



ภาคผนวก

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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ภาคผนวก ก

ข้อมูลสถานะการเดินเครื่องในสภาพปัจจุบันของโรงไฟฟ้าแม่เมาะ หน่วยที่ 8
(ตัวอย่าง จำนวน 1 ชั่วโมง)

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ตาราง ก1 ข้อมูลสถานะการเดินเครื่องโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ที่กำลังการผลิต 300 MW

Date/Time	Condenser Pressure	Condenser Temp	Deaerator Pressure	Main Steam Temp RA20	Main Steam Temp RA10	TB HP Outlet Pressure	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Flow RA20
1	U0880SD11 P001	U0880SD11 T002	U0880RH50 P002	U0880RA20 T003	U0880RA10 T003	U0880RC01 P001	U0880RA20 P003	U0880RA10 P003	U0880RA20 F001
16/7/2555 0:00	0.088201	44.062	9.8025	539.927	539.768	40.2252	160.342	160.443	128.435
16/7/2555 0:01	0.088201	44.062	9.8025	540.107	539.173	40.2252	160.342	160.443	128.435
16/7/2555 0:02	0.088201	44.062	9.8025	540.41	538.568	40.2252	160.203	160.242	128.435
16/7/2555 0:03	0.088201	44.062	9.81781	540.867	538.427	40.2365	160.193	159.894	128.508
16/7/2555 0:04	0.088201	44.062	9.82875	541.392	538.54	40.4503	160.193	159.894	128.926
16/7/2555 0:05	0.086776	44.062	9.82875	541.599	539.032	40.4503	160.193	159.894	128.926
16/7/2555 0:06	0.086701	44.062	9.82875	541.766	539.864	40.4503	160.193	159.894	128.751
16/7/2555 0:07	0.086701	44.0646	9.82875	541.724	540.885	40.4503	160.193	159.894	127.429
16/7/2555 0:08	0.086701	44.1376	9.82875	541.404	541.49	40.4503	160.193	159.894	127.758
16/7/2555 0:09	0.086701	44.1376	9.82875	541.225	541.944	40.4503	160.193	159.894	127.497
16/7/2555 0:10	0.086701	44.1376	9.82875	540.505	541.503	40.4503	160.193	159.894	128.553
16/7/2555 0:11	0.086701	44.1376	9.82875	539.23	540.192	40.4503	160.193	159.894	129.164
16/7/2555 0:12	0.086701	44.1376	9.82875	538.203	539.344	40.4503	160.193	159.894	127.791
16/7/2555 0:13	0.086701	44.1376	9.82875	537.804	538.966	40.4503	160.193	159.894	127.638
16/7/2555 0:14	0.086701	44.1376	9.82875	538.136	539.209	40.4503	159.552	159.754	127.638
16/7/2555 0:15	0.086701	44.1376	9.81268	539.208	540.373	40.4419	159.494	159.494	127.638
16/7/2555 0:16	0.086701	44.1376	9.8012	540.232	541.15	40.2	159.494	159.494	127.638
16/7/2555 0:17	0.086142	44.1376	9.8012	540.659	540.809	40.2	159.494	159.494	127.638
16/7/2555 0:18	0.086102	44.1376	9.8012	540.867	540.063	40.2	159.494	159.494	127.638
16/7/2555 0:19	0.086102	44.1313	9.8012	540.665	539.698	40.2	159.494	159.494	128.691
16/7/2555 0:20	0.086102	43.9499	9.8012	540.39	539.637	40.2	159.494	159.494	128.023
16/7/2555 0:21	0.086102	43.9499	9.8012	540.335	540.104	40.2	159.494	159.494	128.191
16/7/2555 0:22	0.086102	43.9499	9.8012	539.728	540.121	40.2	159.494	159.494	128.31
16/7/2555 0:23	0.086102	43.9499	9.8012	539.495	539.667	40.2	159.494	159.494	127.661
16/7/2555 0:24	0.086102	43.9499	9.8012	539.665	539.133	40.2	159.494	159.494	127.686
16/7/2555 0:25	0.086102	43.9499	9.8012	540.05	538.88	40.2	159.494	159.494	129.166
16/7/2555 0:26	0.086102	43.9499	9.8012	540.822	539.138	40.2	159.898	159.818	127.95
16/7/2555 0:27	0.086102	43.9499	9.8012	541.334	539.763	40.2	159.943	160.467	127.789
16/7/2555 0:28	0.086102	43.9499	9.8012	541.164	540.091	40.1749	159.943	160.467	127.789
16/7/2555 0:29	0.086382	43.9499	9.8012	540.719	539.675	40.1749	159.943	160.467	126.735
16/7/2555 0:30	0.086402	43.9499	9.8012	540.357	538.918	40.1749	159.943	160.467	127.815
16/7/2555 0:31	0.086012	43.9424	9.8012	539.98	538.162	40.1749	159.943	160.467	129.219
16/7/2555 0:32	0.085802	43.7244	9.8012	539.688	537.579	40.1749	159.943	160.467	129.219
16/7/2555 0:33	0.085802	43.7244	9.8012	539.727	537.529	40.1749	159.943	160.467	128.881
16/7/2555 0:34	0.085802	43.7244	9.8012	540.013	538.154	40.1749	159.943	160.467	127.66
16/7/2555 0:35	0.085802	43.7244	9.8012	540.217	539.125	40.1749	159.943	160.467	129.062
16/7/2555 0:36	0.085802	43.7244	9.8012	540.28	540.028	40.1749	159.943	160.467	128.543
16/7/2555 0:37	0.085802	43.7244	9.8012	540.502	541.019	40.1749	159.943	160.467	128.11

Date/Time	Condenser Pressure	Condenser Temp	Deaerator Pressure	Main Steam Temp RA20	Main Steam Temp RA10	TB HP Outlet Pressure	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Flow RA20
1	U0880SD11 P001	U0880SD11 T002	U0880RH50 P002	U0880RA20 T003	U0880RA10 T003	U0880RC01 P001	U0880RA20 P003	U0880RA10 P003	U0880RA20 F001
16/7/2555 0:38	0.085802	43.7244	9.8012	540.367	541.687	40.1749	159.943	160.185	128.11
16/7/2555 0:39	0.085802	43.7244	9.83915	540.167	541.836	40.1749	159.943	159.576	128.11
16/7/2555 0:40	0.085501	43.7244	9.86625	540.135	541.624	40.1749	159.943	159.576	128.11
16/7/2555 0:41	0.0849	43.7244	9.7945	540.49	541.026	40.1749	159.943	159.576	128.242
16/7/2555 0:42	0.0849	43.7244	9.7125	541.459	541.044	40.1749	159.943	159.576	128.606
16/7/2555 0:43	0.0849	43.7226	9.7125	542.312	541.459	40.1749	159.943	159.576	127.929
16/7/2555 0:44	0.0849	43.6123	9.80475	542.542	541.395	40.1749	159.943	159.576	127.929
16/7/2555 0:45	0.0849	43.6123	9.86625	542.077	541.175	40.1749	159.943	159.576	127.929
16/7/2555 0:46	0.0849	43.6123	9.86625	541.122	540.557	40.1749	159.943	159.576	127.929
16/7/2555 0:47	0.0849	43.6123	9.86625	540.068	539.498	40.1749	159.943	159.576	127.929
16/7/2555 0:48	0.0849	43.6123	9.86625	539.308	538.691	40.1749	159.943	159.576	127.929
16/7/2555 0:49	0.085772	43.6123	9.86625	538.955	538.366	40.1749	159.943	159.576	129.376
16/7/2555 0:50	0.085802	43.6123	9.86625	539.08	538.397	40.1749	160.155	159.584	128.183
16/7/2555 0:51	0.085802	43.6123	9.86625	539.588	538.921	40.1749	160.193	159.601	128.039
16/7/2555 0:52	0.08529	43.6123	9.86625	539.941	539.652	40.2252	160.193	159.601	128.582
16/7/2555 0:53	0.0852	43.6123	9.86625	539.645	539.884	40.2252	160.193	159.601	129.441
16/7/2555 0:54	0.0852	43.6123	9.86625	539.273	539.794	40.2252	160.193	159.601	129.042
16/7/2555 0:55	0.0852	43.6117	9.86625	539.29	540	40.2252	160.193	159.601	129.23
16/7/2555 0:56	0.0852	43.5745	9.84438	539.233	540.585	40.2252	160.193	159.601	128.825
16/7/2555 0:57	0.0852	43.5745	9.82875	539.345	540.953	40.2252	160.193	159.601	127.713
16/7/2555 0:58	0.0852	43.5745	9.82875	539.228	540.608	40.2252	160.193	159.601	127.713
16/7/2555 0:59	0.0852	43.5745	9.82875	539.208	539.755	40.2252	160.193	159.601	127.713
16/7/2555 1:00	0.0852	43.5745	9.82875	539.74	538.941	40.2252	160.193	159.601	127.713

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
16/7/2555 0:00	129.23	299.469	350.351	172.024	169.352	394.079	412.5	313.501	305.798
16/7/2555 0:01	129.23	299.371	348.381	172.024	169.352	394.079	412.5	313.501	305.798
16/7/2555 0:02	129.23	299.085	349.004	171.977	169.352	394.079	412.5	313.501	305.798
16/7/2555 0:03	129.23	299.46	348.901	171.805	169.352	394.079	412.5	313.501	305.798
16/7/2555 0:04	129.23	300.064	347.594	171.805	169.352	394.079	412.5	313.501	305.798
16/7/2555 0:05	129.23	299.289	345.186	171.805	169.352	394.079	412.5	313.501	306.145
16/7/2555 0:06	128.965	298.936	349.722	171.805	169.352	394.079	412.5	313.501	306.598
16/7/2555 0:07	127.789	298.815	347.493	171.805	169.561	394.079	412.5	313.501	306.598
16/7/2555 0:08	127.924	299.242	354.969	171.805	169.701	394.079	412.5	314.133	306.598

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
16/7/2555 0:09	127.725	299.385	349.693	171.805	169.701	394.476	412.5	314.203	306.598
16/7/2555 0:10	128.676	299.828	347.817	171.805	169.701	394.901	412.5	314.203	306.598
16/7/2555 0:11	129.243	299.078	348.775	171.805	169.701	394.901	412.5	314.203	306.598
16/7/2555 0:12	127.755	298.741	348.907	171.805	169.701	394.901	412.5	314.203	306.598
16/7/2555 0:13	127.755	299.069	348.291	171.805	169.701	394.901	412.537	314.203	306.598
16/7/2555 0:14	127.755	298.844	353.181	171.862	169.701	394.901	413.599	314.203	306.598
16/7/2555 0:15	127.755	298.919	350.03	172.068	169.701	394.901	413.599	314.203	306.598
16/7/2555 0:16	127.755	298.94	344.183	172.068	169.701	394.901	413.599	314.203	306.598
16/7/2555 0:17	127.755	299.238	348.276	172.068	169.701	394.901	413.599	314.203	306.728
16/7/2555 0:18	127.755	299.246	349.589	172.068	169.701	394.901	413.599	314.203	306.897
16/7/2555 0:19	128.871	299.542	352.096	172.068	169.649	394.901	413.599	314.203	306.897
16/7/2555 0:20	128.434	299.3	354.428	172.068	169.615	394.901	413.599	314.472	306.897
16/7/2555 0:21	127.849	298.689	351.373	172.068	169.615	395.352	413.599	314.502	306.897
16/7/2555 0:22	127.849	299.03	351.639	172.068	169.615	395.866	413.599	314.502	306.897
16/7/2555 0:23	127.849	298.846	351.894	172.068	169.615	395.866	413.599	314.502	306.897
16/7/2555 0:24	127.875	298.645	351.031	172.068	169.615	395.866	413.599	314.502	306.897
16/7/2555 0:25	129.425	299.201	353.612	172.068	169.615	395.866	413.604	314.502	306.897
16/7/2555 0:26	128.304	298.642	353.302	172.182	169.615	395.866	413.876	314.502	306.897
16/7/2555 0:27	127.897	299.159	347.472	172.594	169.615	395.866	413.876	314.502	306.897
16/7/2555 0:28	127.897	299.209	346.72	172.594	169.615	395.866	413.876	314.502	306.897
16/7/2555 0:29	126.812	298.18	346.999	172.594	169.615	395.866	413.876	314.502	307.159
16/7/2555 0:30	128.179	299.639	347.387	172.594	169.615	395.866	413.876	314.502	307.501
16/7/2555 0:31	129.243	299.234	344.997	172.594	169.589	395.866	413.876	314.502	307.501
16/7/2555 0:32	129.243	299.022	347.361	172.594	169.571	395.866	413.876	315.222	307.501
16/7/2555 0:33	129.243	299.371	349.74	172.594	169.571	396.237	413.876	315.302	307.501
16/7/2555 0:34	128.872	298.835	347.587	172.594	169.571	396.689	413.876	315.302	307.501
16/7/2555 0:35	129.085	299.872	348.045	172.594	169.571	396.689	413.876	315.302	307.501
16/7/2555 0:36	128.453	300.345	353.972	172.594	169.571	396.689	413.876	315.302	307.501
16/7/2555 0:37	127.974	298.99	351.495	172.594	169.571	396.689	413.874	315.302	307.501
16/7/2555 0:38	127.974	299.305	351.067	172.727	169.571	396.689	413.734	315.302	307.501
16/7/2555 0:39	127.974	298.876	348.969	173.206	169.571	396.689	413.734	315.302	307.501
16/7/2555 0:40	127.974	299.352	346.221	173.206	169.571	396.689	413.734	315.302	307.501
16/7/2555 0:41	128.301	299.423	349.608	173.206	169.571	396.689	413.734	315.302	307.543
16/7/2555 0:42	128.708	299.651	350.183	173.206	169.571	396.689	413.734	315.302	307.599
16/7/2555 0:43	128.063	299.662	347.157	173.206	169.834	396.689	413.734	315.302	307.599
16/7/2555 0:44	128.063	299.217	348.129	173.206	170.009	396.689	413.734	315.84	307.599
16/7/2555 0:45	128.063	299.189	343.97	173.206	170.009	396.627	413.734	315.9	307.599
16/7/2555 0:46	128.063	299.49	341.721	173.206	170.009	396.546	413.734	315.9	307.599
16/7/2555 0:47	128.063	299.983	345.399	173.206	170.009	396.546	413.734	315.9	307.599
16/7/2555 0:48	128.063	299.579	343.502	173.206	170.009	396.546	413.734	315.9	307.599
16/7/2555 0:49	129.695	299.696	346.112	173.206	170.009	396.546	413.734	315.9	307.599

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
16/7/2555 0:50	128.196	299.64	349.091	173.311	170.009	396.546	414.011	315.9	307.599
16/7/2555 0:51	128.169	299.684	348.593	173.687	170.009	396.546	414.011	315.9	307.599
16/7/2555 0:52	128.559	299.608	346.469	173.687	170.009	396.546	414.011	315.9	307.599
16/7/2555 0:53	129.545	300.331	351.939	173.687	170.009	396.546	414.011	315.9	307.599
16/7/2555 0:54	128.291	300.395	353.303	173.687	170.009	396.546	414.011	315.9	307.599
16/7/2555 0:55	129.233	300.242	354.375	173.687	170.376	396.546	414.011	315.9	307.599
16/7/2555 0:56	128.579	299.638	355.293	173.687	170.621	396.546	414.011	315.9	307.599
16/7/2555 0:57	128.579	299.605	348.892	173.687	170.621	396.328	414.011	315.9	307.599
16/7/2555 0:58	128.579	299.265	347.309	173.687	170.621	396.001	414.011	315.9	307.599
16/7/2555 0:59	128.579	299.817	348.974	173.687	170.621	396.001	414.011	315.9	307.599
16/7/2555 1:00	128.579	299.243	346.411	173.687	170.621	396.001	414.011	315.9	307.599

Date/Time	PAH#2 Air Inlet Temp	PAH#1 Air Inlet Temp	Ambient Air Temperature	Condenser Box2 Outlet Temp	Condenser Box1 Outlet Temp	Condenser Box2 Inlet Temp	Condenser Box1 Inlet Temp	SAH#2 Gas Outlet Temp	SAH#1 Gas Outlet Temp
3	U0880NL22 T001	U0880NL12 T001	U088000QA01 T001	U0880VC42 T001	U0880VC41 T001	U0880VC22 T001	U0880VC21 T001	U0880NR42 T001	U0880NR32 T001
16/7/2555 0:00	53.0383	57.3386	26.5121	41.7999	41.6237	31.0501	31.0669	176.896	180.005
16/7/2555 0:01	53.0383	57.3386	26.5619	41.7999	41.6237	31.0501	31.0669	176.896	180.005
16/7/2555 0:02	53.0383	57.3386	26.5999	41.8685	41.6237	31.0501	31.0669	176.896	180.08
16/7/2555 0:03	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	176.913	180.199
16/7/2555 0:04	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	177.146	180.199
16/7/2555 0:05	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	177.146	180.199
16/7/2555 0:06	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	177.146	180.199
16/7/2555 0:07	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	177.146	180.199
16/7/2555 0:08	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	177.146	180.199
16/7/2555 0:09	53.0383	57.3386	26.5999	41.8747	41.6237	31.0501	31.0669	177.146	180.199
16/7/2555 0:10	52.8501	57.3386	26.5999	41.8747	41.5734	31.0501	31.0523	177.146	180.199
16/7/2555 0:11	52.7062	57.2995	26.5999	41.8747	41.4925	31.0501	30.8922	177.146	180.199
16/7/2555 0:12	52.7062	56.8694	26.5999	41.8747	41.4925	31.0501	30.8922	177.146	180.199
16/7/2555 0:13	52.7062	56.8694	26.8696	41.8747	41.4925	31.0501	30.8922	177.146	180.199
16/7/2555 0:14	52.7062	56.8694	27.0622	41.7145	41.4925	30.9851	30.8922	177.146	180.201
16/7/2555 0:15	52.7062	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:16	52.7062	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:17	52.7062	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:18	52.7062	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:19	52.7062	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:20	53.4102	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:21	53.4884	56.8694	27.0622	41.7	41.4925	30.9502	30.8922	177.146	180.204
16/7/2555 0:22	53.1008	56.8694	27.0622	41.7	41.403	30.9502	30.8847	177.146	180.204
16/7/2555 0:23	52.7382	56.8604	27.0622	41.7	41.2689	30.9502	30.8174	177.146	180.204
16/7/2555 0:24	52.7382	56.7613	27.0622	41.7	41.2689	30.9502	30.8174	177.146	180.204

Date/Time	PAH#2 Air Inlet Temp	PAH#1 Air Inlet Temp	Ambient Air Temperature	Condenser Box2 Outlet Temp	Condenser Box1 Outlet Temp	Condenser Box2 Inlet Temp	Condenser Box1 Inlet Temp	SAH#2 Gas Outlet Temp	SAH#1 Gas Outlet Temp
3	U0880NL22 T001	U0880NL12 T001	U088000QA01 T001	U0880VC42 T001	U0880VC41 T001	U0880VC22 T001	U0880VC21 T001	U0880NR42 T001	U0880NR32 T001
16/7/2555 0:25	52.7382	56.7613	27.1331	41.7	41.2689	30.9502	30.8174	177.146	180.204
16/7/2555 0:26	53.4133	56.7613	27.1873	41.5427	41.2689	30.8869	30.8174	177.146	180.3
16/7/2555 0:27	52.7886	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.192	180.454
16/7/2555 0:28	52.725	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.839	180.454
16/7/2555 0:29	52.725	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.839	180.454
16/7/2555 0:30	52.725	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.839	180.454
16/7/2555 0:31	52.725	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.839	180.454
16/7/2555 0:32	52.725	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.839	180.454
16/7/2555 0:33	52.725	56.7613	27.1873	41.5253	41.2689	30.8502	30.8174	177.839	180.454
16/7/2555 0:34	52.725	56.7613	27.1873	41.5253	41.2168	30.8502	30.7971	177.839	180.454
16/7/2555 0:35	53.0812	56.7551	27.1873	41.5253	41.1438	30.8502	30.6435	177.839	180.454
16/7/2555 0:36	53.4884	56.6863	27.1873	41.5253	41.1438	30.8502	30.6435	177.839	180.454
16/7/2555 0:37	53.0685	56.6863	27.1437	41.5253	41.1438	30.8502	30.6435	177.839	180.454
16/7/2555 0:38	52.725	56.6863	27.1126	41.4147	41.1438	30.7236	30.6435	177.839	180.624
16/7/2555 0:39	52.725	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.849	180.898
16/7/2555 0:40	52.725	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.994	180.898
16/7/2555 0:41	52.7506	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.994	180.898
16/7/2555 0:42	53.4938	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.994	180.898
16/7/2555 0:43	53.4938	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.994	180.898
16/7/2555 0:44	53.1412	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.994	180.898
16/7/2555 0:45	52.7382	56.6863	27.1126	41.4002	41.1438	30.6503	30.6435	177.994	180.898
16/7/2555 0:46	52.7382	56.6863	27.1126	41.4002	41.0896	30.6503	30.6299	177.994	180.898
16/7/2555 0:47	52.7382	56.665	27.1126	41.4002	41.0187	30.6503	30.542	177.994	180.898
16/7/2555 0:48	52.7382	56.3673	27.1126	41.4002	41.0187	30.6503	30.542	177.994	180.898
16/7/2555 0:49	52.7382	56.3673	27.0629	41.4002	41.0187	30.6503	30.542	177.994	180.898
16/7/2555 0:50	52.7382	56.3673	27.0248	41.3557	41.0187	30.6344	30.542	177.994	181.072
16/7/2555 0:51	52.7382	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.024	181.351
16/7/2555 0:52	52.7382	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.438	181.351
16/7/2555 0:53	53.0308	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.438	181.351
16/7/2555 0:54	53.4696	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.438	181.351
16/7/2555 0:55	53.4696	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.438	181.351
16/7/2555 0:56	53.4696	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.438	181.351
16/7/2555 0:57	53.4696	56.3673	27.0248	41.3498	41.0187	30.6252	30.542	178.438	181.351
16/7/2555 0:58	53.4696	56.3673	27.0248	41.3498	40.9972	30.6252	30.5255	178.438	181.351
16/7/2555 0:59	53.4696	56.3507	27.0248	41.3498	40.9691	30.6252	30.4184	178.438	181.351
16/7/2555 1:00	53.4696	56.1186	27.0248	41.3498	40.9691	30.6252	30.4184	178.438	181.351

