

**Catawba Unit 2 Cycle 8**  
**Core Operating Limits Report**  
**October 1995**

Duke Power Company

		Date
Prepared By:	<u>Sandra B Bodi</u>	<u>17 Oct 95</u>
Checked By:	<u>ML Elder</u>	<u>10/17/95</u>
Checked By:	<u>M.E. Carroll</u>	<u>10/17/95</u>
Approved By:	<u>R.H. Clark</u>	<u>10/17/95</u>

**QA Condition 1**

The contents of this document have been reviewed to verify that no material herein either directly or indirectly changes the results and conclusions presented in the 10CFR50.59 Catawba 2 Cycle 8 Reload Safety Evaluation.

INSERTION SHEET FOR REVISION 6

Remove

Pages 1-20, rev 5

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Pages 1-20, rev 6



## REVISION LOG

<u>Revision</u>	<u>Effective Date</u>	<u>Comment</u>
Original Issue	February 1993	C2C06 COLR
Revision 1	April 1994	C2C06 COLR rev 1
Revision 2	May 1994	C2C07 COLR
Revision 3	October 1994	C2C07 COLR rev 1
Revision 4	April 1995	C2C07 COLR rev 2
Revision 5	September 1995	C2C07 COLR rev 3
Revision 6	October 1995	C2C08 COLR

## 1.0 Core Operating Limits Report

This Core Operating Limits Report (COLR) has been prepared in accordance with the requirements of Technical Specification 6.9.1.9.

The Technical Specifications affected by this report are listed below:

<u>Tech Spec Section</u>	<u>Technical Specifications</u>	<u>COLR Section</u>	<u>COLR Page</u>
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3/4.1.1.3	Moderator Temperature Coefficient	3.0	7
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## 1.1 Operating Limits

The cycle-specific parameter limits for the specifications listed in Section 1.0 are presented in the following subsections. These limits have been developed using NRC approved methodologies specified in Technical Specification 6.9.1.9.

## 2.0 Reactor Trip System Instrumentation Setpoints (Specification 2.2.1)

### 2.0.1 Overtemperature $\Delta T$ Setpoint Parameter Values

<u>Parameter</u>	<u>Value</u>
Overtemperature $\Delta T$ reactor trip setpoint	$K_1 = 1.1953$
Overtemperature $\Delta T$ reactor trip heatup setpoint penalty coefficient	$K_2 = 0.03163/^\circ\text{F}$
Overtemperature $\Delta T$ reactor trip depressurization setpoint penalty coefficient	$K_3 = 0.001414/\text{psi}$
Measured reactor vessel $\Delta T$ lead/lag time constants	$\tau_1 = 8 \text{ sec.}$ $\tau_2 = 3 \text{ sec.}$
Measured $\Delta T$ lag time constant	$\tau_3 = 0 \text{ sec.}$
Measured reactor vessel average temperature lead/lag time constants	$\tau_4 = 22 \text{ sec.}$ $\tau_5 = 4 \text{ sec.}$
Measure reactor vessel average temperature lag time constant	$\tau_6 = 0 \text{ sec.}$
$f_1(\Delta I)$ "positive" breakpoint	$= 3.0 \% \Delta I$
$f_1(\Delta I)$ "negative" breakpoint	$= -39.9 \% \Delta I$
$f_1(\Delta I)$ "positive" slope	$= 1.525 \% \Delta T_0 / \% \Delta I$
$f_1(\Delta I)$ "negative" slope	$= 3.910 \% \Delta T_0 / \% \Delta I$

2.0.2 Overpower  $\Delta T$  Setpoint Parameter Values

<u>Parameter</u>	<u>Value</u>
Overpower $\Delta T$ reactor trip setpoint	$K_4 = 1.0819$
Overpower $\Delta T$ reactor trip heatup setpoint penalty coefficient (for $T > T''$ )	$K_6 = 0.001291/^{\circ}\text{F}$
Overpower $\Delta T$ reactor trip heatup setpoint penalty coefficient (for $T \leq T''$ )	$K_6 = 0.0/^{\circ}\text{F}$
Measured reactor vessel $\Delta T$ lead/lag time constants	$\tau_1 = 8 \text{ sec.}$ $\tau_2 = 3 \text{ sec.}$
Measured $\Delta T$ lag time constant	$\tau_3 = 0 \text{ sec.}$
Measure reactor vessel average temperature lag time constant	$\tau_6 = 0 \text{ sec.}$
Measure reactor vessel average temperature rate-lag time constant	$\tau_7 = 10 \text{ sec.}$
$f_2(\Delta I)$ "positive" breakpoint	$= 35.0 \% \Delta I$
$f_2(\Delta I)$ "negative" breakpoint	$= -35.0 \% \Delta I$
$f_2(\Delta I)$ "positive" slope	$= 7.0 \% \Delta T_0 / \% \Delta I$
$f_2(\Delta I)$ "negative" slope	$= 7.0 \% \Delta T_0 / \% \Delta I$

**3.0 Moderator Temperature Coefficient (Specification 3/4.1.1.3)**

**3.0.1** The Moderator Temperature Coefficient (MTC) LCO Limits are:

The MTC shall be less positive than the limits shown in Figure 1. The BOC, ARO, HZP MTC shall be less positive than  $0.7E-04 \Delta K/K/^{\circ}F$ .

The EOC, ARO, RTP MTC shall be less negative than  $-4.1E-04 \Delta K/K/^{\circ}F$ .

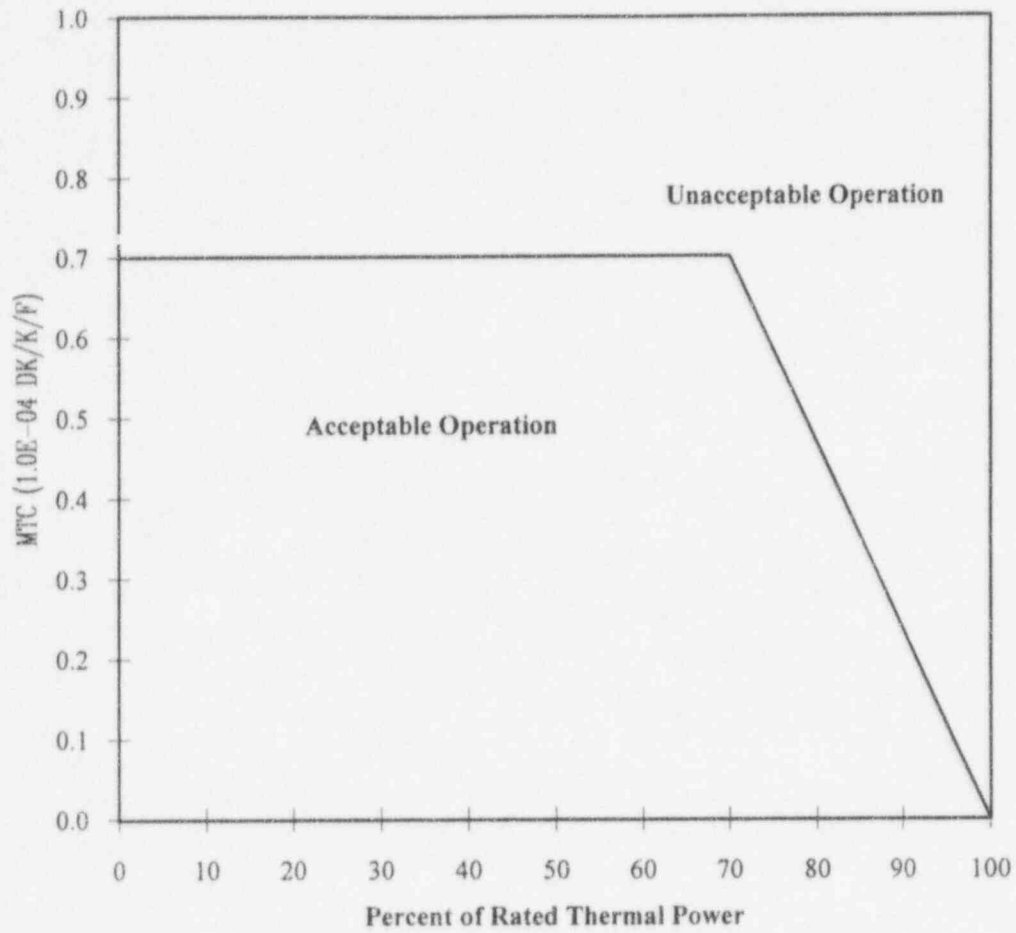
**3.0.2** The MTC Surveillance Limit is:

The 300 PPM/ARO/ RTP MTC shall be less negative than or equal to  $-3.2E-04 \Delta K/K/^{\circ}F$ .

where:    BOC = Beginning of Cycle  
          EOC = End of Cycle  
          ARO = All Rods Out  
          HZP = Hot Zero Thermal Power  
          RTP = Rated Thermal Power

Figure 1

Moderator Temperature Coefficient Versus Power Level



**3.1 Borated Water Source - Shutdown (Specification 3/4.1.2.5)**

**3.1.1** Volume and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during **modes 5 and 6**:

<u>Parameter</u>	<u>Limit</u>
Boric Acid Storage System minimum boron concentration for LCO 3.1.2.5a	7,000 ppm
Boric Acid Storage System minimum contained water volume for LCO 3.1.2.5a	12,000 gallons
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	585 gallons
Refueling Water Storage Tank minimum boron concentration for LCO 3.1.2.5b	2,475 ppm
Refueling Water Storage Tank minimum contained borated water volume for LCO 3.1.2.5b	45,000 gallons
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,475 ppm	3,500 gallons

### 3.2 Borated Water Source - Operating (Specification 3/4.1.2.6)

3.2.1 Volume and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during **modes 1, 2, 3, and 4**:

<u>Parameter</u>	<u>Limit</u>
Boric Acid Storage System minimum boron concentration for LCO 3.1.2.6a	7,000 ppm
Boric Acid Storage System minimum contained water volume for LCO 3.1.2.6a	22,000 gallons
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	9,851 gallons
Refueling Water Storage Tank minimum boron concentration for LCO 3.1.2.6b	2,475 ppm
Refueling Water Storage Tank minimum contained borated water volume for LCO 3.1.2.6b	98,607 gallons
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,475 ppm	57,107 gallons

### 3.3 Shutdown Rod Insertion Limit (Specification 3/4.1.3.5)

3.3.1 The shutdown rods shall be withdrawn to at least 222 steps.

### 3.4 Control Rod Insertion Limits (Specification 3/4.1.3.6)

3.4.1 The control rod banks shall be limited to physical insertion as shown in Figure 2.

### 3.5 Axial Flux Difference (Specification 3/4.2.1)

3.5.1 The Axial Flux Difference (AFD) Limits are provided in Figure 3.



Figure 2

Control Rod Bank Insertion Limits Versus Percent Rated Thermal Power

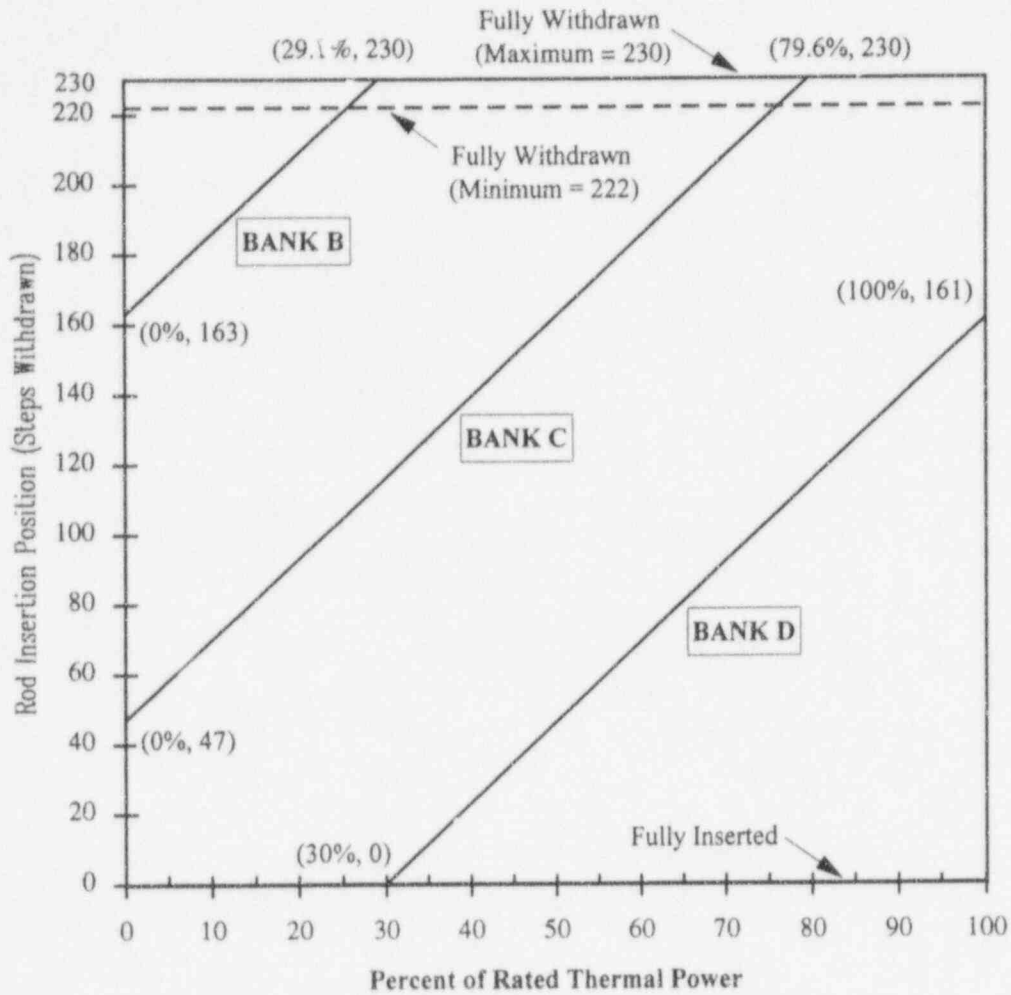
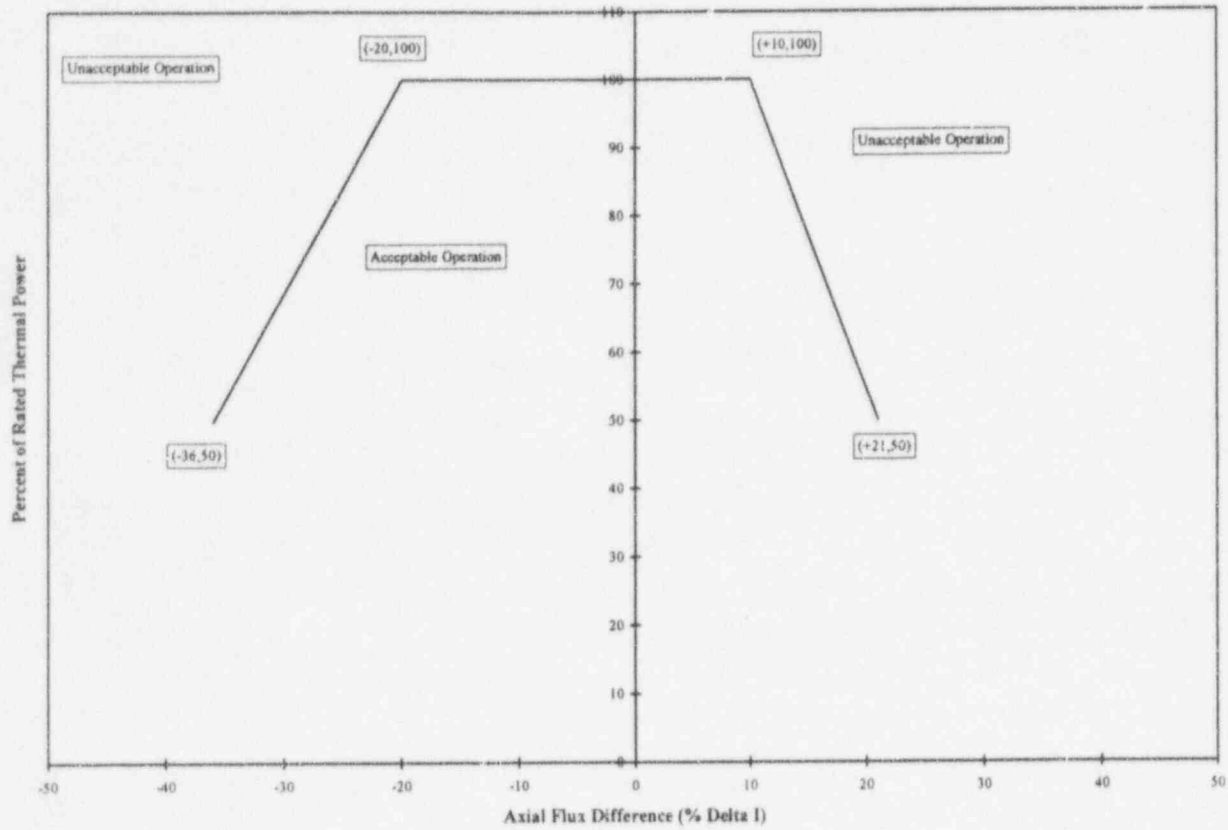


Figure 3

Axial Flux Difference Limits Versus Percent of Rated Thermal Power



### 3.6 Heat Flux Hot Channel Factor, $F_Q(X,Y,Z)$ (Specification 3/4.2.2)

3.6.1  $F_Q^{RTP} = 2.32$

3.6.2  $K(Z)$  is provided in Figure 4 for MkBW fuel.

The following parameters are required for the Surveillance Requirements of T.S. 3/4.2.2:

3.6.3  $[F_Q^L(X,Y,Z)]^{OP} = \frac{F_Q^D(X,Y,Z) * M_Q(X,Y,Z)}{UMT * MT * TILT}$

where:

$[F_Q^L(X,Y,Z)]^{OP}$  = Cycle dependent maximum allowable design peaking factor which ensures that the  $F_Q(X,Y,Z)$  limit will be preserved for operation within the LCO limits.  $[F_Q^L(X,Y,Z)]^{OP}$  includes allowances for calculational and measurement uncertainties.

$F_Q^D(X,Y,Z)$  = Design power distribution for  $F_Q$ .  $F_Q^D(X,Y,Z)$  is provided in Table 1, Appendix A, for normal operating conditions and in Table 2, Appendix A for power escalation testing during initial startup operations.

$M_Q(X,Y,Z)$  = Margin remaining in core location X,Y,Z to the LOCA limit in the transient power distribution.  $M_Q(X,Y,Z)$  is provided in Table 1, Appendix A for normal operating conditions and in Table 2, Appendix A for power escalation testing during initial startup operations.

UMT = Measurement Uncertainty (UMT = 1.05)

MT = Engineering Hot Channel Factor (MT = 1.03)

TILT = Peaking penalty that accounts for allowable quadrant power tilt ratio of 1.02. (TILT = 1.035)

NOTE:  $[F_Q^L(X,Y,Z)]^{OP}$  is the parameter identified as  $F_Q^{MAX}(X,Y,Z)$  in DPC-NE-2011PA.

$$3.6.4 \quad [F_Q^L(X,Y,Z)]^{RPS} = \frac{F_Q^D(X,Y,Z) * M_C(X,Y,Z)}{UMT * MT * TILT}$$

where:

$[F_Q^L(X,Y,Z)]^{RPS}$  = Cycle dependent maximum allowable design peaking factor which ensures that the centerline fuel melt limit will be preserved for operation within the LCO limits.  $[F_Q^L(X,Y,Z)]^{RPS}$  includes allowances for calculational and measurement uncertainties.

$F_Q^D(X,Y,Z)$  = Design power distributions for  $F_Q$ .  $F_Q^D(X,Y,Z)$  is provided in Table 1, Appendix A for normal operating conditions and in Table 2, Appendix A for power escalation testing during initial startup operations.

$M_C(X,Y,Z)$  = Margin remaining to the CFM limit in core location X,Y,Z from the transient power distribution.  $M_C(X,Y,Z)$  calculations parallel the  $M_Q(X,Y,Z)$  calculations described in DPC-NE-2011PA, except that the LOCA limit is replaced with the CFM limit.  $M_C(X,Y,Z)$  is provided in Table 3, Appendix A for normal operating conditions and in Table 4, Appendix A for power escalation testing during initial startup operations.

UMT = Measurement Uncertainty (UMT = 1.05)

MT = Engineering Hot Channel Factor (MT = 1.03)

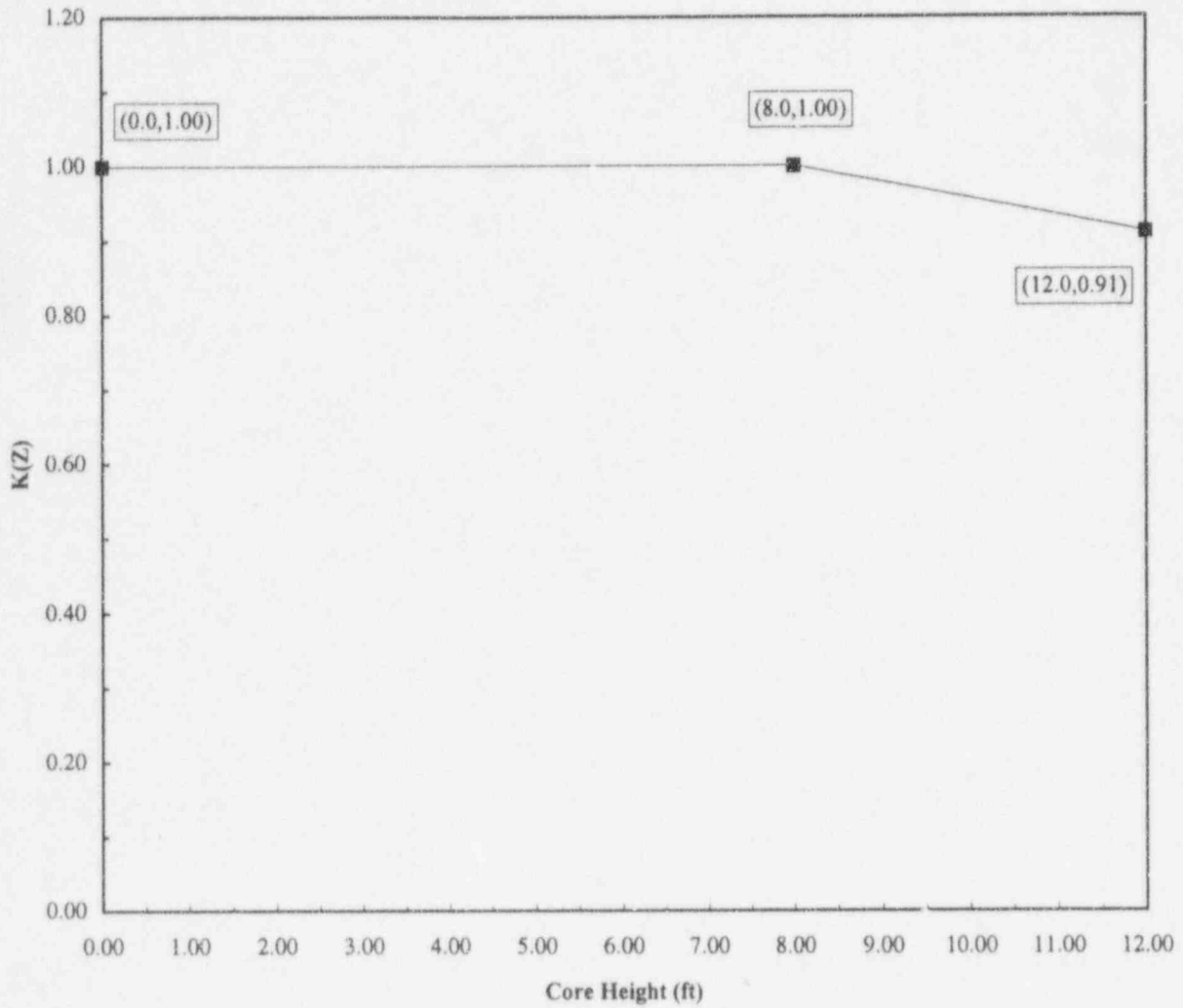
TILT = Peaking penalty that accounts for allowable quadrant power tilt ratio of 1.02. (TILT = 1.035)

NOTE:  $[F_Q^L(X,Y,Z)]^{RPS}$  is the parameter identified as  $F_Q^{MAX}(X,Y,Z)$  in DPC-NE-2011PA, except that  $M_Q(X,Y,Z)$  is replaced by  $M_C(X,Y,Z)$ .

3.6.5 KSLOPE = Adjustment to the  $K_1$  value from OTΔT required to compensate for each 1% that  $[F_Q^L(X,Y,Z)]^{RPS}$  exceeds its limit. (KSLOPE = 0.0725)

Figure 4

$K(Z)$ , Normalized  $F_Q(X,Y,Z)$  as a Function of Core Height for MkBW Fuel



### 3.7 Nuclear Enthalpy Rise Hot Channel Factor, $F_{\Delta H}(X,Y,Z)$ (Specification 3/4.2.3)

The following parameters are required for the LCO requirements of T.S. 3/4.2.3.

$$3.7.1 \quad [F_{\Delta H}^L(X,Y)]^{LCO} = \text{MARP}(X,Y) * \left[ 1.0 + \frac{1}{\text{RRH}} * (1.0 - P) \right]$$

where:

$\text{MARP}(X,Y)$  = Cycle specific operating limit Maximum Allowable Radial Peaks.  $\text{MARP}(X,Y)$  limits for blanket and non-blanket fuel are provided in Table 7, Appendix A.

$$P = \frac{\text{Thermal Power}}{\text{Rated Thermal Power}}$$

$\text{RRH}$  = (Defined in section 3.7.3)

The following parameters are required for core monitoring per the Surveillance requirements of T.S. 3/4.2.3.

$$3.7.2 \quad [F_{\Delta H}^L(X,Y)]^{SURV} = \frac{F_{\Delta H}^D(X,Y) \times M_{\Delta H}(X,Y)}{\text{UMR} \times \text{TILT}}$$

where:

$[F_{\Delta H}^L(X,Y)]^{SURV}$  = Cycle dependent maximum allowable design peaking factor which ensures that the  $F_{\Delta H}(X,Y)$  limit will be preserved for operation within the LCO limits.  $[F_{\Delta H}^L(X,Y)]^{SURV}$  includes allowances for calculational and measurement uncertainty.

$F_{\Delta H}^D(X,Y)$  = Design power distribution for  $F_{\Delta H}$ .  $F_{\Delta H}^D(X,Y)$  is provided in Table 5, Appendix A for normal operation and in Table 6, Appendix A for power escalation testing during initial startup operations.

$M_{DH}(X,Y)$  = Margin remaining in core location X,Y relative to the Operational DNB limit in the transient power distribution.  $M_{\Delta H}(X,Y)$  is provided in Table 5, Appendix A for normal operation and in Table 6, Appendix A for power escalation testing during initial startup operations.

UMR = Uncertainty value for measured radial peaks (UMR = 1.04).

TILT = Factor to account for a peaking increase due to the allowed quadrant tilt ratio of 1.02. (TILT = 1.035).

NOTE:  $[F_{\Delta H}(X,Y)]^{SURV}$  is the parameter identified as  $[F_{\Delta H}(X,Y)]^{MAX}$  in DPC-NE-2011PA.

3.7.3 RRH = Thermal Power reduction required to compensate for each 1% that  $F_{\Delta H}(X,Y)$  exceeds its limit (RRH = 3.34).

3.7.4 TRH = Reduction in OTAT  $K_1$  setpoint required to compensate for each 1% that  $F_{\Delta H}(X,Y)$  exceeds its limit (TRH = 0.04).

**3.8 Boron Dilution Mitigation System (Specification 3/4.3.3.11)****3.8.1 Reactor Water Makeup Pump flowrate limits:**

<u>Applicable Mode</u>	<u>Limit</u>
Mode 3 or 4	$\leq 150$ gpm
Mode 5	$\leq 70$ gpm

**3.9 Accumulators (Specification 3/4.5.1)****3.9.1 Boron concentration limits during modes 1, 2, and 3:**

<u>Parameter</u>	<u>Limit</u>
Cold Leg Accumulator minimum boron concentration for LCO 3.5.1c	2,375 ppm
Cold Leg Accumulator maximum boron concentration for LCO 3.5.1c	2,575 ppm
Minimum Cold Leg Accumulator boron concentration required to ensure post-LOCA subcriticality	2,250 ppm

**3.10 Refueling Water Storage Tank (Specification 3/4.5.4)****3.10.1 Boron concentration limits during modes 1, 2, 3, and 4:**

<u>Parameter</u>	<u>Limit</u>
Refueling Water Storage Tank minimum boron concentration for LCO 3.5.4b	2,475 ppm
Refueling Water Storage Tank maximum boron concentration for LCO 3.5.4b	2,575 ppm



**3.11 Refueling Operations - Boron Concentration (Specification 3/4.9.1)**

**3.11.1** Minimum boron concentration for the filled portions of the Reactor Coolant System and refueling canal. Applicable for mode 6 with the reactor vessel head closure bolts less than fully tensioned, or with the head removed.

<u>Parameter</u>	<u>Limit</u>
Refueling boron concentration for the filled portions of the Reactor Coolant System and refueling canal for LCO 3.9.1.b.	2,475 ppm

**3.12 Instrumentation (Specification 3/4.9.2)**

**3.12.1** Reactor Makeup Water Pump Flowrate Limit:

<u>Applicable Mode</u>	<u>Limit</u>
Mode 6	≤ 70 gpm

**3.13 Refueling Operations - Spent Fuel Pool Boron Concentration (Specification 3/4.9.12)**

**3.13.1** Minimum boron concentration limit for spent fuel pool. Applicable when fuel is stored in the spent fuel pool.

<u>Parameter</u>	<u>Limit</u>
Spent fuel pool minimum boron concentration for LCO 3.9.12	2,475 ppm

### 3.14 Standby Makeup Pump Water Supply - Boreen Concentration (Specification 4.7.13.3)

- 3.14.1 Minimum boron concentration limit for the spent fuel pool, or a contained borated water volume (meeting additional requirements of surveillance 4.7.13.3.a.2).  
Applicable for **modes 1, 2, and 3.**

<u>Parameter</u>	<u>Limit</u>
Spent fuel pool minimum boron concentration for surveillance 4.7.13.3.a.1	2,475 ppm
Contained borated water volume for surveillance 4.7.13.3.a.2	2,475 ppm

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**NOTE:** Data contained in the Appendix of this document was generated in the Catawba 2 Cycle 8 Maneuvering Analysis calculational file, CNC-1553.05-00-0212. The Catawba Nuclear Engineering Section will control this information via computer file(s) and should be contacted if there is a need to access this information.

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.6105	.8279	.7551	.7915	.5077	.8065	.4177	.4102
	2.3810	1.9003	2.0785	1.9635	3.0164	1.8897	3.5991	3.6410
9	.8279	.5152	.8793	.7636	.8407	.7004	.7165	.4498
	1.9003	3.1036	1.7832	2.0411	1.8287	2.1784	2.1508	3.3673
10	.7551	.8814	.7486	.8536	.4980	.7818	.4113	.5216
	2.0785	1.7785	2.0999	1.8436	3.1638	2.0119	3.7655	2.9337
11	.7915	.7658	.8579	.4916	.7904	.6555	.6790	.4048
	1.9635	2.0360	1.8337	3.2399	1.9923	2.3840	2.3224	3.8544
12	.5077	.8418	.4991	.7915	.3898	.6383	.3192	
	3.0164	1.8270	3.1614	1.9884	3.4450	2.2291	4.7741	
13	.8065	.7015	.7818	.6555	.6394	.3084	.3491	
	1.8897	2.1761	2.0108	2.3840	2.2251	4.5297	4.2638	
14	.4177	.7165	.4113	.6790	.3192	.3491		
	3.5991	2.1485	3.7619	2.3224	4.7741	4.2671		
15	.4102	.4498	.5205	.4048	F-SUB-Q			
	3.6410	3.3702	2.9359	3.8544	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8804	1.1503	1.1374	1.1792	1.1802	1.1310	.9842	.5869
	1.8128	1.4483	1.4334	1.3699	1.3520	1.4051	1.5938	2.6485
9	1.1503	1.1481	1.2113	1.1395	1.1802	1.0410	1.0581	.7026
	1.4483	1.4497	1.3419	1.4182	1.3586	1.5297	1.5167	2.2488
10	1.1374	1.2134	1.0260	1.1503	1.1395	1.1085	1.0035	.8279
	1.4334	1.3397	1.5957	1.4225	1.4459	1.4705	1.6056	1.9222
11	1.1792	1.1417	1.1588	1.1299	1.1063	.9992	1.0335	.6437
	1.3699	1.4158	1.4104	1.4645	1.4880	1.6235	1.5893	2.5305
12	1.1802	1.1824	1.1385	1.1063	1.0517	1.0303	.8290	
	1.3520	1.3568	1.4459	1.4870	1.4730	1.5245	1.9329	
13	1.1310	1.0410	1.1085	.9992	1.0324	.8439	.5130	
	1.4051	1.5291	1.4700	1.6235	1.5211	1.8363	3.0605	
14	.9842	1.0581	1.0035	1.0324	.8290	.5130		
	1.5938	1.5162	1.6056	1.5901	1.9336	3.0651		
15	.5869	.7026	.8279	.6437	F-SUB-Q			
	2.6485	2.2500	1.9231	2.5305	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0174	* 1.3398	* 1.3098	* 1.3730	* 1.3730	* 1.3462	* 1.1599	* .6919
	* 1.6923	* 1.3028	* 1.2992	* 1.2254	* 1.2123	* 1.2307	* 1.4116	* 2.3407
9	* 1.3398	* 1.3088	* 1.4116	* 1.3205	* 1.3966	* 1.2188	* 1.2895	* .8600
	* 1.3028	* 1.3335	* 1.1999	* 1.2694	* 1.1961	* 1.3605	* 1.2971	* 1.9129
10	* 1.3098	* 1.4148	* 1.1599	* 1.3591	* 1.3302	* 1.3238	* 1.2209	* 1.0496
	* 1.2992	* 1.1982	* 1.4739	* 1.2576	* 1.2956	* 1.2848	* 1.3779	* 1.5791
11	* 1.3730	* 1.3216	* 1.3602	* 1.3259	* 1.3345	* 1.2038	* 1.2820	* .7958
	* 1.2254	* 1.2679	* 1.2561	* 1.2934	* 1.2784	* 1.4075	* 1.3399	* 2.1277
12	* 1.3730	* 1.3987	* 1.3291	* 1.3345	* 1.3045	* 1.2959	* 1.0078	*
	* 1.2123	* 1.1944	* 1.2959	* 1.2784	* 1.2845	* 1.2924	* 1.6718	*
13	* 1.3462	* 1.2199	* 1.3238	* 1.2038	* 1.2991	* 1.0496	* .6319	*
	* 1.2307	* 1.3596	* 1.2848	* 1.4081	* 1.2893	* 1.5764	* 2.6211	*
14	* 1.1599	* 1.2906	* 1.2209	* 1.2809	* 1.0067	* .6308	*	*
	* 1.4116	* 1.2971	* 1.3783	* 1.3399	* 1.6727	* 2.6244	*	*
15	* .6919	* .8600	* 1.0496	* .7958	* F-SUB-Q			
	* 2.3407	* 1.9146	* 1.5796	* 2.1289	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0774	* 1.4448	* 1.3934	* 1.4737	* 1.4705	* 1.4748	* 1.2574	* .7465
	* 1.6867	* 1.2687	* 1.2772	* 1.1943	* 1.1834	* 1.1749	* 1.3605	* 2.2714
9	* 1.4448	* 1.3880	* 1.5230	* 1.4169	* 1.5155	* 1.3216	* 1.4341	* .9500
	* 1.2687	* 1.3195	* 1.1643	* 1.2379	* 1.1527	* 1.3104	* 1.2195	* 1.8126
10	* 1.3934	* 1.5251	* 1.2402	* 1.4823	* 1.4362	* 1.4576	* 1.3559	* 1.1802
	* 1.2772	* 1.1621	* 1.4438	* 1.2057	* 1.2539	* 1.2170	* 1.2961	* 1.4676
11	* 1.4737	* 1.4180	* 1.4844	* 1.4384	* 1.4683	* 1.3238	* 1.4362	* .8900
	* 1.1943	* 1.2365	* 1.2043	* 1.2481	* 1.2143	* 1.3430	* 1.2531	* 1.9909
12	* 1.4705	* 1.5176	* 1.4351	* 1.4683	* 1.4309	* 1.4501	* 1.1096	*
	* 1.1834	* 1.1511	* 1.2550	* 1.2143	* 1.2350	* 1.2197	* 1.5999	*
13	* 1.4748	* 1.3227	* 1.4566	* 1.3238	* 1.4533	* 1.1567	* .6961	*
	* 1.1749	* 1.3096	* 1.2170	* 1.3435	* 1.2164	* 1.5125	* 2.5163	*
14	* 1.2574	* 1.4341	* 1.3559	* 1.4362	* 1.1085	* .6951	*	*
	* 1.3605	* 1.2191	* 1.2965	* 1.2532	* 1.6023	* 2.5193	*	*
15	* .7465	* .9489	* 1.1802	* .8889	* F-SUB-Q			
	* 2.2714	* 1.8141	* 1.4680	* 1.9918	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0785	* 1.4619	* 1.4030	* 1.4908	* 1.4887	* 1.5123	* 1.2820	* .7561
	* 1.7716	* 1.3049	* 1.3336	* 1.2420	* 1.2303	* 1.2057	* 1.4048	* 2.3599
9	* 1.4619	* 1.3944	* 1.5455	* 1.4341	* 1.5444	* 1.3495	* 1.4833	* .9757
	* 1.3049	* 1.3688	* 1.2060	* 1.2869	* 1.1905	* 1.3506	* 1.2384	* 1.8561
10	* 1.4030	* 1.5487	* 1.2552	* 1.5165	* 1.4619	* 1.4994	* 1.4030	* 1.2231
	* 1.3336	* 1.2037	* 1.4989	* 1.2380	* 1.2934	* 1.2352	* 1.3162	* 1.4871
11	* 1.4908	* 1.4351	* 1.5176	* 1.4694	* 1.5133	* 1.3634	* 1.4908	* .9168
	* 1.2420	* 1.2854	* 1.2370	* 1.2845	* 1.2407	* 1.3740	* 1.2613	* 2.0270
12	* 1.4887	* 1.5465	* 1.4608	* 1.5133	* 1.4673	* 1.4994	* 1.1385	
	* 1.2303	* 1.1889	* 1.2946	* 1.2407	* 1.2721	* 1.2448	* 1.6421	
13	* 1.5123	* 1.3505	* 1.4983	* 1.3623	* 1.5037	* 1.1845	* .7090	
	* 1.2057	* 1.3497	* 1.2352	* 1.3748	* 1.2412	* 1.5640	* 2.6139	
14	* 1.2820	* 1.4833	* 1.4030	* 1.4898	* 1.1374	* .7079		
	* 1.4048	* 1.2384	* 1.3162	* 1.2620	* 1.6434	* 2.6171		
15	* .7561	* .9746	* 1.2231	* .9157	F-SUB-Q			
	* 2.3599	* 1.8577	* 1.4882	* 2.0280	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1042	* 1.5144	* 1.4469	* 1.5465	* 1.5401	* 1.5808	* 1.3334	* .7818
	* 1.8132	* 1.3175	* 1.3640	* 1.2650	* 1.2577	* 1.2187	* 1.4295	* 2.4158
9	* 1.5144	* 1.4330	* 1.6033	* 1.4855	* 1.6076	* 1.4052	* 1.5626	* 1.0207
	* 1.3175	* 1.3921	* 1.2258	* 1.3132	* 1.2090	* 1.3717	* 1.2393	* 1.8742
10	* 1.4469	* 1.6076	* 1.3013	* 1.5829	* 1.5187	* 1.5819	* 1.4812	* 1.2938
	* 1.3640	* 1.2231	* 1.5209	* 1.2465	* 1.3028	* 1.2362	* 1.3137	* 1.4830
11	* 1.5465	* 1.4865	* 1.5840	* 1.5305	* 1.5883	* 1.4298	* 1.5765	* .9682
	* 1.2650	* 1.3120	* 1.2451	* 1.2963	* 1.2483	* 1.3779	* 1.2482	* 2.0097
12	* 1.5401	* 1.6097	* 1.5165	* 1.5883	* 1.5315	* 1.5787	* 1.1877	
	* 1.2577	* 1.2070	* 1.3043	* 1.2483	* 1.2925	* 1.2504	* 1.6565	
13	* 1.5808	* 1.4052	* 1.5808	* 1.4287	* 1.5829	* 1.2349	* .7390	
	* 1.2187	* 1.3708	* 1.2359	* 1.3788	* 1.2475	* 1.5973	* 2.6526	
14	* 1.3334	* 1.5637	* 1.4801	* 1.5754	* 1.1867	* .7379		
	* 1.4295	* 1.2390	* 1.3144	* 1.2482	* 1.6590	* 2.6558		
15	* .7818	* 1.0196	* 1.2938	* .9671	F-SUB-Q			
	* 2.4158	* 1.8749	* 1.4835	* 2.0115	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0988	* 1.5219	* 1.4501	* 1.5572	* 1.5508	* 1.6022	* 1.3452	* .7850
	* 1.9141	* 1.3670	* 1.4276	* 1.3231	* 1.3195	* 1.2701	* 1.4978	* 2.5441
9	* 1.5219	* 1.4341	* 1.6161	* 1.4940	* 1.6236	* 1.4201	* 1.5915	* 1.0324
	* 1.3670	* 1.4514	* 1.2794	* 1.3760	* 1.2628	* 1.4334	* 1.2804	* 1.9528
10	* 1.4501	* 1.6194	* 1.3088	* 1.6011	* 1.5337	* 1.6129	* 1.5101	* 1.3173
	* 1.4276	* 1.2762	* 1.5849	* 1.2903	* 1.3494	* 1.2757	* 1.3527	* 1.5340
11	* 1.5572	* 1.4952	* 1.6033	* 1.5476	* 1.6129	* 1.4533	* 1.6076	* .9810
	* 1.3231	* 1.3748	* 1.2888	* 1.3455	* 1.2881	* 1.4236	* 1.2811	* 2.0738
12	* 1.5508	* 1.6258	* 1.5305	* 1.6129	* 1.5497	* 1.6065	* 1.2006	
	* 1.3195	* 1.2610	* 1.3511	* 1.2881	* 1.3381	* 1.2881	* 1.7185	
13	* 1.6022	* 1.4201	* 1.6119	* 1.4512	* 1.6108	* 1.2456	* .7433	
	* 1.2701	* 1.4330	* 1.2759	* 1.4245	* 1.2843	* 1.6566	* 2.7583	
14	* 1.3452	* 1.5915	* 1.5090	* 1.6065	* 1.1995	* .7422		
	* 1.4978	* 1.2804	* 1.3530	* 1.2819	* 1.7212	* 2.7618		
15	* .7850	* 1.0314	* 1.3163	* .9810	* F-SUB-Q			
	* 2.5441	* 1.9536	* 1.5340	* 2.0757	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0839	* 1.5155	* 1.4426	* 1.5551	* 1.5476	* 1.6065	* 1.3430	* .7786
	* 2.0184	* 1.4373	* 1.5106	* 1.3965	* 1.3969	* 1.3371	* 1.5848	* 2.7042
9	* 1.5155	* 1.4234	* 1.6129	* 1.4919	* 1.6247	* 1.4201	* 1.6011	* 1.0314
	* 1.4373	* 1.5316	* 1.3483	* 1.4551	* 1.3314	* 1.5129	* 1.3383	* 2.0574
10	* 1.4426	* 1.6161	* 1.3045	* 1.6044	* 1.5337	* 1.6258	* 1.5219	* 1.3216
	* 1.5106	* 1.3451	* 1.6714	* 1.3537	* 1.4176	* 1.3237	* 1.4110	* 1.6062
11	* 1.5551	* 1.4930	* 1.6054	* 1.5487	* 1.6194	* 1.4619	* 1.6194	* .9810
	* 1.3965	* 1.4532	* 1.3523	* 1.4080	* 1.3460	* 1.4783	* 1.3293	* 2.1760
12	* 1.5476	* 1.6268	* 1.5305	* 1.6194	* 1.5530	* 1.6151	* 1.2006	
	* 1.3969	* 1.3294	* 1.4195	* 1.3460	* 1.4044	* 1.3468	* 1.8017	
13	* 1.6065	* 1.4212	* 1.6247	* 1.4608	* 1.6194	* 1.2434	* .7390	
	* 1.3371	* 1.5118	* 1.3245	* 1.4793	* 1.3430	* 1.7469	* 2.9183	
14	* 1.3430	* 1.6011	* 1.5208	* 1.6194	* 1.1995	* .7379		
	* 1.5848	* 1.3383	* 1.4119	* 1.3300	* 1.8037	* 2.9208		
15	* .7786	* 1.0314	* 1.3205	* .9800	* F-SUB-Q			
	* 2.7042	* 2.0584	* 1.6073	* 2.1775	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0903	* 1.5390	* 1.4619	* 1.5851	* 1.5733	* 1.6429	* 1.3645	* .7883
	* 2.1145	* 1.4975	* 1.5808	* 1.4559	* 1.4613	* 1.3897	* 1.6562	* 2.8356
9	* 1.5390	* 1.4384	* 1.6429	* 1.5176	* 1.6579	* 1.4480	* 1.6440	* 1.0517
	* 1.4975	* 1.6036	* 1.4046	* 1.5205	* 1.3866	* 1.5787	* 1.3829	* 2.1381
10	* 1.4619	* 1.6461	* 1.3238	* 1.6408	* 1.5626	* 1.6708	* 1.5647	* 1.3559
	* 1.5808	* 1.4011	* 1.7441	* 1.4028	* 1.4739	* 1.3630	* 1.4545	* 1.6569
11	* 1.5851	* 1.5187	* 1.6418	* 1.5797	* 1.6590	* 1.4973	* 1.6665	* 1.0046
	* 1.4559	* 1.5184	* 1.4010	* 1.4577	* 1.3843	* 1.5247	* 1.3669	* 2.2470
12	* 1.5733	* 1.6600	* 1.5594	* 1.6590	* 1.5872	* 1.6579	* 1.2231	*
	* 1.4613	* 1.3849	* 1.4768	* 1.3823	* 1.4475	* 1.3814	* 1.8632	*
13	* 1.6429	* 1.4491	* 1.6697	* 1.4962	* 1.6622	* 1.2649	* .7518	*
	* 1.3897	* 1.5776	* 1.3638	* 1.5268	* 1.3777	* 1.8058	* 3.0072	*
14	* 1.3645	* 1.6440	* 1.5637	* 1.6654	* 1.2209	* .7508	*	*
	* 1.6562	* 1.3820	* 1.4554	* 1.3678	* 1.8663	* 3.0086	*	*
15	* .7883	* 1.0507	* 1.3548	* 1.0035	F-SUB-Q			
	* 2.8356	* 2.1392	* 1.6582	* 2.2485	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0624	* 1.5101	* 1.4330	* 1.5594	* 1.5465	* 1.6215	* 1.3430	* .7722
	* 2.1173	* 1.4935	* 1.5721	* 1.4476	* 1.4581	* 1.3919	* 1.6758	* 2.9008
9	* 1.5101	* 1.4073	* 1.6151	* 1.4919	* 1.6343	* 1.4266	* 1.6258	* 1.0357
	* 1.4935	* 1.6006	* 1.3963	* 1.5119	* 1.3815	* 1.5811	* 1.3893	* 2.1713
10	* 1.4330	* 1.6194	* 1.2991	* 1.6194	* 1.5390	* 1.6558	* 1.5497	* 1.3377
	* 1.5721	* 1.3928	* 1.7364	* 1.4008	* 1.4736	* 1.3695	* 1.4609	* 1.6835
11	* 1.5594	* 1.4940	* 1.6204	* 1.5572	* 1.6397	* 1.4823	* 1.6504	* .9864
	* 1.4476	* 1.5098	* 1.3999	* 1.4590	* 1.3876	* 1.5308	* 1.3738	* 2.2835
12	* 1.5465	* 1.6365	* 1.5358	* 1.6397	* 1.5669	* 1.6408	* 1.2059	*
	* 1.4581	* 1.3798	* 1.4756	* 1.3876	* 1.4533	* 1.3885	* 1.8812	*
13	* 1.6215	* 1.4276	* 1.6547	* 1.4801	* 1.6451	* 1.2456	* .7347	*
	* 1.3919	* 1.5800	* 1.3704	* 1.5318	* 1.3850	* 1.8268	* 3.0786	*
14	* 1.3430	* 1.6268	* 1.5487	* 1.6493	* 1.2049	* .7347	*	*
	* 1.6758	* 1.3893	* 1.4619	* 1.3746	* 1.8828	* 3.0829	*	*
15	* .7722	* 1.0346	* 1.3366	* .9853	F-SUB-Q			
	* 2.9008	* 2.1735	* 1.6848	* 2.2858	M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0699	* 1.5326	* 1.4512	* 1.5862	* 1.5679	* 1.6547	* 1.3634	* .7808
	* 2.0467	* 1.4335	* 1.5129	* 1.3858	* 1.4017	* 1.3300	* 1.6078	* 2.7710
9	* 1.5326	* 1.4223	* 1.6418	* 1.5144	* 1.6643	* 1.4501	* 1.6554	* 1.0539
	* 1.4335	* 1.5436	* 1.3380	* 1.4514	* 1.3220	* 1.5161	* 1.3212	* 2.0720
10	* 1.4512	* 1.6461	* 1.3184	* 1.6515	* 1.5637	* 1.6975	* 1.5894	* 1.3720
	* 1.5129	* 1.3348	* 1.6670	* 1.3364	* 1.4106	* 1.2987	* 1.3858	* 1.5984
11	* 1.5862	* 1.5155	* 1.6536	* 1.5840	* 1.6761	* 1.5144	* 1.6943	* 1.0100
	* 1.3858	* 1.4495	* 1.3348	* 1.3937	* 1.3189	* 1.4561	* 1.3018	* 2.1692
12	* 1.5679	* 1.6665	* 1.5594	* 1.6772	* 1.5969	* 1.6793	* 1.2263	*
	* 1.4017	* 1.3204	* 1.4133	* 1.3173	* 1.3841	* 1.3157	* 1.7956	*
13	* 1.6547	* 1.4512	* 1.6965	* 1.5133	* 1.6847	* 1.2649	* .7476	*
	* 1.3300	* 1.5150	* 1.2995	* 1.4571	* 1.3118	* 1.7432	* 2.9355	*
14	* 1.3634	* 1.6654	* 1.5883	* 1.6933	* 1.2252	* .7465	*	*
	* 1.6078	* 1.3212	* 1.3867	* 1.3025	* 1.7985	* 2.9394	*	*
15	* .7808	* 1.0528	* 1.3709	* 1.0100	* F-SUB-Q			
	* 2.7710	* 2.0740	* 1.5996	* 2.1713	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0571	* 1.5262	* 1.4426	* 1.5808	* 1.5615	* 1.6526	* 1.3570	* .7733
	* 1.9747	* 1.3683	* 1.4461	* 1.3226	* 1.3386	* 1.2651	* 1.5282	* 2.6496
9	* 1.5262	* 1.4126	* 1.6376	* 1.5069	* 1.6611	* 1.4459	* 1.6675	* 1.0496
	* 1.3683	* 1.4769	* 1.2767	* 1.3871	* 1.2601	* 1.4442	* 1.2557	* 1.9684
10	* 1.4426	* 1.6418	* 1.3109	* 1.6504	* 1.5583	* 1.7018	* 1.5926	* 1.3720
	* 1.4461	* 1.2731	* 1.5950	* 1.2795	* 1.3539	* 1.2393	* 1.3192	* 1.5115
11	* 1.5808	* 1.5090	* 1.6526	* 1.5797	* 1.6772	* 1.5144	* 1.6975	* 1.0067
	* 1.3226	* 1.3855	* 1.2781	* 1.3475	* 1.2697	* 1.3954	* 1.2427	* 2.0617
12	* 1.5615	* 1.6633	* 1.5551	* 1.6804	* 1.5947	* 1.6825	* 1.2220	*
	* 1.3386	* 1.2586	* 1.3564	* 1.2711	* 1.3494	* 1.2735	* 1.7288	*
13	* 1.6526	* 1.4469	* 1.7007	* 1.5133	* 1.6868	* 1.2606	* .7422	*
	* 1.2651	* 1.4433	* 1.2406	* 1.3971	* 1.2699	* 1.6938	* 2.8231	*
14	* 1.3570	* 1.6675	* 1.5915	* 1.6965	* 1.2209	* .7411	*	*
	* 1.5282	* 1.2557	* 1.3199	* 1.2434	* 1.7303	* 2.8267	*	*
15	* .7733	* 1.0485	* 1.3709	* 1.0057	* F-SUB-Q			
	* 2.6496	* 1.9702	* 1.5125	* 2.0634	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 3 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0314	* 1.4962	* 1.4137	* 1.5519	* 1.5315	* 1.6215	* 1.3280	* .7518
	* 1.9117	* 1.3223	* 1.3983	* 1.2774	* 1.2938	* 1.2237	* 1.4825	* 2.5856
9	* 1.4962	* 1.3837	* 1.6065	* 1.4780	* 1.6301	* 1.4180	* 1.6354	* 1.0249
	* 1.3223	* 1.4280	* 1.2333	* 1.3408	* 1.2177	* 1.3982	* 1.7136	* 1.9137
10	* 1.4137	* 1.6108	* 1.2831	* 1.6204	* 1.5294	* 1.6708	* 1.5626	* 1.3409
	* 1.3983	* 1.2299	* 1.5442	* 1.2357	* 1.3072	* 1.1945	* 1.2727	* 1.4667
11	* 1.5519	* 1.4801	* 1.6226	* 1.5508	* 1.6483	* 1.4865	* 1.6665	* .9789
	* 1.2774	* 1.3391	* 1.2343	* 1.2955	* 1.2232	* 1.3443	* 1.1983	* 2.0106
12	* 1.5315	* 1.6322	* 1.5262	* 1.6504	* 1.5669	* 1.6515	* 1.1974	
	* 1.2938	* 1.2157	* 1.3095	* 1.2224	* 1.2892	* 1.2211	* 1.6668	
13	* 1.6215	* 1.4191	* 1.6697	* 1.4855	* 1.6568	* 1.2338	* .7219	
	* 1.2237	* 1.3964	* 1.1957	* 1.3452	* 1.2177	* 1.6284	* 2.7437	
14	* 1.3280	* 1.6354	* 1.5615	* 1.6654	* 1.1952	* .7208		
	* 1.4825	* 1.2136	* 1.2735	* 1.1989	* 1.6681	* 2.7471		
15	* .7518	* 1.0239	* 1.3398	* .9778	* F-SUB-Q			
	* 2.5856	* 1.9153	* 1.4677	* 2.0122	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0367	* 1.5144	* 1.4266	* 1.5701	* 1.5444	* 1.6354	* 1.3334	* .7508
	* 1.8043	* 1.2430	* 1.3181	* 1.2000	* 1.2211	* 1.1548	* 1.4076	* 2.4727
9	* 1.5144	* 1.3977	* 1.6247	* 1.4908	* 1.6472	* 1.4244	* 1.6483	* 1.0249
	* 1.2430	* 1.3449	* 1.1600	* 1.2643	* 1.1465	* 1.3235	* 1.1459	* 1.8220
10	* 1.4266	* 1.6290	* 1.2938	* 1.6365	* 1.5401	* 1.6836	* 1.5744	* 1.3484
	* 1.3181	* 1.1570	* 1.4562	* 1.1624	* 1.2326	* 1.1266	* 1.2002	* 1.3894
11	* 1.5701	* 1.4930	* 1.6386	* 1.5637	* 1.6633	* 1.4962	* 1.6804	* .9821
	* 1.2000	* 1.2629	* 1.1612	* 1.2187	* 1.1479	* 1.2682	* 1.1286	* 1.9050
12	* 1.5444	* 1.6493	* 1.5369	* 1.6654	* 1.5808	* 1.6675	* 1.2006	
	* 1.2211	* 1.1447	* 1.2354	* 1.1465	* 1.2077	* 1.1447	* 1.5763	
13	* 1.6354	* 1.4266	* 1.6825	* 1.4940	* 1.6729	* 1.2391	* .7240	
	* 1.1548	* 1.3219	* 1.1272	* 1.2689	* 1.1411	* 1.5343	* 2.5942	
14	* 1.3334	* 1.6483	* 1.5744	* 1.6793	* 1.1995	* .7240		
	* 1.4076	* 1.1459	* 1.2008	* 1.1292	* 1.5786	* 2.5972		
15	* .7508	* 1.0239	* 1.3473	* .9821	* F-SUB-Q			
	* 2.4727	* 1.8235	* 1.3903	* 1.9067	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0067 *	* 1.4726 *	* 1.3891 *	* 1.5262 *	* 1.4994 *	* 1.5765 *	* 1.2841 *	.7165 *
	* 1.7768 *	* 1.2236 *	* 1.2952 *	* 1.1804 *	* 1.2027 *	* 1.1470 *	* 1.3992 *	2.4833 *
9	* 1.4726 *	* 1.3645 *	* 1.5765 *	* 1.4469 *	* 1.5947 *	* 1.3741 *	* 1.5776 *	.9768 *
	* 1.2236 *	* 1.3175 *	* 1.1435 *	* 1.2460 *	* 1.1329 *	* 1.3139 *	* 1.1451 *	1.8318 *
10	* 1.3891 *	* 1.5808 *	* 1.2541 *	* 1.5797 *	* 1.4919 *	* 1.6108 *	* 1.5058 *	1.2798 *
	* 1.2952 *	* 1.1405 *	* 1.4380 *	* 1.1505 *	* 1.2159 *	* 1.1254 *	* 1.1987 *	1.4005 *
11	* 1.5262 *	* 1.4491 *	* 1.5819 *	* 1.5123 *	* 1.6033 *	* 1.4351 *	* 1.6054 *	.9275 *
	* 1.1804 *	* 1.2446 *	* 1.1490 *	* 1.2017 *	* 1.1366 *	* 1.2622 *	* 1.1282 *	1.9323 *
12	* 1.4994 *	* 1.5979 *	* 1.4887 *	* 1.6033 *	* 1.5272 *	* 1.6001 *	* 1.1524 *	
	* 1.2027 *	* 1.1312 *	* 1.2185 *	* 1.1366 *	* 1.1910 *	* 1.1372 *	* 1.5681 *	
13	* 1.5765 *	* 1.3752 *	* 1.6097 *	* 1.4330 *	* 1.6054 *	* 1.1910 *	.6887 *	
	* 1.1470 *	* 1.3123 *	* 1.1259 *	* 1.2633 *	* 1.1337 *	* 1.5212 *	* 2.6059 *	
14	* 1.2841 *	* 1.5787 *	* 1.5058 *	* 1.6044 *	* 1.1513 *	.6887 *		
	* 1.3992 *	* 1.1448 *	* 1.1994 *	* 1.1288 *	* 1.5697 *	* 2.6090 *		
15	* .7165 *	* .9757 *	* 1.2788 *	.9264 *	F-SUB-Q			
	* 2.4833 *	* 1.8333 *	* 1.4014 *	* 1.9340 *	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9950 *	* 1.4448 *	* 1.3645 *	* 1.4951 *	* 1.4673 *	* 1.5219 *	* 1.2402 *	.6833 *
	* 1.7370 *	* 1.2027 *	* 1.2718 *	* 1.1621 *	* 1.1867 *	* 1.1461 *	* 1.3997 *	2.5163 *
9	* 1.4448 *	* 1.3537 *	* 1.5401 *	* 1.4137 *	* 1.5487 *	* 1.3291 *	* 1.5026 *	.9221 *
	* 1.2027 *	* 1.2824 *	* 1.1298 *	* 1.2305 *	* 1.1252 *	* 1.3096 *	* 1.1592 *	1.8725 *
10	* 1.3645 *	* 1.5444 *	* 1.2327 *	* 1.5272 *	* 1.4533 *	* 1.5262 *	* 1.4319 *	1.1984 *
	* 1.2718 *	* 1.1267 *	* 1.4114 *	* 1.1452 *	* 1.2040 *	* 1.1440 *	* 1.2158 *	1.4424 *
11	* 1.4951 *	* 1.4159 *	* 1.5294 *	* 1.4683 *	* 1.5401 *	* 1.3698 *	* 1.5208 *	.8697 *
	* 1.1621 *	* 1.2284 *	* 1.1432 *	* 1.1930 *	* 1.1393 *	* 1.2742 *	* 1.1475 *	1.9883 *
12	* 1.4673 *	* 1.5508 *	* 1.4501 *	* 1.5401 *	* 1.4769 *	* 1.5251 *	* 1.0988 *	
	* 1.1867 *	* 1.1235 *	* 1.2059 *	* 1.1390 *	* 1.1862 *	* 1.1487 *	* 1.5847 *	
13	* 1.5219 *	* 1.3313 *	* 1.5262 *	* 1.3687 *	* 1.5294 *	* 1.1385 *	.6533 *	
	* 1.1461 *	* 1.3080 *	* 1.1445 *	* 1.2753 *	* 1.1451 *	* 1.5327 *	* 2.6486 *	
14	* 1.2402 *	* 1.5037 *	* 1.4309 *	* 1.5197 *	* 1.0978 *	.6533 *		
	* 1.3997 *	* 1.1589 *	* 1.2165 *	* 1.1481 *	* 1.5858 *	* 2.6518 *		
15	* .6833 *	* .9221 *	* 1.1974 *	.8686 *	F-SUB-Q			
	* 2.5163 *	* 1.8741 *	* 1.4433 *	* 1.9901 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9221 *	* 1.2916 *	* 1.2263 *	* 1.3259 *	* 1.2981 *	* 1.3259 *	* 1.0881 *	* .5901 *
	* 1.8260 *	* 1.3088 *	* 1.3774 *	* 1.2753 *	* 1.3026 *	* 1.2792 *	* 1.5496 *	* 2.8428 *
9	* 1.2916 *	* 1.2402 *	* 1.3655 *	* 1.2552 *	* 1.3505 *	* 1.1781 *	* 1.2756 *	* .7711 *
	* 1.3088 *	* 1.3609 *	* 1.2389 *	* 1.3481 *	* 1.2550 *	* 1.4376 *	* 1.3270 *	* 2.1812 *
10	* 1.2263 *	* 1.3698 *	* 1.1331 *	* 1.3398 *	* 1.2873 *	* 1.3173 *	* 1.2134 *	* .9671 *
	* 1.3774 *	* 1.2355 *	* 1.4918 *	* 1.2672 *	* 1.3165 *	* 1.2892 *	* 1.3907 *	* 1.7404 *
11	* 1.3259 *	* 1.2574 *	* 1.3430 *	* 1.2863 *	* 1.3205 *	* 1.1802 *	* 1.2723 *	* .7176 *
	* 1.2753 *	* 1.3457 *	* 1.2643 *	* 1.3207 *	* 1.2892 *	* 1.4380 *	* 1.3326 *	* 2.3463 *
12	* 1.2981 *	* 1.3537 *	* 1.2863 *	* 1.3216 *	* 1.2798 *	* 1.2841 *	* .9425 *	
	* 1.3026 *	* 1.2529 *	* 1.3176 *	* 1.2877 *	* 1.3278 *	* 1.3238 *	* 1.7961 *	
13	* 1.3259 *	* 1.1792 *	* 1.3173 *	* 1.1792 *	* 1.2873 *	* .9703 *	* .5473 *	
	* 1.2792 *	* 1.4358 *	* 1.2888 *	* 1.4390 *	* 1.3206 *	* 1.7494 *	* 3.0794 *	
14	* 1.0881 *	* 1.2766 *	* 1.2134 *	* 1.2713 *	* .9414 *	* .5473 *		
	* 1.5496 *	* 1.3262 *	* 1.3911 *	* 1.3329 *	* 1.7976 *	* 3.0837 *		
15	* .5901 *	* .7700 *	* .5660 *	* .7165 *	F-SUB-Q			
	* 2.8428 *	* 2.1824 *	* 1.7417 *	* 2.3488 *	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6437 *	* .8836 *	* .7775 *	* .8407 *	* .5312 *	* .8825 *	* .4423 *	* .3931 *
	* 2.5624 *	* 1.8683 *	* 2.1315 *	* 1.9697 *	* 3.1084 *	* 1.8754 *	* 3.7237 *	* 4.1841 *
9	* .8836 *	* .5312 *	* .9403 *	* .7979 *	* .9136 *	* .7551 *	* .8032 *	* .4637 *
	* 1.8683 *	* 3.1021 *	* 1.7623 *	* 2.0785 *	* 1.8148 *	* 2.1945 *	* 2.0581 *	* 3.5478 *
10	* .7775 *	* .9446 *	* .7850 *	* .9275 *	* .5334 *	* .8782 *	* .4584 *	* .5601 *
	* 2.1315 *	* 1.7553 *	* 2.1132 *	* 1.7892 *	* 3.1016 *	* 1.8882 *	* 3.5998 *	* 2.9389 *
11	* .8407 *	* .8011 *	* .9361 *	* .5280 *	* .8750 *	* .7368 *	* .7818 *	* .4209 *
	* 1.9697 *	* 2.0699 *	* 1.7742 *	* 3.1323 *	* 1.8963 *	* 2.2523 *	* 2.1190 *	* 3.9141 *
12	* .5312 *	* .9157 *	* .5344 *	* .8771 *	* .4980 *	* .7904 *	* .3588 *	
	* 3.1084 *	* 1.8119 *	* 3.0972 *	* 1.8914 *	* 3.3249 *	* 2.1029 *	* 4.6053 *	
13	* .8825 *	* .7561 *	* .8782 *	* .7368 *	* .7925 *	* .3674 *	* .3556 *	
	* 1.8754 *	* 2.1913 *	* 1.8873 *	* 2.2536 *	* 2.0969 *	* 4.4981 *	* 4.6343 *	
14	* .4423 *	* .8043 *	* .4584 *	* .7818 *	* .3588 *	* .3556 *		
	* 3.7237 *	* 2.0570 *	* 3.5972 *	* 2.1190 *	* 4.6053 *	* 4.6385 *		
15	* .3931 *	* .4637 *	* .5601 *	* .4198 *	F-SUB-Q			
	* 4.1841 *	* 3.5510 *	* 2.9389 *	* 3.9211 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6383 *	* .8654 *	* .7765 *	* .8097 *	* .5441 *	* .8407 *	* .4552 *	* .4338 *
	* 2.2868 *	* 1.8531 *	* 2.0586 *	* 1.9515 *	* 2.8641 *	* 1.8352 *	* 3.3566 *	* 3.4891 *
9	* .8654 *	* .5580 *	* .9061 *	* .7861 *	* .8707 *	* .7336 *	* .7518 *	* .4755 *
	* 1.8531 *	* 2.9200 *	* 1.7597 *	* 2.0181 *	* 1.7926 *	* 2.1181 *	* 2.0796 *	* 3.2338 *
10	* .7765 *	* .9071 *	* .7808 *	* .8879 *	* .5409 *	* .8215 *	* .4487 *	* .5569 *
	* 2.0586 *	* 1.7551 *	* 2.0499 *	* 1.7973 *	* 2.9651 *	* 1.9399 *	* 3.5011 *	* 2.7871 *
11	* .8097 *	* .7872 *	* .8932 *	* .5366 *	* .8311 *	* .6844 *	* .7144 *	* .4284 *
	* 1.9515 *	* 2.0141 *	* 1.7891 *	* 3.0405 *	* 1.9368 *	* 2.3182 *	* 2.2653 *	* 3.6933 *
12	* .5441 *	* .8718 *	* .5409 *	* .8332 *	* .4198 *	* .6758 *	* .3459 *	
	* 2.8641 *	* 1.7910 *	* 2.9608 *	* 1.9331 *	* 3.2362 *	* 2.1484 *	* 4.5238 *	
13	* .8407 *	* .7336 *	* .8215 *	* .6844 *	* .6769 *	* .3352 *	* .5706 *	
	* 1.8352 *	* 2.1159 *	* 1.9396 *	* 2.3182 *	* 2.1459 *	* 4.2548 *	* 4.1129 *	
14	* .4552 *	* .7518 *	* .4487 *	* .7144 *	* .3459 *	* .3706 *		
	* 3.3566 *	* 2.0792 *	* 3.5011 *	* 2.2653 *	* 4.5238 *	* 4.1138 *		
15	* .4338 *	* .4755 *	* .5569 *	* .4284 *	F-SUB-Q			
	* 3.4891 *	* 3.2338 *	* 2.7871 *	* 3.6945 *	M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9232 *	* 1.1963 *	* 1.1395 *	* 1.1749 *	* 1.1824 *	* 1.1749 *	* 1.0132 *	* .6094 *
	* 1.7610 *	* 1.4167 *	* 1.4547 *	* 1.3989 *	* 1.3703 *	* 1.3732 *	* 1.5715 *	* 2.5885 *
9	* 1.1963 *	* 1.1770 *	* 1.2316 *	* 1.1428 *	* 1.2038 *	* 1.0656 *	* 1.0967 *	* .7186 *
	* 1.4167 *	* 1.4398 *	* 1.3419 *	* 1.4359 *	* 1.3524 *	* 1.5168 *	* 1.4805 *	* 2.2307 *
10	* 1.1395 *	* 1.2327 *	* 1.0592 *	* 1.1974 *	* 1.1663 *	* 1.1567 *	* 1.0303 *	* .8579 *
	* 1.4547 *	* 1.3401 *	* 1.5694 *	* 1.3864 *	* 1.4317 *	* 1.4287 *	* 1.5863 *	* 1.8816 *
11	* 1.1749 *	* 1.1449 *	* 1.2059 *	* 1.1611 *	* 1.1599 *	* 1.0282 *	* 1.0667 *	* .6555 *
	* 1.3989 *	* 1.4339 *	* 1.3767 *	* 1.4498 *	* 1.4466 *	* 1.6125 *	* 1.5727 *	* 2.5148 *
12	* 1.1824 *	* 1.2049 *	* 1.1663 *	* 1.1610 *	* 1.0806 *	* 1.0731 *	* .8407 *	
	* 1.3703 *	* 1.3513 *	* 1.4317 *	* 1.4455 *	* 1.4635 *	* 1.4948 *	* 1.9490 *	
13	* 1.1749 *	* 1.0667 *	* 1.1578 *	* 1.0271 *	* 1.0753 *	* .8579 *	* .5334 *	
	* 1.3732 *	* 1.5157 *	* 1.4279 *	* 1.6137 *	* 1.4925 *	* 1.8461 *	* 3.0110 *	
14	* 1.0132 *	* 1.0967 *	* 1.0303 *	* 1.0667 *	* .8407 *	* .5334 *		
	* 1.5715 *	* 1.4795 *	* 1.5863 *	* 1.5737 *	* 1.9490 *	* 3.0149 *		
15	* .6094 *	* .7186 *	* .8579 *	* .6555 *	F-SUB-Q			
	* 2.5885 *	* 2.2312 *	* 1.8833 *	* 2.5154 *	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0667	* 1.3944	* 1.3002	* 1.3516	* 1.3591	* 1.3880	* 1.1760	* .7058
	* 1.6419	* 1.2709	* 1.3304	* 1.2648	* 1.2426	* 1.2105	* 1.4111	* 2.3241
9	* 1.3944	* 1.3377	* 1.4276	* 1.3098	* 1.4116	* 1.2359	* 1.3163	* .8557
	* 1.2709	* 1.3245	* 1.2057	* 1.2988	* 1.2001	* 1.3599	* 1.2882	* 1.9467
10	* 1.3002	* 1.4298	* 1.1963	* 1.4052	* 1.3505	* 1.3720	* 1.2274	* 1.0571
	* 1.3304	* 1.2034	* 1.4510	* 1.2331	* 1.2929	* 1.2566	* 1.3900	* 1.5871
11	* 1.3516	* 1.3109	* 1.4062	* 1.3516	* 1.3891	* 1.2177	* 1.2970	* .7883
	* 1.2648	* 1.2978	* 1.2317	* 1.2941	* 1.2585	* 1.4279	* 1.3481	* 2.1766
12	* 1.3591	* 1.4126	* 1.3505	* 1.3891	* 1.3195	* 1.3280	* .9939	*
	* 1.2426	* 1.1993	* 1.2930	* 1.2585	* 1.2969	* 1.2864	* 1.7288	*
13	* 1.3880	* 1.2359	* 1.3720	* 1.2167	* 1.3302	* 1.0367	* .6426	*
	* 1.2105	* 1.3590	* 1.2566	* 1.4279	* 1.2848	* 1.6276	* 2.6311	*
14	* 1.1760	* 1.3173	* 1.2274	* 1.2959	* .9928	* .6415	*	*
	* 1.4111	* 1.2875	* 1.3900	* 1.3489	* 1.7289	* 2.6344	*	*
15	* .7058	* .8557	* 1.0571	* .7872	* F-SUB-Q			
	* 2.3241	* 1.9485	* 1.5873	* 2.1766	* M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1267	* 1.4983	* 1.3741	* 1.4384	* 1.4405	* 1.5069	* 1.2563	* .7497
	* 1.6340	* 1.2365	* 1.3154	* 1.2421	* 1.2196	* 1.1640	* 1.3764	* 2.2833
9	* 1.4983	* 1.4126	* 1.5315	* 1.3934	* 1.5208	* 1.3248	* 1.4426	* .9253
	* 1.2365	* 1.3110	* 1.1744	* 1.2758	* 1.1644	* 1.3225	* 1.2264	* 1.8802
10	* 1.3741	* 1.5337	* 1.2713	* 1.5219	* 1.4437	* 1.4940	* 1.3366	* 1.1631
	* 1.3154	* 1.1724	* 1.4267	* 1.1889	* 1.2617	* 1.2038	* 1.3299	* 1.5051
11	* 1.4384	* 1.3944	* 1.5230	* 1.4512	* 1.5144	* 1.3184	* 1.4276	* .8600
	* 1.2421	* 1.2742	* 1.1875	* 1.2586	* 1.2050	* 1.3798	* 1.2785	* 2.0812
12	* 1.4405	* 1.5230	* 1.4426	* 1.5144	* 1.4244	* 1.4619	* 1.0699	*
	* 1.2196	* 1.1632	* 1.2624	* 1.2050	* 1.2611	* 1.2286	* 1.6854	*
13	* 1.5069	* 1.3259	* 1.4940	* 1.3173	* 1.4651	* 1.1192	* .6940	*
	* 1.1640	* 1.3216	* 1.2043	* 1.3807	* 1.2265	* 1.5893	* 2.5667	*
14	* 1.2563	* 1.4426	* 1.3366	* 1.4276	* 1.0689	* .6940	*	*
	* 1.3764	* 1.2262	* 1.3301	* 1.2789	* 1.6867	* 2.5667	*	*
15	* .7497	* .9253	* 1.1631	* .8600	* F-SUB-Q			
	* 2.2833	* 1.8805	* 1.5053	* 2.0816	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1256	* 1.5112	* 1.3762	* 1.4448	* 1.4491	* 1.5305	* 1.2681	* .7518
	* 1.7109	* 1.2729	* 1.3782	* 1.2972	* 1.2704	* 1.2028	* 1.4329	* 2.3958
9	* 1.5112	* 1.4148	* 1.5455	* 1.4009	* 1.5444	* 1.3409	* 1.4726	* .9371
	* 1.2729	* 1.3599	* 1.2214	* 1.3322	* 1.2049	* 1.3726	* 1.2589	* 1.9484
10	* 1.3762	* 1.5476	* 1.2809	* 1.5444	* 1.4576	* 1.5219	* 1.3645	* 1.1867
	* 1.3782	* 1.2192	* 1.4857	* 1.2276	* 1.3078	* 1.2386	* 1.3662	* 1.5466
11	* 1.4448	* 1.4019	* 1.5465	* 1.4683	* 1.5412	* 1.3398	* 1.4598	* .8718
	* 1.2972	* 1.3306	* 1.2262	* 1.3007	* 1.2379	* 1.4201	* 1.2997	* 2.1493
12	* 1.4491	* 1.5455	* 1.4566	* 1.5422	* 1.4448	* 1.4919	* 1.0806	
	* 1.2704	* 1.2049	* 1.3086	* 1.2379	* 1.3073	* 1.2648	* 1.7482	
13	* 1.5305	* 1.3409	* 1.5219	* 1.3388	* 1.4951	* 1.1299	* .6972	
	* 1.2028	* 1.3717	* 1.2386	* 1.4211	* 1.2625	* 1.6600	* 2.6921	
14	* 1.2681	* 1.4737	* 1.3645	* 1.4598	* 1.0796	* .6961		
	* 1.4329	* 1.2589	* 1.3662	* 1.3003	* 1.7504	* 2.6921		
15	* .7518	* .9361	* 1.1856	* .8718	F-SUB-Q			
	* 2.3958	* 1.9502	* 1.5466	* 2.1493	M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1503	* 1.5604	* 1.4116	* 1.4894	* 1.4930	* 1.5894	* 1.3055	* .7700
	* 1.7468	* 1.2823	* 1.4114	* 1.3264	* 1.3011	* 1.2217	* 1.4689	* 2.4704
9	* 1.5604	* 1.4501	* 1.5958	* 1.4416	* 1.6022	* 1.3837	* 1.5358	* .9671
	* 1.2823	* 1.3810	* 1.2436	* 1.3639	* 1.2237	* 1.4015	* 1.2689	* 1.9885
10	* 1.4116	* 1.5990	* 1.3205	* 1.6033	* 1.5026	* 1.5829	* 1.4212	* 1.2381
	* 1.4114	* 1.2414	* 1.5103	* 1.2398	* 1.3244	* 1.2483	* 1.3774	* 1.5582
11	* 1.4898	* 1.4426	* 1.6044	* 1.5144	* 1.6022	* 1.3859	* 1.5251	* .9071
	* 1.3264	* 1.3630	* 1.2384	* 1.3159	* 1.2436	* 1.4308	* 1.2940	* 2.1556
12	* 1.4930	* 1.6033	* 1.5015	* 1.6022	* 1.4919	* 1.5551	* 1.1117	
	* 1.3011	* 1.2237	* 1.3260	* 1.2429	* 1.3327	* 1.2767	* 1.7781	
13	* 1.5894	* 1.3848	* 1.5819	* 1.3848	* 1.5572	* 1.1620	* .7176	
	* 1.2217	* 1.4006	* 1.2483	* 1.4318	* 1.2742	* 1.7062	* 2.7460	
14	* 1.3055	* 1.5369	* 1.4212	* 1.5251	* 1.1106	* .7176		
	* 1.4689	* 1.2689	* 1.3776	* 1.2947	* 1.7795	* 2.7460		
15	* .7700	* .9660	* 1.2370	* .9071	F-SUB-Q			
	* 2.4704	* 1.9889	* 1.5593	* 2.1556	M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1438	* 1.5658	* 1.4105	* 1.4919	* 1.4973	* 1.6011	* 1.3088	* .7668 *
	* 1.8373	* 1.3363	* 1.4754	* 1.3885	* 1.3658	* 1.2766	* 1.5451	* 2.6113 *
9	* 1.5658	* 1.4480	* 1.6022	* 1.4437	* 1.6119	* 1.3902	* 1.5519	* .9693 *
	* 1.3363	* 1.4454	* 1.2960	* 1.4316	* 1.2783	* 1.4691	* 1.3166	* 2.0819 *
10	* 1.4105	* 1.6054	* 1.3227	* 1.6161	* 1.5080	* 1.5958	* 1.4351	* 1.2466 *
	* 1.4754	* 1.2937	* 1.5725	* 1.2851	* 1.3753	* 1.2919	* 1.4242	* 1.6226 *
11	* 1.4919	* 1.4448	* 1.6172	* 1.5197	* 1.6140	* 1.3944	* 1.5412	* .9104 *
	* 1.3885	* 1.4307	* 1.2836	* 1.3688	* 1.2890	* 1.4855	* 1.3382	* 2.2367 *
12	* 1.4973	* 1.6140	* 1.5058	* 1.6151	* 1.4994	* 1.5679	* 1.1138	*
	* 1.3658	* 1.2781	* 1.3770	* 1.2890	* 1.3822	* 1.3185	* 1.8504	*
13	* 1.6011	* 1.3912	* 1.5947	* 1.3934	* 1.5712	* 1.1620	* .7165	*
	* 1.2766	* 1.4681	* 1.2919	* 1.4865	* 1.3159	* 1.7737	* 2.8621	*
14	* 1.3088	* 1.5519	* 1.4351	* 1.5401	* 1.1128	* .7154	*	*
	* 1.5451	* 1.3166	* 1.4251	* 1.3390	* 1.8519	* 2.8647	*	*
15	* .7668	* .9693	* 1.2466	* .9104	* F-SUB-Q			
	* 2.6113	* 2.0838	* 1.6229	* 2.2368	* M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1288	* 1.5572	* 1.3998	* 1.4855	* 1.4898	* 1.5979	* 1.3002	* .7572 *
	* 1.9445	* 1.4021	* 1.5589	* 1.4645	* 1.4451	* 1.3450	* 1.6367	* 2.7767 *
9	* 1.5572	* 1.4362	* 1.5947	* 1.4362	* 1.6086	* 1.3848	* 1.5508	* .9628 *
	* 1.4021	* 1.5213	* 1.3655	* 1.5127	* 1.3475	* 1.5520	* 1.3796	* 2.1985 *
10	* 1.3998	* 1.5979	* 1.3163	* 1.6129	* 1.5026	* 1.5936	* 1.4341	* 1.2424 *
	* 1.5589	* 1.3630	* 1.6574	* 1.3468	* 1.4450	* 1.3534	* 1.4917	* 1.7042 *
11	* 1.4855	* 1.4373	* 1.6151	* 1.5144	* 1.6119	* 1.3902	* 1.5412	* .9039 *
	* 1.4645	* 1.5116	* 1.3460	* 1.4374	* 1.3484	* 1.5573	* 1.3934	* 2.3500 *
12	* 1.4898	* 1.6097	* 1.5005	* 1.6129	* 1.4940	* 1.5658	* 1.1063	*
	* 1.4451	* 1.3466	* 1.4460	* 1.3476	* 1.4540	* 1.3837	* 1.9485	*
13	* 1.5979	* 1.3859	* 1.5936	* 1.3902	* 1.5690	* 1.1535	* .7069	*
	* 1.3450	* 1.5509	* 1.3542	* 1.5584	* 1.3811	* 1.8716	* 3.0338	*
14	* 1.3002	* 1.5508	* 1.4341	* 1.5412	* 1.1053	* .7069	*	*
	* 1.6367	* 1.3796	* 1.4917	* 1.3935	* 1.9503	* 3.0338	*	*
15	* .7572	* .9618	* 1.2413	* .9029	* F-SUB-Q			
	* 2.7767	* 2.2002	* 1.7054	* 2.3525	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1374	* 1.5829	* 1.4159	* 1.5090	* 1.5123	* 1.6301	* 1.3163	* .7636
	* 2.0309	* 1.4563	* 1.6305	* 1.5278	* 1.5102	* 1.3968	* 1.7097	* 2.9123
9	* 1.5829	* 1.4512	* 1.6226	* 1.4576	* 1.6397	* 1.4062	* 1.5851	* .9757
	* 1.4563	* 1.5894	* 1.4207	* 1.5791	* 1.3988	* 1.6185	* 1.4259	* 2.2860
10	* 1.4159	* 1.6258	* 1.3345	* 1.6461	* 1.5251	* 1.6268	* 1.4662	* 1.2670
	* 1.6305	* 1.4180	* 1.7273	* 1.3916	* 1.5025	* 1.4022	* 1.5420	* 1.7604
11	* 1.5090	* 1.4587	* 1.6472	* 1.5380	* 1.6451	* 1.4137	* 1.5765	* .9200
	* 1.5278	* 1.5779	* 1.3908	* 1.4902	* 1.3924	* 1.6119	* 1.4347	* 2.4292
12	* 1.5123	* 1.6418	* 1.5219	* 1.6461	* 1.5187	* 1.6001	* 1.1203	*
	* 1.5102	* 1.3971	* 1.5055	* 1.3924	* 1.5043	* 1.4228	* 2.0166	*
13	* 1.6301	* 1.4073	* 1.6258	* 1.4126	* 1.6033	* 1.1674	* .7165	*
	* 1.3968	* 1.6174	* 1.4022	* 1.6131	* 1.4200	* 1.9404	* 3.1277	*
14	* 1.3163	* 1.5862	* 1.4651	* 1.5765	* 1.1192	* .7165	*	*
	* 1.7097	* 1.4259	* 1.5420	* 1.4348	* 2.0184	* 3.1277	*	*
15	* .7636	* .9757	* 1.2659	* .9189	* F-SUB-Q			
	* 2.9123	* 2.2884	* 1.7604	* 2.4319	* M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1117	* 1.5551	* 1.3902	* 1.4844	* 1.4887	* 1.6076	* 1.2948	* .7476
	* 2.0260	* 1.4533	* 1.6229	* 1.5202	* 1.5171	* 1.4070	* 1.7391	* 2.9951
9	* 1.5551	* 1.4244	* 1.5958	* 1.4330	* 1.6161	* 1.3859	* 1.5647	* .9596
	* 1.4533	* 1.5857	* 1.4151	* 1.5755	* 1.4017	* 1.6289	* 1.4447	* 2.3391
10	* 1.3902	* 1.5990	* 1.3120	* 1.6247	* 1.5015	* 1.6044	* 1.4469	* 1.2477
	* 1.6229	* 1.4124	* 1.7228	* 1.3990	* 1.5098	* 1.4115	* 1.5621	* 1.8044
11	* 1.4844	* 1.4351	* 1.6258	* 1.5155	* 1.6236	* 1.3944	* 1.5572	* .9018
	* 1.5202	* 1.5732	* 1.3981	* 1.4996	* 1.4008	* 1.6277	* 1.4561	* 2.4948
12	* 1.4887	* 1.6183	* 1.4994	* 1.6236	* 1.4973	* 1.5787	* 1.1031	*
	* 1.5171	* 1.3999	* 1.5119	* 1.3999	* 1.5202	* 1.4428	* 2.0543	*
13	* 1.6076	* 1.3859	* 1.6044	* 1.3934	* 1.5819	* 1.1481	* .6994	*
	* 1.4070	* 1.6277	* 1.4124	* 1.6289	* 1.4400	* 1.9789	* 3.2316	*
14	* 1.2948	* 1.5647	* 1.4469	* 1.5562	* 1.1031	* .6994	*	*
	* 1.7391	* 1.4447	* 1.5632	* 1.4571	* 2.0562	* 3.2316	*	*
15	* .7476	* .9596	* 1.2466	* .9007	* F-SUB-Q			
	* 2.9951	* 2.3415	* 1.8044	* 2.4976	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1224	* 1.5840	* 1.4084	* 1.5101	* 1.5123	* 1.6418	* 1.3141	* .7561
	* 1.9458	* 1.3850	* 1.5544	* 1.4514	* 1.4504	* 1.3372	* 1.6632	* 2.8480
9	* 1.5840	* 1.4416	* 1.6247	* 1.4555	* 1.6493	* 1.4094	* 1.6022	* .9757
	* 1.3850	* 1.5202	* 1.3486	* 1.5068	* 1.3324	* 1.5566	* 1.3695	* 2.2238
10	* 1.4084	* 1.6290	* 1.3323	* 1.6590	* 1.5262	* 1.6397	* 1.4812	* 1.2766
	* 1.5544	* 1.3462	* 1.6459	* 1.3268	* 1.4419	* 1.3405	* 1.4815	* 1.7054
11	* 1.5101	* 1.4566	* 1.6600	* 1.5412	* 1.6579	* 1.4191	* 1.5958	* .9221
	* 1.4514	* 1.5047	* 1.3260	* 1.4288	* 1.3284	* 1.5490	* 1.3763	* 2.3641
12	* 1.5123	* 1.6515	* 1.5230	* 1.6590	* 1.5251	* 1.6161	* 1.1203	*
	* 1.4504	* 1.3308	* 1.4438	* 1.3276	* 1.4447	* 1.3628	* 1.9579	*
13	* 1.6418	* 1.4094	* 1.6386	* 1.4180	* 1.6194	* 1.1652	* .7111	*
	* 1.3372	* 1.5555	* 1.3405	* 1.5501	* 1.3603	* 1.8844	* 3.0700	*
14	* 1.3141	* 1.6022	* 1.4801	* 1.5947	* 1.1192	* .7111	*	*
	* 1.6632	* 1.3687	* 1.4815	* 1.3772	* 1.9596	* 3.0743	*	*
15	* .7561	* .9757	* 1.2766	* .9211	* F-SUB-Q			
	* 2.8480	* 2.2257	* 1.7056	* 2.3666	* M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1138	* 1.5819	* 1.4030	* 1.5080	* 1.5090	* 1.6429	* 1.3109	* .7508
	* 1.8845	* 1.3248	* 1.4890	* 1.3863	* 1.3819	* 1.2706	* 1.5761	* 2.7123
9	* 1.5819	* 1.4362	* 1.6236	* 1.4512	* 1.6504	* 1.4062	* 1.6065	* .9735
	* 1.3248	* 1.4587	* 1.2877	* 1.4396	* 1.2714	* 1.4801	* 1.2968	* 2.1070
10	* 1.4030	* 1.6279	* 1.3280	* 1.6611	* 1.5240	* 1.6418	* 1.4844	* 1.2788
	* 1.4890	* 1.2854	* 1.5762	* 1.2708	* 1.3795	* 1.2759	* 1.4030	* 1.6094
11	* 1.5080	* 1.4533	* 1.6633	* 1.5401	* 1.6600	* 1.4191	* 1.6001	* .9200
	* 1.3863	* 1.4378	* 1.2699	* 1.3745	* 1.2730	* 1.4833	* 1.3084	* 2.2371
12	* 1.5090	* 1.6526	* 1.5208	* 1.6611	* 1.5251	* 1.6204	* 1.1181	*
	* 1.3819	* 1.2700	* 1.3821	* 1.2723	* 1.4009	* 1.3118	* 1.8717	*
13	* 1.6429	* 1.4073	* 1.6408	* 1.4180	* 1.6236	* 1.1631	* .7079	*
	* 1.2706	* 1.4791	* 1.2765	* 1.4844	* 1.3095	* 1.8182	* 2.9331	*
14	* 1.3109	* 1.6065	* 1.4833	* 1.6001	* 1.1171	* .7079	*	*
	* 1.5761	* 1.2967	* 1.4039	* 1.3091	* 1.8733	* 2.9331	*	*
15	* .7508	* .9725	* 1.2777	* .9189	* F-SUB-Q			
	* 2.7123	* 2.1090	* 1.6095	* 2.2393	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0903	* 1.5551	* 1.3794	* 1.4833	* 1.4865	* 1.6172	* 1.2895	* .7336
	* 1.8158	* 1.2760	* 1.4344	* 1.3347	* 1.3306	* 1.2243	* 1.5203	* 2.6352
9	* 1.5551	* 1.4116	* 1.5969	* 1.4276	* 1.6247	* 1.3837	* 1.5819	* .9564
	* 1.2760	* 1.4034	* 1.2408	* 1.3867	* 1.2237	* 1.4261	* 1.2478	* 2.0367
10	* 1.3794	* 1.6011	* 1.3045	* 1.6365	* 1.5005	* 1.6172	* 1.4608	* 1.2552
	* 1.4344	* 1.2380	* 1.5194	* 1.2210	* 1.3267	* 1.2277	* 1.3502	* 1.5535
11	* 1.4833	* 1.4287	* 1.6376	* 1.5176	* 1.6354	* 1.3977	* 1.5754	* .8996
	* 1.3347	* 1.3850	* 1.2197	* 1.3188	* 1.2218	* 1.4226	* 1.2572	* 2.1691
12	* 1.4865	* 1.6268	* 1.4983	* 1.6354	* 1.5037	* 1.5958	* 1.1010	*
	* 1.3306	* 1.2223	* 1.3291	* 1.2217	* 1.3342	* 1.2545	* 1.7952	*
13	* 1.6172	* 1.3848	* 1.6161	* 1.3966	* 1.5990	* 1.1449	* .6908	*
	* 1.2243	* 1.4251	* 1.2278	* 1.4243	* 1.2516	* 1.7389	* 2.8359	*
14	* 1.2895	* 1.5819	* 1.4608	* 1.5754	* 1.0999	* .6908	*	*
	* 1.5203	* 1.2478	* 1.3502	* 1.2579	* 1.7967	* 2.8359	*	*
15	* .7336	* .9553	* 1.2552	* .8986	F-SUB-Q			
	* 2.6352	* 2.0386	* 1.5546	* 2.1691	M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0988	* 1.5776	* 1.3944	* 1.5037	* 1.5015	* 1.6386	* 1.3013	* .7379
	* 1.6998	* 1.1899	* 1.3419	* 1.2454	* 1.2474	* 1.1450	* 1.4309	* 2.4948
9	* 1.5776	* 1.4287	* 1.6194	* 1.4437	* 1.6472	* 1.3977	* 1.6022	* .9628
	* 1.1899	* 1.3125	* 1.1576	* 1.2979	* 1.1427	* 1.3385	* 1.1679	* 1.9218
10	* 1.3944	* 1.6236	* 1.3184	* 1.6590	* 1.5176	* 1.6386	* 1.4812	* 1.2713
	* 1.3419	* 1.1547	* 1.4227	* 1.1385	* 1.2418	* 1.1474	* 1.2630	* 1.4581
11	* 1.5037	* 1.4448	* 1.6611	* 1.5347	* 1.6590	* 1.4116	* 1.5979	* .9093
	* 1.2454	* 1.2964	* 1.1373	* 1.2315	* 1.1391	* 1.3321	* 1.1740	* 2.0366
12	* 1.5015	* 1.6483	* 1.5144	* 1.6590	* 1.5230	* 1.6194	* 1.1106	*
	* 1.2474	* 1.1415	* 1.2440	* 1.1391	* 1.2418	* 1.1666	* 1.6852	*
13	* 1.6386	* 1.3987	* 1.6376	* 1.4105	* 1.6236	* 1.1556	* .6983	*
	* 1.1450	* 1.3377	* 1.1479	* 1.3336	* 1.1636	* 1.6271	* 2.6592	*
14	* 1.3013	* 1.6033	* 1.4812	* 1.5979	* 1.1106	* .6983	*	*
	* 1.4309	* 1.1678	* 1.2630	* 1.1747	* 1.6865	* 2.6624	*	*
15	* .7379	* .9618	* 1.2702	* .9082	F-SUB-Q			
	* 2.4948	* 1.9235	* 1.4590	* 2.0384	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0689 *	* 1.5358 *	* 1.3623 *	* 1.4662 *	* 1.4630 *	* 1.5872 *	* 1.2638 *	.7111 *
	* 1.6626 *	* 1.1626 *	* 1.3079 *	* 1.2155 *	* 1.2187 *	* 1.1248 *	* 1.4028 *	2.4685 *
9	* 1.5358 *	* 1.3977 *	* 1.5754 *	* 1.4062 *	* 1.5979 *	* 1.3570 *	* 1.5476 *	.9296 *
	* 1.1626 *	* 1.2755 *	* 1.1323 *	* 1.2682 *	* 1.1203 *	* 1.3124 *	* 1.1516 *	1.8982 *
10	* 1.3623 *	* 1.5797 *	* 1.2820 *	* 1.6097 *	* 1.4780 *	* 1.5862 *	* 1.4309 *	1.2209 *
	* 1.3079 *	* 1.1295 *	* 1.3915 *	* 1.1152 *	* 1.2114 *	* 1.1276 *	* 1.2432 *	1.4456 *
11	* 1.4662 *	* 1.4073 *	* 1.6108 *	* 1.4951 *	* 1.6086 *	* 1.3698 *	* 1.5412 *	.8697 *
	* 1.2155 *	* 1.2668 *	* 1.1141 *	* 1.2002 *	* 1.1163 *	* 1.3046 *	* 1.1570 *	2.0285 *
12	* 1.4630 *	* 1.6001 *	* 1.4748 *	* 1.6097 *	* 1.4833 *	* 1.5669 *	* 1.0796 *	
	* 1.2187 *	* 1.1191 *	* 1.2140 *	* 1.1157 *	* 1.2087 *	* 1.1438 *	* 1.6474 *	
13	* 1.5872 *	* 1.3591 *	* 1.5851 *	* 1.3687 *	* 1.5701 *	* 1.1245 *	* .6715 *	
	* 1.1248 *	* 1.3116 *	* 1.1282 *	* 1.3061 *	* 1.1409 *	* 1.5874 *	* 2.6323 *	
14	* 1.2638 *	* 1.5476 *	* 1.4309 *	* 1.5412 *	* 1.0785 *	* .6715 *		
	* 1.4028 *	* 1.1510 *	* 1.2432 *	* 1.1576 *	* 1.6487 *	* 2.6323 *		
15	* .7111 *	* .9286 *	* 1.2209 *	* .8686 *	F-SUB-Q			
	* 2.4685 *	* 1.8998 *	* 1.4465 *	* 2.0302 *	M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0528 *	* 1.5058 *	* 1.3398 *	* 1.4394 *	* 1.4319 *	* 1.5401 *	* 1.2316 *	.6865 *
	* 1.6219 *	* 1.1392 *	* 1.2776 *	* 1.1893 *	* 1.1981 *	* 1.1145 *	* 1.3858 *	2.4667 *
9	* 1.5058 *	* 1.3859 *	* 1.5412 *	* 1.3762 *	* 1.5540 *	* 1.3.05 *	* 1.4887 *	.8911 *
	* 1.1392 *	* 1.2377 *	* 1.1.1.04 *	* 1.2446 *	* 1.1062 *	* 1.2968 *	* 1.1497 *	1.9039 *
10	* 1.3398 *	* 1.5455 *	* 1.2606 *	* 1.5615 *	* 1.4469 *	* 1.5358 *	* 1.3816 *	1.1631 *
	* 1.2776 *	* 1.1096 *	* 1.3606 *	* 1.1029 *	* 1.1898 *	* 1.1190 *	* 1.2382 *	1.4595 *
11	* 1.4394 *	* 1.3784 *	* 1.5637 *	* 1.4598 *	* 1.5604 *	* 1.3270 *	* 1.4791 *	.8300 *
	* 1.1893 *	* 1.2432 *	* 1.1018 *	* 1.1804 *	* 1.1040 *	* 1.2938 *	* 1.1580 *	2.0460 *
12	* 1.4319 *	* 1.5562 *	* 1.4437 *	* 1.5615 *	* 1.4469 *	* 1.5101 *	* 1.0453 *	
	* 1.1981 *	* 1.1046 *	* 1.1917 *	* 1.1034 *	* 1.1898 *	* 1.1391 *	* 1.6335 *	
13	* 1.5401 *	* 1.3216 *	* 1.5358 *	* 1.3259 *	* 1.5133 *	* 1.0892 *	* .6458 *	
	* 1.1145 *	* 1.2953 *	* 1.1190 *	* 1.2945 *	* 1.1367 *	* 1.5711 *	* 2.6302 *	
14	* 1.2316 *	* 1.4898 *	* 1.3816 *	* 1.4791 *	* 1.0453 *	* .6458 *		
	* 1.3858 *	* 1.1491 *	* 1.2382 *	* 1.1581 *	* 1.6347 *	* 2.6302 *		
15	* .6865 *	* .8911 *	* 1.1631 *	* .8290 *	F-SUB-Q			
	* 2.4667 *	* 1.9055 *	* 1.4604 *	* 2.0460 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 100 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.9703	1.3409	1.2102	1.2873	1.2766	1.3462	1.0924	.6008
	1.7110	1.2414	1.3727	1.2912	1.3002	1.2371	1.5147	2.7411
9	1.3409	1.2649	1.3687	1.2295	1.3666	1.1760	1.2777	.7636
	1.2414	1.3134	1.2156	1.3525	1.2202	1.4145	1.2994	2.1621
10	1.2102	1.3720	1.1545	1.3677	1.2884	1.3398	1.1963	.9628
	1.3727	1.2123	1.4403	1.2196	1.2912	1.2433	1.3844	1.7133
11	1.2873	1.2316	1.3699	1.2916	1.3537	1.1663	1.2563	.7036
	1.2912	1.3501	1.2175	1.2897	1.2338	1.4262	1.3217	2.3446
12	1.2766	1.3687	1.2873	1.3548	1.2681	1.2863	.9178	
	1.3002	1.2182	1.2926	1.2330	1.3132	1.2948	1.8067	
13	1.3462	1.1770	1.3398	1.1663	1.2895	.9500	.5516	
	1.2371	1.4127	1.2427	1.4263	1.2925	1.7512	2.9924	
14	1.0924	1.2777	1.1963	1.2563	.9178	.5516		
	1.5147	1.2993	1.3844	1.3217	1.8082	2.9924		
15	.6008	.7626	.9628	.7036	F-SUB-Q			
	2.7411	2.1641	1.7133	2.3471	M-SUB-Q			

