KENDAL POWER STATION

BLACK START FACILITY

FIGURE 9 - C & I SCHEDULES

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ISSUE STATUS:

As issued to [redacted] 11 September 1995

COMPILED BY: ESKOM

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00BBB01 XW88	11KV STN/GAS TURB BD CUB 01 OPEN	FAIL NORMAL						S/W	3286	A 2
00BBB01 XW89	11KV STN/GAS TURB BD CUB01 CLOSE	FAIL NORMAL						S/W	3287	A 2
00BBB02 XW88	11KV STN/GAS TURB BD CUB 02 OPEN	FAIL NORMAL						S/W	3288	A 2
00BBB02 XW89	11KV STN/GAS TURB BD CUB02 CLOSE	FAIL NORMAL						S/W	3289	A 2
00BBB03 XW88	11KV STN/GAS TURB BD CUB 03 OPEN	FAIL NORMAL						S/W	3290	A 2
00BBB03 XW89	11KV STN/GAS TURB BD CUB03 CLOSE	FAIL NORMAL						S/W	3291	A 2
00BBB04 XW88	11KV STN/GAS TURB BD CUB 04 OPEN	FAIL NORMAL						S/W	3292	A 2
00BBB04 XW89	11KV STN/GAS TURB BD CUB04 CLOSE	FAIL NORMAL						S/W	3293	A 2
00BBX30 XW88	G/T - STN TRFR SYNCH OFF COMMAND	FAIL NORMAL						S/W	3311	A 2
00BBX30 XW89	G/T - STN TRFR SYNCH ON COMMAND	FAIL NORMAL						S/W	3312	A 2
00XKA01 EG001 XW89	G/T PEAK LOAD CONTROL COMMAND	FAIL NORMAL						S/W	3295	A 2
00XKA01 EG002 XW89	G/T BASE LOAD CONTROL COMMAND	FAIL NORMAL						S/W	3294	A 2
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00XKA01 EG003 XW89	G/T STOP SEQUENCE COMMAND	FAIL NORMAL						S/W	3296	A 2
00XKA01 EG004 XW89	G/T STARTING SEQUENCE COMMAND	FAIL NORMAL						S/W	3297	A 2
00XKA01 EG005 XW89	GT ISOCH CONTROL COMMAND	FAIL ONLINE						S/W	3298	A 2
00XYD01 EG002 XW00	GT H1 LINK TO UNIT CO-ORDINATOR	DISCONN ONLINE						S/W	3269	A 2
00XYD01 EG003 XW00	GT H1 LINK TO STN CO-ORDINATOR	DISCONN ONLINE						S/W	3270	A 2
00XYD01 EG004 XW00	GT H1 LINK TO ALARM CO-ORDINATOR	DISCONN ONLINE						S/W	3271	A 2
00XYD01 EG006 XW00	GT H1 LINK TO SS2 SAT	DISCONN ONLINE						S/W	3273	A 2
00XYD01 EG007 XW00	GT H1 LINK TO UNIT 1 SAT	DISCONN ONLINE						S/W	3274	A 2
00XYD01 EG008 XW00	GT H1 LINK TO UNIT 2 SAT	DISCONN ONLINE						S/W	3275	A 2
00XYD01 EG009 XW00	GT H1 LINK TO UNIT 3 SAT	DISCONN ONLINE						S/W	3276	A 2
00XYD01 EG010 XW00	GT H1 LINK TO UNIT 4 SAT	DISCONN ONLINE						S/W	3277	A 2
00XYD01 EG011 XW00	GT H1 LINK TO UNIT 5 SAT	DISCONN ONLINE						S/W	3278	A 2
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00XYD01 EG012 XW00	GT H1 LINK TO UNIT 6 SAT	DISCONN ONLINE						S/W	3279	A 2
00XYD01 EW001 XW00	TIME PULSE ON EVERY DAY							Q 7.5		E 3
00XYD01 EW002 XW00	TIME PULSE ON EVERY MINUTE							Q 7.6		E 3
00XYD01 EW003 XW00	TIME PULSE ON EVERY HOUR							Q 7.7		E 3
01BBB01 XW88	11.5KV G/T GEN BD CUB 01 OPEN	FAIL NORMAL						S/W	3284	A 2
01BBB01 XW89	11.5KV G/T GEN BD CUB 01 CLOSE	FAIL NORMAL						S/W	3285	A 2
10BBX30 XW88	G/T - UNIT 1 SYNCH OFF COMMAND	FAIL NORMAL						S/W	3301	A 2
10BBX30 XW89	G/T - UNIT 1 SYNCH ON COMMAND	FAIL NORMAL						S/W	3300	A 2
20BBX30 XW88	G/T - UNIT 2 SYNCH OFF COMMAND	FAIL NORMAL						S/W	3303	A 2
20BBX30 XW89	G/T - UNIT 2 SYNCH ON COMMAND	FAIL NORMAL						S/W	3302	A 2
30BBX30 XW88	G/T - UNIT 3 SYNCH OFF COMMAND	FAIL NORMAL						S/W	3305	A 2
30BBX30 XW89	G/T - UNIT 3 SYNCH ON COMMAND	FAIL NORMAL						S/W	3304	A 2
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
4088X30 XW88	G/T - UNIT 4 SYNCH OFF COMMAND	FAIL NORMAL						S/W	3307	A 2
4088X30 XW89	G/T - UNIT 4 SYNCH ON COMMAND	FAIL NORMAL						S/W	3306	A 2
5088X30 XW88	G/T - UNIT 5 SYNCH OFF COMMAND	FAIL NORMAL						S/W	3309	A 2
5088X30 XW89	G/T - UNIT 5 SYNCH ON COMMAND	FAIL NORMAL						S/W	3308	A 2
6088X30 XW88	G/T - UNIT 6 SYNCH OFF COMMAND	FAIL NORMAL						S/W	3311	A 2
6088X30 XW89	G/T - UNIT 6 SYNCH ON COMMAND	FAIL NORMAL						S/W	3310	A 2
00XYD01 XW51	GAS TURBINE PLC COOLING FAN/BATT	FAULT NORMAL		00XYD01				S/W	3280	A 1
00XYD01 EW001 XW02	GAS TURBINE PLC MCB TRIPPED	ALARM NORMAL		00XYD01				I 6.7	3281	A -
00XYD01 EW002 XW02	GAS TURBINE MEPS SUPPLY	FAIL NORMAL		00XYD01				I 10.7	3282	A 1
01BBB01 YB92	11.5KV G/T GEN BD CUB 01 BKR	CLOSE	04BTZ01 GA001 X03 001/002	00XYD01 XB:001 4B	W Be	04BTZ8003	TVH508X	Q 4.0		Q
01BBB01 YB91	11.5KV G/T GEN BD CUB 01 BKR	OPEN	04BTZ01 GA001 X03 003/004	00XYD01 XB:001 CD	W D	04BTZ8003	TVH508X	Q 4 1		Q
01BBB01 EW001 XB01	11.5KV G/T BD GEN BD CUB 01 BKR	OPENED CLOSED	04BTZ01 GA001 X03 005/006	00XYD01 XB:001 EF	W Gr	04BTZ8003	TVH508X	C-N 00 I 4.0	3151	ES 3
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
01BB801 XB51	11.5KV G/T GEN BD CUB 01	REMOTE LOC/OFF	04BTZ01 GA001 X03 007/008	00XYD01 XB:001 GH	W Bn	04BTZ8003	TVH50EX	CHN 01 I 4.1	3152	ES 2
01BB801 XW54	11.5KV G/T BD 5B U/V	ALARM NORMAL	04BTZ01 GA001 X03 009/010	00XYD01 XB:001 JK	W Gy	04BTZ8003	TVH50EX	CHN 02 I 5.2	3153	A 1
00XKA01 EW001 XW92	GAS TURBINE STARTING SEQUENCE	COMMAND	04BTZ01 GA001 X03 011/012	00XYD01 XB:002 AB	R Be	04BTZ8003	TVH50EX	Q 5 2		Q
00XKA01 EW004 XW92	GAS TURBINE STOP SEQUENCE	COMMAND	04BTZ01 GA001 X03 013/014	00XYE01 XB:002 CD	R O	04BTZ8003	TVH50BX	Q 5.3		Q
00XKA01 EW002 XW92	GAS TURBINE BASE LOAD CONTROL	COMMAND	04BTZ01 GA001 X03 015/016	00XYE01 XB:002 EF	R Gn	04BTZ8003	TVH50BX	Q 5.4		Q
00XYA01 EW003 XW92	GAS TURBINE PEAK LOAD CONTROL	COMMAND	04BTZ01 GA001 X03 017/018	00XYD01 XB:002 Gn	R Bn	04BTZ8003	TVH50EX	Q 5.5		Q
00XKA01 EW001 YE93	GAS TURBINE VOLTAGE	RAISE	04BTZ01 GA001 X03 019/020	00XYD01 XB:002 JK	R Gy	04BTZ8003	TVH50EX	Q 5 6		Q
00XKA01 EW002 YE94	GAS TURBINE VOLTAGE	LOWER	04BTZ01 GA001 X03 021/022	00XYD01 XB:003 AB	Bk Be	04BTZ8003	TVH50BX	Q 5.7		Q
00XKA01 EW002 YB93	GAS TURBINE FREQUENCY	RAISE	04BTZ01 GA001 X03 023/024	00XYD01 XB:003 CD	Bk O	04BTZ8003	TVH50BX	Q 6.0		Q
00XKA01 EW001 YB94	GAS TURBINE FREQUENCY	LOWER	04BTZ01 GA001 X03 025/026	00XYD01 XB:003 EF	Bk Gn	04BTZ8003	TVH50BX	Q 6 1		Q
00XKA01 EW001 YB92	DISABLE BKR (E) FEEDBACK	COMMAND	04BTZ01 GA001 X03 027/028	00XYD01 XB:003 GH	Bk Bn	04BTZ8003	TVH50BX	Q 9.0		Q -
00XKA01 EG003 YB92	GAS TURBINE ISOCH (FREE RUNNING)	COMMAND	04BTZ01 GA001 X03 029/030	00XYD01 XB:003 IK	Sk Gy	04BTZ8003	TVH50BX	Q 6.2		Q

