Revised Embrittlement Database 08/23/2004 E. D. Eason Version 8-04 Including corrections from 6-04 E10.02.02 meeting, emails from B. Hall, S. Byrne, W. Server (Burgos), and R. Lott (Stan Anderson)

Includes calibration dataset from 05/00, outliers from NUREG 6551 and 7/00 models, new points from NewEmbrittlementDatabase.xls (received from Stan Rosinski 7/10/03), and additional new 5/04 points from completeness check

Key to color coding, revision history, and important notes are given below the data |-------- "Best-Estimate Charpy Specimen Chemistry, wt%" -----|

PRE-DECISIONAL - NOT FOR DISTRIBUTION

Dataset	MAT_ID	PLANT_I	REAC_	CAPSU	HEAT_ID	PROD	FLUX_	SPEC	Hrs_use	CAP_F1	Flux_used	Tc	UTT30	ITT30	DTT30	C	MN	MnGen	P	S	SI	NI	CR	MO	CU	VESSEL_MFG	Reference
NRG6551	A5083	BD1	PWR	U	FBD101	F		LT	9639	3.70E+18	1.07E+11	551.0	-66.00	-60.00	6.00	0.213	1.207	1.207	0.009	0.010	0.300	0.736	0.108	0.494	0.046	Babcock & Wilcox	
NRG6551	A5083	BD1	PWR	X	FBD101	F		LT	37080	1.14E+19	8.54E+10	551.0	-66.00	-36.00	30.00	0.213	1.207	1.207	0.009	0.010	0.300	0.736	0.108	0.494	0.046	Babcock & Wilcox	
7-03P	A5083	BD1	PWR	W	FBD101	F		LT	66664	2.09E+19	8.71E+10	551.0	-66.00	-51.51	14.49	0.213	1.207	1.207	0.009	0.010	0.300	0.736	0.108	0.494	0.046	Babcock & Wilcox	[8]
NRG6551	A5083	BD1	PWR	U	FBD101	F		TL	9639	3.70E+18	1.07E+11	551.0	-44.00	-69.00	-25.00	0.213	1.207	1.207	0.009	0.010	0.300	0.736	0.108	0.494	0.046	Babcock & Wilcox	
NRG6551	A5083	BD1	PWR	X	FBD101	F		TL	37080	1.14E+19	8.54E+10	551.0	-44.00	-18.00	26.00	0.213	1.207	1.207	0.009	0.010	0.300	0.736	0.108	0.494	0.046	Babcock & Wilcox	
7-03P	A5083	BD1	PWR	W	FBD101	F		TL	66664	2.09E+19	8.71E+10	551.0	-44.08	-9.63	34.45	0.213	1.207	1.207	0.009	0.010	0.300	0.736	0.108	0.494	0.046	Babcock & Wilcox	[8]
NRG6551	A5083	BD2	PWR	U	FBD201	F		LT	10056	3.85E+18	1.06E+11	558.0	-15.00	-27.00	-12.00	0.230	1.340	1.340	0.012	0.006	0.290	0.787	0.087	0.525	0.057	Babcock & Wilcox	
5-00Calib	A5083	BD2	PWR	X	FBD201	F		LT	36880	1.13E+19	8.51E+10	558.0	-15.00	-19.00	-5.00	0.230	1.340	1.340	0.012	0.006	0.290	0.787	0.087	0.525	0.057	Babcock & Wilcox	
7-03P	A5083	BD2	PWR	W	FBD201	F		LT	74723	2.25E+19	8.36E+10	558.0	-15.00	-9.36	5.64	0.230	1.340	1.340	0.012	0.006	0.290	0.787	0.087	0.525	0.057	Babcock & Wilcox	[9]
NRG6551	A5083	BD2	PWR	U	FBD201	F		TL	10056	3.85E+18	1.06E+11	558.0	-21.00	-20.00	1.00	0.230	1.340	1.340	0.012	0.006	0.290	0.787	0.087	0.525	0.057	Babcock & Wilcox	
5-00Calib	A5083	BD2	PWR	X	FBD201	F		TL	36880	1.13E+19	8.51E+10	558.0	-21.00	13.00	34.00	0.230	1.340	1.340	0.012	0.006	0.290	0.787	0.087	0.525	0.057	Babcock & Wilcox	
7-03P	A5083	BD2	PWR	W	FBD201	F		TL	74723	2.25E+19	8.36E+10	558.0	-21.00	12.42	33.42	0.230	1.340	1.340	0.012	0.006	0.290	0.787	0.087	0.525	0.057	Babcock & Wilcox	[9]
7-03B-OCA	5082	OYS	BWR	H	FBWEPR	F		TL	27384	1.60E+18	1.62E+10	530.0	-29.91	-22.67	7.24	####	####	0.781	0.006	0.012	0.250	0.750	#####	#####	0.040	Babcock & Wilcox	[1]
NRG6551	A5082	BY1	PWR	U	FBY101	F		LT	10083	3.72E+18	1.02E+11	551.0	-86.00	-60.00	26.00	0.198	0.684	0.684	0.005	0.010	0.256	0.761	0.350	0.562	0.033	Babcock & Wilcox	
NRG6551	A5082	BY1	PWR	X	FBY101	F		LT	49444	1.39E+19	7.81E+10	551.0	-86.00	-56.00	30.00	0.198	0.684	0.684	0.005	0.010	0.256	0.761	0.350	0.562	0.033	Babcock & Wilcox	
5-00Calib	A5082	BY1	PWR	W	FBY101	F		LT	80998	2.41E+19	8.26E+10	551.0	-85.59	-26.02	60.00	0.198	0.684	0.684	0.005	0.010	0.256	0.761	0.350	0.562	0.033	Babcock & Wilcox	
NRG6551	A5082	BY1	PWR	U	FBY101	F		TL	10083	3.72E+18	1.02E+11	551.0	-70.00	-50.00	20.00	0.198	0.684	0.684	0.005	0.010	0.256	0.761	0.350	0.562	0.033	Babcock & Wilcox	
NRG6551	A5082	BY1	PWR	X	FBY101	F		TL	49444	1.39E+19	7.81E+10	551.0	-70.00	-16.00	54.00	0.198	0.684	0.684	0.005	0.010	0.256	0.761	0.350	0.562	0.033	Babcock & Wilcox	
5-00Calib	A5082	BY1	PWR	W	FBY101	F		TL	80998	2.41E+19	8.26E+10	551.0	-69.64	-36.95	33.00	0.198	0.684	0.684	0.005	0.010	0.256	0.761	0.350	0.562	0.033	Babcock & Wilcox	
NRG6551	A5083	BY2	PWR	U	FBY201	F		LT	10111	3.93E+18	1.08E+11	551.0	-32.00	-33.00	-1.00	0.124	1.266	1.266	0.009	0.011	0.361	0.704	0.072	0.417	0.053	Babcock & Wilcox	
NRG6551	A5083	BY2	PWR	W	FBY201	F		LT	40587	1.21E+19	8.28E+10	551.0	-32.00	-30.00	2.00	0.124	1.266	1.266	0.009	0.011	0.361	0.704	0.072	0.417	0.053	Babcock & Wilcox	
5-00Calib	A5083	BY2	PWR	X	FBY201	F		LT	75125	2.16E+19	7.99E+10	551.0	-32.22	-15.25	17.00	0.124	1.266	1.266	0.009	0.011	0.361	0.704	0.072	0.417	0.053	Babcock & Wilcox	
NRG6551	A5083	BY2	PWR	U	FBY201	F		TL	10111	3.93E+18	1.08E+11	551.0	-42.00	-22.00	20.00	0.124	1.266	1.266	0.009	0.011	0.361	0.704	0.072	0.417	0.053	Babcock & Wilcox	
NRG6551	A5083	BY2	PWR	W	FBY201	F		TL	40587	1.21E+19	8.28E+10	551.0	-42.00	-13.00	29.00	0.124	1.266	1.266	0.009	0.011	0.361	0.704	0.072	0.417	0.053	Babcock & Wilcox	
5-00Calib	A5083	BY2	PWR	X	FBY201	F		TL	75125	2.16E+19	7.99E+10	551.0	-41.94	-2.30	40.00	0.124	1.266	1.266	0.009	0.011	0.361	0.704	0.072	0.417	0.053	Babcock & Wilcox	
NRG6551	A5082	CB1	PWR	Z	FCB101	F		LT	6944	3.32E+18	1.33E+11	562.0	-4.00	-24.00	-21.00	0.204	0.725	0.725	0.008	0.009	0.292	0.845	0.399	0.580	0.090	Rotterdamse Droogdok Madtdschappij (Netherland	
5-00Calib	A5082	CB1	PWR	Y	FCB101	F		LT	43611	1.35E+19	8.60E+10	560.0	-3.88	11.00	15.00	0.204	0.725	0.725	0.008	0.009	0.292	0.845	0.399	0.580	0.090	Rotterdamse Droogdok Madtdschappij (Netherland	
5-00Calib	A5082	CB1	PWR	V	FCB101	F		LT	81436	2.11E+19	7.20E+10	562.0	-3.88	24.69	29.00	0.204	0.725	0.725	0.008	0.009	0.292	0.845	0.399	0.580	0.090	Rotterdamse Droogdok Madtdschappij (Netherland	
NRG6551	A5082	CB1	PWR	Z	FCB101	F		TL	6944	3.32E+18	1.33E+11	562.0	-16.00	-2.00	14.00	0.204	0.725	0.725	0.008	0.009	0.292	0.845	0.399	0.580	0.090	Rotterdamse Droogdok Madtdschappij (Netherland	
5-00Calib	A5082	CB1	PWR	Y	FCB101	F		TL	43611	1.35E+19	8.60E+10	560.0	-16.06	29.00	45.00	0.204	0.725	0.725	0.008	0.009	0.292	0.845	0.399	0.580	0.090	Rotterdamse Droogdok Madtdschappij (Netherland	
5-00Calib	A5082	CB1	PWR	V	FCB101	F		TL	81436	2.11E+19	7.20E+10	562.0	-16.06	30.56	47.00	0.204	0.725	0.725	0.008	0.009	0.292	0.845	0.399	0.580	0.090	Rotterdamse Droogdok Madtdschappij (Netherland	
NRG6551	A5082	DB1	PWR	A	FDB101	F		TL	29146	1.29E+19	1.23E+11	556.0	-30.00	-34.00	-4.00	0.260	0.680	0.680	0.004	0.006	0.300	0.770	0.380	0.640	0.040	Babcock & Wilcox	
NRG6551	A5082	DB1	PWR	F	FDB102	F		TL	8976	1.96E+18	6.07E+10	556.0	10.00	-1.00	-10.00	0.220	0.630	0.630	0.011	0.011	0.270	0.810	0.320	0.630	0.020	Babcock & Wilcox	
NRG6551	A5082	DB1	PWR	B	FDB102	F		TL	22632	5.92E+18	7.27E+10	556.0	10.00	6.00	-4.00	0.220	0.630	0.630	0.011	0.011	0.270	0.810	0.320	0.630	0.020	Babcock & Wilcox	
NRG6551	A5082	DB1	PWR	A	FDB102	F		TL	29146	1.29E+19	1.23E+11	556.0	10.00	47.00	38.00	0.220	0.630	0.630	0.011	0.011	0.270	0.810	0.320	0.630	0.020	Babcock & Wilcox	
NRG6551	A5082	DB1	PWR	D	FDB102	F		TL	47755	9.62E+18	5.60E+10	556.0	10.00	15.00	6.00	0.220	0.630	0.630	0.011	0.011	0.270	0.810	0.320	0.630	0.020	Babcock & Wilcox	
7-03P-DB	A5083	DB1	PWR	PWR-5	FEP2JP	F		LT	49096	1.14E+19	6.45E+10	556.0	-76.26	-83.30	-7.04	0.170	1.300	1.300	0.009	0.003	0.250	0.730	#####	0.470	0.063	-999	[3]
NRG6551	A5082	GIN	PWR	V	FGIN01	F		LT	12361	5.85E+18	1.31E+11	552.0	-42.00	-7.00	36.00	0.190	0.670	0.670	0.010	0.011	0.200	0.690	0.370	0.570	0.050	Babcock & Wilcox	
NRG6551	A5082	GIN	PWR	R	FGIN01	F		LT	22333	1.10E+19	1.37E+11	550.0	-42.00	20.00	62.00	0.190	0.670	0.670	0.010	0.011	0.200	0.690	0.370	0.570	0.050	Babcock & Wilcox	
NRG6551	A5082	GIN	PWR	T	FGIN01	F		LT	60278	1.91E+19	8.80E+10	548.0	-42.00	-8.00	34.00	0.190	0.670	0.670	0.010	0.011	0.200	0.690	0.370	0.570	0.050	Babcock & Wilcox	
5-00Calib	A5082	GIN	PWR	S	FGIN01	F		LT	149167	3.51E+19	6.54E+10	545.0	-42.00	5.00	47.00	0.190	0.670	0.670	0.010	0.011	0.200	0.690	0.370	0.570	0.050	Babcock & Wilcox	
NRG6551	A5082	GIN	PWR	V	FGIN02	F		LT	12361	5.85E+18	1.31E+11	552.0	-24.00	-36.00	-13.00	0.180	0.660	0.660	0.010	0.007	0.230	0.690	0.330	0.580	0.070	Babcock & Wilcox	
NRG6551	A5082	GIN	PWR	R	FGIN02	F		LT	22333	1.10E+19	1.37E+11	550.0	-24.00	-9.00	15.00	0.180	0.660	0.660	0.010	0.007	0.230	0.690	0.330	0.580	0.070	Babcock & Wilcox	
NRG6551	A5082	GIN	PWR	T	FGIN02	F		LT	60278	1.91E+19	8.80E+10	548.0	-24.00	-58.00	-35.00	0.180	0.660	0.660	0.010	0.007	0.230	0.690	0.330	0.580	0.070	Babcock & Wilcox	
5-00Calib	A5082	GIN	PWR	S	FGIN02	F		LT	149167	3.51E+19	6.54E+10	545.0	-24.00	45.00	68.00	0.180	0.660	0.660	0.010	0.007	0.230	0.690	0.330	0.580	0.070	Babcock & Wilcox	

ATTACHMENT 4

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
66																														
67	NRG6551	A5082	KWE	PWR	V	FKWE01	F		LT	11278	6.08E+18	1.50E+11	532.0	-34.00	-10.00	24.00	0.210	0.690	0.690	0.010	0.011	0.250	0.710	0.400	0.580	0.060	Combustion Engineering			
68	NRG6551	A5082	KWE	PWR	R	FKWE01	F		LT	40556	1.90E+19	1.30E+11	532.0	-34.00	-19.00	15.00	0.210	0.690	0.690	0.010	0.011	0.250	0.710	0.400	0.580	0.060	Combustion Engineering			
69	NRG6551	A5082	KWE	PWR	P	FKWE01	F		LT	97500	2.84E+19	8.09E+10	532.0	-34.00	15.00	49.00	0.210	0.690	0.690	0.010	0.011	0.250	0.710	0.400	0.580	0.060	Combustion Engineering			
70	NRG6551	A5082	KWE	PWR	S	FKWE01	F		LT	142009	3.45E+19	6.75E+10	532.0	-34.00	24.00	58.00	0.210	0.690	0.690	0.010	0.011	0.250	0.710	0.400	0.580	0.060	Combustion Engineering			
71																														
72	NRG6551	A5082	KWE	PWR	V	FKWE02	F		LT	11278	6.08E+18	1.50E+11	532.0	-71.00	-54.00	18.00	0.200	0.790	0.790	0.010	0.009	0.280	0.750	0.350	0.580	0.060	Combustion Engineering			
73	NRG6551	A5082	KWE	PWR	R	FKWE02	F		LT	40556	1.90E+19	1.30E+11	532.0	-71.00	-36.00	35.00	0.200	0.790	0.790	0.010	0.009	0.280	0.750	0.350	0.580	0.060	Combustion Engineering			
74	NRG6551	A5082	KWE	PWR	P	FKWE02	F		LT	97500	2.84E+19	8.09E+10	532.0	-71.00	-25.00	46.00	0.200	0.790	0.790	0.010	0.009	0.280	0.750	0.350	0.580	0.060	Combustion Engineering			
75	NRG6551	A5082	KWE	PWR	S	FKWE02	F		LT	142009	3.45E+19	6.75E+10	532.0	-71.00	-13.00	59.00	0.200	0.790	0.790	0.010	0.009	0.280	0.750	0.350	0.580	0.060	Combustion Engineering			
76																														
77	NRG6551	A5082	MC2	PWR	V	FMC201	F		LT	9000	3.33E+18	1.03E+11	558.0	-74.00	-12.00	63.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
78	NRG6551	A5082	MC2	PWR	X	FMC201	F		LT	36389	1.46E+19	1.11E+11	558.0	-74.00	19.00	93.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
79	NRG6551	A5082	MC2	PWR	U	FMC201	F		LT	53056	2.00E+19	1.05E+11	558.0	-74.00	13.00	87.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
80	5-00Calib	A5082	MC2	PWR	W	FMC201	F		LT	82751	2.97E+19	9.97E+10	558.0	-74.21	19.01	93.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
81																														
82	NRG6551	A5082	MC2	PWR	V	FMC201	F		TL	9000	3.33E+18	1.03E+11	558.0	-19.00	39.00	58.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
83	NRG6551	A5082	MC2	PWR	X	FMC201	F		TL	36389	1.46E+19	1.11E+11	558.0	-19.00	72.00	92.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
84	NRG6551	A5082	MC2	PWR	U	FMC201	F		TL	53056	2.00E+19	1.05E+11	558.0	-19.00	65.00	84.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
85	5-00Calib	A5082	MC2	PWR	W	FMC201	F		TL	82751	2.97E+19	9.97E+10	558.0	-19.30	111.59	131.00	0.181	0.686	0.686	0.012	0.015	0.179	0.780	0.414	0.592	0.154	Rotterdamse Droogdok Madtdschappij (Netherland			
86																														
87	NRG6551	A5082	NA1	PWR	V	FNA101	F		LT	9444	2.63E+18	7.74E+10	550.0	-2.00	47.00	49.00	0.195	0.703	0.703	0.019	0.013	0.240	0.828	0.326	0.637	0.156	Rotterdamse Droogdok Madtdschappij (Netherland			
88	NRG6551	A5082	NA1	PWR	U	FNA101	F		LT	49722	8.72E+18	4.87E+10	553.0	-2.00	110.00	112.00	0.195	0.703	0.703	0.019	0.013	0.240	0.828	0.326	0.637	0.156	Rotterdamse Droogdok Madtdschappij (Netherland			
89	7-03P	A5082	NA1	PWR	W	FNA101	F		LT	129336	2.05E+19	4.41E+10	553.4	-1.71	89.68	91.39	0.195	0.703	0.703	0.019	0.013	0.240	0.828	0.326	0.637	0.156	Rotterdamse Droogdok Madtdschappij (Netherland			
90																														
91	NRG6551	A5082	NA1	PWR	V	FNA101	F		TL	9444	2.63E+18	7.74E+10	550.0	40.00	69.00	29.00	0.195	0.703	0.703	0.019	0.013	0.240	0.828	0.326	0.637	0.156	Rotterdamse Droogdok Madtdschappij (Netherland			
92	NRG6551	A5082	NA1	PWR	U	FNA101	F		TL	49722	8.72E+18	4.87E+10	553.0	40.00	112.00	72.00	0.195	0.703	0.703	0.019	0.013	0.240	0.828	0.326	0.637	0.156	Rotterdamse Droogdok Madtdschappij (Netherland			
93	7-03P	A5082	NA1	PWR	W	FNA101	F		TL	129336	2.05E+19	4.41E+10	553.4	40.17	135.78	95.61	0.195	0.703	0.703	0.019	0.013	0.240	0.828	0.326	0.637	0.156	Rotterdamse Droogdok Madtdschappij (Netherland			
94																														
95	NRG6551	A5082	NA2	PWR	V	FNA201	F		LT	8722	2.46E+18	7.83E+10	550.0	-22.00	-10.00	12.00	0.190	0.715	0.715	0.018	0.013	0.230	0.860	0.345	0.615	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
96	NRG6551	A5082	NA2	PWR	U	FNA201	F		LT	53333	9.80E+18	5.10E+10	554.0	-22.00	13.00	35.00	0.190	0.715	0.715	0.018	0.013	0.230	0.860	0.345	0.615	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
97	7-03P	A5082	NA2	PWR	W	FNA201	F		LT	134160	2.09E+19	4.33E+10	554.5	-22.12	57.36	79.48	0.190	0.715	0.715	0.018	0.013	0.230	0.860	0.345	0.615	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
98																														
99	NRG6551	A5082	NA2	PWR	V	FNA201	F		TL	8722	2.46E+18	7.83E+10	550.0	54.00	69.00	15.00	0.190	0.715	0.715	0.018	0.013	0.230	0.860	0.345	0.615	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
100	NRG6551	A5082	NA2	PWR	U	FNA201	F		TL	53333	9.80E+18	5.10E+10	554.0	54.00	120.00	66.00	0.190	0.715	0.715	0.018	0.013	0.230	0.860	0.345	0.615	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
101	7-03P	A5082	NA2	PWR	W	FNA201	F		TL	134160	2.09E+19	4.33E+10	554.5	54.07	119.92	65.85	0.190	0.715	0.715	0.018	0.013	0.230	0.860	0.345	0.615	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
102																														
103	NRG6551	A5082	OC2	PWR	C	FOC201	F		LT	10561	1.02E+18	2.68E+10	556.0	-26.00	-3.00	24.00	0.240	0.630	0.630	0.006	0.012	0.250	0.750	0.360	0.620	0.040	Babcock & Wilcox			
104	NRG6551	A5082	OC2+CR3	PWR	A	FOC201	F		LT	18672	3.37E+18	5.01E+10	556.0	-26.00	-33.00	-7.00	0.240	0.630	0.630	0.006	0.012	0.250	0.750	0.360	0.620	0.040	Babcock & Wilcox			
105	NRG6551	A5082	OC2+CR3	PWR	E	FOC201	F		LT	55584	1.21E+19	6.05E+10	556.0	-26.00	-8.00	18.00	0.240	0.630	0.630	0.006	0.012	0.250	0.750	0.360	0.620	0.040	Babcock & Wilcox			
106																														
107	NRG6551	A5082	OC2+CR3	PWR	A	FOC201	F		TL	18672	3.37E+18	5.01E+10	556.0	-30.00	-27.00	4.00	0.240	0.630	0.630	0.006	0.012	0.250	0.750	0.360	0.620	0.040	Babcock & Wilcox			
108	NRG6551	A5082	OC2+CR3	PWR	E	FOC201	F		TL	55584	1.21E+19	6.05E+10	556.0	-30.00	-22.00	8.00	0.240	0.630	0.630	0.006	0.012	0.250	0.750	0.360	0.620	0.040	Babcock & Wilcox			
109																														
110	NRG6551	A5082	OC3	PWR	A	FOC301	F		LT	8286	8.05E+17	2.70E+10	556.0	3.00	15.00	12.00	0.240	0.720	0.720	0.014	0.012	0.210	0.760	0.340	0.620	0.020	Babcock & Wilcox			
111																														
112	NRG6551	A5082	OC3	PWR	A	FOC301	F		TL	8286	8.05E+17	2.70E+10	556.0	-2.00	6.00	7.00	0.240	0.720	0.720	0.014	0.012	0.210	0.760	0.340	0.620	0.020	Babcock & Wilcox			
113	NRG6551	A5082	OC3+CR3	PWR	B	FOC301	F		TL	16392	3.12E+18	5.29E+10	556.0	-2.00	2.00	4.00	0.240	0.720	0.720	0.014	0.012	0.210	0.760	0.340	0.620	0.020	Babcock & Wilcox			
114	NRG6551	A5082	OC3+CR3	PWR	D	FOC301	F		TL	68443	1.45E+19	5.88E+10	556.0	-2.00	21.00	22.00	0.240	0.720	0.720	0.014	0.012	0.210	0.760	0.340	0.620	0.020	Babcock & Wilcox			
115																														
116	NRG6551	A5082	OC3	PWR	A	FOC302	F		TL	8286	8.05E+17	2.70E+10	556.0	1.00	53.00	52.00	0.210	0.580	0.580	0.011	0.015	0.240	0.730	0.300	0.600	0.010	Babcock & Wilcox			
117	NRG6551	A5082	OC3+CR3	PWR	B	FOC302	F		TL	16392	3.12E+18	5.29E+10	556.0	1.00	8.00	6.00	0.210	0.580	0.580	0.011	0.015	0.240	0.730	0.300	0.600	0.010	Babcock & Wilcox			
118	NRG6551	A5082	OC3+CR3	PWR	D	FOC302	F		TL	68443	1.45E+19	5.88E+10	556.0	1.00	39.00	38.00	0.210	0.580	0.580	0.011	0.015	0.240	0.730	0.300	0.600	0.010	Babcock & Wilcox			
119																														
120	NRG6551	A5082	PB2	PWR	V	FPB201	F		LT	13361	6.50E+18	1.35E+11	542.0	-55.00	-15.00	39.00	0.220	0.590	0.590	0.010	0.008	0.230	0.700	0.330	0.600	0.051	Babcock & Wilcox			
121	NRG6551	A5082	PB2	PWR	T	FPB201	F		LT	30278	8.61E+18	7.90E+10	542.0	-55.00	-20.00	35.00	0.220	0.590	0.590	0.010	0.008	0.230	0.700	0.330	0.600	0.051	Babcock & Wilcox			
122	NRG6551	A5082	PB2	PWR	R	FPB201	F		LT	45556	2.20E+19	1.34E+11	542.0	-55.00	-4.00	50.00	0.220	0.590	0.590	0.010	0.008	0.230	0.700	0.330	0.600	0.051	Babcock & Wilcox			
123	NRG6551	A5082	PB2	PWR	S	FPB201	F		LT	129444	3.10E+19	6.65E+10	542.0	-55.00	7.00	61.00	0.220	0.590	0.590	0.010	0.008	0.230	0.700	0.330	0.600	0.051	Babcock & Wilcox			
124																														
125	NRG6551	A5082	PB2	PWR	V	FPB202	F		LT	13361	6.50E+18	1.35E+11	542.0	-87.00	-48.00	39.00	0.200	0.650	0.650	0.009	0.009	0.240	0.710	0.350	0.590	0.088	Babcock & Wilcox			
126	NRG6551	A5082	PB2	PWR	T	FPB202	F		LT	30278	8.61E+18	7.90E+10	542.0	-87.00	-25.00	62.00	0.200	0.650	0.650	0.009	0.009	0.240	0.710	0.350	0.590	0.088	Babcock & Wilcox			
127	NRG6551	A5082	PB2	PWR	R	FPB202	F		LT	45556	2.20E+19	1.34E+11	542.0	-87.00	0.00	88.00	0.200	0.650	0.650	0.009	0.009	0.240	0.710	0.350	0.590	0.088	Babcock & Wilcox			
128	NRG6551	A5082	PB2	PWR	S	FPB202	F		LT	129444	3.10E+19	6.65E+10	542.0	-87.00	13.00	101.00	0.200	0.650	0.650	0.009	0.009	0.240	0.710	0.350	0.590	0.088	Babcock & Wilcox			
129																														
130	NRG6551	A5083	PI1	PWR	V	FPI101	F		LT	11722	5.40E+18	1.28E+11	527.0	-35.00	0.00	35.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
131	NRG6551	A5083	PI1	PWR	P	FPI101	F		LT	50278	1.46E+19	8.07E+10	527.0	-35.00	-14.00	21.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
132	NRG6551	A5083	PI1	PWR	R	FPI101	F		LT	75000	3.95E+19	1.46E+11	527.0	-35.00	57.00	92.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
133	5-00Calib	A5083	PI1	PWR	S	FPI101	F		LT	158840	4.02E+19	7.03E+10	527.0	-35.22	60.17	95.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
134																														
135	NRG6551	A5083	PI1	PWR	V	FPI101	F		TL	11722	5.40E+18	1.28E+11	527.0	-26.00	18.00	44.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
136	NRG6551	A5083	PI1	PWR	P	FPI101	F		TL	50278	1.46E+19	8.07E+10	527.0	-26.00	4.00	31.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
137	NRG6551	A5083	PI1	PWR	R	FPI101	F		TL	75000	3.95E+19	1.46E+11	527.0	-26.00	55.00	81.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
138	5-00Calib	A5083	PI1	PWR	S	FPI101	F		TL	158840	4.02E+19	7.03E+10	527.0	-26.39	43.38	70.00	0.170	1.410	1.410	0.013	0.005	0.280	0.720	0.170	0.480	0.060	Societe des Forges et Ateliers du Creusot			
139																														
140	NRG6551	A5083	PI2	PWR	V	FPI201	F		LT	12222	5.78E+18	1.31E+11	527.0	-24.00	14.00	38.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
141	NRG6551	A5083	PI2	PWR	T	FPI201	F		LT	36111	1.09E+19	8.38E+10	527.0	-24.00	28.00	51.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
142	NRG6551	A5083	PI2	PWR	R	FPI201	F		LT	77222	4.05E+19	1.46E+11	527.0	-24.00	62.00	86.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
143	5-00Calib	A5083	PI2	PWR	P	FPI201	F		LT	151126	4.17E+19	7.66E+10	527.0	-23.87	70.55	94.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
144																														
145	NRG6551	A5083	PI2	PWR	V	FPI201	F		TL	12222	5.78E+18	1.31E+11	527.0	-1.00	36.00	36.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
146	NRG6551	A5083	PI2	PWR	T	FPI201	F		TL	36111	1.09E+19	8.38E+10	527.0	-1.00	29.00	29.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
147	NRG6551	A5083	PI2	PWR	R	FPI201	F		TL	77222	4.05E+19	1.46E+11	527.0	-1.00	83.00	83.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
148	5-00Calib	A5083	PI2	PWR	P	FPI201	F		TL	151126	4.17E+19	7.66E+10	527.0	-0.63	102.67	103.00	0.174	1.215	1.215	0.011	0.012	0.272	0.697	0.144	0.458	0.077	Societe des Forges et Ateliers du Creusot			
149																														
150	NRG6551	A5082	SQ1	PWR	T	FSQ101	F		LT	9361	2.88E+18	8.55E+10	545.0	-31.00	32.00	63.00	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
151	NRG6551	A5082	SQ1	PWR	U	FSQ101	F		LT	25139	9.55E+18	1.06E+11	545.0	-31.00	78.00	109.00	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
152	NRG6551	A5082	SQ1	PWR	X	FSQ101	F		LT	46111	1.39E+19	8.37E+10	545.0	-31.00	106.00	138.00	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
153	7-03P	A5082	SQ1	PWR	Y	FSQ101	F		LT	87863	2.19E+19	6.92E+10	545.0	-31.31	93.56	124.87	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droog [5]			
154																														
155	NRG6551	A5082	SQ1	PWR	T	FSQ101	F		TL	9361	2.88E+18	8.55E+10	545.0	40.00	93.00	53.00	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
156	NRG6551	A5082	SQ1	PWR	U	FSQ101	F		TL	25139	9.55E+18	1.06E+11	545.0	40.00	114.00	74.00	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
157	NRG6551	A5082	SQ1	PWR	X	FSQ101	F		TL	46111	1.39E+19	8.37E+10	545.0	40.00	147.00	106.00	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
158	7-03P	A5082	SQ1	PWR	Y	FSQ101	F		TL	87863	2.19E+19	6.92E+10	545.0	40.42	174.21	133.79	0.170	0.620	0.620	0.020	0.016	0.220	0.760	0.370	0.560	0.130	Rotterdamse Droog [5]			
159																														
160	NRG6551	A5082	SQ2	PWR	T	FSQ201	F		LT	9333	2.42E+18	7.20E+10	545.0	-54.00	2.00	55.00	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
161	NRG6551	A5082	SQ2	PWR	U	FSQ201	F		LT	25528	6.08E+18	6.62E+10	545.0	-54.00	15.00	68.00	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
162	NRG6551	A5082	SQ2	PWR	X	FSQ201	F		LT	46944	1.03E+19	6.09E+10	545.0	-54.00	24.00	78.00	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
163	7-03P	A5082	SQ2	PWR	Y	FSQ201	F		LT	92330	2.14E+19	6.44E+10	545.0	-53.82	69.47	123.29	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droog [4]			
164																														
165	NRG6551	A5082	SQ2	PWR	T	FSQ201	F		TL	9333	2.42E+18	7.20E+10	545.0	-14.00	36.00	50.00	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
166	NRG6551	A5082	SQ2	PWR	U	FSQ201	F		TL	25528	6.08E+18	6.62E+10	545.0	-14.00	54.00	68.00	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
167	NRG6551	A5082	SQ2	PWR	X	FSQ201	F		TL	46944	1.03E+19	6.09E+10	545.0	-14.00	99.00	113.00	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
168	7-03P	A5082	SQ2	PWR	Y	FSQ201	F		TL	92330	2.14E+19	6.44E+10	545.0	-14.21	83.56	97.77	0.185	0.710	0.710	0.018	0.015	0.245	0.740	0.335	0.605	0.130	Rotterdamse Droog [4]			
169																														
170	NRG6551	A5082	TP3	PWR	T	FTP301	F		LT	10056	7.39E+18	2.04E+11	547.0	-45.00	-27.00	18.00	0.200	0.640	0.640	0.010	0.010	0.260	0.700	0.400	0.620	0.060	Babcock & Wilcox			
171	NRG6551	A5082	TP3	PWR	S	FTP301	F		LT	30278	1.72E+19	1.58E+11	544.5	-45.00	-32.00	13.00	0.200	0.640	0.640	0.010	0.010	0.260	0.700	0.400	0.620	0.060	Babcock & Wilcox			
172																														
173	NRG6551	A5082	TP3	PWR	S	FTP302	F		LT	30278	1.72E+19	1.58E+11	544.5	-58.00	-16.00	42.00	0.190	0.610	0.610	0.010	0.008	0.200	0.670	0.380	0.580	0.080	Babcock & Wilcox			
174	NRG6551	A5082	TP3	PWR	V	FTP302	F		LT	70556	1.53E+19	6.02E+10	547.0	-58.00	-2.00	55.00	0.190	0.610	0.610	0.010	0.008	0.200	0.670	0.380	0.580	0.080	Babcock & Wilcox			
175	7-03P	A5082	TP3	PWR	X	FTP302	F		LT	173886	2.90E+19	4.63E+10	547.0	-57.67	16.60	74.27	0.190	0.610	0.610	0.010	0.008	0.200	0.670	0.380	0.580	0.080	Babcock & Wilcox	[18]		
176																														
177	NRG6551	A5082	TP4	PWR	T	FTP401	F		LT	10278	7.08E+18	1.91E+11	547.0	-26.00	-14.00	12.00	0.210	0.670	0.670	0.011	0.009	0.230	0.700	0.310	0.560	0.060	Babcock & Wilcox			
178	NRG6551	A5082	TP4	PWR	S	FTP401	F		LT	30000	1.43E+19	1.32E+11	547.0	-26.00	-44.00	-18.00	0.210	0.670	0.670	0.011	0.009	0.230	0.700	0.310	0.560	0.060	Babcock & Wilcox			
179																														
180	NRG6551	A5082	TP4	PWR	S	FTP402	F		LT	30000	1.43E+19	1.32E+11	547.0	-14.00	34.00	48.00	0.220	0.670	0.670	0.010	0.009	0.200	0.710	0.330	0.560	0.050	Babcock & Wilcox			
181																														
182	7-03P	A5082	WB1	PWR	U	FWB101	F		LT	10512	5.05E+18	1.33E+11	559.0	-54.39	39.30	93.69	0.210	0.710	0.710	0.013	0.015	0.250	0.800	0.330	0.590	0.160	Rotterdamse Droog [22]			
183	5-04	A5082	WB1	PWR	W	FWB101	F		LT	33398	1.23E+19	1.02E+11	559.0	-54.39	55.03	109.42	0.210	0.710	0.710	0.013	0.015	0.250	0.800	0.330	0.590	0.160	Rotterdamse Droog [31]			
184																														
185	7-03P	A5082	WB1	PWR	U	FWB101	F		TL	10512	5.05E+18	1.33E+11	559.0	45.10	74.82	29.72	0.210	0.710	0.710	0.013	0.015	0.250	0.800	0.330	0.590	0.160	Rotterdamse Droog [22]			
186	5-04	A5082	WB1	PWR	W	FWB101	F		TL	33398	1.23E+19	1.02E+11	559.0	45.10	126.02	80.92	0.210	0.710	0.710	0.013	0.015	0.250	0.800	0.330	0.590	0.160	Rotterdamse Droog [31]			
187																														
188	NRG6551	A533B1	AN1	PWR	E	PAN101	P		LT	8281	7.27E+17	2.44E+10	556.0	-19.00	-1.00	18.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
189	NRG6551	A533B1	AN1+DB1	PWR	A	PAN101	P		LT	30912	1.03E+19	9.26E+10	556.0	-19.00	28.00	47.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
190	NRG6551	A533B1	AN1+DB1	PWR	C	PAN101	P		LT	46908	1.46E+19	8.65E+10	556.0	-19.00	34.00	53.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
191																														
192	NRG6551	A533B1	AN1	PWR	E	PAN101	P		TL	8281	7.27E+17	2.44E+10	556.0	10.00	54.00	44.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
193	NRG6551	A533B1	AN1+DB1	PWR	A	PAN101	P		TL	30912	1.03E+19	9.26E+10	556.0	10.00	81.00	72.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
194	NRG6551	A533B1	AN1+DB1	PWR	C	PAN101	P		TL	46908	1.46E+19	8.65E+10	556.0	10.00	54.00	45.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
195																														

