U2 Burner Setup & Tuning (new ABT burners & BPI overfire air) following U2 Outage & Installation 04-0419

PARAMETER	PT ID	UNITS	Test 19	Test 20	Test 21	Test 22	Test 23	Test 24	Test 25	Test 26	Test 27	Test 28	Test 29	Test 30	Test 31	Test 32	Test 33
start time			4/27/04 10 45	4/27/04 12 45	4/28/04 9 45	4/28/04 13 15	4/29/04 8 00	4/29/04 13 00	4/30/04 7 45	4/30/04 14 45	5/3/04 8 30	5/3/04 13 30	5/3/04 14 45	5/4/04 7 30	5/4/04 12 15	5/4/04 14 30	5/7/04 11 00
end time			4/27/04 11 15	4/27/04 15 30	4/28/04 12 00	4/28/04 15 30	4/29/04 11 45	4/29/04 15 30	4/30/04 8 45	4/30/04 15 30	5/3/04 9 15	5/3/04 14 15	5/3/04 15 15	5/4/04 8 00	5/4/04 12 45	5/4/04 15 30	5/7/04 12 45
Test Conditions			burner settings 9" OR 3 75" spin 4th hole inner	burner settings calc #1 OR 3 75' spin 4th hole inner	burner settings calc #1 OR 3 75 spin 4th hole inner	burner settings calc #1 OR 3 75" spin 4th hole inner	burner settings calc #1 OR, 3 75" spin 4th hole inner	burner settings calc #1 OR 3 75' spin 4th hole inner	burner settings calc #1 OR 3 75' spin 4th hole inner	burner settings calc #2 OR 3 75" spin 4th hole inner	burner settings calc #3 OR 3 75" spin 4th hole inner	burner settings calc #4 OR 3 75" spin 4th hole inner	burner settings calc #5 OR 3 75" spin 4th hole inner	burner settings calc #5 OR 3 75" spin 4th hole inner	burner settings calc #5 OR 3 75" spin 4th hole inner	burner settings 7" OR, 3 75" spin 4th hole inner	burner settings 7" OR, 3 75" spin 4th hole inner
GROSS CAPACITY	COAXI027A	MW	938 78	930 77	950 07	950 12	949 94	950 02	950 50	950 50	941 70	935 98	936 17	944 85	939 28	950 42	948 04
Load, net																	
Pulv Status			All pulv i/s	All pulv i/s	C Pulv o/s	D Pulv o/s	E Pulv o/s	A Pulv o/s	H Pulv o/s	H Pulv o/s	G Pulv o/s	G Pulv o/s	G Pulv o/s	B Pulv o/s	D Pulv o/s	D Pulv o/s	F Pulv o/s
BOILER																	
BOILER EFF (HL Method)	2SGAPX3550	%	89 13	89 09	89 17	89 50	89 57	89 45	89 70	89 09	89 18	88 63	88 53	89 14	88 94	88 77	89 20
BOILER EFF (Input Output Method)	2SGAPX3561	%	88 93	89 58	89 30	91 17	91 33	90 86	90 68	91 51	89 95	90 40	92 00	91 89	93 42	92 18	86 64
BLOWDOWN FLOW	2SGAPE116F	KPPH	0 00	0 00	0 00	0 80	0 00	0 00	0 00	0 00	0 00	0 02	0 00	0 00	0 88	0 30	12 37
SH SPRAY FLOW	2COAXI022A	KPPH	112 59	130 20	123 35	134 70	172 84	114 67	114 86	120 38	235 33	224 23	257 81	388 59	244 25	176 80	170 01