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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00XKA01 EG002 Y892	GAS TURBINE SPEED DROOP	COMMAND	04BTZ01 GA001 X03 031/032	00XYD01 XB:004 PB	Y Be	04BTZ8003	TVH50BX	Q 6.3		Q
00XKA01 EG001 Y892	GAS TURBINE EMERGENCY STOP	COMMAND	04BTZ01 GA001 X03 033/034	00XYD01 XB:004 CD	Y O	04BTZ8003	TVH50BX	Q 6.4		Q
00XKA01 XW42	GAS TURBINE AVR MODE	SINGLE PARALEL	04BTZ01 GA001 X03 037/038	00XYD01 XB:004 Gn	Y Bn	04BTZ8003	TVH50BX	I11.7		ES 3
00XKA01 EG009 XW89	GAS TURBINE AVR DROOP/NORMAL	COMMAND	04BTZ01 GA001 X03 041/042	00XYD01 XB:005 AB	W/Be Be	04BTZ8003	TVH50BX	Q 7.4		Q
00XKA01 EW003 XB01	G/T AVR SELECTED TO	AUTO HAND/TRF	04BTZ01 GA001 X03 043/044	00XYD01 XB:005 CD	W/Be O	04BTZ8003	TVH50BX	O-N 03 I 11.2	3246	ES 3
10BBX30 XW42	G/T - UNIT 1 SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 051/052	00XYD01 XB:006 AB	P/Be Be	04BTZ8003	TVH50BX	O-N 03 I 5.3	3154	ES 3
20BBX30 XW42	G/T - UNIT 2 SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 053/054	00XYD01 XB:006 CD	R/Be O	04BTZ8003	TVH50BX	O-N 04 I 5.4	3155	ES 3
30BBX30 XW42	G/T - UNIT 3 SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 055/056	00XYD01 XB:006 EF	P/Be Gn	04BTZ8003	TVH50BX	O-N 05 I 5.5	3156	ES 3
40BBX30 XW42	G/T - UNIT 4 SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 057/058	00XYD01 XB:006 GH	R/Be Bn	04BTZ8003	TVH50BX	O-N 06 I 5.6	3157	ES 3
50BBX30 XW42	G/T - UNIT 5 SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 059/060	00XYD01 XB:006 IK	P/Be Gy	04BTZ8003	TVH50BX	O-N 07 I 5.7	3158	ES 3
60BBX30 XW42	G/T - UNIT 6 SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 061/062	00XYD01 XB:007 AB	Be/Bk Be	04BTZ8003	TVH50BX	O-N 08 I 6.0	3159	ES 3
00BBX30 EW002 XW42	G/T - STN TRFR SYNCHRONISER	IN OPER OFF	04BTZ01 GA001 X03 063/064	00XYD01 XB:007 CD	Be/Bk O	04BTZ8003	TVH50BX	O-N 09 I 6.1	3160	ES 3
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00BBX30 EW001 XW42	G/T SYNCHRONISER (K10)	IN OPER COMPL	04BTZ01 GA001 X03 065/066	00XYD01 XB:007 EF	Be/Bk Gn	04BTZ8003	TVH50BX	CHN 10 I 6.2	3161	E 2
00BBX30 XB51	G/T SYNCHRONISER	REMOTE LOCAL	04BTZ01 GA001 X03 067/068	00XYD01 XB:007 GH	Be/Bk Bn	04BTZ8003	TVH50BX	CHN 11 I 6.3	3162	ES 3
10BBX30 XW92	GAS TURBINE - UNIT 1 SYNCH ON	COMMAND	04BTZ01 GA001 X03 071/072	00XYD01 XB:008 AB	Y/Be Be	04BTZ8003	TVH50BX	Q 6.5		Q
20BBX30 XW92	GAS TURBINE - UNIT 2 SYNCH ON	COMMAND	04BTZ01 GA001 X03 073/074	00XYD01 XB:008 CD	Y/Be O	04BTZ8003	TVH50BX	Q 6.6		Q
30BBX30 XW92	GAS TURBINE - UNIT 3 SYNCH ON	COMMAND	04BTZ01 GA001 X03 075/076	00XYD01 XB:008 EF	Y/Be Gn	04BTZ8003	TVH50BX	Q 6.7		Q
40BBX30 XW92	GAS TURBINE - UNIT 4 SYNCH ON	COMMAND	04BTZ01 GA001 X03 077/078	00XYD01 XB:008 GH	Y/Be Bn	04BTZ8003	TVH50BX	Q 7.0		Q
50BBX30 XW92	GAS TURBINE - UNIT 5 SYNCH ON	COMMAND	04BTZ01 GA001 X03 079/080	00XYD01 XB:008 JK	Y/Be Cy	04BTZ8003	TVH50BX	Q 7.1		Q
60BBX30 XW92	GAS TURBINE - UNIT 6 SYNCH ON	COMMAND	04BTZ01 GA001 X03 081/082	00XYD01 XB:009 AB	W/O Be	04BTZ8003	TVH50BX	Q 7.2		Q
00BBX30 EW002 YB92	GAS TURBINE - STN TFFR SYNCH ON	COMMAND	04BTZ01 GA001 X03 083/084	00XYD01 XB:009 CD	W/O O	04BTZ8003	TVH50BX	Q 7.3		Q
00BFB01 XX54	380V GAS TURB BD BB U/V	ALARM NORMAL	04BTZ01 GA001 X03 091/092	00XYD01 XB:010 AB	O/R Be	04BTZ8003	TVH50BX	CHN 12 I 6.4	3163	A 1
07BFB01 EW002 XB01	380V G/T BD GEN BUSBAR SUPL LINK	CLOSED OPENED	04BTZ01 GA001 X03 093/094	00XYD01 XB:010 CD	O/R O	04BTZ8003	TVH50BX	CHN 13 I 7.0	3164	ES 3
07BFB01 EW001 XB01	380V G/T BD ESSENTIAL SUPL LINK	CLOSED OPENED	04BTZ01 GA001 X03 095/096	00XYD01 XB:010 EF	O/G Gn	04BTZ8003	TVH50BX	CHN 14 I 7.1	3165	ES 3