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
196	NRG6551	A533B1	AN1+DB1	PWR	B	PAN102	P		LT	17256	4.28E+18	6.89E+10	556.0	-9.00	13.00	22.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
197																														
198	NRG6551	A533B1	AN1+DB1	PWR	B	PAN102	P		TL	17256	4.28E+18	6.89E+10	556.0	14.00	9.00	-5.00	0.210	1.320	1.320	0.010	0.016	0.200	0.520	0.190	0.570	0.150	Babcock & Wilcox			
199																														
200	NRG6551	A533B1	AN2	PWR	W97	PAN201	P		LT	14815	3.41E+18	6.39E+10	553.0	4.00	25.00	21.00	0.220	1.400	1.400	0.013	0.011	0.210	0.561	0.150	0.630	0.078	Combustion Engineering			
201																														
202	NRG6551	A533B1	AN2	PWR	W97	PAN201	P		TL	14815	3.33E+18	6.24E+10	553.0	12.00	51.00	38.00	0.220	1.400	1.400	0.013	0.011	0.210	0.561	0.150	0.630	0.078	Combustion Engineering			
203	7-03P	A533B1	AN2	PWR	w104	PAN201	P		TL	137424	2.94E+19	5.94E+10	553.0	12.49	76.53	64.04	0.220	1.400	1.400	0.013	0.011	0.210	0.561	0.150	0.630	0.078	Combustion Engineering			
204																														
205	NRG6551	A302BM	BF2	BWR	30D	PBF201	P		LT	79299	1.52E+17	5.32E+08	528.0	-40.00	-13.00	27.00	0.200	1.350	1.350	0.007	0.011	0.190	0.550	#####	0.490	0.140	Babcock & Wilcox			
206																														
207	NRG6551	A302B	BR	BWa	119	PBR_01	P		TL	6578	1.50E+18	6.33E+10	570.0	5.00	-20.00	-25.00	0.300	1.420	1.420	0.016	0.018	0.250	0.180	0.130	0.510	0.100	Combustion Engineering			
208	NRG6551	A302B	BR	BWa	122	PBR_01	P		TL	6578	2.30E+19	9.71E+11	570.0	5.00	72.00	67.00	0.300	1.420	1.420	0.016	0.018	0.250	0.180	0.130	0.510	0.100	Combustion Engineering			
209	NRG6551	A302B	BR	BWa	124	PBR_01	P		TL	18290	1.07E+20	1.63E+12	570.0	5.00	156.00	151.00	0.300	1.420	1.420	0.016	0.018	0.250	0.180	0.130	0.510	0.100	Combustion Engineering			
210	NRG6551	A302B	BR	BWa	127	PBR_01	P		TL	26114	7.10E+18	7.55E+10	570.0	5.00	61.00	56.00	0.300	1.420	1.420	0.016	0.018	0.250	0.180	0.130	0.510	0.100	Combustion Engineering			
211	NRG6551	A302B	BR	BWa	125	PBR_01	P		TL	75556	2.27E+19	8.35E+10	570.0	5.00	110.00	105.00	0.300	1.420	1.420	0.016	0.018	0.250	0.180	0.130	0.510	0.100	Combustion Engineering			
212																														
213	NRG6551	A533B1	BV1	PWR	V	PBV101	P		LT	10167	2.81E+18	7.68E+10	545.0	-2.00	125.00	126.00	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engineering			
214	NRG6551	A533B1	BV1	PWR	U	PBV101	P		LT	31389	6.53E+18	5.78E+10	545.0	-2.00	116.00	117.00	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engineering			
215	NRG6551	A533B1	BV1	PWR	W	PBV101	P		LT	51667	9.13E+18	4.91E+10	545.0	-2.00	145.00	147.00	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engineering			
216	7-03P	A533B1	BV1	PWR	Y	PBV101	P		LT	125268	2.15E+19	4.77E+10	543.0	-1.50	138.51	140.01	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engine [6]			
217																														
218	NRG6551	A533B1	BV1	PWR	V	PBV101	P		TL	10167	2.81E+18	7.68E+10	545.0	18.00	156.00	138.00	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engineering			
219	NRG6551	A533B1	BV1	PWR	U	PBV101	P		TL	31389	6.53E+18	5.78E+10	545.0	18.00	149.00	132.00	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engineering			
220	NRG6551	A533B1	BV1	PWR	W	PBV101	P		TL	51667	9.13E+18	4.91E+10	545.0	18.00	196.00	179.00	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engineering			
221	7-03P	A533B1	BV1	PWR	Y	PBV101	P		TL	125268	2.15E+19	4.77E+10	543.0	17.69	183.91	166.22	0.200	1.310	1.310	0.010	0.015	0.180	0.540	0.140	0.550	0.200	Combustion Engine [6]			
222																														
223	5-04	A533B1	BV2	PWR	U	PBV201	P		LT	10889	6.30E+18	1.61E+11	543.0	33.80	57.78	23.98	0.240	1.320	1.320	0.010	0.016	0.240	0.560	0.080	0.590	0.050	Combustion Engine [46]			
224	5-04	A533B1	BV2	PWR	V	PBV201	P		LT	52420	2.64E+19	1.40E+11	543.0	33.80	93.52	59.72	0.240	1.320	1.320	0.010	0.016	0.240	0.560	0.080	0.590	0.050	Combustion Engine [26]			
225	7-03P	A533B1	BV2	PWR	W	PBV201	P		LT	85585	3.63E+19	1.18E+11	543.0	33.80	103.41	69.61	0.240	1.320	1.320	0.010	0.016	0.240	0.560	0.080	0.590	0.050	Combustion Engine [7]			
226																														
227	5-04	A533B1	BV2	PWR	U	PBV201	P		TL	10889	6.30E+18	1.61E+11	543.0	39.77	57.11	17.34	0.240	1.320	1.320	0.010	0.016	0.240	0.560	0.080	0.590	0.050	Combustion Engine [46]			
228	5-04	A533B1	BV2	PWR	V	PBV201	P		TL	52420	2.64E+19	1.40E+11	543.0	39.77	88.20	48.43	0.240	1.320	1.320	0.010	0.016	0.240	0.560	0.080	0.590	0.050	Combustion Engine [26]			
229	7-03P	A533B1	BV2	PWR	W	PBV201	P		TL	85585	3.63E+19	1.18E+11	543.0	39.77	101.75	61.98	0.240	1.320	1.320	0.010	0.016	0.240	0.560	0.080	0.590	0.050	Combustion Engine [7]			
230																														
231	5-04	A533B1	BW2	BWR	W300	PBW201	P		LT	95547	4.06E+17	1.18E+09	530.0	9.95	28.84	18.89	0.230	1.500	1.500	0.010	0.015	0.270	0.560	#####	0.570	0.120	Chicago Bridge and	[45]		
232																														
233	7-03B-OC	A302BM	OYS	BWR	H	PBWE_1	P		TL	27377	1.57E+18	1.59E+10	530.0	-0.66	52.62	53.28	0.200	1.400	1.400	0.012	0.017	0.200	0.630	#####	0.500	0.110	Babcock & Wilcox	[1]		
234	7-03B-OC	A302BM	OYS	BWR	F	PBWE_1	P		TL	57616	1.86E+18	8.95E+09	530.0	-0.66	43.75	44.41	0.200	1.400	1.400	0.012	0.017	0.200	0.630	#####	0.500	0.110	Babcock & Wilcox	[2]		
235																														
236	7-03P-DB	A302B	DB1	PWR	PWR-5	PBWE_2	P		LT	49096	1.14E+19	6.45E+10	556.0	91.75	199.79	108.04	####	####	1.365	0.026	0.022	0.220	0.190	#####	#####	0.240	-999	[3]		
237																														
238	7-03P-DB	A302BM	DB1	PWR	PWR-5	PBWE_3a	P		LT	49096	1.14E+19	6.45E+10	556.0	-19.57	149.43	169.00	####	####	1.365	0.008	0.011	0.230	0.620	#####	#####	0.240	-999	[3]		
239																														
240	7-03P-DB	A302BM	DB1	PWR	PWR-5	PBWE_3b	P		LT	49096	1.14E+19	6.45E+10	556.0	16.33	167.46	151.13	####	####	1.365	0.008	0.011	0.230	0.620	#####	#####	0.240	-999	[3]		
241																														
242	5-00Calib	A533B1	CB2	PWR	Z	PCB201	P		LT	7556	3.38E+18	1.24E+11	560.0	-19.00	2.00	21.00	0.235	1.393	1.393	0.012	0.013	0.285	0.610	0.087	0.580	0.081	Combustion Engineering			
243	NRG6551	A533B1	CB2	PWR	X	PCB201	P		LT	39722	1.22E+19	8.53E+10	562.0	-19.00	26.00	45.00	0.235	1.393	1.393	0.012	0.013	0.285	0.610	0.087	0.580	0.081	Combustion Engineering			
244	7-03P	A533B1	CB2	PWR	V	PCB201	P		LT	80942	2.38E+19	8.17E+10	562.0	-19.00	22.03	41.03	0.235	1.393	1.393	0.012	0.013	0.285	0.610	0.087	0.580	0.081	Combustion Engine [11]			
245																														
246	5-00Calib	A533B1	CB2	PWR	Z	PCB201	P		TL	7556	3.38E+18	1.24E+11	560.0	1.00	32.00	31.00	0.235	1.393	1.393	0.012	0.013	0.285	0.610	0.087	0.580	0.081	Combustion Engineering			
247	NRG6551	A533B1	CB2	PWR	X	PCB201	P		TL	39722	1.22E+19	8.53E+10	562.0	1.00	52.00	51.00	0.235	1.393	1.393	0.012	0.013	0.285	0.610	0.087	0.580	0.081	Combustion Engineering			
248	7-03P	A533B1	CB2	PWR	V	PCB201	P		TL	80942	2.38E+19	8.17E+10	562.0	1.00	61.11	60.11	0.235	1.393	1.393	0.012	0.013	0.285	0.610	0.087	0.580	0.081	Combustion Engine [11]			
249																														
250	NRG6551	A533B1	CC1	PWR	W263	PCC103	P		LT	25772	6.20E+18	6.68E+10	545.0	6.00	71.00	65.00	0.260	1.374	1.374	0.009	0.032	0.316	0.640	0.033	0.581	0.120	Combustion Engineering			
251	5-00Calib	A533B1	CC1	PWR	W97	PCC103	P		LT	97222	2.64E+19	7.54E+10	545.0	6.00	118.00	111.00	0.260	1.374	1.374	0.009	0.032	0.316	0.640	0.033	0.581	0.120	Combustion Engineering			
252																														
253	5-00Calib	A533B1	CC1	PWR	W97	PCC103	P		TL	97222	2.64E+19	7.54E+10	545.0	21.00	131.00	110.00	0.260	1.374	1.374	0.009	0.032	0.316	0.640	0.033	0.581	0.120	Combustion Engineering			
254																														
255	NRG6551	A533B1	CC2	PWR	W263	PCC202	P		LT	40114	8.06E+18	5.58E+10	545.0	14.00	95.00	81.00	0.208	1.210	1.210	0.005	0.007	0.205	0.660	0.104	0.570	0.133	Combustion Engineering			
256	5-00Calib	A533B1	CC2	PWR	W97	PCC202	P		LT	96120	1.85E+19	5.35E+10	545.0	14.00	122.00	108.00	0.208	1.210	1.210	0.005	0.007	0.205	0.660	0.104	0.570	0.133	Combustion Engineering			
257																														
258	5-00Calib	A533B1	CC2	PWR	W97	PCC202	P		TL	96120	1.85E+19	5.35E+10	545.0	33.00	136.00	103.00	0.208	1.210	1.210	0.005	0.007	0.205	0.660	0.104	0.570	0.133	Combustion Engineering			
259																														
260	NRG6551	A533B1	CH1	BWR	30D	PCH101	P		LT	61871	1.30E+17	5.84E+08	531.0	26.00	38.00	12.00	0.200	1.420	1.420	0.016	0.022	0.300	0.530	#####	0.530	0.165	-999			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
261																														
262	NRG6551	A533B1	CK1	PWR	T	PCK101	P		LT	11111	2.69E+18	6.73E+10	537.0	8.00	67.00	58.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
263	NRG6551	A533B1	CK1	PWR	X	PCK101	P		LT	29722	8.13E+18	7.60E+10	537.0	8.00	94.00	86.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
264	NRG6551	A533B1	CK1	PWR	Y	PCK101	P		LT	43333	1.23E+19	7.88E+10	537.0	8.00	106.00	97.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
265	NRG6551	A533B1	CK1	PWR	U	PCK101	P		LT	80556	1.77E+19	6.10E+10	537.0	8.00	114.00	106.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
266																														
267	NRG6551	A533B1	CK1	PWR	T	PCK101	P		TL	11111	2.69E+18	6.73E+10	537.0	20.00	81.00	60.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
268	NRG6551	A533B1	CK1	PWR	X	PCK101	P		TL	29722	8.13E+18	7.60E+10	537.0	20.00	125.00	105.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
269	NRG6551	A533B1	CK1	PWR	Y	PCK101	P		TL	43333	1.23E+19	7.88E+10	537.0	20.00	130.00	110.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
270	NRG6551	A533B1	CK1	PWR	U	PCK101	P		TL	80556	1.77E+19	6.10E+10	537.0	20.00	115.00	94.00	0.240	1.400	1.400	0.009	0.009	0.250	0.490	0.068	0.460	0.140	Combustion Engineering			
271																														
272	NRG6551	A533B1	CK2	PWR	T	PCK201	P		LT	9444	2.18E+18	6.41E+10	542.0	25.00	81.00	56.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
273	NRG6551	A533B1	CK2	PWR	Y	PCK201	P		LT	28333	6.62E+18	6.49E+10	542.0	25.00	107.00	82.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
274	NRG6551	A533B1	CK2	PWR	X	PCK201	P		LT	46111	1.03E+19	6.20E+10	542.0	25.00	116.00	91.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
275	NRG6551	A533B1	CK2	PWR	U	PCK201	P		LT	75833	1.50E+19	5.49E+10	542.0	25.00	121.00	96.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
276																														
277	NRG6551	A533B1	CK2	PWR	T	PCK201	P		TL	9444	2.18E+18	6.41E+10	542.0	25.00	103.00	78.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
278	NRG6551	A533B1	CK2	PWR	Y	PCK201	P		TL	28333	6.62E+18	6.49E+10	542.0	25.00	127.00	102.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
279	NRG6551	A533B1	CK2	PWR	X	PCK201	P		TL	46111	1.03E+19	6.20E+10	542.0	25.00	137.00	112.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
280	NRG6551	A533B1	CK2	PWR	U	PCK201	P		TL	75833	1.50E+19	5.49E+10	542.0	25.00	162.00	137.00	0.215	1.285	1.285	0.017	0.014	0.215	0.580	0.072	0.525	0.110	Chicago Bridge and Iron			
281																														
282	NRG6551	A533B1	CL1	PWR	U	PCL101	P		LT	9222	3.47E+18	1.05E+11	558.0	-2.00	-5.00	-3.00	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engineering			
283	NRG6551	A533B1	CL1	PWR	Y	PCL101	P		LT	40278	1.30E+19	8.97E+10	558.0	-2.00	20.00	22.00	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engineering			
284	5-04	A533B1	CL1	PWR	V	PCL101	P		LT	86345	2.36E+19	7.59E+10	559.0	-1.74	13.33	15.07	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engine [27]			
285	7-03P	A533B1	CL1	PWR	X	PCL101	P		LT	108624	3.33E+19	8.52E+10	559.0	-1.74	22.65	24.39	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engine [10]			
286																														
287	NRG6551	A533B1	CL1	PWR	U	PCL101	P		TL	9222	3.47E+18	1.05E+11	558.0	-17.00	9.00	26.00	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engineering			
288	NRG6551	A533B1	CL1	PWR	Y	PCL101	P		TL	40278	1.30E+19	8.97E+10	558.0	-17.00	28.00	45.00	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engineering			
289	5-04	A533B1	CL1	PWR	V	PCL101	P		TL	86345	2.36E+19	7.59E+10	559.0	-17.18	28.42	45.60	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engine [27]			
290	7-03P	A533B1	CL1	PWR	X	PCL101	P		TL	108624	3.33E+19	8.52E+10	559.0	-17.18	11.39	28.57	0.225	1.395	1.395	0.006	0.015	0.235	0.570	0.055	0.530	0.065	Combustion Engine [10]			
291																														
292	NRG6551	A533B1	COF	BWR	3D	PCOF01	P		TL	49646	8.40E+17	4.70E+09	533.0	-49.00	-31.00	18.00	####	1.480	1.480	0.005	####	0.240	0.600	#####	0.580	0.029	-999			
293																														
294	5-00Calib	A533B1	CP1	PWR	U	PCP101	P		LT	7972	3.53E+18	1.23E+11	558.0	-20.37	-12.00	8.00	####	1.360	1.360	0.006	####	####	0.590	#####	#####	0.050	Combustion Engineering			
295	5-00Calib	A533B1	CP1	PWR	Y	PCP101	P		LT	54700	1.60E+19	8.13E+10	558.0	-20.37	-12.63	8.00	####	1.360	1.360	0.006	####	####	0.590	#####	#####	0.050	Combustion Engineering			
296																														
297	5-00Calib	A533B1	CP1	PWR	U	PCP101	P		TL	7972	3.53E+18	1.23E+11	558.0	1.94	22.00	20.00	####	1.360	1.360	0.006	####	####	0.590	#####	#####	0.050	Combustion Engineering			
298	5-00Calib	A533B1	CP1	PWR	Y	PCP101	P		TL	54700	1.60E+19	8.13E+10	558.0	1.94	26.95	25.00	####	1.360	1.360	0.006	####	####	0.590	#####	#####	0.050	Combustion Engineering			
299																														
300	5-00Calib	A533B1	CP2	PWR	U	PCP201	P		LT	7924	3.28E+18	1.15E+11	560.0	-8.00	-8.00	0.00	0.220	1.380	1.380	0.014	0.015	0.245	0.620	0.048	0.585	0.065	Combustion Engineering			
301																														
302	5-00Calib	A533B1	CP2	PWR	U	PCP201	P		TL	7924	3.28E+18	1.15E+11	560.0	-12.00	11.00	24.00	0.220	1.380	1.380	0.014	0.015	0.245	0.620	0.048	0.585	0.065	Combustion Engineering			
303																														
304	NRG6551	A533B1	CPR	BWR	30D	PCPR01	P		LT	59528	2.40E+17	1.12E+09	527.0	-54.00	10.00	64.00	0.230	1.278	1.278	0.009	0.014	0.200	0.758	0.110	0.496	0.210	Combustion Engineering			
305	NRG6551	A533B1	CPR	BWR	300D	PCPR01	P		LT	98179	2.80E+17	7.92E+08	527.0	-54.00	8.00	62.00	0.230	1.278	1.278	0.009	0.014	0.200	0.758	0.110	0.496	0.210	Combustion Engineering			
306																														
307	7-03B-OC	A533B1	OYS	BWR	G	PCPR02	P		TL	27384	1.74E+18	1.77E+10	530.0	-12.80	75.54	88.34	0.230	1.410	1.410	0.014	0.020	0.240	0.620	#####	0.450	0.160	Combustion Engine [1], [50]			
308	7-03B-OC	A533B1	OYS	BWR	D	PCPR02	P		TL	27390	1.13E+18	1.15E+10	530.0	-12.80	48.33	61.13	0.230	1.410	1.410	0.014	0.020	0.240	0.620	#####	0.450	0.160	Combustion Engine [1], [50]			
309	7-03B-OC	A533B1	OYS	BWR	E	PCPR02	P		TL	57616	1.72E+18	8.29E+09	530.0	-12.80	61.58	74.38	0.230	1.410	1.410	0.014	0.020	0.240	0.620	#####	0.450	0.160	Combustion Engine [2], [50]			
310	7-03B-OC	A533B1	OYS	BWR	I	PCPR02	P		TL	57617	2.71E+18	1.31E+10	530.0	-12.80	79.34	92.14	0.230	1.410	1.410	0.014	0.020	0.240	0.620	#####	0.450	0.160	Combustion Engine [2], [50]			
311																														
312	NRG6551	A533B1	CR3	PWR	B	PCR301	P		TL	6451	1.05E+18	4.52E+10	556.0	17.00	56.00	39.00	0.230	1.300	1.300	0.008	0.016	0.220	0.540	0.110	0.550	0.200	Babcock & Wilcox			
313	NRG6551	A533B1	CR3	PWR	C	PCR301	P		TL	35568	6.56E+18	5.12E+10	556.0	17.00	133.00	116.00	0.230	1.300	1.300	0.008	0.016	0.220	0.540	0.110	0.550	0.200	Babcock & Wilcox			
314	NRG6551	A533B1	CR3	PWR	D	PCR301	P		TL	41592	7.50E+18	5.01E+10	556.0	17.00	119.00	102.00	0.230	1.300	1.300	0.008	0.016	0.220	0.540	0.110	0.550	0.200	Babcock & Wilcox			
315	NRG6551	A533B1	CR3	PWR	F	PCR301	P		TL	45024	1.08E+19	6.66E+10	556.0	17.00	133.00	116.00	0.230	1.300	1.300	0.008	0.016	0.220	0.540	0.110	0.550	0.200	Babcock & Wilcox			
316																														
317	NRG6551	A302B	CTY	PWR	A	PCTY02	P		LT	14806	2.59E+18	4.86E+10	537.0	-29.00	12.00	42.00	0.200	1.420	1.420	0.010	0.014	0.260	0.200	#####	0.470	0.100	Combustion Engineering			
318	NRG6551	A302B	CTY	PWR	F	PCTY02	P		LT	21278	4.63E+18	6.04E+10	537.0	-29.00	9.00	38.00	0.200	1.420	1.420	0.010	0.014	0.260	0.200	#####	0.470	0.100	Combustion Engineering			
319	NRG6551	A302B	CTY	PWR	H	PCTY02	P		LT	66667	1.55E+19	6.46E+10	537.0	-29.00	12.00	42.00	0.200	1.420	1.420	0.010	0.014	0.260	0.200	#####	0.470	0.100	Combustion Engineering			
320																														
321	NRG6551	A302B	CTY	PWR	F	PCTY04	P		LT	21278	4.63E+18	6.04E+10	537.0	-17.00	59.00	76.00	0.200	1.370	1.370	0.010	0.021	0.190	0.200	#####	0.470	0.120	Combustion Engineering			
322	NRG6551	A302B	CTY	PWR	H	PCTY04	P		LT	66667	1.55E+19	6.46E+10	537.0	-17.00	52.00	69.00	0.200	1.370	1.370	0.010	0.021	0.190	0.200	#####	0.470	0.120	Combustion Engineering			
323	NRG6551	A302B	CTY	PWR	D	PCTY04	P		LT	95278	2.28E+19	6.65E+10	537.0	-17.00	55.00	72.00	0.200	1.370	1.370	0.010	0.021	0.190	0.200	#####	0.470	0.120	Combustion Engineering			
324																														
325	NRG6551	A302B	CTY	PWR	F	PCTY07	P		LT	21278	4.63E+18	6.04E+10	537.0	-24.00	30.00	54.00	0.200	1.460	1.460	0.013	0.010	0.220	0.200	#####	0.480	0.120	Combustion Engineering			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
326	NRG6551	A302B	CTY	PWR	H	PCTY07	P		LT	66667	1.55E+19	6.46E+10	537.0	-24.00	27.00	51.00	0.200	1.460	1.460	0.013	0.010	0.220	0.200	#####	0.480	0.120	Combustion Engineering			
327																														
328	NRG6551	A533B1	DAC	BWR	1	PDAC01	P		LT	52000	4.90E+17	2.62E+09	532.0	-33.00	10.00	42.00	####	1.350	1.350	0.008	####	0.065	0.667	0.140	0.625	0.150	Chicago Bridge and Iron			
329	5-00Calib	A533B1	DAC	BWR	W36	PDAC01	P		LT	128860	1.10E+18	2.37E+09	532.0	-32.96	40.75	74.00	####	1.350	1.350	0.008	####	0.065	0.667	0.140	0.625	0.150	Chicago Bridge and Iron			
330	The heat is the same above & below per ChemChanges.xls. Chemistry was filled in from above set only if missing, because the values from [2] are averages of 6 specimens..																													
331	7-03B-OC	A533B1	OYS	BWR	F	PDAC01	P		LT	57614	1.87E+18	9.02E+09	530.0	-32.96	40.77	73.73	####	1.350	1.350	0.010	####	0.070	0.650	0.140	0.625	0.150	Chicago Bridge and	[2]		
332																														
333	NRG6551	A533B1	DC1	PWR	S	PDC103	P		LT	11056	2.84E+18	7.14E+10	539.0	6.00	14.00	9.00	0.235	1.445	1.445	0.010	0.014	0.225	0.481	0.049	0.475	0.081	Combustion Engineering			
334	NRG6551	A533B1	DC1	PWR	Y	PDC103	P		LT	51389	9.41E+18	5.09E+10	540.0	6.00	51.00	46.00	0.235	1.445	1.445	0.010	0.014	0.225	0.481	0.049	0.475	0.081	Combustion Engineering			
335	7-03P	A533B1	DC1	PWR	V	PDC103	P		LT	125005	1.37E+19	3.04E+10	541.0	5.59	37.17	31.58	0.235	1.445	1.445	0.010	0.014	0.225	0.481	0.049	0.475	0.081	Combustion Engine	[17]		
336																														
337	NRG6551	A533B1	DC2	PWR	U	PDC201	P		LT	8694	3.65E+18	1.17E+11	542.0	6.00	73.00	68.00	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engineering			
338	NRG6551	A533B1	DC2	PWR	X	PDC201	P		LT	27250	9.16E+18	9.34E+10	541.0	6.00	115.00	109.00	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engineering			
339	NRG6551	A533B1	DC2	PWR	Y	PDC201	P		LT	61362	1.32E+19	5.98E+10	540.0	6.00	117.00	111.00	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engineering			
340	7-03P	A533B1	DC2	PWR	V	PDC201	P		LT	100652	2.41E+19	6.65E+10	545.0	5.58	131.50	125.92	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engine	[12]		
341																														
342	NRG6551	A533B1	DC2	PWR	U	PDC201	P		TL	8694	3.65E+18	1.17E+11	542.0	27.00	100.00	73.00	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engineering			
343	NRG6551	A533B1	DC2	PWR	X	PDC201	P		TL	27250	9.16E+18	9.34E+10	541.0	27.00	125.00	98.00	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engineering			
344	NRG6551	A533B1	DC2	PWR	Y	PDC201	P		TL	61362	1.32E+19	5.98E+10	540.0	27.00	136.00	109.00	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engineering			
345	7-03P	A533B1	DC2	PWR	V	PDC201	P		TL	100652	2.41E+19	6.65E+10	545.0	26.71	137.82	111.11	0.237	1.255	1.255	0.009	0.012	0.164	0.662	0.073	0.438	0.140	Combustion Engine	[12]		
346																														
347	NRG6551	A302BM	DR2	BWb	3	PDR201	P		LT	5556	1.20E+16	6.00E+08	546.0	-12.00	-49.00	-37.00	0.197	1.190	1.190	0.008	0.013	0.250	0.465	#####	0.435	0.190	Babcock & Wilcox			
348	NRG6551	A302BM	DR2	BWb	4	PDR201	P		LT	5737	9.50E+18	4.60E+11	546.0	-12.00	38.00	51.00	0.197	1.190	1.190	0.008	0.013	0.250	0.465	#####	0.435	0.190	Babcock & Wilcox			
349	NRG6551	A302BM	DR2	BWb	2	PDR201	P		LT	20136	2.00E+19	2.76E+11	546.0	-12.00	90.00	102.00	0.197	1.190	1.190	0.008	0.013	0.250	0.465	#####	0.435	0.190	Babcock & Wilcox			
350	NRG6551	A302BM	DR2	BWb	5	PDR201	P		LT	33984	4.29E+19	3.51E+11	546.0	-12.00	73.00	85.00	0.197	1.190	1.190	0.008	0.013	0.250	0.465	#####	0.435	0.190	Babcock & Wilcox			
351	NRG6551	A302BM	DR2	BWR	8	PDR201	P		LT	54623	5.21E+16	2.65E+08	529.0	-12.00	-34.00	-21.00	0.197	1.190	1.190	0.008	0.013	0.250	0.465	#####	0.435	0.190	Babcock & Wilcox			
352																														
353	NRG6551	A302BM	DR3	BWR	13	PDR301	P		LT	8460	9.26E+15	3.04E+08	529.0	-5.00	-8.00	-2.00	0.247	1.645	1.645	0.008	0.016	0.253	0.537	0.102	0.493	0.133	Babcock & Wilcox			
354	NRG6551	A302BM	DR3	BWb	14	PDR301	P		LT	8460	7.11E+18	2.33E+11	546.0	-5.00	47.00	53.00	0.247	1.645	1.645	0.008	0.016	0.253	0.537	0.102	0.493	0.133	Babcock & Wilcox			
355	NRG6551	A302BM	DR3	BWb	12	PDR301	P		LT	13200	1.36E+19	2.86E+11	546.0	-5.00	44.00	49.00	0.247	1.645	1.645	0.008	0.016	0.253	0.537	0.102	0.493	0.133	Babcock & Wilcox			
356	NRG6551	A302BM	DR3	BWR	6	PDR301	P		LT	23232	2.70E+16	3.23E+08	529.0	-5.00	-5.00	0.00	0.247	1.645	1.645	0.008	0.016	0.253	0.537	0.102	0.493	0.133	Babcock & Wilcox			
357	NRG6551	A302BM	DR3	BWb	4	PDR301	P		LT	23564	1.86E+19	2.19E+11	546.0	-5.00	97.00	103.00	0.247	1.645	1.645	0.008	0.016	0.253	0.537	0.102	0.493	0.133	Babcock & Wilcox			
358	NRG6551	A302BM	DR3	BWR	18	PDR301	P		LT	52421	7.10E+16	3.76E+08	529.0	-5.00	2.00	8.00	0.247	1.645	1.645	0.008	0.016	0.253	0.537	0.102	0.493	0.133	Babcock & Wilcox			
359																														
360	7-03B-OC	A533B1	OYS	BWR	G	PEP2JP	P		TL	27380	1.86E+18	1.89E+10	530.0	-40.01	-14.42	25.59	0.200	1.490	1.490	0.006	0.008	0.220	0.590	#####	0.460	0.060	CRIEPI/EPRI	[1]		
361	7-03B-OC	A533B1	OYS	BWR	D	PEP2JP	P		TL	27390	1.13E+18	1.15E+10	530.0	-40.01	-4.53	35.48	0.200	1.490	1.490	0.006	0.008	0.220	0.590	#####	0.460	0.060	CRIEPI/EPRI	[1]		
362	7-03B-OC	A533B1	OYS	BWR	E	PEP2JP	P		TL	57615	1.70E+18	8.19E+09	530.0	-40.01	-18.92	21.09	0.200	1.490	1.490	0.006	0.008	0.220	0.590	#####	0.460	0.060	CRIEPI/EPRI	[2]		
363	7-03B-OC	A533B1	OYS	BWR	I	PEP2JP	P		TL	57615	2.60E+18	1.25E+10	530.0	-40.01	-18.01	22.00	0.200	1.490	1.490	0.006	0.008	0.220	0.590	#####	0.460	0.060	CRIEPI/EPRI	[2]		
364	The heat is the same above & below per E900ChemChanges.xls. Missing data filled in above & below from email from Bob Carter, 4/30/04.																													
365	7-03P-DB	A533B1	DB1	PWR	PWR-5	PEP2JP	P		TL	49096	1.14E+19	6.45E+10	556.0	-40.27	-35.57	4.70	0.200	1.490	1.490	0.006	0.008	0.220	0.590	#####	0.460	0.060	CRIEPI/EPRI	[3]		
366																														
367	5-00Calib	A533B1	FA1	PWR	Y	PFA101	P		LT	10111	5.73E+18	1.57E+11	544.0	-22.00	46.00	68.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
368	5-00Calib	A533B1	FA1	PWR	U	PFA101	P		LT	27056	1.75E+19	1.80E+11	544.0	-22.00	85.00	107.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
369	5-00Calib	A533B1	FA1	PWR	X	PFA101	P		LT	53611	2.99E+19	1.55E+11	544.0	-22.00	107.00	128.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
370	5-00Calib	A533B1	FA1	PWR	W	PFA101	P		LT	108961	4.04E+19	1.03E+11	544.0	-22.00	125.00	146.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
371																														
372	5-00Calib	A533B1	FA1	PWR	Y	PFA101	P		TL	10111	5.73E+18	1.57E+11	544.0	3.00	75.00	73.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
373	5-00Calib	A533B1	FA1	PWR	U	PFA101	P		TL	27056	1.75E+19	1.80E+11	544.0	3.00	105.00	103.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
374	5-00Calib	A533B1	FA1	PWR	X	PFA101	P		TL	53611	2.99E+19	1.55E+11	544.0	3.00	116.00	113.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
375	5-00Calib	A533B1	FA1	PWR	W	PFA101	P		TL	108961	4.04E+19	1.03E+11	544.0	3.00	154.00	152.00	0.200	1.395	1.395	0.015	0.014	0.230	0.560	0.130	0.535	0.100	Combustion Engineering			
376																														
377	5-00Calib	A533B1	FA2	PWR	U	PFA201	P		LT	9750	6.12E+18	1.74E+11	544.0	-22.00	80.00	102.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
378	5-00Calib	A533B1	FA2	PWR	W	PFA201	P		LT	34722	1.67E+19	1.34E+11	544.0	-22.00	141.00	163.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
379	5-00Calib	A533B1	FA2	PWR	X	PFA201	P		LT	56389	3.02E+19	1.49E+11	544.0	-22.00	142.00	164.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
380	5-00Calib	A533B1	FA2	PWR	Z	PFA201	P		LT	116062	5.28E+19	1.26E+11	543.0	-21.97	175.60	198.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
381																														
382	5-00Calib	A533B1	FA2	PWR	U	PFA201	P		TL	9750	6.12E+18	1.74E+11	544.0	-8.19	117.00	125.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
383	5-00Calib	A533B1	FA2	PWR	W	PFA201	P		TL	34722	1.67E+19	1.34E+11	544.0	-8.19	160.00	168.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
384	5-00Calib	A533B1	FA2	PWR	X	PFA201	P		TL	56389	3.02E+19	1.49E+11	544.0	-8.19	192.00	200.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
385	5-00Calib	A533B1	FA2	PWR	Z	PFA201	P		TL	116062	5.28E+19	1.26E+11	543.0	-8.19	188.03	196.00	0.215	1.327	1.327	0.005	0.016	0.229	0.597	0.106	0.490	0.195	Combustion Engineering			
386																														
387	NRG6551	A533B1	FC1	PWR	W225	PFC101	P		LT	22753	5.53E+18	6.75E+10	527.0	21.00	77.00	56.00	0.220	1.461	1.461	0.011	0.012	0.214	0.483	0.040	0.524	0.101	Combustion Engineering			
388	NRG6551	A533B1	FC1	PWR	W265	PFC101	P		LT	51895	7.71E+18	4.13E+10	534.0	21.00	93.00	72.00	0.220	1.461	1.461	0.011	0.012	0.214	0.483	0.040	0.524	0.101	Combustion Engineering			
389	5-00Calib	A533B1	FC1	PWR	W275	PFC101	P		LT	118519	1.28E+19	3.00E+10	538.0	21.00	83.00	62.00	0.220	1.461	1.461	0.011	0.012	0.214	0.483	0.040	0.524	0.101	Combustion Engineering			
390																														