PMAX SH SPRAY FLOW	2SGAPX3033	KPPH	119 21	142 10	121 79	129 62	188 52	115 76	112 19	146 58	246 22	232 31	280 54	370 98	244 65	180 29	168 38
RH SPRAY FLOW	2COAXI108A	KPPH	0 00	0 00	0 01	0 00	0 13	0 00	0 02	0 00	0 22	0 00	0 00	21 58	0 30	0 00	0 08
PMAX RH SPRAY FLOW	2SGAPX3918	KPPH	65 27	67 51	0 00	0 00	1 95	5 23	18 74	23 90	2 12	3 25	3 50	40 45	0 00	0 00	0 00
TOTAL AIR FLOW	2COAXI078S	%	80 2	80 1	83 5	83 0	80 1	80 1	83 2	83 2	78 7	80 4	80 4	80 4	81 6	86 8	85 4
EXCESS AIR (CALC'D)	2SGBPX3512	%	16 66	16 14	16 02	15 15	18 35	17 92	13 57	17 09	16 69	15 00	14 12	18 27	16 73	16 84	19 09
TOTAL FUEL FLOW	2COAXI001A	TPH	370 8	364 2	372 4	367 1	367 7	365 0	365 4	365 0	370 3	367 3	364 8	369 9	355 7	361 6	368 9
PMAX BACKCALC COAL FLOW	2SGAPX3504	TPH	363 2	359 5	366 7	365 8	363 2	363 0	361 8	367 4	360.7	363 1	365 0	360 0	362 7	368 0	350 2
REHEAT DAMPER POS	2COAXI136A	%	59 5	71 6	59 0	94 6	47 4	47 2	91 9	98 1	30 2	27 4	27 4	52 0	38 7	30 8	60 0
SUPERHEAT DAMPER POS	2COAXI135A	%	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	75 5	90 1	92 5	94 9
BOILER DUTY (HEAT INPUT)	CALC	MBTU/HR	8517	8365	8555	8431	8445	8385	8392	8384	8835	8765	8380	8498	8488	8630	#VALUE!
COAL AS FIRED																	
HHVC	9CHEKT0001	BTU/LB	11 485	11,485	11 485	11 485	11 485	11 485	11,485	11,485	11 932	11 932	11 485	11 485	11 931	11 931	
% TOTAL MOISTURE	9CHEKT0005	%	9 50	9 50	9 50	9 50	9 50	9 50	9 50	9 50	8 10	8 10	9 50	9 50	8 10	8 10	
% ASH	9CHEKT0006	%	9 24	9 24	9 24	9 24	9 24	9 24	9 24	9 24	9 18	9 18	9 24	9 24	9 18	9 18	
% SULFUR	9CHEKT0007	%	0 37	0 37	0 37	0 37	0 37	0 37	0 37	0 37	0 53	0 53	0 37	0 37	0 53	0 53	
% CARBON	9CHEKT0009	%	64 32	64 32	64 32	64 32	64 32	64 32	64 32	64 32	66 68	66 68	64 32	64 32	66 68	66 68	
% HYDROGEN	9CHEKT0010	%	4 58	4 58	4 58	4 58	4 58	4 58	4 58	4 58	4 69	4 69	4 58	4 58	4 69	4 69	
% NITROGEN	9CHEKT0011	%	1 29	1 29	1 29	1 29	1 29	1 29	1 29	1 29	1 45	1 45	1 29	1 29	1 45	1 45	
% OXYGEN	9CHEKT0012	%	10 70	10 70	10 70	10 70	10 70	10 70	10 70	10 70	9 37	9 37	10 70	10 70	9 36	9 36	
ASH																	
FLY ASH LOI TOTAL	MANUAL	%															
FLY ASH LOI EAST	MANUAL	%															
FLY ASH LOI WEST	MANUAL	%															
BOILER CONDITIONS	Pulv O/s	manual	All pulv i/s	All pulv i/s	C Pulv o/s	D Pulv o/s	E Pulv o/s	A Pulv o/s	H Pulv o/s	H Pulv o/s	G Pulv o/s	G Pulv o/s	G Pulv o/s	B Pulv o/s	D Pulv o/s	D Pulv o/s	F Pulv o/s