Date/Time	SAH#2 Gas Inlet Temp	SAH#1 Gas Inlet Temp	SAH#2 Air Outlet Temp	SAH#1 Air Outlet Temp	SAH#2 Air Inlet Temp	SAH#1 Air Inlet Temp	LP Htr#1 Condensate Inlet Temp	FW Pressure	HP Htr#7 Drain Temp
4	U0880NR41 T001	U0880NR31 T001	U0880NG24 T001	U0880NG14 T001	U0880NG23 T001	U0880NG13 T001	U0880RM61 T001	U0880NB01 P002	U0880RP70 T001
16/7/2555 0:00	313.702	317.401	289.484	274.913	44.9289	43.9791	44.9249	177.571	208.502
16/7/2555 0:01	313.702	317.401	289.612	274.913	44.9289	43.9791	45.0015	177.571	208.502
16/7/2555 0:02	313.702	317.401	289.889	274.913	44.9289	43.9791	45.0249	177.571	208.502
16/7/2555 0:03	313.702	317.401	289.889	274.913	44.9289	43.7825	45.0249	177.571	208.502
16/7/2555 0:04	313.702	317.401	289.889	274.913	44.9289	43.2419	45.0249	177.571	208.502
16/7/2555 0:05	313.702	317.401	289.889	274.913	44.9289	43.2419	45.0249	177.571	208.502
16/7/2555 0:06	313.702	317.401	289.889	275.014	44.9289	43.2419	45.0249	177.572	208.595
16/7/2555 0:07	313.702	317.401	289.889	275.156	44.9289	43.2419	45.0249	177.589	208.649
16/7/2555 0:08	313.702	317.401	289.889	275.156	44.9289	43.2419	45.0249	177.589	208.649
16/7/2555 0:09	313.802	317.401	289.889	275.156	44.7661	43.2419	45.0249	177.589	208.649
16/7/2555 0:10	314.099	317.614	289.889	275.156	44.3862	43.2419	45.0249	177.589	208.649
16/7/2555 0:11	314.099	318.201	289.889	275.156	44.3862	43.2419	45.0249	177.589	208.649
16/7/2555 0:12	314.099	318.201	289.889	275.156	44.3862	43.2419	45.0249	177.589	208.649
16/7/2555 0:13	314.099	318.201	289.915	275.156	44.3862	43.2419	44.931	177.589	208.649
16/7/2555 0:14	314.099	318.201	289.97	275.156	44.3862	43.2419	44.8997	177.589	208.649
16/7/2555 0:15	314.099	318.201	289.97	275.156	44.3862	43.2668	44.8997	177.589	208.649
16/7/2555 0:16	314.099	318.201	289.97	275.156	44.3862	43.3354	44.8997	177.589	208.649
16/7/2555 0:17	314.099	318.201	289.97	275.156	44.3862	43.3354	44.8997	177.589	208.649
16/7/2555 0:18	314.099	318.201	289.97	275.296	44.3862	43.3354	44.8997	177.557	208.558
16/7/2555 0:19	314.099	318.201	289.97	275.492	44.3862	43.3354	44.8997	177.214	208.502
16/7/2555 0:20	314.099	318.201	289.97	275.492	44.3862	43.3354	44.8997	177.214	208.502
16/7/2555 0:21	314.174	318.201	289.97	275.492	44.3076	43.3354	44.8997	177.214	208.502
16/7/2555 0:22	314.398	318.201	289.97	275.492	44.1242	43.3354	44.8997	177.214	208.502
16/7/2555 0:23	314.398	318.201	289.97	275.492	44.1242	43.3354	44.8997	177.214	208.502
16/7/2555 0:24	314.398	318.201	289.97	275.492	44.1242	43.3354	44.8997	177.214	208.502
16/7/2555 0:25	314.398	318.201	290.201	275.492	44.1242	43.3354	44.7901	177.214	208.502
16/7/2555 0:26	314.398	318.201	290.7	275.492	44.1242	43.3354	44.7502	177.214	208.502
16/7/2555 0:27	314.398	318.201	290.7	275.492	44.1242	43.3226	44.7502	177.214	208.502
16/7/2555 0:28	314.398	318.201	290.7	275.492	44.1242	43.2872	44.7502	177.214	208.502
16/7/2555 0:29	314.398	318.201	290.7	275.492	44.1242	43.2872	44.7502	177.214	208.502
16/7/2555 0:30	314.398	318.201	290.7	275.555	44.1242	43.2872	44.7502	177.333	208.365
16/7/2555 0:31	314.398	318.201	290.7	275.642	44.1242	43.2872	44.7502	178.652	208.273
16/7/2555 0:32	314.398	318.201	290.7	275.642	44.1242	43.2872	44.7502	178.652	208.273
16/7/2555 0:33	314.445	318.201	290.7	275.642	44.2309	43.2872	44.7502	178.652	208.273
16/7/2555 0:34	314.6	318.201	290.7	275.642	44.4798	43.2872	44.7502	178.652	208.273
16/7/2555 0:35	314.6	318.201	290.7	275.642	44.4798	43.2872	44.7502	178.652	208.273
16/7/2555 0:36	314.6	318.201	290.7	275.642	44.4798	43.2872	44.7502	178.652	208.273
16/7/2555 0:37	314.6	318.201	290.7	275.642	43.8037	43.2872	44.6786	178.652	208.273
16/7/2555 0:38	314.6	318.201	290.7	275.642	43.7422	43.2872	44.6503	178.652	208.273
16/7/2555 0:39	314.6	318.201	290.7	275.642	43.7422	43.2103	44.6503	178.652	208.273

Date/Time	SAH#2 Gas Inlet Temp	SAH#1 Gas Inlet Temp	SAH#2 Air Outlet Temp	SAH#1 Air Outlet Temp	SAH#2 Air Inlet Temp	SAH#1 Air Inlet Temp	LP Htr#1 Condensate Inlet Temp	FW Pressure	HP Htr#7 Drain Temp
4	U0880NR41 T001	U0880NR31 T001	U0880NG24 T001	U0880NG14 T001	U0880NG23 T001	U0880NG13 T001	U0880RM61 T001	U0880NB01 P002	U0880RP70 T001
16/7/2555 0:40	314.6	318.201	290.7	275.642	43.7422	42.9988	44.6503	178.652	208.273
16/7/2555 0:41	314.6	318.201	290.7	275.642	43.7422	42.9988	44.6503	178.652	208.273
16/7/2555 0:42	314.6	318.201	290.7	275.647	43.7422	42.9988	44.6503	178.652	208.361
16/7/2555 0:43	314.6	318.201	290.7	275.654	43.7422	42.9988	44.6503	178.652	208.424
16/7/2555 0:44	314.6	318.201	290.7	275.654	43.7422	42.9988	44.6503	178.652	208.424
16/7/2555 0:45	314.46	318.201	290.7	275.654	43.7422	42.9988	44.6503	178.652	208.424
16/7/2555 0:46	314.001	317.95	290.7	275.654	43.7422	42.9988	44.6503	178.652	208.424
16/7/2555 0:47	314.001	317.2	290.7	275.654	43.7422	42.9988	44.6503	178.652	208.424
16/7/2555 0:48	314.001	317.2	290.7	275.654	43.7422	42.9988	44.6503	178.652	208.424
16/7/2555 0:49	314.001	317.2	290.289	275.654	43.9138	42.9988	44.5274	178.652	208.424
16/7/2555 0:50	314.001	317.2	289.402	275.654	43.9294	42.9988	44.4748	178.652	208.424
16/7/2555 0:51	314.001	317.2	289.402	275.654	43.9294	43.0159	44.4748	178.652	208.424
16/7/2555 0:52	314.001	317.2	289.402	275.654	43.9294	43.0628	44.4748	178.652	208.424
16/7/2555 0:53	314.001	317.2	289.402	275.654	43.9294	43.0628	44.4748	178.652	208.424
16/7/2555 0:54	314.001	317.2	289.402	275.519	43.9294	43.0628	44.4748	178.567	208.551
16/7/2555 0:55	314.001	317.2	289.402	275.33	43.9294	43.0628	44.4748	177.633	208.649
16/7/2555 0:56	314.001	317.2	289.402	275.33	43.9294	43.0628	44.4748	177.633	208.649
16/7/2555 0:57	313.611	317.2	289.402	275.33	43.9294	42.3572	44.4748	177.633	208.649
16/7/2555 0:58	312.201	316.875	289.402	275.33	43.9294	42.3067	44.4748	177.633	208.649
16/7/2555 0:59	312.201	315.9	289.402	275.33	43.9294	42.3067	44.4748	177.633	208.649
16/7/2555 1:00	312.201	315.9	289.402	275.33	43.6889	42.3067	44.4748	177.633	208.649

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
16/7/2555 0:00	247.629	248.336	239.274	37.4781	37.5407	532.58	531.604	529.953	529.349
16/7/2555 0:01	247.524	248.336	240.694	37.4781	37.5407	532.933	531.258	529.953	529.349
16/7/2555 0:02	247.525	248.336	238.572	37.4939	37.5407	533.126	530.624	529.953	529.349
16/7/2555 0:03	247.469	248.336	240.101	37.5031	37.5407	533.339	530.254	529.953	529.349
16/7/2555 0:04	247.509	248.336	243.715	37.5031	37.5407	533.648	530.235	529.953	529.349
16/7/2555 0:05	247.51	248.336	244.238	37.5031	37.5407	533.722	530.219	529.953	529.349
16/7/2555 0:06	247.402	248.336	231.486	37.5031	37.5407	533.612	530.638	529.953	529.349
16/7/2555 0:07	247.58	248.336	236.777	37.5031	37.5062	533.869	531.483	529.953	529.349
16/7/2555 0:08	247.422	248.336	224.019	37.5031	37.5031	534.734	532.313	529.953	529.011
16/7/2555 0:09	247.781	248.336	234.042	37.5031	37.5031	535.898	533.646	530.053	528.598
16/7/2555 0:10	247.569	248.41	241.261	37.5031	37.5031	535.955	533.978	531.455	528.598
16/7/2555 0:11	247.522	248.546	236.852	37.5031	37.5031	534.75	533.296	531.455	528.598
16/7/2555 0:12	247.576	248.546	238.037	37.5031	37.5031	533.369	532.641	531.455	528.598

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
16/7/2555 0:13	247.436	248.546	238.634	37.5031	37.5031	532.487	532.38	531.455	528.598
16/7/2555 0:14	247.424	248.546	234.927	37.4556	37.5031	532.38	532.83	531.455	528.598
16/7/2555 0:15	247.495	248.546	240.061	37.428	37.5031	533.154	533.727	531.455	528.598
16/7/2555 0:16	247.349	248.546	242.317	37.428	37.5031	533.964	533.825	531.455	528.598
16/7/2555 0:17	247.325	248.546	235.601	37.428	37.5031	533.857	532.966	531.455	528.598
16/7/2555 0:18	247.54	248.546	234.587	37.428	37.5031	533.816	532.751	531.455	528.598
16/7/2555 0:19	247.441	248.546	236.232	37.428	37.5146	533.652	533.148	531.455	528.598
16/7/2555 0:20	247.635	248.546	234.523	37.428	37.5157	534.086	533.713	531.455	529.339
16/7/2555 0:21	247.432	248.546	241.743	37.428	37.5157	535.148	534.753	531.444	530.246
16/7/2555 0:22	247.413	248.378	231.389	37.428	37.5157	535.065	534.607	531.299	530.246
16/7/2555 0:23	247.521	248.064	236.412	37.428	37.5157	534.798	533.872	531.299	530.246
16/7/2555 0:24	247.423	248.064	241.959	37.428	37.5157	534.592	532.938	531.299	530.246
16/7/2555 0:25	247.327	248.064	237.1	37.428	37.5157	534.313	532.401	531.299	530.246
16/7/2555 0:26	247.429	248.064	237.665	37.4201	37.5157	534.536	532.544	531.299	530.246
16/7/2555 0:27	247.332	248.064	242.385	37.4155	37.5157	535.179	533.256	531.299	530.246
16/7/2555 0:28	247.29	248.064	232.057	37.4155	37.5157	534.678	533.183	531.299	530.246
16/7/2555 0:29	247.607	248.064	234.243	37.4155	37.5157	533.823	531.948	531.299	530.246
16/7/2555 0:30	247.482	248.064	239.453	37.4155	37.5157	533.459	530.78	531.299	530.246
16/7/2555 0:31	247.397	248.064	245.813	37.4155	37.7797	533.207	530.031	531.299	530.246
16/7/2555 0:32	247.399	248.064	238.748	37.4155	37.8036	532.774	529.017	531.299	529.101
16/7/2555 0:33	247.507	248.064	239.01	37.4155	37.8036	532.747	528.883	531.246	527.701
16/7/2555 0:34	247.41	248.187	241.878	37.4155	37.8036	533.079	529.785	530.246	527.701
16/7/2555 0:35	247.286	248.414	239.106	37.6246	37.8036	533.092	530.496	530.246	527.701
16/7/2555 0:36	247.733	248.414	231.78	37.9384	37.8036	532.765	530.914	530.246	527.701
16/7/2555 0:37	247.773	248.414	242.344	37.479	37.8036	533.47	532.059	530.246	527.701
16/7/2555 0:38	247.447	248.414	231.389	37.428	37.8036	533.961	532.981	530.246	527.701
16/7/2555 0:39	247.629	248.414	235.861	37.428	37.8036	534.213	533.59	530.246	527.701
16/7/2555 0:40	247.445	248.414	241.899	37.428	37.8036	534.411	533.587	530.246	527.701
16/7/2555 0:41	247.336	248.414	246.512	37.428	37.8036	534.797	533.158	530.246	527.701
16/7/2555 0:42	247.356	248.414	234.432	37.428	37.8036	535.677	533.63	530.246	527.701
16/7/2555 0:43	247.431	248.414	242.013	37.428	37.5219	536.814	534.355	530.246	527.701
16/7/2555 0:44	247.362	248.414	230.947	37.428	37.4906	537.242	534.49	530.246	529.184
16/7/2555 0:45	247.546	248.414	239.583	37.428	37.4906	536.922	534.298	530.331	530.997
16/7/2555 0:46	247.415	248.39	239.316	37.428	37.4906	535.778	533.298	532.8	530.997
16/7/2555 0:47	247.484	248.344	242.346	37.428	37.4906	534.33	531.717	532.8	530.997
16/7/2555 0:48	247.517	248.344	246.902	37.428	37.4906	533.866	530.867	532.8	530.997
16/7/2555 0:49	247.326	248.344	241.986	37.5858	37.4906	533.879	530.662	532.8	530.997
16/7/2555 0:50	247.424	248.344	238.938	37.6033	37.4906	533.914	530.522	532.8	530.997
16/7/2555 0:51	247.487	248.344	242.351	37.6033	37.4906	534.259	531.079	532.8	530.997
16/7/2555 0:52	247.385	248.344	240.473	37.6033	37.4906	534.057	531.399	532.8	530.997

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
16/7/2555 0:53	247.454	248.344	237.565	37.6033	37.4906	533.306	531.294	532.8	530.997
16/7/2555 0:54	247.775	248.344	238.48	37.6033	37.4906	533.315	531.756	532.8	530.997
16/7/2555 0:55	247.543	248.344	242.573	37.6033	37.6033	534.377	533.012	532.8	530.997
16/7/2555 0:56	247.62	248.344	233.234	37.6033	37.6158	535.001	533.958	532.8	530.527
16/7/2555 0:57	247.58	248.344	240.396	37.6033	37.6158	535.039	534.267	532.76	529.953
16/7/2555 0:58	247.431	248.344	236.849	37.6033	37.6158	534.549	533.438	531.601	529.953
16/7/2555 0:59	247.424	248.344	237.844	37.6033	37.6158	534.048	532.073	531.601	529.953
16/7/2555 1:00	247.532	248.344	245.093	37.6033	37.6158	534.031	531.071	531.601	529.953

Date/Time	LP Exhaust Condenser Temp	HP Htr#6 Outlet FW Temp	HP Htr FW Inlet Temp	RH Inlet Temp DESH	FW Pressure	Ext#7 Steam Pressure	HP Htr FW Inlet Pressure	FW Flow to Eco	SH Spray Water Flow	Total Coal Flow
6	U0880SD11 T001	U0880RL64 T001	U0880RL61 T001	U0880RC10 T001	U0880NB01 P002	U0880RF70 P001	U0880RL61 P001	U0880NB01 F001	U0880NB40 F001	U0880NL81 U007
16/7/2555 0:00	44.1376	207.074	185.755	338.997	177.571	39.3227	185.123	239.274	4.62053	262.223
16/7/2555 0:01	44.1376	207.074	185.766	338.997	177.571	39.3227	185.085	240.694	4.34013	265.009
16/7/2555 0:02	44.1376	207.223	185.762	338.997	177.571	39.3227	185.125	238.572	3.06524	262.422
16/7/2555 0:03	44.1376	207.225	185.796	338.997	177.571	39.3227	185.411	240.101	3.09172	262.087
16/7/2555 0:04	44.1376	207.225	185.779	338.997	177.571	39.3227	185.871	243.715	2.76171	260.352
16/7/2555 0:05	44.1376	207.225	185.804	338.997	177.571	39.3227	185.35	244.238	5.35154	267.701
16/7/2555 0:06	44.1376	207.225	185.76	338.997	177.572	39.3227	184.334	231.486	6.89071	263.924
16/7/2555 0:07	44.1376	207.225	185.688	339.756	177.589	39.3227	184.238	236.777	8.44158	270.968
16/7/2555 0:08	44.1703	207.225	185.668	340.378	177.589	39.3227	183.517	224.019	9.74954	266.715
16/7/2555 0:09	44.1753	207.225	185.714	340.378	177.589	39.3227	185.05	234.042	7.87354	255.865
16/7/2555 0:10	44.1753	207.225	185.81	340.378	177.589	39.3227	185.438	241.261	7.2864	264.469
16/7/2555 0:11	44.1753	207.225	185.808	340.378	177.589	39.3227	184.965	236.852	5.63159	265.31
16/7/2555 0:12	44.1753	207.225	185.74	340.378	177.589	39.3227	184.996	238.037	4.43941	262.995
16/7/2555 0:13	44.1753	207.225	185.684	340.378	177.589	39.3227	184.643	238.634	6.03715	270.967
16/7/2555 0:14	44.1753	207.154	185.699	340.378	177.589	39.2592	184.462	234.927	6.44035	266.216
16/7/2555 0:15	44.1753	207.152	185.738	340.378	177.589	39.2522	185.517	240.061	5.94865	256.618
16/7/2555 0:16	44.1753	207.152	185.742	340.378	177.589	39.2522	185.506	242.317	5.63525	263.35
16/7/2555 0:17	44.1753	207.152	185.701	340.378	177.589	39.2522	184.642	235.601	6.78749	269.687
16/7/2555 0:18	44.1753	207.152	185.636	340.378	177.557	39.2522	184.663	234.587	6.36672	264.029
16/7/2555 0:19	44.1753	207.152	185.636	340.239	177.214	39.2522	184.174	236.232	8.9884	276.06
16/7/2555 0:20	44.0454	207.152	185.693	340.126	177.214	39.2522	184.767	234.523	7.68896	260.01
16/7/2555 0:21	44.0254	207.152	185.742	340.126	177.214	39.2522	185.08	241.743	6.85408	267.296
16/7/2555 0:22	44.0254	207.152	185.736	340.126	177.214	39.2522	184.525	231.389	6.29321	264.642
16/7/2555 0:23	44.0254	207.152	185.695	340.126	177.214	39.2522	184.618	236.412	5.51884	269.792
16/7/2555 0:24	44.0254	207.152	185.714	340.126	177.214	39.2522	184.844	241.959	5.49066	268.482
16/7/2555 0:25	44.0254	207.152	185.754	340.126	177.214	39.2522	184.534	237.1	7.14145	270.531

