.0 96.4 115.5 127.5 129.0 121.7 119.6 122.4 120.1 117.3 118.6 117.5
 108.1 105.0 108.6 111.6 106.1 108.1 104.5 91.1 79.1 63.7 47.9 38.5
 4849 41.8 71.5 94.7 112.4 126.1 129.6 125.9 125.0 118.4 112.9 111.8 111.0
 107.1 96.2 97.4 98.5 91.2 90.3 87.8 80.4 69.2 57.8 45.4 27.5
 1657 36.3 54.6 64.8 76.3 82.6 91.4 101.7 106.4 102.0 99.1 96.9 95.1
 91.0 85.2 83.6 81.4 73.5 72.6 67.7 58.4 50.5 44.0 28.6 16.7
 2457 65.6 97.1 107.2 115.0 114.2 108.6 109.0 116.3 117.0 116.7 116.7 116.4
 108.0 102.5 100.2 95.8 85.6 83.4 79.5 67.9 58.7 44.3 32.8 20.9
 3257 68.6 100.4 111.7 119.8 112.2 105.9 103.7 111.8 114.0 111.1 113.0 113.1
 103.1 98.4 95.8 93.5 82.1 80.9 76.4 66.4 58.6 50.2 32.5 21.7
 4057 59.5 90.6 106.2 122.5 127.3 129.9 132.4 139.3 135.2 127.3 131.3 127.7
 118.3 114.0 110.8 108.1 98.7 96.2 89.9 77.0 64.3 54.1 35.1 20.6

CYCLE 2 DATA

DATASET 36, MARCH 11, 1977

Reactor Conditions

Core Average Exposure, 12190 MWd/t
 Core Thermal Power, 2858 MWT
 Dome Pressure, P, 1026 psia
 Core Flow, 78.8 Mlb/hr
 Inlet Subcooling at P, 29.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	32	48	34	48	34	48	32	48	48	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	32	48	36	48	14	48	14	48	36	48	32	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	34	48	14	48	24	48	24	48	14	48	34	48	48
48	40	48	48	48	48	48	48	48	48	48	48	48	40	48
48	48	34	48	14	48	24	48	24	48	14	48	34	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	32	48	36	48	14	48	14	48	36	48	32	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	48	48	32	48	34	48	34	48	32	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	54.8	86.7	100.7	108.8	110.3	105.9	102.7	107.8	111.9	109.8	111.3	106.9
	101.2	92.2	90.6	87.5	80.2	78.4	75.7	67.8	58.7	47.7	36.6	21.9
2409	49.0	75.5	90.2	104.2	113.4	122.7	128.7	134.9	134.9	131.1	125.8	120.6
	113.8	102.4	100.6	90.2	87.7	84.6	76.1	65.4	54.3	42.9	26.2	
3209	52.6	78.5	92.5	109.5	121.4	127.3	135.9	145.0	139.6	138.4	133.1	127.8
	122.0	113.9	111.0	109.3	98.6	96.0	90.7	79.9	68.8	60.9	41.6	29.1
4009	35.1	63.3	81.4	90.8	103.4	111.7	116.8	129.0	133.8	134.5	130.5	127.6
	123.5	112.9	111.5	109.1	104.2	95.1	93.5	85.5	72.2	62.5	49.4	34.6
4809	66.1	96.8	106.3	115.3	109.9	104.5	103.8	103.5	104.5	104.0	104.7	102.2
	97.0	93.0	90.2	88.4	78.2	77.1	72.0	61.6	53.6	44.3	28.3	18.6
0817	50.3	85.0	102.4	111.4	117.3	112.7	105.5	111.7	117.2	116.3	117.6	116.9
	112.8	104.3	105.3	101.5	93.4	90.1	85.4	75.5	63.0	53.1	40.6	25.7
1617	53.2	80.3	97.2	117.7	129.1	133.4	141.4	150.6	151.7	145.8	142.5	142.9
	134.3	126.0	124.1	120.5	109.0	106.7	100.0	86.9	76.0	59.0	45.3	33.0
2417	59.3	88.0	103.8	117.5	119.7	120.9	124.5	126.3	125.6	120.7	121.6	117.2
	111.4	105.6	103.8	105.5	100.5	104.4	102.4	89.7	78.3	69.6	47.3	36.4
3217	68.9	93.1	100.6	107.8	107.2	105.3	106.4	109.2	106.9	103.8	108.0	104.6
	99.3	96.2	98.0	100.7	99.0	106.4	104.5	92.6	82.6	71.5	47.7	41.0
4017	50.2	81.6	96.7	111.4	119.8	123.4	131.7	139.8	138.4	133.3	135.3	131.6
	124.6	113.2	112.1	109.6	101.0	100.7	97.1	86.0	76.1	61.7	48.7	34.2
4817	59.4	89.8	105.2	122.2	125.3	125.5	129.1	136.7	139.9	134.8	138.2	136.2
	126.2	119.9	115.2	113.1	101.4	99.6	95.0	83.0	73.4	63.5	43.3	32.7
5617	60.4	86.2	95.3	101.9	99.1	94.0	93.0	93.8	88.4	86.4	86.2	81.8
	76.6	72.6	71.1	68.6	62.5	62.2	56.9	49.5	44.1	37.5	23.8	17.0
0825	45.6	69.1	83.9	97.7	110.2	122.7	135.0	146.2	145.5	141.4	139.0	132.3
	124.1	114.8	113.2	107.1	98.3	95.8	93.1	82.9	71.7	64.3	47.4	29.4
1625	52.8	80.6	96.2	108.5	112.7	112.7	117.7	123.1	123.1	120.1	122.4	119.1
	111.9	107.2	105.2	107.4	103.3	106.5	101.8	89.9	79.1	63.6	49.5	34.9