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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00BBB01 YB92	11KV STN/GAS TURB BD CUB 01 BKR	CLOSE	00BBB01 AA001 X02 043/044	00XYD01 XB:011 AB	Be/1P R/1P	00BBBE001	UVGBACV	Q 4.2		B
00BBB01 YB91	11KV STN/GAS TURB BD CUB 01 BKR	OPEN	00BBB01 AA001 X02 045/046	00XYD01 XB:011 CD	Gy/1P Y/1P	00BBBE001	UVGBACV	Q 4.3		B
00BBB01 EW001 XB01	11KV STN/GAS TURB BD CUB 01 BKR	OPENED CLOSED	00BBB01 AA001 X02 059/060	00XYD01 XB:011 EF	Gn/1P Bn/1P	00BBB8001	UVGBACV	CHN 15 I 4.2	3166	ES 3
00BBB01 EW001 XB51	11KV STN/GAS TURB BD CUB 01	LOC/OFF REMOTE	00BBB01 AA001 X03 010/011	00XYD01 XB:011 GH	W/1P Bk/1P	00BBB8001	UVGBACV	CHN 16 I 4.3	3167	ES 3
00BBB01 EW002 XB01	11KV STN/ GT BD CUB 01 CBL E/S	ON OFF	00BBB01 AA001 X03 021/022	00XYE01 XB:012 AB	Be/2P R/2P	00BBBE001	UVGBACV	CHN 17 I 7.2	3168	ES 3
00BBB01 EW003 XB01	11KV STN/ GT BD CUB 01 ISOLATOR	CLOSED OPENED	00BBB01 AA001 X03 035/036	00XYD01 XB:012 CD	Gy/2P Y/2P	00BBB8001	UVGBACV	CHN 18 I 7.3	3169	ES 3
00BBB00 EW001 XW54	11KV STN/ GT BD CABLE U/V	ALARM NORMAL	00BBB01 AA001 X03 054/055	00XYD01 XB:012 EF	Gn/2P Bn/2P	00BBB8001	UVGBACV	CHN 32 I 10.3	3245	- 3
00BBB00 EW002 XW54	11KV STN/ GT BD BB U/V	ALARM NORMAL	00BBB01 AA001 X03 039/040	00XYD01 XB:012 GH	W/2P Bk/2P	00BBB8001	UVGBACV	CHN 19 I 6.5	3170	A 1
00BBB02 YB92	11KV STN/GAS TURB BD CUB 02 BKR	CLOSE	00BBB02 AA001 X02 030/031	00XYD01 XB:013 AB	Be/1P R/1P	00BBB8004	UVGBACV	Q 4.4		B
00BBB02 YB91	11KV STN/GAS TURB BD CUB 02 BKR	OPEN	00BBB02 AA001 X02 032/033	00XYD01 XB:013 CD	Gy/1P Y/1P	00BBB8004	UVGBACV	Q 4.5		B
00BBB02 EW001 XB01	11KV STN/GAS TURB BD CUB 02 BKR	OPENED CLOSED	00BBB02 AA001 X02 048/049	00XYD01 XB:013 EF	Gn/1P Bn/1P	00BBB8004	UVGBACV	CHN 20 I 4.4	3171	ES 3
00BBB02 EW001 XB51	11KV STN/GAS TURB BD CUB 02	LOC/OFF REMOTE	00BBB02 AA001 X03 010/011	00XYD01 XB:013 GH	W/1P Bk/1P	00BBB8004	UVGBACV	CHN 21 I 4.5	3172	ES 3
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
0088B02 EW002 XB01	11KV STN/ GT BD CUB 02 CBL E/S	ON OFF	0088B02 AA001 X03 021/022	00XYD01 XB:014 AB	Be/2P R/2P	008B8B004	UVG8ACV	CHN 22 I 7.4	3173	ES 3
0088B02 EW003 XB01	11KV STN/ GT BD CUB 02 ISOLATOR	CLOSED OPENED	0088B02 AA001 X03 037/038	00XYD01 XB:014 CD	Gy/2P Y/2P	008B8B004	UVG8ACV	CHN 23 I 7.5	3174	ES 3
0088B03 YB02	11KV STN/GAS TURB BD CUB 03 BKR	CLOSE	0088B03 AA001 X02 026/027	00XYD01 XB:015 AB	Be/1P R/1P	008B8B007	UVG8ACV	Q 4.6		Q
0088B03 YB91	11KV STN/GAS TURB BD CUB 03 BKR	OPEN	0088B03 AA001 X02 028/029	00XYD01 XB:015 CD	Gy/1P Y/1P	008B8B007	UVG8ACV	Q 4.7		Q
0088B03 EW001 XB01	11KV STN/GAS TURB BD CUB 03 BKR	OPENED CLOSED	0088B03 AA001 X02 044/045	00XYD01 XB:015 EF	Gn/1P Bn/1P	008B8B007	UVG8ACV	CHN 24 I 4.6	3175	ES 3
0088B03 EW001 XB51	11KV STN/GAS TURB BD CUB 03	LOC/OFF REMOTE	0088B03 AA001 X03 010/011	00XYD01 XB:015 GH	W/1P BK/1P	008B8B007	UVG8ACV	CHN 25 I 4.7	3176	ES 2
0088B03 EW002 XB01	11KV STN/ GT BD CUB 03 CBL E/S	ON OFF	0088B03 AA001 X03 022/023	00XYD01 XB:016 AB	Be/2P R/2P	008B8B007	UVG8ACV	CHN 26 I 7.6	3177	ES 3
0088B03 EW003 XB01	11KV STN/ GT BD CUB 03 ISOLATOR	CLOSED OPENED	0088B03 AA001 X03 045/046	00XYD01 XB:016 CD	Gy/2P Y/2P	008B8B007	UVG8ACV	CHN 27 I 7.7	3178	ES 3
0088B04 YB02	11KV STN/GAS TURB BD CUB 04 BKR	CLOSE	0088B04 AA001 X02 027/028	00XYE01 XB:017 AB	Be/1P R/1P	008B8B010	UVG8ACV	Q 5.0		Q
0088B04 YB91	11KV STN/GAS TURB BD CUB 04 BKR	OPEN	0088B04 AA001 X02 029/030	00XYD01 XB:017 CD	Gy/1P Y/1P	008B8B010	UVG8ACV	Q 5.1		Q
0088B04 EW001 XB01	11KV STN/GAS TURB BD CUB 04 BKR	OPENED CLOSED	0088B04 AA001 X02 043/044	00XYD01 XB:017 EF	Gn/1P Bn/1P	008B8B010	UVG8ACV	CHN 28 I 5.0	3179	ES 3
0088B04 EW001 XB51	11KV STN/GAS TURB BD CUB 04	LOC/OFF REMOTE	0088B04 AA001 X02 054/055	00XYD01 XB:017 GH	W/1P BK/1P	008B8B010	UVG8ACV	CHN 29 I 5.1	3180	ES 2
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00BBB04 EW002 XB01	11KV STN/ GT BD CUB 04 CBL E/S	ON OFF	00BBB04 AA001 X02 065/066	00XYD01 X8:018 AB	Be/2P R/2P	00BBB8010	UVG8ACV	CHN 30 I 8.0	3181	ES 3
00BBB04 EW003 XB01	11KV STN/ GT BD CUB 04 ISOLATOR	CLOSED OPENED	00BBB04 AA001 X03 007/008	00XYD01 XB:018 CD	Gy/2P Y/2P	00BBB8010	UVG8ACV	CHN 31 I 8.1	3182	ES 3
01BBA00 EW001 XW54	11KV STATION BD 1 BB U/V	ALARM NORMAL	00BBY01 AA001 X01 072/073	00XYD01 X8:019 AB	W Be	00BBY8013	TVH4BX	CHN 93 I 10.4	3244	A 1
02BBA00 EW001 XW54	11KV STATION BD 2 BB U/V	ALARM NORMAL	00BBY01 AA001 X01 076/077	00XYD01 X8:019 CD	W O	00BB 8013	TVH4BX	CHN 94 I 10.5	3245	A 1
00YKA01 EW004 XW52	GAS TURBINE MCC VOLTAGE	FAULT NORMAL	048TZ01 GA001 X02 001/002	00XYD01 XA:001 AB	W Be	048TZ8002	TVH50BX	CHN 32	3183	A 1
00YKA01 EW003 XW52	GAS TURBINE MINOR ALARM	FAULT NORMAL	048TZ01 GA001 X02 003/004	00XYD01 XA:001 CD	W O	048TZ8002	TVH50BX	CHN 33	3184	A 1
00YKA01 EW007 XW52	GAS TURBINE LUB OIL SYSTEMS	FAULT NORMAL	048TZ01 GA001 X02 005/006	00XYD01 XA:001 EF	W Gn	048TZ8002	TVH50BX	CHN 34	3185	A 1
00XKA01 EW006 XW52	GAS TURBINE SPEED	FAULT NORMAL	048TZ01 GA001 X02 007/008	00XYD01 XA:001 GH	W Bn	048TZ8002	TVH50BX	CHN 35	3186	A 1
00XKA01 EW010 XW54	GAS TURBINE GEN STATOR TEMP	ALARM NORMAL	048TZ01 GA001 X02 009/010	00XYD01 XA:001 IK	W Gy	048TZ8002	TVH50BX	CHN 36	3187	A 1
00YKA01 EW003 XW52	GAS TURBINE AUX MOTORS	FAULT NORMAL	048TZ01 GA001 X02 011/012	00XYD01 XA:002 AB	R Be	048TZ8002	TVH50BX	CHN 37	3188	A 1
00XKA01 EW001 XW52	GAS TURBINE FUEL SYSTEM	FAULT NORMAL	048TZ01 GA001 X02 013/014	00XYD01 XA:002 CD	R O	048TZ8002	TVH50BX	CHN 38	3189	A 1
00XKA01 EW011 XW52	GAS TURBINE AVR	FAULTY NORMAL	048TZ01 GA001 X02 015/016	00XYD01 XA:002 EF	R Gn	048TZ8002	TVH50BX	CHN 39	3190	A 1
END OF PAGE 10										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
01BBB01 XW53	11.5KV G/T GEN BD CUB 01 BKR	TRIP NORMAL	048TZ01 GA001 X02 017/018	00XYD01 XH:002 BN	R Bn	048TZ8002	TVH50BX	CHN 40	3191	A 2
00XKA01 EW010 XW52	GAS TURBINE STARTING DIESEL	FAULTY NORMAL	048TZ01 GA001 X02 019/020	00XYD01 XH:002 IK	R Gy	048TZ8002	TVH50BX	CHN 41	3192	A 1
00XKA01 EW002 XW42	GAS TURBINE SEQUENCE	INCOMPLE NORMAL	048TZ01 GA001 X02 021/022	00XYD01 XH:003 PB	Bk Be	048TZ8002	TVH50BX	CHN 42 I S.2	3193	A 2
00XKA01 EW005 XW52	GAS TURBINE TEMP SYSTEM	FAULT NORMAL	048TZ01 GA001 X02 023/024	00XYD01 XH:003 CD	Bk O	048TZ8002	TVH50BX	CHN 43	3194	A 1
00XKA01 EW009 XW52	GAS TURBINE VIBRATION	FAULT NORMAL	048TZ01 GA001 X02 025/026	00XYD01 XH:003 EF	Bn Gn	048TZ8002	TVH50BX	CHN 44	3195	A 1
00XEN10 XB51	GAS TURBINE FUEL LEVEL	LOW NORMAL	048TZ01 GA001 X02 027/028	00XYD01 XH:003 GH	Bk Bn	048TZ8002	TVH50BX	CHN 45	3196	A 1
00XKA01 EW006 XW54	GAS TURBINE FIRE	ALARM NORMAL	048TZ01 GA001 X02 029/030	00XYD01 XH:003 JK	Bk By	048TZ8002	TVH50BX	CHN 46	3197	A 1
00XKA01 XW51	GAS TURBINE HYDROLIC TRIP PRESS	LOW NORMAL	048TZ01 GA001 X02 031/032	00XYD01 XH:004 PB	Y Be	048TZ8002	TVH50BX	CHN 47	3198	A 1
00XKA01 EW002 XW52	GAS TURBINE FIRING SYSTEM	FAULT NORMAL	048TZ01 GA001 X02 033/034	00XYD01 XH:004 CD	Y O	048TZ8002	TVH50BX	CHN 48	3199	A 1
00XKA01 EW002 XW53	GAS TURBINE PRIMARY TRIP	TRIP NORMAL	048TZ01 GA001 X02 035/036	00XYD01 XH:004 EF	Y Gn	048TZ8002	TVH50BX	CHN 49	3200	A 2
01BFT01 XW57	380V G/T AUX BD TRFR OIL TEMP	ALARM NORMAL	048TZ01 GA001 X02 037/038	00XYD01 XH:004 GH	Y Bn	048TZ8002	TVH50BX	CHN 50	3201	A 1
01BBA01 XW52	11.5KV G/T GEN BD CUB 01 T/CCT	FALLT NORMAL	048TZ01 GA001 X02 039/040	00XYD01 XH:004 IK	Y Gy	048TZ8002	TVH50BX	CHN 51	3202	A 1
END OF PAGE 11										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00XKA01 EW003 XW53	GAS TURBINE BUS ZONE PROT	TRIP NORMAL	04BTZ01 GA001 X02 041/042	00XYD01 XH:005 AB	W/Be Be	04BTZ8002	TVH50BX	CHN 52	3203	A 2
00XKA01 EW001 XW53	GAS TURBINE B/U PROT	TRIP NORMAL	04BTZ01 GA001 X02 043/044	00XYD01 XH:005 CD	W/Be O	04BTZ8002	TVH50BX	CHN 53	3204	A 2
00XKA01 EW003 XW42	GAS TURB LOW FORWARD POWER	OPER NORMAL	04BTZ01 GA001 X02 045/046	00XYD01 XH:005 EF	W/Be Gn	04BTZ8002	TVH50BX	CHN 54 I 8.3	3205	E .
00XKA01 EW011 XW54	GAS TURBINE SYSTEM UNDER FREQ	ALARM NORMAL	04BTZ01 GA001 X02 047/048	00XYD01 XH:005 GH	W/Be Gn	04BTZ8002	TVH50BX	CHN 55 I 8.4	3206	A 1