Date/Time	LP Exhaust Condenser Temp	HP Htr#6 Outlet FW Temp	HP Htr FW Inlet Temp	RH Inlet Temp DESH	FW Pressure	Ext#7 Steam Pressure	HP Htr FW Inlet Pressure	FW Flow to Eco	SH Spray Water Flow	Total Coal Flow
6	U0880SD11 T001	U0880RL64 T001	U0880RL61 T001	U0880RC10 T001	U0880NB01 P002	U0880RF70 P001	U0880RL61 P001	U0880NB01 F001	U0880NB40 F001	U0880NL81 U007
16/7/2555 0:26	44.0254	207.152	185.702	340.126	177.214	39.2522	185.275	237.665	6.45391	258.354
16/7/2555 0:27	44.0254	207.152	185.641	340.126	177.214	39.2522	185.876	242.385	5.65248	260.898
16/7/2555 0:28	44.0254	207.152	185.628	340.126	177.214	39.2522	184.919	232.057	5.99958	266.669
16/7/2555 0:29	44.0254	207.152	185.636	340.126	177.214	39.2522	184.951	234.243	4.80588	262.358
16/7/2555 0:30	44.0254	207.152	185.678	340.126	177.333	39.2522	185.64	239.453	4.00824	261.661
16/7/2555 0:31	44.0254	207.152	185.729	339.524	178.652	39.2522	185.684	245.813	4.40975	267.76
16/7/2555 0:32	43.83	207.152	185.727	338.997	178.652	39.2522	185.027	238.748	3.31176	265.748
16/7/2555 0:33	43.8	207.152	185.685	338.997	178.652	39.2522	185.212	239.01	3.80413	263.491
16/7/2555 0:34	43.8	207.152	185.666	338.997	178.652	39.2522	185.6	241.878	2.92681	260.43
16/7/2555 0:35	43.8	207.152	185.703	338.997	178.652	39.2522	184.846	239.106	5.92568	276.447
16/7/2555 0:36	43.8	207.152	185.709	338.997	178.652	39.2522	184.392	231.78	6.43855	266.435
16/7/2555 0:37	43.8	207.152	185.697	338.997	178.652	39.2522	185.319	242.344	6.62034	263.499
16/7/2555 0:38	43.8	207.152	185.741	338.997	178.652	39.2679	184.43	231.389	6.65112	267.601
16/7/2555 0:39	43.8	207.152	185.743	338.997	178.652	39.2703	185.197	235.861	5.65959	260.247
16/7/2555 0:40	43.8	207.152	185.752	338.997	178.652	39.2703	185.537	241.899	5.2073	267.057
16/7/2555 0:41	43.8	207.152	185.785	338.997	178.652	39.2703	185.299	246.512	7.58525	272.594
16/7/2555 0:42	43.8	207.152	185.742	338.997	178.652	39.2703	185.175	234.432	7.33208	257.604
16/7/2555 0:43	43.8	207.152	185.616	339.933	178.652	39.2703	185.656	242.013	7.47389	265.499
16/7/2555 0:44	43.67	207.152	185.576	340.752	178.652	39.2703	185.18	230.947	6.16255	257.949
16/7/2555 0:45	43.6501	207.152	185.663	340.752	178.652	39.2703	185.9	239.583	5.15716	259.202
16/7/2555 0:46	43.6501	207.152	185.719	340.752	178.652	39.2703	185.551	239.316	6.31557	265.401
16/7/2555 0:47	43.6501	207.152	185.713	340.752	178.652	39.2703	185.484	242.346	4.72798	264.713
16/7/2555 0:48	43.6501	207.152	185.656	340.752	178.652	39.2703	186.024	246.902	2.71709	260.666
16/7/2555 0:49	43.6501	207.152	185.667	340.752	178.652	39.2703	185.388	241.986	4.85961	266.991
16/7/2555 0:50	43.6501	207.152	185.648	340.752	178.652	39.2999	185.082	238.938	4.88716	267.494
16/7/2555 0:51	43.6501	207.152	185.648	340.752	178.652	39.3045	185.483	242.351	5.26315	259.961
16/7/2555 0:52	43.6501	207.152	185.685	340.752	178.652	39.3045	184.995	240.473	5.782	268.61
16/7/2555 0:53	43.6501	207.152	185.716	340.752	178.652	39.3045	184.474	237.565	7.70751	276.386
16/7/2555 0:54	43.6501	207.152	185.666	340.752	178.567	39.3045	184.699	238.48	6.36067	267.152
16/7/2555 0:55	43.6501	207.152	185.67	340.552	177.633	39.3045	184.762	242.573	7.13675	273.132
16/7/2555 0:56	43.6822	207.152	185.728	340.378	177.633	39.3045	184.738	233.234	7.0847	260.162
16/7/2555 0:57	43.6878	207.152	185.744	340.378	177.633	39.3045	185.467	240.396	5.3113	263.15
16/7/2555 0:58	43.6878	207.152	185.747	340.378	177.633	39.3045	185.076	236.849	3.98491	264.911
16/7/2555 0:59	43.6878	207.152	185.763	340.378	177.633	39.3045	185.183	237.844	3.68558	265.693
16/7/2555 1:00	43.6878	207.152	185.746	340.378	177.633	39.3045	186.236	245.093	2.51321	257.61

ตาราง ก2 ข้อมูลสถานะการเดินเครื่องโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ที่กำลังการผลิต 240 MW

Date/Time	Condenser Pressure	Condenser Temp	Deaerator Pressure	Main Steam Temp RA20	Main Steam Temp RA10	TB HP Outlet Pressure	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Flow RA20
1	U0880SD11 P001	U0880SD11 T002	U0880RH50 P002	U0880RA20 T003	U0880RA10 T003	U0880RC01 P001	U0880RA20 P003	U0880RA10 P003	U0880RA20 F001
18/10/2555 10:00	0.071101	40.3496	7.93875	537.754	523.794	32.5752	160.175	159.924	104.974
18/10/2555 10:01	0.071101	40.3496	7.93875	537.609	523.427	32.5752	160.175	159.924	104.974
18/10/2555 10:02	0.071101	40.3496	7.94662	537.561	523.033	32.5752	160.175	159.924	104.974
18/10/2555 10:03	0.071101	40.3496	7.95	537.474	522.572	32.5752	160.175	159.924	104.974
18/10/2555 10:04	0.071101	40.4138	7.95	537.444	522.302	32.5752	160.458	159.924	104.974
18/10/2555 10:05	0.071101	40.4629	7.95	537.241	522.239	32.5752	160.495	160.044	104.974
18/10/2555 10:06	0.071101	40.4629	7.95	536.809	522.063	32.5752	160.495	160.324	104.974
18/10/2555 10:07	0.071101	40.4629	7.95	536.207	521.765	32.5752	160.495	160.324	104.974
18/10/2555 10:08	0.071101	40.4629	7.95	535.562	521.281	32.5952	160.495	160.324	105.434
18/10/2555 10:09	0.071351	40.4629	7.95	535.112	520.514	32.6752	160.495	160.324	105.836
18/10/2555 10:10	0.0717	40.4629	7.95	534.907	519.945	32.6752	160.495	160.324	105.836
18/10/2555 10:11	0.0717	40.4629	7.95	534.768	519.561	32.6752	160.495	160.324	105.836
18/10/2555 10:12	0.0717	40.4629	7.95	534.755	519.279	32.6752	160.495	160.324	105.836
18/10/2555 10:13	0.0717	40.4629	7.95	534.619	519.058	32.6752	160.495	160.324	105.836
18/10/2555 10:14	0.0717	40.4629	7.96575	534.364	519.003	32.6752	160.495	160.324	105.836
18/10/2555 10:15	0.0717	40.4629	7.9725	534.265	519.143	32.6752	160.495	160.324	105.836
18/10/2555 10:16	0.0717	40.6114	7.9725	534.198	519.375	32.6752	160.096	160.324	105.836
18/10/2555 10:17	0.0717	40.7249	7.9725	534.197	519.597	32.6752	160.043	160.092	105.836
18/10/2555 10:18	0.0717	40.7249	7.9725	534.262	519.745	32.6752	160.043	159.549	105.836
18/10/2555 10:19	0.0717	40.7249	7.9725	534.51	520.045	32.6752	160.043	159.549	105.836
18/10/2555 10:20	0.0717	40.7249	7.9725	534.955	520.424	32.6802	160.043	159.549	105.811
18/10/2555 10:21	0.071575	40.7249	7.9725	535.447	520.878	32.7004	160.043	159.549	105.789
18/10/2555 10:22	0.0714	40.7249	7.9725	535.677	521.331	32.7004	160.043	159.549	105.789
18/10/2555 10:23	0.0714	40.7249	7.9725	535.567	521.419	32.7004	160.043	159.549	105.789
18/10/2555 10:24	0.0714	40.7249	7.9725	535.137	521.415	32.7004	160.043	159.549	105.789
18/10/2555 10:25	0.0714	40.7249	7.9725	534.495	521.263	32.7004	160.043	159.549	105.789
18/10/2555 10:26	0.0714	40.7249	7.94888	533.836	520.663	32.7004	160.043	159.549	105.789
18/10/2555 10:27	0.0714	40.7249	7.93875	533.15	519.77	32.7004	160.043	159.549	105.789
18/10/2555 10:28	0.0714	40.6614	7.93875	532.472	518.74	32.7004	160.512	159.549	105.789
18/10/2555 10:29	0.0714	40.6128	7.93875	531.902	517.961	32.7004	160.574	159.817	105.789
18/10/2555 10:30	0.0714	40.6128	7.93875	531.577	517.428	32.7004	160.574	160.443	105.789
18/10/2555 10:31	0.0714	40.6128	7.93875	531.518	517.095	32.7004	160.574	160.443	105.789
18/10/2555 10:32	0.0714	40.6128	7.93875	531.622	517.036	32.7004	160.574	160.443	105.944
18/10/2555 10:33	0.071525	40.6128	7.93875	531.663	517.092	32.7004	160.574	160.443	106.08
18/10/2555 10:34	0.0717	40.6128	7.93875	531.747	517.256	32.7004	160.574	160.443	106.08
18/10/2555 10:35	0.0717	40.6128	7.93875	532.052	517.399	32.7004	160.574	160.443	106.08
18/10/2555 10:36	0.0717	40.6128	7.93875	532.384	517.75	32.7004	160.574	160.443	106.08
18/10/2555 10:37	0.0717	40.6128	7.93875	532.761	518.185	32.7004	160.574	160.443	106.08

Date/Time	Condenser Pressure	Condenser Temp	Deaerator Pressure	Main Steam Temp RA20	Main Steam Temp RA10	TB HP Outlet Pressure	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Flow RA20
1	U0880SD11 P001	U0880SD11 T002	U0880RH50 P002	U0880RA20 T003	U0880RA10 T003	U0880RC01 P001	U0880RA20 P003	U0880RA10 P003	U0880RA20 F001
18/10/2555 10:38	0.0717	40.6128	7.97025	532.992	518.517	32.7004	160.574	160.443	106.08
18/10/2555 10:39	0.0717	40.6128	7.98375	533.173	518.608	32.7004	160.574	160.443	106.08
18/10/2555 10:40	0.0717	40.6953	7.98375	533.22	518.674	32.7004	159.984	160.443	106.08
18/10/2555 10:41	0.0717	40.7627	7.98375	533.365	518.946	32.7004	159.894	160.147	106.08
18/10/2555 10:42	0.0717	40.7627	7.98375	533.545	519.546	32.7004	159.894	159.399	106.08
18/10/2555 10:43	0.0717	40.7627	7.98375	533.946	520.454	32.7004	159.894	159.399	106.08
18/10/2555 10:44	0.0717	40.7627	7.98375	534.595	521.399	32.7004	159.894	159.399	105.982
18/10/2555 10:45	0.071951	40.7627	7.98375	535.074	522.247	32.7004	159.894	159.399	105.897
18/10/2555 10:46	0.072301	40.7627	7.98375	535.68	522.806	32.7004	159.894	159.399	105.897
18/10/2555 10:47	0.072301	40.7627	7.98375	536.372	523.417	32.7004	159.894	159.399	105.897
18/10/2555 10:48	0.072301	40.7627	7.98375	537.146	523.838	32.7004	159.894	159.399	105.897
18/10/2555 10:49	0.072301	40.7627	7.98375	537.706	524.155	32.7004	159.894	159.399	105.897
18/10/2555 10:50	0.072301	40.7627	7.93913	537.763	523.809	32.7004	159.894	159.399	105.897
18/10/2555 10:51	0.072301	40.7627	7.92	537.476	523.21	32.7004	159.894	159.399	105.897
18/10/2555 10:52	0.072301	40.8024	7.92	537.073	522.804	32.7004	160.563	159.399	105.897
18/10/2555 10:53	0.072301	40.8371	7.92	536.766	522.205	32.7004	160.681	159.681	105.897
18/10/2555 10:54	0.072301	40.8371	7.92	536.582	521.754	32.7004	160.681	160.394	105.897
18/10/2555 10:55	0.072301	40.8371	7.92	536.459	521.458	32.7004	160.681	160.394	105.897
18/10/2555 10:56	0.072301	40.8371	7.92	536.447	521.088	32.6957	160.681	160.394	105.618
18/10/2555 10:57	0.072301	40.8371	7.92	536.497	521.223	32.6752	160.681	160.394	105.373
18/10/2555 10:58	0.072301	40.8371	7.92	536.719	521.417	32.6752	160.681	160.394	105.373
18/10/2555 10:59	0.072301	40.8371	7.92	537.169	521.838	32.6752	160.681	160.394	105.373
18/10/2555 11:00	0.072301	40.8371	7.92	537.711	522.58	32.6752	160.681	160.394	105.373

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
18/10/2555 10:00	106.352	238.898	305.899	161.259	161.427	380.735	391.46	298.7	283.698
18/10/2555 10:01	106.352	238.898	307.642	161.259	161.427	380.735	391.46	298.7	283.698
18/10/2555 10:02	106.352	238.843	308.539	161.259	161.05	380.735	391.46	298.7	283.698
18/10/2555 10:03	106.352	238.875	308.128	161.259	161.03	380.735	391.46	298.7	283.698
18/10/2555 10:04	106.352	238.898	307.548	161.259	161.03	380.735	391.46	298.7	283.698
18/10/2555 10:05	106.352	238.898	306.102	161.259	161.03	380.735	391.387	298.7	283.698
18/10/2555 10:06	106.352	238.898	305.487	161.259	161.03	380.625	391.184	298.7	283.698
18/10/2555 10:07	106.352	238.898	304.791	161.259	161.03	380.601	391.184	298.7	283.698
18/10/2555 10:08	106.851	238.898	303.892	161.259	161.03	380.601	391.184	298.7	283.812
18/10/2555 10:09	106.868	238.898	305.022	161.259	161.03	380.601	391.184	298.7	283.899
18/10/2555 10:10	106.868	238.898	304.547	161.259	161.03	380.601	391.184	298.7	283.899
18/10/2555 10:11	106.868	238.898	304.643	161.031	161.03	380.601	391.184	298.132	283.899

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
18/10/2555 10:12	106.868	238.898	304.253	160.734	161.03	380.601	391.184	297.803	283.899
18/10/2555 10:13	106.868	238.898	306.026	160.734	161.03	380.601	391.184	297.803	283.899
18/10/2555 10:14	106.868	238.898	308.188	160.734	160.697	380.601	391.184	297.803	283.899
18/10/2555 10:15	106.868	238.913	307.36	160.734	160.679	380.601	391.184	297.803	283.899
18/10/2555 10:16	106.868	239.031	307.136	160.734	160.679	380.601	391.184	297.803	283.899
18/10/2555 10:17	106.868	238.942	310.329	160.734	160.679	380.601	391.038	297.803	283.899
18/10/2555 10:18	106.868	238.954	309.961	160.734	160.679	380.039	390.638	297.803	283.899
18/10/2555 10:19	106.868	239.001	309.976	160.734	160.679	379.913	390.638	297.803	283.899
18/10/2555 10:20	107.299	239.001	308.302	160.734	160.679	379.913	390.638	297.803	283.899
18/10/2555 10:21	107.314	238.877	305.691	160.734	160.679	379.913	390.638	297.803	283.899
18/10/2555 10:22	107.314	238.896	303.321	160.734	160.679	379.913	390.638	297.803	283.899
18/10/2555 10:23	107.314	238.898	301.797	160.47	160.679	379.913	390.638	297.486	283.899
18/10/2555 10:24	107.314	238.898	302.097	160.125	160.679	379.913	390.638	297.302	283.899
18/10/2555 10:25	107.314	238.845	298.406	160.125	160.679	379.913	390.638	297.302	283.899
18/10/2555 10:26	107.314	238.898	297.887	160.125	160.516	379.913	390.638	297.302	283.899
18/10/2555 10:27	107.314	238.973	299.188	160.125	160.508	379.913	390.638	297.302	283.899
18/10/2555 10:28	107.314	238.898	299.857	160.125	160.508	379.913	390.638	297.302	283.899
18/10/2555 10:29	107.314	238.898	299.292	160.125	160.508	379.913	390.569	297.302	283.899
18/10/2555 10:30	107.314	238.898	298.132	160.125	160.508	379.351	390.361	297.302	283.899
18/10/2555 10:31	107.314	238.898	300.64	160.125	160.508	379.224	390.361	297.302	283.899
18/10/2555 10:32	107.729	238.898	298.024	160.125	160.508	379.224	390.361	297.302	283.844
18/10/2555 10:33	107.744	238.898	297.722	160.125	160.508	379.224	390.361	297.302	283.801
18/10/2555 10:34	107.744	238.898	299.544	160.125	160.508	379.224	390.361	297.302	283.801
18/10/2555 10:35	107.744	238.898	301.151	159.804	160.508	379.224	390.361	296.5	283.801
18/10/2555 10:36	107.744	238.915	301.724	159.385	160.508	379.224	390.361	296.002	283.801
18/10/2555 10:37	107.744	239.001	300.637	159.385	160.508	379.224	390.361	296.002	283.801
18/10/2555 10:38	107.744	238.928	300.058	159.385	160.338	379.224	390.361	296.002	283.801
18/10/2555 10:39	107.744	238.975	300.871	159.385	160.329	379.224	390.361	296.002	283.801
18/10/2555 10:40	107.744	238.981	301.401	159.385	160.329	379.224	390.361	296.002	283.801
18/10/2555 10:41	107.744	238.899	304.686	159.385	160.329	379.224	390.234	296.002	283.801
18/10/2555 10:42	107.744	238.984	306.616	159.385	160.329	378.345	389.815	296.002	283.801
18/10/2555 10:43	107.744	238.928	305.746	159.385	160.329	378.125	389.815	296.002	283.801
18/10/2555 10:44	107.153	239.001	302.844	159.385	160.329	378.125	389.815	296.002	283.742
18/10/2555 10:45	107.133	239.001	305.615	159.385	160.329	378.125	389.815	296.002	283.698
18/10/2555 10:46	107.133	238.941	303.459	159.385	160.329	378.125	389.815	296.002	283.698
18/10/2555 10:47	107.133	239.015	300.157	159.099	160.329	378.125	389.815	295.694	283.698
18/10/2555 10:48	107.133	239.001	297.516	158.725	160.329	378.125	389.815	295.502	283.698
18/10/2555 10:49	107.133	239.001	296.944	158.725	160.329	378.125	389.815	295.502	283.698
18/10/2555 10:50	107.133	239.003	295.629	158.725	160.249	378.125	389.815	295.502	283.698
18/10/2555 10:51	107.133	238.987	299.178	158.725	160.245	378.125	389.815	295.502	283.698

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
18/10/2555 10:52	107.133	238.95	298.774	158.725	160.245	378.125	389.815	295.502	283.698
18/10/2555 10:53	107.133	238.8	297.204	158.725	160.245	378.125	389.878	295.502	283.698
18/10/2555 10:54	107.133	238.862	297.691	158.725	160.245	378.461	390.084	295.502	283.698
18/10/2555 10:55	107.133	238.898	297.002	158.725	160.245	378.536	390.084	295.502	283.698
18/10/2555 10:56	106.898	238.898	296.977	158.725	160.245	378.536	390.084	295.502	283.808
18/10/2555 10:57	106.89	238.898	299.892	158.725	160.245	378.536	390.084	295.502	283.899
18/10/2555 10:58	106.89	238.898	299.146	158.725	160.245	378.536	390.084	295.502	283.899
18/10/2555 10:59	106.89	238.968	296.508	158.477	160.245	378.536	390.084	295.193	283.899
18/10/2555 11:00	106.89	238.8	298.976	158.152	160.245	378.536	390.084	295.001	283.899

Date/Time	PAH#2 Air Inlet Temp	PAH#1 Air Inlet Temp	Ambient Air Temperature	Condenser Box2 Outlet Temp	Condenser Box1 Outlet Temp	Condenser Box2 Inlet Temp	Condenser Box1 Inlet Temp	SAH#2 Gas Outlet Temp	SAH#1 Gas Outlet Temp
3	U0880NL22 T001	U0880NL12 T001	U08800QA01 T001	U0880VC42 T001	U0880VC41 T001	U0880VC22 T001	U0880VC21 T001	U0880NR42 T001	U0880NR32 T001
18/10/2555 10:00	49.6999	53.8591	27.4376	38.3751	38.0501	29.3251	29.4457	174.451	179.008
18/10/2555 10:01	49.6999	54.4206	27.7541	38.3751	38.0501	29.3251	29.4457	174.451	179.008
18/10/2555 10:02	49.6999	54.955	27.9373	38.3751	38.0501	29.3251	29.4457	174.451	179.008
18/10/2555 10:03	49.6999	54.955	27.9373	38.3751	38.0501	29.3251	29.4457	174.451	179.127
18/10/2555 10:04	49.6999	54.955	27.9373	38.3751	38.0501	29.3251	29.4457	174.451	179.456
18/10/2555 10:05	49.6999	54.955	28.296	38.3751	38.0501	29.4273	29.4457	174.451	179.456
18/10/2555 10:06	49.6999	54.3308	28.5627	38.3751	38.0501	29.4502	29.4457	174.451	179.456
18/10/2555 10:07	49.5881	54.1906	28.9375	38.3751	38.0501	29.4502	29.4457	174.426	179.456
18/10/2555 10:08	49.5439	54.1906	28.9375	38.3751	38.1149	29.4502	29.4457	174.401	179.456
18/10/2555 10:09	49.3926	54.1906	28.9375	38.3751	38.1249	29.4502	29.4457	174.401	179.456
18/10/2555 10:10	48.7875	54.1906	28.9375	38.3984	38.1249	29.4502	29.4457	174.401	179.456
18/10/2555 10:11	48.7875	54.1906	28.9375	38.475	38.1249	29.4502	29.4609	174.401	179.456
18/10/2555 10:12	48.7875	54.1906	28.9375	38.475	38.1249	29.4502	29.5219	174.401	179.456
18/10/2555 10:13	48.7875	54.1906	28.9375	38.475	38.1249	29.4502	29.5219	174.401	179.456
18/10/2555 10:14	48.7875	54.1906	28.9375	38.475	38.1249	29.4502	29.5219	174.401	179.456
18/10/2555 10:15	49.3339	54.1906	28.9375	38.475	38.1249	29.4502	29.5219	174.401	179.536
18/10/2555 10:16	49.5499	54.1906	28.9375	38.475	38.1249	29.4502	29.5219	174.401	179.756
18/10/2555 10:17	49.5499	54.1906	28.9375	38.475	38.1249	29.634	29.5219	174.401	179.756
18/10/2555 10:18	49.5499	54.0834	28.9562	38.475	38.1249	29.6753	29.5219	174.401	179.756
18/10/2555 10:19	49.5499	54.0593	29.0123	38.475	38.1249	29.6753	29.5219	174.476	179.756
18/10/2555 10:20	49.5625	54.0593	29.0123	38.475	38.2852	29.6753	29.5219	174.551	179.756
18/10/2555 10:21	50.3063	54.0593	29.0123	38.475	38.3064	29.6753	29.5219	174.551	179.756
18/10/2555 10:22	50.3063	54.0593	28.979	38.4696	38.3064	29.6753	29.5219	174.551	179.756
18/10/2555 10:23	50.3063	54.0593	28.5126	38.4499	38.3064	29.6753	29.4948	174.551	179.756
18/10/2555 10:24	50.3063	54.0593	28.5126	38.4499	38.3064	29.6753	29.3968	174.551	179.756
18/10/2555 10:25	50.3063	54.0593	28.5126	38.4499	38.3064	29.6753	29.3968	174.551	179.756