EAST FLUE GAS O2	2COAXI079A	%	2 7	2 7	3 0	2 6	3 6	3 1	2 9	2 8	2 0	2 6	2 5	3 1	3 2	2 9	3 4
EAST FLUE GAS O2 (GRID)	MANUAL	%	3 2	3 5	4 4	3 7	3 9	3 1	3 6	3 5	2 3	2 8	2 9	3 2	3 8	4 5	4 5
EAST FLUE GAS CO (GRID)	MANUAL	ppm	19 0	12 2	233 1	113 5	96 5	214 2	41 4	60 0	736 9	348 7	457 5	274 4	156 2	47 1	3 7
EAST FLUE GAS CO2 (GRID)	MANUAL	%	15 2	14 6	13 9	14 9	13 6	14 2	15 4	15 5	15 7	14 9	14 6	15 7	15 1	19 31(BAD)	14 2
WEST FLUE GAS O2	2COAXI080A	%	2 9	3 2	2 6	2 4	2 5	2 8	2 2	3 6	3 9	3 7	4 1	2 3	2 2	3 1	2 6
WEST FLUE GAS O2 (GRID)	MANUAL	%	3 5	3 9	3 2	3 7	2 5	3 0	3 4	4 2	3 6	3 6	3 8	2 8	2 5	3 3	2 5
WEST FLUE GAS CO (GRID)	MANUAL	ppm	47 8	22 0	527 9	287 1	1228 6	859 9	303 7	78 3	924 8	949 4	734 3	1212 2	1225 9	744 8	1224 9
WEST FLUE GAS CO2 (GRID)	MANUAL	%	14 6	14 2	14 7	14 5	15 2	14 8	15 2	14 6	15 1	14 9	14 7	15 6	15 7	15 2	15 7
SELECTED ECON OUT O2	2COAXI187A	%	2 8	3 0	2 9	2 5	3 1	3 0	2 6	3 2	3 0	3 1	3 3	2 7	2 7	3 0	3 0
SCRUB INLET SO2	2SAAKK0002	PPM	317 0	334 5	281 8	294 5	408 0	408 3	397 2	405 9	289 0	317 1	311 6	342 8	361 4	345 7	346 9
STACK NOX	2SAAKK0006	PPM	187 1	194 2	161 6	165 0	190 8	185 1	191 9	197 3	151 3	165 8	165 9	170 6	154 5	198 4	184 3
STACK NOX CONVERTED	2SAAKK0007	PPM	0 32	0 34	0 28	0 29	0 32	0 31	0 33	0 34	0 26	0 28	0 29	0 29	0 27	0 38	0 32
STACK CO	MANUAL	ppm	33 8	12 3	416 8	280 8	1011 8	636 2	191 7	86 0		782 4	502 9	564 2	1144 8	911 2	859 2
STACK O2	MANUAL	%	5 8	5 8	5 8	5 5	5 2	5 3	5 7	5 8		5 2	5 3	5 4	5 6	6 1	6 2
O2 TRIM SETPOINT	2COAXI220A	%	53 22	56 47	58 07	59 51	54 36	55 56	60 48	60 48	49 07	55 18	56 18	54 20	61 97	67 28	62 08
CEM STACK VOL FLOW	2SAAKK0016	MSCFH	138 70	137 94	141 03	139 96	134 02	135 57	141 41	141 23	136 23	137 57	138 53	137 82	138 89	144 65	149 38
PMAX CALC STACK VOL FLOW	2SGAPX3903	MSCFH	135 63	133 96	139 40	134 09	138 66	135 04	131 61	136 40	136 46	136 96	137 54	134 75	129 98	134 14	140 86
PMAX BLR GAS FLOW	2SGAPX3520	LB/HR	8 008,047	7 908 039	8 074 831	7 781,136	8 020 430	7 919,889	7 785 555	8 042 359	8 055 074	8 041 602	8,064 948	7,920 727	7,630,408	7,856 305	8 338 547
PMAX BLR AIR FLOW RATE	2SGAPX3522	LB/HR	7 335 344	7,247,292	7 399 134	7 115 189	7,353 483	7 257 401	7 122 589	7 379 924	7 383 466	7 375 029	7 403 186	7 251 068	6 985 074	7 200 422	7 668 554
SCRUB INLET NOX	2SAAKK0010	PPM	199 84	208 91	172 53	174 69	202 07	198 45	199 44	207 94	156 84	176 64	177 73	180 08	163 54	210 37	200 10