00XKA01 EW004 YB01	G/T AVR SELECTED FOR	SINGLE PARALLEL	04BTZ01 GA001 X02 051/052	00XYD01 XH:006 AB	R/Be Be	04BTZ8002	TVH50BX	CHN 56 I 11.3	3241	E 1
00XKA01 EW001 XW51	BLACK START SYNCH	DISABLE OFF	04BTZ01 GA001 X02 053/054	00XYD01 XH:006 CD	R/Be O	04BTZ8002	TVH50BX	CHN 56 I 11.0	3207	E 2
00XKA01 XW61	GAS TURBINE READY TO START	NORMAL UNHEALTH	04BTZ01 GA001 X02 061/062	00XYD01 XH:007 AB	Be/Bk Be	04BTZ8002	TVH50BX	CHN 57 I 8.5	3208	E 1
00XKA01 EW012 XW54	GAS TURBINE START PULSE	ACTIVE NORMAL	04BTZ01 GA001 X02 063/064	00XYD01 XH:007 CD	Be/Bk O	04BTZ8002	TVH50BX	CHN 58 I 9.6	3209	E 2
00XKA01 EW005 XW54	GAS TURBINE AUX RUNNING	ON OFF	04BTZ01 GA001 X02 065/066	00XYD01 XH:007 EF	Be/Bk Gn	04BTZ8002	TVH50BX	CHN 59 I 8.7	3210	E 2
00XKA01 EW001 XW54	GAS TURBINE FLAME SELECTION	ON OFF	04BTZ01 GA001 X02 067/068	00XYD01 XH:007 GH	Be/Bk Gn	04BTZ8002	TVH50BX	CHN 60 I 9.0	3211	E 2
00XKA01 EW009 XW54	GAS TURB BASE LOAD SELECTION	ON OFF	04BTZ01 GA001 X02 069/070	00XYD01 XH:007 IK	Be/Bk Gy	04BTZ8002	TVH50BY	CHN 61 I 9.1	3212	E 2
00XKA01 EW002 XW54	GAS TURB PEAK LOAD SELECTION	ON OFF	04BTZ01 GA001 X02 071/072	00XYD01 XH:008 AB	Be/Bk Be	04BTZ8002	TVH50BX	CHN 62 I 9.2	3213	E 2
END OF PAGE 12										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00XKA01 EW008 XW54	GAS TURBINE TEMP CONTROL	ON OFF	048TZ01 GA001 X02 073/074	00XYD01 XH:008 CD	Y/Be O	048TZ8002	TVH508X	CHN 85 I 9.3	3214	E 2
00XKA01 EW001 XW42	GAS TURBINE CONTROL SEQUENCE IN	PROGRESS OFF	048TZ01 GA001 X02 075/076	00XYD01 XH:008 EF	Y/Be Gn	048TZ8002	TVH508X	I 9.4		E 3
00XKA01 EW004 XW54	GAS TURBINE CONTROL SEQUENCE	COMPLETE NORMAL	048TZ01 GA001 X02 077/078	00XYD01 XH:008 GH	Y/Be Bn	048TZ8002	TVH508X	CHN 65 I 9.5	3216	E 2
00XKA01 EW003 XW54	GAS TURBINE ISOCH CONTROL MODE	ON NORMAL	048TZ01 GA001 X02 079/080	00XYD01 XH:008 IK	Y/Be Gy	048TZ8002	TVH508X	CHN 66 I 9.6	3217	E 2
00XKA01 EW007 XW54	GAS TURBINE DROOP CONTROL MODE	ON NORMAL	048TZ01 GA001 X02 081/082	00XYD01 XH:009 AB	W/O Be	048TZ8002	TVH508X	CHN 67 I 9.7	3218	E 2
00XKA01 EW001 XB01	GAS TURBINE SYNC COND OPERATION	ON OFF	048TZ01 GA001 X02 083/084	00XYD01 XH:009 CD	W/O O	048TZ8002	TVH508X	CHN 68 I 10.0	32.9	E 3
00XKA01 EW003 XB01	GAS TURBINE GENERATOR OPERATION	ON OFF	048TZ01 GA001 X02 085/086	00XYD01 XH:009 EF	W/O Gn	048TZ8002	TVH508X	CHN 69 I 10.1	3220	E 3
00XKA01 EW002 XB01	G/T MASTER CONTOLLER SWITCH	REMOTE MAN/OFF	048TZ01 GA001 X02 087/088	00XYD01 XH:009 GH	W/O Bn	048TZ8002	TVH508X	CHN 89 I 11.1	3240	E 3
00EGX30 XW51	GAS TURBINE SYNCHRONISER DC	FAIL NORMAL	048TZ01 GA001 X02 091/092	00XYD01 XH:010 AB	O/R Be	048TZ8002	TVH508X	CHN 70 I 10.2	3221	A 1
01LXB01 XW54	G/T BATTERY ROOM VENT FAN	FAIL NORMAL	048TZ01 GA001 X02 093/094	00XYD01 XH:010 CD	O/R O	048TZ8002	TVH508X	CHN 64	3215	A 1
00ETX87 XW58	G/T 24V STARTER BATT CHARGER	UNHEALTH NORMAL	048TZ01 GA001 X02 095/096	00XYD01 XH:010 EF	O/R Gn	048TZ8002	TVH508X	CHN 71	3222	A 1
00BTX88 XW58	G/T 24V PLC POWER PACK	UNHEALTH NORMAL	048TZ01 GA001 X02 097/098	00XYD01 XH:010 GH	O/R Bn	048TZ8002	TVH508X	CHN 72	3223	A 1
END OF PAGE 13										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00BTX89 XW58	G/T 110V MMCC BATT CHARGER	UNHEALTH NORMAL	04BTZ01 GA001 X02 099/100	00XYD01 XH:010 1K	O/R Gy	04BTZ8002	TVF5G8X	CHN 73	3224	A 1
00BBEC1 EW002 XW51	11KV STN/ GT BD CUB 01 DC	FAIL NORMAL	00BBE01 AA001 X03 029/030	00XYD01 XH:011 AB	Be/1P R/1P	00BBB8002	UVG44CV	CHN 74	3225	A 1
00BBBC1 XW52	11KV STN/ GT BD CUB 01 T/CCT	FAULT NORMAL	00BBE01 AA001 X03 037/038	00XYD01 XH:011 CD	Gy/1P Y/1P	00BBB8002	UVG44CV	CHN 75	3226	A 1
00BBBD0 EW001 XW51	11KV STN/GAS BD 220V DC SUPPLY	FAIL NORMAL	00BBE01 AA001 X03 033/034	00XYD01 XH:011 GH	R/1P BK/1P	00BBB8002	UVG44CV	CHN 76	3227	A 1
00BBB02 EW002 XW51	11KV STN/ GT BD CUB 02 DC	FAIL NORMAL	00BBE02 AA001 X03 029/030	00XYD01 XH:012 AB	Be/1P R/1P	00BBB8005	UVG44CV	CHN 77	3228	A 1
00BBB02 XW52	11KV STN/ GT BD CUB 02 T/CCT	FAULT NORMAL	00BBE02 AA001 X03 037/038	00XYD01 XH:012 CD	Gy/1P Y/1P	00BBB8005	UVG44CV	CHN 78	3229	A 1
00BBB02 EW002 XW53	11KV STN/ GT BD CUB02 PROT	TRIP NORMAL	00BBB02 AA001 X03 031/032	00XYD01 XH:012 EF	Gn/1P Gn/1P	00BBB8005	UVG44CV	CHN 79	3230	A 2
00BBB03 EW002 XW51	11KV STN/ GT BD CUB 03 DC	FAIL NORMAL	00BBE03 AA001 X03 029/030	00XYD01 XH:013 AB	Be/1P R/1P	00BBB8008	UVG44CV	CHN 80	3231	A 1
00BBB03 XW52	11KV STN/ GT BD CUB 03 T/CCT	FAULT NORMAL	00BBE03 AA001 X03 047/048	00XYD01 XH:013 CD	Gy/1P Y/1P	00BBB8008	UVG44CV	CHN 81	3232	A 1
00BBB03 XW53	11KV STN/ GT BD CUB03 PROT	TRIP NORMAL	00BBE03 AA001 X03 031/032	00XYD01 XH:013 EF	Gn/1P Gn/1P	00BBB8008	UVG44CV	CHN 82	3233	A 2
00BBB04 EW002 XW51	11KV STN/ GT BD CUB 04 DC	FAIL NORMAL	00BBB04 AA001 X03 005/006	00XYD01 XH:014 AB	Be/1P R/1P	00BBB8011	UVG44CV	CHN 83	3234	A 1
00BBB04 XW52	11KV STN/ GT BD CUB 04 T/CCT	FAULT NORMAL	00BBB04 AA001 X03 009/010	00XYD01 XH:014 CD	Gy/1P Y/1P	00BBB8011	UVG44CV	CHN 84	3235	A 1
END OF PAGE 14										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00BBB00 XW33	G/T 11KV BD BUS ZONE PROT	TRIP NORMAL	00BB801 A4C01 X03 045/046	00XYD01 XW:015 AB	Be/1P R/1P	00BBB8013	UVG4ACV	CHN 96	3237	A 2
00BBB00 XW51	G/T 11KV BD BUS ZONE DC	FAIL NORMAL	00BB801 A4001 X03 043/044	00XYD01 XW:015 CD	Gy/1P Y/1P	00BBB8013	UVG4ACV	CHN 97	3238	A 1
00BBB00 XW59	G/T 11KV BD BUS ZONE DISCREP	ALARM NORMAL	00BB801 A4001 X03 046/047	00XYD01 XW:015 EF	Gn/1P Bn/1P	00BBB8013	UVG4ACV	CHN 98	3239	A 1
00ETX90 XW90	220V DC G/T BATT CHARGER	UNHEALTH NORMAL	00ETX90 X05 002/003	00XYD01 XW:017 AB	Be/1P R/1P	00ETX8029	TVH045X	CHN 91	3242	A 1
00XBM10 EW001 XQ83	GAS TURBINE FUEL TANK 1 LEVEL	4-20mA 0-100 %	04BTZ01 G4001 X01 001/002	00XYD01 XW:031 AB	W Be	04BTZ8001	TVH20BX	PW 1C3		A
00XBM10 EW002 XQ83	GAS TURBINE FUEL TANK 2 LEVEL	4-20mA 0-100 %	04BTZ01 GA001 X01 003/004	00XYD01 XW:031 CD	W G	04BTZ8001	TVH20BX	PW 1E0		A
00XKA01 EW001 XQ84	11.5KV G/T BD BB VOLTS	0-5mA 0-11KV	04BTZ01 GA001 X01 005/006	00XYD01 XW:031 EF	W Gn	04BTZ8001	TVH20BX	PW 1C6		A
00XKA01 XQ83	GAS TURBINE FUEL CURVE	4-20mA	04BTZ01 GA001 X01 007/008	00XYD01 XW:031 GH	W Gn	04BTZ8011	TVH20BX	PW 1C2		A
00XKA01 EW001 XQ83	GAS TURBINE RPM	4-20mA 0-5100	04BTZ01 GA001 X01 009/010	00XYD01 XW:001 JK	W Gy	04BTZ8001	TVH20BX	PW 1E4		A
00XKA01 XQ55	11KV GAS TURBINE MW	0-5mA 0-26MW	MEAS	00XYD01 XW:005 AB				PW 1C3		A
00XKA01 XQ56	11KV GAS TURBINE MVAR	0-5mA 0-18MVAR	MEAS	00XYD01 XW:005 CD				PW 1E0		A
00YYA01 XQ52	11KV GAS TURBINE AMPS	0-5mA 0-1800A	MEAS	00XYD01 XW:005 EF				PW 142		A
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SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
00XKA01 EW002 XQ54	11KV GAS TURBINE VOLTS	0-5mA 0-11kV	MEAS	00XYD01 XW:005 GH				PW 144		G
00XKA01 EW001 XQ61	11KV GAS TURBINE FREQUENCY	0-5mA 45-55Hz	MEAS	00XYD01 XW:005 IK				PW 146		G
00XKA01 EW002 XQ61	11KV GAS TURBINE POWER FACTOR	0-5mA 0-1-0	MEAS	00XYD01 XW:006 AB				PW 148		G
02BEB01 XQ52	11KV STN/ GT BD CUB 01 AMPS	0-5mA 0-1800A	00BEB01 AA001 X02 011/012	00XYD01 XW:007 AB	Be/1P R/1P	00BEB0003	UVG44CV	PW 150		G
00BEB01 XQ54	11KV STN/GT INCOMMER VOLTS	0-5mA 0-11KV	00BEB01 AA001 X02 025/026	00XYD01 XW:007 CD	Gy/1P W/1P	00BEB0003	UVG44CV	PW 152		G
00BEB03 XQ54	11KV STN/GT BD BB VOLTS	0-5mA 0-11KV	00BEB01 AA001 X02 027/028	00XYD01 XW:007 EF	Gn/1P Bn/1P	00BEB0003	UVG44CV	PW 154		G
									3257	
									3261	
									3262	
									3259	
									3260	
									3258	
END OF PAGE 16										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
									3263	
00XX401 EG306 XW89	GT DROOP CONTROL COMMAND	FAIL ONLINE						S/W	3299	A 2
00XYD01 EW001 XW00	G/T E490 MODULE	FAULT							3247	E 3
00XYD01 EW002 XW00	G/T E490 MESSAGE MEMORY	FULL							3248	E 3
00XYD01 EW003 XW00	G/T E490 POWER	FAILED							3249	E 3
00XYD01 EW004 XW00	G/T E490 POWER	NORMAL							3250	E 3
00XYD01 EW005 XW00	G/T E490 AUTOMATIC TEST	FAILED							3251	E 3
00XYD01 EW006 XW00	G/T E490 DATE / TIME	UPDATED							3252	E 3
00XYD01 EW007 XW00	G/T E490 UNIT	FAILED							3253	E 3
00XYD01 EW008 XW00	G/T E490 UNIT	NORMAL							3254	E 3
00XYD01 EW009 XW00	G/T E490 SYNCHRONISATION	FAILED							3255	E 3
00XYD01 EW010 XW00	G/T E490 SYNCHRONISATION	NORMAL							3256	E 3
END OF PAGE 17										