Date/Time	PAH#2 Air Inlet Temp	PAH#1 Air Inlet Temp	Ambient Air Temperature	Condenser Box2 Outlet Temp	Condenser Box1 Outlet Temp	Condenser Box2 Inlet Temp	Condenser Box1 Inlet Temp	SAH#2 Gas Outlet Temp	SAH#1 Gas Outlet Temp
3	U0880NL22 T001	U0880NL12 T001	U088000QA01 T001	U0880VC42 T001	U0880VC41 T001	U0880VC22 T001	U0880VC21 T001	U0880NR42 T001	U0880NR32 T001
18/10/2555 10:26	49.8187	54.0593	28.5126	38.4499	38.3064	29.6753	29.3968	174.551	179.756
18/10/2555 10:27	49.5563	54.0593	28.5126	38.4499	38.3064	29.6753	29.3968	174.551	179.728
18/10/2555 10:28	49.5563	53.7591	28.5126	38.4499	38.3064	29.6753	29.3968	174.551	179.651
18/10/2555 10:29	49.5563	53.3087	28.5126	38.4499	38.3064	29.5752	29.3968	174.551	179.651
18/10/2555 10:30	49.5563	53.3087	28.5126	38.4499	38.3064	29.5502	29.3968	174.551	179.651
18/10/2555 10:31	49.5563	53.3087	28.5126	38.4499	38.3064	29.5502	29.3968	174.601	179.651
18/10/2555 10:32	49.5563	53.3087	28.5126	38.4499	38.211	29.5502	29.3968	174.651	179.651
18/10/2555 10:33	49.5563	53.3087	28.5126	38.4499	38.2004	29.5502	29.3968	174.651	179.651
18/10/2555 10:34	49.5563	53.3087	28.5109	38.4549	38.2004	29.5502	29.3968	174.651	179.651
18/10/2555 10:35	49.5563	53.3087	28.4874	38.475	38.2004	29.5502	29.3968	174.651	179.651
18/10/2555 10:36	49.5563	53.3087	28.4874	38.475	38.2004	29.5502	29.3968	174.651	179.651
18/10/2555 10:37	49.5563	53.3087	28.4874	38.475	38.2004	29.5502	29.3968	174.651	179.651
18/10/2555 10:38	49.4953	53.3087	28.4874	38.475	38.2004	29.5502	29.3968	174.651	179.651
18/10/2555 10:39	49.4625	53.3087	28.4874	38.475	38.2004	29.5502	29.3968	174.651	179.665
18/10/2555 10:40	49.4625	53.3141	28.4874	38.475	38.2004	29.5502	29.3968	174.651	179.706
18/10/2555 10:41	49.4625	53.3221	28.4874	38.475	38.2004	29.6503	29.3968	174.651	179.706
18/10/2555 10:42	49.4625	53.3221	28.4874	38.475	38.2004	29.6753	29.3968	174.651	179.706
18/10/2555 10:43	49.4625	53.3221	28.4874	38.475	38.2004	29.6753	29.3968	174.451	179.706
18/10/2555 10:44	49.4625	53.6099	28.4874	38.475	38.3878	29.6753	29.3968	174.251	179.706
18/10/2555 10:45	49.4625	54.0728	28.4874	38.475	38.4049	29.6753	29.3968	174.251	179.706
18/10/2555 10:46	49.4625	54.0728	28.4724	38.5071	38.4049	29.6753	29.3968	174.251	179.706
18/10/2555 10:47	49.4625	54.0728	28.2623	38.6497	38.4049	29.6753	29.4527	174.251	179.706
18/10/2555 10:48	49.4625	54.0728	28.2623	38.6497	38.4049	29.6753	29.6204	174.251	179.706
18/10/2555 10:49	49.4625	54.0728	28.2623	38.6497	38.4049	29.6753	29.6204	174.251	179.706
18/10/2555 10:50	49.6575	54.0728	28.2623	38.6497	38.4049	29.6753	29.6204	174.251	179.706
18/10/2555 10:51	49.7625	54.0728	28.2623	38.6497	38.4049	29.6753	29.6204	174.251	179.598
18/10/2555 10:52	49.7625	54.0728	28.2623	38.6497	38.4049	29.6753	29.6204	174.251	179.302
18/10/2555 10:53	49.7625	54.0728	28.2623	38.6497	38.4049	29.7351	29.6204	174.251	179.302
18/10/2555 10:54	49.7625	54.0728	28.2623	38.6497	38.4049	29.7501	29.6204	174.251	179.302
18/10/2555 10:55	49.7625	54.0728	28.2623	38.6497	38.4049	29.7501	29.6204	174.102	179.302
18/10/2555 10:56	49.7625	54.118	28.2623	38.6497	38.5444	29.7501	29.6204	173.952	179.302
18/10/2555 10:57	49.7625	54.1906	28.2623	38.6497	38.5544	29.7501	29.6204	173.952	179.302
18/10/2555 10:58	49.7625	54.1906	28.2682	38.659	38.5544	29.7501	29.6204	173.952	179.302
18/10/2555 10:59	49.7625	54.1906	28.3501	38.7001	38.5544	29.7501	29.6403	173.952	179.302
18/10/2555 11:00	49.7625	54.3858	28.3501	38.7001	38.5544	29.7501	29.6951	173.952	179.302

Date/Time	SAH#2 Gas Inlet Temp	SAH#1 Gas Inlet Temp	SAH#2 Air Outlet Temp	SAH#1 Air Outlet Temp	SAH#2 Air Inlet Temp	SAH#1 Air Inlet Temp	LP Htr#1 Condensate Inlet Temp	FW Pressure	HP Htr#7 Drain Temp
4	U0880NR41 T001	U0880NR31 T001	U0880NG24 T001	U0880NG14 T001	U0880NG23 T001	U0880NG13 T001	U0880RM61 T001	U0880NB01 P002	U0880RP70 T001
18/10/2555 10:00	297.101	300.403	279.104	267.552	41.833	40.9686	41.3254	173.13	196.875
18/10/2555 10:01	297.101	300.403	279.104	267.552	41.833	40.9686	41.3254	173.13	196.875
18/10/2555 10:02	297.101	300.403	279.085	267.552	41.833	40.9686	41.3254	173.13	196.875
18/10/2555 10:03	297.017	300.403	279.023	267.552	41.754	40.9761	41.3254	173.13	196.875
18/10/2555 10:04	296.6	300.403	279.023	267.552	41.6355	41.1182	41.3254	173.13	196.875
18/10/2555 10:05	296.6	300.403	279.023	267.463	41.6355	41.1182	41.3254	173.13	196.875
18/10/2555 10:06	296.6	300.403	279.023	267.309	41.6355	40.9742	41.3254	173.13	196.875
18/10/2555 10:07	296.6	300.403	279.023	267.309	41.6355	40.3328	41.3254	173.13	196.875
18/10/2555 10:08	296.6	300.403	279.023	267.309	41.6355	40.3328	41.3254	173.13	196.875
18/10/2555 10:09	296.6	300.403	279.023	267.309	41.6355	40.3328	41.422	173.13	197.023
18/10/2555 10:10	296.6	300.403	279.023	267.309	41.6355	40.3328	41.4253	173.13	197.026
18/10/2555 10:11	296.6	300.191	279.023	267.309	41.6355	40.3328	41.4253	173.13	197.026
18/10/2555 10:12	296.6	299.799	279.023	267.309	41.6355	40.3328	41.4253	173.13	197.026
18/10/2555 10:13	296.6	299.799	279.023	267.309	41.6355	40.3328	41.4253	173.13	197.026
18/10/2555 10:14	296.6	299.799	279.023	267.309	41.6355	40.3328	41.4253	173.074	197.026
18/10/2555 10:15	296.54	299.799	279.023	267.309	41.7295	40.3328	41.4253	173.005	197.026
18/10/2555 10:16	296.198	299.799	279.023	267.309	41.8705	40.3328	41.4253	173.005	197.026
18/10/2555 10:17	296.198	299.799	279.023	267.338	41.8705	40.3328	41.4253	173.005	197.026
18/10/2555 10:18	296.198	299.799	279.023	267.39	41.8705	40.2951	41.4253	173.005	197.026
18/10/2555 10:19	296.198	299.799	279.023	267.39	41.8705	40.1272	41.4253	173.005	197.026
18/10/2555 10:20	296.198	299.799	279.023	267.39	41.8705	40.1272	41.4253	173.005	197.026
18/10/2555 10:21	296.198	299.799	279.023	267.39	41.8705	40.1272	41.6152	173.005	197.175
18/10/2555 10:22	296.198	299.799	279.023	267.39	41.8705	40.1272	41.6252	173.005	197.177
18/10/2555 10:23	296.198	299.694	279.023	267.39	41.8705	40.1272	41.6252	173.005	197.177
18/10/2555 10:24	296.198	299.5	279.023	267.39	41.8705	40.1272	41.6252	173.005	197.177
18/10/2555 10:25	296.198	299.5	279.023	267.39	41.8705	40.1272	41.6252	173.005	197.177
18/10/2555 10:26	296.198	299.5	279.004	267.39	41.8705	40.1272	41.6252	173.379	197.177
18/10/2555 10:27	296.118	299.5	278.942	267.39	41.7465	40.1272	41.6252	173.837	197.177
18/10/2555 10:28	295.599	299.5	278.942	267.39	41.5606	40.1272	41.6252	173.837	197.177
18/10/2555 10:29	295.599	299.5	278.942	267.39	41.5606	40.1272	41.6252	173.837	197.177
18/10/2555 10:30	295.599	299.5	278.942	267.39	41.5606	40.1717	41.6252	173.837	197.177
18/10/2555 10:31	295.599	299.5	278.942	267.39	41.5606	40.3702	41.6252	173.837	197.177
18/10/2555 10:32	295.599	299.5	278.942	267.39	41.5606	40.3702	41.6252	173.837	197.177
18/10/2555 10:33	295.599	299.5	278.942	267.39	41.5606	40.3702	41.5303	173.837	197.177
18/10/2555 10:34	295.599	299.5	278.942	267.39	41.5606	40.3702	41.5253	173.837	197.177
18/10/2555 10:35	295.599	299.266	278.942	267.39	41.5606	40.3702	41.5253	173.837	197.177
18/10/2555 10:36	295.599	298.798	278.942	267.39	41.5606	40.3702	41.5253	173.837	197.177
18/10/2555 10:37	295.599	298.798	278.942	267.39	41.5606	40.3702	41.5253	173.837	197.177
18/10/2555 10:38	295.599	298.798	278.904	267.39	41.5606	40.3702	41.5253	173.584	197.177
18/10/2555 10:39	295.547	298.798	278.78	267.39	41.5756	40.3702	41.5253	173.274	197.177

Date/Time	SAH#2 Gas Inlet Temp	SAH#1 Gas Inlet Temp	SAH#2 Air Outlet Temp	SAH#1 Air Outlet Temp	SAH#2 Air Inlet Temp	SAH#1 Air Inlet Temp	LP Htr#1 Condensate Inlet Temp	FW Pressure	HP Htr#7 Drain Temp
4	U0880NR41 T001	U0880NR31 T001	U0880NG24 T001	U0880NG14 T001	U0880NG23 T001	U0880NG13 T001	U0880RM61 T001	U0880NB01 P002	U0880RP70 T001
18/10/2555 10:40	295.203	298.798	278.78	267.39	41.5981	40.3702	41.5253	173.274	197.177
18/10/2555 10:41	295.203	298.798	278.78	267.39	41.5981	40.3702	41.5253	173.274	197.177
18/10/2555 10:42	295.203	298.798	278.78	267.39	41.5981	40.3874	41.5253	173.274	197.177
18/10/2555 10:43	295.203	298.798	278.78	267.39	41.5981	40.4637	41.5253	173.274	197.177
18/10/2555 10:44	295.203	298.798	278.78	267.39	41.5981	40.4637	41.5253	173.274	197.177
18/10/2555 10:45	295.203	298.798	278.78	267.39	41.5981	40.4637	41.6673	173.274	197.177
18/10/2555 10:46	295.203	298.798	278.78	267.39	41.5981	40.4637	41.6748	173.274	197.177
18/10/2555 10:47	295.203	298.999	278.78	267.39	41.5981	40.4637	41.6748	173.274	197.177
18/10/2555 10:48	295.203	299.402	278.78	267.39	41.5981	40.4637	41.6748	173.274	197.177
18/10/2555 10:49	295.203	299.402	278.78	267.39	41.5981	40.4637	41.6748	173.274	197.177
18/10/2555 10:50	295.203	299.402	278.761	267.39	41.5981	40.4637	41.6748	173.302	197.177
18/10/2555 10:51	295.255	299.402	278.699	267.39	42.2758	40.4637	41.6748	173.337	197.177
18/10/2555 10:52	295.599	299.402	278.699	267.39	42.3653	40.4637	41.6748	173.337	197.177
18/10/2555 10:53	295.599	299.402	278.699	267.36	42.3653	40.4637	41.6748	173.337	197.177
18/10/2555 10:54	295.599	299.402	278.699	267.309	42.3653	40.4569	41.6748	173.337	197.177
18/10/2555 10:55	295.599	299.402	278.699	267.309	42.3653	40.4263	41.6748	173.337	197.177
18/10/2555 10:56	295.599	299.402	278.699	267.309	42.3653	40.4263	41.6748	173.337	197.177
18/10/2555 10:57	295.599	299.402	278.699	267.309	42.3653	40.4263	41.7218	173.337	197.177
18/10/2555 10:58	295.599	299.402	278.699	267.309	42.3653	40.4263	41.7252	173.337	197.177
18/10/2555 10:59	295.599	299.2	278.699	267.309	42.3653	40.4263	41.7252	173.337	197.177
18/10/2555 11:00	295.599	298.798	278.699	267.309	42.3653	40.848	41.7252	173.337	197.177

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
18/10/2555 10:00	237.021	238.049	199.627	30.3281	30.4282	508.201	496.747	506.854	495.749
18/10/2555 10:01	237.101	238.049	199.248	30.3281	30.4282	507.912	496.204	506.441	495.749
18/10/2555 10:02	237.115	238.049	200.593	30.3281	30.4282	507.866	495.895	504.602	495.035
18/10/2555 10:03	237.058	238.049	199.582	30.3281	30.4282	507.888	495.611	504.602	494.101
18/10/2555 10:04	237.129	238.049	201.444	30.3281	30.4282	507.938	495.449	504.602	494.101
18/10/2555 10:05	237.029	238.049	199.526	30.3281	30.4282	507.61	495.155	504.602	494.101
18/10/2555 10:06	237.122	238.049	200.357	30.3281	30.4282	506.739	494.75	504.602	494.101
18/10/2555 10:07	237.072	238.049	202.288	30.3281	30.4282	505.945	494.258	504.602	494.101
18/10/2555 10:08	237.054	238.049	201.538	30.3798	30.4865	505.249	493.751	504.602	494.101
18/10/2555 10:09	237.056	238.006	199.413	30.4282	30.541	504.865	493.196	504.602	494.101
18/10/2555 10:10	237.097	237.979	203.86	30.4282	30.541	504.995	492.781	504.602	494.101
18/10/2555 10:11	237.044	237.979	200.027	30.4282	30.541	505.157	492.451	504.602	494.101
18/10/2555 10:12	237.134	237.979	202.575	30.4282	30.541	504.989	492.064	504.602	494.101

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
18/10/2555 10:13	237.046	237.979	199.118	30.4282	30.541	504.656	491.689	504.025	494.101
18/10/2555 10:14	237.132	237.979	199.781	30.4282	30.541	504.398	491.392	501.453	492.224
18/10/2555 10:15	237.105	237.979	203.717	30.4282	30.541	504.685	491.579	501.453	489.597
18/10/2555 10:16	237.085	237.979	202.137	30.4282	30.541	504.673	491.957	501.453	489.597
18/10/2555 10:17	237.144	237.979	198.312	30.4282	30.541	504.629	491.957	501.453	489.597
18/10/2555 10:18	237.167	237.979	200.72	30.4282	30.541	504.888	492.017	501.453	489.597
18/10/2555 10:19	237.098	237.979	202.158	30.4282	30.541	505.459	492.326	501.453	489.597
18/10/2555 10:20	237.059	237.979	199.289	30.4477	30.5539	505.938	492.664	501.453	489.597
18/10/2555 10:21	237.124	238.015	203.327	30.4658	30.566	506.316	493.042	501.453	489.597
18/10/2555 10:22	237.026	238.038	202.521	30.4658	30.566	506.057	493.276	501.453	489.597
18/10/2555 10:23	237.04	238.038	202.124	30.4658	30.566	505.294	493.069	501.453	489.597
18/10/2555 10:24	237.024	238.038	200.455	30.4658	30.566	504.428	492.926	501.453	489.597
18/10/2555 10:25	237.109	238.038	202.354	30.4658	30.566	503.619	492.709	501.37	489.597
18/10/2555 10:26	237.01	238.038	202.473	30.4658	30.566	503.138	492.166	501.004	489.661
18/10/2555 10:27	237.014	238.038	200.696	30.4658	30.566	502.506	491.179	501.004	489.752
18/10/2555 10:28	237.115	238.038	201.945	30.4658	30.566	502.065	490.255	501.004	489.752
18/10/2555 10:29	237.084	238.038	202.974	30.4658	30.566	501.97	489.805	501.004	489.752
18/10/2555 10:30	237.05	238.038	203.639	30.4658	30.566	501.95	489.353	501.004	489.752
18/10/2555 10:31	237.1	238.038	202.12	30.4658	30.566	501.938	489.11	501.004	489.752
18/10/2555 10:32	237.094	238.038	201.05	30.4658	30.566	502.056	489.088	501.004	489.752
18/10/2555 10:33	237.096	237.997	201.164	30.4658	30.566	502.134	489.22	501.004	489.752
18/10/2555 10:34	237.1	237.969	198.247	30.4658	30.566	502.179	489.263	501.004	489.752
18/10/2555 10:35	237.167	237.969	203.283	30.4658	30.566	502.471	489.333	501.004	489.752
18/10/2555 10:36	237.055	237.969	201.279	30.4658	30.566	502.67	489.443	501.004	489.752
18/10/2555 10:37	237.112	237.969	201.046	30.4658	30.566	502.76	489.578	500.647	489.752
18/10/2555 10:38	237.122	237.969	201.738	30.4658	30.566	502.919	489.62	499.054	488.627
18/10/2555 10:39	237.052	237.969	199.021	30.4658	30.566	502.93	489.545	499.054	487.051
18/10/2555 10:40	237.113	237.969	202.096	30.4658	30.566	502.737	489.623	499.054	487.051
18/10/2555 10:41	237.084	237.969	201.047	30.4658	30.566	502.927	490.08	499.054	487.051
18/10/2555 10:42	236.933	237.969	199.545	30.4658	30.566	503.478	490.847	499.054	487.051
18/10/2555 10:43	237.025	237.969	202.714	30.4658	30.566	504.27	492.106	499.054	487.051
18/10/2555 10:44	237.04	237.969	200.272	30.4634	30.5698	504.734	493.271	499.054	487.051
18/10/2555 10:45	237.133	237.891	197.51	30.4609	30.5737	504.978	493.909	499.054	487.051
18/10/2555 10:46	237.174	237.839	203.15	30.4609	30.5737	505.424	494.368	499.054	487.051
18/10/2555 10:47	237.024	237.839	201.745	30.4609	30.5737	506.051	494.903	499.054	487.051
18/10/2555 10:48	237.065	237.839	200.321	30.4609	30.5737	506.568	495.418	499.054	487.051
18/10/2555 10:49	237.123	237.839	200.652	30.4609	30.5737	506.948	495.671	499.553	487.051
18/10/2555 10:50	237.072	237.839	201.256	30.4609	30.5737	506.788	495.411	502.048	489.033
18/10/2555 10:51	237.17	237.839	196.322	30.4609	30.5737	506.283	494.88	502.048	492.004
18/10/2555 10:52	237.197	237.839	201.789	30.4609	30.5737	506.153	494.793	502.048	492.004