AT 100% POWER, 100 EFPD, THIS IS LEVEL 1  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.6812	.9211	.7872	.8407	.5548	.9039	.4670	.4081
	2.3858	1.7614	2.0701	1.9365	2.9226	1.7955	3.4595	3.9517
9	.9211	.5666	.9585	.8043	.9328	.7690	.8161	.4755
	1.7614	2.8663	1.6981	2.0266	1.7420	2.1151	1.9865	3.3853
10	.7872	.9660	.8065	.9521	.5612	.8986	.4809	.5783
	2.0701	1.6853	2.0228	1.7098	2.8958	1.8070	3.3599	2.7898
11	.8407	.8075	.9596	.5601	.9018	.7486	.7883	.4295
	1.9365	2.0191	1.6968	2.8996	1.8056	2.1730	2.0563	3.7514
12	.5548	.9339	.5623	.9039	.5237	.8043	.3716	
	2.9226	1.7393	2.8920	1.8012	3.0976	2.0226	4.3543	
13	.9039	.7700	.8986	.7486	.8065	.3823	.3674	
	1.7955	2.1112	1.8056	2.1751	2.0170	4.2224	4.3970	
14	.4670	.8161	.4819	.7883	.3716	.3674		
	3.4595	1.9864	3.3599	2.0581	4.3543	4.3976		
15	.4081	.4755	.5783	.4295	F-SUB-Q			
	3.9517	3.3901	2.7898	3.7573	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6619 *	* .8943 *	* .7968 *	* .8300 *	* .5773 *	* .8729 *	* .4927 *	* .4637 *
	* 2.1777 *	* 1.8002 *	* 2.0182 *	* 1.9152 *	* 2.7094 *	* 1.7796 *	* 3.1187 *	* 3.2882 *
9	* .8943 *	* .5933 *	* .9243 *	* .8065 *	* .8986 *	* .7647 *	* .7861 *	* .5055 *
	* 1.8002 *	* 2.7604 *	* 1.7336 *	* 1.9756 *	* 1.7526 *	* 2.0440 *	* 2.0003 *	* 3.0590 *
10	* .7968 *	* .9286 *	* .8065 *	* .9146 *	* .5773 *	* .8568 *	* .4852 *	* .5965 *
	* 2.0182 *	* 1.7265 *	* 1.9931 *	* 1.7572 *	* 2.7902 *	* 1.8722 *	* 3.2521 *	* 2.6172 *
11	* .8300 *	* .8086 *	* .9178 *	* .5751 *	* .8664 *	* .7186 *	* .7486 *	* .4573 *
	* 1.9152 *	* 1.9717 *	* 1.7498 *	* 2.8459 *	* 1.8673 *	* 2.2179 *	* 2.1714 *	* 3.4831 *
12	* .5773 *	* .8996 *	* .5773 *	* .8675 *	* .4530 *	* .7133 *	* .3748 *	
	* 2.7094 *	* 1.7511 *	* 2.7870 *	* 1.8638 *	* 2.9874 *	* 2.0415 *	* 4.1830 *	
13	* .8729 *	* .7647 *	* .8568 *	* .7186 *	* .7144 *	* .3652 *	* .3995 *	
	* 1.7796 *	* 2.0419 *	* 1.8722 *	* 2.2179 *	* 2.0394 *	* 3.9148 *	* 3.8363 *	
14	* .4927 *	* .7861 *	* .4852 *	* .7486 *	* .3748 *	* .3995 *		
	* 3.1187 *	* 2.0003 *	* 3.2521 *	* 2.1714 *	* 1.830 *	* 3.8426 *		
15	* .4637 *	* .5055 *	* .5955 *	* .4562 *	F-SUB-Q			
	* 3.2882 *	* 3.0590 *	* 2.6172 *	* 3.4831 *	M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9500 *	* 1.2156 *	* 1.1374 *	* 1.1652 *	* 1.1802 *	* 1.1920 *	* 1.0335 *	* .6330 *
	* 1.7131 *	* 1.3959 *	* 1.4671 *	* 1.4155 *	* 1.3779 *	* 1.3591 *	* 1.5480 *	* 2.5016 *
9	* 1.2156 *	* 1.1910 *	* 1.2338 *	* 1.1395 *	* 1.2124 *	* 1.0796 *	* 1.1171 *	* .7336 *
	* 1.3959 *	* 1.4253 *	* 1.3446 *	* 1.4446 *	* 1.3523 *	* 1.5035 *	* 1.4557 *	* 2.1860 *
10	* 1.1374 *	* 1.2359 *	* 1.0774 *	* 1.2177 *	* 1.1802 *	* 1.1802 *	* 1.0485 *	* .8782 *
	* 1.4671 *	* 1.3430 *	* 1.5505 *	* 1.3684 *	* 1.4202 *	* 1.4050 *	* 1.5680 *	* 1.8440 *
11	* 1.1652 *	* 1.1417 *	* 1.2242 *	* 1.1813 *	* 1.1867 *	* 1.0442 *	* 1.0849 *	* .6683 *
	* 1.4155 *	* 1.4436 *	* 1.3612 *	* 1.4313 *	* 1.4170 *	* 1.5915 *	* 1.5514 *	* 2.4785 *
12	* 1.1802 *	* 1.2134 *	* 1.1802 *	* 1.1877 *	* 1.0988 *	* 1.0935 *	* .8482 *	
	* 1.3779 *	* 1.3506 *	* 1.4202 *	* 1.4161 *	* 1.4432 *	* 1.4684 *	* 1.9349 *	
13	* 1.1920 *	* 1.0796 *	* 1.1802 *	* 1.0442 *	* 1.0946 *	* .8654 *	* .5558 *	
	* 1.3591 *	* 1.5026 *	* 1.4050 *	* 1.5915 *	* 1.4674 *	* 1.8308 *	* 2.8998 *	
14	* 1.0335 *	* 1.1171 *	* 1.0485 *	* 1.0849 *	* .8482 *	* .5548 *		
	* 1.5480 *	* 1.4555 *	* 1.5680 *	* 1.5514 *	* 1.9349 *	* 2.9033 *		
15	* .6330 *	* .7326 *	* .8782 *	* .6683 *	F-SUB-Q			
	* 2.5016 *	* 2.1860 *	* 1.8454 *	* 2.4785 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0903	* 1.4030	* 1.2798	* 1.3205	* 1.3323	* 1.3859	* 1.1738	* .7165
	* 1.6035	* 1.2597	* 1.3569	* 1.2973	* 1.2624	* 1.2142	* 1.4144	* 2.2928
9	* 1.4030	* 1.3388	* 1.4137	* 1.2873	* 1.4062	* 1.2316	* 1.3130	* .8504
	* 1.2597	* 1.3206	* 1.2206	* 1.3231	* 1.2157	* 1.3655	* 1.2886	* 1.9576
10	* 1.2798	* 1.4159	* 1.2070	* 1.4073	* 1.3441	* 1.3762	* 1.2188	* 1.0507
	* 1.3569	* 1.2185	* 1.4406	* 1.2319	* 1.2989	* 1.2530	* 1.4035	* 1.6000
11	* 1.3205	* 1.2884	* 1.4084	* 1.3484	* 1.3977	* 1.2113	* 1.2852	* .7786
	* 1.2973	* 1.3223	* 1.2305	* 1.2977	* 1.2534	* 1.4344	* 1.3601	* 2.2053
12	* 1.3323	* 1.4073	* 1.3441	* 1.3987	* 1.3088	* 1.3205	* .9746	
	* 1.2624	* 1.2143	* 1.2990	* 1.2526	* 1.3074	* 1.2939	* 1.7636	
13	* 1.3859	* 1.2327	* 1.3762	* 1.2102	* 1.3216	* 1.0174	* .6512	
	* 1.2142	* 1.3646	* 1.2530	* 1.4353	* 1.2923	* 1.6599	* 2.6011	
14	* 1.1738	* 1.3130	* 1.2188	* 1.2852	* .9735	* .6512		
	* 1.4144	* 1.2878	* 1.4035	* 1.3609	* 1.7636	* 2.6011		
15	* .7165	* .8504	* 1.0496	* .7786	F-SUB-Q			
	* 2.2928	* 1.9591	* 1.6011	* 2.2053	M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1481	* 1.4973	* 1.3441	* 1.3902	* 1.4030	* 1.4844	* 1.2349	* .7497
	* 1.5982	* 1.2311	* 1.3506	* 1.2839	* 1.2467	* 1.1799	* 1.3985	* 2.2836
9	* 1.4973	* 1.4052	* 1.5015	* 1.3559	* 1.5069	* 1.3045	* 1.4148	* .9018
	* 1.2311	* 1.3122	* 1.1969	* 1.3095	* 1.1818	* 1.3421	* 1.2468	* 1.9268
10	* 1.3441	* 1.5037	* 1.2734	* 1.5080	* 1.4201	* 1.4791	* 1.3055	* 1.1310
	* 1.3506	* 1.1956	* 1.4217	* 1.1976	* 1.2794	* 1.2138	* 1.3619	* 1.5463
11	* 1.3902	* 1.3570	* 1.5090	* 1.4298	* 1.5048	* 1.2906	* 1.3869	* .8322
	* 1.2839	* 1.3080	* 1.1964	* 1.2771	* 1.2153	* 1.4073	* 1.3137	* 2.1481
12	* 1.4030	* 1.5080	* 1.4201	* 1.5048	* 1.3912	* 1.4276	* 1.0271	
	* 1.2467	* 1.1811	* 1.2802	* 1.2146	* 1.2904	* 1.2565	* 1.7521	
13	* 1.4844	* 1.3045	* 1.4791	* 1.2895	* 1.4287	* 1.0764	* .6897	
	* 1.1799	* 1.3412	* 1.2139	* 1.4081	* 1.2551	* 1.6512	* 2.5814	
14	* 1.2349	* 1.4148	* 1.3055	* 1.3869	* 1.0271	* .6897		
	* 1.3985	* 1.2461	* 1.3619	* 1.3137	* 1.7536	* 2.5814		
15	* .7497	* .9007	* 1.1310	* .8322	F-SUB-Q			
	* 2.2836	* 1.9286	* 1.5463	* 2.1481	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1449	* 1.5048	* 1.3420	* 1.3880	* 1.4041	* 1.4940	* 1.2338	* .7433
	* 1.6713	* 1.2696	* 1.4180	* 1.3466	* 1.3056	* 1.2273	* 1.4666	* 2.4142
9	* 1.5048	* 1.4030	* 1.5058	* 1.3548	* 1.5176	* 1.3066	* 1.4276	* .9007
	* 1.2696	* 1.3622	* 1.2497	* 1.3719	* 1.2288	* 1.4019	* 1.2935	* 2.0183
10	* 1.3420	* 1.5112	* 1.2756	* 1.5187	* 1.4234	* 1.4919	* 1.3152	* 1.1374
	* 1.4180	* 1.2482	* 1.4845	* 1.2427	* 1.3308	* 1.2578	* 1.4129	* 1.6070
11	* 1.3880	* 1.3559	* 1.5197	* 1.4341	* 1.5176	* 1.2970	* 1.3998	* .8322
	* 1.3466	* 1.3710	* 1.2420	* 1.3263	* 1.2539	* 1.4602	* 1.3493	* 2.2439
12	* 1.4041	* 1.5187	* 1.4223	* 1.5187	* 1.3955	* 1.4394	* 1.0249	*
	* 1.3056	* 1.2280	* 1.3316	* 1.2533	* 1.3479	* 1.3063	* 1.8371	*
13	* 1.4940	* 1.3077	* 1.4919	* 1.2959	* 1.4405	* 1.0731	* .6833	*
	* 1.2273	* 1.4010	* 1.2578	* 1.4610	* 1.3047	* 1.7422	* 2.7380	*
14	* 1.2338	* 1.4276	* 1.3152	* 1.3998	* 1.0239	* .6833	*	*
	* 1.4666	* 1.2928	* 1.4129	* 1.3494	* 1.8386	* 2.7380	*	*
15	* .7433	* .9007	* 1.1363	* .8311	* F-SUB-Q			
	* 2.4142	* 2.0202	* 1.6080	* 2.2439	* M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1695	* 1.5508	* 1.3730	* 1.4234	* 1.4373	* 1.5422	* 1.2616	* .7551
	* 1.7007	* 1.2774	* 1.4429	* 1.3787	* 1.3411	* 1.2498	* 1.5090	* 2.4995
9	* 1.5508	* 1.4341	* 1.5497	* 1.3859	* 1.5658	* 1.3398	* 1.4769	* .9211
	* 1.2774	* 1.3817	* 1.2710	* 1.4091	* 1.2519	* 1.4376	* 1.3105	* 2.0726
10	* 1.3730	* 1.5604	* 1.3098	* 1.5690	* 1.4587	* 1.5412	* 1.3570	* 1.1738
	* 1.4429	* 1.2643	* 1.5081	* 1.2559	* 1.3509	* 1.2709	* 1.4309	* 1.6323
11	* 1.4234	* 1.3869	* 1.5701	* 1.4705	* 1.5679	* 1.3302	* 1.4480	* .8568
	* 1.3787	* 1.4082	* 1.2548	* 1.3421	* 1.2584	* 1.4785	* 1.3514	* 2.2663
12	* 1.4373	* 1.5669	* 1.4576	* 1.5690	* 1.4298	* 1.4865	* 1.0442	*
	* 1.3411	* 1.2512	* 1.3518	* 1.2583	* 1.3794	* 1.3250	* 1.8796	*
13	* 1.5422	* 1.3398	* 1.5412	* 1.3302	* 1.4876	* 1.0935	* .6983	*
	* 1.2498	* 1.4368	* 1.2712	* 1.4795	* 1.3234	* 1.8006	* 2.8077	*
14	* 1.2616	* 1.4769	* 1.3570	* 1.4480	* 1.0432	* .6983	*	*
	* 1.5090	* 1.3105	* 1.4314	* 1.3515	* 1.8813	* 2.8077	*	*
15	* .7551	* .9211	* 1.1738	* .8568	* F-SUB-Q			
	* 2.4995	* 2.0726	* 1.6336	* 2.2674	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1663	* 1.5562	* 1.3720	* 1.4234	* 1.4373	* 1.5487	* 1.2595	* .7497
	* 1.7832	* 1.3300	* 1.5068	* 1.4393	* 1.4091	* 1.3067	* 1.5899	* 2.6460
9	* 1.5562	* 1.4330	* 1.5562	* 1.3848	* 1.5722	* 1.3409	* 1.4844	* .9189
	* 1.3300	* 1.4447	* 1.3208	* 1.4759	* 1.3020	* 1.5081	* 1.3609	* 2.1744
10	* 1.3720	* 1.5658	* 1.3109	* 1.5765	* 1.4598	* 1.5476	* 1.3634	* 1.1749
	* 1.5068	* 1.3117	* 1.5689	* 1.3012	* 1.4039	* 1.3163	* 1.4831	* 1.7038
11	* 1.4234	* 1.3859	* 1.5776	* 1.4726	* 1.5754	* 1.3323	* 1.4555	* .8547
	* 1.4393	* 1.4744	* 1.3005	* 1.3973	* 1.3057	* 1.5374	* 1.4016	* 2.3567
12	* 1.4373	* 1.5733	* 1.4587	* 1.5765	* 1.4309	* 1.4919	* 1.0399	*
	* 1.4091	* 1.3012	* 1.4048	* 1.3049	* 1.4318	* 1.3712	* 1.9607	*
13	* 1.5487	* 1.3420	* 1.5476	* 1.3313	* 1.4930	* 1.0892	* .6929	*
	* 1.3067	* 1.5071	* 1.3167	* 1.5384	* 1.3695	* 1.8751	* 2.9336	*
14	* 1.2595	* 1.4844	* 1.3634	* 1.4555	* 1.0399	* .6929	*	*
	* 1.5899	* 1.3609	* 1.4837	* 1.4022	* 1.9610	* 2.9336	*	*
15	* .7497	* .9189	* 1.1749	* .8547	* F-SUB-Q			
	* 2.6460	* 2.1765	* 1.7045	* 2.3581	* M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1545	* 1.5508	* 1.3634	* 1.4169	* 1.4298	* 1.5433	* 1.2499	* .7401
	* 1.8812	* 1.3909	* 1.5836	* 1.5166	* 1.4885	* 1.3754	* 1.6828	* 2.8142
9	* 1.5508	* 1.4244	* 1.5508	* 1.3773	* 1.5679	* 1.3345	* 1.4801	* .9114
	* 1.3909	* 1.5156	* 1.3861	* 1.5561	* 1.3650	* 1.5919	* 1.4271	* 2.2966
10	* 1.3634	* 1.5615	* 1.3055	* 1.5733	* 1.4523	* 1.5444	* 1.3591	* 1.1674
	* 1.5836	* 1.3761	* 1.6498	* 1.3632	* 1.4734	* 1.3785	* 1.5547	* 1.7913
11	* 1.4169	* 1.3784	* 1.5744	* 1.4651	* 1.5712	* 1.3259	* 1.4512	* .8461
	* 1.5166	* 1.5550	* 1.3624	* 1.4661	* 1.3649	* 1.6127	* 1.4610	* 2.4796
12	* 1.4298	* 1.5690	* 1.4512	* 1.5722	* 1.4234	* 1.4865	* 1.0314	*
	* 1.4885	* 1.3637	* 1.4754	* 1.7645	* 1.5073	* 1.4402	* 2.0635	*
13	* 1.5433	* 1.3345	* 1.5433	* 1.3248	* 1.4876	* 1.0785	* .6833	*
	* 1.3754	* 1.5907	* 1.3790	* 1.6133	* 1.4383	* 1.9789	* 3.1085	*
14	* 1.2499	* 1.4812	* 1.3591	* 1.4512	* 1.0303	* .6833	*	*
	* 1.6828	* 1.4266	* 1.5547	* 1.4610	* 2.0655	* 3.1085	*	*
15	* .7401	* .9104	* 1.1674	* .8461	* F-SUB-Q			
	* 2.8142	* 2.2970	* 1.7913	* 2.4811	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1674	* 1.5819	* 1.3827	* 1.4405	* 1.4512	* 1.5765	* 1.2659	* .7465 *
	* 1.9585	* 1.4407	* 1.6506	* 1.5803	* 1.5531	* 1.4262	* 1.7558	* 2.9445 *
9	* 1.5819	* 1.4448	* 1.5819	* 1.3987	* 1.6001	* 1.3548	* 1.5123	* .9232 *
	* 1.4407	* 1.5792	* 1.4364	* 1.6238	* 1.4138	* 1.6580	* 1.4750	* 2.3865 *
10	* 1.3827	* 1.5936	* 1.3259	* 1.6065	* 1.4758	* 1.5765	* 1.3859	* 1.1899 *
	* 1.6506	* 1.4262	* 1.7158	* 1.4065	* 1.5330	* 1.4265	* 1.6080	* 1.8491 *
11	* 1.4405	* 1.3998	* 1.6086	* 1.4887	* 1.6054	* 1.3462	* 1.4823	* .8600 *
	* 1.5803	* 1.6219	* 1.4052	* 1.5208	* 1.4079	* 1.6688	* 1.5045	* 2.5629 *
12	* 1.4512	* 1.6022	* 1.4737	* 1.6054	* 1.4469	* 1.5165	* 1.0432	*
	* 1.5531	* 1.4120	* 1.5351	* 1.4074	* 1.5582	* 1.4799	* 2.1357	*
13	* 1.5765	* 1.3559	* 1.5765	* 1.3452	* 1.5187	* 1.0903	* .6919	*
	* 1.4262	* 1.6567	* 1.4265	* 1.6701	* 1.4784	* 2.0494	* 3.2018	*
14	* 1.2659	* 1.5123	* 1.3859	* 1.4823	* 1.0421	* .6919	*	*
	* 1.7558	* 1.4750	* 1.6080	* 1.5050	* 2.1377	* 3.2018	*	*
15	* .7465	* .9221	* 1.1888	* .8600	* F-SUB-Q			
	* 2.9445	* 2.3891	* 1.8504	* 2.5659	* M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1481	* 1.5626	* 1.3634	* 1.4212	* 1.4330	* 1.5583	* 1.2488	* .7326 *
	* 1.9718	* 1.4533	* 1.6620	* 1.5925	* 1.5800	* 1.4552	* 1.8074	* 3.0615 *
9	* 1.5626	* 1.4255	* 1.5637	* 1.3805	* 1.5829	* 1.3388	* 1.4951	* .9104 *
	* 1.4533	* 1.5914	* 1.4523	* 1.6410	* 1.4363	* 1.6912	* 1.5150	* 2.4725 *
10	* 1.3634	* 1.5754	* 1.3088	* 1.5904	* 1.4576	* 1.5594	* 1.3709	* 1.1727 *
	* 1.6620	* 1.4419	* 1.7323	* 1.4344	* 1.5588	* 1.4571	* 1.6520	* 1.9221 *
11	* 1.4212	* 1.3816	* 1.5915	* 1.4716	* 1.5883	* 1.3313	* 1.4651	* .8450 *
	* 1.5925	* 1.6398	* 1.4325	* 1.5490	* 1.4363	* 1.7082	* 1.5501	* 2.6664 *
12	* 1.4330	* 1.5851	* 1.4555	* 1.5894	* 1.4287	* 1.4994	* 1.0292	*
	* 1.5800	* 1.4353	* 1.5610	* 1.4353	* 1.5948	* 1.5202	* 2.2038	*
13	* 1.5583	* 1.3398	* 1.5594	* 1.3302	* 1.5015	* 1.0753	* .6769	*
	* 1.4552	* 1.6899	* 1.4571	* 1.7095	* 1.5181	* 2.1152	* 3.3440	*
14	* 1.2488	* 1.4951	* 1.3698	* 1.4651	* 1.0292	* .6769	*	*
	* 1.8074	* 1.5150	* 1.6533	* 1.5501	* 2.2060	* 3.3440	*	*
15	* .7326	* .9093	* 1.1727	* .8439	* F-SUB-Q			
	* 3.0615	* 2.4753	* 1.9221	* 2.6696	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1663	* 1.6001	* 1.3891	* 1.4501	* 1.4598	* 1.5979	* 1.2713	* .7433
	* 1.8780	* 1.3738	* 1.5800	* 1.5119	* 1.5037	* 1.3746	* 1.7202	* 2.8977
9	* 1.6001	* 1.4501	* 1.6011	* 1.4062	* 1.6226	* 1.3655	* 1.5347	* .9275
	* 1.3738	* 1.5140	* 1.3721	* 1.5599	* 1.3561	* 1.6064	* 1.4288	* 2.3418
10	* 1.3891	* 1.6140	* 1.3355	* 1.6311	* 1.4855	* 1.5990	* 1.4052	* 1.2027
	* 1.5800	* 1.3619	* 1.6447	* 1.3511	* 1.4805	* 1.3746	* 1.5610	* 1.8090
11	* 1.4501	* 1.4084	* 1.6322	* 1.5005	* 1.6290	* 1.3580	* 1.5048	* .8654
	* 1.5119	* 1.5588	* 1.3495	* 1.4677	* 1.3528	* 1.6194	* 1.4590	* 2.5177
12	* 1.4598	* 1.6236	* 1.4833	* 1.6290	* 1.4587	* 1.5369	* 1.0474	*
	* 1.5037	* 1.3544	* 1.4825	* 1.3519	* 1.5098	* 1.4316	* 2.0932	*
13	* 1.5979	* 1.3666	* 1.5990	* 1.570	* 1.5401	* 1.0935	* .6897	*
	* 1.3746	* 1.6052	* 1.3746	* 1.6194	* 1.4298	* 2.0076	* 3.1623	*
14	* 1.2713	* 1.5347	* 1.4052	* 1.5037	* 1.0464	* .6897	*	*
	* 1.7202	* 1.4288	* 1.5610	* 1.4600	* 2.0952	* 3.1623	*	*
15	* .7433	* .9264	* 1.2027	* .8643	* F-SUB-Q			
	* 2.8977	* 2.3442	* 1.8105	* 2.5177	* M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1652	* 1.6076	* 1.3912	* 1.4544	* 1.4641	* 1.6076	* 1.2745	* .7422
	* 1.8257	* 1.3186	* 1.5198	* 1.4483	* 1.4325	* 1.3056	* 1.6277	* 2.7554
9	* 1.6076	* 1.4533	* 1.6097	* 1.4094	* 1.6311	* 1.3698	* 1.5455	* .9296
	* 1.3186	* 1.4576	* 1.3140	* 1.4933	* 1.2955	* 1.5275	* 1.3520	* 2.2145
10	* 1.3912	* 1.6226	* 1.3388	* 1.6418	* 1.4908	* 1.6086	* 1.4137	* 1.2092
	* 1.5198	* 1.3039	* 1.5773	* 1.2939	* 1.4167	* 1.3086	* 1.4775	* 1.7044
11	* 1.4544	* 1.4116	* 1.6429	* 1.5058	* 1.6397	* 1.3634	* 1.5144	* .8664
	* 1.4483	* 1.4913	* 1.2924	* 1.4119	* 1.2969	* 1.5497	* 1.3849	* 2.3762
12	* 1.4641	* 1.6333	* 1.4887	* 1.6397	* 1.4651	* 1.5476	* 1.0496	*
	* 1.4325	* 1.2940	* 1.4194	* 1.2961	* 1.4600	* 1.3766	* 1.9960	*
13	* 1.6076	* 1.3709	* 1.6086	* 1.3623	* 1.5497	* 1.0967	* .6897	*
	* 1.3056	* 1.5264	* 1.3094	* 1.5507	* 1.3741	* 1.9311	* 3.0132	*
14	* 1.2745	* 1.5455	* 1.4137	* 1.5144	* 1.0496	* .6897	*	*
	* 1.6277	* 1.3520	* 1.4775	* 1.3857	* 1.9978	* 3.0093	*	*
15	* .7422	* .9286	* 1.2081	* .8664	* F-SUB-Q			
	* 2.7554	* 2.2146	* 1.7057	* 2.3788	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1481	* 1.5915	* 1.3762	* 1.4394	* 1.4501	* 1.5926	* 1.2627	* .7315
	* 1.7494	* 1.2639	* 1.4570	* 1.3886	* 1.3731	* 1.2527	* 1.5634	* 2.6613
9	* 1.5915	* 1.4384	* 1.5926	* 1.3944	* 1.6161	* 1.3570	* 1.5305	* .9189
	* 1.2639	* 1.3963	* 1.2604	* 1.4317	* 1.2413	* 1.4650	* 1.2961	* 2.1289
10	* 1.3762	* 1.6054	* 1.3238	* 1.6268	* 1.4769	* 1.5936	* 1.4009	* 1.1952
	* 1.4570	* 1.2504	* 1.5138	* 1.2378	* 1.3570	* 1.2540	* 1.4154	* 1.6388
11	* 1.4394	* 1.3966	* 1.6279	* 1.4919	* 1.6247	* 1.3516	* 1.5005	* .8536
	* 1.3886	* 1.4308	* 1.2370	* 1.3486	* 1.2398	* 1.4804	* 1.3255	* 2.2920
12	* 1.4501	* 1.6172	* 1.4748	* 1.6247	* 1.4533	* 1.5337	* 1.0410	*
	* 1.3731	* 1.2399	* 1.3587	* 1.2391	* 1.3874	* 1.3110	* 1.9065	*
13	* 1.5926	* 1.3580	* 1.5936	* 1.3505	* 1.5358	* 1.0860	* .6779	*
	* 1.2527	* 1.4640	* 1.2541	* 1.4814	* 1.3087	* 1.8382	* 2.8975	*
14	* 1.2627	* 1.5315	* 1.4009	* 1.5005	* 1.0399	* .6790	*	*
	* 1.5634	* 1.2960	* 1.4154	* 1.3262	* 1.9066	* 2.8975	*	*
15	* .7315	* .9178	* 1.1942	* .8525	* F-SUB-Q			
	* 2.6613	* 2.1310	* 1.6388	* 2.2943	* M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1652	* 1.6236	* 1.3987	* 1.4673	* 1.4758	* 1.6258	* 1.2841	* .7411
	* 1.6304	* 1.1736	* 1.3585	* 1.2925	* 1.2817	* 1.1648	* 1.4615	* 2.5002
9	* 1.6236	* 1.4641	* 1.6236	* 1.4180	* 1.6493	* 1.3805	* 1.5637	* .9339
	* 1.1736	* 1.3007	* 1.1718	* 1.3355	* 1.1536	* 1.3678	* 1.2061	* 1.9957
10	* 1.3987	* 1.6376	* 1.3462	* 1.6611	* 1.5037	* 1.6279	* 1.4298	* 1.2199
	* 1.3585	* 1.1622	* 1.4113	* 1.1486	* 1.2650	* 1.1659	* 1.3176	* 1.5281
11	* 1.4673	* 1.4201	* 1.6633	* 1.5187	* 1.6590	* 1.3752	* 1.5337	* .8697
	* 1.2925	* 1.3347	* 1.1474	* 1.2556	* 1.1504	* 1.3794	* 1.2318	* 2.1413
12	* 1.4758	* 1.6515	* 1.5005	* 1.6600	* 1.4823	* 1.5679	* 1.0592	*
	* 1.2817	* 1.1524	* 1.2666	* 1.1498	* 1.2860	* 1.2139	* 1.7797	*
13	* 1.6258	* 1.3816	* 1.6279	* 1.3741	* 1.5712	* 1.1053	* .6919	*
	* 1.1648	* 1.3670	* 1.1659	* 1.3802	* 1.2114	* 1.7117	* 2.7022	*
14	* 1.2841	* 1.5647	* 1.4298	* 1.5337	* 1.0581	* .6919	*	*
	* 1.4615	* 1.2059	* 1.3176	* 1.2320	* 1.7811	* 2.7022	*	*
15	* .7411	* .9328	* 1.2199	* .8697	* F-SUB-Q			
	* 2.5002	* 1.9975	* 1.5292	* 2.1429	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1395	* 1.5904	* 1.3741	* 1.4394	* 1.4501	* 1.5904	* 1.2616	* .7240
	* 1.5849	* 1.1401	* 1.3162	* 1.2531	* 1.2422	* 1.1345	* 1.4185	* 2.4456
9	* 1.5904	* 1.4405	* 1.5872	* 1.3923	* 1.6140	* 1.3548	* 1.5283	* .9136
	* 1.1401	* 1.2565	* 1.1406	* 1.2954	* 1.1222	* 1.3288	* 1.1759	* 1.9464
10	* 1.3741	* 1.6011	* 1.3184	* 1.6258	* 1.4780	* 1.5915	* 1.3998	* 1.1888
	* 1.3162	* 1.1314	* 1.3715	* 1.1164	* 1.2246	* 1.1351	* 1.2821	* 1.4957
11	* 1.4394	* 1.3944	* 1.6268	* 1.4930	* 1.6236	* 1.3495	* 1.4983	* .8439
	* 1.2531	* 1.2941	* 1.1154	* 1.2140	* 1.1177	* 1.3366	* 1.1999	* 2.1036
12	* 1.4501	* 1.6151	* 1.4748	* 1.6247	* 1.4587	* 1.5347	* 1.0421	*
	* 1.2422	* 1.1211	* 1.2265	* 1.1171	* 1.2405	* 1.1778	* 1.7186	*
13	* 1.5904	* 1.3559	* 1.5915	* 1.3484	* 1.5369	* 1.0892	* .6737	*
	* 1.1345	* 1.3274	* 1.1351	* 1.3375	* 1.1754	* 1.6502	* 2.6410	*
14	* 1.2616	* 1.5283	* 1.3998	* 1.4983	* 1.0410	* .6737	*	*
	* 1.4185	* 1.1754	* 1.2821	* 1.2004	* 1.7197	* 2.6386	*	*
15	* .7240	* .9125	* 1.1888	* .8439	* F-SUB-Q			
	* 2.4456	* 1.9468	* 1.4959	* 2.1056	* M-SUB-Q			

AT 100% POWER, 200 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1245	* 1.5658	* 1.3580	* 1.4223	* 1.4319	* 1.5594	* 1.2445	* .7090
	* 1.5431	* 1.1128	* 1.2794	* 1.2191	* 1.2107	* 1.1128	* 1.3851	* 2.4052
9	* 1.5658	* 1.4298	* 1.5604	* 1.3741	* 1.5829	* 1.3323	* 1.4919	* .8921
	* 1.1128	* 1.2164	* 1.1159	* 1.2620	* 1.0995	* 1.2996	* 1.1580	* 1.9181
10	* 1.3580	* 1.5733	* 1.3023	* 1.5915	* 1.4576	* 1.5583	* 1.3709	* 1.1545
	* 1.2794	* 1.1061	* 1.3347	* 1.0950	* 1.1935	* 1.1144	* 1.2585	* 1.4814
11	* 1.4223	* 1.3762	* 1.5936	* 1.4716	* 1.5904	* 1.3238	* 1.4608	* .8215
	* 1.2191	* 1.2606	* 1.0935	* 1.1834	* 1.0960	* 1.3085	* 1.1823	* 2.0814
12	* 1.4319	* 1.5851	* 1.4555	* 1.5915	* 1.4384	* 1.5005	* 1.0271	*
	* 1.2107	* 1.0983	* 1.1952	* 1.0950	* 1.2079	* 1.1567	* 1.6763	*
13	* 1.5594	* 1.3334	* 1.5583	* 1.3238	* 1.5026	* 1.0731	* .6597	*
	* 1.1128	* 1.2981	* 1.1145	* 1.3093	* 1.1549	* 1.6090	* 2.5932	*
14	* 1.2445	* 1.4919	* 1.3709	* 1.4608	* 1.0260	* .6597	*	*
	* 1.3851	* 1.1574	* 1.2585	* 1.1823	* 1.6775	* 2.5932	*	*
15	* .7090	* .8911	* 1.1545	* .8215	* F-SUB-Q			
	* 2.4052	* 1.9198	* 1.4816	* 2.0819	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 100% POWER, 200 EPPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0346	* 1.3998	* 1.2359	* 1.2895	* 1.2948	* 1.3794	* 1.1245	* .6340
	* 1.6286	* 1.2067	* 1.3654	* 1.3059	* 1.2973	* 1.2197	* 1.4872	* 2.6206
9	* 1.3998	* 1.3109	* 1.4009	* 1.2424	* 1.4052	* 1.2006	* 1.3045	* .7840
	* 1.2067	* 1.2867	* 1.2050	* 1.3553	* 1.2010	* 1.4005	* 1.2849	* 2.1212
10	* 1.2359	* 1.4137	* 1.1963	* 1.4105	* 1.3152	* 1.3773	* 1.2145	* .9864
	* 1.3654	* 1.1949	* 1.4098	* 1.1998	* 1.2811	* 1.2230	* 1.3770	* 1.6851
11	* 1.2895	* 1.2466	* 1.4159	* 1.3238	* 1.3966	* 1.1845	* 1.2713	* .7176
	* 1.3059	* 1.3515	* 1.1943	* 1.2747	* 1.2094	* 1.4181	* 1.3179	* 2.3154
12	* 1.2948	* 1.4073	* 1.3141	* 1.3977	* 1.2873	* 1.3077	* .9253	*
	* 1.2973	* 1.1992	* 1.2819	* 1.2085	* 1.3076	* 1.2864	* 1.8072	*
13	* 1.3794	* 1.2017	* 1.3773	* 1.1845	* 1.3088	* .9596	* .5783	*
	* 1.2197	* 1.3989	* 1.2224	* 1.4188	* 1.2849	* 1.7471	* 2.8788	*
14	* 1.1245	* 1.3045	* 1.2145	* 1.2713	* .9253	* .5783	*	*
	* 1.4872	* 1.2849	* 1.3770	* 1.3179	* 1.8072	* 2.8788	*	*
15	* .6340	* .7840	* .9864	* .7176	* F-SUB-Q			
	* 2.6206	* 2.1228	* 1.6864	* 2.3173	* M-SUB-Q			

AT 100% POWER, 200 EPPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7358	* .9800	* .8225	* .8718	* .5987	* .9489	* .5098	* .4423
	* 2.2422	* 1.6839	* 2.0066	* 1.8918	* 2.7416	* 1.7309	* 3.2001	* 3.6806
9	* .9800	* .6180	* 1.0025	* .8386	* .9768	* .8075	* .8568	* .5109
	* 1.6839	* 2.6614	* 1.6468	* 1.9695	* 1.6858	* 2.0364	* 1.9112	* 3.1817
10	* .8225	* 1.0100	* .8482	* .9982	* .6073	* .9446	* .5226	* .6223
	* 2.0066	* 1.6349	* 1.9473	* 1.6539	* 2.7055	* 1.7401	* 3.1164	* 2.6127
11	* .8718	* .8429	* 1.0046	* .6094	* .9521	* .7850	* .8257	* .4595
	* 1.8918	* 1.9577	* 1.6431	* 2.6989	* 1.7298	* 2.0909	* 1.9820	* 3.5361
12	* .5987	* .9778	* .6083	* .9543	* .5687	* .8461	* .4016	*
	* 2.7416	* 1.6846	* 2.7022	* 1.7271	* 2.8813	* 1.9410	* 4.0673	*
13	* .9489	* .8075	* .9446	* .7850	* .8472	* .4155	* .3973	*
	* 1.7309	* 2.0345	* 1.7390	* 2.0929	* 1.9376	* 3.9261	* 4.0899	*
14	* .5098	* .8568	* .5226	* .8257	* .4016	* .3973	*	*
	* 3.2001	* 1.9099	* 3.1164	* 1.9834	* 4.0673	* 4.0957	*	*
15	* .4423	* .5109	* .6223	* .4595	* F-SUB-Q			
	* 3.6806	* 3.1852	* 2.6151	* 3.5361	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6972 *	* .9361 *	* .8343 *	* .8664 *	* .6223 *	* .9200 *	* .5409 *	* .5055 *
	* 2.0639 *	* 1.7392 *	* 1.9612 *	* 1.8643 *	* 2.5506 *	* 1.7168 *	* 2.8966 *	* 3.0721 *
9	* .9361 *	* .6383 *	* .9628 *	* .8439 *	* .9436 *	* .8107 *	* .8375 *	* .5494 *
	* 1.7392 *	* 2.6095 *	* 1.6924 *	* 1.9190 *	* 1.7017 *	* 1.9617 *	* 1.9068 *	* 2.8660 *
10	* .8343 *	* .9671 *	* .8482 *	* .9564 *	* .6255 *	* .9071 *	* .5323 *	* .6501 *
	* 1.9612 *	* 1.6865 *	* 1.9263 *	* 1.7085 *	* 2.6206 *	* 1.7994 *	* 3.0207 *	* 2.4446 *
11	* .8664 *	* .8461 *	* .9596 *	* .6244 *	* .9178 *	* .7679 *	* .8011 *	* .4980 *
	* 1.8643 *	* 1.9154 *	* 1.7024 *	* 2.6561 *	* 1.7814 *	* 2.1035 *	* 2.0576 *	* 3.2493 *
12	* .6223 *	* .9436 *	* .6255 *	* .9189 *	* .4948 *	* .7658 *	* .4145 *	
	* 2.5506 *	* 1.7013 *	* 2.6173 *	* 1.7808 *	* 2.7469 *	* 1.9241 *	* 3.8422 *	
13	* .9200 *	* .8107 *	* .9071 *	* .7679 *	* .7658 *	* .4048 *	* .4402 *	
	* 1.7168 *	* 1.9602 *	* 1.7994 *	* 2.1035 *	* 1.9222 *	* 3.5778 *	* 3.5287 *	
14	* .5409 *	* .8375 *	* .5323 *	* .8011 *	* .4145 *	* .4402 *		
	* 2.8966 *	* 1.9068 *	* 3.0207 *	* 2.0576 *	* 3.8422 *	* 3.5287 *		
15	* .5055 *	* .5494 *	* .6501 *	* .4980 *	F-SUB-Q			
	* 3.0721 *	* 2.8670 *	* 2.4446 *	* 3.2545 *	M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9864 *	* 1.2456 *	* 1.1513 *	* 1.1749 *	* 1.1974 *	* 1.2242 *	* 1.0678 *	* .6694 *
	* 1.6667 *	* 1.3764 *	* 1.4729 *	* 1.4245 *	* 1.3714 *	* 1.3430 *	* 1.5210 *	* 2.4058 *
9	* 1.2456 *	* 1.2156 *	* 1.2520 *	* 1.1535 *	* 1.2445 *	* 1.1085 *	* 1.1545 *	* .7690 *
	* 1.3764 *	* 1.4101 *	* 1.3450 *	* 1.4455 *	* 1.3463 *	* 1.4867 *	* 1.4282 *	* 2.1128 *
10	* 1.1513 *	* 1.2541 *	* 1.1063 *	* 1.2499 *	* 1.2092 *	* 1.2177 *	* 1.0849 *	* .9168 *
	* 1.4729 *	* 1.3439 *	* 1.5303 *	* 1.3532 *	* 1.4075 *	* 1.3825 *	* 1.5403 *	* 1.7965 *
11	* 1.1749 *	* 1.1556 *	* 1.2552 *	* 1.2124 *	* 1.2252 *	* 1.0774 *	* 1.1203 *	* .6972 *
	* 1.4245 *	* 1.4445 *	* 1.3474 *	* 1.4099 *	* 1.3872 *	* 1.5621 *	* 1.5204 *	* 2.4128 *
12	* 1.1974 *	* 1.2456 *	* 1.2081 *	* 1.2263 *	* 1.1320 *	* 1.1310 *	* .8761 *	
	* 1.3714 *	* 1.3454 *	* 1.4075 *	* 1.3866 *	* 1.4155 *	* 1.4358 *	* 1.8970 *	
13	* 1.2242 *	* 1.1085 *	* 1.2177 *	* 1.0764 *	* 1.1320 *	* .8943 *	* .5912 *	
	* 1.3430 *	* 1.4856 *	* 1.3825 *	* 1.5621 *	* 1.4348 *	* 1.7918 *	* 2.7592 *	
14	* 1.0678 *	* 1.1545 *	* 1.0849 *	* 1.1203 *	* .8761 *	* .5912 *		
	* 1.5210 *	* 1.4282 *	* 1.5403 *	* 1.5204 *	* 1.8970 *	* 2.7592 *		
15	* .6694 *	* .7690 *	* .9168 *	* .6972 *	F-SUB-Q			
	* 2.4058 *	* 2.1145 *	* 1.7965 *	* 2.4128 *	M-SUB-Q			



TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1203	* 1.4180	* 1.2841	* 1.3077	* 1.3323	* 1.3955	* 1.1877	* .7422
	* 1.5743	* 1.2563	* 1.3781	* 1.3251	* 1.2766	* 1.2190	* 1.4157	* 2.2460
9	* 1.4180	* 1.3495	* 1.4148	* 1.2831	* 1.4180	* 1.2402	* 1.3270	* .8675
	* 1.2563	* 1.3207	* 1.2365	* 1.3439	* 1.2220	* 1.3723	* 1.2886	* 1.9350
10	* 1.2841	* 1.4201	* 1.2252	* 1.4191	* 1.3516	* 1.3923	* 1.2295	* 1.0656
	* 1.3781	* 1.2339	* 1.4336	* 1.2348	* 1.3055	* 1.2526	* 1.4073	* 1.5990
11	* 1.3077	* 1.2852	* 1.4212	* 1.3591	* 1.4148	* 1.2209	* 1.2948	* .7904
	* 1.3251	* 1.3430	* 1.2339	* 1.3004	* 1.2485	* 1.4368	* 1.3638	* 2.2005
12	* 1.3323	* 1.4191	* 1.3516	* 1.4159	* 1.3152	* 1.3313	* .9789	
	* 1.2766	* 1.2213	* 1.3063	* 1.2485	* 1.3139	* 1.2966	* 1.7722	
13	* 1.3955	* 1.2413	* 1.3923	* 1.2209	* 1.3313	* 1.0217	* .6758	
	* 1.2190	* 1.3714	* 1.2526	* 1.4374	* 1.2958	* 1.6698	* 2.5353	
14	* 1.1877	* 1.3270	* 1.2295	* 1.2948	* .9789	* .6758		
	* 1.4157	* 1.2886	* 1.4081	* 1.3638	* 1.7737	* 2.5341		
15	* .7422	* .8675	* 1.0646	* .7904	* F-SUB-Q			
	* 2.2460	* 1.9368	* 1.5990	* 2.2023	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1685	* 1.4951	* 1.3355	* 1.3580	* 1.3816	* 1.4705	* 1.2284	* .7636
	* 1.5771	* 1.2391	* 1.3821	* 1.3246	* 1.2759	* 1.1997	* 1.4181	* 2.2643
9	* 1.4951	* 1.3998	* 1.4908	* 1.3355	* 1.4962	* 1.2927	* 1.4030	* .9007
	* 1.2391	* 1.3231	* 1.2213	* 1.3430	* 1.2029	* 1.3644	* 1.2656	* 1.9349
10	* 1.3355	* 1.4962	* 1.2777	* 1.4994	* 1.4073	* 1.4716	* 1.2938	* 1.1235
	* 1.3821	* 1.2153	* 1.4281	* 1.2146	* 1.3011	* 1.2292	* 1.3869	* 1.5718
11	* 1.3580	* 1.3377	* 1.5015	* 1.4169	* 1.4983	* 1.2788	* 1.3698	* .8279
	* 1.3246	* 1.3428	* 1.2133	* 1.2970	* 1.2275	* 1.4308	* 1.3407	* 2.1812
12	* 1.3816	* 1.4973	* 1.4062	* 1.4994	* 1.3741	* 1.4105	* 1.0132	
	* 1.2759	* 1.2023	* 1.3019	* 1.2268	* 1.3165	* 1.2817	* 1.7909	
13	* 1.4705	* 1.2938	* 1.4716	* 1.2777	* 1.4116	* 1.0614	* .7026	
	* 1.1997	* 1.3635	* 1.2294	* 1.4308	* 1.2802	* 1.6887	* 2.5590	
14	* 1.2284	* 1.4030	* 1.2938	* 1.3698	* 1.0121	* .7026		
	* 1.4181	* 1.2649	* 1.3869	* 1.3407	* 1.7918	* 2.5590		
15	* .7636	* .9007	* 1.1235	* .8279	* F-SUB-Q			
	* 2.2643	* 1.9353	* 1.5720	* 2.1817	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1567	* 1.4887	* 1.3216	* 1.3430	* 1.3655	* 1.4619	* 1.2113	* .7486 *
	* 1.6434	* 1.2840	* 1.4430	* 1.3966	* 1.3459	* 1.2575	* 1.4993	* 2.4107 *
9	* 1.4887	* 1.3859	* 1.4844	* 1.3227	* 1.4898	* 1.2809	* 1.3966	* .8889 *
	* 1.2840	* 1.3799	* 1.2770	* 1.4165	* 1.2602	* 1.4358	* 1.3254	* 2.0483 *
10	* 1.3216	* 1.4908	* 1.2670	* 1.4951	* 1.3934	* 1.4651	* 1.2863	* 1.1138 *
	* 1.4430	* 1.2706	* 1.4991	* 1.2693	* 1.3616	* 1.2846	* 1.4512	* 1.6494 *
11	* 1.3430	* 1.3238	* 1.4983	* 1.4052	* 1.4930	* 1.2681	* 1.3634	* .8161 *
	* 1.3966	* 1.4155	* 1.2684	* 1.3574	* 1.2772	* 1.4984	* 1.3910	* 2.2985 *
12	* 1.3655	* 1.4908	* 1.3923	* 1.4940	* 1.3612	* 1.4030	* .9971 *	
	* 1.3459	* 1.2597	* 1.3625	* 1.2771	* 1.3891	* 1.3462	* 1.8989 *	
13	* 1.4619	* 1.2809	* 1.4651	* 1.2681	* 1.4052	* 1.0442	* .6865 *	
	* 1.2575	* 1.4348	* 1.2846	* 1.4994	* 1.3445	* 1.8021	* 2.7416 *	
14	* 1.2113	* 1.3966	* 1.2863	* 1.3634	* .9960	* .6876 *		
	* 1.4993	* 1.3246	* 1.4515	* 1.3910	* 1.8991	* 2.7416 *		
15	* .7486 *	* .8889 *	* 1.1138 *	* .8161 *	F-SUB-Q			
	* 2.4107 *	* 2.0488 *	* 1.6497 *	* 2.2991 *	M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1760	* 1.5240	* 1.3430	* 1.3655	* 1.3848	* 1.4940	* 1.2274	* .7551 *
	* 1.6469	* 1.2939	* 1.4682	* 1.4329	* 1.3896	* 1.2878	* 1.5504	* 2.5050 *
9	* 1.5240	* 1.4073	* 1.5197	* 1.3430	* 1.5240	* 1.3013	* 1.4309	* .9007 *
	* 1.2939	* 1.4017	* 1.2958	* 1.4577	* 1.2844	* 1.4788	* 1.3525	* 2.1181 *
10	* 1.3430	* 1.5262	* 1.2906	* 1.5347	* 1.4148	* 1.4994	* 1.3141	* 1.1385 *
	* 1.4682	* 1.2890	* 1.5264	* 1.2807	* 1.3888	* 1.3043	* 1.4783	* 1.6856 *
11	* 1.3655	* 1.3441	* 1.5380	* 1.4266	* 1.5283	* 1.2895	* 1.3966	* .8322 *
	* 1.4329	* 1.4558	* 1.2784	* 1.3806	* 1.2878	* 1.5244	* 1.4017	* 2.3339 *
12	* 1.3848	* 1.5251	* 1.4137	* 1.5294	* 1.3805	* 1.4341	* 1.0057 *	
	* 1.3896	* 1.2846	* 1.3897	* 1.2874	* 1.4273	* 1.3728	* 1.9521 *	
13	* 1.4940	* 1.3013	* 1.4994	* 1.2884	* 1.4362	* 1.0539	* .6951 *	
	* 1.2878	* 1.4778	* 1.3043	* 1.5249	* 1.3715	* 1.8698	* 2.8269 *	
14	* 1.2274	* 1.4309	* 1.3141	* 1.3955	* 1.0057 *	* .6951 *		
	* 1.5504	* 1.3525	* 1.4783	* 1.4022	* 1.9521 *	* 2.8251 *		
15	* .7551 *	* .9007 *	* 1.1385 *	* .8322 *	F-SUB-Q			
	* 2.5050 *	* 2.1186 *	* 1.6866 *	* 2.3364 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1695	* 1.5240	* 1.3366	* 1.3602	* 1.3773	* 1.4919	* 1.2188	* .7454
	* 1.7199	* 1.3462	* 1.5343	* 1.4959	* 1.4610	* 1.3477	* 1.6359	* 2.6549
9	* 1.5240	* 1.4009	* 1.5187	* 1.3366	* 1.5219	* 1.2948	* 1.4287	* .8932
	* 1.3462	* 1.4648	* 1.3448	* 1.5206	* 1.3359	* 1.5531	* 1.4064	* 2.2298
10	* 1.3366	* 1.5251	* 1.2852	* 1.5347	* 1.4084	* 1.4973	* 1.3109	* 1.1331
	* 1.5343	* 1.3367	* 1.5883	* 1.3287	* 1.4450	* 1.3522	* 1.5343	* 1.7617
11	* 1.3602	* 1.3377	* 1.5390	* 1.4201	* 1.5272	* 1.2831	* 1.3934	* .8257
	* 1.4959	* 1.5185	* 1.3263	* 1.4395	* 1.3377	* 1.5890	* 1.4574	* 2.4323
12	* 1.3773	* 1.5230	* 1.4073	* 1.5272	* 1.3741	* 1.4309	* .9971	*
	* 1.4610	* 1.3351	* 1.4469	* 1.3377	* 1.4845	* 1.4234	* 2.0386	*
13	* 1.4919	* 1.2948	* 1.4973	* 1.2820	* 1.4330	* 1.0442	* .6865	*
	* 1.3477	* 1.5520	* 1.3531	* 1.5896	* 1.4215	* 1.9488	* 2.9551	*
14	* 1.2188	* 1.4287	* 1.3109	* 1.3934	* .9960	* .6865	*	*
	* 1.6359	* 1.4064	* 1.5354	* 1.4574	* 2.0395	* 2.9551	*	*
15	* .7454	* .8932	* 1.1320	* .8257	* F-SUB-Q			
	* 2.6549	* 2.2321	* 1.7631	* 2.4323	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1588	* 1.5165	* 1.3270	* 1.3495	* 1.3655	* 1.4833	* 1.2059	* .7336
	* 1.8124	* 1.4054	* 1.6078	* 1.5746	* 1.5424	* 1.4171	* 1.7295	* 2.8198
9	* 1.5165	* 1.3912	* 1.5112	* 1.3259	* 1.5133	* 1.2841	* 1.4201	* .8825
	* 1.4054	* 1.5342	* 1.4072	* 1.5997	* 1.3992	* 1.6376	* 1.4738	* 2.3524
10	* 1.3270	* 1.5176	* 1.2766	* 1.5283	* 1.3977	* 1.4887	* 1.3023	* 1.1213
	* 1.6078	* 1.4001	* 1.6672	* 1.3860	* 1.5152	* 1.4153	* 1.6078	* 1.8516
11	* 1.3495	* 1.3270	* 1.5315	* 1.4094	* 1.5187	* 1.2723	* 1.3848	* .8150
	* 1.5746	* 1.5985	* 1.3834	* 1.5090	* 1.3974	* 1.6647	* 1.5184	* 2.5558
12	* 1.3655	* 1.5144	* 1.3955	* 1.5197	* 1.3623	* 1.4212	* .9853	*
	* 1.5424	* 1.3974	* 1.5173	* 1.3974	* 1.5628	* 1.4952	* 2.1443	*
13	* 1.4833	* 1.2841	* 1.4887	* 1.2713	* 1.4223	* 1.0314	* .6747	*
	* 1.4171	* 1.6376	* 1.4153	* 1.6660	* 1.4932	* 2.0552	* 3.1270	*
14	* 1.2059	* 1.4201	* 1.3023	* 1.3848	* .9842	* .6747	*	*
	* 1.7295	* 1.4738	* 1.6090	* 1.5184	* 2.1443	* 3.1270	*	*
15	* .7336	* .8825	* 1.1213	* .8150	* F-SUB-Q			
	* 2.8198	* 2.3543	* 1.8516	* 2.5558	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1738	* 1.5497	* 1.3452	* 1.3709	* 1.3827	* 1.5101	* 1.2188	* .7390
	* 1.8658	* 1.4476	* 1.6721	* 1.6386	* 1.6077	* 1.4688	* 1.8019	* 2.9454
9	* 1.5497	* 1.4105	* 1.5412	* 1.3430	* 1.5422	* 1.3013	* 1.4469	* .8932
	* 1.4476	* 1.5949	* 1.4524	* 1.6658	* 1.4457	* 1.7043	* 1.5235	* 2.4419
10	* 1.3452	* 1.5465	* 1.2959	* 1.5604	* 1.4159	* 1.5165	* 1.3238	* 1.1395
	* 1.6721	* 1.4476	* 1.7310	* 1.4280	* 1.5756	* 1.4630	* 1.6621	* 1.9114
11	* 1.3709	* 1.3452	* 1.5647	* 1.4287	* 1.5487	* 1.2884	* 1.4094	* .8268
	* 1.6386	* 1.6633	* 1.4252	* 1.5633	* 1.4401	* 1.7216	* 1.5633	* 2.6410
12	* 1.3827	* 1.5433	* 1.4137	* 1.5487	* 1.3794	* 1.4459	* .9239	*
	* 1.6077	* 1.4457	* 1.5778	* 1.4391	* 1.6124	* 1.5340	* 2.2150	*
13	* 1.5101	* 1.3013	* 1.5165	* 1.2884	* 1.4480	* 1.0410	* .6822	*
	* 1.4688	* 1.7043	* 1.4630	* 1.7229	* 1.5319	* 2.1235	* 3.2130	*
14	* 1.2188	* 1.4469	* 1.3238	* 1.4094	* .9939	* .6822	*	*
	* 1.8019	* 1.5235	* 1.6633	* 1.5633	* 2.2172	* 3.2130	*	*
15	* .7390	* .8921	* 1.1395	* .8268	* F-SUB-Q			
	* 2.9454	* 2.4446	* 1.9118	* 2.6410	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1567	* 1.5358	* 1.3291	* 1.3527	* 1.3655	* 1.4940	* 1.2027	* .7251
	* 1.9217	* 1.4905	* 1.7135	* 1.6796	* 1.6632	* 1.5234	* 1.8812	* 3.0958
9	* 1.5358	* 1.3944	* 1.5272	* 1.3270	* 1.5262	* 1.2852	* 1.4298	* .8804
	* 1.4905	* 1.6337	* 1.4955	* 1.7148	* 1.4966	* 1.7669	* 1.5891	* 2.5613
10	* 1.3291	* 1.5326	* 1.2798	* 1.5465	* 1.3987	* 1.5005	* 1.3088	* 1.1235
	* 1.7135	* 1.4905	* 1.7797	* 1.4815	* 1.6301	* 1.5192	* 1.7350	* 2.0095
11	* 1.3527	* 1.3291	* 1.5497	* 1.4116	* 1.5326	* 1.2734	* 1.3934	* .8118
	* 1.6796	* 1.7135	* 1.4776	* 1.6182	* 1.4925	* 1.7898	* 1.6337	* 2.7804
12	* 1.3655	* 1.5272	* 1.3977	* 1.5326	* 1.3634	* 1.4287	* .9810	*
	* 1.6632	* 1.4955	* 1.6325	* 1.4925	* 1.6758	* 1.5983	* 2.3170	*
13	* 1.4940	* 1.2863	* 1.5005	* 1.2734	* 1.4309	* 1.0260	* .6672	*
	* 1.5234	* 1.7655	* 1.5202	* 1.7913	* 1.5960	* 2.2193	* 3.3902	*
14	* 1.2027	* 1.4298	* 1.3088	* 1.3923	* .9810	* .6683	*	*
	* 1.8812	* 1.5891	* 1.7350	* 1.6349	* 2.3170	* 3.3902	*	*
15	* .7251	* .8793	* 1.1235	* .8118	* F-SUB-Q			
	* 3.0958	* 2.5643	* 2.0095	* 2.7839	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1792	* 1.5787	* 1.3559	* 1.3816	* 1.3912	* 1.5315	* 1.2252	* .7368
	* 1.8016	* 1.3972	* 1.6205	* 1.5879	* 1.5777	* 1.4344	* 1.7855	* 2.9247
9	* 1.5787	* 1.4223	* 1.5690	* 1.3527	* 1.5647	* 1.3109	* 1.4673	* .8975
	* 1.3972	* 1.5468	* 1.4052	* 1.6241	* 1.4070	* 1.6733	* 1.4945	* 2.4212
10	* 1.3559	* 1.5744	* 1.3077	* 1.5894	* 1.4266	* 1.5390	* 1.3409	* 1.1524
	* 1.6205	* 1.4008	* 1.6809	* 1.3893	* 1.5425	* 1.4298	* 1.6361	* 1.8894
11	* 1.3816	* 1.3548	* 1.5936	* 1.4394	* 1.5722	* 1.2991	* 1.4287	* .8311
	* 1.5879	* 1.6217	* 1.3858	* 1.5308	* 1.4034	* 1.6925	* 1.5361	* 2.6190
12	* 1.3912	* 1.5658	* 1.4244	* 1.5722	* 1.3912	* 1.4641	* .9982	*
	* 1.5777	* 1.4061	* 1.5447	* 1.4025	* 1.5834	* 1.5027	* 2.1950	*
13	* 1.5315	* 1.3120	* 1.5390	* 1.2981	* 1.4662	* 1.0442	* .6812	*
	* 1.4344	* 1.6720	* 1.4298	* 1.6925	* 1.5006	* 2.1032	* 3.2035	*
14	* 1.2252	* 1.4673	* 1.3409	* 1.4287	* .9971	* .6812	*	*
	* 1.7855	* 1.4945	* 1.6361	* 1.5361	* 2.1950	* 3.1989	*	*
15	* .7368	* .8964	* 1.1513	* .8311	* F-SUB-Q			
	* 2.9247	* 2.4214	* 1.8894	* 2.6190	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1845	* 1.5936	* 1.3634	* 1.3902	* 1.3987	* 1.5444	* 1.2316	* .7379
	* 1.7397	* 1.3429	* 1.5605	* 1.5211	* 1.5019	* 1.3622	* 1.6867	* 2.7672
9	* 1.5936	* 1.4309	* 1.5840	* 1.3602	* 1.5787	* 1.3184	* 1.4801	* .9018
	* 1.3429	* 1.4909	* 1.3475	* 1.5553	* 1.3428	* 1.5905	* 1.4129	* 2.2818
10	* 1.3634	* 1.5894	* 1.3152	* 1.6044	* 1.4351	* 1.5519	* 1.3516	* 1.1610
	* 1.5605	* 1.3418	* 1.6141	* 1.3289	* 1.4764	* 1.3595	* 1.5461	* 1.7749
11	* 1.3902	* 1.3623	* 1.6086	* 1.4480	* 1.5862	* 1.3066	* 1.4416	* .8343
	* 1.5211	* 1.5532	* 1.3264	* 1.4712	* 1.3442	* 1.6178	* 1.4563	* 2.4648
12	* 1.3987	* 1.5797	* 1.4330	* 1.5862	* 1.3998	* 1.4769	* 1.0035	*
	* 1.5019	* 1.3428	* 1.4784	* 1.3442	* 1.5244	* 1.4432	* 2.0888	*
13	* 1.5444	* 1.3195	* 1.5519	* 1.3066	* 1.4791	* 1.0485	* .6822	*
	* 1.3622	* 1.5893	* 1.3603	* 1.6190	* 1.4412	* 2.0176	* 3.0390	*
14	* 1.2316	* 1.4801	* 1.3516	* 1.4416	* 1.0025	* .6833	*	*
	* 1.6867	* 1.4129	* 1.5461	* 1.4563	* 2.0888	* 3.0390	*	*
15	* .7379	* .9007	* 1.1599	* .8343	* F-SUB-Q			
	* 2.7672	* 2.2820	* 1.7763	* 2.4674	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1738	* 1.5851	* 1.3559	* 1.3816	* 1.3934	* 1.5380	* 1.2263	* .7315
	* 1.6763	* 1.2819	* 1.4880	* 1.4522	* 1.4327	* 1.2991	* 1.6102	* 2.6577
9	* 1.5851	* 1.4244	* 1.5754	* 1.3527	* 1.5712	* 1.3130	* 1.4737	* .8964
	* 1.2819	* 1.4193	* 1.2843	* 1.4834	* 1.2808	* 1.5172	* 1.3475	* 2.1813
10	* 1.3559	* 1.5808	* 1.3077	* 1.5969	* 1.4287	* 1.5455	* 1.3452	* 1.1535
	* 1.4880	* 1.2799	* 1.5399	* 1.2660	* 1.4061	* 1.2959	* 1.4740	* 1.6969
11	* 1.3816	* 1.3548	* 1.6011	* 1.4426	* 1.5797	* 1.3013	* 1.4351	* .8257
	* 1.4522	* 1.4814	* 1.2631	* 1.3987	* 1.2784	* 1.5380	* 1.3861	* 2.3652
12	* 1.3934	* 1.5722	* 1.4266	* 1.5797	* 1.3955	* 1.4705	* .9992	*
	* 1.4327	* 1.2800	* 1.4078	* 1.2777	* 1.4470	* 1.3669	* 1.9832	*
13	* 1.5380	* 1.3141	* 1.5455	* 1.3013	* 1.4726	* 1.0442	* .6747	*
	* 1.2991	* 1.5162	* 1.2959	* 1.5390	* 1.3652	* 1.9108	* 2.9076	*
14	* 1.2263	* 1.4737	* 1.3452	* 1.4341	* .9982	* .6758	*	*
	* 1.6102	* 1.3475	* 1.4740	* 1.3870	* 1.9848	* 2.9073	*	*
15	* .7315	* .8954	* 1.1524	* .8257	* F-SUB-Q			
	* 2.6577	* 2.1833	* 1.6981	* 2.3675	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1995	* 1.6290	* 1.3869	* 1.4159	* 1.4266	* 1.5808	* 1.2563	* .7476
	* 1.5430	* 1.1809	* 1.3793	* 1.3445	* 1.3299	* 1.2012	* 1.4963	* 2.4799
9	* 1.6290	* 1.4566	* 1.6194	* 1.3837	* 1.6140	* 1.3441	* 1.5165	* .9178
	* 1.1809	* 1.3150	* 1.1850	* 1.3766	* 1.1820	* 1.4080	* 1.2453	* 2.0292
10	* 1.3869	* 1.6258	* 1.3388	* 1.6429	* 1.4630	* 1.5894	* 1.3827	* 1.1856
	* 1.3793	* 1.1808	* 1.4268	* 1.1671	* 1.3033	* 1.1973	* 1.3637	* 1.5721
11	* 1.4159	* 1.3859	* 1.6472	* 1.4780	* 1.6236	* 1.3334	* 1.4758	* .8482
	* 1.3445	* 1.3741	* 1.1644	* 1.2946	* 1.1792	* 1.4247	* 1.2806	* 2.1939
12	* 1.4266	* 1.6151	* 1.4608	* 1.6247	* 1.4319	* 1.5133	* 1.0239	*
	* 1.3299	* 1.1823	* 1.3049	* 1.1786	* 1.3339	* 1.2585	* 1.8399	*
13	* 1.5808	* 1.3452	* 1.5883	* 1.3323	* 1.5155	* 1.0699	* .6929	*
	* 1.2012	* 1.4066	* 1.1973	* 1.4251	* 1.2566	* 1.7679	* 2.6909	*
14	* 1.2563	* 1.5165	* 1.3827	* 1.4758	* 1.0228	* .6940	*	*
	* 1.4963	* 1.2453	* 1.3637	* 1.2806	* 1.8406	* 2.6909	*	*
15	* .7476	* .9168	* 1.1856	* .8482	* F-SUB-Q			
	* 2.4799	* 2.0311	* 1.5732	* 2.1951	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1824	* 1.6076	* 1.3730	* 1.4009	* 1.4169	* 1.5637	* 1.2488	* .7390
	* 1.5041	* 1.1372	* 1.3236	* 1.2919	* 1.2740	* 1.1554	* 1.4336	* 2.3929
9	* 1.6076	* 1.4459	* 1.5979	* 1.3709	* 1.5958	* 1.3334	* 1.4994	* .9093
	* 1.1372	* 1.2586	* 1.1416	* 1.3211	* 1.1380	* 1.3511	* 1.1988	* 1.9532
10	* 1.3730	* 1.6044	* 1.3238	* 1.6226	* 1.4533	* 1.5722	* 1.3698	* 1.1706
	* 1.3236	* 1.1375	* 1.3722	* 1.1239	* 1.2475	* 1.1509	* 1.3095	* 1.5179
11	* 1.4009	* 1.3730	* 1.6268	* 1.4673	* 1.6065	* 1.3238	* 1.4598	* .8343
	* 1.2919	* 1.3192	* 1.1208	* 1.2374	* 1.1319	* 1.3632	* 1.2310	* 2.1255
12	* 1.4169	* 1.5969	* 1.4512	* 1.6076	* 1.4255	* 1.4983	* 1.0196	*
	* 1.2740	* 1.1368	* 1.2496	* 1.1316	* 1.2706	* 1.2057	* 1.7540	*
13	* 1.5637	* 1.3345	* 1.5712	* 1.3227	* 1.5015	* 1.0667	* .6844	*
	* 1.1554	* 1.3500	* 1.1515	* 1.3640	* 1.2037	* 1.6835	* 2.5944	*
14	* 1.2488	* 1.4994	* 1.3698	* 1.4598	* 1.0196	* .6844	*	*
	* 1.4336	* 1.1984	* 1.3100	* 1.2310	* 1.7553	* 2.5914	*	*
15	* .7390	* .9082	* 1.1706	* .8332	* F-SUB-Q			
	* 2.3929	* 1.9541	* 1.5184	* 2.1275	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1749	* 1.5926	* 1.3687	* 1.3977	* 1.4169	* 1.5540	* 1.2499	* .7358
	* 1.4737	* 1.1006	* 1.2746	* 1.2438	* 1.2248	* 1.1171	* 1.3779	* 2.3136
9	* 1.5926	* 1.4469	* 1.5851	* 1.3666	* 1.5840	* 1.3291	* 1.4876	* .9029
	* 1.1006	* 1.2080	* 1.1036	* 1.2734	* 1.1005	* 1.3028	* 1.1605	* 1.8905
10	* 1.3687	* 1.5915	* 1.3184	* 1.6065	* 1.4512	* 1.5604	* 1.3634	* 1.1588
	* 1.2746	* 1.0992	* 1.3220	* 1.0876	* 1.1999	* 1.1134	* 1.2648	* 1.4744
11	* 1.3977	* 1.3687	* 1.6119	* 1.4651	* 1.5936	* 1.3184	* 1.4491	* .8268
	* 1.2438	* 1.2716	* 1.0847	* 1.1900	* 1.0945	* 1.3140	* 1.1914	* 2.0638
12	* 1.4169	* 1.5851	* 1.4491	* 1.5947	* 1.4255	* 1.4887	* 1.0228	*
	* 1.2248	* 1.0997	* 1.2019	* 1.0940	* 1.2190	* 1.1645	* 1.6814	*
13	* 1.5540	* 1.3302	* 1.5604	* 1.3173	* 1.4908	* 1.0689	* .6812	*
	* 1.1171	* 1.3020	* 1.1137	* 1.3143	* 1.1627	* 1.6123	* 2.5044	*
14	* 1.2499	* 1.4876	* 1.3634	* 1.4480	* 1.0217	* .6812	*	*
	* 1.3779	* 1.1605	* 1.2648	* 1.1914	* 1.6819	* 2.5028	*	*
15	* .7358	* .9029	* 1.1578	* .8257	* F-SUB-Q			
	* 2.3136	* 1.8921	* 1.4750	* 2.0638	* M-SUB-Q			



TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 300 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0849	* 1.4501	* 1.2563	* 1.2863	* 1.3045	* 1.4041	* 1.1513	* .6715
	* 1.5608	* 1.1727	* 1.3463	* 1.3116	* 1.2890	* 1.1991	* 1.4502	* 2.4671
9	* 1.4501	* 1.3388	* 1.4523	* 1.2531	* 1.4373	* 1.2167	* 1.3302	* .8140
	* 1.1727	* 1.2646	* 1.1690	* 1.3463	* 1.1760	* 1.3809	* 1.2592	* 2.0395
10	* 1.2553	* 1.4576	* 1.2231	* 1.4608	* 1.3302	* 1.4041	* 1.2359	* 1.0196
	* 1.3463	* 1.1647	* 1.3824	* 1.1610	* 1.2666	* 1.1997	* 1.3517	* 1.6260
11	* 1.2863	* 1.2563	* 1.4651	* 1.3420	* 1.4255	* 1.2027	* 1.2927	* .7433
	* 1.3116	* 1.3438	* 1.1576	* 1.2584	* 1.1857	* 1.3955	* 1.2941	* 2.2301
12	* 1.3045	* 1.4373	* 1.3291	* 1.4266	* 1.3013	* 1.3291	* .9446	*
	* 1.2890	* 1.1760	* 1.2681	* 1.1851	* 1.2920	* 1.2640	* 1.7660	*
13	* 1.4041	* 1.2177	* 1.4041	* 1.2027	* 1.3302	* .9800	* .6126	*
	* 1.1991	* 1.3800	* 1.2001	* 1.3960	* 1.2625	* 1.7069	* 2.7064	*
14	* 1.1513	* 1.3302	* 1.2359	* 1.2927	* .9436	* .6126	*	*
	* 1.4502	* 1.2585	* 1.3517	* 1.2945	* 1.7666	* 2.7064	*	*
15	* .6715	* .8129	* 1.0196	* .7422	* F-SUB-Q			
	* 2.4671	* 2.0403	* 1.6272	* 2.2324	* M-SUB-Q			

AT 100% POWER, 300 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7840	* 1.0303	* .8611	* .9018	* .6437	* .9928	* .5569	* .4819
	* 2.1091	* 1.6061	* 1.9203	* 1.8307	* 2.5470	* 1.6525	* 2.9227	* 3.3605
9	* 1.0303	* .6694	* 1.0421	* .8729	* 1.0185	* .8461	* .9018	* .5537
	* 1.6061	* 2.4653	* 1.5860	* 1.8939	* 1.6159	* 1.9401	* 1.8108	* 2.9261
10	* .8611	* 1.0485	* .8868	* 1.0389	* .6555	* .9917	* .5719	* .6747
	* 1.9203	* 1.5769	* 1.8645	* 1.5899	* 2.5054	* 1.6550	* 2.8474	* 2.4004
11	* .9018	* .8771	* 1.0453	* .6597	* .9982	* .8268	* .8697	* .4980
	* 1.8307	* 1.8842	* 1.5808	* 2.4944	* 1.6482	* 1.9842	* 1.8766	* 3.2475
12	* .6437	* 1.0196	* .6565	* 1.0003	* .6180	* .8921	* .4370	*
	* 2.5470	* 1.6147	* 2.5041	* 1.6458	* 2.6505	* 1.8356	* 3.7219	*
13	* .9928	* .8461	* .9917	* .8257	* .8932	* .4562	* .4359	*
	* 1.6525	* 1.9384	* 1.6550	* 1.9842	* 1.8325	* 3.5690	* 3.7087	*
14	* .5569	* .9029	* .5719	* .8697	* .4370	* .4359	*	*
	* 2.9227	* 1.8108	* 2.8474	* 1.8766	* 3.7247	* 3.7087	*	*
15	* .4819	* .5537	* .6747	* .4980	* F-SUB-Q			
	* 3.3605	* 2.9261	* 2.4016	* 3.2496	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7733	* 1.0335	* .9200	* .9564	* .7165	* 1.0303	* .6362	* .5955
	* 1.8708	* 1.6100	* 1.8623	* 1.7813	* 2.3391	* 1.6190	* 2.6041	* 2.7539
9	* 1.0335	* .7283	* 1.0592	* .9339	* 1.0485	* .9114	* .9478	* .6458
	* 1.6100	* 2.3438	* 1.6230	* 1.8310	* 1.6151	* 1.8417	* 1.7665	* 2.5777
10	* .9200	* 1.0624	* .9393	* 1.0560	* .7208	* 1.0207	* .6330	* .7647
	* 1.8623	* 1.6185	* 1.8344	* 1.6307	* 2.3890	* 1.6822	* 2.6849	* 2.1954
11	* .9564	* .9361	* 1.0592	* .7197	* 1.0249	* .8729	* .9125	* .5890
	* 1.7813	* 1.8285	* 1.6262	* 2.3639	* 1.6121	* 1.8989	* 1.8571	* 2.8971
12	* .7165	* 1.0485	* .7208	* 1.0249	* .5762	* .8729	* .4927	*
	* 2.3391	* 1.6151	* 2.3890	* 1.6121	* 2.3927	* 1.7174	* 3.3111	*
13	* 1.0303	* .9114	* 1.0207	* .8718	* .8729	* .4884	* .5301	*
	* 1.6190	* 1.8400	* 1.6822	* 1.8989	* 1.7154	* 3.0546	* 3.0062	*
14	* .6362	* .9478	* .6330	* .9125	* .4927	* .5301	*	*
	* 2.6041	* 1.7657	* 2.6849	* 1.8571	* 3.3111	* 3.0062	*	*
15	* .5955	* .6458	* .7647	* .5890	F-SUB-Q			
	* 2.7539	* 2.5793	* 2.1954	* 2.9012	M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0464	* 1.3023	* 1.1974	* 1.2156	* 1.2541	* 1.2906	* 1.1438	* .7465
	* 1.6036	* 1.3365	* 1.4682	* 1.4447	* 1.3745	* 1.3367	* 1.4909	* 2.2679
9	* 1.3023	* 1.2670	* 1.3088	* 1.2006	* 1.3066	* 1.1706	* 1.2359	* .8514
	* 1.3365	* 1.3814	* 1.3500	* 1.4589	* 1.3384	* 1.4760	* 1.3986	* 2.0060
10	* 1.1974	* 1.3130	* 1.1642	* 1.3141	* 1.2691	* 1.2916	* 1.1652	* 1.0057
	* 1.4682	* 1.3491	* 1.5211	* 1.3421	* 1.3817	* 1.3663	* 1.5045	* 1.7113
11	* 1.2156	* 1.2017	* 1.3173	* 1.2723	* 1.2970	* 1.1470	* 1.2027	* .7700
	* 1.4447	* 1.4579	* 1.3395	* 1.3676	* 1.3353	* 1.5000	* 1.4499	* 2.2824
12	* 1.2541	* 1.3077	* 1.2681	* 1.2970	* 1.1995	* 1.2081	* .9489	*
	* 1.3745	* 1.3384	* 1.3827	* 1.3353	* 1.3613	* 1.3716	* 1.7918	*
13	* 1.2906	* 1.1706	* 1.2916	* 1.1460	* 1.2092	* .9735	* .6704	*
	* 1.3367	* 1.4755	* 1.3663	* 1.5000	* 1.3709	* 1.6911	* 2.4916	*
14	* 1.1438	* 1.2370	* 1.1652	* 1.2017	* .9478	* .6704	*	*
	* 1.4909	* 1.3986	* 1.5045	* 1.4506	* 1.7934	* 2.4916	*	*
15	* .7465	* .8504	* 1.0057	* .7700	F-SUB-Q			
	* 2.2679	* 2.0080	* 1.7113	* 2.2824	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 16 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1535 *	* 1.4373 *	* 1.2927 *	* 1.3034 *	* 1.3420 *	* 1.4137 *	* 1.2252 *	* .8011 *
	* 1.5008 *	* 1.2547 *	* 1.4068 *	* 1.3839 *	* 1.3199 *	* 1.2488 *	* 1.4310 *	* 2.1731 *
9	* 1.4373 *	* 1.3570 *	* 1.4330 *	* 1.2938 *	* 1.4341 *	* 1.2638 *	* 1.3655 *	* .9243 *
	* 1.2547 *	* 1.3375 *	* 1.2708 *	* 1.3931 *	* 1.2478 *	* 1.4014 *	* 1.3031 *	* 1.8972 *
10	* 1.2927 *	* 1.4362 *	* 1.2477 *	* 1.4480 *	* 1.3645 *	* 1.4191 *	* 1.2691 *	* 1.1203 *
	* 1.4068 *	* 1.2682 *	* 1.4623 *	* 1.2520 *	* 1.3242 *	* 1.2778 *	* 1.4194 *	* 1.5814 *
11	* 1.3034 *	* 1.2948 *	* 1.4501 *	* 1.3709 *	* 1.4373 *	* 1.2520 *	* 1.3334 *	* .8397 *
	* 1.3839 *	* 1.3922 *	* 1.2505 *	* 1.3106 *	* 1.2457 *	* 1.4293 *	* 1.3519 *	* 2.1563 *
12	* 1.3420 *	* 1.4341 *	* 1.3634 *	* 1.4373 *	* 1.3388 *	* 1.3634 *	* 1.0239 *	
	* 1.3199 *	* 1.2481 *	* 1.3253 *	* 1.2455 *	* 1.3177 *	* 1.2906 *	* 1.7257 *	
13	* 1.4137 *	* 1.2638 *	* 1.4191 *	* 1.2520 *	* 1.3645 *	* 1.0689 *	* .7368 *	
	* 1.2488 *	* 1.4009 *	* 1.2785 *	* 1.4296 *	* 1.2898 *	* 1.6296 *	* 2.3725 *	
14	* 1.2252 *	* 1.3655 *	* 1.2691 *	* 1.3323 *	* 1.0239 *	* .7379 *		
	* 1.4310 *	* 1.3027 *	* 1.4194 *	* 1.3519 *	* 1.7257 *	* 2.3716 *		
15	* .8011 *	* .9232 *	* 1.1203 *	* .8397 *	F-SUB-Q			
	* 2.1731 *	* 1.8990 *	* 1.5820 *	* 2.1577 *	M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 15 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1727 *	* 1.4823 *	* 1.3066 *	* 1.3184 *	* 1.3505 *	* 1.4501 *	* 1.2316 *	* .8032 *
	* 1.4826 *	* 1.2653 *	* 1.4387 *	* 1.4055 *	* 1.3456 *	* 1.2505 *	* 1.4618 *	* 2.2294 *
9	* 1.4823 *	* 1.3709 *	* 1.4716 *	* 1.3077 *	* 1.4748 *	* 1.2788 *	* 1.3998 *	* .9339 *
	* 1.2653 *	* 1.3709 *	* 1.2758 *	* 1.4167 *	* 1.2487 *	* 1.4224 *	* 1.3060 *	* 1.9297 *
10	* 1.3066 *	* 1.4748 *	* 1.2638 *	* 1.4898 *	* 1.3794 *	* 1.4544 *	* 1.2948 *	* 1.1503 *
	* 1.4387 *	* 1.2731 *	* 1.4833 *	* 1.2578 *	* 1.3568 *	* 1.2805 *	* 1.4262 *	* 1.5841 *
11	* 1.3184 *	* 1.3088 *	* 1.4919 *	* 1.3880 *	* 1.4833 *	* 1.2713 *	* 1.3677 *	* .8547 *
	* 1.4055 *	* 1.4167 *	* 1.2564 *	* 1.3439 *	* 1.2551 *	* 1.4628 *	* 1.3651 *	* 2.1728 *
12	* 1.3505 *	* 1.4748 *	* 1.3784 *	* 1.4833 *	* 1.3548 *	* 1.4009 *	* 1.0324 *	
	* 1.3456 *	* 1.2487 *	* 1.3580 *	* 1.2551 *	* 1.3585 *	* 1.3117 *	* 1.7844 *	
13	* 1.4501 *	* 1.2788 *	* 1.4544 *	* 1.2702 *	* 1.4019 *	* 1.0796 *	* .7465 *	
	* 1.2505 *	* 1.4219 *	* 1.2813 *	* 1.4632 *	* 1.3112 *	* 1.6900 *	* 2.4540 *	
14	* 1.2316 *	* 1.3998 *	* 1.2948 *	* 1.3677 *	* 1.0324 *	* .7465 *		
	* 1.4618 *	* 1.3060 *	* 1.4262 *	* 1.3651 *	* 1.7844 *	* 2.4530 *		
15	* .8032 *	* .9339 *	* 1.1492 *	* .8547 *	F-SUB-Q			
	* 2.2294 *	* 1.9306 *	* 1.5841 *	* 2.1738 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1406	* 1.4501	* 1.2702	* 1.2820	* 1.3109	* 1.4148	* 1.1920	* .7733
	* 1.5646	* 1.3307	* 1.5174	* 1.4883	* 1.4302	* 1.3212	* 1.5578	* 2.3912
9	* 1.4501	* 1.3323	* 1.4384	* 1.2702	* 1.4394	* 1.2413	* 1.3666	* .9039
	* 1.3307	* 1.4514	* 1.3337	* 1.5012	* 1.3156	* 1.5095	* 1.3793	* 2.0554
10	* 1.2702	* 1.4416	* 1.2284	* 1.4555	* 1.3398	* 1.4212	* 1.2627	* 1.1213
	* 1.5174	* 1.3304	* 1.5607	* 1.3197	* 1.4321	* 1.3463	* 1.5022	* 1.6747
11	* 1.2820	* 1.2713	* 1.4576	* 1.3484	* 1.4491	* 1.2359	* 1.3355	* .8290
	* 1.4883	* 1.5001	* 1.3172	* 1.4279	* 1.3272	* 1.5545	* 1.4376	* 2.2965
12	* 1.3109	* 1.4394	* 1.3377	* 1.4491	* 1.3163	* 1.3666	* .9992	*
	* 1.4302	* 1.3164	* 1.4330	* 1.3272	* 1.4544	* 1.3997	* 1.9183	*
13	* 1.4148	* 1.2424	* 1.4212	* 1.2359	* 1.3677	* 1.0442	* .7186	*
	* 1.3212	* 1.5085	* 1.3463	* 1.5552	* 1.3982	* 1.8272	* 2.6605	*
14	* 1.1920	* 1.3666	* 1.2627	* 1.3355	* .9982	* .7186	*	*
	* 1.5578	* 1.3793	* 1.5028	* 1.4377	* 1.9183	* 2.6605	*	*
15	* .7733	* .9039	* 1.1213	* .8290	* F-SUB-Q			
	* 2.3912	* 2.0573	* 1.6747	* 2.2965	* M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1460	* 1.4683	* 1.2745	* 1.2873	* 1.3109	* 1.4309	* 1.1931	* .7711
	* 1.5743	* 1.3460	* 1.5516	* 1.5276	* 1.4798	* 1.3533	* 1.6151	* 2.4889
9	* 1.4683	* 1.3345	* 1.4566	* 1.2723	* 1.4566	* 1.2445	* 1.3794	* .9050
	* 1.3460	* 1.4818	* 1.3553	* 1.5448	* 1.3438	* 1.5585	* 1.4110	* 2.1277
10	* 1.2745	* 1.4587	* 1.2349	* 1.4737	* 1.3409	* 1.4384	* 1.2723	* 1.1320
	* 1.5516	* 1.3519	* 1.5995	* 1.3394	* 1.4707	* 1.3671	* 1.5346	* 1.7113
11	* 1.2873	* 1.2734	* 1.4737	* 1.3505	* 1.4662	* 1.2391	* 1.3495	* .8365
	* 1.5276	* 1.5437	* 1.3377	* 1.4647	* 1.3491	* 1.5934	* 1.4578	* 2.3419
12	* 1.3109	* 1.4566	* 1.3388	* 1.4651	* 1.3173	* 1.3784	* .9971	*
	* 1.4798	* 1.3446	* 1.4727	* 1.3492	* 1.5060	* 1.4383	* 1.9826	*
13	* 1.4309	* 1.2456	* 1.4384	* 1.2391	* 1.3794	* 1.0410	* .7197	*
	* 1.3533	* 1.5580	* 1.3671	* 1.5945	* 1.4364	* 1.9060	* 2.7564	*
14	* 1.1931	* 1.3805	* 1.2723	* 1.3495	* .9971	* .7197	*	*
	* 1.6151	* 1.4110	* 1.5346	* 1.4578	* 1.9826	* 2.7532	*	*
15	* .7711	* .9039	* 1.1320	* .8365	* F-SUB-Q			
	* 2.4889	* 2.1277	* 1.7126	* 2.3419	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1310	* 1.4587	* 1.2595	* 1.2734	* 1.2948	* 1.4180	* 1.1760	* .7572
	* 1.6425	* 1.3981	* 1.6227	* 1.5963	* 1.5544	* 1.4141	* 1.6999	* 2.6290
9	* 1.4587	* 1.3195	* 1.4459	* 1.2574	* 1.4448	* 1.2295	* 1.3687	* .8921
	* 1.3981	* 1.5493	* 1.4082	* 1.6144	* 1.3998	* 1.6347	* 1.4689	* 2.2352
10	* 1.2595	* 1.4480	* 1.2209	* 1.4619	* 1.3238	* 1.4276	* 1.2616	* 1.1203
	* 1.6227	* 1.4051	* 1.6698	* 1.3936	* 1.5356	* 1.4186	* 1.5965	* 1.7856
11	* 1.2734	* 1.2574	* 1.4530	* 1.3334	* 1.4544	* 1.2242	* 1.3377	* .8257
	* 1.5963	* 1.6132	* 1.3914	* 1.5286	* 1.4006	* 1.6626	* 1.5167	* 2.4395
12	* 1.2948	* 1.4448	* 1.3227	* 1.4533	* 1.3002	* 1.3655	* .9821	*
	* 1.5544	* 1.3998	* 1.5377	* 1.4006	* 1.5654	* 1.4898	* 2.0699	*
13	* 1.4180	* 1.2306	* 1.4276	* 1.2242	* 1.3666	* 1.0249	* .7069	*
	* 1.4141	* 1.6335	* 1.4186	* 1.6627	* 1.4888	* 1.9838	* 2.8746	*
14	* 1.1760	* 1.3687	* 1.2616	* 1.3377	* .9810	* .7069	*	*
	* 1.6999	* 1.4689	* 1.5965	* 1.5168	* 2.0699	* 2.8746	*	*
15	* .7572	* .8911	* 1.1203	* .8247	* F-SUB-Q			
	* 2.6290	* 2.2363	* 1.7864	* 2.4395	* M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1160	* 1.4469	* 1.2445	* 1.2584	* 1.2788	* 1.4052	* 1.1599	* .7443
	* 1.7328	* 1.4596	* 1.6992	* 1.6761	* 1.6365	* 1.4826	* 1.7901	* 2.7790
9	* 1.4469	* 1.3045	* 1.4330	* 1.2413	* 1.4309	* 1.2145	* 1.3548	* .8793
	* 1.4596	* 1.6220	* 1.4693	* 1.6954	* 1.4645	* 1.7198	* 1.5366	* 2.3510
10	* 1.2445	* 1.4351	* 1.2070	* 1.4480	* 1.3077	* 1.4148	* 1.2488	* 1.1074
	* 1.6992	* 1.4659	* 1.7489	* 1.4525	* 1.6080	* 1.4787	* 1.6693	* 1.8704
11	* 1.2584	* 1.2424	* 1.4491	* 1.3173	* 1.4405	* 1.2102	* 1.3248	* .8129
	* 1.6761	* 1.6941	* 1.4496	* 1.6034	* 1.4640	* 1.7408	* 1.5794	* 2.5546
12	* 1.2788	* 1.4309	* 1.3066	* 1.4394	* 1.2852	* 1.3516	* .9671	*
	* 1.6365	* 1.4649	* 1.6098	* 1.4640	* 1.6442	* 1.5600	* 2.1744	*
13	* 1.4052	* 1.2156	* 1.4137	* 1.2092	* 1.3527	* 1.0089	* .6929	*
	* 1.4826	* 1.7185	* 1.4792	* 1.7422	* 1.5589	* 2.0845	* 3.0318	*
14	* 1.1599	* 1.3559	* 1.2488	* 1.3248	* .9671	* .6929	*	*
	* 1.7901	* 1.5361	* 1.6693	* 1.5794	* 2.1750	* 3.0318	*	*
15	* .7443	* .8782	* 1.1074	* .8118	* F-SUB-Q			
	* 2.7790	* 2.3523	* 1.8704	* 2.5561	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1278	* 1.4737	* 1.2574	* 1.2723	* 1.2895	* 1.4287	* 1.1695	* .7497
	* 1.7745	* 1.4993	* 1.7613	* 1.7385	* 1.7025	* 1.5305	* 1.8609	* 2.8892
9	* 1.4737	* 1.3173	* 1.4587	* 1.2531	* 1.4555	* 1.2274	* 1.3762	* .8868
	* 1.4993	* 1.6817	* 1.5137	* 1.7607	* 1.5091	* 1.7850	* 1.5843	* 2.4372
10	* 1.2574	* 1.4608	* 1.2199	* 1.4737	* 1.3195	* 1.4394	* 1.2659	* 1.1235
	* 1.7613	* 1.5095	* 1.8045	* 1.4933	* 1.6685	* 1.5201	* 1.7219	* 1.9258
11	* 1.2723	* 1.2541	* 1.4748	* 1.3291	* 1.4651	* 1.2209	* 1.3452	* .8236
	* 1.7385	* 1.7593	* 1.4923	* 1.6585	* 1.5004	* 1.7959	* 1.6227	* 2.6300
12	* 1.2895	* 1.4555	* 1.3184	* 1.4651	* 1.2970	* 1.3709	* .9746	*
	* 1.7025	* 1.5091	* 1.6703	* 1.5004	* 1.6967	* 1.5998	* 2.2364	*
13	* 1.4287	* 1.2274	* 1.4394	* 1.2209	* 1.3720	* 1.0164	* .7004	*
	* 1.5305	* 1.7842	* 1.5206	* 1.7974	* 1.5992	* 2.1494	* 3.1130	*
14	* 1.1695	* 1.3762	* 1.2659	* 1.3452	* .9746	* .7004	*	*
	* 1.8609	* 1.5843	* 1.7219	* 1.6227	* 2.2364	* 3.1086	*	*
15	* .7497	* .8868	* 1.1235	* .8236	* F-SUB-Q			
	* 2.8892	* 2.4385	* 1.9258	* 2.6300	* M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1106	* 1.4576	* 1.2413	* 1.2541	* 1.2713	* 1.4105	* 1.1535	* .7358
	* 1.8685	* 1.5755	* 1.8435	* 1.8208	* 1.7971	* 1.6217	* 1.9701	* 3.0658
9	* 1.4576	* 1.3002	* 1.4416	* 1.2359	* 1.4373	* 1.2102	* 1.3591	* .8739
	* 1.5755	* 1.7613	* 1.5925	* 1.8513	* 1.5960	* 1.8876	* 1.6771	* 2.5823
10	* 1.2413	* 1.4448	* 1.2027	* 1.4555	* 1.3023	* 1.4223	* 1.2499	* 1.1074
	* 1.8435	* 1.5891	* 1.9023	* 1.5789	* 1.7585	* 1.6111	* 1.8223	* 2.0391
11	* 1.2541	* 1.2370	* 1.4576	* 1.3120	* 1.4480	* 1.2059	* 1.3280	* .8086
	* 1.8208	* 1.8497	* 1.5766	* 1.7487	* 1.5879	* 1.8974	* 1.7175	* 2.7945
12	* 1.2713	* 1.4373	* 1.3002	* 1.4469	* 1.2798	* 1.3537	* .9596	*
	* 1.7971	* 1.5960	* 1.7613	* 1.5879	* 1.7927	* 1.6925	* 2.3691	*
13	* 1.4105	* 1.2113	* 1.4223	* 1.2049	* 1.3548	* 1.0014	* .6854	*
	* 1.6217	* 1.8860	* 1.6123	* 1.8990	* 1.6912	* 2.2741	* 3.3090	*
14	* 1.1535	* 1.3591	* 1.2499	* 1.3280	* .9596	* .6854	*	*
	* 1.9701	* 1.6771	* 1.8223	* 1.7188	* 2.3691	* 3.3090	*	*
15	* .7358	* .8739	* 1.1074	* .8086	* F-SUB-Q			
	* 3.0658	* 2.5823	* 2.0410	* 2.7980	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1320	* 1.4951	* 1.2627	* 1.2777	* 1.2927	* 1.4459	* 1.1738	* .7476 *
	* 1.7452	* 1.4795	* 1.7432	* 1.7188	* 1.7003	* 1.5244	* 1.8669	* 2.8880 *
9	* 1.4951	* 1.3238	* 1.4791	* 1.2574	* 1.4737	* 1.2327	* 1.3912	* .8911 *
	* 1.4795	* 1.6657	* 1.4935	* 1.7515	* 1.4986	* 1.7826	* 1.5789	* 2.4355 *
10	* 1.2627	* 1.4812	* 1.2263	* 1.4930	* 1.3248	* 1.4587	* 1.2777	* 1.1353 *
	* 1.7432	* 1.4925	* 1.7847	* 1.4815	* 1.6645	* 1.5129	* 1.7188	* 1.9204 *
11	* 1.2777	* 1.2574	* 1.4940	* 1.3345	* 1.4844	* 1.2274	* 1.3602	* .8279 *
	* 1.7188	* 1.7501	* 1.4815	* 1.6545	* 1.4905	* 1.7927	* 1.6158	* 2.6314 *
12	* 1.2927	* 1.4737	* 1.3227	* 1.4844	* 1.3023	* 1.3848	* .9768 *	
	* 1.7003	* 1.4986	* 1.6670	* 1.4905	* 1.6938	* 1.5925	* 2.2418 *	
13	* 1.4459	* 1.2338	* 1.4587	* 1.2274	* 1.3859	* 1.0185	* .6994 *	
	* 1.5244	* 1.7812	* 1.5129	* 1.7942	* 1.5902	* 2.1544	* 3.1177 *	
14	* 1.1738	* 1.3923	* 1.2777	* 1.3602	* .9757	* .7004 *		
	* 1.8669	* 1.5789	* 1.7188	* 1.6158	* 2.2418	* 3.1133 *		
15	* .7476	* .8911	* 1.1342	* .8279	* F-SUB-Q			
	* 2.8880	* 2.4376	* 1.9204	* 2.6314	* M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1374	* 1.5090	* 1.2702	* 1.2852	* 1.2991	* 1.4587	* 1.1802	* .7508 *
	* 1.6749	* 1.4142	* 1.6746	* 1.6469	* 1.6173	* 1.4434	* 1.7591	* 2.7244 *
9	* 1.5090	* 1.3313	* 1.4919	* 1.2627	* 1.4865	* 1.2402	* 1.4041	* .8975 *
	* 1.4142	* 1.5994	* 1.4288	* 1.6759	* 1.4274	* 1.6915	* 1.4906	* 2.2888 *
10	* 1.2702	* 1.4940	* 1.2338	* 1.5069	* 1.3323	* 1.4726	* 1.2884	* 1.1449 *
	* 1.6746	* 1.4270	* 1.7096	* 1.4169	* 1.5923	* 1.4369	* 1.6237	* 1.8010 *
11	* 1.2852	* 1.2638	* 1.5069	* 1.3420	* 1.4983	* 1.2349	* 1.3720	* .8332 *
	* 1.6469	* 1.6746	* 1.4160	* 1.5868	* 1.4242	* 1.7143	* 1.5308	* 2.4710 *
12	* 1.2991	* 1.4865	* 1.3302	* 1.4983	* 1.3109	* 1.3966	* .9821 *	
	* 1.6173	* 1.4274	* 1.5946	* 1.4242	* 1.6229	* 1.5223	* 2.1279 *	
13	* 1.4587	* 1.2413	* 1.4726	* 1.2349	* 1.3977	* 1.0239	* .7026 *	
	* 1.4434	* 1.6905	* 1.4371	* 1.7157	* 1.5202	* 2.0601	* 2.9576 *	
14	* 1.1802	* 1.4041	* 1.2884	* 1.3720	* .9821 *	* .7026 *		
	* 1.7591	* 1.4906	* 1.6237	* 1.5308	* 2.1279 *	* 2.9544 *		
15	* .7508	* .8964	* 1.1449	* .8332	* F-SUB-Q			
	* 2.7244	* 2.2907	* 1.8010	* 2.4710	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1320	* 1.5069	* 1.2670	* 1.2809	* 1.2981	* 1.4566	* 1.1802	* .7476
	* 1.6172	* 1.3491	* 1.5917	* 1.5634	* 1.5345	* 1.3693	* 1.6684	* 2.5953
9	* 1.5069	* 1.3291	* 1.4887	* 1.2606	* 1.4844	* 1.2381	* 1.4030	* .8954
	* 1.3491	* 1.5206	* 1.3589	* 1.5895	* 1.3527	* 1.6056	* 1.4124	* 2.1746
10	* 1.2670	* 1.4908	* 1.2295	* 1.5048	* 1.3302	* 1.4716	* 1.2884	* 1.1428
	* 1.5917	* 1.3564	* 1.6325	* 1.3427	* 1.5075	* 1.3511	* 1.5373	* 1.7087
11	* 1.2809	* 1.2616	* 1.5048	* 1.3398	* 1.4962	* 1.2338	* 1.3709	* .8279
	* 1.5634	* 1.5883	* 1.3419	* 1.5034	* 1.3506	* 1.6195	* 1.4485	* 2.3528
12	* 1.2981	* 1.4844	* 1.3280	* 1.4962	* 1.3109	* 1.3955	* .9810	*
	* 1.5345	* 1.3534	* 1.5104	* 1.3506	* 1.5400	* 1.4399	* 2.0100	*
13	* 1.4566	* 1.2391	* 1.4716	* 1.2338	* 1.3966	* 1.0228	* .6983	*
	* 1.3693	* 1.6045	* 1.3611	* 1.6207	* 1.4382	* 1.9388	* 2.8068	*
14	* 1.1802	* 1.4030	* 1.2873	* 1.3709	* .9810	* .6983	*	*
	* 1.6684	* 1.4124	* 1.5373	* 1.4485	* 2.0100	* 2.8040	*	*
15	* .7476	* .8954	* 1.1428	* .8279	* F-SUB-Q			
	* 2.5953	* 2.1767	* 1.7089	* 2.3533	* M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1642	* 1.5572	* 1.3034	* 1.3195	* 1.3366	* 1.5090	* 1.2177	* .7700
	* 1.4725	* 1.2355	* 1.4661	* 1.4392	* 1.4150	* 1.2553	* 1.5383	* 2.3959
9	* 1.5572	* 1.3677	* 1.5401	* 1.2970	* 1.5369	* 1.2766	* 1.4523	* .9253
	* 1.2355	* 1.4004	* 1.2454	* 1.4649	* 1.2393	* 1.4786	* 1.2965	* 2.0050
10	* 1.3034	* 1.5422	* 1.2670	* 1.5583	* 1.3709	* 1.5262	* 1.3323	* 1.1845
	* 1.4661	* 1.2434	* 1.4920	* 1.2286	* 1.3885	* 1.2452	* 1.4113	* 1.5689
11	* 1.3195	* 1.2981	* 1.5594	* 1.3805	* 1.5508	* 1.2723	* 1.4201	* .8579
	* 1.4392	* 1.4639	* 1.2284	* 1.3824	* 1.2341	* 1.4883	* 1.3270	* 2.1600
12	* 1.3366	* 1.5369	* 1.3687	* 1.5508	* 1.3527	* 1.4448	* 1.0132	*
	* 1.4150	* 1.2400	* 1.3905	* 1.2341	* 1.4093	* 1.3148	* 1.8457	*
13	* 1.5090	* 1.2777	* 1.5251	* 1.2723	* 1.4469	* 1.0571	* .7229	*
	* 1.2553	* 1.4776	* 1.2459	* 1.4893	* 1.3138	* 1.7774	* 2.5671	*
14	* 1.2177	* 1.4533	* 1.3323	* 1.4201	* 1.0132	* .7240	*	*
	* 1.5383	* 1.2965	* 1.4120	* 1.3270	* 1.8457	* 2.5654	*	*
15	* .7700	* .9243	* 1.1835	* .8579	* F-SUB-Q			
	* 2.3959	* 2.0064	* 1.5696	* 2.1614	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1631	* 1.5583	* 1.3077	* 1.3238	* 1.3473	* 1.5155	* 1.2295	* .7743
	* 1.4142	* 1.1693	* 1.3848	* 1.3608	* 1.3325	* 1.1870	* 1.4467	* 2.2678
9	* 1.5583	* 1.3741	* 1.5412	* 1.3034	* 1.5412	* 1.2852	* 1.4598	* .9318
	* 1.1693	* 1.3201	* 1.1794	* 1.3829	* 1.1721	* 1.3942	* 1.2240	* 1.8922
10	* 1.3077	* 1.5433	* 1.2702	* 1.5626	* 1.3805	* 1.5315	* 1.3409	* 1.1888
	* 1.3848	* 1.1776	* 1.4241	* 1.1610	* 1.3067	* 1.1766	* 1.3309	* 1.4848
11	* 1.3238	* 1.3045	* 1.5637	* 1.3912	* 1.5572	* 1.2831	* 1.4276	* .8579
	* 1.3608	* 1.3820	* 1.1606	* 1.2990	* 1.1638	* 1.3986	* 1.2514	* 2.0539
12	* 1.3473	* 1.5412	* 1.3784	* 1.5572	* 1.3666	* 1.4533	* 1.0239	*
	* 1.3325	* 1.1726	* 1.3090	* 1.1638	* 1.3180	* 1.2348	* 1.7304	*
13	* 1.5155	* 1.2863	* 1.5315	* 1.2820	* 1.4555	* 1.0689	* .7251	*
	* 1.1870	* 1.3934	* 1.1768	* 1.3995	* 1.2343	* 1.6643	* 2.4292	*
14	* 1.2295	* 1.4608	* 1.3409	* 1.4276	* 1.0239	* 7261	*	*
	* 1.4467	* 1.2240	* 1.3309	* 1.2519	* 1.7307	* 2.4265	*	*
15	* .7743	* .9307	* 1.1877	* .8568	F-SUB-Q			
	* 2.2678	* 1.8938	* 1.4856	* 2.0539	M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1792	* 1.5776	* 1.3291	* 1.3484	* 1.3784	* 1.5422	* 1.2616	* .7915
	* 1.3559	* 1.1050	* 1.3055	* 1.2811	* 1.2494	* 1.1177	* 1.3539	* 2.1327
9	* 1.5776	* 1.4019	* 1.5626	* 1.3270	* 1.5647	* 1.3109	* 1.4865	* .9500
	* 1.1050	* 1.2393	* 1.1141	* 1.3023	* 1.1049	* 1.3102	* 1.1524	* 1.7816
10	* 1.3291	* 1.5647	* 1.2927	* 1.5851	* 1.4116	* 1.5562	* 1.3687	* 1.2081
	* 1.3055	* 1.1114	* 1.3406	* 1.0950	* 1.2242	* 1.1090	* 1.2496	* 1.4018
11	* 1.3484	* 1.3280	* 1.5862	* 1.4212	* 1.5819	* 1.3098	* 1.4533	* .8718
	* 1.2811	* 1.3007	* 1.0945	* 1.2179	* 1.0958	* 1.3117	* 1.1772	* 1.9370
12	* 1.3784	* 1.5647	* 1.4094	* 1.5819	* 1.4009	* 1.4823	* 1.0528	*
	* 1.2494	* 1.1054	* 1.2262	* 1.0960	* 1.2307	* 1.1589	* 1.6171	*
13	* 1.5422	* 1.3120	* 1.5562	* 1.3088	* 1.4823	* 1.0967	* .7411	*
	* 1.1177	* 1.3094	* 1.1090	* 1.3125	* 1.1584	* 1.5532	* 2.2778	*
14	* 1.2616	* 1.4865	* 1.3687	* 1.4533	* 1.0517	* .7422	*	*
	* 1.3539	* 1.1524	* 1.2496	* 1.1779	* 1.6180	* 2.2778	*	*
15	* .7915	* .9500	* 1.2081	* .8718	F-SUB-Q			
	* 2.1327	* 1.7827	* 1.4024	* 1.9374	M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 100% POWER, 430 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1160 *	* 1.4780 *	* 1.2584 *	* 1.2820 *	* 1.3173 *	* 1.4501 *	* 1.2081 *	* .7497 *
	* 1.4897 *	* 1.1420 *	* 1.3345 *	* 1.3057 *	* 1.2646 *	* 1.1504 *	* 1.3694 *	* 2.1860 *
9	* 1.4780 *	* 1.3388 *	* 1.4716 *	* 1.2606 *	* 1.4705 *	* 1.2445 *	* 1.3869 *	* .8900 *
	* 1.1420 *	* 1.2555 *	* 1.1446 *	* 1.3277 *	* 1.1393 *	* 1.3375 *	* 1.1959 *	* 1.8418 *
10	* 1.2584 *	* 1.4748 *	* 1.2327 *	* 1.4865 *	* 1.3430 *	* 1.4598 *	* 1.2938 *	* 1.1106 *
	* 1.3345 *	* 1.1421 *	* 1.3608 *	* 1.1313 *	* 1.2444 *	* 1.1445 *	* 1.2789 *	* 1.4772 *
11	* 1.2820 *	* 1.2616 *	* 1.4887 *	* 1.3495 *	* 1.4769 *	* 1.2424 *	* 1.3537 *	* .8161 *
	* 1.3057 *	* 1.3263 *	* 1.1294 *	* 1.2400 *	* 1.1357 *	* 1.3385 *	* 1.2235 *	* 2.0069 *
12	* 1.3173 *	* 1.4705 *	* 1.3409 *	* 1.4769 *	* 1.3334 *	* 1.3848 *	* 1.0110 *	
	* 1.2646 *	* 1.1398 *	* 1.2458 *	* 1.1357 *	* 1.2491 *	* 1.2006 *	* 1.6332 *	
13	* 1.4501 *	* 1.2456 *	* 1.4587 *	* 1.2413 *	* 1.3848 *	* 1.0453 *	* .6929 *	
	* 1.1504 *	* 1.3367 *	* 1.1449 *	* 1.3393 *	* 1.1999 *	* 1.5821 *	* 2.3649 *	
14	* 1.2081 *	* 1.3869 *	* 1.2938 *	* 1.3537 *	* 1.0100 *	* .6929 *		
	* 1.3694 *	* 1.1959 *	* 1.2789 *	* 1.2237 *	* 1.6335 *	* 2.3643 *		
15	* .7497 *	* .8900 *	* 1.1106 *	* .8161 *	F-SUB-Q			
	* 2.1860 *	* 1.8433 *	* 1.4772 *	* 2.0082 *	M-SUB-Q			

AT 100% POWER, 430 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8439 *	* 1.0913 *	* .9146 *	* .9543 *	* .7229 *	* 1.0753 *	* .6469 *	* .5655 *
	* 1.9421 *	* 1.5030 *	* 1.7914 *	* 1.7123 *	* 2.2431 *	* 1.5100 *	* 2.4887 *	* 2.8286 *
9	* 1.0913 *	* .7390 *	* 1.0967 *	* .9275 *	* 1.0903 *	* .9211 *	* 1.0014 *	* .6469 *
	* 1.5030 *	* 2.2112 *	* 1.4931 *	* 1.7628 *	* 1.4949 *	* 1.7625 *	* 1.6115 *	* 2.4741 *
10	* .9146 *	* 1.1021 *	* .9414 *	* 1.0988 *	* .7347 *	* 1.0796 *	* .6662 *	* .7883 *
	* 1.7914 *	* 1.4859 *	* 1.7386 *	* 1.4891 *	* 2.2128 *	* 1.5028 *	* 2.4120 *	* 2.0281 *
11	* .9543 *	* .9307 *	* 1.1031 *	* .7379 *	* 1.0817 *	* .9114 *	* .9693 *	* .5858 *
	* 1.7123 *	* 1.7569 *	* 1.4829 *	* 2.2084 *	* 1.5043 *	* 1.7802 *	* 1.6649 *	* 2.7257 *
12	* .7229 *	* 1.0903 *	* .7347 *	* 1.0817 *	* .7079 *	* .9885 *	* .5141 *	
	* 2.2431 *	* 1.4949 *	* 2.2128 *	* 1.5043 *	* 2.2884 *	* 1.6381 *	* 3.1245 *	
13	* 1.0753 *	* .9221 *	* 1.0796 *	* .9104 *	* .9896 *	* .5387 *	* .5226 *	
	* 1.5100 *	* 1.7611 *	* 1.5035 *	* 1.7806 *	* 1.6357 *	* 2.9863 *	* 3.0554 *	
14	* .6469 *	* 1.0014 *	* .6662 *	* .9693 *	* .5141 *	* .5226 *		
	* 2.4887 *	* 1.6115 *	* 2.4120 *	* 1.6649 *	* 3.1245 *	* 3.0554 *		
15	* .5655 *	* .6469 *	* .7883 *	* .5858 *	F-SUB-Q			
	* 2.8286 *	* 2.4741 *	* 2.0281 *	* 2.7291 *	M-SUB-Q			

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 Appendix A  
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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8 *	.5269 *	.7797 *	.7443 *	.7893 *	.5066 *	.8150 *	.4198 *	.4059 *
	2.7377 *	2.1325 *	2.2234 *	2.0946 *	3.2321 *	2.0145 *	3.8653 *	3.9788 *
9 *	.7797 *	.4916 *	.8697 *	.7583 *	.8450 *	.7047 *	.7101 *	.4434 *
	2.1325 *	3.3510 *	1.9035 *	2.1796 *	1.9515 *	2.3278 *	2.3022 *	3.6582 *
10 *	.7443 *	.8718 *	.7347 *	.8397 *	.4819 *	.7636 *	.4016 *	.5098 *
	2.2234 *	1.8985 *	2.2497 *	1.9692 *	3.4067 *	2.1532 *	4.0487 *	3.1781 *
11 *	.7893 *	.7604 *	.8450 *	.4616 *	.7326 *	.6040 *	.6426 *	.3856 *
	2.0946 *	2.1744 *	1.9575 *	3.5693 *	2.2601 *	2.6981 *	2.5461 *	4.1984 *
12 *	.5066 *	.8450 *	.4830 *	.7347 *	.3202 *	.5194 *	.2795 *	
	3.2321 *	1.9490 *	3.3993 *	2.2563 *	3.9143 *	2.5191 *	5.4451 *	
13 *	.8150 *	.7058 *	.7636 *	.6040 *	.5194 *	.2345 *	.2806 *	
	2.0145 *	2.3263 *	2.1515 *	2.6981 *	2.5144 *	5.1677 *	4.9615 *	
14 *	.4198 *	.7101 *	.4016 *	.6415 *	.2785 *	.2795 *		
	3.8653 *	2.3022 *	4.0471 *	2.5466 *	5.4451 *	4.9699 *		
15 *	.4059 *	.4434 *	.5098 *	.3856 *	F-SUB-Q			
	3.9788 *	3.6582 *	3.1781 *	4.2034 *	M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8 *	.7229 *	1.1053 *	1.1363 *	1.1910 *	1.2070 *	1.1599 *	1.0110 *	.5901 *
	2.0742 *	1.5818 *	1.5294 *	1.4558 *	1.4359 *	1.4916 *	1.7003 *	2.8822 *
9 *	1.1053 *	1.1181 *	1.2156 *	1.1492 *	1.2027 *	1.0624 *	1.0678 *	.7026 *
	1.5818 *	1.5614 *	1.4298 *	1.5080 *	1.4430 *	1.6266 *	1.6118 *	2.4296 *
10 *	1.1363 *	1.2177 *	1.0174 *	1.1470 *	1.1278 *	1.1074 *	1.0035 *	.8268 *
	1.5294 *	1.4270 *	1.7067 *	1.5157 *	1.5413 *	1.5643 *	1.7084 *	2.0591 *
11 *	1.1910 *	1.1513 *	1.1556 *	1.0817 *	1.0378 *	.9200 *	.9928 *	.6223 *
	1.4558 *	1.5064 *	1.5047 *	1.6147 *	1.6693 *	1.8222 *	1.7355 *	2.7350 *
12 *	1.2070 *	1.2038 *	1.1278 *	1.0389 *	.7786 *	.8354 *	.7304 *	
	1.4359 *	1.4410 *	1.5415 *	1.6692 *	1.6480 *	1.7058 *	2.1847 *	
13 *	1.1599 *	1.0624 *	1.1074 *	.9189 *	.8354 *	.6190 *	.4155 *	
	1.4916 *	1.6256 *	1.5643 *	1.8222 *	1.7016 *	2.0691 *	3.5297 *	
14 *	1.0110 *	1.0678 *	1.0035 *	.9917 *	.7304 *	.4155 *		
	1.7003 *	1.6109 *	1.7084 *	1.7355 *	2.1865 *	3.5343 *		
15 *	.5901 *	.7026 *	.8268 *	.6223 *	F-SUB-Q			
	2.8822 *	2.4309 *	2.0607 *	2.7371 *	M-SUB-Q			