SIGNAL KKS	DESCRIPTION OF SIGNAL	ALARM STATUS	REMOTE SIDE FIELD TERMINATION	LOCAL SIDE PLC TERMINATION	COLOR CODING	CABLE NUMBER	CABLE SIZE	CH NR IN/OUTP	ALARM NUMBER	SIG TYPE
									3272	
END OF PAGE 18										

END OF GT SAT PLC C&I SCHEDULE

17. DESCRIPTION LIST

SWITCHGEAR LISTS			KKS
BREAKER	A	11.5kV G/T GEN BOARD CUB 01	01 BBB 01
CONTACTOR	B	380V ESSENTIAL BOARD CONTACTOR	06BFB01
FUSES	C	380V NORMAL SUPPLY FUSES	01BBB01
CONTACTOR	D	380V NORMAL SUPPLY CONTACTOR	06BFB02
BREAKER	E	11kV STATION G/T GEN BOARD CUB 04	00 BBB 04
BREAKER	F	11kV STATION G/T GEN BOARD CUB 03	00 BBB 03
BREAKER	G	11kV STATION G/T GEN BOARD CUB 02	00 BBB 02
BREAKER	H	11kV STATION G/T GEN BOARD CUB 01	00 BBB 01
BREAKER	I	11kV STATION BOARD 1 CUB 14	01 BBA 14
BREAKER	J	11kV STATION BOARD 2 CUB 01	02 BBA 01
BREAKER	K	11kV UNIT BOARD 1A CUB 10	11 BBA 10
BREAKER	L	11kV UNIT BOARD 1A CUB 03	11 BBA 03
BREAKER	M	11kV UNIT BOARD 1A CUB 01	11 BBA 01
BREAKER	N	11kV UNIT BOARD 1B CUB 03	22 BBA 03
BREAKER	O	GENERATOR 1 22kV BREAKER	10 BAC 00
BREAKER	P	GENERATOR 1 400kV BREAKER	10 ACA 00
BREAKER	Q	11kV UNIT BOARD 3A CUB 10	31 BBA 10
BREAKER	R	11kV UNIT BOARD 3A CUB 03	31 BBA 03
BREAKER	S	11kV UNIT BOARD 3A CUB 01	31 BBA 01
BREAKER	T	11kV UNIT BOARD 3B CUB 03	32 BBA 03
BREAKER	U	GENERATOR 3 22kV BREAKER	30 BAC 00
BREAKER	V	GENERATOR 3 400kV BREAKER	30 ACA 00
BREAKER	W	11kV STATION BOARD 1 CUB 05	01 BBA 05
BREAKER	X	11kV UNIT BOARD 5A CUB 10	51 BBA 10
BREAKER	Y	11kV UNIT BOARD 5A CUB 03	51 BBA 03
BREAKER	Z	11kV UNIT BOARD 5A CUB 01	51 BBA 01
BREAKER	AA	11kV UNIT BOARD 5B CUB 03	52 BBA 03
BREAKER	BB	GENERATOR 5 22kV BREAKER	50 BAC 00
BREAKER	CC	GENERATOR 5 400kV BREAKER	50 ACA 00
BREAKER	DD	11kV STATION BOARD 2 CUB 10	02 BBA 10
BREAKER	EE	11kV UNIT BOARD 2A CUB 10	21 BBA 10
BREAKER	FF	11kV UNIT BOARD 2A CUB 03	21 BBA 03
BREAKER	GG	11kV UNIT BOARD 2A CUB 01	21 BBA 01
BREAKER	HH	11kV UNIT BOARD 2B CUB 03	22 BBA 03
BREAKER	I I	GENERATOR 2 22kV BREAKER	20 BAC 00
BREAKER	J J	GENERATOR 2 400kV BREAKER	20 ACA 00
BREAKER	KK	11kV UNIT BOARD 4A CUB 10	41 BBA 10
BREAKER	LL	11kV UNIT BOARD 4A CUB 03	41 BBA 03
BREAKER	MM	11kV UNIT BOARD 4A CUB 01	41 BBA 01
BREAKER	NN	11kV UNIT BOARD 4B CUB 03	42 BBA 03
BREAKER	OO	GENERATOR 4 22kV BREAKER	40 BAC 00
BREAKER	PP	GENERATOR 4 400kV BREAKER	40 ACA 00
BREAKER	QQ	11kV UNIT BOARD 6A CUB 10	61 BBA 10
BREAKER	RR	11kV UNIT BOARD 6A CUB 03	61 BBA 03
BREAKER	SS	11kV UNIT BOARD 6A CUB 01	61 BBA 01
BREAKER	TT	11kV UNIT BOARD 6B CUB 03	62 BBA 03
BREAKER	UU	GENERATOR 6 22kV BREAKER	60 BAC 00
BREAKER	VV	GENERATOR 6 400kV BREAKER	60 ACA 00

KENDAL POWER STATION

BLACK START FACILITY

FIGURE 10 - DETAILED SIGNAL LIST

<u>ISSUE STATUS</u>:

REVISION 2: 10 November 1995

<u>COMPILED BY</u>:

KENDAL POWER STATION
GAS TURBINE

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
01BBB01 EW001 XB01	11.5KV G/T BD GEN BD CUB 01 BKR	OPENED	CLOSED	ES 3	CHN 00	DI	I 4 0	3151
	11.5KV G/T BD GEN BD CUB 01 BKR	FAULT				S/W		
01BBB01 XB51	11 5KV G/T GEN BD CUB 01	REMOTE	LOC/OFF	ES 2	CHN 01	DI	I 4.1	3152
00BBB01 EW001 XB01	11KV STN/GAS TURB BD CUB 01 BKR	OPENED	CLOSED	ES 3	CHN 15	DI	I 4 2	3166
	11KV STN/GAS TURB BD CUB 01 BKR	FAULT				S/W		
00BBB01 EW001 XB51	11KV STN/GAS TURB BD CUB 01	LOC/OFF	REMOTE	ES 2	CHN 16	DI	I 4.3	3167
00BBB02 EW001 XB01	11KV STN/GAS TURB BD CUB 02 BKR	OPENED	CLOSED	ES 3	CHN 20	DI	I 4.4	3171
	11KV STN/GAS TURB BD CUB 02 BKR	FAULT				S/W		
00BBB02 EW001 XB51	11KV STN/GAS TURB BD CUB 02	LOC/OFF	REMOTE	ES 2	CHN 21	DI	I 4 5	3172
00BBB03 EW001 XB01	11KV STN/GAS TURB BD CUB 03 BKR	OPENED	CLOSED	ES 3	CHN 24	DI	I 4.6	3175
	11KV STN/GAS TURB BD CUB 03 BKR	FAULT				S/W		
00BBB03 EW001 XB51	11KV STN/GAS TURB BD CUB 03	LOC/OFF	REMOTE	ES 2	CHN 25	DI	I 4.7	3176
00BBB04 EW001 XB01	11KV STN/GAS TURB BD CUB 04 BKR	OPENED	CLOSED	ES 3	CHN 28	DI	I 5 0	3179
	11KV STN/GAS TURB BD CUB 04 BKR	FAULT				S/W		
00BBB04 EW001 XB51	11KV STN/GAS TURB BD CUB 04	LOC/OFF	REMOTE	ES 2	CHN 29	DI	I 5.1	3180
	SPARE							
01BBB01 XW54	11 5KV G/T BD BB U/V	ALARM	NORMAL	A 1	CHN 02	DI	I 5 2	3153
10BBX30 XW42	G/T - UNIT 1 SYNCHRONISER	IN OPER	OFF	ES 3	CHN 03	DI	I 5 3	3154
20BBX30 XW42	G/T - UNIT 2 SYNCHRONISER	IN OPER	OFF	ES 3	CHN 04	DI	I 5.4	3155
30BBX30 XW42	G/T - UNIT 3 SYNCHRONISER	IN OPER	OFF	ES 3	CHN 05	DI	I 5 5	3156
40BBX30 XW42	G/T - UNIT 4 SYNCHRONISER	IN OPER	OFF	ES 3	CHN 06	DI	I 5 6	3157
50BBX30 XW42	G/T - UNIT 5 SYNCHRONISER	IN OPER	OFF	ES 3	CHN 07	DI	I 5 7	3158
60BBX30 XW42	G/T - UNIT 6 SYNCHRONISER	IN OPER	OFF	ES 3	CHN 08	DI	I 6 0	3159
00BBX30 EW002 XW42	G/T - STN TRFR SYNCHRONISER	IN OPER	OFF	ES 3	CHN 09	DI	I 6.1	3160
00BBX30 EW001 XW42	G/T SYNCHRONISER (K10)	IN OPER	COMPL	E 2	CHN 10	DI	I 6.2	3161
00BBX30 XB51	G/T SYNCHRONISER	REMOTE	LOCAL	ES 3	CHN 11	DI	I 6.3	3162
00BFB01 XW54	380V GAS TURB BD BB U/V	ALARM	NORMAL	A 1	CHN 12	DI	I 6 4	3163
00BBB00 EW002 XW54	11KV STN/ GT BD BB U/V	ALARM	NORMAL	A 1	CHN 19	DI	I 6.5	3170
00XYD01 XW01	GAS TURBINE PLC COOLING FAN	FAULT	NORMAL	A 1	S/W	DI	I 6.6	
	SPARE							
00XYD01 EW001 XW02	GAS TURBINE PLC MCB TRIPPED	ALARM	NORMAL	A 1	S/W	DI	I 6.7	3281
	GAS TURBINE UNACK FAULT LED	FAULT	NORMAL			S/W		
07BFB01 EW002 XB01	380V G/T BD GEN BUSBAR SUPL LINK	CLOSED	OPENED	ES 3	CHN 13	DI	I 7 0	3164
	380V G/T BD GEN BUSBAR SUPL LINK	FAULT				S/W		
07BFB01 EW001 XB01	380V G/T BD ESSENTIAL SUPL LINK	CLOSED	OPENED	ES 3	CHN 14	DI	I 7.1	3165
	380V G/T BD ESSENTIAL SUPL LINK	FAULT				S/W		
00BBB01 EW002 XB01	11KV STN/ GT BD CUB 01 CBL E/S	ON	OFF	ES 3	CHN 17	DI	I 7.2	3168
	11KV STN/ GT BD CUB 01 CBL E/S	FAULT				S/W		
00BBB01 EW003 XB01	11KV STN/ GT BD CUB 01 ISOLATOR	CLOSED	OPENED	ES 3	CHN 18	DI	I 7.3	3169
	11KV STN/ GT BD CUB 01 ISOLATOR	FAULT				S/W		
00BBB02 EW002 XB01	11KV STN/ GT BD CUB 02 CBL E/S	ON	OFF	ES 3	CHN 22	DI	I 7.4	3173