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
391	NRG6551	A533B1	FC1	PWR	W265	PFC101	P		TL	51895	7.71E+18	4.13E+10	534.0	31.00	106.00	75.00	0.220	1.461	1.461	0.011	0.012	0.214	0.483	0.040	0.524	0.101	Combustion Engineering			
392	5-00Calib	A533B1	FC1	PWR	W275	PFC101	P		TL	118519	1.28E+19	3.00E+10	538.0	31.00	108.00	77.00	0.220	1.461	1.461	0.011	0.012	0.214	0.483	0.040	0.524	0.101	Combustion Engineering			
393																														
394	NRG6551	A533B1	FTZ	BWR	30D	PFTZ01	P		LT	52438	2.60E+17	1.38E+09	532.0	-29.00	-22.00	7.00	0.205	1.290	1.290	0.012	0.019	0.230	0.600	0.100	0.460	0.110	Combustion Engine [43], [44], [50]			
395	5-04	A533B1	FTZ	BWR	W120	PFTZ01	P		LT	117461	5.00E+17	1.18E+09	532.0	-29.00	-4.88	24.12	0.205	1.290	1.290	0.012	0.019	0.230	0.600	0.100	0.460	0.110	Combustion Engine [44], [50]			
396						Above and below are same heat. The chemistry from several sources, [43,50,1,2] was considered in [44] to get best estimate. Values from [44] were used in all cases except C and S..																								
397	7-03B-OC	A533B1	OYS	BWR	G	PFTZ01	P		TL	27389	1.55E+18	1.57E+10	530.0	-34.46	-9.03	25.43	0.205	1.290	1.290	0.013	0.018	0.230	0.610	0.100	0.460	0.110	Combustion Engine [1], [44], [50]			
398	7-03B-OC	A533B1	OYS	BWR	D	PFTZ01	P		TL	27390	1.06E+18	1.08E+10	530.0	-34.46	-0.56	33.90	0.205	1.290	1.290	0.013	0.018	0.230	0.610	0.100	0.460	0.110	Combustion Engine [1], [44], [50]			
399	7-03B-OC	A533B1	OYS	BWR	I	PFTZ01	P		TL	57616	2.80E+18	1.35E+10	530.0	-34.46	34.51	68.97	0.205	1.290	1.290	0.013	0.018	0.230	0.610	0.100	0.460	0.110	Combustion Engine [2], [44], [50]			
400	7-03B-OC	A533B1	OYS	BWR	E	PFTZ01	P		TL	57617	1.71E+18	8.26E+09	530.0	-34.46	20.85	55.31	0.205	1.290	1.290	0.013	0.018	0.230	0.610	0.100	0.460	0.110	Combustion Engine [2], [44], [50]			
401																														
402	7-03B-OC	A533B1	OYS	BWR	D	PGG_01	P		TL	27373	1.15E+18	1.17E+10	530.0	-15.73	-4.49	11.24	0.180	1.375	1.375	0.012	0.012	0.280	0.650	#####	0.445	0.030	Chicago Bridge and [1], [50]			
403	7-03B-OC	A533B1	OYS	BWR	G	PGG_01	P		TL	27391	1.84E+18	1.87E+10	530.0	-15.73	7.88	23.61	0.180	1.375	1.375	0.012	0.012	0.280	0.650	#####	0.445	0.030	Chicago Bridge and [1], [50]			
404	7-03B-OC	A533B1	OYS	BWR	E	PGG_01	P		TL	57615	1.71E+18	8.25E+09	530.0	-15.73	14.99	30.72	0.180	1.375	1.375	0.012	0.012	0.280	0.650	#####	0.445	0.030	Chicago Bridge and [2], [50]			
405	7-03B-OC	A533B1	OYS	BWR	I	PGG_01	P		TL	57617	2.66E+18	1.28E+10	530.0	-15.73	13.84	29.57	0.180	1.375	1.375	0.012	0.012	0.280	0.650	#####	0.445	0.030	Chicago Bridge and [2], [50]			
406																														
407	NRG6551	A533B1	HA1	BWR	30D	PHA101	P		LT	50324	2.40E+17	1.32E+09	530.0	-64.00	-16.00	48.00	0.240	1.430	1.430	0.010	0.013	0.200	0.650	#####	0.560	0.113	Combustion Engineering			
408																														
409	7-03B-OC	A533B1	OYS	BWR	H	PHA102	P		TL	27384	1.53E+18	1.55E+10	530.0	-11.15	17.21	28.36	0.240	1.420	1.420	0.015	0.017	0.270	0.600	#####	0.480	0.110	Combustion Engine [1], [50]			
410																														
411	NRG6551	A533B1	HA2	BWR	30D	PHA201	P		LT	57692	2.30E+17	1.11E+09	532.0	-21.00	-16.00	4.00	#####	1.390	1.390	0.010	#####	#####	0.630	#####	0.600	0.080	Combustion Engineering			
412																														
413	NRG6551	A302B	HB2	PWR	S	PHB201	P		LT	11222	5.06E+18	1.25E+11	546.0	-17.00	17.00	34.00	0.190	1.350	1.350	0.007	0.019	0.230	0.090	#####	0.480	0.120	Combustion Engineering			
414	7-03P	A302B	HB2	PWR	X	PHB201	P		LT	178616	4.49E+19	6.98E+10	546.0	-17.28	86.95	104.23	0.190	1.350	1.350	0.007	0.019	0.230	0.090	#####	0.480	0.120	Combustion Engine [23]			
415																														
416	NRG6551	A302B	HB2	PWR	S	PHB202	P		LT	11222	5.06E+18	1.25E+11	546.0	11.00	27.00	16.00	0.200	1.290	1.290	0.010	0.021	0.220	0.200	#####	0.460	0.100	Combustion Engineering			
417	NRG6551	A302B	HB2	PWR	V	PHB202	P		LT	28056	6.01E+18	5.95E+10	546.0	11.00	55.00	44.00	0.200	1.290	1.290	0.010	0.021	0.220	0.200	#####	0.460	0.100	Combustion Engineering			
418																														
419	NRG6551	A302B	HB2	PWR	S	PHB203	P		LT	11222	5.06E+18	1.25E+11	546.0	27.00	41.00	13.00	0.190	1.320	1.320	0.010	0.015	0.190	0.200	#####	0.490	0.090	Combustion Engineering			
420	NRG6551	A302B	HB2	PWR	T	PHB203	P		LT	63611	4.42E+19	1.93E+11	546.0	27.00	102.00	74.00	0.190	1.320	1.320	0.010	0.015	0.190	0.200	#####	0.490	0.090	Combustion Engineering			
421																														
422	NRG6551	A533B1	HOP	BWR	30D	PHOP01	P		LT	52646	1.42E+17	7.49E+08	532.0	-6.00	-8.00	-2.00	0.200	1.380	1.380	0.012	0.012	0.290	0.640	0.120	0.560	0.090	Babcock & Wilcox	[34]		
423																														
424	NRG6551	A302BM	IP2	PWR	T	PIP201	P		LT	12444	2.43E+18	5.42E+10	534.0	9.00	58.00	49.00	0.200	1.280	1.280	0.010	0.019	0.250	0.630	#####	0.460	0.211	Combustion Engineering			
425	NRG6551	A302BM	IP2	PWR	Z	PIP201	P		LT	45833	1.08E+19	6.55E+10	525.0	9.00	121.00	113.00	0.200	1.280	1.280	0.010	0.019	0.250	0.630	#####	0.460	0.211	Combustion Engineering			
426																														
427	NRG6551	A302BM	IP2	PWR	T	PIP202	P		LT	12444	2.43E+18	5.42E+10	534.0	17.00	110.00	93.00	0.220	1.300	1.300	0.014	0.020	0.220	0.441	#####	0.500	0.149	Combustion Engineering			
428	NRG6551	A302BM	IP2	PWR	Z	PIP202	P		LT	45833	1.08E+19	6.55E+10	525.0	17.00	123.00	106.00	0.220	1.300	1.300	0.014	0.020	0.220	0.441	#####	0.500	0.149	Combustion Engineering			
429	NRG6551	A302BM	IP2	PWR	V	PIP202	P		LT	75833	5.06E+18	1.85E+10	524.0	17.00	100.00	83.00	0.220	1.300	1.300	0.014	0.020	0.220	0.441	#####	0.500	0.149	Combustion Engineering			
430																														
431	NRG6551	A302BM	IP2	PWR	T	PIP203	P		LT	12444	2.43E+18	5.42E+10	534.0	16.00	147.00	131.00	0.220	1.290	1.290	0.011	0.018	0.250	0.595	#####	0.460	0.197	Combustion Engineering			
432	NRG6551	A302BM	IP2	PWR	Y	PIP203	P		LT	20833	4.53E+18	6.04E+10	529.0	16.00	169.00	152.00	0.220	1.290	1.290	0.011	0.018	0.250	0.595	#####	0.460	0.197	Combustion Engineering			
433	NRG6551	A302BM	IP2	PWR	Z	PIP203	P		LT	45833	1.08E+19	6.55E+10	525.0	16.00	198.00	182.00	0.220	1.290	1.290	0.011	0.018	0.250	0.595	#####	0.460	0.197	Combustion Engineering			
434																														
435	NRG6551	A302BM	IP3	PWR	T	PIP301	P		LT	12000	3.12E+18	7.22E+10	540.0	-6.00	87.00	93.00	0.220	1.410	1.410	0.010	0.023	0.280	0.500	0.080	0.460	0.180	Combustion Engineering			
436																														
437	NRG6551	A302BM	IP3	PWR	Z	PIP303	P		LT	48889	1.04E+19	5.91E+10	540.0	-20.00	118.00	138.00	0.200	1.320	1.320	0.011	0.025	0.260	0.490	0.080	0.500	0.190	Combustion Engineering			
438																														
439	NRG6551	A302BM	IP3	PWR	T	PIP304	P		LT	12000	3.12E+18	7.22E+10	540.0	25.00	168.00	143.00	0.220	1.300	1.300	0.012	0.024	0.280	0.520	0.080	0.450	0.240	Combustion Engineering			
440	NRG6551	A302BM	IP3	PWR	Z	PIP304	P		LT	48889	1.04E+19	5.91E+10	540.0	25.00	199.00	174.00	0.220	1.300	1.300	0.012	0.024	0.280	0.520	0.080	0.450	0.240	Combustion Engineering			
441																														
442	NRG6551	A302BM	IP3	PWR	T	PIP304	P		TL	12000	3.12E+18	7.22E+10	540.0	59.00	168.00	109.00	0.220	1.300	1.300	0.012	0.024	0.280	0.520	0.080	0.450	0.240	Combustion Engineering			
443	NRG6551	A302BM	IP3	PWR	Y	PIP304	P		TL	29167	7.24E+18	6.90E+10	540.0	59.00	208.00	150.00	0.220	1.300	1.300	0.012	0.024	0.280	0.520	0.080	0.450	0.240	Combustion Engineering			
444	NRG6551	A302BM	IP3	PWR	Z	PIP304	P		TL	48889	1.04E+19	5.91E+10	540.0	59.00	216.00	157.00	0.220	1.300	1.300	0.012	0.024	0.280	0.520	0.080	0.450	0.240	Combustion Engineering			
445																														
446	NRG6551	A533B1	KU1	BWR	177D	PKU101	P		TL	59968	9.60E+17	4.45E+09	533.0	-27.00	-15.00	11.00	0.210	1.160	1.160	0.008	0.010	0.230	0.600	0.066	0.500	0.060	-999			
447																														
448	NRG6551	A533B1	KU2	BWR	3D	PKU201	P		TL	61223	1.10E+18	4.99E+09	533.0	14.00	29.00	15.00	0.210	1.330	1.330	0.008	0.013	0.250	0.580	0.130	0.500	0.090	-999			
449																														
450	NRG6551	A533B1	LS1	BWR	300D	PLS101	P		LT	56979	9.00E+16	4.39E+08	533.0	-32.00	-3.00	29.00	0.140	1.290	1.290	0.014	0.015	0.200	0.540	0.260	0.500	0.140	Combustion Engine [35]			
451																														
452	NRG6551	A533B1	MC1	PWR	U	PMC101	P		LT	9556	4.43E+18	1.29E+11	558.0	9.00	45.00	36.00	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engineering			
453	NRG6551	A533B1	MC1	PWR	X	PMC101	P		LT	37778	1.46E+19	1.07E+11	557.0	9.00	45.00	36.00	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engineering			
454	5-04	A533B1	MC1	PWR	V	PMC101	P		LT	63466	2.19E+19	9.57E+10	557.0	8.71	89.44	80.73	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engine [28]			
455	5-00Calib	A533B1	MC1	PWR	Y	PMC101	P		LT	89501	2.93E+19	9.09E+10	557.0	8.71	100.93	92.00	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engineering			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
456																													
457	NRG6551	A533B1	MC1	PWR	U	PMC101	P		TL	9556	4.43E+18	1.29E+11	558.0	2.00	53.00	52.00	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engineering			
458	NRG6551	A533B1	MC1	PWR	X	PMC101	P		TL	37778	1.46E+19	1.07E+11	557.0	2.00	66.00	64.00	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engineering			
459	5-04	A533B1	MC1	PWR	V	PMC101	P		TL	63466	2.19E+19	9.57E+10	557.0	1.65	77.84	76.19	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engine [28]			
460	5-00Calib	A533B1	MC1	PWR	Y	PMC101	P		TL	89501	2.93E+19	9.09E+10	557.0	1.65	111.19	110.00	0.210	1.260	1.260	0.010	0.016	0.230	0.600	0.068	0.570	0.087	Combustion Engineering			
461																													
462	NRG6551	A302BM	ML1	BWR	210D	PML101	P		LT	78470	3.30E+17	1.17E+09	531.0	15.00	73.00	58.00	0.230	1.320	1.320	0.010	0.028	0.220	0.490	0.080	0.470	0.210	Combustion Engineering			
463	NRG6551	A302BM	ML1	BWR	300D	PML101	P		LT	129823	6.60E+17	1.41E+09	531.0	15.00	94.00	79.00	0.230	1.320	1.320	0.010	0.028	0.220	0.490	0.080	0.470	0.210	Combustion Engineering			
464																Assumed the heats are the same above & below to fill in missing chemistry. Did not change the chemistry where it was reported													
465	7-03B-OC	A302BM	OYS	BWR	H	PML101	P		TL	27376	1.50E+18	1.52E+10	530.0	9.45	103.73	94.28	0.230	1.370	1.370	0.018	0.028	0.220	0.510	0.080	0.390	0.220	Combustion Engine [1], [50]			
466	7-03B-OC	A302BM	OYS	BWR	F	PML101	P		TL	57615	1.88E+18	9.06E+09	530.0	9.45	82.12	72.67	0.230	1.370	1.370	0.018	0.028	0.220	0.510	0.080	0.390	0.220	Combustion Engine [2], [50]			
467																													
468	NRG6551	A533B1	ML2	PWR	W97	PML201	P		LT	26298	3.78E+18	3.99E+10	546.5	41.00	108.00	67.00	0.210	1.276	1.276	0.007	0.015	0.312	0.603	0.100	0.601	0.141	Combustion Engineering			
469	NRG6551	A533B1	ML2	PWR	W104	PML201	P		LT	87149	8.84E+18	2.82E+10	549.0	41.00	131.00	90.00	0.210	1.276	1.276	0.007	0.015	0.312	0.603	0.100	0.601	0.141	Combustion Engineering			
470	7-03P	A533B1	ML2	PWR	W83	PML201	P		LT	134028	1.74E+19	3.61E+10	549.0	41.14	157.85	116.71	0.210	1.276	1.276	0.007	0.015	0.312	0.603	0.100	0.601	0.141	Combustion Engine [16]			
471																													
472	NRG6551	A533B1	ML2	PWR	W97	PML201	P		TL	26298	3.78E+18	3.99E+10	546.5	13.00	109.00	95.00	0.210	1.276	1.276	0.007	0.015	0.312	0.603	0.100	0.601	0.141	Combustion Engineering			
473	7-03P	A533B1	ML2	PWR	W83	PML201	P		TL	134028	1.74E+19	3.61E+10	549.0	13.07	162.03	148.96	0.210	1.276	1.276	0.007	0.015	0.312	0.603	0.100	0.601	0.141	Combustion Engine [16]			
474																													
475	7-03P	A533B1	ML3	PWR	X	PML301	P		LT	70080	2.21E+19	8.76E+10	558.0	2.45	30.59	28.14	0.230	1.310	1.310	0.014	0.012	0.220	0.620	0.070	0.580	0.050	Combustion Engine [13]			
476																													
477	7-03P	A533B1	ML3	PWR	X	PML301	P		TL	70080	2.21E+19	8.76E+10	558.0	17.44	43.69	26.25	0.230	1.310	1.310	0.014	0.012	0.220	0.620	0.070	0.580	0.050	Combustion Engine [13]			
478																													
479	5-04	A533B1	MON	BWR	G-1	PMON01	P		LT	66883	2.93E+17	1.22E+09	530.0	23.90	58.52	34.62	0.242	1.413	1.413	0.010	0.012	0.290	0.648	0.100	0.439	0.166	Chicago Bridge and	[37]		
480	5-04	A533B1	MON+PI1	BWR+I	W	PMON01	P		LT	78366	3.33E+18	1.18E+10	531.5	23.90	118.09	94.19	0.242	1.413	1.413	0.010	0.012	0.290	0.648	0.100	0.439	0.166	Chicago Bridge and	[37]	This set has been irra	
481																													
482	NRG6551	A533B1	MY	PWR	A25	PMY_01	P		LT	7714	1.76E+19	6.34E+11	522.0	-6.00	112.00	119.00	0.238	1.332	1.332	0.013	0.011	0.154	0.528	0.030	0.492	0.100	Combustion Engineering			
483	NRG6551	A533B1	MY	PWR	A35	PMY_01	P		LT	40167	7.13E+19	4.93E+11	533.0	-6.00	184.00	190.00	0.238	1.332	1.332	0.013	0.011	0.154	0.528	0.030	0.492	0.100	Combustion Engineering			
484	NRG6551	A533B1	MY	PWR	W263	PMY_01	P		LT	40167	5.67E+18	3.92E+10	533.0	-6.00	97.00	103.00	0.238	1.332	1.332	0.013	0.011	0.154	0.528	0.030	0.492	0.100	Combustion Engineering			
485	NRG6551	A533B1	MY	PWR	W253	PMY_01	P		LT	102562	1.25E+19	3.39E+10	542.0	-6.00	127.00	133.00	0.238	1.332	1.332	0.013	0.011	0.154	0.528	0.030	0.492	0.100	Combustion Engineering			
486																													
487	NRG6551	A533B1	MY	PWR	A35	PMY_01	P		TL	40167	7.13E+19	4.93E+11	533.0	6.00	208.00	202.00	0.238	1.332	1.332	0.013	0.011	0.154	0.528	0.030	0.492	0.100	Combustion Engineering			
488	NRG6551	A533B1	MY	PWR	W263	PMY_01	P		TL	40167	5.67E+18	3.92E+10	533.0	6.00	108.00	102.00	0.238	1.332	1.332	0.013	0.011	0.154	0.528	0.030	0.492	0.100	Combustion Engineering			
489																													
490	5-00Calib	A302B1	NM1	BWR	W210	PNM101	P		LT	147356	9.34E+17	1.76E+09	530.0	9.89	87.78	78.00	0.216	1.263	1.263	0.031	0.021	0.195	0.554	0.094	0.458	0.207	Combustion Engineering			
491			PNM101 above & below are believed to be the same heat per E900ChemChanges, but apparent mixup in heats at NM1 (see NMEL-90001, Jan 1991) causes some uncertainty. Only Cr was filled in from the prior entry.																											
492	7-03B-OC	A302BM	OYS	BWR	D	PNM101	P		TL	27376	1.09E+18	1.11E+10	530.0	-6.93	49.14	56.07	0.200	1.160	1.160	0.018	0.028	0.170	0.584	0.094	0.430	0.172	Combustion Engine [1], [50]			
493	7-03B-OC	A302BM	OYS	BWR	G	PNM101	P		TL	27382	1.66E+18	1.68E+10	530.0	-6.93	75.49	82.42	0.200	1.160	1.160	0.018	0.028	0.170	0.584	0.094	0.430	0.172	Combustion Engine [1], [50]			
494	7-03B-OC	A302BM	OYS	BWR	E	PNM101	P		TL	57615	1.72E+18	8.29E+09	530.0	-6.93	78.08	85.01	0.200	1.160	1.160	0.018	0.028	0.170	0.584	0.094	0.430	0.172	Combustion Engine [2], [50]			
495	7-03B-OC	A302BM	OYS	BWR	I	PNM101	P		TL	57618	2.75E+18	1.33E+10	530.0	-6.93	92.59	99.52	0.200	1.160	1.160	0.018	0.028	0.170	0.584	0.094	0.430	0.172	Combustion Engine [2], [50]			
496																													
497	NRG6551	A302B	OC1	PWR	F	POC101	P		LT	7303	5.70E+17	2.17E+10	556.0	2.00	25.00	22.00	0.200	1.400	1.400	0.012	0.017	0.200	0.630	0.130	0.500	0.110	Babcock & Wilcox			
498																													
499	NRG6551	A302B	OC1	PWR	F	POC101	P		TL	7303	5.70E+17	2.17E+10	556.0	-1.00	29.00	30.00	0.200	1.400	1.400	0.012	0.017	0.200	0.630	0.130	0.500	0.110	Babcock & Wilcox			
500																													
501	NRG6551	A302B	OC1	PWR	E	POC102	P		LT	14406	1.50E+18	2.89E+10	556.0	-7.00	49.00	55.00	0.210	1.420	1.420	0.015	0.015	0.230	0.500	0.170	0.490	0.100	Babcock & Wilcox			
502	NRG6551	A302B	OC1+CR	PWR	A	POC102	P		LT	38093	8.95E+18	6.53E+10	556.0	-7.00	48.00	55.00	0.210	1.420	1.420	0.015	0.015	0.230	0.500	0.170	0.490	0.100	Babcock & Wilcox			
503	NRG6551	A302B	OC1+CR	PWR	C	POC102	P		LT	51888	9.86E+18	5.28E+10	556.0	-7.00	38.00	45.00	0.210	1.420	1.420	0.015	0.015	0.230	0.500	0.170	0.490	0.100	Babcock & Wilcox			
504																													
505	NRG6551	A302B	OC1	PWR	E	POC102	P		TL	14406	1.50E+18	2.89E+10	556.0	7.00	36.00	29.00	0.210	1.420	1.420	0.015	0.015	0.230	0.500	0.170	0.490	0.100	Babcock & Wilcox			
506	NRG6551	A302B	OC1+CR	PWR	A	POC102	P		TL	38093	8.95E+18	6.53E+10	556.0	7.00	35.00	28.00	0.210	1.420	1.420	0.015	0.015	0.230	0.500	0.170	0.490	0.100	Babcock & Wilcox			
507	NRG6551	A302B	OC1+CR	PWR	C	POC102	P		TL	51888	9.86E+18	5.28E+10	556.0	7.00	94.00	87.00	0.210	1.420	1.420	0.015	0.015	0.230	0.500	0.170	0.490	0.100	Babcock & Wilcox			
508																													
509	NRG6551	A302B1	OYS	BWR	210D	POYS01	P		LT	71400	7.46E+17	2.90E+09	530.0	16.00	93.00	78.00	0.200	1.400	1.400	0.011	0.022	0.024	0.107	#####	0.510	0.173	Combustion Engineering			
510																													
511	NRG6551	A302BM	PAL	PWR	A240	PPAL01	P		LT	19806	6.00E+19	8.41E+11	524.0	3.00	204.00	201.00	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engineering			
512	NRG6551	A302BM	PAL	PWR	W290	PPAL01	P		LT	43611	1.09E+19	6.94E+10	530.0	3.00	174.00	172.00	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engineering			
513	NRG6551	A302BM	PAL	PWR	W110	PPAL01	P		LT	87167	1.78E+19	5.67E+10	533.0	3.00	175.00	172.00	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engineering			
514	5-04	A302BM	PAL	PWR	W100	PPAL01	P		LT	148404	2.09E+19	3.91E+10	534.0	2.85	151.67	148.82	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engine [29]			
515																													
516	NRG6551	A302BM	PAL	PWR	A240	PPAL01	P		TL	19806	6.00E+19	8.41E+11	524.0	18.00	212.00	195.00	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engineering			
517	NRG6551	A302BM	PAL	PWR	W290	PPAL01	P		TL	43611	1.09E+19	6.94E+10	530.0	18.00	174.00	156.00	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engineering			
518	5-04	A302BM	PAL	PWR	W100	PPAL01	P		TL	148404	2.09E+19	3.91E+10	534.0	17.84	161.96	144.12	0.115	1.368	1.368	0.012	0.011	0.180	0.530	0.085	0.501	0.250	Combustion Engine [29]			
519																													
520	NRG6551	A302B	PB1	PWR	V	PPB101	P		LT	13028	6.34E+18	1.35E+11	542.0	-35.00	46.00	81.00	0.190	1.460	1.460	0.010	0.020	0.250	0.056	0.057	0.480	0.200	Babcock & Wilcox			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
521	NRG6551	A302B	PB1	PWR	S	PPB101	P		LT	31667	8.29E+18	7.27E+10	542.0	-35.00	52.00	87.00	0.190	1.460	1.460	0.010	0.020	0.250	0.056	0.057	0.480	0.200	Babcock & Wilcox			
522	NRG6551	A302B	PB1	PWR	R	PPB101	P		LT	44722	2.19E+19	1.36E+11	542.0	-35.00	58.00	93.00	0.190	1.460	1.460	0.010	0.020	0.250	0.056	0.057	0.480	0.200	Babcock & Wilcox			
523	NRG6551	A302B	PB1	PWR	T	PPB101	P		LT	81389	2.23E+19	7.61E+10	535.0	-35.00	47.00	82.00	0.190	1.460	1.460	0.010	0.020	0.250	0.056	0.057	0.480	0.200	Babcock & Wilcox			
524																														
525	NRG6551	A302B	PB1	PWR	V	PPB102	P		LT	13028	6.34E+18	1.35E+11	542.0	-26.00	15.00	41.00	0.210	1.460	1.460	0.014	0.019	0.250	0.067	0.062	0.470	0.120	Babcock & Wilcox			
526	NRG6551	A302B	PB1	PWR	S	PPB102	P		LT	31667	8.29E+18	7.27E+10	542.0	-26.00	17.00	43.00	0.210	1.460	1.460	0.014	0.019	0.250	0.067	0.062	0.470	0.120	Babcock & Wilcox			
527	NRG6551	A302B	PB1	PWR	R	PPB102	P		LT	44722	2.19E+19	1.36E+11	542.0	-26.00	2.00	28.00	0.210	1.460	1.460	0.014	0.019	0.250	0.067	0.062	0.470	0.120	Babcock & Wilcox			
528	NRG6551	A302B	PB1	PWR	T	PPB102	P		LT	81389	2.23E+19	7.61E+10	535.0	-26.00	19.00	45.00	0.210	1.460	1.460	0.014	0.019	0.250	0.067	0.062	0.470	0.120	Babcock & Wilcox			
529																														
530	NRG6551	A302BM	PH3	BWR	1	PPH301	P		LT	66359	1.60E+17	6.70E+08	528.0	-11.00	1.00	12.00	0.210	1.427	1.427	0.008	0.016	0.233	0.620	#####	0.497	0.133	Babcock & Wilcox			
531																														
532	NRG6551	A533B1	PL1	BWR	1	PPL101	P		LT	36582	2.30E+17	1.75E+09	529.0	6.00	35.00	29.00	0.231	1.337	1.337	0.015	0.014	0.175	0.634	0.135	0.596	0.134	Combustion Engineering			
533																														
534	5-00Calib	A533B1	PV1	PWR	W137	PPV101	P		LT	39931	3.45E+18	2.40E+10	552.0	12.00	41.00	29.00	0.240	1.330	1.330	0.004	0.010	0.280	0.600	0.040	0.530	0.060	Combustion Engineering			
535																														
536	5-00Calib	A533B1	PV1	PWR	W137	PPV101	P		TL	39931	3.45E+18	2.40E+10	552.0	28.00	43.00	15.00	0.240	1.330	1.330	0.004	0.010	0.280	0.600	0.040	0.530	0.060	Combustion Engineering			
537																														
538	7-03P	A533B1	PV1	PWR	W38	PPV104	P		LT	85936	7.85E+18	2.54E+10	552.0	-12.85	10.79	23.64	0.240	1.480	1.480	0.003	0.006	0.230	0.630	0.070	0.500	0.040	Combustion Engine [21]			
539																														
540	7-03P	A533B1	PV1	PWR	W38	PPV104	P		TL	85936	7.85E+18	2.54E+10	552.0	9.04	10.42	1.38	0.240	1.480	1.480	0.003	0.006	0.230	0.630	0.070	0.500	0.040	Combustion Engine [21]			
541																														
542	NRG6551	A533B1	PV2	PWR	W137	PPV201	P		LT	39806	4.07E+18	2.84E+10	552.0	0.00	8.00	8.00	0.240	1.540	1.540	0.006	0.009	0.210	0.680	0.030	0.520	0.040	Combustion Engineering			
543																														
544	NRG6551	A533B1	PV2	PWR	W137	PPV201	P		TL	39806	4.07E+18	2.84E+10	552.0	3.00	9.00	6.00	0.240	1.540	1.540	0.006	0.009	0.210	0.680	0.030	0.520	0.040	Combustion Engineering			
545																														
546	5-00Calib	A533B1	PV3	PWR	W137	PPV301	P		TL	38921	3.64E+18	2.60E+10	552.0	-30.00	-13.00	17.00	####	1.400	1.400	0.005	####	####	0.650	#####	#####	0.040	Combustion Engineering			
547																														
548	NRG6551	A302BM	QC1	BWb	1	PQC101	P		LT	10800	8.20E+18	2.11E+11	546.0	-28.00	79.00	107.00	0.238	1.520	1.520	0.010	0.017	0.224	0.520	0.110	0.490	0.212	Babcock & Wilcox			
549	NRG6551	A302BM	QC1	BWR	2	PQC101	P		LT	10800	1.03E+16	2.65E+08	530.0	-28.00	-37.00	-8.00	0.238	1.520	1.520	0.010	0.017	0.224	0.520	0.110	0.490	0.212	Babcock & Wilcox			
550	NRG6551	A302BM	QC1	BWb	3	PQC101	P		LT	34528	4.23E+19	3.40E+11	546.0	-28.00	137.00	165.00	0.238	1.520	1.520	0.010	0.017	0.224	0.520	0.110	0.490	0.212	Babcock & Wilcox			
551	NRG6551	A302BM	QC1	BWR	8	PQC101	P		LT	58206	5.50E+16	2.62E+08	530.0	-28.00	-25.00	3.00	0.238	1.520	1.520	0.010	0.017	0.224	0.520	0.110	0.490	0.212	Babcock & Wilcox			
552												Assumed the heats are the same above & below to fill in missing chemistry. Did not change the chemistry where it was reported																		
553	7-03B-OC	A302BM	OYS	BWR	H	PQC101	P		TL	27381	1.45E+18	1.47E+10	530.0	-33.95	22.05	56.00	0.185	1.315	1.315	0.015	0.018	0.190	0.520	0.110	0.385	0.170	Babcock & Wilcox	[1], [50]		
554	7-03B-OC	A302BM	OYS	BWR	F	PQC101	P		TL	57615	1.88E+18	9.06E+09	530.0	-33.95	51.83	85.78	0.185	1.315	1.315	0.015	0.018	0.190	0.520	0.110	0.385	0.170	Babcock & Wilcox	[2], [50]		
555																														
556	NRG6551	A302BM	QC2	BWb	12	PQC201	P		LT	14316	9.75E+18	1.89E+11	546.0	-12.00	25.00	37.00	0.268	1.640	1.640	0.008	0.016	0.283	0.522	0.130	0.474	0.095	Babcock & Wilcox			
557	NRG6551	A302BM	QC2	BWR	13	PQC201	P		LT	14316	1.73E+16	3.36E+08	530.0	-12.00	-10.00	2.00	0.268	1.640	1.640	0.008	0.016	0.283	0.522	0.130	0.474	0.095	Babcock & Wilcox			
558	NRG6551	A302BM	QC2	BWb	3	PQC201	P		LT	39500	4.28E+19	3.01E+11	546.0	-12.00	41.00	53.00	0.268	1.640	1.640	0.008	0.016	0.283	0.522	0.130	0.474	0.095	Babcock & Wilcox			
559	NRG6551	A302BM	QC2	BWR	18	PQC201	P		LT	49353	6.56E+16	3.69E+08	530.0	-12.00	-11.00	1.00	0.268	1.640	1.640	0.008	0.016	0.283	0.522	0.130	0.474	0.095	Babcock & Wilcox			
560																														
561	7-03B		RB	BWR	183	PRB_01	P		TL	88301	1.16E+18	3.65E+09	534.0	-14.93	24.91	39.84	0.180	1.300	1.300	0.007	0.016	0.280	0.670	#####	0.560	0.080	Chicago Bridge and	[24]		
562																														
563	NRG6551	A533B1	RS1+DB1	PWR	B	PRS101	P		TL	13068	3.99E+18	8.48E+10	556.0	5.00	40.00	34.00	0.200	1.260	1.260	0.013	0.017	0.150	0.600	0.140	0.550	0.120	Babcock & Wilcox			
564	NRG6551	A533B1	RS1+DB1	PWR	D	PRS101	P		TL	20172	6.60E+18	9.09E+10	556.0	5.00	63.00	57.00	0.200	1.260	1.260	0.013	0.017	0.150	0.600	0.140	0.550	0.120	Babcock & Wilcox			
565	NRG6551	A533B1	RS1+DB1	PWR	F	PRS101	P		TL	42720	1.42E+19	9.23E+10	556.0	5.00	75.00	69.00	0.200	1.260	1.260	0.013	0.017	0.150	0.600	0.140	0.550	0.120	Babcock & Wilcox			
566																														
567	NRG6551	A533B1	SA1	PWR	T	PSA101	P		LT	9639	2.56E+18	7.38E+10	539.0	-22.00	87.00	109.00	0.235	1.497	1.497	0.013	0.017	0.285	0.528	0.185	0.480	0.241	Combustion Engineering			
568	NRG6551	A533B1	SA1	PWR	Z	PSA101	P		LT	53056	1.23E+19	6.44E+10	539.0	-22.00	159.00	181.00	0.235	1.497	1.497	0.013	0.017	0.285	0.528	0.185	0.480	0.241	Combustion Engineering			
569	5-00Calib	A533B1	SA1	PWR	S	PSA101	P		LT	94672	1.97E+19	5.78E+10	539.0	-21.72	152.92	175.00	0.235	1.497	1.497	0.013	0.017	0.285	0.528	0.185	0.480	0.241	Combustion Engineering			
570																														
571	NRG6551	A533B1	SA1	PWR	T	PSA102	P		LT	9639	2.56E+18	7.38E+10	539.0	-21.00	68.00	89.00	0.220	1.467	1.467	0.016	0.018	0.305	0.525	0.175	0.473	0.235	Combustion Engineering			
572	NRG6551	A533B1	SA1	PWR	Z	PSA102	P		LT	53056	1.23E+19	6.44E+10	539.0	-21.00	137.00	158.00	0.220	1.467	1.467	0.016	0.018	0.305	0.525	0.175	0.473	0.235	Combustion Engineering			
573																														
574	NRG6551	A533B1	SA1	PWR	T	PSA103	P		LT	9639	2.56E+18	7.38E+10	539.0	-43.00	25.00	68.00	0.200	1.220	1.220	0.012	0.026	0.270	0.508	0.110	0.437	0.220	Combustion Engineering			
575	NRG6551	A533B1	SA1	PWR	Y	PSA103	P		LT	31389	9.30E+18	8.23E+10	539.0	-43.00	71.00	114.00	0.200	1.220	1.220	0.012	0.026	0.270	0.508	0.110	0.437	0.220	Combustion Engineering			
576	NRG6551	A533B1	SA1	PWR	Z	PSA103	P		LT	53056	1.23E+19	6.44E+10	539.0	-43.00	64.00	107.00	0.200	1.220	1.220	0.012	0.026	0.270	0.508	0.110	0.437	0.220	Combustion Engineering			
577																														
578	NRG6551	A533B1	SA2	PWR	T	PSA201	P		LT	10444	2.75E+18	7.31E+10	545.0	28.00	84.00	56.00	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engineering			
579	NRG6551	A533B1	SA2	PWR	U	PSA201	P		LT	23667	5.50E+18	6.46E+10	541.0	28.00	92.00	65.00	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engineering			
580	NRG6551	A533B1	SA2	PWR	X	PSA201	P		LT	54444	1.07E+19	5.46E+10	539.0	28.00	116.00	88.00	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engineering			
581	7-03P	A533B1	SA2	PWR	Y	PSA201	P		LT	94608	1.81E+19	5.31E+10	539.0	27.85	128.57	100.72	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engine [14]			
582																														
583	NRG6551	A533B1	SA2	PWR	T	PSA201	P		TL	10444	2.75E+18	7.31E+10	545.0	11.00	87.00	76.00	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engineering			
584	NRG6551	A533B1	SA2	PWR	U	PSA201	P		TL	23667	5.50E+18	6.46E+10	541.0	11.00	111.00	99.00	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engineering			
585	NRG6551	A533B1	SA2	PWR	X	PSA201	P		TL	54444	1.07E+19	5.46E+10	539.0	11.00	138.00	127.00	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engineering			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
586	7-03P	A533B1	SA2	PWR	Y	PSA201	P		TL	94608	1.81E+19	5.31E+10	539.0	11.18	140.01	128.83	0.235	1.359	1.359	0.010	0.009	0.275	0.617	0.105	0.563	0.117	Combustion Engine [14]			
587																														
588	NRG6551	A533B1	SB1	PWR	U	PSB101	P		LT	8001	3.36E+18	1.17E+11	558.0	-24.00	15.00	39.00	0.200	1.450	1.450	0.007	0.010	0.240	0.570	0.060	0.550	0.060	Combustion Engineering			
589	7-03P	A533B1	SB1	PWR	Y	PSB101	P		LT	48840	1.15E+19	6.54E+10	559.0	-24.20	21.24	45.44	0.200	1.450	1.450	0.007	0.010	0.240	0.570	0.060	0.550	0.060	Combustion Engineering			
590																														
591	NRG6551	A533B1	SB1	PWR	U	PSB101	P		TL	8001	3.36E+18	1.17E+11	558.0	9.00	37.00	29.00	0.200	1.450	1.450	0.007	0.010	0.240	0.570	0.060	0.550	0.060	Combustion Engineering			
592	7-03P	A533B1	SB1	PWR	Y	PSB101	P		TL	48840	1.15E+19	6.54E+10	559.0	8.60	43.85	35.25	0.200	1.450	1.450	0.007	0.010	0.240	0.570	0.060	0.550	0.060	Combustion Engineering			
593																														
594	NRG6551	A533B1	SH1	BWR	30D	PSH101	P		LT	58531	1.40E+17	6.64E+08	528.0	10.00	28.00	18.00	0.180	1.313	1.313	0.009	0.015	0.177	0.613	#####	0.567	0.093	Chicago Bridge and Iron			
595																														
596	NRG6551	A533B1	SH2	BWR	30D	PSH201	P		LT	54619	1.30E+17	6.61E+08	528.0	-9.00	0.00	9.00	0.200	1.300	1.300	0.008	0.015	0.240	0.633	#####	0.573	0.123	Chicago Bridge and Iron			
597																														
598	NRG6551	A533B1	SL1	PWR	W97	PSL101	P		LT	40917	5.50E+18	3.73E+10	541.0	6.00	76.00	69.00	0.250	1.300	1.300	0.007	0.017	0.201	0.575	0.070	0.629	0.141	Combustion Engineering			
599	NRG6551	A533B1	SL1	PWR	W104	PSL101	P		LT	83408	7.16E+18	2.38E+10	545.0	6.00	86.00	80.00	0.250	1.300	1.300	0.007	0.017	0.201	0.575	0.070	0.629	0.141	Combustion Engineering			
600	7-03P	A533B1	SL1	PWR	W284	PSL101	P		LT	150935	1.45E+19	2.67E+10	546.7	6.07	95.04	88.97	0.250	1.300	1.300	0.007	0.017	0.201	0.575	0.070	0.629	0.141	Combustion Engine [19]			
601																														
602	NRG6551	A533B1	SL1	PWR	W97	PSL101	P		TL	40917	5.50E+18	3.73E+10	541.0	19.00	79.00	60.00	0.250	1.300	1.300	0.007	0.017	0.201	0.575	0.070	0.629	0.141	Combustion Engineering			
603	7-03P	A533B1	SL1	PWR	W284	PSL101	P		TL	150935	1.45E+19	2.67E+10	546.7	18.76	99.42	80.66	0.250	1.300	1.300	0.007	0.017	0.201	0.575	0.070	0.629	0.141	Combustion Engine [19]			
604																														
605	NRG6551	A533B1	SL2	PWR	W83	PSL201	P		LT	9773	1.60E+18	4.55E+10	548.0	12.00	39.00	27.00	0.275	1.335	1.335	0.005	0.010	0.270	0.565	0.095	0.535	0.101	Combustion Engineering			
606																														
607	NRG6551	A533B1	SL2	PWR	W83	PSL201	P		TL	9773	1.60E+18	4.55E+10	548.0	31.00	60.00	29.00	0.275	1.335	1.335	0.005	0.010	0.270	0.565	0.095	0.535	0.101	Combustion Engineering			
608	5-00Calib	A533B1	SL2	PWR	W263	PSL201	P		TL	96426	1.24E+19	3.57E+10	558.0	31.31	133.72	102.00	0.275	1.335	1.335	0.005	0.010	0.270	0.565	0.095	0.535	0.101	Combustion Engineering			
609																														
610	5-00Calib	A302B	SO1	PWR	D	PSO101	P		LT	24722	3.48E+19	3.91E+11	552.0	31.00	150.00	118.00	0.235	1.403	1.403	0.013	0.021	0.270	0.200	#####	0.453	0.170	Combustion Engineering			
611																														
612	5-00Calib	A302B	SO1	PWR	D	PSO102	P		LT	24722	3.48E+19	3.91E+11	552.0	14.00	119.00	104.00	0.210	1.360	1.360	0.011	0.019	0.230	0.200	#####	0.470	0.180	Combustion Engineering			
613	5-00Calib	A302B	SO1	PWR	F	PSO102	P		LT	67500	3.85E+19	1.58E+11	552.0	14.00	123.00	108.00	0.210	1.360	1.360	0.011	0.019	0.230	0.200	#####	0.470	0.180	Combustion Engineering			
614																														
615	5-00Calib	A302B	SO1	PWR	A	PSO103	P		LT	16278	1.75E+19	2.99E+11	552.0	27.00	121.00	94.00	0.205	1.437	1.437	0.011	0.023	0.245	0.200	#####	0.467	0.180	Combustion Engineering			
616	5-00Calib	A302B	SO1	PWR	D	PSO103	P		LT	24722	3.48E+19	3.91E+11	552.0	27.00	145.00	118.00	0.205	1.437	1.437	0.011	0.023	0.245	0.200	#####	0.467	0.180	Combustion Engineering			
617																														
618	5-00Calib	A533B1	SO2	PWR	W97	PSO201	P		LT	23620	5.07E+18	5.96E+10	553.0	22.81	73.00	50.19	####	1.420	1.420	0.008	0.009	0.280	0.600	0.200	0.580	0.100	Combustion Engineering			
619																														
620	5-00Calib	A533B1	SO2	PWR	W97	PSO201	P		TL	23620	5.07E+18	5.96E+10	553.0	36.25	67.00	30.75	####	1.420	1.420	0.008	0.009	0.280	0.600	0.200	0.580	0.100	Combustion Engineering			
621						Above & below are same heat per Brian Hall email 6/11/04																									
622	7-03P	A533B1	SO2	PWR	W263	PSO201	P		TL	116376	2.20E+19	5.26E+10	551.1	36.25	114.36	78.11	####	1.420	1.420	0.008	0.009	0.280	0.600	0.200	0.580	0.100	Combustion Engineering			
623																														
624	NRG6551	A533B1	SO3	PWR	W97	PSO301	P		LT	37957	8.00E+18	5.85E+10	553.0	82.00	138.00	56.00	0.238	1.312	1.312	0.009	0.014	0.180	0.562	0.090	0.550	0.056	Combustion Engineering			
625																														
626	NRG6551	A533B1	SO3	PWR	W97	PSO301	P		TL	37957	8.00E+18	5.85E+10	553.0	43.00	111.00	68.00	0.238	1.312	1.312	0.009	0.014	0.180	0.562	0.090	0.550	0.056	Combustion Engineering			
627	5-04	A533B1	SO3	PWR	W263	PSO301	P		TL	130353	2.47E+19	5.27E+10	549.6	42.90	136.14	93.24	0.238	1.312	1.312	0.009	0.014	0.180	0.562	0.090	0.550	0.056	Combustion Engine [30]			
628																														
629	NRG6551	A533B1	SR1	PWR	U	PSR101	P		LT	9583	6.12E+18	1.77E+11	557.0	52.00	82.00	29.00	0.220	1.340	1.340	0.014	0.016	0.370	0.490	0.095	0.500	0.073	Chicago Bridge and Iron			
630	NRG6551	A533B1	SR1	PWR	V	PSR101	P		LT	26722	1.52E+19	1.58E+11	557.0	52.00	94.00	42.00	0.220	1.340	1.340	0.014	0.016	0.370	0.490	0.095	0.500	0.073	Chicago Bridge and Iron			
631	7-03P	A533B1	SR1	PWR	X	PSR101	P		LT	82788	3.25E+19	1.09E+11	557.0	52.06	146.95	94.89	0.220	1.340	1.340	0.014	0.016	0.370	0.490	0.095	0.500	0.073	Chicago Bridge and Iron			
632																														
633	NRG6551	A533B1	SR1	PWR	U	PSR101	P		TL	9583	6.12E+18	1.77E+11	557.0	74.00	110.00	36.00	0.220	1.340	1.340	0.014	0.016	0.370	0.490	0.095	0.500	0.073	Chicago Bridge and Iron			
634	NRG6551	A533B1	SR1	PWR	V	PSR101	P		TL	26722	1.52E+19	1.58E+11	557.0	74.00	106.00	33.00	0.220	1.340	1.340	0.014	0.016	0.370	0.490	0.095	0.500	0.073	Chicago Bridge and Iron			
635	7-03P	A533B1	SR1	PWR	X	PSR101	P		TL	82788	3.25E+19	1.09E+11	557.0	73.57	151.72	78.15	0.220	1.340	1.340	0.014	0.016	0.370	0.490	0.095	0.500	0.073	Chicago Bridge and Iron			
636																														
637	NRG6551	A533B1	ST1	PWR	U	PST101	P		LT	6861	2.83E+18	1.15E+11	560.0	-46.00	-34.00	12.00	0.190	1.180	1.180	0.012	0.013	0.190	0.650	0.030	0.530	0.060	Combustion Engineering			
638	5-04	A533B1	ST1	PWR	Y	PST101	P		LT	42952	1.34E+19	8.67E+10	559.0	-46.00	-7.67	38.33	0.190	1.180	1.180	0.012	0.013	0.190	0.650	0.030	0.530	0.060	Combustion Engine [47]			
639																														
640	NRG6551	A533B1	ST1	PWR	U	PST101	P		TL	6861	2.83E+18	1.15E+11	560.0	-6.00	16.00	21.00	0.190	1.180	1.180	0.012	0.013	0.190	0.650	0.030	0.530	0.060	Combustion Engineering			
641	5-04	A533B1	ST1	PWR	Y	PST101	P		TL	42952	1.34E+19	8.67E+10	559.0	-6.00	5.52	11.52	0.190	1.180	1.180	0.012	0.013	0.190	0.650	0.030	0.530	0.060	Combustion Engine [47]			
642																														
643	NRG6551	A533B1	ST2	PWR	V	PST201	P		LT	7889	2.54E+18	8.94E+10	560.0	-34.00	-23.00	11.00	####	1.550	1.550	0.006	####	####	0.650	#####	#####	0.040	Combustion Engineering			
644	5-00Calib	A533B1	ST2	PWR	Y	PST201	P		LT	44970	1.16E+19	7.17E+10	560.0	-33.57	-4.05	30.00	####	1.550	1.550	0.006	####	####	0.650	#####	#####	0.040	Combustion Engineering			
645																														
646	NRG6551	A533B1	ST2	PWR	V	PST201	P		TL	7889	2.54E+18	8.94E+10	560.0	-18.00	-10.00	8.00	####	1.550	1.550	0.006	####	####	0.650	#####	#####	0.040	Combustion Engineering			
647	5-00Calib	A533B1	ST2	PWR	Y	PST201	P		TL	44970	1.16E+19	7.17E+10	560.0	-18.09	16.71	35.00	####	1.550	1.550	0.006	####	####	0.650	#####	#####	0.040	Combustion Engineering			
648																														
649	NRG6551	A533B1	SU1	PWR	T	PSU101	P		LT	9389	2.82E+18	8.34E+10	534.0	-7.00	42.00	49.00	0.232	1.395	1.395	0.013	0.015	0.325	0.500	0.091	0.584	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
650	NRG6551	A533B1	SU1	PWR	V	PSU101	P		LT	70278	1.97E+19	7.79E+10	538.0	-7.00	105.00	112.00	0.232	1.395	1.395	0.013	0.015	0.325	0.500	0.091	0.584	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
651	5-00Calib	A533B1	SU1	PWR	X	PSU101	P		LT	139914	1.60E+19	3.18E+10	541.0	-6.92	77.46	84.00	0.232	1.395	1.395	0.013	0.015	0.325	0.500	0.091	0.584	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
652																														
653	NRG6551	A533B1	SU2	PWR	X	PSU201	P		LT	10250	2.94E+18	7.97E+10	535.0	-2.00	56.00	58.00	0.244	1.340	1.340	0.011	0.014	0.244	0.540	0.083	0.536	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
654	NRG6551	A533B1	SU2	PWR	V	PSU201	P		LT	73333	1.75E+19	6.63E+10	541.0	-2.00	77.00	80.00	0.244	1.340	1.340	0.011	0.014	0.244	0.540	0.083	0.536	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
655	7-03P	A533B1	SU2	PWR	Y	PSU201	P		LT	177828	2.73E+19	4.26E+10	543.0	-2.38	105.89	108.27	0.244	1.340	1.340	0.011	0.014	0.244	0.540	0.083	0.536	0.110	Rotterdamse Droog [15]			
656																														
657	NRG6551	A533B1	SU2	PWR	X	PSU201	P		TL	10250	2.94E+18	7.97E+10	535.0	11.00	59.00	49.00	0.244	1.340	1.340	0.011	0.014	0.244	0.540	0.083	0.536	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
658	NRG6551	A533B1	SU2	PWR	V	PSU201	P		TL	73333	1.75E+19	6.63E+10	541.0	11.00	76.00	65.00	0.244	1.340	1.340	0.011	0.014	0.244	0.540	0.083	0.536	0.110	Rotterdamse Droogdok Madtdschappij (Netherland			
659	7-03P	A533B1	SU2	PWR	Y	PSU201	P		TL	177828	2.73E+19	4.26E+10	543.0	10.60	115.84	105.24	0.244	1.340	1.340	0.011	0.014	0.244	0.540	0.083	0.536	0.110	Rotterdamse Droog [15]			
660																														
661	NRG6551	A302B	TM1	PWR	E	PTM101	P		LT	11211	1.09E+18	2.70E+10	556.0	-11.00	14.00	26.00	0.240	1.360	1.360	0.010	0.017	0.230	0.570	0.190	0.510	0.090	Babcock & Wilcox			
662	NRG6551	A302B	TM1+CR3	PWR	C	PTM101	P		LT	38371	8.66E+18	6.27E+10	556.0	-11.00	2.00	14.00	0.240	1.360	1.360	0.010	0.017	0.230	0.570	0.190	0.510	0.090	Babcock & Wilcox			
663																														
664	NRG6551	A302B	TM1+CR3	PWR	C	PTM101	P		TL	38371	8.66E+18	6.27E+10	556.0	25.00	41.00	15.00	0.240	1.360	1.360	0.010	0.017	0.230	0.570	0.190	0.510	0.090	Babcock & Wilcox			
665																														
666	5-04	A533B1	DB1	PWR	TM2-C	PTM201	P		TL	9126	1.71E+18	5.20E+10	556.0	14.80	44.37	29.57	0.220	1.420	1.420	0.010	0.015	0.190	0.500	#####	0.470	0.140	Babcock & Wilcox	[52]		
667																														
668	5-04	A533B1	DB1	PWR	TM2-C	PTM202	P		TL	9126	1.68E+18	5.11E+10	556.0	38.20	82.65	44.45	0.220	1.350	1.350	0.010	0.015	0.230	0.500	#####	0.470	0.120	Babcock & Wilcox	[52]		
669	5-04	A533B1	DB1	PWR	TM2-E	PTM202	P		TL	9126	1.74E+18	5.30E+10	556.0	38.20	77.18	38.98	0.220	1.350	1.350	0.010	0.015	0.230	0.500	#####	0.470	0.120	Babcock & Wilcox	[52]		
670																														
671	NRG6551	A533B1	TRO	PWR	U	PTRO01	P		LT	10139	4.11E+18	1.13E+11	554.0	-17.00	45.00	62.00	0.210	1.270	1.270	0.011	0.016	0.200	0.600	0.048	0.530	0.150	Chicago Bridge and Iron			
672	NRG6551	A533B1	TRO	PWR	X	PTRO01	P		LT	38333	1.77E+19	1.28E+11	554.0	-17.00	69.00	86.00	0.210	1.270	1.270	0.011	0.016	0.200	0.600	0.048	0.530	0.150	Chicago Bridge and Iron			
673	NRG6551	A533B1	TRO	PWR	V	PTRO01	P		LT	70278	2.34E+19	9.25E+10	554.0	-17.00	72.00	89.00	0.210	1.270	1.270	0.011	0.016	0.200	0.600	0.048	0.530	0.150	Chicago Bridge and Iron			
674																														
675	NRG6551	A533B1	TRO	PWR	U	PTRO01	P		TL	10139	4.11E+18	1.13E+11	554.0	-6.00	60.00	66.00	0.210	1.270	1.270	0.011	0.016	0.200	0.600	0.048	0.530	0.150	Chicago Bridge and Iron			
676	NRG6551	A533B1	TRO	PWR	X	PTRO01	P		TL	38333	1.77E+19	1.28E+11	554.0	-6.00	102.00	108.00	0.210	1.270	1.270	0.011	0.016	0.200	0.600	0.048	0.530	0.150	Chicago Bridge and Iron			
677	NRG6551	A533B1	TRO	PWR	V	PTRO01	P		TL	70278	2.34E+19	9.25E+10	554.0	-6.00	94.00	99.00	0.210	1.270	1.270	0.011	0.016	0.200	0.600	0.048	0.530	0.150	Chicago Bridge and Iron			
678																														
679	5-04	A533B1	VO1	PWR	U	PVO101	P		LT	9583	3.62E+18	1.05E+11	560.0	-14.01	3.72	17.73	0.235	1.301	1.301	0.014	0.010	0.270	0.593	0.049	0.510	0.057	Combustion Engine	[48]		
680	NRG6551	A533B1	VO1	PWR	Y	PVO101	P		LT	40556	1.31E+19	8.97E+10	560.0	-14.00	24.00	38.00	0.235	1.301	1.301	0.014	0.010	0.270	0.593	0.049	0.510	0.057	Combustion Engineering			
681	5-00Calib	A533B1	VO1	PWR	V	PVO101	P		LT	75125	1.98E+19	7.32E+10	560.0	-14.01	27.03	41.00	0.235	1.301	1.301	0.014	0.010	0.270	0.593	0.049	0.510	0.057	Combustion Engineering			
682																														
683	5-04	A533B1	VO1	PWR	U	PVO101	P		TL	9583	3.62E+18	1.05E+11	560.0	16.66	5.26	-11.40	0.235	1.301	1.301	0.014	0.010	0.270	0.593	0.049	0.510	0.057	Combustion Engine	[48]		
684	NRG6551	A533B1	VO1	PWR	Y	PVO101	P		TL	40556	1.31E+19	8.97E+10	560.0	17.00	27.00	10.00	0.235	1.301	1.301	0.014	0.010	0.270	0.593	0.049	0.510	0.057	Combustion Engineering			
685	5-00Calib	A533B1	VO1	PWR	V	PVO101	P		TL	75125	1.98E+19	7.32E+10	560.0	16.66	50.02	33.00	0.235	1.301	1.301	0.014	0.010	0.270	0.593	0.049	0.510	0.057	Combustion Engineering			
686																														
687	5-04	A533B1	VO2	PWR	U	PVO201	P		LT	10361	4.03E+18	1.08E+11	557.0	8.25	10.73	2.48	0.221	1.252	1.252	0.008	0.012	0.217	0.582	0.054	0.537	0.051	Combustion Engine	[49]	Chemistry is the avera	
688	5-04	A533B1	VO2	PWR	Y	PVO201	P		LT	42339	1.13E+19	7.41E+10	557.0	8.25	14.03	5.78	0.221	1.252	1.252	0.008	0.012	0.217	0.582	0.054	0.537	0.051	Combustion Engine	[49]	Chemistry is the avera	
689	5-04	A533B1	VO2	PWR	X	PVO201	P		LT	66795	2.16E+19	8.98E+10	557.0	8.25	37.82	29.57	0.221	1.252	1.252	0.008	0.012	0.217	0.582	0.054	0.537	0.051	Combustion Engine	[49]	Chemistry is the avera	
690																														
691	5-04	A533B1	VO2	PWR	U	PVO201	P		TL	10361	4.03E+18	1.08E+11	557.0	27.47	20.64	-6.83	0.221	1.252	1.252	0.008	0.012	0.217	0.582	0.054	0.537	0.051	Combustion Engine	[49]	Chemistry is the avera	
692	5-04	A533B1	VO2	PWR	Y	PVO201	P		TL	42339	1.13E+19	7.41E+10	557.0	27.47	30.12	2.65	0.221	1.252	1.252	0.008	0.012	0.217	0.582	0.054	0.537	0.051	Combustion Engine	[49]	Chemistry is the avera	
693	5-04	A533B1	VO2	PWR	X	PVO201	P		TL	66795	2.16E+19	8.98E+10	557.0	27.47	58.07	30.60	0.221	1.252	1.252	0.008	0.012	0.217	0.582	0.054	0.537	0.051	Combustion Engine	[49]	Chemistry is the avera	
694																														
695	NRG6551	A533B1	VS1	PWR	U	PVS101	P		LT	9861	6.55E+18	1.85E+11	555.0	-19.00	21.00	40.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
696	NRG6551	A533B1	VS1	PWR	V	PVS101	P		LT	25639	1.55E+19	1.68E+11	555.0	-19.00	40.00	58.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
697	NRG6551	A533B1	VS1	PWR	X	PVS101	P		LT	44167	2.62E+19	1.65E+11	555.0	-19.00	16.00	35.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
698	5-00Calib	A533B1	VS1	PWR	W	PVS101	P		LT	94498	4.66E+19	1.37E+11	555.0	-18.87	44.98	64.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
699																														
700	NRG6551	A533B1	VS1	PWR	U	PVS101	P		TL	9861	6.55E+18	1.85E+11	555.0	28.00	43.00	15.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
701	NRG6551	A533B1	VS1	PWR	V	PVS101	P		TL	25639	1.55E+19	1.68E+11	555.0	28.00	60.00	32.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
702	NRG6551	A533B1	VS1	PWR	X	PVS101	P		TL	44167	2.62E+19	1.65E+11	555.0	28.00	56.00	28.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
703	5-00Calib	A533B1	VS1	PWR	W	PVS101	P		TL	94498	4.66E+19	1.37E+11	555.0	27.56	85.86	58.00	0.220	1.300	1.300	0.009	0.015	0.240	0.510	0.080	0.490	0.100	Chicago Bridge and Iron			
704																														
705	NRG6551	A533B1	VY	BWR	30D	PVY_01	P		LT	66120	4.30E+16	1.81E+08	527.0	8.00	27.00	19.00	####	####	1.365	0.015	####	####	0.679	#####	#####	0.104	Chicago Bridge and Iron			
706																														
707	NRG6551	A533B1	WC1	PWR	U	PWC101	P		LT	9417	3.53E+18	1.04E+11	560.0	-18.00	15.00	32.00	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engineering			
708	NRG6551	A533B1	WC1	PWR	Y	PWC101	P		LT	41944	1.27E+19	8.41E+10	560.0	-18.00	-7.00	11.00	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engineering			
709	5-04	A533B1	WC1	PWR	V	PWC101	P		LT	83188	2.53E+19	8.44E+10	557.0	-17.61	28.63	46.24	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engine	[32]		
710	7-03P	A533B1	WC1	PWR	X	PWC101	P		LT	120888	3.49E+19	8.02E+10	554.0	-17.61	37.35	54.96	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engine	[20]		
711																														
712	NRG6551	A533B1	WC1	PWR	U	PWC101	P		TL	9417	3.53E+18	1.04E+11	560.0	2.00	26.00	24.00	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engineering			
713	NRG6551	A533B1	WC1	PWR	Y	PWC101	P		TL	41944	1.27E+19	8.41E+10	560.0	2.00	38.00	36.00	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engineering			
714	5-04	A533B1	WC1	PWR	V	PWC101	P		TL	83188	2.53E+19	8.44E+10	557.0	1.74	56.11	54.37	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engine	[32]		
715	7-03P	A533B1	WC1	PWR	X	PWC101	P		TL	120888	3.49E+19	8.02E+10	554.0	1.74	54.83	53.09	0.200	1.450	1.450	0.008	0.010	0.200	0.620	0.050	0.550	0.070	Combustion Engine	[20]		