2425 58.4 82.4 89.4 94.0 93.6 92.5 92.7 94.9 93.9 95.8 103.9 110.6
 113.9 117.6 118.3 117.0 108.9 108.0 103.8 90.5 81.3 64.4 49.4 37.6
 3225 64.2 87.3 92.8 97.8 97.1 94.7 94.8 98.2 96.7 101.1 111.1 120.1
 124.8 128.2 128.7 127.5 116.7 117.3 109.0 94.6 83.9 72.7 49.8 40.2
 4025 56.5 84.3 93.9 101.8 103.0 103.6 103.4 106.2 103.5 100.7 106.4 105.7
 103.9 100.7 101.1 104.6 101.5 106.7 102.8 93.2 82.0 67.6 52.5 35.0
 4825 55.1 85.8 102.4 114.1 121.3 124.9 134.3 146.1 148.1 141.4 139.5 138.1
 126.2 119.2 116.5 113.4 103.7 103.5 99.2 87.3 76.2 59.7 46.0 33.7
 5625 57.7 92.3 109.9 127.2 131.2 132.5 126.0 126.2 119.5 113.5 111.0 108.3
 100.9 94.5 93.5 91.7 81.8 80.2 74.9 65.0 55.6 43.6 32.1 19.6
 0833 50.4 76.8 90.7 107.5 124.8 130.8 135.0 143.8 139.2 133.7 132.4 128.5
 120.0 111.3 110.3 108.0 96.9 95.1 90.9 78.2 68.0 60.6 41.8 27.9
 1633 55.8 81.2 90.2 97.3 99.9 100.4 103.0 106.3 103.6 100.2 102.1 101.5
 97.0 90.5 92.2 95.1 94.1 98.9 96.3 86.5 76.8 62.3 48.3 32.8
 2433 49.9 75.1 86.0 91.7 91.6 88.8 85.8 90.1 91.0 91.7 100.4 107.8
 114.6 116.4 119.0 119.3 111.7 111.2 107.0 95.4 81.9 68.2 53.6 35.6
 3233 55.8 81.7 89.5 93.1 93.1 91.3 90.4 95.0 98.6 103.4 116.7 127.3
 133.8 134.1 137.9 136.2 123.7 119.7 112.8 100.4 86.5 80.3 59.5 39.0
 4033 57.3 82.9 92.6 98.3 100.1 97.9 97.2 103.1 102.6 105.6 109.2 112.0
 110.8 110.9 110.6 115.9 112.7 117.3 113.9 100.7 89.5 72.1 55.9 40.3
 4833 60.3 86.2 95.3 105.3 112.1 114.2 121.5 133.9 132.5 129.4 131.3 125.6
 114.8 108.1 107.1 104.7 95.5 95.8 92.7 82.4 72.5 58.7 45.9 35.7
 5633 52.5 86.6 108.1 122.3 128.9 130.3 116.2 121.3 114.2 107.3 102.8 100.5
 94.4 87.1 86.5 84.3 75.7 73.3 70.2 61.9 53.7 44.5 34.0 20.9
 0841 51.0 79.2 92.9 104.6 114.1 123.7 130.1 139.2 141.7 141.6 142.2 138.2
 127.4 118.5 116.4 114.2 102.7 99.6 92.3 80.6 68.7 61.1 41.8 26.9
 1641 56.7 82.8 99.4 116.6 120.9 126.6 138.0 142.6 138.1 132.8 134.3 127.9
 120.1 112.8 111.2 108.9 99.9 100.4 93.9 83.2 73.2 58.3 45.0 35.9
 2441 52.2 81.5 94.5 103.0 107.8 106.0 105.0 107.3 106.4 107.0 107.1 110.6