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Appendix A

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Revision 6

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8215 *	* 1.2938 *	* 1.3120 *	* 1.3934 *	* 1.4105 *	* 1.3880 *	* 1.1952 *	* .6994 *
	* 1.9573 *	* 1.4378 *	* 1.4039 *	* 1.3156 *	* 1.2965 *	* 1.3148 *	* 1.5160 *	* 2.5680 *
9	* 1.2938 *	* 1.2745 *	* 1.4234 *	* 1.3441 *	* 1.4309 *	* 1.2509 *	* 1.3098 *	* .8664 *
	* 1.4378 *	* 1.4571 *	* 1.2937 *	* 1.3627 *	* 1.2805 *	* 1.4552 *	* 1.3875 *	* 2.0771 *
10	* 1.3120 *	* 1.4266 *	* 1.1545 *	* 1.3634 *	* 1.3248 *	* 1.3323 *	* 1.2306 *	* 1.0571 *
	* 1.4039 *	* 1.2913 *	* 1.5988 *	* 1.3523 *	* 1.3923 *	* 1.3763 *	* 1.4745 *	* 1.7018 *
11	* 1.3934 *	* 1.3462 *	* 1.3655 *	* 1.2691 *	* 1.2616 *	* 1.1278 *	* 1.2434 *	* .7786 *
	* 1.3156 *	* 1.3614 *	* 1.3504 *	* 1.4574 *	* 1.4382 *	* 1.5878 *	* 1.4714 *	* 2.3165 *
12	* 1.4105 *	* 1.4319 *	* 1.3238 *	* 1.2616 *	* .9350 *	* 1.0592 *	* .8986 *	
	* 1.2965 *	* 1.2789 *	* 1.3930 *	* 1.4382 *	* 1.4436 *	* 1.4540 *	* 1.9039 *	
13	* 1.3880 *	* 1.2520 *	* 1.3323 *	* 1.1267 *	* 1.0581 *	* .7808 *	* .5216 *	
	* 1.3148 *	* 1.4544 *	* 1.3763 *	* 1.5887 *	* 1.4502 *	* 1.7880 *	* 3.0405 *	
14	* 1.1952 *	* 1.3109 *	* 1.2306 *	* 1.2434 *	* .8975 *	* .5205 *		
	* 1.5160 *	* 1.3875 *	* 1.4746 *	* 1.4722 *	* 1.9052 *	* 3.0438 *		
15	* .6994 *	* .8664 *	* 1.0571 *	* .7786 *	F-SUB-Q			
	* 2.5680 *	* 2.0787 *	* 1.7020 *	* 2.3183 *	M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9061 *	* 1.4169 *	* 1.4084 *	* 1.5058 *	* 1.5197 *	* 1.5283 *	* 1.3023 *	* .7572 *
	* 1.9861 *	* 1.4244 *	* 1.4046 *	* 1.3047 *	* 1.2844 *	* 1.2730 *	* 1.4848 *	* 2.5284 *
9	* 1.4169 *	* 1.3687 *	* 1.5476 *	* 1.4512 *	* 1.5615 *	* 1.3655 *	* 1.4694 *	* .9628 *
	* 1.4244 *	* 1.4668 *	* 1.2767 *	* 1.3506 *	* 1.2532 *	* 1.4215 *	* 1.3202 *	* 1.9918 *
10	* 1.4084 *	* 1.5508 *	* 1.2466 *	* 1.5026 *	* 1.4469 *	* 1.4801 *	* 1.3805 *	* 1.1974 *
	* 1.4046 *	* 1.2739 *	* 1.5958 *	* 1.3178 *	* 1.3691 *	* 1.3172 *	* 1.4024 *	* 1.6002 *
11	* 1.5058 *	* 1.4533 *	* 1.5037 *	* 1.3934 *	* 1.4169 *	* 1.2756 *	* 1.4180 *	* .8804 *
	* 1.3047 *	* 1.3493 *	* 1.3160 *	* 1.4264 *	* 1.3850 *	* 1.5373 *	* 1.3883 *	* 2.1933 *
12	* 1.5197 *	* 1.5637 *	* 1.4459 *	* 1.4180 *	* 1.0753 *	* 1.2456 *	* 1.0207 *	
	* 1.2844 *	* 1.2516 *	* 1.3704 *	* 1.3850 *	* 1.4078 *	* 1.3906 *	* 1.8504 *	
13	* 1.5283 *	* 1.3666 *	* 1.4801 *	* 1.2745 *	* 1.2445 *	* .9168 *	* .6008 *	
	* 1.2730 *	* 1.4208 *	* 1.3172 *	* 1.5373 *	* 1.3872 *	* 1.7413 *	* 2.9577 *	
14	* 1.3023 *	* 1.4694 *	* 1.3805 *	* 1.4180 *	* 1.0196 *	* .6008 *		
	* 1.4848 *	* 1.3202 *	* 1.4031 *	* 1.3896 *	* 1.8528 *	* 2.9605 *		
15	* .7572 *	* .9618 *	* 1.1974 *	* .8804 *	F-SUB-Q			
	* 2.5284 *	* 1.9931 *	* 1.6011 *	* 2.1948 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0046	* 1.4705	* 1.4351	* 1.5369	* 1.5476	* 1.5765	* 1.3323	* .7722
	* 2.1326	* 1.5144	* 1.4992	* 1.3828	* 1.3614	* 1.3299	* 1.5571	* 2.6612
9	* 1.4705	* 1.4030	* 1.5872	* 1.4812	* 1.6022	* 1.4030	* 1.5337	* .9960
	* 1.5144	* 1.5713	* 1.3506	* 1.4320	* 1.3191	* 1.4931	* 1.3697	* 2.0914
10	* 1.4351	* 1.5904	* 1.2766	* 1.5562	* 1.4951	* 1.5422	* 1.4437	* 1.2520
	* 1.4992	* 1.3475	* 1.6941	* 1.3832	* 1.4461	* 1.3665	* 1.4577	* 1.6605
11	* 1.5369	* 1.4823	* 1.5583	* 1.4544	* 1.5048	* 1.3570	* 1.5058	* .9211
	* 1.3828	* 1.4305	* 1.3819	* 1.4993	* 1.4456	* 1.6073	* 1.4428	* 2.2952
12	* 1.5476	* 1.6044	* 1.4940	* 1.5048	* 1.2349	* 1.3912	* 1.0978	*
	* 1.3614	* 1.3174	* 1.4475	* 1.4456	* 1.4813	* 1.4498	* 1.9403	*
13	* 1.5765	* 1.4030	* 1.5422	* 1.3559	* 1.3944	* 1.0678	* .6533	*
	* 1.3299	* 1.4923	* 1.3665	* 1.6081	* 1.4459	* 1.8409	* 3.1358	*
14	* 1.3323	* 1.5347	* 1.4437	* 1.5048	* 1.0967	* .6533	*	*
	* 1.5571	* 1.3697	* 1.4578	* 1.4435	* 1.9421	* 3.1392	*	*
15	* .7722	* .9960	* 1.2509	* .9211	* F-SUB-Q			
	* 2.6612	* 2.0828	* 1.6615	* 2.2971	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1010	* 1.5540	* 1.4940	* 1.6076	* 1.6097	* 1.6568	* 1.3891	* .8022
	* 2.2311	* 1.5977	* 1.5928	* 1.4600	* 1.4408	* 1.3908	* 1.6358	* 2.8047
9	* 1.5540	* 1.4683	* 1.6622	* 1.5444	* 1.6783	* 1.4673	* 1.6301	* 1.0496
	* 1.5977	* 1.6705	* 1.4241	* 1.5150	* 1.3875	* 1.5701	* 1.4236	* 2.1746
10	* 1.4940	* 1.6665	* 1.3377	* 1.6440	* 1.5744	* 1.6365	* 1.5390	* 1.3345
	* 1.5928	* 1.4213	* 1.7893	* 1.4519	* 1.5267	* 1.4209	* 1.5152	* 1.7193
11	* 1.6076	* 1.5465	* 1.6451	* 1.5615	* 1.6204	* 1.4630	* 1.6247	* .9864
	* 1.4600	* 1.5134	* 1.4505	* 1.5535	* 1.4929	* 1.6544	* 1.4935	* 2.3825
12	* 1.6097	* 1.6804	* 1.5722	* 1.6204	* 1.5326	* 1.5840	* 1.1910	*
	* 1.4408	* 1.3856	* 1.5290	* 1.4929	* 1.5474	* 1.4960	* 2.0071	*
13	* 1.6568	* 1.4683	* 1.6365	* 1.4619	* 1.5883	* 1.2145	* .7208	*
	* 1.3908	* 1.5693	* 1.4209	* 1.6561	* 1.4920	* 1.9312	* 3.2631	*
14	* 1.3891	* 1.6311	* 1.5390	* 1.6236	* 1.1899	* .7197	*	*
	* 1.6358	* 1.4229	* 1.5152	* 1.4942	* 2.0098	* 3.2667	*	*
15	* .8022	* 1.0496	* 1.3334	* .9864	* F-SUB-Q			
	* 2.8047	* 2.1763	* 1.7204	* 2.3843	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1203	* 1.5765	* 1.5058	* 1.6258	* 1.6226	* 1.6815	* 1.4019	* .8065
	* 2.4229	* 1.7098	* 1.7550	* 1.6042	* 1.5805	* 1.5162	* 1.7879	* 3.0759
9	* 1.5765	* 1.4833	* 1.6815	* 1.5583	* 1.6997	* 1.4844	* 1.6654	* 1.0656
	* 1.7098	* 1.8190	* 1.5621	* 1.6660	* 1.5178	* 1.7170	* 1.5448	* 2.3702
10	* 1.5058	* 1.6858	* 1.3537	* 1.6718	* 1.5990	* 1.6815	* 1.5754	* 1.3634
	* 1.7550	* 1.5588	* 1.9654	* 1.5871	* 1.6738	* 1.5424	* 1.6445	* 1.8643
11	* 1.6258	* 1.5604	* 1.6740	* 1.6065	* 1.6718	* 1.5080	* 1.6761	* 1.0089
	* 1.6042	* 1.6641	* 1.5854	* 1.6619	* 1.5882	* 1.7621	* 1.5837	* 2.5950
12	* 1.6226	* 1.7018	* 1.5969	* 1.6718	* 1.6011	* 1.6600	* 1.2306	*
	* 1.5805	* 1.5170	* 1.6762	* 1.5882	* 1.6504	* 1.5880	* 2.1425	*
13	* 1.6815	* 1.4855	* 1.6804	* 1.5069	* 1.6643	* 1.2713	* .7476	*
	* 1.5162	* 1.7160	* 1.5424	* 1.7633	* 1.5837	* 2.0605	* 3.4813	*
14	* 1.4019	* 1.6665	* 1.5744	* 1.6750	* 1.2295	* .7476	*	*
	* 1.7879	* 1.5448	* 1.6454	* 1.5845	* 2.1443	* 3.4854	*	*
15	* .8065	* 1.0656	* 1.3623	* 1.0078	* F-SUB-Q			
	* 3.0759	* 2.3721	* 1.8653	* 2.5953	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1117	* 1.5712	* 1.4962	* 1.6194	* 1.6151	* 1.6815	* 1.3966	* .8000
	* 2.6342	* 1.8562	* 1.9524	* 1.7871	* 1.7577	* 1.6792	* 1.9846	* 3.4222
9	* 1.5712	* 1.4737	* 1.6772	* 1.5519	* 1.6965	* 1.4823	* 1.6740	* 1.0656
	* 1.8562	* 1.9811	* 1.7378	* 1.8563	* 1.6811	* 1.9066	* 1.7047	* 2.6269
10	* 1.4962	* 1.6815	* 1.3495	* 1.6750	* 1.6001	* 1.6986	* 1.5872	* 1.3687
	* 1.9524	* 1.7337	* 2.1608	* 1.7344	* 1.8165	* 1.6915	* 1.8067	* 2.0577
11	* 1.6194	* 1.5540	* 1.6772	* 1.6161	* 1.6911	* 1.5219	* 1.6922	* 1.0110
	* 1.7871	* 1.8540	* 1.7330	* 1.8016	* 1.7189	* 1.8941	* 1.6993	* 2.8238
12	* 1.6151	* 1.6986	* 1.5969	* 1.6911	* 1.6183	* 1.6836	* 1.2402	*
	* 1.7577	* 1.6793	* 1.8199	* 1.7189	* 1.7953	* 1.7203	* 2.3234	*
13	* 1.6815	* 1.4823	* 1.6975	* 1.5208	* 1.6879	* 1.2841	* .7529	*
	* 1.6792	* 1.9054	* 1.6930	* 1.8953	* 1.7153	* 2.2441	* 3.8011	*
14	* 1.3966	* 1.6740	* 1.5872	* 1.6911	* 1.2391	* .7518	*	*
	* 1.9846	* 1.7047	* 1.8074	* 1.7003	* 2.3262	* 3.8054	*	*
15	* .8000	* 1.0646	* 1.3687	* 1.0100	* F-SUB-Q			
	* 3.4222	* 2.6290	* 2.0579	* 2.8238	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1171	* 1.5904	* 1.5090	* 1.6418	* 1.6322	* 1.7104	* 1.4137	* .8075
	* 2.8042	* 1.9701	* 2.0726	* 1.9039	* 1.9163	* 1.8306	* 2.1769	* 3.7586
9	* 1.5904	* 1.4844	* 1.6997	* 1.5712	* 1.7222	* 1.5026	* 1.7104	* 1.0828
	* 1.9701	* 2.1097	* 1.8409	* 1.9914	* 1.8170	* 2.0814	* 1.8306	* 2.8682
10	* 1.5090	* 1.7040	* 1.3666	* 1.7082	* 1.6247	* 1.7393	* 1.6258	* 1.4009
	* 2.0726	* 1.8363	* 2.2900	* 1.8386	* 1.9326	* 1.8026	* 1.9275	* 2.2152
11	* 1.6418	* 1.5733	* 1.7104	* 1.6440	* 1.7286	* 1.5551	* 1.7350	* 1.0335
	* 1.9039	* 1.9887	* 1.8363	* 1.9125	* 1.8181	* 2.0173	* 1.8081	* 3.0145
12	* 1.6322	* 1.7243	* 1.6215	* 1.7286	* 1.6515	* 1.7254	* 1.2638	*
	* 1.9163	* 1.8148	* 1.9364	* 1.8181	* 1.9051	* 1.8226	* 2.4859	*
13	* 1.7104	* 1.5037	* 1.7382	* 1.5540	* 1.7307	* 1.3077	* .7679	*
	* 1.8306	* 2.0814	* 1.8037	* 2.0186	* 1.8170	* 2.4048	* 4.0526	*
14	* 1.4137	* 1.7104	* 1.6247	* 1.7339	* 1.2616	* .7679	*	*
	* 2.1769	* 1.8306	* 1.9275	* 1.8092	* 2.4880	* 4.0582	*	*
15	* .8075	* 1.0817	* 1.3998	* 1.0335	* F-SUB-Q			
	* 3.7586	* 2.8710	* 2.2169	* 3.0162	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0839	* 1.5519	* 1.4716	* 1.6044	* 1.5947	* 1.6761	* 1.3827	* .7872
	* 2.8421	* 1.9860	* 2.0902	* 1.9175	* 1.9301	* 1.8363	* 2.2210	* 3.8779
9	* 1.5519	* 1.4459	* 1.6622	* 1.5358	* 1.6858	* 1.4716	* 1.6815	* 1.0614
	* 1.9860	* 2.1326	* 1.8524	* 2.0035	* 1.8260	* 2.0917	* 1.8340	* 2.9008
10	* 1.4716	* 1.6665	* 1.3345	* 1.6761	* 1.5915	* 1.7136	* 1.6011	* 1.3752
	* 2.0902	* 1.8478	* 2.3079	* 1.8466	* 1.9441	* 1.8037	* 1.9288	* 2.2412
11	* 1.6044	* 1.5369	* 1.6783	* 1.6119	* 1.7007	* 1.5305	* 1.7082	* 1.0100
	* 1.9175	* 2.0022	* 1.8443	* 1.9225	* 1.8249	* 2.0200	* 1.8103	* 3.0541
12	* 1.5947	* 1.6879	* 1.5883	* 1.7007	* 1.6226	* 1.6986	* 1.2413	*
	* 1.9301	* 1.8238	* 1.9479	* 1.8249	* 1.9138	* 1.8272	* 2.4976	*
13	* 1.6761	* 1.4726	* 1.7125	* 1.5294	* 1.7029	* 1.2831	* .7497	*
	* 1.8363	* 2.0902	* 1.8048	* 2.0228	* 1.8226	* 2.4237	* 4.1394	*
14	* 1.3827	* 1.6815	* 1.6001	* 1.7072	* 1.2391	* .7486	*	*
	* 2.2210	* 1.8340	* 1.9301	* 1.8114	* 2.5019	* 4.1452	*	*
15	* .7872	* 1.0603	* 1.3741	* 1.0100	* F-SUB-Q			
	* 3.8779	* 2.9037	* 2.2429	* 3.0541	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0839	* 1.5647	* 1.4791	* 1.6194	* 1.6044	* 1.6975	* 1.3923	* .7904 *
	* 2.7544	* 1.8965	* 1.9995	* 1.8272	* 1.8283	* 1.7306	* 2.0828	* 3.6207 *
9	* 1.5647	* 1.4501	* 1.6772	* 1.5465	* 1.7040	* 1.4844	* 1.7093	* 1.0731 *
	* 1.8965	* 2.0467	* 1.7648	* 1.9101	* 1.7306	* 1.9753	* 1.7367	* 2.7213 *
10	* 1.4791	* 1.6815	* 1.3452	* 1.6975	* 1.6044	* 1.7447	* 1.6290	* 1.3998 *
	* 1.9995	* 1.7606	* 2.2093	* 1.7690	* 1.8713	* 1.7255	* 1.8340	* 2.1037 *
11	* 1.6194	* 1.5487	* 1.6997	* 1.6279	* 1.7254	* 1.5530	* 1.7404	* 1.0282 *
	* 1.8272	* 1.9076	* 1.7669	* 1.8618	* 1.7616	* 1.9454	* 1.7306	* 2.8810 *
12	* 1.6044	* 1.7061	* 1.6011	* 1.7254	* 1.6408	* 1.7275	* 1.2531	*
	* 1.8283	* 1.7286	* 1.8748	* 1.7616	* 1.8548	* 1.7627	* 2.4197	*
13	* 1.6975	* 1.4855	* 1.7436	* 1.5508	* 1.7318	* 1.2948	* .7583	*
	* 1.7306	* 1.9740	* 1.7265	* 1.9466	* 1.7574	* 2.3559	* 4.0098	*
14	* 1.3923	* 1.7093	* 1.6279	* 1.7393	* 1.2520	* .7583	*	*
	* 2.0828	* 1.7367	* 1.8340	* 1.7326	* 2.4237	* 4.0153	*	*
15	* .7904	* 1.0721	* 1.3987	* 1.0271	* F-SUB-Q			
	* 3.6207	* 2.7239	* 2.1052	* 2.8810	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0635	* 1.5465	* 1.4576	* 1.6011	* 1.5851	* 1.6804	* 1.3752	* .7765 *
	* 2.5740	* 1.7533	* 1.8363	* 1.6717	* 1.6832	* 1.5897	* 1.9238	* 3.3606 *
9	* 1.5465	* 1.4287	* 1.6579	* 1.5262	* 1.6858	* 1.4683	* 1.6954	* 1.0592 *
	* 1.7533	* 1.8917	* 1.6167	* 1.7522	* 1.5871	* 1.8181	* 1.5879	* 2.5019 *
10	* 1.4576	* 1.6633	* 1.3280	* 1.6825	* 1.5862	* 1.7329	* 1.6183	* 1.3880 *
	* 1.8363	* 1.6131	* 2.0340	* 1.6247	* 1.7255	* 1.5828	* 1.6774	* 1.9225 *
11	* 1.6011	* 1.5283	* 1.6847	* 1.6097	* 1.7115	* 1.5401	* 1.7286	* 1.0164 *
	* 1.6717	* 1.7501	* 1.6229	* 1.7429	* 1.6383	* 1.8037	* 1.5974	* 2.6504 *
12	* 1.5851	* 1.6879	* 1.5829	* 1.7125	* 1.6258	* 1.7147	* 1.2391	*
	* 1.6832	* 1.5854	* 1.7286	* 1.6397	* 1.7553	* 1.6548	* 2.2532	*
13	* 1.6804	* 1.4694	* 1.7318	* 1.5380	* 1.7200	* 1.2798	* .7476	*
	* 1.5897	* 1.8170	* 1.5828	* 1.8059	* 1.6493	* 2.2176	* 3.7259	*
14	* 1.3752	* 1.6954	* 1.6172	* 1.7275	* 1.2381	* .7465	*	*
	* 1.9238	* 1.5879	* 1.6784	* 1.5983	* 2.2550	* 3.7307	*	*
15	* .7765	* 1.0581	* 1.3869	* 1.0153	* F-SUB-Q			
	* 3.3606	* 2.5040	* 1.9250	* 2.6528	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0292 *	* 1.5026 *	* 1.4169 *	* 1.5562 *	* 1.5401 *	* 1.6343 *	* 1.3334 *	* .7497 *
	* 2.3845 *	* 1.6319 *	* 1.7215 *	* 1.5677 *	* 1.5862 *	* 1.4976 *	* 1.8204 *	* 3.2000 *
9	* 1.5026 *	* 1.3880 *	* 1.6129 *	* 1.4833 *	* 1.6397 *	* 1.4255 *	* 1.6483 *	* 1.0249 *
	* 1.6319 *	* 1.7648 *	* 1.5161 *	* 1.6465 *	* 1.4923 *	* 1.7145 *	* 1.4915 *	* 2.3672 *
10	* 1.4169 *	* 1.6172 *	* 1.2873 *	* 1.6365 *	* 1.5422 *	* 1.6858 *	* 1.5722 *	* 1.3441 *
	* 1.7215 *	* 1.5114 *	* 1.9064 *	* 1.5208 *	* 1.6123 *	* 1.4795 *	* 1.5727 *	* 1.8137 *
11	* 1.5562 *	* 1.4855 *	* 1.6386 *	* 1.5658 *	* 1.6665 *	* 1.4973 *	* 1.6804 *	* .9789 *
	* 1.5677 *	* 1.6447 *	* 1.5184 *	* 1.6158 *	* 1.5184 *	* 1.6717 *	* 1.4840 *	* 2.4998 *
12	* 1.5401 *	* 1.6418 *	* 1.5390 *	* 1.6665 *	* 1.5819 *	* 1.6675 *	* 1.2027 *	
	* 1.5862 *	* 1.4900 *	* 1.6149 *	* 1.5192 *	* 1.6202 *	* 1.5342 *	* 2.0947 *	
13	* 1.6343 *	* 1.4276 *	* 1.6847 *	* 1.4951 *	* 1.6729 *	* 1.2413 *	* .7208 *	
	* 1.4976 *	* 1.7135 *	* 1.4803 *	* 1.6736 *	* 1.5294 *	* 2.0653 *	* 3.5003 *	
14	* 1.3334 *	* 1.6483 *	* 1.5712 *	* 1.6793 *	* 1.2017 *	* .7208 *		
	* 1.8204 *	* 1.4915 *	* 1.5735 *	* 1.4855 *	* 2.0977 *	* 3.5044 *		
15	* .7497 *	* 1.0239 *	* 1.3430 *	* .9789 *	F-SUB-Q			
	* 3.2000 *	* 2.3691 *	* 1.8148 *	* 2.5019 *	M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0271 *	* 1.5080 *	* 1.4169 *	* 1.5604 *	* 1.5380 *	* 1.6333 *	* 1.3270 *	* .7422 *
	* 2.1880 *	* 1.4999 *	* 1.5897 *	* 1.4447 *	* 1.4699 *	* 1.3882 *	* 1.6977 *	* 3.0043 *
9	* 1.5080 *	* 1.3902 *	* 1.6161 *	* 1.4833 *	* 1.6418 *	* 1.4201 *	* 1.6451 *	* 1.0174 *
	* 1.4999 *	* 1.6247 *	* 1.3974 *	* 1.5231 *	* 1.3791 *	* 1.5940 *	* 1.3817 *	* 2.2093 *
10	* 1.4169 *	* 1.6215 *	* 1.2873 *	* 1.6376 *	* 1.5390 *	* 1.6825 *	* 1.5701 *	* 1.3398 *
	* 1.5897 *	* 1.3935 *	* 1.7595 *	* 1.4021 *	* 1.4885 *	* 1.3626 *	* 1.4518 *	* 1.6832 *
11	* 1.5604 *	* 1.4855 *	* 1.6397 *	* 1.5637 *	* 1.6665 *	* 1.4919 *	* 1.6783 *	* .9746 *
	* 1.4447 *	* 1.5208 *	* 1.4001 *	* 1.4766 *	* 1.3915 *	* 1.5366 *	* 1.3651 *	* 2.3170 *
12	* 1.5380 *	* 1.6440 *	* 1.5358 *	* 1.6665 *	* 1.5808 *	* 1.6675 *	* 1.1952 *	
	* 1.4699 *	* 1.3772 *	* 1.4915 *	* 1.3915 *	* 1.4677 *	* 1.3909 *	* 1.9225 *	
13	* 1.6333 *	* 1.4212 *	* 1.6815 *	* 1.4908 *	* 1.6729 *	* 1.2359 *	* .7176 *	
	* 1.3882 *	* 1.5922 *	* 1.3632 *	* 1.5382 *	* 1.3869 *	* 1.8760 *	* 3.1931 *	
14	* 1.3270 *	* 1.6451 *	* 1.5690 *	* 1.6772 *	* 1.1942 *	* .7176 *		
	* 1.6977 *	* 1.3817 *	* 1.4525 *	* 1.3664 *	* 1.9250 *	* 3.1966 *		
15	* .7422 *	* 1.0164 *	* 1.3388 *	* .9735 *	F-SUB-Q			
	* 3.0043 *	* 2.2110 *	* 1.6841 *	* 2.3188 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9896 *	* 1.4533 *	* 1.3677 *	* 1.5037 *	* 1.4812 *	* 1.5604 *	* 1.2670 *	* .7036 *
	* 2.1249 *	* 1.4576 *	* 1.5439 *	* 1.4054 *	* 1.4321 *	* 1.3651 *	* 1.6717 *	* 2.9830 *
9	* 1.4533 *	* 1.3462 *	* 1.5562 *	* 1.4266 *	* 1.5765 *	* 1.3570 *	* 1.5604 *	* .9618 *
	* 1.4576 *	* 1.5710 *	* 1.3619 *	* 1.4847 *	* 1.3482 *	* 1.5652 *	* 1.3664 *	* 2.1978 *
10	* 1.3677 *	* 1.5604 *	* 1.2370 *	* 1.5669 *	* 1.4780 *	* 1.5936 *	* 1.4876 *	* 1.2606 *
	* 1.5439 *	* 1.3582 *	* 1.7155 *	* 1.3714 *	* 1.4504 *	* 1.3445 *	* 1.4335 *	* 1.6793 *
11	* 1.5037 *	* 1.4287 *	* 1.5690 *	* 1.4994 *	* 1.5915 *	* 1.4180 *	* 1.5883 *	* .9125 *
	* 1.4054 *	* 1.4825 *	* 1.3695 *	* 1.4349 *	* 1.3569 *	* 1.5098 *	* 1.3482 *	* 2.3206 *
12	* 1.4812 *	* 1.5787 *	* 1.4748 *	* 1.5915 *	* 1.5144 *	* 1.5862 *	* 1.1374 *	
	* 1.4321 *	* 1.3464 *	* 1.4540 *	* 1.3569 *	* 1.4245 *	* 1.3607 *	* 1.8832 *	
13	* 1.5604 *	* 1.3591 *	* 1.5926 *	* 1.4169 *	* 1.5904 *	* 1.1770 *	* .6769 *	
	* 1.3651 *	* 1.5643 *	* 1.3451 *	* 1.5114 *	* 1.3563 *	* 1.8283 *	* 3.1487 *	
14	* 1.2670 *	* 1.5615 *	* 1.4876 *	* 1.5883 *	* 1.1363 *	* .6769 *		
	* 1.6717 *	* 1.3657 *	* 1.4342 *	* 1.3488 *	* 1.8856 *	* 3.1521 *		
15	* .7036 *	* .9607 *	* 1.2595 *	* .9114 *	* F-SUB-Q			
	* 2.9830 *	* 2.1994 *	* 1.6803 *	* 2.3225 *	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9703 *	* 1.4148 *	* 1.3334 *	* 1.4608 *	* 1.4351 *	* 1.4930 *	* 1.2134 *	* .6662 *
	* 2.0639 *	* 1.4245 *	* 1.5075 *	* 1.3772 *	* 1.4068 *	* 1.3582 *	* 1.6642 *	* 3.0074 *
9	* 1.4148 *	* 1.3238 *	* 1.5069 *	* 1.3827 *	* 1.5176 *	* 1.3023 *	* 1.4726 *	* .9007 *
	* 1.4245 *	* 1.5200 *	* 1.3378 *	* 1.4583 *	* 1.3330 *	* 1.5536 *	* 1.3772 *	* 2.2344 *
10	* 1.3334 *	* 1.5112 *	* 1.2059 *	* 1.5015 *	* 1.4255 *	* 1.4973 *	* 1.4009 *	* 1.1706 *
	* 1.5075 *	* 1.3342 *	* 1.6736 *	* 1.3563 *	* 1.4279 *	* 1.3594 *	* 1.4468 *	* 1.7215 *
11	* 1.4608 *	* 1.3848 *	* 1.5037 *	* 1.4426 *	* 1.5155 *	* 1.3420 *	* 1.4919 *	* .8482 *
	* 1.3772 *	* 1.4561 *	* 1.3544 *	* 1.4156 *	* 1.3519 *	* 1.5153 *	* 1.3645 *	* 2.3768 *
12	* 1.4351 *	* 1.5197 *	* 1.4223 *	* 1.5155 *	* 1.4501 *	* 1.4983 *	* 1.0753 *	
	* 1.4068 *	* 1.3306 *	* 1.4300 *	* 1.3513 *	* 1.4095 *	* 1.3657 *	* 1.8905 *	
13	* 1.4930 *	* 1.3034 *	* 1.4962 *	* 1.3409 *	* 1.5026 *	* 1.1160 *	* .6383 *	
	* 1.3582 *	* 1.5520 *	* 1.3600 *	* 1.5168 *	* 1.3613 *	* 1.8283 *	* 3.1759 *	
14	* 1.2134 *	* 1.4737 *	* 1.3998 *	* 1.4908 *	* 1.0742 *	* .6372 *		
	* 1.6642 *	* 1.3766 *	* 1.4476 *	* 1.3651 *	* 1.8929 *	* 3.1793 *		
15	* .6662 *	* .8996 *	* 1.1706 *	* .8482 *	* F-SUB-Q			
	* 3.0074 *	* 2.2361 *	* 1.7225 *	* 2.3787 *	* M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8932 *	* 1.2552 *	* 1.1899 *	* 1.2852 *	* 1.2616 *	* 1.2895 *	* 1.0571 *	* .5708 *
	* 2.1655 *	* 1.5495 *	* 1.6319 *	* 1.5106 *	* 1.5439 *	* 1.5161 *	* 1.8432 *	* 3.3954 *
9	* 1.2552 *	* 1.2049 *	* 1.3270 *	* 1.2177 *	* 1.3130 *	* 1.1449 *	* 1.2402 *	* .7465 *
	* 1.5495 *	* 1.6131 *	* 1.4670 *	* 1.5974 *	* 1.4862 *	* 1.7046 *	* 1.5769 *	* 2.6036 *
10	* 1.1899 *	* 1.3313 *	* 1.1021 *	* 1.3045 *	* 1.2531 *	* 1.2820 *	* 1.1792 *	* .9361 *
	* 1.6319 *	* 1.4626 *	* 1.7680 *	* 1.5006 *	* 1.5610 *	* 1.5286 *	* 1.6548 *	* 2.0770 *
11	* 1.2852 *	* 1.2209 *	* 1.3077 *	* 1.2531 *	* 1.2863 *	* 1.1481 *	* 1.2370 *	* .6951 *
	* 1.5106 *	* 1.5940 *	* 1.4976 *	* 1.5668 *	* 1.5278 *	* 1.7085 *	* 1.5845 *	* 2.8015 *
12	* 1.2616 *	* 1.3152 *	* 1.2520 *	* 1.2873 *	* 1.2466 *	* 1.2509 *	* .9157 *	
	* 1.5439 *	* 1.4833 *	* 1.5619 *	* 1.5263 *	* 1.5777 *	* 1.5735 *	* 2.1419 *	
13	* 1.2895 *	* 1.1470 *	* 1.2831 *	* 1.1470 *	* 1.2541 *	* .9425 *	* .5301 *	
	* 1.5161 *	* 1.7026 *	* 1.5278 *	* 1.7095 *	* 1.5693 *	* 2.0858 *	* 3.6840 *	
14	* 1.0571 *	* 1.2413 *	* 1.1792 *	* 1.2370 *	* .9146 *	* .5301 *		
	* 1.8432 *	* 1.5761 *	* 1.6548 *	* 1.5854 *	* 2.1434 *	* 3.6845 *		
15	* .5708 *	* .7465 *	* .9361 *	* .6940 *	F-SUB-Q			
	* 3.3954 *	* 2.6059 *	* 2.0784 *	* 2.8042 *	M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6190 *	* .8525 *	* .7476 *	* .8097 *	* .5098 *	* .8514 *	* .4241 *	* .3770 *
	* 3.0478 *	* 2.2210 *	* 2.5320 *	* 2.3409 *	* 3.7025 *	* 2.2327 *	* 4.4520 *	* 5.0123 *
9	* .8525 *	* .5098 *	* .9071 *	* .7679 *	* .8825 *	* .7272 *	* .7743 *	* .4455 *
	* 2.2310 *	* 3.6933 *	* 2.0932 *	* 2.4704 *	* 2.1576 *	* 2.6128 *	* 2.4560 *	* 4.2528 *
10	* .7476 *	* .9114 *	* .7561 *	* .8954 *	* .5119 *	* .8472 *	* .4391 *	* .5376 *
	* 2.5320 *	* 2.0843 *	* 2.5104 *	* 2.1264 *	* 3.6933 *	* 2.2481 *	* 4.3025 *	* 3.5212 *
11	* .8097 *	* .7711 *	* .9029 *	* .5077 *	* .8439 *	* .7111 *	* .7529 *	* .4038 *
	* 2.3409 *	* 2.4601 *	* 2.1067 *	* 3.7307 *	* 2.2567 *	* 2.6866 *	* 2.5298 *	* 4.6930 *
12	* .5098 *	* .8836 *	* .5130 *	* .8461 *	* .4787 *	* .7526 *	* .3459 *	
	* 3.7025 *	* 2.1528 *	* 3.6886 *	* 2.2515 *	* 3.9720 *	* 2.5083 *	* 5.5088 *	
13	* .3514 *	* .7283 *	* .8482 *	* .7101 *	* .7636 *	* .3534 *	* .3416 *	
	* 2.2327 *	* 2.6105 *	* 2.2481 *	* 2.6866 *	* 2.5019 *	* 5.3880 *	* 5.5608 *	
14	* .4241 *	* .7743 *	* .4391 *	* .7518 *	* .3449 *	* .3416 *		
	* 4.4520 *	* 2.4540 *	* 4.3025 *	* 2.5298 *	* 5.5088 *	* 5.5713 *		
15	* .3770 *	* .4455 *	* .5366 *	* .4038 *	F-SUB-Q			
	* 5.0123 *	* 4.2528 *	* 3.5212 *	* 4.6930 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5580 *	* .8257 *	* .7743 *	* .8172 *	* .5505 *	* .8654 *	* .4648 *	* .4359 *
	* 2.6206 *	* 2.0701 *	* 2.1957 *	* 2.0770 *	* 3.0587 *	* 1.9478 *	* 3.5910 *	* 3.8033 *
9	* .8257 *	* .5398 *	* .9082 *	* .7904 *	* .8879 *	* .7486 *	* .7551 *	* .4745 *
	* 2.0701 *	* 3.1392 *	* 1.8713 *	* 2.1485 *	* 1.9052 *	* 2.2524 *	* 2.2215 *	* 3.5041 *
10	* .7743 *	* .9104 *	* .7765 *	* .8868 *	* .5312 *	* .8150 *	* .4434 *	* .5516 *
	* 2.1957 *	* 1.8662 *	* 2.1856 *	* 1.9115 *	* 3.1761 *	* 2.0685 *	* 3.7557 *	* 3.0132 *
11	* .8172 *	* .7915 *	* .8921 *	* .5119 *	* .7829 *	* .6394 *	* .6833 *	* .4123 *
	* 2.0770 *	* 2.1445 *	* 1.9016 *	* 3.3042 *	* 2.1669 *	* 2.6296 *	* 2.4492 *	* 4.0175 *
12	* .5505 *	* .8889 *	* .5312 *	* .7840 *	* .3513 *	* .5569 *	* .3052 *	
	* 3.0587 *	* 1.9039 *	* 3.1724 *	* 2.1634 *	* 3.6886 *	* 2.4389 *	* 5.1804 *	
13	* .8654 *	* .7486 *	* .8150 *	* .6394 *	* .5569 *	* .2592 *	* .2999 *	
	* 1.9478 *	* 2.2505 *	* 2.0680 *	* 2.6296 *	* 2.4345 *	* 4.8845 *	* 4.8139 *	
14	* .4648 *	* .7551 *	* .4434 *	* .6833 *	* .3052 *	* .2999 *		
	* 3.5910 *	* 2.2203 *	* 3.7540 *	* 2.4501 *	* 5.1817 *	* 4.8139 *		
15	* .4359 *	* .4745 *	* .5505 *	* .4123 *	F-SUB-Q			
	* 3.8033 *	* 3.5041 *	* 3.0132 *	* 4.0198 *	M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7540 *	* 1.1620 *	* 1.1503 *	* 1.1984 *	* 1.2231 *	* 1.2199 *	* 1.0539 *	* .6201 *
	* 2.0081 *	* 1.5405 *	* 1.5484 *	* 1.4839 *	* 1.4528 *	* 1.4533 *	* 1.6715 *	* 2.8133 *
9	* 1.1620 *	* 1.1588 *	* 1.2488 *	* 1.1663 *	* 1.2391 *	* 1.1010 *	* 1.1224 *	* .7251 *
	* 1.5405 *	* 1.5417 *	* 1.4261 *	* 1.5234 *	* 1.4338 *	* 1.6073 *	* 1.5690 *	* 2.4071 *
10	* 1.1503 *	* 1.2499 *	* 1.0646 *	* 1.2070 *	* 1.1695 *	* 1.1695 *	* 1.0421 *	* .8632 *
	* 1.5484 *	* 1.4237 *	* 1.6715 *	* 1.4746 *	* 1.5206 *	* 1.5154 *	* 1.6849 *	* 2.0169 *
11	* 1.1984 *	* 1.1674 *	* 1.2167 *	* 1.1278 *	* 1.1010 *	* .9543 *	* 1.0324 *	* .6394 *
	* 1.4839 *	* 1.5218 *	* 1.4636 *	* 1.5813 *	* 1.6202 *	* 1.8149 *	* 1.6999 *	* 2.7196 *
12	* 1.2231 *	* 1.2413 *	* 1.1695 *	* 1.1021 *	* .8086 *	* .8686 *	* .7443 *	
	* 1.4528 *	* 1.4323 *	* 1.5206 *	* 1.6193 *	* 1.6419 *	* 1.6785 *	* 2.2154 *	
13	* 1.2199 *	* 1.1021 *	* 1.1695 *	* .9543 *	* .8675 *	* .6372 *	* .4327 *	
	* 1.4533 *	* 1.6063 *	* 1.5151 *	* 1.8150 *	* 1.6763 *	* 2.0934 *	* 3.4967 *	
14	* 1.0539 *	* 1.1235 *	* 1.0421 *	* 1.0324 *	* .7433 *	* .4327 *		
	* 1.6715 *	* 1.5687 *	* 1.6849 *	* 1.6999 *	* 2.2154 *	* 3.4967 *		
15	* .6201 *	* .7251 *	* .8632 *	* .6394 *	F-SUB-Q			
	* 2.8133 *	* 2.4079 *	* 2.0174 *	* 2.7196 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8504	* 1.3527	* 1.3109	* 1.3805	* 1.4073	* 1.4448	* 1.2242	* .7197
	* 1.8913	* 1.4016	* 1.4359	* 1.3586	* 1.3284	* 1.2905	* 1.5139	* 2.5489
9	* 1.3527	* 1.3120	* 1.4491	* 1.3441	* 1.4576	* 1.2809	* 1.3473	* .8675
	* 1.4016	* 1.4424	* 1.2981	* 1.3932	* 1.2843	* 1.4527	* 1.3755	* 2.1150
10	* 1.3109	* 1.4523	* 1.2006	* 1.4201	* 1.3548	* 1.3902	* 1.2434	* 1.0699
	* 1.4359	* 1.2961	* 1.5690	* 1.3224	* 1.3855	* 1.3430	* 1.4865	* 1.7135
11	* 1.3805	* 1.3452	* 1.4223	* 1.3066	* 1.3195	* 1.1310	* 1.2616	* .7733
	* 1.3586	* 1.3918	* 1.3205	* 1.4479	* 1.4186	* 1.6169	* 1.4703	* 2.3707
12	* 1.4073	* 1.4587	* 1.3548	* 1.3205	* .9489	* 1.0656	* .8814	*
	* 1.3284	* 1.2829	* 1.3861	* 1.4166	* 1.4628	* 1.4536	* 1.9797	*
13	* 1.4448	* 1.2809	* 1.3902	* 1.1310	* 1.0656	* .7733	* .5248	*
	* 1.2905	* 1.4516	* 1.3430	* 1.6169	* 1.4512	* 1.8563	* 3.0735	*
14	* 1.2242	* 1.3473	* 1.2434	* 1.2606	* .8814	* .5248	*	*
	* 1.5139	* 1.3745	* 1.4865	* 1.4707	* 1.9811	* 3.0735	*	*
15	* .7197	* .8675	* 1.0699	* .7733	* F-SUB-Q			
	* 2.5489	* 2.1166	* 1.7141	* 2.3707	* M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9157	* 1.4683	* 1.3923	* 1.4748	* 1.5015	* 1.5733	* 1.3109	* .7668
	* 1.9138	* 1.3920	* 1.4476	* 1.3581	* 1.3197	* 1.2593	* 1.5026	* 2.5450
9	* 1.4683	* 1.3977	* 1.5615	* 1.4351	* 1.5744	* 1.3784	* 1.4833	* .9425
	* 1.3920	* 1.4584	* 1.2885	* 1.3917	* 1.2618	* 1.4331	* 1.3281	* 2.0680
10	* 1.3923	* 1.5647	* 1.2841	* 1.5487	* 1.4598	* 1.5240	* 1.3645	* 1.1813
	* 1.4476	* 1.2860	* 1.5730	* 1.2963	* 1.3740	* 1.3056	* 1.4400	* 1.6460
11	* 1.4748	* 1.4362	* 1.5497	* 1.4126	* 1.4576	* 1.2466	* 1.4052	* .8504
	* 1.3581	* 1.3903	* 1.2948	* 1.4396	* 1.3769	* 1.5861	* 1.4129	* 2.2980
12	* 1.5015	* 1.5754	* 1.4587	* 1.4576	* 1.0474	* 1.2092	* .9693	*
	* 1.3197	* 1.2613	* 1.3754	* 1.3769	* 1.4419	* 1.4079	* 1.9605	*
13	* 1.5733	* 1.3794	* 1.5240	* 1.2466	* 1.2092	* .8686	* .5848	*
	* 1.2593	* 1.4323	* 1.3059	* 1.5870	* 1.4057	* 1.8411	* 3.0369	*
14	* 1.3109	* 1.4833	* 1.3645	* 1.4041	* .9693	* .5848	*	*
	* 1.5026	* 1.3278	* 1.4400	* 1.4132	* 1.9619	* 3.0397	*	*
15	* .7668	* .9414	* 1.1813	* .8504	* F-SUB-Q			
	* 2.5450	* 2.0695	* 1.6465	* 2.2980	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EPPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9971 *	* 1.5133 *	* 1.4094 *	* 1.4940 *	* 1.5197 *	* 1.6044 *	* 1.3248 *	* .7711 *
	* 2.0478 *	* 1.4852 *	* 1.5520 *	* 1.4491 *	* 1.4024 *	* 1.3267 *	* 1.5907 *	* 2.7057 *
9	* 1.5133 *	* 1.4244 *	* 1.5894 *	* 1.4523 *	* 1.6011 *	* 1.4009 *	* 1.5251 *	* .9585 *
	* 1.4852 *	* 1.5664 *	* 1.3699 *	* 1.4844 *	* 1.3298 *	* 1.5178 *	* 1.3948 *	* 2.1915 *
10	* 1.4094 *	* 1.5926 *	* 1.3077 *	* 1.5883 *	* 1.4919 *	* 1.5679 *	* 1.4041 *	* 1.2124 *
	* 1.5520 *	* 1.3676 *	* 1.6778 *	* 1.3705 *	* 1.4628 *	* 1.3767 *	* 1.5174 *	* 1.7346 *
11	* 1.4940 *	* 1.4533 *	* 1.5904 *	* 1.4576 *	* 1.5251 *	* 1.3045 *	* 1.4641 *	* .8729 *
	* 1.4491 *	* 1.4829 *	* 1.3688 *	* 1.5196 *	* 1.4447 *	* 1.6693 *	* 1.4901 *	* 2.4427 *
12	* 1.5197 *	* 1.6022 *	* 1.4908 *	* 1.5262 *	* 1.1674 *	* 1.3152 *	* 1.0207 *	
	* 1.4024 *	* 1.3295 *	* 1.4639 *	* 1.4447 *	* 1.5276 *	* 1.4800 *	* 2.0771 *	
13	* 1.6044 *	* 1.4019 *	* 1.5669 *	* 1.3034 *	* 1.3141 *	* .9575 *	* .6233 *	
	* 1.3267 *	* 1.5170 *	* 1.3771 *	* 1.6702 *	* 1.4773 *	* 1.9648 *	* 3.2494 *	
14	* 1.3248 *	* 1.5262 *	* 1.4041 *	* 1.4641 *	* 1.0196 *	* .6233 *		
	* 1.5907 *	* 1.3948 *	* 1.5174 *	* 1.4909 *	* 2.0786 *	* 3.2513 *		
15	* .7711 *	* .9585 *	* 1.2113 *	* .8729 *	* F-SUB-Q			
	* 2.7057 *	* 2.1915 *	* 1.7357 *	* 2.4437 *	* M-SUB-Q			

AT 75% POWER, 100 EPPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1288 *	* 1.6022 *	* 1.4608 *	* 1.5519 *	* 1.5712 *	* 1.6740 *	* 1.3666 *	* .7925 *
	* 2.1417 *	* 1.5527 *	* 1.6585 *	* 1.5401 *	* 1.4894 *	* 1.3966 *	* 1.6863 *	* 2.8781 *
9	* 1.6022 *	* 1.4865 *	* 1.6590 *	* 1.5048 *	* 1.6708 *	* 1.4523 *	* 1.6044 *	* .9960 *
	* 1.5527 *	* 1.6723 *	* 1.4516 *	* 1.5802 *	* 1.3999 *	* 1.6081 *	* 1.4628 *	* 2.3182 *
10	* 1.4608 *	* 1.6622 *	* 1.3634 *	* 1.6675 *	* 1.5594 *	* 1.6493 *	* 1.4780 *	* 1.2745 *
	* 1.6585 *	* 1.4483 *	* 1.7823 *	* 1.4461 *	* 1.5553 *	* 1.4497 *	* 1.5957 *	* 1.8178 *
11	* 1.5519 *	* 1.5058 *	* 1.6697 *	* 1.5390 *	* 1.6354 *	* 1.3987 *	* 1.5626 *	* .9211 *
	* 1.5401 *	* 1.5790 *	* 1.4447 *	* 1.5802 *	* 1.4910 *	* 1.7262 *	* 1.5589 *	* 2.5684 *
12	* 1.5712 *	* 1.6718 *	* 1.5583 *	* 1.6365 *	* 1.4469 *	* 1.5165 *	* 1.0978 *	
	* 1.4894 *	* 1.3999 *	* 1.5570 *	* 1.4903 *	* 1.6006 *	* 1.5349 *	* 2.1651 *	
13	* 1.6740 *	* 1.4533 *	* 1.6483 *	* 1.3977 *	* 1.5187 *	* 1.1053 *	* .6844 *	
	* 1.3966 *	* 1.6072 *	* 1.4500 *	* 1.7272 *	* 1.5317 *	* 2.0736 *	* 3.3964 *	
14	* 1.3666 *	* 1.6044 *	* 1.4780 *	* 1.5615 *	* 1.0967 *	* .6844 *		
	* 1.6863 *	* 1.4628 *	* 1.5957 *	* 1.5597 *	* 2.1667 *	* 3.3991 *		
15	* .7925 *	* .9950 *	* 1.2734 *	* .9211 *	* F-SUB-Q			
	* 2.8781 *	* 2.3182 *	* 1.8189 *	* 2.5707 *	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1695	* 1.6290	* 1.4694	* 1.5626	* 1.5765	* 1.6879	* 1.3698	* .7915
	* 2.3180	* 1.6696	* 1.8343	* 1.6991	* 1.6398	* 1.5301	* 1.8538	* 3.1725
9	* 1.6290	* 1.5048	* 1.6740	* 1.5123	* 1.6911	* 1.4598	* 1.6268	* 1.0025
	* 1.6696	* 1.8096	* 1.5979	* 1.7439	* 1.5340	* 1.7669	* 1.5982	* 2.5437
10	* 1.4694	* 1.6783	* 1.3762	* 1.6911	* 1.5776	* 1.6729	* 1.5005	* 1.2906
	* 1.8343	* 1.5945	* 1.9648	* 1.5875	* 1.7083	* 1.5883	* 1.7448	* 1.9865
11	* 1.5626	* 1.5133	* 1.6933	* 1.5787	* 1.6815	* 1.4384	* 1.6001	* .9339
	* 1.6991	* 1.7418	* 1.5858	* 1.6937	* 1.5936	* 1.8472	* 1.6629	* 2.8193
12	* 1.5765	* 1.6933	* 1.5765	* 1.6815	* 1.5358	* 1.6044	* 1.1331	*
	* 1.6398	* 1.5340	* 1.7102	* 1.5936	* 1.7111	* 1.6337	* 2.3183	*
13	* 1.6879	* 1.4608	* 1.6729	* 1.4373	* 1.6076	* 1.1717	* .7122	*
	* 1.5301	* 1.7664	* 1.5883	* 1.8484	* 1.6304	* 2.2172	* 3.6361	*
14	* 1.3698	* 1.6268	* 1.4994	* 1.6001	* 1.1320	* .7122	*	*
	* 1.8538	* 1.5982	* 1.7453	* 1.6632	* 2.3201	* 3.6391	*	*
15	* .7915	* 1.0025	* 1.2895	* .9339	F-SUB-Q			
	* 3.1725	* 2.5459	* 1.9879	* 2.8206	M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1663	* 1.6247	* 1.4587	* 1.5530	* 1.5647	* 1.6804	* 1.3580	* .7808
	* 2.5317	* 1.8101	* 2.0162	* 1.8904	* 1.8282	* 1.6999	* 2.0626	* 3.5408
9	* 1.6247	* 1.4962	* 1.6665	* 1.5015	* 1.6868	* 1.4512	* 1.6247	* .9971
	* 1.8101	* 1.9663	* 1.7624	* 1.9462	* 1.7043	* 1.9669	* 1.7709	* 2.8264
10	* 1.4587	* 1.6697	* 1.3709	* 1.6900	* 1.5722	* 1.6718	* 1.5005	* 1.2873
	* 2.0162	* 1.7582	* 2.1408	* 1.7259	* 1.8556	* 1.7371	* 1.9183	* 2.2014
11	* 1.5530	* 1.5026	* 1.6922	* 1.5829	* 1.6890	* 1.4459	* 1.6076	* .9307
	* 1.8904	* 1.9449	* 1.7249	* 1.8447	* 1.7269	* 2.0047	* 1.7909	* 3.0665
12	* 1.5647	* 1.6890	* 1.5712	* 1.6890	* 1.5540	* 1.6268	* 1.1406	*
	* 1.8282	* 1.7038	* 1.8579	* 1.7269	* 1.8626	* 1.7723	* 2.5247	*
13	* 1.6804	* 1.4523	* 1.6708	* 1.4448	* 1.6301	* 1.1867	* .7176	*
	* 1.6999	* 1.9656	* 1.7371	* 2.0060	* 1.7688	* 2.4164	* 3.9714	*
14	* 1.3580	* 1.6247	* 1.4994	* 1.6076	* 1.1395	* .7176	*	*
	* 2.0626	* 1.7703	* 1.9183	* 1.7919	* 2.5269	* 3.9714	*	*
15	* .7808	* .9960	* 1.2863	* .9307	F-SUB-Q			
	* 3.5408	* 2.8291	* 2.2031	* 3.0695	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1749	* 1.6472	* 1.4694	* 1.5701	* 1.5787	* 1.7040	* 1.3687	* .7850
	* 2.6696	* 1.9051	* 2.1310	* 1.9941	* 1.9860	* 1.8397	* 2.2646	* 3.8895
9	* 1.6472	* 1.5080	* 1.6879	* 1.5155	* 1.7125	* 1.4662	* 1.6536	* 1.0078
	* 1.9051	* 2.0799	* 1.8571	* 2.0668	* 1.8317	* 2.1372	* 1.8929	* 3.0829
10	* 1.4694	* 1.6911	* 1.3859	* 1.7211	* 1.5904	* 1.6986	* 1.5272	* 1.3109
	* 2.1310	* 1.8524	* 2.2619	* 1.8249	* 1.9727	* 1.8466	* 2.0481	* 2.3653
11	* 1.5701	* 1.5176	* 1.7222	* 1.6044	* 1.7190	* 1.4694	* 1.6418	* .9478
	* 1.9941	* 2.0639	* 1.8238	* 1.9570	* 1.8272	* 2.1357	* 1.9051	* 3.2783
12	* 1.5787	* 1.7147	* 1.5883	* 1.7200	* 1.5819	* 1.6643	* 1.1578	*
	* 1.9860	* 1.8294	* 1.9753	* 1.8260	* 1.9873	* 1.8856	* 2.6989	*
13	* 1.7040	* 1.4673	* 1.6986	* 1.4683	* 1.6686	* 1.2059	* .7326	*
	* 1.8397	* 2.1357	* 1.8466	* 2.1372	* 1.8808	* 2.5944	* 4.2406	*
14	* 1.3687	* 1.6536	* 1.5272	* 1.6408	* 1.1567	* .7315	*	*
	* 2.2646	* 1.8929	* 2.0481	* 1.9051	* 2.7014	* 4.2467	*	*
15	* .7850	* 1.0078	* 1.3098	* .9478	* F-SUB-Q			
	* 3.8895	* 3.0861	* 2.3672	* 3.2783	* M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1417	* 1.6086	* 1.4341	* 1.5337	* 1.5422	* 1.6675	* 1.3377	* .7647
	* 2.7113	* 1.9263	* 2.1560	* 2.0145	* 2.0049	* 1.8559	* 2.3079	* 4.0153
9	* 1.6086	* 1.4716	* 1.6483	* 1.4812	* 1.6761	* 1.4341	* 1.6215	* .9864
	* 1.9263	* 2.1052	* 1.8760	* 2.0873	* 1.8489	* 2.1576	* 1.9113	* 3.1387
10	* 1.4341	* 1.6526	* 1.3537	* 1.6868	* 1.5583	* 1.6654	* 1.4983	* 1.2831
	* 2.1560	* 1.8713	* 2.2864	* 1.8420	* 1.9941	* 1.8630	* 2.0682	* 2.4138
11	* 1.5337	* 1.4823	* 1.6890	* 1.5733	* 1.6858	* 1.4426	* 1.6119	* .9253
	* 2.0145	* 2.0858	* 1.8409	* 1.9780	* 1.8443	* 2.1544	* 1.9263	* 3.3529
12	* 1.5422	* 1.6783	* 1.5551	* 1.6868	* 1.5530	* 1.6354	* 1.1363	*
	* 2.0049	* 1.8466	* 1.9968	* 1.8432	* 2.0076	* 1.9051	* 2.7391	*
13	* 1.6675	* 1.4351	* 1.6643	* 1.4416	* 1.6397	* 1.1835	* .7144	*
	* 1.8559	* 2.1560	* 1.8630	* 2.1560	* 1.9014	* 2.6385	* 4.3663	*
14	* 1.3377	* 1.6215	* 1.4973	* 1.6119	* 1.1353	* .7144	*	*
	* 2.3079	* 1.9101	* 2.0697	* 1.9275	* 2.7416	* 4.3663	*	*
15	* .7647	* .9853	* 1.2831	* .9243	* F-SUB-Q			
	* 4.0153	* 3.1420	* 2.4138	* 3.3529	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1449	* 1.6247	* 1.4405	* 1.5465	* 1.5530	* 1.6879	* 1.3452	* .7668
	* 2.6385	* 1.8466	* 2.0682	* 1.9250	* 1.8965	* 1.7481	* 2.1607	* 3.7307
9	* 1.6247	* 1.4769	* 1.6654	* 1.4908	* 1.6965	* 1.4459	* 1.6461	* .9950
	* 1.8466	* 2.0298	* 1.7905	* 1.9941	* 1.7512	* 2.0368	* 1.8059	* 2.9296
10	* 1.4405	* 1.6697	* 1.3645	* 1.7093	* 1.5690	* 1.6868	* 1.5208	* 1.3045
	* 2.0682	* 1.7873	* 2.1929	* 1.7669	* 1.9175	* 1.7744	* 1.9583	* 2.2532
11	* 1.5465	* 1.4919	* 1.7115	* 1.5862	* 1.7082	* 1.4566	* 1.6397	* .9393
	* 1.9250	* 1.9927	* 1.7659	* 1.9213	* 1.7797	* 2.0828	* 1.8363	* 3.1487
12	* 1.5530	* 1.6986	* 1.5669	* 1.7093	* 1.5690	* 1.6622	* 1.1460	*
	* 1.8965	* 1.7501	* 1.5200	* 1.7797	* 1.9518	* 1.8432	* 2.6504	*
13	* 1.6879	* 1.4469	* 1.6858	* 1.4555	* 1.6654	* 1.1931	* .7219	*
	* 1.7481	* 2.0354	* 1.7754	* 2.0843	* 1.8386	* 2.5717	* 4.1983	*
14	* 1.3452	* 1.472	* 1.5197	* 1.6385	* 1.1449	* .7219	*	*
	* 2.1607	* 1.8016	* 1.9583	* 1.8374	* 2.6528	* 4.2043	*	*
15	* .7668	* .9939	* 1.3034	* .9382	* F-SUB-Q			
	* 3.7307	* 2.9326	* 2.2550	* 3.1487	* M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1256	* 1.6065	* 1.4212	* 1.5294	* 1.5347	* 1.6729	* 1.3302	* .7551
	* 2.4479	* 1.6938	* 1.8868	* 1.7481	* 1.7316	* 1.5914	* 1.9780	* 3.4310
9	* 1.6065	* 1.4576	* 1.6483	* 1.4726	* 1.6815	* 1.4298	* 1.6343	* .9842
	* 1.6938	* 1.8630	* 1.6274	* 1.8137	* 1.5940	* 1.8571	* 1.6355	* 2.6720
10	* 1.4212	* 1.6526	* 1.3473	* 1.6954	* 1.5530	* 1.6729	* 1.5090	* 1.2938
	* 1.8868	* 1.6238	* 2.0022	* 1.6096	* 1.7522	* 1.6140	* 1.7776	* 2.0438
11	* 1.5294	* 1.4748	* 1.6965	* 1.5701	* 1.6943	* 1.4426	* 1.6290	* .9286
	* 1.7481	* 1.8114	* 1.6079	* 1.7722	* 1.6383	* 1.9188	* 1.6803	* 2.8725
12	* 1.5347	* 1.6836	* 1.5497	* 1.6954	* 1.5540	* 1.6504	* 1.1342	*
	* 1.7316	* 1.5931	* 1.7553	* 1.6373	* 1.8238	* 1.7066	* 2.4418	*
13	* 1.6729	* 1.4309	* 1.6729	* 1.4416	* 1.6547	* 1.1802	* .7133	*
	* 1.5914	* 1.8559	* 1.6149	* 1.9200	* 1.7036	* 2.3845	* 3.8779	*
14	* 1.3302	* 1.6354	* 1.5090	* 1.6279	* 1.1331	* .7122	*	*
	* 1.9780	* 1.6355	* 1.7776	* 1.6803	* 2.4438	* 3.8779	*	*
15	* .7551	* .9832	* 1.2927	* .9286	* F-SUB-Q			
	* 3.4310	* 2.6744	* 2.0438	* 2.8725	* M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0913 *	* 1.5637 *	* 1.3837 *	* 1.4887 *	* 1.4962 *	* 1.6290 *	* 1.2948 *	.7326 *
	* 2.2412 *	* 1.5610 *	* 1.7501 *	* 1.6247 *	* 1.6158 *	* 1.4855 *	* 1.8513 *	3.2316 *
9	* 1.5637 *	* 1.4191 *	* 1.6044 *	* 1.4341 *	* 1.6376 *	* 1.3923 *	* 1.5926 *	.9564 *
	* 1.5610 *	* 1.7185 *	* 1.5114 *	* 1.6880 *	* 1.4877 *	* 1.7337 *	* 1.5223 *	2.4976 *
10	* 1.3837 *	* 1.6086 *	* 1.3098 *	* 1.6526 *	* 1.5133 *	* 1.6311 *	* 1.4705 *	1.2584 *
	* 1.7501 *	* 1.5083 *	* 1.8583 *	* 1.4923 *	* 1.6211 *	* 1.4976 *	* 1.6502 *	1.9076 *
11	* 1.4887 *	* 1.4351 *	* 1.6536 *	* 1.5315 *	* 1.6526 *	* 1.4073 *	* 1.5872 *	.8996 *
	* 1.6247 *	* 1.6861 *	* 1.4908 *	* 1.6238 *	* 1.5022 *	* 1.7574 *	* 1.5471 *	2.6769 *
12	* 1.4962 *	* 1.6397 *	* 1.5101 *	* 1.6526 *	* 1.5176 *	* 1.6097 *	* 1.1053 *	
	* 1.6158 *	* 1.4870 *	* 1.6238 *	* 1.5014 *	* 1.6642 *	* 1.5643 *	* 2.2395 *	
13	* 1.6290 *	* 1.3934 *	* 1.6301 *	* 1.4062 *	* 1.6129 *	* 1.1503 *	* .6908 *	
	* 1.4855 *	* 1.7326 *	* 1.4983 *	* 1.7595 *	* 1.5610 *	* 2.1912 *	* 3.5898 *	
14	* 1.2948 *	* 1.5926 *	* 1.4705 *	* 1.5872 *	* 1.1042 *	* .6897 *		
	* 1.8513 *	* 1.5223 *	* 1.6511 *	* 1.5471 *	* 2.2429 *	* 3.5898 *		
15	.7326 *	.9564 *	1.2574 *	.8986 *	F-SUB-Q			
	3.2316 *	2.4998 *	1.9076 *	2.6793 *	M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0892 *	* 1.5712 *	* 1.3848 *	* 1.4940 *	* 1.4962 *	* 1.6343 *	* 1.2938 *	.7294 *
	* 2.0396 *	* 1.4217 *	* 1.6035 *	* 1.4870 *	* 1.4870 *	* 1.3638 *	* 1.7085 *	2.9982 *
9	* 1.5712 *	* 1.4212 *	* 1.6108 *	* 1.4351 *	* 1.6429 *	* 1.3923 *	* 1.5979 *	.9543 *
	* 1.4217 *	* 1.5693 *	* 1.3817 *	* 1.5495 *	* 1.3638 *	* 1.5965 *	* 1.3948 *	2.3061 *
10	* 1.3848 *	* 1.6151 *	* 1.3109 *	* 1.6590 *	* 1.5144 *	* 1.6365 *	* 1.4748 *	1.2616 *
	* 1.6035 *	* 1.3783 *	* 1.7016 *	* 1.3626 *	* 1.4847 *	* 1.3702 *	* 1.5106 *	1.7501 *
11	* 1.4940 *	* 1.4373 *	* 1.6600 *	* 1.5326 *	* 1.6590 *	* 1.4073 *	* 1.5936 *	.9007 *
	* 1.4870 *	* 1.5479 *	* 1.3613 *	* 1.4773 *	* 1.3638 *	* 1.6000 *	* 1.4075 *	2.4540 *
12	* 1.4962 *	* 1.6451 *	* 1.5112 *	* 1.6590 *	* 1.5208 *	* 1.6172 *	* 1.1053 *	
	* 1.4870 *	* 1.3626 *	* 1.4870 *	* 1.3632 *	* 1.4945 *	* 1.4048 *	* 2.0340 *	
13	* 1.6343 *	* 1.3934 *	* 1.6354 *	* 1.4062 *	* 1.6204 *	* 1.1503 *	* .6919 *	
	* 1.3638 *	* 1.5957 *	* 1.3708 *	* 1.6009 *	* 1.4014 *	* 1.9701 *	* 3.2387 *	
14	* 1.2938 *	* 1.5979 *	* 1.4748 *	* 1.5926 *	* 1.1042 *	* .6908 *		
	* 1.7085 *	* 1.3948 *	* 1.5106 *	* 1.4081 *	* 2.0354 *	* 3.2387 *		
15	.7294 *	.9543 *	1.2606 *	.8996 *	F-SUB-Q			
	2.9982 *	2.3079 *	1.7501 *	2.4560 *	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EPPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0496	* 1.5144	* 1.3398	* 1.4426	* 1.4437	* 1.5679	* 1.2456	* .6972 *
	* 1.9701	* 1.3740	* 1.5463	* 1.4363	* 1.4405	* 1.3288	* 1.6613	* 2.9384 *
9	* 1.5144	* 1.3784	* 1.5530	* 1.3848	* 1.5787	* 1.3388	* 1.5272	* .9125 *
	* 1.3740	* 1.5083	* 1.3378	* 1.4991	* 1.3240	* 1.5520	* 1.3626	* 2.2550 *
10	* 1.3398	* 1.5562	* 1.2627	* 1.5926	* 1.4608	* 1.5679	* 1.4116	* 1.2006 *
	* 1.5463	* 1.3348	* 1.6465	* 1.3193	* 1.4342	* 1.3336	* 1.4729	* 1.7175 *
11	* 1.4426	* 1.3869	* 1.5947	* 1.4780	* 1.5926	* 1.3516	* 1.5219	* .8536 *
	* 1.4363	* 1.4976	* 1.3181	* 1.4217	* 1.3204	* 1.5479	* 1.3721	* 2.4158 *
12	* 1.4437	* 1.5808	* 1.4587	* 1.5926	* 1.4673	* 1.5487	* 1.0635	*
	* 1.4405	* 1.3222	* 1.4363	* 1.3198	* 1.4342	* 1.3582	* 1.9622	*
13	* 1.5679	* 1.3398	* 1.5679	* 1.3505	* 1.5519	* 1.1085	* .6587	*
	* 1.3288	* 1.9504	* 1.3336	* 1.5487	* 1.3550	* 1.8917	* 3.1487	*
14	* 1.2456	* 1.5283	* 1.4116	* 1.5208	* 1.0624	* .6587	*	*
	* 1.6613	* 1.3619	* 1.4729	* 1.3721	* 1.9635	* 3.1521	*	*
15	* .6972	* .9125	* 1.1995	* .8536	* F-SUB-Q			
	* 2.9384	* 2.2567	* 1.7185	* 2.4177	* M-SUB-Q			

AT 75% POWER, 100 EPPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0260	* 1.4726	* 1.3077	* 1.4041	* 1.3998	* 1.5080	* 1.2017	* .6672 *
	* 1.9113	* 1.3396	* 1.5029	* 1.3994	* 1.4095	* 1.3110	* 1.6346	* 2.9209 *
9	* 1.4726	* 1.3527	* 1.5048	* 1.3441	* 1.5219	* 1.2906	* 1.4566	* .8686 *
	* 1.3396	* 1.4561	* 1.3081	* 1.4648	* 1.3012	* 1.5271	* 1.3550	* 2.2515 *
10	* 1.3077	* 1.5090	* 1.2306	* 1.5315	* 1.4159	* 1.5037	* 1.3495	* 1.1342 *
	* 1.5029	* 1.3052	* 1.6018	* 1.2983	* 1.4008	* 1.3169	* 1.4605	* 1.7265 *
11	* 1.4041	* 1.3462	* 1.5337	* 1.4287	* 1.5305	* 1.2981	* 1.4469	* .8086 *
	* 1.3994	* 1.4626	* 1.2966	* 1.3902	* 1.2995	* 1.5263	* 1.3664	* 2.4217 *
12	* 1.3998	* 1.5240	* 1.4137	* 1.5315	* 1.4169	* 1.4780	* 1.0217	*
	* 1.4095	* 1.2995	* 1.4028	* 1.2983	* 1.4034	* 1.3445	* 1.9339	*
13	* 1.5080	* 1.2927	* 1.5037	* 1.2970	* 1.4812	* 1.0656	* .6287	*
	* 1.3110	* 1.5255	* 1.3169	* 1.5271	* 1.3415	* 1.8594	* 3.1254	*
14	* 1.2017	* 1.4576	* 1.3495	* 1.4469	* 1.0207	* .6287	*	*
	* 1.6346	* 1.3544	* 1.4612	* 1.3670	* 1.9351	* 3.1254	*	*
15	* .6672	* .8686	* 1.1331	* .8075	* F-SUB-Q			
	* 2.9209	* 2.2532	* 1.7275	* 2.4237	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 100 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9382	* 1.3002	* 1.1727	* 1.2466	* 1.2402	* 1.3066	* 1.0603	* .5805
	* 2.0131	* 1.4590	* 1.6140	* 1.5176	* 1.5302	* 1.4554	* 1.7862	* 3.2423
9	* 1.3002	* 1.2274	* 1.3270	* 1.1920	* 1.3280	* 1.1406	* 1.2402	* .7379
	* 1.4590	* 1.5447	* 1.4286	* 1.5905	* 1.4349	* 1.6651	* 1.5318	* 2.5561
10	* 1.1727	* 1.3313	* 1.1203	* 1.3280	* 1.2520	* 1.3023	* 1.1610	* .9318
	* 1.6140	* 1.4252	* 1.6938	* 1.4342	* 1.5200	* 1.4626	* 1.6328	* 2.0256
11	* 1.2466	* 1.1942	* 1.3313	* 1.2563	* 1.3163	* 1.1331	* 1.2199	* .6801
	* 1.5176	* 1.5879	* 1.4314	* 1.5184	* 1.4518	* 1.6812	* 1.5594	* 2.7752
12	* 1.2402	* 1.3302	* 1.2509	* 1.3173	* 1.2338	* 1.2499	* .8900	*
	* 1.5302	* 1.4321	* 1.5208	* 1.4504	* 1.5479	* 1.5271	* 2.1357	*
13	* 1.3066	* 1.1417	* 1.3023	* 1.1320	* 1.2531	* .9211	* .5334	*
	* 1.4554	* 1.6632	* 1.4626	* 1.6822	* 1.5239	* 2.0697	* 3.5509	*
14	* 1.0603	* 1.2402	* 1.1610	* 1.2188	* .8889	* .5334	*	*
	* 1.7862	* 1.5310	* 1.6328	* 1.5594	* 2.1372	* 3.5509	*	*
15	* .5805	* .7379	* .9307	* .6801	* F-SUB-Q			
	* 3.2423	* 2.5584	* 2.0256	* 2.7778	* M-SUB-Q			

AT 75% POWER, 100 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6544	* .8879	* .7561	* .8086	* .5312	* .8707	* .4466	* .3909
	* 2.8122	* 2.0755	* 2.4398	* 2.2811	* 3.4551	* 2.1188	* 4.0991	* 4.6856
9	* .8879	* .5419	* .9232	* .7722	* .8996	* .7401	* .7850	* .4562
	* 2.0755	* 3.3837	* 2.0008	* 2.3883	* 2.0538	* 2.4955	* 2.3484	* 4.0153
10	* .7561	* .9318	* .7754	* .9178	* .5376	* .8664	* .4595	* .5537
	* 2.4398	* 1.9847	* 2.3845	* 2.0159	* 3.4190	* 2.1326	* 3.9827	* 3.3078
11	* .8086	* .7754	* .9253	* .5366	* .8686	* .7208	* .7583	* .4123
	* 2.2811	* 2.3787	* 1.9995	* 3.4270	* 2.1310	* 2.5695	* 2.4337	* 4.4520
12	* .5312	* .9018	* .5376	* .8697	* .5023	* .7743	* .3566	*
	* 3.4551	* 2.0510	* 3.4151	* 2.1264	* 3.6657	* 2.3922	* 5.1615	*
13	* .8707	* .7401	* .8675	* .7197	* .7765	* .3674	* .3524	*
	* 2.1188	* 2.4934	* 2.1326	* 2.5695	* 2.3864	* 5.0123	* 5.2256	*
14	* .4466	* .7850	* .4595	* .7583	* .3566	* .3513	*	*
	* 4.0991	* 2.3484	* 3.9774	* 2.4337	* 5.1615	* 5.2256	*	*
15	* .3909	* .4562	* .5537	* .4123	* F-SUB-Q			
	* 4.6856	* 4.0153	* 3.3078	* 4.4520	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.5837	.8632	.8043	.8482	.5944	.9114	.5109	.4723
	2.4916	2.0174	2.1546	2.0422	2.8945	1.8916	3.3418	3.5958
9	.8632	.5826	.9393	.8225	.9275	.7925	.8043	.5109
	2.0174	2.9671	1.8436	2.1063	1.8647	2.1764	2.1358	3.3259
10	.8043	.9436	.8140	.9253	.5762	.8622	.4873	.5987
	2.1546	1.8361	2.1262	1.8688	2.9863	1.9965	3.4955	2.8355
11	.8482	.8247	.9296	.5580	.8279	.6769	.7261	.4445
	2.0422	2.1017	1.8612	3.0912	2.0880	2.5249	2.3475	3.7975
12	.5944	.9275	.5762	.8290	.3813	.5933	.3342	
	2.8945	1.8634	2.9863	2.0850	3.4180	2.3281	4.8284	
13	.9114	.7925	.8622	.6769	.5933	.2860	.3256	
	1.8916	2.1746	1.9965	2.5249	2.3261	4.5184	4.5335	
14	.5109	.8043	.4873	.7261	.3342	.3256		
	3.3418	2.1358	3.4955	2.3475	4.8284	4.5335		
15	.4723	.5109	.5987	.4445	F-SUB-Q			
	3.5958	3.3259	2.8381	3.7975	M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.7733	1.1931	1.1588	1.2027	1.2381	1.2563	1.0903	.6522
	1.9458	1.5227	1.5626	1.5037	1.4594	1.4390	1.6482	2.7265
9	1.1931	1.1856	1.2659	1.1781	1.2606	1.1320	1.1620	.7497
	1.5227	1.5303	1.4304	1.5342	1.4353	1.5937	1.5452	2.3719
10	1.1588	1.2681	1.0967	1.2445	1.1984	1.2092	1.0721	.8943
	1.5626	1.4282	1.6496	1.4544	1.5078	1.4903	1.6681	1.9828
11	1.2027	1.1802	1.2520	1.1610	1.1417	.9810	1.0624	.6576
	1.5037	1.5326	1.4453	1.5596	1.5862	1.7954	1.6773	2.6843
12	1.2381	1.2627	1.1984	1.1428	.8290	.8911	.7572	
	1.4594	1.4332	1.5078	1.5845	1.6248	1.6565	2.2125	
13	1.2563	1.1320	1.2102	.9800	.8911	.6555	.4520	
	1.4390	1.5928	1.4903	1.7966	1.6545	2.0873	3.3908	
14	1.0903	1.1631	1.0721	1.0624	.7561	.4520		
	1.6482	1.5443	1.6681	1.6773	2.2137	3.3936		
15	.6522	.7497	.8943	.6576	F-SUB-Q			
	2.7265	2.3739	1.9842	2.6844	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 16 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BC1TOM)

	H	G	F	E	D	C	B	A
8	* .8643 *	* 1.3720 *	* 1.2991 *	* 1.3612 *	* 1.4041 *	* 1.4598 *	* 1.2370 *	* .7401 *
	* 1.8377 *	* 1.3948 *	* 1.4658 *	* 1.3956 *	* 1.3471 *	* 1.2954 *	* 1.5208 *	* 2.5241 *
9	* 1.3720 *	* 1.3248 *	* 1.4480 *	* 1.3345 *	* 1.4576 *	* 1.2927 *	* 1.3634 *	* .8707 *
	* 1.3948 *	* 1.4424 *	* 1.3149 *	* 1.4204 *	* 1.2972 *	* 1.4596 *	* 1.3777 *	* 2.1382 *
10	* 1.2991 *	* 1.4501 *	* 1.2242 *	* 1.4384 *	* 1.3623 *	* 1.4105 *	* 1.2466 *	* 1.0699 *
	* 1.4658 *	* 1.3130 *	* 1.5549 *	* 1.3198 *	* 1.3914 *	* 1.3394 *	* 1.5028 *	* 1.7360 *
11	* 1.3612 *	* 1.3366 *	* 1.4405 *	* 1.3184 *	* 1.3388 *	* 1.1299 *	* 1.2574 *	* .7690 *
	* 1.3956 *	* 1.4189 *	* 1.3186 *	* 1.4454 *	* 1.4151 *	* 1.6301 *	* 1.4862 *	* 2.4095 *
12	* 1.4041 *	* 1.4576 *	* 1.3623 *	* 1.3398 *	* .9468 *	* 1.0560 *	* .8643 *	
	* 1.3471 *	* 1.2966 *	* 1.3921 *	* 1.4143 *	* 1.4796 *	* 1.4682 *	* 2.0320 *	
13	* 1.4598 *	* 1.2938 *	* 1.4105 *	* 1.1288 *	* 1.0560 *	* .7626 *	* .5291 *	
	* 1.2954 *	* 1.4589 *	* 1.3394 *	* 1.6307 *	* 1.4661 *	* 1.9050 *	* 3.0583 *	
14	* 1.2370 *	* 1.3645 *	* 1.2466 *	* 1.2574 *	* .8643 *	* .5291 *		
	* 1.5208 *	* 1.3777 *	* 1.5028 *	* 1.4870 *	* 2.0325 *	* 3.0583 *		
15	* .7401 *	* .8707 *	* 1.0699 *	* .7679 *	* F-SUB-Q			
	* 2.5241 *	* 2.1398 *	* 1.7360 *	* 2.4116 *	* M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 15 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9136 *	* 1.4673 *	* 1.3623 *	* 1.4330 *	* 1.4791 *	* 1.5637 *	* 1.3013 *	* .7733 *
	* 1.8610 *	* 1.3919 *	* 1.4882 *	* 1.4070 *	* 1.3506 *	* 1.2776 *	* 1.5306 *	* 2.5541 *
9	* 1.4673 *	* 1.3923 *	* 1.5390 *	* 1.4052 *	* 1.5615 *	* 1.3687 *	* 1.4662 *	* .9232 *
	* 1.3919 *	* 1.4636 *	* 1.3148 *	* 1.4292 *	* 1.2793 *	* 1.4560 *	* 1.3527 *	* 2.1294 *
10	* 1.3623 *	* 1.5422 *	* 1.2948 *	* 1.5433 *	* 1.4426 *	* 1.5176 *	* 1.3377 *	* 1.1524 *
	* 1.4882 *	* 1.3127 *	* 1.5662 *	* 1.3046 *	* 1.3922 *	* 1.3161 *	* 1.4781 *	* 1.7003 *
11	* 1.4330 *	* 1.4073 *	* 1.5455 *	* 1.3987 *	* 1.4469 *	* 1.2092 *	* 1.3623 *	* .8225 *
	* 1.4070 *	* 1.4277 *	* 1.3034 *	* 1.4501 *	* 1.3905 *	* 1.6235 *	* 1.4550 *	* 2.3821 *
12	* 1.4791 *	* 1.5626 *	* 1.4426 *	* 1.4469 *	* 1.0100 *	* 1.1524 *	* .9189 *	
	* 1.3506 *	* 1.2782 *	* 1.3934 *	* 1.3898 *	* 1.4809 *	* 1.4463 *	* 2.0502 *	
13	* 1.5637 *	* 1.3698 *	* 1.5176 *	* 1.2092 *	* 1.1524 *	* .8172 *	* .5676 *	
	* 1.2776 *	* 1.4553 *	* 1.3161 *	* 1.6241 *	* 1.4443 *	* 1.9250 *	* 3.0777 *	
14	* 1.3013 *	* 1.4673 *	* 1.3377 *	* 1.3623 *	* .9178 *	* .5676 *		
	* 1.5306 *	* 1.3520 *	* 1.4781 *	* 1.4551 *	* 2.0516 *	* 3.0777 *		
15	* .7733 *	* .9221 *	* 1.1524 *	* .8225 *	* F-SUB-Q			
	* 2.5541 *	* 2.1310 *	* 1.7004 *	* 2.3821 *	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9436 *	* 1.4940 *	* 1.3666 *	* 1.4373 *	* 1.4801 *	* 1.5765 *	* 1.2970 *	* .7668 *
	* 1.9876 *	* 1.4860 *	* 1.6000 *	* 1.5076 *	* 1.4433 *	* 1.3549 *	* 1.6324 *	* 2.7375 *
9	* 1.4940 *	* 1.4052 *	* 1.5519 *	* 1.4084 *	* 1.5744 *	* 1.3730 *	* 1.4823 *	* .9243 *
	* 1.4860 *	* 1.5738 *	* 1.4025 *	* 1.5317 *	* 1.3569 *	* 1.5530 *	* 1.4322 *	* 2.2776 *
10	* 1.3666 *	* 1.5551 *	* 1.3045 *	* 1.5647 *	* 1.4566 *	* 1.5390 *	* 1.3537 *	* 1.1610 *
	* 1.6000 *	* 1.4004 *	* 1.6737 *	* 1.3856 *	* 1.4898 *	* 1.3981 *	* 1.5739 *	* 1.8122 *
11	* 1.4373 *	* 1.4094 *	* 1.5658 *	* 1.4212 *	* 1.4844 *	* 1.2402 *	* 1.3923 *	* .8290 *
	* 1.5076 *	* 1.5307 *	* 1.3843 *	* 1.5500 *	* 1.4634 *	* 1.7215 *	* 1.5527 *	* 2.5609 *
12	* 1.4801 *	* 1.5754 *	* 1.4555 *	* 1.4855 *	* 1.0571 *	* 1.2059 *	* .9414 *	
	* 1.4433 *	* 1.3563 *	* 1.4913 *	* 1.4627 *	* 1.5816 *	* 1.5361 *	* 2.1952 *	
13	* 1.5765 *	* 1.3741 *	* 1.5390 *	* 1.2391 *	* 1.2059 *	* .8589 *	* .5858 *	
	* 1.3549 *	* 1.5522 *	* 1.3982 *	* 1.7215 *	* 1.5336 *	* 2.0750 *	* 3.3297 *	
14	* 1.2970 *	* 1.4823 *	* 1.3537 *	* 1.3912 *	* .9403 *	* .5858 *		
	* 1.6324 *	* 1.4314 *	* 1.5740 *	* 1.5527 *	* 2.1969 *	* 3.3297 *		
15	* .7668 *	* .9232 *	* 1.1610 *	* .8290 *	F-SUB-Q			
	* 2.7375 *	* 2.2794 *	* 1.8133 *	* 2.5628 *	M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0710 *	* 1.5797 *	* 1.4116 *	* 1.4844 *	* 1.5197 *	* 1.6322 *	* 1.3270 *	* .7808 *
	* 2.0726 *	* 1.5378 *	* 1.7114 *	* 1.6072 *	* 1.5386 *	* 1.4306 *	* 1.7377 *	* 2.9245 *
9	* 1.5797 *	* 1.4641 *	* 1.6119 *	* 1.4491 *	* 1.6322 *	* 1.4116 *	* 1.5433 *	* .9500 *
	* 1.5378 *	* 1.6659 *	* 1.4889 *	* 1.6357 *	* 1.4334 *	* 1.6518 *	* 1.5099 *	* 2.4262 *
10	* 1.4116 *	* 1.6215 *	* 1.3537 *	* 1.6322 *	* 1.5112 *	* 1.6054 *	* 1.4084 *	* 1.2059 *
	* 1.7114 *	* 1.4826 *	* 1.7817 *	* 1.4664 *	* 1.5897 *	* 1.4785 *	* 1.6659 *	* 1.9145 *
11	* 1.4844 *	* 1.4512 *	* 1.6343 *	* 1.4908 *	* 1.5808 *	* 1.3163 *	* 1.4683 *	* .8643 *
	* 1.6072 *	* 1.6348 *	* 1.4650 *	* 1.6107 *	* 1.5065 *	* 1.7882 *	* 1.6356 *	* 2.7147 *
12	* 1.5197 *	* 1.6343 *	* 1.5101 *	* 1.5819 *	* 1.2081 *	* 1.3623 *	* 1.0025 *	
	* 1.5386 *	* 1.4327 *	* 1.5915 *	* 1.5062 *	* 1.6610 *	* 1.5990 *	* 2.3021 *	
13	* 1.6322 *	* 1.4126 *	* 1.6054 *	* 1.3152 *	* 1.3634 *	* .9682 *	* .6383 *	
	* 1.4306 *	* 1.6509 *	* 1.4785 *	* 1.7893 *	* 1.5973 *	* 2.2006 *	* 3.4995 *	
14	* 1.3270 *	* 1.5433 *	* 1.4084 *	* 1.4683 *	* 1.0014 *	* .6383 *		
	* 1.7377 *	* 1.5091 *	* 1.6659 *	* 1.6356 *	* 2.3039 *	* 3.4995 *		
15	* .7808 *	* .9489 *	* 1.2059 *	* .8643 *	F-SUB-Q			
	* 2.9245 *	* 2.4265 *	* 1.9147 *	* 2.7169 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1749	* 1.6183	* 1.4244	* 1.4930	* 1.5208	* 1.6408	* 1.3238	* .7765
	* 2.2339	* 1.6501	* 1.8803	* 1.7732	* 1.6948	* 1.5687	* 1.9122	* 3.2264
9	* 1.6183	* 1.4865	* 1.6301	* 1.4544	* 1.6526	* 1.4148	* 1.5572	* .9521
	* 1.6501	* 1.7962	* 1.6384	* 1.8051	* 1.5720	* 1.8182	* 1.6535	* 2.6686
10	* 1.4244	* 1.6418	* 1.3677	* 1.6536	* 1.5283	* 1.6258	* 1.4234	* 1.2156
	* 1.8803	* 1.6287	* 1.9559	* 1.6096	* 1.7421	* 1.6212	* 1.8267	* 2.0974
11	* 1.4930	* 1.4555	* 1.6558	* 1.5219	* 1.6311	* 1.3591	* 1.5005	* .8729
	* 1.7732	* 1.8039	* 1.6088	* 1.7285	* 1.6108	* 1.9161	* 1.7484	* 2.9882
12	* 1.5208	* 1.6547	* 1.5262	* 1.6311	* 1.4255	* 1.4865	* 1.0399	*
	* 1.6948	* 1.5712	* 1.7434	* 1.6105	* 1.7768	* 1.7049	* 2.4692	*
13	* 1.6408	* 1.4148	* 1.6258	* 1.3580	* 1.4887	* 1.0603	* .6715	*
	* 1.5687	* 1.8170	* 1.5221	* 1.9174	* 1.7030	* 2.3561	* 3.7504	*
14	* 1.3238	* 1.5583	* 1.4234	* 1.5005	* 1.0389	* .6715	*	*
	* 1.9122	* 1.6526	* 1.8269	* 1.7487	* 2.4712	* 3.7504	*	*
15	* .7765	* .9510	* 1.2145	* .8729	* F-SUB-Q			
	* 3.2264	* 2.6689	* 2.0989	* 2.9908	* M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1952	* 1.6268	* 1.4255	* 1.4865	* 1.5080	* 1.6333	* 1.3120	* .7658
	* 2.4350	* 1.7854	* 2.0386	* 1.9541	* 1.8866	* 1.7410	* 2.1268	* 3.5960
9	* 1.6268	* 1.4919	* 1.6290	* 1.4459	* 1.6526	* 1.4052	* 1.5551	* .9446
	* 1.7854	* 1.9489	* 1.7794	* 2.0032	* 1.7451	* 2.0209	* 1.8322	* 2.9629
10	* 1.4255	* 1.6418	* 1.3666	* 1.6536	* 1.5262	* 1.6258	* 1.4223	* 1.2113
	* 2.0386	* 1.7655	* 2.1234	* 1.7425	* 1.8889	* 1.7673	* 2.0034	* 2.3244
11	* 1.4865	* 1.4480	* 1.6558	* 1.5315	* 1.6472	* 1.3741	* 1.5101	* .8707
	* 1.9541	* 2.0002	* 1.7415	* 1.8777	* 1.7446	* 2.0780	* 1.8837	* 3.2525
12	* 1.5080	* 1.6547	* 1.5251	* 1.6483	* 1.4694	* 1.5315	* 1.0549	*
	* 1.8866	* 1.7440	* 1.8913	* 1.7446	* 1.9323	* 1.8491	* 2.6867	*
13	* 1.6333	* 1.4062	* 1.6258	* 1.3730	* 1.5326	* 1.0956	* .6854	*
	* 1.7410	* 2.0195	* 1.7673	* 2.0795	* 1.8468	* 2.5651	* 4.0948	*
14	* 1.3120	* 1.5551	* 1.4223	* 1.5101	* 1.0539	* .6854	*	*
	* 2.1268	* 1.8310	* 2.0048	* 1.8845	* 2.6883	* 4.0948	*	*
15	* .7658	* .9446	* 1.2102	* .8707	* F-SUB-Q			
	* 3.5960	* 2.9655	* 2.3260	* 3.2534	* M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2145	* 1.6590	* 1.4459	* 1.5069	* 1.5230	* 1.6579	* 1.3227	* .7711
	* 2.5762	* 1.8868	* 2.1639	* 2.0770	* 2.0538	* 1.8844	* 2.3288	* 3.9455
9	* 1.6590	* 1.5123	* 1.6590	* 1.4630	* 1.6825	* 1.4201	* 1.5829	* .9564
	* 1.8868	* 2.0697	* 1.8868	* 2.1388	* 1.8606	* 2.1994	* 1.9622	* 3.2281
10	* 1.4459	* 1.6718	* 1.3869	* 1.6879	* 1.5476	* 1.6558	* 1.4491	* 1.2327
	* 2.1639	* 1.8724	* 2.2567	* 1.8524	* 2.0214	* 1.8856	* 2.1419	* 2.4955
11	* 1.5069	* 1.4651	* 1.6890	* 1.5594	* 1.6847	* 1.4019	* 1.5455	* .8879
	* 2.0770	* 2.1357	* 1.8501	* 2.0049	* 1.8536	* 2.2210	* 2.0049	* 3.4714
12	* 1.5230	* 1.6836	* 1.5455	* 1.6858	* 1.5069	* 1.5776	* 1.0764	*
	* 2.0538	* 1.8594	* 2.0242	* 1.8536	* 2.0668	* 1.9674	* 2.8697	*
13	* 1.6579	* 1.4212	* 1.6547	* 1.4009	* 1.5797	* 1.1235	* .7047	*
	* 1.8844	* 2.1978	* 1.8856	* 2.2210	* 1.9648	* 2.7493	* 4.3598	*
14	* 1.3227	* 1.5840	* 1.4480	* 1.5455	* 1.0753	* .7047	*	*
	* 2.3288	* 1.9622	* 2.1419	* 2.0049	* 2.8725	* 4.3598	*	*
15	* .7711	* .9553	* 1.2327	* .8868	* F-SUB-Q			
	* 3.9455	* 3.2316	* 2.4976	* 3.4714	* M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1888	* 1.6290	* 1.4180	* 1.4769	* 1.4930	* 1.6268	* 1.2959	* .7518
	* 2.6174	* 1.9125	* 2.1945	* 2.1052	* 2.0858	* 1.9150	* 2.4000	* 4.1105
9	* 1.6290	* 1.4844	* 1.6290	* 1.4351	* 1.6526	* 1.3934	* 1.5562	* .9382
	* 1.9125	* 2.0992	* 1.9125	* 2.1687	* 1.8868	* 2.2344	* 2.0035	* 3.3227
10	* 1.4180	* 1.6418	* 1.3612	* 1.6611	* 1.5197	* 1.6268	* 1.4244	* 1.2102
	* 2.1945	* 1.8978	* 2.2882	* 1.8808	* 2.0524	* 1.9163	* 2.1896	* 2.5762
11	* 1.4769	* 1.4373	* 1.6633	* 1.5337	* 1.6590	* 1.3816	* 1.5219	* .8686
	* 2.1052	* 2.1655	* 1.8784	* 2.0368	* 1.8832	* 2.2601	* 2.0524	* 3.5942
12	* 1.4930	* 1.6547	* 1.5176	* 1.6600	* 1.4865	* 1.5572	* 1.0614	*
	* 2.0858	* 1.8844	* 2.0552	* 1.8820	* 2.1052	* 2.0104	* 2.9472	*
13	* 1.6268	* 1.3944	* 1.6268	* 1.3805	* 1.5594	* 1.1096	* .6908	*
	* 1.9150	* 2.2327	* 1.9175	* 2.2619	* 2.0076	* 2.8257	* 4.5342	*
14	* 1.2959	* 1.5562	* 1.4244	* 1.5219	* 1.0614	* .6908	*	*
	* 2.4000	* 2.0035	* 2.1896	* 2.0538	* 2.9502	* 4.5342	*	*
15	* .7518	* .9371	* 1.2092	* .8675	* F-SUB-Q			
	* 4.1105	* 3.3264	* 2.5785	* 3.5942	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1984	* 1.6536	* 1.4309	* 1.4930	* 1.5069	* 1.6526	* 1.3077	* .7572
	* 2.5517	* 1.8489	* 2.1295	* 2.0256	* 1.9807	* 1.8092	* 2.2481	* 3.8176
9	* 1.6536	* 1.4973	* 1.6536	* 1.4491	* 1.6783	* 1.4084	* 1.5840	* .9489
	* 1.8489	* 2.0424	* 1.8397	* 2.0843	* 1.8126	* 2.1157	* 1.8978	* 3.1023
10	* 1.4309	* 1.6675	* 1.3762	* 1.6900	* 1.5358	* 1.6536	* 1.4480	* 1.2316
	* 2.1295	* 1.8260	* 2.2093	* 1.8114	* 1.9833	* 1.8340	* 2.0784	* 2.4059
11	* 1.4930	* 1.4523	* 1.6911	* 1.5519	* 1.6879	* 1.3987	* 1.5508	* .8836
	* 2.0256	* 2.0828	* 1.8103	* 1.9820	* 1.8226	* 2.1929	* 1.9609	* 3.3798
12	* 1.5069	* 1.6804	* 1.5337	* 1.6879	* 1.5058	* 1.5862	* 1.0731	*
	* 1.9807	* 1.8114	* 1.9860	* 1.8215	* 2.0538	* 1.9505	* 2.8558	*
13	* 1.6526	* 1.4094	* 1.6536	* 1.3987	* 1.5894	* 1.1224	* .7015	*
	* 1.8092	* 2.1142	* 1.8340	* 2.1945	* 1.9479	* 2.7647	* 4.3598	*
14	* 1.3077	* 1.5840	* 1.4480	* 1.5508	* 1.0721	* .7015	*	*
	* 2.2481	* 1.8978	* 2.0784	* 1.9609	* 2.8586	* 4.3598	*	*
15	* .7572	* .9478	* 1.2306	* .8825	* F-SUB-Q			
	* 3.8176	* 3.1056	* 2.4059	* 3.3798	* M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1856	* 1.6440	* 1.4191	* 1.4823	* 1.4951	* 1.6451	* 1.2981	* .7486
	* 2.3864	* 1.6938	* 1.9479	* 1.8374	* 1.8048	* 1.6447	* 2.0538	* 3.5044
9	* 1.6440	* 1.4844	* 1.6451	* 1.4373	* 1.6708	* 1.3987	* 1.5776	* .9414
	* 1.6938	* 1.8724	* 1.6717	* 1.8917	* 1.6465	* 1.9275	* 1.7165	* 2.8257
10	* 1.4191	* 1.6590	* 1.3655	* 1.6836	* 1.5251	* 1.6472	* 1.4416	* 1.2252
	* 1.9479	* 1.6595	* 2.0131	* 1.6465	* 1.8081	* 1.6642	* 1.8832	* 2.1799
11	* 1.4823	* 1.4405	* 1.6847	* 1.5412	* 1.6804	* 1.3902	* 1.5455	* .8771
	* 1.8374	* 1.8892	* 1.6447	* 1.8260	* 1.6793	* 2.0200	* 1.7905	* 3.0732
12	* 1.4951	* 1.6718	* 1.5219	* 1.6815	* 1.4983	* 1.5819	* 1.0667	*
	* 1.8048	* 1.6447	* 1.8114	* 1.6784	* 1.9213	* 1.8070	* 2.6314	*
13	* 1.6451	* 1.3998	* 1.6461	* 1.3902	* 1.5840	* 1.1149	* .6951	*
	* 1.6447	* 1.9263	* 1.6651	* 2.0214	* 1.8037	* 2.5584	* 4.0208	*
14	* 1.2981	* 1.5776	* 1.4416	* 1.5455	* 1.0656	* .6961	*	*
	* 2.0538	* 1.7165	* 1.8832	* 1.7905	* 2.6338	* 4.0208	*	*
15	* .7486	* .9403	* 1.2252	* .8761	* F-SUB-Q			
	* 3.5044	* 2.8284	* 2.1815	* 3.0764	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1556 *	* 1.6086 *	* 1.3869 *	* 1.4501 *	* 1.4641 *	* 1.6097 *	* 1.2702 *	* .7304 *
	* 2.1703 *	* 1.5536 *	* 1.7916 *	* 1.7006 *	* 1.6774 *	* 1.5294 *	* 1.9150 *	* 3.2820 *
9	* 1.6086 *	* 1.4523 *	* 1.6086 *	* 1.4062 *	* 1.6354 *	* 1.3687 *	* 1.5455 *	* .9211 *
	* 1.5536 *	* 1.7175 *	* 1.5455 *	* 1.7533 *	* 1.5215 *	* 1.7916 *	* 1.5914 *	* 2.6291 *
10	* 1.3869 *	* 1.6226 *	* 1.3345 *	* 1.6483 *	* 1.4940 *	* 1.6129 *	* 1.4126 *	* 1.1984 *
	* 1.7916 *	* 1.5334 *	* 1.8606 *	* 1.5208 *	* 1.6670 *	* 1.5382 *	* 1.7419 *	* 2.0270 *
11	* 1.4501 *	* 1.4094 *	* 1.6504 *	* 1.5101 *	* 1.6461 *	* 1.3634 *	* 1.5144 *	* .8547 *
	* 1.7006 *	* 1.7522 *	* 1.5192 *	* 1.6698 *	* 1.5318 *	* 1.8397 *	* 1.6428 *	* 2.8531 *
12	* 1.4641 *	* 1.6365 *	* 1.4908 *	* 1.6472 *	* 1.4694 *	* 1.5497 *	* 1.0464 *	
	* 1.6774 *	* 1.5200 *	* 1.6698 *	* 1.5310 *	* 1.7408 *	* 1.6456 *	* 2.3961 *	
13	* 1.6097 *	* 1.3698 *	* 1.6119 *	* 1.3623 *	* 1.5530 *	* 1.0935 *	* .6779 *	
	* 1.5294 *	* 1.7905 *	* 1.5390 *	* 1.8409 *	* 1.6428 *	* 2.3335 *	* 3.6979 *	
14	* 1.2702 *	* 1.5455 *	* 1.4126 *	* 1.5133 *	* 1.0453 *	* .6779 *		
	* 1.9150 *	* 1.5914 *	* 1.7419 *	* 1.6428 *	* 2.3981 *	* 3.6979 *		
15	* .7304 *	* .9200 *	* 1.1984 *	* .8536 *	F-SUB-Q			
	* 3.2820 *	* 2.6314 *	* 2.0270 *	* 2.8558 *	M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1588 *	* 1.6226 *	* 1.3944 *	* 1.4598 *	* 1.4726 *	* 1.6247 *	* 1.2777 *	* .7326 *
	* 1.9648 *	* 1.4088 *	* 1.6319 *	* 1.5512 *	* 1.5366 *	* 1.3955 *	* 1.7564 *	* 3.0228 *
9	* 1.6226 *	* 1.4608 *	* 1.6215 *	* 1.4137 *	* 1.6493 *	* 1.3762 *	* 1.5604 *	* .9253 *
	* 1.4088 *	* 1.5610 *	* 1.4061 *	* 1.6035 *	* 1.3837 *	* 1.6410 *	* 1.4497 *	* 2.4118 *
10	* 1.3944 *	* 1.6365 *	* 1.3420 *	* 1.6643 *	* 1.5026 *	* 1.6268 *	* 1.4255 *	* 1.2102 *
	* 1.6319 *	* 1.3948 *	* 1.6958 *	* 1.3817 *	* 1.5192 *	* 1.3994 *	* 1.5862 *	* 1.8478 *
11	* 1.4598 *	* 1.4159 *	* 1.6654 *	* 1.5187 *	* 1.6622 *	* 1.3709 *	* 1.5294 *	* .8622 *
	* 1.5512 *	* 1.6018 *	* 1.3798 *	* 1.5122 *	* 1.3837 *	* 1.6660 *	* 1.4862 *	* 2.5990 *
12	* 1.4726 *	* 1.6515 *	* 1.4994 *	* 1.6622 *	* 1.4812 *	* 1.5669 *	* 1.0528 *	
	* 1.5366 *	* 1.3824 *	* 1.5215 *	* 1.3830 *	* 1.5561 *	* 1.4707 *	* 2.1639 *	
13	* 1.6247 *	* 1.3773 *	* 1.6268 *	* 1.3698 *	* 1.5690 *	* 1.1010 *	* .6844 *	
	* 1.3955 *	* 1.6401 *	* 1.4001 *	* 1.6670 *	* 1.4677 *	* 2.0858 *	* 3.3152 *	
14	* 1.2777 *	* 1.5604 *	* 1.4255 *	* 1.5294 *	* 1.0517 *	* .6844 *		
	* 1.7564 *	* 1.4497 *	* 1.5862 *	* 1.4870 *	* 2.1655 *	* 3.3115 *		
15	* .7326 *	* .9253 *	* 1.2102 *	* .8611 *	F-SUB-Q			
	* 3.0228 *	* 2.4138 *	* 1.8478 *	* 2.5990 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1213	* 1.5701	* 1.3537	* 1.4169	* 1.4309	* 1.5712	* 1.2424	* .7079
	* 1.8880	* 1.3550	* 1.5660	* 1.4908	* 1.4780	* 1.3488	* 1.6919	* 2.9326
9	* 1.5701	* 1.4212	* 1.5669	* 1.3720	* 1.5947	* 1.3355	* 1.5069	* .8964
	* 1.3550	* 1.4945	* 1.3563	* 1.5414	* 1.3348	* 1.5820	* 1.4014	* 2.3317
10	* 1.3537	* 1.5819	* 1.3002	* 1.6097	* 1.4598	* 1.5733	* 1.3794	* 1.1663
	* 1.5660	* 1.3451	* 1.6328	* 1.3288	* 1.4576	* 1.3507	* 1.5302	* 1.7916
11	* 1.4169	* 1.3741	* 1.6108	* 1.4758	* 1.6076	* 1.3302	* 1.4769	* .8279
	* 1.4908	* 1.5398	* 1.3276	* 1.4468	* 1.3306	* 1.5965	* 1.4335	* 2.5255
12	* 1.4309	* 1.5969	* 1.4576	* 1.6076	* 1.4416	* 1.5155	* 1.0249	*
	* 1.4780	* 1.3330	* 1.4597	* 1.3300	* 1.4818	* 1.4081	* 2.0624	*
13	* 1.5712	* 1.3366	* 1.5722	* 1.3302	* 1.5187	* 1.0721	* .6597	*
	* 1.3488	* 1.5803	* 1.3513	* 1.5974	* 1.4054	* 1.9820	* 3.1862	*
14	* 1.2424	* 1.5080	* 1.3794	* 1.4769	* 1.0249	* .6597	*	*
	* 1.6919	* 1.4014	* 1.5302	* 1.4342	* 2.0639	* 3.1862	*	*
15	* .7079	* .8954	* 1.1663	* .8268	* F-SUB-Q			
	* 2.9326	* 2.3335	* 1.7927	* 2.5276	* M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0956	* 1.5305	* 1.3248	* 1.3859	* 1.3977	* 1.5240	* 1.2124	* .6876
	* 1.8306	* 1.3175	* 1.5161	* 1.4454	* 1.4363	* 1.3193	* 1.6474	* 2.8753
9	* 1.5305	* 1.3955	* 1.5251	* 1.3398	* 1.5476	* 1.2991	* 1.4555	* .8664
	* 1.3175	* 1.4412	* 1.3216	* 1.4968	* 1.3029	* 1.5422	* 1.3766	* 2.2900
10	* 1.3248	* 1.5380	* 1.2702	* 1.5594	* 1.4244	* 1.5230	* 1.3366	* 1.1224
	* 1.5161	* 1.3105	* 1.5828	* 1.2983	* 1.4156	* 1.3222	* 1.4976	* 1.7690
11	* 1.3859	* 1.3409	* 1.5604	* 1.4384	* 1.5572	* 1.2916	* 1.4255	* .7979
	* 1.4454	* 1.4953	* 1.2966	* 1.4041	* 1.2995	* 1.5561	* 1.4075	* 2.4892
12	* 1.3977	* 1.5497	* 1.4223	* 1.5583	* 1.4062	* 1.4662	* 1.0003	*
	* 1.4363	* 1.3012	* 1.4176	* 1.2989	* 1.4363	* 1.3766	* 2.0022	*
13	* 1.5240	* 1.3002	* 1.5230	* 1.2916	* 1.4683	* 1.0464	* .6405	*
	* 1.3193	* 1.5406	* 1.3222	* 1.5569	* 1.3746	* 1.9213	* 3.1122	*
14	* 1.2124	* 1.4566	* 1.3366	* 1.4255	* .9992	* .6405	*	*
	* 1.6474	* 1.3759	* 1.4976	* 1.4075	* 2.0035	* 3.1122	*	*
15	* .6876	* .8664	* 1.1224	* .7968	* F-SUB-Q			
	* 2.8753	* 2.2918	* 1.7701	* 2.4913	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 200 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9992	* 1.3559	* 1.1942	* 1.2456	* 1.2531	* 1.3355	* 1.0860	* .6094
	* 1.9326	* 1.4300	* 1.6185	* 1.5487	* 1.5406	* 1.4483	* 1.7712	* 3.1320
9	* 1.3559	* 1.2681	* 1.3570	* 1.2006	* 1.3612	* 1.1599	* 1.2606	* .7551
	* 1.4300	* 1.5255	* 1.4286	* 1.6079	* 1.4245	* 1.6632	* 1.5294	* 2.5342
10	* 1.1942	* 1.3687	* 1.1578	* 1.3677	* 1.2734	* 1.3334	* 1.1738	* .9500
	* 1.6185	* 1.4163	* 1.6717	* 1.4224	* 1.5208	* 1.4525	* 1.6401	* 2.0145
11	* 1.2456	* 1.2038	* 1.3720	* 1.2820	* 1.3548	* 1.1460	* 1.2295	* .6908
	* 1.5487	* 1.6035	* 1.4156	* 1.5129	* 1.4356	* 1.6880	* 1.5702	* 2.7699
12	* 1.2531	* 1.3634	* 1.2723	* 1.3559	* 1.2466	* 1.2659	* .8932	*
	* 1.5406	* 1.4224	* 1.5223	* 1.4342	* 1.5561	* 1.5318	* 2.1576	*
13	* 1.3355	* 1.1610	* 1.3334	* 1.1460	* 1.2681	* .9264	* .5558	*
	* 1.4483	* 1.6623	* 1.4518	* 1.6880	* 1.5294	* 2.0858	* 3.4511	*
14	* 1.0860	* 1.2616	* 1.1738	* 1.2295	* .8932	* .5558	*	*
	* 1.7712	* 1.5294	* 1.6401	* 1.5702	* 2.1591	* 3.4511	*	*
15	* .6094	* .7551	* .9500	* .6908	* F-SUB-Q			
	* 3.1320	* 2.5363	* 2.0145	* 2.7725	* M-SUB-Q			