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
716																														
717	NRG6551	A533B1	WF3	PWR	W97	PWF301	P		LT	38921	6.47E+18	4.62E+10	553.0	-7.00	-2.00	5.00	0.230	1.380	1.380	0.005	0.005	0.230	0.580	0.010	0.570	0.030	Combustion Engineering			
718																														
719	NRG6551	A533B1	WF3	PWR	W97	PWF301	P		TL	38921	6.47E+18	4.62E+10	553.0	-25.00	6.00	31.00	0.230	1.380	1.380	0.005	0.005	0.230	0.580	0.010	0.570	0.030	Combustion Engineering			
720	5-04	A533B1	WF3	PWR	W263	PWF301	P		TL	121231	1.45E+19	3.32E+10	553.0	-24.59	-25.57	-0.98	0.230	1.380	1.380	0.005	0.005	0.230	0.580	0.010	0.570	0.030	Combustion Engine [33]		surprisingly small shift	
721																														
722	NRG6551	A533B1	ZN1	PWR	T	PZN101	P		LT	10667	3.10E+18	8.07E+10	529.0	-3.00	50.00	53.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
723	NRG6551	A533B1	ZN1	PWR	U	PZN101	P		LT	31389	1.02E+19	9.03E+10	529.0	-3.00	87.00	90.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
724	NRG6551	A533B1	ZN1	PWR	X	PZN101	P		LT	45278	1.26E+19	7.73E+10	529.0	-3.00	91.00	94.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
725	NRG6551	A533B1	ZN1	PWR	Y	PZN101	P		LT	75278	1.56E+19	5.76E+10	529.0	-3.00	96.00	99.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
726																														
727	NRG6551	A533B1	ZN1	PWR	T	PZN101	P		TL	10667	3.10E+18	8.07E+10	529.0	21.00	53.00	32.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
728	NRG6551	A533B1	ZN1	PWR	U	PZN101	P		TL	31389	1.02E+19	9.03E+10	529.0	21.00	87.00	65.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
729	NRG6551	A533B1	ZN1	PWR	X	PZN101	P		TL	45278	1.26E+19	7.73E+10	529.0	21.00	94.00	73.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
730	NRG6551	A533B1	ZN1	PWR	Y	PZN101	P		TL	75278	1.56E+19	5.76E+10	529.0	21.00	121.00	100.00	0.239	1.375	1.375	0.010	0.015	0.202	0.490	0.082	0.467	0.110	Babcock & Wilcox			
731																														
732	NRG6551	A533B1	ZN2	PWR	U	PZN201	P		LT	11583	2.70E+18	6.48E+10	528.0	31.00	73.00	42.00	0.160	1.315	1.315	0.007	0.013	0.235	0.530	0.065	0.495	0.120	Babcock & Wilcox			
733	NRG6551	A533B1	ZN2	PWR	T	PZN201	P		LT	31389	7.79E+18	6.89E+10	528.0	31.00	102.00	71.00	0.160	1.315	1.315	0.007	0.013	0.235	0.530	0.065	0.495	0.120	Babcock & Wilcox			
734	NRG6551	A533B1	ZN2	PWR	Y	PZN201	P		LT	80556	1.46E+19	5.03E+10	528.0	31.00	126.00	94.00	0.160	1.315	1.315	0.007	0.013	0.235	0.530	0.065	0.495	0.120	Babcock & Wilcox			
735																														
736	NRG6551	A533B1	ZN2	PWR	U	PZN201	P		TL	11583	2.70E+18	6.48E+10	528.0	47.00	100.00	53.00	0.160	1.315	1.315	0.007	0.013	0.235	0.530	0.065	0.495	0.120	Babcock & Wilcox			
737	NRG6551	A533B1	ZN2	PWR	T	PZN201	P		TL	31389	7.79E+18	6.89E+10	528.0	47.00	130.00	83.00	0.160	1.315	1.315	0.007	0.013	0.235	0.530	0.065	0.495	0.120	Babcock & Wilcox			
738	NRG6551	A533B1	ZN2	PWR	Y	PZN201	P		TL	80556	1.46E+19	5.03E+10	528.0	47.00	168.00	121.00	0.160	1.315	1.315	0.007	0.013	0.235	0.530	0.065	0.495	0.120	Babcock & Wilcox			
739																														
740	NRG6551	A302B	TP3	PWR	T	SASTM	SRM		LT	10056	7.39E+18	2.04E+11	547.0	37.00	117.00	80.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
741	NRG6551	A302B	GIN	PWR	V	SASTM	SRM		LT	12361	5.85E+18	1.31E+11	552.0	37.00	127.00	90.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
742	NRG6551	A302B	IP2	PWR	T	SASTM	SRM		LT	12444	2.43E+18	5.42E+10	534.0	37.00	96.00	59.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
743	NRG6551	A302B	PB1	PWR	V	SASTM	SRM		LT	13028	6.34E+18	1.35E+11	542.0	37.00	132.00	95.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
744	5-00Calib	A302B	SO1	PWR	A	SASTM	SRM		LT	16278	1.75E+19	2.99E+11	552.0	37.00	147.00	110.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
745	NRG6551	A302B	IP2	PWR	Y	SASTM	SRM		LT	20833	4.53E+18	6.04E+10	529.0	37.00	104.00	67.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
746	NRG6551	A302B	CTY	PWR	F	SASTM	SRM		LT	21278	4.63E+18	6.04E+10	537.0	37.00	123.00	86.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
747	NRG6551	A302B	GIN	PWR	R	SASTM	SRM		LT	22333	1.10E+19	1.37E+11	550.0	37.00	133.00	97.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
748	5-00Calib	A302B	SO1	PWR	D	SASTM	SRM		LT	24722	3.48E+19	3.91E+11	552.0	37.00	185.00	148.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
749	7-03B-OC	A302B	OYS	BWR	H	SASTM	SRM		LT	27387	1.54E+18	1.56E+10	530.0	36.91	105.05	68.14	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	US STEEL	[1]		
750	NRG6551	A302B	TP3	PWR	S	SASTM	SRM		LT	30278	1.72E+19	1.58E+11	544.5	37.00	137.00	100.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
751	NRG6551	A302B	PB1	PWR	S	SASTM	SRM		LT	31667	8.29E+18	7.27E+10	542.0	37.00	129.00	92.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
752	NRG6551	A302B	PB1	PWR	R	SASTM	SRM		LT	44722	2.19E+19	1.36E+11	542.0	37.00	149.00	112.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
753	NRG6551	A302B	IP2	PWR	Z	SASTM	SRM		LT	45833	1.08E+19	6.55E+10	525.0	37.00	125.00	88.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
754	NRG6551	A302B	GIN	PWR	T	SASTM	SRM		LT	60278	1.91E+19	8.80E+10	548.0	37.00	127.00	90.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
755	NRG6551	A302B	CTY	PWR	H	SASTM	SRM		LT	66667	1.55E+19	6.46E+10	537.0	37.00	156.00	119.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
756	5-00Calib	A302B	SO1	PWR	F	SASTM	SRM		LT	67500	3.85E+19	1.58E+11	552.0	37.00	161.00	124.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
757	NRG6551	A302B	TP3	PWR	V	SASTM	SRM		LT	70556	1.53E+19	6.02E+10	547.0	37.00	131.00	94.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
758	NRG6551	A302B	IP2	PWR	V	SASTM	SRM		LT	75833	5.06E+18	1.85E+10	524.0	37.00	131.00	94.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
759	NRG6551	A302B	PB1	PWR	T	SASTM	SRM		LT	81389	2.23E+19	7.61E+10	535.0	37.00	112.00	75.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox			
760	NRG6551	A302B	CTY	PWR	D	SASTM	SRM		LT	95278	2.28E+19	6.65E+10	537.0	37.00	169.00	132.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
761	7-03P	A5082	TP3	PWR	X	SASTM	SRM		LT	173886	2.90E+19	4.63E+10	547.0	36.91	157.44	120.53	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Babcock & Wilcox	[18]		
762																														
763	NRG6551	A302B	HB2	PWR	S	SASTM	SRM		TL	11222	5.06E+18	1.25E+11	546.0	65.00	136.00	72.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
764	NRG6551	A302B	HB2	PWR	V	SASTM	SRM		TL	28056	6.01E+18	5.95E+10	546.0	65.00	132.00	68.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
765	NRG6551	A302B	HB2	PWR	T	SASTM	SRM		TL	63611	4.42E+19	1.93E+11	546.0	65.00	232.00	167.00	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engineering			
766	7-03P	A302B	HB2	PWR	X	SASTM	SRM		TL	178616	4.49E+19	6.98E+10	546.0	64.57	188.80	124.23	0.240	1.340	1.340	0.014	0.023	0.230	0.180	0.110	0.510	0.200	Combustion Engine [23]			
767																														
768	NRG6551	A533B1	MY	PWR	A25	SHSS01	SRM		LT	7714	1.76E+19	6.34E+11	522.0	30.00	167.00	137.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
769	NRG6551	A533B1	FC1	PWR	W225	SHSS01	SRM		LT	22753	5.53E+18	6.75E+10	527.0	30.00	146.00	116.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
770	NRG6551	A533B1	CC1	PWR	W263	SHSS01	SRM		LT	25772	6.20E+18	6.68E+10	545.0	30.00	131.00	101.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
771	NRG6551	A533B1	PV2	PWR	W137	SHSS01	SRM		LT	39806	4.07E+18	2.84E+10	552.0	30.00	120.00	90.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
772	5-00Calib	A533B1	PV1	PWR	W137	SHSS01	SRM		LT	39931	3.45E+18	2.40E+10	552.0	29.74	122.00	92.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
773	NRG6551	A533B1	CC2	PWR	W263	SHSS01	SRM		LT	40114	8.06E+18	5.58E+10	545.0	30.00	149.00	120.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
774	NRG6551	A533B1	SL1	PWR	W104	SHSS01	SRM		LT	83408	7.16E+18	2.38E+10	545.0	30.00	159.00	129.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
775	7-03P	A533B1	PV1	PWR	W38	SHSS01	SRM		LT	85936	7.85E+18	2.54E+10	552.0	29.74	134.81	105.07	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engine [21]			
776	NRG6551	A533B1	ML2	PWR	W104	SHSS01	SRM		LT	87149	8.84E+18	2.82E+10	549.0	30.00	166.00	136.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
777	NRG6551	A533B1	PAL	PWR	W110	SHSS01	SRM		LT	87167	1.78E+19	5.67E+10	533.0	30.00	167.00	137.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
778	5-00Calib	A533B1	SL2	PWR	W263	SHSS01	SRM		LT	96426	1.24E+19	3.57E+10	558.0	29.74	156.63	127.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
779	NRG6551	A533B1	MY	PWR	W253	SHSS01	SRM		LT	102562	1.25E+19	3.39E+10	542.0	30.00	185.00	156.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
780	7-03P	A533B1	SO2	PWR	W263	SHSS01	SRM		LT	116376	2.20E+19	5.26E+10	551.1	29.74	178.67	148.93	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
781	5-00Calib	A533B1	FC1	PWR	W275	SHSS01	SRM		LT	118519	1.28E+19	3.00E+10	538.0	29.74	186.00	156.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
782	5-04	A533B1	WF3	PWR	W263	SHSS01	SRM		LT	121231	1.45E+19	3.32E+10	553.0	29.74	186.89	157.15	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engine [33]			
783	5-04	A533B1	SO3	PWR	W263	SHSS01	SRM		LT	130353	2.47E+19	5.27E+10	549.6	29.74	156.04	126.30	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engine [30]			
784	7-03P	A533B1	AN2	PWR	w104	SHSS01	SRM		LT	137424	2.94E+19	5.94E+10	553.0	29.74	163.74	134.00	0.219	1.465	1.465	0.010	0.015	0.186	0.665	0.103	0.548	0.174	Combustion Engineering			
785																														
786	NRG6551	A533B1	OC1	PWR	F	SHSS02	SRM		LT	7303	5.70E+17	2.17E+10	556.0	47.00	56.00	9.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
787	NRG6551	A533B1	AN1	PWR	E	SHSS02	SRM		LT	8281	7.27E+17	2.44E+10	556.0	47.00	55.00	8.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
788	5-04	A533B1	DB1	PWR	TM2-C	SHSS02	SRM		LT	9126	1.71E+18	5.20E+10	556.0	46.90	101.96	55.06	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox	[52]		
789	NRG6551	A533B1	SU1	PWR	T	SHSS02	SRM		LT	9389	2.82E+18	8.34E+10	534.0	47.00	119.00	72.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Rotterdamse Droogdok Madtdschappij (Netherland			
790	NRG6551	A533B1	SA1	PWR	T	SHSS02	SRM		LT	9639	2.56E+18	7.38E+10	539.0	47.00	114.00	67.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
791	NRG6551	A533B1	SU2	PWR	X	SHSS02	SRM		LT	10250	2.94E+18	7.97E+10	535.0	47.00	108.00	61.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Rotterdamse Droogdok Madtdschappij (Netherland			
792	NRG6551	A533B1	TP4	PWR	T	SHSS02	SRM		LT	10278	7.08E+18	1.91E+11	547.0	47.00	134.00	87.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
793	NRG6551	A533B1	OC2	PWR	C	SHSS02	SRM		LT	10561	1.02E+18	2.68E+10	556.0	47.00	89.00	42.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
794	NRG6551	A533B1	ZN1	PWR	T	SHSS02	SRM		LT	10667	3.10E+18	8.07E+10	529.0	47.00	113.00	67.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
795	NRG6551	A533B1	DC1	PWR	S	SHSS02	SRM		LT	11056	2.84E+18	7.14E+10	539.0	47.00	112.00	66.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
796	NRG6551	A533B1	CK1	PWR	T	SHSS02	SRM		LT	11111	2.69E+18	6.73E+10	537.0	47.00	105.00	58.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
797	NRG6551	A533B1	TM1	PWR	E	SHSS02	SRM		LT	11211	1.09E+18	2.70E+10	556.0	47.00	88.00	41.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
798	NRG6551	A533B1	KWE	PWR	V	SHSS02	SRM		LT	11278	6.08E+18	1.50E+11	532.0	47.00	143.00	96.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
799	NRG6551	A533B1	ZN2	PWR	U	SHSS02	SRM		LT	11583	2.70E+18	6.48E+10	528.0	47.00	97.00	50.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
800	NRG6551	A533B1	PI1	PWR	V	SHSS02	SRM		LT	11722	5.40E+18	1.28E+11	527.0	47.00	149.00	102.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
801	NRG6551	A533B1	PI2	PWR	V	SHSS02	SRM		LT	12222	5.78E+18	1.31E+11	527.0	47.00	169.00	122.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
802	NRG6551	A533B1	PB2	PWR	V	SHSS02	SRM		LT	13361	6.50E+18	1.35E+11	542.0	47.00	140.00	93.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
803	NRG6551	A533B1	OC1	PWR	E	SHSS02	SRM		LT	14406	1.50E+18	2.89E+10	556.0	47.00	77.00	30.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
804	NRG6551	A533B1	OC3+CR	PWR	B	SHSS02	SRM		LT	16392	3.12E+18	5.29E+10	556.0	47.00	98.00	51.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
805	NRG6551	A533B1	OC2+CR	PWR	A	SHSS02	SRM		LT	18672	3.37E+18	5.01E+10	556.0	47.00	117.00	70.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
806	NRG6551	A533B1	DB1	PWR	A	SHSS02	SRM		LT	29146	1.29E+19	1.23E+11	556.0	47.00	159.00	112.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
807	NRG6551	A533B1	IP3	PWR	Y	SHSS02	SRM		LT	29167	7.24E+18	6.90E+10	540.0	47.00	192.00	145.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
808	NRG6551	A533B1	CK1	PWR	X	SHSS02	SRM		LT	29722	8.13E+18	7.60E+10	537.0	47.00	147.00	100.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
809	NRG6551	A533B1	TP4	PWR	S	SHSS02	SRM		LT	30000	1.43E+19	1.32E+11	547.0	47.00	150.00	103.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
810	NRG6551	A533B1	PB2	PWR	T	SHSS02	SRM		LT	30278	8.61E+18	7.90E+10	542.0	47.00	166.00	119.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
811	NRG6551	A533B1	SA1	PWR	Y	SHSS02	SRM		LT	31389	9.30E+18	8.23E+10	539.0	47.00	178.00	132.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
812	NRG6551	A533B1	ZN1	PWR	U	SHSS02	SRM		LT	31389	1.02E+19	9.03E+10	529.0	47.00	171.00	124.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
813	NRG6551	A533B1	ZN2	PWR	T	SHSS02	SRM		LT	31389	7.79E+18	6.89E+10	528.0	47.00	146.00	99.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
814	NRG6551	A533B1	AN1+DB1	PWR	A	SHSS02	SRM		LT	30912	1.03E+19	9.26E+10	556.0	47.00	118.00	71.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
815	NRG6551	A533B1	CR3	PWR	C	SHSS02	SRM		LT	35568	6.56E+18	5.12E+10	556.0	47.00	129.00	82.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
816	NRG6551	A533B1	PI2	PWR	T	SHSS02	SRM		LT	36111	1.09E+19	8.38E+10	527.0	47.00	207.00	160.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
817	NRG6551	A533B1	OC1+CR	PWR	A	SHSS02	SRM		LT	38093	8.95E+18	6.53E+10	556.0	47.00	129.00	82.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
818	NRG6551	A533B1	TM1+CR	PWR	C	SHSS02	SRM		LT	38371	8.66E+18	6.27E+10	556.0	47.00	124.00	77.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
819	NRG6551	A533B1	KWE	PWR	R	SHSS02	SRM		LT	40556	1.90E+19	1.30E+11	532.0	47.00	201.00	154.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
820	NRG6551	A533B1	CK1	PWR	Y	SHSS02	SRM		LT	43333	1.23E+19	7.88E+10	537.0	47.00	155.00	108.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
821	NRG6551	A533B1	ZN1	PWR	X	SHSS02	SRM		LT	45278	1.26E+19	7.73E+10	529.0	47.00	165.00	118.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
822	NRG6551	A533B1	PB2	PWR	R	SHSS02	SRM		LT	45556	2.20E+19	1.34E+11	542.0	47.00	200.00	153.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
823	NRG6551	A533B1	AN1+DB1	PWR	C	SHSS02	SRM		LT	46908	1.46E+19	8.65E+10	556.0	47.00	122.00	75.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
824	NRG6551	A533B1	PI1	PWR	P	SHSS02	SRM		LT	50278	1.46E+19	8.07E+10	527.0	47.00	207.00	161.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
825	NRG6551	A533B1	DC1	PWR	Y	SHSS02	SRM		LT	51389	9.41E+18	5.09E+10	540.0	47.00	155.00	109.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
826	NRG6551	A533B1	OC1+CR	PWR	C	SHSS02	SRM		LT	51888	9.86E+18	5.28E+10	556.0	47.00	122.00	75.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
827	NRG6551	A533B1	SA1	PWR	Z	SHSS02	SRM		LT	53056	1.23E+19	6.44E+10	539.0	47.00	182.00	135.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
828	NRG6551	A533B1	OC2+CR	PWR	E	SHSS02	SRM		LT	55584	1.21E+19	6.05E+10	556.0	47.00	168.00	121.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
829	NRG6551	A533B1	AN1+DB1	PWR	B	SHSS02	SRM		LT	17256	4.28E+18	6.89E+10	556.0	47.00	97.00	50.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
830	NRG6551	A533B1	OC3+CR	PWR	D	SHSS02	SRM		LT	68443	1.45E+19	5.88E+10	556.0	47.00	150.00	103.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
831	NRG6551	A533B1	SU1	PWR	V	SHSS02	SRM		LT	70278	1.97E+19	7.79E+10	538.0	47.00	186.00	139.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Rotterdamse Droogdok Madtdschappij (Netherland			
832	NRG6551	A533B1	SU2	PWR	V	SHSS02	SRM		LT	73333	1.75E+19	6.63E+10	541.0	47.00	162.00	115.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Rotterdamse Droogdok Madtdschappij (Netherland			
833	NRG6551	A533B1	PI1	PWR	R	SHSS02	SRM		LT	75000	3.95E+19	1.46E+11	527.0	47.00	239.00	193.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
834	NRG6551	A533B1	ZN1	PWR	Y	SHSS02	SRM		LT	75278	1.56E+19	5.76E+10	529.0	47.00	168.00	121.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
835	NRG6551	A533B1	PI2	PWR	R	SHSS02	SRM		LT	77222	4.05E+19	1.46E+11	527.0	47.00	230.00	183.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
836	NRG6551	A533B1	CK1	PWR	U	SHSS02	SRM		LT	80556	1.77E+19	6.10E+10	537.0	47.00	185.00	138.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
837	NRG6551	A533B1	ZN2	PWR	Y	SHSS02	SRM		LT	80556	1.46E+19	5.03E+10	528.0	47.00	181.00	134.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
838	5-00Calib	A533B1	SA1	PWR	S	SHSS02	SRM		LT	94672	1.97E+19	5.78E+10	539.0	46.93	191.43	145.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
839	NRG6551	A533B1	KWE	PWR	P	SHSS02	SRM		LT	97500	2.84E+19	8.09E+10	532.0	47.00	198.00	151.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
840	NRG6551	A533B1	PB2	PWR	S	SHSS02	SRM		LT	129444	3.10E+19	6.65E+10	542.0	47.00	197.00	150.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox			
841	5-00Calib	A533B1	SU1	PWR	X	SHSS02	SRM		LT	139914	1.60E+19	3.18E+10	541.0	46.93	187.06	140.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Rotterdamse Droogdok Madtdschappij (Netherland			
842	NRG6551	A533B1	KWE	PWR	S	SHSS02	SRM		LT	142009	3.45E+19	6.75E+10	532.0	47.00	203.00	157.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engineering			
843	5-00Calib	A533B1	PI2	PWR	P	SHSS02	SRM		LT	151126	4.17E+19	7.66E+10	527.0	46.93	237.03	190.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			
844	5-00Calib	A533B1	PI1	PWR	S	SHSS02	SRM		LT	158840	4.02E+19	7.03E+10	527.0	46.93	212.28	165.00	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Societe des Forges et Ateliers du Creusot			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
845	7-03P	A533B1	DC1	PWR	V	SHSS02	SRM		LT	125005	1.37E+19	3.04E+10	541.0	46.93	158.89	111.96	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Combustion Engine	[17]		
846	7-03P	A533B1	SU2	PWR	Y	SHSS02	SRM		LT	177828	2.73E+19	4.26E+10	543.0	46.93	187.74	140.81	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Rotterdamse Droog	[15]		
847										Found that the OYS and PWR-5 specimens were machined in the TL orientation, so pooled the raw data to get UTT30 in TL orient.																			
848	7-03B-OC	A533B1	OYS	BWR	H	SHSS02	SRM		TL	27381	1.38E+18	1.40E+10	530.0	25.84	103.16	77.32	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	LUKENS STEEL	[1], [50]		
849	7-03P-DB	A533B1	DB1	PWR	PWR-5	SHSS02	SRM		TL	49096	1.14E+19	6.45E+10	556.0	25.84	168.80	142.96	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	Babcock & Wilcox	[3]		
850	7-03B-OC	A533B1	OYS	BWR	F	SHSS02	SRM		TL	57615	1.87E+18	9.03E+09	530.0	25.84	107.03	81.19	0.217	1.478	1.478	0.011	0.015	0.225	0.640	0.095	0.502	0.170	LUKENS STEEL	[2], [50]		
851																														
852	NRG6551	A533B1	AN1	PWR	E	WAN101	W	L80	TL	8281	7.27E+17	2.44E+10	556.0	8.00	108.00	100.00	0.090	1.490	1.490	0.016	0.016	0.510	0.580	0.060	0.390	0.270	Babcock & Wilcox			
853	NRG6551	A533B1	AN1+DB1	PWR	A	WAN101	W	L80	TL	30912	1.03E+19	9.26E+10	556.0	8.00	153.00	145.00	0.090	1.490	1.490	0.016	0.016	0.510	0.580	0.060	0.390	0.270	Babcock & Wilcox			
854	NRG6551	A533B1	AN1+DB1	PWR	C	WAN101	W	L80	TL	46908	1.46E+19	8.65E+10	556.0	8.00	182.00	174.00	0.090	1.490	1.490	0.016	0.016	0.510	0.580	0.060	0.390	0.270	Babcock & Wilcox			
855																														
856	NRG6551	A533B1	AN2	PWR	W97	WAN201	W	L0091	TL	14815	3.34E+18	6.26E+10	553.0	-2.00	12.00	14.00	0.130	1.330	1.330	0.007	0.009	0.140	0.083	0.020	0.620	0.044	Combustion Engineering			
857	7-03P	A533B1	AN2	PWR	W104	WAN201	W	L0091	TL	137424	2.94E+19	5.94E+10	553.0	-1.95	22.25	24.20	0.130	1.330	1.330	0.007	0.009	0.140	0.083	0.020	0.620	0.044	Combustion Engineering			
858																														
859	NRG6551	A5083	BD1	PWR	U	WBD101	W	L80	TL	9639	3.70E+18	1.07E+11	551.0	-28.00	-9.00	18.00	0.065	1.467	1.467	0.017	0.013	0.488	0.657	0.090	0.443	0.032	Babcock & Wilcox			
860	NRG6551	A5083	BD1	PWR	X	WBD101	W	L80	TL	37080	1.14E+19	8.54E+10	551.0	-28.00	4.00	32.00	0.065	1.467	1.467	0.017	0.013	0.488	0.657	0.090	0.443	0.032	Babcock & Wilcox			
861	7-03P	A5083	BD1	PWR	W	WBD101	W	L80	TL	66664	2.09E+19	8.71E+10	551.0	-27.48	24.24	51.72	0.065	1.467	1.467	0.017	0.013	0.488	0.657	0.090	0.443	0.032	Babcock & Wilcox	[8]		
862																														
863	NRG6551	A5083	BD2	PWR	U	WBD201	W	L80	TL	10056	3.85E+18	1.06E+11	558.0	-19.00	-19.00	-1.00	0.068	1.445	1.445	0.015	0.013	0.505	0.718	0.091	0.450	0.033	Babcock & Wilcox			
864	5-00Calib	A5083	BD2	PWR	X	WBD201	W	L80	TL	36880	1.13E+19	8.51E+10	558.0	-19.00	6.00	24.00	0.068	1.445	1.445	0.015	0.013	0.505	0.718	0.091	0.450	0.033	Babcock & Wilcox			
865	7-03P	A5083	BD2	PWR	W	WBD201	W	L80	TL	74723	2.25E+19	8.36E+10	558.0	-19.00	4.26	23.26	0.068	1.445	1.445	0.015	0.013	0.505	0.718	0.091	0.450	0.033	Babcock & Wilcox	[9]		
866																														
867	NRG6551	A302BM	BF2	BWR	30D	WBF201	W		TL	79299	1.52E+17	5.32E+08	528.0	-48.00	-20.00	28.00	0.150	1.490	1.490	0.010	0.011	0.090	0.330	#####	0.490	0.200	Babcock & Wilcox			
868																														
869	NRG6551	A302B	BR	BWa	119	WBR_01	W		TS	6578	1.50E+18	6.33E+10	570.0	-72.00	-23.00	49.00	0.120	1.250	1.250	0.014	0.012	0.280	0.100	0.190	0.530	0.270	Combustion Engineering			
870	NRG6551	A302B	BR	BWa	127	WBR_01	W		TS	26114	7.10E+18	7.55E+10	570.0	-72.00	69.00	141.00	0.120	1.250	1.250	0.014	0.012	0.280	0.100	0.190	0.530	0.270	Combustion Engineering			
871	NRG6551	A302B	BR	BWa	125	WBR_01	W		TS	75556	2.27E+19	8.35E+10	570.0	-72.00	51.00	123.00	0.120	1.250	1.250	0.014	0.012	0.280	0.100	0.190	0.530	0.270	Combustion Engineering			
872																														
873	NRG6551	A533B1	BV1	PWR	V	WBV101	W	L1092	TL	10167	2.81E+18	7.68E+10	545.0	-63.00	92.00	154.00	0.117	1.395	1.395	0.013	0.005	0.274	0.629	0.022	0.480	0.245	Combustion Engineering			
874	NRG6551	A533B1	BV1	PWR	U	WBV101	W	L1092	TL	31389	6.53E+18	5.78E+10	545.0	-63.00	98.00	161.00	0.117	1.395	1.395	0.013	0.005	0.274	0.629	0.022	0.480	0.245	Combustion Engineering			
875	NRG6551	A533B1	BV1	PWR	W	WBV101	W	L1092	TL	51667	9.13E+18	4.91E+10	545.0	-63.00	119.00	182.00	0.117	1.395	1.395	0.013	0.005	0.274	0.629	0.022	0.480	0.245	Combustion Engineering			
876	7-03P	A533B1	BV1	PWR	Y	WBV101	W	L1092	TL	125268	2.15E+19	4.77E+10	543.0	-62.69	110.78	173.47	0.117	1.395	1.395	0.013	0.005	0.274	0.629	0.022	0.480	0.245	Combustion Engine	[6]		
877																														
878	5-04	A533B1	BV2	PWR	U	WBV201	W	L0091	TL	10889	6.30E+18	1.61E+11	543.0	-27.15	-11.01	16.14	0.100	1.170	1.170	0.008	0.011	0.140	0.070	0.070	0.490	0.080	Combustion Engine	[46]		
879	5-04	A533B1	BV2	PWR	V	WBV201	W	L0091	TL	52420	2.64E+19	1.40E+11	543.0	-27.15	-4.47	22.68	0.100	1.170	1.170	0.008	0.011	0.140	0.070	0.070	0.490	0.080	Combustion Engine	[26]		
880	7-03P	A533B1	BV2	PWR	W	WBV201	W	L0091	TL	85585	3.63E+19	1.18E+11	543.0	-27.15	-18.36	8.79	0.100	1.170	1.170	0.008	0.011	0.140	0.070	0.070	0.490	0.080	Combustion Engine	[7]		
881																														
882	7-03B-OC	SAW	OYS	BWR	H	WBWL80	W	L80	TL	27376	1.50E+18	1.52E+10	530.0	38.20	200.70	162.50	0.080	1.540	1.540	0.014	0.011	0.530	0.560	#####	0.330	0.260	Babcock & Wilcox	[1], [50]		
883	7-03B-OC	SAW	OYS	BWR	F	WBWL80	W	L80	TL	57615	1.94E+18	9.36E+09	530.0	38.20	162.43	124.23	0.080	1.540	1.540	0.014	0.011	0.530	0.560	#####	0.330	0.260	Babcock & Wilcox	[2], [50]		
884						Note Brian Hall suggests WBWL01 - WBWL02 for the welds above & below																								
885	7-03B-OC	SAW	OYS	BWR	F	WBWL80_1	W	L80	TL	57614	1.92E+18	9.25E+09	530.0	9.73	149.94	140.21	####	1.630	1.630	0.019	0.008	0.600	0.570	#####	#####	0.280	Babcock & Wilcox	[2]		
886																														
887	NRG6551	A5082	BY1	PWR	U	WBY101	W	L80	TL	10083	3.72E+18	1.02E+11	551.0	-30.00	-26.00	4.00	0.080	1.443	1.443	0.011	0.014	0.535	0.690	0.099	0.417	0.022	Babcock & Wilcox			
888	NRG6551	A5082	BY1	PWR	X	WBY101	W	L80	TL	49444	1.39E+19	7.81E+10	551.0	-30.00	10.00	40.00	0.080	1.443	1.443	0.011	0.014	0.535	0.690	0.099	0.417	0.022	Babcock & Wilcox			
889	5-00Calib	A5082	BY1	PWR	W	WBY101	W	L80	TL	80998	2.41E+19	8.26E+10	551.0	-30.04	20.24	50.00	0.080	1.443	1.443	0.011	0.014	0.535	0.690	0.099	0.417	0.022	Babcock & Wilcox			
890																														
891	NRG6551	A5083	BY2	PWR	U	WBY201	W	L80	TL	10111	3.93E+18	1.08E+11	551.0	-71.00	-64.00	8.00	0.083	1.417	1.417	0.012	0.013	0.520	0.708	0.086	0.433	0.028	Babcock & Wilcox			
892	NRG6551	A5083	BY2	PWR	W	WBY201	W	L80	TL	40587	1.21E+19	8.28E+10	551.0	-71.00	-42.00	29.00	0.083	1.417	1.417	0.012	0.013	0.520	0.708	0.086	0.433	0.028	Babcock & Wilcox			
893	5-00Calib	A5083	BY2	PWR	X	WBY201	W	L80	TL	75125	2.16E+19	7.99E+10	551.0	-71.27	-19.04	52.00	0.083	1.417	1.417	0.012	0.013	0.520	0.708	0.086	0.433	0.028	Babcock & Wilcox			
894																														
895	NRG6551	A5082	CB1	PWR	Z	WCB101	W	LW320	TL	6944	3.32E+18	1.33E+11	562.0	-37.00	-37.00	0.00	0.059	1.850	1.850	0.012	0.007	0.239	0.725	0.021	0.570	0.049	Rotterdamse Droogdok Madtdschappij (Netherland			
896	5-00Calib	A5082	CB1	PWR	Y	WCB101	W	LW320	TL	43611	1.35E+19	8.60E+10	560.0	-36.88	-19.00	18.00	0.059	1.850	1.850	0.012	0.007	0.239	0.725	0.021	0.570	0.049	Rotterdamse Droogdok Madtdschappij (Netherland			
897	5-00Calib	A5082	CB1	PWR	V	WCB101	W	LW320	TL	81436	2.11E+19	7.20E+10	562.0	-36.88	-11.84	25.00	0.059	1.850	1.850	0.012	0.007	0.239	0.725	0.021	0.570	0.049	Rotterdamse Droogdok Madtdschappij (Netherland			
898																														
899	5-00Calib	A533B1	CB2	PWR	Z	WCB201	W	L0091	TL	7556	3.38E+18	1.24E+11	560.0	-51.00	-84.00	-32.00	0.140	1.163	1.163	0.008	0.010	0.133	0.153	0.043	0.568	0.042	Combustion Engineering			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
900	NRG6551	A533B1	CB2	PWR	X	WCB201	W	L0091	TL	39722	1.22E+19	8.53E+10	562.0	-51.00	-19.00	32.00	0.140	1.163	1.163	0.008	0.010	0.133	0.153	0.043	0.568	0.042	Combustion Engineering			
901	7-03P	A533B1	CB2	PWR	V	WCB201	W	L0091	TL	80942	2.38E+19	8.17E+10	562.0	-51.00	7.02	58.02	0.140	1.163	1.163	0.008	0.010	0.133	0.153	0.043	0.568	0.042	Combustion Engine [11]			
902																														
903	NRG6551	A533B1	CC1	PWR	W263	WCC101	W	L0091	TL	25772	6.20E+18	6.68E+10	545.0	-53.00	-10.00	43.00	0.150	1.254	1.254	0.009	0.028	0.291	0.160	0.036	0.470	0.177	Combustion Engineering			
904	5-00Calib	A533B1	CC1	PWR	W97	WCC101	W	L0091	TL	97222	2.64E+19	7.54E+10	545.0	-53.00	43.00	96.00	0.150	1.254	1.254	0.009	0.028	0.291	0.160	0.036	0.470	0.177	Combustion Engineering			
905															Same heat above and below per E900ChemChanges.xls - PWR-5 Chemistry per Carter email 4/30/04														
906	7-03P-DB	CE-4 (WI	DB1	PWR	PWR-5	WCC101	W	L0091	TL	49096	1.14E+19	6.45E+10	556.0	-52.96	-1.50	51.46	0.150	1.050	1.050	0.014	0.013	0.200	0.180	0.036	0.550	0.160	Combustion Engine [3]			
907																														
908	NRG6551	A533B1	CC2	PWR	W263	WCC201	W	L0091	TL	40114	8.06E+18	5.58E+10	545.0	-49.00	18.00	67.00	0.115	1.167	1.167	0.013	0.008	0.143	0.060	0.050	0.480	0.210	Combustion Engineering			
909	5-00Calib	A533B1	CC2	PWR	W97	WCC201	W	L0091	TL	96120	1.85E+19	5.35E+10	545.0	-49.00	30.00	78.00	0.115	1.167	1.167	0.013	0.008	0.143	0.060	0.050	0.480	0.210	Combustion Engineering			
910																														
911	7-03B-OC	SAW	OYS	BWR	D	WCEL_1	W	L1092	TL	27393	1.14E+18	1.16E+10	530.0	-41.84	86.74	128.58	####	####	1.426	0.014	0.009	0.210	1.000	#####	#####	0.220	Combustion Engine [1]			
912	7-03B-OC	SAW	OYS	BWR	I	WCEL_1	W	L1092	TL	57614	2.69E+18	1.30E+10	530.0	-41.84	151.83	193.67	####	####	1.426	0.014	0.009	0.210	1.000	#####	#####	0.220	Combustion Engine [1], [2]			
913																														
914	7-03B-OC	SAW	OYS	BWR	G	WCEL_2	W	L1092	TL	27382	1.87E+18	1.90E+10	530.0	-96.39	69.09	165.48	####	####	1.426	0.012	0.012	0.230	0.860	#####	#####	0.210	Combustion Engine [1]			
915	7-03B-OC	SAW	OYS	BWR	E	WCEL_2	W	L1092	TL	57616	1.76E+18	8.47E+09	530.0	-96.39	96.12	192.51	####	####	1.426	0.012	0.012	0.230	0.860	#####	#####	0.210	Combustion Engine [2]			
916																Lott notes that two outliers in same heat below suggests common cause														
917	OL7-00	A533B1	CK1	PWR	T	WCK101	W	L1092	TL	11111	2.69E+18	6.73E+10	537.0	-97.00	-27.00	70.00	0.260	1.330	1.330	0.023	0.014	0.180	0.740	0.022	0.440	0.270	Combustion Engineering			
918	NRG6551	A533B1	CK1	PWR	Y	WCK101	W	L1092	TL	43333	1.23E+19	7.88E+10	537.0	-97.00	86.00	184.00	0.260	1.330	1.330	0.023	0.014	0.180	0.740	0.022	0.440	0.270	Combustion Engineering			
919	OLNRG	A533B1	CK1	PWR	U	WCK101	W	L1092	TL	80556	1.77E+19	6.10E+10	537.0	-97.00	11.00	109.00	0.260	1.330	1.330	0.023	0.014	0.180	0.740	0.022	0.440	0.270	Combustion Engineering			
920																														
921	NRG6551	A533B1	CK2	PWR	T	WCK201	W	L124	TL	9444	2.18E+18	6.41E+10	542.0	2.00	44.00	41.00	0.095	1.375	1.375	0.020	0.014	0.400	0.965	0.069	0.540	0.053	Chicago Bridge and Iron			
922	NRG6551	A533B1	CK2	PWR	Y	WCK201	W	L124	TL	28333	6.62E+18	6.49E+10	542.0	2.00	47.00	45.00	0.095	1.375	1.375	0.020	0.014	0.400	0.965	0.069	0.540	0.053	Chicago Bridge and Iron			
923	NRG6551	A533B1	CK2	PWR	X	WCK201	W	L124	TL	46111	1.03E+19	6.20E+10	542.0	2.00	69.00	67.00	0.095	1.375	1.375	0.020	0.014	0.400	0.965	0.069	0.540	0.053	Chicago Bridge and Iron			
924	NRG6551	A533B1	CK2	PWR	U	WCK201	W	L124	TL	75833	1.50E+19	5.49E+10	542.0	2.00	54.00	51.00	0.095	1.375	1.375	0.020	0.014	0.400	0.965	0.069	0.540	0.053	Chicago Bridge and Iron			
925																														
926	NRG6551	A533B1	CL1	PWR	U	WCL101	W	L124	TL	9222	3.47E+18	1.05E+11	558.0	-55.00	13.00	68.00	0.130	1.325	1.325	0.005	0.012	0.455	0.065	0.040	0.520	0.045	Combustion Engineering			
927	NRG6551	A533B1	CL1	PWR	Y	WCL101	W	L124	TL	40278	1.30E+19	8.97E+10	558.0	-55.00	-16.00	39.00	0.130	1.325	1.325	0.005	0.012	0.455	0.065	0.040	0.520	0.045	Combustion Engineering			
928	5-04	A533B1	CL1	PWR	V	WCL101	W	L124	TL	86345	2.36E+19	7.59E+10	559.0	-54.91	-7.66	47.25	0.130	1.325	1.325	0.005	0.012	0.455	0.065	0.040	0.520	0.045	Combustion Engine [27]			
929	7-03P	A533B1	CL1	PWR	X	WCL101	W	L124	TL	108624	3.33E+19	8.52E+10	559.0	-54.91	-3.91	51.00	0.130	1.325	1.325	0.005	0.012	0.455	0.065	0.040	0.520	0.045	Combustion Engine [10]			
930																														
931	NRG6551	A533B1	COF	BWR	3D	WCOF01	W		TL	49646	8.40E+17	4.70E+09	533.0	-36.00	-64.00	-28.00	####	1.700	1.700	0.012	####	0.240	0.760	#####	0.510	0.072	-999			
932																														
933	5-00Calib	A533B1	CP1	PWR	Y	WCP101	W	L0091	TL	54700	1.60E+19	8.13E+10	558.0	-64.74	-49.59	15.00	####	1.330	1.330	0.004	####	####	0.220	#####	#####	0.040	Combustion Engineering			
934	5-00Calib	A533B1	CP1	PWR	U	WCP101	W	L0091	TL	7972	3.53E+18	1.23E+11	558.0	-64.74	-81.00	-16.00	####	1.330	1.330	0.004	####	####	0.220	#####	#####	0.040	Combustion Engineering			
935																														
936	5-00Calib	A533B1	CP2	PWR	U	WCP201	W	L124	TL	7924	3.28E+18	1.15E+11	560.0	-50.00	-48.00	2.00	0.110	1.370	1.370	0.011	0.014	0.490	0.072	0.058	0.590	0.030	Combustion Engineering			
937																														
938	NRG6551	A533B1	CR3	PWR	B	WCR301	W	L80	TL	6451	1.17E+18	5.04E+10	556.0	38.00	70.00	32.00	0.080	1.650	1.650	0.021	0.013	1.000	0.100	0.070	0.450	0.410	Babcock & Wilcox			
939	NRG6551	A533B1	CR3	PWR	C	WCR301	W	L80	TL	35568	6.56E+18	5.12E+10	556.0	38.00	151.00	114.00	0.080	1.650	1.650	0.021	0.013	1.000	0.100	0.070	0.450	0.410	Babcock & Wilcox			
940	NRG6551	A533B1	CR3	PWR	D	WCR301	W	L80	TL	41592	7.50E+18	5.01E+10	556.0	38.00	136.00	99.00	0.080	1.650	1.650	0.021	0.013	1.000	0.100	0.070	0.450	0.410	Babcock & Wilcox			
941	NRG6551	A533B1	CR3	PWR	F	WCR301	W	L80	TL	45024	1.08E+19	6.66E+10	556.0	38.00	156.00	118.00	0.080	1.650	1.650	0.021	0.013	1.000	0.100	0.070	0.450	0.410	Babcock & Wilcox			
942																														
943	NRG6551	A302B	CTY	PWR	A	WCTY01	W	ARCO	TL	14806	2.59E+18	4.86E+10	537.0	-49.00	52.00	100.00	0.047	1.304	1.304	0.018	0.019	0.325	0.044	0.061	0.516	0.205	Combustion Engineering			
944	NRG6551	A302B	CTY	PWR	D	WCTY01	W	ARCO	TL	95278	2.28E+19	6.65E+10	537.0	-49.00	64.00	112.00	0.047	1.304	1.304	0.018	0.019	0.325	0.044	0.061	0.516	0.205	Combustion Engineering			
945																														
946	NRG6551	A533B1	DAC	BWR	1	WDAC01	W		LT	52000	4.90E+17	2.62E+09	532.0	-45.00	-41.00	4.00	####	1.250	1.250	0.012	####	0.325	0.973	0.035	0.490	0.023	Chicago Bridge and Iron			
947	5-00Calib	A533B1	DAC	BWR	W36	WDAC01	W		LT	128860	1.10E+18	2.37E+09	532.0	-44.71	-29.61	15.00	####	1.250	1.250	0.012	####	0.325	0.973	0.035	0.490	0.023	Chicago Bridge and Iron			
948						The heat is the same above & below per E900ChemChanges.xls. Three values below are averages of 5 specimens [2] and are used, the others are copied from the plant data																											
949	7-03B-OC	SMAW	OYS	BWR	F	WDAC01	W		TL	57614	1.93E+18	9.32E+09	530.0	-44.70	-18.28	26.42	####	1.250	1.250	0.010	####	0.325	0.936	0.035	0.490	0.023	Chicago Bridge and	[2]		
950																														
951	NRG6551	A5082	DB1	PWR	F	WDB101	W	L80	TL	8976	1.96E+18	6.07E+10	556.0	-6.00	101.00	107.00	0.089	1.705	1.705	0.014	0.013	0.422	0.630	0.150	0.400	0.220	Babcock & Wilcox			
952	NRG6551	A5082	DB1	PWR	B	WDB101	W	L80	TL	22632	5.92E+18	7.27E+10	556.0	-6.00	103.00	109.00	0.089	1.705	1.705	0.014	0.013	0.422	0.630	0.150	0.400	0.220	Babcock & Wilcox			
953	NRG6551	A5082	DB1	PWR	A	WDB101	W	L80	TL	29146	1.29E+19	1.23E+11	556.0	-6.00	157.00	163.00	0.089	1.705	1.705	0.014	0.013	0.422	0.630	0.150	0.400	0.220	Babcock & Wilcox			
954	NRG6551	A5082	DB1	PWR	D	WDB101	W	L80	TL	47755	9.62E+18	5.60E+10	556.0	-6.00	136.00	142.00	0.089	1.705	1.705	0.014	0.013	0.422	0.630	0.150	0.400	0.220	Babcock & Wilcox			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
955	7-03P	A5082	DB1	PWR	A3	WDB101	W	L80	TL	68935	1.06E+19	4.27E+10	556.0	-5.70	208.76	214.46	0.089	1.705	1.705	0.014	0.013	0.422	0.630	0.150	0.400	0.220	Babcock & Wilcox	[41]		
956																														
957	NRG6551	A533B1	DC1	PWR	S	WDC101	W	L1092	TL	11056	2.84E+18	7.14E+10	539.0	-68.00	45.00	113.00	0.097	1.347	1.347	0.013	0.016	0.214	1.000	0.113	0.501	0.196	Combustion Engineering			
958	NRG6551	A533B1	DC1	PWR	Y	WDC101	W	L1092	TL	51389	9.41E+18	5.09E+10	540.0	-68.00	166.00	233.00	0.097	1.347	1.347	0.013	0.016	0.214	1.000	0.113	0.501	0.196	Combustion Engineering			
959	7-03P	A533B1	DC1	PWR	V	WDC101	W	L1092	TL	125005	1.37E+19	3.04E+10	541.0	-67.82	136.65	204.47	0.097	1.347	1.347	0.013	0.016	0.214	1.000	0.113	0.501	0.196	Combustion Engine	[17]		
960																														
961	NRG6551	A533B1	DC2	PWR	U	WDC201	W	L1092	TL	8694	3.65E+18	1.17E+11	542.0	-13.00	160.00	173.00	0.127	1.403	1.403	0.015	0.007	0.158	0.871	0.049	0.493	0.219	Combustion Engineering			
962	NRG6551	A533B1	DC2	PWR	X	WDC201	W	L1092	TL	27250	9.16E+18	9.34E+10	541.0	-13.00	190.00	203.00	0.127	1.403	1.403	0.015	0.007	0.158	0.871	0.049	0.493	0.219	Combustion Engineering			
963	NRG6551	A533B1	DC2	PWR	Y	WDC201	W	L1092	TL	61362	1.32E+19	5.98E+10	540.0	-13.00	198.00	211.00	0.127	1.403	1.403	0.015	0.007	0.158	0.871	0.049	0.493	0.219	Combustion Engineering			
964	7-03P	A533B1	DC2	PWR	V	WDC201	W	L1092	TL	100652	2.41E+19	6.65E+10	545.0	-12.67	211.85	224.52	0.127	1.403	1.403	0.015	0.007	0.158	0.871	0.049	0.493	0.219	Combustion Engine	[12]		
965																														
966	NRG6551	A302BM	DR3	BWR	13	WDR301	W		TL	8460	9.26E+15	3.04E+08	529.0	45.00	35.00	-10.00	0.209	1.780	1.780	0.009	0.017	0.213	0.345	0.065	0.522	0.212	Babcock & Wilcox			
967	NRG6551	A302BM	DR3	BWb	14	WDR301	W		TL	8460	7.11E+18	2.33E+11	546.0	45.00	181.00	136.00	0.209	1.780	1.780	0.009	0.017	0.213	0.345	0.065	0.522	0.212	Babcock & Wilcox			
968	NRG6551	A302BM	DR3	BWb	12	WDR301	W		TL	13200	1.36E+19	2.86E+11	546.0	45.00	146.00	101.00	0.209	1.780	1.780	0.009	0.017	0.213	0.345	0.065	0.522	0.212	Babcock & Wilcox			
969	NRG6551	A302BM	DR3	BWb	4	WDR301	W		TL	23564	1.61E+19	1.90E+11	546.0	45.00	184.00	139.00	0.209	1.780	1.780	0.009	0.017	0.213	0.345	0.065	0.522	0.212	Babcock & Wilcox			
970	NRG6551	A302BM	DR3	BWR	18	WDR301	W		TL	52421	7.10E+16	3.76E+08	529.0	45.00	37.00	-8.00	0.209	1.780	1.780	0.009	0.017	0.213	0.345	0.065	0.522	0.212	Babcock & Wilcox			
971																														
972	NRG6551	A302B	DR3	BWb	14	WDR302	W		TL	8460	7.11E+18	2.33E+11	546.0	-47.00	151.00	198.00	0.090	1.750	1.750	0.013	0.013	0.540	0.730	0.100	0.420	0.350	Babcock & Wilcox			
973	NRG6551	A302B	DR3	BWb	12	WDR302	W		TL	13200	1.36E+19	2.86E+11	546.0	-47.00	155.00	201.00	0.090	1.750	1.750	0.013	0.013	0.540	0.730	0.100	0.420	0.350	Babcock & Wilcox			
974	NRG6551	A302B	DR3	BWb	4	WDR302	W		TL	23564	1.08E+19	1.27E+11	546.0	-47.00	212.00	259.00	0.090	1.750	1.750	0.013	0.013	0.540	0.730	0.100	0.420	0.350	Babcock & Wilcox			
975																														
976	5-00Calib	A533B1	FA1	PWR	Y	WFA101	W	L0091	TL	10111	5.73E+18	1.57E+11	544.0	-73.00	1.00	74.00	0.130	1.060	1.060	0.016	0.009	0.270	0.190	0.063	0.500	0.140	Combustion Engineering			
977	5-00Calib	A533B1	FA1	PWR	U	WFA101	W	L0091	TL	27056	1.75E+19	1.80E+11	544.0	-73.00	-2.00	72.00	0.130	1.060	1.060	0.016	0.009	0.270	0.190	0.063	0.500	0.140	Combustion Engineering			
978	5-00Calib	A533B1	FA1	PWR	X	WFA101	W	L0091	TL	53611	2.99E+19	1.55E+11	544.0	-73.00	14.00	87.00	0.130	1.060	1.060	0.016	0.009	0.270	0.190	0.063	0.500	0.140	Combustion Engineering			
979	5-00Calib	A533B1	FA1	PWR	W	WFA101	W	L0091	TL	108961	4.04E+19	1.03E+11	544.0	-73.00	23.00	96.00	0.130	1.060	1.060	0.016	0.009	0.270	0.190	0.063	0.500	0.140	Combustion Engineering			
980																														
981	5-00Calib	A533B1	FA2	PWR	U	WFA201	W		TL	9750	6.12E+18	1.74E+11	544.0	-28.00	-44.00	-16.00	0.139	0.937	0.937	0.004	0.014	0.324	0.900	0.027	0.234	0.030	Combustion Engineering			
982	5-00Calib	A533B1	FA2	PWR	W	WFA201	W		TL	34722	1.67E+19	1.34E+11	544.0	-28.00	-29.00	-1.00	0.139	0.937	0.937	0.004	0.014	0.324	0.900	0.027	0.234	0.030	Combustion Engineering			
983	5-00Calib	A533B1	FA2	PWR	X	WFA201	W		TL	56389	3.02E+19	1.49E+11	544.0	-28.00	-47.00	-19.00	0.139	0.937	0.937	0.004	0.014	0.324	0.900	0.027	0.234	0.030	Combustion Engineering			
984	5-00Calib	A533B1	FA2	PWR	Z	WFA201	W		TL	116062	5.28E+19	1.26E+11	543.0	-27.97	-12.44	16.00	0.139	0.937	0.937	0.004	0.014	0.324	0.900	0.027	0.234	0.030	Combustion Engineering			
985																														
986	NRG6551	A533B1	FC1	PWR	W225	WFC101	W	L1092	TL	22753	5.53E+18	6.75E+10	527.0	-32.00	178.00	210.00	0.140	1.563	1.563	0.013	0.012	0.202	0.600	0.030	0.527	0.301	Combustion Engineering			
987	NRG6551	A533B1	FC1	PWR	W265	WFC101	W	L1092	TL	51895	7.71E+18	4.13E+10	534.0	-32.00	193.00	225.00	0.140	1.563	1.563	0.013	0.012	0.202	0.600	0.030	0.527	0.301	Combustion Engineering			
988	5-00Calib	A533B1	FC1	PWR	W275	WFC101	W	L1092	TL	118519	1.28E+19	3.00E+10	538.0	-32.00	187.00	219.00	0.140	1.563	1.563	0.013	0.012	0.202	0.600	0.030	0.527	0.301	Combustion Engineering			
989																	The heat is the same above & below per E900ChemChanges.xls, Chemistry for PWR-5 below from Carter email 4/30/0													
990	7-03P-DB	CE-3 (WI	DB1	PWR	PWR-5	WFC101	W	L1092	TL	49096	1.14E+19	6.45E+10	556.0	-31.70	145.63	177.33	0.140	1.570	1.570	0.013	0.011	0.140	0.600	0.030	0.500	0.350	Combustion Engine	[3]		
991																														
992	7-03B-OC	SAW	OYS	BWR	D	WGG_01	W	L124	TL	27380	1.17E+18	1.19E+10	530.0	-27.05	-26.84	0.21	0.070	1.330	1.330	0.012	0.017	0.430	0.900	#####	0.390	0.010	Chicago Bridge and	[1], [50]		
993	7-03B-OC	SAW	OYS	BWR	G	WGG_01	W	L124	TL	27382	1.87E+18	1.90E+10	530.0	-27.05	6.76	33.81	0.070	1.330	1.330	0.012	0.017	0.430	0.900	#####	0.390	0.010	Chicago Bridge and	[1], [50]		
994	7-03B-OC	SAW	OYS	BWR	E	WGG_01	W	L124	TL	57614	1.77E+18	8.54E+09	530.0	-27.05	-22.38	4.67	0.070	1.330	1.330	0.012	0.017	0.430	0.900	#####	0.390	0.010	Chicago Bridge and	[2], [50]		
995	7-03B-OC	SAW	OYS	BWR	I	WGG_01	W	L124	TL	57615	2.75E+18	1.32E+10	530.0	-27.05	-4.78	22.27	0.070	1.330	1.330	0.012	0.017	0.430	0.900	#####	0.390	0.010	Chicago Bridge and	[2], [50]		
996																														
997	NRG6551	A5082	GIN	PWR	V	WGIN01	W	L80	TL	12361	5.03E+18	1.13E+11	552.0	-36.00	111.00	148.00	0.070	1.300	1.300	0.009	0.018	0.500	0.520	0.030	0.290	0.240	Babcock & Wilcox			
998	NRG6551	A5082	GIN	PWR	R	WGIN01	W	L80	TL	22333	1.11E+19	1.38E+11	550.0	-36.00	122.00	158.00	0.070	1.300	1.300	0.009	0.018	0.500	0.520	0.030	0.290	0.240	Babcock & Wilcox			
999	NRG6551	A5082	GIN	PWR	T	WGIN01	W	L80	TL	60278	1.86E+19	8.57E+10	548.0	-36.00	129.00	165.00	0.070	1.300	1.300	0.009	0.018	0.500	0.520	0.030	0.290	0.240	Babcock & Wilcox			
1000	5-00Calib	A5082	GIN	PWR	S	WGIN01	W	L80	TL	149167	3.75E+19	6.98E+10	545.0	-36.00	184.00	221.00	0.070	1.300	1.300	0.009	0.018	0.500	0.520	0.030	0.290	0.240	Babcock & Wilcox			
1001																														
1002	NRG6551	A533B1	HA2	BWR	30D	WHA201	W	L0091	TL	57692	2.30E+17	1.11E+09	532.0	-18.00	-17.00	1.00	####	1.190	1.190	0.014	####	####	0.095	#####	0.570	0.125	Combustion Engineering			
1003																														
1004	NRG6551	A302B	HB2	PWR	V	WHB201	W	L1092	TL	28056	6.01E+18	5.95E+10	546.0	-88.00	123.00	211.00	0.117	1.170	1.170	0.024	0.024	0.275	0.660	0.022	0.350	0.340	Combustion Engineering			
1005	NRG6551	A302B	HB2	PWR	T	WHB201	W	L1092	TL	63611	4.42E+19	1.93E+11	546.0	-88.00	210.00	298.00	0.117	1.170	1.170	0.024	0.024	0.275	0.660	0.022	0.350	0.340	Combustion Engineering			
1006	7-03P	A302B	HB2	PWR	X	WHB201	W	L1092	TL	178616	4.49E+19	6.98E+10	546.0	-88.30	176.22	264.52	0.117	1.170	1.170	0.024	0.024	0.275	0.660	0.022	0.350	0.340	Combustion Engine	[23]		
1007																														
1008	7-03B-OC	SAW	OYS	BWR	H	WHM301	W		TL	27376	1.43E+18	1.45E+10	530.0	-75.07	19.64	94.71	0.110	1.290	1.290	0.016	0.016	0.280	0.060	#####	0.410	0.270	Combustion Engine	[1], [50]		
1009	7-03B-OC	SAW	OYS	BWR	F	WHM301	W		TL	57616	1.94E+18	9.37E+09	530.0	-75.07	29.11	104.18	0.110	1.290	1.290	0.016	0.016	0.280	0.060	#####	0.410	0.270	Combustion Engine	[2], [50]		