 109.6 104.2 106.9 108.4 106.8 110.7 108.8 99.9 86.2 71.9 56.7 36.2
 3241 53.0 79.2 89.8 93.8 94.2 93.1 92.6 97.4 96.5 98.1 102.9 106.0
 107.7 105.3 107.3 111.8 109.9 113.8 112.5 101.8 87.7 80.3 60.8 39.6
 4041 59.9 88.5 102.8 112.9 117.8 122.8 130.8 135.4 132.2 125.9 128.7 125.1
 119.1 114.2 114.4 112.4 103.7 103.1 99.3 87.6 76.6 62.9 48.3 32.8
 4841 51.2 83.9 102.2 118.7 124.2 125.0 127.7 136.8 140.0 137.9 136.6 133.7
 126.1 117.8 117.5 114.5 105.1 103.9 99.8 88.3 76.0 61.5 48.6 29.6
 5641 49.0 83.7 104.7 118.2 127.4 132.4 129.3 133.4 124.4 117.9 114.5 111.4
 107.5 95.7 93.8 90.8 84.0 79.9 76.7 68.2 57.2 50.6 36.1 21.7
 0849 70.3 97.0 104.8 111.7 107.6 103.1 101.8 104.7 103.7 103.0 101.8 100.3
 93.0 91.4 86.6 82.8 74.5 72.9 66.2 56.7 49.6 37.8 26.6 17.8
 1649 59.9 86.2 98.2 111.6 112.6 111.8 114.2 122.0 125.3 125.1 125.8 124.2
 115.6 110.7 107.1 104.5 93.2 94.0 87.8 77.1 68.1 53.5 40.7 30.9
 2449 60.3 87.4 103.2 118.5 121.0 121.6 128.9 138.6 138.0 134.3 130.8 127.2
 119.7 115.6 112.2 110.6 99.0 96.9 92.9 80.7 71.8 55.8 43.0 33.7
 3249 54.9 85.7 99.3 106.4 109.2 112.2 118.0 132.2 137.1 134.2 129.8 128.7
 123.0 114.4 115.4 112.9 106.1 103.0 102.7 94.2 81.3 74.5 54.9 36.0
 4049 63.5 94.4 109.4 121.7 126.7 125.1 130.6 136.4 134.7 129.0 133.3 127.6
 115.7 110.9 109.0 104.9 94.3 95.5 89.5 77.6 68.4 54.7 41.4 33.5
 4849 59.4 98.1 120.6 131.2 129.6 124.8 113.8 112.9 110.1 110.3 210.7 101.6
 96.9 90.8 89.8 89.1 82.1 79.4 76.3 69.1 58.8 49.9 40.0 26.7
 1657 58.2 84.0 94.6 102.8 100.1 96.6 94.7 94.1 91.0 88.8 86.9 85.7
 80.3 76.9 74.7 72.9 65.5 63.7 59.0 51.5 44.8 38.2 24.5 15.2
 2457 66.8 99.9 111.8 126.0 130.4 126.7 124.5 124.4 115.1 110.8 106.4 103.7
 94.7 89.9 87.5 83.9 75.7 74.2 70.1 60.7 52.2 39.8 29.2 19.3
 3257 71.2 102.7 119.5 135.5 137.7 128.5 119.0 115.7 109.9 100.2 98.3 94.4
 87.8 82.0 80.8 78.4 70.8 70.9 67.6 58.4 51.4 44.6 28.8 20.1
 4057 63.1 94.2 108.7 125.9 130.5 131.9 130.4 131.1 127.6 120.6 120.6 114.8
 106.8 100.3 98.2 96.9 88.3 84.4 77.8 67.0 57.0 48.5 30.8 18.9