AT 75% POWER, 200 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7047	* .9393	* .7872	* .8343	* .5698	* .9093	* .4862	* .4209
	* 2.6672	* 2.0035	* 2.3883	* 2.2515	* 3.2747	* 2.0639	* 3.8276	* 4.4120
9	* .9393	* .5901	* .9618	* .8032	* .9371	* .7733	* .8204	* .4873
	* 2.0035	* 3.1725	* 1.9583	* 2.3446	* 2.0090	* 2.4277	* 2.2829	* 3.8176
10	* .7872	* .9693	* .8129	* .9575	* .5794	* .9050	* .4980	* .5933
	* 2.3883	* 1.9454	* 2.3170	* 1.9688	* 3.2281	* 2.0755	* 3.7354	* 3.1353
11	* .8343	* .8075	* .9650	* .5816	* .9125	* .7518	* .7904	* .4391
	* 2.2515	* 2.3298	* 1.9557	* 3.2175	* 2.0624	* 2.4998	* 2.3711	* 4.2467
12	* .5698	* .9382	* .5805	* .9136	* .5430	* .8107	* .3834	*
	* 3.2747	* 2.0063	* 3.2245	* 2.0596	* 3.4470	* 2.3206	* 4.8795	*
13	* .9093	* .7733	* .9061	* .7518	* .8118	* .3973	* .3791	*
	* 2.0639	* 2.4257	* 2.0755	* 2.4998	* 2.3170	* 4.7080	* 4.9202	*
14	* .4862	* .8204	* .4980	* .7893	* .3834	* .3781	*	*
	* 3.8276	* 2.2829	* 3.7354	* 2.3730	* 4.8795	* 4.9202	*	*
15	* .4209	* .4873	* .5923	* .4380	* F-SUB-Q			
	* 4.4120	* 3.8176	* 3.1353	* 4.2467	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 18 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6169 *	* .9168 *	* .8568 *	* .9018 *	* .6565 *	* .9810 *	* .5730 *	* .5259 *
	* 2.3636 *	* 1.9637 *	* 2.1012 *	* 1.9942 *	* 2.7349 *	* 1.8307 *	* 3.1166 *	* 3.3734 *
9	* .9168 *	* .6394 *	* .9971 *	* .8771 *	* .9896 *	* .8568 *	* .8771 *	* .5676 *
	* 1.9637 *	* 2.8088 *	* 1.8050 *	* 2.0533 *	* 1.8172 *	* 2.0947 *	* 2.0409 *	* 3.1275 *
10	* .8568 *	* 1.0003 *	* .8729 *	* .9875 *	* .6372 *	* .9307 *	* .5462 *	* .6662 *
	* 2.1012 *	* 1.7978 *	* 2.0611 *	* 1.8221 *	* 2.8147 *	* 1.9246 *	* 3.2556 *	* 2.6622 *
11	* .9018 *	* .8782 *	* .9907 *	* .6169 *	* .8943 *	* .7358 *	* .7925 *	* .4948 *
	* 1.9942 *	* 2.0486 *	* 1.8147 *	* 2.9024 *	* 2.0060 *	* 2.4038 *	* 2.2396 *	* 3.5662 *
12	* .6565 *	* .9907 *	* .6372 *	* .8954 *	* .4188 *	* .6469 *	* .3759 *	
	* 2.7349 *	* 1.8159 *	* 2.8118 *	* 2.0045 *	* 3.1534 *	* 2.2036 *	* 4.4581 *	
13	* .9810 *	* .8579 *	* .9307 *	* .7358 *	* .6469 *	* .3224 *	* .3652 *	
	* 1.8307 *	* 2.0947 *	* 1.9246 *	* 2.4038 *	* 2.2013 *	* 4.1513 *	* 4.1983 *	
14	* .5730 *	* .8771 *	* .5462 *	* .7925 *	* .3759 *	* .3652 *		
	* 3.1166 *	* 2.0409 *	* 3.2556 *	* 2.2396 *	* 4.4581 *	* 4.2001 *		
15	* .5259 *	* .5676 *	* .6651 *	* .4948 *	F-SUB-Q			
	* 3.3734 *	* 3.1311 *	* 2.6622 *	* 3.5668 *	M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 17 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8065 *	* 1.2424 *	* 1.1910 *	* 1.2338 *	* 1.2863 *	* 1.3152 *	* 1.1481 *	* .7036 *
	* 1.8902 *	* 1.5091 *	* 1.5713 *	* 1.5166 *	* 1.4563 *	* 1.4245 *	* 1.6243 *	* 2.6319 *
9	* 1.2424 *	* 1.2316 *	* 1.3066 *	* 1.2167 *	* 1.3109 *	* 1.1945 *	* 1.2274 *	* .8032 *
	* 1.5091 *	* 1.5216 *	* 1.4327 *	* 1.5378 *	* 1.4282 *	* 1.5785 *	* 1.5191 *	* 2.3029 *
10	* 1.1910 *	* 1.3077 *	* 1.1470 *	* 1.3002 *	* 1.2499 *	* 1.2723 *	* 1.1299 *	* .9521 *
	* 1.5713 *	* 1.4312 *	* 1.6291 *	* 1.4394 *	* 1.4959 *	* 1.4690 *	* 1.6430 *	* 1.9403 *
11	* 1.2338 *	* 1.2177 *	* 1.3077 *	* 1.2124 *	* 1.2006 *	* 1.0292 *	* 1.1171 *	* .6983 *
	* 1.5166 *	* 1.5370 *	* 1.4319 *	* 1.5430 *	* 1.5579 *	* 1.7664 *	* 1.6528 *	* 2.6255 *
12	* 1.2863 *	* 1.3120 *	* 1.2499 *	* 1.2017 *	* .8654 *	* .9382 *	* .7936 *	
	* 1.4563 *	* 1.4275 *	* 1.4967 *	* 1.5570 *	* 1.5990 *	* 1.6245 *	* 2.1792 *	
13	* 1.3152 *	* 1.1845 *	* 1.2723 *	* 1.0292 *	* .9382 *	* .6919 *	* .4884 *	
	* 1.4245 *	* 1.5776 *	* 1.4684 *	* 1.7664 *	* 1.6233 *	* 2.0536 *	* 3.2466 *	
14	* 1.1481 *	* 1.2274 *	* 1.1299 *	* 1.1171 *	* .7936 *	* .4884 *		
	* 1.6243 *	* 1.5191 *	* 1.6432 *	* 1.6537 *	* 2.1796 *	* 3.2438 *		
15	* .7036 *	* .8032 *	* .9521 *	* .6983 *	F-SUB-Q			
	* 2.6319 *	* 2.3029 *	* 1.9415 *	* 2.6255 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8932 *	* 1.4030 *	* 1.3109 *	* 1.3655 *	* 1.4266 *	* 1.4951 *	* 1.2723 *	* .7786 *
	* 1.7989 *	* 1.3968 *	* 1.4902 *	* 1.4276 *	* 1.3647 *	* 1.3021 *	* 1.5271 *	* 2.4809 *
9	* 1.4030 *	* 1.3527 *	* 1.4651 *	* 1.3484 *	* 1.4908 *	* 1.3227 *	* 1.4030 *	* .9050 *
	* 1.3968 *	* 1.4475 *	* 1.3333 *	* 1.4449 *	* 1.3057 *	* 1.4690 *	* 1.3812 *	* 2.1274 *
10	* 1.3109 *	* 1.4716 *	* 1.2627 *	* 1.4726 *	* 1.3912 *	* 1.4491 *	* 1.2777 *	* 1.1010 *
	* 1.4902 *	* 1.3289 *	* 1.5471 *	* 1.3237 *	* 1.3992 *	* 1.3399 *	* 1.5116 *	* 1.7427 *
11	* 1.3655 *	* 1.3495 *	* 1.4748 *	* 1.3484 *	* 1.3752 *	* 1.1545 *	* 1.2841 *	* .7904 *
	* 1.4276 *	* 1.4434 *	* 1.3224 *	* 1.4483 *	* 1.4104 *	* 1.6361 *	* 1.4957 *	* 2.4136 *
12	* 1.4266 *	* 1.4919 *	* 1.3902 *	* 1.3762 *	* .9660 *	* 1.0774 *	* .8771 *	
	* 1.3647 *	* 1.3051 *	* 1.3999 *	* 1.4097 *	* 1.4916 *	* 1.4768 *	* 2.0525 *	
13	* 1.4951 *	* 1.3238 *	* 1.4491 *	* 1.1535 *	* 1.0774 *	* .7775 *	* .5526 *	
	* 1.3021 *	* 1.4682 *	* 1.3399 *	* 1.6368 *	* 1.4760 *	* 1.9269 *	* 3.0005 *	
14	* 1.2723 *	* 1.4030 *	* 1.2777 *	* 1.2841 *	* .8771 *	* .5526 *		
	* 1.5271 *	* 1.3811 *	* 1.5116 *	* 1.4961 *	* 2.0540 *	* 3.0005 *		
15	* .7786 *	* .9039 *	* 1.1010 *	* .7904 *	F-SUB-Q			
	* 2.4809 *	* 2.1276 *	* 1.7428 *	* 2.4156 *	M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9264 *	* 1.4726 *	* 1.3516 *	* 1.4116 *	* 1.4737 *	* 1.5690 *	* 1.3098 *	* .7968 *
	* 1.8306 *	* 1.4048 *	* 1.5247 *	* 1.4538 *	* 1.3845 *	* 1.3007 *	* 1.5565 *	* 2.5415 *
9	* 1.4726 *	* 1.3966 *	* 1.5358 *	* 1.3934 *	* 1.5658 *	* 1.3730 *	* 1.4748 *	* .9350 *
	* 1.4048 *	* 1.4793 *	* 1.3408 *	* 1.4681 *	* 1.3034 *	* 1.4825 *	* 1.3765 *	* 2.1542 *
10	* 1.3516 *	* 1.5455 *	* 1.3109 *	* 1.5487 *	* 1.4426 *	* 1.5251 *	* 1.3388 *	* 1.1556 *
	* 1.5247 *	* 1.3325 *	* 1.5710 *	* 1.3223 *	* 1.4156 *	* 1.3337 *	* 1.5089 *	* 1.7355 *
11	* 1.4116 *	* 1.3944 *	* 1.5497 *	* 1.3998 *	* 1.4501 *	* 1.2038 *	* 1.3537 *	* .8247 *
	* 1.4538 *	* 1.4673 *	* 1.3216 *	* 1.4678 *	* 1.4049 *	* 1.6545 *	* 1.4889 *	* 2.4260 *
12	* 1.4737 *	* 1.5647 *	* 1.4416 *	* 1.4512 *	* 1.0014 *	* 1.1363 *	* .9039 *	
	* 1.3845 *	* 1.3031 *	* 1.4170 *	* 1.4042 *	* 1.5167 *	* 1.4815 *	* 2.1084 *	
13	* 1.5690 *	* 1.3741 *	* 1.5251 *	* 1.2027 *	* 1.1363 *	* .8054 *	* .5741 *	
	* 1.3007 *	* 1.4817 *	* 1.3337 *	* 1.6554 *	* 1.4797 *	* 1.9811 *	* 3.0745 *	
14	* 1.3098 *	* 1.4748 *	* 1.3388 *	* 1.3537 *	* .9039 *	* .5741 *		
	* 1.5565 *	* 1.3758 *	* 1.5089 *	* 1.4893 *	* 2.1089 *	* 3.0721 *		
15	* .7968 *	* .9350 *	* 1.1556 *	* .8236 *	F-SUB-Q			
	* 2.5415 *	* 2.1558 *	* 1.7360 *	* 2.4260 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9253	* 1.4705	* 1.3345	* 1.3944	* 1.4512	* 1.5551	* 1.2852	* .7786
	* 1.9457	* 1.5016	* 1.6463	* 1.5669	* 1.4910	* 1.3903	* 1.6729	* 2.7442
9	* 1.4705	* 1.3848	* 1.5305	* 1.3752	* 1.5572	* 1.3559	* 1.4619	* .9178
	* 1.5016	* 1.5968	* 1.4327	* 1.5836	* 1.3921	* 1.5928	* 1.4698	* 2.3233
10	* 1.3345	* 1.5390	* 1.3002	* 1.5412	* 1.4298	* 1.5187	* 1.3280	* 1.1428
	* 1.6463	* 1.4236	* 1.6886	* 1.4152	* 1.5265	* 1.4285	* 1.6210	* 1.8681
11	* 1.3944	* 1.3762	* 1.5422	* 1.3923	* 1.4523	* 1.2006	* 1.3516	* .8140
	* 1.5669	* 1.5823	* 1.4138	* 1.5807	* 1.4900	* 1.7692	* 1.6054	* 2.6347
12	* 1.4512	* 1.5572	* 1.4287	* 1.4533	* 1.0035	* 1.1438	* .8986	*
	* 1.4910	* 1.3924	* 1.5273	* 1.4896	* 1.6336	* 1.5886	* 2.2791	*
13	* 1.5551	* 1.3570	* 1.5187	* 1.2006	* 1.1438	* .8075	* .5719	*
	* 1.3903	* 1.5919	* 1.4285	* 1.7703	* 1.5868	* 2.1577	* 3.3554	*
14	* 1.2852	* 1.4630	* 1.3280	* 1.3505	* .8986	* .5719	*	*
	* 1.6729	* 1.4695	* 1.6219	* 1.6058	* 2.2809	* 3.3554	*	*
15	* .7786	* .9178	* 1.1428	* .8129	* F-SUB-Q			
	* 2.7442	* 2.3233	* 1.8681	* 2.6358	* M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9907	* 1.5315	* 1.3623	* 1.4234	* 1.4705	* 1.5894	* 1.2981	* .7840
	* 1.9979	* 1.5466	* 1.7661	* 1.6764	* 1.5971	* 1.4719	* 1.7899	* 2.9408
9	* 1.5315	* 1.4234	* 1.5765	* 1.3998	* 1.6011	* 1.3762	* 1.4962	* .9307
	* 1.5466	* 1.6842	* 1.5210	* 1.6967	* 1.4738	* 1.7022	* 1.5582	* 2.4854
10	* 1.3623	* 1.5862	* 1.3323	* 1.5872	* 1.4619	* 1.5615	* 1.3612	* 1.1695
	* 1.7661	* 1.5109	* 1.8037	* 1.5035	* 1.6363	* 1.5184	* 1.7259	* 1.9849
11	* 1.4234	* 1.4019	* 1.5915	* 1.4362	* 1.5165	* 1.2477	* 1.4009	* .8365
	* 1.6764	* 1.6958	* 1.5024	* 1.6558	* 1.5406	* 1.8474	* 1.7022	* 2.8089
12	* 1.4705	* 1.6001	* 1.4608	* 1.5165	* 1.0785	* 1.2220	* .9361	*
	* 1.5971	* 1.4745	* 1.6382	* 1.5398	* 1.7232	* 1.6629	* 2.4008	*
13	* 1.5894	* 1.3773	* 1.5615	* 1.2477	* 1.2209	* .8697	* .6073	*
	* 1.4719	* 1.7018	* 1.5184	* 1.8475	* 1.6609	* 2.2959	* 3.5446	*
14	* 1.2981	* 1.4973	* 1.3612	* 1.3998	* .9361	* .6073	*	*
	* 1.7899	* 1.5578	* 1.7259	* 1.7031	* 2.4028	* 3.5403	*	*
15	* .7840	* .9307	* 1.1695	* .8354	* F-SUB-Q			
	* 2.9408	* 2.4865	* 1.9849	* 2.8103	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUE-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0988	* 1.5690	* 1.3773	* 1.4234	* 1.4608	* 1.5862	* 1.2863	* .7743
	* 2.1412	* 1.6536	* 1.9053	* 1.8498	* 1.7607	* 1.6129	* 1.9715	* 3.2471
9	* 1.5690	* 1.4426	* 1.5904	* 1.3998	* 1.6065	* 1.3687	* 1.4983	* .9253
	* 1.6536	* 1.8121	* 1.6591	* 1.8733	* 1.6168	* 1.8752	* 1.7090	* 2.7375
10	* 1.3773	* 1.5979	* 1.3388	* 1.6065	* 1.4683	* 1.5701	* 1.3655	* 1.1695
	* 1.9053	* 1.6525	* 1.9749	* 1.6330	* 1.7928	* 1.6675	* 1.8953	* 2.1789
11	* 1.4234	* 1.4019	* 1.6119	* 1.4587	* 1.5594	* 1.2841	* 1.4223	* .8386
	* 1.8498	* 1.8721	* 1.6285	* 1.7785	* 1.6485	* 1.9815	* 1.8234	* 3.0944
12	* 1.4608	* 1.6054	* 1.4673	* 1.5594	* 1.2402	* 1.3484	* .9703	
	* 1.7607	* 1.6177	* 1.7945	* 1.6485	* 1.8442	* 1.7737	* 2.5791	
13	* 1.5862	* 1.3698	* 1.5701	* 1.2831	* 1.3505	* .9564	* .6405	
	* 1.6129	* 1.8740	* 1.6679	* 1.9828	* 1.7715	* 2.4598	* 3.7995	
14	* 1.2863	* 1.4983	* 1.3655	* 1.4212	* .9693	* .6405		
	* 1.9715	* 1.7080	* 1.8958	* 1.8234	* 2.5791	* 3.7995		
15	* .7743	* .9253	* 1.1695	* .8386	F-SUB-Q			
	* 3.2471	* 2.7389	* 2.1789	* 3.0976	M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1888	* 1.5883	* 1.3859	* 1.4169	* 1.4448	* 1.5733	* 1.2691	* .7615
	* 2.3350	* 1.7900	* 2.0633	* 2.0261	* 1.9571	* 1.7856	* 2.1879	* 3.6118
9	* 1.5883	* 1.4533	* 1.5947	* 1.3923	* 1.5979	* 1.3548	* 1.4919	* .9168
	* 1.7900	* 1.9640	* 1.7919	* 2.0550	* 1.7844	* 2.0820	* 1.8909	* 3.0348
10	* 1.3859	* 1.6001	* 1.3377	* 1.6129	* 1.4662	* 1.5679	* 1.3612	* 1.1631
	* 2.0633	* 1.7859	* 2.1387	* 1.7626	* 1.9414	* 1.8141	* 2.0786	* 2.4105
11	* 1.4169	* 1.3944	* 1.6172	* 1.4694	* 1.5829	* 1.3066	* 1.4319	* .8354
	* 2.0261	* 2.0513	* 1.7584	* 1.9312	* 1.7851	* 2.1504	* 1.9645	* 3.3686
12	* 1.4448	* 1.5979	* 1.4651	* 1.5829	* 1.3794	* 1.4351	* .9928	
	* 1.9571	* 1.7855	* 1.9439	* 1.7844	* 2.0034	* 1.9220	* 2.8010	
13	* 1.5733	* 1.3559	* 1.5669	* 1.3055	* 1.4373	* 1.0217	* .6629	
	* 1.7856	* 2.0813	* 1.8141	* 2.1504	* 1.9194	* 2.6710	* 4.1376	
14	* 1.2691	* 1.4919	* 1.3612	* 1.4319	* .9928	* .6629		
	* 2.1879	* 1.8909	* 2.0786	* 1.9653	* 2.8036	* 4.1376		
15	* .7615	* .9168	* 1.1620	* .8354	F-SUB-Q			
	* 3.6118	* 3.0379	* 2.4116	* 3.3708	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2220	* 1.6343	* 1.4105	* 1.4362	* 1.4566	* 1.5947	* 1.2788	* .7658
	* 2.4619	* 1.8965	* 2.2044	* 2.1671	* 2.1310	* 1.9393	* 2.3908	* 3.9493
9	* 1.6343	* 1.4812	* 1.6290	* 1.4105	* 1.6268	* 1.3687	* 1.5176	* .9264
	* 1.8965	* 2.0977	* 1.9051	* 2.2011	* 1.9039	* 2.2636	* 2.0317	* 3.3088
10	* 1.4105	* 1.6354	* 1.3591	* 1.6504	* 1.4876	* 1.5958	* 1.3848	* 1.1835
	* 2.2044	* 1.8990	* 2.2847	* 1.8748	* 2.0814	* 1.9364	* 2.2217	* 2.5900
11	* 1.4362	* 1.4116	* 1.6536	* 1.4973	* 1.6247	* 1.3388	* 1.4673	* .8525
	* 2.1671	* 2.1978	* 1.8701	* 2.0639	* 1.8978	* 2.2953	* 2.0900	* 3.5927
12	* 1.4566	* 1.6268	* 1.4855	* 1.6258	* 1.4287	* 1.4940	* 1.0207	*
	* 2.1310	* 1.9051	* 2.0843	* 1.8978	* 2.1434	* 2.0458	* 2.9916	*
13	* 1.5947	* 1.3687	* 1.5958	* 1.3377	* 1.4962	* 1.0635	* .6887	*
	* 1.9393	* 2.2616	* 1.9364	* 2.2953	* 2.0430	* 2.8621	* 4.4070	*
14	* 1.2788	* 1.5176	* 1.3848	* 1.4673	* 1.0196	* .6887	*	*
	* 2.3908	* 2.0303	* 2.2217	* 2.0906	* 2.9928	* 4.4031	*	*
15	* .7658	* .9264	* 1.1824	* .8514	* F-SUB-Q			
	* 3.9493	* 3.3109	* 2.5909	* 3.5927	* M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2049	* 1.6129	* 1.3891	* 1.4105	* 1.4287	* 1.5658	* 1.2531	* .7476
	* 2.5307	* 1.9390	* 2.2498	* 2.2126	* 2.1896	* 1.9981	* 2.4955	* 4.1627
9	* 1.6129	* 1.4598	* 1.6044	* 1.3859	* 1.5990	* 1.3430	* 1.4930	* .9093
	* 1.9390	* 2.1403	* 1.9492	* 2.2550	* 1.9570	* 2.3298	* 2.0992	* 3.4430
10	* 1.3891	* 1.6097	* 1.3377	* 1.6258	* 1.4641	* 1.5712	* 1.3634	* 1.1620
	* 2.2498	* 1.9428	* 2.3372	* 1.9263	* 2.1388	* 1.9927	* 2.2971	* 2.6964
11	* 1.4105	* 1.3880	* 1.6301	* 1.4758	* 1.6044	* 1.3238	* 1.4480	* .8354
	* 2.2126	* 2.2515	* 1.9213	* 2.1203	* 1.9518	* 2.3653	* 2.1639	* 3.7544
12	* 1.4287	* 1.6001	* 1.4619	* 1.6054	* 1.4180	* 1.4833	* 1.0110	*
	* 2.1896	* 1.9557	* 2.1403	* 1.9518	* 2.2110	* 2.1142	* 3.1023	*
13	* 1.5658	* 1.3441	* 1.5712	* 1.3227	* 1.4855	* 1.0560	* .6801	*
	* 1.9981	* 2.3280	* 1.9941	* 2.3672	* 2.1112	* 2.9710	* 4.6195	*
14	* 1.2531	* 1.4930	* 1.3634	* 1.4480	* 1.0100	* .6801	*	*
	* 2.4955	* 2.0977	* 2.2971	* 2.1639	* 3.1056	* 4.6122	*	*
15	* .7476	* .9093	* 1.1620	* .8354	* F-SUB-Q			
	* 4.1627	* 3.4470	* 2.6964	* 3.7544	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2199	* 1.6451	* 1.4052	* 1.4287	* 1.4426	* 1.5904	* 1.2649	* .7540
	* 2.4559	* 1.8844	* 2.1961	* 2.1403	* 2.0873	* 1.8941	* 2.3428	* 3.8677
9	* 1.6451	* 1.4758	* 1.6343	* 1.4009	* 1.6268	* 1.3580	* 1.5187	* .9200
	* 1.8844	* 2.0947	* 1.8917	* 2.1847	* 1.8832	* 2.2143	* 1.9927	* 3.2175
10	* 1.4052	* 1.6408	* 1.3559	* 1.6568	* 1.4801	* 1.5979	* 1.3859	* 1.1835
	* 2.1961	* 1.8844	* 2.2688	* 1.8689	* 2.0755	* 1.9150	* 2.1896	* 2.5211
11	* 1.4287	* 1.4030	* 1.6611	* 1.4940	* 1.6343	* 1.3420	* 1.4758	* .8504
	* 2.1403	* 2.1815	* 1.8641	* 2.0740	* 1.9014	* 2.3025	* 2.0740	* 3.5338
12	* 1.4426	* 1.6268	* 1.4780	* 1.6354	* 1.4394	* 1.5133	* 1.0239	*
	* 2.0873	* 1.8844	* 2.0784	* 1.9014	* 2.1719	* 2.0668	* 3.0104	*
13	* 1.5904	* 1.3580	* 1.5969	* 1.3409	* 1.5155	* 1.0721	* .6929	*
	* 1.8941	* 2.2126	* 1.9150	* 2.3043	* 2.0624	* 2.9209	* 4.4386	*
14	* 1.2649	* 1.5197	* 1.3859	* 1.4758	* 1.0239	* .6929	*	*
	* 2.3428	* 1.9927	* 2.1896	* 2.0740	* 3.0135	* 4.4386	*	*
15	* .7540	* .9200	* 1.1824	* .8493	F-SUB-Q			
	* 3.8677	* 3.2210	* 2.5233	* 3.5338	M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2113	* 1.6418	* 1.3966	* 1.4201	* 1.4330	* 1.5851	* 1.2574	* .7465
	* 2.2951	* 1.7326	* 2.0063	* 1.9364	* 1.8990	* 1.7185	* 2.1372	* 3.5381
9	* 1.6418	* 1.4683	* 1.6311	* 1.3923	* 1.6236	* 1.3495	* 1.5155	* .9157
	* 1.7326	* 1.9213	* 1.7175	* 1.9807	* 1.7006	* 2.0131	* 1.8004	* 2.9267
10	* 1.3966	* 1.6365	* 1.3484	* 1.6547	* 1.4726	* 1.5936	* .3816	* 1.1792
	* 2.0063	* 1.7105	* 2.0610	* 1.6987	* 1.8880	* 1.7337	* 1.9780	* 2.2811
11	* 1.4201	* 1.3944	* 1.6590	* 1.4876	* 1.6311	* 1.3366	* 1.4737	* .8461
	* 1.9364	* 1.9780	* 1.6948	* 1.8990	* 1.7439	* 2.1203	* 1.8892	* 3.2070
12	* 1.4330	* 1.6226	* 1.4705	* 1.6322	* 1.4341	* 1.5123	* 1.0207	*
	* 1.8990	* 1.7016	* 1.8905	* 1.7429	* 2.0242	* 1.9064	* 2.7752	*
13	* 1.5851	* 1.3505	* 1.5936	* 1.3355	* 1.5144	* 1.0678	* .6897	*
	* 1.7185	* 2.0118	* 1.7337	* 2.1218	* 1.9039	* 2.6915	* 4.0934	*
14	* 1.2574	* 1.5155	* 1.3816	* 1.4737	* 1.0196	* .6897	*	*
	* 2.1372	* 1.8004	* 1.9793	* 1.8892	* 2.7752	* 4.0934	*	*
15	* .7465	* .9146	* 1.1792	* .8461	F-SUB-Q			
	* 3.5381	* 2.9267	* 2.2829	* 3.2070	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1856 *	* 1.6119 *	* 1.3709 *	* 1.3944 *	* 1.4094 *	* 1.5583 *	* 1.2359 *	.7315 *
	* 2.0822 *	* 1.5794 *	* 1.8328 *	* 1.7851 *	* 1.7564 *	* 1.5914 *	* 1.9820 *	* 3.3004 *
9	* 1.6119 *	* 1.4426 *	* 1.6011 *	* 1.3677 *	* 1.5936 *	* 1.3270 *	* 1.4898 *	.8996 *
	* 1.5794 *	* 1.7491 *	* 1.5769 *	* 1.8238 *	* 1.5702 *	* 1.8630 *	* 1.6613 *	* 2.7113 *
10	* 1.3709 *	* 1.6065 *	* 1.3227 *	* 1.6247 *	* 1.4480 *	* 1.5669 *	* 1.3591 *	* 1.1588 *
	* 1.8328 *	* 1.5710 *	* 1.8953 *	* 1.5569 *	* 1.7326 *	* 1.5948 *	* 1.8226 *	* 2.1112 *
11	* 1.3944 *	* 1.3698 *	* 1.6290 *	* 1.4630 *	* 1.6044 *	* 1.3152 *	* 1.4491 *	.8279 *
	* 1.7851 *	* 1.8215 *	* 1.5536 *	* 1.7306 *	* 1.5828 *	* 1.9188 *	* 1.7255 *	* 2.9620 *
12	* 1.4094 *	* 1.5947 *	* 1.4459 *	* 1.6044 *	* 1.4126 *	* 1.4876 *	* 1.0046 *	
	* 1.7564 *	* 1.5702 *	* 1.7347 *	* 1.5828 *	* 1.8215 *	* 1.7235 *	* 2.5083 *	
13	* 1.5583 *	* 1.3280 *	* 1.5658 *	* 1.3141 *	* 1.4898 *	* 1.0517 *	.6747 *	
	* 1.5914 *	* 1.8606 *	* 1.5957 *	* 1.9200 *	* 1.7205 *	* 2.4377 *	* 3.7307 *	
14	* 1.2359 *	* 1.4898 *	* 1.3591 *	* 1.4491 *	* 1.0046 *	.6747 *		
	* 1.9820 *	* 1.6613 *	* 1.8226 *	* 1.7265 *	* 2.5083 *	* 3.7307 *		
15	.7315 *	.8986 *	* 1.1578 *	.8279 *	F-SUB-Q			
	* 3.3004 *	* 2.7113 *	* 2.1112 *	* 2.9650 *	M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1952 *	* 1.6343 *	* 1.3837 *	* 1.4094 *	* 1.4234 *	* 1.5819 *	* 1.2509 *	.7390 *
	* 1.8605 *	* 1.4183 *	* 1.6595 *	* 1.6185 *	* 1.6000 *	* 1.4440 *	* 1.8059 *	* 3.0166 *
9	* 1.6343 *	* 1.4566 *	* 1.6236 *	* 1.3805 *	* 1.6183 *	* 1.3409 *	* 1.5133 *	.9104 *
	* 1.4183 *	* 1.5820 *	* 1.4224 *	* 1.6567 *	* 1.4197 *	* 1.6958 *	* 1.5037 *	* 2.4684 *
10	* 1.3837 *	* 1.6301 *	* 1.3366 *	* 1.6493 *	* 1.4630 *	* 1.5894 *	* 1.3784 *	* 1.1770 *
	* 1.6595 *	* 1.4169 *	* 1.7175 *	* 1.4028 *	* 1.5693 *	* 1.4419 *	* 1.6493 *	* 1.9113 *
11	* 1.4094 *	* 1.3827 *	* 1.6536 *	* 1.4791 *	* 1.6279 *	* 1.3302 *	* 1.4726 *	.8397 *
	* 1.6185 *	* 1.6548 *	* 1.3994 *	* 1.5627 *	* 1.4217 *	* 1.7265 *	* 1.5520 *	* 2.6793 *
12	* 1.4234 *	* 1.6172 *	* 1.4608 *	* 1.6279 *	* 1.4309 *	* 1.5112 *	* 1.0174 *	
	* 1.6000 *	* 1.4203 *	* 1.5719 *	* 1.4210 *	* 1.6194 *	* 1.5302 *	* 2.2481 *	
13	* 1.5819 *	* 1.3420 *	* 1.5894 *	* 1.3291 *	* 1.5144 *	* 1.0646 *	.6854 *	
	* 1.4440 *	* 1.6938 *	* 1.4419 *	* 1.7276 *	* 1.5278 *	* 2.1639 *	* 3.3189 *	
14	* 1.2509 *	* 1.5133 *	* 1.3784 *	* 1.4716 *	* 1.0164 *	.6854 *		
	* 1.8059 *	* 1.5037 *	* 1.6493 *	* 1.5528 *	* 2.2498 *	* 3.3189 *		
15	.7390 *	.9093 *	* 1.1760 *	.8397 *	F-SUB-Q			
	* 3.0166 *	* 2.4684 *	* 1.9125 *	* 2.6793 *	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1642	* 1.5904	* 1.3527	* 1.3773	* 1.3966	* 1.5433	* 1.2274	* .7229 *
	* 1.7964	* 1.3538	* 1.5794	* 1.5430	* 1.5231	* 1.3804	* 1.7205	* 2.8923 *
9	* 1.5904	* 1.4266	* 1.5808	* 1.3505	* 1.5776	* 1.3130	* 1.4769	* .8911 *
	* 1.3538	* 1.5014	* 1.3594	* 1.5786	* 1.3582	* 1.6167	* 1.4370	* 2.3578 *
10	* 1.3527	* 1.5872	* 1.3045	* 1.6065	* 1.4351	* 1.5519	* 1.3484	* 1.1481 *
	* 1.5794	* 1.3544	* 1.6383	* 1.3396	* 1.4908	* 1.3766	* 1.5727	* 1.8317 *
11	* 1.3773	* 1.3527	* 1.6108	* 1.4501	* 1.5894	* 1.3034	* 1.4384	* .8161 *
	* 1.5430	* 1.5761	* 1.3360	* 1.4803	* 1.3526	* 1.6364	* 1.4795	* 2.5717 *
12	* 1.3966	* 1.5776	* 1.4330	* 1.5894	* 1.4062	* 1.4780	* 1.0014	*
	* 1.5231	* 1.3575	* 1.4930	* 1.3526	* 1.5255	* 1.4490	* 2.1188	*
13	* 1.5433	* 1.3141	* 1.5519	* 1.3034	* 1.4801	* 1.0485	* .6683	*
	* 1.3804	* 1.6149	* 1.3766	* 1.6373	* 1.4468	* 2.0340	* 3.1555	*
14	* 1.2274	* 1.4780	* 1.3484	* 1.4373	* 1.0014	* .6694	*	
	* 1.7205	* 1.4370	* 1.5727	* 1.4795	* 2.1203	* 3.1555	*	
15	* .7229	* .8900	* 1.1470	* .8161	* F-SUB-Q			
	* 2.8923	* 2.3578	* 1.8317	* 2.5740	* M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1428	* 1.5572	* 1.3334	* 1.3591	* 1.3784	* 1.5155	* 1.2145	* .7122 *
	* 1.7555	* 1.3076	* 1.5176	* 1.4833	* 1.4619	* 1.3330	* 1.6520	* 2.7909 *
9	* 1.5572	* 1.4105	* 1.5497	* 1.3302	* 1.5455	* 1.2938	* 1.4491	* .8761 *
	* 1.3076	* 1.4377	* 1.3122	* 1.5192	* 1.3116	* 1.5569	* 1.3902	* 2.2776 *
10	* 1.3334	* 1.5562	* 1.2841	* 1.5722	* 1.4159	* 1.5219	* 1.3259	* 1.1235 *
	* 1.5176	* 1.3070	* 1.5761	* 1.2949	* 1.4321	* 1.3294	* 1.5161	* 1.7765 *
11	* 1.3591	* 1.3323	* 1.5776	* 1.4287	* 1.5572	* 1.2631	* 1.4105	* .8011 *
	* 1.4833	* 1.5161	* 1.2909	* 1.4203	* 1.3052	* 1.5735	* 1.4286	* 2.4892 *
12	* 1.3784	* 1.5476	* 1.4137	* 1.5583	* 1.3891	* 1.4512	* .9928	*
	* 1.4619	* 1.3105	* 1.4342	* 1.3047	* 1.4590	* 1.3955	* 2.0242	*
13	* 1.5155	* 1.2948	* 1.5219	* 1.2820	* 1.4533	* 1.0389	* .6597	*
	* 1.3330	* 1.5553	* 1.3300	* 1.5744	* 1.3935	* 1.9415	* 3.0321	*
14	* 1.2145	* 1.4491	* 1.3259	* 1.4094	* .9928	* .6597	*	
	* 1.6520	* 1.3895	* 1.5161	* 1.4293	* 2.0256	* 3.0290	*	
15	* .7122	* .8750	* 1.1235	* .8000	* F-SUB-Q			
	* 2.7909	* 2.2794	* 1.7776	* 2.4913	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 300 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0453	* 1.3998	* 1.2113	* 1.2381	* 1.2574	* 1.3548	* 1.1085	* .6437
	* 1.8630	* 1.3974	* 1.6070	* 1.5668	* 1.5430	* 1.4363	* 1.7429	* 2.9800
9	* 1.3998	* 1.2916	* 1.4019	* 1.2081	* 1.3880	* 1.1727	* 1.2820	* .7818
	* 1.3974	* 1.5083	* 1.3935	* 1.6096	* 1.4054	* 1.6548	* 1.5122	* 2.4622
10	* 1.2113	* 1.4073	* 1.1792	* 1.4116	* 1.2841	* 1.3548	* 1.1899	* .9789
	* 1.6070	* 1.3889	* 1.6511	* 1.3863	* 1.5161	* 1.4363	* 1.6256	* 1.9648
11	* 1.2381	* 1.2113	* 1.4159	* 1.2959	* 1.3784	* 1.1599	* 1.2456	* .7133
	* 1.5668	* 1.6061	* 1.3824	* 1.5052	* 1.4183	* 1.6755	* 1.5561	* 2.6989
12	* 1.2574	* 1.3880	* 1.2831	* 1.3784	* 1.2563	* 1.2820	* .9082	*
	* 1.5430	* 1.4054	* 1.5176	* 1.4169	* 1.5504	* 1.5184	* 2.1310	*
13	* 1.3548	* 1.1738	* 1.3548	* 1.1588	* 1.2841	* .9425	* .5880	*
	* 1.4363	* 1.6530	* 1.4363	* 1.6765	* 1.5168	* 2.0581	* 3.2820	*
14	* 1.1085	* 1.2820	* 1.1899	* 1.2456	* .9082	* .5880	*	*
	* 1.7429	* 1.5114	* 1.6256	* 1.5569	* 2.1310	* 3.2783	*	*
15	* .6437	* .7808	* .9789	* .7122	* F-SUB-Q			
	* 2.9800	* 2.4642	* 1.9648	* 2.6989	* M-SUB-Q			

AT 75% POWER, 300 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7486	* .9842	* .8215	* .8589	* .6115	* .9478	* .5291	* .4573
	* 2.5298	* 1.9263	* 2.3043	* 2.1994	* 3.0700	* 1.9914	* 3.5381	* 4.0820
9	* .9842	* .6362	* .9960	* .8322	* .9735	* .8065	* .8600	* .5269
	* 1.9263	* 2.9620	* 1.9039	* 2.2741	* 1.9441	* 2.3391	* 2.1880	* 3.5552
10	* .8215	* 1.0025	* .8461	* .9939	* .6233	* .9468	* .5419	* .6405
	* 2.3043	* 1.8929	* 2.2378	* 1.9088	* 3.0197	* 1.9954	* 3.4511	* 2.9180
11	* .8589	* .8365	* .9992	* .6276	* .9532	* .7883	* .8290	* .4734
	* 2.1994	* 2.2619	* 1.8978	* 3.0043	* 1.9847	* 2.3961	* 2.2706	* 3.9507
12	* .6115	* .9746	* .6244	* .9543	* .5880	* .8514	* .4166	*
	* 3.0700	* 1.9428	* 3.0166	* 1.9820	* 3.2035	* 2.2193	* 4.5134	*
13	* .9478	* .8075	* .9468	* .7883	* .8525	* .4338	* .4145	*
	* 1.9914	* 2.3372	* 1.9954	* 2.3961	* 2.2160	* 4.3341	* 4.5134	*
14	* .5291	* .8600	* .5419	* .8290	* .4166	* .4134	*	*
	* 3.5381	* 2.1880	* 3.4511	* 2.2706	* 4.5134	* 4.5203	*	*
15	* .4573	* .5259	* .6405	* .4734	* F-SUB-Q			
	* 4.0820	* 3.5552	* 2.9180	* 3.9507	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6994 *	* 1.0442 *	* .9789 *	* 1.0314 *	* .7861 *	* 1.1428 *	* .7015 *	* .6469 *
	* 2.2661 *	* 1.8345 *	* 1.9676 *	* 1.8680 *	* 2.4524 *	* 1.6878 *	* 2.7388 *	* 2.9596 *
9	* 1.042 *	* .7540 *	* 1.1353 *	* 1.0057 *	* 1.1438 *	* 1.0025 *	* 1.0410 *	* .6951 *
	* 1.8345 *	* 2.5433 *	* 1.6948 *	* 1.9165 *	* 1.6851 *	* 1.9231 *	* 1.8478 *	* 2.7494 *
10	* .9789 *	* 1.1395 *	* 1.0014 *	* 1.1310 *	* .7626 *	* 1.0903 *	* .6769 *	* .8172 *
	* 1.9676 *	* 1.6884 *	* 1.9209 *	* 1.7016 *	* 2.5172 *	* 1.7606 *	* 2.8264 *	* 2.3353 *
11	* 1.0314 *	* 1.0067 *	* 1.1342 *	* .7379 *	* 1.0335 *	* .8664 *	* .9382 *	* .6094 *
	* 1.8680 *	* 1.9160 *	* 1.6961 *	* 2.5961 *	* 1.8503 *	* 2.1940 *	* 2.0265 *	* 3.1118 *
12	* .7861 *	* 1.1449 *	* .7636 *	* 1.0346 *	* .5002 *	* .7679 *	* .4637 *	
	* 2.4524 *	* 1.6843 *	* 2.5149 *	* 1.8491 *	* 2.9385 *	* 2.1121 *	* 4.0437 *	
13	* 1.1428 *	* 1.0025 *	* 1.0903 *	* .8664 *	* .7679 *	* .3984 *	* .4530 *	
	* 1.6878 *	* 1.9228 *	* 1.7606 *	* 2.1945 *	* 2.1104 *	* 3.8238 *	* 3.8676 *	
14	* .7015 *	* 1.0410 *	* .6758 *	* .9382 *	* .4637 *	* .4530 *		
	* 2.7388 *	* 1.8468 *	* 2.8264 *	* 2.0265 *	* 4.0437 *	* 3.8620 *		
15	* .6469 *	* .6951 *	* .8172 *	* .6094 *	F-SUB-Q			
	* 2.9596 *	* 2.7494 *	* 2.3353 *	* 3.1118 *	M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8547 *	* 1.3377 *	* 1.2756 *	* 1.3195 *	* 1.3977 *	* 1.4394 *	* 1.2788 *	* .8172 *
	* 1.9138 *	* 1.4838 *	* 1.5579 *	* 1.5069 *	* 1.4269 *	* 1.3847 *	* 1.5562 *	* 2.4240 *
9	* 1.3377 *	* 1.3238 *	* 1.4105 *	* 1.3109 *	* 1.4384 *	* 1.2991 *	* 1.3666 *	* .9264 *
	* 1.4838 *	* 1.4993 *	* 1.4097 *	* 1.5186 *	* 1.3845 *	* 1.5324 *	* 1.4535 *	* 2.1361 *
10	* 1.2756 *	* 1.4159 *	* 1.2488 *	* 1.4116 *	* 1.3602 *	* 1.3998 *	* 1.2616 *	* 1.0935 *
	* 1.5579 *	* 1.4044 *	* 1.5897 *	* 1.4088 *	* 1.4618 *	* 1.4199 *	* 1.5706 *	* 1.8094 *
11	* 1.3195 *	* 1.3109 *	* 1.4169 *	* 1.3152 *	* 1.3120 *	* 1.1331 *	* 1.2434 *	* .8022 *
	* 1.5069 *	* 1.5176 *	* 1.4029 *	* 1.5076 *	* 1.5091 *	* 1.7314 *	* 1.5789 *	* 2.4410 *
12	* 1.3977 *	* 1.4394 *	* 1.3591 *	* 1.3130 *	* .9243 *	* 1.0378 *	* .8879 *	
	* 1.4269 *	* 1.3845 *	* 1.4620 *	* 1.5082 *	* 1.6425 *	* 1.6604 *	* 2.1916 *	
13	* 1.4394 *	* 1.3002 *	* 1.3998 *	* 1.1331 *	* 1.0378 *	* .7733 *	* .5698 *	
	* 1.3847 *	* 1.5315 *	* 1.4199 *	* 1.7314 *	* 1.6594 *	* 2.0901 *	* 3.1567 *	
14	* 1.2788 *	* 1.3677 *	* 1.2616 *	* 1.2434 *	* .8868 *	* .5698 *		
	* 1.5562 *	* 1.4535 *	* 1.5708 *	* 1.5789 *	* 2.1921 *	* 3.1567 *		
15	* .8172 *	* .9264 *	* 1.0935 *	* .8022 *	F-SUB-Q			
	* 2.4240 *	* 2.1361 *	* 1.8103 *	* 2.4416 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 16 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9232 *	* 1.4501 *	* 1.3516 *	* 1.4019 *	* 1.4844 *	* 1.5744 *	* 1.3591 *	* .8707 *
	* 1.7978 *	* 1.4195 *	* 1.5225 *	* 1.4673 *	* 1.3862 *	* 1.3069 *	* 1.5154 *	* 2.3574 *
9	* 1.4501 *	* 1.3977 *	* 1.5240 *	* 1.3966 *	* 1.5733 *	* 1.3944 *	* 1.4962 *	* .9982 *
	* 1.4195 *	* 1.4718 *	* 1.3503 *	* 1.4719 *	* 1.3054 *	* 1.4733 *	* 1.3711 *	* 2.0467 *
10	* 1.3516 *	* 1.5305 *	* 1.3238 *	* 1.5347 *	* 1.4480 *	* 1.5251 *	* 1.3634 *	* 1.2049 *
	* 1.5225 *	* 1.3450 *	* 1.5537 *	* 1.3385 *	* 1.4160 *	* 1.3429 *	* 1.4967 *	* 1.6940 *
11	* 1.4019 *	* 1.3977 *	* 1.5369 *	* 1.3998 *	* 1.4351 *	* 1.2177 *	* 1.3645 *	* .8675 *
	* 1.4673 *	* 1.4716 *	* 1.3373 *	* 1.4667 *	* 1.4259 *	* 1.6702 *	* 1.4887 *	* 2.3368 *
12	* 1.4844 *	* 1.5733 *	* 1.4469 *	* 1.4362 *	* .9939 *	* 1.1374 *	* .9371 *	
	* 1.3862 *	* 1.3056 *	* 1.4169 *	* 1.4254 *	* 1.5920 *	* 1.5659 *	* 2.0950 *	
13	* 1.5744 *	* 1.3955 *	* 1.5251 *	* 1.2167 *	* 1.1374 *	* .8300 *	* .6158 *	
	* 1.3069 *	* 1.4726 *	* 1.3431 *	* 1.6712 *	* 1.5650 *	* 2.0330 *	* 2.9779 *	
14	* 1.3591 *	* 1.4962 *	* 1.3634 *	* 1.3634 *	* .9371 *	* .6169 *		
	* 1.5154 *	* 1.3704 *	* 1.4967 *	* 1.4887 *	* 2.0966 *	* 2.9779 *		
15	* .8707 *	* .9982 *	* 1.2049 *	* .8675 *	* F-SUB-Q			
	* 2.3574 *	* 2.0482 *	* 1.6940 *	* 2.3368 *	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 15 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9328 *	* 1.4662 *	* 1.3441 *	* 1.3998 *	* 1.4791 *	* 1.5990 *	* 1.3505 *	* .8643 *
	* 1.7281 *	* 1.4479 *	* 1.5955 *	* 1.5297 *	* 1.4462 *	* 1.3365 *	* 1.5823 *	* 2.4670 *
9	* 1.4662 *	* 1.3923 *	* 1.5455 *	* 1.3934 *	* 1.5969 *	* 1.3955 *	* 1.5155 *	* .9982 *
	* 1.4479 *	* 1.5417 *	* 1.3859 *	* 1.5363 *	* 1.3372 *	* 1.5307 *	* 1.4058 *	* 2.1305 *
10	* 1.3441 *	* 1.5519 *	* 1.3248 *	* 1.5615 *	* 1.4459 *	* 1.5433 *	* 1.3752 *	* 1.2209 *
	* 1.5955 *	* 1.3798 *	* 1.6173 *	* 1.3692 *	* 1.4771 *	* 1.3820 *	* 1.5463 *	* 1.7410 *
11	* 1.3998 *	* 1.3934 *	* 1.5637 *	* 1.3977 *	* 1.4544 *	* 1.2199 *	* 1.3827 *	* .8729 *
	* 1.5297 *	* 1.5352 *	* 1.3673 *	* 1.5299 *	* 1.4425 *	* 1.7027 *	* 1.5370 *	* 2.4296 *
12	* 1.4791 *	* 1.5958 *	* 1.4448 *	* 1.4544 *	* .9982 *	* 1.1535 *	* .9307 *	
	* 1.4462 *	* 1.3379 *	* 1.4787 *	* 1.4425 *	* 1.5922 *	* 1.5436 *	* 2.1435 *	
13	* 1.5990 *	* 1.3966 *	* 1.5433 *	* 1.2199 *	* 1.1535 *	* .8290 *	* .6169 *	
	* 1.3365 *	* 1.5299 *	* 1.3825 *	* 1.7037 *	* 1.5420 *	* 2.0433 *	* 3.0119 *	
14	* 1.3505 *	* 1.5155 *	* 1.3752 *	* 1.3816 *	* .9296 *	* .6169 *		
	* 1.5823 *	* 1.4056 *	* 1.5463 *	* 1.5370 *	* 2.1451 *	* 3.0090 *		
15	* .8643 *	* .9971 *	* 1.2199 *	* .8718 *	* F-SUB-Q			
	* 2.4670 *	* 2.1305 *	* 1.7418 *	* 2.4296 *	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8996	* 1.4169	* 1.2884	* 1.3441	* 1.4169	* 1.5412	* 1.2895	* .8225
	* 1.8540	* 1.5495	* 1.7666	* 1.6911	* 1.5989	* 1.4640	* 1.7505	* 2.7400
9	* 1.4169	* 1.3366	* 1.4930	* 1.3355	* 1.5412	* 1.3388	* 1.4608	* .9553
	* 1.5495	* 1.7001	* 1.5195	* 1.6991	* 1.4666	* 1.6891	* 1.5435	* 2.3562
10	* 1.2884	* 1.5005	* 1.2734	* 1.5090	* 1.3880	* 1.4887	* 1.3248	* 1.1738
	* 1.7666	* 1.5131	* 1.7855	* 1.5021	* 1.6345	* 1.5192	* 1.7035	* 1.9173
11	* 1.3441	* 1.3366	* 1.5101	* 1.3450	* 1.4052	* 1.1738	* 1.3345	* .8365
	* 1.6911	* 1.6988	* 1.5003	* 1.6741	* 1.5467	* 1.8404	* 1.6940	* 2.6928
12	* 1.4169	* 1.5401	* 1.3869	* 1.4052	* .9607	* 1.1149	* .8921	*
	* 1.5989	* 1.4671	* 1.6364	* 1.5467	* 1.7185	* 1.6581	* 2.3289	*
13	* 1.5412	* 1.3398	* 1.4887	* 1.1727	* 1.1138	* .7958	* .5901	*
	* 1.4640	* 1.6888	* 1.5200	* 1.8415	* 1.6563	* 2.2149	* 3.2778	*
14	* 1.2895	* 1.4608	* 1.3238	* 1.3345	* .8911	* .5901	*	*
	* 1.7505	* 1.5429	* 1.7042	* 1.6947	* 2.3289	* 3.2741	*	*
15	* .8225	* .9543	* 1.1738	* .8365	* F-SUB-Q			
	* 2.7400	* 2.3581	* 1.9177	* 2.6928	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9007	* 1.4255	* 1.2809	* 1.3377	* 1.4030	* 1.5444	* 1.2756	* .8118
	* 1.9085	* 1.6054	* 1.8714	* 1.8351	* 1.7377	* 1.5728	* 1.9014	* 2.9804
9	* 1.4255	* 1.3313	* 1.5037	* 1.3270	* 1.5455	* 1.3280	* 1.4608	* .9478
	* 1.6054	* 1.7818	* 1.6171	* 1.8475	* 1.5773	* 1.8333	* 1.6618	* 2.5551
10	* 1.2809	* 1.5101	* 1.2702	* 1.5176	* 1.3794	* 1.4930	* 1.3238	* 1.1749
	* 1.8714	* 1.6126	* 1.9284	* 1.5952	* 1.7692	* 1.6369	* 1.8400	* 2.0627
11	* 1.3377	* 1.3280	* 1.5197	* 1.3388	* 1.4126	* 1.1727	* 1.3409	* .8397
	* 1.8351	* 1.8464	* 1.5926	* 1.7605	* 1.6118	* 1.9357	* 1.7753	* 2.9041
12	* 1.4030	* 1.5444	* 1.3784	* 1.4126	* .9596	* 1.1267	* .8911	*
	* 1.7377	* 1.5781	* 1.7714	* 1.6118	* 1.8237	* 1.7469	* 2.4652	*
13	* 1.5444	* 1.3291	* 1.4919	* 1.1717	* 1.1256	* .8000	* .5965	*
	* 1.5728	* 1.8321	* 1.6371	* 1.9370	* 1.7452	* 2.3666	* 3.4753	*
14	* 1.2756	* 1.4608	* 1.3227	* 1.3409	* .8911	* .5965	*	*
	* 1.9014	* 1.6615	* 1.8403	* 1.7753	* 2.4661	* 3.4735	*	*
15	* .8118	* .9468	* 1.1749	* .8386	* F-SUB-Q			
	* 2.9804	* 2.5574	* 2.0627	* 2.9041	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9114	* 1.4234	* 1.2638	* 1.3163	* 1.3730	* 1.5187	* 1.2466	* .7925
	* 2.0454	* 1.7174	* 2.0155	* 1.9924	* 1.9238	* 1.7320	* 2.1033	* 3.3039
9	* 1.4234	* 1.3195	* 1.4919	* 1.3055	* 1.5251	* 1.3023	* 1.4373	* .9286
	* 1.7174	* 1.9180	* 1.7343	* 2.0089	* 1.7247	* 2.0268	* 1.8299	* 2.8223
10	* 1.2638	* 1.4973	* 1.2541	* 1.5048	* 1.3602	* 1.4780	* 1.3055	* 1.1578
	* 2.0155	* 1.7293	* 2.0745	* 1.7122	* 1.9052	* 1.7543	* 1.9994	* 2.2698
11	* 1.3163	* 1.3066	* 1.5080	* 1.3280	* 1.4116	* 1.1706	* 1.3345	* .8290
	* 1.9924	* 2.0061	* 1.7087	* 1.8940	* 1.7246	* 2.0791	* 1.9029	* 3.1309
12	* 1.3730	* 1.5240	* 1.3580	* 1.4116	* .9757	* 1.1460	* .8954	*
	* 1.9238	* 1.7248	* 1.9077	* 1.7246	* 1.9523	* 1.8647	* 2.6448	*
13	* 1.5187	* 1.3023	* 1.4780	* 1.1706	* 1.1460	* .8225	* .6051	*
	* 1.7320	* 2.0263	* 1.7543	* 2.0806	* 1.8623	* 2.5306	* 3.7252	*
14	* 1.2466	* 1.4373	* 1.3055	* 1.3345	* .8954	* .6062	*	*
	* 2.1033	* 1.8291	* 2.0006	* 1.9041	* 2.6448	* 3.7205	*	*
15	* .7925	* .9275	* 1.1567	* .8290	* F-SUB-Q			
	* 3.3039	* 2.8242	* 2.2710	* 3.1309	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0003	* 1.4426	* 1.2616	* 1.3023	* 1.3484	* 1.4940	* 1.2231	* .7743
	* 2.2232	* 1.8517	* 2.1745	* 2.1538	* 2.1000	* 1.8930	* 2.3163	* 3.6597
9	* 1.4426	* 1.3205	* 1.4855	* 1.2884	* 1.5058	* 1.2788	* 1.4159	* .9125
	* 1.8517	* 2.0713	* 1.8659	* 2.1734	* 1.8641	* 2.2098	* 1.9806	* 3.0948
10	* 1.2616	* 1.4898	* 1.2434	* 1.4983	* 1.3484	* 1.4673	* 1.2927	* 1.1417
	* 2.1745	* 1.8612	* 2.2387	* 1.8431	* 2.0576	* 1.8883	* 2.1564	* 2.4546
11	* 1.3023	* 1.2895	* 1.5015	* 1.3302	* 1.4266	* 1.1888	* 1.3366	* .8215
	* 2.1538	* 2.1718	* 1.8398	* 2.0492	* 1.8644	* 2.2471	* 2.0436	* 3.3750
12	* 1.3484	* 1.5048	* 1.3473	* 1.4276	* 1.0753	* 1.2145	* .9168	*
	* 2.1000	* 1.8651	* 2.0605	* 1.8644	* 2.1150	* 2.0140	* 2.8650	*
13	* 1.4940	* 1.2798	* 1.4673	* 1.1877	* 1.2145	* .8879	* .6297	*
	* 1.8930	* 2.2082	* 1.8884	* 2.2471	* 2.0120	* 2.7382	* 4.0410	*
14	* 1.2231	* 1.4159	* 1.2927	* 1.3366	* .9168	* .6297	*	*
	* 2.3163	* 1.9806	* 2.1578	* 2.0449	* 2.8650	* 4.0385	*	*
15	* .7743	* .9114	* 1.1417	* .8215	* F-SUB-Q			
	* 3.6597	* 3.0948	* 2.4546	* 3.3755	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1256	* 1.5090	* 1.2948	* 1.3205	* 1.3548	* 1.5101	* 1.2284	* .7775
	* 2.3449	* 1.9623	* 2.3235	* 2.3054	* 2.2541	* 2.0189	* 2.4829	* 3.8984
9	* 1.5090	* 1.3537	* 1.5208	* 1.3034	* 1.5272	* 1.2884	* 1.4362	* .9200
	* 1.9623	* 2.2136	* 1.9847	* 2.3281	* 1.9843	* 2.3684	* 2.1088	* 3.3078
10	* 1.2948	* 1.5251	* 1.2649	* 1.5337	* 1.3698	* 1.5005	* 1.3152	* 1.1610
	* 2.3235	* 1.9795	* 2.3821	* 1.9591	* 2.2034	* 2.0054	* 2.2961	* 2.6074
11	* 1.3205	* 1.3045	* 1.5369	* 1.3645	* 1.4930	* 1.2359	* 1.3762	* .8397
	* 2.3054	* 2.3262	* 1.9554	* 2.1874	* 1.9728	* 2.3902	* 2.1666	* 3.5848
12	* 1.3548	* 1.5262	* 1.3677	* 1.4930	* 1.2702	* 1.3452	* .9618	*
	* 2.2541	* 1.9843	* 2.2052	* 1.9728	* 2.2517	* 2.1333	* 3.0359	*
13	* 1.5101	* 1.2884	* 1.5005	* 1.2349	* 1.3473	* .9768	* .6737	*
	* 2.0189	* 2.3665	* 2.0054	* 2.3922	* 2.1302	* 2.9129	* 4.2752	*
14	* 1.2284	* 1.4373	* 1.3141	* 1.3762	* .9607	* .6747	*	*
	* 2.4829	* 2.1088	* 2.2977	* 2.1666	* 3.0359	* 4.2691	*	*
15	* .7775	* .9189	* 1.1610	* .8397	* F-SUB-Q			
	* 3.8984	* 3.3078	* 2.6082	* 3.5848	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1417	* 1.5165	* 1.2863	* 1.3023	* 1.3302	* 1.4823	* 1.2049	* .7604
	* 2.4526	* 2.0424	* 2.4138	* 2.3922	* 2.3540	* 2.1142	* 2.6059	* 4.1048
9	* 1.5165	* 1.3495	* 1.5058	* 1.2852	* 1.5048	* 1.2649	* 1.4169	* .9039
	* 2.0424	* 2.2989	* 2.0668	* 2.4257	* 2.0755	* 2.4746	* 2.2093	* 3.4673
10	* 1.2863	* 1.5101	* 1.2509	* 1.5197	* 1.3548	* 1.4844	* 1.2991	* 1.1449
	* 2.4138	* 2.0624	* 2.4852	* 2.0481	* 2.3007	* 2.1022	* 2.4059	* 2.7365
11	* 1.3023	* 1.2873	* 1.5230	* 1.3580	* 1.4983	* 1.2391	* 1.3709	* .8290
	* 2.3922	* 2.4237	* 2.0438	* 2.2864	* 2.0668	* 2.5019	* 2.2723	* 3.7736
12	* 1.3302	* 1.5048	* 1.3527	* 1.4983	* 1.3045	* 1.3773	* .9703	*
	* 2.3540	* 2.0755	* 2.3025	* 2.0682	* 2.3559	* 2.2344	* 3.1896	*
13	* 1.4823	* 1.2659	* 1.4844	* 1.2381	* 1.3794	* 1.0035	* .6822	*
	* 2.1142	* 2.4746	* 2.1022	* 2.5040	* 2.2311	* 3.0573	* 4.5065	*
14	* 1.2049	* 1.4169	* 1.2991	* 1.3698	* .9703	* .6833	*	*
	* 2.6059	* 2.2077	* 2.4079	* 2.2723	* 3.1896	* 4.5065	*	*
15	* .7604	* .9039	* 1.1438	* .8279	* F-SUB-Q			
	* 4.1048	* 3.4714	* 2.7391	* 3.7736	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1685	* 1.5562	* 1.3077	* 1.3205	* 1.3430	* 1.5080	* 1.2167	* .7679
	* 2.4073	* 2.0159	* 2.3883	* 2.3428	* 2.2706	* 2.0242	* 2.4684	* 3.8475
9	* 1.5562	* 1.3720	* 1.5390	* 1.3023	* 1.5347	* 1.2798	* 1.4437	* .9168
	* 2.0159	* 2.2829	* 2.0340	* 2.3787	* 2.0228	* 2.3787	* 2.1188	* 3.2530
10	* 1.3077	* 1.5422	* 1.2702	* 1.5540	* 1.3741	* 1.5187	* 1.3227	* 1.1674
	* 2.3883	* 2.0298	* 2.4326	* 2.0159	* 2.2619	* 2.0453	* 2.3225	* 2.5853
11	* 1.3205	* 1.3034	* 1.5562	* 1.3805	* 1.5412	* 1.2649	* 1.4041	* .8472
	* 2.3428	* 2.3768	* 2.0118	* 2.2671	* 2.0424	* 2.4663	* 2.2044	* 3.5898
12	* 1.3430	* 1.5347	* 1.3720	* 1.5412	* 1.3398	* 1.4223	* .9939	*
	* 2.2706	* 2.0242	* 2.2653	* 2.0438	* 2.3446	* 2.2110	* 3.1188	*
13	* 1.5080	* 1.2809	* 1.5176	* 1.2638	* 1.4244	* 1.0346	* .7058	*
	* 2.0242	* 2.3768	* 2.0467	* 2.4684	* 2.2077	* 3.0259	* 4.3792	*
14	* 1.2167	* 1.4437	* 1.3227	* 1.4030	* .9939	* .7069	*	*
	* 2.4684	* 2.1188	* 2.3243	* 2.2060	* 3.1188	* 4.3727	*	*
15	* .7679	* .9168	* 1.1674	* .8472	* F-SUB-Q			
	* 3.8475	* 3.2566	* 2.5853	* 3.5942	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1663	* 1.5604	* 1.3045	* 1.3163	* 1.3366	* 1.5058	* 1.2113	* .7636
	* 2.2617	* 1.8677	* 2.1831	* 2.1234	* 2.0682	* 1.8397	* 2.2532	* 3.5212
9	* 1.5604	* 1.3698	* 1.5412	* 1.2981	* 1.5358	* 1.2756	* 1.4437	* .9157
	* 1.8677	* 2.0947	* 1.8489	* 2.1576	* 1.8294	* 2.1655	* 1.9200	* 2.9650
10	* 1.3045	* 1.5433	* 1.2681	* 1.5562	* 1.3709	* 1.5208	* 1.3227	* 1.1685
	* 2.1831	* 1.8443	* 2.2096	* 1.8340	* 2.0581	* 1.8548	* 2.0992	* 2.3391
11	* 1.3163	* 1.2991	* 1.5583	* 1.3805	* 1.5465	* 1.2659	* 1.4073	* .8472
	* 2.1234	* 2.1560	* 1.8306	* 2.0770	* 1.8856	* 2.2706	* 2.0076	* 3.2494
12	* 1.3366	* 1.5358	* 1.3687	* 1.5465	* 1.3441	* 1.4309	* .9971	*
	* 2.0682	* 1.8306	* 2.0624	* 1.8856	* 2.2011	* 2.0524	* 2.8866	*
13	* 1.5058	* 1.2756	* 1.5197	* 1.2649	* 1.4319	* 1.0399	* .7090	*
	* 1.8397	* 2.1639	* 1.8559	* 2.2723	* 2.0495	* 2.7989	* 4.0539	*
14	* 1.2113	* 1.4437	* 1.3227	* 1.4073	* .9971	* .7101	*	*
	* 2.2532	* 1.9200	* 2.0992	* 2.0076	* 2.8894	* 4.0484	*	*
15	* .7636	* .9146	* 1.1685	* .8472	* F-SUB-Q			
	* 3.5212	* 2.9680	* 2.3409	* 3.2494	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1481 *	* 1.5390 *	* 1.2863 *	* 1.2981 *	* 1.3184 *	* 1.4855 *	* 1.1963 *	.7518 *
	* 2.0351 *	* 1.6851 *	* 1.9887 *	* 1.9492 *	* 1.9076 *	* 1.6987 *	* 2.0828 *	* 3.2711 *
9	* 1.5390 *	* 1.3516 *	* 1.5197 *	* 1.2798 *	* 1.5144 *	* 1.2574 *	* 1.4266 *	.9039 *
	* 1.6851 *	* 1.9002 *	* 1.6919 *	* 1.9820 *	* 1.6832 *	* 1.9981 *	* 1.7659 *	* 2.7416 *
10	* 1.2863 *	* 1.5219 *	* 1.2499 *	* 1.5369 *	* 1.3527 *	* 1.5005 *	* 1.3066 *	* 1.1535 *
	* 1.9887 *	* 1.6870 *	* 2.0370 *	* 1.6755 *	* 1.8832 *	* 1.6987 *	* 1.9263 *	* 2.1560 *
11	* 1.2981 *	* 1.2809 *	* 1.5369 *	* 1.3634 *	* 1.5272 *	* 1.2520 *	* 1.3912 *	.8343 *
	* 1.9492 *	* 1.9807 *	* 1.6727 *	* 1.8868 *	* 1.6977 *	* 2.0481 *	* 1.8272 *	* 2.9891 *
12	* 1.3184 *	* 1.5144 *	* 1.3505 *	* 1.5272 *	* 1.3313 *	* 1.4159 *	.9885 *	
	* 1.9076 *	* 1.6841 *	* 1.8868 *	* 1.6977 *	* 1.9635 *	* 1.8386 *	* 2.5853 *	
13	* 1.4855 *	* 1.2584 *	* 1.5005 *	* 1.2509 *	* 1.4180 *	* 1.0314 *	.6994 *	
	* 1.6987 *	* 1.9968 *	* 1.6997 *	* 2.0481 *	* 1.8363 *	* 2.5125 *	* 3.6566 *	
14	* 1.1963 *	* 1.4266 *	* 1.3066 *	* 1.3912 *	.9885 *	.7004 *		
	* 2.0828 *	* 1.7659 *	* 1.9275 *	* 1.8272 *	* 2.5853 *	* 3.6521 *		
15	.7518 *	.9039 *	1.1535 *	.8332 *	F-SUB-Q			
	* 3.2711 *	* 2.7416 *	* 2.1560 *	* 2.9921 *	M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1652 *	* 1.5690 *	* 1.3055 *	* 1.3184 *	* 1.3388 *	* 1.5176 *	* 1.2177 *	.7658 *
	* 1.7994 *	* 1.5029 *	* 1.7884 *	* 1.7574 *	* 1.7265 *	* 1.5294 *	* 1.8856 *	* 2.9620 *
9	* 1.5690 *	* 1.3720 *	* 1.5508 *	* 1.2991 *	* 1.5465 *	* 1.2788 *	* 1.4566 *	.9221 *
	* 1.5029 *	* 1.7066 *	* 1.5145 *	* 1.7884 *	* 1.5098 *	* 1.8059 *	* 1.5879 *	* 2.4767 *
10	* 1.3055 *	* 1.5530 *	* 1.2702 *	* 1.5701 *	* 1.3752 *	* 1.5347 *	* 1.3334 *	* 1.1802 *
	* 1.7884 *	* 1.5122 *	* 1.8205 *	* 1.4976 *	* 1.6958 *	* 1.5208 *	* 1.7316 *	* 1.9377 *
11	* 1.3184 *	* 1.3002 *	* 1.5712 *	* 1.3869 *	* 1.5626 *	* 1.2745 *	* 1.4223 *	.8536 *
	* 1.7574 *	* 1.7873 *	* 1.4968 *	* 1.6919 *	* 1.5083 *	* 1.8294 *	* 1.6319 *	* 2.6793 *
12	* 1.3388 *	* 1.5465 *	* 1.3730 *	* 1.5626 *	* 1.3570 *	* 1.4480 *	* 1.0089 *	
	* 1.7265 *	* 1.5106 *	* 1.6987 *	* 1.5083 *	* 1.7337 *	* 1.6220 *	* 2.2971 *	
13	* 1.5176 *	* 1.2798 *	* 1.5347 *	* 1.2734 *	* 1.4501 *	* 1.0528 *	.7176 *	
	* 1.5294 *	* 1.8048 *	* 1.5208 *	* 1.8306 *	* 1.6202 *	* 2.2160 *	* 3.2210 *	
14	* 1.2177 *	* 1.4566 *	* 1.3334 *	* 1.4223 *	* 1.0089 *	.7176 *		
	* 1.8856 *	* 1.5879 *	* 1.7316 *	* 1.6328 *	* 2.2971 *	* 3.2210 *		
15	.7658 *	.9211 *	1.1802 *	.8525 *	F-SUB-Q			
	* 2.9620 *	* 2.4787 *	* 1.9377 *	* 2.6817 *	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1492	* 1.5465	* 1.2916	* 1.3045	* 1.3313	* 1.5015	* 1.2134	* .7593
	* 1.7154	* 1.4135	* 1.6793	* 1.6530	* 1.6194	* 1.4412	* 1.7669	* 2.7909
9	* 1.5465	* 1.3591	* 1.5294	* 1.2873	* 1.5283	* 1.2691	* 1.4437	* .9168
	* 1.4135	* 1.5991	* 1.4265	* 1.6793	* 1.4217	* 1.6967	* 1.4930	* 2.3261
10	* 1.2916	* 1.5315	* 1.2552	* 1.5519	* 1.3666	* 1.5187	* 1.3238	* 1.1695
	* 1.6793	* 1.4245	* 1.7276	* 1.4075	* 1.5879	* 1.4300	* 1.6247	* 1.8249
11	* 1.3045	* 1.2884	* 1.5530	* 1.3773	* 1.5465	* 1.2670	* 1.4105	* .8418
	* 1.6530	* 1.6784	* 1.4068	* 1.5794	* 1.4129	* 1.7075	* 1.5302	* 2.5320
12	* 1.3313	* 1.5283	* 1.3645	* 1.5465	* 1.3527	* 1.4384	* 1.0089	*
	* 1.6194	* 1.4224	* 1.5905	* 1.4129	* 1.6079	* 1.5114	* 2.1341	*
13	* 1.5015	* 1.2702	* 1.5187	* 1.2670	* 1.4394	* 1.0517	* .7111	*
	* 1.4412	* 1.6958	* 1.4300	* 1.7085	* 1.5098	* 2.0510	* 3.0104	*
14	* 1.2134	* 1.4437	* 1.3238	* 1.4105	* 1.0089	* .7111	*	*
	* 1.7669	* 1.4923	* 1.6247	* 1.5302	* 2.1341	* 3.0074	*	*
15	* .7593	* .9157	* 1.1695	* .8418	* F-SUB-Q			
	* 2.7909	* 2.3280	* 1.8260	* 2.5320	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1492	* 1.5455	* 1.2959	* 1.3109	* 1.3441	* 1.5080	* 1.2295	* .7679
	* 1.6444	* 1.3360	* 1.5828	* 1.5561	* 1.5200	* 1.3594	* 1.6548	* 2.6268
9	* 1.5455	* 1.3687	* 1.5294	* 1.2938	* 1.5326	* 1.2788	* 1.4512	* .9243
	* 1.3360	* 1.5014	* 1.3476	* 1.5820	* 1.3415	* 1.5965	* 1.4068	* 2.1912
10	* 1.2959	* 1.5326	* 1.2606	* 1.5540	* 1.3794	* 1.5240	* 1.3345	* 1.1738
	* 1.5828	* 1.3451	* 1.6265	* 1.3276	* 1.4892	* 1.3482	* 1.5278	* 1.7245
11	* 1.3109	* 1.2948	* 1.5551	* 1.3880	* 1.5508	* 1.2777	* 1.4180	* .8472
	* 1.5561	* 1.5803	* 1.3270	* 1.4810	* 1.3306	* 1.6018	* 1.4405	* 2.3883
12	* 1.3441	* 1.5326	* 1.3762	* 1.5508	* 1.3677	* 1.4480	* 1.0249	*
	* 1.5200	* 1.4421	* 1.4915	* 1.3312	* 1.5014	* 1.4169	* 1.9887	*
13	* 1.5080	* 1.2798	* 1.5240	* 1.2766	* 1.4480	* 1.0678	* .7186	*
	* 1.3594	* 1.5948	* 1.3488	* 1.6026	* 1.4169	* 1.9113	* 2.8176	*
14	* 1.2295	* 1.4512	* 1.3345	* 1.4180	* 1.0239	* .7197	*	*
	* 1.6548	* 1.4068	* 1.5278	* 1.4405	* 1.9900	* 2.8176	*	*
15	* .7679	* .9232	* 1.1738	* .8461	* F-SUB-Q			
	* 2.6268	* 2.1929	* 1.7245	* 2.3883	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 75% POWER, 430 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0764	* 1.4287	* 1.2134	* 1.2338	* 1.2702	* 1.4019	* 1.1642	* .7197
	* 1.8141	* 1.3876	* 1.6256	* 1.5922	* 1.5471	* 1.4068	* 1.6822	* 2.7039
9	* 1.4287	* 1.2927	* 1.4223	* 1.2156	* 1.4212	* 1.1995	* 1.3388	* .8557
	* 1.3876	* 1.5286	* 1.3928	* 1.6202	* 1.3909	* 1.6373	* 1.4677	* 2.2776
10	* 1.2134	* 1.4255	* 1.1899	* 1.4373	* 1.2970	* 1.4116	* 1.2477	* 1.0689
	* 1.6256	* 1.3889	* 1.6585	* 1.3785	* 1.5208	* 1.3994	* 1.5719	* 1.8249
11	* 1.2338	* 1.2167	* 1.4405	* 1.3034	* 1.4287	* 1.1984	* 1.3066	* .7850
	* 1.5922	* 1.6194	* 1.3759	* 1.5153	* 1.3863	* 1.6419	* 1.5037	* 2.4850
12	* 1.2702	* 1.4201	* 1.2948	* 1.4287	* 1.2884	* 1.3366	* .9735	*
	* 1.5471	* 1.3909	* 1.5231	* 1.3863	* 1.5310	* 1.4751	* 2.0145	*
13	* 1.4019	* 1.2006	* 1.4105	* 1.1974	* 1.3366	* 1.0078	* .6651	*
	* 1.4068	* 1.6364	* 1.4001	* 1.6428	* 1.4751	* 1.9505	* 2.9355	*
14	* 1.1642	* 1.3388	* 1.2477	* 1.3066	* .9735	* .6652	*	*
	* 1.6822	* 1.4677	* 1.5719	* 1.5045	* 2.0159	* 2.9326	*	*
15	* .7197	* .8557	* 1.0689	* .7840	* F-SUB-Q			
	* 2.7039	* 2.2794	* 1.8260	* 2.4850	* M-SUB-Q			

AT 75% POWER, 430 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8054	* 1.0421	* .8729	* .9093	* .6865	* 1.0260	* .6148	* .5366
	* 2.3826	* 1.8432	* 2.1978	* 2.1052	* 2.7699	* 1.8630	* 3.0861	* 3.5254
9	* 1.0421	* .7036	* 1.0485	* .8846	* 1.0410	* .8782	* .9553	* .6158
	* 1.8432	* 2.7163	* 1.8328	* 2.1671	* 1.8409	* 2.1751	* 1.9968	* 3.0829
10	* .8729	* 1.0539	* .8986	* 1.0496	* .6994	* 1.0314	* .6330	* .7486
	* 2.1978	* 1.8238	* 2.1357	* 1.8294	* 2.7289	* 1.8559	* 2.9982	* 2.5276
11	* .9093	* .8879	* 1.0549	* .7015	* 1.0335	* .8686	* .9243	* .5569
	* 2.1052	* 2.1591	* 1.8215	* 2.7213	* 1.8548	* 2.2011	* 2.0639	* 3.4033
12	* .6865	* 1.0410	* .6994	* 1.0335	* .6726	* .9436	* .4905	*
	* 2.7699	* 1.8409	* 2.7289	* 1.8548	* 2.8311	* 2.0284	* 3.8882	*
13	* 1.0260	* .8793	* 1.0314	* .8686	* .9446	* .5130	* .4959	*
	* 1.8630	* 2.1735	* 1.8559	* 2.2027	* 2.0256	* 3.7119	* 3.8226	*
14	* .6148	* .9553	* .6319	* .9243	* .4905	* .4959	*	*
	* 3.0861	* 1.9968	* 2.9982	* 2.0653	* 3.8882	* 3.8226	*	*
15	* .5366	* .6148	* .7486	* .5569	* F-SUB-Q			
	* 3.5254	* 3.0829	* 2.5298	* 3.4033	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5301 *	* .8172 *	* .7893 *	* .8418 *	* .5355 *	* .8697 *	* .4402 *	* .4188 *
	* 3.1422 *	* 2.4538 *	* 2.7216 *	* 2.5504 *	* 3.9756 *	* 2.4577 *	* 4.7933 *	* 5.0375 *
9	* .8172 *	* .5141 *	* .9253 *	* .8065 *	* .9007 *	* .7497 *	* .7497 *	* .4584 *
	* 2.4538 *	* 4.0679 *	* 2.3212 *	* 2.6626 *	* 2.3798 *	* 2.8477 *	* 2.8298 *	* 4.5977 *
10	* .7893 *	* .9286 *	* .7765 *	* .8921 *	* .5066 *	* .8086 *	* .4198 *	* .5280 *
	* 2.7216 *	* 2.3146 *	* 2.7624 *	* 2.4066 *	* 4.1756 *	* 2.6104 *	* 5.0125 *	* 3.9834 *
11	* .8418 *	* .8086 *	* .8986 *	* .4819 *	* .7636 *	* .6287 *	* .6715 *	* .3952 *
	* 2.5504 *	* 2.6556 *	* 2.3910 *	* 4.1819 *	* 2.5548 *	* 3.0297 *	* 2.9605 *	* 5.2154 *
12	* .5355 *	* .9018 *	* .5066 *	* .7658 *	* .3213 *	* .5312 *	* .2838 *	
	* 3.9756 *	* 2.3784 *	* 4.1894 *	* 2.5500 *	* 4.4114 *	* 2.8228 *	* 6.1876 *	
13	* .8697 *	* .7508 *	* .8097 *	* .6287 *	* .5312 *	* .2292 *	* .2742 *	
	* 2.4577 *	* 2.8457 *	* 2.6088 *	* 3.0297 *	* 2.8180 *	* 5.8793 *	* 5.7468 *	
14	* .4402 *	* .7508 *	* .4198 *	* .6715 *	* .2827 *	* .2742 *		
	* 4.7933 *	* 2.8298 *	* 5.0125 *	* 2.9605 *	* 6.1876 *	* 5.7468 *		
15	* .4188 *	* .4584 *	* .5280 *	* .3952 *	F-SUB-Q			
	* 5.0375 *	* 4.5977 *	* 3.9834 *	* 5.2154 *	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7411 *	* 1.1706 *	* 1.2113 *	* 1.2788 *	* 1.2970 *	* 1.2477 *	* 1.0764 *	* .6148 *
	* 2.3794 *	* 1.8557 *	* 1.8657 *	* 1.7650 *	* 1.7426 *	* 1.8092 *	* 2.0858 *	* 3.6231 *
9	* 1.1706 *	* 1.1845 *	* 1.3002 *	* 1.2316 *	* 1.2916 *	* 1.1385 *	* 1.1428 *	* .7347 *
	* 1.8557 *	* 1.8602 *	* 1.7397 *	* 1.8333 *	* 1.7507 *	* 1.9796 *	* 1.9635 *	* 3.0313 *
10	* 1.2113 *	* 1.3023 *	* 1.0796 *	* 1.2263 *	* 1.2038 *	* 1.1845 *	* 1.0678 *	* .8675 *
	* 1.8657 *	* 1.7360 *	* 2.0922 *	* 1.8444 *	* 1.8514 *	* 1.9021 *	* 2.0922 *	* 2.5635 *
11	* 1.2788 *	* 1.2327 *	* 1.2316 *	* 1.1460 *	* 1.0988 *	* .9650 *	* 1.0474 *	* .6447 *
	* 1.7650 *	* 1.8309 *	* 1.8358 *	* 1.8406 *	* 1.8614 *	* 2.0391 *	* 1.9994 *	* 3.3703 *
12	* 1.2970 *	* 1.2938 *	* 1.2038 *	* 1.0999 *	* .7990 *	* .8611 *	* .7497 *	
	* 1.7426 *	* 1.7478 *	* 1.8514 *	* 1.8614 *	* 1.8365 *	* 1.9001 *	* 2.4718 *	
13	* 1.2477 *	* 1.1385 *	* 1.1845 *	* .9650 *	* .8600 *	* .6158 *	* .4113 *	
	* 1.8092 *	* 1.9786 *	* 1.9030 *	* 2.0401 *	* 1.8962 *	* 2.3344 *	* 4.0635 *	
14	* 1.0764 *	* 1.1438 *	* 1.0678 *	* 1.0474 *	* .7486 *	* .4102 *		
	* 2.0858 *	* 1.9617 *	* 2.0922 *	* 1.9998 *	* 2.4733 *	* 4.0675 *		
15	* .6148 *	* .7347 *	* .8664 *	* .6447 *	F-SUB-Q			
	* 3.6231 *	* 3.0313 *	* 2.5651 *	* 3.3703 *	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8407	1.3548	1.3827	1.801	1.5048	1.4812	1.2659	.7261
	2.2789	1.7109	1.7360	1.185	1.5963	1.6210	1.8872	3.2661
9	1.3548	1.3355	1.5058	1.4255	1.5240	1.3302	1.3869	.9018
	1.7109	1.7529	1.5963	1.6823	1.5770	1.8018	1.7175	2.6231
10	1.3827	1.5090	1.2092	1.4426	1.3998	1.4105	1.2981	1.1021
	1.7360	1.5926	1.9861	1.6546	1.6787	1.6796	1.8278	2.1390
11	1.4801	1.4276	1.4448	1.3280	1.3184	1.1674	1.2981	.8000
	1.6185	1.6803	1.6523	1.6493	1.6241	1.8014	1.7141	2.8923
12	1.5048	1.5262	1.3987	1.3184	.9532	1.0731	.9071	
	1.5963	1.5747	1.6807	1.6241	1.6290	1.6415	2.1816	
13	1.4812	1.3302	1.4105	1.1663	1.0721	.7636	.5055	
	1.6210	1.8003	1.6803	1.8021	1.6373	2.0388	3.5355	
14	1.2659	1.3880	1.2981	1.2981	.9061	.5055		
	1.8872	1.7175	1.8278	1.7149	2.1834	3.5398		
15	.7261	.9007	1.1010	.8000	F-SUB-Q			
	3.2661	2.6248	2.1401	2.8932	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8857	1.4469	1.4576	1.5722	1.5969	1.6097	1.3623	.7786
	2.3723	1.7375	1.7820	1.6454	1.6210	1.6050	1.8857	3.2731
9	1.4469	1.4030	1.6076	1.5144	1.6386	1.4319	1.5326	.9896
	1.7375	1.8104	1.6154	1.7090	1.5811	1.8010	1.6746	2.5733
10	1.4576	1.6119	1.2841	1.5604	1.4983	1.5401	1.4330	1.2327
	1.7820	1.6117	2.0140	1.6469	1.6946	1.6581	1.7805	2.0614
11	1.5722	1.5165	1.5626	1.4201	1.4384	1.2852	1.4480	.8911
	1.6454	1.7069	1.6453	1.6581	1.6054	1.7892	1.6671	2.8104
12	1.5969	1.6408	1.4973	1.4384	1.0324	1.2017	.9950	
	1.6210	1.5788	1.6973	1.6054	1.6301	1.6111	2.1725	
13	1.6097	1.4330	1.5401	1.2841	1.2006	.8429	.5580	
	1.6050	1.7995	1.6590	1.7900	1.6068	2.0338	3.5182	
14	1.3623	1.5326	1.4330	1.4469	.9939	.5580		
	1.8857	1.6746	1.7805	1.6678	2.1752	3.5224		
15	.7786	.9896	1.3316	.8911	F-SUB-Q			
	3.2731	2.5749	2.0624	2.8111	M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8 *	.8857 *	1.4555 *	1.4544 *	1.5754 *	1.6001 *	1.6354 *	1.3762 *	.7850 *
	2.6356 *	1.8816 *	1.9460 *	1.8076 *	1.7841 *	1.7409 *	2.0540 *	3.5741 *
9 *	1.4555 *	1.3998 *	1.6172 *	1.5187 *	1.6536 *	1.4491 *	1.5744 *	1.0121 *
	1.8816 *	1.9789 *	1.7562 *	1.8808 *	1.7277 *	1.9625 *	1.7860 *	2.7801 *
10 *	1.4544 *	1.6215 *	1.2906 *	1.5840 *	1.5144 *	1.5787 *	1.4726 *	1.2702 *
	1.9460 *	1.7519 *	2.1828 *	1.7699 *	1.8337 *	1.7728 *	1.8873 *	2.1961 *
11 *	1.5754 *	1.5208 *	1.5862 *	1.4362 *	1.4705 *	1.3238 *	1.4983 *	.9168 *
	1.8076 *	1.8788 *	1.7677 *	1.8085 *	1.7392 *	1.3405 *	1.7808 *	2.9807 *
12 *	1.6001 *	1.6553 *	1.5123 *	1.4705 *	1.0571 *	1.2499 *	1.0249 *	
	1.7841 *	1.7256 *	1.8353 *	1.7392 *	1.7820 *	1.7439 *	2.3613 *	
13 *	1.6354 *	1.4491 *	1.5787 *	1.3227 *	1.2488 *	.8729 *	.5751 *	
	1.7409 *	1.9616 *	1.7735 *	1.9420 *	1.7392 *	2.2322 *	3.8657 *	
14 *	1.3762 *	1.5744 *	1.4726 *	1.4973 *	1.0239 *	.5751 *		
	2.0540 *	1.7859 *	1.8882 *	1.7815 *	2.3639 *	3.8692 *		
15 *	.7850 *	1.0110 *	1.2702 *	.9157 *	F-SUB-Q			
	3.5741 *	2.7819 *	2.1972 *	2.9827 *	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8 *	.9189 *	1.5112 *	1.4951 *	1.6268 *	1.6451 *	1.7007 *	1.4223 *	.8097 *
	2.8694 *	2.0344 *	2.1291 *	1.9687 *	1.9486 *	1.8769 *	2.2221 *	3.8681 *
9 *	1.5112 *	1.4405 *	1.6740 *	1.5658 *	1.7115 *	1.4994 *	1.6536 *	1.0571 *
	2.0344 *	2.1563 *	1.9071 *	2.0515 *	1.8761 *	2.1252 *	1.9063 *	2.9799 *
10 *	1.4951 *	1.6772 *	1.3366 *	1.6504 *	1.5712 *	1.6579 *	1.5508 *	1.3420 *
	2.1291 *	1.9030 *	2.3705 *	1.8989 *	1.9767 *	1.8754 *	2.0065 *	2.3327 *
11 *	1.6268 *	1.5669 *	1.6526 *	1.4983 *	1.5497 *	1.4030 *	1.5936 *	.9725 *
	1.9687 *	2.0496 *	1.8964 *	1.9547 *	1.8754 *	2.0866 *	1.8794 *	3.1584 *
12 *	1.6451 *	1.7136 *	1.5701 *	1.5508 *	1.1224 *	1.3516 *	1.0903 *	
	1.9486 *	1.8737 *	1.9803 *	1.8754 *	1.9452 *	1.8810 *	2.5495 *	
13 *	1.7007 *	1.5005 *	1.6590 *	1.4019 *	1.3505 *	.9436 *	.6201 *	
	1.8769 *	2.1242 *	1.8762 *	2.0886 *	1.8762 *	2.4467 *	4.2051 *	
14 *	1.4223 *	1.6547 *	1.5508 *	1.5926 *	1.0881 *	.6190 *		
	2.2221 *	1.9063 *	2.0074 *	1.8802 *	2.5525 *	4.2092 *		
15 *	.8097 *	1.0560 *	1.3409 *	.9714 *	F-SUB-Q			
	3.8681 *	2.9819 *	2.3340 *	3.1607 *	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9810	* 1.5390	* 1.5015	* 1.6365	* 1.6483	* 1.7157	* 1.4276	* .8107
	* 3.2864	* 2.3148	* 2.4357	* 2.2148	* 2.1650	* 2.0736	* 2.4560	* 4.2713
9	* 1.5390	* 1.4555	* 1.6868	* 1.5722	* 1.7243	* 1.5090	* 1.6836	* 1.0699
	* 2.3148	* 2.4643	* 2.1607	* 2.2953	* 2.0755	* 2.3528	* 2.1112	* 3.2698
10	* 1.5015	* 1.6911	* 1.3484	* 1.6750	* 1.5936	* 1.6890	* 1.5829	* 1.3677
	* 2.4357	* 2.1555	* 2.6940	* 2.1391	* 2.2375	* 2.0995	* 2.2486	* 2.5613
11	* 1.6365	* 1.5744	* 1.6772	* 1.5337	* 1.6054	* 1.4544	* 1.6461	* .9939
	* 2.2148	* 2.2930	* 2.1370	* 2.2052	* 2.1025	* 2.3430	* 2.1025	* 3.5502
12	* 1.6483	* 1.7265	* 1.5915	* 1.6054	* 1.2370	* 1.4555	* 1.1438	*
	* 2.1650	* 2.0745	* 2.2420	* 2.1025	* 2.1877	* 2.1035	* 2.8650	*
13	* 1.7157	* 1.5101	* 1.6890	* 1.4533	* 1.4544	* 1.0474	* .6608	*
	* 2.0736	* 2.3515	* 2.1005	* 2.3455	* 2.0975	* 2.7510	* 4.7159	*
14	* 1.4276	* 1.6836	* 1.5829	* 1.6451	* 1.1417	* .6608	*	*
	* 2.4560	* 2.1102	* 2.2498	* 2.1035	* 2.8687	* 4.7210	*	*
15	* .8107	* 1.0689	* 1.3666	* .9928	F-SUB-Q			
	* 4.2713	* 3.2723	* 2.5628	* 3.5530	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0528	* 1.5583	* 1.4994	* 1.6333	* 1.6386	* 1.7136	* 1.4201	* .8043
	* 3.8375	* 2.6777	* 2.7408	* 2.4822	* 2.4131	* 2.3013	* 2.7272	* 4.7434
9	* 1.5583	* 1.4630	* 1.6868	* 1.5669	* 1.7211	* 1.5058	* 1.6954	* 1.0710
	* 2.6777	* 2.8614	* 2.4210	* 2.5703	* 2.3037	* 2.6159	* 2.3280	* 3.6059
10	* 1.4994	* 1.6911	* 1.3505	* 1.6847	* 1.6033	* 1.7018	* 1.5979	* 1.3762
	* 2.7408	* 2.4158	* 3.0636	* 2.4330	* 2.5658	* 2.3231	* 2.4780	* 2.8122
11	* 1.6333	* 1.5690	* 1.6868	* 1.5765	* 1.6536	* 1.4973	* 1.6825	* 1.0025
	* 2.4822	* 2.5673	* 2.4304	* 2.5650	* 2.4351	* 2.7129	* 2.4284	* 3.9472
12	* 1.6386	* 1.7232	* 1.6011	* 1.6536	* 1.5026	* 1.5819	* 1.1931	*
	* 2.4131	* 2.3025	* 2.5703	* 2.4337	* 2.5414	* 2.4337	* 3.3249	*
13	* 1.7136	* 1.5058	* 1.7018	* 1.4962	* 1.5862	* 1.1813	* .7004	*
	* 2.3013	* 2.6143	* 2.3231	* 2.7146	* 2.4270	* 3.1951	* 5.4729	*
14	* 1.4201	* 1.6954	* 1.5969	* 1.6815	* 1.1910	* .7004	*	*
	* 2.7272	* 2.3280	* 2.4780	* 2.4297	* 3.3299	* 5.4797	*	*
15	* .8043	* 1.0699	* 1.3752	* 1.0025	F-SUB-Q			
	* 4.7434	* 3.6088	* 2.8140	* 3.9472	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1053	* 1.6001	* 1.5208	* 1.6611	* 1.6600	* 1.7447	* 1.4373	* .8118
	* 4.1824	* 2.9084	* 3.0115	* 2.7205	* 2.6409	* 2.5047	* 2.9750	* 5.1645
9	* 1.6001	* 1.4908	* 1.7190	* 1.5904	* 1.7511	* 1.5283	* 1.7382	* 1.0913
	* 2.9084	* 3.1221	* 2.6472	* 2.8176	* 2.5076	* 2.8558	* 2.5233	* 3.9157
10	* 1.5208	* 1.7232	* 1.3762	* 1.7243	* 1.6397	* 1.7543	* 1.6429	* 1.4137
	* 3.0115	* 2.6409	* 3.3517	* 2.6567	* 2.8104	* 2.5190	* 2.6858	* 3.0363
11	* 1.6611	* 1.5926	* 1.7265	* 1.6418	* 1.7254	* 1.5583	* 1.7479	* 1.0346
	* 2.7205	* 2.8158	* 2.6536	* 2.7998	* 2.6583	* 2.9591	* 2.6472	* 4.2672
12	* 1.6600	* 1.7532	* 1.6365	* 1.7243	* 1.6343	* 1.7093	* 1.2499	*
	* 2.6409	* 2.5061	* 2.8158	* 2.6583	* 2.7892	* 2.6664	* 3.6718	*
13	* 1.7447	* 1.5294	* 1.7532	* 1.5562	* 1.7147	* 1.2798	* .7454	*
	* 2.5047	* 2.8540	* 2.5190	* 2.9610	* 2.6599	* 3.5509	* 6.1146	*
14	* 1.4373	* 1.7382	* 1.6418	* 1.7468	* 1.2488	* .7443	*	*
	* 2.9750	* 2.5233	* 2.6874	* 2.6488	* 3.6748	* 6.1230	*	*
15	* .8118	* 1.0903	* 1.4126	* 1.0335	* F-SUB-Q			
	* 5.1645	* 3.9192	* 3.0384	* 4.2713	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0860	* 1.5712	* 1.4876	* 1.6268	* 1.6236	* 1.7104	* 1.4062	* .7915
	* 4.3046	* 2.9571	* 2.9591	* 2.6712	* 2.6314	* 2.5019	* 3.0074	* 5.2944
9	* 1.5712	* 1.4608	* 1.6847	* 1.5572	* 1.7157	* 1.4973	* 1.7125	* 1.0710
	* 2.9571	* 3.1331	* 2.6036	* 2.7786	* 2.5033	* 2.8558	* 2.5495	* 4.0116
10	* 1.4876	* 1.6890	* 1.3495	* 1.7029	* 1.6151	* 1.7404	* 1.6247	* 1.3912
	* 2.9591	* 2.5959	* 3.3016	* 2.6377	* 2.8104	* 2.5451	* 2.7205	* 3.1221
11	* 1.6268	* 1.5594	* 1.7050	* 1.6333	* 1.7222	* 1.5487	* 1.7339	* 1.0164
	* 2.6712	* 2.7752	* 2.6346	* 2.8595	* 2.7088	* 3.0115	* 2.6923	* 4.4120
12	* 1.6236	* 1.7179	* 1.6119	* 1.7222	* 1.6376	* 1.7147	* 1.2466	*
	* 2.6314	* 2.5019	* 2.8140	* 2.7088	* 2.8448	* 2.7155	* 3.7433	*
13	* 1.7104	* 1.4983	* 1.7393	* 1.5465	* 1.7200	* 1.2852	* .7433	*
	* 2.5019	* 2.8540	* 2.5451	* 3.0135	* 2.7088	* 3.6266	* 6.2707	*
14	* 1.4062	* 1.7125	* 1.6236	* 1.7329	* 1.2445	* .7422	*	*
	* 3.0074	* 2.5495	* 2.7222	* 2.6940	* 3.7496	* 6.2796	*	*
15	* .7915	* 1.0710	* 1.3902	* 1.0153	* F-SUB-Q			
	* 5.2944	* 4.0153	* 3.1243	* 4.4164	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0892	* 1.5862	* 1.4951	* 1.6408	* 1.6333	* 1.7297	* 1.4137	* .7947
	* 4.1667	* 2.7821	* 2.7998	* 2.5190	* 2.4934	* 2.3590	* 2.8430	* 4.9840
9	* 1.5862	* 1.4683	* 1.7007	* 1.5679	* 1.7318	* 1.5090	* 1.7404	* 1.0828
	* 2.7821	* 2.9650	* 2.4547	* 2.6299	* 2.3616	* 2.7022	* 2.3974	* 3.7720
10	* 1.4951	* 1.7050	* 1.3623	* 1.7297	* 1.6322	* 1.7746	* 1.6547	* 1.4169
	* 2.7998	* 2.4479	* 3.1177	* 2.4850	* 2.6583	* 2.3948	* 2.5569	* 2.9238
11	* 1.6408	* 1.5701	* 1.7318	* 1.6558	* 1.7564	* 1.5754	* 1.7704	* 1.0357
	* 2.5190	* 2.6268	* 2.4822	* 2.7962	* 2.6299	* 2.9046	* 2.5305	* 4.1355
12	* 1.6333	* 1.7350	* 1.6290	* 1.7564	* 1.6675	* 1.7554	* 1.2659	*
	* 2.4934	* 2.3603	* 2.6632	* 2.6314	* 2.7998	* 2.6599	* 3.6415	*
13	* 1.7297	* 1.5101	* 1.7736	* 1.5733	* 1.7597	* 1.3077	* .7593	*
	* 2.3590	* 2.7006	* 2.3948	* 2.9065	* 2.6520	* 3.5825	* 6.0893	*
14	* 1.4137	* 1.7404	* 1.6536	* 1.7693	* 1.2649	* .7583	*	*
	* 2.8430	* 2.3974	* 2.5584	* 2.5334	* 3.6475	* 6.0893	*	*
15	* .7947	* 1.0817	* 1.4159	* 1.0357	* F-SUB-Q			
	* 4.9840	* 3.7753	* 2.9277	* 4.1432	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0678	* 1.5637	* 1.4705	* 1.6172	* 1.6076	* 1.7072	* 1.3912	* .7786
	* 3.9122	* 2.5510	* 2.5777	* 2.3194	* 2.3001	* 2.1713	* 2.6221	* 4.6146
9	* 1.5637	* 1.4437	* 1.6772	* 1.5433	* 1.7093	* 1.4876	* 1.7211	* 1.0667
	* 2.5510	* 2.7255	* 2.2567	* 2.4250	* 2.1735	* 2.4906	* 2.2027	* 3.4728
10	* 1.4705	* 1.6815	* 1.3420	* 1.7115	* 1.6108	* 1.7597	* 1.6397	* 1.4009
	* 2.5777	* 2.2498	* 2.8725	* 2.2894	* 2.4547	* 2.2005	* 2.3490	* 2.6825
11	* 1.6172	* 1.5455	* 1.7136	* 1.6365	* 1.7414	* 1.5594	* 1.7554	* 1.0228
	* 2.3194	* 2.4224	* 2.2870	* 2.6112	* 2.4519	* 2.7088	* 2.3280	* 3.7980
12	* 1.6076	* 1.7115	* 1.6076	* 1.7414	* 1.6515	* 1.7414	* 1.2520	*
	* 2.3001	* 2.1724	* 2.4587	* 2.4547	* 2.6314	* 2.4794	* 3.4033	*
13	* 1.7072	* 1.4887	* 1.7586	* 1.5583	* 1.7468	* 1.2938	* .7497	*
	* 2.1713	* 2.4892	* 2.2005	* 2.7122	* 2.4725	* 3.3491	* 5.6896	*
14	* 1.3912	* 1.7222	* 1.6386	* 1.7543	* 1.2499	* .7486	*	*
	* 2.6221	* 2.2027	* 2.3503	* 2.3304	* 3.4085	* 5.6969	*	*
15	* .7786	* 1.0656	* 1.3998	* 1.0217	* F-SUB-Q			
	* 4.6146	* 3.4782	* 2.6842	* 3.8012	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0303	* 1.5133	* 1.4223	* 1.5647	* 1.5551	* 1.6515	* 1.3430	* .7497
	* 3.6326	* 2.3832	* 2.4144	* 2.1724	* 2.1639	* 2.0429	* 2.4767	* 4.3814
9	* 1.5133	* 1.3966	* 1.6236	* 1.4930	* 1.6547	* 1.4384	* 1.6643	* 1.0282
	* 2.3832	* 2.5480	* 2.1132	* 2.2753	* 2.0448	* 2.3465	* 2.0716	* 3.2844
10	* 1.4223	* 1.6279	* 1.2959	* 1.6579	* 1.5594	* 1.7040	* 1.5862	* 1.3505
	* 2.4144	* 2.1072	* 2.6940	* 2.1450	* 2.2989	* 2.0687	* 2.2071	* 2.5305
11	* 1.5647	* 1.4951	* 1.6600	* 1.5851	* 1.6890	* 1.5101	* 1.6986	* .9821
	* 2.1724	* 2.2729	* 2.1419	* 2.4317	* 2.2800	* 2.5076	* 2.1777	* 3.5913
12	* 1.5551	* 1.6568	* 1.5562	* 1.6890	* 1.6011	* 1.6879	* 1.2113	*
	* 2.1639	* 2.0438	* 2.3025	* 2.2823	* 2.4411	* 2.3097	* 3.1782	*
13	* 1.6515	* 1.4394	* 1.7029	* 1.5080	* 1.6933	* 1.2520	* .7208	*
	* 2.0429	* 2.3440	* 2.0677	* 2.5104	* 2.3025	* 3.1331	* 5.3651	*
14	* 1.3430	* 1.6643	* 1.5851	* 1.6965	* 1.2092	* .7208	*	*
	* 2.4767	* 2.0716	* 2.2082	* 2.1799	* 3.1805	* 5.3716	*	*
15	* .7497	* 1.0271	* 1.3495	* .9810	* F-SUB-Q			
	* 4.3814	* 3.2869	* 2.5334	* 3.5942	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0228	* 1.5090	* 1.4148	* 1.5594	* 1.5422	* 1.6408	* 1.3280	* .7379
	* 3.2482	* 2.1671	* 2.2126	* 1.9887	* 1.9995	* 1.8852	* 2.3001	* 4.0934
9	* 1.5090	* 1.3902	* 1.6172	* 1.4833	* 1.6461	* 1.4223	* 1.6515	* 1.0142
	* 2.1671	* 2.3255	* 1.9339	* 2.0922	* 1.8836	* 2.1703	* 1.9105	* 3.0531
10	* 1.4148	* 1.6226	* 1.2884	* 1.6493	* 1.5476	* 1.6890	* 1.5733	* 1.3377
	* 2.2126	* 1.9280	* 2.4670	* 1.9648	* 2.1082	* 1.9072	* 2.0316	* 2.3403
11	* 1.5594	* 1.4855	* 1.6515	* 1.5733	* 1.6793	* 1.4962	* 1.6847	* .9714
	* 1.9887	* 2.0892	* 1.9622	* 2.1853	* 2.0457	* 2.2636	* 1.9914	* 3.3090
12	* 1.5422	* 1.6483	* 1.5433	* 1.6793	* 1.5904	* 1.6772	* 1.1963	*
	* 1.9995	* 1.8804	* 2.1122	* 2.0476	* 2.2038	* 2.0843	* 2.8707	*
13	* 1.6408	* 1.4244	* 1.6879	* 1.4940	* 1.6825	* 1.2381	* .7144	*
	* 1.8852	* 2.1692	* 1.9072	* 2.2659	* 2.0784	* 2.8503	* 4.8581	*
14	* 1.3280	* 1.6515	* 1.5722	* 1.6836	* 1.1952	* .7144	*	*
	* 2.3001	* 1.9105	* 2.0326	* 1.9923	* 2.8744	* 4.8634	*	*
15	* .7379	* 1.0132	* 1.3366	* .9703	* F-SUB-Q			
	* 4.0934	* 3.0552	* 2.3415	* 3.3115	* M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9800 *	* 1.4459 *	* 1.3570 *	* 1.4930 *	* 1.4726 *	* 1.5562 *	* 1.2595 *	* .6951 *
	* 3.0980 *	* 2.0514 *	* 2.1203 *	* 1.9146 *	* 1.9364 *	* 1.8412 *	* 2.2521 *	* 4.0447 *
9	* 1.4459 *	* 1.3377 *	* 1.5465 *	* 1.4180 *	* 1.5690 *	* 1.3505 *	* 1.5551 *	* .9521 *
	* 2.0514 *	* 2.2060 *	* 1.8622 *	* 2.0196 *	* 1.8260 *	* 2.1173 *	* 1.8740 *	* 3.0135 *
10	* 1.3570 *	* 1.5508 *	* 1.2295 *	* 1.5669 *	* 1.4748 *	* 1.5894 *	* 1.4801 *	* 1.2499 *
	* 2.1203 *	* 1.8567 *	* 2.3768 *	* 1.8982 *	* 2.0270 *	* 1.8685 *	* 1.9896 *	* 2.3158 *
11	* 1.4930 *	* 1.4201 *	* 1.5690 *	* 1.4983 *	* 1.5915 *	* 1.4116 *	* 1.5829 *	* .9039 *
	* 1.9146 *	* 2.0168 *	* 1.8949 *	* 2.0892 *	* 1.9736 *	* 2.1810 *	* 1.9238 *	* 3.2747 *
12	* 1.4726 *	* 1.5712 *	* 1.4716 *	* 1.5915 *	* 1.5123 *	* 1.5840 *	* 1.1310 *	
	* 1.9364 *	* 1.8230 *	* 2.0307 *	* 1.9727 *	* 2.0853 *	* 1.9923 *	* 2.7682 *	
13	* 1.5562 *	* 1.3527 *	* 1.5883 *	* 1.4105 *	* 1.5883 *	* 1.1727 *	* .6704 *	
	* 1.8412 *	* 2.1152 *	* 1.8685 *	* 2.1842 *	* 1.9860 *	* 2.7006 *	* 4.6831 *	
14	* 1.2595 *	* 1.5551 *	* 1.4791 *	* 1.5829 *	* 1.1299 *	* .6694 *		
	* 2.2521 *	* 1.8740 *	* 1.9896 *	* 1.9246 *	* 2.7699 *	* 4.6880 *		
15	* .6951 *	* .9510 *	* 1.2488 *	* .9029 *	F-SUB-Q			
	* 4.0447 *	* 3.0176 *	* 2.3170 *	* 3.2795 *	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9553 *	* 1.3977 *	* 1.3141 *	* 1.4394 *	* 1.4169 *	* 1.4769 *	* 1.1963 *	* .6533 *
	* 2.8781 *	* 1.9570 *	* 2.0410 *	* 1.8552 *	* 1.8876 *	* 1.8208 *	* 2.2316 *	* 4.0558 *
9	* 1.3977 *	* 1.3066 *	* 1.4876 *	* 1.3634 *	* 1.5005 *	* 1.2863 *	* 1.4555 *	* .8857 *
	* 1.9570 *	* 2.0853 *	* 1.8066 *	* 1.9657 *	* 1.7898 *	* 2.0873 *	* 1.8724 *	* 3.0426 *
10	* 1.3141 *	* 1.4919 *	* 1.1899 *	* 1.4898 *	* 1.4126 *	* 1.4823 *	* 1.3827 *	* 1.1524 *
	* 2.0410 *	* 1.8015 *	* 2.2847 *	* 1.8513 *	* 1.9622 *	* 1.8653 *	* 1.9833 *	* 2.3553 *
11	* 1.4394 *	* 1.3655 *	* 1.4919 *	* 1.4298 *	* 1.5037 *	* 1.3248 *	* 1.4748 *	* .8343 *
	* 1.8552 *	* 1.9622 *	* 1.8482 *	* 1.9950 *	* 1.9014 *	* 2.1346 *	* 1.9096 *	* 3.3090 *
12	* 1.4169 *	* 1.5026 *	* 1.4094 *	* 1.5037 *	* 1.4373 *	* 1.4844 *	* 1.0614 *	
	* 1.8876 *	* 1.7869 *	* 1.9648 *	* 1.9006 *	* 2.0307 *	* 1.9683 *	* 2.7122 *	
13	* 1.4769 *	* 1.2884 *	* 1.4812 *	* 1.3238 *	* 1.4887 *	* 1.1031 *	* .6276 *	
	* 1.8208 *	* 2.0853 *	* 1.8653 *	* 2.1367 *	* 1.9622 *	* 2.6777 *	* 4.6584 *	
14	* 1.1963 *	* 1.4566 *	* 1.3816 *	* 1.4737 *	* 1.0603 *	* .6265 *		
	* 2.2316 *	* 1.8716 *	* 1.9833 *	* 1.9105 *	* 2.7155 *	* 4.6633 *		
15	* .6533 *	* .8846 *	* 1.1513 *	* .8332 *	F-SUB-Q			
	* 4.0558 *	* 3.0467 *	* 2.3565 *	* 3.3115 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8729 *	* 1.2306 *	* 1.1642 *	* 1.2574 *	* 1.2359 *	* 1.2659 *	* 1.0346 *	* .5558 *
	* 2.9610 *	* 2.0902 *	* 2.1885 *	* 2.0214 *	* 2.0629 *	* 2.0251 *	* 2.4656 *	* 4.5623 *
9	* 1.2306 *	* 1.1802 *	* 1.3002 *	* 1.1920 *	* 1.2873 *	* 1.1224 *	* 1.2156 *	* .7283 *
	* 2.0902 *	* 2.1756 *	* 1.9648 *	* 2.1398 *	* 1.9860 *	* 2.2847 *	* 2.1326 *	* 3.5282 *
10	* 1.1642 *	* 1.3045 *	* 1.0796 *	* 1.2820 *	* 1.2295 *	* 1.2595 *	* 1.1535 *	* .9136 *
	* 2.1885 *	* 1.9587 *	* 2.3871 *	* 2.0279 *	* 2.1213 *	* 2.0697 *	* 2.2521 *	* 2.8266 *
11	* 1.2574 *	* 1.1952 *	* 1.2841 *	* 1.2306 *	* 1.2649 *	* 1.1256 *	* 1.2124 *	* .6779 *
	* 2.0214 *	* 2.1357 *	* 2.0242 *	* 2.1628 *	* 2.1102 *	* 2.3768 *	* 2.1950 *	* 3.8677 *
12	* 1.2359 *	* 1.2895 *	* 1.2284 *	* 1.2659 *	* 1.2242 *	* 1.2284 *	* .8964 *	
	* 2.0629 *	* 1.9824 *	* 2.1234 *	* 2.1082 *	* 2.2160 *	* 2.2126 *	* 3.0156 *	
13	* 1.2659 *	* 1.1235 *	* 1.2595 *	* 1.1256 *	* 1.2316 *	* .9243 *	* .5173 *	
	* 2.0251 *	* 2.2823 *	* 2.0697 *	* 2.3781 *	* 2.2071 *	* 2.9670 *	* 5.2692 *	
14	* 1.0346 *	* 1.2156 *	* 1.1535 *	* 1.2124 *	* .8954 *	* .5173 *		
	* 2.4656 *	* 2.1315 *	* 2.2521 *	* 2.1961 *	* 3.0197 *	* 5.2755 *		
15	* .5558 *	* .7283 *	* .9136 *	* .6769 *	F-SUB-Q			
	* 4.5623 *	* 3.5310 *	* 2.8284 *	* 3.8711 *	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5998 *	* .8268 *	* .7251 *	* .7850 *	* .4927 *	* .8268 *	* .4091 *	* .3631 *
	* 4.1124 *	* 2.9810 *	* 3.3876 *	* 3.1287 *	* 4.9505 *	* 2.9810 *	* 5.9580 *	* 6.7391 *
9	* .8268 *	* .4916 *	* .8814 *	* .7454 *	* .8579 *	* .7058 *	* .7497 *	* .4295 *
	* 2.9810 *	* 4.9616 *	* 2.7998 *	* 3.3041 *	* 2.8913 *	* 3.5003 *	* 3.3189 *	* 5.7563 *
10	* .7251 *	* .8857 *	* .7347 *	* .8707 *	* .4948 *	* .8236 *	* .4230 *	* .5184 *
	* 3.3876 *	* 2.7892 *	* 3.3747 *	* 2.8632 *	* 5.0066 *	* 3.0531 *	* 5.8477 *	* 4.7896 *
11	* .7850 *	* .7486 *	* .8782 *	* .4905 *	* .8193 *	* .6897 *	* .7294 *	* .3898 *
	* 3.1287 *	* 3.2918 *	* 2.8375 *	* 5.0990 *	* 3.0980 *	* 3.7244 *	* 3.4865 *	* 6.4538 *
12	* .4927 *	* .8589 *	* .4959 *	* .8215 *	* .4627 *	* .7401 *	* .3342 *	
	* 4.9505 *	* 2.8875 *	* 5.0009 *	* 3.0915 *	* 5.5468 *	* 3.5086 *	* 7.7287 *	
13	* .8268 *	* .7069 *	* .8236 *	* .6897 *	* .7422 *	* .3416 *	* .3288 *	
	* 2.9810 *	* 3.4975 *	* 3.0510 *	* 3.7244 *	* 3.4975 *	* 7.6090 *	* 7.8943 *	
14	* .4091 *	* .7497 *	* .4230 *	* .7294 *	* .3342 *	* .3288 *		
	* 5.9580 *	* 3.3165 *	* 5.8477 *	* 3.4892 *	* 7.7287 *	* 7.8943 *		
15	* .3631 *	* .4295 *	* .5173 *	* .3898 *	F-SUB-Q			
	* 6.7391 *	* 5.7563 *	* 4.7896 *	* 6.4632 *	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5826 *	* .9029 *	* .8547 *	* .9082 *	* .6073 *	* .9660 *	* .5087 *	* .4691 *
	* 2.9546 *	* 2.3438 *	* 2.4809 *	* 2.3369 *	* 3.4690 *	* 2.1899 *	* 4.1143 *	* 4.4531 *
9	* .9029 *	* .5890 *	* 1.0100 *	* .8761 *	* .9896 *	* .8311 *	* .8343 *	* .5109 *
	* 2.3438 *	* 3.5747 *	* 2.1016 *	* 2.4238 *	* 2.1421 *	* 2.5435 *	* 2.5232 *	* 4.0777 *
10	* .8547 *	* 1.0132 *	* .8568 *	* .9864 *	* .5826 *	* .9007 *	* .4830 *	* .5933 *
	* 2.4809 *	* 2.0952 *	* 2.4704 *	* 2.1477 *	* 3.6060 *	* 2.3341 *	* 4.2995 *	* 3.5011 *
11	* .9082 *	* .8782 *	* .9917 *	* .5569 *	* .8514 *	* .6929 *	* .7411 *	* .4391 *
	* 2.3369 *	* 2.4166 *	* 2.1355 *	* 3.7611 *	* 2.4455 *	* 2.9104 *	* 2.8051 *	* 4.7137 *
12	* .6073 *	* .9907 *	* .5826 *	* .8525 *	* .3641 *	* .5869 *	* .3202 *	
	* 3.4690 *	* 2.1398 *	* 3.6028 *	* 2.4415 *	* 4.0881 *	* 2.6931 *	* 5.8136 *	
13	* .9660 *	* .8311 *	* .9018 *	* .6929 *	* .5869 *	* .2592 *	* .3031 *	
	* 2.1899 *	* 2.5419 *	* 2.3329 *	* 2.9119 *	* 2.6982 *	* 5.4697 *	* 5.4845 *	
14	* .5087 *	* .8343 *	* .4830 *	* .7411 *	* .3202 *	* .3020 *		
	* 4.1143 *	* 2.5232 *	* 4.2953 *	* 2.8051 *	* 5.8136 *	* 5.4845 *		
15	* .4691 *	* .5109 *	* .5933 *	* .4391 *	F-SUB-Q			
	* 4.4531 *	* 4.0815 *	* 3.5011 *	* 4.7141 *	M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7925 *	* 1.2798 *	* 1.2745 *	* 1.3355 *	* 1.3666 *	* 1.3677 *	* 1.1674 *	* .6715 *
	* 2.2688 *	* 1.7405 *	* 1.7478 *	* 1.6662 *	* 1.6328 *	* 1.6302 *	* 1.9002 *	* 3.2794 *
9	* 1.2798 *	* 1.2788 *	* 1.3891 *	* 1.2991 *	* 1.3859 *	* 1.2284 *	* 1.2499 *	* .7883 *
	* 1.7405 *	* 1.7426 *	* 1.6047 *	* 1.7147 *	* 1.6102 *	* 1.8105 *	* 1.7705 *	* 2.7868 *
10	* 1.2745 *	* 1.3912 *	* 1.1770 *	* 1.3430 *	* 1.2991 *	* 1.3013 *	* 1.1492 *	* .9382 *
	* 1.7478 *	* 1.6016 *	* 1.8902 *	* 1.6575 *	* 1.7111 *	* 1.7055 *	* 1.9142 *	* 2.3335 *
11	* 1.3355 *	* 1.3013 *	* 1.3527 *	* 1.2434 *	* 1.2102 *	* 1.0346 *	* 1.1288 *	* .6854 *
	* 1.6662 *	* 1.7126 *	* 1.6464 *	* 1.7836 *	* 1.7951 *	* 2.0127 *	* 1.9357 *	* 3.1724 *
12	* 1.3666 *	* 1.3869 *	* 1.2991 *	* 1.2113 *	* .8482 *	* .9168 *	* .7861 *	
	* 1.6328 *	* 1.6083 *	* 1.7111 *	* 1.7946 *	* 1.8074 *	* 1.8503 *	* 2.4809 *	
13	* 1.3677 *	* 1.2295 *	* 1.3013 *	* 1.0346 *	* .9168 *	* .6447 *	* .4380 *	
	* 1.6302 *	* 1.8089 *	* 1.7055 *	* 2.0134 *	* 1.8472 *	* 2.3319 *	* 3.9749 *	
14	* 1.1674 *	* 1.2509 *	* 1.1492 *	* 1.1288 *	* .7850 *	* .4380 *		
	* 1.9002 *	* 1.7697 *	* 1.9142 *	* 1.9366 *	* 2.4824 *	* 3.9777 *		
15	* .6715 *	* .7883 *	* .9382 *	* .6854 *	F-SUB-Q			
	* 3.2794 *	* 2.7886 *	* 2.3336 *	* 3.1725 *	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8825 *	* 1.4683 *	* 1.4309 *	* 1.5165 *	* 1.5540 *	* 1.6001 *	* 1.3430 *	* .7733 *
	* 2.1794 *	* 1.6094 *	* 1.6495 *	* 1.5546 *	* 1.5192 *	* 1.4737 *	* 1.7505 *	* 3.0162 *
9	* 1.4683 *	* 1.4276 *	* 1.5883 *	* 1.4758 *	* 1.6076 *	* 1.4116 *	* 1.4823 *	* .9339 *
	* 1.6094 *	* 1.6566 *	* 1.4874 *	* 1.5991 *	* 1.4692 *	* 1.6664 *	* 1.5793 *	* 2.4834 *
10	* 1.4309 *	* 1.5915 *	* 1.3066 *	* 1.5604 *	* 1.4844 *	* 1.5262 *	* 1.3559 *	* 1.1513 *
	* 1.6495 *	* 1.4843 *	* 1.8054 *	* 1.5129 *	* 1.5865 *	* 1.5381 *	* 1.7124 *	* 2.0054 *
11	* 1.5165 *	* 1.4780 *	* 1.5626 *	* 1.4191 *	* 1.4287 *	* 1.2092 *	* 1.3591 *	* .8204 *
	* 1.5546 *	* 1.5967 *	* 1.5107 *	* 1.6404 *	* 1.5894 *	* 1.8247 *	* 1.7014 *	* 2.8046 *
12	* 1.5540 *	* 1.6097 *	* 1.4844 *	* 1.4298 *	* .9800 *	* 1.1053 *	* .9157 *	
	* 1.5192 *	* 1.4681 *	* 1.5871 *	* 1.5894 *	* 1.6381 *	* 1.6312 *	* 2.2561 *	
13	* 1.6001 *	* 1.4126 *	* 1.5262 *	* 1.2081 *	* 1.1042 *	* .7679 *	* .5226 *	
	* 1.4737 *	* 1.6658 *	* 1.5381 *	* 1.8249 *	* 1.6282 *	* 2.1010 *	* 3.5437 *	
14	* 1.3430 *	* 1.4833 *	* 1.3559 *	* 1.3591 *	* .9146 *	* .5226 *		
	* 1.7505 *	* 1.5781 *	* 1.7131 *	* 1.7021 *	* 2.2582 *	* 3.5467 *		
15	* .7733 *	* .9339 *	* 1.1513 *	* .8204 *	F-SUB-Q			
	* 3.0162 *	* 2.4848 *	* 2.0063 *	* 2.8047 *	M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9264 *	* 1.5497 *	* 1.4833 *	* 1.5840 *	* 1.6290 *	* 1.7082 *	* 1.4126 *	* .8107 *
	* 2.2748 *	* 1.6460 *	* 1.7124 *	* 1.6001 *	* 1.5541 *	* 1.4812 *	* 1.7818 *	* 3.0788 *
9	* 1.5497 *	* 1.4791 *	* 1.6718 *	* 1.5412 *	* 1.7029 *	* 1.4898 *	* 1.5947 *	* .9960 *
	* 1.6460 *	* 1.7240 *	* 1.5196 *	* 1.6435 *	* 1.4848 *	* 1.6940 *	* 1.5735 *	* 2.4999 *
10	* 1.4833 *	* 1.6750 *	* 1.3634 *	* 1.6600 *	* 1.5594 *	* 1.6343 *	* 1.4566 *	* 1.2488 *
	* 1.7124 *	* 1.5164 *	* 1.8624 *	* 1.5266 *	* 1.6218 *	* 1.5430 *	* 1.7137 *	* 1.9862 *
11	* 1.5840 *	* 1.5433 *	* 1.6622 *	* 1.4898 *	* 1.5305 *	* 1.2938 *	* 1.4737 *	* .8836 *
	* 1.6001 *	* 1.6422 *	* 1.5244 *	* 1.6710 *	* 1.5916 *	* 1.8465 *	* 1.6859 *	* 2.7932 *
12	* 1.6290 *	* 1.7040 *	* 1.5583 *	* 1.5315 *	* 1.0464 *	* 1.2049 *	* .9725 *	
	* 1.5541 *	* 1.4843 *	* 1.6230 *	* 1.5916 *	* 1.6663 *	* 1.6293 *	* 2.3000 *	
13	* 1.7082 *	* 1.4908 *	* 1.6343 *	* 1.2927 *	* 1.2049 *	* .8257 *	* .5601 *	
	* 1.4812 *	* 1.6927 *	* 1.5430 *	* 1.8465 *	* 1.6262 *	* 2.1449 *	* 3.6006 *	
14	* 1.4126 *	* 1.5958 *	* 1.4566 *	* 1.4737 *	* .9714 *	* .5591 *		
	* 1.7818 *	* 1.5723 *	* 1.7137 *	* 1.6866 *	* 2.3025 *	* 3.6015 *		
15	* .8107 *	* .9950 *	* 1.2477 *	* .8836 *	F-SUB-Q			
	* 3.0788 *	* 2.5013 *	* 1.9871 *	* 2.7932 *	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9232	* 1.5358	* 1.4566	* 1.5594	* 1.6086	* 1.7007	* 1.3977	* .8000
	* 2.5313	* 1.8300	* 1.9163	* 1.7826	* 1.7174	* 1.6225	* 1.9616	* 3.3996
9	* 1.5358	* 1.4533	* 1.6536	* 1.5187	* 1.6965	* 1.4769	* 1.5958	* .9917
	* 1.8300	* 1.9326	* 1.6865	* 1.8256	* 1.6268	* 1.8634	* 1.7119	* 2.7326
10	* 1.4566	* 1.6568	* 1.3462	* 1.6526	* 1.5444	* 1.6333	* 1.4576	* 1.2509
	* 1.9163	* 1.6832	* 2.0717	* 1.6799	* 1.7937	* 1.6872	* 1.8658	* 2.1566
11	* 1.5594	* 1.5208	* 1.6547	* 1.4758	* 1.5315	* 1.2959	* 1.4823	* .8825
	* 1.7826	* 1.8240	* 1.6773	* 1.8381	* 1.7414	* 2.0266	* 1.8349	* 3.0577
12	* 1.6086	* 1.6965	* 1.5422	* 1.5315	* 1.0560	* 1.2188	* .9714	*
	* 1.7174	* 1.6268	* 1.7952	* 1.7414	* 1.8404	* 1.7858	* 2.5359	*
13	* 1.7007	* 1.4780	* 1.6322	* 1.2948	* 1.2177	* .8311	* .5591	*
	* 1.6225	* 1.8626	* 1.6072	* 2.0276	* 1.7821	* 2.3857	* 4.0070	*
14	* 1.3977	* 1.5958	* 1.4576	* 1.4823	* .9703	* .5591	*	*
	* 1.9616	* 1.7119	* 1.8666	* 1.8357	* 2.5376	* 4.0073	*	*
15	* .8000	* .9907	* 1.2509	* .8825	* F-SUB-Q			
	* 3.3996	* 2.7343	* 2.1577	* 3.0599	* M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9328	* 1.5615	* 1.4662	* 1.5776	* 1.6258	* 1.7350	* 1.4137	* .8075
	* 2.7680	* 1.9872	* 2.1324	* 1.9741	* 1.9005	* 1.7795	* 2.1640	* 3.7555
9	* 1.5615	* 1.4651	* 1.6783	* 1.5347	* 1.7297	* 1.4983	* 1.6365	* 1.0089
	* 1.9872	* 2.1463	* 1.8610	* 2.0251	* 1.7838	* 2.0555	* 1.8666	* 2.9941
10	* 1.4662	* 1.6825	* 1.3655	* 1.6858	* 1.5647	* 1.6708	* 1.4951	* 1.2863
	* 2.1324	* 1.8571	* 2.2905	* 1.8461	* 1.9866	* 1.8492	* 2.0355	* 2.3369
11	* 1.5776	* 1.5369	* 1.6879	* 1.4973	* 1.5679	* 1.3270	* 1.5272	* .9071
	* 1.9741	* 2.0232	* 1.8438	* 2.0039	* 1.8898	* 2.1974	* 1.9826	* 3.3130
12	* 1.6258	* 1.7297	* 1.5626	* 1.5690	* 1.0753	* 1.2606	* .9917	*
	* 1.9005	* 1.7838	* 1.9893	* 1.8890	* 2.0294	* 1.9469	* 2.7758	*
13	* 1.7350	* 1.4983	* 1.6697	* 1.3259	* 1.2606	* .8525	* .5751	*
	* 1.7795	* 2.0545	* 1.8500	* 2.1990	* 1.9435	* 2.6470	* 4.4082	*
14	* 1.4137	* 1.6376	* 1.4951	* 1.5272	* .9907	* .5751	*	*
	* 2.1640	* 1.8666	* 2.0364	* 1.9831	* 2.7785	* 4.4103	*	*
15	* .8075	* 1.0089	* 1.2852	* .9071	* F-SUB-Q			
	* 3.7555	* 2.9962	* 2.3382	* 3.3130	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.9232	1.5487	1.4459	1.5583	1.6044	1.7190	1.3944	.7947
	3.1761	2.2593	2.4357	2.2452	2.1481	1.9995	2.4330	4.2143
9	1.5487	1.4459	1.6611	1.5155	1.7147	1.4812	1.6301	1.0003
	2.2593	2.4512	2.1142	2.2989	2.0058	2.3158	2.0883	3.3567
10	1.4459	1.6654	1.3516	1.6740	1.5497	1.6622	1.4898	1.2809
	2.4357	2.1102	2.6066	2.0863	2.2521	2.0794	2.2823	2.6143
11	1.5583	1.5165	1.6761	1.4865	1.5658	1.3270	1.5294	.9039
	2.2452	2.2965	2.0843	2.2760	2.1383	2.4917	2.2396	3.7150
12	1.6044	1.7157	1.5476	1.5658	1.0764	1.2713	.9928	
	2.1481	2.0058	2.2555	2.1383	2.2997	2.1951	3.1443	
13	1.7190	1.4823	1.6611	1.3259	1.2702	.8589	.5783	
	1.9995	2.3146	2.0794	2.4931	2.1908	3.0001	4.9833	
14	1.3944	1.6301	1.4898	1.5294	.9917	.5783		
	2.4330	2.0883	2.2823	2.2402	3.1477	4.9861		
15	.7947	.9992	1.2809	.9039	F-SUB-Q			
	4.2143	3.3593	2.6143	3.7181	M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.9243	1.5380	1.4244	1.5358	1.5765	1.6943	1.3698	.7786
	3.7033	2.6216	2.8069	2.5777	2.4492	2.2718	2.7647	4.7793
9	1.5380	1.4298	1.6408	1.4919	1.6911	1.4576	1.6151	.9864
	2.6216	2.8485	2.4277	2.6314	2.2788	2.6330	2.3578	3.7850
10	1.4244	1.6440	1.3355	1.6579	1.5326	1.6472	1.4780	1.2691
	2.8069	2.4224	2.9972	2.3832	2.5747	2.3590	2.5732	2.9355
11	1.5358	1.4930	1.6600	1.4791	1.5679	1.3302	1.5294	.8964
	2.5777	2.6299	2.3806	2.6559	2.4823	2.8937	2.5291	4.1943
12	1.5765	1.6911	1.5315	1.5679	1.0946	1.2970	1.0025	
	2.4492	2.2788	2.5792	2.4823	2.6820	2.5512	3.6634	
13	1.6943	1.4587	1.6461	1.3291	1.2970	.8846	.5901	
	2.2718	2.6314	2.3603	2.8956	2.5468	3.4981	5.8117	
14	1.3698	1.6151	1.4780	1.5283	1.0014	.5890		
	2.7647	2.3578	2.5747	2.5305	3.6665	5.8117		
15	.7786	.9864	1.2681	.8964	F-SUB-Q			
	4.7793	3.7882	2.9374	4.1983	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 10 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0067	* 1.5819	* 1.4416	* 1.5540	* 1.5862	* 1.7147	* 1.3762	* .7808
	* 3.9613	* 2.8033	* 3.1443	* 2.8970	* 2.7578	* 2.5422	* 3.0980	* 5.3521
9	* 1.5819	* 1.4566	* 1.6654	* 1.5058	* 1.7115	* 1.4694	* 1.6451	* .9982
	* 2.8033	* 3.0658	* 2.7222	* 2.9670	* 2.5510	* 2.9571	* 2.6268	* 4.2224
10	* 1.4416	* 1.6697	* 1.3570	* 1.6900	* 1.5583	* 1.6793	* 1.5090	* 1.2938
	* 3.1443	* 2.7155	* 3.3340	* 2.6728	* 2.8951	* 2.6314	* 2.8707	* 3.2578
11	* 1.5540	* 1.5080	* 1.6922	* 1.5187	* 1.6290	* 1.3784	* 1.5797	* .9178
	* 2.8970	* 2.9630	* 2.6696	* 2.8707	* 2.6744	* 3.1443	* 2.8122	* 4.6633
12	* 1.5862	* 1.7115	* 1.5562	* 1.6290	* 1.2145	* .4019	* 1.0517	*
	* 2.7578	* 2.5510	* 2.8989	* 2.6744	* 2.9180	* 2.7752	* 4.0263	*
13	* 1.7147	* 1.4705	* 1.6783	* 1.3773	* 1.4019	* .9778	* .6330	*
	* 2.5422	* 2.9551	* 2.6314	* 3.1465	* 2.7682	* 3.8644	* 6.4444	*
14	* 1.3762	* 1.6451	* 1.5080	* 1.5797	* 1.0507	* .6319	*	*
	* 3.0980	* 2.6268	* 2.8707	* 2.8122	* 4.0299	* 6.4444	*	*
15	* .7808	* .9971	* 1.2927	* .9178	* F-SUB-Q			
	* 5.3521	* 4.2264	* 3.2578	* 4.6682	* M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 9 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0785	* 1.5808	* 1.4212	* 1.5283	* 1.5540	* 1.6825	* 1.3462	* .7615
	* 4.1124	* 2.8951	* 3.0764	* 2.8230	* 2.7357	* 2.5320	* 3.1265	* 5.4849
9	* 1.5808	* 1.4469	* 1.6408	* 1.4791	* 1.6793	* 1.4416	* 1.6236	* .9810
	* 2.8951	* 3.1177	* 2.6536	* 2.9065	* 2.5392	* 2.9472	* 2.6599	* 4.3384
10	* 1.4212	* 1.6451	* 1.3398	* 1.6708	* 1.5433	* 1.6611	* 1.4919	* 1.2745
	* 3.0764	* 2.6472	* 3.2893	* 2.6393	* 2.8781	* 2.6409	* 2.9180	* 3.3670
11	* 1.5283	* 1.4812	* 1.6729	* 1.5251	* 1.6451	* 1.3934	* 1.5819	* .9071
	* 2.8230	* 2.9046	* 2.6362	* 2.9630	* 2.7578	* 3.2387	* 2.8800	* 4.8474
12	* 1.5540	* 1.6793	* 1.5412	* 1.6461	* 1.4362	* 1.5240	* 1.0785	*
	* 2.7357	* 2.5378	* 2.8819	* 2.7578	* 3.0094	* 2.8595	* 4.1471	*
13	* 1.6825	* 1.4426	* 1.6600	* 1.3923	* 1.5272	* 1.0796	* .6576	*
	* 2.5320	* 2.9453	* 2.6425	* 3.2411	* 2.8540	* 3.9863	* 6.6780	*
14	* 1.3462	* 1.6236	* 1.4919	* 1.5808	* 1.0774	* .6565	*	*
	* 3.1265	* 2.6599	* 2.9180	* 2.8819	* 4.1510	* 6.6881	*	*
15	* .7615	* .9800	* 1.2745	* .9061	* F-SUB-Q			
	* 5.4849	* 4.3427	* 3.3695	* 4.8527	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1299 * * 4.0080 *	* 1.6247 * * 2.7205 *	* 1.4416 * * 2.9142 *	* 1.5519 * * 2.6680 *	* 1.5701 * * 2.5944 *	* 1.7093 * * 2.3883 *	* 1.3591 * * 2.9531 *	* .7668 * * 5.1405 *
9	* 1.6247 * * 2.7205 *	* 1.4748 * * 2.9512 *	* 1.6718 * * 2.5019 *	* 1.4983 * * 2.7544 *	* 1.7072 * * 2.3961 *	* 1.4598 * * 2.7927 *	* 1.6590 * * 2.5047 *	* .9960 * * 4.0707 *
10	* 1.4416 * * 2.9142 *	* 1.6761 * * 2.4962 *	* 1.3645 * * 3.1089 *	* 1.7072 * * 2.4864 *	* 1.5722 * * 2.7255 *	* 1.6986 * * 2.4892 *	* 1.5272 * * 2.7476 *	* 1.3045 * * 3.1443 *
11	* 1.5519 * * 2.6680 *	* 1.5005 * * 2.7510 *	* 1.7093 * * 2.4836 *	* 1.5765 * * 2.8725 *	* 1.7050 * * 2.6615 *	* 1.4437 * * 3.1287 *	* 1.6354 * * 2.7039 *	* .9318 * * 4.5342 *
12	* 1.5701 * * 2.5944 *	* 1.7093 * * 2.3948 *	* 1.5701 * * 2.7306 *	* 1.7061 * * 2.6615 *	* 1.5401 * * 2.9790 *	* 1.6311 * * 2.7945 *	* 1.1235 * * 4.0116 *	
13	* 1.7093 * * 2.3883 *	* 1.4608 * * 2.7909 *	* 1.6975 * * 2.4906 *	* 1.4426 * * 3.1331 *	* 1.6343 * * 2.7892 *	* 1.1578 * * 3.9261 *	* .6951 * * 6.4350 *	
14	* 1.3591 * * 2.9531 *	* 1.6600 * * 2.5047 *	* 1.5272 * * 2.7476 *	* 1.6343 * * 2.7055 *	* 1.1224 * * 4.0153 *	* .6951 * * 6.4350 *		
15	* .7668 * * 5.1405 *	* .9950 * * 4.0745 *	* 1.3045 * * 3.1465 *	* .9307 * * 4.5388 *	F-SUB-Q M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1267 * * 3.7433 *	* 1.6215 * * 2.4850 *	* 1.4319 * * 2.6680 *	* 1.5422 * * 2.4411 *	* 1.5562 * * 2.3742 *	* 1.6986 * * 2.1810 *	* 1.3452 * * 2.7022 *	* .7572 * * 4.7231 *
9	* 1.6215 * * 2.4850 *	* 1.4683 * * 2.7006 *	* 1.6633 * * 2.2870 *	* 1.4865 * * 2.5219 *	* 1.7018 * * 2.1874 *	* 1.4469 * * 2.5524 *	* 1.6547 * * 2.2776 *	* .9885 * * 3.7212 *
10	* 1.4319 * * 2.6680 *	* 1.6675 * * 2.2811 *	* 1.3580 * * 2.8466 *	* 1.7125 * * 2.2753 *	* 1.5669 * * 2.4991 *	* 1.6943 * * 2.2741 *	* 1.5240 * * 2.4991 *	* 1.3002 * * 2.8632 *
11	* 1.5422 * * 2.4411 *	* 1.4887 * * 2.5190 *	* 1.7147 * * 2.2718 *	* 1.5808 * * 2.6362 *	* 1.7115 * * 2.4711 *	* 1.4491 * * 2.8838 *	* 1.6408 * * 2.4601 *	* .9296 * * 4.1316 *
12	* 1.5562 * * 2.3742 *	* 1.7040 * * 2.1964 *	* 1.5637 * * 2.5019 *	* 1.7125 * * 2.4711 *	* 1.5594 * * 2.7682 *	* 1.6536 * * 2.5929 *	* 1.1320 * * 3.7401 *	
13	* 1.6986 * * 2.1810 *	* 1.4480 * * 2.5495 *	* 1.6933 * * 2.2741 *	* 1.4480 * * 2.8857 *	* 1.6579 * * 2.5868 *	* 1.1749 * * 3.6475 *	* .7036 * * 5.9984 *	
14	* 1.3452 * * 2.7022 *	* 1.6547 * * 2.2776 *	* 1.5240 * * 2.4991 *	* 1.6408 * * 2.4615 *	* 1.1310 * * 3.7433 *	* .7026 * * 6.0066 *		
15	* .7572 * * 4.7231 *	* .9885 * * 3.7244 *	* 1.3002 * * 2.8632 *	* .9286 * * 4.1355 *	F-SUB-Q M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0978	* 1.5829	* 1.3966	* 1.5037	* 1.5165	* 1.6547	* 1.3098	* .7347
	* 3.4484	* 2.3025	* 2.4767	* 2.2683	* 2.2148	* 2.0363	* 2.5276	* 4.4430
9	* 1.5829	* 1.4351	* 1.6226	* 1.4501	* 1.6611	* 1.4105	* 1.6140	* .9628
	* 2.3025	* 2.5033	* 2.1244	* 2.3478	* 2.0410	* 2.3819	* 2.1244	* 3.4810
10	* 1.3966	* 1.6268	* 1.3238	* 1.6761	* 1.5337	* 1.6536	* 1.4876	* 1.2670
	* 2.4767	* 2.1193	* 2.6456	* 2.1142	* 2.3194	* 2.1152	* 2.3255	* 2.6744
11	* 1.5037	* 1.4512	* 1.6783	* 1.5508	* 1.6761	* 1.4212	* 1.6054	* .9029
	* 2.2683	* 2.3453	* 2.1112	* 2.4398	* 2.2659	* 2.6583	* 2.2811	* 3.8644
12	* 1.5165	* 1.6633	* 1.5305	* 1.6761	* 1.5337	* 1.6258	* 1.1117	*
	* 2.2148	* 2.0401	* 2.3231	* 2.2648	* 2.5407	* 2.3909	* 3.4511	*
13	* 1.6547	* 1.4116	* 1.6526	* 1.4191	* 1.6290	* 1.1567	* .6887	*
	* 2.0363	* 2.3806	* 2.1162	* 2.6599	* 2.3858	* 3.3721	* 5.5889	*
14	* 1.3098	* 1.6140	* 1.4876	* 1.6044	* 1.1106	* .6887	*	*
	* 2.5276	* 2.1234	* 2.3268	* 2.2823	* 3.4538	* 5.5889	*	*
15	* .7347	* .9618	* 1.2659	* .9029	F-SUB-Q			
	* 4.4430	* 3.4837	* 2.6760	* 3.8677	M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0967	* 1.5883	* 1.3966	* 1.5069	* 1.5144	* 1.6568	* 1.3066	* .7315
	* 3.0552	* 2.0775	* 2.2544	* 2.0629	* 2.0298	* 1.8622	* 2.3255	* 4.1048
9	* 1.5883	* 1.4351	* 1.6268	* 1.4491	* 1.6654	* 1.4073	* 1.6161	* .9596
	* 2.0775	* 2.2683	* 1.9297	* 2.1429	* 1.8661	* 2.1853	* 1.9390	* 3.2012
10	* 1.3966	* 1.6311	* 1.3248	* 1.6825	* 1.5337	* 1.6579	* 1.4908	* 1.2691
	* 2.2544	* 1.9246	* 2.4052	* 1.9213	* 2.1112	* 1.9263	* 2.1203	* 2.4451
11	* 1.5069	* 1.4512	* 1.6836	* 1.5530	* 1.6815	* 1.4212	* 1.6108	* .9039
	* 2.0629	* 2.1408	* 1.9188	* 2.1929	* 2.0186	* 2.3819	* 2.0629	* 3.5226
12	* 1.5144	* 1.6675	* 1.5305	* 1.6815	* 1.5380	* 1.6343	* 1.1117	*
	* 2.0298	* 1.8645	* 2.1152	* 2.0177	* 2.2636	* 2.1264	* 3.0722	*
13	* 1.6568	* 1.4084	* 1.6568	* 1.4201	* 1.6386	* 1.1588	* .6919	*
	* 1.8622	* 2.1842	* 1.9271	* 2.3832	* 2.1213	* 3.0238	* 4.9840	*
14	* 1.3066	* 1.6172	* 1.4898	* 1.6097	* 1.1117	* .6919	*	*
	* 2.3255	* 1.9381	* 2.1213	* 2.0648	* 3.0743	* 4.9840	*	*
15	* .7315	* .9596	* 1.2681	* .9039	F-SUB-Q			
	* 4.1048	* 3.2035	* 2.4465	* 3.5254	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0539	* 1.5272	* 1.3473	* 1.4512	* 1.4555	* 1.5829	* 1.2531	* .6972
	* 2.9008	* 1.9527	* 2.1450	* 1.9727	* 1.9544	* 1.8029	* 2.2509	* 4.0008
9	* 1.5272	* 1.3880	* 1.5626	* 1.3934	* 1.5936	* 1.3484	* 1.5401	* .9146
	* 1.9527	* 2.1388	* 1.8466	* 2.0552	* 1.8059	* 2.1112	* 1.8788	* 3.1089
10	* 1.3473	* 1.5669	* 1.2713	* 1.6097	* 1.4748	* 1.5829	* 1.4212	* 1.2038
	* 2.1450	* 1.8412	* 2.2977	* 1.8428	* 2.0131	* 1.8544	* 2.0486	* 2.3819
11	* 1.4512	* 1.3955	* 1.6119	* 1.4930	* 1.6097	* 1.3612	* 1.5326	* .8547
	* 1.9727	* 2.0524	* 1.8397	* 2.0668	* 1.9113	* 2.2544	* 1.9701	* 3.4270
12	* 1.4555	* 1.5958	* 1.4716	* 1.6097	* 1.4801	* 1.5615	* 1.0689	
	* 1.9544	* 1.8052	* 2.0159	* 1.9105	* 2.1223	* 2.0122	* 2.9180	
13	* 1.5829	* 1.3495	* 1.5819	* 1.3602	* 1.5658	* 1.1149	* .6587	
	* 1.8029	* 2.1092	* 1.8552	* 2.2567	* 2.0076	* 2.8266	* 4.7434	
14	* 1.2531	* 1.5401	* 1.4212	* 1.5326	* 1.0678	* .6587		
	* 2.2509	* 1.8780	* 2.0486	* 1.9709	* 2.9200	* 4.7434		
15	* .6972	* .9146	* 1.2027	* .8547	* F-SUB-Q			
	* 4.0008	* 3.1111	* 2.3832	* 3.4297	* M-SUB-Q			