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
18/10/2555 10:53	237.089	237.839	201.046	30.4609	30.5737	506.292	494.605	502.048	492.004
18/10/2555 10:54	237.135	237.839	201.927	30.4609	30.5737	506.444	494.448	502.048	492.004
18/10/2555 10:55	237.14	237.839	199.684	30.4609	30.5737	506.629	494.196	502.048	492.004
18/10/2555 10:56	237.145	237.839	199.27	30.4383	30.5448	506.704	494.053	502.048	492.004
18/10/2555 10:57	237.147	237.923	197.829	30.4157	30.5159	506.844	494.186	502.048	492.004
18/10/2555 10:58	237.164	237.979	202.215	30.4157	30.5159	507.247	494.624	502.048	492.004
18/10/2555 10:59	237.044	237.979	205.894	30.4157	30.5159	507.964	495.118	502.048	492.004
18/10/2555 11:00	237.036	237.979	196.472	30.4157	30.5159	508.455	495.517	502.048	492.004

Date/Time	LP Exhaust Condenser Temp	HP Htr#6 Outlet FW Temp	HP Htr FW Inlet Temp	RH Inlet Temp DESH	FW Pressure	Ext#7 Steam Pressure	HP Htr FW Inlet Pressure	FW Flow to Eco	SH Spray Water Flow	Total Coal Flow
6	U0880SD11 T001	U0880RL64 T001	U0880RL61 T001	U0880RC10 T001	U0880NB01 P002	U0880RF70 P001	U0880RL61 P001	U0880NB01 F001	U0880NB40 F001	U0880NL81 U007
18/10/2555 10:00	40.4629	197.177	177.238	326.378	173.13	31.8501	179.137	199.627	-0.20172	238.219
18/10/2555 10:01	40.4629	197.177	177.233	326.378	173.13	31.8501	179.11	199.248	-0.21729	236.195
18/10/2555 10:02	40.4629	197.177	177.233	324.875	173.13	31.8501	179.056	200.593	-0.21522	235.044
18/10/2555 10:03	40.4629	197.177	177.294	324.875	173.13	31.8501	179.081	199.582	-0.19643	236.007
18/10/2555 10:04	40.4629	197.177	177.265	324.875	173.13	31.8501	179.541	201.444	-0.20531	232.144
18/10/2555 10:05	40.4629	197.177	177.263	324.875	173.13	31.8501	179.516	199.526	-0.1997	232.213
18/10/2555 10:06	40.4629	197.177	177.305	324.875	173.13	31.8501	179.418	200.357	-0.19641	233.436
18/10/2555 10:07	40.4988	197.177	177.304	324.875	173.13	31.8727	179.636	202.288	-0.18677	231.696
18/10/2555 10:08	40.5373	197.177	177.271	324.875	173.13	31.8848	179.461	201.538	-0.16769	235.181
18/10/2555 10:09	40.5373	197.275	177.264	324.875	173.13	31.8848	179.213	199.413	-0.19275	234.353
18/10/2555 10:10	40.5373	197.324	177.262	324.875	173.13	31.8848	179.63	203.86	-0.20241	229.653
18/10/2555 10:11	40.5373	197.324	177.276	324.875	173.13	31.8848	179.492	200.027	-0.19437	233.549
18/10/2555 10:12	40.5373	197.324	177.298	324.875	173.13	31.8848	179.446	202.575	-0.21134	232.183
18/10/2555 10:13	40.5373	197.324	177.288	324.875	173.13	31.8848	178.816	199.118	-0.19079	240.173
18/10/2555 10:14	40.5373	197.324	177.33	321.999	173.074	31.8848	178.899	199.781	-0.20561	235.124
18/10/2555 10:15	40.5373	197.324	177.305	321.999	173.005	31.8848	179.281	203.717	-0.19328	234.727
18/10/2555 10:16	40.5373	197.324	177.367	321.999	173.005	31.8848	179.054	202.137	-0.20625	236.817
18/10/2555 10:17	40.5373	197.324	177.317	321.999	173.005	31.8848	178.682	198.312	-0.19526	238.947
18/10/2555 10:18	40.5373	197.324	177.347	321.999	173.005	31.8848	178.857	200.72	-0.20284	236.315
18/10/2555 10:19	40.6097	197.324	177.314	321.999	173.005	31.9183	179.056	202.158	-0.18161	234.838
18/10/2555 10:20	40.6872	197.324	177.338	321.999	173.005	31.9377	179.156	199.289	-0.19978	233.791
18/10/2555 10:21	40.6872	197.374	177.338	321.999	173.005	31.9377	179.79	203.327	-0.19362	227.603
18/10/2555 10:22	40.6872	197.401	177.328	321.999	173.005	31.9377	179.825	202.521	-0.19745	230.97
18/10/2555 10:23	40.6872	197.401	177.317	321.999	173.005	31.9377	180.075	202.124	-0.20312	226.201
18/10/2555 10:24	40.6872	197.401	177.3	321.999	173.005	31.9377	179.968	200.455	-0.17849	228.33
18/10/2555 10:25	40.6872	197.401	177.318	321.999	173.005	31.9377	180.155	202.354	-0.18666	224.027

Date/Time	LP Exhaust Condenser Temp	HP Htr#6 Outlet FW Temp	HP Htr FW Inlet Temp	RH Inlet Temp DESH	FW Pressure	Ext#7 Steam Pressure	HP Htr FW Inlet Pressure	FW Flow to Eco	SH Spray Water Flow	Total Coal Flow
6	U0880SD11 T001	U0880RL64 T001	U0880RL61 T001	U0880RC10 T001	U0880NB01 P002	U0880RF70 P001	U0880RL61 P001	U0880NB01 F001	U0880NB40 F001	U0880NL81 U007
18/10/2555 10:26	40.6872	197.401	177.276	322.246	173.379	31.9377	179.991	202.473	-0.19556	226.952
18/10/2555 10:27	40.6872	197.401	177.343	322.25	173.837	31.9377	179.631	200.696	-0.18171	230.255
18/10/2555 10:28	40.6872	197.401	177.309	322.25	173.837	31.9377	179.616	201.945	-0.2003	227.4
18/10/2555 10:29	40.6872	197.401	177.291	322.25	173.837	31.9377	179.805	202.974	-0.1714	227.371
18/10/2555 10:30	40.6872	197.401	177.314	322.25	173.837	31.9377	179.718	203.639	-0.20005	229.309
18/10/2555 10:31	40.6512	197.401	177.314	322.25	173.837	31.982	179.431	202.12	-0.19	228.581
18/10/2555 10:32	40.6128	197.401	177.31	322.25	173.837	32.0077	179.431	201.05	-0.1913	226.007
18/10/2555 10:33	40.6128	197.401	177.316	322.25	173.837	32.0077	179.431	201.164	-0.17643	228.936
18/10/2555 10:34	40.6128	197.401	177.344	322.25	173.837	32.0077	179.227	198.247	-0.18339	228.689
18/10/2555 10:35	40.6128	197.401	177.408	322.25	173.837	32.0077	179.506	203.283	-0.19544	225.651
18/10/2555 10:36	40.6128	197.401	177.374	322.25	173.837	32.0077	179.396	201.279	-0.19055	229.769
18/10/2555 10:37	40.6128	197.401	177.369	322.25	173.837	32.0077	179.506	201.046	-0.15949	226.85
18/10/2555 10:38	40.6128	197.401	177.359	320.532	173.584	32.0077	179.348	201.738	-0.17974	227.774
18/10/2555 10:39	40.6128	197.401	177.352	320.503	173.274	32.0077	178.975	199.021	-0.1748	232.25
18/10/2555 10:40	40.6128	197.401	177.362	320.503	173.274	32.0077	179.076	202.096	-0.18665	230.266
18/10/2555 10:41	40.6128	197.401	177.357	320.503	173.274	32.0077	178.883	201.047	-0.15884	234.318
18/10/2555 10:42	40.6128	197.401	177.354	320.503	173.274	32.0077	178.863	199.545	-0.17724	229.981
18/10/2555 10:43	40.7004	197.401	177.324	320.503	173.274	31.9751	179.131	202.714	-0.18842	228.989
18/10/2555 10:44	40.8005	197.401	177.309	320.503	173.274	31.9548	178.925	200.272	-0.19251	232.292
18/10/2555 10:45	40.8005	197.352	177.299	320.503	173.274	31.9548	178.81	197.51	-0.1952	231.415
18/10/2555 10:46	40.8005	197.324	177.298	320.503	173.274	31.9548	179.421	203.15	-0.19305	224.87
18/10/2555 10:47	40.8005	197.324	177.36	320.503	173.274	31.9548	179.581	201.745	-0.19054	225.253
18/10/2555 10:48	40.8005	197.324	177.327	320.503	173.274	31.9548	179.795	200.321	-0.18642	222.898
18/10/2555 10:49	40.8005	197.324	177.292	320.503	173.274	31.9548	180.05	200.652	-0.18816	218.331
18/10/2555 10:50	40.8005	197.324	177.277	324.307	173.302	31.9548	179.629	201.256	-0.18459	227.46
18/10/2555 10:51	40.8005	197.324	177.284	324.371	173.337	31.9548	179.231	196.322	-0.18273	223.508
18/10/2555 10:52	40.8005	197.324	177.325	324.371	173.337	31.9548	179.581	201.789	-0.17358	222.141
18/10/2555 10:53	40.8005	197.324	177.311	324.371	173.337	31.9548	179.581	201.046	-0.19166	224.435
18/10/2555 10:54	40.8005	197.324	177.311	324.371	173.337	31.9548	179.549	201.927	-0.18928	223.73
18/10/2555 10:55	40.8005	197.324	177.297	324.371	173.337	31.9548	179.311	199.684	-0.18439	224.845
18/10/2555 10:56	40.8005	197.324	177.277	324.371	173.337	31.9548	179.067	199.27	-0.16693	227.221
18/10/2555 10:57	40.8005	197.372	177.29	324.371	173.337	31.9548	179.035	197.829	-0.15449	226.335
18/10/2555 10:58	40.8005	197.401	177.361	324.371	173.337	31.9548	179.356	202.215	-0.16826	223.451
18/10/2555 10:59	40.8005	197.401	177.327	324.371	173.337	31.9548	179.55	205.894	-0.18162	224.737
18/10/2555 11:00	40.8005	197.401	177.339	324.371	173.337	31.9548	178.887	196.472	-0.17799	226.492

ตาราง ก3 ข้อมูลสภาวะการเดินเครื่องโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ที่กำลังการผลิต 180 MW

Date/Time	Condenser Pressure	Condenser Temp	Deaerator Pressure	Main Steam Temp RA20	Main Steam Temp RA10	TB HP Outlet Pressure	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Flow RA20
1	U0880SD11 P001	U0880SD11 T002	U0880RH50 P002	U0880RA20 T003	U0880RA10 T003	U0880RC01 P001	U0880RA20 P003	U0880RA10 P003	U0880RA20 F001
13/9/2555 15:00	0.067651	39.5245	6.03	536.463	536.629	24.8249	160.095	159.824	79.9493
13/9/2555 15:01	0.0672	39.5245	6.03	536.342	536.78	24.8249	159.753	159.533	79.9493
13/9/2555 15:02	0.0672	39.5245	6.03	536.244	536.944	24.8249	159.692	159.494	79.9493
13/9/2555 15:03	0.0672	39.5245	6.03	536.344	537.229	24.8249	159.692	159.494	79.9493
13/9/2555 15:04	0.0672	39.5245	6.03	536.829	537.378	24.8249	159.692	159.494	79.9493
13/9/2555 15:05	0.0672	39.5245	6.03	537.574	537.54	24.8249	159.692	159.494	79.9493
13/9/2555 15:06	0.0672	39.5245	6.0445	538.173	537.852	24.8249	159.692	159.494	79.9493
13/9/2555 15:07	0.0672	39.5232	6.045	538.476	538.132	24.8249	159.692	159.494	79.9493
13/9/2555 15:08	0.0672	39.4501	6.045	538.811	538.275	24.8063	159.692	159.494	80.1157
13/9/2555 15:09	0.0672	39.4501	6.045	538.918	538.283	24.8001	159.692	159.494	80.2518
13/9/2555 15:10	0.0672	39.4501	6.045	539.01	538.419	24.8001	159.692	159.494	80.2518
13/9/2555 15:11	0.0672	39.4501	6.045	539.25	538.268	24.8001	159.692	159.494	80.2518
13/9/2555 15:12	0.067051	39.4501	6.045	539.188	538.124	24.8001	159.692	159.494	80.2518
13/9/2555 15:13	0.066601	39.4501	6.045	539.12	538.117	24.8001	160.076	159.831	80.2518
13/9/2555 15:14	0.066601	39.4501	6.045	538.955	537.965	24.8001	160.144	159.876	80.2518
13/9/2555 15:15	0.066601	39.4501	6.045	538.541	537.814	24.8001	160.144	159.876	80.2518
13/9/2555 15:16	0.066601	39.4501	6.045	538.191	537.655	24.8001	160.144	159.876	80.2518
13/9/2555 15:17	0.066601	39.4501	6.045	537.924	537.368	24.8001	160.144	159.876	80.2518
13/9/2555 15:18	0.066601	39.4501	6.02688	537.649	537.368	24.8001	160.144	159.876	80.2518
13/9/2555 15:19	0.066856	39.4488	6.02625	537.386	537.375	24.8001	160.144	159.876	80.2518
13/9/2555 15:20	0.0675	39.3745	6.02625	537.381	537.519	24.8001	160.144	159.876	80.1428
13/9/2555 15:21	0.0675	39.3745	6.02625	537.309	537.524	24.8001	160.144	159.876	80.0535
13/9/2555 15:22	0.0675	39.3745	6.02625	537.304	537.673	24.8001	160.144	159.876	80.0535
13/9/2555 15:23	0.0675	39.3745	6.02625	537.311	537.817	24.8001	160.144	159.876	80.0535
13/9/2555 15:24	0.0675	39.3745	6.02625	537.306	537.685	24.8001	160.144	159.876	80.0535
13/9/2555 15:25	0.0675	39.3745	6.02625	537.219	537.668	24.8001	159.916	159.633	80.0535
13/9/2555 15:26	0.0675	39.3745	6.02625	537.328	537.534	24.8001	159.876	159.601	80.0535
13/9/2555 15:27	0.0675	39.3745	6.02625	537.451	537.519	24.8001	159.876	159.601	80.0535
13/9/2555 15:28	0.0675	39.3745	6.02625	537.304	537.519	24.8001	159.876	159.601	80.0535
13/9/2555 15:29	0.0675	39.3745	6.02625	537.289	537.516	24.8001	159.876	159.601	80.0535
13/9/2555 15:30	0.0675	39.3745	6.02987	537.763	537.368	24.8001	159.876	159.601	80.0535
13/9/2555 15:31	0.067245	39.3745	6.03	538.205	537.665	24.8001	159.876	159.601	80.0535
13/9/2555 15:32	0.066601	39.3002	6.03	538.381	537.817	24.8001	159.876	159.601	79.7441
13/9/2555 15:33	0.066601	39.3002	6.03	538.666	537.97	24.8001	159.876	159.601	79.4733
13/9/2555 15:34	0.066601	39.3002	6.03	538.808	537.973	24.8001	159.876	159.601	79.4733
13/9/2555 15:35	0.066601	39.3002	6.03	538.945	537.973	24.8001	159.876	159.601	79.4733
13/9/2555 15:36	0.066601	39.3002	6.03	538.94	537.829	24.8001	159.876	159.601	79.4733
13/9/2555 15:37	0.066601	39.3002	6.03	538.671	537.678	24.8001	160.316	159.97	79.4733

Date/Time	Condenser Pressure	Condenser Temp	Deaerator Pressure	Main Steam Temp RA20	Main Steam Temp RA10	TB HP Outlet Pressure	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Flow RA20
1	U0880SD11 P001	U0880SD11 T002	U0880RH50 P002	U0880RA20 T003	U0880RA10 T003	U0880RC01 P001	U0880RA20 P003	U0880RA10 P003	U0880RA20 F001
13/9/2555 15:38	0.066601	39.3002	6.03	538.398	537.383	24.8001	160.394	160.019	79.4733
13/9/2555 15:39	0.066601	39.3002	6.03	537.956	537.09	24.8001	160.394	160.019	79.4733
13/9/2555 15:40	0.066601	39.3002	6.03	537.716	536.798	24.8001	160.394	160.019	79.4733
13/9/2555 15:41	0.066721	39.3002	6.03	537.631	536.905	24.8001	160.394	160.019	79.4733
13/9/2555 15:42	0.067801	39.3002	6.02637	537.686	536.914	24.8001	160.394	160.019	79.4733
13/9/2555 15:43	0.067801	39.3002	6.02625	537.436	537.196	24.8001	160.394	160.019	79.4733
13/9/2555 15:44	0.067801	39.3745	6.02625	537.191	537.355	24.8001	160.394	160.019	79.727
13/9/2555 15:45	0.067381	39.3745	6.02625	537.063	537.64	24.8001	160.394	160.019	79.9491
13/9/2555 15:46	0.066901	39.3745	6.02625	536.968	537.806	24.8001	160.394	160.019	79.9491
13/9/2555 15:47	0.066901	39.3745	6.02625	537.051	537.7	24.8001	160.394	160.019	79.9491
13/9/2555 15:48	0.066901	39.3745	6.02625	537.091	537.82	24.8001	160.394	160.019	79.9491
13/9/2555 15:49	0.066901	39.3745	6.02625	537.451	537.968	24.8001	160.335	160.04	79.9491
13/9/2555 15:50	0.066901	39.3745	6.02625	538.091	538.368	24.8001	160.324	160.043	79.9491
13/9/2555 15:51	0.066901	39.3745	6.02625	538.471	538.558	24.8001	160.324	160.043	79.9491
13/9/2555 15:52	0.066901	39.3745	6.02625	538.49	538.447	24.8001	160.324	160.043	79.9491
13/9/2555 15:53	0.065861	39.3745	6.02625	538.501	538.298	24.8001	160.324	160.043	79.9491
13/9/2555 15:54	0.065701	39.3745	6.01912	538.451	538.018	24.8001	160.324	160.043	79.9491
13/9/2555 15:55	0.065701	39.3745	6.01875	538.805	537.721	24.8001	160.324	160.043	79.9491
13/9/2555 15:56	0.065701	38.9694	6.01875	539.01	537.431	24.7285	160.324	160.043	79.6401
13/9/2555 15:57	0.065701	38.9626	6.01875	539	537.371	24.7002	160.324	160.043	79.3697
13/9/2555 15:58	0.065701	38.9626	6.01875	538.875	537.12	24.7002	160.324	160.043	79.3697
13/9/2555 15:59	0.065701	38.9626	6.01875	538.661	536.818	24.7002	160.324	160.043	79.3697
13/9/2555 16:00	0.065701	38.9626	6.01875	538.214	536.515	24.7002	160.324	160.043	79.3697

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
13/9/2555 15:00	79.8398	179.199	237.188	149.094	145.053	366.023	372.762	279.602	269.501
13/9/2555 15:01	79.8398	179.199	236.457	149.094	145.053	366.023	372.762	279.602	268.474
13/9/2555 15:02	79.8398	179.199	236.298	149.094	145.053	366.023	370.744	279.602	266.699
13/9/2555 15:03	79.8398	179.179	234.873	149.094	144.398	366.023	370.01	279.602	266.699
13/9/2555 15:04	79.8398	179.199	235.617	149.094	143.345	366.023	370.01	279.602	266.699
13/9/2555 15:05	79.8398	179.171	235.253	149.094	143.345	366.023	370.01	279.602	266.699
13/9/2555 15:06	79.8398	179.098	235.851	147.87	143.345	366.023	370.01	279.602	266.699
13/9/2555 15:07	79.8398	179.098	234.594	147.387	143.345	366.023	370.01	279.602	266.699
13/9/2555 15:08	79.9241	179.098	235.159	147.387	143.345	366.023	370.01	279.602	266.699
13/9/2555 15:09	79.9474	179.098	235.218	147.387	143.345	366.023	370.01	279.602	266.699
13/9/2555 15:10	79.9474	179.098	234.54	147.387	143.345	364.716	370.01	279.602	266.699
13/9/2555 15:11	79.9474	179.098	234.606	147.387	143.345	364.647	370.01	277.619	266.699