CYCLE 2 DATA

DATASET 37, APRIL 3, 1977

Reactor Conditions

Core Average Exposure, 12530 MWd/t
 Core Thermal Power, 3247 MWT
 Dome Pressure, P, 1023 psia
 Core Flow, 104.2 Mlb/hr
 Inlet Subcooling at P, 23.5 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	34	48	34	48	34	48	34	48	48	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	34	48	36	48	18	48	18	48	36	48	34	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	34	48	18	48	36	48	36	48	18	48	34	48	48
48	40	48	48	48	48	48	48	48	48	48	48	40	48	48
48	48	34	48	18	48	36	48	36	48	18	48	34	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	34	48	36	48	18	48	18	48	36	48	34	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	48	48	34	48	34	48	34	48	34	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
 See Figure 22

1609	44.0	70.5	82.2	90.1	94.4	94.2	97.1	104.5	104.7	104.1	101.5	99.1		
	92.6	84.8	84.3	83.2	75.7	74.2	72.0	64.5	56.2	46.5	35.7	21.7		
2409	38.5	59.9	70.6	82.3	93.8	104.4	110.6	124.1	122.7	120.8	117.0	113.7		
	108.3	97.6	95.5	95.7	84.4	83.2	80.8	71.7	61.2	50.9	40.6	26.0		
3209	42.0	61.1	71.2	83.1	95.1	108.0	120.0	132.5	128.0	126.9	127.5	124.3		
	117.2	109.1	109.1	107.5	95.1	92.5	87.6	76.7	66.6	59.2	40.2	27.6		
4009	28.7	51.7	67.9	76.6	87.9	99.7	107.6	122.7	127.7	124.8	119.2	120.3		
	116.4	108.8	104.9	104.0	98.3	89.0	88.7	81.8	69.4	59.9	47.4	33.9		
4809	54.5	78.9	86.5	95.4	95.1	95.3	95.8	99.4	97.7	95.9	98.8	98.8		
	91.8	88.2	89.2	83.3	76.4	74.8	70.1	60.6	52.7	44.1	28.0	18.8		
0817	40.6	69.0	83.1	92.2	96.7	97.6	98.2	110.8	113.9	113.0	111.3	108.0		
	107.2	99.0	100.0	99.7	91.6	87.9	84.7	76.4	63.1	52.3	39.7	25.4		
1617	43.7	65.8	81.5	100.3	111.4	120.1	126.3	141.9	137.5	134.5	134.5	132.6		
	124.3	118.4	117.8	115.1	110.4	100.8	95.0	83.2	71.5	55.7	43.0	29.7		
2417	48.3	72.9	85.6	99.3	104.1	108.4	112.0	118.6	115.0	111.4	114.1	112.6		
	107.8	106.1	107.8	111.1	110.3	103.0	96.7	84.7	72.7	64.9	44.4	32.3		
3217	57.3	78.4	86.8	93.9	95.9	95.3	98.8	103.8	103.7	103.3	101.3	102.4		
	99.1	100.1	106.0	111.8	102.5	103.2	98.3	85.0	76.5	65.5	43.9	36.9		
4017	41.8	68.0	81.9	97.1	104.9	114.2	122.6	129.5	129.0	125.5	127.3	126.7		
	118.6	109.9	108.6	107.2	99.0	96.2	93.5	82.8	72.3	58.2	45.8	31.2		
4817	48.5	73.7	88.8	104.7	110.2	113.7	124.5	133.6	132.2	127.5	129.6	127.0		
	119.9	113.9	110.5	106.7	97.4	95.5	91.8	79.8	70.4	62.5	41.6	31.6		
5617	49.2	71.4	79.8	84.9	85.3	84.7	86.4	86.3	83.4	81.9	79.6	77.9		
	73.4	69.0	67.0	66.1	61.8	60.0	56.2	49.3	43.7	37.0	23.7	16.7		
0825	37.9	57.0	69.4	82.1	92.2	105.2	118.9	130.5	135.9	129.9	128.8	126.8		
	121.9	109.6	107.1	107.9	96.3	95.2	91.0	81.0	70.8	63.9	45.6	28.3		
1625	44.4	67.9	81.2	93.3	98.3	102.9	105.3	114.0	113.6	111.3	114.6	114.6		
	108.3	106.0	110.3	113.6	105.9	104.6	98.0	85.6	72.8	59.2	45.7	29.9		