KENDAL POWER STATION
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KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
	11KV STN/ GT BD CUB 02 CBL E/S	FAULT				S/W		
00BBB02 EW003 XB01	11KV STN/ GT BD CUB 02 ISOLATOR	CLOSED	OPENED	ES 3	CHN 23	DI	I 7.5	3174
	11KV STN/ GT BD CUB 02 ISOLATOR	FAULT				S/W		
00BBB03 EW002 XB01	11KV STN/ GT BD CUB 03 CBL E/S	ON	OFF	ES 3	CHN 26	DI	I 7 6	3177
	11KV STN/ GT BD CUB 03 CBL E/S	FAULT				S/W		
00BBB03 EW003 XB01	11KV STN/ GT BD CUB 03 ISOLATOR	CLOSED	OPENED	ES 3	CHN 27	DI	I 7 7	3178
	11KV STN/ GT BD CUB 03 ISOLATOR	FAULT				S/W		
00BBB04 EW002 XB01	11KV STN/ GT BD CUB 04 CBL E/S	ON	OFF	ES 3	CHN 30	DI	I 8 0	3181
	11KV STN/ GT BD CUB 04 CBL E/S	FAULT				S/W		
00BBB04 EW003 XB01	11KV STN/ GT BD CUB 04 ISOLATOR	CLOSED	OPENED	ES 3	CHN 31	DI	I 8 1	3182
	11KV STN/ GT BD CUB 04 ISOLATOR	FAULT				S/W		
00XKA01 EW002 XW42	GAS TURBINE SEQUENCE	INCOMPLE	NORMAL	A 2	CHN 42	DI	I 8 2	3193
00XKA01 EW003 XW42	GAS TURB LOW FORWARD POWER	OPER	NORMAL	E 1	CHN 54	DI	I 8 3	3205
00XKA01 EW011 XW54	GAS TURBINE SYSTEM UNDER FREQ	ALARM	NORMAL	A 1	CHN 55	DI	I 8.4	3206
00XKA01 XW61	GAS TURBINE READY TO START	NORMAL	UNHEALTH	E 1	CHN 57	DI	I 8.5	3208
00XKA01 EW012 XW54	GAS TURBINE START PULSE	ACTIVE	NORMAL	E 2	CHN 58	DI	I 8 6	3209
00XKA01 EW005 XW54	GAS TURBINE AUX RUNNING	ON	OFF	E 2	CHN 59	DI	I 8 7	3210
00XKA01 EW001 XW54	GAS TURBINE FLAME SELECTION	ON	OFF	E 2	CHN 60	DI	I 9 0	3211
00XKA01 EW009 XW54	GAS TURB BASE LOAD SELECTION	ON	OFF	E 2	CHN 61	DI	I 9.1	3212
00XKA01 EW002 XW54	GAS TURB PEAK LOAD SELECTION	ON	OFF	E 2	CHN 62	DI	I 9 2	3213
00XKA01 EW008 XW54	GAS TURBINE TEMP CONTROL	ON	OFF	E 2	CHN 63	DI	I 9.3	3214
00XKA01 EW001 XW42	GAS TURBINE CONTROL SEQUENCE IN	PROGRESS	OFF			DI	I 9 4	
00XKA01 EW004 XW54	GAS TURBINE CONTROL SEQUENCE	COMPLETE	NORMAL	E 2	CHN 65	DI	I 9 5	3216
	SPARE							
00XKA01 EW003 XW54	GAS TURBINE ISOCH CONTROL MODE	ON	NORMAL	E 2	CHN 66	DI	I 9.6	3217
00XKA01 EW007 XW54	GAS TURBINE DROOP CONTROL MODE	ON	NORMAL	E 2	CHN 67	DI	I 9 7	3218
00XKA01 EW001 XB01	GAS TURBINE SYNC COND OPERATION	ON	OFF	E 3	CHN 68	DI	I 10 0	3219
00XKA01 EW003 XB01	GAS TURBINE GENERATOR OPERATION	ON	OFF	E 3	CHN 69	DI	I 10.1	3220
00BBX30 XW51	GAS TURBINE SYNCHRONISER DC	FAIL	NORMAL	A 1	CHN 70	DI	I 10 2	3221
00BBB00 EW001 XW54	11KV STN/ GT BD CABLE U/V	ALARM	NORMAL	A 1	CHN 92	DI	I 10 3	3243
01BBA00 EW001 XW54	11KV STATION BD 1 BB U/V	ALARM	NORMAL	A 1	CHN 93	DI	I 10 4	3244
02BBA00 EW001 XW54	11KV STATION BD 2 BB U/V	ALARM	NORMAL	A 1	CHN 94	DI	I 10 5	3245
	SPARE					DI	I 10.6	
00XYD01 EW002 XW02	GAS TURBINE MEAS SUPPLY	FAIL	NORMAL	A 1	S/W	DI	I 10 7	3282
00XKA01 EW004 XB01	G/T AVR SELECTED FOR	SINGLE	PARRALEL	E 1	CHN 90	DI	I 11.0	3241
00XKA01 EW002 XB01	G/T MASTER CONTOLLER SWITCH	REMOTE	MAN/OFF	E 3	CHN 89	DI	I 11 1	3240
00XKA01 EW003 XB01	G/T AVR SELECTED TO	AUTO	HAND/TRF	ES 3	CHN 95	DI	I 11.2	3246
	SPARE					DI	I 11 3	
	SPARE					DI	I 11.4	
	SPARE					DI	I 11 5	
00XKA01 EW001 XW51	BLACK START SYNCH	DISABLE	OFF	E 2	CHN 56	DI	I 11.6	3207

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
00XKA01 XW42	GAS TURBINE AVR MODE	SINGLE	PARALLEL			DI	I 11.7	
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	SPARE							
	BLACK START	SELECTED				S/W		
	UNIT 1 BLACK START	SELECTED				S/W		
	UNIT 2 BLACK START	SELECTED				S/W		
	UNIT 3 BLACK START	SELECTED				S/W		
	UNIT 4 BLACK START	SELECTED				S/W		
	UNIT 5 BLACK START	SELECTED				S/W		
	UNIT 6 BLACK START	SELECTED				S/W		
	MONTHLY START	SELECTED				S/W		
	"SELECT UNIT TO BLACK START"	PROMPT				S/W		
	"BLACK START MASK"	PROMPT				S/W		
	"OPERATOR SEQ CONT / ABORT"	PROMPT				S/W		
	"TIMEOUT CONT / ABORT"	PROMPT				S/W		
	"AUTO / MAN STOP"	PROMPT				S/W		
	SEQUENCER	FAULTY				S/W		
	BLACK START SEQUENCER	IN PROGRESS	FINISHED			S/W		
	MONTHLY START SEQUENCER	IN PROGRESS	FINISHED			S/W		
	BREAKER E CLOSE	ENABLED	INTERLOCKED			S/W	F 130 0	
	BREAKERS K, Q, X	OPENED	NOT OPENED			S/W	F 130 1	
	LOOP 1 OR STN BD 1	ISOLATED	NOT ISOLATED			S/W	F 130 2	
	BREAKERS EE, KK, QQ	OPENED	NOT OPENED			S/W	F 130 3	
	LOOP 2 OR STN BD 2	ISOLATED	NOT ISOLATED			S/W	F 130 4	
	BREAKER E SO CALLED	OPENED	NOT OPENED			S/W	F 130.5	
	BREAKER F SO CALLED	OPENED	NOT OPENED			S/W	F 130.6	
	GAS TURBINE	ISOLATED	NOT ISOLATED			S/W	F 130.7	
	BREAKER H PRIM COND	SATISFIED	NOT SATISFIED			S/W	F 131 0	
	BREAKER H CLOSE	ENABLED	INTERLOCKED			S/W	F 131.1	
	LOOPS AND STN BOARDS	ISOLATED	NOT ISOLATED			S/W	F 131.2	