SCRUB INLET SO2	2SAAKK0003	#/mbtu	0 72	0 77	0 66	0 68	0 91	0 91	0 93	0 93	0 64	0 72	0 71	0 79	0 84	0 82	0 81
U1 SCRUB INLET SO2	1SAAKK0002	PPM	333 36	353 82	321 79	329 52	431 54	428 48	412 97	426 87	295 72	330 23	328 00	382 34	381 55	377 66	378 28
U1 SCRUB INLET SO2	1SAAKK0003	#/mbtu	0 73	0 78	0 70	0 71	0 91	0 90	0 91	0 92	0 63	0 71	0 71	0 82	0 83	0 83	0 82
Scrub In CO2	2SAAKK0012	%	13 05	12 82	12 71	12 85	13 32	13 42	12 80	13 05	13 38	13 08	13 03	12 98	12 83	12 60	12 73
Stack CO2	2SAAKK0015	%	12 47	12 29	12 30	12 37	12 77	12 77	12 48	12 43	12 74	12 52	12 40	12 48	12 28	11 97	12 22
SA FLOW EAST %	2COAXI076R	%	72 68	72 51	76 39	75 65	73 21	73 23	76 27	76 12	71 36	72 95	73 05	72 98	73 82	78 94	78 18
SA FLOW West %	2COAXI077R	%	73 03	72 81	75 58	75 42	72 56	72 53	75 51	75 58	71 29	72 92	73 20	72 68	74 31	79 15	77 66
TOTAL AIR %	2COAXI078S	%	80 22	80 05	83 46	83 02	80 06	80 09	83 18	83 15	78 65	80 44	80 37	80 43	81 56	86 84	85 45
E WINDBOX PRESS	2SGAPT0176	psig	2 58	2 67	3 85	3 72	0 00	3 17	3 51	4 70	3 73	4 59	5 01	5 05	4 91	5 06	4 49
A WINDBOX PRESS	2SGAPT0175	psig	2 36	2 43	3 80	3 70	3 01	0 09	3 43	4 61	3 59	4 42	4 84	4 93	4 84	5 08	4 40
F WINDBOX PRESS	2SGAPT0174	psig	2 48	2 54	3 78	3 65	3 25	3 24	3 39	4 56	3 58	4 47	4 89	4 65	4 73	4 83	0 04
B WINDBOX PRESS	2SGAPT0173	psig	2 01	2 01	3 36	3 26	2 88	2 87	3 00	4 07	3 16	4 00	4 42	0 05	4 29	4 66	3 45
D WINDBOX PRESS	2SGAPT0180	psig	2 43	2 48	3 71	0 01	3 22	3 21	3 16	4 30	3 61	4 44	4 88	4 92	2 23	0 03	4 41
H WINDBOX PRESS	2SGAPT0179	psig	2 31	2 32	3 71	3 37	3 16	3 15	0 43	0 00	3 47	4 25	4 66	4 73	4 44	4 77	4 37
C WINDBOX PRESS	2SGAPT0178	psig	2 67	2 70	0 00	3 84	3 40	3 39	3 57	4 86	3 74	4 61	5 05	5 13	4 93	5 36	4 52
G WINDBOX PRESS	2SGAPT0177	psig	2 04	2 07	2 10	2 66	2 29	2 29	2 44	3 49	0 03	0 00	0 00	3 49	3 54	4 02	3 31
SA Duct East PRESS	2SGBPT0256	psig	2 46	2 57	2 93	2 91	2 63	2 62	2 77	3 42	2 75	3 22	3 52	3 42	3 45	3 86	3 37
SA Duct West PRESS	2SGBPT0257	psig	2 86	2 72	3 05	3 10	2 86	2 84	2 96	3 56	2 87	3 40	3 63	3 55	3 62	4 09	3 56
Coal Bias Pulv A	2COAXI221A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 90	-2 90	-2 90	0 00	0 00	0 00	0 00
Coal Bias Pulv B	2COAXI222A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	3 90
Coal Bias Pulv C	2COAXI223A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	4 10	0 00	-2 00
Coal Bias Pulv D	2COAXI224A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	5 00	5 00	0 00	0 00