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
13/9/2555 15:12	79.9474	179.098	234.292	147.387	143.345	364.647	370.01	277.399	266.699
13/9/2555 15:13	79.9474	179.094	234.848	147.387	143.345	364.647	370.01	277.399	266.174
13/9/2555 15:14	79.9474	179.199	235.367	146.628	143.345	364.647	369.434	277.399	265.198
13/9/2555 15:15	79.9474	179.169	235.129	145.636	142.001	364.647	369.187	277.399	265.198
13/9/2555 15:16	79.9474	179.199	233.694	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:17	79.9474	179.179	233.795	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:18	79.9474	179.098	233.411	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:19	79.9474	179.098	233.678	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:20	79.7625	179.098	234.267	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:21	79.7114	179.098	234.476	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:22	79.7114	179.098	235.317	145.636	141.629	364.647	369.187	277.399	265.198
13/9/2555 15:23	79.7114	179.098	234.714	145.636	141.629	364.647	369.187	275.69	265.198
13/9/2555 15:24	79.7114	179.098	234.215	144.755	141.629	364.647	369.187	275.5	265.198
13/9/2555 15:25	79.7114	179.098	234.918	143.93	141.629	364.647	369.187	275.5	264.709
13/9/2555 15:26	79.7114	179.12	235.179	143.93	141.629	364.647	368.805	275.5	263.8
13/9/2555 15:27	79.7114	179.098	236.859	143.93	140.401	364.647	368.642	275.5	263.8
13/9/2555 15:28	79.7114	179.098	235.282	143.93	140.061	364.647	368.642	275.5	263.8
13/9/2555 15:29	79.7114	179.169	235.808	143.93	140.061	364.647	368.642	275.5	263.8
13/9/2555 15:30	79.7114	179.199	236.543	143.93	140.061	364.647	368.642	275.5	263.8
13/9/2555 15:31	79.7114	179.199	234.26	143.93	140.061	364.647	368.642	275.5	263.8
13/9/2555 15:32	79.5372	179.199	234.425	143.93	140.061	364.647	368.642	275.5	263.8
13/9/2555 15:33	79.4842	179.199	234.493	143.93	140.061	364.647	368.642	275.5	263.8
13/9/2555 15:34	79.4842	179.199	234.863	143.93	140.061	364.778	368.642	275.5	263.8
13/9/2555 15:35	79.4842	179.199	233.327	143.93	140.061	364.79	368.642	274.352	263.8
13/9/2555 15:36	79.4842	179.199	232.367	143.03	140.061	364.79	368.642	274.2	263.8
13/9/2555 15:37	79.4842	179.199	231.007	142.188	140.061	364.79	368.642	274.2	263.379
13/9/2555 15:38	79.4842	179.199	232.318	142.188	140.061	364.79	368.544	274.2	262.598
13/9/2555 15:39	79.4842	179.199	234.889	142.188	139.025	364.79	368.499	274.2	262.598
13/9/2555 15:40	79.4842	179.199	236.57	142.188	138.739	364.79	368.499	274.2	262.598
13/9/2555 15:41	79.4842	179.122	240.016	142.188	138.739	364.79	368.499	274.2	262.598
13/9/2555 15:42	79.4842	179.098	240.363	142.188	138.739	364.79	368.499	274.2	262.598
13/9/2555 15:43	79.4842	179.098	238.883	142.188	138.739	364.79	368.499	274.2	262.598
13/9/2555 15:44	79.881	179.098	239.753	142.188	138.739	364.79	368.499	274.2	262.598
13/9/2555 15:45	80.0018	179.098	240.516	142.188	138.739	364.79	368.499	274.2	262.598
13/9/2555 15:46	80.0018	179.098	239.009	142.188	138.739	364.536	368.499	274.2	262.598
13/9/2555 15:47	80.0018	179.098	239.593	142.188	138.739	364.513	368.499	273.23	262.598
13/9/2555 15:48	80.0018	179.098	239.22	141.532	138.739	364.513	368.499	273.102	262.598
13/9/2555 15:49	80.0018	179.098	236.666	140.919	138.739	364.513	368.499	273.102	262.318
13/9/2555 15:50	80.0018	179.098	234.538	140.919	138.739	364.513	368.407	273.102	261.798
13/9/2555 15:51	80.0018	179.098	232.734	140.919	137.95	364.513	368.365	273.102	261.798

Date/Time	Main Steam Flow RA10	Gen Active Power	Total Air Flow	PAH#2 Gas Outlet Temp	PAH#1 Gas Outlet Temp	PAH#2 Gas Inlet Temp	PAH#1 Gas Inlet Temp	PAH#2 Air Outlet Temp	PAH#1 Air Outlet Temp
2	U0880RA10 F001	U0880SP01 E131	U0880NG01 U002	U0880NR22 T001	U0880NR12 T001	U0880NR21 T001	U0880NR11 T001	U0880NL01 T021	U0880NL01 T011
13/9/2555 15:52	80.0018	179.098	232.726	140.919	137.732	364.513	368.365	273.102	261.798
13/9/2555 15:53	80.0018	179.098	230.171	140.919	137.732	364.513	368.365	273.102	261.798
13/9/2555 15:54	80.0018	179.098	231.24	140.919	137.732	364.513	368.365	273.102	261.798
13/9/2555 15:55	80.0018	179.098	232.894	140.919	137.732	364.513	368.365	273.102	261.798
13/9/2555 15:56	79.5428	179.098	231.748	140.919	137.732	364.513	368.365	273.102	261.798
13/9/2555 15:57	79.4031	179.098	231.203	140.919	137.732	364.513	368.365	273.102	261.798
13/9/2555 15:58	79.4031	179.098	231.185	140.919	137.732	364.634	368.365	273.102	261.798
13/9/2555 15:59	79.4031	179.048	231.138	140.919	137.732	364.647	368.365	272.66	261.798
13/9/2555 16:00	79.4031	179.093	233.147	140.439	137.732	364.647	368.365	272.601	261.798

Date/Time	PAH#2 Air Inlet Temp	PAH#1 Air Inlet Temp	Ambient Air Temperature	Condenser Box2 Outlet Temp	Condenser Box1 Outlet Temp	Condenser Box2 Inlet Temp	Condenser Box1 Inlet Temp	SAH#2 Gas Outlet Temp	SAH#1 Gas Outlet Temp
3	U0880NL22 T001	U0880NL12 T001	U088000QA01 T001	U0880VC42 T001	U0880VC41 T001	U0880VC22 T001	U0880VC21 T001	U0880NR42 T001	U0880NR32 T001
13/9/2555 15:00	46.5491	49.2557	31.2378	38.0753	37.825	30.2002	30.7236	191.218	195.711
13/9/2555 15:01	46.5491	49.585	31.2378	38.0753	37.825	30.2002	30.7236	191.218	195.711
13/9/2555 15:02	46.5491	49.9875	31.2378	38.0753	37.825	30.2002	30.7236	191.218	195.711
13/9/2555 15:03	46.5491	49.9875	31.2378	38.0753	37.825	30.2002	30.7236	191.218	195.711
13/9/2555 15:04	46.5491	49.9875	31.2378	38.0753	37.825	30.2002	30.7236	191.218	195.711
13/9/2555 15:05	46.5491	49.9875	31.2378	38.0753	37.825	30.2002	30.7236	191.218	195.554
13/9/2555 15:06	46.4466	49.9875	31.3487	38.0753	37.8192	30.2002	30.7236	191.218	195.363
13/9/2555 15:07	46.3991	49.9875	31.7497	37.9065	37.6518	30.2002	30.6252	191.218	195.363
13/9/2555 15:08	46.3991	49.9875	31.7497	37.8502	37.6518	30.2002	30.5924	190.024	195.363
13/9/2555 15:09	46.3991	49.9875	31.7497	37.8502	37.6518	30.2002	30.5924	189.471	195.363
13/9/2555 15:10	46.3991	49.9875	31.7497	37.8502	37.6518	30.2002	30.5924	189.471	195.363
13/9/2555 15:11	46.3991	49.9875	32.0422	37.8502	37.6518	30.5686	30.5924	189.471	195.363
13/9/2555 15:12	46.3991	49.9875	32.2372	37.8502	37.6518	30.5748	30.5924	189.471	195.363
13/9/2555 15:13	46.3991	49.9959	32.2372	37.8502	37.6518	30.5748	30.5924	189.471	195.363
13/9/2555 15:14	46.3991	50.0063	32.2372	37.8502	37.6518	30.5748	30.5924	189.471	195.363
13/9/2555 15:15	46.3991	50.0063	32.2372	37.8502	37.6518	30.5748	30.5924	189.471	195.363
13/9/2555 15:16	46.3991	50.0063	32.4708	37.8502	37.6518	30.5748	30.5924	189.471	195.363
13/9/2555 15:17	46.3991	50.0063	32.7377	37.8502	37.6518	30.5748	30.5924	189.471	195.071
13/9/2555 15:18	46.1171	50.0063	32.7377	37.8502	37.6484	30.5748	30.5924	189.471	194.714
13/9/2555 15:19	45.9865	50.0063	32.7377	37.8133	37.5832	30.5748	30.5537	189.471	194.714
13/9/2555 15:20	45.9865	50.0063	32.3373	37.7998	37.5832	30.5748	30.542	189.71	194.714
13/9/2555 15:21	45.9865	50.0063	32.0124	37.7998	37.5832	30.5748	30.542	189.82	194.714
13/9/2555 15:22	45.9865	50.0063	31.7375	37.7998	37.5832	30.5748	30.542	189.82	194.714
13/9/2555 15:23	45.9865	50.0063	31.7375	37.7998	37.5832	30.6714	30.542	189.82	194.714
13/9/2555 15:24	45.9865	49.7686	31.7375	37.7998	37.5832	30.6747	30.542	189.82	194.714
13/9/2555 15:25	45.9865	49.2557	31.7375	37.7998	37.5832	30.6747	30.542	189.82	194.714

Date/Time	PAH#2 Air Inlet Temp	PAH#1 Air Inlet Temp	Ambient Air Temperature	Condenser Box2 Outlet Temp	Condenser Box1 Outlet Temp	Condenser Box2 Inlet Temp	Condenser Box1 Inlet Temp	SAH#2 Gas Outlet Temp	SAH#1 Gas Outlet Temp
3	U0880NL22 T001	U0880NL12 T001	U08800QA01 T001	U0880VC42 T001	U0880VC41 T001	U0880VC22 T001	U0880VC21 T001	U0880NR42 T001	U0880NR32 T001
13/9/2555 15:26	45.9865	49.2557	31.7375	37.7998	37.5832	30.6747	30.542	189.82	194.714
13/9/2555 15:27	46.5944	49.2557	31.7375	37.7998	37.5832	30.6747	30.542	189.82	194.714
13/9/2555 15:28	46.7625	49.2557	31.8486	37.7998	37.5832	30.6747	30.542	189.82	194.714
13/9/2555 15:29	46.7625	49.2557	32.2502	37.7998	37.5832	30.6747	30.542	189.82	194.625
13/9/2555 15:30	46.7625	49.2557	32.2502	37.7998	37.5794	30.6747	30.542	189.82	194.515
13/9/2555 15:31	46.7625	49.2557	32.2502	37.7818	37.5267	30.6747	30.4846	189.82	194.515
13/9/2555 15:32	46.7625	49.2557	32.2502	37.7747	37.5267	30.6747	30.4688	189.752	194.515
13/9/2555 15:33	46.7625	49.2557	32.2502	37.7747	37.5267	30.6747	30.4688	189.721	194.515
13/9/2555 15:34	46.7625	49.2557	32.2502	37.7747	37.5267	30.6747	30.4688	189.721	194.515
13/9/2555 15:35	46.7625	49.2557	32.2502	37.7747	37.5267	30.5088	30.4688	189.721	194.515
13/9/2555 15:36	46.7625	49.3131	32.6342	37.7747	37.5267	30.5	30.4688	189.721	194.515
13/9/2555 15:37	46.7625	49.4369	32.7621	37.7747	37.5267	30.5	30.4688	189.721	194.515
13/9/2555 15:38	46.7625	49.4369	32.7621	37.7747	37.5267	30.5	30.4688	189.721	194.515
13/9/2555 15:39	46.4485	49.4369	32.7621	37.7747	37.5267	30.5	30.4688	189.721	194.515
13/9/2555 15:40	46.3616	49.5505	32.5574	37.7747	37.5267	30.5	30.4688	189.721	194.515
13/9/2555 15:41	46.3616	50.1939	32.2502	37.7747	37.5267	30.5	30.4688	189.721	194.538
13/9/2555 15:42	46.3616	50.1939	31.9008	37.7747	37.5272	30.5	30.4688	189.721	194.565
13/9/2555 15:43	46.3616	50.1939	31.7627	37.7927	37.5328	30.5	30.509	189.721	194.565
13/9/2555 15:44	46.3616	50.1939	31.7627	37.7998	37.5328	30.5	30.5191	189.685	194.565
13/9/2555 15:45	46.3616	50.1034	31.7627	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:46	46.3616	49.4182	31.5959	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:47	46.7149	49.4182	31.2622	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:48	47.1188	49.4182	31.2622	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:49	46.5687	49.4182	31.2622	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:50	46.3688	49.4182	31.2622	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:51	46.3688	49.4182	31.2622	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:52	46.3688	49.4182	31.5872	37.7998	37.5328	30.5	30.5191	189.668	194.565
13/9/2555 15:53	46.3688	49.4182	31.7497	37.7998	37.5328	30.5	30.5191	189.668	194.386
13/9/2555 15:54	46.3688	49.4182	31.7497	37.7998	37.4948	30.5	30.5191	189.668	194.167
13/9/2555 15:55	46.3688	49.4182	31.7497	37.4933	37.1529	30.5	30.1714	189.668	194.167
13/9/2555 15:56	46.3688	49.4182	31.7497	37.4001	37.1529	30.5	30.0934	190.215	194.167
13/9/2555 15:57	46.3688	49.4277	31.7497	37.4001	37.1529	30.5	30.0934	190.469	194.167
13/9/2555 15:58	46.3688	49.4996	31.7497	37.4001	37.1529	30.5	30.0934	190.469	194.167
13/9/2555 15:59	46.3688	49.4996	31.7497	37.4001	37.1529	30.1269	30.0934	190.469	194.167
13/9/2555 16:00	46.3688	49.4996	31.7497	37.4001	37.1529	30.1003	30.0934	190.469	194.167

Date/Time	SAH#2 Gas Inlet Temp	SAH#1 Gas Inlet Temp	SAH#2 Air Outlet Temp	SAH#1 Air Outlet Temp	SAH#2 Air Inlet Temp	SAH#1 Air Inlet Temp	LP Htr#1 Condensate Inlet Temp	FW Pressure	HP Htr#7 Drain Temp
4	U0880NR41 T001	U0880NR31 T001	U0880NG24 T001	U0880NG14 T001	U0880NG23 T001	U0880NG13 T001	U0880RM61 T001	U0880NB01 P002	U0880RP70 T001
13/9/2555 15:00	283.502	287	277.227	271.684	41.2051	38.8744	41.0751	167	182.474
13/9/2555 15:01	283.502	287	277.227	271.684	41.2051	38.8744	41.0751	167	182.474
13/9/2555 15:02	283.502	287	276.743	271.684	41.2051	38.8744	41.0751	167	182.474
13/9/2555 15:03	283.502	287	275.699	271.684	41.2051	38.8744	41.0751	167	182.474
13/9/2555 15:04	283.502	287	275.699	270.674	41.2051	38.8744	41.0751	167	182.474
13/9/2555 15:05	283.502	287	275.699	269.901	41.2051	38.8744	40.6664	167	182.474
13/9/2555 15:06	282.004	287	275.699	269.901	41.2051	38.8744	40.5746	167	182.474
13/9/2555 15:07	281.897	286.76	275.699	269.901	41.2051	38.8744	40.5746	167	182.474
13/9/2555 15:08	281.897	286.2	275.699	269.901	41.2051	38.8744	40.5746	167	182.474
13/9/2555 15:09	281.897	286.2	275.699	269.901	41.1604	39.3164	40.5746	167	182.474
13/9/2555 15:10	281.897	286.2	275.699	269.901	40.8223	39.6322	40.5746	167	182.474
13/9/2555 15:11	281.897	286.2	275.699	269.901	40.8223	39.6322	40.5746	167	182.474
13/9/2555 15:12	281.897	286.2	275.699	269.901	40.8223	39.6322	40.5746	167.209	182.474
13/9/2555 15:13	281.897	286.2	275.699	269.901	40.8223	39.6322	40.5746	167.209	182.474
13/9/2555 15:14	281.897	286.2	275.442	269.901	40.8223	39.6322	40.5746	167.209	182.474
13/9/2555 15:15	281.897	286.2	274.888	269.901	40.8223	39.6322	40.5746	167.209	182.474
13/9/2555 15:16	281.897	286.2	274.888	269.167	40.8223	39.6322	40.5746	167.209	182.474
13/9/2555 15:17	281.897	286.2	274.888	268.605	40.8223	39.6322	40.535	167.209	182.474
13/9/2555 15:18	280.985	286.2	274.888	268.605	40.8223	39.6322	40.5251	167.209	182.374
13/9/2555 15:19	280.902	285.916	274.888	268.605	40.8223	39.6322	40.5251	167.209	182.327
13/9/2555 15:20	280.902	285.199	274.888	268.605	40.8223	39.6322	40.5251	167.209	182.327
13/9/2555 15:21	280.902	285.199	274.888	268.605	40.8289	39.6264	40.5251	167.209	182.327
13/9/2555 15:22	280.902	285.199	274.888	268.605	40.8785	39.6223	40.5251	167.209	182.327
13/9/2555 15:23	280.902	285.199	274.888	268.605	40.8785	39.6223	40.5251	167.217	182.327
13/9/2555 15:24	280.902	285.199	274.888	268.605	40.8785	39.6223	40.5251	167.688	182.327
13/9/2555 15:25	280.902	285.199	274.888	268.605	40.8785	39.6223	40.5251	167.688	182.327
13/9/2555 15:26	280.902	285.199	274.682	268.605	40.8785	39.6223	40.5251	167.688	182.327
13/9/2555 15:27	280.902	285.199	274.239	268.605	40.8785	39.6223	40.5251	167.688	182.327
13/9/2555 15:28	280.902	285.199	274.239	268.092	40.8785	39.6223	40.5251	167.688	182.327
13/9/2555 15:29	280.902	285.199	274.239	267.699	40.8785	39.6223	40.6619	167.688	182.327
13/9/2555 15:30	280.452	285.199	274.239	267.699	40.8785	39.6223	40.6998	167.688	182.425
13/9/2555 15:31	280.402	285.142	274.239	267.699	40.8785	39.6223	40.6998	167.688	182.474
13/9/2555 15:32	280.402	284.998	274.239	267.699	40.8785	39.6223	40.6998	167.688	182.474
13/9/2555 15:33	280.402	284.998	274.239	267.699	40.9231	39.6223	40.6998	167.688	182.474
13/9/2555 15:34	280.402	284.998	274.239	267.699	41.2612	39.6223	40.6998	167.688	182.474
13/9/2555 15:35	280.402	284.998	274.239	267.699	41.2612	39.6223	40.6998	167.688	182.474
13/9/2555 15:36	280.402	284.998	274.239	267.699	41.2612	39.6223	40.6998	167.834	182.474
13/9/2555 15:37	280.402	284.998	274.239	267.699	41.2612	39.6223	40.6998	167.834	182.474
13/9/2555 15:38	280.402	284.998	274.081	267.699	41.2612	39.6223	40.6998	167.834	182.474

Date/Time	SAH#2 Gas Inlet Temp	SAH#1 Gas Inlet Temp	SAH#2 Air Outlet Temp	SAH#1 Air Outlet Temp	SAH#2 Air Inlet Temp	SAH#1 Air Inlet Temp	LP Htr#1 Condensate Inlet Temp	FW Pressure	HP Htr#7 Drain Temp
4	U0880NR41 T001	U0880NR31 T001	U0880NG24 T001	U0880NG14 T001	U0880NG23 T001	U0880NG13 T001	U0880RM61 T001	U0880NB01 P002	U0880RP70 T001
13/9/2555 15:39	280.402	284.998	273.74	267.699	41.2612	39.6223	40.6998	167.834	182.474
13/9/2555 15:40	280.402	284.998	273.74	267.386	41.2612	39.6223	40.6998	167.834	182.474
13/9/2555 15:41	280.402	284.998	273.74	267.147	41.2612	39.6223	40.5235	167.834	182.474
13/9/2555 15:42	280.224	284.998	273.74	267.147	40.7753	39.6223	40.4747	167.834	182.376
13/9/2555 15:43	280.2	284.918	273.74	267.147	40.494	39.6223	40.4747	167.834	182.327
13/9/2555 15:44	280.2	284.698	273.74	267.147	40.494	39.6223	40.4747	167.834	182.327
13/9/2555 15:45	280.2	284.698	273.74	267.147	40.494	38.9323	40.4747	167.834	182.327
13/9/2555 15:46	280.2	284.698	273.74	267.147	40.494	38.8557	40.4747	167.834	182.327
13/9/2555 15:47	280.2	284.698	273.74	267.147	40.494	38.8557	40.4747	167.834	182.327
13/9/2555 15:48	280.2	284.698	273.74	267.147	40.494	38.8557	40.4747	167.146	182.327
13/9/2555 15:49	280.2	284.698	273.74	267.147	39.9058	38.8557	40.4747	167.146	182.327
13/9/2555 15:50	280.2	284.698	273.744	267.147	39.7268	38.8557	40.4747	167.146	182.327
13/9/2555 15:51	280.2	284.698	273.753	267.147	39.7268	38.8557	40.4747	167.146	182.327
13/9/2555 15:52	280.2	284.698	273.753	266.917	39.7268	38.8557	40.4747	167.146	182.327
13/9/2555 15:53	280.2	284.698	273.753	266.741	39.7268	38.8557	40.4174	167.146	182.327
13/9/2555 15:54	280.2	284.698	273.753	266.741	39.7268	38.8557	40.3999	167.146	182.327
13/9/2555 15:55	280.2	284.593	273.753	266.741	39.7268	38.8557	40.3999	167.146	182.327
13/9/2555 15:56	280.2	284.302	273.753	266.741	39.7268	38.8557	40.3999	167.146	182.327
13/9/2555 15:57	280.2	284.302	273.753	266.741	39.7268	38.8307	40.3999	167.146	182.327
13/9/2555 15:58	280.2	284.302	273.753	266.741	39.7268	38.8279	40.3999	167.146	182.327
13/9/2555 15:59	280.2	284.302	273.753	266.741	39.7268	38.8279	40.3999	167.146	182.327
13/9/2555 16:00	280.2	284.302	273.753	266.741	39.7268	38.8279	40.3999	167.313	182.327

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
5	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
13/9/2555 15:00	224.044	225.092	144.598	23.0153	23.1154	523.429	509.22	520.953	506.937
13/9/2555 15:01	224.028	225.092	144.732	23.0153	23.1154	524.035	509.655	520.614	506.552
13/9/2555 15:02	224.093	225.092	144.125	23.0153	23.1154	524.543	510.03	519.754	506.552
13/9/2555 15:03	224.027	225.092	146.35	23.0153	23.1154	524.813	510.52	519.754	506.552
13/9/2555 15:04	223.954	225.092	139.418	23.0153	23.1154	524.869	510.547	519.754	506.552
13/9/2555 15:05	224.034	225.092	142.609	23.0153	23.1154	524.841	510.372	519.754	506.552
13/9/2555 15:06	224.051	225.092	145.643	23.0153	23.1154	524.959	510.252	519.754	506.552
13/9/2555 15:07	223.994	225.092	145.16	22.979	23.1154	525.169	510.189	519.754	506.552
13/9/2555 15:08	223.987	225.092	143.798	22.9777	23.1154	525.257	510.372	519.754	506.552
13/9/2555 15:09	224.016	225.092	142.465	22.9777	23.1154	525.277	510.456	519.754	506.552
13/9/2555 15:10	224.054	225.033	141.746	22.9777	23.1154	525.187	510.424	519.754	506.552
13/9/2555 15:11	224.027	225.023	144.044	22.9777	23.1154	524.971	510.557	519.754	506.552