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
1010																														
1011	NRG6551	A533B1	HOP	BWR	30D	WHOP01	W	1125-0	TL	52646	1.42E+17	7.49E+08	532.0	-55.00	-6.00	49.00	0.110	1.480	1.480	0.014	0.005	0.310	0.590	0.011	0.400	0.080	Babcock & Wilcox	[34]		
1012																														
1013	5-00Calib	A5082	CR3	PWR	C1	WHSS63	W	L80	TL	23352	7.79E+18	9.27E+10	556.0	-18.00	187.00	205.00	0.090	1.550	1.550	0.014	0.015	0.550	0.700	0.080	0.410	0.360	Babcock & Wilcox			
1014								Above & below are the same weld type (WF-25), wire (299L44), & flux but are from different sources per Brian Hall, hence different Chemistry and UTT30																			
1015	5-00Calib	A5082	TM2+CR3	PWR	T1(LG1	WTM202	W	L80	TL	40344	9.68E+18	6.66E+10	556.0	15.44	262.00	246.56	0.090	1.580	1.580	0.015	0.016	0.540	0.670	0.090	0.420	0.350	Babcock & Wilcox	[39]		
1016																														
1017	5-00Calib	A5082	CR3	PWR	C1	WHSS65	W	L80	TL	23352	5.10E+18	6.07E+10	556.0	-25.59	116.00	141.59	0.080	1.450	1.450	0.016	0.016	0.510	0.590	0.090	0.380	0.220	Babcock & Wilcox			
1018	5-00Calib	A5082	CR3	PWR	C2(LG2	WHSS65	W	L80	TL	72000	1.67E+19	6.44E+10	556.0	-25.59	144.00	170.00	0.080	1.450	1.450	0.016	0.016	0.510	0.590	0.090	0.380	0.220	Babcock & Wilcox	[40]		
1019								The one below is the same weld type (SA-1585), wire (72445), flux, and UTT30 as above (confirmed JB Hall 6/11/04)																			
1020	5-00Calib	A5082	SU2	PWR	W1	WHSS65	W	L80	TL	46608	6.69E+18	3.99E+10	546.0	-25.59	125.11	151.00	0.080	1.450	1.450	0.016	0.016	0.510	0.590	0.090	0.380	0.220	Babcock & Wilcox	[38]		
1021																														
1022	5-00Calib	A5082	CR3	PWR	C2(LG2	WHSS66	W	L80	TL	72000	1.19E+19	4.59E+10	556.0	44.00	170.00	126.00	0.090	1.630	1.630	0.018	0.009	0.540	0.580	0.110	0.400	0.390	Babcock & Wilcox	[40]		
1023	5-00Calib	A5082	DB1	PWR	D1	WHSS66	W	L80	TL	20160	6.63E+18	9.14E+10	556.0	44.00	181.00	138.00	0.090	1.630	1.630	0.018	0.009	0.540	0.580	0.110	0.400	0.390	Babcock & Wilcox			
1024								The next two are the same weld type (WF-70(N)), wire (72105), flux, and UTT30 as above (confirmed JB Hall 6/11/04)																			
1025	5-00Calib	A5082	SU2	PWR	W1	WHSS66	W	L80	TL	46608	6.44E+18	3.84E+10	546.0	43.52	228.47	185.00	0.090	1.630	1.630	0.018	0.009	0.540	0.580	0.110	0.400	0.390	Babcock & Wilcox	[38]		
1026	5-00Calib	A5082	TM2+CR3	PWR	T1(LG1	WHSS66	W	L80	TL	40344	5.85E+18	4.03E+10	556.0	44.00	166.00	122.00	0.090	1.630	1.630	0.018	0.009	0.540	0.580	0.110	0.400	0.390	Babcock & Wilcox	[39]		
1027																														
1028	5-00Calib	A5082	DB1	PWR	D1	WHSS67	W	L80	TL	20160	1.03E+19	1.42E+11	556.0	-33.00	105.00	138.00	0.080	1.450	1.450	0.011	0.013	0.490	0.590	0.080	0.380	0.270	Babcock & Wilcox			
1029																														
1030	5-00Calib	A5082	CR3	PWR	C1	WHSSCR	W	L80	TL	23352	6.09E+18	7.24E+10	556.0	-1.00	167.00	168.00	0.080	1.550	1.550	0.021	0.016	0.580	0.600	0.100	0.400	0.220	Babcock & Wilcox			
1031	5-00Calib	A5082	CR3	PWR	C2(LG2	WHSSCR	W	L80	TL	72000	1.95E+19	7.52E+10	556.0	-1.00	137.00	138.00	0.080	1.550	1.550	0.021	0.016	0.580	0.600	0.100	0.400	0.220	Babcock & Wilcox	[40]		
1032												Assumed the heats are the same above & below to fill in missing entries. Did not change the chemistry where it was reported																		
1033	7-03P-DB	B&W-3 (\	DB1	PWR	PWR-5	WHSSCR	W	L80	TL	49096	1.14E+19	6.45E+10	556.0	-1.17	165.13	166.30	0.080	1.550	1.550	0.021	0.016	0.580	0.600	0.100	0.400	0.220	Babcock & Wilcox	[3]		
1034																														
1035	5-00Calib	A5082	DB1	PWR	D1	WHSSDB	W	L80	TL	20160	8.21E+18	1.13E+11	556.0	-46.00	144.00	189.00	0.080	1.470	1.470	0.016	0.015	0.540	0.590	0.070	0.400	0.320	Babcock & Wilcox			
1036																														
1037	NRG6551	A302B	IP2	PWR	Y	WIP201	W	L1092	TL	20833	4.53E+18	6.04E+10	529.0	-68.00	128.00	196.00	####	####	1.426	0.019	####	####	1.150	#####	#####	0.200	Combustion Engineering			
1038	NRG6551	A302B	IP2	PWR	V	WIP201	W	L1092	TL	75833	5.06E+18	1.85E+10	524.0	-68.00	128.00	196.00	####	####	1.426	0.019	####	####	1.150	#####	#####	0.200	Combustion Engineering			
1039																														
1040	NRG6551	A302B	IP3	PWR	T	WIP301	W	L1092	TL	12000	3.12E+18	7.22E+10	540.0	-70.00	85.00	155.00	0.080	1.180	1.180	0.019	0.016	0.170	1.080	0.040	0.530	0.155	Combustion Engineering			
1041	NRG6551	A302B	IP3	PWR	Y	WIP301	W	L1092	TL	29167	7.24E+18	6.90E+10	540.0	-70.00	106.00	176.00	0.080	1.180	1.180	0.019	0.016	0.170	1.080	0.040	0.530	0.155	Combustion Engineering			
1042	NRG6551	A302B	IP3	PWR	Z	WIP301	W	L1092	TL	48889	1.04E+19	5.91E+10	540.0	-70.00	165.00	235.00	0.080	1.180	1.180	0.019	0.016	0.170	1.080	0.040	0.530	0.155	Combustion Engineering			
1043																														
1044	NRG6551	A533B1	KU1	BWR	177D	WKU101	W		TL	59968	9.60E+17	4.45E+09	533.0	-31.00	-15.00	15.00	0.096	1.300	1.300	0.009	0.012	0.370	0.880	0.083	0.450	0.080	-999			
1045																														
1046	NRG6551	A533B1	KU2	BWR	3D	WKU201	W		TL	61223	1.10E+18	4.99E+09	533.0	-38.00	-4.00	34.00	0.086	1.430	1.430	0.010	0.016	0.400	0.870	0.092	0.440	0.050	-999			
1047																														
1048	NRG6551	A5082	KWE	PWR	V	WKWE01	W	L1092	TL	11278	6.08E+18	1.50E+11	532.0	-69.00	126.00	194.00	0.120	1.370	1.370	0.016	0.011	0.200	0.724	0.090	0.480	0.218	Combustion Engineering			
1049	NRG6551	A5082	KWE	PWR	R	WKWE01	W	L1092	TL	40556	1.90E+19	1.30E+11	532.0	-69.00	180.00	249.00	0.120	1.370	1.370	0.016	0.011	0.200	0.724	0.090	0.480	0.218	Combustion Engineering			
1050	NRG6551	A5082	KWE	PWR	P	WKWE01	W	L1092	TL	97500	2.84E+19	8.09E+10	532.0	-69.00	180.00	248.00	0.120	1.370	1.370	0.016	0.011	0.200	0.724	0.090	0.480	0.218	Combustion Engineering			
1051	NRG6551	A5082	KWE	PWR	S	WKWE01	W	L1092	TL	142009	3.45E+19	6.75E+10	532.0	-69.00	180.00	249.00	0.120	1.370	1.370	0.016	0.011	0.200	0.724	0.090	0.480	0.218	Combustion Engineering			
1052																														
1053	NRG6551	A533B1	LS1	BWR	300D	WLS101	W	L1092	TL	56979	9.00E+16	4.39E+08	533.0	-69.00	-12.00	56.00	0.120	1.490	1.490	0.016	0.011	0.230	0.780	0.080	0.520	0.210	Combustion Engine	[35]		
1054																														
1055	NRG6551	A533B1	LS2	BWR	300D	WLS201	W	L124	LT	61217	1.15E+17	5.22E+08	533.0	-60.00	-40.00	20.00	0.069	1.470	1.470	0.010	0.015	0.370	0.890	0.080	0.470	0.040	Chicago Bridge and	[36]		
1056																														
1057	NRG6551	A533B1	MC1	PWR	U	WMC101	W	L1092	TL	9556	4.43E+18	1.29E+11	558.0	-11.00	146.00	157.00	0.100	1.275	1.275	0.013	0.008	0.235	0.874	0.045	0.545	0.198	Combustion Engineering			
1058	NRG6551	A533B1	MC1	PWR	X	WMC101	W	L1092	TL	37778	1.46E+19	1.07E+11	557.0	-11.00	155.00	167.00	0.100	1.275	1.275	0.013	0.008	0.235	0.874	0.045	0.545	0.198	Combustion Engineering			
1059	5-04	A533B1	MC1	PWR	V	WMC101	W	L1092	TL	63466	2.19E+19	9.57E+10	557.0	-11.22	164.64	175.86	0.100	1.275	1.275	0.013	0.008	0.235	0.874	0.045	0.545	0.198	Combustion Engine	[28]		
1060	5-00Calib	A533B1	MC1	PWR	Y	WMC101	W	L1092	TL	89501	2.93E+19	9.09E+10	557.0	-11.22	174.26	185.00	0.100	1.275	1.275	0.013	0.008	0.235	0.874	0.045	0.545	0.198	Combustion Engineering			
1061																														
1062	NRG6551	A5082	MC2	PWR	V	WMC201	W	LW320	TL	9000	3.33E+18	1.03E+11	558.0	-52.00	-13.00	39.00	0.059	1.830	1.830	0.013	0.009	0.200	0.736	0.035	0.575	0.036	Rotterdamse Droogdok Madtdschappij (Netherland			
1063	NRG6551	A5082	MC2	PWR	X	WMC201	W	LW320	TL	36389	1.46E+19	1.11E+11	558.0	-52.00	-19.00	33.00	0.059	1.830	1.830	0.013	0.009	0.200	0.736	0.035	0.575	0.036	Rotterdamse Droogdok Madtdschappij (Netherland			
1064	NRG6551	A5082	MC2	PWR	U	WMC201	W	LW320	TL	53056	2.00E+19	1.05E+11	558.0	-52.00	-31.00	21.00	0.059	1.830	1.830	0.013	0.009	0.200	0.736	0.035	0.575	0.036	Rotterdamse Droogdok Madtdschappij (Netherland			
1065	5-00Calib	A5082	MC2	PWR	W	WMC201	W	LW320	TL	82751	2.97E+19	9.97E+10	558.0	-52.10	-11.15	41.00	0.059	1.830	1.830	0.013	0.009	0.200	0.736	0.035	0.575	0.036	Rotterdamse Droogdok Madtdschappij (Netherland			
1066																														
1067	7-03B-OC	SAW	OYS	BWR	G	WML101	W	L1092	TL	27380	1.79E+18	1.82E+10	530.0	-66.42	42.15	108.57	0.110	1.280	1.280	0.019	0.016	0.170	1.050	#####	0.550	0.200	Combustion Engine	[1]		
1068	7-03B-OC	SAW	OYS	BWR	D	WML101	W	L1092	TL	27390	1.13E+18	1.15E+10	530.0	-66.42	34.53	100.95	0.110	1.280	1.280	0.019	0.016	0.170	1.050	#####	0.550	0.200	Combustion Engine	[1]		
1069	7-03B-OC	SAW	OYS	BWR	I	WML101	W	L1092	TL	57613	2.80E+18	1.35E+10	530.0	-66.42	70.51	136.93	0.110	1.280	1.280	0.019	0.016	0.170	1.050	#####	0.550	0.200	Combustion Engine	[2]		
1070	7-03B-OC	SAW	OYS	BWR	E	WML101	W	L1092	TL	57615	1.78E+18	8.57E+09	530.0	-66.42	56.93	123.35	0.110	1.280	1.280	0.019	0.016	0.170	1.050	#####	0.550	0.200	Combustion Engine	[2]		