AT 50% POWER, 100 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0260	* 1.4769	* 1.3077	* 1.4052	* 1.4030	* 1.5133	* 1.2027	* .6640
	* 2.6907	* 1.8598	* 2.0543	* 1.9014	* 1.9014	* 1.7683	* 2.2049	* 3.9578
9	* 1.4769	* 1.3559	* 1.5080	* 1.3452	* 1.5283	* 1.2938	* 1.4598	* .8664
	* 1.8598	* 2.0177	* 1.7833	* 1.9896	* 1.7712	* 2.0648	* 1.8528	* 3.0829
10	* 1.3077	* 1.5123	* 1.2327	* 1.5401	* 1.4223	* 1.5101	* 1.3505	* 1.1310
	* 2.0543	* 1.7783	* 2.2027	* 1.7876	* 1.9373	* 1.8103	* 2.0122	* 2.3755
11	* 1.4052	* 1.3473	* 1.5422	* 1.4362	* 1.5401	* 1.3002	* 1.4501	* .8054
	* 1.9014	* 1.9869	* 1.7840	* 1.9648	* 1.8306	* 2.1681	* 1.9263	* 3.3928
12	* 1.4030	* 1.5315	* 1.4191	* 1.5401	* 1.4223	* 1.4833	* 1.0217	
	* 1.9014	* 1.7705	* 1.9398	* 1.8298	* 2.0326	* 1.9492	* 2.7909	
13	* 1.5133	* 1.2948	* 1.5101	* 1.2991	* 1.4865	* 1.0667	* .6265	
	* 1.7683	* 2.0620	* 1.8103	* 2.1703	* 1.9449	* 2.7408	* 4.6098	
14	* 1.2027	* 1.4608	* 1.3505	* 1.4491	* 1.0207	* .6265		
	* 2.2049	* 1.8528	* 2.0122	* 1.9271	* 2.7945	* 4.6146		
15	* .6640	* .8664	* 1.1310	* .8054	* F-SUB-Q			
	* 3.9578	* 3.0850	* 2.3768	* 3.3954	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 100 EPPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9339	* 1.2970	* 1.1663	* 1.2402	* 1.2349	* 1.3034	* 1.0539	* .5751
	* 2.7804	* 1.9878	* 2.1853	* 2.0486	* 2.0581	* 1.9570	* 2.4026	* 4.3814
9	* 1.2970	* 1.2231	* 1.3227	* 1.1867	* 1.3248	* 1.1353	* 1.2338	* .7315
	* 1.9878	* 2.1022	* 1.9313	* 2.1471	* 1.9518	* 2.2452	* 2.0843	* 3.4837
10	* 1.1663	* 1.3259	* 1.1160	* 1.3248	* 1.2488	* 1.2981	* 1.1535	* .9232
	* 2.1853	* 1.9254	* 2.3049	* 1.9527	* 2.0784	* 1.9950	* 2.2339	* 2.7734
11	* 1.2402	* 1.1888	* 1.3280	* 1.2531	* 1.3141	* 1.1278	* 1.2134	* .6737
	* 2.0486	* 2.1440	* 1.9458	* 2.1012	* 2.0214	* 2.3565	* 2.1713	* 3.8509
12	* 1.2349	* 1.3270	* 1.2477	* 1.3152	* 1.2295	* 1.2466	* .8846	*
	* 2.0581	* 1.9484	* 2.0804	* 2.0196	* 2.1885	* 2.1628	* 3.0300	*
13	* 1.3034	* 1.1363	* 1.2981	* 1.1278	* 1.2488	* .9157	* .5291	*
	* 1.9570	* 2.2429	* 1.9941	* 2.3578	* 2.1586	* 2.9630	* 5.1049	*
14	* 1.0539	* 1.2349	* 1.1535	* 1.2134	* .8836	* .5280	*	*
	* 2.4026	* 2.0833	* 2.2339	* 2.1724	* 3.0321	* 5.1049	*	*
15	* .5751	* .7315	* .9232	* .6737	* F-SUB-Q			
	* 4.3814	* 3.4865	* 2.7734	* 3.8543	* M-SUB-Q			

AT 50% POWER, 100 EPPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6458	* .8782	* .7465	* .7979	* .5226	* .8600	* .4391	* .3834
	* 3.8342	* 2.8140	* 3.2918	* 3.0743	* 4.6535	* 2.8503	* 5.5260	* 6.3336
9	* .8782	* .5334	* .9136	* .7636	* .8900	* .7304	* .7733	* .4487
	* 2.8140	* 4.5859	* 2.7039	* 3.2222	* 2.7821	* 3.3670	* 3.1942	* 5.4713
10	* .7465	* .9221	* .7668	* .9093	* .5291	* .8568	* .4509	* .5430
	* 3.2918	* 2.6842	* 3.2316	* 2.7357	* 4.6682	* 2.9142	* 5.4444	* 4.5249
11	* .7979	* .7668	* .9168	* .5291	* .8568	* .7111	* .7476	* .4048
	* 3.0743	* 3.2105	* 2.7138	* 4.7130	* 2.9433	* 3.5796	* 3.3721	* 6.1571
12	* .5226	* .8911	* .5291	* .8589	* .4937	* .7647	* .3513	*
	* 4.6535	* 2.7769	* 4.6633	* 2.9355	* 5.1645	* 3.3695	* 7.2951	*
13	* .8600	* .7315	* .8569	* .7111	* .7658	* .3620	* .3449	*
	* 2.8503	* 3.3618	* 2.9142	* 3.5825	* 3.3618	* 7.1304	* 7.4550	*
14	* .4391	* .7733	* .4509	* .7476	* .3513	* .3449	*	*
	* 5.5260	* 3.1942	* 5.4444	* 3.3747	* 7.2951	* 7.4676	*	*
15	* .3834	* .4487	* .5430	* .4048	* F-SUB-Q			
	* 6.3336	* 5.4713	* 4.5249	* 6.1657	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.5719	.8729	.8182	.8739	.6201	.9371	.4391	
	2.7914	2.2608	2.4178	2.2852	3.2587	2.1114	3.8089	
9	.8729	.5569	.9361	.8450	.9778	.8204	.8290	.5098
	2.2608	3.3443	2.0520	2.3601	2.0811	2.4434	2.4087	3.8607
10	.8182	.9382	.6951	.9168	.5965	.9189	.5066	.6126
	2.4178	2.0408	2.3826	2.0802	3.3673	2.2382	3.9848	3.2908
11	.8739	.8461	.9178	.5334	.8472	.7208	.7754	.4637
	2.2852	2.3540	2.0691	3.4907	2.3567	2.8060	2.6315	4.3698
12	.6201	.9778	.5965	.8482	.3856	.6276	.3524	
	3.2587	2.0800	3.3645	2.3540	3.7982	2.5835	5.4535	
13	.9371	.8215	.9189	.7208	.6265	.2913	.3331	
	2.1114	2.4419	2.2376	2.8060	2.5791	5.0970	5.2045	
14	.4391	.8290	.5066	.7754	.3524	.3331		
	3.8089	2.4081	3.9848	2.6315	5.4535	5.2064		
15	.3877	.5098	.6115	.4637	F-SUB-Q			
	4.2007	3.8607	3.2908	4.3698	M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.7765	1.2381	1.2134	1.2745	1.3313	1.3462	1.0185	.5998
	2.1828	1.7040	1.7527	1.6806	1.6304	1.6044	1.8672	3.1720
9	1.2381	1.1931	1.3270	1.2552	1.3559	1.2081	1.2295	.7754
	1.7040	1.7134	1.5981	1.7172	1.6023	1.7858	1.7362	2.7439
10	1.2134	1.3280	1.0282	1.3184	1.2841	1.3109	1.1492	.9414
	1.7527	1.5956	1.8487	1.6242	1.6863	1.6679	1.8894	2.2938
11	1.2745	1.2552	1.3195	1.1802	1.2092	1.0571	1.1535	.6994
	1.6806	1.7151	1.6120	1.7468	1.7586	2.0002	1.8819	3.0881
12	1.3313	1.3570	1.2831	1.2102	.8579	.9489	.8065	
	1.6304	1.6004	1.6863	1.7573	1.7942	1.8352	2.4966	
13	1.3462	1.2092	1.3109	1.0571	.9489	.6747	.4680	
	1.6044	1.7847	1.6679	2.0005	1.8327	2.3405	3.8881	
14	1.0185	1.2295	1.1492	1.1524	.8054	.4680		
	1.8672	1.7355	1.8894	1.8828	2.4977	3.8881		
15	.5998	.7754	.9414	.6983	F-SUB-Q			
	3.1720	2.7457	2.2950	3.0927	M-SUB-Q			



TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8782 *	* 1.4533 *	* 1.3837 *	* 1.4630 *	* 1.5315 *	* 1.5926 *	* 1.2927 *	* .7540 *
	* 2.1058 *	* 1.5886 *	* 1.6763 *	* 1.5925 *	* 1.5347 *	* 1.4736 *	* 1.7554 *	* 2.9842 *
9	* 1.4533 *	* 1.3912 *	* 1.5487 *	* 1.4416 *	* 1.5904 *	* 1.4009 *	* 1.4705 *	* .9221 *
	* 1.5886 *	* 1.6442 *	* 1.4988 *	* 1.6238 *	* 1.4756 *	* 1.6693 *	* 1.5792 *	* 2.5129 *
10	* 1.3837 *	* 1.5508 *	* 1.2659 *	* 1.5572 *	* 1.4791 *	* 1.5412 *	* 1.3516 *	* 1.1428 *
	* 1.6763 *	* 1.4962 *	* 1.7766 *	* 1.5017 *	* 1.5862 *	* 1.5275 *	* 1.7302 *	* 2.0350 *
11	* 1.4630 *	* 1.4426 *	* 1.5594 *	* 1.3987 *	* 1.4405 *	* 1.2145 *	* 1.3645 *	* .8193 *
	* 1.5925 *	* 1.6223 *	* 1.4998 *	* 1.6473 *	* 1.5917 *	* 1.8533 *	* 1.6932 *	* 2.8080 *
12	* 1.5315 *	* 1.5915 *	* 1.4780 *	* 1.4416 *	* .9821 *	* 1.1149 *	* .9146 *	
	* 1.5347 *	* 1.4748 *	* 1.5871 *	* 1.5915 *	* 1.6650 *	* 1.6580 *	* 2.3336 *	
13	* 1.5926 *	* 1.4009 *	* 1.5401 *	* 1.2134 *	* 1.1138 *	* .7765 *	* .5409 *	
	* 1.4736 *	* 1.6680 *	* 1.5275 *	* 1.8541 *	* 1.6553 *	* 2.1722 *	* 3.5574 *	
14	* 1.2927 *	* 1.4705 *	* 1.3516 *	* 1.3645 *	* .9136 *	* .5409 *		
	* 1.7554 *	* 1.5783 *	* 1.7302 *	* 1.6946 *	* 2.3349 *	* 3.5574 *		
15	* .7540 *	* .9221 *	* 1.1428 *	* .8193 *	* F-SUB-Q			
	* 2.9842 *	* 2.5136 *	* 2.0354 *	* 2.8098 *	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9264 *	* 1.5604 *	* 1.4555 *	* 1.5433 *	* 1.6161 *	* 1.7125 *	* 1.4041 *	* .8172 *
	* 2.2014 *	* 1.6357 *	* 1.7558 *	* 1.6565 *	* 1.5832 *	* 1.4942 *	* 1.8131 *	* 3.0921 *
9	* 1.5604 *	* 1.4801 *	* 1.6547 *	* 1.5197 *	* 1.7093 *	* 1.4908 *	* 1.5947 *	* .9853 *
	* 1.6357 *	* 1.7219 *	* 1.5459 *	* 1.6826 *	* 1.4963 *	* 1.7121 *	* 1.5924 *	* 2.5614 *
10	* 1.4555 *	* 1.6579 *	* 1.3794 *	* 1.6740 *	* 1.5626 *	* 1.6526 *	* 1.4480 *	* 1.2327 *
	* 1.7558 *	* 1.5428 *	* 1.8455 *	* 1.5273 *	* 1.6338 *	* 1.5435 *	* 1.7471 *	* 2.0407 *
11	* 1.5433 *	* 1.5219 *	* 1.6761 *	* 1.4951 *	* 1.5487 *	* 1.2809 *	* 1.4608 *	* .8718 *
	* 1.6565 *	* 1.6813 *	* 1.5253 *	* 1.7022 *	* 1.6155 *	* 1.9042 *	* 1.7008 *	* 2.8398 *
12	* 1.6161 *	* 1.7104 *	* 1.5615 *	* 1.5497 *	* 1.0314 *	* 1.1877 *	* .9510 *	
	* 1.5832 *	* 1.4955 *	* 1.6350 *	* 1.6153 *	* 1.7201 *	* 1.6848 *	* 2.4245 *	
13	* 1.7125 *	* 1.4908 *	* 1.6515 *	* 1.2798 *	* 1.1867 *	* .8086 *	* .5655 *	
	* 1.4942 *	* 1.7114 *	* 1.5435 *	* 1.9051 *	* 1.6821 *	* 2.2601 *	* 3.6800 *	
14	* 1.4041 *	* 1.5958 *	* 1.4480 *	* 1.4608 *	* .9500 *	* .5655 *		
	* 1.8131 *	* 1.5914 *	* 1.7475 *	* 1.7018 *	* 2.4259 *	* 3.6800 *		
15	* .8172 *	* .9842 *	* 1.2316 *	* .8718 *	* F-SUB-Q			
	* 3.0921 *	* 2.5630 *	* 2.0417 *	* 2.8417 *	* M-SUB-Q			



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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9232	* 1.5572	* 1.4405	* 1.5283	* 1.6011	* 1.7082	* 1.3966	* .8107
	* 2.4474	* 1.8129	* 1.9523	* 1.8286	* 1.7318	* 1.6230	* 1.9990	* 3.4248
9	* 1.5572	* 1.4705	* 1.6472	* 1.5048	* 1.7050	* 1.4812	* 1.5958	* .9789
	* 1.8129	* 1.9213	* 1.7057	* 1.8494	* 1.6248	* 1.8675	* 1.7211	* 2.7789
10	* 1.4405	* 1.6515	* 1.3762	* 1.6708	* 1.5487	* 1.6483	* 1.4426	* 1.2284
	* 1.9523	* 1.7024	* 2.0459	* 1.6638	* 1.7849	* 1.6663	* 1.8811	* 2.1919
11	* 1.5283	* 1.5058	* 1.6729	* 1.4876	* 1.5465	* 1.2702	* 1.4555	* .8622
	* 1.8286	* 1.8479	* 1.6619	* 1.8757	* 1.7746	* 2.0995	* 1.8435	* 3.0905
12	* 1.6011	* 1.7061	* 1.5476	* 1.5476	* 1.0260	* 1.1802	* .9361	
	* 1.7318	* 1.6242	* 1.7864	* 1.7739	* 1.9141	* 1.8634	* 2.6991	
13	* 1.7082	* 1.4823	* 1.6483	* 1.2691	* 1.1792	* .7947	* .5537	
	* 1.6230	* 1.8667	* 1.6669	* 2.1005	* 1.8610	* 2.5373	* 4.1366	
14	* 1.3966	* 1.5969	* 1.4426	* 1.4544	* .9350	* .5537		
	* 1.9990	* 1.7211	* 1.8812	* 1.8443	* 2.7008	* 4.1366		
15	* .8107	* .9778	* 1.2284	* .8622	* F-SUB-Q			
	* 3.4248	* 2.7806	* 2.1931	* 3.0927	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9425	* 1.5883	* 1.4523	* 1.5455	* 1.6140	* 1.7372	* 1.4084	* .8172
	* 2.6810	* 1.9566	* 2.1219	* 1.9837	* 1.8806	* 1.7449	* 2.1411	* 3.6627
9	* 1.5883	* 1.4855	* 1.6729	* 1.5176	* 1.7339	* 1.4962	* 1.6258	* .9896
	* 1.9566	* 2.0899	* 1.8393	* 2.0115	* 1.7484	* 2.0208	* 1.8456	* 3.0010
10	* 1.4523	* 1.6836	* 1.3955	* 1.7007	* 1.5637	* 1.6772	* 1.4662	* 1.2520
	* 2.1219	* 1.8288	* 2.2062	* 1.7943	* 1.9442	* 1.8009	* 2.0321	* 2.3583
11	* 1.5455	* 1.5187	* 1.7018	* 1.5048	* 1.5776	* 1.2873	* 1.4833	* .8771
	* 1.9837	* 2.0098	* 1.7921	* 2.0339	* 1.9190	* 2.2914	* 2.0011	* 3.3510
12	* 1.6140	* 1.7350	* 1.5626	* 1.5776	* 1.0442	* 1.2070	* .9436	
	* 1.8806	* 1.7476	* 1.9459	* 1.9182	* 2.1191	* 2.0432	* 2.9737	
13	* 1.7372	* 1.4962	* 1.6761	* 1.2863	* 1.2070	* .8065	* .5623	
	* 1.7449	* 2.0198	* 1.8016	* 2.2926	* 2.0404	* 2.8306	* 4.5737	
14	* 1.4084	* 1.6268	* 1.4662	* 1.4833	* .9425	* .5623		
	* 2.1411	* 1.8448	* 2.0330	* 2.0029	* 2.9757	* 4.5737		
15	* .8172	* .9885	* 1.2509	* .8771	* F-SUB-Q			
	* 3.6627	* 3.0031	* 2.3596	* 3.3510	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9414	* 1.5701	* 1.4266	* 1.5187	* 1.5829	* 1.7115	* 1.3816	* .7990
	* 3.0666	* 2.2295	* 2.4321	* 2.2715	* 2.1505	* 1.9853	* 2.4342	* 4.1664
9	* 1.5701	* 1.4608	* 1.6483	* 1.4887	* 1.7082	* 1.4694	* 1.6033	* .9725
	* 2.2295	* 2.3893	* 2.0995	* 2.3056	* 1.9897	* 2.3071	* 2.0944	* 3.4059
10	* 1.4266	* 1.6611	* 1.3741	* 1.6772	* 1.5369	* 1.6547	* 1.4469	* 1.2338
	* 2.4321	* 2.0821	* 2.5174	* 2.0470	* 2.2290	* 2.0486	* 2.2977	* 2.6552
11	* 1.5187	* 1.4908	* 1.6793	* 1.4812	* 1.5594	* 1.2691	* 1.4662	* .8643
	* 2.2715	* 2.3033	* 2.0443	* 2.3312	* 2.1759	* 2.6020	* 2.2532	* 3.7656
12	* 1.5829	* 1.7093	* 1.5347	* 1.5604	* 1.0432	* 1.2006	* .9296	*
	* 2.1505	* 1.9888	* 2.2312	* 2.1759	* 2.4041	* 2.3077	* 3.3762	*
13	* 1.7115	* 1.4705	* 1.6536	* 1.2691	* 1.2006	* .8022	* .5548	*
	* 1.9853	* 2.3059	* 2.0495	* 2.6035	* 2.3053	* 3.2121	* 5.1772	*
14	* 1.3816	* 1.6044	* 1.4469	* 1.4662	* .9296	* .5548	*	*
	* 2.4342	* 2.0934	* 2.2989	* 2.2544	* 3.3788	* 5.1772	*	*
15	* .7990	* .9714	* 1.2338	* .8632	* F-SUB-Q			
	* 4.1664	* 3.4085	* 2.6552	* 3.7688	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9243	* 1.5401	* 1.3934	* 1.4844	* 1.5444	* 1.6740	* 1.3462	* .7775
	* 3.5803	* 2.6005	* 2.8321	* 2.6346	* 2.4753	* 2.2764	* 2.7892	* 4.7638
9	* 1.5401	* 1.4287	* 1.6140	* 1.4544	* 1.6708	* 1.4341	* 1.5690	* .9500
	* 2.6005	* 2.7927	* 2.4344	* 2.6664	* 2.2823	* 2.6472	* 2.3896	* 3.8847
10	* 1.3934	* 1.6279	* 1.3441	* 1.6429	* 1.5015	* 1.6204	* 1.4180	* 1.2081
	* 2.8321	* 2.4144	* 2.9277	* 2.3603	* 2.5717	* 2.3540	* 2.6362	* 3.0342
11	* 1.4844	* 1.4555	* 1.6451	* 1.4501	* 1.5315	* 1.2466	* 1.4405	* .8450
	* 2.6346	* 2.6632	* 2.3578	* 2.7022	* 2.5281	* 3.0265	* 2.6051	* 4.3512
12	* 1.5444	* 1.6718	* 1.5005	* 1.5326	* 1.0282	* 1.1845	* .9146	*
	* 2.4753	* 2.2811	* 2.5747	* 2.5281	* 2.7986	* 2.6784	* 3.9238	*
13	* 1.6740	* 1.4351	* 1.6204	* 1.2456	* 1.1645	* .7925	* .5462	*
	* 2.2764	* 2.6456	* 2.3540	* 3.0286	* 2.6751	* 3.7380	* 6.0254	*
14	* 1.3462	* 1.5701	* 1.4169	* 1.4394	* .9136	* .5462	*	*
	* 2.7892	* 2.3883	* 2.6362	* 2.6051	* 3.9273	* 6.0254	*	*
15	* .7775	* .9489	* 1.2081	* .8439	* F-SUB-Q			
	* 4.7638	* 3.8882	* 3.0363	* 4.3555	* M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% PCWER, 200 EFPD, THIS IS LEVEL 10 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9296	* 1.5540	* 1.3944	* 1.4876	* 1.5422	* 1.6815	* 1.3441	* .7754
	* 3.8012	* 2.7647	* 3.1805	* 3.0094	* 2.8485	* 2.6082	* 3.2058	* 5.4713
9	* 1.5540	* 1.4330	* 1.6258	* 1.4555	* 1.6783	* 1.4351	* 1.5776	* .9510
	* 2.7647	* 3.0363	* 2.7665	* 3.0552	* 2.6143	* 3.0426	* 2.7357	* 4.4610
10	* 1.3944	* 1.6397	* 1.3505	* 1.6547	* 1.5048	* 1.6322	* 1.4276	* 1.2188
	* 3.1805	* 2.7442	* 3.3165	* 2.7039	* 2.9670	* 2.7006	* 3.0259	* 3.4673
11	* 1.4876	* 1.4566	* 1.6558	* 1.4566	* 1.5487	* 1.2584	* 1.4576	* .8525
	* 3.0094	* 3.0531	* 2.7022	* 2.9413	* 2.7172	* 3.2893	* 2.9891	* 4.9840
12	* 1.5422	* 1.6793	* 1.5037	* 1.5487	* 1.0378	* 1.2070	* .9243	*
	* 2.8485	* 2.6128	* 2.9710	* 2.7155	* 3.0531	* 2.9200	* 4.3299	*
13	* 1.6815	* 1.4351	* 1.6311	* 1.2574	* 1.2070	* .8065	* .5569	*
	* 2.6082	* 3.0426	* 2.7022	* 3.2918	* 2.9161	* 4.1394	* 6.6982	*
14	* 1.3441	* 1.5787	* 1.4276	* 1.4576	* .9232	* .5569	*	*
	* 3.2058	* 2.7340	* 3.0280	* 2.9891	* 4.3299	* 6.6982	*	*
15	* .7754	* .9510	* 1.2177	* .8514	* F-SUB-Q			
	* 5.4713	* 4.4655	* 3.4700	* 4.9840	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 9 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9253	* 1.5337	* 1.3687	* 1.4576	* 1.5058	* 1.6440	* 1.3120	* .7540
	* 3.9756	* 2.8838	* 3.1782	* 2.9630	* 2.8466	* 2.6128	* 3.2482	* 5.6173
9	* 1.5337	* 1.4116	* 1.5969	* 1.4244	* 1.6408	* 1.4030	* 1.5476	* .9307
	* 2.8838	* 3.1287	* 2.7289	* 3.0259	* 2.6190	* 3.0531	* 2.7786	* 4.5955
10	* 1.3687	* 1.6108	* 1.3259	* 1.6247	* 1.4791	* 1.6033	* 1.4030	* 1.1942
	* 3.1782	* 2.7138	* 3.2942	* 2.6874	* 2.9571	* 2.7155	* 3.0850	* 3.5971
11	* 1.4576	* 1.4255	* 1.6268	* 1.4384	* 1.5347	* 1.2499	* 1.4416	* .8354
	* 2.9630	* 3.0218	* 2.6858	* 3.0679	* 2.8339	* 3.4270	* 3.0636	* 5.2010
12	* 1.5058	* 1.6418	* 1.4780	* 1.5358	* 1.0453	* 1.2167	* .9253	*
	* 2.8466	* 2.6174	* 2.9610	* 2.8321	* 3.1827	* 3.0446	* 4.5111	*
13	* 1.6440	* 1.4030	* 1.6022	* 1.2488	* 1.2156	* .8215	* .5612	*
	* 2.6128	* 3.0510	* 2.7155	* 3.4297	* 3.0405	* 4.3172	* 7.0172	*
14	* 1.3120	* 1.5476	* 1.4030	* 1.4416	* .9243	* .5612	*	*
	* 3.2482	* 2.7769	* 3.0872	* 3.0658	* 4.5111	* 7.0172	*	*
15	* .7540	* .9307	* 1.1942	* .8354	* F-SUB-Q			
	* 5.6173	* 4.5955	* 3.6000	* 5.2010	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0121	* 1.5936	* 1.3966	* 1.4855	* 1.5251	* 1.6750	* 1.3259	* .7615
	* 3.9331	* 2.7255	* 3.0176	* 2.8104	* 2.7088	* 2.4725	* 3.0722	* 5.2629
9	* 1.5936	* 1.4501	* 1.6376	* 1.4469	* 1.6718	* 1.4223	* 1.5851	* .9468
	* 2.7255	* 2.9670	* 2.5808	* 2.8763	* 2.4780	* 2.9027	* 2.6190	* 4.3130
10	* 1.3966	* 1.6526	* 1.3570	* 1.6675	* 1.5133	* 1.6440	* 1.4384	* 1.2242
	* 3.0176	* 2.5613	* 3.1221	* 2.5407	* 2.8122	* 2.5688	* 2.9142	* 3.3593
11	* 1.4855	* 1.4480	* 1.6697	* 1.4855	* 1.6033	* 1.3066	* 1.4973	* .8611
	* 2.8104	* 2.8744	* 2.5378	* 2.9335	* 2.7544	* 3.3340	* 2.8913	* 4.8634
12	* 1.5251	* 1.6729	* 1.5112	* 1.6044	* 1.1567	* 1.3184	* .9746	*
	* 2.7088	* 2.4767	* 2.8158	* 2.7544	* 3.1691	* 2.9911	* 4.3814	*
13	* 1.6750	* 1.4234	* 1.6440	* 1.3055	* 1.3184	* .9082	* .6051	*
	* 2.4725	* 2.9008	* 2.5688	* 3.3340	* 2.9870	* 4.2672	* 6.7804	*
14	* 1.3259	* 1.5851	* 1.4384	* 1.4962	* .9735	* .6051	*	*
	* 3.0722	* 2.6174	* 2.9161	* 2.8932	* 4.3814	* 6.7700	*	*
15	* .7615	* .9468	* 1.2231	* .8600	* F-SUB-Q			
	* 5.2629	* 4.3172	* 3.3618	* 4.8688	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1235	* 1.6322	* 1.4105	* 1.4919	* 1.5230	* 1.6772	* 1.3227	* .7572
	* 3.6933	* 2.5005	* 2.7734	* 2.5792	* 2.4808	* 2.2590	* 2.8140	* 4.8368
9	* 1.6322	* 1.4726	* 1.6526	* 1.4501	* 1.6825	* 1.4223	* 1.5958	* .9478
	* 2.5005	* 2.7289	* 2.3666	* 2.6393	* 2.2648	* 2.6536	* 2.3883	* 3.9472
10	* 1.4105	* 1.6675	* 1.3677	* 1.6836	* 1.5272	* 1.6600	* 1.4501	* 1.2316
	* 2.7734	* 2.3503	* 2.8688	* 2.3304	* 2.5823	* 2.3478	* 2.6536	* 3.0658
11	* 1.4919	* 1.4512	* 1.6858	* 1.5165	* 1.6536	* 1.3527	* 1.5294	* .8697
	* 2.5792	* 2.6377	* 2.3280	* 2.6973	* 2.5276	* 3.0786	* 2.6283	* 4.4386
12	* 1.5230	* 1.6847	* 1.5251	* 1.6547	* 1.3848	* 1.4758	* 1.0185	*
	* 2.4808	* 2.2636	* 2.5853	* 2.5262	* 2.9670	* 2.7962	* 4.1086	*
13	* 1.6772	* 1.4234	* 1.6590	* 1.3516	* 1.4780	* 1.0164	* .6437	*
	* 2.2590	* 2.6520	* 2.3478	* 3.0807	* 2.7909	* 3.9899	* 6.3609	*
14	* 1.3227	* 1.5958	* 1.4501	* 1.5283	* 1.0174	* .6437	*	*
	* 2.8140	* 2.3871	* 2.6552	* 2.6283	* 4.1124	* 6.3609	*	*
15	* .7572	* .9478	* 1.2306	* .8686	* F-SUB-Q			
	* 4.8368	* 3.9507	* 3.0658	* 4.4386	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1588	* 1.6333	* 1.4062	* 1.4758	* 1.5015	* 1.6536	* 1.3023	* .7433 *
	* 3.3876	* 2.3134	* 2.5732	* 2.3948	* 2.3121	* 2.1062	* 2.6283	* 4.5388 *
9	* 1.6333	* 1.4726	* 1.6386	* 1.4330	* 1.6686	* 1.4019	* 1.5787	* .9361 *
	* 2.3134	* 2.5247	* 2.1972	* 2.4547	* 2.1112	* 2.4739	* 2.2282	* 3.6840 *
10	* 1.4062	* 1.6536	* 1.3570	* 1.6708	* 1.5187	* 1.6461	* 1.4384	* 1.2167 *
	* 2.5732	* 2.1820	* 2.6632	* 2.1628	* 2.3948	* 2.1820	* 2.4684	* 2.8595 *
11	* 1.4758	* 1.4362	* 1.6729	* 1.5219	* 1.6643	* 1.3677	* 1.5283	* .8600 *
	* 2.3948	* 2.4519	* 2.1607	* 2.4948	* 2.3317	* 2.8339	* 2.4330	* 4.1432 *
12	* 1.5015	* 1.6708	* 1.5165	* 1.6654	* 1.4576	* 1.5369	* 1.0378	*
	* 2.3121	* 2.1102	* 2.3974	* 2.3317	* 2.7138	* 2.5688	* 3.7656	*
13	* 1.6536	* 1.4041	* 1.6461	* 1.3666	* 1.5401	* 1.0710	* .6608	*
	* 2.1062	* 2.4725	* 2.1820	* 2.8357	* 2.5643	* 3.6748	* 5.8944	*
14	* 1.3023	* 1.5787	* 1.4384	* 1.5283	* 1.0367	* .6608	*	*
	* 2.6283	* 2.2271	* 2.4684	* 2.4344	* 3.7688	* 5.8944	*	*
15	* .7433	* .9350	* 1.2167	* .8600	* F-SUB-Q			
	* 4.5388	* 3.6871	* 2.8595	* 4.1471	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1835	* 1.6675	* 1.4298	* 1.4973	* 1.5176	* 1.6772	* 1.3163	* .7497 *
	* 2.9810	* 2.0833	* 2.3366	* 2.1756	* 2.1142	* 1.9196	* 2.4092	* 4.1745 *
9	* 1.6675	* 1.4983	* 1.6665	* 1.4512	* 1.6975	* 1.4180	* 1.6054	* .9478 *
	* 2.0833	* 2.2847	* 1.9923	* 2.2373	* 1.9246	* 2.2625	* 2.0298	* 3.3721 *
10	* 1.4298	* 1.6825	* 1.3773	* 1.7082	* 1.5422	* 1.6750	* 1.4630	* 1.2381 *
	* 2.3366	* 1.9762	* 2.4171	* 1.9605	* 2.1756	* 1.9798	* 2.2418	* 2.6020 *
11	* 1.4973	* 1.4544	* 1.7104	* 1.5551	* 1.7050	* 1.3987	* 1.5647	* .8771 *
	* 2.1756	* 2.2350	* 1.9587	* 2.2532	* 2.0755	* 2.5204	* 2.1929	* 3.7592 *
12	* 1.5176	* 1.6997	* 1.5401	* 1.7061	* 1.5069	* 1.5926	* 1.0667	*
	* 2.1142	* 1.9229	* 2.1788	* 2.0745	* 2.3909	* 2.2590	* 3.3189	*
13	* 1.6772	* 1.4191	* 1.6750	* 1.3977	* 1.5958	* 1.1117	* .6865	*
	* 1.9196	* 2.2613	* 1.9807	* 2.5219	* 2.2544	* 3.2530	* 5.1888	*
14	* 1.3163	* 1.6054	* 1.4630	* 1.5647	* 1.0656	* .6865	*	*
	* 2.4092	* 2.0288	* 2.2429	* 2.1940	* 3.3214	* 5.1888	*	*
15	* .7497	* .9468	* 1.2370	* .8771	* F-SUB-Q			
	* 4.1745	* 3.3747	* 2.6020	* 3.7592	* M-SUB-Q			



TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1535 *	* 1.6226 *	* 1.3955 *	* 1.4587 *	* 1.4780 *	* 1.6258 *	* 1.2809 *	* .7261 *
	* 2.8248 *	* 1.9509 *	* 2.2160 *	* 2.0736 *	* 2.0251 *	* 1.8474 *	* 2.3134 *	* 4.0336 *
9	* 1.6226 *	* 1.4662 *	* 1.6183 *	* 1.4137 *	* 1.6483 *	* 1.3784 *	* 1.5551 *	* .9200 *
	* 1.9509 *	* 2.1481 *	* 1.8998 *	* 2.1357 *	* 1.8520 *	* 2.1713 *	* 1.9509 *	* 3.2435 *
10	* 1.3955 *	* 1.6333 *	* 1.3398 *	* 1.6622 *	* 1.5058 *	* 1.6247 *	* 1.4201 *	* 1.1974 *
	* 2.2160 *	* 1.8868 *	* 2.3001 *	* 1.8724 *	* 2.0639 *	* 1.8949 *	* 2.1471 *	* 2.5090 *
11	* 1.4587 *	* 1.4169 *	* 1.6633 *	* 1.5219 *	* 1.6600 *	* 1.3677 *	* 1.5197 *	* .8472 *
	* 2.0736 *	* 2.1336 *	* 1.8701 *	* 2.1072 *	* 1.9441 *	* 2.3616 *	* 2.0814 *	* 3.6177 *
12	* 1.4780 *	* 1.6504 *	* 1.5037 *	* 1.6600 *	* 1.4812 *	* 1.5562 *	* 1.0496 *	
	* 2.0251 *	* 1.8505 *	* 2.0668 *	* 1.9432 *	* 2.2327 *	* 2.1244 *	* 3.1243 *	
13	* 1.6258 *	* 1.3794 *	* 1.6247 *	* 1.3666 *	* 1.5594 *	* 1.0967 *	* .6704 *	
	* 1.8474 *	* 2.1692 *	* 1.8949 *	* 2.3628 *	* 2.1203 *	* 3.0197 *	* 4.8957 *	
14	* 1.2809 *	* 1.5551 *	* 1.4201 *	* 1.5197 *	* 1.0485 *	* .6704 *		
	* 2.3134 *	* 1.9509 *	* 2.1481 *	* 2.0814 *	* 3.1265 *	* 4.8957 *		
15	* .7261 *	* .9189 *	* 1.1974 *	* .8472 *	F-SUB-Q			
	* 4.0336 *	* 3.2458 *	* 2.5104 *	* 3.6207 *	M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1288 *	* 1.5808 *	* 1.3666 *	* 1.4266 *	* 1.4416 *	* 1.5744 *	* 1.2488 *	* .7058 *
	* 2.6159 *	* 1.8552 *	* 2.1162 *	* 1.9905 *	* 1.9596 *	* 1.8007 *	* 2.2464 *	* 3.9401 *
9	* 1.5808 *	* 1.4405 *	* 1.5765 *	* 1.3794 *	* 1.5990 *	* 1.3398 *	* 1.5015 *	* .8900 *
	* 1.8552 *	* 2.0270 *	* 1.8275 *	* 2.0591 *	* 1.8044 *	* 2.1092 *	* 1.9031 *	* 3.1691 *
10	* 1.3666 *	* 1.5883 *	* 1.3098 *	* 1.6108 *	* 1.4705 *	* 1.5733 *	* 1.3762 *	* 1.1524 *
	* 2.1162 *	* 1.8178 *	* 2.2027 *	* 1.8081 *	* 1.9780 *	* 1.8359 *	* 2.0843 *	* 2.4601 *
11	* 1.4266 *	* 1.3816 *	* 1.6129 *	* 1.4844 *	* 1.6097 *	* 1.3302 *	* 1.4683 *	* .8182 *
	* 1.9905 *	* 2.0562 *	* 1.8059 *	* 2.0040 *	* 1.8528 *	* 2.2395 *	* 2.0076 *	* 3.5226 *
12	* 1.4416 *	* 1.6011 *	* 1.4683 *	* 1.6097 *	* 1.4480 *	* 1.5090 *	* 1.0271 *	
	* 1.9596 *	* 1.8029 *	* 1.9807 *	* 1.8520 *	* 2.1042 *	* 2.0186 *	* 2.9277 *	
13	* 1.5744 *	* 1.3420 *	* 1.5733 *	* 1.3291 *	* 1.5112 *	* 1.0742 *	* .6544 *	
	* 1.8007 *	* 2.1072 *	* 1.8367 *	* 2.2407 *	* 2.0159 *	* 2.8632 *	* 4.6486 *	
14	* 1.2488 *	* 1.5015 *	* 1.3762 *	* 1.4673 *	* 1.0260 *	* .6544 *		
	* 2.2464 *	* 1.9023 *	* 2.0843 *	* 2.0086 *	* 2.9296 *	* 4.6486 *		
15	* .7058 *	* .8900 *	* 1.1513 *	* .8172 *	F-SUB-Q			
	* 3.9401 *	* 3.1713 *	* 2.4615 *	* 3.5226 *	M-SUB-Q			



TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 50% POWER, 200 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0271	* 1.3966	* 1.2284	* 1.2788	* 1.2884	* 1.3752	* 1.1149	* .6233
	* 2.7122	* 1.9780	* 2.2327	* 2.1213	* 2.0992	* 1.9727	* 2.4131	* 4.2879
9	* 1.3966	* 1.3045	* 1.3977	* 1.2338	* 1.4019	* 1.1931	* 1.2959	* .7733
	* 1.9780	* 2.1092	* 1.9639	* 2.2016	* 1.9631	* 2.2718	* 2.1062	* 3.4975
10	* 1.2284	* 1.4105	* 1.1899	* 1.4105	* 1.3098	* 1.3730	* 1.2038	* .9725
	* 2.2327	* 1.9492	* 2.3061	* 1.9631	* 2.1062	* 2.0040	* 2.2718	* 2.7909
11	* 1.2788	* 1.2370	* 1.4148	* 1.3195	* 1.3944	* 1.1770	* 1.2616	* .7069
	* 2.1213	* 2.1983	* 1.9492	* 2.1183	* 2.0205	* 2.3987	* 2.2115	* 3.8882
12	* 1.2884	* 1.4041	* 1.3088	* 1.3955	* 1.2798	* 1.3002	* .9146	*
	* 2.0992	* 1.9596	* 2.1082	* 2.0196	* 2.2294	* 2.1983	* 3.1045	*
13	* 1.3752	* 1.1942	* 1.3730	* 1.1760	* 1.3023	* .9489	* .5676	*
	* 1.9727	* 2.2694	* 2.0040	* 2.4000	* 2.1961	* 3.0280	* 5.0351	*
14	* 1.1149	* 1.2959	* 1.2038	* 1.2616	* .9146	* .5676	*	*
	* 2.4131	* 2.1052	* 2.2718	* 2.2115	* 3.1045	* 5.0351	*	*
15	* .6233	* .7722	* .9714	* .7058	* F-SUB-Q			
	* 4.2879	* 3.4975	* 2.7927	* 3.8916	* M-SUB-Q			

AT 50% POWER, 200 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7197	* .9618	* .8054	* .8525	* .5805	* .9296	* .4937	* .4284
	* 3.6963	* 2.7596	* 3.2747	* 3.0807	* 4.4700	* 2.8140	* 5.2318	* 6.0394
9	* .9618	* .6008	* .9853	* .8215	* .9585	* .7893	* .8365	* .4959
	* 2.7596	* 4.3684	* 2.6874	* 3.2128	* 2.7578	* 3.3189	* 3.1465	* 5.2692
10	* .8054	* .9928	* .8322	* .9810	* .5901	* .9253	* .5055	* .6019
	* 3.2747	* 2.6696	* 3.1873	* 2.7105	* 4.4655	* 2.8725	* 5.1766	* 4.3469
11	* .8525	* .8257	* .9875	* .5923	* .9318	* .7679	* .8054	* .4455
	* 3.0807	* 3.1989	* 2.6923	* 4.4836	* 2.8857	* 3.5254	* 3.3264	* 5.9420
12	* .5805	* .9596	* .5901	* .9328	* .5516	* .8268	* .3898	*
	* 4.4700	* 2.7544	* 4.4610	* 2.8800	* 4.9285	* 3.3189	* 6.9950	*
13	* .9296	* .7904	* .9253	* .7668	* .8279	* .4038	* .3834	*
	* 2.8140	* 3.3165	* 2.8725	* 3.5254	* 3.3140	* 6.8013	* 7.1304	*
14	* .4937	* .8365	* .5055	* .8043	* .3898	* .3834	*	*
	* 5.2318	* 3.1443	* 5.1706	* 3.3289	* 6.9950	* 7.1304	*	*
15	* .4284	* .4948	* .6019	* .4455	* F-SUB-Q			
	* 6.0394	* 5.2692	* 4.3469	* 5.9500	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 18 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5816 *	* .8771 *	* .8182 *	* .8771 *	* .6490 *	* .9521 *	* .4498 *	* .3898 *
	* 2.6366 *	* 2.1801 *	* 2.3450 *	* 2.2230 *	* 3.0639 *	* 2.0340 *	* 3.5366 *	* 3.9270 *
9	* .8771 *	* .5730 *	* .9275 *	* .8579 *	* .9950 *	* .8450 *	* .8589 *	* .5355 *
	* 2.1801 *	* 3.1422 *	* 1.9931 *	* 2.2880 *	* 2.0167 *	* 2.3425 *	* 2.2911 *	* 3.6209 *
10	* .8182 *	* .9286 *	* .6822 *	* .9296 *	* .6351 *	* .9585 *	* .5451 *	* .6512 *
	* 2.3450 *	* 1.9844 *	* 2.2936 *	* 2.0126 *	* 3.1513 *	* 2.1073 *	* 3.6530 *	* 3.0512 *
11	* .8771 *	* .8579 *	* .9296 *	* .5655 *	* .8804 *	* .7679 *	* .8279 *	* .5023 *
	* 2.2230 *	* 2.2832 *	* 2.0037 *	* 3.2526 *	* 2.2484 *	* 2.5672 *	* 2.3746 *	* 3.8825 *
12	* .6490 *	* .9960 *	* .6351 *	* .8804 *	* .4188 *	* .6822 *	* .3941 *	
	* 3.0639 *	* 2.0154 *	* 3.1488 *	* 2.2459 *	* 3.5219 *	* 2.4608 *	* 4.8566 *	
13	* .9521 *	* .8461 *	* .9585 *	* .7679 *	* .6822 *	* .3320 *	* .3770 *	
	* 2.0340 *	* 2.3415 *	* 2.1081 *	* 2.5688 *	* 2.4579 *	* 4.7193 *	* 4.8708 *	
14	* .4498 *	* .8589 *	* .5451 *	* .8268 *	* .3941 *	* .3759 *		
	* 3.5366 *	* 2.2898 *	* 3.6530 *	* 2.3760 *	* 4.8609 *	* 4.8708 *		
15	* .3898 *	* .5344 *	* .6512 *	* .5023 *	* F-SUB-Q			
	* 3.9270 *	* 3.6209 *	* 3.0529 *	* 3.8835 *	* M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 17 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7711 *	* 1.2102 *	* 1.1706 *	* 1.2327 *	* 1.3130 *	* 1.3323 *	* .9339 *	* .5473 *
	* 2.1108 *	* 1.6766 *	* 1.7542 *	* 1.6909 *	* 1.6211 *	* 1.5822 *	* 1.8345 *	* 3.0541 *
9	* 1.2102 *	* 1.1545 *	* 1.2831 *	* 1.2284 *	* 1.3505 *	* 1.1974 *	* 1.2295 *	* .7765 *
	* 1.6766 *	* 1.6925 *	* 1.5940 *	* 1.7159 *	* 1.5863 *	* 1.7628 *	* 1.7027 *	* 2.6609 *
10	* 1.1706 *	* 1.2841 *	* .9350 *	* 1.3077 *	* 1.2852 *	* 1.3280 *	* 1.1631 *	* .9504 *
	* 1.7542 *	* 1.5876 *	* 1.8150 *	* 1.5971 *	* 1.6651 *	* 1.6359 *	* 1.8432 *	* 2.2281 *
11	* 1.2327 *	* 1.2284 *	* 1.3077 *	* 1.1663 *	* 1.2252 *	* 1.0913 *	* 1.1877 *	* .7240 *
	* 1.6909 *	* 1.7140 *	* 1.5866 *	* 1.7175 *	* 1.7262 *	* 1.9195 *	* 1.7625 *	* 2.8749 *
12	* 1.3130 *	* 1.3505 *	* 1.2841 *	* 1.2242 *	* .8771 *	* .9960 *	* .8429 *	
	* 1.6211 *	* 1.5852 *	* 1.6651 *	* 1.7248 *	* .7754 *	* 1.8118 *	* 2.4089 *	
13	* 1.3323 *	* 1.1974 *	* 1.3270 *	* 1.0903 *	* .9960 *	* .7197 *	* .5098 *	
	* 1.5822 *	* 1.7621 *	* 1.6353 *	* 1.9210 *	* 1.8110 *	* 2.3212 *	* 3.7535 *	
14	* .9339 *	* 1.2295 *	* 1.1631 *	* 1.1877 *	* .8429 *	* .5098 *		
	* 1.8345 *	* 1.7020 *	* 1.8440 *	* 1.7638 *	* 2.4103 *	* 3.7535 *		
15	* .5473 *	* .7754 *	* .9564 *	* .7240 *	* F-SUB-Q			
	* 3.0541 *	* 2.6621 *	* 2.2293 *	* 2.8749 *	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8727 *	* 1.4105 *	* 1.3248 *	* 1.3987 *	* 1.4908 *	* 1.5562 *	* 1.1224 *	* .6758 *
	* 2.0519 *	* 1.5836 *	* 1.7017 *	* 1.6299 *	* 1.5545 *	* 1.4801 *	* 1.7627 *	* 2.9338 *
9	* 1.4105 *	* 1.3195 *	* 1.4844 *	* 1.3934 *	* 1.5712 *	* 1.3698 *	* 1.4459 *	* .9061 *
	* 1.5836 *	* 1.6433 *	* 1.5156 *	* 1.6510 *	* 1.4838 *	* 1.6791 *	* 1.5828 *	* 2.5058 *
10	* 1.3248 *	* 1.4855 *	* 1.1342 *	* 1.5262 *	* 1.4566 *	* 1.5380 *	* 1.3398 *	* 1.1342 *
	* 1.7017 *	* 1.5054 *	* 1.7618 *	* 1.5021 *	* 1.5927 *	* 1.5260 *	* 1.7299 *	* 2.0321 *
11	* 1.3987 *	* 1.3944 *	* 1.5272 *	* 1.3409 *	* 1.4298 *	* 1.2284 *	* 1.3752 *	* .8290 *
	* 1.6299 *	* 1.6497 *	* 1.5007 *	* 1.6461 *	* 1.5919 *	* 1.8179 *	* 1.6302 *	* 2.6936 *
12	* 1.4908 *	* 1.5712 *	* 1.4555 *	* 1.4309 *	* .9875 *	* 1.1406 *	* .9307 *	
	* 1.5545 *	* 1.4833 *	* 1.5938 *	* 1.5912 *	* 1.6887 *	* 1.6793 *	* 2.3242 *	
13	* 1.5562 *	* 1.3698 *	* 1.5380 *	* 1.2284 *	* 1.1395 *	* .8043 *	* .5741 *	
	* 1.4801 *	* 1.6784 *	* 1.5260 *	* 1.8195 *	* 1.6780 *	* 2.2156 *	* 3.5243 *	
14	* 1.1224 *	* 1.4459 *	* 1.3398 *	* 1.3752 *	* .9307 *	* .5741 *		
	* 1.7627 *	* 1.5822 *	* 1.7304 *	* 1.6308 *	* 2.3265 *	* 3.5243 *		
15	* .6758 *	* .9050 *	* 1.1331 *	* .8290 *	F-SUB-Q			
	* 2.9338 *	* 2.5073 *	* 2.0331 *	* 2.6949 *	M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9264 *	* 1.5283 *	* 1.4062 *	* 1.4823 *	* 1.5744 *	* 1.6772 *	* 1.3259 *	* .7893 *
	* 2.1560 *	* 1.6491 *	* 1.8009 *	* 1.7172 *	* 1.6274 *	* 1.5242 *	* 1.8489 *	* 3.0845 *
9	* 1.5283 *	* 1.4309 *	* 1.5990 *	* 1.4748 *	* 1.6911 *	* 1.4598 *	* 1.5615 *	* .9714 *
	* 1.6491 *	* 1.7391 *	* 1.5735 *	* 1.7327 *	* 1.5192 *	* 1.7471 *	* 1.6244 *	* 2.6038 *
10	* 1.4062 *	* 1.6022 *	* 1.3195 *	* 1.6472 *	* 1.5401 *	* 1.6418 *	* 1.4298 *	* 1.2167 *
	* 1.8009 *	* 1.5622 *	* 1.8511 *	* 1.5486 *	* 1.6625 *	* 1.5653 *	* 1.7820 *	* 2.0829 *
11	* 1.4823 *	* 1.4758 *	* 1.6483 *	* 1.4566 *	* 1.5380 *	* 1.2820 *	* 1.4544 *	* .8718 *
	* 1.7172 *	* 1.7313 *	* 1.5469 *	* 1.7256 *	* 1.6381 *	* 1.8963 *	* 1.6768 *	* 2.7896 *
12	* 1.5744 *	* 1.6900 *	* 1.5380 *	* 1.5390 *	* 1.0303 *	* 1.1931 *	* .9532 *	
	* 1.6274 *	* 1.5197 *	* 1.6638 *	* 1.6374 *	* 1.7717 *	* 1.7379 *	* 2.4610 *	
13	* 1.6772 *	* 1.4598 *	* 1.6418 *	* 1.2809 *	* 1.1931 *	* .8215 *	* .5880 *	
	* 1.5242 *	* 1.7457 *	* 1.5653 *	* 1.8973 *	* 1.7358 *	* 2.3469 *	* 3.7079 *	
14	* 1.3259 *	* 1.5615 *	* 1.4287 *	* 1.4533 *	* .9521 *	* .5880 *		
	* 1.8489 *	* 1.6231 *	* 1.7828 *	* 1.6781 *	* 2.639 *	* 3.7076 *		
15	* .7893 *	* .9703 *	* 1.2156 *	* .8718 *	F-SUB-Q			
	* 3.0845 *	* 2.6054 *	* 2.0839 *	* 2.7914 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9286	* 1.5455	* 1.4084	* 1.4823	* 1.5701	* 1.6858	* 1.3720	* .8161
	* 2.3849	* 1.8242	* 2.0129	* 1.9065	* 1.7932	* 1.6694	* 2.0556	* 3.4464
9	* 1.5455	* 1.4533	* 1.6247	* 1.4716	* 1.6943	* 1.4619	* 1.5744	* .9735
	* 1.8242	* 1.9531	* 1.7489	* 1.9157	* 1.6597	* 1.9210	* 1.7760	* 2.8521
10	* 1.4084	* 1.6354	* 1.3720	* 1.6568	* 1.5337	* 1.6408	* 1.4266	* 1.2156
	* 2.0129	* 1.7368	* 2.0677	* 1.7002	* 1.8302	* 1.7050	* 1.9438	* 2.2687
11	* 1.4823	* 1.4726	* 1.6579	* 1.4737	* 1.5422	* 1.2649	* 1.4405	* .8589
	* 1.9065	* 1.9148	* 1.6988	* 1.9129	* 1.8094	* 2.1289	* 1.8711	* 3.1264
12	* 1.5701	* 1.6933	* 1.5326	* 1.5422	* 1.0185	* 1.1727	* .9286	*
	* 1.7932	* 1.6606	* 1.8318	* 1.8086	* 1.9869	* 1.9397	* 2.7967	*
13	* 1.6858	* 1.4630	* 1.6397	* 1.2638	* 1.1717	* .7958	* .5687	*
	* 1.6694	* 1.9202	* 1.7054	* 2.1307	* 1.9368	* 2.6565	* 4.2060	*
14	* 1.3720	* 1.5754	* 1.4266	* 1.4394	* .9275	* .5687	*	*
	* 2.0556	* 1.7760	* 1.9441	* 1.8725	* 2.7985	* 4.2019	*	*
15	* .8161	* .9735	* 1.2156	* .8589	F-SUB-Q			
	* 3.4464	* 2.8540	* 2.2694	* 3.1286	M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9468	* 1.5851	* 1.4287	* 1.5058	* 1.5862	* 1.7243	* 1.3966	* .8311
	* 2.5748	* 1.9718	* 2.2007	* 2.0817	* 1.9622	* 1.8006	* 2.2176	* 3.7056
9	* 1.5851	* 1.4801	* 1.6686	* 1.4898	* 1.7297	* 1.4823	* 1.6108	* .9875
	* 1.9718	* 2.1324	* 1.8834	* 2.0975	* 1.7999	* 2.0935	* 1.9159	* 3.1032
10	* 1.4287	* 1.6804	* 1.4030	* 1.6911	* 1.5497	* 1.6697	* 1.4501	* 1.2402
	* 2.2007	* 1.8698	* 2.2381	* 1.8461	* 2.0091	* 1.8577	* 2.1182	* 2.4620
11	* 1.5058	* 1.4908	* 1.6922	* 1.4951	* 1.5712	* 1.2734	* 1.4608	* .8718
	* 2.0817	* 2.0961	* 1.8450	* 2.0904	* 1.9653	* 2.3688	* 2.0584	* 3.4265
12	* 1.5862	* 1.7286	* 1.5487	* 1.5722	* 1.0749	* 1.1867	* .9275	*
	* 1.9622	* 1.8011	* 2.0119	* 1.9644	* 2.2078	* 2.1362	* 3.1234	*
13	* 1.7243	* 1.4833	* 1.6686	* 1.2723	* 1.1856	* .7947	* .5708	*
	* 1.8006	* 2.0925	* 1.8585	* 2.3706	* 2.1331	* 2.9754	* 4.6666	*
14	* 1.3966	* 1.6119	* 1.4501	* 1.4608	* .9264	* .5708	*	*
	* 2.2176	* 1.9151	* 2.1186	* 2.0593	* 3.1236	* 4.6616	*	*
15	* .8311	* .9864	* 1.2391	* .8718	F-SUB-Q			
	* 3.7056	* 3.1054	* 2.4620	* 3.4291	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9436 *	* 1.5701 *	* 1.4062 *	* 1.4823 *	* 1.5572 *	* 1.7018 *	* 1.3720 *	* .8161 *
	* 2.9291 *	* 2.2375 *	* 2.5276 *	* 2.3891 *	* 2.2349 *	* 2.0431 *	* 2.5301 *	* 4.2257 *
9	* 1.5701 *	* 1.4598 *	* 1.6493 *	* 1.4630 *	* 1.7061 *	* 1.4566 *	* 1.5883 *	* .9703 *
	* 2.2375 *	* 2.4444 *	* 2.1497 *	* 2.4020 *	* 2.0396 *	* 2.3804 *	* 2.1661 *	* 3.4960 *
10	* 1.4062 *	* 1.6611 *	* 1.3837 *	* 1.6675 *	* 1.5219 *	* 1.6451 *	* 1.4276 *	* 1.2220 *
	* 2.5276 *	* 2.1343 *	* 2.5621 *	* 2.1042 *	* 2.2910 *	* 2.0981 *	* 2.3794 *	* 2.7501 *
11	* 1.4823 *	* 1.4651 *	* 1.6718 *	* 1.4716 *	* 1.5508 *	* 1.2520 *	* 1.4394 *	* .8557 *
	* 2.3891 *	* 2.4016 *	* 2.1032 *	* 2.4038 *	* 2.2303 *	* 2.7021 *	* 2.3415 *	* 3.8903 *
12	* 1.5572 *	* 1.7050 *	* 1.5208 *	* 1.5519 *	* 1.0164 *	* 1.1706 *	* .9093 *	
	* 2.2349 *	* 2.0415 *	* 2.2945 *	* 2.2292 *	* 2.5040 *	* 2.4143 *	* 3.5449 *	
13	* 1.7018 *	* 1.4576 *	* 1.6440 *	* 1.2509 *	* 1.1706 *	* .7829 *	* .5591 *	
	* 2.0431 *	* 2.3791 *	* 2.0985 *	* 2.7038 *	* 2.4104 *	* 3.3726 *	* 5.2846 *	
14	* 1.3720 *	* 1.5894 *	* 1.4276 *	* 1.4384 *	* .9082 *	* .5601 *		
	* 2.5301 *	* 2.1661 *	* 2.3794 *	* 2.3427 *	* 3.5477 *	* 5.2789 *		
15	* .8161 *	* .9693 *	* 1.2209 *	* .8557 *	F-SUB-Q			
	* 4.2257 *	* 3.4979 *	* 2.7518 *	* 3.8927 *	M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
3	* .9361 *	* 1.5401 *	* 1.3720 *	* 1.4459 *	* 1.5144 *	* 1.6600 *	* 1.3355 *	* .7925 *
	* 3.4179 *	* 2.5959 *	* 2.9401 *	* 2.7664 *	* 2.5849 *	* 2.3422 *	* 2.8916 *	* 4.8172 *
9	* 1.5401 *	* 1.4276 *	* 1.6129 *	* 1.4255 *	* 1.6643 *	* 1.4180 *	* 1.5508 *	* .9457 *
	* 2.5959 *	* 2.8527 *	* 2.4889 *	* 2.7820 *	* 2.3597 *	* 2.7455 *	* 2.4840 *	* 4.0169 *
10	* 1.3720 *	* 1.6247 *	* 1.3516 *	* 1.6290 *	* 1.4833 *	* 1.6054 *	* 1.3934 *	* 1.1920 *
	* 2.9401 *	* 2.4713 *	* 2.9736 *	* 2.4330 *	* 2.6622 *	* 2.4320 *	* 2.7521 *	* 3.1694 *
11	* 1.4459 *	* 1.4276 *	* 1.6343 *	* 1.4362 *	* 1.5176 *	* 1.2231 *	* 1.4062 *	* .8332 *
	* 2.7664 *	* 2.7802 *	* 2.4313 *	* 2.7824 *	* 2.5881 *	* 3.1375 *	* 2.7311 *	* 4.5303 *
12	* 1.5144 *	* 1.6633 *	* 1.4812 *	* 1.5187 *	* 1.0067 *	* 1.1513 *	* .8889 *	
	* 2.5849 *	* 2.3610 *	* 2.6665 *	* 2.5866 *	* 2.9087 *	* 2.7952 *	* 4.1130 *	
13	* 1.6600 *	* 1.4191 *	* 1.6054 *	* 1.2220 *	* 1.1513 *	* .7722 *	* .5473 *	
	* 2.3422 *	* 2.7450 *	* 2.4329 *	* 3.1377 *	* 2.7915 *	* 3.9131 *	* 6.1397 *	
14	* 1.3355 *	* 1.5508 *	* 1.3934 *	* 1.4062 *	* .8889 *	* .5473 *		
	* 2.8916 *	* 2.4826 *	* 2.7533 *	* 2.7328 *	* 4.1168 *	* 6.1312 *		
15	* .7925 *	* .9446 *	* 1.1920 *	* .8332 *	F-SUB-Q			
	* 4.8172 *	* 4.0194 *	* 3.1710 *	* 4.5350 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 10 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9403 *	* 1.5465 *	* 1.3666 *	* 1.4416 *	* 1.5048 *	* 1.6600 *	* 1.3280 *	* .7872 *
	* 3.6182 *	* 2.7647 *	* 3.2316 *	* 3.1287 *	* 2.9492 *	* 2.6599 *	* 3.2991 *	* 5.4917 *
9	* 1.5465 *	* 1.4234 *	* 1.6172 *	* 1.4191 *	* 1.6654 *	* 1.4116 *	* 1.5508 *	* .9425 *
	* 2.7647 *	* 3.0700 *	* 2.7821 *	* 3.1623 *	* 2.6809 *	* 3.1309 *	* 2.8248 *	* 4.5859 *
10	* 1.3666 *	* 1.6279 *	* 1.3495 *	* 1.6333 *	* 1.4758 *	* 1.6065 *	* 1.3934 *	* 1.1942 *
	* 3.2316 *	* 2.7734 *	* 3.3567 *	* 2.7476 *	* 3.0446 *	* 2.7699 *	* 3.1398 *	* 3.6059 *
11	* 1.4416 *	* 1.4212 *	* 1.6386 *	* 1.5309 *	* 1.5219 *	* 1.2231 *	* 1.4116 *	* .8354 *
	* 3.1287 *	* 3.1600 *	* 2.7391 *	* 3.0384 *	* 2.7945 *	* 3.4217 *	* 3.1221 *	* 5.1645 *
12	* 1.5048 *	* 1.6654 *	* 1.4737 *	* 1.5230 *	* 1.0089 *	* 1.1610 *	* .8900 *	
	* 2.9492 *	* 2.6825 *	* 3.0488 *	* 2.7945 *	* 3.1873 *	* 3.0573 *	* 4.5388 *	
13	* 1.6600 *	* 1.4116 *	* 1.6054 *	* 1.2220 *	* 1.1610 *	* .7775 *	* .5516 *	
	* 2.6599 *	* 3.1287 *	* 2.7699 *	* 3.4243 *	* 3.0531 *	* 4.3341 *	* 6.8013 *	
14	* 1.3280 *	* 1.5519 *	* 1.3934 *	* 1.4105 *	* .8889 *	* .5516 *		
	* 3.2991 *	* 2.8230 *	* 3.1420 *	* 3.1221 *	* 4.5435 *	* 6.8013 *		
15	* .7872 *	* .9414 *	* 1.1931 *	* .8343 *	F-SUB-Q			
	* 5.4917 *	* 4.5907 *	* 3.6088 *	* 5.1706 *	M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 9 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9200 *	* 1.5112 *	* 1.3323 *	* 1.4041 *	* 1.4619 *	* 1.6129 *	* 1.2895 *	* .7626 *
	* 3.8606 *	* 2.9277 *	* 3.3165 *	* 3.1287 *	* 2.9911 *	* 2.7172 *	* 3.3798 *	* 5.6823 *
9	* 1.5112 *	* 1.3902 *	* 1.5776 *	* 1.3816 *	* 1.6204 *	* 1.3720 *	* 1.5090 *	* .9168 *
	* 2.9277 *	* 3.2105 *	* 2.8140 *	* 3.1759 *	* 2.7222 *	* 3.1850 *	* 2.9008 *	* 4.7587 *
10	* 1.3323 *	* 1.5883 *	* 1.3163 *	* 1.5936 *	* 1.4384 *	* 1.5658 *	* 1.3591 *	* 1.1620 *
	* 3.3165 *	* 2.7927 *	* 3.3670 *	* 2.7892 *	* 3.0807 *	* 2.8230 *	* 3.2387 *	* 3.7624 *
11	* 1.4041 *	* 1.837 *	* 1.5990 *	* 1.3977 *	* 1.4887 *	* 1.1984 *	* 1.3805 *	* .8118 *
	* 3.1287 *	* 3.1736 *	* 2.7857 *	* 3.2035 *	* 2.9610 *	* 3.6207 *	* 3.2292 *	* 5.4310 *
12	* 1.4619 *	* 1.6194 *	* 1.4362 *	* 1.4887 *	* .9917 *	* 1.1428 *	* .8750 *	
	* 2.9911 *	* 2.7239 *	* 3.0850 *	* 2.9591 *	* 3.3747 *	* 3.2363 *	* 4.8000 *	
13	* 1.6129 *	* 1.3730 *	* 1.5647 *	* 1.1974 *	* 1.1417 *	* .7679 *	* .5430 *	
	* 2.7172 *	* 3.1827 *	* 2.8230 *	* 3.6236 *	* 3.2316 *	* 4.5907 *	* 7.2354 *	
14	* 1.2895 *	* 1.5090 *	* 1.3591 *	* 1.3794 *	* .8739 *	* .5430 *		
	* 3.3798 *	* 2.9008 *	* 3.2387 *	* 3.2316 *	* 4.8052 *	* 7.2354 *		
15	* .7626 *	* .9168 *	* 1.1620 *	* .8118 *	F-SUB-Q			
	* 5.6823 *	* 4.7638 *	* 3.7624 *	* 5.4310 *	M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9446 *	* 1.5487 *	* 1.3484 *	* 1.4212 *	* 1.4726 *	* 1.6365 *	* 1.2981 *	* .7668 *
	* 3.8219 *	* 2.8104 *	* 3.1713 *	* 2.9911 *	* 2.8614 *	* 2.5762 *	* 3.2035 *	* 5.3327 *
9	* 1.5487 *	* 1.4126 *	* 1.6108 *	* 1.3977 *	* 1.6472 *	* 1.3837 *	* 1.5305 *	* .9275 *
	* 2.8104 *	* 3.0679 *	* 2.6760 *	* 3.0426 *	* 2.5929 *	* 3.0384 *	* 2.7425 *	* 4.4655 *
10	* 1.3484 *	* 1.6183 *	* 1.3366 *	* 1.6279 *	* 1.4576 *	* 1.5926 *	* 1.3816 *	* 1.1835 *
	* 3.1713 *	* 2.6567 *	* 3.2151 *	* 2.6567 *	* 2.9531 *	* 2.6907 *	* 3.0679 *	* 3.5198 *
11	* 1.4212 *	* 1.3987 *	* 1.6333 *	* 1.4223 *	* 1.5272 *	* 1.2263 *	* 1.4148 *	* .8290 *
	* 2.9911 *	* 3.0426 *	* 2.6536 *	* 3.0636 *	* 2.8744 *	* 3.5423 *	* 3.0615 *	* 5.0873 *
12	* 1.4726 *	* 1.6461 *	* 1.4555 *	* 1.5272 *	* 1.0228 *	* 1.1899 *	* .9007 *	
	* 2.8614 *	* 2.5944 *	* 2.9571 *	* 2.8744 *	* 3.3824 *	* 3.1989 *	* 4.6831 *	
13	* 1.6365 *	* 1.3848 *	* 1.5926 *	* 1.2263 *	* 1.1888 *	* .8032 *	* .5676 *	
	* 2.5762 *	* 3.0363 *	* 2.6923 *	* 3.5452 *	* 3.1942 *	* 4.5576 *	* 7.0061 *	
14	* 1.2981 *	* 1.5315 *	* 1.3816 *	* 1.4137 *	* .8996 *	* .5676 *		
	* 3.2035 *	* 2.7408 *	* 3.0679 *	* 3.0636 *	* 4.6880 *	* 7.0061 *		
15	* .7668 *	* .9264 *	* 1.1824 *	* .8290 *	F-SUB-Q			
	* 5.3327 *	* 4.4700 *	* 3.5226 *	* 5.0873 *	M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0121 *	* 1.5808 *	* 1.3645 *	* 1.4255 *	* 1.4683 *	* 1.6354 *	* 1.2927 *	* .7626 *
	* 3.6084 *	* 2.5777 *	* 2.9084 *	* 2.7374 *	* 2.6221 *	* 2.3553 *	* 2.9394 *	* 4.9120 *
9	* 1.5808 *	* 1.4309 *	* 1.6268 *	* 1.4009 *	* 1.6526 *	* 1.3805 *	* 1.5358 *	* .9264 *
	* 2.5777 *	* 2.8176 *	* 2.4506 *	* 2.7857 *	* 2.3691 *	* 2.7839 *	* 2.5061 *	* 4.0972 *
10	* 1.3645 *	* 1.6343 *	* 1.3441 *	* 1.6461 *	* 1.4673 *	* 1.6033 *	* 1.3891 *	* 1.1877 *
	* 2.9084 *	* 2.4344 *	* 2.9492 *	* 2.4304 *	* 2.7055 *	* 2.4533 *	* 2.7998 *	* 3.2198 *
11	* 1.4255 *	* 1.4030 *	* 1.6515 *	* 1.4448 *	* 1.5647 *	* 1.2595 *	* 1.4384 *	* .8354 *
	* 2.7374 *	* 2.7839 *	* 2.4290 *	* 2.8122 *	* 2.6314 *	* 3.2602 *	* 2.7839 *	* 4.6486 *
12	* 1.4683 *	* 1.6515 *	* 1.4641 *	* 1.5647 *	* 1.1085 *	* 1.2584 *	* .9339 *	
	* 2.6221 *	* 2.3704 *	* 2.7088 *	* 2.6314 *	* 3.1942 *	* 3.0156 *	* 4.4164 *	
13	* 1.6354 *	* 1.3816 *	* 1.6022 *	* 1.2584 *	* 1.2584 *	* .8707 *	* .5987 *	
	* 2.3553 *	* 2.7821 *	* 2.4547 *	* 3.2626 *	* 3.0115 *	* 4.2962 *	* 6.6279 *	
14	* 1.2927 *	* 1.5358 *	* 1.3891 *	* 1.4373 *	* .9328 *	* .5987 *		
	* 2.9394 *	* 2.5061 *	* 2.8015 *	* 2.7857 *	* 4.4208 *	* 6.6279 *		
15	* .7626 *	* .9264 *	* 1.1877 *	* .8343 *	F-SUB-Q			
	* 4.9120 *	* 4.1010 *	* 3.2198 *	* 4.6535 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1245	* 1.6033	* 1.3752	* 1.4180	* 1.4523	* 1.6151	* 1.2766	* .7508
	* 3.3187	* 2.3806	* 2.6940	* 2.5392	* 2.4398	* 2.1950	* 2.7408	* 4.5955
9	* 1.6033	* 1.4426	* 1.6258	* 1.3934	* 1.6386	* 1.3666	* 1.5251	* .9189
	* 2.3806	* 2.6020	* 2.2718	* 2.5868	* 2.2027	* 2.5913	* 2.3341	* 3.8242
10	* 1.3752	* 1.6333	* 1.3409	* 1.6472	* 1.4673	* 1.5979	* 1.3837	* 1.1792
	* 2.6940	* 2.2555	* 2.7340	* 2.2532	* 2.5047	* 2.2776	* 2.6005	* 3.0012
11	* 1.4180	* 1.3955	* 1.6515	* 1.4608	* 1.5947	* 1.2916	* 1.4491	* .8311
	* 2.5392	* 2.5853	* 2.2521	* 2.5959	* 2.4277	* 2.9951	* 2.5762	* 4.3341
12	* 1.4523	* 1.6376	* 1.4651	* 1.5947	* 1.3077	* 1.3934	* .9682	*
	* 2.4398	* 2.2038	* 2.5090	* 2.4277	* 2.9084	* 2.7578	* 3.9971	*
13	* 1.6151	* 1.3677	* 1.5979	* 1.2906	* 1.3955	* .9628	* .6297	*
	* 2.1950	* 2.5883	* 2.2776	* 2.9972	* 2.7544	* 3.9401	* 6.1146	*
14	* 1.2766	* 1.5262	* 1.3837	* 1.4491	* .9682	* .6297	*	*
	* 2.7408	* 2.3341	* 2.6005	* 2.5762	* 4.0008	* 6.1146	*	*
15	* .7508	* .9178	* 1.1792	* .8311	* F-SUB-Q			
	* 4.5955	* 3.8276	* 3.0033	* 4.3384	* M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2113	* 1.6740	* 1.4180	* 1.4512	* 1.4769	* 1.6493	* 1.2991	* .7636
	* 2.8695	* 2.1357	* 2.4411	* 2.3025	* 2.2249	* 1.9941	* 2.5019	* 4.2063
9	* 1.6740	* 1.4919	* 1.6750	* 1.4234	* 1.6793	* 1.3912	* 1.5647	* .9382
	* 2.1357	* 2.3478	* 2.0514	* 2.3528	* 1.9950	* 2.3616	* 2.1193	* 3.4837
10	* 1.4180	* 1.6825	* 1.3752	* 1.6997	* 1.5048	* 1.6418	* 1.4201	* 1.2102
	* 2.4411	* 2.0372	* 2.4739	* 2.0354	* 2.2683	* 2.0591	* 2.3540	* 2.7205
11	* 1.4512	* 1.4255	* 1.7050	* 1.5101	* 1.6633	* 1.3484	* 1.5037	* .8568
	* 2.3025	* 2.3503	* 2.0288	* 2.3403	* 2.1671	* 2.6583	* 2.3121	* 3.9157
12	* 1.4769	* 1.6783	* 1.5026	* 1.6643	* 1.4330	* 1.5133	* 1.0207	*
	* 2.2249	* 1.9959	* 2.2718	* 2.1660	* 2.5305	* 2.3948	* 3.5170	*
13	* 1.6493	* 1.3923	* 1.6408	* 1.3473	* 1.5155	* 1.0539	* .6758	*
	* 1.9941	* 2.3603	* 2.0600	* 2.6615	* 2.3909	* 3.4377	* 5.3008	*
14	* 1.2991	* 1.5647	* 1.4201	* 1.5037	* 1.0196	* .6758	*	*
	* 2.5019	* 2.1193	* 2.3540	* 2.3134	* 3.5198	* 5.2944	*	*
15	* .7636	* .9371	* 1.2102	* .8568	* F-SUB-Q			
	* 4.2063	* 3.4865	* 2.7222	* 3.9157	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2027	* 1.6547	* 1.4041	* 1.4298	* 1.4555	* 1.6151	* 1.2798	* .7497
	* 2.7407	* 1.9851	* 2.2989	* 2.1799	* 2.1142	* 1.9080	* 2.3819	* 4.0263
9	* 1.6547	* 1.4812	* 1.6472	* 1.4030	* 1.6472	* 1.3687	* 1.5380	* .9243
	* 1.9851	* 2.1940	* 1.9424	* 2.2305	* 1.9023	* 2.2475	* 2.0242	* 3.3189
10	* 1.4041	* 1.6536	* 1.3548	* 1.6729	* 1.4898	* 1.6161	* 1.4009	* 1.1888
	* 2.2989	* 1.9313	* 2.3391	* 1.9263	* 2.1367	* 1.9535	* 2.2339	* 2.5959
11	* 1.4298	* 1.4062	* 1.6783	* 1.5005	* 1.6483	* 1.3441	* 1.4876	* .8418
	* 2.1799	* 2.2294	* 1.9196	* 2.1756	* 2.0013	* 2.4519	* 2.1756	* 3.7275
12	* 1.4555	* 1.6461	* 1.4876	* 1.6493	* 1.4459	* 1.5187	* 1.0271	*
	* 2.1142	* 1.9031	* 2.1398	* 2.0004	* 2.3478	* 2.2350	* 3.2506	*
13	* 1.6151	* 1.3698	* 1.6151	* 1.3441	* 1.5208	* 1.0699	* .6790	*
	* 1.9080	* 2.2464	* 1.9544	* 2.4533	* 2.2316	* 3.1668	* 4.9561	*
14	* 1.2798	* 1.5380	* 1.3998	* 1.4876	* 1.0260	* .6790	*	*
	* 2.3819	* 2.0233	* 2.2339	* 2.1756	* 3.2530	* 4.9561	*	*
15	* .7497	* .9232	* 1.1888	* .8418	* F-SUB-Q			
	* 4.0263	* 3.3214	* 2.5974	* 3.7307	* M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1899	* 1.6290	* 1.3891	* 1.4148	* 1.4405	* 1.5851	* 1.2681	* .7401
	* 2.5519	* 1.8764	* 2.1650	* 2.0775	* 2.0260	* 1.8443	* 2.2847	* 3.8813
9	* 1.6290	* 1.4716	* 1.6215	* 1.3859	* 1.6172	* 1.3505	* 1.5112	* .9114
	* 1.8764	* 2.0581	* 1.8520	* 2.1326	* 1.8306	* 2.1597	* 1.9484	* 3.1942
10	* 1.3891	* 1.6279	* 1.3388	* 1.6451	* 1.4758	* 1.5894	* 1.3816	* 1.1674
	* 2.1650	* 1.8443	* 2.2260	* 1.8389	* 2.0288	* 1.8724	* 2.1398	* 2.5061
11	* 1.4148	* 1.3891	* 1.6493	* 1.4887	* 1.6247	* 1.3323	* 1.4662	* .8300
	* 2.0775	* 2.1285	* 1.8321	* 2.0514	* 1.8892	* 2.2977	* 2.0658	* 3.5709
12	* 1.4405	* 1.6172	* 1.4726	* 1.6258	* 1.4426	* 1.5058	* 1.0282	*
	* 2.0260	* 1.8313	* 2.0316	* 1.8884	* 2.1681	* 2.0775	* 3.0053	*
13	* 1.5851	* 1.3516	* 1.5894	* 1.3323	* 1.5080	* 1.0742	* .6779	*
	* 1.8443	* 2.1576	* 1.8724	* 2.3001	* 2.0745	* 2.9355	* 4.5955	*
14	* 1.2681	* 1.5123	* 1.3805	* 1.4662	* 1.0271	* .6790	*	*
	* 2.2847	* 1.9484	* 2.1398	* 2.0668	* 3.0074	* 4.5955	*	*
15	* .7401	* .9104	* 1.1674	* .8300	* F-SUB-Q			
	* 3.8813	* 3.1966	* 2.5076	* 3.5738	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 300 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0881	* 1.4630	* 1.2627	* 1.2884	* 1.3109	* 1.4159	* 1.1545	* .6683
	* 2.6632	* 1.9798	* 2.2601	* 2.1842	* 2.1377	* 1.9833	* 2.4131	* 4.1432
9	* 1.4630	* 1.3473	* 1.4651	* 1.2584	* 1.4501	* 1.2220	* 1.3355	* .8118
	* 1.9798	* 2.1254	* 1.9509	* 2.2486	* 1.9561	* 2.2953	* 2.1142	* 3.4484
10	* 1.2627	* 1.4705	* 1.2295	* 1.4737	* 1.3377	* 1.4137	* 1.2381	* 1.0164
	* 2.2601	* 1.9441	* 2.3158	* 1.9518	* 2.1326	* 2.0131	* 2.2847	* 2.7647
11	* 1.2884	* 1.2616	* 1.4791	* 1.3505	* 1.4373	* 1.2049	* 1.2959	* .7390
	* 2.1842	* 2.2452	* 1.9449	* 2.1388	* 2.0260	* 2.4171	* 2.2249	* 3.8442
12	* 1.3109	* 1.4501	* 1.3366	* 1.4373	* 1.3055	* 1.3323	* .9414	*
	* 2.1377	* 1.9561	* 2.1346	* 2.0251	* 2.2590	* 2.2160	* 3.1155	*
13	* 1.4159	* 1.2231	* 1.4137	* 1.2049	* 1.3345	* .9768	* .6062	*
	* 1.9833	* 2.2930	* 2.0131	* 2.4184	* 2.2137	* 3.0363	* 4.8688	*
14	* 1.1545	* 1.3355	* 1.2381	* 1.2948	* .9414	* .6062	*	*
	* 2.4131	* 2.1132	* 2.2847	* 2.2249	* 3.1177	* 4.8634	*	*
15	* .6683	* .8118	* 1.0164	* .7390	* F-SUB-Q			
	* 4.1432	* 3.4511	* 2.7647	* 3.8475	* M-SUB-Q			