2425 52.6 74.2 82.2 90.1 96.5 102.7 111.6 118.9 116.6 112.4 113.8 114.0
 109.1 106.4 107.2 107.6 96.3 96.2 90.9 80.1 70.2 56.5 43.9 32.3
 3225 57.7 80.2 88.9 99.5 106.5 114.5 122.4 129.5 127.5 124.1 124.5 122.7
 116.8 113.7 112.5 112.8 100.8 99.5 93.8 81.4 70.8 61.9 42.0 34.4
 4025 49.7 74.5 85.7 94.3 97.2 100.1 102.3 106.6 105.0 102.3 102.8 102.4
 100.9 98.6 103.8 109.0 102.1 101.0 97.2 84.7 74.2 60.3 48.3 32.3
 4825 45.1 71.4 85.8 99.6 106.3 113.5 122.5 137.0 135.6 130.3 131.8 130.8
 121.9 115.9 114.9 113.9 101.5 99.4 95.7 84.4 72.9 57.6 44.6 31.3
 5625 48.9 79.0 94.2 106.0 113.1 118.0 113.2 112.5 107.1 105.4 105.1 102.5
 96.8 89.7 89.5 89.4 79.2 77.4 74.0 64.7 55.9 42.9 31.7 19.1
 0833 41.6 62.2 75.3 90.8 104.6 111.2 119.0 127.3 126.4 123.2 123.1 122.8
 114.4 105.9 104.8 103.1 94.2 91.5 86.2 75.0 63.8 57.7 40.5 26.4
 1633 46.3 68.6 76.9 84.2 88.7 89.8 92.4 97.1 96.5 94.7 96.1 96.7
 92.2 91.4 96.4 103.0 95.5 95.9 90.5 80.2 69.2 56.1 44.4 29.6
 2433 45.6 70.6 81.9 90.7 98.1 105.7 110.4 119.8 119.0 114.8 114.4 114.7
 111.2 103.6 105.0 105.3 97.0 94.6 90.8 81.3 69.7 56.5 44.7 30.0
 3233 51.5 76.7 87.5 97.1 106.5 115.6 126.6 135.2 134.3 133.3 133.3 132.8
 127.5 116.5 114.5 113.0 102.4 98.5 94.4 84.0 72.2 65.6 48.3 32.4
 4033 51.3 74.8 84.7 92.6 95.6 99.3 103.7 108.1 109.7 108.9 110.4 111.3
 110.3 108.2 114.9 121.8 113.5 111.2 104.5 91.2 79.5 63.6 50.4 35.0
 4833 50.1 73.2 79.0 89.0 94.5 100.5 107.8 120.8 119.3 120.4 122.4 117.7
 111.6 106.4 106.9 104.8 94.1 95.1 89.4 78.6 68.6 56.2 43.8 33.6
 5633 43.1 71.7 89.0 101.0 109.9 112.2 108.0 110.7 108.1 101.2 95.7 94.9
 89.5 82.3 82.8 81.8 75.5 72.4 68.2 61.8 52.4 43.5 33.5 20.6
 0841 41.7 65.6 77.7 86.9 99.6 112.0 123.8 138.8 136.2 133.3 133.9 128.9
 123.0 115.5 111.8 110.5 98.6 96.0 90.1 79.6 67.4 60.6 41.4 26.2
 1641 47.4 71.0 85.9 98.4 109.3 118.8 128.2 135.3 130.9 129.0 128.3 124.2
 116.4 110.2 110.9 109.3 97.3 96.4 91.9 79.4 69.5 55.4 42.7 33.3
 2441 45.3 70.9 84.1 94.2 99.3 102.8 102.5 108.7 109.7 106.8 106.8 109.8