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
1071		The welds above and below have been assumed to be the same and the older chemistry values have been used above, based on Millstone1SurveillanceWeldNickel.txt by Steve Byrne, 2/20/04. But note that the recorded Ni are unusually far apart (1.8																												
1072	NRG6551	A302BM	ML1	BWR	210D	WML101	W	L1092	TS	78470	3.30E+17	1.17E+09	531.0	-42.00	-21.00	22.00	0.110	1.280	1.280	0.019	0.016	0.170	1.050	#####	0.550	0.200	Combustion Engineering			
1073	NRG6551	A302BM	ML1	BWR	300D	WML101	W	L1092	TS	129823	6.60E+17	1.41E+09	531.0	-42.00	26.00	68.00	0.110	1.280	1.280	0.019	0.016	0.170	1.050	#####	0.550	0.200	Combustion Engineering			
1074																														
1075	5-00Calib	A533B1	ML2	PWR	W97	WML201	W	L0091	TL	26298	3.78E+18	3.99E+10	546.5	-34.00	35.00	68.00	0.120	1.104	1.104	0.013	0.015	0.247	0.059	0.040	0.536	0.279	Combustion Engineering			
1076	NRG6551	A533B1	ML2	PWR	W104	WML201	W	L0091	TL	87149	8.84E+18	2.82E+10	549.0	-34.00	25.00	59.00	0.120	1.104	1.104	0.013	0.015	0.247	0.059	0.040	0.536	0.279	Combustion Engineering			
1077							Above & below welds are the same based on ASTM meeting 1/04																							
1078	7-03P	A533B1	ML2	PWR	W83	WML201	W	L0091	TL	134028	1.74E+19	3.61E+10	549.0	-25.44	30.19	55.63	0.120	1.104	1.104	0.013	0.015	0.247	0.059	0.040	0.536	0.279	Combustion Engine [16]			
1079																														
1080	7-03P	A533B1	ML3	PWR	X	WML301	W	L0091	TL	70080	2.21E+19	8.76E+10	558.0	-36.96	-41.99	-5.03	0.140	1.330	1.330	0.018	0.012	0.130	0.060	0.067	0.520	0.038	Combustion Engine [13]			
1081																														
1082	NRG6551	A533B1	MY	PWR	A25	WMY_01	W	L1092	TL	7714	1.76E+19	6.34E+11	522.0	-34.00	238.00	272.00	0.176	1.418	1.418	0.013	0.011	0.180	0.780	0.036	0.489	0.360	Combustion Engineering			
1083	NRG6551	A533B1	MY	PWR	A35	WMY_01	W	L1092	TL	40167	7.13E+19	4.93E+11	533.0	-34.00	311.00	345.00	0.176	1.418	1.418	0.013	0.011	0.180	0.780	0.036	0.489	0.360	Combustion Engineering			
1084	NRG6551	A533B1	MY	PWR	W263	WMY_01	W	L1092	TL	40167	5.67E+18	3.92E+10	533.0	-34.00	188.00	222.00	0.176	1.418	1.418	0.013	0.011	0.180	0.780	0.036	0.489	0.360	Combustion Engineering			
1085	NRG6551	A533B1	MY	PWR	W253	WMY_01	W	L1092	TL	102562	1.25E+19	3.39E+10	542.0	-34.00	221.00	255.00	0.176	1.418	1.418	0.013	0.011	0.180	0.780	0.036	0.489	0.360	Combustion Engineering			
1086																														
1087	NRG6551	A5082	NA1	PWR	V	WNA101	W	SMIT 8	TL	9444	2.63E+18	7.74E+10	550.0	-40.00	45.00	84.00	0.060	1.370	1.370	0.020	0.012	0.350	0.110	0.041	0.514	0.086	Rotterdamse Droogdok Madtdschappij (Netherland			
1088	NRG6551	A5082	NA1	PWR	U	WNA101	W	SMIT 8	TL	49722	8.72E+18	4.87E+10	553.0	-40.00	-13.00	27.00	0.060	1.370	1.370	0.020	0.012	0.350	0.110	0.041	0.514	0.086	Rotterdamse Droogdok Madtdschappij (Netherland			
1089	7-03P	A5082	NA1	PWR	W	WNA101	W	SMIT 8	TL	129336	2.05E+19	4.41E+10	553.4	-39.92	43.60	83.52	0.060	1.370	1.370	0.020	0.012	0.350	0.110	0.041	0.514	0.086	Rotterdamse Droogdok Madtdschappij (Netherland			
1090																														
1091	NRG6551	A5082	NA2	PWR	V	WNA201	W	LW320	TL	8722	2.46E+18	7.83E+10	550.0	-35.00	-20.00	15.00	0.080	1.820	1.820	0.017	0.011	0.250	0.084	0.042	0.490	0.088	Rotterdamse Droogdok Madtdschappij (Netherland			
1092	NRG6551	A5082	NA2	PWR	U	WNA201	W	LW320	TL	53333	9.80E+18	5.10E+10	554.0	-35.00	-23.00	13.00	0.080	1.820	1.820	0.017	0.011	0.250	0.084	0.042	0.490	0.088	Rotterdamse Droogdok Madtdschappij (Netherland			
1093	7-03P	A5082	NA2	PWR	W	WNA201	W	LW320	TL	134160	2.09E+19	4.33E+10	554.5	-35.20	9.68	44.88	0.080	1.820	1.820	0.017	0.011	0.250	0.084	0.042	0.490	0.088	Rotterdamse Droogdok Madtdschappij (Netherland			
1094																														
1095	NRG6551	A302B	OC1	PWR	E	WOC101	W	L80	TL	14406	1.50E+18	2.89E+10	556.0	-9.00	73.00	82.00	0.080	1.470	1.470	0.016	0.015	0.540	0.590	0.070	0.400	0.320	Babcock & Wilcox			
1096	NRG6551	A302B	OC1+CR3	PWR	A	WOC101	W	L80	TL	38093	8.95E+18	6.53E+10	556.0	-9.00	163.00	172.00	0.080	1.470	1.470	0.016	0.015	0.540	0.590	0.070	0.400	0.320	Babcock & Wilcox			
1097	NRG6551	A302B	OC1+CR3	PWR	C	WOC101	W	L80	TL	51888	9.86E+18	5.28E+10	556.0	-9.00	180.00	189.00	0.080	1.470	1.470	0.016	0.015	0.540	0.590	0.070	0.400	0.320	Babcock & Wilcox			
1098																														
1099	NRG6551	A5082	OC2	PWR	C	WOC201	W	L80	TL	10561	1.02E+18	2.68E+10	556.0	5.00	51.00	46.00	0.110	1.550	1.550	0.022	0.010	0.650	0.580	0.090	0.390	0.350	Babcock & Wilcox			
1100	NRG6551	A5082	OC2+CR3	PWR	A	WOC201	W	L80	TL	18672	3.37E+18	5.01E+10	556.0	5.00	111.00	107.00	0.110	1.550	1.550	0.022	0.010	0.650	0.580	0.090	0.390	0.350	Babcock & Wilcox			
1101	NRG6551	A5082	OC2+CR3	PWR	E	WOC201	W	L80	TL	55584	1.21E+19	6.05E+10	556.0	5.00	179.00	174.00	0.110	1.550	1.550	0.022	0.010	0.650	0.580	0.090	0.390	0.350	Babcock & Wilcox			
1102																														
1103	NRG6551	A5082	OC3	PWR	A	WOC301	W	L80	TL	8286	8.05E+17	2.70E+10	556.0	29.00	45.00	16.00	0.080	1.630	1.630	0.017	0.012	0.610	0.560	0.100	0.390	0.290	Babcock & Wilcox			
1104	NRG6551	A5082	OC3+CR3	PWR	B	WOC301	W	L80	TL	16392	3.12E+18	5.29E+10	556.0	29.00	98.00	70.00	0.080	1.630	1.630	0.017	0.012	0.610	0.560	0.100	0.390	0.290	Babcock & Wilcox			
1105	NRG6551	A5082	OC3+CR3	PWR	D	WOC301	W	L80	TL	68443	1.45E+19	5.88E+10	556.0	29.00	174.00	145.00	0.080	1.630	1.630	0.017	0.012	0.610	0.560	0.100	0.390	0.290	Babcock & Wilcox			
1106																	The heat is the same above & below per discussion at 1/04 ASTM E900 meeting (confirmed JB Hall 6/11/04)											
1107	7-03P-DB	B&W-2 (\	DB1	PWR	PWR-5	WOC301	W	L80	TL	49096	1.14E+19	6.45E+10	556.0	28.56	218.78	190.22	0.080	1.630	1.630	0.017	0.012	0.610	0.560	0.100	0.390	0.290	Babcock & Wilcox	[3]		
1108																														
1109	NRG6551	A302BM	PAL	PWR	A240	WPAL01	W	L1092	TL	19806	6.00E+19	8.41E+11	524.0	-86.00	272.00	358.00	0.134	1.230	1.230	0.012	0.011	0.199	1.200	0.068	0.507	0.230	Combustion Engineering			
1110	NRG6551	A302BM	PAL	PWR	W290	WPAL01	W	L1092	TL	43611	1.09E+19	6.94E+10	530.0	-86.00	199.00	285.00	0.134	1.230	1.230	0.012	0.011	0.199	1.200	0.068	0.507	0.230	Combustion Engineering			
1111	NRG6551	A302BM	PAL	PWR	W110	WPAL01	W	L1092	TL	87167	1.78E+19	5.67E+10	533.0	-86.00	219.00	305.00	0.134	1.230	1.230	0.012	0.011	0.199	1.200	0.068	0.507	0.230	Combustion Engineering			
1112	5-04	A302BM	PAL	PWR	W100	WPAL01	W	L1092	TL	148404	2.09E+19	3.91E+10	534.0	-86.21	219.94	306.15	0.134	1.230	1.230	0.012	0.011	0.199	1.200	0.068	0.507	0.230	Combustion Engine [29]			
1113																														
1114	NRG6551	A302B	PB1	PWR	V	WPB101	W	L80	TL	13028	6.34E+18	1.35E+11	542.0	-42.00	65.00	108.00	0.090	1.575	1.575	0.019	0.024	0.490	0.620	0.140	0.385	0.230	Babcock & Wilcox			
1115	NRG6551	A302B	PB1	PWR	S	WPB101	W	L80	TL	31667	8.29E+18	7.27E+10	542.0	-42.00	123.00	165.00	0.090	1.575	1.575	0.019	0.024	0.490	0.620	0.140	0.385	0.230	Babcock & Wilcox			
1116	NRG6551	A302B	PB1	PWR	R	WPB101	W	L80	TL	44722	2.19E+19	1.36E+11	542.0	-42.00	112.00	154.00	0.090	1.575	1.575	0.019	0.024	0.490	0.620	0.140	0.385	0.230	Babcock & Wilcox			
1117	NRG6551	A302B	PB1	PWR	T	WPB101	W	L80	TL	81389	2.23E+19	7.61E+10	535.0	-42.00	137.00	179.00	0.090	1.575	1.575	0.019	0.024	0.490	0.620	0.140	0.385	0.230	Babcock & Wilcox			
1118																														
1119	NRG6551	A5082	PB2	PWR	V	WPB201	W	L80	TL	13361	6.50E+18	1.35E+11	542.0	-10.00	157.00	167.00	0.079	1.400	1.400	0.014	0.013	0.550	0.590	0.070	0.390	0.250	Babcock & Wilcox			
1120	NRG6551	A5082	PB2	PWR	T	WPB201	W	L80	TL	30278	8.61E+18	7.90E+10	542.0	-10.00	145.00	154.00	0.079	1.400	1.400	0.014	0.013	0.550	0.590	0.070	0.390	0.250	Babcock & Wilcox			
1121	NRG6551	A5082	PB2	PWR	R	WPB201	W	L80	TL	45556	2.20E+19	1.34E+11	542.0	-10.00	214.00	223.00	0.079	1.400	1.400	0.014	0.013	0.550	0.590	0.070	0.390	0.250	Babcock & Wilcox			
1122	NRG6551	A5082	PB2	PWR	S	WPB201	W	L80	TL	129444	3.10E+19	6.65E+10	542.0	-10.00	215.00	224.00	0.079	1.400	1.400	0.014	0.013	0.550	0.590	0.070	0.390	0.250	Babcock & Wilcox			
1123																														
1124	NRG6551	A302BM	PH3	BWR	1	WPH301	W		LT	66359	1.60E+17	6.70E+08	528.0	3.00	17.00	14.00	####	1.560	1.560	0.009	####	0.190	0.407	#####	0.507	0.110	Babcock & Wilcox			
1125																														
1126	NRG6551	A5083	PI1	PWR	V	WPI101	W	UM89	TL	11722	5.40E+18	1.28E+11	527.0	-62.00	-33.00	29.00	0.052	1.290	1.290	0.017	0.013	0.173	0.090	0.013	0.520	0.130	Societe des Forges et Ateliers du Creusot			
1127	NRG6551	A5083	PI1	PWR	P	WPI101	W	UM89	TL	50278	1.46E+19	8.07E+10	527.0	-62.00	-22.00	40.00	0.052	1.290	1.290	0.017	0.013	0.173	0.090	0.013	0.520	0.130	Societe des Forges et Ateliers du Creusot			
1128	NRG6551	A5083	PI1	PWR	R	WPI101	W	UM89	TL	75000	3.95E+19	1.46E+11	527.0	-62.00	59.00	121.00	0.052	1.290	1.290	0.017	0.013	0.173	0.090	0.013	0.520	0.130	Societe des Forges et Ateliers du Creusot			
1129	5-00Calib	A5083	PI1	PWR	S	WPI101	W	UM89	TL	158840	4.02E+19	7.03E+10	527.0	-62.28	94.51	157.00	0.052	1.290	1.290	0.017	0.013	0.173	0.090	0.013	0.520	0.130	Societe des Forges et Ateliers du Creusot			
1130																														
1131	NRG6551	A5083	PI2	PWR	V	WPI201	W	UM89	TL	12222	5.78E+18	1.31E+11	527.0	-74.00	-6.00	67.00	0.046	1.280	1.280	0.019	0.014	0.445	0.071	0.015	0.505	0.082	Societe des Forges et Ateliers du Creusot			
1132	NRG6551	A5083	PI2	PWR	T	WPI201	W	UM89	TL	36111	1.09E+19	8.38E+10	527.0	-74.00	-18.00	56.00	0.046	1.280	1.280	0.019	0.014	0.445	0.071	0.015	0.505	0.082	Societe des Forges et Ateliers du Creusot			
1133	NRG6551	A5083	PI2	PWR	R	WPI201	W	UM89	TL	77222	4.05E+19	1.46E+11	527.0	-74.00	24.00	98.00	0.046	1.280	1.280	0.019	0.014	0.445	0.071	0.015	0.505	0.082	Societe des Forges et Ateliers du Creusot			
1134	5-00Calib	A5083	PI2	PWR	P	WPI201	W	UM89	TL	151126	4.17E+19	7.66E+10	527.0	-73.88	18.90	93.00	0.046	1.280	1.280	0.019	0.014	0.445	0.071	0.015	0.505	0.082	Societe des Forges et Ateliers du Creusot			
1135																														