AT 50% POWER, 300 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7765	* 1.0228	* .8525	* .8911	* .6319	* .9842	* .5473	* .4723
	* 3.5738	* 2.7055	* 3.2269	* 3.0658	* 4.2713	* 2.7630	* 4.9175	* 5.6823
9	* 1.0228	* .6587	* 1.0346	* .8643	* 1.0100	* .8365	* .8900	* .5441
	* 2.7055	* 4.1588	* 2.6615	* 3.1782	* 2.7172	* 3.2530	* 3.0658	* 4.9840
10	* .8525	* 1.0421	* .8793	* 1.0324	* .6447	* .9821	* .5591	* .6608
	* 3.2269	* 2.6456	* 3.1353	* 2.6760	* 4.2467	* 2.8069	* 4.8581	* 4.1086
11	* .8911	* .8686	* 1.0389	* .6490	* .9864	* .8161	* .8568	* .4884
	* 3.0658	* 3.1623	* 2.6599	* 4.2549	* 2.8212	* 3.4323	* 3.2363	* 5.6245
12	* .6319	* 1.0110	* .6447	* .9885	* .6051	* .8804	* .4295	*
	* 4.2713	* 2.7138	* 4.2467	* 2.8176	* 4.6584	* 3.2316	* 6.5786	*
13	* .9842	* .8375	* .9821	* .8150	* .8814	* .4466	* .4252	*
	* 2.7630	* 3.2506	* 2.8069	* 3.4350	* 3.2269	* 6.3701	* 6.6679	*
14	* .5473	* .8911	* .5591	* .8568	* .4295	* .4252	*	*
	* 4.9175	* 3.0658	* 4.8581	* 3.2387	* 6.5786	* 6.6679	*	*
15	* .4723	* .5430	* .6597	* .4884	* F-SUB-Q			
	* 5.6823	* 4.9897	* 4.1124	* 5.6245	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.6458	.9703	.9039	.9725	.7583	1.0785	.5312	.4605
	2.4092	2.0371	2.2050	2.0914	2.7541	1.8782	3.1106	3.4539
9	.9703	.6544	1.0196	.9607	1.1278	.9725	.9971	.6447
	2.0371	2.8527	1.8764	2.1470	1.8731	2.1564	2.0774	3.1872
10	.9039	1.0207	.7518	1.0507	.7551	1.1106	.6694	.7904
	2.2050	1.8691	2.1449	1.8850	2.8259	1.9647	3.2150	2.7087
11	.9725	.9607	1.0507	.6715	1.0260	.9104	.9832	.6201
	2.0914	2.1402	1.8776	2.9170	2.0712	2.3675	2.1901	3.4571
12	.7583	1.1267	.7551	1.0260	.5087	.8322	.4980	
	2.7541	1.8727	2.8249	2.0703	3.1029	2.2258	4.2599	
13	1.0785	.9725	1.1106	.9093	.8322	.4305	.4873	
	1.8782	2.1553	1.9642	2.3689	2.2245	4.0833	4.2264	
14	.5312	.9971	.6694	.9832	.4969	.4873		
	3.1106	2.0769	3.2150	2.1902	4.2599	4.2264		
15	.4605	.6437	.7904	.6201	F-SUB-Q			
	3.4539	3.1898	2.7095	3.4574	M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8011	1.2413	1.1920	1.2584	1.3730	1.4030	.9757	.5944
	2.0360	1.6500	1.7446	1.6861	1.5917	1.5337	1.7598	2.8161
9	1.2413	1.1781	1.3120	1.2702	1.4491	1.2788	1.3323	.8611
	1.6500	1.6709	1.5638	1.6984	1.5293	1.7130	1.6299	2.4721
10	1.1920	1.3130	.9543	1.3741	1.3730	1.4266	1.2713	1.0699
	1.7446	1.5585	1.7737	1.5608	1.6292	1.5816	1.7732	2.0856
11	1.2584	1.2702	1.3741	1.2359	1.3430	1.2027	1.3195	.8268
	1.6861	1.6977	1.5570	1.6815	1.6610	1.8778	1.7172	2.7296
12	1.3730	1.4491	1.3720	1.3420	.9532	1.1278	.9618	
	1.5917	1.5290	1.6298	1.6610	1.7224	1.7462	2.3163	
13	1.4030	1.2777	1.4266	1.2017	1.1278	.8418	.6169	
	1.5337	1.7123	1.5816	1.8787	1.7447	2.2173	3.4369	
14	.9757	1.3313	1.2713	1.3184	.9607	.6169		
	1.7598	1.6296	1.7732	1.7179	2.3176	3.4369		
15	.5944	.8600	1.0689	.8268	F-SUB-Q			
	2.8161	2.4721	2.0861	2.7296	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8611	* 1.3570	* 1.2723	* 1.3462	* 1.4694	* 1.5380	* 1.0464	* .6458
	* 1.9609	* 1.5931	* 1.7434	* 1.6808	* 1.5820	* 1.4814	* 1.7504	* 2.7881
9	* 1.3570	* 1.2574	* 1.4234	* 1.3634	* 1.5958	* 1.3773	* 1.4683	* .9414
	* 1.5931	* 1.6745	* 1.5240	* 1.6851	* 1.4754	* 1.6863	* 1.5722	* 2.4146
10	* 1.2723	* 1.4244	* 1.0314	* 1.5058	* 1.4694	* 1.5615	* 1.3816	* 1.1931
	* 1.7434	* 1.5193	* 1.7720	* 1.5103	* 1.6150	* 1.5305	* 1.7260	* 1.9886
11	* 1.3462	* 1.3634	* 1.5048	* 1.3259	* 1.4641	* 1.2895	* 1.4469	* .8986
	* 1.6808	* 1.6831	* 1.5065	* 1.6706	* 1.5870	* 1.8441	* 1.6507	* 2.6529
12	* 1.4694	* 1.5947	* 1.4673	* 1.4630	* 1.0142	* 1.2252	* 1.0110	*
	* 1.5820	* 1.4759	* 1.6162	* 1.5870	* 1.7099	* 1.6861	* 2.3220	*
13	* 1.5380	* 1.3773	* 1.5615	* 1.2884	* 1.2242	* .8932	* .6629	*
	* 1.4814	* 1.6853	* 1.5308	* 1.8457	* 1.6855	* 2.2055	* 3.3460	*
14	* 1.0464	* 1.4683	* 1.3816	* 1.4459	* 1.0100	* .6629	*	*
	* 1.7504	* 1.5716	* 1.7263	* 1.6513	* 2.3245	* 3.3460	*	*
15	* .6458	* .9403	* 1.1920	* .8975	* F-SUB-Q			
	* 2.7881	* 2.4160	* 1.9896	* 2.6545	* M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8804	* 1.4052	* 1.2948	* 1.3730	* 1.4898	* 1.5851	* 1.0839	* .6790
	* 2.0299	* 1.6793	* 1.8904	* 1.8129	* 1.6989	* 1.5611	* 1.8837	* 3.0013
9	* 1.4052	* 1.2873	* 1.4673	* 1.3859	* 1.6440	* 1.3987	* 1.5155	* .9660
	* 1.6793	* 1.8164	* 1.6203	* 1.8110	* 1.5548	* 1.8014	* 1.6567	* 2.5694
10	* 1.2948	* 1.4683	* 1.0785	* 1.5508	* 1.4833	* 1.6054	* 1.4126	* 1.2274
	* 1.8904	* 1.6151	* 1.9087	* 1.5978	* 1.7309	* 1.6147	* 1.8211	* 2.0851
11	* 1.3730	* 1.3859	* 1.5508	* 1.3452	* 1.4876	* 1.2948	* 1.4716	* .9114
	* 1.8129	* 1.8094	* 1.5951	* 1.7984	* 1.6741	* 1.9712	* 1.7413	* 2.8068
12	* 1.4898	* 1.6429	* 1.4812	* 1.4865	* 1.0132	* 1.2327	* .9982	*
	* 1.6989	* 1.5554	* 1.7329	* 1.6741	* 1.8484	* 1.7961	* 2.5214	*
13	* 1.5851	* 1.3987	* 1.6054	* 1.2938	* 1.2316	* .8793	* .6565	*
	* 1.5611	* 1.8006	* 1.6149	* 1.9722	* 1.7954	* 2.3992	* 3.6106	*
14	* 1.0839	* 1.5155	* 1.4116	* 1.4705	* .9971	* .6565	*	*
	* 1.8837	* 1.6561	* 1.8219	* 1.7426	* 2.5244	* 3.6078	*	*
15	* .6790	* .9650	* 1.2274	* .9104	* F-SUB-Q			
	* 3.0013	* 2.5710	* 2.0861	* 2.8086	* M-SUB-Q			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8739 *	* 1.4137 *	* 1.2916 *	* 1.3634 *	* 1.4705 *	* 1.5872 *	* 1.1695 *	* .7497 *
	* 2.2729 *	* 1.8782 *	* 2.1494 *	* 2.0485 *	* 1.9071 *	* 1.7445 *	* 2.1274 *	* 3.3933 *
9	* 1.4137 *	* 1.2948 *	* 1.4791 *	* 1.3709 *	* 1.6247 *	* 1.3805 *	* 1.5090 *	* .9639 *
	* 1.8782 *	* 2.0684 *	* 1.8297 *	* 2.0399 *	* 1.7330 *	* 2.0180 *	* 1.8471 *	* 2.8673 *
10	* 1.2916 *	* 1.4812 *	* 1.1845 *	* 1.5455 *	* 1.4501 *	* 1.5797 *	* 1.3923 *	* 1.2145 *
	* 2.1494 *	* 1.8228 *	* 2.1634 *	* 1.7922 *	* 1.9414 *	* 1.7893 *	* 2.0144 *	* 2.3002 *
11	* 1.3634 *	* 1.3709 *	* 1.5455 *	* 1.3366 *	* 1.4576 *	* 1.2509 *	* 1.4309 *	* .8846 *
	* 2.0485 *	* 2.0390 *	* 1.7899 *	* 2.0329 *	* 1.8789 *	* 2.2369 *	* 1.9623 *	* 3.1646 *
12	* 1.4705 *	* 1.6236 *	* 1.4480 *	* 1.4576 *	* .9842 *	* 1.1845 *	* .9532 *	
	* 1.9071 *	* 1.7344 *	* 1.9440 *	* 1.8789 *	* 2.1019 *	* 2.0354 *	* 2.8995 *	
13	* 1.5872 *	* 1.3805 *	* 1.5787 *	* 1.2509 *	* 1.1845 *	* .8322 *	* .6212 *	
	* 1.7445 *	* 2.0176 *	* 1.7896 *	* 2.2381 *	* 2.0339 *	* 2.7489 *	* 4.1431 *	
14	* 1.1695 *	* 1.5090 *	* 1.3923 *	* 1.4309 *	* .9521 *	* .6212 *		
	* 2.1274 *	* 1.8467 *	* 2.0144 *	* 1.9632 *	* 2.9027 *	* 4.1391 *		
15	* .7497 *	* .9628 *	* 1.2145 *	* .8846 *	F-SUB-Q			
	* 3.3933 *	* 2.8692 *	* 2.3002 *	* 3.1670 *	M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8964 *	* 1.4726 *	* 1.3313 *	* 1.4009 *	* 1.5005 *	* 1.6547 *	* 1.3270 *	* .8300 *
	* 2.4590 *	* 2.0454 *	* 2.3656 *	* 2.2507 *	* 2.1019 *	* 1.8928 *	* 2.3135 *	* 3.6771 *
9	* 1.4726 *	* 1.3666 *	* 1.5626 *	* 1.4019 *	* 1.6665 *	* 1.4159 *	* 1.5551 *	* .9950 *
	* 2.0454 *	* 2.2861 *	* 1.9939 *	* 2.2474 *	* 1.8960 *	* 2.2163 *	* 2.0053 *	* 3.1250 *
10	* 1.3313 *	* 1.5690 *	* 1.3034 *	* 1.6097 *	* 1.4705 *	* 1.6129 *	* 1.4212 *	* 1.2488 *
	* 2.3656 *	* 1.9840 *	* 2.3715 *	* 1.9529 *	* 2.1504 *	* 1.9625 *	* 2.2143 *	* 2.5075 *
11	* 1.4009 *	* 1.4019 *	* 1.6108 *	* 1.3966 *	* 1.4951 *	* 1.2520 *	* 1.4448 *	* .8964 *
	* 2.2507 *	* 2.2451 *	* 1.9503 *	* 2.2413 *	* 2.0576 *	* 2.4966 *	* 2.1688 *	* 3.4788 *
12	* 1.5005 *	* 1.6654 *	* 1.4683 *	* 1.4951 *	* .9842 *	* 1.1835 *	* .9425 *	
	* 2.1019 *	* 1.8977 *	* 2.1529 *	* 2.0576 *	* 2.3473 *	* 2.2565 *	* 3.2271 *	
13	* 1.6547 *	* 1.4169 *	* 1.6129 *	* 1.2520 *	* 1.1835 *	* .8182 *	* .6148 *	
	* 1.8928 *	* 2.2151 *	* 1.9630 *	* 2.4994 *	* 2.2543 *	* 3.0912 *	* 4.6133 *	
14	* 1.3270 *	* 1.5551 *	* 1.4212 *	* 1.4437 *	* .9414 *	* .6148 *		
	* 2.3135 *	* 2.0044 *	* 2.2148 *	* 2.1699 *	* 3.2271 *	* 4.6133 *		
15	* .8300 *	* .9939 *	* 1.2477 *	* .8964 *	F-SUB-Q			
	* 3.6771 *	* 3.1273 *	* 2.5075 *	* 3.4790 *	M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8964 *	* 1.4812 *	* 1.3313 *	* 1.3987 *	* 1.4908 *	* 1.6590 *	* 1.3484 *	* .8461 *
	* 2.7900 *	* 2.3167 *	* 2.7126 *	* 2.5792 *	* 2.4109 *	* 2.1549 *	* 2.6372 *	* 4.1895 *
9	* 1.4812 *	* 1.3784 *	* 1.5851 *	* 1.3966 *	* 1.6590 *	* 1.4126 *	* 1.5615 *	* .9971 *
	* 2.3167 *	* 2.6059 *	* 2.2736 *	* 2.5809 *	* 2.1685 *	* 2.5381 *	* 2.2844 *	* 3.5582 *
10	* 1.3313 *	* 1.5926 *	* 1.3259 *	* 1.6140 *	* 1.4576 *	* 1.6011 *	* 1.4116 *	* 1.2466 *
	* 2.7126 *	* 2.2619 *	* 2.7128 *	* 2.7341 *	* 2.4742 *	* 2.2296 *	* 2.5082 *	* 2.8264 *
11	* 1.3987 *	* 1.3977 *	* 1.6161 *	* 1.3987 *	* 1.4865 *	* 1.2295 *	* 1.4244 *	* .8846 *
	* 2.5792 *	* 2.5779 *	* 2.2307 *	* 2.5708 *	* 2.3300 *	* 2.8411 *	* 2.4722 *	* 3.9519 *
12	* 1.4908 *	* 1.6579 *	* 1.4555 *	* 1.4865 *	* .9693 *	* 1.1588 *	* .9200 *	
	* 2.4109 *	* 2.1702 *	* 2.4783 *	* 2.3300 *	* 2.6578 *	* 2.5455 *	* 3.6576 *	
13	* 1.6590 *	* 1.4137 *	* 1.6001 *	* 1.2295 *	* 1.1588 *	* .7958 *	* .5976 *	
	* 2.1549 *	* 2.5366 *	* 2.2307 *	* 2.8428 *	* 2.5427 *	* 3.4942 *	* 5.2159 *	
14	* 1.3484 *	* 1.5615 *	* 1.4116 *	* 1.4244 *	* .9189 *	* .5976 *		
	* 2.6372 *	* 2.2838 *	* 2.5083 *	* 2.4736 *	* 3.6579 *	* 5.2098 *		
15	* .8461 *	* .9960 *	* 1.2466 *	* .8846 *	* F-SUB-Q			
	* 4.1895 *	* 3.5609 *	* 2.8282 *	* 3.9551 *	* M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8868 *	* 1.4662 *	* 1.3120 *	* 1.3784 *	* 1.4630 *	* 1.6343 *	* 1.3313 *	* .8343 *
	* 3.2389 *	* 2.6750 *	* 3.1624 *	* 2.9915 *	* 2.7745 *	* 2.4699 *	* 3.0193 *	* 4.7852 *
9	* 1.4662 *	* 1.3612 *	* 1.5669 *	* 1.3720 *	* 1.6290 *	* 1.3880 *	* 1.5390 *	* .9821 *
	* 2.6750 *	* 3.0135 *	* 2.6432 *	* 2.9878 *	* 2.4948 *	* 2.9135 *	* 2.6068 *	* 4.0464 *
10	* 1.3120 *	* 1.5744 *	* 1.3098 *	* 1.5883 *	* 1.4287 *	* 1.5701 *	* 1.3859 *	* 1.2284 *
	* 3.1624 *	* 2.6306 *	* 3.1582 *	* 2.5833 *	* 2.8570 *	* 2.5721 *	* 2.8857 *	* 3.2315 *
11	* 1.3784 *	* 1.3730 *	* 1.5904 *	* 1.3741 *	* 1.4598 *	* 1.2027 *	* 1.3955 *	* .8643 *
	* 2.9915 *	* 2.9838 *	* 2.5803 *	* 2.9747 *	* 2.6897 *	* 3.2846 *	* 2.8692 *	* 4.5787 *
12	* 1.4630 *	* 1.6279 *	* 1.4266 *	* 1.4598 *	* .9510 *	* 1.1342 *	* .8975 *	
	* 2.7745 *	* 2.4962 *	* 2.8609 *	* 2.6912 *	* 3.0708 *	* 2.9329 *	* 4.2191 *	
13	* 1.6343 *	* 1.3880 *	* 1.5701 *	* 1.2017 *	* 1.1331 *	* .7765 *	* .5805 *	
	* 2.4699 *	* 2.9117 *	* 2.5734 *	* 3.2848 *	* 2.9292 *	* 4.0273 *	* 6.0211 *	
14	* 1.3313 *	* 1.5390 *	* 1.3859 *	* 1.3944 *	* .8964 *	* .5805 *		
	* 3.0193 *	* 2.6054 *	* 2.8857 *	* 2.8709 *	* 4.2191 *	* 6.0129 *		
15	* .8343 *	* .9821 *	* 1.2274 *	* .8643 *	* F-SUB-Q			
	* 4.7852 *	* 4.0467 *	* 3.2339 *	* 4.5834 *	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8996 *	* 1.4737 *	* 1.3088 *	* 1.3762 *	* 1.4544 *	* 1.6365 *	* 1.3270 *	* .8332 *
	* 3.4674 *	* 2.8838 *	* 3.4350 *	* 3.3415 *	* 3.1331 *	* 2.7769 *	* 3.4111 *	* 5.3978 *
9	* 1.4737 *	* 1.3602 *	* 1.5744 *	* 1.3666 *	* 1.6301 *	* 1.3827 *	* 1.5401 *	* .9810 *
	* 2.8838 *	* 3.2650 *	* 2.9219 *	* 3.3593 *	* 2.8033 *	* 3.2893 *	* 2.9413 *	* 4.5717 *
10	* 1.3088 *	* 1.5819 *	* 1.3088 *	* 1.5926 *	* 1.4212 *	* 1.5733 *	* 1.3859 *	* 1.2316 *
	* 3.4350 *	* 2.9142 *	* 3.5109 *	* 2.8932 *	* 3.2340 *	* 2.9027 *	* 3.2674 *	* 3.6445 *
11	* 1.3762 *	* 1.3677 *	* 1.5947 *	* 1.3687 *	* 1.4608 *	* 1.1995 *	* 1.3966 *	* .8664 *
	* 3.3415 *	* 3.3567 *	* 2.8875 *	* 3.2482 *	* 2.9258 *	* 3.5913 *	* 3.2554 *	* 5.1827 *
12	* 1.4544 *	* 1.6290 *	* 1.4191 *	* 1.4608 *	* .9575 *	* 1.1395 *	* .8943 *	
	* 3.1331 *	* 2.8051 *	* 3.2363 *	* 2.9277 *	* 3.3721 *	* 3.2081 *	* 4.6389 *	
13	* 1.6365 *	* 1.3837 *	* 1.5722 *	* 1.1984 *	* 1.1395 *	* .7797 *	* .5826 *	
	* 2.7769 *	* 3.2869 *	* 2.9046 *	* 3.5913 *	* 3.2058 *	* 4.4430 *	* 6.6180 *	
14	* 1.3270 *	* 1.5412 *	* 1.3859 *	* 1.3955 *	* .8943 *	* .5826 *		
	* 3.4111 *	* 2.9394 *	* 3.2674 *	* 3.2554 *	* 4.6389 *	* 6.6180 *		
15	* .8332 *	* .9810 *	* 1.2316 *	* .8654 *	* F-SUB-Q			
	* 5.3978 *	* 4.5764 *	* 3.6475 *	* 5.1827 *	* M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8846 *	* 1.4351 *	* 1.2713 *	* 1.3355 *	* 1.4094 *	* 1.5862 *	* 1.2863 *	* .8065 *
	* 3.8008 *	* 3.1353 *	* 3.6059 *	* 3.4190 *	* 3.2316 *	* 2.8781 *	* 3.5338 *	* 5.6173 *
9	* 1.4351 *	* 1.3227 *	* 1.5272 *	* 1.3248 *	* 1.5797 *	* 1.3398 *	* 1.4951 *	* .9521 *
	* 3.1353 *	* 3.4920 *	* 3.0156 *	* 3.4457 *	* 2.9008 *	* 3.3980 *	* 3.0510 *	* 4.7690 *
10	* 1.2713 *	* 1.5347 *	* 1.2702 *	* 1.5444 *	* 1.3773 *	* 1.5251 *	* 1.3452 *	* 1.1952 *
	* 3.6059 *	* 3.0012 *	* 3.6177 *	* 2.9850 *	* 3.3340 *	* 3.0156 *	* 3.4006 *	* 3.8111 *
11	* 1.3355 *	* 1.3270 *	* 1.5465 *	* 1.3291 *	* 1.4191 *	* 1.1663 *	* 1.3570 *	* .8386 *
	* 3.4190 *	* 3.4457 *	* 2.9810 *	* 3.4810 *	* 3.1873 *	* 3.9019 *	* 3.4006 *	* 5.4646 *
12	* 1.4094 *	* 1.5787 *	* 1.3762 *	* 1.4201 *	* .9414 *	* 1.1138 *	* .8729 *	
	* 3.2316 *	* 2.9008 *	* 3.3390 *	* 3.1873 *	* 3.6657 *	* 3.4865 *	* 5.0294 *	
13	* 1.5862 *	* 1.3409 *	* 1.5251 *	* 1.1663 *	* 1.1138 *	* .7647 *	* .5666 *	
	* 2.8781 *	* 3.3954 *	* 3.0156 *	* 3.9019 *	* 3.4837 *	* 4.8262 *	* 7.2236 *	
14	* 1.2863 *	* 1.4951 *	* 1.3452 *	* 1.3570 *	* .8729 *	* .5666 *		
	* 3.5338 *	* 3.0510 *	* 3.4006 *	* 3.4006 *	* 5.0351 *	* 7.2118 *		
15	* .8065 *	* .9521 *	* 1.1952 *	* .8386 *	* F-SUB-Q			
	* 5.6173 *	* 4.7741 *	* 3.8143 *	* 5.4713 *	* M-SUB-Q			

TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 8 OF 16  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8911	1.4491	1.2734	1.3388	1.4084	1.5958	1.2863	.8075
	3.8377	3.1155	3.5003	3.3115	3.1221	2.7596	3.3824	5.3199
9	1.4491	1.3270	1.5422	1.3270	1.5904	1.3409	1.5037	.9553
	3.1155	3.3902	2.9123	3.3390	2.7874	3.2723	2.9142	4.5157
10	1.2734	1.5497	1.2756	1.5583	1.3794	1.5390	1.3537	1.2059
	3.5003	2.8970	3.4866	2.8857	3.2387	2.8970	3.2530	3.5971
11	1.3388	1.3280	1.5604	1.3323	1.4319	1.1738	1.3709	.8472
	3.3115	3.3390	2.8819	3.3876	3.1668	3.8143	3.2554	5.1585
12	1.4084	1.5894	1.3773	1.4319	.9468	1.1299	.8804	
	3.1221	2.7892	3.2435	3.1668	3.7465	3.5086	4.9897	
13	1.5958	1.3420	1.5390	1.1738	1.1299	.7754	.5762	
	2.7596	3.2698	2.8989	3.8176	3.5058	4.8421	7.0960	
14	1.2863	1.5048	1.3537	1.3698	.8793	.5773		
	3.3824	2.9123	3.2530	3.2554	4.9897	7.0847		
15	.8075	.9543	1.2059	.8472	F-SUB-Q			
	5.3199	4.5203	3.6000	5.1645	M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8911	1.4469	1.2649	1.3302	1.3934	1.5829	1.2734	.7979
	3.6758	2.8595	3.2175	3.0446	2.8838	2.5422	3.1243	4.9230
9	1.4469	1.3216	1.5369	1.3163	1.5797	1.3280	1.4940	.9478
	2.8595	3.1177	2.6712	3.0764	2.5643	3.0197	2.6842	4.1706
10	1.2649	1.5444	1.2681	1.5530	1.3698	1.5337	1.3462	1.2006
	3.2175	2.6583	3.1984	2.6472	2.9790	2.6599	2.9931	3.3115
11	1.3302	1.3173	1.5551	1.3270	1.4309	1.1738	1.3709	.8450
	3.0446	3.0764	2.6425	3.1133	2.9027	3.5003	2.9830	4.7485
12	1.3934	1.5797	1.3677	1.4309	.9500	1.1395	.8846	
	2.8838	2.5658	2.9850	2.9027	3.6147	3.3773	4.7030	
13	1.5829	1.3291	1.5337	1.1727	1.1395	.7850	.5837	
	2.5422	3.0176	2.6615	3.5003	3.3747	4.6732	6.8223	
14	1.2734	1.4951	1.3462	1.3698	.8846	.5837		
	3.1243	2.6825	2.9931	2.9850	4.7080	6.8223		
15	.7979	.9468	1.2006	.8439	F-SUB-Q			
	4.9230	4.1706	3.3140	4.7485	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9061	* 1.4501	* 1.2595	* 1.3163	* 1.3741	* 1.5594	* 1.2563	* .7850
	* 3.3899	* 2.6456	* 2.9870	* 2.8302	* 2.6891	* 2.3755	* 2.9180	* 4.6146
9	* 1.4501	* 1.3184	* 1.5251	* 1.3034	* 1.5604	* 1.3098	* 1.4748	* .9361
	* 2.6456	* 2.8857	* 2.4822	* 2.8632	* 2.3935	* 2.8194	* 2.5047	* 3.8950
10	* 1.2595	* 1.5315	* 1.2574	* 1.5401	* 1.3612	* 1.5219	* 1.3345	* 1.1867
	* 2.9870	* 2.4697	* 2.9893	* 2.4601	* 2.7682	* 2.4753	* 2.7874	* 3.0937
11	* 1.3163	* 1.3045	* 1.5422	* 1.3270	* 1.4351	* 1.1781	* 1.3687	* .8365
	* 2.8302	* 2.8622	* 2.4560	* 2.8819	* 2.6858	* 3.2340	* 2.7647	* 4.4297
12	* 1.3741	* 1.5604	* 1.3591	* 1.4351	* .9778	* 1.1674	* .8996	
	* 2.6891	* 2.3948	* 2.7717	* 2.6842	* 3.2795	* 3.0807	* 4.2305	
13	* 1.5594	* 1.3109	* 1.5208	* 1.1770	* 1.1674	* .8193	* .5987	
	* 2.3755	* 2.8176	* 2.4767	* 3.2363	* 3.0764	* 4.2713	* 6.1743	
14	* 1.2563	* 1.4758	* 1.3345	* 1.3687	* .8996	* .5987		
	* 2.9180	* 2.5047	* 2.7874	* 2.7665	* 4.2345	* 6.1657		
15	* .7850	* .9350	* 1.1856	* .8365	F-SUB-Q			
	* 4.6146	* 3.8984	* 3.0937	* 4.4341	M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0357	* 1.5380	* 1.3077	* 1.3527	* 1.4019	* 1.5979	* 1.2820	* .8022
	* 2.8673	* 2.3616	* 2.6989	* 2.5598	* 2.4479	* 2.1534	* 2.6583	* 4.2023
9	* 1.5380	* 1.3698	* 1.5797	* 1.3366	* 1.6044	* 1.3388	* 1.5133	* .9585
	* 2.3616	* 2.5974	* 2.2327	* 2.5990	* 2.1109	* 2.5628	* 2.2694	* 3.5395
10	* 1.3077	* 1.5851	* 1.2959	* 1.5958	* 1.4030	* 1.5754	* 1.3762	* 1.2220
	* 2.6989	* 2.2215	* 2.6789	* 2.2104	* 2.5005	* 2.2271	* 2.5176	* 2.7962
11	* 1.3527	* 1.3377	* 1.5990	* 1.3816	* 1.5197	* 1.2445	* 1.4298	* .6686
	* 2.5598	* 2.5974	* 2.2082	* 2.5898	* 2.3806	* 2.8932	* 2.4753	* 3.9863
12	* 1.4019	* 1.6044	* 1.4009	* 1.5197	* 1.1245	* 1.2927	* .9628	
	* 2.4479	* 2.1650	* 2.5047	* 2.3806	* 2.7980	* 2.6190	* 3.7150	
13	* 1.5979	* 1.3398	* 1.5754	* 1.2434	* 1.2927	* .9253	* .6565	
	* 2.1534	* 2.5613	* 2.2271	* 2.8951	* 2.6159	* 3.6415	* 5.3135	
14	* 1.2820	* 1.5144	* 1.3762	* 1.4287	* .9618	* .6565		
	* 2.6583	* 2.2694	* 2.5176	* 2.4767	* 3.7181	* 5.3071		
15	* .8022	* .9585	* 1.2209	* .8675	F-SUB-Q			
	* 4.2023	* 3.5423	* 2.7980	* 3.9863	M-SUB-Q			

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TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1449	* 1.5754	* 1.3280	* 1.3559	* 1.4019	* 1.5894	* 1.2831	* .8000
	* 2.7178	* 2.1481	* 2.5118	* 2.3974	* 2.3001	* 2.0354	* 2.4991	* 3.9720
9	* 1.5754	* 1.3934	* 1.5851	* 1.3409	* 1.6011	* 1.3366	* 1.5133	* .9607
	* 2.1481	* 2.4000	* 2.0922	* 2.4330	* 2.0401	* 2.4118	* 2.1398	* 3.3314
10	* 1.3280	* 1.5904	* 1.3013	* 1.6044	* 1.4169	* 1.5829	* 1.3816	* 1.2220
	* 2.5118	* 2.0833	* 2.5276	* 2.0697	* 2.3280	* 2.0863	* 2.3578	* 2.6393
11	* 1.3559	* 1.3420	* 1.6076	* 1.4084	* 1.5701	* 1.2852	* 1.4501	* .8697
	* 2.3974	* 2.4317	* 2.0668	* 2.3819	* 2.1650	* 2.6174	* 2.2977	* 3.7465
12	* 1.4019	* 1.6001	* 1.4137	* 1.5701	* 1.3238	* 1.4126	* 1.0089	*
	* 2.3001	* 2.0410	* 2.3317	* 2.1660	* 2.5688	* 2.4184	* 3.3517	*
13	* 1.5894	* 1.3377	* 1.5819	* 1.2841	* 1.4137	* 1.0185	* .6940	*
	* 2.0354	* 2.4105	* 2.0863	* 2.6190	* 2.4158	* 3.3264	* 4.8903	*
14	* 1.2831	* 1.5133	* 1.3816	* 1.4491	* 1.0078	* .6951	*	*
	* 2.4991	* 2.1368	* 2.3578	* 2.2977	* 3.3517	* 4.8903	*	*
15	* .8000	* .9596	* 1.2209	* .8697	* F-SUB-Q			
	* 3.9720	* 3.3340	* 2.6393	* 3.7465	* M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1920	* 1.6151	* 1.3548	* 1.3762	* 1.4212	* 1.6011	* 1.3034	* .8118
	* 2.4621	* 1.9807	* 2.3231	* 2.2429	* 2.1607	* 1.9229	* 1.3453	* 3.7433
9	* 1.6151	* 1.4309	* 1.6065	* 1.3591	* 1.6183	* 1.3527	* 1.5315	* .9746
	* 1.9807	* 2.2104	* 1.9553	* 2.2800	* 1.9204	* 2.2694	* 2.0177	* 3.1398
10	* 1.3548	* 1.6108	* 1.3216	* 1.6290	* 1.4437	* 1.6044	* 1.4041	* 1.2359
	* 2.3231	* 1.9501	* 2.3603	* 1.9373	* 2.1660	* 1.9544	* 2.2071	* 2.4892
11	* 1.3762	* 1.3602	* 1.6311	* 1.4448	* 1.6151	* 1.3259	* 1.4812	* .8857
	* 2.2429	* 2.2776	* 1.9330	* 2.1972	* 1.9878	* 2.4000	* 2.1305	* 3.5058
12	* 1.4212	* 1.6172	* 1.4416	* 1.6140	* 1.4052	* 1.4855	* 1.0549	*
	* 2.1607	* 1.9213	* 2.1692	* 1.9878	* 2.2894	* 2.1660	* 3.0280	*
13	* 1.6011	* 1.3537	* 1.6044	* 1.3248	* 1.4876	* 1.0881	* .7304	*
	* 1.9229	* 2.2683	* 1.9544	* 2.4013	* 2.1639	* 2.9690	* 4.3814	*
14	* 1.3034	* 1.5315	* 1.4041	* 1.4801	* 1.0549	* .7315	*	*
	* 2.3453	* 2.0168	* 2.2071	* 2.1315	* 3.0300	* 4.3814	*	*
15	* .8118	* .9735	* 1.2349	* .8846	* F-SUB-Q			
	* 3.7433	* 3.1420	* 2.4906	* 3.5086	* M-SUB-Q			



TABLE 1 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - NORMAL OPERATION

AT 50% POWER, 430 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1299	* 1.5058	* 1.2777	* 1.3002	* 1.3452	* 1.4876	* 1.2349	* .7615
	* 2.6712	* 2.0251	* 2.3540	* 2.2858	* 2.2016	* 1.9968	* 2.3909	* 3.8610
9	* 1.5058	* 1.3602	* 1.5015	* 1.2820	* 1.5048	* 1.2713	* 1.4159	* .9050
	* 2.0251	* 2.2182	* 2.0067	* 2.3292	* 1.9887	* 2.3329	* 2.1042	* 3.2650
10	* 1.2777	* 1.5058	* 1.2531	* 1.5165	* 1.3645	* 1.4908	* 1.3163	* 1.1278
	* 2.3540	* 2.0013	* 2.3935	* 1.9950	* 2.2005	* 2.0205	* 2.2671	* 2.6346
11	* 1.3002	* 1.2831	* 1.5197	* 1.3687	* 1.5015	* 1.2563	* 1.3730	* .8247
	* 2.2858	* 2.3268	* 1.9905	* 2.2148	* 2.0448	* 2.4277	* 2.2038	* 3.6296
12	* 1.3452	* 1.5048	* 1.3634	* 1.5015	* 1.3430	* 1.3923	* 1.0153	*
	* 2.2016	* 1.9887	* 2.2038	* 2.0448	* 2.2953	* 2.2193	* 3.0321	*
13	* 1.4876	* 1.2713	* 1.4908	* 1.2552	* 1.3923	* 1.0453	* .6876	*
	* 1.9968	* 2.3304	* 2.0205	* 2.4290	* 2.2193	* 2.9591	* 4.4791	*
14	* 1.2349	* 1.4159	* 1.3163	* 1.3730	* 1.0142	* .6887	*	*
	* 2.3909	* 2.1032	* 2.2671	* 2.2049	* 3.0321	* 4.4745	*	*
15	* .7615	* .9039	* 1.1278	* .8236	* F-SUB-Q			
	* 3.8610	* 3.2674	* 2.6346	* 3.6326	* M-SUB-Q			

AT 50% POWER, 430 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8461	* 1.0967	* .9178	* .9575	* .7229	* 1.0849	* .6480	* .5655
	* 3.4728	* 2.6712	* 3.1759	* 3.0238	* 3.9649	* 2.6615	* 4.4120	* 5.0524
9	* 1.0967	* .7379	* 1.1042	* .9318	* 1.0967	* .9275	* 1.0078	* .6480
	* 2.6712	* 3.9331	* 2.6409	* 3.1221	* 2.6504	* 3.1133	* 2.8688	* 4.4475
10	* .9178	* 1.1106	* .9457	* 1.1063	* .7336	* 1.0860	* .6640	* .7872
	* 3.1759	* 2.6283	* 3.0829	* 2.6409	* 3.9507	* 2.6858	* 4.3427	* 3.6627
11	* .9575	* .9350	* 1.1117	* .7347	* 1.0839	* .9104	* .9693	* .5848
	* 3.0238	* 3.1111	* 2.6299	* 3.9720	* 2.7239	* 3.2387	* 3.0238	* 4.9784
12	* .7229	* 1.0978	* .7336	* 1.0839	* .7004	* .9842	* .5109	*
	* 3.9649	* 2.6488	* 3.9507	* 2.7239	* 4.2305	* 3.0321	* 5.8092	*
13	* 1.0849	* .9275	* 1.0860	* .9104	* .9853	* .5323	* .5130	*
	* 2.6615	* 3.1111	* 2.6858	* 3.2411	* 3.0280	* 5.6245	* 5.8169	*
14	* .6480	* 1.0078	* .6640	* .9693	* .5109	* .5130	*	*
	* 4.4120	* 2.8669	* 4.3427	* 3.0238	* 5.8092	* 5.8169	*	*
15	* .5655	* .6480	* .7872	* .5837	* F-SUB-Q			
	* 5.0524	* 4.4475	* 3.6627	* 4.9784	* M-SUB-Q			

TABLE 2

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.5762	.8075	.7454	.7829	.5034	.8000	.4145	.4070
	2.3810	1.9003	2.0785	1.9635	3.0164	1.8897	3.5991	3.6410
9	.8075	.5055	.8675	.7551	.8332	.6951	.7090	.4455
	1.9003	3.1036	1.7832	2.0411	1.8287	2.1784	2.1508	3.3673
10	.7454	.8697	.7390	.8429	.4916	.7711	.4070	.5162
	2.0785	1.7785	2.0999	1.8436	3.1638	2.0119	3.7655	2.9337
11	.7829	.7572	.8472	.4819	.7722	.6405	.6672	.4006
	1.9635	2.0360	1.8337	3.2399	1.9923	2.3840	2.3224	3.8544
12	.5034	.8343	.4916	.7743	.3663	.5976	.3106	
	3.0164	1.8270	3.1614	1.9884	3.4450	2.2291	4.7741	
13	.8000	.6961	.7711	.6405	.5987	.2881	.3363	
	1.8897	2.1761	2.0108	2.3840	2.2251	4.5297	4.2638	
14	.4145	.7090	.4070	.6672	.3095	.3352		
	3.5991	2.1485	3.7619	2.3224	4.7741	4.2671		
15	.4070	.4455	.5162	.3995	F-SUB-Q			
	3.6410	3.3702	2.9359	3.8544	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8429	1.1310	1.1256	1.1685	1.1717	1.1235	.9778	.5837
	1.8128	1.4483	1.4334	1.3699	1.3520	1.4051	1.5938	2.6485
9	1.1310	1.1320	1.1984	1.1288	1.1706	1.0324	1.0485	.6972
	1.4483	1.4497	1.3419	1.4182	1.3586	1.5297	1.5167	2.2488
10	1.1256	1.2006	1.0142	1.1374	1.1256	1.0967	.9939	.8215
	1.4334	1.3397	1.5957	1.4225	1.4459	1.4705	1.6056	1.9222
11	1.1685	1.1310	1.1470	1.1117	1.0860	.9800	1.0185	.6362
	1.3699	1.4158	1.4104	1.4645	1.4880	1.6235	1.5893	2.5305
12	1.1717	1.1727	1.1256	1.0871	.9478	.9864	.8097	
	1.3520	1.3568	1.4459	1.4870	1.4730	1.5245	1.9329	
13	1.1235	1.0335	1.0967	.9789	.9875	.8032	.4980	
	1.4051	1.5291	1.4700	1.6235	1.5211	1.8363	3.0605	
14	.9778	1.0485	.9939	1.0185	.8097	.4980		
	1.5938	1.5162	1.6056	1.5901	1.9336	3.0651		
15	.5837	.6972	.8204	.6362	F-SUB-Q			
	2.6485	2.2500	1.9231	2.5305	M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OF MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0003	* 1.3259	* 1.2991	* 1.3634	* 1.3645	* 1.3377	* 1.1535	* .6887
	* 1.6923	* .3028	* 1.2992	* 1.2254	* 1.2123	* 1.2307	* 1.4116	* 2.3407
9	* 1.3259	* 1.2938	* 1.4009	* 1.3109	* 1.3869	* 1.2113	* 1.2809	* .8547
	* 1.3028	* 1.3335	* 1.1999	* 1.2694	* 1.1961	* 1.3605	* 1.2971	* 1.9129
10	* 1.2991	* 1.4041	* 1.1503	* 1.3473	* 1.3184	* 1.3141	* 1.2124	* 1.0421
	* 1.2992	* 1.1982	* 1.4739	* 1.2576	* 1.2956	* 1.2848	* 1.3779	* 1.5791
11	* 1.3634	* 1.3130	* 1.3495	* 1.3088	* 1.3184	* 1.1877	* 1.2681	* .7893
	* 1.2254	* 1.2679	* 1.2561	* 1.2934	* 1.2784	* 1.4075	* 1.3399	* 2.1277
12	* 1.3645	* 1.3891	* 1.3173	* 1.3184	* 1.2756	* 1.2702	* .9928	*
	* 1.2123	* 1.1944	* 1.2959	* 1.2784	* 1.2845	* 1.2924	* 1.6718	*
13	* 1.3377	* 1.2124	* 1.3141	* 1.1877	* 1.2734	* 1.0249	* .6201	*
	* 1.2307	* 1.3596	* 1.2848	* 1.4081	* 1.2893	* 1.5764	* 2.6211	*
14	* 1.1535	* 1.2809	* 1.2124	* 1.2681	* .9917	* .6190	*	*
	* 1.4116	* 1.2971	* 1.3783	* 1.3399	* 1.6727	* 2.6244	*	*
15	* .6887	* .8547	* 1.0421	* .7893	* F-SUB-Q			
	* 2.3407	* 1.9146	* 1.5796	* 2.1289	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0689	* 1.4351	* 1.3859	* 1.4673	* 1.4641	* 1.4683	* 1.2520	* .7433
	* 1.6867	* 1.2687	* 1.2772	* 1.1943	* 1.1834	* 1.1749	* 1.3605	* 2.2714
9	* 1.4351	* 1.3794	* 1.5144	* 1.4094	* 1.5090	* 1.3163	* 1.4276	* .9457
	* 1.2687	* 1.3195	* 1.1643	* 1.2379	* 1.1527	* 1.3104	* 1.2195	* 1.8126
10	* 1.3859	* 1.5176	* 1.2338	* 1.4748	* 1.4276	* 1.4501	* 1.3495	* 1.1749
	* 1.2772	* 1.1621	* 1.4438	* 1.2057	* 1.2539	* 1.2170	* 1.2961	* 1.4676
11	* 1.4673	* 1.4116	* 1.4758	* 1.4276	* 1.4576	* 1.3141	* 1.4266	* .8846
	* 1.1943	* 1.2365	* 1.2043	* 1.2481	* 1.2143	* 1.3430	* 1.2531	* 1.9909
12	* 1.4641	* 1.5112	* 1.4266	* 1.4587	* 1.4169	* 1.4362	* 1.0999	*
	* 1.1834	* 1.1511	* 1.2550	* 1.2143	* 1.2350	* 1.2197	* 1.5999	*
13	* 1.4683	* 1.3163	* 1.4491	* 1.3130	* 1.4394	* 1.1449	* .6887	*
	* 1.1749	* 1.3096	* 1.2170	* 1.3435	* 1.2164	* 1.5125	* 2.5163	*
14	* 1.2520	* 1.4276	* 1.3484	* 1.4266	* 1.0988	* .6887	*	*
	* 1.3605	* 1.2191	* 1.2965	* 1.2532	* 1.6023	* 2.5193	*	*
15	* .7433	* .9446	* 1.1749	* .8846	* F-SUB-Q			
	* 2.2714	* 1.8141	* 1.4680	* 1.9918	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0742	* 1.4576	* 1.3987	* 1.4865	* 1.4844	* 1.5080	* 1.2788	* .7551
	* 1.7716	* 1.3049	* 1.3336	* 1.2420	* 1.2303	* 1.2057	* 1.4048	* 2.3599
9	* 1.4576	* 1.3891	* 1.5412	* 1.4298	* 1.5401	* 1.3462	* 1.4791	* .9725
	* 1.3049	* 1.3688	* 1.2060	* 1.2869	* 1.1905	* 1.3506	* 1.2384	* 1.8561
10	* 1.3987	* 1.5433	* 1.2520	* 1.5123	* 1.4576	* 1.4951	* 1.3987	* 1.2199
	* 1.3336	* 1.2037	* 1.4989	* 1.2380	* 1.2934	* 1.2352	* 1.3162	* 1.4871
11	* 1.4865	* 1.4309	* 1.5133	* 1.4641	* 1.5069	* 1.3570	* 1.4855	* .9136
	* 1.2420	* 1.2854	* 1.2370	* 1.2845	* 1.2407	* 1.3740	* 1.2613	* 2.0270
12	* 1.4844	* 1.5422	* 1.4555	* 1.5069	* 1.4598	* 1.4930	* 1.1331	*
	* 1.2303	* 1.1889	* 1.2946	* 1.2407	* 1.2721	* 1.2448	* 1.6421	*
13	* 1.5080	* 1.3462	* 1.4940	* 1.3570	* 1.4962	* 1.1792	* .7058	*
	* 1.2057	* 1.3497	* 1.2352	* 1.3748	* 1.2412	* 1.5640	* 2.6139	*
14	* 1.2788	* 1.4791	* 1.3987	* 1.4844	* 1.1320	* .7047	*	*
	* 1.4048	* 1.2384	* 1.3162	* 1.2620	* 1.6434	* 2.6171	*	*
15	* .7551	* .9725	* 1.2199	* .9136	* F-SUB-Q			
	* 2.3599	* 1.8577	* 1.4882	* 2.0280	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1021	* 1.5123	* 1.4448	* 1.5444	* 1.5390	* 1.5797	* 1.3323	* .7818
	* 1.8132	* 1.3175	* 1.3640	* 1.2650	* 1.2577	* 1.2187	* 1.4295	* 2.4158
9	* 1.5123	* 1.4319	* 1.6022	* 1.4833	* 1.6054	* 1.4030	* 1.5615	* 1.0196
	* 1.3175	* 1.3921	* 1.2258	* 1.3132	* 1.2090	* 1.3717	* 1.2393	* 1.8742
10	* 1.4448	* 1.6054	* 1.2991	* 1.5808	* 1.5165	* 1.5787	* 1.4791	* 1.2927
	* 1.3640	* 1.2231	* 1.5209	* 1.2465	* 1.3028	* 1.2362	* 1.3137	* 1.4830
11	* 1.5444	* 1.4855	* 1.5819	* 1.5272	* 1.5851	* 1.4276	* 1.5733	* .9671
	* 1.2650	* 1.3120	* 1.2451	* 1.2963	* 1.2483	* 1.3779	* 1.2482	* 2.0097
12	* 1.5390	* 1.6076	* 1.5144	* 1.5851	* 1.5283	* 1.5765	* 1.1856	*
	* 1.2577	* 1.2070	* 1.3043	* 1.2483	* 1.2925	* 1.2504	* 1.6565	*
13	* 1.5797	* 1.4041	* 1.5787	* 1.4255	* 1.5808	* 1.2316	* .7379	*
	* 1.2187	* 1.3708	* 1.2359	* 1.3788	* 1.2475	* 1.5973	* 2.6526	*
14	* 1.3323	* 1.5615	* 1.4780	* 1.5733	* 1.1845	* .7368	*	*
	* 1.4295	* 1.2390	* 1.3144	* 1.2482	* 1.6590	* 2.6558	*	*
15	* .7818	* 1.0185	* 1.2916	* .9660	* F-SUB-Q			
	* 2.4158	* 1.8749	* 1.4835	* 2.0115	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0988	* 1.5219	* 1.4512	* 1.5572	* 1.5508	* 1.6022	* 1.3462	* .7850
	* 1.9141	* 1.3670	* 1.4276	* 1.3231	* 1.3195	* 1.2701	* 1.4978	* 2.5441
9	* 1.5219	* 1.4341	* 1.6161	* 1.4951	* 1.6236	* 1.4201	* 1.5915	* 1.0324
	* 1.3670	* 1.4514	* 1.2794	* 1.3760	* 1.2628	* 1.4334	* 1.2804	* 1.9528
10	* 1.4512	* 1.6194	* 1.3088	* 1.6011	* 1.5337	* 1.6129	* 1.5101	* 1.3173
	* 1.4276	* 1.2762	* 1.5849	* 1.2903	* 1.3494	* 1.2757	* 1.3527	* 1.5340
11	* 1.5572	* 1.4962	* 1.6033	* 1.5476	* 1.6119	* 1.4533	* 1.6076	* .9821
	* 1.3231	* 1.3748	* 1.2888	* 1.3455	* 1.2881	* 1.4236	* 1.2811	* 2.0738
12	* 1.5508	* 1.6258	* 1.5305	* 1.6119	* 1.5497	* 1.6054	* 1.2006	*
	* 1.3195	* 1.2610	* 1.3511	* 1.2881	* 1.3381	* 1.2881	* 1.7185	*
13	* 1.6022	* 1.4212	* 1.6119	* 1.4512	* 1.6097	* 1.2456	* .7433	*
	* 1.2701	* 1.4330	* 1.2759	* 1.4245	* 1.2843	* 1.6566	* 2.7583	*
14	* 1.3462	* 1.5915	* 1.5090	* 1.6065	* 1.1995	* .7422	*	*
	* 1.4978	* 1.2804	* 1.3530	* 1.2819	* 1.7212	* 2.7618	*	*
15	* .7850	* 1.0324	* 1.3173	* .9810	* F-SUB-Q			
	* 2.5441	* 1.9536	* 1.5340	* 2.0757	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0849	* 1.5176	* 1.4448	* 1.5572	* 1.5487	* 1.6086	* 1.3452	* .7808
	* 2.0184	* 1.4373	* 1.5106	* 1.3965	* 1.3969	* 1.3371	* 1.5848	* 2.7042
9	* 1.5176	* 1.4255	* 1.6151	* 1.4930	* 1.6268	* 1.4223	* 1.6033	* 1.0335
	* 1.4373	* 1.5316	* 1.3483	* 1.4551	* 1.3314	* 1.5129	* 1.3383	* 2.0574
10	* 1.4448	* 1.6183	* 1.3055	* 1.6054	* 1.5358	* 1.6279	* 1.5230	* 1.3238
	* 1.5106	* 1.3451	* 1.6714	* 1.3537	* 1.4176	* 1.3237	* 1.4110	* 1.6062
11	* 1.5572	* 1.4951	* 1.6076	* 1.5497	* 1.6215	* 1.4630	* 1.6215	* .9821
	* 1.3965	* 1.4532	* 1.3523	* 1.4080	* 1.3460	* 1.4783	* 1.3293	* 2.1760
12	* 1.5487	* 1.6290	* 1.5326	* 1.6215	* 1.5551	* 1.6172	* 1.2027	*
	* 1.3969	* 1.3294	* 1.4195	* 1.3460	* 1.4044	* 1.3468	* 1.8017	*
13	* 1.6086	* 1.4234	* 1.6268	* 1.4619	* 1.6215	* 1.2456	* .7401	*
	* 1.3371	* 1.5118	* 1.3245	* 1.4793	* 1.3430	* 1.7469	* 2.9183	*
14	* 1.3452	* 1.6033	* 1.5230	* 1.6204	* 1.2006	* .7390	*	*
	* 1.5848	* 1.3383	* 1.4119	* 1.3300	* 1.8037	* 2.9208	*	*
15	* .7808	* 1.0324	* 1.3227	* .9821	* F-SUB-Q			
	* 2.7042	* 2.0584	* 1.6073	* 2.1775	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0924	* 1.5422	* 1.4651	* 1.5883	* 1.5765	* 1.6472	* 1.3677	* .7904
	* 2.1145	* 1.4975	* 1.5808	* 1.4559	* 1.4613	* 1.3897	* 1.6562	* 2.8356
9	* 1.5422	* 1.4416	* 1.6461	* 1.5208	* 1.6611	* 1.4512	* 1.6472	* 1.0539
	* 1.4975	* 1.6036	* 1.4046	* 1.5205	* 1.3866	* 1.5787	* 1.3829	* 2.1381
10	* 1.4651	* 1.6493	* 1.3270	* 1.6440	* 1.5647	* 1.6740	* 1.5679	* 1.3591
	* 1.5808	* 1.4011	* 1.7441	* 1.4028	* 1.4739	* 1.3630	* 1.4545	* 1.6569
11	* 1.5883	* 1.5219	* 1.6451	* 1.5829	* 1.6622	* 1.5005	* 1.6697	* 1.0067
	* 1.4559	* 1.5184	* 1.4010	* 1.4577	* 1.3843	* 1.5247	* 1.3669	* 2.2470
12	* 1.5765	* 1.6643	* 1.5626	* 1.6622	* 1.5904	* 1.6611	* 1.2252	*
	* 1.4613	* 1.3849	* 1.4768	* 1.3823	* 1.4475	* 1.3814	* 1.8632	*
13	* 1.6472	* 1.4523	* 1.6740	* 1.4994	* 1.6654	* 1.2681	* .7529	*
	* 1.3897	* 1.5776	* 1.3638	* 1.5268	* 1.3777	* 1.8058	* 3.0072	*
14	* 1.3677	* 1.6472	* 1.5659	* 1.6686	* 1.2242	* .7518	*	*
	* 1.6562	* 1.3820	* 1.4554	* 1.3678	* 1.8663	* 3.0086	*	*
15	* .7904	* 1.0528	* 1.3580	* 1.0067	* F-SUB-Q			
	* 2.8356	* 2.1392	* 1.6582	* 2.2485	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0656	* 1.5144	* 1.4373	* 1.5637	* 1.5508	* 1.6258	* 1.3473	* .7743
	* 2.1173	* 1.4935	* 1.5721	* 1.4476	* 1.4581	* 1.3919	* 1.6758	* 2.9008
9	* 1.5144	* 1.4116	* 1.6194	* 1.4962	* 1.6386	* 1.4309	* 1.6311	* 1.0389
	* 1.4935	* 1.6006	* 1.3963	* 1.5119	* 1.3815	* 1.5811	* 1.3893	* 2.1713
10	* 1.4373	* 1.6236	* 1.3034	* 1.6236	* 1.5433	* 1.6611	* 1.5540	* 1.3420
	* 1.5721	* 1.3928	* 1.7364	* 1.4008	* 1.4736	* 1.3695	* 1.4609	* 1.6835
11	* 1.5637	* 1.4983	* 1.6258	* 1.5615	* 1.6451	* 1.4865	* 1.6558	* .9896
	* 1.4476	* 1.5098	* 1.3999	* 1.4590	* 1.3876	* 1.5308	* 1.3738	* 2.2835
12	* 1.5508	* 1.6408	* 1.5401	* 1.6451	* 1.5712	* 1.6451	* 1.2092	*
	* 1.4581	* 1.3798	* 1.4756	* 1.3876	* 1.4533	* 1.3885	* 1.8812	*
13	* 1.6258	* 1.4319	* 1.6600	* 1.4844	* 1.6493	* 1.2488	* .7368	*
	* 1.3919	* 1.5800	* 1.3704	* 1.5318	* 1.3850	* 1.8268	* 3.0786	*
14	* 1.3473	* 1.6311	* 1.5530	* 1.6547	* 1.2081	* .7368	*	*
	* 1.6758	* 1.3893	* 1.4619	* 1.3746	* 1.8828	* 3.0829	*	*
15	* .7743	* 1.0378	* 1.3409	* .9885	* F-SUB-Q			
	* 2.9008	* 2.1735	* 1.6848	* 2.2858	* M-SUB-Q			



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TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0731 *	* 1.5380 *	* 1.4566 *	* 1.5915 *	* 1.5733 *	* 1.6600 *	* 1.3677 *	* .7829 *
	* 2.0467 *	* 1.4335 *	* 1.5129 *	* 1.3858 *	* 1.4017 *	* 1.3300 *	* 1.6078 *	* 2.7710 *
9	* 1.5380 *	* 1.4276 *	* 1.6483 *	* 1.5187 *	* 1.6697 *	* 1.4555 *	* 1.6708 *	* 1.0581 *
	* 1.4335 *	* 1.5436 *	* 1.3380 *	* 1.4514 *	* 1.3220 *	* 1.5161 *	* 1.3212 *	* 2.0720 *
10	* 1.4566 *	* 1.6526 *	* 1.3227 *	* 1.6568 *	* 1.5690 *	* 1.7040 *	* 1.5947 *	* 1.3773 *
	* 1.5129 *	* 1.3348 *	* 1.6670 *	* 1.3364 *	* 1.4106 *	* 1.2987 *	* 1.3858 *	* 1.5984 *
11	* 1.5915 *	* 1.5208 *	* 1.6590 *	* 1.5894 *	* 1.6815 *	* 1.5197 *	* 1.6997 *	* 1.0142 *
	* 1.3858 *	* 1.4495 *	* 1.3348 *	* 1.3937 *	* 1.3189 *	* 1.4561 *	* 1.3018 *	* 2.1692 *
12	* 1.5733 *	* 1.6718 *	* 1.5647 *	* 1.6836 *	* 1.6022 *	* 1.6858 *	* 1.2306 *	
	* 1.4017 *	* 1.3264 *	* 1.4133 *	* 1.3173 *	* 1.3841 *	* 1.3157 *	* 1.7956 *	
13	* 1.6600 *	* 1.4566 *	* 1.7029 *	* 1.5187 *	* 1.6900 *	* 1.2702 *	* .7508 *	
	* 1.3300 *	* 1.5150 *	* 1.2995 *	* 1.4571 *	* 1.3118 *	* 1.7432 *	* 2.9355 *	
14	* 1.3677 *	* 1.6718 *	* 1.5936 *	* 1.6986 *	* 1.2295 *	* .7497 *		
	* 1.6078 *	* 1.3212 *	* 1.3867 *	* 1.3025 *	* 1.7985 *	* 2.9394 *		
15	* .7829 *	* 1.571 *	* 1.3762 *	* 1.0132 *	* F-SUB-Q			
	* 2.7710 *	* 2.7740 *	* 1.5996 *	* 2.1713 *	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0614 *	* 1.5326 *	* 1.4480 *	* 1.5872 *	* 1.5679 *	* 1.6590 *	* 1.3623 *	* .7765 *
	* 1.9747 *	* 1.3683 *	* 1.4461 *	* 1.3226 *	* 1.3386 *	* 1.2651 *	* 1.5282 *	* 2.6496 *
9	* 1.5326 *	* 1.4180 *	* 1.6440 *	* 1.5133 *	* 1.6675 *	* 1.4512 *	* 1.6740 *	* 1.0539 *
	* 1.3683 *	* 1.4769 *	* 1.2767 *	* 1.3871 *	* 1.2601 *	* 1.4442 *	* 1.2557 *	* 1.9684 *
10	* 1.4480 *	* 1.6483 *	* 1.3163 *	* 1.6568 *	* 1.5647 *	* 1.7082 *	* 1.5979 *	* 1.3773 *
	* 1.4461 *	* 1.2731 *	* 1.5950 *	* 1.2795 *	* 1.3539 *	* 1.2393 *	* 1.3192 *	* 1.5115 *
11	* 1.5872 *	* 1.5155 *	* 1.6590 *	* 1.5862 *	* 1.6836 *	* 1.5208 *	* 1.7050 *	* 1.0110 *
	* 1.3226 *	* 1.3855 *	* 1.2781 *	* 1.3475 *	* 1.2697 *	* 1.3954 *	* 1.2427 *	* 2.0617 *
12	* 1.5679 *	* 1.6697 *	* 1.5615 *	* 1.6868 *	* 1.6011 *	* 1.6890 *	* 1.2274 *	
	* 1.3386 *	* 1.2586 *	* 1.3564 *	* 1.2711 *	* 1.3494 *	* 1.2735 *	* 1.7288 *	
13	* 1.6590 *	* 1.4533 *	* 1.7072 *	* 1.5197 *	* 1.6933 *	* 1.2659 *	* .7454 *	
	* 1.2651 *	* 1.4433 *	* 1.2406 *	* 1.3971 *	* 1.2699 *	* 1.6938 *	* 2.8231 *	
14	* 1.3623 *	* 1.6740 *	* 1.5979 *	* 1.7040 *	* 1.2252 *	* .7443 *		
	* 1.5282 *	* 1.2557 *	* 1.3199 *	* 1.2434 *	* 1.7303 *	* 2.8267 *		
15	* .7765 *	* 1.0528 *	* 1.3762 *	* 1.0100 *	* F-SUB-Q			
	* 2.6496 *	* 1.9702 *	* 1.5125 *	* 2.0634 *	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0357 *	* 1.5037 *	* 1.4201 *	* 1.5583 *	* 1.5380 *	* 1.6290 *	* 1.3334 *	.7551 *
	* 1.9117 *	* 1.3223 *	* 1.3983 *	* 1.2774 *	* 1.2938 *	* 1.2237 *	* 1.4825 *	* 2.5856 *
9	* 1.5037 *	* 1.3902 *	* 1.6129 *	* 1.4844 *	* 1.6376 *	* 1.4234 *	* 1.6429 *	* 1.0292 *
	* 1.3223 *	* 1.4280 *	* 1.2333 *	* 1.3408 *	* 1.2177 *	* 1.3982 *	* 1.2136 *	* 1.9137 *
10	* 1.4201 *	* 1.6172 *	* 1.2884 *	* 1.6279 *	* 1.5358 *	* 1.6783 *	* 1.5690 *	* 1.3462 *
	* 1.3983 *	* 1.2299 *	* 1.5442 *	* 1.2357 *	* 1.3072 *	* 1.1945 *	* 1.2727 *	* 1.4667 *
11	* 1.5583 *	* 1.4865 *	* 1.6301 *	* 1.5583 *	* 1.6547 *	* 1.4930 *	* 1.6740 *	.9832 *
	* 1.2774 *	* 1.3391 *	* 1.2343 *	* 1.2955 *	* 1.2232 *	* 1.3443 *	* 1.1983 *	* 2.0106 *
12	* 1.5380 *	* 1.6397 *	* 1.5326 *	* 1.6568 *	* 1.5733 *	* 1.6590 *	* 1.2017 *	
	* 1.2938 *	* 1.2157 *	* 1.3095 *	* 1.2224 *	* 1.2892 *	* 1.2211 *	* 1.6668 *	
13	* 1.6290 *	* 1.4255 *	* 1.6772 *	* 1.4919 *	* 1.6633 *	* 1.2391 *	.7251 *	
	* 1.2237 *	* 1.3964 *	* 1.1957 *	* 1.3452 *	* 1.2177 *	* 1.6284 *	* 2.7437 *	
14	* 1.3334 *	* 1.6429 *	* 1.5679 *	* 1.6729 *	* 1.2006 *	.7240 *		
	* 1.4825 *	* 1.2136 *	* 1.2735 *	* 1.1989 *	* 1.6681 *	* 2.7471 *		
15	.7551 *	* 1.0282 *	* 1.3462 *	.9821 *	F-SUB-Q			
	* 2.5856 *	* 1.9153 *	* 1.4677 *	* 2.0122 *	M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0421 *	* 1.5208 *	* 1.4330 *	* 1.5776 *	* 1.5508 *	* 1.6440 *	* 1.3398 *	.7540 *
	* 1.8043 *	* 1.2430 *	* 1.3181 *	* 1.2000 *	* 1.2211 *	* 1.1548 *	* 1.4076 *	* 2.4727 *
9	* 1.5208 *	* 1.4041 *	* 1.6322 *	* 1.4973 *	* 1.6547 *	* 1.4309 *	* 1.6558 *	* 1.0303 *
	* 1.2430 *	* 1.3449 *	* 1.1600 *	* 1.2643 *	* 1.1465 *	* 1.3235 *	* 1.1459 *	* 1.8220 *
10	* 1.4330 *	* 1.6365 *	* 1.3002 *	* 1.6440 *	* 1.5476 *	* 1.6911 *	* 1.5819 *	* 1.3548 *
	* 1.3181 *	* 1.1570 *	* 1.4562 *	* 1.1624 *	* 1.2326 *	* 1.1266 *	* 1.2002 *	* 1.3894 *
11	* 1.5776 *	* 1.4994 *	* 1.6461 *	* 1.5701 *	* 1.6718 *	* 1.5026 *	* 1.6879 *	.9875 *
	* 1.2000 *	* 1.2629 *	* 1.1612 *	* 1.2187 *	* 1.1479 *	* 1.2682 *	* 1.1286 *	* 1.9050 *
12	* 1.5508 *	* 1.6568 *	* 1.5444 *	* 1.6729 *	* 1.5872 *	* 1.6750 *	* 1.2059 *	
	* 1.2211 *	* 1.1447 *	* 1.2354 *	* 1.1465 *	* 1.2077 *	* 1.1447 *	* 1.5763 *	
13	* 1.6440 *	* 1.4330 *	* 1.6900 *	* 1.5015 *	* 1.6804 *	* 1.2445 *	.7283 *	
	* 1.1548 *	* 1.3219 *	* 1.1272 *	* 1.2689 *	* 1.1411 *	* 1.5343 *	* 2.5942 *	
14	* 1.3398 *	* 1.6558 *	* 1.5819 *	* 1.6868 *	* 1.2049 *	.7272 *		
	* 1.4076 *	* 1.1459 *	* 1.2008 *	* 1.1292 *	* 1.5786 *	* 2.5972 *		
15	.7540 *	* 1.0292 *	* 1.3537 *	.9864 *	F-SUB-Q			
	* 2.4727 *	* 1.8235 *	* 1.3903 *	* 1.9067 *	M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0121	* 1.4791	* 1.3966	* 1.5337	* 1.5069	* 1.5851	* 1.2906	* .7208
	* 1.7768	* 1.2236	* 1.2952	* 1.1804	* 1.2027	* 1.1470	* 1.3992	* 2.4833
9	* 1.4791	* 1.3720	* 1.5851	* 1.4544	* 1.6033	* 1.3805	* 1.5862	* .9821
	* 1.2236	* 1.3175	* 1.1435	* 1.2460	* 1.1329	* 1.3139	* 1.1451	* 1.8318
10	* 1.3966	* 1.5894	* 1.2606	* 1.5883	* 1.4994	* 1.6183	* 1.5133	* 1.2863
	* 1.2952	* 1.1405	* 1.4380	* 1.1505	* 1.2159	* 1.1254	* 1.1987	* 1.4005
11	* 1.5337	* 1.4566	* 1.5904	* 1.5197	* 1.6108	* 1.4416	* 1.6140	* .9318
	* 1.1804	* 1.2446	* 1.1490	* 1.2017	* 1.1366	* 1.2622	* 1.1282	* 1.9323
12	* 1.5069	* 1.6054	* 1.4962	* 1.6108	* 1.5347	* 1.6076	* 1.1578	*
	* 1.2027	* 1.1312	* 1.2185	* 1.1366	* 1.1910	* 1.1372	* 1.5681	*
13	* 1.5851	* 1.3827	* 1.6172	* 1.4405	* 1.6129	* 1.1974	* .6919	*
	* 1.1470	* 1.3123	* 1.1259	* 1.2633	* 1.1337	* 1.5212	* 2.6059	*
14	* 1.2906	* 1.5862	* 1.5133	* 1.6129	* 1.1567	* .6919	*	*
	* 1.3992	* 1.1448	* 1.1994	* 1.1288	* 1.5697	* 2.6090	*	*
15	* .7208	* .9810	* 1.2863	* .9318	* F-SUB-Q			
	* 2.4833	* 1.8333	* 1.4014	* 1.9340	* M-SUB-Q			

AT 100% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0003	* 1.4523	* 1.3720	* 1.5026	* 1.4748	* 1.5294	* 1.2466	* .6876
	* 1.7370	* 1.2027	* 1.2718	* 1.1621	* 1.1867	* 1.1461	* 1.3997	* 2.5163
9	* 1.4523	* 1.3612	* 1.5476	* 1.4212	* 1.5572	* 1.3366	* 1.5101	* .9275
	* 1.2027	* 1.2824	* 1.1298	* 1.2305	* 1.1252	* 1.3096	* 1.1592	* 1.8725
10	* 1.3720	* 1.5530	* 1.2391	* 1.5358	* 1.4608	* 1.5347	* 1.4394	* 1.2049
	* 1.2718	* 1.1267	* 1.4114	* 1.1452	* 1.2040	* 1.1440	* 1.2158	* 1.4424
11	* 1.5026	* 1.4234	* 1.5380	* 1.4758	* 1.5487	* 1.3762	* 1.5294	* .8739
	* 1.1621	* 1.2284	* 1.1432	* 1.1930	* 1.1393	* 1.2742	* 1.1475	* 1.9883
12	* 1.4748	* 1.5594	* 1.4576	* 1.5487	* 1.4855	* 1.5326	* 1.1042	*
	* 1.1867	* 1.1235	* 1.2059	* 1.1390	* 1.1862	* 1.1487	* 1.5847	*
13	* 1.5294	* 1.3377	* 1.5337	* 1.3752	* 1.5380	* 1.1438	* .6565	*
	* 1.1461	* 1.3080	* 1.1445	* 1.2753	* 1.1451	* 1.5327	* 2.6486	*
14	* 1.2466	* 1.5112	* 1.4384	* 1.5283	* 1.1031	* .6565	*	*
	* 1.3997	* 1.1589	* 1.2165	* 1.1481	* 1.5858	* 2.6518	*	*
15	* .6876	* .9264	* 1.2038	* .8729	* F-SUB-Q			
	* 2.5163	* 1.8741	* 1.4433	* 1.9901	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 100% POWER, 4 EPPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9275	* 1.2991	* 1.2327	* 1.3323	* 1.3055	* 1.3323	* 1.0946	* .5933
	* 1.8260	* 1.3088	* 1.3774	* 1.2753	* 1.3026	* 1.2792	* 1.5496	* 2.8428
9	* 1.2991	* 1.2466	* 1.3730	* 1.2616	* 1.3580	* 1.1845	* 1.2831	* .7754
	* 1.3088	* 1.3609	* 1.2389	* 1.3481	* 1.2550	* 1.4376	* 1.3270	* 2.1812
10	* 1.2327	* 1.3773	* 1.1395	* 1.3473	* 1.2948	* 1.3238	* 1.2199	* .9725
	* 1.3774	* 1.2355	* 1.4918	* 1.2672	* 1.3165	* 1.2892	* 1.3907	* 1.7404
11	* 1.3323	* 1.2638	* 1.3505	* 1.2927	* 1.3270	* 1.1867	* 1.2788	* .7208
	* 1.2753	* 1.3457	* 1.2643	* 1.3207	* 1.2892	* 1.4380	* 1.3326	* 2.3463
12	* 1.3055	* 1.3612	* 1.2938	* 1.3280	* 1.2863	* 1.2916	* .9468	*
	* 1.3026	* 1.2529	* 1.3176	* 1.2877	* 1.3278	* 1.3238	* 1.7961	*
13	* 1.3323	* 1.1856	* 1.3248	* 1.1856	* 1.2948	* .9746	* .5505	*
	* 1.2792	* 1.4358	* 1.2888	* 1.4390	* 1.3206	* 1.7494	* 3.0794	*
14	* 1.0946	* 1.2831	* 1.2199	* 1.2788	* .9468	* .5494	*	*
	* 1.5496	* 1.3262	* 1.3911	* 1.3329	* 1.7976	* 3.0837	*	*
15	* .5933	* .7743	* .9714	* .7208	F-SUB-Q			
	* 2.8428	* 2.1824	* 1.7417	* 2.3488	M-SUB-Q			

AT 100% POWER, 4 EPPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6480	* .8889	* .7818	* .8461	* .5344	* .8879	* .4445	* .3952
	* 2.5624	* 1.8683	* 2.1315	* 1.9697	* 3.1084	* 1.8754	* 3.7237	* 4.1841
9	* .8889	* .5344	* .9457	* .8022	* .9189	* .7593	* .8086	* .4659
	* 1.8683	* 3.1021	* 1.7623	* 2.0785	* 1.8148	* 2.1945	* 2.0581	* 3.5478
10	* .7818	* .9500	* .7893	* .9318	* .5366	* .8825	* .4605	* .5633
	* 2.1315	* 1.7553	* 2.1132	* 1.7892	* 3.1016	* 1.8882	* 3.5998	* 2.9389
11	* .8461	* .8054	* .9403	* .5312	* .8804	* .7411	* .7861	* .4230
	* 1.9697	* 2.0699	* 1.7742	* 3.1323	* 1.8963	* 2.2523	* 2.1190	* 3.9141
12	* .5344	* .9200	* .5376	* .8825	* .5012	* .7947	* .3609	*
	* 3.1084	* 1.8119	* 3.0972	* 1.8914	* 3.3249	* 2.1029	* 4.6053	*
13	* .8879	* .7604	* .8825	* .7411	* .7968	* .3695	* .3577	*
	* 1.8754	* 2.1913	* 1.8873	* 2.2536	* 2.0969	* 4.4981	* 4.6343	*
14	* .4445	* .8086	* .4616	* .7861	* .3609	* .3577	*	*
	* 3.7237	* 2.0570	* 3.5972	* 2.1190	* 4.6053	* 4.6385	*	*
15	* .3952	* .4659	* .5633	* .4230	F-SUB-Q			
	* 4.1841	* 3.5510	* 2.9389	* 3.9211	M-SUB-Q			

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TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.5730	.8407	.7915	.8375	.5355	.8579	.4413	.4252
	2.7377	2.1325	2.2234	2.0946	3.2321	2.0145	3.8653	3.9788
9	.8407	.5280	.9264	.8054	.8943	.7443	.7551	.4691
	2.1325	3.3510	1.9035	2.1796	1.9515	2.3278	2.3022	3.6582
10	.7915	.9286	.7850	.8975	.5173	.8193	.4284	.5430
	2.2234	1.8985	2.2497	1.9692	3.4067	2.1532	4.0487	3.1781
11	.8375	.8075	.9029	.5012	.8011	.6640	.7004	.4155
	2.0946	2.1744	1.9575	3.5693	2.2601	2.6981	2.5461	4.1984
12	.5355	.8943	.5184	.8022	.3609	.5933	.3149	
	3.2321	1.9490	3.3993	2.2563	3.9143	2.5191	5.4451	
13	.8579	.7454	.8204	.6640	.5933	.2763	.3256	
	2.0145	2.3263	2.1515	2.6981	2.5144	5.1677	4.9615	
14	.4413	.7551	.4284	.7004	.3149	.3256		
	3.8653	2.3022	4.0471	2.5466	5.4451	4.9699		
15	.4252	.4691	.5430	.4155	F-SUB-Q			
	3.9788	3.6582	3.1781	4.2034	M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8279	1.1995	1.2113	1.2649	1.2745	1.2231	1.0603	.6180
	2.0742	1.5818	1.5294	1.4558	1.4359	1.4916	1.7003	2.8822
9	1.1995	1.2070	1.2948	1.2209	1.2713	1.1224	1.1353	.7433
	1.5818	1.5614	1.4298	1.5080	1.4430	1.6266	1.6118	2.4296
10	1.2113	1.2970	1.0903	1.2284	1.2145	1.1856	1.0742	.8804
	1.5294	1.4270	1.7067	1.5157	1.5413	1.5643	1.7084	2.0591
11	1.2649	1.2231	1.2359	1.1856	1.1503	1.0303	1.0881	.6726
	1.4558	1.5064	1.5047	1.6147	1.6693	1.8222	1.7355	2.7350
12	1.2745	1.2734	1.2145	1.1513	.9307	.9832	.8375	
	1.4359	1.4410	1.5415	1.6692	1.6480	1.7058	2.1847	
13	1.2231	1.1224	1.1867	1.0303	.9821	.7679	.4959	
	1.4916	1.6256	1.5643	1.8222	1.7016	2.0691	3.5297	
14	1.0603	1.1353	1.0742	1.0871	.8365	.4948		
	1.7003	1.6109	1.7084	1.7355	2.1865	3.5343		
15	.6180	.7433	.8804	.6715	F-SUB-Q			
	2.8822	2.4309	2.0607	2.7371	M-SUB-Q			

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TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0078	* 1.4159	* 1.3987	* 1.4758	* 1.4833	* 1.4576	* 1.2499	* .7294
	* 1.9573	* 1.4378	* 1.4039	* 1.3156	* 1.2965	* 1.3148	* 1.5160	* 2.5680
9	* 1.4159	* 1.3827	* 1.5133	* 1.4201	* 1.5080	* 1.3163	* 1.3902	* .9136
	* 1.4378	* 1.4571	* 1.2937	* 1.3627	* 1.2805	* 1.4552	* 1.3875	* 2.0771
10	* 1.3987	* 1.5155	* 1.2359	* 1.4587	* 1.4255	* 1.4244	* 1.3120	* 1.1203
	* 1.4039	* 1.2913	* 1.5988	* 1.3523	* 1.3923	* 1.3763	* 1.4745	* 1.7018
11	* 1.4758	* 1.4223	* 1.4608	* 1.3998	* 1.4126	* 1.2638	* 1.3645	* .8386
	* 1.3156	* 1.3614	* 1.3504	* 1.4574	* 1.4382	* 1.5878	* 1.4734	* 2.3222
12	* 1.4833	* 1.5101	* 1.4255	* 1.4126	* 1.2884	* 1.3098	* 1.0421	*
	* 1.2965	* 1.2789	* 1.3930	* 1.4382	* 1.4436	* 1.4540	* 1.9039	*
13	* 1.4576	* 1.3163	* 1.4244	* 1.2638	* 1.3130	* 1.0410	* .6319	*
	* 1.3148	* 1.4544	* 1.3763	* 1.5887	* 1.4502	* 1.7880	* 3.0405	*
14	* 1.2499	* 1.3902	* 1.3120	* 1.3645	* 1.0410	* .6308	*	*
	* 1.5160	* 1.3875	* 1.4746	* 1.4740	* 1.9052	* 3.0438	*	*
15	* .7294	* .9125	* 1.1203	* .8375	* F-SUB-Q			
	* 2.5680	* 2.0787	* 1.7020	* 2.3222	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1224	* 1.5380	* 1.4908	* 1.5840	* 1.5872	* 1.5947	* 1.3516	* .7850
	* 1.9861	* 1.4244	* 1.4046	* 1.3047	* 1.2873	* 1.2764	* 1.4855	* 2.5311
9	* 1.5380	* 1.4769	* 1.6322	* 1.5230	* 1.6343	* 1.4255	* 1.5465	* 1.0067
	* 1.4244	* 1.4668	* 1.2767	* 1.3522	* 1.2556	* 1.4260	* 1.3280	* 2.0053
10	* 1.4908	* 1.6354	* 1.3227	* 1.5947	* 1.5455	* 1.5701	* 1.4598	* 1.2584
	* 1.4046	* 1.2739	* 1.5958	* 1.3199	* 1.3733	* 1.3252	* 1.4129	* 1.6139
11	* 1.5840	* 1.5240	* 1.5969	* 1.5390	* 1.5722	* 1.4116	* 1.5401	* .9382
	* 1.3047	* 1.3509	* 1.3182	* 1.4264	* 1.3850	* 1.5373	* 1.4030	* 2.2193
12	* 1.5872	* 1.6365	* 1.5444	* 1.5733	* 1.5165	* 1.5347	* 1.1674	*
	* 1.2873	* 1.2540	* 1.3746	* 1.3850	* 1.4078	* 1.3906	* 1.8504	*
13	* 1.5947	* 1.4255	* 1.5701	* 1.4105	* 1.5390	* 1.2081	* .7144	*
	* 1.2764	* 1.4253	* 1.3252	* 1.5373	* 1.3872	* 1.7413	* 2.9577	*
14	* 1.3516	* 1.5465	* 1.4598	* 1.5390	* 1.1663	* .7133	*	*
	* 1.4855	* 1.3275	* 1.4134	* 1.4035	* 1.8528	* 2.9605	*	*
15	* .7850	* 1.0067	* 1.2584	* .9382	* F-SUB-Q			
	* 2.5311	* 2.0053	* 1.6148	* 2.2211	* M-SUB-Q			



TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1278	* 1.5562	* 1.4951	* 1.5947	* 1.5979	* 1.6258	* 1.3687	* .7915
	* 2.1326	* 1.5259	* 1.5149	* 1.3990	* 1.3797	* 1.3490	* 1.5799	* 2.7024
9	* 1.5562	* 1.4823	* 1.6504	* 1.5337	* 1.6568	* 1.4469	* 1.5926	* 1.0292
	* 1.5259	* 1.5843	* 1.3658	* 1.4506	* 1.3366	* 1.5155	* 1.3920	* 2.1171
10	* 1.4951	* 1.6536	* 1.3345	* 1.6268	* 1.5690	* 1.6108	* 1.5048	* 1.2981
	* 1.5149	* 1.3627	* 1.7129	* 1.4014	* 1.4655	* 1.3887	* 1.4825	* 1.6909
11	* 1.5947	* 1.5358	* 1.6279	* 1.5754	* 1.6226	* 1.4566	* 1.5990	* .9650
	* 1.3990	* 1.4492	* 1.3996	* 1.4993	* 1.4456	* 1.6073	* 1.4675	* 2.3392
12	* 1.5979	* 1.6590	* 1.5679	* 1.6226	* 1.5701	* 1.6033	* 1.2038	*
	* 1.3797	* 1.3349	* 1.4670	* 1.4456	* 1.4813	* 1.4498	* 1.9403	*
13	* 1.6258	* 1.4480	* 1.6097	* 1.4555	* 1.6076	* 1.2531	* .7347	*
	* 1.3490	* 1.5147	* 1.3887	* 1.6081	* 1.4459	* 1.8409	* 3.1358	*
14	* 1.3687	* 1.5936	* 1.5048	* 1.5979	* 1.2027	* .7347	*	*
	* 1.5799	* 1.3914	* 1.4825	* 1.4682	* 1.9421	* 3.1392	*	*
15	* .7915	* 1.0292	* 1.2981	* .9650	* F-SUB-Q			
	* 2.7024	* 2.1187	* 1.6919	* 2.3407	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1481	* 1.5990	* 1.5272	* 1.6418	* 1.6386	* 1.6858	* 1.4094	* .8118
	* 2.2311	* 1.6000	* 1.6216	* 1.4882	* 1.4705	* 1.4202	* 1.6724	* 2.8713
9	* 1.5990	* 1.5112	* 1.6986	* 1.5754	* 1.7104	* 1.4930	* 1.6654	* 1.0689
	* 1.6000	* 1.6922	* 1.4506	* 1.5457	* 1.4155	* 1.6038	* 1.4545	* 2.2273
10	* 1.5272	* 1.7029	* 1.3709	* 1.6858	* 1.6194	* 1.6868	* 1.5776	* 1.3612
	* 1.6216	* 1.4477	* 1.8224	* 1.4799	* 1.5568	* 1.4524	* 1.5487	* 1.7606
11	* 1.6418	* 1.5776	* 1.6868	* 1.6333	* 1.6965	* 1.5208	* 1.6815	* 1.0132
	* 1.4882	* 1.5440	* 1.4784	* 1.5535	* 1.4929	* 1.6544	* 1.4935	* 2.4379
12	* 1.6386	* 1.7125	* 1.6172	* 1.6965	* 1.6343	* 1.6847	* 1.2520	*
	* 1.4705	* 1.4140	* 1.5585	* 1.4929	* 1.5474	* 1.4960	* 2.0071	*
13	* 1.6858	* 1.4940	* 1.6858	* 1.5197	* 1.6890	* 1.3023	* .7658	*
	* 1.4202	* 1.6029	* 1.4524	* 1.6561	* 1.4920	* 1.9312	* 3.2631	*
14	* 1.4094	* 1.6665	* 1.5765	* 1.6804	* 1.2499	* .7658	*	*
	* 1.6724	* 1.4545	* 1.5493	* 1.4942	* 2.0098	* 3.2667	*	*
15	* .8118	* 1.0678	* 1.3612	* 1.0121	* F-SUB-Q			
	* 2.8713	* 2.2276	* 1.7606	* 2.4399	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	F	A
8	* 1.1310	* 1.5883	* 1.5133	* 1.6333	* 1.6290	* 1.6868	* 1.4052	* .8065
	* 2.4229	* 1.7098	* 1.7850	* 1.6400	* 1.6183	* 1.5527	* 1.8338	* 3.1564
9	* 1.5883	* 1.4951	* 1.6911	* 1.5658	* 1.7061	* 1.4898	* 1.6750	* 1.0699
	* 1.7098	* 1.8190	* 1.5953	* 1.7035	* 1.5533	* 1.7583	* 1.5823	* 2.4319
10	* 1.5133	* 1.6943	* 1.3634	* 1.6879	* 1.6161	* 1.7018	* 1.5894	* 1.3709
	* 1.7850	* 1.5915	* 1.9840	* 1.6010	* 1.6738	* 1.5773	* 1.6759	* 1.9122
11	* 1.6333	* 1.5679	* 1.6900	* 1.6333	* 1.7050	* 1.5294	* 1.6954	* 1.0164
	* 1.6400	* 1.7018	* 1.5988	* 1.6619	* 1.5882	* 1.7621	* 1.5837	* 2.6088
12	* 1.6290	* 1.7093	* 1.6140	* 1.7050	* 1.6376	* 1.6965	* 1.2541	*
	* 1.6183	* 1.5517	* 1.6762	* 1.5882	* 1.6504	* 1.5880	* 2.1425	*
13	* 1.6868	* 1.4908	* 1.7007	* 1.5272	* 1.7018	* 1.3034	* .7658	*
	* 1.5527	* 1.7573	* 1.5782	* 1.7633	* 1.5837	* 2.0605	* 3.4813	*
14	* 1.4052	* 1.6761	* 1.5894	* 1.6954	* 1.2520	* .7647	*	*
	* 1.8338	* 1.5817	* 1.6759	* 1.5845	* 2.1443	* 3.4854	*	*
15	* .8065	* 1.0689	* 1.3698	* 1.0164	* F-SUB-Q			
	* 3.1564	* 2.4339	* 1.9124	* 2.6098	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1031	* 1.5594	* 1.4833	* 1.6065	1.6011	* 1.6665	* 1.3837	* .7915
	* 2.6342	* 1.8562	* 1.9524	* 1.7998	1.7957	* 1.7138	* 2.0331	* 3.5122
9	* 1.5594	* 1.4630	* 1.6633	* 1.5390	* 1.6825	* 1.4694	* 1.6611	* 1.0560
	* 1.8562	* 1.9811	* 1.7383	* 1.8757	* 1.7105	* 1.9450	* 1.7150	* 2.6707
10	* 1.4833	* 1.6675	* 1.3398	* 1.6686	* 1.5936	* 1.6900	* 1.5787	* 1.3580
	* 1.9524	* 1.7338	* 2.1608	* 1.7344	* 1.8165	* 1.6915	* 1.8067	* 2.0757
11	* 1.6065	* 1.5412	* 1.6708	* 1.6119	* 1.6879	* 1.5165	* 1.6847	* 1.0035
	* 1.7998	* 1.8733	* 1.7330	* 1.6016	* 1.7189	* 1.8941	* 1.6993	* 2.8238
12	* 1.6011	* 1.6847	* 1.5904	* 1.6879	* 1.6172	* 1.6825	* 1.2381	*
	* 1.7957	* 1.7085	* 1.8199	* 1.7189	* 1.7953	* 1.7203	* 2.3234	*
13	* 1.6665	* 1.4694	* 1.6890	* 1.5144	* 1.6868	* 1.2852	* .7529	*
	* 1.7138	* 1.9437	* 1.6930	* 1.8953	* 1.7153	* 2.2441	* 3.8011	*
14	* 1.3837	* 1.6611	* 1.5776	* 1.6836	* 1.2370	* .7518	*	*
	* 2.0331	* 1.7140	* 1.8074	* 1.7003	* 2.3262	* 3.8054	*	*
15	* .7915	* 1.0549	* 1.3570	* 1.0035	* F-SUB-Q			
	* 3.5122	* 2.6732	* 2.0772	* 2.8238	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0956	* 1.5604	* 1.4812	* 1.6108	* 1.6011	* 1.6783	* 1.3859	* .7904
	* 2.8042	* 1.9701	* 2.0726	* 1.9039	* 1.9163	* 1.8306	* 2.2105	* 3.8325
9	* 1.5604	* 1.4566	* 1.6686	* 1.5422	* 1.6900	* 1.4748	* 1.6793	* 1.0624
	* 1.9701	* 2.1097	* 1.8409	* 1.9914	* 1.8170	* 2.0814	* 1.8306	* 2.8709
10	* 1.4812	* 1.6718	* 1.3420	* 1.6804	* 1.5969	* 1.7104	* 1.9979	* 1.3741
	* 2.0726	* 1.8363	* 2.2900	* 1.8386	* 1.9326	* 1.8026	* 1.9275	* 2.2152
11	* 1.6108	* 1.5433	* 1.6815	* 1.6172	* 1.7029	* 1.5294	* 1.7061	* 1.0142
	* 1.9039	* 1.9887	* 1.8363	* 1.9125	* 1.8181	* 2.0173	* 1.8081	* 3.0145
12	* 1.6011	* 1.6922	* 1.5947	* 1.7029	* 1.6268	* 1.6997	* 1.2434	*
	* 1.9163	* 1.8148	* 1.9364	* 1.8181	* 1.9051	* 1.8226	* 2.4859	*
13	* 1.6783	* 1.4758	* 1.7093	* 1.5283	* 1.7050	* 1.2884	* .7561	*
	* 1.8306	* 2.0814	* 1.8037	* 2.0186	* 1.8170	* 2.4048	* 4.0526	*
14	* 1.3859	* 1.6793	* 1.5969	* 1.7050	* 1.2413	* .7551	*	*
	* 2.2105	* 1.8306	* 1.9275	* 1.8092	* 2.4880	* 4.0582	*	*
15	* .7904	* 1.0614	* 1.3730	* 1.0142	* F-SUB-Q			
	* 3.8325	* 2.8721	* 2.2169	* 3.0162	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0539	* 1.5101	* 1.4319	* 1.5615	* 1.5519	* 1.6311	* 1.3452	* .7647
	* 2.8421	* 1.9860	* 2.0902	* 1.9175	* 1.9301	* 1.8363	* 2.2210	* 3.8779
9	* 1.5101	* 1.4062	* 1.6172	* 1.4940	* 1.6408	* 1.4319	* 1.6365	* 1.0314
	* 1.9860	* 2.1326	* 1.8524	* 2.0035	* 1.8260	* 2.0917	* 1.8340	* 2.9008
10	* 1.4319	* 1.6215	* 1.2991	* 1.6333	* 1.5508	* 1.6697	* 1.5594	* 1.3377
	* 2.0902	* 1.8478	* 2.3079	* 1.8466	* 1.9441	* 1.8037	* 1.9288	* 2.2412
11	* 1.5615	* 1.4962	* 1.6354	* 1.5712	* 1.6579	* 1.4908	* 1.6643	* .9832
	* 1.9175	* 2.0022	* 1.8443	* 1.9225	* 1.8249	* 2.0200	* 1.8103	* 3.0541
12	* 1.5519	* 1.6429	* 1.5476	* 1.6579	* 1.5819	* 1.6558	* 1.2092	*
	* 1.9301	* 1.8238	* 1.9479	* 1.8249	* 1.9138	* 1.8272	* 2.4976	*
13	* 1.6311	* 1.4330	* 1.6686	* 1.4898	* 1.6611	* 1.2509	* .7304	*
	* 1.8363	* 2.0902	* 1.8048	* 2.0228	* 1.8226	* 2.4237	* 4.1394	*
14	* 1.3452	* 1.6376	* 1.5583	* 1.6633	* 1.2070	* .7294	*	*
	* 2.2210	* 1.8340	* 1.9301	* 1.8114	* 2.5019	* 4.1452	*	*
15	* .7647	* 1.0303	* 1.3366	* .9821	* F-SUB-Q			
	* 3.8779	* 2.9037	* 2.2429	* 3.0541	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0464	* 1.5123	* 1.4287	* 1.5647	* 1.5519	* 1.6408	* 1.3462	* .7626
	* 2.7544	* 1.8965	* 1.9995	* 1.8272	* 1.8283	* 1.7306	* 2.0828	* 3.6207
9	* 1.5123	* 1.4019	* 1.6215	* 1.4940	* 1.6472	* 1.4351	* 1.6526	* 1.0357
	* 1.8965	* 2.0467	* 1.7648	* 1.9101	* 1.7306	* 1.9753	* 1.7367	* 2.7213
10	* 1.4287	* 1.6258	* 1.3002	* 1.6429	* 1.5519	* 1.6879	* 1.5754	* 1.3527
	* 1.9995	* 1.7606	* 2.2093	* 1.7690	* 1.8713	* 1.7255	* 1.8340	* 2.1017
11	* 1.5647	* 1.4962	* 1.6451	* 1.5754	* 1.6697	* 1.5015	* 1.6836	* .9928
	* 1.8272	* 1.9076	* 1.7669	* 1.8618	* 1.7616	* 1.9454	* 1.7306	* 2.8810
12	* 1.5519	* 1.6493	* 1.5487	* 1.6697	* 1.5883	* 1.6718	* 1.2124	*
	* 1.8283	* 1.7286	* 1.8748	* 1.7616	* 1.8548	* 1.7627	* 2.4197	*
13	* 1.6408	* 1.4362	* 1.6858	* 1.5005	* 1.6761	* 1.2531	* .7326	*
	* 1.7306	* 1.9740	* 1.7265	* 1.9466	* 1.7574	* 2.3559	* 4.0098	*
14	* 1.3462	* 1.6526	* 1.5744	* 1.6825	* 1.2102	* .7326	*	*
	* 2.0828	* 1.7367	* 1.8340	* 1.7326	* 2.4237	* 4.0153	*	*
15	* .7626	* 1.0346	* 1.3516	* .9917	* F-SUB-Q			
	* 3.6207	* 2.7239	* 2.1052	* 2.8810	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0217	* 1.4865	* 1.4009	* 1.5380	* 1.5240	* 1.6161	* 1.3216	* .7454
	* 2.5740	* 1.7533	* 1.8363	* 1.6717	* 1.6832	* 1.5897	* 1.9238	* 3.3606
9	* 1.4865	* 1.3730	* 1.5936	* 1.4673	* 1.6215	* 1.4116	* 1.6311	* 1.0174
	* 1.7533	* 1.8917	* 1.6167	* 1.7522	* 1.5871	* 1.8181	* 1.5879	* 2.5019
10	* 1.4009	* 1.5979	* 1.2766	* 1.6194	* 1.5262	* 1.6665	* 1.5562	* 1.3334
	* 1.8363	* 1.6131	* 2.0340	* 1.6247	* 1.7255	* 1.5828	* 1.6774	* 1.9225
11	* 1.5380	* 1.4694	* 1.6204	* 1.5487	* 1.6472	* 1.4812	* 1.6633	* .9757
	* 1.6717	* 1.7501	* 1.6229	* 1.7429	* 1.6383	* 1.8037	* 1.5974	* 2.6504
12	* 1.5240	* 1.6236	* 1.5230	* 1.6483	* 1.5637	* 1.6504	* 1.1920	*
	* 1.6832	* 1.5854	* 1.7286	* 1.6392	* 1.7553	* 1.6548	* 2.2532	*
13	* 1.6161	* 1.4126	* 1.6654	* 1.4791	* 1.6547	* 1.2306	* .7186	*
	* 1.5897	* 1.8170	* 1.5828	* 1.8059	* 1.6493	* 2.2176	* 3.7259	*
14	* 1.3216	* 1.6311	* 1.5551	* 1.6622	* 1.1899	* .7176	*	*
	* 1.9238	* 1.5879	* 1.6784	* 1.5983	* 2.2550	* 3.7307	*	*
15	* .7454	* 1.0164	* 1.3323	* .9757	* F-SUB-Q			
	* 3.3606	* 2.5040	* 1.9250	* 2.6528	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9842	* 1.4384	* 1.3559	* 1.4898	* 1.4748	* 1.5647	* 1.2766	* .7165
	* 2.3845	* 1.6319	* 1.7215	* 1.5677	* 1.5862	* 1.4976	* 1.8204	* 3.2000
9	* 1.4384	* 1.3291	* 1.5433	* 1.4201	* 1.5701	* 1.3655	* 1.5776	* .9810
	* 1.6319	* 1.7648	* 1.5161	* 1.6465	* 1.4923	* 1.7145	* 1.4915	* 2.3672
10	* 1.3559	* 1.5476	* 1.2327	* 1.5679	* 1.4769	* 1.6140	* 1.5058	* 1.2863
	* 1.7215	* 1.5114	* 1.9064	* 1.5208	* 1.6123	* 1.4795	* 1.5727	* 1.8137
11	* 1.4898	* 1.4212	* 1.5701	* 1.5005	* 1.5958	* 1.4330	* 1.6097	* .9371
	* 1.5677	* 1.6447	* 1.5184	* 1.6158	* 1.5184	* 1.6717	* 1.4840	* 2.4998
12	* 1.4748	* 1.5722	* 1.4737	* 1.5969	* 1.5155	* 1.5979	* 1.1513	*
	* 1.5862	* 1.4900	* 1.6149	* 1.5192	* 1.6202	* 1.5342	* 2.0947	*
13	* 1.5647	* 1.3666	* 1.6129	* 1.4319	* 1.6022	* 1.1888	* .6897	*
	* 1.4976	* 1.7135	* 1.4803	* 1.6736	* 1.5294	* 2.0653	* 3.5003	*
14	* 1.2766	* 1.5787	* 1.5048	* 1.6086	* 1.1503	* .6887	*	*
	* 1.8204	* 1.4915	* 1.5735	* 1.4855	* 2.0977	* 3.5044	*	*
15	* .7165	* .9800	* 1.2852	* .9361	* F-SUB-Q			
	* 3.2000	* 2.3691	* 1.8148	* 2.5019	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9789	* 1.4384	* 1.3505	* 1.4887	* 1.4673	* 1.5594	* 1.2659	* .7069
	* 2.1880	* 1.4999	* 1.5897	* 1.4447	* 1.4699	* 1.3882	* 1.6977	* 3.0043
9	* 1.4384	* 1.3248	* 1.5422	* 1.4148	* 1.5669	* 1.3548	* 1.5701	* .9693
	* 1.4999	* 1.6247	* 1.3974	* 1.5231	* 1.3791	* 1.5940	* 1.3817	* 2.2093
10	* 1.3505	* 1.5465	* 1.2274	* 1.5637	* 1.4694	* 1.6054	* 1.4983	* 1.2777
	* 1.5897	* 1.3935	* 1.7595	* 1.4021	* 1.4885	* 1.3626	* 1.4518	* 1.6832
11	* 1.4887	* 1.4159	* 1.5658	* 1.4919	* 1.5915	* 1.4234	* 1.6011	* .9296
	* 1.4447	* 1.5208	* 1.4001	* 1.4766	* 1.3915	* 1.5366	* 1.3651	* 2.3170
12	* 1.4673	* 1.5690	* 1.4662	* 1.5915	* 1.5090	* 1.5926	* 1.1406	*
	* 1.4699	* 1.3772	* 1.4915	* 1.3915	* 1.4677	* 1.3909	* 1.9225	*
13	* 1.5594	* 1.3559	* 1.6044	* 1.4223	* 1.5969	* 1.1792	* .6844	*
	* 1.3882	* 1.5922	* 1.3632	* 1.5382	* 1.3869	* 1.8760	* 3.1931	*
14	* 1.2659	* 1.5701	* 1.4973	* 1.6011	* 1.1395	* .6833	*	*
	* 1.6977	* 1.3817	* 1.4525	* 1.3664	* 1.9250	* 3.1966	*	*
15	* .7069	* .9693	* 1.2766	* .9286	* F-SUB-Q			
	* 3.0043	* 2.2110	* 1.6841	* 2.3188	* M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9403	* 1.3827	* 1.3013	* 1.4298	* 1.4084	* 1.4844	* 1.2049	* .6683
	* 2.1249	* 1.4576	* 1.5439	* 1.4054	* 1.4321	* 1.3651	* 1.6717	* 2.9830
9	* 1.3827	* 1.2798	* 1.4801	* 1.3570	* 1.4994	* 1.2916	* 1.4844	* .9136
	* 1.4576	* 1.5710	* 1.3619	* 1.4847	* 1.3482	* 1.5652	* 1.3664	* 2.1978
10	* 1.3013	* 1.4844	* 1.1760	* 1.4919	* 1.4062	* 1.5165	* 1.4159	* 1.1984
	* 1.5439	* 1.3582	* 1.7155	* 1.3714	* 1.4504	* 1.3445	* 1.4335	* 1.6793
11	* 1.4298	* 1.3591	* 1.4940	* 1.4276	* 1.5144	* 1.3495	* 1.5123	* .8675
	* 1.4054	* 1.4825	* 1.3695	* 1.4349	* 1.3569	* 1.5098	* 1.3482	* 2.3206
12	* 1.4084	* 1.5015	* 1.4030	* 1.5155	* 1.4416	* 1.5090	* 1.0817	
	* 1.4321	* 1.3464	* 1.4540	* 1.3569	* 1.4245	* 1.3607	* 1.8832	
13	* 1.4844	* 1.2927	* 1.5155	* 1.3473	* 1.5144	* 1.1203	* .6437	
	* 1.3651	* 1.5643	* 1.3451	* 1.5114	* 1.3563	* 1.8283	* 3.1487	
14	* 1.2049	* 1.4855	* 1.4148	* 1.5112	* 1.0806	* .6437		
	* 1.6717	* 1.3657	* 1.4342	* 1.3488	* 1.8856	* 3.1521		
15	* .6683	* .9136	* 1.1974	* .8664	* F-SUB-Q			
	* 2.9830	* 2.1994	* 1.6803	* 2.3225	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9211	* 1.3430	* 1.2649	* 1.3859	* 1.3623	* 1.4180	* 1.1513	* .6319
	* 2.0639	* 1.4245	* 1.5075	* 1.3772	* 1.4068	* 1.3582	* 1.6642	* 3.0074
9	* 1.3430	* 1.2563	* 1.4298	* 1.3120	* 1.4405	* 1.2359	* 1.3987	* .8547
	* 1.4245	* 1.5200	* 1.3378	* 1.4583	* 1.3330	* 1.5536	* 1.3772	* 2.2344
10	* 1.2649	* 1.4341	* 1.1449	* 1.4266	* 1.3537	* 1.4212	* 1.3291	* 1.1106
	* 1.5075	* 1.3342	* 1.6736	* 1.3563	* 1.4279	* 1.3594	* 1.4468	* 1.7215
11	* 1.3859	* 1.3141	* 1.4287	* 1.3698	* 1.4394	* 1.2734	* 1.4159	* .8054
	* 1.3772	* 1.4561	* 1.3544	* 1.4156	* 1.3519	* 1.5153	* 1.3645	* 2.3768
12	* 1.3623	* 1.4426	* 1.3505	* 1.4394	* 1.3773	* 1.4223	* 1.0207	
	* 1.4068	* 1.3306	* 1.4300	* 1.3513	* 1.4095	* 1.3657	* 1.8905	
13	* 1.4180	* 1.2381	* 1.4212	* 1.2723	* 1.4266	* 1.0603	* .6051	
	* 1.3582	* 1.5520	* 1.3600	* 1.5168	* 1.3613	* 1.8283	* 3.1759	
14	* 1.1513	* 1.3987	* 1.3291	* 1.4148	* 1.0196	* .6051		
	* 1.6642	* 1.3766	* 1.4476	* 1.3651	* 1.8929	* 3.1793		
15	* .6319	* .8536	* 1.1106	* .8043	* F-SUB-Q			
	* 3.0074	* 2.2361	* 1.7225	* 2.3787	* M-SUB-Q			



TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 75% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8461	* 1.1899	* 1.1267	* 1.2177	* 1.1952	* 1.2220	* 1.0014	* .5409
	* 2.1655	* 1.5495	* 1.6319	* 1.5106	* 1.5439	* 1.5161	* 1.8432	* 3.3954
9	* 1.1899	* 1.1406	* 1.2574	* 1.1535	* 1.2445	* 1.0849	* 1.1749	* .7069
	* 1.5495	* 1.6131	* 1.4670	* 1.5974	* 1.4862	* 1.7046	* 1.5769	* 2.6036
10	* 1.1267	* 1.2606	* 1.0442	* 1.2370	* 1.1877	* 1.2156	* 1.1171	* .8868
	* 1.6319	* 1.4626	* 1.7680	* 1.5006	* 1.5610	* 1.5286	* 1.6548	* 2.0770
11	* 1.2177	* 1.1567	* 1.2391	* 1.1867	* 1.2199	* 1.0881	* 1.1717	* .6576
	* 1.5106	* 1.5940	* 1.4976	* 1.5668	* 1.5278	* 1.7085	* 1.5845	* 2.8015
12	* 1.1952	* 1.2466	* 1.1867	* 1.2209	* 1.1824	* 1.1856	* .8675	*
	* 1.5439	* 1.4833	* 1.5619	* 1.5263	* 1.5777	* 1.5735	* 2.1419	*
13	* 1.2220	* 1.0860	* 1.2156	* 1.0871	* 1.1888	* .8932	* .5023	*
	* 1.5161	* 1.7026	* 1.5278	* 1.7095	* 1.5693	* 2.0858	* 3.6840	*
14	* 1.0014	* 1.1760	* 1.1171	* 1.1717	* .8664	* .5023	*	*
	* 1.8432	* 1.5761	* 1.6548	* 1.5854	* 2.1434	* 3.6886	*	*
15	* .5409	* .7069	* .8868	* .6576	* F-SUB-Q			
	* 3.3954	* 2.6059	* 2.0784	* 2.8042	* M-SUB-Q			