 107.9 103.4 109.6 114.4 109.9 109.5 104.1 92.4 78.3 65.5 51.2 33.3
 3241 46.0 70.8 80.7 86.4 90.3 91.8 94.5 101.6 102.3 105.4 104.7 104.7
 105.4 102.6 110.3 116.1 111.4 108.4 104.9 93.8 79.2 71.3 55.2 36.6
 4041 51.1 77.9 88.4 100.1 106.4 114.6 120.9 128.3 125.0 123.3 123.0 121.6
 116.4 110.2 111.7 112.3 101.1 99.2 93.6 82.0 71.6 57.9 45.2 29.9
 4841 42.5 69.2 86.7 98.8 109.1 113.8 122.1 134.8 133.3 129.6 130.3 126.4
 120.8 112.8 113.1 113.4 101.8 101.4 98.1 86.7 73.6 60.4 47.6 29.9
 5641 40.0 68.9 85.8 99.0 109.8 118.4 119.0 120.9 118.6 111.7 106.1 108.5
 102.4 93.0 92.9 88.9 84.1 79.7 75.8 67.5 57.5 50.7 36.9 20.8
 0849 59.6 80.1 87.8 93.8 92.1 92.4 95.9 95.6 96.4 95.8 95.4 93.3
 88.2 85.1 81.3 79.1 71.5 69.2 64.3 54.4 47.6 36.2 25.2 18.0
 1649 48.5 70.2 82.0 95.5 100.4 103.7 109.3 117.1 118.2 114.4 117.2 116.6
 107.2 103.6 102.4 99.3 89.5 89.4 84.6 74.0 65.2 51.0 38.9 28.2
 2449 49.0 71.4 84.7 98.3 104.0 107.6 116.1 129.0 129.0 123.1 123.1 120.8
 113.3 110.1 111.7 107.2 95.4 92.2 88.9 76.9 66.7 52.6 39.9 32.3
 3249 45.4 70.1 80.2 87.9 94.3 99.2 104.8 122.4 124.9 126.5 123.5 125.0
 120.5 113.9 113.4 113.2 105.7 102.1 99.2 91.4 77.5 70.1 52.8 33.1
 4049 51.9 77.8 90.0 104.2 110.7 116.4 124.7 133.1 130.0 120.4 121.4 116.7
 110.3 103.1 110.1 99.8 90.2 88.7 84.9 74.0 64.2 51.2 39.6 32.3
 4849 48.4 81.1 98.6 107.8 116.3 111.0 103.9 106.8 103.5 100.4 96.0 98.5
 93.1 86.2 86.5 85.7 79.5 75.9 74.5 68.6 57.9 49.2 39.9 26.0
 1657 46.5 67.5 76.0 84.8 86.0 86.3 83.7 86.1 85.4 81.1 81.0 80.6
 74.8 70.9 69.8 69.1 62.4 61.4 56.9 49.5 42.8 37.1 24.3 14.7
 2457 56.0 79.1 89.5 103.5 110.5 111.6 112.6 113.3 108.4 100.7 100.8 98.0
 89.1 85.7 84.1 80.7 72.4 72.3 67.4 58.1 50.9 38.0 28.0 18.6
 3257 55.8 81.4 92.2 104.9 109.0 108.5 109.0 110.3 104.8 96.6 95.9 91.9
 84.9 80.0 77.7 77.2 69.2 69.0 65.8 57.4 50.6 43.5 28.3 20.2
 4057 50.3 77.2 89.0 103.8 113.6 117.9 121.9 122.4 121.6 111.9 111.7 110.3
 101.1 97.5 95.6 92.8 83.9 81.9 78.1 65.7 55.8 46.9 30.3 18.0