KENDAL POWER STATION
GAS TURBINE

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
	UNITS AND STN BOARDS	ISOLATED	NOT ISOLATED			S/W	F 131.3	
	BREAKER G PRIM COND	SATISFIED	NOT SATISFIED			S/W	F 131 4	
	BREAKER G CLOSE	ENABLED	INTERLOCKED			S/W	F 131 5	
	SEQUENCER MONITORING TIME	ACTIVE	NOT ACTIVE			S/W	F 131.6	
	SEQUENCER WAITING TIME	ACTIVE	NOT ACTIVE			S/W	F 131 7	
00XBN10 EW001 XQ63	GAS TURBINE FUEL TANK 1 LEVEL	4-20mA	0-100 %			AI	PW 128	
00XBN10 EW002 XQ63	GAS TURBINE FUEL TANK 2 LEVEL	4-20mA	0-100 %			AI	PW 130	
00XKA01 XQ63	GAS TURBINE FUEL CURVE	4-20mA				AI	PW 132	
00XKA01 EW001 XQ63	GAS TURBINE RPM	4-20mA	0-5100			AI	PW 134	
00XKA01 EW001 XQ54	11,5KV G/T BD BB VOLTS	0-5mA	0-11KV			AI	PW 136	
00XKA01 XQ55	11KV GAS TURBINE MW	0-5mA	0-36MW			AI	PW 138	
00XKA01 XQ56	11KV GAS TURBINE MVAR	0-5mA	0-18MVAR			AI	PW 140	
00XKA01 XQ52	11KV GAS TURBINE AMPS	0-5mA	0-1800A			AI	PW 142	
00XKA01 EW002 XQ54	11KV GAS TURBINE VOLTS	0-5mA	0-11kV			AI	PW 144	
00XKA01 EW001 XQ61	11KV GAS TURBINE FREQUENCY	0-5mA	45-55Hz			AI	PW 146	
00XKA01 EW002 XQ61	11KV GAS TURBINE POWER FACTOR	0-5mA	0-1-0			AI	PW 148	
02BBB01 XQ52	11KV STN/ GT BD CUB 01 AMPS	0-5mA	0-1800A			AI	PW 150	
00BBB01 XQ54	11KV STN/GT INCOMMER VOLTS	0-5mA	0-11KV			AI	PW 152	
00BBB00 XQ54	11KV STN/GT BD BB VOLTS	0-5mA	0-11KV			AI	PW 154	
	SPARE	0-5mA				AI	PW 156	
	SPARE	0-5mA				AI	PW 158	
	SEQUENCE PROGRAM STEP NUMBER					S/W		
01BBB01 YB92	11 5KV G/T GEN BD CUB 01 BKR	CLOSE				DQ	Q 4 0	
01BBB01 YB91	11 5KV G/T GEN BD CUB 01 BKR	OPEN				DQ	Q 4 1	
00BBB01 YB92	11KV STN/GAS TURB BD CUB 01 BKR	CLOSE				DQ	Q 4 2	
00BBB01 YB91	11KV STN/GAS TURB BD CUB 01 BKR	OPEN				DQ	Q 4 3	
00BBB02 YB92	11KV STN/GAS TURB BD CUB 02 BKR	CLOSE				DQ	Q 4.4	
00BBB02 YB91	11KV STN/GAS TURB BD CUB 02 BKR	OPEN				DQ	Q 4.5	
00BBB03 YB92	11KV STN/GAS TURB BD CUB 03 BKR	CLOSE				DQ	Q 4 6	
00BBB03 YB91	11KV STN/GAS TURB BD CUB 03 BKR	OPEN				DQ	Q 4 7	
00BBB04 YB92	11KV STN/GAS TURB BD CUB 04 BKR	CLOSE				DQ	Q 5 0	
00BBB04 YB91	11KV STN/GAS TURB BD CUB 04 BKR	OPEN				DQ	Q 5.1	
00XKA01 EW001 XW92	GAS TURBINE STARTING SEQUENCE	COMMAND				DQ	Q 5 2	
00XKA01 EW004 XW92	GAS TURBINE STOP SEQUENCE	COMMAND				DQ	Q 5 3	
00XKA01 EW002 XW92	GAS TURBINE BASE LOAD CONTROL	COMMAND				DQ	Q 5 4	
00XKA01 EW003 XW92	GAS TURBINE PEAK LOAD CONTROL	COMMAND				DQ	Q 5 5	
00XKA01 EW001 YB93	GAS TURBINE VOLTAGE	RAISE				DQ	Q 5 6	
00XKA01 EW002 YB94	GAS TURBINE VOLTAGE	LOWER				DQ	Q 5 7	
00XKA01 EW002 YB93	GAS TURBINE FREQUENCY	RAISE				DQ	Q 6 0	
00XKA01 EW001 YB94	GAS TURBINE FREQUENCY	LOWER				DQ	Q 6.1	
00XKA01 EG003 YB92	GAS TURBINE ISOCH (FREE RUNNING)	COMMAND				DQ	Q 6 2	

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
00XKA01 EG002 YB92	GAS TURBINE SPEED DROOP	COMMAND				DQ	Q 6.3	
00XKA01 EG001 YB92	GAS TURBINE EMERGENCY STOP	COMMAND				DQ	Q 6.4	
10BBX30 XW92	GAS TURBINE - UNIT 1 SYNCH ON	COMMAND				DQ	Q 6.5	
20BBX30 XW92	GAS TURBINE - UNIT 2 SYNCH ON	COMMAND				DQ	Q 6 6	
30BBX30 XW92	GAS TURBINE - UNIT 3 SYNCH ON	COMMAND				DQ	Q 6.7	
40BBX30 XW92	GAS TURBINE - UNIT 4 SYNCH ON	COMMAND				DQ	Q 7 0	
50BBX30 XW92	GAS TURBINE - UNIT 5 SYNCH ON	COMMAND				DQ	Q 7.1	
60BBX30 XW92	GAS TURBINE - UNIT 6 SYNCH ON	COMMAND				DQ	Q 7.2	
00BBX30 EW002 YB92	GAS TURBINE - STN TRFR SYNCH ON	COMMAND				DQ	Q 7 3	
00XKA01 EG009 XW89	GAS TURBINE AVR DROOP/NORMAL	COMMAND				DQ	Q 7 4	
00XYD01 EW001 XW00	TIME PULSE ON EVERY DAY					DQ	Q 7 5	
	GAS TURBINE - SYNCH OFF	COMMAND				S/W	F 172.5	
00XYD01 EW002 XW00	TIME PULSE ON EVERY MINUTE					DQ	Q 7 6	
	ACKNOWLEDGE UNIT CO					S/W		
00XYD01 EW003 XW00	TIME PULSE ON EVERY HOUR					DQ	Q 7.7	
	ACKNOWLEDGE SSB CO					S/W	F 172.7	
	SPARE					DQ	Q 8 0	
	SPARE					DQ	Q 8 1	
	SPARE					DQ	Q 8 2	
	SPARE					DQ	Q 8 3	
	SPARE					DQ	Q 8 4	
	SPARE					DQ	Q 8 5	
	SPARE					DQ	Q 8 6	
	SPARE					DQ	Q 8 7	
00XKA01 EW001 YB92	DISABLE BKR (E) FEEDBACK	COMMAND				DQ	Q 9 0	
	SPARE					DQ	Q 9 1	
	SPARE					DQ	Q 9.2	
	SPARE					DQ	Q 9 3	
	SPARE					DQ	Q 9 4	
	SPARE					DQ	Q 9 5	
	SPARE					DQ	Q 9 6	
	SPARE					DQ	Q 9 7	
	SPARE					DQ	Q 10.0	
	SPARE					DQ	Q 10 1	
	SPARE					DQ	Q 10 2	
	SPARE					DQ	Q 10 3	
	SPARE					DQ	Q 10 4	
	SPARE					DQ	Q 10 5	
	SPARE					DQ	Q 10 6	
	SPARE					DQ	Q 10.7	
	SPARE					DQ	Q 11 0	

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
	SPARE					DQ	Q 11 1	
	SPARE					DQ	Q 11.2	
	SPARE					DQ	Q 11 3	
	SPARE					DQ	Q 11.4	
	SPARE					DQ	Q 11 5	
	SPARE					DQ	Q 11.6	
	SPARE					DQ	Q 11.7	
	OPERATOR START MONTHLY SEQUENCE	COMMAND				S/W	F 174 0	
	OPERATOR CONTINUE SEQUENCE	COMMAND				S/W	F 174 1	
	SPARE					S/W	F 174 2	
	OPERATOR ABORT SEQUENCE	COMMAND				S/W	F 174 3	
	SPARE					S/W	F 174 4	
	SPARE					S/W	F 174 5	
	SPARE					S/W	F 174 6	
	SPARE					S/W	F 174 7	
	SPARE					S/W	F 175 0	
	OPERATOR START UNIT 1 SEQUENCE	COMMAND				S/W	F 175 1	
	OPERATOR START UNIT 2 SEQUENCE	COMMAND				S/W	F 175 2	
	OPERATOR START UNIT 3 SEQUENCE	COMMAND				S/W	F 175 3	
	OPERATOR START UNIT 4 SEQUENCE	COMMAND				S/W	F 175 4	
	OPERATOR START UNIT 5 SEQUENCE	COMMAND				S/W	F 175 5	
	OPERATOR START UNIT 6 SEQUENCE	COMMAND				S/W	F 175 6	
	SPARE					S/W	F 175 7	
	G/T E490 MODULE	FAULT			S/W	S/W		3247
	G/T E490 MESSAGE MEMORY	FULL		E3	S/W	S/W		3248
	G/T E490 POWER	FAILED		E3	S/W	S/W		3249
	G/T E490 POWER	NORMAL		E3	S/W	S/W		3250
	G/T E490 AUTOMATIC TEST	FAILED		E3	S/W	S/W		3251
	G/T E40 DATE / TIME	UPDATED		E3	S/W	S/W		3252
	G/T E490 UNIT	FAILED		E3	S/W	S/W		3253
	G/T E490 UNIT	NORMAL		E3	S/W	S/W		3254
	G/T E490 SYNCHRONISATION	FAILED		E3	S/W	S/W		3255
	G/T E490 SYNCHRONISATION	NORMAL		E3	S/W	S/W		3256
	SPARE				S/W	S/W		3257
	SPARE				S/W	S/W		3258
	SPARE				S/W	S/W		3259
	SPARE				S/W	S/W		3260
	SPARE				S/W	S/W		3261
	SPARE				S/W	S/W		3262
	SPARE				S/W	S/W		3263
	SPARE				S/W	S/W		3264