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
13/9/2555 15:12	224.001	225.023	143.112	22.9777	23.1154	524.846	510.641	519.754	507.225
13/9/2555 15:13	224.02	225.023	146.101	22.9777	23.1154	524.748	510.675	520.032	507.449
13/9/2555 15:14	224.006	225.023	141.44	22.9777	23.1154	524.613	510.852	520.798	507.449
13/9/2555 15:15	224.028	225.023	142.133	22.9777	23.1154	524.453	510.981	520.798	507.449
13/9/2555 15:16	224.04	225.023	143.525	22.9777	23.1154	524.468	511.156	520.798	507.449
13/9/2555 15:17	223.957	225.023	144.32	22.9777	23.1154	524.378	511.079	520.798	507.449
13/9/2555 15:18	224.03	225.023	143.612	22.9777	23.1154	524.135	511.22	520.798	507.449
13/9/2555 15:19	224.039	225.023	143.624	22.9898	23.1154	523.959	511.238	520.798	507.449
13/9/2555 15:20	224.076	225.023	145.571	22.9902	23.109	523.877	511.317	520.798	507.449
13/9/2555 15:21	224.025	225.023	142.145	22.9902	23.1029	523.789	511.251	520.798	507.449
13/9/2555 15:22	224.033	225.082	140.576	22.9902	23.1029	523.639	511.059	520.798	507.449
13/9/2555 15:23	224.107	225.092	145.09	22.9902	23.1029	523.742	511.137	520.798	507.449
13/9/2555 15:24	224.023	225.092	144.515	22.9902	23.1029	523.934	510.985	520.798	508.013
13/9/2555 15:25	224.037	225.092	142.277	22.9902	23.1029	524	510.607	520.639	508.2
13/9/2555 15:26	224.115	225.092	142.85	22.9902	23.1029	523.862	510.375	520.203	508.2
13/9/2555 15:27	224.064	225.092	143.93	22.9902	23.1029	523.654	510.382	520.203	508.2
13/9/2555 15:28	224.014	225.092	144.885	22.9902	23.1029	523.697	510.565	520.203	508.2
13/9/2555 15:29	224.041	225.092	143.74	22.9902	23.1029	523.797	510.824	520.203	508.2
13/9/2555 15:30	224.034	225.092	142.488	22.9902	23.1029	524.009	511.242	520.203	508.2
13/9/2555 15:31	224.032	225.092	146.603	22.9539	23.1029	524.345	511.648	520.203	508.2
13/9/2555 15:32	223.974	225.092	141.276	22.9527	23.09	524.648	511.677	520.203	508.2
13/9/2555 15:33	224.046	225.092	143.236	22.9527	23.0779	524.789	511.662	520.203	508.2
13/9/2555 15:34	224.012	225.14	140.393	22.9527	23.0779	524.788	511.362	520.203	508.2
13/9/2555 15:35	224.042	225.149	143.303	22.9527	23.0779	524.646	511.251	520.203	508.2
13/9/2555 15:36	223.98	225.149	145.706	22.9527	23.0779	524.355	511.296	520.203	508.2
13/9/2555 15:37	223.986	225.149	142.609	22.9527	23.0779	524.027	510.914	520.242	508.2
13/9/2555 15:38	224.034	225.149	145.651	22.9527	23.0779	523.692	510.718	520.349	508.2
13/9/2555 15:39	223.974	225.149	141.845	22.9527	23.0779	523.361	510.247	520.349	508.2
13/9/2555 15:40	224.049	225.149	143.331	22.9527	23.0779	523.163	509.991	520.349	508.2
13/9/2555 15:41	224.056	225.149	140.978	22.9527	23.0779	523.211	510.085	520.349	508.2
13/9/2555 15:42	224.051	225.149	142.305	22.9527	23.0779	523.599	510.446	520.349	508.2
13/9/2555 15:43	224.037	225.149	141.222	22.989	23.0779	524.13	510.971	520.349	508.2
13/9/2555 15:44	224.02	225.149	142.298	22.9902	23.0973	524.429	511.698	520.349	508.2
13/9/2555 15:45	224.018	225.149	143.353	22.9902	23.1154	524.871	512.071	520.349	508.2
13/9/2555 15:46	224.044	225.149	141.486	22.9902	23.1154	525.096	512.509	520.349	508.2
13/9/2555 15:47	224.059	225.149	141.953	22.9902	23.1154	525.417	512.685	520.349	508.2
13/9/2555 15:48	224.002	225.149	141.317	22.9902	23.1154	525.773	512.699	520.349	508.763
13/9/2555 15:49	223.985	225.149	144.72	22.9902	23.1154	526.123	512.866	520.549	508.951
13/9/2555 15:50	223.964	225.149	143.111	22.9902	23.1154	526.354	513.257	521.1	508.951
13/9/2555 15:51	223.99	225.149	143.09	22.9902	23.1154	526.278	513.068	521.1	508.951

Date/Time	HP Htr#7 Outlet FW Temp Before BFP	FW Temp to Eco	FW Flow to Eco	RH Steam Pressure RB20 (P002)	RH Steam Pressure RB10 (P002)	RH Steam Temp RB20	RH Steam Temp RB10	RH IP TB Inlet Temp RB20	RH IP TB Inlet Temp RB10
	U0880RL65 T001	U0880NB01 T002	U0880NB01 F001	U0880RB20 P002	U0880RB10 P002	U0880RB20 T002	U0880RB10 T002	U0880RB20 T010	U0880RB10 T010
13/9/2555 15:52	223.936	225.149	141.776	22.9902	23.1154	525.997	512.849	521.1	508.951
13/9/2555 15:53	223.893	225.149	143.929	22.9902	23.1154	525.612	512.429	521.1	508.951
13/9/2555 15:54	223.932	225.149	144.148	22.9902	23.1154	525.229	511.726	521.1	508.951
13/9/2555 15:55	223.949	225.149	138.66	22.9297	23.1154	524.833	511.335	521.1	508.951
13/9/2555 15:56	224.032	225.149	141.717	22.9276	23.0702	524.498	510.815	521.1	508.951
13/9/2555 15:57	223.934	225.149	147.431	22.9276	23.0278	524.32	510.562	521.1	508.951
13/9/2555 15:58	223.849	225.101	146.82	22.9276	23.0278	524.172	510.288	521.1	508.951
13/9/2555 15:59	223.883	225.092	142.479	22.9276	23.0278	524.065	509.992	521.1	508.951
13/9/2555 16:00	223.939	225.092	141.456	22.9276	23.0278	523.732	509.818	521.1	508.051

Date/Time	LP Exhaust Condenser Temp	HP Htr#6 Outlet FW Temp	HP Htr FW Inlet Temp	RH Inlet Temp DESH	FW Pressure	Ext#7 Steam Pressure	HP Htr FW Inlet Pressure	FW Flow to Eco	SH Spray Water Flow	Total Coal Flow
	U0880SD11 T001	U0880RL64 T001	U0880RL61 T001	U0880RC10 T001	U0880NB01 P002	U0880RF70 P001	U0880RL61 P001	U0880NB01 F001	U0880NB40 F001	U0880NL81 U007
13/9/2555 15:00	39.6	184.726	167.334	322.926	167	24.2201	172.054	144.598	2.522	190.219
13/9/2555 15:01	39.6	184.726	167.322	321.503	167	24.2201	171.982	144.732	1.63028	190.616
13/9/2555 15:02	39.6	184.726	167.298	321.503	167	24.2201	172.167	144.125	1.45437	186.723
13/9/2555 15:03	39.6	184.726	167.309	321.503	167	24.2201	172.316	146.35	1.70437	188.421
13/9/2555 15:04	39.6	184.726	167.262	321.503	167	24.2201	171.95	139.418	2.04753	190.009
13/9/2555 15:05	39.6	184.726	167.287	321.503	167	24.2201	172.16	142.609	1.86804	189.315
13/9/2555 15:06	39.6	184.726	167.288	321.503	167	24.2201	172.337	145.643	1.62469	188.738
13/9/2555 15:07	39.6	184.669	167.321	321.503	167	24.2156	172.437	145.16	2.3752	186.876
13/9/2555 15:08	39.5364	184.648	167.251	321.503	167	24.2024	172.366	143.798	2.20972	188.542
13/9/2555 15:09	39.4878	184.648	167.272	321.503	167	24.2024	172.359	142.465	2.10847	187.766
13/9/2555 15:10	39.4878	184.648	167.208	321.503	167	24.2024	172.348	141.746	2.71757	188.541
13/9/2555 15:11	39.4878	184.648	167.2	321.503	167	24.2024	172.385	144.044	2.71853	187.746
13/9/2555 15:12	39.4878	184.648	167.241	322.101	167.209	24.2024	172.327	143.112	2.65397	189.67
13/9/2555 15:13	39.4878	184.648	167.208	322.998	167.209	24.2024	172.372	146.101	2.8127	188.759
13/9/2555 15:14	39.4878	184.648	167.209	322.998	167.209	24.2024	172.22	141.44	3.88461	188.887
13/9/2555 15:15	39.4878	184.648	167.146	322.998	167.209	24.2024	172.371	142.133	2.97991	187.453
13/9/2555 15:16	39.4878	184.648	167.136	322.998	167.209	24.2024	172.502	143.525	2.94075	185.622
13/9/2555 15:17	39.4878	184.648	167.144	322.998	167.209	24.2024	172.494	144.32	2.54105	187.606
13/9/2555 15:18	39.4878	184.648	167.174	322.998	167.209	24.2024	172.56	143.612	2.12862	187.094
13/9/2555 15:19	39.4878	184.704	167.159	322.998	167.209	24.2258	172.56	143.624	1.89521	187.619
13/9/2555 15:20	39.4664	184.726	167.144	322.998	167.209	24.29	172.421	145.571	2.34995	188.346
13/9/2555 15:21	39.4501	184.726	167.171	322.998	167.209	24.29	172.126	142.145	2.80282	190.979
13/9/2555 15:22	39.4501	184.726	167.13	322.998	167.209	24.29	172.143	140.576	2.65258	189.777
13/9/2555 15:23	39.4501	184.726	167.186	322.998	167.217	24.29	172.527	145.09	3.28509	186.089
13/9/2555 15:24	39.4501	184.726	167.161	322.598	167.688	24.29	172.479	144.515	2.63189	187.347

Date/Time	LP Exhaust Condenser Temp	HP Htr#6 Outlet FW Temp	HP Htr FW Inlet Temp	RH Inlet Temp DESH	FW Pressure	Ext#7 Steam Pressure	HP Htr FW Inlet Pressure	FW Flow to Eco	SH Spray Water Flow	Total Coal Flow
6	U0880SD11 T001	U0880RL6 4 T001	U0880RL6 1 T001	U0880RC1 0 T001	U0880NB0 1 P002	U0880RF7 0 P001	U0880RL6 1 P001	U0880NB0 1 F001	U0880NB4 0 F001	U0880NL8 1 U007
13/9/2555 15:25	39.4501	184.726	167.159	321.999	167.688	24.29	172.172	142.277	3.49539	190.893
13/9/2555 15:26	39.4501	184.726	167.185	321.999	167.688	24.29	172.117	142.85	2.56923	190.723
13/9/2555 15:27	39.4501	184.726	167.133	321.999	167.688	24.29	172.222	143.93	2.99858	189.278
13/9/2555 15:28	39.4501	184.726	167.126	321.999	167.688	24.29	172.161	144.885	2.71898	190.079
13/9/2555 15:29	39.4501	184.726	167.178	321.999	167.688	24.29	172.078	143.74	2.65114	190.518
13/9/2555 15:30	39.4501	184.726	167.173	321.999	167.688	24.29	172.353	142.488	3.08553	187.662
13/9/2555 15:31	39.4501	184.726	167.12	321.999	167.688	24.2725	172.735	146.603	3.05312	186.251
13/9/2555 15:32	39.4085	184.726	167.091	321.999	167.688	24.2201	172.506	141.276	3.07029	186.561
13/9/2555 15:33	39.3745	184.726	167.1	321.999	167.688	24.2201	172.463	143.236	3.15171	187.63
13/9/2555 15:34	39.3745	184.726	167.141	321.999	167.688	24.2201	172.315	140.393	3.40092	187.944
13/9/2555 15:35	39.3745	184.726	167.115	321.999	167.688	24.2201	172.646	143.303	3.08444	184.97
13/9/2555 15:36	39.3745	184.726	167.12	322.2	167.834	24.2201	172.701	145.706	2.9001	186.711
13/9/2555 15:37	39.3745	184.726	167.111	322.502	167.834	24.2201	172.541	142.609	2.28832	186.627
13/9/2555 15:38	39.3745	184.726	167.097	322.502	167.834	24.2201	172.454	145.651	2.96774	188.958
13/9/2555 15:39	39.3745	184.726	167.061	322.502	167.834	24.2201	172.083	141.845	3.08868	192.108
13/9/2555 15:40	39.3745	184.726	167.071	322.502	167.834	24.2201	171.693	143.331	4.40301	194.98
13/9/2555 15:41	39.3745	184.726	167.098	322.502	167.834	24.2201	171.682	140.978	4.939	192.709
13/9/2555 15:42	39.3745	184.726	167.067	322.502	167.834	24.2201	171.779	142.305	4.29596	193.473
13/9/2555 15:43	39.3745	184.726	167.122	322.502	167.834	24.2242	171.865	141.222	4.4398	191.374
13/9/2555 15:44	39.4148	184.726	167.092	322.502	167.834	24.2377	171.971	142.298	4.05525	191.129
13/9/2555 15:45	39.4501	184.726	167.095	322.502	167.834	24.2377	171.915	143.353	3.66706	193.793
13/9/2555 15:46	39.4501	184.726	167.099	322.502	167.834	24.2377	171.828	141.486	3.73096	192.161
13/9/2555 15:47	39.4501	184.726	167.1	322.502	167.834	24.2377	171.939	141.953	4.07457	191.723
13/9/2555 15:48	39.4501	184.726	167.099	322.353	167.146	24.2377	172.12	141.317	4.4988	189.831
13/9/2555 15:49	39.4501	184.726	167.098	322.128	167.146	24.2377	172.695	144.72	3.68994	185.469
13/9/2555 15:50	39.4501	184.726	167.132	322.128	167.146	24.2377	172.784	143.111	3.59617	185.068
13/9/2555 15:51	39.4501	184.726	167.084	322.128	167.146	24.2377	172.798	143.09	3.54468	184.947
13/9/2555 15:52	39.4501	184.726	167.074	322.128	167.146	24.2377	172.864	141.776	3.22977	183.766
13/9/2555 15:53	39.4501	184.726	167.066	322.128	167.146	24.2377	172.831	143.929	2.3464	185.847
13/9/2555 15:54	39.4501	184.726	167.069	322.128	167.146	24.2377	172.706	144.148	3.34777	187.179
13/9/2555 15:55	39.4501	184.569	167.059	322.128	167.146	24.2458	172.304	138.66	3.58345	188.701
13/9/2555 15:56	39.2366	184.502	167.093	322.128	167.146	24.2724	172.572	141.717	3.16746	184.702
13/9/2555 15:57	39.0369	184.502	167.034	322.128	167.146	24.2724	172.984	147.431	2.59398	184.091
13/9/2555 15:58	39.0369	184.502	167.034	322.128	167.146	24.2724	172.887	146.82	2.3952	184.258
13/9/2555 15:59	39.0369	184.502	167.007	322.128	167.146	24.2724	172.389	142.479	3.23307	189.03
13/9/2555 16:00	39.0369	184.502	167.024	322.028	167.313	24.2724	171.99	141.456	4.19539	191.915

ตาราง ก4 ข้อมูล Cooling water flow rate ในสภาพปัจจุบันของโรงไฟฟ้าแม่เมาะหน่วยที่ 8 จาก
การวัดด้วยอุปกรณ์ Ultrasonic Flow Meter

Date/Time	Flow (m3/s)
11/20/2012 14:14:22	8.42266
11/20/2012 14:15:22	8.32383
11/20/2012 14:16:22	8.29183
11/20/2012 14:17:22	7.55611
11/20/2012 14:18:22	8.36922
11/20/2012 14:19:22	8.37556
11/20/2012 14:20:22	8.35466
11/20/2012 14:21:22	8.33888
11/20/2012 14:22:23	8.33718
11/20/2012 14:23:22	8.26626
11/20/2012 14:24:22	7.87533
11/20/2012 14:25:22	8.55975
11/20/2012 14:26:23	8.42002
11/20/2012 14:27:22	8.40813
11/20/2012 14:28:22	9.04014
11/20/2012 14:29:23	10.06034
11/20/2012 14:30:22	8.48024
11/20/2012 14:31:22	8.43535
11/20/2012 14:32:22	8.40093
11/20/2012 14:33:22	8.33192
11/20/2012 14:34:22	8.31457
11/20/2012 14:35:22	8.34217
11/20/2012 14:36:22	8.28198
11/20/2012 14:37:22	8.45101
11/20/2012 14:38:22	8.45085
11/20/2012 14:39:22	8.47131
11/20/2012 14:40:23	8.45208
11/20/2012 14:41:22	9.67819
11/20/2012 14:42:23	8.17851
11/20/2012 14:43:22	8.46815
11/20/2012 14:44:22	8.12950
11/20/2012 14:45:23	8.44073
11/20/2012 14:46:22	9.78993
11/20/2012 14:47:23	12.13632
11/20/2012 14:48:23	8.65975

Date/Time	Flow (m3/s)
11/20/2012 14:49:22	8.53976
11/20/2012 14:50:23	8.29739
11/20/2012 14:51:22	8.35148
11/20/2012 14:52:22	8.31100
11/20/2012 14:53:22	8.37912
11/20/2012 14:54:22	8.52398
11/20/2012 14:55:22	12.24958
11/20/2012 14:56:22	17.53802
11/20/2012 14:57:22	8.05295
11/20/2012 14:58:23	8.74438
11/20/2012 14:59:23	8.31946
11/20/2012 15:00:22	8.31471
11/20/2012 15:01:22	8.37604
11/20/2012 15:02:22	8.35775
11/20/2012 15:03:22	8.33086
11/20/2012 15:04:22	8.25451
11/20/2012 15:05:22	8.32115
11/20/2012 15:06:22	12.12416
11/20/2012 15:07:23	8.72523
11/20/2012 15:08:22	8.70115
11/20/2012 15:09:22	8.39104
11/20/2012 15:10:23	8.42897
11/20/2012 15:11:23	8.61283
11/20/2012 15:12:23	8.19618
11/20/2012 15:13:22	8.55884
11/20/2012 15:14:23	8.50969
11/20/2012 15:15:22	8.46400
11/20/2012 15:16:23	8.39260
11/20/2012 15:17:22	8.42897
11/20/2012 15:18:23	8.41784
11/20/2012 15:19:22	8.22210
11/20/2012 15:20:22	8.58026
11/20/2012 15:21:22	8.50655
11/20/2012 15:22:22	8.26672
11/20/2012 15:23:22	8.32689
11/20/2012 15:24:22	8.26769
11/20/2012 15:25:22	9.61260



ภาคผนวก ข

ข้อมูลสถานะการเดินเครื่องหลังจากซ่อมบำรุงรักษาตามวาระครั้งล่าสุด
ของโรงไฟฟ้าแม่เมาะ หน่วยที่ 8
(ตัวอย่าง จำนวน 1 ชั่วโมง)

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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ตาราง ข1 ข้อมูลสภาวะการเดินเครื่องโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ที่กำลังการผลิต 300 MW