AT 75% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5858	* .8065	* .7069	* .7658	* .4819	* .8054	* .4006	* .3556
	* 3.0478	* 2.2210	* 2.5320	* 2.3409	* 3.7025	* 2.2327	* 4.4520	* 5.0123
9	* .8065	* .4819	* .8579	* .7261	* .8343	* .6887	* .7315	* .4209
	* 2.2210	* 3.6933	* 2.0932	* 2.4704	* 2.1576	* 2.6128	* 2.4560	* 4.2528
10	* .7069	* .8622	* .7154	* .8472	* .4841	* .8022	* .4145	* .5077
	* 2.5320	* 2.0843	* 2.5104	* 2.1264	* 3.6933	* 2.2481	* 4.3025	* 3.5212
11	* .7658	* .7294	* .8547	* .4796	* .7979	* .6726	* .7122	* .3823
	* 2.3409	* 2.4601	* 2.1067	* 3.7307	* 2.2567	* 2.6866	* 2.5298	* 4.6930
12	* .4819	* .8365	* .4852	* .8000	* .4520	* .7208	* .3267	*
	* 3.7025	* 2.1528	* 3.6886	* 2.2515	* 3.9720	* 2.5083	* 5.5088	*
13	* .8054	* .6887	* .8022	* .6715	* .7229	* .3342	* .3224	*
	* 2.2327	* 2.6105	* 2.2481	* 2.6866	* 2.5019	* 5.3880	* 5.5608	*
14	* .4006	* .7326	* .4145	* .7111	* .3267	* .3224	*	*
	* 4.4520	* 2.4540	* 4.3025	* 2.5298	* 5.5088	* 5.5713	*	*
15	* .3556	* .4209	* .5077	* .3813	* F-SUB-Q			
	* 5.0123	* 4.2528	* 3.5212	* 4.6930	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6040 *	* .8986 *	* .8504 *	* .9039 *	* .5708 *	* .9243 *	* .4670 *	* .4434 *
	* 3.1422 *	* 2.4538 *	* 2.7216 *	* 2.5504 *	* 3.9756 *	* 2.4577 *	* 4.7933 *	* 5.0375 *
9	* .8986 *	* .5601 *	* .9992 *	* .8675 *	* .9650 *	* .8011 *	* .8097 *	* .4927 *
	* 2.4538 *	* 4.0679 *	* 2.3212 *	* 2.6626 *	* 2.3798 *	* 2.8477 *	* 2.8298 *	* 4.5977 *
10	* .8504 *	* 1.0025 *	* .8418 *	* .9693 *	* .5526 *	* .8836 *	* .4562 *	* .5708 *
	* 2.7216 *	* 2.3146 *	* 2.7624 *	* 2.4066 *	* 4.1756 *	* 2.6104 *	* 5.0125 *	* 3.9834 *
11	* .9039 *	* .8697 *	* .9757 *	* .5344 *	* .8579 *	* .7111 *	* .7518 *	* .4359 *
	* 2.5504 *	* 2.6556 *	* 2.3910 *	* 4.1819 *	* 2.5548 *	* 3.0297 *	* 2.9605 *	* 5.2154 *
12	* .5708 *	* .9660 *	* .5526 *	* .8600 *	* .3845 *	* .6383 *	* .3331 *	
	* 3.9756 *	* 2.3784 *	* 4.1694 *	* 2.5500 *	* 4.4114 *	* 2.8228 *	* 6.1876 *	
13	* .9243 *	* .8011 *	* .8836 *	* .7111 *	* .6383 *	* .2892 *	* .3384 *	
	* 2.4577 *	* 2.8457 *	* 2.6088 *	* 3.0297 *	* 2.8180 *	* 5.8793 *	* 5.7468 *	
14	* .4670 *	* .8097 *	* .4562 *	* .7508 *	* .3331 *	* .3384 *		
	* 4.7933 *	* 2.8298 *	* 5.0125 *	* 2.9605 *	* 6.1876 *	* 5.7468 *		
15	* .4434 *	* .4916 *	* .5708 *	* .4348 *	F-SUB-Q			
	* 5.0375 *	* 4.5977 *	* 3.9834 *	* 5.2154 *	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8846 *	* 1.2981 *	* 1.3141 *	* 1.3784 *	* 1.3891 *	* 1.3334 *	* 1.1438 *	* .6522 *
	* 2.3794 *	* 1.8557 *	* 1.8657 *	* 1.7650 *	* 1.7426 *	* 1.8092 *	* 2.0858 *	* 3.6231 *
9	* 1.2981 *	* 1.3055 *	* 1.4073 *	* 1.3259 *	* 1.3869 *	* 1.2199 *	* 1.2349 *	* .7915 *
	* 1.8557 *	* 1.8602 *	* 1.7397 *	* 1.8333 *	* 1.7507 *	* 1.9796 *	* 1.9635 *	* 3.0313 *
10	* 1.3141 *	* 1.4105 *	* 1.1792 *	* 1.3409 *	* 1.3248 *	* 1.2938 *	* 1.1663 *	* .9414 *
	* 1.8657 *	* 1.7360 *	* 2.0922 *	* 1.8444 *	* 1.8514 *	* 1.9021 *	* 2.0922 *	* 2.5635 *
11	* 1.3784 *	* 1.3291 *	* 1.3430 *	* 1.2916 *	* 1.2563 *	* 1.1213 *	* 1.1845 *	* .7144 *
	* 1.7650 *	* 1.8309 *	* 1.8358 *	* 1.8406 *	* 1.8614 *	* 2.0391 *	* 1.9994 *	* 3.3703 *
12	* 1.3891 *	* 1.3891 *	* 1.3248 *	* 1.2574 *	* 1.0132 *	* 1.0710 *	* .9007 *	
	* 1.7426 *	* 1.7478 *	* 1.8514 *	* 1.8614 *	* 1.8365 *	* 1.9001 *	* 2.4718 *	
13	* 1.3334 *	* 1.2209 *	* 1.2938 *	* 1.1203 *	* 1.0710 *	* .8268 *	* .5226 *	
	* 1.8092 *	* 1.9786 *	* 1.9030 *	* 2.0401 *	* 1.8962 *	* 2.3344 *	* 4.0635 *	
14	* 1.1438 *	* 1.2349 *	* 1.1663 *	* 1.1845 *	* .9007 *	* .5216 *		
	* 2.0858 *	* 1.9617 *	* 2.0922 *	* 1.9998 *	* 2.4733 *	* 4.0675 *		
15	* .6522 *	* .7915 *	* .9414 *	* .7144 *	F-SUB-Q			
	* 3.6231 *	* 3.0313 *	* 2.5651 *	* 3.3703 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0742	* 1.5272	* 1.5080	* 1.6001	* 1.6119	* 1.5851	* 1.3452	* .7700
	* 2.2789	* 1.7109	* 1.7360	* 1.6185	* 1.5963	* 1.6210	* 1.8872	* 3.2661
9	* 1.5272	* 1.4908	* 1.6354	* 1.5380	* 1.6376	* 1.4255	* 1.5080	* .9714
	* 1.7109	* 1.7529	* 1.5963	* 1.6823	* 1.5770	* 1.8018	* 1.7175	* 2.6231
10	* 1.5080	* 1.6397	* 1.3291	* 1.5862	* 1.5519	* 1.5497	* 1.4234	* 1.1984
	* 1.7360	* 1.5926	* 1.9861	* 1.6546	* 1.6787	* 1.6796	* 1.8278	* 2.1390
11	* 1.6001	* 1.5401	* 1.5883	* 1.5240	* 1.5412	* 1.3720	* 1.4833	* .8911
	* 1.6185	* 1.6803	* 1.6523	* 1.6493	* 1.6241	* 1.8014	* 1.7141	* 2.8923
12	* 1.6119	* 1.6397	* 1.5519	* 1.5422	* 1.4062	* 1.4276	* 1.1203	*
	* 1.5963	* 1.5747	* 1.6807	* 1.6241	* 1.6290	* 1.6415	* 2.1816	*
13	* 1.5851	* 1.4266	* 1.5497	* 1.3709	* 1.4309	* 1.1213	* .6672	*
	* 1.6210	* 1.8003	* 1.6803	* 1.8021	* 1.6373	* 2.0388	* 3.5355	*
14	* 1.3452	* 1.5090	* 1.4234	* 1.4833	* 1.1192	* .6672	*	*
	* 1.8872	* 1.7175	* 1.8278	* 1.7149	* 2.1834	* 3.5398	*	*
15	* .7700	* .9714	* 1.1974	* .8911	* F-SUB-Q			
	* 3.2661	* 2.6248	* 2.1401	* 2.8932	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1824	* 1.6429	* 1.5904	* 1.6997	* 1.7072	* 1.7179	* 1.4426	* .8225
	* 2.3723	* 1.7375	* 1.7821	* 1.6454	* 1.6210	* 1.6050	* 1.8857	* 3.2731
9	* 1.6429	* 1.5765	* 1.7479	* 1.6322	* 1.7586	* 1.5294	* 1.6643	* 1.0646
	* 1.7375	* 1.8104	* 1.6154	* 1.7090	* 1.5811	* 1.8010	* 1.6746	* 2.5733
10	* 1.5904	* 1.7522	* 1.4105	* 1.7190	* 1.6665	* 1.6943	* 1.5701	* 1.3377
	* 1.7821	* 1.6117	* 2.0228	* 1.6469	* 1.6946	* 1.6581	* 1.7851	* 2.0614
11	* 1.6997	* 1.6343	* 1.7211	* 1.6633	* 1.7018	* 1.5187	* 1.6622	* .9917
	* 1.6454	* 1.7069	* 1.6453	* 1.6581	* 1.6054	* 1.7892	* 1.6671	* 2.8104
12	* 1.7072	* 1.7607	* 1.6654	* 1.7029	* 1.6418	* 1.6611	* 1.2466	*
	* 1.6210	* 1.5788	* 1.6973	* 1.6054	* 1.6301	* 1.6111	* 2.1725	*
13	* 1.7179	* 1.5305	* 1.6933	* 1.5176	* 1.6654	* 1.2936	* .7508	*
	* 1.6050	* 1.7995	* 1.6590	* 1.7900	* 1.6068	* 2.0338	* 3.5182	*
14	* 1.4426	* 1.6643	* 1.5701	* 1.6611	* 1.2445	* .7508	*	*
	* 1.8857	* 1.6746	* 1.7851	* 1.6678	* 2.1752	* 3.5224	*	*
15	* .8225	* 1.0646	* 1.3366	* .9917	* F-SUB-Q			
	* 3.2731	* 2.5749	* 2.0624	* 2.8111	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1760	* 1.6429	* 1.5765	* 1.6911	* 1.6975	* 1.7318	* 1.4459	* .8225
	* 2.6356	* 1.9054	* 1.9723	* 1.8125	* 1.7841	* 1.7409	* 2.0540	* 3.5741
9	* 1.6429	* 1.5637	* 1.7457	* 1.6247	* 1.7607	* 1.5347	* 1.6954	* 1.0785
	* 1.9054	* 2.0016	* 1.7724	* 1.8812	* 1.7277	* 1.9625	* 1.8004	* 2.7801
10	* 1.5765	* 1.7500	* 1.4062	* 1.7318	* 1.6729	* 1.7179	* 1.6011	* 1.3666
	* 1.9723	* 1.7680	* 2.2211	* 1.7800	* 1.8435	* 1.7805	* 1.9108	* 2.2084
11	* 1.6911	* 1.6268	* 1.7339	* 1.6858	* 1.7393	* 1.5497	* 1.7061	* 1.0110
	* 1.8125	* 1.8788	* 1.7783	* 1.8085	* 1.7392	* 1.9405	* 1.7808	* 3.0188
12	* 1.6975	* 1.7629	* 1.6708	* 1.7393	* 1.6804	* 1.7157	* 1.2734	*
	* 1.7841	* 1.7256	* 1.8464	* 1.7392	* 1.7820	* 1.7439	* 2.3613	*
13	* 1.7318	* 1.5358	* 1.7168	* 1.5487	* 1.7200	* 1.3280	* .7668	*
	* 1.7409	* 1.9616	* 1.7812	* 1.9420	* 1.7392	* 2.2322	* 3.8657	*
14	* 1.4459	* 1.6954	* 1.6001	* 1.7050	* 1.2723	* .7658	*	*
	* 2.0540	* 1.8004	* 1.9116	* 1.7815	* 2.3639	* 3.8692	*	*
15	* .8225	* 1.0785	* 1.3666	* 1.0100	* F-SUB-Q			
	* 3.5741	* 2.7819	* 2.2096	* 3.0209	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1845	* 1.6686	* 1.5904	* 1.7157	* 1.7179	* 1.7725	* 1.4726	* .8354
	* 2.9394	* 2.0941	* 2.1672	* 1.9803	* 1.9486	* 1.8769	* 2.2221	* 3.8681
9	* 1.6686	* 1.5754	* 1.7746	* 1.6461	* 1.7939	* 1.5647	* 1.7511	* 1.1085
	* 2.0941	* 2.2182	* 1.9340	* 2.0555	* 1.8761	* 2.1252	* 1.9239	* 2.9799
10	* 1.5904	* 1.7789	* 1.4287	* 1.7779	* 1.7061	* 1.7779	* 1.6579	* 1.4180
	* 2.1672	* 1.9289	* 2.4248	* 1.9366	* 2.0188	* 1.9166	* 2.0507	* 2.3444
11	* 1.7157	* 1.6483	* 1.7800	* 1.7254	* 1.7950	* 1.5990	* 1.7714	* 1.0496
	* 1.9803	* 2.0536	* 1.9343	* 1.9803	* 1.8919	* 2.1133	* 1.9144	* 3.2423
12	* 1.7179	* 1.7961	* 1.7040	* 1.7950	* 1.7265	* 1.7800	* 1.3088	*
	* 1.9486	* 1.8737	* 2.0225	* 1.8919	* 1.9553	* 1.8908	* 2.5758	*
13	* 1.7725	* 1.5658	* 1.7768	* 1.5969	* 1.7843	* 1.3655	* .7915	*
	* 1.8769	* 2.1242	* 1.9175	* 2.1143	* 1.8859	* 2.4467	* 4.2056	*
14	* 1.4726	* 1.7511	* 1.6568	* 1.7704	* 1.3066	* .7904	*	*
	* 2.2221	* 1.9230	* 2.0516	* 1.9152	* 2.5789	* 4.2096	*	*
15	* .8354	* 1.1074	* 1.4180	* 1.0496	* F-SUB-Q			
	* 3.8681	* 2.9819	* 2.3457	* 3.2447	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1535	* 1.6365	* 1.5562	* 1.6847	* 1.6847	* 1.7511	* 1.4491	* .8204
	* 3.3644	* 2.3403	* 2.4357	* 2.2148	* 2.1650	* 2.0736	* 2.4560	* 4.2713
9	* 1.6365	* 1.5390	* 1.7436	* 1.6151	* 1.7671	* 1.5412	* 1.7393	* 1.0967
	* 2.3403	* 2.4920	* 2.1607	* 2.2953	* 2.0755	* 2.3528	* 2.1112	* 3.2698
10	* 1.5562	* 1.7479	* 1.4041	* 1.7586	* 1.6815	* 1.7704	* 1.6493	* 1.4105
	* 2.4357	* 2.1555	* 2.7188	* 2.1756	* 2.2764	* 2.1072	* 2.2486	* 2.5613
11	* 1.6847	* 1.6172	* 1.7607	* 1.7029	* 1.7800	* 1.5872	* 1.7639	* 1.0421
	* 2.2148	* 2.2930	* 2.1735	* 2.2700	* 2.1603	* 2.4052	* 2.1502	* 3.5796
12	* 1.6847	* 1.7693	* 1.6783	* 1.7800	* 1.7072	* 1.7693	* 1.2948	*
	* 2.1650	* 2.0745	* 2.2788	* 2.1596	* 2.2447	* 2.1572	* 2.9453	*
13	* 1.7511	* 1.5422	* 1.7693	* 1.5851	* 1.7736	* 1.3495	* .7818	*
	* 2.0736	* 2.3515	* 2.1072	* 2.4065	* 2.1516	* 2.8124	* 4.8262	*
14	* 1.4491	* 1.7393	* 1.6483	* 1.7629	* 1.2938	* .7808	*	*
	* 2.4560	* 2.1102	* 2.2498	* 2.1513	* 2.9485	* 4.8315	*	*
15	* .8204	* 1.0956	* 1.4094	* 1.0410	* F-SUB-Q			
	* 4.2713	* 3.2723	* 2.5628	* 3.5796	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1106	* 1.5862	* 1.5058	* 1.6343	* 1.6333	* 1.7072	* 1.4084	* .7958
	* 3.8375	* 2.6777	* 2.7408	* 2.4822	* 2.4131	* 2.3013	* 2.7272	* 4.7434
9	* 1.5862	* 1.4855	* 1.6933	* 1.5669	* 1.7190	* 1.5005	* 1.7018	* 1.0689
	* 2.6777	* 2.8614	* 2.4210	* 2.5703	* 2.3037	* 2.6159	* 2.3280	* 3.6059
10	* 1.5058	* 1.6975	* 1.3623	* 1.7157	* 1.6343	* 1.7350	* 1.6161	* 1.3794
	* 2.7408	* 2.4158	* 3.0636	* 2.4330	* 2.5658	* 2.3231	* 2.4780	* 2.8122
11	* 1.6343	* 1.5690	* 1.7168	* 1.6568	* 1.7393	* 1.5530	* 1.7286	* 1.0164
	* 2.4822	* 2.5673	* 2.4304	* 2.5777	* 2.4560	* 2.7155	* 2.4304	* 3.9472
12	* 1.6333	* 1.7211	* 1.6322	* 1.7393	* 1.6643	* 1.7307	* 1.2627	*
	* 2.4131	* 2.3025	* 2.5703	* 2.4560	* 2.5717	* 2.4629	* 3.3517	*
13	* 1.7072	* 1.5005	* 1.7339	* 1.5508	* 1.7350	* 1.3130	* .7593	*
	* 2.3013	* 2.6143	* 2.3231	* 2.7188	* 2.4560	* 3.2506	* 5.5608	*
14	* 1.4084	* 1.7018	* 1.6151	* 1.7275	* 1.2606	* .7583	*	*
	* 2.7272	* 2.3280	* 2.4780	* 2.4317	* 3.3567	* 5.5678	*	*
15	* .7958	* 1.0678	* 1.3794	* 1.0153	* F-SUB-Q			
	* 4.7434	* 3.6088	* 2.8140	* 3.9472	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0892	* 1.5669	* 1.4833	* 1.6172	* 1.6129	* 1.6954	* 1.3934	* .7850
	* 4.1824	* 2.9084	* 3.0115	* 2.7205	* 2.6409	* 2.5047	* 2.9750	* 5.1645
9	* 1.5669	* 1.4608	* 1.6750	* 1.5487	* 1.7040	* 1.4855	* 1.6975	* 1.0614
	* 2.9084	* 3.1221	* 2.6472	* 2.8176	* 2.5076	* 2.8558	* 2.5233	* 3.9157
10	* 1.4833	* 1.6793	* 1.3473	* 1.7040	* 1.6172	* 1.7318	* 1.6140	* 1.3784
	* 3.0115	* 2.6409	* 3.3517	* 2.6567	* 2.8104	* 2.5190	* 2.6858	* 3.0363
11	* 1.6172	* 1.5508	* 1.7050	* 1.6408	* 1.7297	* 1.5455	* 1.7275	* 1.0142
	* 2.7205	* 2.8158	* 2.6536	* 2.7998	* 2.6583	* 2.9591	* 2.6472	* 4.2672
12	* 1.6129	* 1.7061	* 1.6140	* 1.7297	* 1.6504	* 1.7243	* 1.2509	
	* 2.6409	* 2.5061	* 2.8158	* 2.6583	* 2.7892	* 2.6664	* 3.6718	
13	* 1.6954	* 1.4865	* 1.7307	* 1.5433	* 1.7297	* 1.3002	* .7540	
	* 2.5047	* 2.8540	* 2.5190	* 2.9610	* 2.6599	* 3.5509	* 6.1146	
14	* 1.3934	* 1.6975	* 1.6129	* 1.7265	* 1.2499	* .7529		
	* 2.9750	* 2.5233	* 2.6874	* 2.6488	* 3.6748	* 6.1230		
15	* .7850	* 1.0603	* 1.3773	* 1.0132	* F-SUB-Q			
	* 5.1645	* 3.9192	* 3.0384	* 4.2713	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0346	* 1.4962	* 1.4148	* 1.5455	* 1.5422	* 1.6258	* 1.3334	* .7497
	* 4.3046	* 2.9571	* 2.9591	* 2.6712	* 2.6314	* 2.5019	* 3.0074	* 5.2944
9	* 1.4962	* 1.3912	* 1.6022	* 1.4801	* 1.6311	* 1.4234	* 1.6311	* 1.0174
	* 2.9571	* 3.1331	* 2.6036	* 2.7786	* 2.5033	* 2.8558	* 2.5495	* 4.0116
10	* 1.4148	* 1.6065	* 1.2873	* 1.6333	* 1.5476	* 1.6675	* 1.5519	* 1.3238
	* 2.9591	* 2.5959	* 3.3016	* 2.6377	* 2.8104	* 2.5451	* 2.7205	* 3.1221
11	* 1.5455	* 1.4823	* 1.6354	* 1.5712	* 1.6611	* 1.4855	* 1.6611	* .9693
	* 2.6712	* 2.7752	* 2.6346	* 2.8595	* 2.7088	* 3.0115	* 2.6923	* 4.4120
12	* 1.5422	* 1.6333	* 1.5444	* 1.6611	* 1.5819	* 1.6568	* 1.2006	
	* 2.6314	* 2.5019	* 2.8140	* 2.7088	* 2.8448	* 2.7155	* 3.7433	
13	* 1.6258	* 1.4244	* 1.6654	* 1.4844	* 1.6611	* 1.2445	* .7186	
	* 2.5019	* 2.8540	* 2.5451	* 3.0135	* 2.7088	* 3.6266	* 6.2707	
14	* 1.3334	* 1.6311	* 1.5519	* 1.6600	* 1.1984	* .7176		
	* 3.0074	* 2.5495	* 2.7222	* 2.6940	* 3.7496	* 6.2796		
15	* .7497	* 1.0164	* 1.3227	* .9682	* F-SUB-Q			
	* 5.2944	* 4.0153	* 3.1243	* 4.4164	* M-SUB-Q			



TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0153	* 1.4791	* 1.3934	* 1.5283	* 1.5230	* 1.6129	* 1.3173	* .7390
	* 4.1667	* 2.7821	* 2.7998	* 2.5190	* 2.4934	* 2.3590	* 2.8430	* 4.9840
9	* 1.4791	* 1.3687	* 1.5851	* 1.4608	* 1.6161	* 1.4073	* 1.6247	* 1.0089
	* 2.7821	* 2.9650	* 2.4547	* 2.6299	* 2.3616	* 2.7022	* 2.3974	* 3.7720
10	* 1.3934	* 1.5894	* 1.2723	* 1.6204	* 1.5283	* 1.6611	* 1.5465	* 1.3205
	* 2.7998	* 2.4479	* 3.1177	* 2.4850	* 2.6583	* 2.3948	* 2.5569	* 2.9238
11	* 1.5283	* 1.4630	* 1.6226	* 1.5530	* 1.6504	* 1.4758	* 1.6568	* .9671
	* 2.5190	* 2.6268	* 2.4822	* 2.7962	* 2.6299	* 2.9046	* 2.5305	* 4.1355
12	* 1.5230	* 1.6172	* 1.5251	* 1.6504	* 1.5669	* 1.6493	* 1.1877	*
	* 2.4934	* 2.3603	* 2.6632	* 2.6314	* 2.7998	* 2.6599	* 3.6415	*
13	* 1.6129	* 1.4084	* 1.6600	* 1.4737	* 1.6536	* 1.2295	* .7122	*
	* 2.3590	* 2.7006	* 2.3948	* 2.9065	* 2.6520	* 3.5825	* 6.0893	*
14	* 1.3173	* 1.6247	* 1.5455	* 1.6558	* 1.1856	* .7111	*	*
	* 2.8430	* 2.3974	* 2.5584	* 2.5334	* 3.6475	* 6.0893	*	*
15	* .7390	* 1.0078	* 1.3195	* .9660	* F-SUB-Q			
	* 4.9840	* 3.7753	* 2.9277	* 4.1432	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9789	* 1.4351	* 1.3484	* 1.4833	* 1.4758	* 1.5679	* 1.2756	* .7133
	* 3.9122	* 2.5510	* 2.5777	* 2.3194	* 2.3001	* 2.1713	* 2.6221	* 4.6146
9	* 1.4351	* 1.3238	* 1.5380	* 1.4159	* 1.5712	* 1.3655	* 1.5819	* .9778
	* 2.5510	* 2.7255	* 2.2567	* 2.4250	* 2.1735	* 2.4906	* 2.2027	* 3.4728
10	* 1.3484	* 1.5433	* 1.2327	* 1.5754	* 1.4823	* 1.6183	* 1.5069	* 1.2852
	* 2.5777	* 2.2498	* 2.8725	* 2.2894	* 2.4547	* 2.2005	* 2.3490	* 2.6825
11	* 1.4833	* 1.4180	* 1.5776	* 1.5069	* 1.6054	* 1.4351	* 1.6151	* .9382
	* 2.3194	* 2.4224	* 2.2870	* 2.6112	* 2.4519	* 2.7088	* 2.3280	* 3.7980
12	* 1.4758	* 1.5712	* 1.4791	* 1.6054	* 1.5219	* 1.6054	* 1.1524	*
	* 2.3001	* 2.1724	* 2.4587	* 2.4547	* 2.6314	* 2.4794	* 3.4033	*
13	* 1.5679	* 1.3677	* 1.6172	* 1.4330	* 1.6097	* 1.1920	* .6897	*
	* 2.1713	* 2.4892	* 2.2005	* 2.7122	* 2.4725	* 3.3491	* 5.6896	*
14	* 1.2756	* 1.5819	* 1.5058	* 1.6140	* 1.1503	* .6887	*	*
	* 2.6221	* 2.2027	* 2.3503	* 2.3304	* 3.4085	* 5.6969	*	*
15	* .7133	* .9778	* 1.2841	* .9371	* F-SUB-Q			
	* 4.6146	* 3.4782	* 2.6842	* 3.8012	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9328 *	* 1.3720 *	* 1.2884 *	* 1.4180 *	* 1.4094 *	* 1.4983 *	* 1.2167 *	* .6779 *
	* 3.6326 *	* 2.3832 *	* 2.4144 *	* 2.1724 *	* 2.1639 *	* 2.0429 *	* 2.4767 *	* 4.3814 *
9	* 1.3720 *	* 1.2649 *	* 1.4716 *	* 1.3527 *	* 1.5015 *	* 1.3045 *	* 1.5101 *	* .9307 *
	* 2.3832 *	* 2.5480 *	* 2.1132 *	* 2.2753 *	* 2.0448 *	* 2.3465 *	* 2.0716 *	* 3.2844 *
10	* 1.2884 *	* 1.4758 *	* 1.1760 *	* 1.5069 *	* 1.4159 *	* 1.5465 *	* 1.4384 *	* 1.2231 *
	* 2.4144 *	* 2.1072 *	* 2.6940 *	* 2.1450 *	* 2.2989 *	* 2.0687 *	* 2.2071 *	* 2.5305 *
11	* 1.4180 *	* 1.3548 *	* 1.5080 *	* 1.4405 *	* 1.5358 *	* 1.3709 *	* 1.5412 *	* .8889 *
	* 2.1724 *	* 2.2729 *	* 2.1419 *	* 2.4317 *	* 2.2800 *	* 2.5076 *	* 2.1777 *	* 3.5913 *
12	* 1.4094 *	* 1.5015 *	* 1.4126 *	* 1.5358 *	* 1.4555 *	* 1.5337 *	* 1.0988 *	
	* 2.1639 *	* 2.0438 *	* 2.3025 *	* 2.2823 *	* 2.4411 *	* 2.3097 *	* 3.1782 *	
13	* 1.4983 *	* 1.3055 *	* 1.5455 *	* 1.3687 *	* 1.5380 *	* 1.1374 *	* .6544 *	
	* 2.0429 *	* 2.3440 *	* 2.0677 *	* 2.5104 *	* 2.3025 *	* 3.1331 *	* 5.3651 *	
14	* 1.2167 *	* 1.5101 *	* 1.4373 *	* 1.5401 *	* 1.0978 *	* .6533 *		
	* 2.4767 *	* 2.0716 *	* 2.2082 *	* 2.1799 *	* 3.1805 *	* 5.3716 *		
15	* .6779 *	* .9307 *	* 1.2220 *	* .8889 *	* F-SUB-Q			
	* 4.3814 *	* 3.2869 *	* 2.5334 *	* 3.5942 *	* M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9168 *	* 1.3548 *	* 1.2691 *	* 1.3987 *	* 1.3848 *	* 1.4737 *	* 1.1920 *	* .6608 *
	* 3.2482 *	* 2.1671 *	* 2.2126 *	* 1.9887 *	* 1.9995 *	* 1.8852 *	* 2.3001 *	* 4.0934 *
9	* 1.3548 *	* 1.2477 *	* 1.4512 *	* 1.3313 *	* 1.4780 *	* 1.2777 *	* 1.4833 *	* .9093 *
	* 2.1671 *	* 2.3255 *	* 1.9339 *	* 2.0922 *	* 1.8836 *	* 2.1703 *	* 1.9105 *	* 3.0531 *
10	* 1.2691 *	* 1.4566 *	* 1.1567 *	* 1.4833 *	* 1.3912 *	* 1.5187 *	* 1.4126 *	* 1.1995 *
	* 2.2126 *	* 1.9280 *	* 2.4670 *	* 1.9648 *	* 2.1082 *	* 1.9072 *	* 2.0316 *	* 2.3403 *
11	* 1.3987 *	* 1.3334 *	* 1.4855 *	* 1.4148 *	* 1.5112 *	* 1.3441 *	* 1.5144 *	* .8718 *
	* 1.9887 *	* 2.0892 *	* 1.9622 *	* 2.1853 *	* 2.0457 *	* 2.2636 *	* 1.9914 *	* 3.3090 *
12	* 1.3848 *	* 1.4801 *	* 1.3880 *	* 1.5112 *	* 1.4298 *	* 1.5090 *	* 1.0753 *	
	* 1.9995 *	* 1.8804 *	* 2.1122 *	* 2.0476 *	* 2.2038 *	* 2.0843 *	* 2.8707 *	
13	* 1.4737 *	* 1.2788 *	* 1.5176 *	* 1.3420 *	* 1.5133 *	* 1.1128 *	* .6415 *	
	* 1.8852 *	* 2.1692 *	* 1.9072 *	* 2.2659 *	* 2.0784 *	* 2.8503 *	* 4.8581 *	
14	* 1.1920 *	* 1.4833 *	* 1.4116 *	* 1.5133 *	* 1.0742 *	* .6405 *		
	* 2.3001 *	* 1.9105 *	* 2.0326 *	* 1.9923 *	* 2.8744 *	* 4.8634 *		
15	* .6608 *	* .9093 *	* 1.1984 *	* .8707 *	* F-SUB-Q			
	* 4.0934 *	* 3.0552 *	* 2.3415 *	* 3.3115 *	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8718	1.2884	1.2081	1.3291	1.3120	1.3869	1.1224	.6180
	3.0980	2.0514	2.1203	1.9146	1.9364	1.8412	2.2521	4.0447
9	1.2884	1.1920	1.3773	1.2627	1.3987	1.2038	1.3859	.8472
	2.0514	2.2060	1.8622	2.0196	1.8260	2.1173	1.8740	3.0135
10	1.2081	1.3816	1.0946	1.3987	1.3163	1.4169	1.3184	1.1128
	2.1203	1.8567	2.3768	1.8977	2.0270	1.8685	1.9896	2.3158
11	1.3291	1.2649	1.3998	1.3366	1.4212	1.2584	1.4116	.8043
	1.9146	2.0168	1.8949	2.0892	1.9736	2.1810	1.9238	3.2747
12	1.3120	1.4009	1.3130	1.4211	.3495	1.4126	1.0078	
	1.9364	1.8230	2.0307	1.9727	2.0853	1.9923	2.7682	
13	1.3869	1.2049	1.4159	1.257	1.4169	1.0453	.5965	
	1.8412	2.1152	1.8685	2.184	1.9860	2.7006	4.6831	
14	1.1224	1.3859	1.3184	1.4105	1.0067	.5965		
	2.2521	1.8740	1.9896	1.9246	2.7699	4.6880		
15	.6180	.8472	1.1117	.8032	F-SUB-Q			
	4.0447	3.0176	2.3170	3.2795	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	.8450	1.2391	1.1631	1.2745	1.2552	1.3098	1.0603	.5783
	2.8781	1.9570	2.0410	1.8552	1.8876	1.8208	2.2316	4.0558
9	1.2391	1.1578	1.3173	1.2081	1.3291	1.1395	1.2906	.7840
	1.9570	2.0853	1.8066	1.9657	1.7898	2.0873	1.8724	3.0426
10	1.1631	1.3216	1.0539	1.3216	1.2520	1.3141	1.2242	1.0196
	2.0410	1.8015	2.2847	1.8513	1.9622	1.8653	1.9833	2.3553
11	1.2745	1.2102	1.3238	1.2681	1.3345	1.1738	1.3066	.7390
	1.8552	1.9622	1.8482	1.9950	1.9014	2.1346	1.9096	3.3090
12	1.2552	1.3313	1.2499	1.3345	1.2756	1.3163	.9414	
	1.8876	1.7869	1.9648	1.9006	2.0307	1.9683	2.7122	
13	1.3098	1.1417	1.3130	1.1727	1.3205	.9789	.5558	
	1.8208	2.0853	1.8653	2.1367	1.9622	2.6777	4.6584	
14	1.0603	1.2906	1.2242	1.3066	.9403	.5548		
	2.2316	1.8716	1.9833	1.9105	2.7155	4.6633		
15	.5783	.7829	1.0196	.7379	F-SUB-Q			
	4.0558	3.0467	2.3565	3.3115	M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 50% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7690	* 1.0860	* 1.0260	* 1.1085	* 1.0903	* 1.1171	* .9125	* .4894
	* 2.9610	* 2.0902	* 2.1885	* 2.0214	* 2.0629	* 2.0251	* 2.4656	* 4.5623
9	* 1.0860	* 1.0410	* 1.1470	* 1.0517	* 1.1363	* .9907	* 1.0721	* .6415
	* 2.0902	* 2.1756	* 1.9648	* 2.1398	* 1.9860	* 2.2847	* 2.1326	* 3.5282
10	* 1.0260	* 1.1503	* .9521	* 1.1310	* 1.0860	* 1.1117	* 1.0174	* .8054
	* 2.1885	* 1.9587	* 2.3871	* 2.0279	* 2.1213	* 2.0697	* 2.2521	* 2.8266
11	* 1.1085	* 1.0539	* 1.1342	* 1.0860	* 1.1171	* .9939	* 1.0699	* .5976
	* 2.0214	* 2.1357	* 2.0242	* 2.1628	* 2.1102	* 2.3768	* 2.1950	* 3.8677
12	* 1.0903	* 1.1385	* 1.0849	* 1.1181	* 1.0817	* 1.0849	* .7904	*
	* 2.0629	* 1.9824	* 2.1234	* 2.1082	* 2.2160	* 2.2126	* 3.0156	*
13	* 1.1171	* .9917	* 1.1117	* .9928	* 1.0881	* .8150	* .4562	*
	* 2.0251	* 2.2823	* 2.0697	* 2.3781	* 2.2071	* 2.9670	* 5.2692	*
14	* .9125	* 1.0731	* 1.0174	* 1.0689	* .7904	* .4552	*	*
	* 2.4656	* 2.1315	* 2.2521	* 2.1961	* 3.0197	* 5.2755	*	*
15	* .4894	* .6415	* .8043	* .5965	F-SUB-Q			
	* 4.5623	* 3.5310	* 2.8284	* 3.8711	M-SUB-Q			

AT 50% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .5269	* .7272	* .6372	* .6897	* .4316	* .7272	* .3588	* .3181
	* 4.1124	* 2.9810	* 3.3876	* 3.1287	* 4.9505	* 2.9810	* 5.9580	* 6.7391
9	* .7272	* .4316	* .7743	* .6544	* .7540	* .6201	* .6587	* .3770
	* 2.9810	* 4.9616	* 2.7998	* 3.3041	* 2.8913	* 3.5003	* 3.3189	* 5.7563
10	* .6372	* .7786	* .6458	* .7658	* .4348	* .7240	* .3716	* .4541
	* 3.3876	* 2.7892	* 3.3747	* 2.8632	* 5.0066	* 3.0531	* 5.8477	* 4.7896
11	* .6897	* .6576	* .7722	* .4305	* .7197	* .6062	* .6405	* .3416
	* 3.1287	* 3.2918	* 2.8375	* 5.0990	* 3.0980	* 3.7244	* 3.4865	* 6.4538
12	* .4316	* .7551	* .4348	* .7219	* .4059	* .6501	* .2935	*
	* 4.9505	* 2.8875	* 5.0009	* 3.0915	* 5.5468	* 3.5086	* 7.7287	*
13	* .7272	* .6212	* .7240	* .6062	* .6522	* .2999	* .2892	*
	* 2.9810	* 3.4975	* 3.0510	* 3.7244	* 3.4975	* 7.6090	* 7.8943	*
14	* .3588	* .6587	* .3716	* .6405	* .2935	* .2881	*	*
	* 5.9580	* 3.3165	* 5.8477	* 3.4892	* 7.7287	* 7.8943	*	*
15	* .3181	* .3770	* .4541	* .3416	F-SUB-Q			
	* 6.7391	* 5.7563	* 4.7896	* 6.4632	M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .6201 *	* .9318 *	* .8846 *	* .9425 *	* .5890 *	* .9628 *	* .4787 *	* .4498 *
	* 3.1422 *	* 2.4538 *	* 2.7216 *	* 2.5504 *	* 3.9756 *	* 2.4577 *	* 4.7933 *	* 5.0375 *
9	* .9318 *	* .5751 *	* 1.0421 *	* .9029 *	* 1.0057 *	* .8332 *	* .8386 *	* .5023 *
	* 2.4538 *	* 4.0679 *	* 2.3212 *	* 2.6626 *	* 2.3798 *	* 2.8477 *	* 2.8298 *	* 4.5977 *
10	* .8846 *	* 1.0453 *	* .8750 *	* 1.0110 *	* .5698 *	* .9200 *	* .4691 *	* .5837 *
	* 2.7216 *	* 2.3146 *	* 2.7624 *	* 2.4066 *	* 4.1756 *	* 2.6104 *	* 5.0125 *	* 3.9834 *
11	* .9425 *	* .9061 *	* 1.0185 *	* .5505 *	* .8889 *	* .7368 *	* .7786 *	* .4445 *
	* 2.5504 *	* 2.6556 *	* 2.3910 *	* 4.1819 *	* 2.5548 *	* 3.0297 *	* 2.9605 *	* 5.2154 *
12	* .5890 *	* 1.0067 *	* .5708 *	* .8911 *	* .3973 *	* .6640 *	* .3416 *	
	* 3.9756 *	* 2.3784 *	* 4.1694 *	* 2.5500 *	* 4.4114 *	* 2.8228 *	* 6.1876 *	
13	* .9628 *	* .8332 *	* .9200 *	* .7368 *	* .6640 *	* .2956 *	* .3427 *	
	* 2.4577 *	* 2.8457 *	* 2.6088 *	* 3.0297 *	* 2.8180 *	* 5.8793 *	* 5.7468 *	
14	* .4787 *	* .8397 *	* .4691 *	* .7786 *	* .3416 *	* .3416 *		
	* 4.7933 *	* 2.8298 *	* 5.0125 *	* 2.9605 *	* 6.1876 *	* 5.7468 *		
15	* .4498 *	* .5023 *	* .5837 *	* .4434 *	F-SUB-Q			
	* 5.0375 *	* 4.5977 *	* 3.9834 *	* 5.2154 *	M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9221 *	* 1.3645 *	* 1.3805 *	* 1.4512 *	* 1.4641 *	* 1.4084 *	* 1.1984 *	* .6726 *
	* 2.3794 *	* 1.8557 *	* 1.8657 *	* 1.7650 *	* 1.7426 *	* 1.8092 *	* 2.0858 *	* 3.6231 *
9	* 1.3645 *	* 1.3720 *	* 1.4812 *	* 1.3944 *	* 1.4630 *	* 1.2852 *	* 1.2991 *	* .8215 *
	* 1.8557 *	* 1.8602 *	* 1.7397 *	* 1.8333 *	* 1.7507 *	* 1.9796 *	* 1.9635 *	* 3.0313 *
10	* 1.3805 *	* 1.4844 *	* 1.2370 *	* 1.4159 *	* 1.3987 *	* 1.3666 *	* 1.2242 *	* .9800 *
	* 1.8657 *	* 1.7360 *	* 2.0922 *	* 1.8444 *	* 1.8514 *	* 1.9021 *	* 2.0922 *	* 2.5635 *
11	* 1.4512 *	* 1.3977 *	* 1.4180 *	* 1.3634 *	* 1.3280 *	* 1.1802 *	* 1.2477 *	* .7401 *
	* 1.7650 *	* 1.8309 *	* 1.8358 *	* 1.8406 *	* 1.8614 *	* 2.0391 *	* 1.9994 *	* 3.3703 *
12	* 1.4641 *	* 1.4651 *	* 1.3987 *	* 1.3291 *	* 1.0689 *	* 1.1288 *	* .9414 *	
	* 1.7426 *	* 1.7478 *	* 1.8514 *	* 1.8614 *	* 1.8365 *	* 1.9001 *	* 2.4718 *	
13	* 1.4084 *	* 1.2852 *	* 1.3666 *	* 1.1802 *	* 1.1278 *	* .8643 *	* .5387 *	
	* 1.8092 *	* 1.9786 *	* 1.9030 *	* 2.0401 *	* 1.8962 *	* 2.3344 *	* 4.0635 *	
14	* 1.1984 *	* 1.3002 *	* 1.2242 *	* 1.2477 *	* .9414 *	* .5376 *		
	* 2.0858 *	* 1.9617 *	* 2.0922 *	* 1.9998 *	* 2.4733 *	* 4.0675 *		
15	* .6726 *	* .8204 *	* .9789 *	* .7401 *	F-SUB-Q			
	* 3.6231 *	* 3.0313 *	* 2.5651 *	* 3.3703 *	M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1213	* 1.6065	* 1.5840	* 1.6847	* 1.7029	* 1.6761	* 1.4126	* .7958
	* 2.2789	* 1.7109	* 1.7360	* 1.6185	* 1.5963	* 1.6210	* 1.8872	* 3.2661
9	* 1.6065	* 1.5679	* 1.7222	* 1.6194	* 1.7297	* 1.5026	* 1.5915	* 1.0121
	* 1.7109	* 1.7529	* 1.5963	* 1.6823	* 1.5770	* 1.8018	* 1.7175	* 2.6231
10	* 1.5840	* 1.7265	* 1.3955	* 1.6783	* 1.6429	* 1.6397	* 1.4994	* 1.2520
	* 1.7360	* 1.5926	* 1.9861	* 1.6546	* 1.6787	* 1.6796	* 1.8278	* 2.1390
11	* 1.6847	* 1.6215	* 1.6804	* 1.6151	* 1.6354	* 1.4469	* 1.5679	* .9264
	* 1.6185	* 1.6803	* 1.6523	* 1.6493	* 1.6241	* 1.8014	* 1.7141	* 2.8923
12	* 1.7029	* 1.7318	* 1.6418	* 1.6365	* 1.4908	* 1.5123	* 1.1749	
	* 1.5963	* 1.5747	* 1.6807	* 1.6241	* 1.6290	* 1.6415	* 2.1816	
13	* 1.6761	* 1.5037	* 1.6397	* 1.4459	* 1.5155	* 1.1792	* .6919	
	* 1.6210	* 1.8003	* 1.6803	* 1.8021	* 1.6373	* 2.0388	* 3.5355	
14	* 1.4126	* 1.5915	* 1.4994	* 1.5669	* 1.1738	* .6908		
	* 1.8872	* 1.7175	* 1.8278	* 1.7149	* 2.1834	* 3.5398		
15	* .7958	* 1.0110	* 1.2509	* .9264	* F-SUB-Q			
	* 3.2661	* 2.6248	* 2.1401	* 2.8932	* M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2274	* 1.7222	* 1.6643	* 1.7821	* 1.7961	* 1.8111	* 1.5123	* .8504
	* 2.3723	* 1.7375	* 1.7821	* 1.6454	* 1.6210	* 1.6050	* 1.8857	* 3.2731
9	* 1.7222	* 1.6515	* 1.8336	* 1.7125	* 1.8507	* 1.6076	* 1.7522	* 1.1074
	* 1.7375	* 1.8104	* 1.6154	* 1.7090	* 1.5811	* 1.8010	* 1.6746	* 2.5733
10	* 1.6643	* 1.8378	* 1.4758	* 1.8121	* 1.7586	* 1.7875	* 1.6515	* 1.3955
	* 1.7821	* 1.6117	* 2.0228	* 1.6469	* 1.6946	* 1.6581	* 1.7851	* 2.0614
11	* 1.7821	* 1.7147	* 1.8153	* 1.7586	* 1.8014	* 1.5990	* 1.7522	* 1.0303
	* 1.6454	* 1.7069	* 1.6453	* 1.6581	* 1.6054	* 1.7892	* 1.6671	* 2.8104
12	* 1.7961	* 1.8528	* 1.7575	* 1.8014	* 1.7382	* 1.7564	* 1.3055	
	* 1.6210	* 1.5788	* 1.6973	* 1.6054	* 1.6301	* 1.6111	* 2.1725	
13	* 1.8111	* 1.6086	* 1.7875	* 1.5979	* 1.7607	* 1.3591	* .7775	
	* 1.6050	* 1.7995	* 1.6590	* 1.7900	* 1.6068	* 2.0338	* 3.5182	
14	* 1.5123	* 1.7532	* 1.6515	* 1.7511	* 1.3045	* .7775		
	* 1.8857	* 1.6746	* 1.7851	* 1.6678	* 2.1752	* 3.5224		
15	* .8504	* 1.1063	* 1.3944	* 1.0303	* F-SUB-Q			
	* 3.2731	* 2.5749	* 2.0624	* 2.8111	* M-SUB-Q			



TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2145	* 1.7125	* 1.6397	* 1.7618	* 1.7746	* 1.8153	* 1.5080	* .8461
	* 2.6356	* 1.9054	* 1.9723	* 1.8125	* 1.7841	* 1.7409	* 2.0540	* 3.5741
9	* 1.7125	* 1.6279	* 1.8196	* 1.6943	* 1.8421	* 1.6044	* 1.7757	* 1.1171
	* 1.9054	* 2.0016	* 1.7724	* 1.8812	* 1.7277	* 1.9625	* 1.8004	* 2.7801
10	* 1.6397	* 1.8250	* 1.4651	* 1.8218	* 1.7575	* 1.8057	* 1.6750	* 1.4201
	* 1.9723	* 1.7680	* 2.2211	* 1.7800	* 1.8435	* 1.7805	* 1.9108	* 2.2084
11	* 1.7618	* 1.6965	* 1.8239	* 1.7746	* 1.8336	* 1.6247	* 1.7896	* 1.0464
	* 1.8125	* 1.8788	* 1.7783	* 1.8085	* 1.7392	* 1.9405	* 1.7808	* 3.0188
12	* 1.7746	* 1.8443	* 1.7554	* 1.8336	* 1.7693	* 1.8057	* 1.3280	*
	* 1.7841	* 1.7256	* 1.8464	* 1.7392	* 1.7820	* 1.7439	* 2.3613	*
13	* 1.8153	* 1.6054	* 1.8046	* 1.6236	* 1.8100	* 1.3891	* .7915	*
	* 1.7409	* 1.9616	* 1.7812	* 1.9420	* 1.7392	* 2.2322	* 3.8657	*
14	* 1.5080	* 1.7768	* 1.6740	* 1.7886	* 1.3259	* .7904	*	*
	* 2.0540	* 1.8004	* 1.9116	* 1.7815	* 2.3639	* 3.8692	*	*
15	* .8461	* 1.1160	* 1.4191	* 1.0453	* F-SUB-Q			
	* 3.5741	* 2.7819	* 2.2096	* 3.0209	* M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.2145	* 1.7265	* 1.6418	* 1.7746	* 1.7821	* 1.8443	* 1.5240	* .8536
	* 2.9394	* 2.0941	* 2.1672	* 1.9803	* 1.9486	* 1.8769	* 2.2221	* 3.8681
9	* 1.7265	* 1.6290	* 1.8368	* 1.7040	* 1.8635	* 1.6236	* 1.8218	* 1.1395
	* 2.0941	* 2.2182	* 1.9340	* 2.0555	* 1.8761	* 2.1252	* 1.9239	* 2.9799
10	* 1.6418	* 1.8410	* 1.4780	* 1.8571	* 1.7800	* 1.8518	* 1.7232	* 1.4641
	* 2.1672	* 1.9289	* 2.4248	* 1.9366	* 2.0188	* 1.9166	* 2.0507	* 2.3444
11	* 1.7746	* 1.7061	* 1.8593	* 1.8025	* 1.8785	* 1.6622	* 1.8464	* 1.0796
	* 1.9803	* 2.0536	* 1.9343	* 1.9803	* 1.8919	* 2.1133	* 1.9144	* 3.2423
12	* 1.7821	* 1.8657	* 1.7768	* 1.8785	* 1.8046	* 1.8593	* 1.3559	*
	* 1.9486	* 1.8737	* 2.0225	* 1.8919	* 1.9553	* 1.8908	* 2.5758	*
13	* 1.8443	* 1.6247	* 1.8507	* 1.6611	* 1.8646	* 1.4191	* .8118	*
	* 1.8769	* 2.1242	* 1.9175	* 2.1143	* 1.8859	* 2.4467	* 4.2056	*
14	* 1.5240	* 1.8218	* 1.7222	* 1.8443	* 1.3548	* .8107	*	*
	* 2.2221	* 1.9230	* 2.0516	* 1.9152	* 2.5789	* 4.2096	*	*
15	* .8536	* 1.1395	* 1.4630	* 1.0796	* F-SUB-Q			
	* 3.8681	* 2.9819	* 2.3457	* 3.2447	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1738	* 1.6793	* 1.5926	* 1.7275	* 1.7329	* 1.8068	* 1.4887	* .8332
	* 3.3644	* 2.3403	* 2.4357	* 2.2148	* 2.1650	* 2.0736	* 2.4560	* 4.2713
9	* 1.6793	* 1.5776	* 1.7896	* 1.6579	* 1.8196	* 1.5862	* 1.7939	* 1.1192
	* 2.3403	* 2.4920	* 2.1607	* 2.2953	* 2.0755	* 2.3528	* 2.1112	* 3.2698
10	* 1.5926	* 1.7939	* 1.4405	* 1.8218	* 1.7393	* 1.8293	* 1.7007	* 1.4437
	* 2.4357	* 2.1555	* 2.7188	* 2.1756	* 2.2764	* 2.1072	* 2.2486	* 2.5613
11	* 1.7275	* 1.6600	* 1.8239	* 1.7639	* 1.8475	* 1.6365	* 1.8228	* 1.0635
	* 2.2148	* 2.2930	* 2.1735	* 2.2700	* 2.1603	* 2.4052	* 2.1502	* 3.5796
12	* 1.7329	* 1.8218	* 1.7361	* 1.8475	* 1.7693	* 1.8325	* 1.3313	*
	* 2.1650	* 2.0745	* 2.2788	* 2.1596	* 2.2447	* 2.1572	* 2.9453	*
13	* 1.8068	* 1.5872	* 1.8271	* 1.6354	* 1.8378	* 1.3912	* .7958	*
	* 2.0736	* 2.3515	* 2.1072	* 2.4065	* 2.1516	* 2.8124	* 4.8262	*
14	* 1.4887	* 1.7939	* 1.6997	* 1.8218	* 1.3302	* .7958	*	*
	* 2.4560	* 2.1102	* 2.2498	* 2.1513	* 2.9485	* 4.8315	*	*
15	* .8332	* 1.1181	* 1.4437	* 1.0624	* F-SUB-Q			
	* 4.2713	* 3.2723	* 2.5628	* 3.5796	* M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.1203	* 1.6129	* 1.5262	* 1.6600	* 1.6654	* 1.7447	* 1.4330	* .8000
	* 3.8375	* 2.6777	* 2.7408	* 2.4822	* 2.4131	* 2.3013	* 2.7272	* 4.7434
9	* 1.6129	* 1.5090	* 1.7211	* 1.5936	* 1.7532	* 1.5294	* 1.7393	* 1.0817
	* 2.6777	* 2.8614	* 2.4210	* 2.5703	* 2.3037	* 2.6159	* 2.3280	* 3.6059
10	* 1.5262	* 1.7254	* 1.3848	* 1.7597	* 1.6750	* 1.7757	* 1.6504	* 1.3998
	* 2.7408	* 2.4158	* 3.0636	* 2.4330	* 2.5658	* 2.3231	* 2.4780	* 2.8122
11	* 1.6600	* 1.5958	* 1.7618	* 1.6997	* 1.7875	* 1.5862	* 1.7693	* 1.0282
	* 2.4822	* 2.5673	* 2.4304	* 2.5777	* 2.4560	* 2.7155	* 2.4304	* 3.9472
12	* 1.6654	* 1.7554	* 1.6718	* 1.7875	* 1.7082	* 1.7757	* 1.2863	*
	* 2.4131	* 2.3025	* 2.5703	* 2.4560	* 2.5717	* 2.4629	* 3.3517	*
13	* 1.7447	* 1.5305	* 1.7746	* 1.5840	* 1.7800	* 1.3409	* .7668	*
	* 2.3013	* 2.6143	* 2.3231	* 2.7188	* 2.4560	* 3.2506	* 5.5608	*
14	* 1.4330	* 1.7393	* 1.6493	* 1.7682	* 1.2841	* .7658	*	*
	* 2.7272	* 2.3280	* 2.4780	* 2.4317	* 3.3567	* 5.5678	*	*
15	* .8000	* 1.0806	* 1.3987	* 1.0271	* F-SUB-Q			
	* 4.7434	* 3.6088	* 2.8140	* 3.9472	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0881	* 1.5776	* 1.4887	* 1.6268	* 1.6290	* 1.7157	* 1.4030	* .7829
	* 4.1824	* 2.9084	* 3.0115	* 2.7205	* 2.6409	* 2.5047	* 2.9750	* 5.1645
9	* 1.5776	* 1.4694	* 1.6858	* 1.5583	* 1.7200	* 1.4994	* 1.7157	* 1.0635
	* 2.9084	* 3.1221	* 2.6472	* 2.8176	* 2.5076	* 2.8558	* 2.5233	* 3.9157
10	* 1.4887	* 1.6911	* 1.3570	* 1.7297	* 1.6386	* 1.7543	* 1.6301	* 1.3837
	* 3.0115	* 2.6409	* 3.3517	* 2.6567	* 2.8104	* 2.5190	* 2.6858	* 3.0363
11	* 1.6268	* 1.5604	* 1.7318	* 1.6654	* 1.7597	* 1.5615	* 1.7500	* 1.0164
	* 2.7205	* 2.8158	* 2.6536	* 2.7998	* 2.6583	* 2.9591	* 2.6472	* 4.2672
12	* 1.6290	* 1.7222	* 1.6354	* 1.7597	* 1.6761	* 1.7511	* 1.2616	*
	* 2.6409	* 2.5061	* 2.8158	* 2.6583	* 2.7892	* 2.6664	* 3.6718	*
13	* 1.7157	* 1.4994	* 1.7532	* 1.5604	* 1.7564	* 1.3130	* .7540	*
	* 2.5047	* 2.8540	* 2.5190	* 2.9610	* 2.6599	* 3.5509	* 6.1146	*
14	* 1.4030	* 1.7168	* 1.6290	* 1.7479	* 1.2595	* .7529	*	*
	* 2.9750	* 2.5233	* 2.6874	* 2.6488	* 3.6748	* 6.1230	*	*
15	* .7829	* 1.0624	* 1.3837	* 1.0153	* F-SUB-Q			
	* 5.1645	* 3.9192	* 3.0384	* 4.2713	* M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 1.0228	* 1.4898	* 1.4052	* 1.5380	* 1.5422	* 1.6268	* 1.3291	* .7401
	* 4.3046	* 2.9571	* 2.9591	* 2.6712	* 2.6314	* 2.5019	* 3.0074	* 5.2944
9	* 1.4898	* 1.3848	* 1.5947	* 1.4748	* 1.6311	* 1.4212	* 1.6322	* 1.0089
	* 2.9571	* 3.1331	* 2.6036	* 2.7786	* 2.5033	* 2.8558	* 2.5495	* 4.0116
10	* 1.4052	* 1.6001	* 1.2831	* 1.6408	* 1.5519	* 1.6697	* 1.5519	* 1.3152
	* 2.9591	* 2.5959	* 3.3016	* 2.6377	* 2.8104	* 2.5451	* 2.7205	* 3.1221
11	* 1.5380	* 1.4769	* 1.6429	* 1.5776	* 1.6708	* 1.4855	* 1.6633	* .9618
	* 2.6712	* 2.7752	* 2.6346	* 2.8595	* 2.7088	* 3.0115	* 2.6923	* 4.4120
12	* 1.5422	* 1.6311	* 1.5487	* 1.6708	* 1.5894	* 1.6633	* 1.1974	*
	* 2.6314	* 2.5019	* 2.8140	* 2.7088	* 2.8448	* 2.7155	* 3.7433	*
13	* 1.6268	* 1.4212	* 1.6686	* 1.4833	* 1.6686	* 1.2445	* .7111	*
	* 2.5019	* 2.8540	* 2.5451	* 3.0135	* 2.7088	* 3.6266	* 6.2707	*
14	* 1.3291	* 1.6322	* 1.5508	* 1.6622	* 1.1963	* .7101	*	*
	* 3.0074	* 2.5495	* 2.7222	* 2.6940	* 3.7496	* 6.2796	*	*
15	* .7401	* 1.0078	* 1.3141	* .9607	* F-SUB-Q			
	* 5.2944	* 4.0153	* 3.1243	* 4.4164	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9939 *	* 1.4566 *	* 1.3698 *	* 1.5037 *	* 1.5058 *	* 1.5969 *	* 1.2981 *	* .7208 *
	* 4.1667 *	* 2.7821 *	* 2.7998 *	* 2.5190 *	* 2.4934 *	* 2.3590 *	* 2.8430 *	* 4.9840 *
9	* 1.4566 *	* 1.3473 *	* 1.5615 *	* 1.4394 *	* 1.6011 *	* 1.3891 *	* 1.6065 *	* .9896 *
	* 2.7821 *	* 2.9650 *	* 2.4547 *	* 2.6299 *	* 2.3616 *	* 2.7022 *	* 2.3974 *	* 3.7720 *
10	* 1.3698 *	* 1.5658 *	* 1.2541 *	* 1.6097 *	* 1.5155 *	* 1.6451 *	* 1.5283 *	* 1.2970 *
	* 2.7998 *	* 2.4479 *	* 3.1177 *	* 2.4850 *	* 2.6583 *	* 2.3948 *	* 2.5569 *	* 2.9238 *
11	* 1.5037 *	* 1.4416 *	* 1.6108 *	* 1.5422 *	* 1.6408 *	* 1.4587 *	* 1.6408 *	* .9478 *
	* 2.5190 *	* 2.6268 *	* 2.4822 *	* 2.7962 *	* 2.6299 *	* 2.9046 *	* 2.5305 *	* 4.1355 *
12	* 1.5058 *	* 1.6001 *	* 1.5123 *	* 1.6408 *	* 1.5551 *	* 1.6365 *	* 1.1717 *	
	* 2.4934 *	* 2.3603 *	* 2.6632 *	* 2.6314 *	* 2.7998 *	* 2.6599 *	* 3.6415 *	
13	* 1.5969 *	* 1.3902 *	* 1.6440 *	* 1.4566 *	* 1.6408 *	* 1.2156 *	* .6972 *	
	* 2.3590 *	* 2.7006 *	* 2.3948 *	* 2.1065 *	* 2.6520 *	* 3.5825 *	* 6.0893 *	
14	* 1.2981 *	* 1.6065 *	* 1.5272 *	* 1.6197 *	* 1.1695 *	* .6972 *		
	* 2.8430 *	* 2.3974 *	* 2.5584 *	* 2.5314 *	* 3.6475 *	* 6.0893 *		
15	* .7208 *	* .9885 *	* 1.2970 *	* .9478 *	* F-SUB-Q			
	* 4.9840 *	* 3.7753 *	* 2.9277 *	* 4.1432 *	* M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .9478 *	* 1.3977 *	* 1.3109 *	* 1.4426 *	* 1.4426 *	* 1.5337 *	* 1.2434 *	* .6887 *
	* 3.9122 *	* 2.5510 *	* 2.5777 *	* 2.3194 *	* 2.3001 *	* 2.1713 *	* 2.6221 *	* 4.6146 *
9	* 1.3977 *	* 1.2895 *	* 1.4983 *	* 1.3794 *	* 1.5390 *	* 1.3334 *	* 1.5455 *	* .9489 *
	* 2.5510 *	* 2.7255 *	* 2.2567 *	* 2.4250 *	* 2.1735 *	* 2.4906 *	* 2.2027 *	* 3.4728 *
10	* 1.3109 *	* 1.5026 *	* 1.2017 *	* 1.5465 *	* 1.4533 *	* 1.5840 *	* 1.4716 *	* 1.2488 *
	* 2.5777 *	* 2.2498 *	* 2.8725 *	* 2.2894 *	* 2.4547 *	* 2.2005 *	* 2.3490 *	* 2.6825 *
11	* 1.4426 *	* 1.3816 *	* 1.5487 *	* 1.4791 *	* 1.5776 *	* 1.4019 *	* 1.5797 *	* .9104 *
	* 2.3194 *	* 2.4224 *	* 2.2870 *	* 2.6112 *	* 2.4519 *	* 2.7088 *	* 2.3280 *	* 3.7980 *
12	* 1.4426 *	* 1.5380 *	* 1.4491 *	* 1.5776 *	* 1.4930 *	* 1.5744 *	* 1.1235 *	
	* 2.3001 *	* 2.1724 *	* 2.4587 *	* 2.4547 *	* 2.6314 *	* 2.4794 *	* 3.4033 *	
13	* 1.5337 *	* 1.3345 *	* 1.5829 *	* 1.4009 *	* 1.5797 *	* 1.1652 *	* .6683 *	
	* 2.1713 *	* 2.4892 *	* 2.2005 *	* 2.7122 *	* 2.4725 *	* 3.3491 *	* 5.6896 *	
14	* 1.2434 *	* 1.5465 *	* 1.4705 *	* 1.5787 *	* 1.1224 *	* .6672 *		
	* 2.6221 *	* 2.2027 *	* 2.3503 *	* 2.3304 *	* 3.4085 *	* 5.6969 *		
15	* .6887 *	* .9478 *	* 1.2477 *	* .9093 *	* F-SUB-Q			
	* 4.6146 *	* 3.4782 *	* 2.6842 *	* 3.8012 *	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 6 OF 13  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8943	* 1.3216	* 1.2391	* 1.3645	* 1.3623	* 1.4491	* 1.1727	* .6480
	* 3.6326	* 2.3832	* 2.4144	* 2.1724	* 2.1639	* 2.0429	* 2.4767	* 4.3814
9	* 1.3216	* 1.2188	* 1.4169	* 1.3034	* 1.4544	* 1.2584	* 1.4587	* .8932
	* 2.3832	* 2.5480	* 2.1132	* 2.2753	* 2.0448	* 2.3465	* 2.0716	* 3.2844
10	* 1.2391	* 1.4212	* 1.1342	* 1.4619	* 1.3730	* 1.4962	* 1.3891	* 1.1749
	* 2.4144	* 2.1072	* 2.6940	* 2.1450	* 2.2989	* 2.0687	* 2.2071	* 2.5305
11	* 1.3645	* 1.3055	* 1.4641	* 1.3977	* 1.4919	* 1.3238	* 1.4908	* .8536
	* 2.1724	* 2.2729	* 2.1419	* 2.4317	* 2.2800	* 2.5076	* 2.1777	* 3.5913
12	* 1.3623	* 1.4533	* 1.3698	* 1.4919	* 1.4116	* 1.4876	* 1.0603	
	* 2.1639	* 2.0438	* 2.3025	* 2.2823	* 2.4411	* 2.3097	* 3.1782	
13	* 1.4491	* 1.2595	* 1.4951	* 1.3227	* 1.4919	* 1.0988	* .6265	
	* 2.0429	* 2.3440	* 2.0677	* 2.5104	* 2.3025	* 3.1331	* 5.3651	
14	* 1.1727	* 1.4598	* 1.3880	* 1.4898	* 1.0592	* .6265		
	* 2.4767	* 2.0716	* 2.2082	* 2.1799	* 3.1805	* 5.3716		
15	* .6480	* .8932	* 1.1738	* .8525	* F-SUB-Q			
	* 4.3814	* 3.2869	* 2.5334	* 3.5942	* M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8697	* 1.2916	* 1.2070	* 1.3323	* 1.3238	* 1.4094	* 1.1353	* .6255
	* 3.2482	* 2.1671	* 2.2126	* 1.9887	* 1.9995	* 1.8852	* 2.3001	* 4.0934
9	* 1.2916	* 1.1888	* 1.3837	* 1.2681	* 1.4137	* 1.2199	* 1.4169	* .8632
	* 2.1671	* 2.3255	* 1.9339	* 2.0922	* 1.8836	* 2.1703	* 1.9105	* 3.0531
10	* 1.2070	* 1.3880	* 1.1042	* 1.4234	* 1.3334	* 1.4512	* 1.3473	* 1.1395
	* 2.2126	* 1.9280	* 2.4670	* 1.9648	* 2.1082	* 1.9072	* 2.0316	* 2.3403
11	* 1.3323	* 1.2702	* 1.4255	* 1.3570	* 1.4512	* 1.2831	* 1.4480	* .8268
	* 1.9887	* 2.0892	* 1.9622	* 2.1853	* 2.0457	* 2.2636	* 1.9914	* 3.3090
12	* 1.3238	* 1.4137	* 1.3302	* 1.4512	* 1.3720	* 1.4459	* 1.0249	
	* 1.9995	* 1.8804	* 2.1122	* 2.0476	* 2.2038	* 2.0843	* 2.8707	
13	* 1.4094	* 1.2209	* 1.4512	* 1.2820	* 1.4501	* 1.0635	* .6083	
	* 1.8852	* 2.1692	* 1.9072	* 2.2659	* 2.0784	* 2.8503	* 4.8581	
14	* 1.1353	* 1.4169	* 1.3473	* 1.4469	* 1.0239	* .6073		
	* 2.3001	* 1.9105	* 2.0326	* 1.9923	* 2.8744	* 4.8634		
15	* .6255	* .8622	* 1.1385	* .8268	* F-SUB-Q			
	* 4.0934	* 3.0552	* 2.3415	* 3.3115	* M-SUB-Q			

TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .8193 *	* 1.2156 *	* 1.1385 *	* 1.2520 *	* 1.2391 *	* 1.3120 *	* 1.0571 *	* .5783 *
	* 3.0980 *	* 2.0514 *	* 2.1203 *	* 1.9146 *	* 1.9364 *	* 1.8412 *	* 2.2521 *	* 4.0447 *
9	* 1.2156 *	* 1.1235 *	* 1.2991 *	* 1.1910 *	* 1.3216 *	* 1.1374 *	* 1.3088 *	* .7958 *
	* 2.0514 *	* 2.2060 *	* 1.8622 *	* 2.0196 *	* 1.8260 *	* 2.1173 *	* 1.8740 *	* 3.0135 *
10	* 1.1385 *	* 1.3034 *	* 1.0346 *	* 1.3270 *	* 1.2477 *	* 1.3398 *	* 1.2434 *	* 1.0453 *
	* 2.1203 *	* 1.8567 *	* 2.3768 *	* 1.8982 *	* 2.0270 *	* 1.8685 *	* 1.9896 *	* 2.3158 *
11	* 1.2520 *	* 1.1931 *	* 1.3291 *	* 1.2681 *	* 1.3495 *	* 1.1877 *	* 1.3345 *	* .7551 *
	* 1.9146 *	* 2.0168 *	* 1.8949 *	* 2.0892 *	* 1.9736 *	* 2.1810 *	* 1.9238 *	* 3.2747 *
12	* 1.2391 *	* 1.3238 *	* 1.2445 *	* 1.3495 *	* 1.2798 *	* 1.3388 *	* .9510 *	
	* 1.9364 *	* 1.8230 *	* 2.0307 *	* 1.9727 *	* 2.0853 *	* 1.9923 *	* 2.7682 *	
13	* 1.3120 *	* 1.1385 *	* 1.3388 *	* 1.1867 *	* 1.3430 *	* .9885 *	* .5601 *	
	* 1.8412 *	* 2.1152 *	* 1.8685 *	* 2.1842 *	* 1.9860 *	* 2.7006 *	* 4.6831 *	
14	* 1.0571 *	* 1.3098 *	* 1.2434 *	* 1.3334 *	* .9500 *	* .5591 *		
	* 2.2521 *	* 1.8740 *	* 1.9896 *	* 1.9246 *	* 2.7699 *	* 4.6880 *		
15	* .5783 *	* .7947 *	* 1.0442 *	* .7540 *	F-SUB-Q			
	* 4.0447 *	* 3.0176 *	* 2.3170 *	* 3.2795 *	M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7861 *	* 1.1567 *	* 1.0839 *	* 1.1888 *	* 1.1727 *	* 1.2252 *	* .9885 *	* .5355 *
	* 2.8781 *	* 1.9570 *	* 2.0410 *	* 1.8552 *	* 1.8876 *	* 1.8208 *	* 2.2316 *	* 4.0558 *
9	* 1.1567 *	* 1.0806 *	* 1.2295 *	* 1.1267 *	* 1.2424 *	* 1.0646 *	* 1.2049 *	* .7283 *
	* 1.9570 *	* 2.0853 *	* 1.8066 *	* 1.9657 *	* 1.7898 *	* 2.0873 *	* 1.8724 *	* 3.0426 *
10	* 1.0839 *	* 1.2338 *	* .9842 *	* 1.2413 *	* 1.1738 *	* 1.2316 *	* 1.1417 *	* .9468 *
	* 2.0410 *	* 1.8015 *	* 2.2847 *	* 1.8513 *	* 1.9622 *	* 1.8653 *	* 1.9833 *	* 2.3553 *
11	* 1.1888 *	* 1.1288 *	* 1.2424 *	* 1.1899 *	* 1.2531 *	* 1.0967 *	* 1.2209 *	* .6854 *
	* 1.8552 *	* 1.9622 *	* 1.8482 *	* 1.9950 *	* 1.9014 *	* 2.1346 *	* 1.9096 *	* 3.3090 *
12	* 1.1727 *	* 1.2445 *	* 1.1717 *	* 1.2531 *	* 1.1963 *	* 1.2327 *	* .8782 *	
	* 1.8876 *	* 1.7869 *	* 1.9648 *	* 1.9006 *	* 2.0307 *	* 1.9683 *	* 2.7122 *	
13	* 1.2252 *	* 1.0667 *	* 1.2306 *	* 1.0956 *	* 1.2370 *	* .9146 *	* .5152 *	
	* 1.8208 *	* 2.0853 *	* 1.8653 *	* 2.1367 *	* 1.9622 *	* 2.6777 *	* 4.6584 *	
14	* .9885 *	* 1.2059 *	* 1.1417 *	* 1.2209 *	* .8771 *	* .5152 *		
	* 2.2316 *	* 1.8716 *	* 1.9833 *	* 1.9105 *	* 2.7155 *	* 4.6633 *		
15	* .5355 *	* .7272 *	* .9468 *	* .6854 *	F-SUB-Q			
	* 4.0558 *	* 3.0467 *	* 2.3565 *	* 3.3115 *	M-SUB-Q			



TABLE 2 (CONTINUED)

F-SUB-Q & M-SUB-Q VALUES (F-SUB-Q OP MARGIN) - POWER ESCALATION

AT 30% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .7090 *	* 1.0035 *	* .9468 *	* 1.0239 *	* 1.0067 *	* 1.0335 *	* .8407 *	* .4487 *
	* 2.9610 *	* 2.0902 *	* 2.1885 *	* 2.0214 *	* 2.0629 *	* 2.0251 *	* 2.4656 *	* 4.5623 *
9	* 1.0035 *	* .9618 *	* 1.0603 *	* .9714 *	* 1.0507 *	* .9157 *	* .9896 *	* .5890 *
	* 2.0902 *	* 2.1756 *	* 1.9648 *	* 2.1398 *	* 1.9860 *	* 2.2847 *	* 2.1326 *	* 3.5282 *
10	* .9468 *	* 1.0635 *	* .8804 *	* 1.0485 *	* 1.0057 *	* 1.0292 *	* .9371 *	* .7390 *
	* 2.1885 *	* 1.9587 *	* 2.3871 *	* 2.0279 *	* 2.1213 *	* 2.0697 *	* 2.2521 *	* 2.8266 *
11	* 1.0239 *	* .9735 *	* 1.0507 *	* 1.0067 *	* 1.0367 *	* .9189 *	* .9875 *	* .5484 *
	* 2.0214 *	* 2.1357 *	* 2.0242 *	* 2.1628 *	* 2.1102 *	* 2.3768 *	* 2.1950 *	* 3.8677 *
12	* 1.0067 *	* 1.0528 *	* 1.0046 *	* 1.0378 *	* 1.0014 *	* 1.0046 *	* .7294 *	
	* 2.0629 *	* 1.9824 *	* 2.1234 *	* 2.1082 *	* 2.2160 *	* 2.2126 *	* 3.0156 *	
13	* 1.0335 *	* .9157 *	* 1.0292 *	* .9178 *	* 1.0067 *	* .7529 *	* .4188 *	
	* 2.0251 *	* 2.2823 *	* 2.0697 *	* 2.3781 *	* 2.2071 *	* 2.9670 *	* 5.2692 *	
14	* .8407 *	* .9907 *	* .9371 *	* .9875 *	* .7283 *	* .4177 *		
	* 2.4656 *	* 2.1315 *	* 2.2521 *	* 2.1961 *	* 3.0197 *	* 5.2755 *		
15	* .4487 *	* .5890 *	* .7379 *	* .5473 *	F-SUB-Q			
	* 4.5623 *	* 3.5310 *	* 2.8284 *	* 3.8711 *	M-SUB-Q			

AT 30% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* .4798 *	* .6629 *	* .5816 *	* .6297 *	* .3931 *	* .6640 *	* .3256 *	* .2881 *
	* 4.1124 *	* 2.9810 *	* 3.3876 *	* 3.1287 *	* 4.9505 *	* 2.9810 *	* 5.9580 *	* 6.7391 *
9	* .6629 *	* .3920 *	* .7079 *	* .5976 *	* .6897 *	* .5666 *	* .5998 *	* .3406 *
	* 2.9810 *	* 4.9616 *	* 2.7998 *	* 3.3041 *	* 2.8913 *	* 3.5003 *	* 3.3189 *	* 5.7563 *
10	* .5816 *	* .7122 *	* .5912 *	* .7004 *	* .3952 *	* .6608 *	* .3363 *	* .4102 *
	* 3.3876 *	* 2.7892 *	* 3.3747 *	* 2.8632 *	* 5.0066 *	* 3.0531 *	* 5.8477 *	* 4.7896 *
11	* .6297 *	* .6008 *	* .7069 *	* .3920 *	* .6576 *	* .5537 *	* .5826 *	* .3095 *
	* 3.1287 *	* 3.2918 *	* 2.8375 *	* 5.0990 *	* 3.0980 *	* 3.7244 *	* 3.4865 *	* 6.4538 *
12	* .3931 *	* .6908 *	* .3963 *	* .6587 *	* .3695 *	* .5933 *	* .2667 *	
	* 4.9505 *	* 2.8875 *	* 5.0009 *	* 3.0915 *	* 5.5468 *	* 3.5086 *	* 7.7287 *	
13	* .6640 *	* .5666 *	* .6608 *	* .5537 *	* .5955 *	* .2720 *	* .2603 *	
	* 2.9810 *	* 3.4975 *	* 3.0510 *	* 3.7244 *	* 3.4975 *	* 7.6090 *	* 7.8943 *	
14	* .3256 *	* .5998 *	* .3363 *	* .5826 *	* .2667 *	* .2603 *		
	* 5.9580 *	* 3.3165 *	* 5.8477 *	* 3.4892 *	* 7.7287 *	* 7.8943 *		
15	* .2881 *	* .3406 *	* .4102 *	* .3095 *	F-SUB-Q			
	* 6.7391 *	* 5.7563 *	* 4.7896 *	* 6.4632 *	M-SUB-Q			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 3.0411	* 2.4347	* 2.7475	* 2.6060	* 4.0089	* 2.4977	* 4.7216	* 4.7711
	* 2.7522	* 2.2365	* 2.5806	* 2.4725	* 3.6258	* 2.3179	* 4.1991	* 4.3480
	* 2.7078	* 2.2539	* 2.4630	* 2.3417	* 3.3061	* 2.1755	* 3.7717	* 3.9493
	* 2.7032	* 2.2879	* 2.5016	* 2.3784	* 3.2521	* 2.1965	* 3.6930	* 3.8678
	* 2.2863	* 1.9722	* 2.2912	* 2.2428	* 3.0238	* 2.1079	* 3.3977	* 3.5770
9	* 2.4347	* 3.9739	* 2.3538	* 2.6986	* 2.4718	* 2.8738	* 2.8179	* 4.3960
	* 2.2365	* 3.5373	* 2.2132	* 2.5497	* 2.2700	* 2.6648	* 2.6124	* 4.0190
	* 2.2539	* 3.3761	* 2.1205	* 2.4108	* 2.1462	* 2.4880	* 2.4310	* 3.6675
	* 2.2879	* 3.3164	* 2.1607	* 2.4478	* 2.1725	* 2.5115	* 2.4385	* 3.6341
	* 1.9722	* 2.8661	* 1.9969	* 2.2945	* 2.0456	* 2.3731	* 2.2684	* 3.3061
10	* 2.7475	* 2.3486	* 2.7642	* 2.4255	* 4.1337	* 2.6318	* 4.9259	* 3.8169
	* 2.5806	* 2.2071	* 2.5661	* 2.2492	* 3.6760	* 2.4108	* 4.3839	* 3.4605
	* 2.4630	* 2.1120	* 2.4292	* 2.1491	* 3.4014	* 2.2830	* 3.9298	* 3.1338
	* 2.5016	* 2.1520	* 2.4592	* 2.1814	* 3.3373	* 2.3028	* 3.8491	* 3.1003
	* 2.2912	* 1.9957	* 2.2700	* 2.0108	* 2.9455	* 2.0803	* 3.3726	* 2.7835
11	* 2.6060	* 2.6918	* 2.4126	* 4.1391	* 2.5517	* 3.0557	* 2.9758	* 4.9643
	* 2.4725	* 2.5456	* 2.2381	* 3.6549	* 2.3349	* 2.8031	* 2.7287	* 4.5207
	* 2.3417	* 2.4072	* 2.1404	* 3.5100	* 2.3297	* 2.7333	* 2.6493	* 4.1607
	* 2.3784	* 2.4441	* 2.1740	* 3.4344	* 2.3383	* 2.7738	* 2.6626	* 4.1071
	* 2.2428	* 2.2896	* 2.0095	* 2.9079	* 1.9808	* 2.3452	* 2.2962	* 3.5491
12	* 4.0089	* 2.4200	* 4.1283	* 2.5456	* 4.4020	* 2.8635	* 6.1055	*
	* 3.6258	* 2.2684	* 3.6718	* 2.3314	* 3.8867	* 2.5932	* 5.4294	*
	* 3.3061	* 2.1447	* 3.4014	* 2.3263	* 3.6845	* 2.5174	* 5.0993	*
	* 3.2521	* 2.1710	* 3.3338	* 2.3383	* 3.5972	* 2.5274	* 5.0349	*
	* 3.0238	* 2.0443	* 2.9428	* 1.9796	* 2.9293	* 2.1065	* 4.0600	*
13	* 2.4977	* 2.8712	* 2.6318	* 3.0557	* 2.8584	* 5.7842	* 5.3745	*
	* 2.3179	* 2.6648	* 2.4108	* 2.8031	* 2.5890	* 5.0993	* 4.8584	*
	* 2.1755	* 2.4880	* 2.2814	* 2.7333	* 2.5135	* 4.7711	* 4.6595	*
	* 2.1965	* 2.5095	* 2.3011	* 2.7738	* 2.5254	* 4.6663	* 4.5271	*
	* 2.1079	* 2.3731	* 2.0803	* 2.3469	* 2.1037	* 3.7319	* 3.6176	*
14	* 4.7216	* 2.8179	* 4.9259	* 2.9758	* 6.1055	* 5.3836	*	*
	* 4.1991	* 2.6124	* 4.3839	* 2.7287	* 5.4294	* 4.8584	*	*
	* 3.7717	* 2.4310	* 3.9298	* 2.6493	* 5.0993	* 4.6663	*	*
	* 3.6930	* 2.4385	* 3.8491	* 2.6626	* 5.0349	* 4.5271	*	*
	* 3.3977	* 2.2684	* 3.3726	* 2.2962	* 4.0600	* 3.6176	*	*
15	* 4.7711	* 4.3960	* 3.8169	* 4.9643	* 4 EFPD	118 %	POWER	
	* 4.3480	* 4.0190	* 3.4605	* 4.5207	* 100 EFPD	118 %	POWER	
	* 3.9493	* 3.6675	* 3.1369	* 4.1661	* 200 EFPD	118 %	POWER	
	* 3.8678	* 3.6341	* 3.1003	* 4.1071	* 300 EFPD	118 %	POWER	
	* 3.5770	* 3.3061	* 2.7835	* 3.5491	* 430 EFPD	118 %	POWER	

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 17 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	2.3045	1.8530	1.8422	1.7657	1.7425	1.8067	2.0378	3.4014
	2.1134	1.7098	1.8047	1.7378	1.7007	1.7025	1.9281	3.1681
	2.0954	1.7135	1.7569	1.6980	1.6522	1.6311	1.8401	2.9565
	2.1814	1.7986	1.8737	1.8119	1.7531	1.7181	1.9433	3.0295
	1.9517	1.6378	1.8016	1.8026	1.7628	1.7163	1.9153	2.8973
9	1.8530	1.8519	1.7274	1.8243	1.7511	1.9589	1.9281	2.8532
	1.7098	1.7378	1.6686	1.7805	1.6818	1.8737	1.8222	2.7194
	1.7135	1.7218	1.6153	1.7302	1.6252	1.7965	1.7359	2.5723
	1.7986	1.8181	1.7107	1.8412	1.7181	1.9005	1.8275	2.6737
	1.6378	1.6926	1.6573	1.8243	1.6765	1.8858	1.7785	2.5395
10	1.8422	1.7246	2.0443	1.9212	1.8433	1.8737	2.0300	2.4163
	1.8047	1.6660	1.9433	1.7218	1.7657	1.7677	1.9457	2.2846
	1.7569	1.6129	1.8540	1.6428	1.7007	1.6827	1.8616	2.1651
	1.8737	1.7098	1.9481	1.7237	1.7976	1.7677	1.9685	2.2797
	1.8016	1.6565	1.8715	1.6565	1.7052	1.6863	1.8792	2.1534
11	1.7657	1.8201	1.8098	1.8759	1.9084	2.0790	2.0339	3.1681
	1.7378	1.7785	1.7107	1.7521	1.7492	1.9457	1.8971	3.0616
	1.6980	1.7284	1.6344	1.7521	1.7368	1.9304	1.8704	2.9079
	1.8119	1.8401	1.7163	1.8317	1.8212	2.0509	1.9457	3.0440
	1.8026	1.8201	1.6539	1.6836	1.6411	1.8476	1.7895	2.7859
12	1.7425	1.7483	1.8433	1.9061	1.8903	1.9565	2.4668	
	1.7007	1.6792	1.7657	1.7483	1.7677	1.8037	2.3383	
	1.6522	1.6227	1.7016	1.7368	1.7492	1.7785	2.3263	
	1.7531	1.7163	1.7986	1.8201	1.8605	1.8847	2.4687	
	1.7628	1.6756	1.7061	1.6411	1.6686	1.6836	2.1904	
13	1.8067	1.9589	1.8725	2.0790	1.9517	2.3486	3.8631	
	1.7025	1.8725	1.7677	1.9469	1.8006	2.2194	3.5650	
	1.6311	1.7955	1.6827	1.9304	1.7755	2.1965	3.4680	
	1.7181	1.8993	1.7677	2.0509	1.8836	2.3314	3.5451	
	1.7163	1.8858	1.6863	1.8476	1.6818	2.0602	2.9982	
14	2.0378	1.9269	2.0300	2.0339	2.4687	3.8631		
	1.9281	1.8212	1.9457	1.8971	2.3400	3.5690		
	1.8401	1.7349	1.8616	1.8704	2.3263	3.4680		
	1.9433	1.8275	1.9685	1.9457	2.4706	3.5451		
	1.9153	1.7785	1.8792	1.7895	2.1904	2.9982		
15	3.4014	2.8532	2.4181	3.1681	4 EFPD 118	POWER		
	3.1681	2.7194	2.2846	3.0616	100 EFPD 118	POWER		
	2.9565	2.5744	2.1666	2.9106	200 EFPD 118	POWER		
	3.0295	2.6737	2.2814	3.0440	300 EFPD 118	POWER		
	2.8973	2.5395	2.1549	2.7859	430 EFPD 118	POWER		

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TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.1276	* 1.6496	* 1.6437	* 1.5516	* 1.5352	* 1.5562	* 1.7805	* 2.9814
	* 1.9529	* 1.5220	* 1.6369	* 1.5570	* 1.5249	* 1.4844	* 1.7135	* 2.8304
	* 1.9517	* 1.5308	* 1.6056	* 1.5359	* 1.4914	* 1.4369	* 1.6582	* 2.6873
	* 2.0248	* 1.5848	* 1.7302	* 1.6634	* 1.6129	* 1.5411	* 1.7865	* 2.7908
	* 1.8704	* 1.5198	* 1.7052	* 1.7061	* 1.6608	* 1.5778	* 1.8057	* 2.7357
9	* 1.6496	* 1.6863	* 1.5206	* 1.6064	* 1.5155	* 1.7163	* 1.6162	* 2.3927
	* 1.5220	* 1.5864	* 1.4858	* 1.5951	* 1.4769	* 1.6617	* 1.5684	* 2.3591
	* 1.5308	* 1.5817	* 1.4474	* 1.5638	* 1.4389	* 1.6096	* 1.5155	* 2.2846
	* 1.5848	* 1.6634	* 1.5532	* 1.6899	* 1.5441	* 1.7321	* 1.6286	* 2.4163
	* 1.5198	* 1.6195	* 1.5449	* 1.7190	* 1.5547	* 1.7589	* 1.6227	* 2.3661
10	* 1.6437	* 1.5177	* 1.8605	* 1.5762	* 1.6129	* 1.6024	* 1.7043	* 1.9529
	* 1.6369	* 1.4831	* 1.7785	* 1.5148	* 1.5700	* 1.5389	* 1.6872	* 1.9130
	* 1.6056	* 1.4454	* 1.7025	* 1.4593	* 1.5345	* 1.4803	* 1.6445	* 1.8605
	* 1.7302	* 1.5516	* 1.8026	* 1.5585	* 1.6479	* 1.5840	* 1.7785	* 2.0045
	* 1.7052	* 1.5434	* 1.7765	* 1.5278	* 1.6145	* 1.5600	* 1.7416	* 1.9505
11	* 1.5516	* 1.6048	* 1.5746	* 1.6445	* 1.6261	* 1.7845	* 1.6669	* 2.6145
	* 1.5570	* 1.5935	* 1.5141	* 1.5524	* 1.5083	* 1.7052	* 1.6129	* 2.6274
	* 1.5359	* 1.5631	* 1.4580	* 1.5669	* 1.5133	* 1.7227	* 1.6227	* 2.5682
	* 1.6634	* 1.6890	* 1.5532	* 1.6428	* 1.5785	* 1.8108	* 1.8962	* 2.7404
	* 1.7061	* 1.7181	* 1.5264	* 1.5935	* 1.5155	* 1.7359	* 1.6462	* 2.5911
12	* 1.5352	* 1.5133	* 1.6137	* 1.6261	* 1.6327	* 1.6420	* 2.1106	
	* 1.5249	* 1.4755	* 1.5708	* 1.5083	* 1.5524	* 1.5382	* 2.0549	
	* 1.4914	* 1.4376	* 1.5352	* 1.5126	* 1.5654	* 1.5494	* 2.1023	
	* 1.6129	* 1.5434	* 1.6488	* 1.5778	* 1.6998	* 1.6739	* 2.2318	
	* 1.6608	* 1.5539	* 1.6153	* 1.5155	* 1.5927	* 1.5608	* 2.0749	
13	* 1.5562	* 1.7153	* 1.6024	* 1.7845	* 1.6378	* 1.9944	* 3.2755	
	* 1.4844	* 1.6608	* 1.5389	* 1.7052	* 1.5359	* 1.9374	* 3.0883	
	* 1.4369	* 1.6088	* 1.4803	* 1.7237	* 1.5471	* 1.9734	* 3.0853	
	* 1.5411	* 1.7312	* 1.5832	* 1.8108	* 1.6739	* 2.1361	* 3.2128	
	* 1.5778	* 1.7589	* 1.5600	* 1.7368	* 1.5600	* 1.9553	* 2.8154	
14	* 1.7805	* 1.6162	* 1.7043	* 1.6678	* 2.1120	* 3.2789		
	* 1.7135	* 1.5677	* 1.6872	* 1.6129	* 2.0562	* 3.0913		
	* 1.6582	* 1.5148	* 1.6445	* 1.6236	* 2.1037	* 3.0853		
	* 1.7865	* 1.6286	* 1.7785	* 1.6962	* 2.2334	* 3.2095		
	* 1.8067	* 1.6227	* 1.7416	* 1.6462	* 2.0749	* 2.8154		
15	* 2.9814	* 2.3945	* 1.9541	* 2.6145	* 4 EFPD 118	* POWER		
	* 2.8304	* 2.3591	* 1.9142	* 2.6274	* 100 EFPD 118	* POWER		
	* 2.6873	* 2.2863	* 1.8616	* 2.5682	* 200 EFPD 118	* POWER		
	* 2.7908	* 2.4181	* 2.0057	* 2.7404	* 300 EFPD 118	* POWER		
	* 2.7357	* 2.3678	* 1.9517	* 2.5932	* 430 EFPD 118	* POWER		

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN NORMAL OPERATION

THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.1037	* 1.5770	* 1.6007	* 1.4991	* 1.4886	* 1.4748	* 1.7080	* 2.8842
	* 1.9339	* 1.4769	* 1.6145	* 1.5293	* 1.4907	* 1.4241	* 1.6730	* 2.7883
	* 1.9517	* 1.4928	* 1.5951	* 1.5148	* 1.4640	* 1.3875	* 1.6336	* 2.6760
	* 1.9433	* 1.5264	* 1.7061	* 1.6471	* 1.5951	* 1.5019	* 1.7686	* 2.7835
	* 1.8993	* 1.5155	* 1.7200	* 1.7089	* 1.6704	* 1.5577	* 1.8222	* 2.7786
9	* 1.5770	* 1.6369	* 1.4620	* 1.5554	* 1.4507	* 1.6428	* 1.5026	* 2.2524
	* 1.4769	* 1.5646	* 1.4493	* 1.5684	* 1.4266	* 1.6137	* 1.4928	* 2.2814
	* 1.4928	* 1.5684	* 1.4159	* 1.5419	* 1.3893	* 1.5731	* 1.4580	* 2.2460
	* 1.5264	* 1.6269	* 1.5235	* 1.6730	* 1.5048	* 1.7043	* 1.5832	* 2.3855
	* 1.5155	* 1.6403	* 1.5322	* 1.7218	* 1.5315	* 1.7608	* 1.6024	* 2.3820
10	* 1.6007	* 1.4586	* 1.8037	* 1.4928	* 1.5382	* 1.4984	* 1.5832	* 1.7996
	* 1.6145	* 1.4467	* 1.7387	* 1.4467	* 1.5220	* 1.4707	* 1.6129	* 1.8191
	* 1.5951	* 1.4133	* 1.6783	* 1.4121	* 1.5048	* 1.4273	* 1.5896	* 1.7976
	* 1.7061	* 1.5162	* 1.7795	* 1.5097	* 1.6056	* 1.5404	* 1.7340	* 1.9505
	* 1.7200	* 1.5286	* 1.7805	* 1.5112	* 1.6252	* 1.5471	* 1.7255	* 1.9281
11	* 1.4991	* 1.5539	* 1.4914	* 1.5723	* 1.5308	* 1.6713	* 1.5191	* 2.4163
	* 1.5293	* 1.5669	* 1.4454	* 1.5005	* 1.4343	* 1.6378	* 1.5235	* 2.5056
	* 1.5148	* 1.5404	* 1.4108	* 1.5359	* 1.4606	* 1.6881	* 1.5615	* 2.5036
	* 1.6471	* 1.6721	* 1.5090	* 1.5912	* 1.5090	* 1.7473	* 1.6302	* 2.6827
	* 1.7089	* 1.7209	* 1.5090	* 1.6129	* 1.5105	* 1.7492	* 1.6269	* 2.5806
12	* 1.4886	* 1.4487	* 1.5397	* 1.5308	* 1.5539	* 1.5345	* 2.0032	*
	* 1.4907	* 1.4260	* 1.5235	* 1.4343	* 1.4970	* 1.4586	* 1.9919	*
	* 1.4640	* 1.3887	* 1.5055	* 1.4606	* 1.5374	* 1.4991	* 2.0899	*
	* 1.5951	* 1.5033	* 1.6072	* 1.5083	* 1.6137	* 1.5723	* 2.1814	*
	* 1.6704	* 1.5315	* 1.6269	* 1.5112	* 1.6219	* 1.5661	* 2.1177	*
13	* 1.4748	* 1.6420	* 1.4977	* 1.6721	* 1.5308	* 1.8948	* 3.1154	*
	* 1.4241	* 1.6129	* 1.4707	* 1.6378	* 1.4560	* 1.8770	* 2.9954	*
	* 1.3875	* 1.5723	* 1.4273	* 1.6890	* 1.4970	* 1.9601	* 3.0674	*
	* 1.5019	* 1.7034	* 1.5404	* 1.7473	* 1.5700	* 2.0655	* 3.1215	*
	* 1.5577	* 1.7598	* 1.5471	* 1.7492	* 1.5654	* 2.0007	* 2.8764	*
14	* 1.7080	* 1.5026	* 1.5832	* 1.5198	* 2.0045	* 3.1185	*	*
	* 1.6730	* 1.4921	* 1.6129	* 1.5242	* 1.9932	* 2.9954	*	*
	* 1.6336	* 1.4573	* 1.5896	* 1.5615	* 2.0913	* 3.0674	*	*
	* 1.7686	* 1.5825	* 1.7340	* 1.6311	* 2.1814	* 3.1215	*	*
	* 1.8222	* 1.6024	* 1.7255	* 1.6269	* 2.1177	* 2.8764	*	*
15	* 2.8842	* 2.2539	* 1.8006	* 2.4181	* 4 EFPD 118	* POWER		
	* 2.7883	* 2.2830	* 1.8191	* 2.5075	* 100 EFPD 118	* POWER		
	* 2.6760	* 2.2476	* 1.7976	* 2.5056	* 200 EFPD 118	* POWER		
	* 2.7835	* 2.3873	* 1.9505	* 2.6850	* 300 EFPD 118	* POWER		
	* 2.7786	* 2.3838	* 1.9292	* 2.5806	* 430 EFPD 118	* POWER		

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 Appendix A  
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 Revision 6

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 14 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.2256	* 1.6219	* 1.6739	* 1.5623	* 1.5532	* 1.5177	* 1.7696	* 3.0067
	* 2.0522	* 1.5464	* 1.7016	* 1.6096	* 1.5677	* 1.4837	* 1.7569	* 2.9483
	* 2.0817	* 1.5700	* 1.7007	* 1.6080	* 1.5426	* 1.4507	* 1.7246	* 2.8456
	* 2.0417	* 1.5912	* 1.7865	* 1.7172	* 1.6713	* 1.5631	* 1.8605	* 2.9537
	* 2.0146	* 1.5888	* 1.8212	* 1.8129	* 1.7716	* 1.6411	* 1.9398	* 2.9814
9	* 1.6219	* 1.7016	* 1.5169	* 1.6219	* 1.5019	* 1.6980	* 1.5264	* 2.3095
	* 1.5464	* 1.6505	* 1.5169	* 1.6505	* 1.4858	* 1.6917	* 1.5374	* 2.3891
	* 1.5700	* 1.6686	* 1.4970	* 1.6336	* 1.4526	* 1.6548	* 1.5213	* 2.3731
	* 1.5912	* 1.7071	* 1.5708	* 1.7473	* 1.5623	* 1.7815	* 1.6428	* 2.5155
	* 1.5888	* 1.7349	* 1.6104	* 1.8243	* 1.6113	* 1.8638	* 1.6863	* 2.5375
10	* 1.6739	* 1.5141	* 1.8737	* 1.5315	* 1.5825	* 1.5126	* 1.6048	* 1.8254
	* 1.7016	* 1.5141	* 1.8233	* 1.4998	* 1.5880	* 1.5162	* 1.6599	* 1.8825
	* 1.7007	* 1.4942	* 1.7795	* 1.4817	* 1.5888	* 1.4921	* 1.6634	* 1.8870
	* 1.7865	* 1.5631	* 1.8401	* 1.5646	* 1.6783	* 1.5864	* 1.7915	* 2.0274
	* 1.8212	* 1.6072	* 1.8847	* 1.5856	* 1.7163	* 1.6236	* 1.8181	* 2.0404
11	* 1.5623	* 1.6195	* 1.5300	* 1.5864	* 1.5374	* 1.6730	* 1.5198	* 2.4554
	* 1.6096	* 1.6488	* 1.4984	* 1.5654	* 1.4865	* 1.7034	* 1.5700	* 2.6081
	* 1.6080	* 1.6327	* 1.4803	* 1.6244	* 1.5345	* 1.7845	* 1.6319	* 2.6493
	* 1.7172	* 1.7463	* 1.5631	* 1.6608	* 1.5661	* 1.8254	* 1.6989	* 2.7981
	* 1.8129	* 1.8233	* 1.5840	* 1.7016	* 1.5825	* 1.8433	* 1.7098	* 2.7451
12	* 1.5532	* 1.4998	* 1.5840	* 1.5382	* 1.5904	* 1.5479	* 2.0146	*
	* 1.5677	* 1.4858	* 1.5904	* 1.4865	* 1.5623	* 1.5112	* 2.0844	*
	* 1.5426	* 1.4513	* 1.5896	* 1.5345	* 1.6319	* 1.5809	* 2.2303	*
	* 1.6713	* 1.5631	* 1.6801	* 1.5654	* 1.6818	* 1.6319	* 2.3011	*
	* 1.7716	* 1.6113	* 1.7181	* 1.5825	* 1.7144	* 1.6488	* 2.2539	*
13	* 1.5177	* 1.6971	* 1.5133	* 1.6739	* 1.5441	* 1.9589	* 3.2455	*
	* 1.4837	* 1.6908	* 1.5162	* 1.7043	* 1.5090	* 1.9710	* 3.1681	*
	* 1.4507	* 1.6539	* 1.4921	* 1.7855	* 1.5793	* 2.0995	* 3.3061	*
	* 1.5631	* 1.7805	* 1.5864	* 1.8264	* 1.6302	* 2.1755	* 3.3095	*
	* 1.6411	* 1.8627	* 1.6244	* 1.8433	* 1.6488	* 2.1419	* 3.1093	*
14	* 1.7696	* 1.5256	* 1.6056	* 1.5206	* 2.0159	* 3.2488	*	*
	* 1.7569	* 1.5367	* 1.6599	* 1.5708	* 2.0858	* 3.1681	*	*
	* 1.7246	* 1.5206	* 1.6643	* 1.6319	* 2.2318	* 3.3061	*	*
	* 1.8605	* 1.6428	* 1.7915	* 1.6989	* 2.3011	* 3.3061	*	*
	* 1.9398	* 1.6863	* 1.8181	* 1.7098	* 2.2555	* 3.1093	*	*
15	* 3.0067	* 2.3112	* 1.8264	* 2.4573	* 4 EFPD 118	* POWER		
	* 2.9483	* 2.3909	* 1.8836	* 2.6102	* 100 EFPD 118	* POWER		
	* 2.8456	* 2.3749	* 1.8870	* 2.6515	* 200 EFPD 118	* POWER		
	* 2.9537	* 2.5174	* 2.0287	* 2.8006	* 300 EFPD 118	* POWER		
	* 2.9814	* 2.5395	* 2.0417	* 2.7451	* 430 EFPD 118	* POWER		



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 13 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.3297	* 1.6704	* 1.7435	* 1.6186	* 1.6129	* 1.5562	* 1.8275	* 3.1215
	* 2.1770	* 1.6104	* 1.7795		* 1.6277	* 1.5256	* 1.8327	* 3.0973
	* 2.1065	* 1.5888	* 1.7172		* 1.6219	* 1.5105	* 1.8119	* 3.0095
	* 2.1476	* 1.6162			* 1.7181	* 1.5935	* 1.9165	* 3.0734
	* 2.1290	* 1.6513		* 1.9050	* 1.8638	* 1.7025	* 2.0404	* 3.1462
9	* 1.6704	* 1.7657		* 1.6827	* 1.5486	* 1.7511	* 1.5486	* 2.3625
	* 1.6104	* 1.7333	* 1.5654	* 1.7144	* 1.5278	* 1.7502	* 1.5661	* 2.4630
	* 1.5888	* 1.7172	* 1.5615	* 1.7218	* 1.5133	* 1.7368	* 1.5801	* 2.4919
	* 1.6162	* 1.7473	* 1.5935	* 1.7915	* 1.5848	* 1.8275	* 1.6651	* 2.5932
	* 1.6513	* 1.8275	* 1.6721	* 1.9199	* 1.6713	* 1.9565	* 1.7531	* 2.6670
10	* 1.7435	* 1.5646	* 1.9374	* 1.5623	* 1.6219	* 1.5213	* 1.6195	* 1.8444
	* 1.7795	* 1.5623	* 1.8993	* 1.5449	* 1.6471	* 1.5464	* 1.6908	* 1.9176
	* 1.7845	* 1.5509	* 1.8540	* 1.5330	* 1.6513	* 1.5434	* 1.7246	* 1.9637
	* 1.8222	* 1.5856	* 1.8759	* 1.5856	* 1.7135	* 1.6064	* 1.8160	* 2.0588
	* 1.9176	* 1.6686	* 1.9783	* 1.6437	* 1.8037	* 1.6818	* 1.8948	* 2.1247
11	* 1.6186	* 1.6809	* 1.5608	* 1.6032	* 1.5359	* 1.6872	* 1.5220	* 2.4802
	* 1.6686	* 1.7126	* 1.5134	* 1.6319	* 1.5404	* 1.7726	* 1.6032	* 2.6515
	* 1.6890	* 1.7200	* 1.5315	* 1.6686	* 1.5661	* 1.8317	* 1.6651	* 2.7428
	* 1.7589	* 1.7895	* 1.5832	* 1.7265	* 1.6211	* 1.9073	* 1.7387	* 2.8380
	* 1.9050	* 1.9176	* 1.6428	* 1.7875	* 1.6411	* 1.9363	* 1.7775	* 2.8635
12	* 1.6129	* 1.5464	* 1.6244	* 1.5337	* 1.5880	* 1.5322	* 2.0339	
	* 1.6277	* 1.5278	* 1.6488	* 1.5404	* 1.6361	* 1.5661	* 2.1829	
	* 1.6219	* 1.5119	* 1.6530	* 1.5654	* 1.7089	* 1.6411	* 2.3128	
	* 1.7181	* 1.5848	* 1.7144	* 1.6203	* 1.7667	* 1.6980	* 2.4181	
	* 1.8638	* 1.6713	* 1.8067	* 1.6420	* 1.8098	* 1.7200	* 2.3766	
13	* 1.5562	* 1.7502	* 1.5220	* 1.6881	* 1.5286	* 1.9601	* 3.2722	
	* 1.5256	* 1.7492	* 1.5471	* 1.7736	* 1.5631	* 2.0736	* 3.3233	
	* 1.5105	* 1.7349	* 1.5434	* 1.8327	* 1.6394	* 2.2179	* 3.4233	
	* 1.5935	* 1.8264	* 1.6072	* 1.9084	* 1.6962	* 2.2929	* 3.4756	
	* 1.7025	* 1.9553	* 1.6818	* 1.9374	* 1.7190	* 2.2652	* 3.2755	
14	* 1.8275	* 1.5479	* 1.6203	* 1.5227	* 2.0365	* 3.2755		
	* 1.8327	* 1.5661	* 1.6908	* 1.6040	* 2.1844	* 3.3233		
	* 1.8119	* 1.5793	* 1.7246	* 1.6651	* 2.3145	* 3.4233		
	* 1.9165	* 1.6651	* 1.8160	* 1.7387	* 2.4181	* 3.4718		
	* 2.0404	* 1.7531	* 1.8948	* 1.7785	* 2.3784	* 3.2722		
15	* 3.1215	* 2.3643	* 1.8454	* 2.4821	* 4 EFPD 118	* POWER		
	* 3.0973	* 2.4649	* 1.9176	* 2.6515	* 100 EFPD 118	* POWER		
	* 3.0095	* 2.4938	* 1.9637	* 2.7451	* 200 EFPD 118	* POWER		
	* 3.0734	* 2.5932	* 2.0588	* 2.8380	* 300 EFPD 118	* POWER		
	* 3.1462	* 2.6670	* 2.1247	* 2.8635	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 12 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.5537	* 1.8150	* 1.9039	* 1.7608	* 1.7521	* 1.6774	* 1.9771	* 3.3905
	* 2.4017	* 1.7502	* 1.9327	* 1.8119	* 1.7667	* 1.6462	* 1.9870	* 3.3797
	* 2.2700	* 1.6962	* 1.9234	* 1.8412	* 1.7755	* 1.6437	* 1.9894	* 3.3164
	* 2.2460	* 1.6989	* 1.9316	* 1.8814	* 1.8401	* 1.6980	* 2.0549	* 3.3130
	* 2.3383	* 1.7965	* 2.0981	* 2.0817	* 2.0313	* 1.8433	* 2.2210	* 3.4344
9	* 1.8150	* 1.9281	* 1.7034	* 1.8306	* 1.6774	* 1.8903	* 1.6573	* 2.5456
	* 1.7502	* 1.8948	* 1.6944	* 1.8627	* 1.6488	* 1.8948	* 1.6774	* 2.6581
	* 1.6962	* 1.8412	* 1.6899	* 1.8781	* 1.6462	* 1.8971	* 1.7034	* 2.7170
	* 1.6989	* 1.8487	* 1.6935	* 1.9130	* 1.6827	* 1.9541	* 1.7647	* 2.7762
	* 1.7965	* 1.9994	* 1.8160	* 2.0954	* 1.8119	* 2.1304	* 1.8982	* 2.9000
10	* 1.9039	* 1.6989	* 2.1037	* 1.6774	* 1.7492	* 1.6211	* 1.7293	* 1.9734
	* 1.9327	* 1.6908	* 2.0535	* 1.6599	* 1.7726	* 1.6573	* 1.8088	* 2.0535
	* 1.9234	* 1.6774	* 2.0082	* 1.6539	* 1.7845	* 1.6617	* 1.8562	* 2.1191
	* 1.9316	* 1.6836	* 1.9982	* 1.6748	* 1.8191	* 1.7016	* 1.9234	* 2.1889
	* 2.0981	* 1.8119	* 2.1593	* 1.7825	* 1.9698	* 1.8201	* 2.0549	* 2.3011
11	* 1.7608	* 1.8285	* 1.6756	* 1.7237	* 1.6361	* 1.8037	* 1.6203	* 2.6603
	* 1.8119	* 1.8605	* 1.6582	* 1.7736	* 1.6651	* 1.9119	* 1.6980	* 2.8380
	* 1.8412	* 1.8770	* 1.6522	* 1.7785	* 1.6625	* 1.9481	* 1.7726	* 2.9565
	* 1.8814	* 1.9107	* 1.6713	* 1.8201	* 1.6953	* 2.0070	* 1.8243	* 3.0152
	* 2.0817	* 2.0940	* 1.7825	* 1.9529	* 1.7815	* 2.1134	* 1.9281	* 3.1124
12	* 1.7521	* 1.6748	* 1.7521	* 1.6336	* 1.7016	* 1.6327	* 2.1799	*
	* 1.7667	* 1.6488	* 1.7745	* 1.6651	* 1.7885	* 1.7034	* 2.3838	*
	* 1.7755	* 1.6454	* 1.7865	* 1.6617	* 1.8160	* 1.7359	* 2.4668	*
	* 1.8401	* 1.6818	* 1.8212	* 1.6944	* 1.9096	* 1.8264	* 2.5744	*
	* 2.0313	* 1.8119	* 1.9722	* 1.7815	* 1.9820	* 1.8737	* 2.5996	*
13	* 1.6774	* 1.8881	* 1.6219	* 1.8047	* 1.6277	* 2.1009	* 3.5139	*
	* 1.6462	* 1.8937	* 1.6573	* 1.9142	* 1.7007	* 2.2781	* 3.6507	*
	* 1.6437	* 1.8959	* 1.6625	* 1.9493	* 1.7340	* 2.3591	* 3.6549	*
	* 1.6980	* 1.9529	* 1.7025	* 2.0082	* 1.8243	* 2.4997	* 3.7363	*
	* 1.8433	* 2.1304	* 1.8201	* 2.1149	* 1.8737	* 2.4841	* 3.5931	*
14	* 1.9771	* 1.6573	* 1.7302	* 1.6211	* 2.1829	* 3.5177	*	*
	* 1.9870	* 1.6765	* 1.8088	* 1.6980	* 2.3873	* 3.6549	*	*
	* 1.9894	* 1.7034	* 1.8573	* 1.7736	* 2.4687	* 3.6549	*	*
	* 2.0549	* 1.7647	* 1.9234	* 1.8254	* 2.5765	* 3.7363	*	*
	* 2.2210	* 1.8982	* 2.0549	* 1.9281	* 2.5996	* 3.5931	*	*
15	* 3.3905	* 2.5456	* 1.9734	* 2.6626	* 4 EFPD 118	* POWER		
	* 3.3797	* 2.6603	* 2.0549	* 2.8405	* 100 EFPD 118	* POWER		
	* 3.3164	* 2.7194	* 2.1205	* 2.9565	* 200 EFPD 118	* POWER		
	* 3.3130	* 2.7786	* 2.1904	* 3.0152	* 300 EFPD 118	* POWER		
	* 3.4344	* 2.9000	* 2.3011	* 3.1124	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 11 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.8055	* 2.0120	* 2.1191	* 1.9601	* 1.9422	* 1.8519	* 2.1799	* 3.7276
	* 2.6626	* 1.9292	* 2.1491	* 2.0210	* 1.9673	* 1.8264	* 2.2102	* 3.7717
	* 2.5234	* 1.8725	* 2.1333	* 2.0469	* 1.9870	* 1.8317	* 2.2256	* 3.7363
	* 2.4497	* 1.8562	* 2.1233	* 2.0763	* 2.0287	* 1.8638	* 2.2619	* 3.6591
	* 2.5890	* 1.9808	* 2.3162	* 2.2945	* 2.2318	* 2.0171	* 2.4292	* 3.7583
9	* 2.0120	* 2.1433	* 1.8948	* 2.0378	* 1.8519	* 2.0885	* 1.8254	* 2.8105
	* 1.9292	* 2.0926	* 1.8836	* 2.0763	* 1.8285	* 2.1065	* 1.8487	* 2.9455
	* 1.8725	* 2.0404	* 1.8671	* 2.0995	* 1.8338	* 2.1177	* 1.8858	* 3.0209
	* 1.8562	* 2.0261	* 1.8562	* 2.1079	* 1.8422	* 2.1505	* 1.9281	* 3.0469
	* 1.9808	* 2.2086	* 1.9994	* 2.3112	* 1.9907	* 2.3417	* 2.0776	* 3.1649
10	* 2.1191	* 1.8892	* 2.3400	* 1.8584	* 1.9445	* 1.7845	* 1.9050	* 2.1710
	* 2.1491	* 1.8803	* 2.2814	* 1.8243	* 1.9589	* 1.8296	* 1.9919	* 2.2636
	* 2.1333	* 1.8540	* 2.2210	* 1.8233	* 1.9759	* 1.3401	* 2.0522	* 2.3452
	* 2.1233	* 1.8465	* 2.1995	* 1.8264	* 1.9957	* 1.8594	* 2.0995	* 2.3945
	* 2.3162	* 1.9944	* 2.3838	* 1.9649	* 2.1755	* 1.9982	* 2.2492	* 2.5095
11	* 1.9601	* 2.0352	* 1.8562	* 1.9142	* 1.8047	* 1.9907	* 1.7835	* 2.9510
	* 2.0210	* 2.0749	* 1.8233	* 1.9433	* 1.8243	* 2.0926	* 1.8584	* 3.1338
	* 2.0469	* 2.0968	* 1.8222	* 1.9589	* 1.8243	* 2.1433	* 1.9410	* 3.2688
	* 2.0763	* 2.1051	* 1.8222	* 1.9857	* 1.8391	* 2.1785	* 1.9808	* 3.2993
	* 2.2945	* 2.3095	* 1.9625	* 2.1607	* 1.9661	* 2.3331	* 2.1163	* 3.4123
12	* 1.9422	* 1.8508	* 1.9481	* 1.8016	* 1.8858	* 1.8006	* 2.4163	*
	* 1.9673	* 1.8285	* 1.9625	* 1.8243	* 1.9577	* 1.8551	* 2.6017	*
	* 1.9870	* 1.8327	* 1.9783	* 1.8243	* 1.9969	* 1.9027	* 2.7147	*
	* 2.0287	* 1.8412	* 1.9982	* 1.8391	* 2.0509	* 1.9565	* 2.7835	*
	* 2.2318	* 1.9919	* 2.1785	* 1.9661	* 2.1965	* 2.0722	* 2.8712	*
13	* 1.8519	* 2.0858	* 1.7845	* 1.9932	* 1.7955	* 2.3314	* 3.9105	*
	* 1.8264	* 2.1051	* 1.8296	* 2.0940	* 1.8519	* 2.5135	* 4.0497	*
	* 1.8317	* 2.1177	* 1.8401	* 2.1433	* 1.9005	* 2.5975	* 4.0394	*
	* 1.8638	* 2.1491	* 1.8594	* 2.1799	* 1.9529	* 2.6760	* 4.0241	*
	* 2.0171	* 2.3400	* 1.9982	* 2.3331	* 2.0709	* 2.7522	* 3.9888	*
14	* 2.1799	* 1.8254	* 1.9061	* 1.7845	* 2.4200	* 3.9153	*	*
	* 2.2102	* 1.8487	* 1.9919	* 1.8584	* 2.6038	* 4.0548	*	*
	* 2.2256	* 1.8858	* 2.0522	* 1.9410	* 2.7170	* 4.0394	*	*
	* 2.2619	* 1.9281	* 2.0995	* 1.9808	* 2.7835	* 4.0241	*	*
	* 2.4292	* 2.0776	* 2.2508	* 2.1163	* 2.8712	* 3.9838	*	*
15	* 3.7276	* 2.8105	* 2.1725	* 2.9510	* 4 EFPD 118	* POWER		
	* 3.7717	* 2.9455	* 2.2652	* 3.1369	* 100 EFPD 118	* POWER		
	* 3.7363	* 3.0238	* 2.3469	* 3.2722	* 200 EFPD 118	* POWER		
	* 3.6591	* 3.0498	* 2.3945	* 3.2993	* 300 EFPD 118	* POWER		
	* 3.7583	* 3.1681	* 2.5115	* 3.4123	* 430 EFPD 118	* POWER		