Coal Bias Pulv E	2COAXI225A	%	0 00	0 00	-4 00	-4 00	-4 00	4 00	-4 00	4 00	4 90	-4 90	-4 90	4 50	4 50	-4 60	-5 10
Coal Bias Pulv F	2COAXI226A	%	0 00	0 00	4 00	-4 00	-4 00	-4 00	4 00	4 00	-6 00	-6 00	-6 00	-6 00	-6 00	-6 90	-2 00
Coal Bias Pulv G	2COAXI227A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	5 00	5 00	5 50	5 50
Coal Bias Pulv H	2COAXI228A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 80	2.80	2 80	0 00	0 00	0 00	0 00
PA Bias Pulv A	2COAXI211A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	6 60	6 60	6 60	0 00	0 00	0 00	3 00
PA Bias Pulv B	2COAXI212A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	4 07	4 07	4 07	4 07	4 07	2 60	6 20
PA Bias Pulv C	*2COAXI213A*	*%*	*0 00*	*0 00*	*0 00*	*0 00*	*0 00*	*0 00*	*0 00*	*8 10*	*3 00*	*3 00*	*3 00*	*3 00*	*5 97*	*4 44*	*3 01*
PA Bias Pulv D	2COAXI214A	%	0 00	0 00	0 00	0 00	2 11	2 11	1 00	5 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00
PA Bias Pulv E	2COAXI215A	%	0 00	0 00	1 45	3 01	3 01	3 06	3 06	3 06	5 10	5 10	5 10	6 90	6 90	4 41	5 87
PA Bias Pulv F	2COAXI216A	%	0 00	0 00	2 83	4 50	6 54	6 54	6 54	6 54	5 10	5 10	5 10	0 00	2 86	2 86	2 31
PA Bias Pulv G	2COAXI217A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
PA Bias Pulv H	2COAXI218A	%	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	6 38	6 38	4 44	2 64
SA Damper Pos Pulv A	2COAKS007A	%	61 11	59 69	77 39	74 25	74 31	19 71	74 10	73 59	74 00	72 71	72 09	75 65	71 61	72 49	74 16
SA Damper Pos Pulv B	2COAKS003A	%	61 06	59 70	77 43	74 23	74 31	74 29	74 07	73 55	77 32	76 29	75 77	23 00	71 64	72 46	69 09
SA Damper Pos Pulv C	2COAKS005A	%	65 57	64 12	22 06	78 73	78 76	78 72	78 50	78 07	81 77	80 67	80 28	80 13	70 64	76 89	75 97
SA Damper Pos Pulv D	2COAKS009A	%	65 10	63 69	81 40	24 61	78 29	78 22	78 06	77 50	81 39	80 22	79 86	84 84	40 59	18 38	78 12
SA Damper Pos Pulv E	2COAKS010A	%	65 56	64 15	76 97	73 52	19 00	73 51	73 38	72 87	75 99	74 51	73 95	74 54	70 11	71 11	71 99
SA Damper Pos Pulv F	2COAKS006A	%	65 36	64 04	76 84	73 40	73 46	73 42	73 16	72 71	74 47	72 99	72 38	72 47	68 14	67 81	.28 75
SA Damper Pos Pulv G	2COAKS004A	%	61 18	59 81	77 65	74 35	74 44	74 36	74 20	73 71	28 48	18 54	18 53	80 95	77 64	78 98	80 22
SA Damper Pos Pulv H	2COAKS008A	%	61 00	59 56	77 32	74 18	74 20	74 15	35 20	21 82	74 06	72 71	72 06	75 53	71 52	72 40	74 05