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
1136	NRG6551	A533B1	PL1	BWR	1	WPL101	W	L1092	TL	36582	2.30E+17	1.75E+09	529.0	-112.00	-83.00	29.00	0.122	1.122	1.122	0.014	0.009	0.245	0.794	0.099	0.618	0.161	Combustion Engineering			
1137																														
1138	5-00Calib	A533B1	PV1	PWR	W137	WPV101	W	L0091	TL	39931	3.45E+18	2.40E+10	552.0	-53.00	-51.00	2.00	0.160	1.080	1.080	0.005	0.005	0.240	0.060	0.060	0.580	0.040	Combustion Engineering			
1139								The heat is the same above & below.																						
1140	7-03P	A533B1	PV1	PWR	W38	WPV101	W	L0091	TL	85936	7.85E+18	2.54E+10	552.0	-53.00	-44.06	8.94	0.160	1.080	1.080	0.005	0.005	0.240	0.060	0.060	0.580	0.040	Combustion Engine [21]			
1141																														
1142	NRG6551	A533B1	PV2	PWR	W137	WPV201	W	L124	TL	39806	4.07E+18	2.84E+10	552.0	-38.00	-42.00	-4.00	0.120	1.460	1.460	0.010	0.011	0.470	0.090	0.100	0.510	0.070	Combustion Engineering			
1143																														
1144	5-00Calib	A533B1	PV3	PWR	W137	WPV301	W	L124	TL	38921	3.64E+18	2.60E+10	552.0	-37.00	-12.00	25.00	####	1.550	1.550	0.008	####	####	0.140	#####	#####	0.020	Combustion Engineering			
1145																														
1146	NRG6551	A302BM	QC1	BWb	1	WQC101	W		TL	10800	8.20E+18	2.11E+11	546.0	14.00	96.00	83.00	0.203	1.560	1.560	0.012	0.009	0.153	0.315	0.061	0.450	0.188	Babcock & Wilcox			
1147	NRG6551	A302BM	QC1	BWR	2	WQC101	W		TL	10800	1.03E+16	2.65E+08	530.0	14.00	1.00	-12.00	0.203	1.560	1.560	0.012	0.009	0.153	0.315	0.061	0.450	0.188	Babcock & Wilcox			
1148	NRG6551	A302BM	QC1	BWb	3	WQC101	W		TL	34528	3.68E+19	2.96E+11	546.0	14.00	169.00	155.00	0.203	1.560	1.560	0.012	0.009	0.153	0.315	0.061	0.450	0.188	Babcock & Wilcox			
1149	NRG6551	A302BM	QC1	BWR	8	WQC101	W		TL	58206	5.50E+16	2.62E+08	530.0	14.00	-18.00	-32.00	0.203	1.560	1.560	0.012	0.009	0.153	0.315	0.061	0.450	0.188	Babcock & Wilcox			
1150																														
1151	NRG6551	A302B	QC1	BWb	1	WQC102	W		TL	10800	8.20E+18	2.11E+11	546.0	-37.66	120.00	158.00	0.090	1.800	1.800	0.010	0.014	0.550	0.650	0.080	0.390	0.310	Babcock & Wilcox			
1152	NRG6551	A302B	QC1	BWb	3	WQC102	W		TL	34806	2.47E+19	1.97E+11	546.0	-37.66	224.00	262.00	0.090	1.800	1.800	0.010	0.014	0.550	0.650	0.080	0.390	0.310	Babcock & Wilcox			
1153												Heats above & below are different per E900ChemChanges.xls																		
1154	7-03B-OC	SAW	OYS	BWR	D	WQC102_1	W	L80	TL	27394	1.07E+18	1.09E+10	530.0	-12.22	120.22	132.44	0.090	1.575	1.575	0.016	0.018	0.470	0.690	#####	0.360	0.290	Babcock & Wilcox	[1], [50]		
1155	7-03B-OC	SAW	OYS	BWR	G	WQC102_1	W	L80	TL	27379	1.58E+18	1.60E+10	530.0	-12.22	147.50	159.72	0.090	1.575	1.575	0.016	0.018	0.470	0.690	#####	0.360	0.290	Babcock & Wilcox	[1], [50]		
1156	7-03B-OC	SAW	OYS	BWR	I	WQC102_1	W	L80	TL	57615	2.89E+18	1.39E+10	530.0	-12.22	182.43	194.65	0.090	1.575	1.575	0.016	0.018	0.470	0.690	#####	0.360	0.290	Babcock & Wilcox	[2], [50]		
1157	7-03B-OC	SAW	OYS	BWR	E	WQC102_1	W	L80	TL	57615	1.77E+18	8.55E+09	530.0	-12.22	162.29	174.51	0.090	1.575	1.575	0.016	0.018	0.470	0.690	#####	0.360	0.290	Babcock & Wilcox	[2], [50]		
1158																														
1159	NRG6551	A302BM	QC2	BWb	12	WQC201	W	ESW	TL	14316	9.75E+18	1.89E+11	546.0	-26.16	67.00	93.00	0.202	1.750	1.750	0.009	0.016	0.145	0.338	0.087	0.501	0.158	Babcock & Wilcox			
1160	NRG6551	A302BM	QC2	BWR	13	WQC201	W	ESW	TL	14316	1.73E+16	3.36E+08	530.0	-26.16	7.00	33.00	0.202	1.750	1.750	0.009	0.016	0.145	0.338	0.087	0.501	0.158	Babcock & Wilcox			
1161	NRG6551	A302BM	QC2	BWb	3	WQC201	W	ESW	TL	39500	3.94E+19	2.77E+11	546.0	-26.16	124.00	150.00	0.202	1.750	1.750	0.009	0.016	0.145	0.338	0.087	0.501	0.158	Babcock & Wilcox			
1162	NRG6551	A302BM	QC2	BWR	18	WQC201	W	ESW	TL	49353	6.56E+16	3.69E+08	530.0	-26.16	6.00	32.00	0.202	1.750	1.750	0.009	0.016	0.145	0.338	0.087	0.501	0.158	Babcock & Wilcox			
1163												Heats above & below are different per discussion at 1/04 ASTM E900 meeting																		
1164	7-03B-OC	ESW	OYS	BWR	D	WQC201_1	W	ESW	TL	27380	1.10E+18	1.12E+10	530.0	-23.37	8.43	31.80	0.170	1.485	1.485	0.015	0.017	0.130	0.240	#####	0.410	0.110	Babcock & Wilcox	[1], [50]		
1165	7-03B-OC	ESW	OYS	BWR	G	WQC201_1	W	ESW	TL	27391	1.70E+18	1.72E+10	530.0	-23.37	53.65	77.02	0.170	1.485	1.485	0.015	0.017	0.130	0.240	#####	0.410	0.110	Babcock & Wilcox	[1], [50]		
1166	7-03B-OC	ESW	OYS	BWR	E	WQC201_1	W	ESW	TL	57615	1.78E+18	8.58E+09	530.0	-23.37	55.32	78.69	0.170	1.485	1.485	0.015	0.017	0.130	0.240	#####	0.410	0.110	Babcock & Wilcox	[2], [50]		
1167	7-03B-OC	ESW	OYS	BWR	I	WQC201_1	W	ESW	TL	57617	2.85E+18	1.37E+10	530.0	-23.37	53.00	76.37	0.170	1.485	1.485	0.015	0.017	0.130	0.240	#####	0.410	0.110	Babcock & Wilcox	[2], [50]		
1168																														
1169	NRG6551	A302B1	QC2	BWb	12	WQC202	W		TL	14316	9.75E+18	1.89E+11	546.0	9.00	192.00	182.00	0.090	1.880	1.880	0.013	0.014	0.300	0.600	0.070	0.390	0.260	Babcock & Wilcox			
1170	NRG6551	A302B1	QC2	BWb	3	WQC202	W		TL	39500	2.52E+19	1.77E+11	546.0	9.00	224.00	214.00	0.090	1.880	1.880	0.013	0.014	0.300	0.600	0.070	0.390	0.260	Babcock & Wilcox			
1171																														
1172	7-03B-OC	SAW	OYS	BWR	H	WRB_01	W	L124	TL	27375	1.36E+18	1.38E+10	530.0	-64.99	-3.71	61.28	0.090	1.320	1.320	0.009	0.015	0.400	0.930	#####	0.440	0.059	Chicago Bridge and	[1], [24], [50]		
1173	7-03B-OC	SAW	OYS	BWR	F	WRB_01	W	L124	TL	57617	1.94E+18	9.34E+09	530.0	-64.99	-6.33	58.66	0.090	1.320	1.320	0.009	0.015	0.400	0.930	#####	0.440	0.059	Chicago Bridge and	[2], [24], [50]		
1174						The WRB_01 heat above & below are same per E900ChemChanges.xls. The plant chemistry below is the average of the SSP chemistry [50] plus 183 specimen chemistry, so it is used for all WRB-01 entries.																											
1175	7-03B	SAW	RB	BWR	183	WRB_01	W	L124	TL	88301	1.16E+18	3.65E+09	534.0	-64.99	-18.70	46.29	0.090	1.320	1.320	0.009	0.015	0.400	0.930	#####	0.440	0.059	Chicago Bridge and	[24]		
1176																														
1177	NRG6551	A533B1	RS1+DB1	PWR	B	WRS101	W	L80	TL	13068	3.99E+18	8.48E+10	556.0	-20.00	95.00	114.00	0.090	1.490	1.490	0.016	0.016	0.520	0.590	0.070	0.400	0.310	Babcock & Wilcox			
1178	NRG6551	A533B1	RS1+DB1	PWR	D	WRS101	W	L80	TL	20172	6.60E+18	9.09E+10	556.0	-20.00	129.00	148.00	0.090	1.490	1.490	0.016	0.016	0.520	0.590	0.070	0.400	0.310	Babcock & Wilcox			
1179	NRG6551	A533B1	RS1+DB1	PWR	F	WRS101	W	L80	TL	42720	1.42E+19	9.23E+10	556.0	-20.00	145.00	164.00	0.090	1.490	1.490	0.016	0.016	0.520	0.590	0.070	0.400	0.310	Babcock & Wilcox			
1180																														
1181	NRG6551	A533B1	SA1	PWR	Y	WSA101	W	L1092	TL	31389	9.30E+18	8.23E+10	539.0	-150.00	36.00	186.00	0.150	1.210	1.210	0.019	0.015	0.165	1.260	0.040	0.510	0.160	Combustion Engineering			
1182	5-00Calib	A533B1	SA1	PWR	S	WSA101	W	L1092	TL	94672	1.97E+19	5.78E+10	539.0	-150.42	81.37	232.00	0.150	1.210	1.210	0.019	0.015	0.165	1.260	0.040	0.510	0.160	Combustion Engineering			
1183																														
1184	NRG6551	A533B1	SA2	PWR	T	WSA201	W	L1092	TL	10444	2.75E+18	7.31E+10	545.0	-33.00	112.00	145.00	0.103	1.285	1.285	0.015	0.010	0.247	0.726	0.025	0.459	0.254	Combustion Engineering			
1185	NRG6551	A533B1	SA2	PWR	U	WSA201	W	L1092	TL	23667	5.50E+18	6.46E+10	541.0	-33.00	147.00	180.00	0.103	1.285	1.285	0.015	0.010	0.247	0.726	0.025	0.459	0.254	Combustion Engineering			
1186	NRG6551	A533B1	SA2	PWR	X	WSA201	W	L1092	TL	54444	1.07E+19	5.46E+10	539.0	-33.00	155.00	188.00	0.103	1.285	1.285	0.015	0.010	0.247	0.726	0.025	0.459	0.254	Combustion Engineering			
1187	7-03P	A533B1	SA2	PWR	Y	WSA201	W	L1092	TL	94608	1.81E+19	5.31E+10	539.0	-32.76	158.73	191.49	0.103	1.285	1.285	0.015	0.010	0.247	0.726	0.025	0.459	0.254	Combustion Engine [14]			
1188																														
1189	NRG6551	A533B1	SB1	PWR	U	WSB101	W	L0091	TL	8001	3.36E+18	1.17E+11	558.0	-64.00	-47.00	18.00	0.140	1.267	1.267	0.009	0.007	0.133	0.075	0.022	0.510	0.020	Combustion Engineering			
1190	7-03P	A533B1	SB1	PWR	Y	WSB101	W	L0091	TL	48840	1.15E+19	6.54E+10	559.0	-64.37	-40.73	23.64	0.140	1.267	1.267	0.009	0.007	0.133	0.075	0.022	0.510	0.020	Combustion Engineering			
1191																														
1192	NRG6551	A533B1	SH1	BWR	30D	WSH101	W	L311A2	TL	58531	1.40E+17	6.64E+08	528.0	-41.00	-16.00	25.00	0.055	1.182	1.182	0.014	0.018	0.392	0.950	#####	0.532	0.025	Chicago Bridge and Iron			
1193																														
1194	NRG6551	A533B1	SH2	BWR	30D	WSH201	W	L311A2	TL	54619	1.30E+17	6.61E+08	528.0	-7.00	-38.00	-31.00	0.050	1.172	1.172	0.014	0.015	0.430	0.965	#####	0.532	0.025	Chicago Bridge and Iron			
1195																														
1196	NRG6551	A533B1	SL1	PWR	W97	WSL101	W	L0091	TL	40917	5.50E+18	3.73E+10	541.0	-55.00	18.00	73.00	0.120	1.069	1.069	0.015	0.012	0.205	0.061	0.060	0.530	0.247	Combustion Engineering			
1197	NRG6551	A533B1	SL1	PWR	W104	WSL101	W	L0091	TL	83408	7.16E+18	2.38E+10	545.0	-55.00	11.00	66.00	0.120	1.069	1.069	0.015	0.012	0.205	0.061	0.060	0.530	0.247	Combustion Engineering			
1198	7-03P	A533B1	SL1	PWR	W284	WSL101	W	L0091	TL	150935	1.45E+19	2.67E+10	546.7	-55.23	11.56	66.79	0.120	1.069	1.069	0.015	0.012	0.205	0.061	0.060	0.530	0.247	Combustion Engine [19]			
1199																														
1200	NRG6551	A533B1	SL2	PWR	W83	WSL201	W	L124	TL	9773	1.60E+18	4.55E+10	548.0	-44.00	-33.00	11.00	0.160	1.525	1.525	0.005	0.012	0.375	0.067	0.056	0.555	0.048	Combustion Engineering			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
1201	5-00Calib	A533B1	SL2	PWR	W263	WSL201	W	L124	TL	96426	1.24E+19	3.57E+10	558.0	-43.86	-25.17	19.00	0.160	1.525	1.525	0.005	0.012	0.375	0.067	0.056	0.555	0.048	Combustion Engineering			
1202																														
1203	NRG6551	A533B1	SO2	PWR	W97	WSO201	W	L0091	TL	23620	5.07E+18	5.96E+10	553.0	-58.00	-50.00	9.00	####	1.380	1.380	0.003	0.009	0.230	0.140	0.110	0.540	0.030	Combustion Engineering			
1204	7-03P	A533B1	SO2	PWR	W263	WSO201	W	L0091	TL	116376	2.20E+19	5.26E+10	551.1	-58.49	-29.93	28.56	####	1.380	1.380	0.003	0.009	0.230	0.140	0.110	0.540	0.030	Combustion Engineering			
1205																														
1206	NRG6551	A533B1	SO3	PWR	W97	WSO301	W	L124	TL	37957	8.00E+18	5.85E+10	553.0	-28.00	2.00	30.00	0.116	1.419	1.419	0.009	0.008	0.390	0.097	0.060	0.540	0.031	Combustion Engineering			
1207	5-04	A533B1	SO3	PWR	W263	WSO301	W	L124	TL	130353	2.47E+19	5.27E+10	549.6	-27.88	48.11	75.99	0.116	1.419	1.419	0.009	0.008	0.390	0.097	0.060	0.540	0.031	Combustion Engine [30]			
1208																														
1209	NRG6551	A5082	SQ1	PWR	T	WSQ101	W	SMIT 8	TL	9361	2.88E+18	8.55E+10	545.0	-80.00	47.00	128.00	0.058	1.400	1.400	0.021	0.009	0.420	0.125	0.068	0.530	0.370	Rotterdamse Droogdok Madtdschappij (Netherland			
1210	NRG6551	A5082	SQ1	PWR	U	WSQ101	W	SMIT 8	TL	25139	9.55E+18	1.06E+11	545.0	-80.00	65.00	145.00	0.058	1.400	1.400	0.021	0.009	0.420	0.125	0.068	0.530	0.370	Rotterdamse Droogdok Madtdschappij (Netherland			
1211	NRG6551	A5082	SQ1	PWR	X	WSQ101	W	SMIT 8	TL	46111	1.39E+19	8.37E+10	545.0	-80.00	77.00	157.00	0.058	1.400	1.400	0.021	0.009	0.420	0.125	0.068	0.530	0.370	Rotterdamse Droogdok Madtdschappij (Netherland			
1212	7-03P	A5082	SQ1	PWR	Y	WSQ101	W	SMIT 4	TL	87863	2.19E+19	6.92E+10	545.0	-80.33	81.53	161.86	0.058	1.400	1.400	0.021	0.009	0.420	0.125	0.068	0.530	0.370	Rotterdamse Droog [5]			
1213																														
1214	NRG6551	A5082	SQ2	PWR	T	WSQ201	W	SMIT 8	TL	9333	2.42E+18	7.20E+10	545.0	-82.00	-1.00	81.00	0.095	1.500	1.500	0.016	0.013	0.410	0.110	0.085	0.530	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
1215	OLNRG	A5082	SQ2	PWR	U	WSQ201	W	SMIT 8	TL	25528	6.08E+18	6.62E+10	545.0	-82.00	72.00	154.00	0.095	1.500	1.500	0.016	0.013	0.410	0.110	0.085	0.530	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
1216	NRG6551	A5082	SQ2	PWR	X	WSQ201	W	SMIT 8	TL	46944	1.03E+19	6.09E+10	545.0	-82.00	-53.00	30.00	0.095	1.500	1.500	0.016	0.013	0.410	0.110	0.085	0.530	0.130	Rotterdamse Droogdok Madtdschappij (Netherland			
1217	7-03P	A5082	SQ2	PWR	Y	WSQ201	W	SMIT 8	TL	92330	2.14E+19	6.44E+10	545.0	-82.31	0.83	83.14	0.095	1.500	1.500	0.016	0.013	0.410	0.110	0.085	0.530	0.130	Rotterdamse Droog [4]			
1218																														
1219	NRG6551	A533B1	SR1	PWR	U	WSR101	W	L124	TL	9583	6.12E+18	1.77E+11	557.0	-34.00	-15.00	18.00	0.040	1.230	1.230	0.006	0.006	0.410	0.958	0.068	0.480	0.024	Chicago Bridge and Iron			
1220	7-03P	A533B1	SR1	PWR	V	WSR101	W	L124	TL	26722	1.32E+19	1.37E+11	557.0	-33.74	-16.14	17.60	0.040	1.230	1.230	0.006	0.006	0.410	0.958	0.068	0.480	0.024	Chicago Bridge and Iron			
1221	7-03P	A533B1	SR1	PWR	X	WSR101	W	L124	TL	82788	3.25E+19	1.09E+11	557.0	-33.74	44.99	78.73	0.040	1.230	1.230	0.006	0.006	0.410	0.958	0.068	0.480	0.024	Chicago Bridge and Iron			
1222																														
1223	NRG6551	A533B1	ST1	PWR	U	WST101	W	L124	TL	6861	2.83E+18	1.15E+11	560.0	-54.00	-23.00	31.00	0.120	1.360	1.360	0.009	0.010	0.420	0.090	0.020	0.530	0.020	Combustion Engineering			
1224	5-04	A533B1	ST1	PWR	Y	WST101	W	L124	TL	42952	1.34E+19	8.67E+10	559.0	-54.00	-20.02	33.98	0.120	1.360	1.360	0.009	0.010	0.420	0.090	0.020	0.530	0.020	Combustion Engine [47]			
1225																														
1226	NRG6551	A533B1	ST2	PWR	V	WST201	W	L124	TL	7889	2.54E+18	8.94E+10	560.0	-15.00	-23.00	-8.00	####	1.450	1.450	0.010	####	####	0.150	#####	#####	0.010	Combustion Engineering			
1227	5-00Calib	A533B1	ST2	PWR	Y	WST201	W	L124	TL	44970	1.16E+19	7.17E+10	560.0	-15.14	-10.26	5.00	####	1.450	1.450	0.010	####	####	0.150	#####	#####	0.010	Combustion Engineering			
1228																														
1229	NRG6551	A533B1	SU1	PWR	T	WSU101	W	L80	TL	9389	2.92E+18	8.64E+10	534.0	-25.00	146.00	171.00	0.140	1.470	1.470	0.011	0.014	0.380	0.640	0.070	0.430	0.230	Rotterdamse Droogdok Madtdschappij (Netherland			
1230	NRG6551	A533B1	SU1	PWR	V	WSU101	W	L80	TL	70278	1.99E+19	7.87E+10	538.0	-25.00	225.00	250.00	0.140	1.470	1.470	0.011	0.014	0.380	0.640	0.070	0.430	0.230	Rotterdamse Droogdok Madtdschappij (Netherland			
1231	5-00Calib	A533B1	SU1	PWR	X	WSU101	W	L80	TL	139914	1.60E+19	3.18E+10	541.0	-24.59	209.64	234.00	0.140	1.470	1.470	0.011	0.014	0.380	0.640	0.070	0.430	0.230	Rotterdamse Droogdok Madtdschappij (Netherland			
1232	The next two are the same weld type (SA-1526), wire (299L44), flux, and UTT30 as above, but are from the B&W MIRVSP program instead of plant surveillance (different source, hence different Chemistry per Brian																													
1233	5-00Calib	A5082	TM2+CR3	PWR	T1(LG1	WTM201	W	L80	TL	40344	8.30E+18	5.71E+10	556.0	-25.00	201.00	226.00	0.090	1.530	1.530	0.013	0.017	0.530	0.700	0.080	0.420	0.370	Babcock & Wilcox	[39]		
1234	OL7-00	-999	SU2	PWR	W1	WTM201	W	L80	TL	46608	6.14E+18	3.66E+10	546.0	-24.95	238.53	263.00	0.090	1.530	1.530	0.013	0.017	0.530	0.700	0.080	0.420	0.370	Babcock & Wilcox	[38]		
1235																														
1236	NRG6551	A533B1	SU2	PWR	X	WSU201	W	GRAU	TL	10250	2.94E+18	7.97E+10	535.0	-20.00	75.00	95.00	0.093	1.535	1.535	0.018	0.014	0.454	0.560	0.108	0.410	0.190	Rotterdamse Droogdok Madtdschappij (Netherland			
1237	NRG6551	A533B1	SU2	PWR	V	WSU201	W	GRAU	TL	73333	1.75E+19	6.63E+10	541.0	-20.00	121.00	141.00	0.093	1.535	1.535	0.018	0.014	0.454	0.560	0.108	0.410	0.190	Rotterdamse Droogdok Madtdschappij (Netherland			
1238	7-03P	A533B1	SU2	PWR	Y	WSU201	W	GRAU	TL	177828	2.73E+19	4.26E+10	543.0	-20.05	159.44	179.49	0.093	1.535	1.535	0.018	0.014	0.454	0.560	0.108	0.410	0.190	Rotterdamse Droog [15]			
1239																														
1240	NRG6551	A302B	TM1	PWR	E	WTM101	W	L80	TL	11211	1.07E+18	2.65E+10	556.0	-25.00	50.00	75.00	0.090	1.620	1.620	0.014	0.015	0.460	0.670	0.100	0.400	0.330	Babcock & Wilcox			
1241	NRG6551	A302B	TM1+CR3	PWR	C	WTM101	W	L80	TL	38371	8.82E+18	6.39E+10	556.0	-25.00	140.00	165.00	0.090	1.620	1.620	0.014	0.015	0.460	0.670	0.100	0.400	0.330	Babcock & Wilcox			
1242																														
1243	5-04	A533B1	DB1	PWR	TM2-C	WTM203	W	L80	TL	9126	1.68E+18	5.11E+10	556.0	-1.63	117.28	118.91	0.090	1.680	1.680	0.015	0.013	0.490	0.630	0.130	0.390	0.280	Babcock & Wilcox	[52]		
1244	5-04	A533B1	DB1	PWR	TM2-E	WTM203	W	L80	TL	9126	1.74E+18	5.30E+10	556.0	-1.63	106.41	108.04	0.090	1.680	1.680	0.015	0.013	0.490	0.630	0.130	0.390	0.280	Babcock & Wilcox	[52]		
1245																														
1246	NRG6551	A5082	TP3	PWR	T	WTP301	W	L80	TL	10056	7.39E+18	2.04E+11	547.0	0.00	166.00	166.00	0.076	1.260	1.260	0.011	0.018	0.660	0.570	0.140	0.420	0.330	Babcock & Wilcox			
1247	NRG6551	A5082	TP3	PWR	V	WTP301	W	L80	TL	70556	1.53E+19	6.02E+10	547.0	0.00	180.00	180.00	0.076	1.260	1.260	0.011	0.018	0.660	0.570	0.140	0.420	0.330	Babcock & Wilcox			
1248	7-03P	A5082	TP3+DB1	PWR	V+A5	WTP301	W	L80	TL	121107	2.57E+19	5.89E+10	551.0	0.12	217.06	216.94	0.076	1.260	1.260	0.011	0.018	0.660	0.570	0.140	0.420	0.330	Babcock & Wilcox	[42]		
1249	7-03P	A302B	TP3	PWR	X	WTP301	W	L80	TL	173886	2.90E+19	4.63E+10	547.0	0.12	195.70	195.58	0.076	1.260	1.260	0.011	0.018	0.660	0.570	0.140	0.420	0.330	Babcock & Wilcox	[18]		
1250																														
1251	NRG6551	A5082	TP4	PWR	T	WTP401	W	L80	TL	10278	7.08E+18	1.91E+11	547.0	-4.00	207.00	211.00	0.098	1.440	1.440	0.014	0.011	0.500	0.600	0.140	0.360	0.290	Babcock & Wilcox			
1252																														
1253	NRG6551	A533B1	TRO	PWR	U	WTRO01	W	L124	TL	10139	4.11E+18	1.13E+11	554.0	-10.00	22.00	33.00	0.185	1.390	1.390	0.020	0.013	0.445	0.957	0.074	0.505	0.055	Chicago Bridge and Iron			
1254	NRG6551	A533B1	TRO	PWR	X	WTRO01	W	L124	TL	38333	1.77E+19	1.28E+11	554.0	-10.00	37.00	47.00	0.185	1.390	1.390	0.020	0.013	0.445	0.957	0.074	0.505	0.055	Chicago Bridge and Iron			
1255	NRG6551	A533B1	TRO	PWR	V	WTRO01	W	L124	TL	70278	2.34E+19	9.25E+10	554.0	-10.00	32.00	42.00	0.185	1.390	1.390	0.020	0.013	0.445	0.957	0.074	0.505	0.055	Chicago Bridge and Iron			
1256																														
1257	5-04	A533B1	VO1	PWR	U	WVO101	W	L0091	TL	9583	3.62E+18	1.05E+11	560.0	-49.48	-25.76	23.72	0.133	1.130	1.130	0.012	0.010	0.153	0.102	0.051	0.562	0.040	Combustion Engine [48]			
1258	NRG6551	A533B1	VO1	PWR	Y	WVO101	W	L0091	TL	40556	1.31E+19	8.97E+10	560.0	-49.00	-28.00	21.00	0.133	1.130	1.130	0.012	0.010	0.153	0.102	0.051	0.562	0.040	Combustion Engineering			
1259	5-00Calib	A533B1	VO1	PWR	V	WVO101	W	L0091	TL	75125	1.98E+19	7.32E+10	560.0	-49.48	-45.90	4.00	0.133	1.130	1.130	0.012	0.010	0.153	0.102	0.051	0.562	0.040	Combustion Engineering			
1260																														
1261	5-04	A533B1	VO2	PWR	U	WVO201	W	L124	TL	10361	4.03E+18	1.08E+11	557.0	-19.26	-31.77	-12.51	0.086	1.128	1.128	0.009	0.009	0.456	0.127	0.059	0.485	0.044	Combustion Engine [49]		Chemistry is the avera	
1262	5-04	A533B1	VO2	PWR	Y	WVO201	W	L124	TL	42339	1.13E+19	7.41E+10	557.0	-19.26	-0.28	18.98	0.086	1.128	1.128	0.009	0.009	0.456	0.127	0.059	0.485	0.044	Combustion Engine [49]		Chemistry is the avera	
1263	5-04	A533B1	VO2	PWR	X	WVO201	W	L124	TL	66795	2.16E+19	8.98E+10	557.0	-19.26	2.18	21.44	0.086	1.128	1.128	0.009	0.009	0.456	0.127	0.059	0.485	0.044	Combustion Engine [49]		Chemistry is the avera	
1264																														
1265	NRG6551	A533B1	VS1	PWR	U	WVS101	W	L124	TL	9861	6.55E+18	1.85E+11	555.0	-53.00	-31.00	23.00	0.085	1.410	1.410	0.009	0.009	0.450	0.950	0.130	0.475	0.040	Chicago Bridge and Iron			

	A	B	C	E	F	G	I	J	K	M	N	P	Q	S	W	AA	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BJ	BK	BL
1266	NRG6551	A533B1	VS1	PWR	V	WVS101	W	L124	TL	25639	1.55E+19	1.68E+11	555.0	-53.00	-6.00	47.00	0.085	1.410	1.410	0.009	0.009	0.450	0.950	0.130	0.475	0.040	Chicago Bridge and Iron			
1267	NRG6551	A533B1	VS1	PWR	X	WVS101	W	L124	TL	44167	2.62E+19	1.65E+11	555.0	-53.00	-30.00	23.00	0.085	1.410	1.410	0.009	0.009	0.450	0.950	0.130	0.475	0.040	Chicago Bridge and Iron			
1268	5-00Calib	A533B1	VS1	PWR	W	WVS101	W	L124	TL	94498	4.66E+19	1.37E+11	555.0	-53.35	-10.06	43.00	0.085	1.410	1.410	0.009	0.009	0.450	0.950	0.130	0.475	0.040	Chicago Bridge and Iron			
1269																														
1270	NRG6551	A533B1	VY	BWR	30D	WVY_01	W		TL	66120	4.30E+16	1.81E+08	527.0	-56.00	-46.00	10.00	####	####	1.426	0.013	####	####	0.941	#####	#####	0.026	Chicago Bridge and Iron			
1271																														
1272	7-03P	A5082	WB1	PWR	U	WWB101	W	GRAU	TL	10512	5.05E+18	1.33E+11	559.0	-29.75	-23.36	6.39	0.075	1.960	1.960	0.013	0.009	0.250	0.730	0.035	0.550	0.041	Rotterdamse Droog	[22]		
1273	5-04	A5082	WB1	PWR	W	WWB101	W	GRAU	TL	33398	1.23E+19	1.02E+11	559.0	-29.75	-0.43	29.32	0.075	1.960	1.960	0.013	0.009	0.250	0.730	0.037	0.550	0.041	Rotterdamse Droog	[31]		
1274																														
1275	NRG6551	A533B1	WC1	PWR	U	WWC101	W	L124	TL	9417	3.53E+18	1.04E+11	560.0	-55.00	-31.00	24.00	0.110	1.460	1.460	0.005	0.011	0.480	0.090	0.090	0.560	0.040	Combustion Engineering			
1276	NRG6551	A533B1	WC1	PWR	Y	WWC101	W	L124	TL	41944	1.27E+19	8.41E+10	560.0	-55.00	-12.00	43.00	0.110	1.460	1.460	0.005	0.011	0.480	0.090	0.090	0.560	0.040	Combustion Engineering			
1277	5-04	A533B1	WC1	PWR	V	WWC101	W	L124	TL	83188	2.53E+19	8.44E+10	557.0	-55.10	-10.82	44.28	0.110	1.460	1.460	0.005	0.011	0.480	0.090	0.090	0.560	0.040	Combustion Engine	[32]		
1278	7-03P	A533B1	WC1	PWR	X	WWC101	W	L124	TL	120888	3.49E+19	8.02E+10	554.0	-55.11	10.80	65.91	0.110	1.460	1.460	0.005	0.011	0.480	0.090	0.090	0.560	0.040	Combustion Engine	[20]		
1279																														
1280	NRG6551	A533B1	WF3	PWR	W97	WWF301	W	L0091	TL	38921	6.47E+18	4.62E+10	553.0	-80.57	-51.06	29.51	0.230	1.350	1.350	0.008	0.006	0.160	0.160	0.050	0.570	0.050	Combustion Engine	[51]		
1281	5-04	A533B1	WF3	PWR	W263	WWF301	W	L0091	TL	121231	1.45E+19	3.32E+10	553.0	-80.57	-75.86	4.71	0.230	1.350	1.350	0.008	0.006	0.160	0.160	0.050	0.570	0.050	Combustion Engine	[33]		surprisingly small shift
1282																														
1283	NRG6551	A533B1	ZN1	PWR	T	WZN101	W	L80	TL	10667	3.10E+18	8.07E+10	529.0	5.00	113.00	108.00	0.100	1.480	1.480	0.019	0.014	0.670	0.540	0.070	0.390	0.250	Babcock & Wilcox			
1284	NRG6551	A533B1	ZN1	PWR	U	WZN101	W	L80	TL	31389	1.02E+19	9.03E+10	529.0	5.00	194.00	190.00	0.100	1.480	1.480	0.019	0.014	0.670	0.540	0.070	0.390	0.250	Babcock & Wilcox			
1285	NRG6551	A533B1	ZN1	PWR	X	WZN101	W	L80	TL	45278	1.26E+19	7.73E+10	529.0	5.00	199.00	194.00	0.100	1.480	1.480	0.019	0.014	0.670	0.540	0.070	0.390	0.250	Babcock & Wilcox			
1286	NRG6551	A533B1	ZN1	PWR	Y	WZN101	W	L80	TL	75278	1.56E+19	5.76E+10	529.0	5.00	205.00	200.00	0.100	1.480	1.480	0.019	0.014	0.670	0.540	0.070	0.390	0.250	Babcock & Wilcox			
1287	7-03P	A533B1	ZN1+DB1	PWR	Y+A5	WZN101	W	L80	TL	125829	2.60E+19	5.74E+10	540.0	4.77	220.71	215.94	0.100	1.480	1.480	0.019	0.014	0.670	0.540	0.070	0.390	0.250	Babcock & Wilcox	[42]		
1288												Note for the above ZN1+DB1, the raw data for ITT30 and the chemistry came from BWOG via Brian Hall																		
1289	NRG6551	A533B1	ZN2	PWR	U	WZN201	W	L80	LT	11583	2.70E+18	6.48E+10	528.0	-23.00	115.00	138.00	0.084	1.560	1.560	0.019	0.010	0.450	0.554	0.071	0.389	0.250	Babcock & Wilcox			
1290	NRG6551	A533B1	ZN2	PWR	T	WZN201	W	L80	LT	31389	7.79E+18	6.89E+10	528.0	-23.00	151.00	174.00	0.084	1.560	1.560	0.019	0.010	0.450	0.554	0.071	0.389	0.250	Babcock & Wilcox			
1291	NRG6551	A533B1	ZN2	PWR	Y	WZN201	W	L80	LT	80556	1.46E+19	5.03E+10	528.0	-23.00	202.00	225.00	0.084	1.560	1.560	0.019	0.010	0.450	0.554	0.071	0.389	0.250	Babcock & Wilcox			
1292																														
1293	Light blue fill is for outliers from NUREG 6551 and 7/00 models																													
1294	Yellow fill is for attention of EPRI/ASTM/ORNL: potential or actual data changes that should be checked or missing items to fill in																													
1295	Green fill denoted a duplicate of a point in earlier dataset (there were 24 of them). These duplicates have been deleted 2/25/04 both on this sheet and Database sheet, where they were 7-03P.																													
1296	Tan fill is for attention of ORNL: EDB heat ID and Matl ID codes needing resolved and similar issues																													
1297	Pink fill denotes large error found during database update (these are in hidden columns)																													
1298	Dark blue fill denotes generic values of Mn																													
1299	Gray fill in column A denotes a new point added 5/04 from completeness check																													
1300																														
1301						Review and Revision History																								
1302																														
1303						10/3/03	E. D. Eason	10-03 Draft, combining NewEmbrittlementDatabase.xls with earlier calibration database and outliers from prior fits, sorted by heats																							
1304						11/9/03	J. A. Wang	Reviewed Draft, corrected many details regarding HEAT_IDs, filled in missing info from EDB update 12																							
1305						11/12/03	E. D. Eason	10-03 Version, incorporating comments from J-A Wang																							
1306						12/19/03	R. G. Lott	Reviewed and commented on 10-03 Version, extracted subsets for more detailed E10.02 review																							
1307						1/13/04	ASTM E10.02	Reviewed 10-03 Version at E10.02 meeting in Tampa FL, resolved many discrepancies, assigned AI's for additional investigation																							
1308						4/30/04	E. D. Eason	4-04 Version incorporating E10.02 and Lott's comments and revisions from 1/04 meeting & follow-up emails. TT30 from asymmetric fit, consistency of heat chemistry, etc.																							
1309						6/1/04	E. D. Eason	5-04 Version adding in new data from completeness check, further corrections of Tc, chemistry, updated TT30 for PWR-5 and new 5-04 data																							
1310						6/8/04	ASTM E10.02	Reviewed 5-04 Version at E10.02 meeting in Boston MA, resolved some discrepancies and assigned action items for others																							
1311						6/11/04	E. D. Eason	Prelim6-04 Version with updates from the 6/8/04 E10.02 meeting, S. Byrne's email 6/10/04																							
1312						6/11/04	J. B. Hall	Reviewed 5-04 Version in detail, made changes to update some fluences, Tc, EFPH and chemistry of B&W L80 welds. The chemistry changes agree with B&W response to GL92-01																							
1313						6/18/04	E.D. Eason	Incorporated Brian Hall's changes, including corrections in 6/17/04 email and additional capsules (TM2, irrad at DB1)																							
1314						6/25/04	E.D. Eason	Incorporated fits to raw unirr Cv data at BV2, chemistry changes from B. Burgos (email dated 6/18/04)																							
1315						7/16/04	E.D. Eason	Incorporated temperature updates from Stan Anderson via Randy Lott emails 7/8/04 and 7/9/04, estimated time-varying temperatures																							
1316						8/6/04	E.D. Eason	Incorporated temperature updates from S Byrne email 8/6/04 and SO2 & SO3 chemistry update from B Hall email 8/5/04																							
1317						8/23/04	E. D. Eason	Changed VO2 Tc from 560 to 557 per S. Byrne email 8/18/04, changed VESSEL_MFG codes to eliminate variations on B&W, B&W/other, etc. Original VESSEL_MFG is preserved in an adjacent hidden																							
1318	Notes:																													
1319	1. Where cell comments refer to an "ASTM" or "E10.02" 1/04 meeting, that is a reference to the ASTM E10.02 data analysis subcommittee meeting held 1/13/04 in Tampa FL, at which the 11/12/03 draft spreadsheet was discussed in detaiL																													
1320	Similarly, reference to 6/06 E10.02 meeting is a reference to the ASTM E10.02 data analysis subcommittee meeting held 6/8/04 in Boston, at which the 5-04 Verion draft spreadsheet was discussed in detaiL																													
1321																														
1322	2. The USE values in the older datasets (NRG6551, 5-00Calib) are consistently fitted using a tanh model and data with %shear >50%.																													
1323	The newer datasets (7-03x, 5-04) may have ASTM standard USE values or blanks in the USE column, which has not been updated.																													
1324	The USE column in this spreadsheet is a hidden column that should not be used for any purpose until it is updated to be either consistently fitted values or ASTM values.																													
1325																														
1326	3. The older values of UTT30, ITT30, and DTT30 (all NUREG 6551, some 5-00calib) were rounded to the nearest degree, while the newer values are as output from the fitting routine (2 dec places) to simplify QA.																													
1327	The result is that DTT30 may be up to 1 degree different from ITT30-UTT30 in the older data, because DTT30 was rounded after doing the subtraction, rather than subtracting the rounded numbers.																													
1328	There may be discrepancies of up to 1/2 degree between the rounded and 2 dec. place values of UTT30 for the same heat. While updating, a few of the 5-00 set have been restored from rounded to 2 dec. place form.																													
1329	The practical uncertainty in the fitted values of UTT30 and ITT30 and the shift DTT30 is at least 1 degree F, so rounded values are acceptable and the roundoff discrepancies should be ignored.																													
1330																														

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Plan for filling in and changing data in the Workbook

It is important to take an organized approach to the changes that will result from review of the Database8-04.xls workbook. **All changes and additions should be made on the Database sheet**, to make it easy to put the change in context with other data on the same heat. **The changes should be made in red font, leaving the yellow fill as is (or adding yellow fill if there was none) so that they are easy to find**. In addition, the comment feature should be used as suggested in NewEmbrittlementData.xls, reproduced in updated form below.