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
	SPARE				S/W	S/W		3265
	SPARE				S/W	S/W		3266
	SPARE				S/W	S/W		3267
	SPARE				S/W	S/W		3268
00XYD01 EG002 XW00	GT H1 LINK TO UNIT CO-ORDINATOR	DISCONN	ONLINE	A 2	S/W	S/W		3269
00XYD01 EG003 XW00	GT H1 LINK TO STN CO-ORDINATOR	DISCONN	ONLINE	A 2	S/W	S/W		3270
00XYD01 EG004 XW00	GT H1 LINK TO ALARM CO-ORDINATOR	DISCONN	ONLINE	A 2	S/W	S/W		3271
03UXB02 XW58	G/T HARMONIC FILTER ROOM FAN	FAIL	NORMAL	A 1	S/W	S/W		3272
00XYD01 EG006 XW00	GT H1 LINK TO SSB SAT	DISCONN	ONLINE	A 2	S/W	S/W		3273
00XYD01 EG007 XW00	GT H1 LINK TO UNIT 1 SAT	DISCONN	ONLINE	A 2	S/W	S/W		3274
00XYD01 EG008 XW00	GT H1 LINK TO UNIT 2 SAT	DISCONN	ONLINE	A 2	S/W	S/W		3275
00XYD01 EG009 XW00	GT H1 LINK TO UNIT 3 SAT	DISCONN	ONLINE	A 2	S/W	S/W		3276
00XYD01 EG010 XW00	GT H1 LINK TO UNIT 4 SAT	DISCONN	ONLINE	A 2	S/W	S/W		3277
00XYD01 EG011 XW00	GT H1 LINK TO UNIT 5 SAT	DISCONN	ONLINE	A 2	S/W	S/W		3278
00XYD01 EG012 XW00	GT H1 LINK TO UNIT 6 SAT	DISCONN	ONLINE	A 2	S/W	S/W		3279
00XYD01 XW51	GAS TURBINE PLC COOLING FAN / BATT	FAULT	NORMAL	A 1	S/W	S/W		3280
	SPARE				S/W	S/W		3283
01BBB01 XW88	11 5KV G/T GEN BD CUB 01 OPEN	FAIL	NORMAL	A 2	S/W	S/W		3284
01BBB01 XW89	11 5KV G/T GEN BD CUB 01 CLOSE	FAIL	NORMAL	A 2	S/W	S/W		3285
00BBB01 XW88	11KV STN/GAS TURB BD CUB 01 OPEN	FAIL	NORMAL	A 2	S/W	S/W		3286
00BBB01 XW89	11KV STN/GAS TURB BD CUB01 CLOSE	FAIL	NORMAL	A 2	S/W	S/W		3287
00BBB02 XW88	11KV STN/GAS TURB BD CUB 02 OPEN	FAIL	NORMAL	A 2	S/W	S/W		3288
00BBB02 XW89	11KV STN/GAS TURB BD CUB02 CLOSE	FAIL	NORMAL	A 2	S/W	S/W		3289
00BBB03 XW88	11KV STN/GAS TURB BD CUB 03 OPEN	FAIL	NORMAL	A 2	S/W	S/W		3290
00BBB03 XW89	11KV STN/GAS TURB BD CUB03 CLOSE	FAIL	NORMAL	A 2	S/W	S/W		3291
00BBB04 XW88	11KV STN/GAS TURB BD CUB 04 OPEN	FAIL	NORMAL	A 2	S/W	S/W		3292
00BBB04 XW89	11KV STN/GAS TURB BD CUB04 CLOSE	FAIL	NORMAL	A 2	S/W	S/W		3293
00XKA01 EG002 XW89	G/T BASE LOAD CONTROL COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3294
00XKA01 EG001 XW89	G/T PEAK LOAD CONTROL COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3295
00XKA01 EG003 XW89	G/T STOP SEQUENCE COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3296
00XKA01 EG004 XW89	G/T STARTING SEQUENCE COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3297
00XKA01 EG005 XW89	G/T ISOCH CONTROL COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3298
00XKA01 EG006 XW89	G/T DROOP CONTROL COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3299
10BBX30 XW89	G/T - UNIT 1 SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3300
	SPARE				S/W	S/W		3301
20BBX30 XW89	G/T - UNIT 2 SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3302
	SPARE				S/W	S/W		3303
30BBX30 XW89	G/T - UNIT 3 SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3304
	SPARE				S/W	S/W		3305
40BBX30 XW89	G/T - UNIT 4 SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3306
	SPARE				S/W	S/W		3307

KENDAL POWER STATION
GAS TURBINE

KKS OF SIGNAL	DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
50BBX30 XW89	G/T - UNIT 5 SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3308
	SPARE				S/W	S/W		3309
60BBX30 XW89	G/T - UNIT 6 SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3310
	SPARE				S/W	S/W		3311
00BBX30 XW89	G/T - STN TRFR SYNCH ON COMMAND	FAIL	NORMAL	A 2	S/W	S/W		3312
00XKA01 EW004 XW52	GAS TURBINE MCC VOLTAGE	FAULT	NORMAL	A 1	CHN 32			3183
00XKA01 EW008 XW52	GAS TURBINE MINOR ALARM	FAULT	NORMAL	A 1	CHN 33			3184
00XKA01 EW007 XW52	GAS TURBINE LUB OIL SYSTEMS	FAULT	NORMAL	A 1	CHN 34			3185
00XKA01 EW006 XW52	GAS TURBINE SPEED	FAULT	NORMAL	A 1	CHN 35			3186
00XKA01 EW010 XW54	GAS TURBINE GEN STATOR TEMP	ALARM	NORMAL	A 1	CHN 36			3187
00XKA01 EW003 XW52	GAS TURBINE AUX MOTORS	FAULT	NORMAL	A 1	CHN 37			3188
00XKA01 EW001 XW52	GAS TURBINE FUEL SYSTEM	FAULT	NORMAL	A 1	CHN 38			3189
00XKA01 EW011 XW52	GAS TURBINE AVR	FAULTY	NORMAL	A 1	CHN 39			3190
01BBB01 XW53	11 5KV G/T GEN BD CUB 01 BKR	TRIP	NORMAL	A 2	CHN 40			3191
00XKA01 EW010 XW52	GAS TURBINE STARTING DIESEL	FAULTY	NORMAL	A 1	CHN 41			3192
00XKA01 EW005 XW52	GAS TURBINE TEMP SYSTEM	FAULT	NORMAL	A 1	CHN 43			3194
00XKA01 EW009 XW52	GAS TURBINE VIBRATION	FAULT	NORMAL	A 1	CHN 44			3195
00XBN10 XB51	GAS TURBINE FUEL LEVEL	LOW	NORMAL	A 1	CHN 45			3196
00XKA01 EW006 XW54	GAS TURBINE FIRE	ALARM	NORMAL	A 1	CHN 46			3197
00XKA01 XW51	GAS TURBINE HYDROLIC TRIP PRESS	LOW	NORMAL	A 1	CHN 47			3198
00XKA01 EW002 XW52	GAS TURBINE FIRING SYSTEM	FAULT	NORMAL	A 1	CHN 48			3199
00XKA01 EW002 XW53	GAS TURBINE PRIMARY PROT	TRIP	NORMAL	A 2	CHN 49			3200
01BFT01 XW57	380V G/T AUX BD TRFR OIL TEMP	ALARM	NORMAL	A 1	CHN 50			3201
01BBA01 XW52	11.5KV G/T GEN BD CUB 01 T/CCT	FAULT	NORMAL	A 1	CHN 51			3202
00XKA01 EW003 XW53	GAS TURBINE BUS ZONE PROT	TRIP	NORMAL	A 2	CHN 52			3203
00XKA01 EW001 XW53	GAS TURBINE B/U PROT	TRIP	NORMAL	A 2	CHN 53			3204
01UXB01 XW54	G/T BATTERY ROOM VENT FAN	FAIL	NORMAL	A 1	CHN 64			3215
00BTX87 XW58	G/T 24V STARTER BATT CHARGER	UNHEALTH	NORMAL	A 1	CHN 71			3222
00BTX88 XW58	G/T 24V PLC POWER PACK	UNHEALTH	NORMAL	A 1	CHN 72			3223
00BTX89 XW58	G/T 110V MMCC BATT CHARGER	UNHEALTH	NORMAL	A 1	CHN 73			3224
00BBB01 EW002 XW51	11KV STN/ GT BD CUB 01 DC	FAIL	NORMAL	A 1	CHN 74			3225
00BBB01 XW52	11KV STN/ GT BD CUB 01 T/CCT	FAULT	NORMAL	A 1	CHN 75			3226
00BBB00 EW001 XW51	11KV STN/GAS BD 220V DC SUPPLY	FAIL	NORMAL	A 1	CHN 76			3227
00BBB02 EW002 XW51	11KV STN/ GT BD CUB 02 DC	FAIL	NORMAL	A 1	CHN 77			3228
00BBB02 XW52	11KV STN/ GT BD CUB 02 T/CCT	FAULT	NORMAL	A 1	CHN 78			3229
00BBB02 EW002 XW53	11KV STN/ GT BD CUB02 PROT	TRIP	NORMAL	A 2	CHN 79			3230
00BBB03 EW002 XW51	11KV STN/ GT BD CUB 03 DC	FAIL	NORMAL	A 1	CHN 80			3231
00BBB03 XW52	11KV STN/ GT BD CUB 03 T/CCT	FAULT	NORMAL	A 1	CHN 81			3232
00BBB03 XW53	11KV STN/ GT BD CUB03 PROT	TRIP	NORMAL	A 2	CHN 82			3233
00BBB04 EW002 XW51	11KV STN/ GT BD CUB 04 DC	FAIL	NORMAL	A 1	CHN 83			3234
00BBB04 XW52	11KV STN/ GT BD CUB 04 T/CCT	FAULT	NORMAL	A 1	CHN 84			3235

KKS OF SIGNAL		DESCRIPTION OF SIGNAL	COMING TEXT	GOING TEXT	ALARM PRIORITY	E490 CHN	I/O TYPE	PLC ADDRESS	ALARM NO.
		SPARE				CHN 85			3236
00BBB00	XW53	G/T 11KV BD BUS ZONE PROT	TRIP	NORMAL	A 2	CHN 86			3237
00BBB00	XW51	G/T 11KV BD BUS ZONE DC	FAIL	NORMAL	A 1	CHN 87			3238
00BBB00	XW59	G/T 11KV BD BUS ZONE DISCREP	ALARM	NORMAL	A 1	CHN 88			3239
00BTX90	XW90	220V DC G/T BATT CHARGER	UNHEALTH	NORMAL	A 1	CHN 91			3242