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Appendix A  
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TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 3.0010	* 2.1347	* 2.2571	* 2.0831	* 2.0954	* 1.9932	* 2.3521	* 4.0039
	* 2.8842	* 2.0749	* 2.3229	* 2.1770	* 2.1520	* 1.9907	* 2.4236	* 4.0860
	* 2.7714	* 2.0417	* 2.3366	* 2.2365	* 2.1904	* 2.0108	* 2.4573	* 4.0755
	* 2.7032	* 2.0352	* 2.3504	* 2.2995	* 2.2428	* 2.0430	* 2.4880	* 4.0190
	* 2.7981	* 2.1347	* 2.5075	* 2.4725	* 2.4072	* 2.1563	* 2.6060	* 4.0241
9	* 2.1347	* 2.2846	* 2.0082	* 2.1755	* 1.9870	* 2.2603	* 1.9698	* 3.0382
	* 2.0749	* 2.2636	* 2.0248	* 2.2492	* 1.9932	* 2.3028	* 2.0223	* 3.2193
	* 2.0417	* 2.2365	* 2.0326	* 2.2945	* 1.9969	* 2.3331	* 2.0655	* 3.3130
	* 2.0352	* 2.2413	* 2.0391	* 2.3314	* 2.0184	* 2.3713	* 2.1051	* 3.3373
	* 2.1347	* 2.3927	* 2.1534	* 2.4997	* 2.1347	* 2.5174	* 2.2210	* 3.3833
10	* 2.2571	* 2.0032	* 2.4880	* 2.0082	* 2.1079	* 1.9281	* 2.0575	* 2.3383
	* 2.3229	* 2.0210	* 2.4592	* 1.9832	* 2.1404	* 1.9944	* 2.1814	* 2.4744
	* 2.3366	* 2.0184	* 2.4273	* 1.9857	* 2.1622	* 2.0082	* 2.2492	* 2.5620
	* 2.3504	* 2.0313	* 2.4273	* 1.9982	* 2.1995	* 2.0365	* 2.2929	* 2.6060
	* 2.5075	* 2.1476	* 2.5765	* 2.1134	* 2.3573	* 2.1404	* 2.4090	* 2.6737
11	* 2.0831	* 2.1725	* 2.0057	* 2.0872	* 1.9661	* 2.1637	* 1.9281	* 3.1807
	* 2.1770	* 2.2476	* 1.9820	* 2.1219	* 1.9832	* 2.2879	* 2.0261	* 3.4086
	* 2.2365	* 2.2912	* 1.9832	* 2.1462	* 1.9870	* 2.3417	* 2.1037	* 3.5451
	* 2.2995	* 2.3280	* 1.9932	* 2.1829	* 2.0095	* 2.3838	* 2.1549	* 3.5931
	* 2.4725	* 2.4977	* 2.1134	* 2.3434	* 2.1163	* 2.5214	* 2.2684	* 3.6424
12	* 2.0954	* 1.9845	* 2.1120	* 1.9625	* 2.0642	* 1.9613	* 2.6427	
	* 2.1520	* 1.9907	* 2.1433	* 1.9832	* 2.1375	* 2.0171	* 2.8431	
	* 2.1904	* 1.9957	* 2.1651	* 1.9857	* 2.1889	* 2.0736	* 2.9703	
	* 2.2428	* 2.0184	* 2.2025	* 2.0095	* 2.2365	* 2.1205	* 3.0295	
	* 2.4072	* 2.1347	* 2.3608	* 2.1163	* 2.3838	* 2.2350	* 3.1033	
13	* 1.9932	* 2.2587	* 1.9292	* 2.1651	* 1.9553	* 2.5620	* 4.2381	
	* 1.9907	* 2.3011	* 1.9944	* 2.2896	* 2.0133	* 2.7404	* 4.3719	
	* 2.0108	* 2.3314	* 2.0082	* 2.3417	* 2.0709	* 2.8532	* 4.4081	
	* 2.0430	* 2.3696	* 2.0365	* 2.3855	* 2.1177	* 2.9053	* 4.3599	
	* 2.1563	* 2.5174	* 2.1419	* 2.5234	* 2.2350	* 2.9842	* 4.3011	
14	* 2.3521	* 1.9698	* 2.0575	* 1.9292	* 2.6471	* 4.2438		
	* 2.4236	* 2.0223	* 2.1829	* 2.0274	* 2.8456	* 4.3719		
	* 2.4573	* 2.0655	* 2.2476	* 2.1037	* 2.9703	* 4.4081		
	* 2.4880	* 2.1051	* 2.2945	* 2.1549	* 3.0295	* 4.3539		
	* 2.6060	* 2.2210	* 2.4090	* 2.2684	* 3.1033	* 4.2953		
15	* 4.0039	* 3.0411	* 2.3383	* 3.1807	* 4 EFPD 118	* POWER		
	* 4.0860	* 3.2193	* 2.4764	* 3.4123	* 100 EFPD 118	* POWER		
	* 4.0755	* 3.3130	* 2.5640	* 3.5451	* 200 EFPD 118	* POWER		
	* 4.0190	* 3.3408	* 2.6060	* 3.5931	* 300 EFPD 118	* POWER		
	* 4.0241	* 3.3869	* 2.6737	* 3.6465	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 9 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 3.0586	* 2.1785	* 2.2945	* 2.1191	* 2.1333	* 2.0261	* 2.4200	* 4.1770
	* 2.9483	* 2.1347	* 2.3802	* 2.2365	* 2.2071	* 2.0430	* 2.5095	* 4.3244
	* 2.8973	* 2.1290	* 2.4347	* 2.3331	* 2.2945	* 2.1093	* 2.6060	* 4.4142
	* 2.8816	* 2.1799	* 2.5075	* 2.4573	* 2.4181	* 2.2132	* 2.7194	* 4.4637
	* 3.0353	* 2.3179	* 2.7147	* 2.6782	* 2.6166	* 2.3538	* 2.8380	* 4.3659
9	* 2.1785	* 2.3331	* 2.0430	* 2.2132	* 2.0261	* 2.2945	* 2.0007	* 3.1215
	* 2.1347	* 2.3263	* 2.0803	* 2.3095	* 2.0443	* 2.3643	* 2.0803	* 3.3619
	* 2.1290	* 2.3314	* 2.1219	* 2.3945	* 2.0885	* 2.4497	* 2.1829	* 3.5491
	* 2.1799	* 2.3909	* 2.1889	* 2.5016	* 2.1785	* 2.5640	* 2.2978	* 3.6802
	* 2.3179	* 2.5932	* 2.3400	* 2.7101	* 2.3297	* 2.7404	* 2.4218	* 3.6802
10	* 2.2945	* 2.0378	* 2.5294	* 2.0391	* 2.1419	* 1.9613	* 2.0913	* 2.4017
	* 2.3802	* 2.0763	* 2.5274	* 2.0313	* 2.1934	* 2.0456	* 2.2444	* 2.5785
	* 2.4347	* 2.1065	* 2.5314	* 2.0790	* 2.2619	* 2.1093	* 2.3749	* 2.7499
	* 2.5075	* 2.1785	* 2.5996	* 2.1563	* 2.3713	* 2.2056	* 2.5036	* 2.8842
	* 2.7147	* 2.3349	* 2.7932	* 2.3061	* 2.5682	* 2.3383	* 2.6253	* 2.9132
11	* 2.1191	* 2.2102	* 2.0365	* 2.1163	* 1.9994	* 2.1965	* 1.9673	* 3.2722
	* 2.2365	* 2.3061	* 2.0300	* 2.1725	* 2.0326	* 2.3469	* 2.0899	* 3.5730
	* 2.3331	* 2.3927	* 2.0763	* 2.2444	* 2.0803	* 2.4649	* 2.2272	* 3.8169
	* 2.4573	* 2.4977	* 2.1505	* 2.3521	* 2.1696	* 2.5890	* 2.3573	* 3.9888
	* 2.6782	* 2.7101	* 2.3045	* 2.5517	* 2.3112	* 2.7475	* 2.4744	* 3.9789
12	* 2.1333	* 2.0235	* 2.1462	* 1.9957	* 2.0940	* 1.9957	* 2.6986	
	* 2.2071	* 2.0417	* 2.1965	* 2.0313	* 2.1919	* 2.0749	* 2.9483	
	* 2.2945	* 2.0858	* 2.2652	* 2.0803	* 2.3011	* 2.1904	* 3.1649	
	* 2.4181	* 2.1770	* 2.3731	* 2.1696	* 2.4255	* 2.3095	* 3.3338	
	* 2.6166	* 2.3297	* 2.5723	* 2.3112	* 2.5975	* 2.4366	* 3.3761	
13	* 2.0261	* 2.2929	* 1.9625	* 2.1980	* 1.9894	* 2.6231	* 4.4327	
	* 2.0430	* 2.3625	* 2.0469	* 2.3486	* 2.0709	* 2.8431	* 4.6459	
	* 2.1093	* 2.4478	* 2.1093	* 2.4668	* 2.1874	* 3.0382	* 4.7998	
	* 2.2132	* 2.5640	* 2.2071	* 2.5911	* 2.3061	* 3.1967	* 4.8658	
	* 2.3538	* 2.7380	* 2.3400	* 2.7475	* 2.4366	* 3.2455	* 4.6800	
14	* 2.4200	* 1.9994	* 2.0926	* 1.9685	* 2.7009	* 4.4388		
	* 2.5095	* 2.0803	* 2.2444	* 2.0913	* 2.9510	* 4.6527		
	* 2.6060	* 2.1829	* 2.3766	* 2.2272	* 3.1681	* 4.7998		
	* 2.7194	* 2.2962	* 2.5036	* 2.3591	* 3.3338	* 4.8658		
	* 2.8380	* 2.4200	* 2.6253	* 2.4744	* 3.3761	* 4.6800		
15	* 4.1770	* 3.1246	* 2.4035	* 3.2722	* 4 EFPD 118	* POWER		
	* 4.3244	* 3.3619	* 2.5785	* 3.5770	* 100 EFPD 118	* POWER		
	* 4.4142	* 3.5530	* 2.7499	* 3.8214	* 200 EFPD 118	* POWER		
	* 4.4637	* 3.6845	* 2.8842	* 3.9888	* 300 EFPD 118	* POWER		
	* 4.3659	* 3.6845	* 2.9132	* 3.9789	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 8 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.8973	* 2.0443	* 2.1549	* 1.9820	* 2.0007	* 1.9016	* 2.2700	* 3.8819
	* 2.7714	* 1.9870	* 2.2241	* 2.0803	* 2.0803	* 1.9211	* 2.3661	* 4.0241
	* 2.6986	* 1.9907	* 2.2814	* 2.1799	* 2.1666	* 1.9820	* 2.4554	* 4.1018
	* 2.7009	* 2.0365	* 2.3556	* 2.3028	* 2.2684	* 2.0642	* 2.5476	* 4.1607
	* 2.8279	* 2.1607	* 2.5375	* 2.4977	* 2.4592	* 2.2117	* 2.6760	* 4.1177
9	* 2.0443	* 2.1980	* 1.9119	* 2.0736	* 1.8926	* 2.1607	* 1.8959	* 2.9347
	* 1.9870	* 2.1785	* 1.9339	* 2.1578	* 1.9188	* 2.2287	* 1.9649	* 3.1587
	* 1.9907	* 2.1889	* 1.9857	* 2.2476	* 1.9661	* 2.3112	* 2.0483	* 3.3303
	* 2.0365	* 2.2492	* 2.0417	* 2.3486	* 2.0352	* 2.4017	* 2.1390	* 3.4418
	* 2.1607	* 2.4255	* 2.1799	* 2.5415	* 2.1814	* 2.5744	* 2.2781	* 3.4718
10	* 2.1549	* 1.9073	* 2.3749	* 1.9222	* 2.0287	* 1.8638	* 1.9845	* 2.2587
	* 2.2241	* 1.9304	* 2.3573	* 1.9176	* 2.0763	* 1.9304	* 2.1233	* 2.4145
	* 2.2814	* 1.9734	* 2.3731	* 1.9601	* 2.1433	* 1.9845	* 2.2334	* 2.5702
	* 2.3556	* 2.0339	* 2.4366	* 2.0120	* 2.2272	* 2.0588	* 2.3366	* 2.6827
	* 2.5375	* 2.1785	* 2.6124	* 2.1593	* 2.4145	* 2.1950	* 2.4744	* 2.7428
11	* 1.9820	* 2.0722	* 1.9211	* 2.0159	* 1.9119	* 2.0954	* 1.8682	* 3.0793
	* 2.0803	* 2.1563	* 1.9165	* 2.0682	* 1.9234	* 2.2334	* 1.9771	* 3.3548
	* 2.1799	* 2.2460	* 1.9589	* 2.1290	* 1.9625	* 2.3366	* 2.0940	* 3.5730
	* 2.3028	* 2.3452	* 2.0082	* 2.2148	* 2.0313	* 2.4366	* 2.2010	* 3.7189
	* 2.4977	* 2.5415	* 2.1578	* 2.3999	* 2.1681	* 2.5890	* 2.3280	* 3.7495
12	* 2.0007	* 1.8903	* 2.0326	* 1.9084	* 2.0032	* 1.9061	* 2.5806	
	* 2.0803	* 1.9176	* 2.0790	* 1.9222	* 2.0899	* 1.9710	* 2.8080	
	* 2.1666	* 1.9649	* 2.1462	* 1.9613	* 2.1844	* 2.0682	* 3.0010	
	* 2.2684	* 2.0339	* 2.2303	* 2.0313	* 2.2830	* 2.1637	* 3.1431	
	* 2.4592	* 2.1814	* 2.4181	* 2.1681	* 2.4497	* 2.2978	* 3.2031	
13	* 1.9016	* 2.1593	* 1.8649	* 2.0981	* 1.9005	* 2.5095	* 4.1825	
	* 1.9211	* 2.2272	* 1.9304	* 2.2350	* 1.9673	* 2.7078	* 4.3659	
	* 1.9820	* 2.3095	* 1.9845	* 2.3366	* 2.0655	* 2.8842	* 4.4888	
	* 2.0642	* 2.3999	* 2.0588	* 2.4385	* 2.1607	* 3.0124	* 4.5400	
	* 2.2117	* 2.5744	* 2.1950	* 2.5911	* 2.2962	* 3.0793	* 4.4327	
14	* 2.2700	* 1.8959	* 1.9857	* 1.8693	* 2.5827	* 4.1880		
	* 2.3661	* 1.9649	* 2.1233	* 1.9783	* 2.8105	* 4.3659		
	* 2.4554	* 2.0483	* 2.2334	* 2.0940	* 3.0038	* 4.4888		
	* 2.5476	* 2.1390	* 2.3366	* 2.2010	* 3.1462	* 4.5400		
	* 2.6760	* 2.2781	* 2.4744	* 2.3280	* 3.2031	* 4.4265		
15	* 3.8819	* 2.9374	* 2.2603	* 3.0823	* 4 EFPD 118	* POWER		
	* 4.0241	* 3.1618	* 2.4145	* 3.3548	* 100 EFPD 118	* POWER		
	* 4.1018	* 3.3338	* 2.5702	* 3.5730	* 200 EFPD 118	* POWER		
	* 4.1607	* 3.4455	* 2.6827	* 3.7232	* 300 EFPD 118	* POWER		
	* 4.1177	* 3.4756	* 2.7451	* 3.7495	* 430 EFPD 118	* POWER		



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TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.7055	* 1.8892	* 1.9932	* 1.8306	* 1.8508	* 1.7531	* 2.0926	* 3.5730
	* 2.6124	* 1.8519	* 2.0736	* 1.9351	* 1.9188	* 1.7628	* 2.1637	* 3.6973
	* 2.5314	* 1.8519	* 2.1261	* 2.0248	* 1.9894	* 1.8139	* 2.2381	* 3.7407
	* 2.5056	* 1.8881	* 2.1814	* 2.1261	* 2.1009	* 1.9061	* 2.3349	* 3.7851
	* 2.6145	* 1.9994	* 2.3452	* 2.3045	* 2.2781	* 2.0365	* 2.4573	* 3.7583
9	* 1.8892	* 2.0352	* 1.7647	* 1.9176	* 1.7463	* 1.9944	* 1.7302	* 2.6895
	* 1.8519	* 2.0339	* 1.7986	* 2.0082	* 1.7657	* 2.0496	* 1.7875	* 2.8790
	* 1.8519	* 2.0417	* 1.8444	* 2.0858	* 1.8108	* 2.1163	* 1.8660	* 3.0267
	* 1.8881	* 2.0844	* 1.8948	* 2.1799	* 1.8881	* 2.2194	* 1.9649	* 3.1338
	* 1.9994	* 2.2444	* 2.0184	* 2.3538	* 2.0171	* 2.3802	* 2.0926	* 3.1681
10	* 1.9932	* 1.7608	* 2.1995	* 1.7785	* 1.8814	* 1.7255	* 1.8201	* 2.0588
	* 2.0736	* 1.7945	* 2.1980	* 1.7815	* 1.9304	* 1.7755	* 1.9316	* 2.1919
	* 2.1261	* 1.8306	* 2.2086	* 1.8098	* 1.9771	* 1.8201	* 2.0352	* 2.3263
	* 2.1814	* 1.8858	* 2.2603	* 1.8781	* 2.0749	* 1.9061	* 2.1462	* 2.4385
	* 2.3452	* 2.0159	* 2.4163	* 1.9969	* 2.2397	* 2.0287	* 2.2749	* 2.4997
11	* 1.8306	* 1.9153	* 1.7765	* 1.8858	* 1.7765	* 1.9469	* 1.7340	* 2.8304
	* 1.9351	* 2.0057	* 1.7795	* 1.9339	* 1.7905	* 2.0628	* 1.8129	* 3.0616
	* 2.0248	* 2.0844	* 1.8088	* 1.9759	* 1.8160	* 2.1549	* 1.9142	* 3.2488
	* 2.1261	* 2.1785	* 1.8737	* 2.0075	* 1.8926	* 2.2668	* 2.0287	* 3.3869
	* 2.3045	* 2.3521	* 1.9957	* 2.2287	* 2.0057	* 2.4017	* 2.1476	* 3.4233
12	* 1.8508	* 1.7444	* 1.8847	* 1.7775	* 1.8959	* 1.7905	* 2.4017	
	* 1.9188	* 1.7647	* 1.9327	* 1.7895	* 1.9649	* 1.8401	* 2.6017	
	* 1.9894	* 1.8098	* 1.9796	* 1.8150	* 2.0378	* 1.9234	* 2.7618	
	* 2.1009	* 1.8892	* 2.0776	* 1.8926	* 2.1290	* 2.0133	* 2.9053	
	* 2.2781	* 2.0171	* 2.2428	* 2.0057	* 2.2732	* 2.1290	* 2.9620	
13	* 1.7531	* 1.9919	* 1.7255	* 1.9481	* 1.7855	* 2.3643	* 3.8867	
	* 1.7628	* 2.0483	* 1.7765	* 2.0655	* 1.8359	* 2.5436	* 4.0497	
	* 1.8139	* 2.1149	* 1.8212	* 2.1563	* 1.9199	* 2.6873	* 4.1391	
	* 1.9061	* 2.2179	* 1.9073	* 2.2684	* 2.0108	* 2.8006	* 4.1825	
	* 2.0365	* 2.3784	* 2.0287	* 2.4035	* 2.1261	* 2.8532	* 4.0860	
14	* 2.0926	* 1.7302	* 1.8201	* 1.7359	* 2.4035	* 3.8914		
	* 2.1637	* 1.7875	* 1.9316	* 1.8129	* 2.6038	* 4.0548		
	* 2.2381	* 1.8660	* 2.0352	* 1.9153	* 2.7642	* 4.1391		
	* 2.3349	* 1.9649	* 2.1462	* 2.0287	* 2.9079	* 4.1825		
	* 2.4573	* 2.0926	* 2.2749	* 2.1476	* 2.9620	* 4.0860		
15	* 3.5730	* 2.6918	* 2.0602	* 2.8304	* 4 EFPD 118	* POWER		
	* 3.6973	* 2.8790	* 2.1934	* 3.0645	* 100 EFPD 118	* POWER		
	* 3.7407	* 3.0267	* 2.3263	* 3.2521	* 200 EFPD 118	* POWER		
	* 3.7851	* 3.1369	* 2.4385	* 3.3905	* 300 EFPD 118	* POWER		
	* 3.7583	* 3.1712	* 2.4997	* 3.4233	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 6 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.5194	* 1.7569	* 1.8519	* 1.6953	* 1.7153	* 1.6261	* 1.9529	* 3.3619 *
	* 2.4218	* 1.7135	* 1.9211	* 1.7915	* 1.7835	* 1.6394	* 2.0171	* 3.4718 *
	* 2.3331	* 1.6971	* 1.9493	* 1.8540	* 1.8338	* 1.6756	* 2.0709	* 3.4718 *
	* 2.3196	* 1.7368	* 2.0057	* 1.9505	* 1.9257	* 1.7511	* 2.1491	* 3.4908 *
	* 2.4236	* 1.8412	* 2.1563	* 2.1134	* 2.0749	* 1.8605	* 2.2428	* 3.4455 *
9	* 1.7569	* 1.8937	* 1.6369	* 1.7785	* 1.6178	* 1.8540	* 1.6153	* 2.5135 *
	* 1.7135	* 1.8825	* 1.6651	* 1.8605	* 1.6420	* 1.9061	* 1.6573	* 2.6827 *
	* 1.6971	* 1.8704	* 1.6899	* 1.9119	* 1.6678	* 1.9541	* 1.7218	* 2.7981 *
	* 1.7368	* 1.9165	* 1.7406	* 1.9969	* 1.7321	* 2.0378	* 1.8037	* 2.8816 *
	* 1.8412	* 2.0628	* 1.8519	* 2.1534	* 1.8422	* 2.1710	* 1.9096	* 2.8973 *
10	* 1.8519	* 1.6327	* 2.0496	* 1.6505	* 1.7454	* 1.5959	* 1.6917	* 1.9292 *
	* 1.9211	* 1.6617	* 2.0391	* 1.6454	* 1.7845	* 1.6445	* 1.7875	* 2.0404 *
	* 1.9493	* 1.6783	* 2.0261	* 1.6634	* 1.8191	* 1.6774	* 1.8748	* 2.1520 *
	* 2.0057	* 1.7312	* 2.0763	* 1.7200	* 1.8959	* 1.7473	* 1.9673	* 2.2444 *
	* 2.1563	* 1.8497	* 2.2179	* 1.8317	* 2.0443	* 1.8519	* 2.0749	* 2.2846 *
11	* 1.6953	* 1.7765	* 1.6488	* 1.7368	* 1.6394	* 1.7976	* 1.6007	* 2.6515 *
	* 1.7915	* 1.8584	* 1.6445	* 1.7755	* 1.6471	* 1.8959	* 1.6695	* 2.8558 *
	* 1.8540	* 1.9096	* 1.6625	* 1.8108	* 1.6660	* 1.9746	* 1.7589	* 3.0152 *
	* 1.9505	* 1.9944	* 1.7163	* 1.8903	* 1.7331	* 2.0668	* 1.8551	* 3.1185 *
	* 2.1134	* 2.1520	* 1.8317	* 2.0417	* 1.8422	* 2.1904	* 1.9553	* 3.1338 *
12	* 1.7153	* 1.6153	* 1.7492	* 1.6411	* 1.7312	* 1.6403	* 2.2194	*
	* 1.7835	* 1.6403	* 1.7875	* 1.6462	* 1.7935	* 1.6818	* 2.3891	*
	* 1.8338	* 1.6660	* 1.8222	* 1.6651	* 1.8573	* 1.7511	* 2.5274	*
	* 1.9257	* 1.7312	* 1.8993	* 1.7321	* 1.9517	* 1.8401	* 2.6405	*
	* 2.0749	* 1.8433	* 2.0483	* 1.8422	* 2.0872	* 1.9493	* 2.6850	*
13	* 1.6261	* 1.8519	* 1.5967	* 1.7996	* 1.6361	* 2.1740	* 3.6258	*
	* 1.6394	* 1.9050	* 1.6454	* 1.8982	* 1.6783	* 2.3280	* 3.7583	*
	* 1.6756	* 1.9529	* 1.6774	* 1.9759	* 1.7483	* 2.4460	* 3.8169	*
	* 1.7511	* 2.0352	* 1.7483	* 2.0668	* 1.8380	* 2.5476	* 3.8260	*
	* 1.8605	* 2.1696	* 1.8519	* 2.1919	* 1.9469	* 2.5953	* 3.7189	*
14	* 1.9529	* 1.6153	* 1.6926	* 1.6015	* 2.2225	* 3.6258	*	
	* 2.0171	* 1.6573	* 1.7875	* 1.6704	* 2.3909	* 3.7583	*	
	* 2.0709	* 1.7218	* 1.8748	* 1.7598	* 2.5294	* 3.8169	*	
	* 2.1491	* 1.8037	* 1.9685	* 1.8551	* 2.6427	* 3.8214	*	
	* 2.2428	* 1.9096	* 2.0749	* 1.9553	* 2.6850	* 3.7145	*	
15	* 3.3619	* 2.5155	* 1.9304	* 2.6537	* 4 EFPD 118	* POWER		
	* 3.4718	* 2.6850	* 2.0404	* 2.8584	* 100 EFPD 118	* POWER		
	* 3.4718	* 2.8006	* 2.1534	* 3.0152	* 200 EFPD 118	* POWER		
	* 3.4908	* 2.8842	* 2.2444	* 3.1215	* 300 EFPD 118	* POWER		
	* 3.4455	* 2.8973	* 2.2846	* 3.1338	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 5 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.2945	* 1.5935	* 1.6863	* 1.5382	* 1.5654	* 1.4844	* 1.7945	* 3.1154
	* 2.2086	* 1.5570	* 1.7521	* 1.6286	* 1.6311	* 1.4956	* 1.8508	* 3.1999
	* 2.1037	* 1.5235	* 1.7589	* 1.6713	* 1.6573	* 1.5083	* 1.8748	* 3.1618
	* 2.0763	* 1.5479	* 1.7976	* 1.7483	* 1.7284	* 1.5638	* 1.9292	* 3.1493
	* 2.1419	* 1.6186	* 1.9130	* 1.8748	* 1.8422	* 1.6394	* 1.9932	* 3.0704
9	* 1.5935	* 1.7209	* 1.4879	* 1.6211	* 1.4735	* 1.6971	* 1.4735	* 2.3128
	* 1.5570	* 1.7144	* 1.5141	* 1.6971	* 1.4963	* 1.7454	* 1.5090	* 2.4630
	* 1.5235	* 1.6854	* 1.5198	* 1.7274	* 1.4977	* 1.7657	* 1.5547	* 2.5355
	* 1.5479	* 1.7163	* 1.5524	* 1.7915	* 1.5441	* 1.8275	* 1.6129	* 2.5911
	* 1.6186	* 1.8285	* 1.6302	* 1.9107	* 1.6211	* 1.9246	* 1.6863	* 2.5765
10	* 1.6863	* 1.4844	* 1.8660	* 1.4998	* 1.5888	* 1.4546	* 1.5434	* 1.7696
	* 1.7521	* 1.5105	* 1.8584	* 1.4914	* 1.6244	* 1.4970	* 1.6261	* 1.8605
	* 1.7589	* 1.5090	* 1.8275	* 1.4942	* 1.6394	* 1.5105	* 1.6935	* 1.9445
	* 1.7976	* 1.5449	* 1.8594	* 1.5300	* 1.6980	* 1.5585	* 1.7618	* .0095
	* 1.9130	* 1.6277	* 1.9649	* 1.6088	* 1.8108	* 1.6277	* 1.8338	* 2.0223
11	* 1.5382	* 1.6186	* 1.4984	* 1.5785	* 1.4907	* 1.6352	* 1.4566	* 2.4236
	* 1.6286	* 1.6953	* 1.4900	* 1.6088	* 1.4879	* 1.7218	* 1.5126	* 2.6060
	* 1.6713	* 1.7255	* 1.4928	* 1.6294	* 1.4956	* 1.7815	* 1.5840	* 2.7170
	* 1.7483	* 1.7895	* 1.5264	* 1.6881	* 1.5404	* 1.8454	* 1.6548	* 2.7932
	* 1.8748	* 1.9096	* 1.6088	* 1.8037	* 1.6145	* 1.9363	* 1.7237	* 2.7738
12	* 1.5654	* 1.5007	* 1.5919	* 1.4886	* 1.5677	* 1.4865	* 2.0274	*
	* 1.6311	* 1.4963	* 1.6286	* 1.4879	* 1.6145	* 1.5119	* 2.1696	*
	* 1.6573	* 1.4963	* 1.6420	* 1.4949	* 1.6643	* 1.5669	* 2.2765	*
	* 1.7284	* 1.5434	* 1.7007	* 1.5397	* 1.7321	* 1.6311	* 2.3591	*
	* 1.8422	* 1.6211	* 1.8139	* 1.6145	* 1.8338	* 1.7098	* 2.3749	*
13	* 1.4844	* 1.6953	* 1.4553	* 1.6369	* 1.4817	* 1.9808	* 3.3095	*
	* 1.4956	* 1.7435	* 1.4970	* 1.7237	* 1.5083	* 2.1009	* 3.4159	*
	* 1.5083	* 1.7647	* 1.5112	* 1.7825	* 1.5646	* 2.1950	* 3.4196	*
	* 1.5638	* 1.8254	* 1.5592	* 1.8465	* 1.6286	* 2.2684	* 3.4086	*
	* 1.6394	* 1.9234	* 1.6277	* 1.9374	* 1.7080	* 2.2896	* 3.2789	*
14	* 1.7945	* 1.4728	* 1.5441	* 1.4573	* 2.0300	* 3.3130	*	*
	* 1.8508	* 1.5090	* 1.6269	* 1.5133	* 2.1710	* 3.4159	*	*
	* 1.8748	* 1.5539	* 1.6935	* 1.5840	* 2.2781	* 3.4196	*	*
	* 1.9292	* 1.6129	* 1.7628	* 1.6556	* 2.3608	* 3.4086	*	*
	* 1.9932	* 1.6863	* 1.8338	* 1.7237	* 2.3749	* 3.2755	*	*
15	* 3.1154	* 2.3145	* 1.7706	* 2.4255	* 4 EFPD 118	* POWER		
	* 3.1999	* 2.4649	* 1.8616	* 2.6060	* 100 EFPD 118	* POWER		
	* 3.1618	* 2.5375	* 1.9457	* 2.7194	* 200 EFPD 118	* POWER		
	* 3.1493	* 2.5932	* 2.0095	* 2.7932	* 300 EFPD 118	* POWER		
	* 3.0704	* 2.5785	* 2.0223	* 2.7738	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 4 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.1995	* 1.5256	* 1.6121	* 1.4714	* 1.4998	* 1.4343	* 1.7368	* 3.0498
	* 2.1205	* 1.4914	* 1.6739	* 1.5570	* 1.5615	* 1.4428	* 1.7825	* 3.1063
	* 1.9994	* 1.4460	* 1.6643	* 1.5832	* 1.5684	* 1.4337	* 1.7775	* 3.0238
	* 1.9541	* 1.4540	* 1.6845	* 1.6403	* 1.6153	* 1.4680	* 1.8047	* 2.9730
	* 1.9759	* 1.4900	* 1.7589	* 1.7255	* 1.6881	* 1.5076	* 1.8243	* 2.8330
9	* 1.5256	* 1.6394	* 1.4273	* 1.5539	* 1.4159	* 1.6386	* 1.4305	* 2.2619
	* 1.4914	* 1.6336	* 1.4513	* 1.6244	* 1.4395	* 1.6792	* 1.4606	* 2.3909
	* 1.4460	* 1.5904	* 1.4454	* 1.6361	* 1.4222	* 1.6748	* 1.4789	* 2.4163
	* 1.4540	* 1.6040	* 1.4593	* 1.6783	* 1.4493	* 1.7107	* 1.5141	* 2.4347
	* 1.4900	* 1.6765	* 1.5019	* 1.7550	* 1.4900	* 1.7667	* 1.5486	* 2.3696
10	* 1.6121	* 1.4234	* 1.7915	* 1.4434	* 1.5235	* 1.4090	* 1.4956	* 1.7340
	* 1.6739	* 1.4480	* 1.7825	* 1.4337	* 1.5547	* 1.4415	* 1.5708	* 1.8108
	* 1.6643	* 1.4343	* 1.7349	* 1.4159	* 1.5494	* 1.4350	* 1.6096	* 1.8573
	* 1.6845	* 1.4520	* 1.7454	* 1.4363	* 1.5856	* 1.4620	* 1.6513	* 1.8926
	* 1.7589	* 1.4998	* 1.8078	* 1.4782	* 1.6582	* 1.4949	* 1.6818	* 1.8638
11	* 1.4714	* 1.5516	* 1.4415	* 1.5083	* 1.4305	* 1.5778	* 1.4121	* 2.3873
	* 1.5570	* 1.6227	* 1.4318	* 1.5374	* 1.4279	* 1.6565	* 1.4620	* 2.5476
	* 1.5832	* 1.6344	* 1.4146	* 1.5374	* 1.4177	* 1.6836	* 1.5076	* 2.6060
	* 1.6403	* 1.6765	* 1.4324	* 1.5739	* 1.4421	* 1.7227	* 1.5516	* 2.6427
	* 1.7255	* 1.7531	* 1.4776	* 1.6488	* 1.4803	* 1.7696	* 1.5809	* 2.5682
12	* 1.4998	* 1.4140	* 1.5256	* 1.4305	* 1.4956	* 1.4285	* 1.9541	*
	* 1.5615	* 1.4376	* 1.5577	* 1.4279	* 1.5397	* 1.4520	* 2.0730	*
	* 1.5684	* 1.4209	* 1.5516	* 1.4171	* 1.5661	* 1.4844	* 2.1447	*
	* 1.6153	* 1.4487	* 1.5880	* 1.4415	* 1.6096	* 1.5242	* 2.1950	*
	* 1.6881	* 1.4907	* 1.6608	* 1.4803	* 1.6686	* 1.5615	* 2.1681	*
13	* 1.4343	* 1.6369	* 1.4102	* 1.5793	* 1.4241	* 1.8993	* 3.2193	*
	* 1.4428	* 1.6783	* 1.4421	* 1.6573	* 1.4487	* 2.0070	* 3.3130	*
	* 1.4337	* 1.6730	* 1.4356	* 1.6845	* 1.4817	* 2.0642	* 3.2588	*
	* 1.4680	* 1.7098	* 1.4626	* 1.7237	* 1.5220	* 2.1106	* 3.2095	*
	* 1.5076	* 1.7657	* 1.4949	* 1.7706	* 1.5608	* 2.0858	* 3.0209	*
14	* 1.7368	* 1.4298	* 1.4963	* 1.4127	* 1.9553	* 3.2225	*	*
	* 1.7825	* 1.4600	* 1.5708	* 1.4626	* 2.0817	* 3.3130	*	*
	* 1.7775	* 1.4782	* 1.6096	* 1.5083	* 2.1462	* 3.2588	*	*
	* 1.8047	* 1.5141	* 1.6513	* 1.5524	* 2.1965	* 3.2095	*	*
	* 1.8243	* 1.5486	* 1.6818	* 1.5817	* 2.1681	* 3.0181	*	*
15	* 3.0498	* 2.2636	* 1.7349	* 2.3891	* 4 EFPD 118	* POWER		
	* 3.1063	* 2.3927	* 1.8119	* 2.5476	* 100 EFPD 118	* POWER		
	* 3.0238	* 2.4181	* 1.8584	* 2.6081	* 200 EFPD 118	* POWER		
	* 2.9730	* 2.4366	* 1.8926	* 2.6449	* 300 EFPD 118	* POWER		
	* 2.8330	* 2.3713	* 1.8638	* 2.5682	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 3 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.1037	* 1.4660	* 1.5471	* 1.4152	* 1.4460	* 1.4003	* 1.6980	* 3.0238
	* 2.0339	* 1.4356	* 1.6064	* 1.4970	* 1.5062	* 1.4028	* 1.7321	* 3.0498
	* 1.9084	* 1.3821	* 1.5856	* 1.5090	* 1.4963	* 1.3773	* 1.6989	* 2.9186
	* 1.8497	* 1.3755	* 1.5888	* 1.5464	* 1.5198	* 1.3887	* 1.6980	* 2.8179
	* 1.8264	* 1.3749	* 1.6211	* 1.5888	* 1.5471	* 1.3863	* 1.6686	* 2.6081
9	* 1.4660	* 1.5600	* 1.3779	* 1.4991	* 1.3743	* 1.5959	* 1.4133	* 2.2587
	* 1.4356	* 1.5577	* 1.4009	* 1.5661	* 1.3948	* 1.6294	* 1.4356	* 2.3608
	* 1.3821	* 1.5090	* 1.3839	* 1.5615	* 1.3643	* 1.6040	* 1.4253	* 2.3331
	* 1.3755	* 1.5069	* 1.3797	* 1.5840	* 1.3714	* 1.6145	* 1.4343	* 2.3078
	* 1.3749	* 1.5389	* 1.3857	* 1.6145	* 1.3726	* 1.6219	* 1.4247	* 2.1814
10	* 1.5471	* 1.3743	* 1.7190	* 1.4009	* 1.4714	* 1.3966	* 1.4789	* 1.7435
	* 1.6064	* 1.3978	* 1.7126	* 1.3923	* 1.4984	* 1.4083	* 1.5397	* 1.7996
	* 1.5856	* 1.3731	* 1.6539	* 1.3591	* 1.4782	* 1.3791	* 1.5464	* 1.8016
	* 1.5888	* 1.3737	* 1.6471	* 1.3591	* 1.4921	* 1.3839	* 1.5600	* 1.7996
	* 1.6211	* 1.3827	* 1.6643	* 1.3614	* 1.5177	* 1.3755	* 1.5426	* 1.7209
11	* 1.4152	* 1.4970	* 1.3991	* 1.4606	* 1.3978	* 1.5532	* 1.4003	* 2.3999
	* 1.4970	* 1.5646	* 1.3905	* 1.4879	* 1.3930	* 1.6211	* 1.4395	* 2.5274
	* 1.5090	* 1.5600	* 1.3574	* 1.4667	* 1.3603	* 1.6129	* 1.4533	* 2.5254
	* 1.5464	* 1.5817	* 1.3556	* 1.4810	* 1.3643	* 1.6252	* 1.4694	* 2.5115
	* 1.5888	* 1.6137	* 1.3608	* 1.5105	* 1.3614	* 1.6227	* 1.4540	* 2.3696
12	* 1.4460	* 1.3720	* 1.4735	* 1.3972	* 1.4520	* 1.4059	* 1.9246	
	* 1.5062	* 1.3930	* 1.5012	* 1.3923	* 1.4914	* 1.4228	* 2.0287	
	* 1.4963	* 1.3626	* 1.4796	* 1.3591	* 1.4921	* 1.4266	* 2.0483	
	* 1.5198	* 1.3702	* 1.4949	* 1.3637	* 1.5105	* 1.4402	* 2.0602	
	* 1.5471	* 1.3726	* 1.5206	* 1.3614	* 1.5227	* 1.4318	* 1.9820	
13	* 1.4003	* 1.5943	* 1.3972	* 1.5547	* 1.4015	* 1.8649	* 3.1935	
	* 1.4028	* 1.6277	* 1.4083	* 1.6219	* 1.4196	* 1.9541	* 3.2554	
	* 1.3773	* 1.6024	* 1.3791	* 1.6137	* 1.4241	* 1.9698	* 3.1400	
	* 1.3887	* 1.6137	* 1.3839	* 1.6261	* 1.4382	* 1.9796	* 3.0382	
	* 1.3863	* 1.6211	* 1.3761	* 1.6236	* 1.4311	* 1.9050	* 2.7762	
14	* 1.6980	* 1.4127	* 1.4796	* 1.4009	* 1.9269	* 3.1967		
	* 1.7321	* 1.4350	* 1.5397	* 1.4402	* 2.0300	* 3.2554		
	* 1.6989	* 1.4247	* 1.5464	* 1.4540	* 2.0496	* 3.1400		
	* 1.6980	* 1.4343	* 1.5600	* 1.4694	* 2.0615	* 3.0382		
	* 1.6686	* 1.4247	* 1.5434	* 1.4540	* 1.9832	* 2.7738		
15	* 3.0238	* 2.2603	* 1.7444	* 2.4017	* 4 EFPD 118	* POWER		
	* 3.0498	* 2.3625	* 1.8006	* 2.5294	* 100 EFPD 118	* POWER		
	* 2.9186	* 2.3349	* 1.8026	* 2.5274	* 200 EFPD 118	* POWER		
	* 2.8179	* 2.3095	* 1.8006	* 2.5135	* 300 EFPD 118	* POWER		
	* 2.6081	* 2.1829	* 1.7209	* 2.3713	* 430 EFPD 118	* POWER		

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 2 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.1696	* 1.5638	* 1.6437	* 1.5220	* 1.5547	* 1.5308	* 1.8422	* 3.3548
	* 2.1120	* 1.5382	* 1.6989	* 1.5975	* 1.6072	* 1.5300	* 1.8605	* 3.3373
	* 1.9783	* 1.4701	* 1.6608	* 1.5864	* 1.5715	* 1.4796	* 1.7895	* 3.1215
	* 1.9073	* 1.4382	* 1.6462	* 1.5999	* 1.5669	* 1.4593	* 1.7511	* 2.9510
	* 1.8359	* 1.3942	* 1.6277	* 1.5904	* 1.5374	* 1.3997	* 1.6573	* 2.6296
9	* 1.5638	* 1.6236	* 1.4817	* 1.6104	* 1.5019	* 1.7163	* 1.5832	* 2.5806
	* 1.5382	* 1.6252	* 1.5062	* 1.6730	* 1.5119	* 1.7463	* 1.6007	* 2.6383
	* 1.4701	* 1.5654	* 1.4667	* 1.6454	* 1.4606	* 1.6953	* 1.5501	* 2.5334
	* 1.4382	* 1.5464	* 1.4324	* 1.6420	* 1.4356	* 1.6783	* 1.5242	* 2.4422
	* 1.3942	* 1.5300	* 1.3972	* 1.6170	* 1.3881	* 1.6261	* 1.4507	* 2.2179
10	* 1.6437	* 1.4776	* 1.7825	* 1.5184	* 1.5746	* 1.5434	* 1.6548	* 2.0602
	* 1.6989	* 1.5019	* 1.7825	* 1.5112	* 1.5975	* 1.5374	* 1.7016	* 2.0899
	* 1.6608	* 1.4553	* 1.7144	* 1.4593	* 1.5547	* 1.4831	* 1.6573	* 2.0108
	* 1.6462	* 1.4273	* 1.6890	* 1.4209	* 1.5434	* 1.4606	* 1.6327	* 1.9469
	* 1.6277	* 1.3936	* 1.6582	* 1.3797	* 1.5141	* 1.3930	* 1.5494	* 1.7795
11	* 1.5220	* 1.6072	* 1.5155	* 1.5817	* 1.5464	* 1.7181	* 1.5904	* 2.7762
	* 1.5975	* 1.6704	* 1.5090	* 1.5967	* 1.5293	* 1.7589	* 1.6244	* 2.8584
	* 1.5864	* 1.6428	* 1.4540	* 1.5486	* 1.4701	* 1.7135	* 1.5872	* 2.7594
	* 1.5999	* 1.6394	* 1.4171	* 1.5352	* 1.4467	* 1.6926	* 1.5638	* 2.6670
	* 1.5904	* 1.6153	* 1.3773	* 1.5090	* 1.3839	* 1.6252	* 1.4824	* 2.4126
12	* 1.5547	* 1.4991	* 1.5762	* 1.5449	* 1.5888	* 1.5848	* 2.1375	*
	* 1.6072	* 1.5090	* 1.5991	* 1.5278	* 1.6219	* 1.5975	* 2.2148	*
	* 1.5715	* 1.4586	* 1.5562	* 1.4694	* 1.5825	* 1.5539	* 2.1666	*
	* 1.5669	* 1.4356	* 1.5456	* 1.4460	* 1.5684	* 1.5315	* 2.1233	*
	* 1.5374	* 1.3887	* 1.5162	* 1.3839	* 1.5169	* 1.4553	* 1.9698	*
13	* 1.5308	* 1.7144	* 1.5434	* 1.7190	* 1.5809	* 2.0844	* 3.6424	*
	* 1.5300	* 1.7454	* 1.5374	* 1.7598	* 1.5943	* 2.1491	* 3.6424	*
	* 1.4796	* 1.6944	* 1.4831	* 1.7144	* 1.5524	* 2.0981	* 3.4233	*
	* 1.4593	* 1.6765	* 1.4606	* 1.6926	* 1.5300	* 2.0549	* 3.2291	*
	* 1.3997	* 1.6244	* 1.3936	* 1.6261	* 1.4546	* 1.9107	* 2.8355	*
14	* 1.8422	* 1.5825	* 1.6548	* 1.5912	* 2.1390	* 3.6465	*	*
	* 1.8605	* 1.5999	* 1.7016	* 1.6252	* 2.2163	* 3.6465	*	*
	* 1.7895	* 1.5501	* 1.6573	* 1.5880	* 2.1666	* 3.4233	*	*
	* 1.7511	* 1.5235	* 1.6327	* 1.5638	* 2.1247	* 3.2258	*	*
	* 1.6573	* 1.4507	* 1.5494	* 1.4824	* 1.9710	* 2.8355	*	*
15	* 3.3548	* 2.5827	* 2.0615	* 2.7786	* 4 EFPD 118 % POWER			
	* 3.3373	* 2.6405	* 2.0913	* 2.8609	* 100 EFPD 118 % POWER			
	* 3.1215	* 2.5334	* 2.0120	* 2.7618	* 200 EFPD 118 % POWER			
	* 2.9510	* 2.4441	* 1.9469	* 2.6670	* 300 EFPD 118 % POWER			
	* 2.6296	* 2.2194	* 1.7805	* 2.4145	* 430 EFPD 118 % POWER			



Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 3 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) NORMAL OPERATION

THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8	* 2.9954	* 2.1904	* 2.4997	* 2.3112	* 3.6299	* 2.1995	* 4.3362	* 4.8510
	* 2.9000	* 2.1462	* 2.5214	* 2.3573	* 3.5412	* 2.1814	* 4.1716	* 4.7427
	* 2.6737	* 2.0133	* 2.3981	* 2.2571	* 3.2488	* 2.0562	* 3.7672	* 4.3069
	* 2.5294	* 1.9281	* 2.3045	* 2.1919	* 3.0295	* 1.9698	* 3.4530	* 3.9444
	* 2.3349	* 1.8088	* 2.1549	* 2.0588	* 2.6895	* 1.8108	* 2.9703	* 3.3619
9	* 2.1904	* 3.6217	* 2.0709	* 2.4385	* 2.1318	* 2.5723	* 2.4072	* 4.1230
	* 2.1462	* 3.4793	* 2.0709	* 2.4687	* 2.1205	* 2.5661	* 2.4035	* 4.0652
	* 2.0133	* 3.1681	* 1.9685	* 2.3504	* 2.0095	* 2.4181	* 2.2603	* 3.7276
	* 1.9281	* 2.9510	* 1.9039	* 2.2684	* 1.9327	* 2.3112	* 2.1476	* 3.4381
	* 1.8088	* 2.6581	* 1.7965	* 2.1191	* 1.7945	* 2.1120	* 1.9257	* 2.9401
10	* 2.4997	* 2.0615	* 2.4821	* 2.1051	* 3.6258	* 2.2163	* 4.1880	* 3.4123
	* 2.5214	* 2.0549	* 2.4649	* 2.0844	* 3.5100	* 2.1934	* 4.0445	* 3.3478
	* 2.3981	* 1.9553	* 2.3263	* 1.9759	* 3.2095	* 2.0655	* 3.6633	* 3.0586
	* 2.3045	* 1.8926	* 2.2350	* 1.9061	* 2.9870	* 1.9710	* 3.3584	* 2.8179
	* 2.1549	* 1.7875	* 2.0913	* 1.7905	* 2.6537	* 1.8016	* 2.8790	* 2.4108
11	* 2.3112	* 2.4292	* 2.0858	* 3.6633	* 2.2272	* 2.6405	* 2.4783	* 4.5465
	* 2.3573	* 2.4592	* 2.0682	* 3.5177	* 2.1950	* 2.6361	* 2.4860	* 4.5015
	* 2.2571	* 2.3383	* 1.9625	* 3.2063	* 2.0602	* 2.4802	* 2.3417	* 4.1337
	* 2.1919	* 2.2571	* 1.8959	* 2.9758	* 1.9685	* 2.3591	* 2.2225	* 3.8077
	* 2.0588	* 2.1120	* 1.7825	* 2.6515	* 1.8057	* 2.1318	* 1.9894	* 3.2356
12	* 3.6299	* 2.1290	* 3.6217	* 2.2210	* 3.8867	* 2.4668	* 5.3655	
	* 3.5412	* 2.1177	* 3.5061	* 2.1904	* 3.7451	* 2.4497	* 5.2419	
	* 3.2488	* 2.0070	* 3.2063	* 2.0562	* 3.4050	* 2.2995	* 4.7782	
	* 3.0295	* 1.9316	* 2.9842	* 1.9661	* 3.1431	* 2.1799	* 4.3899	
	* 2.6895	* 1.7945	* 2.6537	* 1.8047	* 2.7380	* 1.9601	* 3.7189	
13	* 2.1995	* 2.5702	* 2.2148	* 2.6427	* 2.4592	* 5.2505	* 5.3836	
	* 2.1814	* 2.5640	* 2.1934	* 2.6361	* 2.4441	* 5.0831	* 5.2679	
	* 2.0562	* 2.4163	* 2.0655	* 2.4802	* 2.2945	* 4.6123	* 4.7782	
	* 1.9698	* 2.3095	* 1.9710	* 2.3591	* 2.1770	* 4.2101	* 4.3362	
	* 1.8108	* 2.1106	* 1.8016	* 2.1318	* 1.9577	* 3.5530	* 3.6217	
14	* 4.3362	* 2.4053	* 4.1880	* 2.4783	* 5.3655	* 5.3836		
	* 4.1716	* 2.4035	* 4.0445	* 2.4860	* 5.2419	* 5.2679		
	* 3.7672	* 2.2587	* 3.6633	* 2.3417	* 4.7782	* 4.7782		
	* 3.4530	* 2.1476	* 3.3584	* 2.2225	* 4.3899	* 4.3421		
	* 2.9703	* 1.9257	* 2.8790	* 1.9894	* 3.7189	* 3.6217		
15	* 4.8510	* 4.1230	* 3.4123	* 4.5530	* 4 EFPD 118 % POWER			
	* 4.7427	* 4.0652	* 3.3478	* 4.5015	* 100 EFPD 118 % POWER			
	* 4.3069	* 3.7319	* 3.0616	* 4.1391	* 200 EFPD 118 % POWER			
	* 3.9444	* 3.4418	* 2.8179	* 3.8123	* 300 EFPD 118 % POWER			
	* 3.3619	* 2.9428	* 2.4126	* 3.2389	* 430 EFPD 118 % POWER			

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 4

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) POWER ESCALATION

AT 118% POWER, 4 EFPD, THIS IS LEVEL 18 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.8526	2.2686	2.5613	2.4559	3.8439	2.4050	4.5936	4.6778
9*	2.2686	3.7316	2.1953	2.5384	2.3039	2.7453	2.6567	4.1978
10*	2.5613	2.1897	2.5670	2.2498	3.8532	2.4237	4.6002	3.6040
11*	2.4559	2.5324	2.2380	3.8648	2.3763	2.8068	2.7329	4.5787
12*	3.8439	2.3018	3.8486	2.3714	4.0796	2.6315	5.5865	
13*	2.4050	2.7435	2.4223	2.8087	2.6271	5.3166	5.0177	
14*	4.5936	2.6551	4.6002	2.7329	5.5865	5.0256		
15 *	4.6778	4.2019	3.6040	4.5853				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 17 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.1382	1.7003	1.7305	1.6760	1.6753	1.7401	1.9804	3.3243
9*	1.7003	1.7005	1.6308	1.7305	1.6771	1.8812	1.8278	2.7370
10*	1.7305	1.6283	1.9124	1.7032	1.7091	1.7552	1.9090	2.2984
11*	1.6760	1.7270	1.6971	1.7050	1.7302	1.8715	1.8333	2.9406
12*	1.6753	1.6744	1.7091	1.7299	1.7036	1.7609	2.2189	
13*	1.7401	1.8801	1.7552	1.8723	1.7571	2.1102	3.5223	
14*	1.9804	1.8278	1.9090	1.8333	2.2204	3.5252		
15 *	3.3243	2.7370	2.2988	2.9406				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 16 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.0014	1.5279	1.5690	1.4934	1.4922	1.5155	1.7467	2.9358
9*	1.5279	1.5625	1.4566	1.5522	1.4688	1.6689	1.5530	2.3214
10*	1.5690	1.4539	1.7656	1.4925	1.5103	1.5080	1.6200	1.8803
11*	1.4934	1.5502	1.4906	1.4885	1.4688	1.6073	1.5288	2.4681
12*	1.4922	1.4670	1.5118	1.4688	1.4686	1.4778	1.9078	
13*	1.5155	1.6682	1.5082	1.6079	1.4738	1.7968	2.9999	
14*	1.7467	1.5524	1.6208	1.5293	1.9098	3.0027		
15 *	2.9358	2.3230	1.8814	2.4686				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 15 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.0178	1.5045	1.5614	1.4704	1.4694	1.4580	1.6983	2.8755
9*	1.5045	1.5629	1.4286	1.5285	1.4286	1.6240	1.4709	2.2199
10*	1.5614	1.4256	1.7491	1.4337	1.4702	1.4352	1.5306	1.7635
11*	1.4704	1.5271	1.4320	1.4425	1.3990	1.5383	1.4318	2.3344
12*	1.4694	1.4269	1.4721	1.3978	1.4150	1.3961	1.8358	
13*	1.4580	1.6226	1.4359	1.5390	1.3924	1.7296	2.8944	
14*	1.6983	1.4702	1.5311	1.4323	1.8377	2.8970		
15 *	2.8755	2.2203	1.7645	2.3361				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 14 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.1851	1.6020	1.6715	1.5623	1.5532	1.5177	1.7696	3.0067
9*	1.6020	1.6794	1.5151	1.6219	1.5019	1.6980	1.5236	2.3095
10*	1.6715	1.5123	1.8616	1.5014	1.5503	1.4824	1.5844	1.8249
11*	1.5623	1.6195	1.4995	1.5189	1.4574	1.6087	1.4798	2.4343
12*	1.5532	1.4998	1.5524	1.4547	1.4883	1.4540	1.9274	
13*	1.5177	1.6971	1.4829	1.6095	1.4497	1.8249	3.0703	
14*	1.7696	1.5231	1.5850	1.4805	1.9295	3.0732		
15 *	3.0067	2.3112	1.8257	2.4348				

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 4 (continued)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) POWER ESCALATION

AT 118% POWER, 4 EFPD, THIS IS LEVEL 13 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.3297	1.6704	1.7435	1.6186	1.6129	1.5562	1.8275	3.1215
9*	1.6704	1.7657	1.5684	1.6827	1.5486	1.7511	1.5486	2.3625
10*	1.7435	1.5646	1.9374	1.5623	1.6219	1.5213	1.6195	1.8444
11*	1.6186	1.6809	1.5608	1.6004	1.5221	1.6863	1.5220	2.4802
12*	1.6129	1.5464	1.6244	1.5194	1.5724	1.5180	2.0266	
13*	1.5562	1.7502	1.5220	1.6878	1.5138	1.9312	3.2372	
14*	1.8275	1.5479	1.6203	1.5227	2.0288	3.2405		
15*	3.1215	2.3643	1.8454	2.4821				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 12 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.5537	1.8150	1.9039	1.7608	1.7521	1.6774	1.9771	3.3905
9*	1.8150	1.9281	1.7034	1.8306	1.6774	1.8903	1.6573	2.5456
10*	1.9039	1.6989	2.1037	1.6774	1.7492	1.6211	1.7293	1.9734
11*	1.7608	1.8285	1.6756	1.7237	1.6361	1.8037	1.6203	2.6603
12*	1.7521	1.6748	1.7521	1.6336	1.7016	1.6327	2.1799	
13*	1.6774	1.8881	1.6219	1.8047	1.6277	2.1009	3.5139	
14*	1.9771	1.6573	1.7302	1.6211	2.1829	3.5177		
15*	3.3905	2.5456	1.9734	2.6626				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 11 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.8055	2.0120	2.1191	1.9601	1.9422	1.8519	2.1799	3.7276
9*	2.0120	2.1433	1.8948	2.0378	1.8519	2.0885	1.8254	2.8105
10*	2.1191	1.8892	2.3400	1.8584	1.9445	1.7845	1.9050	2.1710
11*	1.9601	2.0352	1.8562	1.9142	1.8047	1.9907	1.7835	2.9510
12*	1.9422	1.8508	1.9481	1.8016	1.8858	1.8006	2.4163	
13*	1.8519	2.0858	1.7845	1.9932	1.7955	2.3314	3.9105	
14*	2.1799	1.8254	1.9061	1.7845	2.4200	3.9153		
15*	3.7276	2.8105	2.1725	2.9510				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 10 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	3.0010	2.1347	2.2571	2.0831	2.0954	1.9932	2.3521	4.0039
9*	2.1347	2.2846	2.0082	2.1755	1.9870	2.2603	1.9698	3.0382
10*	2.2571	2.0032	2.4880	2.0082	2.1079	1.9281	2.0575	2.3383
11*	2.0831	2.1725	2.0057	2.0872	1.9661	2.1637	1.9281	3.1807
12*	2.0954	1.9845	2.1120	1.9625	2.0642	1.9613	2.6427	
13*	1.9932	2.2587	1.9292	2.1651	1.9553	2.5620	4.2381	
14*	2.3521	1.9698	2.0575	1.9292	2.6471	4.2438		
15*	4.0039	3.0411	2.3383	3.1807				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 9 OF 18  
(LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	3.0586	2.1785	2.2945	2.1191	2.1333	2.0261	2.4200	4.1770
9*	2.1785	2.3331	2.0430	2.2132	2.0261	2.2945	2.0007	3.1215
10*	2.2945	2.0378	2.5294	2.0391	2.1419	1.9613	2.0913	2.4017
11*	2.1191	2.2102	2.0365	2.1163	1.9994	2.1965	1.9673	3.2722
12*	2.1333	2.0235	2.1462	1.9957	2.0940	1.9957	2.6986	
13*	2.0261	2.2929	1.9625	2.1980	1.9894	2.6231	4.4327	
14*	2.4200	1.9994	2.0926	1.9685	2.7009	4.4388		
15*	4.1770	3.1246	2.4035	3.2722				

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 4 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) POWER ESCALATION

AT 118% POWER, 4 EFPD, THIS IS LEVEL 8 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.8973	2.0443	2.1549	1.9820	2.0007	1.9016	2.2700	3.8819
9*	2.0443	2.1980	1.9119	2.0736	1.8926	2.1607	1.8959	2.9347
10*	2.1549	1.9073	2.3749	1.9222	2.0287	1.8638	1.9845	2.2587
11*	1.9820	2.0722	1.9211	2.0159	1.9119	2.0954	1.8682	3.0793
12*	2.0007	1.8903	2.0326	1.9084	2.0032	1.9061	2.5806	
13*	1.9016	2.1593	1.8649	2.0981	1.9005	2.5095	4.1825	
14*	2.2700	1.8959	1.9857	1.8693	2.5827	4.1880		
15*	3.8819	2.9374	2.2603	3.0823				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 7 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.7055	1.8892	1.9902	1.8272	1.8448	1.7484	2.0857	3.5606
9*	1.8892	2.0352	1.7616	1.9126	1.7423	1.9894	1.7302	2.6829
10*	1.9902	1.7578	2.1970	1.7771	1.8814	1.7255	1.8201	2.0588
11*	1.8272	1.9114	1.7753	1.8858	1.7765	1.9469	1.7340	2.8273
12*	1.8448	1.7395	1.8847	1.7775	1.8959	1.7905	2.4017	
13*	1.7484	1.9881	1.7255	1.9481	1.7855	2.3643	3.8867	
14*	2.0857	1.7302	1.8201	1.7359	2.4035	3.8914		
15*	3.5606	2.6851	2.0602	2.8298				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 6 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.5028	1.7454	1.8405	1.6852	1.7050	1.6168	1.9415	3.3421
9*	1.7454	1.8811	1.6271	1.7677	1.6084	1.8429	1.6070	2.4985
10*	1.8405	1.6231	2.0369	1.6404	1.7349	1.5920	1.6889	1.9243
11*	1.6852	1.7657	1.6388	1.7301	1.6328	1.7892	1.5960	2.6361
12*	1.7050	1.6060	1.7377	1.6336	1.7262	1.6360	2.2115	
13*	1.6168	1.8411	1.5928	1.7902	1.6319	2.1693	3.6149	
14*	1.9415	1.6062	1.6898	1.5968	2.2130	3.6154		
15*	3.3421	2.5005	1.9254	2.6383				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 5 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.2756	1.5807	1.6721	1.5253	1.5525	1.4727	1.7804	3.0908
9*	1.5807	1.7066	1.4757	1.6075	1.4615	1.6835	1.4619	2.2946
10*	1.6721	1.4723	1.8508	1.4878	1.5760	1.4433	1.5311	1.7559
11*	1.5253	1.6053	1.4864	1.5659	1.4788	1.6224	1.4451	2.4041
12*	1.5525	1.4588	1.5791	1.4767	1.5542	1.4739	2.0112	
13*	1.4727	1.6817	1.4440	1.6240	1.4692	1.9635	3.2837	
14*	1.7804	1.4614	1.5318	1.4460	2.0138	3.2871		
15*	3.0908	2.2962	1.7569	2.4064				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 4 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.1780	1.5108	1.5960	1.4569	1.4851	1.4207	1.7208	3.0214
9*	1.5108	1.6235	1.4132	1.5387	1.4022	1.6229	1.4171	2.2409
10*	1.5960	1.4095	1.7741	1.4296	1.5089	1.3960	1.4815	1.7180
11*	1.4569	1.5365	1.4277	1.4938	1.4169	1.5630	1.3989	2.3649
12*	1.4851	1.4002	1.5110	1.4169	1.4813	1.4152	1.9354	
13*	1.4207	1.6212	1.3970	1.5645	1.4108	1.8817	3.1894	
14*	1.7208	1.4166	1.4822	1.3995	1.9369	3.1926		
15*	3.0214	2.2425	1.7189	2.3667				

Catawba 2 Cycle 8 Core Operating Limits Report

TABLE 4 (CONTINUED)

M-SUB-C VALUES (F-SUB-Q RPS MARGIN) POWER ESCALATION

AT 118% POWER, 4 EFPD, THIS IS LEVEL 3 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.0809	1.4503	1.5302	1.3997	1.4304	1.3854	1.6804	2.9927
9*	1.4503	1.5430	1.3630	1.4828	1.3597	1.5791	1.3987	2.2360
10*	1.5302	1.3593	1.7005	1.3860	1.4556	1.3823	1.4637	1.7260
11*	1.3997	1.4806	1.3842	1.4450	1.3832	1.5370	1.3858	2.3753
12*	1.4304	1.3574	1.4577	1.3828	1.4367	1.3912	1.9049	
13*	1.3854	1.5773	1.3829	1.5384	1.3870	1.8458	3.1614	
14*	1.6804	1.3981	1.4643	1.3864	1.9068	3.1646		
15 *	2.9927	2.2376	1.7266	2.3771				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 2 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.1449	1.5461	1.6246	1.5044	1.5370	1.5136	1.8221	3.3185
9*	1.5461	1.6050	1.4648	1.5919	1.4850	1.6973	1.5660	2.5533
10*	1.6246	1.4606	1.7623	1.5013	1.5569	1.5264	1.6366	2.0383
11*	1.5044	1.5887	1.4985	1.5638	1.5293	1.6993	1.5732	2.7466
12*	1.5370	1.4821	1.5584	1.5278	1.5714	1.5675	2.1144	
13*	1.5136	1.6954	1.5264	1.7002	1.5635	2.0617	3.6042	
14*	1.8221	1.5652	1.6366	1.5739	2.1158	3.6071		
15 *	3.3185	2.5548	2.0396	2.7490				

AT 118% POWER, 4 EFPD, THIS IS LEVEL 1 OF 18  
 (LEVEL 18 = TOP OF CORE, LEVEL 1 = BOTTOM)

	H	G	F	E	D	C	B	A
8*	2.9610	2.1653	2.4703	2.2842	3.5886	2.1750	4.2870	4.7997
9*	2.1653	3.5794	2.0466	2.4105	2.1073	2.5435	2.3804	4.0785
10*	2.4703	2.0378	2.4532	2.0808	3.5846	2.1915	4.1421	3.3757
11*	2.2842	2.4009	2.0619	3.6212	2.2017	2.6113	2.4510	4.4978
12*	3.5886	2.1045	3.5805	2.1960	3.8432	2.4392	5.3077	
13*	2.1750	2.5409	2.1900	2.6135	2.4318	5.1929	5.3255	
14*	4.2870	2.3786	4.1421	2.4510	5.3077	5.3280		
15 *	4.7997	4.0785	3.3757	4.5042				

TABLE 5

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 100% POWER, 4 EPPD

	H	G	F	E	D	C	B	A
8	.9170	1.2950	1.2310	1.3270	1.2850	1.3570	1.1030	.6500
	1.6024	1.1790	1.2112	1.1209	1.1160	1.0941	1.2737	2.1559
9	1.2950	1.1920	1.3730	1.2670	1.3780	1.1980	1.3370	.8510
	1.1790	1.2346	1.0977	1.1714	1.0863	1.2308	1.1543	1.6869
10	1.2310	1.3760	1.1190	1.3590	1.2690	1.3530	1.2400	1.0800
	1.2112	1.0951	1.3405	1.1319	1.1621	1.1537	1.2167	1.3991
11	1.3270	1.2690	1.3610	1.2760	1.3580	1.2190	1.3470	.8030
	1.1209	1.1702	1.1313	1.1538	1.1194	1.2473	1.1661	1.8709
12	1.2850	1.3800	1.2680	1.3580	1.2670	1.3430	.9760	
	1.1160	1.0847	1.1633	1.1194	1.1436	1.1204	1.4809	
13	1.3570	1.1990	1.3520	1.2180	1.3470	1.0090	.6110	
	1.0941	1.2304	1.1537	1.2472	1.1172	1.4156	2.3665	
14	1.1030	1.3380	1.2390	1.3460	.9750	.6110		
	1.2737	1.1539	1.2172	1.1661	1.4814	2.3704		
15	.6500	.8500	1.0800	.8030	F-DEL-H			
	2.1559	1.6878	1.4004	1.8730	M-DEL-H			

AT 100% POWER, 100 EPPD

	H	G	F	E	D	C	B	A
8	.9630	1.3410	1.2070	1.2820	1.2530	1.3660	1.0870	.6450
	1.5396	1.1444	1.2447	1.1644	1.1417	1.0863	1.2904	2.1707
9	1.3410	1.2150	1.3710	1.2350	1.3790	1.1850	1.3170	.8130
	1.1444	1.2183	1.1049	1.2049	1.0907	1.2434	1.1242	1.7551
10	1.2070	1.3740	1.1400	1.3800	1.2620	1.3610	1.1930	1.0390
	1.2447	1.1027	1.3240	1.1039	1.1699	1.1350	1.2147	1.3963
11	1.2820	1.2360	1.3810	1.2690	1.3780	1.1840	1.3040	.7590
	1.1644	1.2042	1.1024	1.1641	1.1113	1.2786	1.1669	1.9273
12	1.2530	1.3800	1.2600	1.3790	1.2370	1.3240	.9210	
	1.1417	1.0901	1.1709	1.1113	1.1682	1.1332	1.5645	
13	1.3660	1.1860	1.3600	1.1830	1.3260	.9570	.5990	
	1.0863	1.2424	1.1351	1.2796	1.1314	1.4888	2.4194	
14	1.0870	1.3170	1.1930	1.3040	.9200	.5980		
	1.2904	1.1242	1.2149	1.1676	1.5647	2.4230		
15	.6450	.8130	1.0390	.7580	F-DEL-H			
	2.1707	1.7554	1.3965	1.9277	M-DEL-H			



TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 100% POWER, 200 EFPD

	H	G	F	E	D	C	B	A
8	* 1.0010	* 1.3600	* 1.1970	* 1.2480	* 1.2290	* 1.3510	* 1.0730	* .6480
	* 1.4915	* 1.1322	* 1.2689	* 1.2000	* 1.1641	* 1.0991	* 1.3076	* 2.1640
9	* 1.3600	* 1.2290	* 1.3580	* 1.2100	* 1.3730	* 1.1690	* 1.2900	* .7930
	* 1.1322	* 1.2097	* 1.1223	* 1.2327	* 1.1022	* 1.2601	* 1.1463	* 1.7979
10	* 1.1970	* 1.3680	* 1.1520	* 1.3760	* 1.2480	* 1.3490	* 1.1600	* 1.0070
	* 1.2689	* 1.1144	* 1.3161	* 1.1094	* 1.1828	* 1.1241	* 1.2457	* 1.4360
11	* 1.2480	* 1.2110	* 1.3770	* 1.2560	* 1.3740	* 1.1580	* 1.2610	* .7330
	* 1.2000	* 1.2326	* 1.1087	* 1.1770	* 1.1136	* 1.3050	* 1.2009	* 1.9899
12	* 1.2290	* 1.3740	* 1.2470	* 1.3750	* 1.2070	* 1.2890	* .8830	*
	* 1.1641	* 1.1014	* 1.1837	* 1.1135	* 1.1944	* 1.1604	* 1.6283	*
13	* 1.3510	* 1.1700	* 1.3490	* 1.1570	* 1.2910	* .9200	* .5960	*
	* 1.0991	* 1.2592	* 1.1248	* 1.3050	* 1.1594	* 1.5453	* 2.4346	*
14	* 1.0730	* 1.2900	* 1.1600	* 1.2610	* .8830	* .5960	*	*
	* 1.3076	* 1.1456	* 1.2457	* 1.2019	* 1.6286	* 2.4347	*	*
15	* .6480	* .7920	* 1.0070	* .7330	* F-DEL-H			
	* 2.1640	* 1.7996	* 1.4371	* 1.9898	* M-DEL-H			

AT 100% POWER, 300 EFPD

	H	G	F	E	D	C	B	A
8	* 1.0240	* 1.3580	* 1.1890	* 1.2140	* 1.2020	* 1.3280	* 1.0610	* .6590
	* 1.4622	* 1.1331	* 1.2862	* 1.2342	* 1.1908	* 1.1170	* 1.3247	* 2.1397
9	* 1.3580	* 1.2250	* 1.3570	* 1.1880	* 1.3550	* 1.1520	* 1.2670	* .7890
	* 1.1331	* 1.2146	* 1.1305	* 1.2595	* 1.1119	* 1.2797	* 1.1660	* 1.8129
10	* 1.1890	* 1.3610	* 1.1500	* 1.3700	* 1.2270	* 1.3310	* 1.1380	* .9960
	* 1.2862	* 1.1239	* 1.3193	* 1.1213	* 1.2020	* 1.1381	* 1.2691	* 1.4577
11	* 1.2140	* 1.1900	* 1.3730	* 1.2370	* 1.3590	* 1.1380	* 1.2330	* .7250
	* 1.2342	* 1.2575	* 1.1183	* 1.1956	* 1.1249	* 1.3270	* 1.2284	* 2.0136
12	* 1.2020	* 1.3560	* 1.2260	* 1.3590	* 1.1810	* 1.2620	* .8660	*
	* 1.1908	* 1.1120	* 1.2031	* 1.1244	* 1.2186	* 1.1840	* 1.6633	*
13	* 1.3280	* 1.1520	* 1.3310	* 1.1370	* 1.2640	* .9030	* .6040	*
	* 1.1170	* 1.2787	* 1.1381	* 1.3274	* 1.1831	* 1.5794	* 2.4091	*
14	* 1.0610	* 1.2670	* 1.1380	* 1.2330	* .8650	* .6040	*	*
	* 1.3247	* 1.1660	* 1.2691	* 1.2284	* 1.6645	* 2.4092	*	*
15	* .6590	* .7890	* .9950	* .7250	* F-DEL-H			
	* 2.1397	* 1.8134	* 1.4577	* 2.0155	* M-DEL-H			

TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 100% POWER, 430 EFPD

	H	G	F	E	D	C	B	A
8	1.0150	1.3350	1.1500	1.1660	1.1620	1.3040	1.0570	.6940
	1.4393	1.1486	1.3001	1.2703	1.2174	1.1462	1.3216	2.0303
9	1.3350	1.1840	1.3270	1.1490	1.3260	1.1270	1.2520	.8140
	1.1486	1.2281	1.1592	1.3056	1.1417	1.3209	1.1947	1.7515
10	1.1500	1.3290	1.1210	1.3400	1.1870	1.3110	1.1300	1.0200
	1.3001	1.1567	1.3407	1.1458	1.2214	1.1664	1.2933	1.4488
11	1.1660	1.1500	1.3410	1.1940	1.3310	1.1200	1.2220	.7510
	1.2703	1.3045	1.1447	1.2101	1.1450	1.3247	1.2464	1.9768
12	1.1620	1.3260	1.1860	1.3310	1.1500	1.2430	.8760	
	1.2174	1.1421	1.2229	1.1450	1.2213	1.1853	1.6107	
13	1.3040	1.1280	1.3110	1.1190	1.2440	.9130	.6440	
	1.1462	1.3203	1.1664	1.3247	1.1844	1.5307	2.2246	
14	1.0570	1.2520	1.1290	1.2220	.8760	.6440		
	1.3216	1.1947	1.2933	1.2464	1.6108	2.2248		
15	.6940	.8140	1.0190	.7500	F-DEL-H			
	2.0303	1.7524	1.4488	1.9767	M-DEL-H			

AT 75% POWER, 4 EFPD

	H	G	F	E	D	C	B	A
8	.8870	1.2960	1.2410	1.3440	1.3080	1.3840	1.1220	.6540
	2.0012	1.4528	1.4440	1.3278	1.3102	1.2860	1.5156	2.5871
9	1.2960	1.1950	1.3880	1.2840	1.4020	1.2190	1.3590	.8570
	1.4528	1.4888	1.3072	1.3828	1.2815	1.4471	1.3155	2.0092
10	1.2410	1.3920	1.1260	1.3770	1.2840	1.3690	1.2570	1.0910
	1.4440	1.3046	1.6110	1.3317	1.3814	1.3252	1.3921	1.6085
11	1.3440	1.2860	1.3790	1.2720	1.3570	1.2190	1.3560	.8040
	1.3278	1.3818	1.3300	1.4139	1.3736	1.5321	1.3750	2.2089
12	1.3080	1.4030	1.2830	1.3580	1.1540	1.3030	.9630	
	1.3102	1.2797	1.3824	1.3736	1.3965	1.3735	1.8288	
13	1.3840	1.2200	1.3680	1.2180	1.3070	.9650	.5880	
	1.2860	1.4461	1.3252	1.5321	1.3704	1.7405	2.9574	
14	1.1220	1.3590	1.2570	1.3550	.9620	.5880		
	1.5156	1.3155	1.3931	1.3760	1.8308	2.9623		
15	.6540	.8570	1.0900	.8030	F-DEL-H			
	2.5871	2.0113	1.6098	2.2090	M-DEL-H			

TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 75% POWER, 100 EFPD

	H	G	F	E	D	C	B	A
8	* .9170	* 1.3460	* 1.2200	* 1.3020	* 1.2820	* 1.3980	* 1.1100	* .6510
	* 1.9139	* 1.4146	* 1.4856	* 1.3825	* 1.3371	* 1.2759	* 1.5382	* 2.6078
9	* 1.3460	* 1.2210	* 1.3900	* 1.2560	* 1.4010	* 1.2100	* 1.3400	* .8210
	* 1.4146	* 1.4776	* 1.3174	* 1.4237	* 1.2812	* 1.4609	* 1.3297	* 2.0927
10	* 1.2200	* 1.3930	* 1.1520	* 1.4010	* 1.2790	* 1.3830	* 1.2110	* 1.0490
	* 1.4856	* 1.3148	* 1.5935	* 1.3127	* 1.3885	* 1.3220	* 1.4366	* 1.6632
11	* 1.3020	* 1.2570	* 1.4030	* 1.2660	* 1.3810	* 1.1760	* 1.3110	* .7590
	* 1.3825	* 1.4227	* 1.3110	* 1.4262	* 1.3656	* 1.5746	* 1.4085	* 2.3187
12	* 1.2820	* 1.4020	* 1.2780	* 1.3810	* 1.1010	* 1.2720	* .9030	*
	* 1.3371	* 1.2807	* 1.3894	* 1.3648	* 1.4293	* 1.3933	* 1.9389	*
13	* 1.3980	* 1.2110	* 1.3820	* 1.1750	* 1.2750	* .9040	* .5710	*
	* 1.2759	* 1.4598	* 1.3219	* 1.5759	* 1.3912	* 1.8378	* 3.0383	*
14	* 1.1100	* 1.3410	* 1.2110	* 1.3100	* .9020	* .5710	*	*
	* 1.5382	* 1.3297	* 1.4366	* 1.4090	* 1.9410	* 3.0390	*	*
15	* .6510	* .8200	* 1.0480	* .7590	F-DEL-H			
	* 2.6078	* 2.0926	* 1.6632	* 2.3215	M-DEL-H			

AT 75% POWER, 200 EFPD

	H	G	F	E	D	C	B	A
8	* .9430	* 1.3690	* 1.2080	* 1.2710	* 1.2630	* 1.3890	* 1.1000	* .6560
	* 1.8469	* 1.3942	* 1.4876	* 1.4277	* 1.3637	* 1.2910	* 1.5594	* 2.5547
9	* 1.3690	* 1.2370	* 1.3820	* 1.2340	* 1.4000	* 1.1990	* 1.3160	* .8020
	* 1.3942	* 1.4427	* 1.3379	* 1.4583	* 1.2963	* 1.4818	* 1.3569	* 2.1499
10	* 1.2080	* 1.3930	* 1.1690	* 1.4010	* 1.2690	* 1.3760	* 1.1790	* 1.0170
	* 1.4876	* 1.3360	* 1.5823	* 1.3175	* 1.4033	* 1.3307	* 1.4757	* 1.7158
11	* 1.2710	* 1.2360	* 1.4030	* 1.2620	* 1.3770	* 1.1470	* 1.2660	* .7320
	* 1.4277	* 1.4572	* 1.3166	* 1.4416	* 1.3673	* 1.6105	* 1.4516	* 2.4007
12	* 1.2630	* 1.4020	* 1.2680	* 1.3780	* 1.0610	* 1.2250	* .8610	*
	* 1.3637	* 1.2953	* 1.4043	* 1.3666	* 1.4644	* 1.4312	* 2.0278	*
13	* 1.3890	* 1.2000	* 1.3750	* 1.1460	* 1.2260	* .8560	* .5630	*
	* 1.2910	* 1.4807	* 1.3307	* 1.6109	* 1.4290	* 1.9171	* 3.0803	*
14	* 1.1000	* 1.3160	* 1.1790	* 1.2660	* .8600	* .5630	*	*
	* 1.5594	* 1.3569	* 1.4759	* 1.4516	* 2.0278	* 3.0769	*	*
15	* .6560	* .8020	* 1.0170	* .7320	F-DEL-H			
	* 2.5547	* 2.1519	* 1.7174	* 2.4033	M-DEL-H			

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TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 75% POWER, 300 EFPD

	H	G	F	E	D	C	B	A
8	* .9550 *	* 1.3680 *	* 1.2000 *	* 1.2400 *	* 1.2400 *	* 1.3720 *	* 1.0930 *	* .6700 *
	* 1.7624 *	* 1.3866 *	* 1.5111 *	* 1.4367 *	* 1.3696 *	* 1.3126 *	* 1.5462 *	* 2.5213 *
9	* 1.3680 *	* 1.2350 *	* 1.3860 *	* 1.2150 *	* 1.3910 *	* 1.1850 *	* 1.2970 *	* .8010 *
	* 1.3866 *	* 1.4483 *	* 1.3530 *	* 1.4645 *	* 1.3086 *	* 1.4887 *	* 1.3829 *	* 2.1379 *
10	* 1.2000 *	* 1.3910 *	* 1.1710 *	* 1.3980 *	* 1.2510 *	* 1.3620 *	* 1.1600 *	* 1.0090 *
	* 1.5111 *	* 1.3461 *	* 1.5462 *	* 1.3330 *	* 1.3995 *	* 1.3461 *	* 1.5052 *	* 1.7484 *
11	* 1.2400 *	* 1.2170 *	* 1.4020 *	* 1.2460 *	* 1.3610 *	* 1.1240 *	* 1.2380 *	* .7260 *
	* 1.4367 *	* 1.4634 *	* 1.3321 *	* 1.4430 *	* 1.3787 *	* 1.6401 *	* 1.4852 *	* 2.4145 *
12	* 1.2400 *	* 1.3910 *	* 1.2500 *	* 1.3620 *	* 1.0340 *	* 1.1840 *	* .8390 *	
	* 1.3696 *	* 1.3095 *	* 1.4004 *	* 1.3784 *	* 1.4631 *	* 1.4642 *	* 2.0275 *	
13	* 1.3720 *	* 1.1860 *	* 1.3610 *	* 1.1240 *	* 1.1850 *	* .8280 *	* .5660 *	
	* 1.3126 *	* 1.4875 *	* 1.3461 *	* 1.6404 *	* 1.4623 *	* 1.9164 *	* 2.9840 *	
14	* 1.0930 *	* 1.2970 *	* 1.1600 *	* 1.2380 *	* .8380 *	* .5660 *		
	* 1.5462 *	* 1.3823 *	* 1.5058 *	* 1.4858 *	* 2.0281 *	* 2.9829 *		
15	* .6700 *	* .8010 *	* 1.0080 *	* .7250 *	F-DEL-H			
	* 2.5213 *	* 2.1378 *	* 1.7483 *	* 2.4144 *	M-DEL-H			

AT 75% POWER, 430 EFPD

	H	G	F	E	D	C	B	A
8	* .9290 *	* 1.3290 *	* 1.1610 *	* 1.1960 *	* 1.2110 *	* 1.3640 *	* 1.1010 *	* .7140 *
	* 1.7895 *	* 1.3959 *	* 1.5546 *	* 1.4852 *	* 1.4161 *	* 1.3059 *	* 1.5592 *	* 2.4154 *
9	* 1.3290 *	* 1.1940 *	* 1.3600 *	* 1.1820 *	* 1.3740 *	* 1.1720 *	* 1.2930 *	* .8360 *
	* 1.3959 *	* 1.4843 *	* 1.3424 *	* 1.5011 *	* 1.3045 *	* 1.5012 *	* 1.3779 *	* 2.0749 *
10	* 1.1610 *	* 1.3640 *	* 1.1470 *	* 1.3710 *	* 1.2150 *	* 1.3460 *	* 1.1600 *	* 1.0420 *
	* 1.5546 *	* 1.3374 *	* 1.5676 *	* 1.3297 *	* 1.4310 *	* 1.3468 *	* 1.4914 *	* 1.6958 *
11	* 1.1960 *	* 1.1830 *	* 1.3740 *	* 1.2020 *	* 1.3160 *	* 1.1040 *	* 1.2300 *	* .7550 *
	* 1.4852 *	* 1.4999 *	* 1.3278 *	* 1.4778 *	* 1.3990 *	* 1.6589 *	* 1.4793 *	* 2.3398 *
12	* 1.2110 *	* 1.3730 *	* 1.2140 *	* 1.3170 *	* .9900 *	* 1.1430 *	* .8420 *	
	* 1.4161 *	* 1.3054 *	* 1.4320 *	* 1.3990 *	* 1.5311 *	* 1.4943 *	* 2.0452 *	
13	* 1.3640 *	* 1.1730 *	* 1.3460 *	* 1.1040 *	* 1.1440 *	* .8240 *	* .5940 *	
	* 1.3059 *	* 1.5000 *	* 1.3467 *	* 1.6589 *	* 1.4932 *	* 1.9638 *	* 2.9051 *	
14	* 1.1010 *	* 1.2930 *	* 1.1600 *	* 1.2300 *	* .8420 *	* .5950 *		
	* 1.5592 *	* 1.3768 *	* 1.4918 *	* 1.4793 *	* 2.0474 *	* 2.9037 *		
15	* .7140 *	* .8350 *	* 1.0420 *	* .7550 *	F-DEL-H			
	* 2.4154 *	* 2.0748 *	* 1.6958 *	* 2.3406 *	M-DEL-H			

TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 50% POWER, 4 EFPD

	H	G	F	E	D	C	B	A
8	* .8610 *	* 1.3010 *	* 1.2530 *	* 1.3640 *	* 1.3320 *	* 1.4130 *	* 1.1420 *	* .6580 *
	* 2.5894 *	* 1.9136 *	* 1.9256 *	* 1.7754 *	* 1.8153 *	* 1.7581 *	* 2.1043 *	* 3.5883 *
9	* 1.3010 *	* 1.2010 *	* 1.4070 *	* 1.3040 *	* 1.4270 *	* 1.2420 *	* 1.3810 *	* .8630 *
	* 1.9136 *	* 2.0118 *	* 1.7881 *	* 1.8554 *	* 1.7490 *	* 1.9774 *	* 1.8117 *	* 2.8013 *
10	* 1.2530 *	* 1.4100 *	* 1.1360 *	* 1.3960 *	* 1.3000 *	* 1.3900 *	* 1.2730 *	* 1.0990 *
	* 1.9256 *	* 1.7833 *	* 2.1621 *	* 1.8244 *	* 1.9257 *	* 1.8268 *	* 1.9599 *	* 2.2449 *
11	* 1.3640 *	* 1.3060 *	* 1.3980 *	* 1.2690 *	* 1.3600 *	* 1.2170 *	* 1.3630 *	* .8030 *
	* 1.7754 *	* 1.8542 *	* 1.8220 *	* 1.8949 *	* 1.8053 *	* 2.0141 *	* 1.8540 *	* 3.0584 *
12	* 1.3320 *	* 1.4290 *	* 1.2980 *	* 1.3610 *	* 1.0780 *	* 1.2580 *	* .9460 *	
	* 1.8153 *	* 1.7466 *	* 1.9284 *	* 1.8053 *	* 1.8651 *	* 1.8035 *	* 2.4740 *	
13	* 1.4130 *	* 1.2430 *	* 1.3890 *	* 1.2160 *	* 1.2610 *	* .9160 *	* .5640 *	
	* 1.7581 *	* 1.9759 *	* 1.8267 *	* 2.0157 *	* 1.7989 *	* 2.3393 *	* 3.9485 *	
14	* 1.1420 *	* 1.3810 *	* 1.2730 *	* 1.3620 *	* .9440 *	* .5640 *		
	* 2.1043 *	* 1.8104 *	* 1.9599 *	* 1.8554 *	* 2.4765 *	* 3.9514 *		
15	* .6580 *	* .8630 *	* 1.0990 *	* .8030 *	F-DEL-H			
	* 3.5883 *	* 2.8043 *	* 2.2449 *	* 3.0622 *	M-DEL-H			

AT 50% POWER, 100 EFPD

	H	G	F	E	D	C	B	A
8	* .8780 *	* 1.3540 *	* 1.2410 *	* 1.3310 *	* 1.3210 *	* 1.4430 *	* 1.1410 *	* .6620 *
	* 2.4709 *	* 1.8391 *	* 1.9010 *	* 1.7726 *	* 1.7466 *	* 1.6773 *	* 2.0147 *	* 3.4175 *
9	* 1.3540 *	* 1.2330 *	* 1.4190 *	* 1.2860 *	* 1.4400 *	* 1.2450 *	* 1.3710 *	* .8330 *
	* 1.8391 *	* 1.9252 *	* 1.7058 *	* 1.8289 *	* 1.6853 *	* 1.8976 *	* 1.7626 *	* 2.7886 *
10	* 1.2410 *	* 1.4220 *	* 1.1700 *	* 1.4300 *	* 1.3010 *	* 1.4130 *	* 1.2330 *	* 1.0630 *
	* 1.9010 *	* 1.7024 *	* 2.0433 *	* 1.7309 *	* 1.8267 *	* 1.7459 *	* 1.9473 *	* 2.2323 *
11	* 1.3310 *	* 1.2870 *	* 1.4320 *	* 1.2720 *	* 1.3810 *	* 1.1630 *	* 1.3160 *	* .7600 *
	* 1.7726 *	* 1.8276 *	* 1.7292 *	* 1.8678 *	* 1.7907 *	* 2.0748 *	* 1.8796 *	* 3.1338 *
12	* 1.3210 *	* 1.4410 *	* 1.3000 *	* 1.3820 *	* 1.0290 *	* 1.1930 *	* .8760 *	
	* 1.7466 *	* 1.6853 *	* 1.8278 *	* 1.7907 *	* 1.8670 *	* 1.8267 *	* 2.5643 *	
13	* 1.4430 *	* 1.2460 *	* 1.4120 *	* 1.1630 *	* 1.1950 *	* .8280 *	* .5370 *	
	* 1.6773 *	* 1.8962 *	* 1.7471 *	* 2.0748 *	* 1.8240 *	* 2.4095 *	* 3.9558 *	
14	* 1.1410 *	* 1.3720 *	* 1.2330 *	* 1.3160 *	* .8750 *	* .5370 *		
	* 2.0147 *	* 1.7626 *	* 1.9473 *	* 1.8810 *	* 2.5671 *	* 3.9608 *		
15	* .6620 *	* .8330 *	* 1.0630 *	* .7600 *	F-DEL-H			
	* 3.4175 *	* 2.7916 *	* 2.2343 *	* 3.1376 *	M-DEL-H			

TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 50% POWER, 200 EFPD

	H	G	F	E	D	C	B	A
8	* .8860	* 1.3750	* 1.2300	* 1.3040	* 1.3150	* 1.4470	* 1.1070	* .6630
	* 2.3750	* 1.8138	* 1.9307	* 1.8209	* 1.7727	* 1.6764	* 2.0317	* 3.4011
9	* 1.3750	* 1.2440	* 1.4130	* 1.2720	* 1.4450	* 1.2440	* 1.3570	* .8210
	* 1.8138	* 1.9111	* 1.7228	* 1.8628	* 1.6798	* 1.9075	* 1.7851	* 2.8321
10	* 1.2300	* 1.4160	* 1.1640	* 1.4380	* 1.2980	* 1.4180	* 1.2110	* 1.0410
	* 1.9307	* 1.7137	* 2.0152	* 1.7063	* 1.8333	* 1.7384	* 1.9689	* 2.2836
11	* 1.3040	* 1.2730	* 1.4400	* 1.2650	* 1.3780	* 1.1370	* 1.2800	* .7410
	* 1.8209	* 1.8614	* 1.7039	* 1.8839	* 1.7995	* 2.0744	* 1.8590	* 3.1070
12	* 1.3150	* 1.4460	* 1.2970	* 1.3790	* .9850	* 1.1270	* .8340	*
	* 1.7727	* 1.6785	* 1.8345	* 1.7982	* 1.9042	* 1.8832	* 2.6678	*
13	* 1.4470	* 1.2440	* 1.4180	* 1.1360	* 1.1290	* .7710	* .5250	*
	* 1.6764	* 1.9011	* 1.7397	* 2.0746	* 1.8804	* 2.5028	* 3.9945	*
14	* 1.1070	* 1.3570	* 1.2110	* 1.2800	* .8330	* .5250	*	*
	* 2.0317	* 1.7846	* 1.9689	* 1.8592	* 2.6699	* 3.9948	*	*
15	* .6630	* .8200	* 1.0400	* .7400	* F-DEL-H			
	* 3.4011	* 2.8334	* 2.2838	* 3.1070	* M-DEL-H			

AT 50% POWER, 300 EFPD

	H	G	F	E	D	C	B	A
8	* .8900	* 1.3690	* 1.2080	* 1.2700	* 1.2930	* 1.4310	* 1.0640	* .6680
	* 2.3064	* 1.7849	* 1.9615	* 1.8673	* 1.8050	* 1.6842	* 2.0486	* 3.3572
9	* 1.3690	* 1.2340	* 1.4040	* 1.2480	* 1.4520	* 1.2310	* 1.3420	* .8210
	* 1.7849	* 1.9129	* 1.7217	* 1.8990	* 1.6731	* 1.9221	* 1.7953	* 2.8472
10	* 1.2080	* 1.4090	* 1.1550	* 1.4260	* 1.2840	* 1.4100	* 1.1970	* 1.0360
	* 1.9615	* 1.7146	* 2.0055	* 1.7106	* 1.8323	* 1.6964	* 1.9340	* 2.2368
11	* 1.2700	* 1.2490	* 1.4270	* 1.2460	* 1.3650	* 1.1220	* 1.2600	* .7390
	* 1.8673	* 1.8972	* 1.7065	* 1.9017	* 1.7759	* 2.0550	* 1.8179	* 3.0051
12	* 1.2930	* 1.4510	* 1.2830	* 1.3650	* .9600	* 1.0980	* .8190	*
	* 1.8050	* 1.6743	* 1.8351	* 1.7758	* 1.9374	* 1.8828	* 2.6970	*
13	* 1.4310	* 1.2320	* 1.4100	* 1.1210	* 1.0970	* .7540	* .5320	*
	* 1.6842	* 1.9206	* 1.6976	* 2.0567	* 1.8800	* 2.5605	* 3.9771	*
14	* 1.0640	* 1.3420	* 1.1970	* 1.2600	* .8180	* .5320	*	*
	* 2.0486	* 1.7943	* 1.9340	* 1.8193	* 2.6971	* 3.9774	*	*
15	* .6680	* .8200	* 1.0350	* .7390	* F-DEL-H			
	* 3.3572	* 2.8470	* 2.2388	* 3.0060	* M-DEL-H			



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TABLE 5 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - NORMAL OPERATION

AT 50% POWER, 430 EFPD

	H	G	F	E	D	C	B	A
8	* .8530 *	* 1.3110 *	* 1.1610 *	* 1.2200 *	* 1.2620 *	* 1.4210 *	* 1.0460 *	* .6960 *
	* 2.2915 *	* 1.7775 *	* 2.0168 *	* 1.9315 *	* 1.8486 *	* 1.6855 *	* 2.0469 *	* 3.2094 *
9	* 1.3110 *	* 1.1720 *	* 1.3580 *	* 1.2100 *	* 1.4380 *	* 1.2160 *	* 1.3430 *	* .8580 *
	* 1.7775 *	* 1.9588 *	* 1.7317 *	* 1.9444 *	* 1.6819 *	* 1.9441 *	* 1.7977 *	* 2.7650 *
10	* 1.1610 *	* 1.3610 *	* 1.1080 *	* 1.3920 *	* 1.2500 *	* 1.4040 *	* 1.2060 *	* 1.0790 *
	* 2.0168 *	* 1.7267 *	* 2.0309 *	* 1.7180 *	* 1.8872 *	* 1.7198 *	* 1.9596 *	* 3.2174 *
11	* 1.2200 *	* 1.2110 *	* 1.4000 *	* 1.1920 *	* 1.3420 *	* 1.1160 *	* 1.2700 *	* .7810 *
	* 1.9315 *	* 1.9428 *	* 1.7144 *	* 1.9441 *	* 1.7773 *	* 2.0892 *	* 1.8479 *	* 2.9559 *
12	* 1.2620 *	* 1.4370 *	* 1.2480 *	* 1.3230 *	* .9200 *	* 1.0930 *	* .8390 *	
	* 1.8486 *	* 1.6824 *	* 1.8885 *	* 1.7773 *	* 1.9751 *	* 1.9054 *	* 2.6952 *	
13	* 1.4210 *	* 1.2170 *	* 1.4040 *	* 1.1150 *	* 1.0930 *	* .7650 *	* .5720 *	
	* 1.6855 *	* 1.9434 *	* 1.7210 *	* 2.0911 *	* 1.9026 *	* 2.5566 *	* 3.7885 *	
14	* 1.0460 *	* 1.3430 *	* 1.2060 *	* 1.2690 *	* .8380 *	* .5720 *		
	* 2.0469 *	* 1.7970 *	* 1.9613 *	* 1.8479 *	* 2.6955 *	* 3.7888 *		
15	* .6960 *	* .8580 *	* 1.0790 *	* .7800 *	* F-DEL-H			
	* 3.2094 *	* 2.7681 *	* 2.2193 *	* 2.9561 *	* M-DEL-H			

TABLE 6

F-DEL-H & M-DEL-H VALUES - POWER ESCALATION

AT 100% POWER, 4 EFPD

	H	G	F	E	D	C	B	A
8	* .9140 *	* 1.2940 *	* 1.2310 *	* 1.3280 *	* 1.2870 *	* 1.3580 *	* 1.1050 *	* .6510 *
	* 1.6024 *	* 1.1790 *	* 1.2112 *	* 1.1209 *	* 1.1160 *	* 1.0941 *	* 1.2737 *	* 2.1559 *
9	* 1.2940 *	* 1.1920 *	* 1.3740 *	* 1.2680 *	* 1.3800 *	* 1.2000 *	* 1.3390 *	* .8520 *
	* 1.1790 *	* 1.2346 *	* 1.0977 *	* 1.1714 *	* 1.0863 *	* 1.2308 *	* 1.1543 *	* 1.6869 *
10	* 1.2310 *	* 1.3770 *	* 1.1200 *	* 1.3600 *	* 1.2700 *	* 1.3530 *	* 1.2410 *	* 1.0820 *
	* 1.2112 *	* 1.0951 *	* 1.3405 *	* 1.1319 *	* 1.1621 *	* 1.1537 *	* 1.2167 *	* 1.3991 *
11	* 1.3280 *	* 1.2700 *	* 1.3620 *	* 1.2740 *	* 1.3540 *	* 1.2190 *	* 1.3470 *	* .8040 *
	* 1.1209 *	* 1.1702 *	* 1.1313 *	* 1.1538 *	* 1.1194 *	* 1.2473 *	* 1.1661 *	* 1.8709 *
12	* 1.2870 *	* 1.3820 *	* 1.2680 *	* 1.3550 *	* 1.2570 *	* 1.3400 *	* .9750 *	
	* 1.1160 *	* 1.0847 *	* 1.1633 *	* 1.1194 *	* 1.1436 *	* 1.1204 *	* 1.4809 *	
13	* 1.3580 *	* 1.2010 *	* 1.3530 *	* 1.2180 *	* 1.3430 *	* 1.0060 *	* .6100 *	
	* 1.0941 *	* 1.2304 *	* 1.1537 *	* 1.2472 *	* 1.1172 *	* 1.4156 *	* 2.3665 *	
14	* 1.1050 *	* 1.3390 *	* 1.2400 *	* 1.3460 *	* .9750 *	* .6100 *		
	* 1.2737 *	* 1.1539 *	* 1.2172 *	* 1.1661 *	* 1.4814 *	* 2.3704 *		
15	* .6510 *	* .8510 *	* 1.0810 *	* .8030 *	* F-DEL-H			
	* 2.1559 *	* 1.6878 *	* 1.4004 *	* 1.8730 *	* M-DEL-H			

AT 75% POWER, 4 EFPD

	H	G	F	E	D	C	B	A
8	* .9020 *	* 1.2940 *	* 1.2330 *	* 1.3330 *	* 1.2950 *	* 1.3680 *	* 1.1090 *	* .6450 *
	* 2.0012 *	* 1.4528 *	* 1.4440 *	* 1.3294 *	* 1.3185 *	* 1.2924 *	* 1.5156 *	* 2.5871 *
9	* 1.2940 *	* 1.1920 *	* 1.3780 *	* 1.2730 *	* 1.3980 *	* 1.2060 *	* 1.3460 *	* .8480 *
	* 1.4528 *	* 1.4888 *	* 1.3091 *	* 1.3878 *	* 1.2862 *	* 1.4530 *	* 1.3241 *	* 2.0247 *
10	* 1.2330 *	* 1.3810 *	* 1.1200 *	* 1.3680 *	* 1.2790 *	* 1.3600 *	* 1.2460 *	* 1.0800 *
	* 1.4440 *	* 1.3065 *	* 1.6110 *	* 1.3356 *	* 1.3872 *	* 1.3350 *	* 1.4036 *	* 1.6235 *
11	* 1.3330 *	* 1.2750 *	* 1.3700 *	* 1.2790 *	* 1.3620 *	* 1.2220 *	* 1.3540 *	* .7990 *
	* 1.3294 *	* 1.3861 *	* 1.3347 *	* 1.4139 *	* 1.3736 *	* 1.5321 *	* 1.3873 *	* 2.2333 *
12	* 1.2950 *	* 1.3900 *	* 1.2770 *	* 1.3620 *	* 1.2390 *	* 1.3370 *	* .9730 *	
	* 1.3185 *	* 1.2844 *	* 1.3881 *	* 1.3736 *	* 1.3965 *	* 1.3735 *	* 1.8288 *	
13	* 1.3680 *	* 1.2070 *	* 1.3590 *	* 1.2210 *	* 1.3400 *	* .9980 *	* .6000 *	
	* 1.2924 *	* 1.4519 *	* 1.3350 *	* 1.5321 *	* 1.3704 *	* 1.7405 *	* 2.9574 *	
14	* 1.1090 *	* 1.3470 *	* 1.2460 *	* 1.3530 *	* .9720 *	* .6000 *		
	* 1.5156 *	* 1.3239 *	* 1.4035 *	* 1.3883 *	* 1.8308 *	* 2.9623 *		
15	* .6450 *	* .8480 *	* 1.0790 *	* .7990 *	* F-DEL-H			
	* 2.5871 *	* 2.0246 *	* 1.6246 *	* 2.2339 *	* M-DEL-H			

TABLE 6 (CONTINUED)

F-DEL-H & M-DEL-H VALUES - POWER ESCALATION

AT 50% POWER, 4 EFPD

	H	G	F	E	D	C	B	A
8	.8960	1.2930	1.2310	1.3330	1.2980	1.3750	1.1080	.6380
	2.5894	1.9136	1.9256	1.7754	1.8153	1.7581	2.1043	3.5883
9	1.2930	1.1910	1.3780	1.2740	1.3920	1.2090	1.3510	.8420
	1.9136	2.0118	1.7881	1.8554	1.7490	1.9774	1.8117	2.8013
10	1.2310	1.3820	1.1180	1.3750	1.2860	1.3670	1.2490	1.0740
	1.9256	1.7833	2.1621	1.8244	1.9257	1.8268	1.9599	2.2449
11	1.3330	1.2760	1.3770	1.2880	1.3710	1.2250	1.3590	.7930
	1.7754	1.8542	1.8220	1.8949	1.8053	2.0141	1.8540	3.0584
12	1.2980	1.3940	1.2840	1.3720	1.2440	1.3440	.9720	
	1.8153	1.7466	1.9284	1.8053	1.8651	1.8035	2.4740	
13	1.3750	1.2100	1.3660	1.2240	1.3470	.9980	.5940	
	1.7581	1.9759	1.8267	2.0157	1.7989	2.3393	3.9485	
14	1.1080	1.3510	1.2480	1.3580	.9710	.5930		
	2.1043	1.8104	1.9599	1.8554	2.4765	3.9514		
15	.6380	.8410	1.0740	.7920	F-DEL-H			
	3.5883	2.8043	2.2449	3.0622	M-DEL-H			

AT 30% POWER, 4 EFPD

	H	G	F	E	D	C	B	A
8	.8910	1.2920	1.2290	1.3320	1.3010	1.3790	1.1070	.6310
	2.5894	1.9136	1.9256	1.7754	1.8153	1.7581	2.1043	3.5883
9	1.2920	1.1910	1.3780	1.2740	1.3950	1.2110	1.3530	.8360
	1.9136	2.0118	1.7881	1.8554	1.7490	1.9774	1.8117	2.8013
10	1.2290	1.3820	1.1170	1.3810	1.2920	1.3730	1.2500	1.0690
	1.9256	1.7833	2.1621	1.8244	1.9257	1.8268	1.9599	2.2449
11	1.3320	1.2760	1.3830	1.2970	1.3800	1.2270	1.3630	.7870
	1.7754	1.8542	1.8220	1.8949	1.8053	2.0141	1.8540	3.0584
12	1.3010	1.3970	1.2900	1.3810	1.2510	1.3500	.9720	
	1.8153	1.7466	1.9284	1.8053	1.8651	1.8035	2.4740	
13	1.3790	1.2120	1.3720	1.2260	1.3540	.9990	.5880	
	1.7581	1.9759	1.8267	2.0157	1.7989	2.3393	3.9485	
14	1.1070	1.3540	1.2490	1.3620	.9700	.5870		
	2.1043	1.8104	1.9599	1.8554	2.4765	3.9514		
15	.6310	.8360	1.0680	.7870	F-DEL-H			
	3.5883	2.8043	2.2449	3.0622	M-DEL-H			

**Table 7**  
**Maximum Allowable Radial Peaks (MARPS)**  
**Non-Axial Blanket Fuel**

<u>Core Height</u> (ft)	<u>1.1 Axial Peak</u> MARP	<u>1.2 Axial Peak</u> MARP	<u>1.3 Axial Peak</u> MARP	<u>1.4 Axial Peak</u> MARP	<u>1.5 Axial Peak</u> MARP
0.12	1.5809	1.6266	1.6722	1.7113	1.7477
1.2	1.5806	1.6259	1.6677	1.7085	1.7433
2.4	1.5836	1.6265	1.6663	1.7025	1.7126
3.6	1.5859	1.6263	1.6635	1.6960	1.6735
4.8	1.5871	1.6240	1.6571	1.6751	1.6313
6.0	1.5878	1.6196	1.6470	1.6303	1.5868
7.2	1.5864	1.6130	1.6265	1.5848	1.5378
8.4	1.5781	1.5956	1.5773	1.5327	1.4886
9.6	1.5655	1.5612	1.5208	1.4815	1.4399
10.8	1.5459	1.5152	1.4717	1.4292	1.3883
12.0	1.5133	1.4693	1.4274	1.3878	1.3500

<u>Core Height</u> (ft)	<u>1.6 Axial Peak</u> MARP	<u>1.7 Axial Peak</u> MARP	<u>1.8 Axial Peak</u> MARP	<u>1.9 Axial Peak</u> MARP	<u>2.1 Axial Peak</u> MARP
0.12	1.7331	1.7054	1.6438	1.5839	1.5401
1.2	1.7029	1.6789	1.6193	1.5624	1.5154
2.4	1.6616	1.6433	1.5869	1.5328	1.4801
3.6	1.6211	1.6011	1.5504	1.5013	1.4395
4.8	1.5811	1.5622	1.5121	1.4626	1.4030
6.0	1.5415	1.5238	1.4763	1.4291	1.3619
7.2	1.4913	1.4766	1.4344	1.3920	1.3271
8.4	1.4450	1.4296	1.3880	1.3485	1.2824
9.6	1.4013	1.3882	1.3490	1.3126	1.2501
10.8	1.3526	1.3433	1.3081	1.2726	1.2091
12.0	1.3140	1.3078	1.2749	1.2443	1.1890

**Axial Blanket Fuel**

<u>Core Height</u> (ft)	<u>1.1 Axial Peak</u> MARP	<u>1.2 Axial Peak</u> MARP	<u>1.3 Axial Peak</u> MARP	<u>1.4 Axial Peak</u> MARP	<u>1.5 Axial Peak</u> MARP
0.12	1.5491	1.5942	1.6385	1.6771	1.7127
1.2	1.5491	1.5933	1.6346	1.6743	1.7087
2.4	1.5518	1.5942	1.6331	1.6686	1.6787
3.6	1.5545	1.5942	1.6300	1.6621	1.6400
4.8	1.5555	1.5917	1.6238	1.6414	1.5987
6.0	1.5564	1.5875	1.6138	1.5979	1.5553
7.2	1.5545	1.5808	1.5938	1.5529	1.5073
8.4	1.5464	1.5633	1.5454	1.5021	1.4587
9.6	1.5345	1.5300	1.4900	1.4521	1.4113
10.8	1.5145	1.4850	1.4423	1.4007	1.3607
12.0	1.4827	1.4400	1.3985	1.3600	1.3227

<u>Core Height</u> (ft)	<u>1.6 Axial Peak</u> MARP	<u>1.7 Axial Peak</u> MARP	<u>1.8 Axial Peak</u> MARP	<u>1.9 Axial Peak</u> MARP	<u>2.1 Axial Peak</u> MARP
0.12	1.6988	1.7053	1.6439	1.5837	1.5400
1.2	1.6688	1.6788	1.6194	1.5626	1.5152
2.4	1.6281	1.6435	1.5867	1.5326	1.4800
3.6	1.5888	1.6012	1.5506	1.5011	1.4395
4.8	1.5494	1.5624	1.5122	1.4626	1.4029
6.0	1.5106	1.5235	1.4761	1.4289	1.3619
7.2	1.4613	1.4765	1.4344	1.3921	1.3271
8.4	1.4163	1.4294	1.3878	1.3484	1.2824
9.6	1.3731	1.3882	1.3489	1.3126	1.2500
10.8	1.3256	1.3435	1.3083	1.2726	1.2090
12.0	1.2875	1.3076	1.2750	1.2442	1.1890