Changing Existing Data or Adding Info on the Database sheet:

1. Any time a cell is filled in or changed, it is critical to document that change with an inserted comment. Within the comment, the following information must be provided:
    a. Name of Individual changing the data.
    b. Date the change was made.
    c. Reason for change.
    d. Document the original value or state it was missing, and give the value it is being changed to (e.g., changed from 2.5 ft-lbs to the new value of 3.2 ft-lbs).
2. Ensure that the reference column (BD) is still accurate or that a reference is added (with a comment) as applicable.
3. Update Cell G1 with the last date changes were made and put the name(s) of the reviewer(s) making the changes in cell P1.
4. Update the Reference Sheet with the new reference (if applicable).
5. Add the revision date and details below line 1300, add notes there as appropriate.

When changes are received from the reviewers, they will be integrated by M&CS on a master copy, disagreements will be addressed, and the revised result will be sent out to the reviewers. The plan is to eventually delete the blank lines and do the fitting with the revised database defined by the updated Database sheet.

Analysis of generic Mn values for forging, plate, and weld E. D. Eason 4/28/04

HEAT_ID	MN	MnGeneric	
FBD101	1.207	1.207	
FBD101	1.207	1.207	
FBD101	1.207	1.207	
			1.207
FBD101	1.207	1.207	
FBD101	1.207	1.207	
FBD101	1.207	1.207	
FBD201	1.340	1.340	
FBD201	1.340	1.340	
FBD201	1.340	1.340	
			1.340
FBD201	1.340	1.340	
FBD201	1.340	1.340	
FBD201	1.340	1.340	
FBWEPR	-999.000	-999.000	
FBY101	0.684	0.684	
FBY101	0.684	0.684	
FBY101	0.684	0.684	
			0.684
FBY101	0.684	0.684	
FBY101	0.684	0.684	
FBY101	0.684	0.684	
FBY201	1.266	1.266	
FBY201	1.266	1.266	
FBY201	1.266	1.266	
			1.266
FBY201	1.266	1.266	
FBY201	1.266	1.266	
FBY201	1.266	1.266	
FCB101	0.725	0.725	
FCB101	0.725	0.725	
FCB101	0.725	0.725	
			0.725
FCB101	0.725	0.725	
FCB101	0.725	0.725	
FCB101	0.725	0.725	
FDB101	0.680	0.680	0.680
FDB102	0.630	0.630	
FDB102	0.630	0.630	0.630
FDB102	0.630	0.630	
FDB102	0.630	0.630	
FEP2JP	-999.000	-999.000	
FGIN01	0.670	0.670	
FGIN01	0.670	0.670	
FGIN01	0.670	0.670	0.670
FGIN01	0.670	0.670	
FGIN02	0.660	0.660	
FGIN02	0.660	0.660	
FGIN02	0.660	0.660	0.660
FGIN02	0.660	0.660	
FKWE01	0.690	0.690	
FKWE01	0.690	0.690	
FKWE01	0.690	0.690	0.690
FKWE01	0.690	0.690	
FKWE02	0.790	0.790	
FKWE02	0.790	0.790	
FKWE02	0.790	0.790	0.790
FKWE02	0.790	0.790	

FMC201	0.686	0.686	
FMC201	0.686	0.686	
FMC201	0.686	0.686	
FMC201	0.686	0.686	
			0.686
FMC201	0.686	0.686	
FMC201	0.686	0.686	
FMC201	0.686	0.686	
FMC201	0.686	0.686	
FNA101	0.703	0.703	
FNA101	0.703	0.703	
FNA101	0.703	0.703	
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FNA101	0.703	0.703	
FNA101	0.703	0.703	
FNA101	0.703	0.703	
FNA201	0.715	0.715	
FNA201	0.715	0.715	
FNA201	0.715	0.715	
			0.715
FNA201	0.715	0.715	
FNA201	0.715	0.715	
FNA201	0.715	0.715	
FOC201	0.630	0.630	
FOC201	0.630	0.630	
FOC201	0.630	0.630	
			0.630
FOC201	0.630	0.630	
FOC201	0.630	0.630	
FOC301	0.720	0.720	
			0.720
FOC301	0.720	0.720	
FOC301	0.720	0.720	
FOC301	0.720	0.720	
FOC302	0.580	0.580	
FOC302	0.580	0.580	0.580
FOC302	0.580	0.580	
FPB201	0.590	0.590	
FPB201	0.590	0.590	
FPB201	0.590	0.590	0.590
FPB201	0.590	0.590	
FPB202	0.650	0.650	
FPB202	0.650	0.650	
FPB202	0.650	0.650	0.650
FPB202	0.650	0.650	
FPI101	1.410	1.410	
FPI101	1.410	1.410	
FPI101	1.410	1.410	
FPI101	1.410	1.410	
			1.410
FPI101	1.410	1.410	
FPI101	1.410	1.410	
FPI101	1.410	1.410	
FPI101	1.410	1.410	
FPI201	1.215	1.215	
FPI201	1.215	1.215	
FPI201	1.215	1.215	
FPI201	1.215	1.215	
			1.215
FPI201	1.215	1.215	
FPI201	1.215	1.215	
FPI201	1.215	1.215	
FPI201	1.215	1.215	
FSQ101	0.620	0.620	
FSQ101	0.620	0.620	
FSQ101	0.620	0.620	

FSQ101		0.620	0.620			
				0.620		
FSQ101		0.620	0.620			
FSQ101		0.620	0.620			
FSQ101		0.620	0.620			
FSQ101		0.620	0.620			
FSQ201		0.710	0.710			
FSQ201		0.710	0.710			
FSQ201		0.710	0.710			
FSQ201		0.710	0.710			
				0.710		
FSQ201		0.710	0.710			
FSQ201		0.710	0.710			
FSQ201		0.710	0.710			
FSQ201		0.710	0.710			
FTP301		0.640	0.640			
FTP301		0.640	0.640	0.640		
FTP302		0.610	0.610			
FTP302		0.610	0.610	0.610		
FTP302		0.610	0.610			
FTP401		0.670	0.670			
FTP401		0.670	0.670	0.670		
FTP402		0.670	0.670	0.670		
FWB101		0.710	0.710			
				0.710	Average of 28 forging heats =	0.781107
FWB101		0.710	0.710			
PAN101		1.320	1.320			
PAN101		1.320	1.320			
PAN101		1.320	1.320			
				1.320		
PAN101		1.320	1.320			
PAN101		1.320	1.320			
PAN101		1.320	1.320			
PAN102		1.320	1.320			
				1.320		
PAN102		1.320	1.320			
PAN201		1.400	1.400			
				1.400		
PAN201		1.400	1.400			
PAN201		1.400	1.400			
PBF201		1.350	1.350	1.350		
PBR_01		1.420	1.420			
PBR_01		1.420	1.420			
PBR_01		1.420	1.420	1.420		
PBR_01		1.420	1.420			
PBR_01		1.420	1.420			
PBV101		1.310	1.310			
PBV101		1.310	1.310			
PBV101		1.310	1.310			
PBV101		1.310	1.310			
				1.310		
PBV101		1.310	1.310			
PBV101		1.310	1.310			
PBV101		1.310	1.310			
PBV101		1.310	1.310			
PBV201		1.320	1.320			
				1.320		
PBV201		1.320	1.320			
PBWE_1		-999.000	-999.000			
PBWE_1		-999.000	-999.000			
PBWE_2		-999.000	-999.000			

PBWE_3	-999.000	-999.000	
PBWE_3	-999.000	-999.000	
PCB201	1.393	1.393	
PCB201	1.393	1.393	
PCB201	1.393	1.393	
			1.393
PCB201	1.393	1.393	
PCB201	1.393	1.393	
PCB201	1.393	1.393	
PCC103	1.374	1.374	
PCC103	1.374	1.374	
			1.374
PCC103	1.374	1.374	
PCC202	1.210	1.210	
PCC202	1.210	1.210	
			1.210
PCC202	1.210	1.210	
PCH101	1.420	1.420	1.420
PCK101	1.400	1.400	
PCK101	1.400	1.400	
PCK101	1.400	1.400	
PCK101	1.400	1.400	
			1.400
PCK101	1.400	1.400	
PCK101	1.400	1.400	
PCK101	1.400	1.400	
PCK101	1.400	1.400	
PCK201	1.285	1.285	
PCK201	1.285	1.285	
PCK201	1.285	1.285	
PCK201	1.285	1.285	
			1.285
PCK201	1.285	1.285	
PCK201	1.285	1.285	
PCK201	1.285	1.285	
PCK201	1.285	1.285	
PCL101	1.395	1.395	
PCL101	1.395	1.395	
PCL101	1.400	1.400	
			1.395
PCL101	1.395	1.395	
PCL101	1.395	1.395	
PCL101	1.400	1.400	
PCOF01	1.480	1.480	1.480
PCP101	1.360	1.360	
PCP101	1.360	1.360	
			1.360
PCP101	1.360	1.360	
PCP101	1.360	1.360	
PCP201	1.380	1.380	
			1.380
PCP201	1.380	1.380	
PCPR01	1.278	1.278	
PCPR01	1.278	1.278	1.278
PCPR02	-999.000	-999.000	
PCPR02	-999.000	-999.000	
PCPR02	-999.000	-999.000	
PCPR02	-999.000	-999.000	
PCR301	1.300	1.300	
PCR301	1.300	1.300	
PCR301	1.300	1.300	1.300

PCR301	1.300	1.300	
PCTY02	1.420	1.420	
PCTY02	1.420	1.420	1.420
PCTY02	1.420	1.420	
PCTY04	1.370	1.370	
PCTY04	1.370	1.370	1.370
PCTY04	1.370	1.370	
PCTY07	1.460	1.460	
PCTY07	1.460	1.460	1.460
PDAC01	1.350	1.350	
PDAC01	1.350	1.350	
			1.350
PDAC01	1.350	1.350	
PDC103	1.445	1.445	
PDC103	1.445	1.445	1.445
PDC103	1.445	1.445	
PDC201	1.255	1.255	
PDC201	1.255	1.255	
PDC201	1.255	1.255	
PDC201	1.255	1.255	
			1.255
PDC201	1.255	1.255	
PDC201	1.255	1.255	
PDC201	1.255	1.255	
PDC201	1.255	1.255	
PDR201	1.190	1.190	
PDR201	1.190	1.190	
PDR201	1.190	1.190	1.190
PDR201	1.190	1.190	
PDR201	1.190	1.190	
PDR301	1.645	1.645	
PDR301	1.645	1.645	
PDR301	1.645	1.645	1.645
PDR301	1.645	1.645	
PDR301	1.645	1.645	
PDR301	1.645	1.645	
PEP2JP	-999.000	-999.000	
PEP2JP	-999.000	-999.000	
PEP2JP	-999.000	-999.000	
PEP2JP	-999.000	-999.000	
PEP2JP	-999.000	-999.000	
PFA101	1.395	1.395	
PFA101	1.395	1.395	
PFA101	1.395	1.395	
PFA101	1.395	1.395	
			1.395
PFA101	1.395	1.395	
PFA101	1.395	1.395	
PFA101	1.395	1.395	
PFA101	1.395	1.395	
PFA201	1.327	1.327	
PFA201	1.327	1.327	
PFA201	1.327	1.327	
PFA201	1.327	1.327	
			1.327
PFA201	1.327	1.327	
PFA201	1.327	1.327	
PFA201	1.327	1.327	
PFA201	1.327	1.327	
PFC101	1.461	1.461	
PFC101	1.461	1.461	
PFC101	1.461	1.461	
			1.461

PFC101	1.461	1.461	
PFC101	1.461	1.461	
PFTZ01	1.350	1.350	
			1.350
PFTZ01	1.350	1.350	
PFTZ01	1.350	1.350	
PFTZ01	1.350	1.350	
PFTZ01	1.350	1.350	
PGG_01	-999.000	-999.000	
PGG_01	-999.000	-999.000	
PGG_01	-999.000	-999.000	
PGG_01	-999.000	-999.000	
PHA101	1.430	1.430	1.430
PHA102	-999.000	-999.000	
PHA201	1.390	1.390	1.390
PHB201	1.350	1.350	
PHB201	1.350	1.350	1.350
PHB202	1.290	1.290	
PHB202	1.290	1.290	1.290
PHB203	1.320	1.320	
PHB203	1.320	1.320	1.320
PHOP01	1.380	1.380	1.380
PIP201	1.280	1.280	
PIP201	1.280	1.280	1.280
PIP202	1.300	1.300	
PIP202	1.300	1.300	1.300
PIP202	1.300	1.300	
PIP203	1.290	1.290	
PIP203	1.290	1.290	1.290
PIP203	1.290	1.290	
PIP301	1.410	1.410	1.410
PIP303	1.320	1.320	1.320
PIP304	1.300	1.300	
PIP304	1.300	1.300	
			1.300
PIP304	1.300	1.300	
PIP304	1.300	1.300	
PIP304	1.300	1.300	
PKU101	1.160	1.160	1.160
PKU201	1.330	1.330	1.330
PLS101	1.290	1.290	1.290
PMC101	1.260	1.260	
PMC101	1.260	1.260	
PMC101	1.260	1.260	
			1.260
PMC101	1.260	1.260	
PMC101	1.260	1.260	
PMC101	1.260	1.260	
PML101	1.320	1.320	
PML101	1.320	1.320	
			1.320
PML101	1.320	1.320	
PML101	1.320	1.320	
PML201	1.276	1.276	
PML201	1.276	1.276	

PML201	1.276	1.276	
			1.276
PML201	1.276	1.276	
PML201	1.276	1.276	
PML301	1.310	1.310	
			1.310
PML301	1.310	1.310	
PMY_01	1.332	1.332	
PMY_01	1.332	1.332	
PMY_01	1.332	1.332	
PMY_01	1.332	1.332	
			1.332
PMY_01	1.332	1.332	
PMY_01	1.332	1.332	
PNM101	1.263	1.263	
			1.263
PNM101	1.263	1.263	
PNM101	1.263	1.263	
PNM101	1.263	1.263	
PNM101	1.253	1.253	
POC101	1.400	1.400	
			1.400
POC101	1.400	1.400	
POC102	1.420	1.420	
POC102	1.420	1.420	
POC102	1.420	1.420	
			1.420
POC102	1.420	1.420	
POC102	1.420	1.420	
POC102	1.420	1.420	
POYS01	1.400	1.400	1.400
PPAL01	1.368	1.368	
PPAL01	1.368	1.368	
PPAL01	1.368	1.368	
			1.368
PPAL01	1.368	1.368	
PPAL01	1.368	1.368	
PPB101	1.460	1.460	
PPB101	1.460	1.460	
PPB101	1.460	1.460	1.460
PPB101	1.460	1.460	
PPB102	1.460	1.460	
PPB102	1.460	1.460	
PPB102	1.460	1.460	1.460
PPB102	1.460	1.460	
PPH301	1.427	1.427	1.427
PPL101	1.337	1.337	1.337
PPV101	1.330	1.330	
			1.330
PPV101	1.330	1.330	
PPV104	1.480	1.480	
			1.480
PPV104	1.480	1.480	
PPV201	1.540	1.540	
			1.540
PPV201	1.540	1.540	
PPV301	1.400	1.400	1.400
PQC101	1.520	1.520	
PQC101	1.520	1.520	
PQC101	1.520	1.520	

PQC101		1.520	1.520	
				1.520
PQC101		1.520	1.520	
PQC101		1.520	1.520	
PQC201		1.640	1.640	
PQC201		1.640	1.640	
PQC201		1.640	1.640	1.640
PQC201		1.640	1.640	
PRB_01		1.300	1.300	1.300
PRS101		1.260	1.260	
PRS101		1.260	1.260	1.260
PRS101		1.260	1.260	
PSA101		1.497	1.497	
PSA101		1.497	1.497	1.497
PSA101		1.497	1.497	
PSA102		1.467	1.467	1.467
PSA102		1.467	1.467	
PSA103		1.220	1.220	
PSA103		1.220	1.220	1.220
PSA103		1.220	1.220	
PSA201		1.359	1.359	
PSA201		1.359	1.359	
PSA201		1.359	1.359	
PSA201		1.359	1.359	
				1.359
PSA201		1.359	1.359	
PSA201		1.359	1.359	
PSA201		1.359	1.359	
PSA201		1.359	1.359	
PSB101		1.450	1.450	
PSB101		1.450	1.450	
				1.450
PSB101		1.450	1.450	
PSB101		1.450	1.450	
PSH101		1.313	1.313	1.313
PSH201		1.300	1.300	1.300
PSL101		1.300	1.300	
PSL101		1.300	1.300	
PSL101		1.300	1.300	
				1.300
PSL101		1.300	1.300	
PSL101		1.300	1.300	
PSL201		1.335	1.335	
				1.335
PSL201		1.335	1.335	
PSL201		1.335	1.335	
PSO101		1.403	1.403	1.403
PSO102		1.360	1.360	
PSO102		1.360	1.360	1.360
PSO103		1.437	1.437	
PSO103		1.437	1.437	1.437
PSO201		1.420	1.420	
PSO201		1.420	1.420	1.420
PSO201		1.420	1.420	
PSO301		1.343	1.343	
				1.343
PSO301		1.343	1.343	

PSR101	1.340	1.340	
PSR101	1.340	1.340	
PSR101	1.340	1.340	
			1.340
PSR101	1.340	1.340	
PSR101	1.340	1.340	
PSR101	1.340	1.340	
PST101	1.180	1.180	
			1.180
PST101	1.180	1.180	
PST201	1.550	1.550	
PST201	1.550	1.550	
			1.550
PST201	1.550	1.550	
PST201	1.550	1.550	
PSU101	1.395	1.395	
PSU101	1.395	1.395	1.395
PSU101	1.395	1.395	
PSU201	1.340	1.340	
PSU201	1.340	1.340	
PSU201	1.340	1.340	
			1.340
PSU201	1.340	1.340	
PSU201	1.340	1.340	
PSU201	1.340	1.340	
PTM101	1.360	1.360	
PTM101	1.360	1.360	
			1.360
PTM101	1.360	1.360	
PTRO01	1.270	1.270	
PTRO01	1.270	1.270	
PTRO01	1.270	1.270	
			1.270
PTRO01	1.270	1.270	
PTRO01	1.270	1.270	
PTRO01	1.270	1.270	
PVO101	1.301	1.301	
PVO101	1.301	1.301	
			1.301
PVO101	1.301	1.301	
PVO101	1.301	1.301	
PVS101	1.300	1.300	
PVS101	1.300	1.300	
PVS101	1.300	1.300	
PVS101	1.300	1.300	
			1.300
PVS101	1.300	1.300	
PVS101	1.300	1.300	
PVS101	1.300	1.300	
PVS101	1.300	1.300	
PVY_01	-999.000	-999.000	
PWC101	1.450	1.450	
PWC101	1.450	1.450	
PWC101	1.450	1.450	
			1.450
PWC101	1.450	1.450	
PWC101	1.450	1.450	
PWC101	1.450	1.450	
PWF301	1.380	1.380	
			1.380
PWF301	1.380	1.380	
PZN101	1.375	1.375	
PZN101	1.375	1.375	

PZN101	1.375	1.375	
PZN101	1.375	1.375	
			1.375
PZN101	1.375	1.375	
PZN101	1.375	1.375	
PZN101	1.375	1.375	
PZN101	1.375	1.375	
PZN201	1.315	1.315	
PZN201	1.315	1.315	
PZN201	1.315	1.315	
			1.315
PZN201	1.315	1.315	
PZN201	1.315	1.315	
PZN201	1.315	1.315	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
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SASTM	1.340	1.340	
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SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
			1.340
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SASTM	1.340	1.340	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	1.465
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS01	1.465	1.465	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	
SHSS02	1.478	1.478	

SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
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SHSS02	1.478	1.478			
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SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478	1.478		
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478		Average of 98 plate heats =	1.364986
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
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SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
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SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
SHSS02	1.478	1.478			
WAN101	1.495	1.495			
WAN101	1.495	1.495	1.495		
WAN101	1.495	1.495			
WAN201	1.330	1.330			
WAN201	1.330	1.330	1.330		
WBD101	1.467	1.467			
WBD101	1.467	1.467	1.467		
WBD101	1.467	1.467			
WBD201	1.445	1.445			
WBD201	1.445	1.445	1.445		
WBD201	1.445	1.445			
WBF201	1.490	1.490	1.490		
WBR_01	1.250	1.250			
WBR_01	1.250	1.250	1.250		
WBR_01	1.250	1.250			
WBV101	1.395	1.395			
WBV101	1.395	1.395			
WBV101	1.395	1.395	1.395		
WBV101	1.395	1.395			
WBV201	1.170	1.170	1.170		

WBWL80	-999.000	-999.000	
WBWL80	-999.000	-999.000	
WBWL80_1	-999.000	-999.000	
WBY101	1.443	1.443	
WBY101	1.443	1.443	1.443
WBY101	1.443	1.443	
WBY201	1.417	1.417	
WBY201	1.417	1.417	1.417
WBY201	1.417	1.417	
WCB101	1.850	1.850	
WCB101	1.850	1.850	1.850
WCB101	1.850	1.850	
WCB201	1.163	1.163	
WCB201	1.163	1.163	1.163
WCB201	1.163	1.163	
WCC101	1.254	1.254	
WCC101	1.254	1.254	
			1.254
WCC101	1.254	1.254	
WCC201	1.167	1.167	
WCC201	1.167	1.167	1.167
WCEL_1	-999.000	-999.000	
WCEL_1	-999.000	-999.000	
WCEL_2	-999.000	-999.000	
WCEL_2	-999.000	-999.000	
WCK101	1.330	1.330	
WCK101	1.330	1.330	1.330
WCK101	1.330	1.330	
WCK201	1.375	1.375	
WCK201	1.375	1.375	
WCK201	1.375	1.375	1.375
WCK201	1.375	1.375	
WCL101	1.325	1.325	
WCL101	1.325	1.325	1.325
WCL101	1.330	1.330	
WCOF01	1.700	1.700	1.700
WCP101	1.330	1.330	
WCP101	1.330	1.330	1.330
WCP201	1.370	1.370	1.370
WCR301	1.623	1.623	
WCR301	1.623	1.623	
WCR301	1.623	1.623	1.623
WCR301	1.623	1.623	
WCTY01	1.304	1.304	
WCTY01	1.304	1.304	1.304
WDAC01	1.250	1.250	
WDAC01	1.250	1.250	
			1.250
WDAC01	1.250	1.250	
WDB101	1.705	1.705	
WDB101	1.705	1.705	
WDB101	1.705	1.705	1.705
WDB101	1.705	1.705	
WDB101	1.705	1.705	
WDC101	1.347	1.347	
WDC101	1.347	1.347	1.347

WDC101	1.347	1.347	
WDC201	1.403	1.403	
WDC201	1.403	1.403	
WDC201	1.403	1.403	1.403
WDC201	1.403	1.403	
WDR301	1.780	1.780	
WDR301	1.780	1.780	
WDR301	1.780	1.780	1.780
WDR301	1.780	1.780	
WDR301	1.780	1.780	
WDR302	1.750	1.750	
WDR302	1.750	1.750	1.750
WDR302	1.750	1.750	
WFA101	1.060	1.060	
WFA101	1.060	1.060	
WFA101	1.060	1.060	1.060
WFA101	1.060	1.060	
WFA201	0.937	0.937	
WFA201	0.937	0.937	
WFA201	0.937	0.937	0.937
WFA201	0.937	0.937	
WFC101	1.563	1.563	
WFC101	1.563	1.563	
WFC101	1.563	1.563	
			1.563
WFC101	1.563	1.563	
WGG_01	-999.000	-999.000	
WGG_01	-999.000	-999.000	
WGG_01	-999.000	-999.000	
WGG_01	-999.000	-999.000	
WGIN01	1.337	1.337	
WGIN01	1.337	1.337	
WGIN01	1.337	1.337	1.337
WGIN01	1.337	1.337	
WHA201	1.190	1.190	1.190
WHB201	1.170	1.170	
WHB201	1.170	1.170	1.170
WHB201	1.170	1.170	
WHM301	-999.000	-999.000	
WHM301	-999.000	-999.000	
WHOP01	1.480	1.480	1.480
WHSS63	1.580	1.580	1.580
WHSS65	1.450	1.450	
WHSS65	1.450	1.450	1.450
WHSS65	1.450	1.450	
WHSS66	1.630	1.630	
WHSS66	1.630	1.630	1.630
WHSS67	1.450	1.450	1.450
WHSSCR	1.550	1.550	
WHSSCR	1.550	1.550	
			1.550
WHSSCR	1.550	1.550	
WHSSDB	1.470	1.470	1.470
WIP201	-999.000	-999.000	
WIP201	-999.000	-999.000	
WIP301	1.180	1.180	

WIP301	1.180	1.180	1.180
WIP301	1.180	1.180	
WKU101	1.300	1.300	1.300
WKU201	1.430	1.430	1.430
WKWE01	1.370	1.370	
WKWE01	1.370	1.370	
WKWE01	1.370	1.370	1.370
WKWE01	1.370	1.370	
WLS101	1.490	1.490	1.490
WLS201	1.470	1.470	1.470
WMC101	1.275	1.275	
WMC101	1.275	1.275	1.275
WMC101	1.275	1.275	
WMC201	1.830	1.830	
WMC201	1.830	1.830	
WMC201	1.830	1.830	1.830
WMC201	1.830	1.830	
WML101	1.280	1.280	
WML101	1.280	1.280	
WML101	1.280	1.280	
WML101	1.280	1.280	
			1.280
WML101	1.280	1.280	
WML101	1.280	1.280	
WML201	1.104	1.104	
WML201	1.104	1.104	
			1.104
WML201	1.104	1.104	
WML301	1.330	1.330	1.330
WMY_01	1.418	1.418	
WMY_01	1.418	1.418	
WMY_01	1.418	1.418	1.418
WMY_01	1.418	1.418	
WNA101	1.370	1.370	
WNA101	1.370	1.370	1.370
WNA101	1.370	1.370	
WNA201	1.820	1.820	
WNA201	1.820	1.820	1.820
WNA201	1.820	1.820	
WOC101	1.482	1.482	
WOC101	1.482	1.482	1.482
WOC101	1.482	1.482	
WOC201	1.565	1.565	
WOC201	1.565	1.565	1.565
WOC201	1.565	1.565	
WOC301	1.613	1.613	
WOC301	1.613	1.613	
WOC301	1.613	1.613	
			1.613
WOC301	1.613	1.613	
WPAL01	1.230	1.230	
WPAL01	1.230	1.230	1.230
WPAL01	1.230	1.230	
WPB101	1.575	1.575	
WPB101	1.575	1.575	
WPB101	1.575	1.575	1.575
WPB101	1.575	1.575	

	WPB201	1.400	1.400	
	WPB201	1.400	1.400	
	WPB201	1.400	1.400	1.400
	WPB201	1.400	1.400	
	WPH301	1.560	1.560	1.560
	WPI101	1.290	1.290	
	WPI101	1.290	1.290	
	WPI101	1.290	1.290	1.290
	WPI101	1.290	1.290	
	WPI201	1.280	1.280	
	WPI201	1.280	1.280	
	WPI201	1.280	1.280	1.280
	WPI201	1.280	1.280	
	WPL101	1.122	1.122	1.122
	WPV101	1.080	1.080	
				1.080
	WPV101	1.080	1.080	
	WPV201	1.460	1.460	1.460
	WPV301	1.550	1.550	1.550
	WQC101	1.560	1.560	
	WQC101	1.560	1.560	
	WQC101	1.560	1.560	1.560
	WQC101	1.560	1.560	
	WQC102	1.800	1.800	
	WQC102	1.800	1.800	1.800
ove & below are different per E900ChemChanges.x hanges.x				
	WQC102_1	-999.000	-999.000	
	WQC102_1	-999.000	-999.000	
	WQC102_1	-999.000	-999.000	
	WQC102_1	-999.000	-999.000	
	WQC201	1.750	1.750	
	WQC201	1.750	1.750	
	WQC201	1.750	1.750	1.750
	WQC201	1.750	1.750	
e different per discussion at 1/04 ASTM E900 meetin 0 meetin				
	WQC201_1	-999.000	-999.000	
	WQC201_1	-999.000	-999.000	
	WQC201_1	-999.000	-999.000	
	WQC201_1	-999.000	-999.000	
	WQC202	1.880	1.880	
	WQC202	1.880	1.880	1.880
	WRB_01	1.320	1.320	
	WRB_01	1.320	1.320	
				1.320
	WRB_01	1.320	1.320	
	WRS101	1.492	1.492	
	WRS101	1.492	1.492	1.492
	WRS101	1.492	1.492	
	WSA101	1.210	1.210	
	WSA101	1.210	1.210	1.210
	WSA201	1.285	1.285	
	WSA201	1.285	1.285	
	WSA201	1.285	1.285	1.285
	WSA201	1.285	1.285	
	WSB101	1.267	1.267	
	WSB101	1.267	1.267	1.267
	WSH101	1.182	1.182	1.182
	WSH201	1.172	1.172	1.172

WSL101	1.069	1.069	
WSL101	1.069	1.069	1.069
WSL101	1.069	1.069	
WSL201	1.525	1.525	
WSL201	1.525	1.525	1.525
WSO201	1.400	1.400	
WSO201	1.400	1.400	1.400
WSO301	1.478	1.478	1.478
WSQ101	1.400	1.400	
WSQ101	1.400	1.400	
WSQ101	1.400	1.400	1.400
WSQ101	1.400	1.400	
WSQ201	1.500	1.500	
WSQ201	1.500	1.500	
WSQ201	1.500	1.500	1.500
WSQ201	1.500	1.500	
WSR101	1.230	1.230	
WSR101	1.230	1.230	1.230
WSR101	1.230	1.230	
WST101	1.360	1.360	1.360
WST201	1.450	1.450	
WST201	1.450	1.450	1.450
WSU101	1.497	1.497	
WSU101	1.497	1.497	1.497
WSU101	1.497	1.497	
WSU201	1.535	1.535	
WSU201	1.535	1.535	1.535
WSU201	1.535	1.535	
WSU201_	1.530	1.530	1.530
WSU2JW2			
WSU2JW3	1.630	1.630	1.630
WTM101	1.560	1.560	
WTM101	1.560	1.560	1.560
WTM201	1.530	1.530	1.530
WTM202	1.580	1.580	1.580
WTM203	1.630	1.630	1.630
WTP301	1.410	1.410	
WTP301	1.410	1.410	
WTP301	1.410	1.410	1.410
WTP301	1.410	1.410	
WTP401	1.440	1.440	1.440
WTRO01	1.390	1.390	
WTRO01	1.390	1.390	1.390
WTRO01	1.390	1.390	
WVO101	1.130	1.130	
WVO101	1.130	1.130	1.130
WVS101	1.410	1.410	
WVS101	1.410	1.410	
WVS101	1.410	1.410	1.410
WVS101	1.410	1.410	
WVY_01	-999.000	-999.000	
WWB101	1.960	1.960	1.960

WWC101		1.460	1.460	
WWC101		1.460	1.460	1.460
WWC101		1.460	1.460	
WWF301		1.350	1.350	1.350
WZN101		1.500	1.500	
WZN101		1.500	1.500	
WZN101		1.500	1.500	1.500
WZN101		1.500	1.500	
WZN101		1.480	1.480	
WZN201		1.581	1.581	
WZN201		1.581	1.581	1.581
WZN201		1.581	1.581	

Average of 106 Welds Mn = 1.425679

This worksheet is for estimating the time-averaged temperature in plants with operating changes. E. D. Eason ########

The average temperature X over the last time interval is assumed to be the same as the average over the immediately preceeding interval.

Dataset	PLANT_ID	CAPSUL	HEAT_ID	Hrs_used	Tc	Est Tc	X
NRG6551	NA1	V	FNA101	9444	550.0		
NRG6551	NA1	U	FNA101	49722	553.0		553.7
7-03P	NA1	W	FNA101	129336	>553?	553.4	
NRG6551	NA1	V	FNA101	9444	550.0		
NRG6551	NA1	U	FNA101	49722	553.0		553.7
7-03P	NA1	W	FNA101	129336	>553?	553.4	
NRG6551	NA2	V	FNA201	8722	550.0		
NRG6551	NA2	U	FNA201	53333	554.0		554.8
7-03P	NA2	W	FNA201	134160	>554?	554.5	
NRG6551	NA2	V	FNA201	8722	550.0		
NRG6551	NA2	U	FNA201	53333	554.0		554.8
7-03P	NA2	W	FNA201	134160	>554?	554.5	
5-00Calib	CB2	Z	PCB201	7556	560.0		
NRG6551	CB2	X	PCB201	39722	562.0		562.5
7-03P	CB2	V	PCB201	80942	>562?	562.2	
5-00Calib	CB2	Z	PCB201	7556	560.0		
NRG6551	CB2	X	PCB201	39722	562.0		562.5
7-03P	CB2	V	PCB201	80942	>562?	562.2	
NRG6551	DC1	S	PDC103	11056	539.0		
NRG6551	DC1	Y	PDC103	51389	540.0		540.3
7-03P	DC1	V	PDC103	125005	>540?	540.2	
NRG6551	DC2	U	PDC201	8694	542.0		
NRG6551	DC2	X	PDC201	27250	541.0		
NRG6551	DC2	Y	PDC201	61362	540.0		539.2
7-03P	DC2	V	PDC201	100652	<540?	539.7	
NRG6551	DC2	U	PDC201	8694	542.0		
NRG6551	DC2	X	PDC201	27250	541.0		
NRG6551	DC2	Y	PDC201	61362	540.0		539.2
7-03P	DC2	V	PDC201	100652	<540?	539.7	
NRG6551	SL1	W97	PSL101	40917	541.0		
NRG6551	SL1	W104	PSL101	83408	545.0		548.9
7-03P	SL1	W284	PSL101	150935	>545?	546.7	
NRG6551	SL1	W97	PSL101	40917	541.0		
7-03P	SL1	W284	PSL101	150935	>545?	546.7	
NRG6551	WC1	U	PWC101	9417	560.0		
NRG6551	WC1	Y	PWC101	41944	561.0		561.3
5-04	WC1	V	PWC101	83188	>561?	561.1	561.3
7-03P	WC1	X	PWC101	120888	>561?	561.2	

Note:
X is the average temperature over the interval 9444 to 49722 hours, based on the time-averaged values of Tc at 9444 and 4
Est Tc assumes X is the same in the interval 49722 to 129336 as in the interval 9444 to 49722 hours

same as PSL101 above - same heat & capsule

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
57																				
58	NRG6551	WC1	U	PWC101	9417	560.0														
59	NRG6551	WC1	Y	PWC101	41944	561.0		561.3												
60	5-04	WC1	V	PWC101	83188	>561?	561.1	561.3												
61	7-03P	WC1	X	PWC101	120888	>561?	561.2													
62																				
63	7-03P	DC1	V	SHSS02	125005	>540?	540.2			same as PDC103 above - same plant & capsule										
64																				
65	5-00Calib	CB2	Z	WCB201	7556	560.0														
66	NRG6551	CB2	X	WCB201	39722	562.0		562.5												
67	7-03P	CB2	V	WCB201	80942	>562?	562.2													
68																				
69	NRG6551	DC1	S	WDC101	11056	539.0														
70	NRG6551	DC1	Y	WDC101	51389	540.0		540.3												
71	7-03P	DC1	V	WDC101	125005	>540?	540.2													
72																				
73	NRG6551	DC2	U	WDC201	8694	542.0														
74	NRG6551	DC2	X	WDC201	27250	541.0														
75	NRG6551	DC2	Y	WDC201	61362	540.0		539.2												
76	7-03P	DC2	V	WDC201	100652	<540?	539.7													
77																				
78	NRG6551	NA1	V	WNA101	9444	550.0														
79	NRG6551	NA1	U	WNA101	49722	553.0		553.7												
80	7-03P	NA1	W	WNA101	129336	>553?	553.4													
81																				
82	NRG6551	NA2	V	WNA201	8722	550.0														
83	NRG6551	NA2	U	WNA201	53333	554.0		554.8												
84	7-03P	NA2	W	WNA201	134160	>554?	554.5													
85																				
86	NRG6551	SL1	W97	WSL101	40917	541.0														
87	NRG6551	SL1	W104	WSL101	83408	545.0		548.9												
88	7-03P	SL1	W284	WSL101	150935	>545?	546.7													
89																				
90	NRG6551	WC1	U	WWC101	9417	560.0														
91	NRG6551	WC1	Y	WWC101	41944	561.0		561.3												
92	5-04	WC1	V	WWC101	83188	>561?	561.1	561.3												
93	7-03P	WC1	X	WWC101	120888	>561?	561.2													
94																				