Date/Time	Main Steam Pressure RA20	Main Steam Temp RA10	Main Steam Temp RA20	TB HP Outlet Pressure	RH Steam Pressure RB10 (P002)	RH Steam Pressure RB20 (P002)	RH IP TB Inlet Temp RB10	RH IP TB Inlet Temp RB20	Condenser Pressure
1	U0880RA20 P004	U0880RA10 T003	U0880RA20 T003	U0880RC01 P001	U0880RB10 P002	U0880RB20 P002	U0880RB10 T010	U0880RB20 T010	U0880SD11 P001
2/1/2556 8:00	158.545	541.649	535.637	40.1749	37.6392	37.4731	518.253	522.601	0.0699012
2/1/2556 8:01	158.545	541.392	535.809	40.1749	37.5657	37.3904	518.253	522.601	0.0697211
2/1/2556 8:02	158.545	541.095	535.941	40.1749	37.5657	37.3904	519.03	522.601	0.0690006
2/1/2556 8:03	158.545	541.215	536.187	40.1749	37.5657	37.3904	520.047	522.601	0.0690006
2/1/2556 8:04	158.545	541.725	536.626	40.0299	37.5657	37.3904	520.047	522.601	0.0690006
2/1/2556 8:05	158.545	541.811	536.651	39.875	37.5657	37.3904	520.047	522.601	0.0690006
2/1/2556 8:06	158.545	541.442	536.271	39.875	37.5657	37.3904	520.047	522.601	0.0690006
2/1/2556 8:07	158.545	540.676	535.932	39.875	37.5657	37.3904	520.047	522.601	0.0690006
2/1/2556 8:08	158.635	540.186	535.741	39.875	37.5657	37.3904	520.047	522.601	0.0690006
2/1/2556 8:09	158.649	539.784	535.845	39.875	37.5657	37.3904	520.047	522.601	0.0691207
2/1/2556 8:10	158.649	539.959	536.269	39.875	37.5657	37.3904	520.047	522.601	0.0699012
2/1/2556 8:11	158.649	540.091	536.528	39.875	37.5657	37.3904	520.047	523.402	0.0699012
2/1/2556 8:12	158.649	539.985	536.416	39.875	37.5628	37.3904	520.047	524.103	0.0699012
2/1/2556 8:13	158.649	539.728	536.112	39.875	37.5532	37.3904	520.047	524.103	0.0699012
2/1/2556 8:14	158.649	539.425	536.017	39.875	37.5532	37.3904	519.527	524.103	0.0699012
2/1/2556 8:15	158.649	539.451	536.136	39.875	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:16	158.649	540.02	536.378	39.8868	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:17	158.649	540.772	536.781	39.9002	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:18	158.649	541.422	537.211	39.9002	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:19	158.649	541.921	537.461	39.9002	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:20	159.082	542.481	537.706	39.9002	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:21	159.149	542.673	537.771	39.9002	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:22	159.149	542.773	537.766	39.9002	37.5532	37.3904	518.848	524.103	0.0699012
2/1/2556 8:23	159.149	542.612	537.792	39.9002	37.5532	37.3904	518.848	524.342	0.0699012
2/1/2556 8:24	159.149	542.304	537.68	39.9002	37.5883	37.4255	518.848	524.551	0.0699012
2/1/2556 8:25	159.149	541.69	537.296	39.9002	37.7035	37.5407	518.848	524.551	0.0699012
2/1/2556 8:26	159.149	541.245	536.977	39.9002	37.7035	37.5407	519.693	524.551	0.0699012
2/1/2556 8:27	159.149	541.15	536.891	39.9002	37.7035	37.5407	520.798	524.551	0.0699012
2/1/2556 8:28	159.149	541.362	536.728	39.9002	37.7035	37.5407	520.798	524.551	0.0699012
2/1/2556 8:29	159.149	541.357	536.371	39.9002	37.7035	37.5407	520.798	524.551	0.0699012
2/1/2556 8:30	159.149	541.104	536.094	39.9002	37.7035	37.5407	520.798	524.551	0.0699012
2/1/2556 8:31	159.149	540.897	536.142	39.9002	37.7035	37.5407	520.798	524.551	0.0699012
2/1/2556 8:32	158.321	540.529	536.321	39.9002	37.7035	37.5407	520.798	524.551	0.0699012
2/1/2556 8:33	158.194	540.393	536.734	39.9002	37.7035	37.5407	520.798	524.551	0.0699912
2/1/2556 8:34	158.194	540.605	537.03	39.9002	37.7035	37.5407	520.798	524.551	0.0708007
2/1/2556 8:35	158.194	540.908	537.069	39.9002	37.7035	37.5407	520.798	524.151	0.0708007
2/1/2556 8:36	158.194	541.316	536.961	39.9002	37.6392	37.4764	520.798	523.801	0.0708007
2/1/2556 8:37	158.194	541.77	536.716	39.9002	37.428	37.2652	520.798	523.801	0.0708007
2/1/2556 8:38	158.194	541.906	536.404	39.9002	37.428	37.2652	520.734	523.801	0.0708007

Date/Time	Main Steam Pressure RA20	Main Steam Temp RA10	Main Steam Temp RA20	TB HP Outlet Pressure	RH Steam Pressure RB10 (P002)	RH Steam Pressure RB20 (P002)	RH IP TB Inlet Temp RB10	RH IP TB Inlet Temp RB20	Condenser Pressure
1	U0880RA20 P004	U0880RA10 T003	U0880RA20 T003	U0880RC01 P001	U0880RB10 P002	U0880RB20 P002	U0880RB10 T010	U0880RB20 T010	U0880SD11 P001
2/1/2556 8:39	158.194	541.599	536.101	39.9002	37.428	37.2652	520.651	523.801	0.0708007
2/1/2556 8:40	158.194	541.351	535.784	39.9565	37.428	37.2652	520.651	523.801	0.0708007
2/1/2556 8:41	158.194	541.407	535.521	40.0253	37.428	37.2652	520.651	523.801	0.0708007
2/1/2556 8:42	158.194	541.569	535.301	40.0253	37.428	37.2652	520.651	523.801	0.0708007
2/1/2556 8:43	158.194	541.513	535.146	40.0253	37.428	37.2652	520.651	523.801	0.0708007
2/1/2556 8:44	158.474	541.563	535.041	40.0253	37.428	37.2652	520.651	523.801	0.0709956
2/1/2556 8:45	158.518	541.286	534.881	40.0253	37.8815	37.7187	520.651	523.801	0.0717003
2/1/2556 8:46	158.518	540.948	534.975	40.0253	37.9414	37.7786	520.651	523.801	0.0717003
2/1/2556 8:47	158.518	540.64	535.118	40.0253	37.9414	37.7786	520.651	523	0.0717003
2/1/2556 8:48	158.518	539.814	535.051	40.0253	37.9414	37.7786	520.651	522.299	0.0717003
2/1/2556 8:49	158.518	538.866	535.298	40.0253	37.9414	37.7786	520.651	522.299	0.0717003
2/1/2556 8:50	158.518	538.583	535.656	40.0253	37.9414	37.7786	520.651	522.299	0.0723758
2/1/2556 8:51	158.518	539.107	536.169	40.0253	37.9414	37.7786	520.651	522.299	0.0726009
2/1/2556 8:52	158.518	539.98	536.809	40.0253	37.9414	37.7786	520.651	522.299	0.0726009
2/1/2556 8:53	158.518	540.998	537.512	40.0253	37.5019	37.331	520.651	522.299	0.0726009
2/1/2556 8:54	158.518	541.835	537.716	40.0253	37.453	37.2903	520.651	522.299	0.0726009
2/1/2556 8:55	158.518	541.644	537.315	40.0253	37.453	37.2903	520.651	522.299	0.0726009
2/1/2556 8:56	158.893	541.351	536.955	40.0253	37.453	37.2903	520.651	522.299	0.0726009
2/1/2556 8:57	158.951	541.407	536.663	40.0253	37.453	37.2903	520.651	522.299	0.0726009
2/1/2556 8:58	158.951	541.452	536.256	40.0253	37.453	37.2903	520.651	522.299	0.0726009
2/1/2556 8:59	158.951	541.357	535.924	40.0253	37.453	37.2903	520.651	522.622	0.0726009
2/1/2556 9:00	158.951	541.316	535.847	40.0253	37.453	37.2903	520.651	522.903	0.0726009

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
2/1/2556 8:00	-0.331754	3.24753	99.8874	0.999969	300.473	158.493	41.1807	28.22415	245.5134
2/1/2556 8:01	-0.331754	3.24753	99.8874	0.999969	300.003	158.493	41.2125	28.22415	247.9161
2/1/2556 8:02	-0.331754	3.24753	99.8874	0.999969	299.092	158.493	41.2125	28.22415	245.4765
2/1/2556 8:03	-0.330473	3.24753	99.8874	0.999772	299.437	158.493	41.2125	28.22415	241.7516
2/1/2556 8:04	-0.331754	3.24753	99.8874	0.999497	299.029	158.493	41.2125	28.22415	245.5772
2/1/2556 8:05	-0.331754	3.24753	99.8874	0.999497	299.164	158.685	41.2125	28.22415	242.8559
2/1/2556 8:06	-0.331754	3.24753	99.8874	0.999497	299.609	158.993	41.2125	28.2565	243.1885
2/1/2556 8:07	-0.331754	3.24753	99.8874	0.999497	299.779	158.993	41.2125	28.2627	246.4253
2/1/2556 8:08	-0.331754	3.24753	99.8874	0.999497	299.612	158.993	41.2125	28.2627	245.076
2/1/2556 8:09	-0.331754	3.24753	99.8874	0.999497	300.156	158.993	41.2125	28.2627	242.1431
2/1/2556 8:10	-0.331754	3.24753	99.8874	0.999497	300.11	158.993	41.2125	28.2627	245.8738
2/1/2556 8:11	-0.331754	3.24753	99.8874	0.999497	300.015	158.993	41.2125	28.2627	245.2002
2/1/2556 8:12	-0.331754	3.24753	99.8874	0.999497	299.72	158.993	41.2389	28.2627	242.5254

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U080NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
2/1/2556 8:13	-0.331754	3.24753	99.8874	0.999497	299.852	158.993	41.2502	28.2627	242.7064
2/1/2556 8:14	-0.331754	3.24753	99.8874	0.999497	299.995	158.993	41.2502	28.2627	245.4489
2/1/2556 8:15	-0.337574	3.24753	99.8874	0.999503	300.197	158.993	41.2502	28.2627	246.2383
2/1/2556 8:16	-0.349214	3.24753	99.8874	0.999512	299.199	158.993	41.2502	28.2627	245.9472
2/1/2556 8:17	-0.349214	3.24753	99.8874	0.999512	299.632	158.881	41.2502	28.2627	244.2994
2/1/2556 8:18	-0.349214	3.24753	99.8874	0.999512	299.999	158.701	41.2502	28.3158	242.5245
2/1/2556 8:19	-0.349214	3.24753	99.8874	0.999512	300.02	158.701	41.2502	28.3249	243.8745
2/1/2556 8:20	-0.349214	3.24753	99.8874	0.999512	300.141	158.701	41.2502	28.3249	248.3069
2/1/2556 8:21	-0.349214	3.24753	99.8874	0.999512	300.447	158.701	41.2502	28.3249	246.6252
2/1/2556 8:22	-0.349214	3.24753	99.8874	0.999512	300.559	158.701	41.2502	28.3249	243.7612
2/1/2556 8:23	-0.349214	3.24867	99.8874	0.999512	301.285	158.701	41.2502	28.3249	243.4853
2/1/2556 8:24	-0.349214	3.24997	99.8874	0.999512	300.746	158.701	41.3269	28.3249	248.4129
2/1/2556 8:25	-0.349214	3.24997	99.8874	0.999512	300.872	158.701	41.3624	28.3249	246.8127
2/1/2556 8:26	-0.349214	3.24997	99.8874	0.999512	300.947	158.701	41.3624	28.3249	245.0518
2/1/2556 8:27	-0.350378	3.24997	99.8874	0.999505	300.767	158.701	41.3624	28.3249	245.293
2/1/2556 8:28	-0.352706	3.24997	99.8874	0.999497	299.611	158.701	41.3624	28.3249	243.3559
2/1/2556 8:29	-0.352706	3.24997	99.8874	0.999497	299.999	158.77	41.3624	28.3249	240.9064
2/1/2556 8:30	-0.352706	3.24997	99.8874	0.999497	300.309	158.881	41.3624	28.4306	245.9193
2/1/2556 8:31	-0.352706	3.24997	99.8874	0.999497	300.209	158.881	41.3624	28.44925	244.4308
2/1/2556 8:32	-0.352706	3.24997	99.8874	0.999497	300.14	158.881	41.3624	28.44925	247.3974
2/1/2556 8:33	-0.352706	3.24997	99.8874	0.999497	300.014	158.881	41.3624	28.44925	245.6008
2/1/2556 8:34	-0.352706	3.24997	99.8874	0.999497	300.081	158.881	41.3624	28.44925	243.954
2/1/2556 8:35	-0.352706	3.24997	99.8874	0.999497	299.482	158.881	41.3624	28.44925	243.7606
2/1/2556 8:36	-0.352706	3.24997	99.8874	0.999497	299.558	158.881	41.4623	28.44925	246.5904
2/1/2556 8:37	-0.340726	3.24997	99.8818	0.999497	299.843	158.881	41.5123	28.44925	246.8001
2/1/2556 8:38	-0.352794	3.24997	99.8801	0.999497	299.78	158.881	41.5123	28.44925	245.0938
2/1/2556 8:39	-0.352794	3.24997	99.8801	0.999497	299.567	158.881	41.5123	28.44925	245.3218
2/1/2556 8:40	-0.352794	3.24997	99.8801	0.999497	300.092	158.881	41.5123	28.44925	243.2237
2/1/2556 8:41	-0.352794	3.24997	99.8801	0.999497	300.078	158.984	41.5123	28.44925	246.0875
2/1/2556 8:42	-0.352794	3.24997	99.8801	0.999497	300.162	159.149	41.5123	28.6012	246.0395
2/1/2556 8:43	-0.352794	3.24997	99.8801	0.999497	299.816	159.149	41.5123	28.62625	245.4903
2/1/2556 8:44	-0.352794	3.24997	99.8801	0.999497	300.771	159.149	41.5123	28.62625	244.7366
2/1/2556 8:45	-0.352794	3.24997	99.8801	0.999497	301.594	159.149	41.5123	28.62625	243.8669
2/1/2556 8:46	-0.352794	3.24997	99.8801	0.999497	300.473	159.149	41.5123	28.62625	248.2857
2/1/2556 8:47	-0.352794	3.24997	99.8801	0.999497	300.67	159.149	41.5123	28.62625	244.4464
2/1/2556 8:48	-0.352794	3.24997	99.8801	0.999497	300.87	159.149	41.6834	28.62625	244.6541
2/1/2556 8:49	-0.352758	3.24997	99.8857	0.999497	300.248	159.149	41.7755	28.62625	244.2493
2/1/2556 8:50	-0.352706	3.24997	99.8874	0.999497	300.396	159.149	41.7755	28.62625	245.8324
2/1/2556 8:51	-0.352706	3.24997	99.8874	0.999694	299.904	159.149	41.7755	28.62625	246.8145
2/1/2556 8:52	-0.352706	3.24997	99.8874	0.999969	299.667	159.149	41.7755	28.62625	244.2774
2/1/2556 8:53	-0.352706	3.24997	99.8874	0.999969	298.619	159.389	41.7755	28.62625	246.8593

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U080NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
2/1/2556 8:54	-0.352706	3.24997	99.8874	0.999969	298.291	159.775	41.7755	28.9451	242.3393
2/1/2556 8:55	-0.352706	3.24997	99.8874	0.999969	298.853	159.775	41.7755	28.9986	241.495
2/1/2556 8:56	-0.352706	3.24997	99.8874	0.999969	299.197	159.775	41.7755	28.9986	246.5477
2/1/2556 8:57	-0.352706	3.24997	99.8874	0.999969	299.916	159.775	41.7755	28.9986	245.2702
2/1/2556 8:58	-0.352706	3.24997	99.8874	0.999969	300.031	159.775	41.7755	28.9986	247.181
2/1/2556 8:59	-0.352706	3.24997	99.8874	0.999969	299.335	159.775	41.7755	28.9986	247.9966
2/1/2556 9:00	-0.352706	3.24997	99.8874	0.999969	299.446	159.775	41.8226	28.9986	244.8039

Date/Time	HP Turbine Inlet Enthalpy(Hi)	Feed Water Enthalpy	Hot RH Enthalpy	Cold RH Enthalpy	Total RH Steam Flow	FW Flow to Eco	RH Spray Water Flow	RH Spray Water Enthalpy	BFP Inlet Enthalpy
3	U08TB08 U001_k	U08BE08 U005	U08BE08 U006	U08CRH08 U001	U0880RB10 U001	U0880NB01 F001	U0880NB60 F001	U08BE08 U007	U08BF08 U011
2/1/2556 8:00	3408.259	1076.377	3493.789	3054.199	218.065	246.14	-0.331754	796.1288	776.9799
2/1/2556 8:01	3408.149	1076.377	3493.756	3054.303	218.12	248.565	-0.331754	796.3538	777.8864
2/1/2556 8:02	3407.929	1076.377	3494.227	3053.861	216.965	246.116	-0.331754	796.2972	777.8864
2/1/2556 8:03	3408.424	1076.377	3495.067	3053.548	217	242.295	-0.330473	795.9935	777.8864
2/1/2556 8:04	3409.742	1076.377	3495.865	3053.965	216.568	246.176	-0.331754	795.8256	777.8864
2/1/2556 8:05	3409.779	1076.377	3495.214	3054.382	216.946	243.413	-0.331754	795.9463	777.8864
2/1/2556 8:06	3408.583	1076.377	3494.018	3054.382	217.429	243.807	-0.331754	795.8157	777.8864
2/1/2556 8:07	3407.043	1075.768	3493.331	3054.173	217.748	247.049	-0.331754	795.6851	777.8864
2/1/2556 8:08	3406.063	1075.393	3493.418	3053.757	217.508	245.706	-0.331754	795.8157	777.8864
2/1/2556 8:09	3405.638	1075.393	3493.685	3053.627	217.857	242.772	-0.331754	795.8561	777.8864
2/1/2556 8:10	3406.464	1075.393	3494.633	3053.393	217.757	246.474	-0.331754	795.877	777.8864
2/1/2556 8:11	3407.014	1075.393	3494.424	3053.757	218.169	245.727	-0.331754	795.9872	777.8864
2/1/2556 8:12	3406.712	1075.393	3492.867	3054.173	217.968	243.079	-0.331754	796.0056	778.0674
2/1/2556 8:13	3405.941	1075.393	3491.835	3054.355	217.84	243.287	-0.331754	795.96	778.0674
2/1/2556 8:14	3405.391	1075.393	3492.36	3054.407	218.255	246.072	-0.331754	795.962	778.0674
2/1/2556 8:15	3405.583	1075.391	3493.037	3055.135	218.747	246.849	-0.337574	796.1881	778.0674
2/1/2556 8:16	3406.712	1075.388	3494.356	3055.473	217.4	246.579	-0.349214	796.197	778.0674
2/1/2556 8:17	3408.375	1075.388	3495.749	3055.006	217.268	244.911	-0.349214	796.0664	778.0674
2/1/2556 8:18	3409.948	1075.388	3496.42	3055.109	217.529	243.111	-0.349214	795.8923	778.0674
2/1/2556 8:19	3410.964	1075.388	3496.832	3055.655	217.719	244.499	-0.349214	795.9551	778.0674
2/1/2556 8:20	3411.828	1075.388	3497.388	3055.915	217.678	248.939	-0.349214	796.241	778.0674
2/1/2556 8:21	3412.141	1075.388	3497.098	3056.434	218.068	247.207	-0.349214	796.1912	778.0674
2/1/2556 8:22	3412.278	1075.388	3496.709	3056.953	217.768	244.396	-0.349214	795.8366	778.0674
2/1/2556 8:23	3412.086	1075.388	3496.378	3057.057	218.357	244.095	-0.349214	795.7941	778.0674
2/1/2556 8:24	3411.509	1075.388	3496.082	3057.109	218.282	249.031	-0.349214	796.0726	778.0674
2/1/2556 8:25	3410.136	1075.388	3495.479	3057.161	218.806	247.404	-0.349214	796.3632	777.8864
2/1/2556 8:26	3409.091	1075.388	3495.531	3057.213	218.516	245.681	-0.349214	796.3139	777.8864
2/1/2556 8:27	3408.844	1075.392	3496.465	3056.668	218.087	245.909	-0.350378	796.1398	777.8864

Date/Time	HP Turbine Inlet Enthalpy(Hi)	Feed Water Enthalpy	Hot RH Enthalpy	Cold RH Enthalpy	Total RH Steam Flow	FW Flow to Eco	RH Spray Water Flow	RH Spray Water Enthalpy	BFP Inlet Enthalpy
3	U08TB08 U001_k	U08BE08 U005	U08BE08 U006	U08CRH08 U001	U0880RB10 U001	U0880NB01 F001	U0880NB60 F001	U08BE08 U007	U08BF08 U011
2/1/2556 8:28	3408.926	1075.398	3496.486	3055.837	217.19	243.98	-0.352706	796.262	777.8864
2/1/2556 8:29	3408.37	1075.398	3495.62	3055.395	217.819	241.348	-0.352706	796.3701	777.8864
2/1/2556 8:30	3407.599	1075.398	3494.663	3055.343	218.3	246.51	-0.352706	796.3307	777.8864
2/1/2556 8:31	3407.379	1076.006	3493.906	3055.759	218.358	245.049	-0.352706	796.2883	777.8864
2/1/2556 8:32	3407.564	1076.381	3494.267	3055.525	218.201	248.012	-0.352706	796.2609	777.8864
2/1/2556 8:33	3408.016	1076.381	3495.327	3055.395	217.721	246.236	-0.352706	796.2174	777.8864
2/1/2556 8:34	3408.731	1076.381	3495.517	3055.161	217.525	244.6	-0.352706	796.1739	777.8864
2/1/2556 8:35	3409.198	1076.381	3495.102	3054.927	217.035	244.406	-0.352706	796.178	777.8864
2/1/2556 8:36	3409.61	1076.381	3495.052	3054.902	217.51	247.234	-0.352706	796.4539	777.7054
2/1/2556 8:37	3409.885	1076.381	3494.365	3054.902	217.865	247.438	-0.340726	796.4497	776.9799
2/1/2556 8:38	3409.637	1076.381	3493.421	3055.031	217.802	245.738	-0.352794	796.0433	776.9799
2/1/2556 8:39	3408.813	1076.379	3492.815	3054.511	217.546	245.944	-0.352794	795.7821	776.9799
2/1/2556 8:40	3408.044	1076.377	3492.243	3054.173	217.933	243.803	-0.352794	795.8167	776.9799
2/1/2556 8:41	3407.685	1076.377	3492.757	3053.887	218.247	246.708	-0.352794	796.0433	776.9799
2/1/2556 8:42	3407.513	1076.377	3493.137	3053.991	218.628	246.644	-0.352794	796.1802	776.9799
2/1/2556 8:43	3407.238	1075.955	3493.604	3053.887	218.013	246.129	-0.352794	796.1424	776.9799
2/1/2556 8:44	3406.998	1075.721	3493.285	3053.678	218.72	245.21	-0.352794	796.0417	776.9799
2/1/2556 8:45	3406.37	1075.721	3492.487	3055.058	219.982	243.994	-0.352794	796.068	776.9799
2/1/2556 8:46	3406.04	1075.721	3493.138	3055.11	218.753	248.791	-0.352794	796.4062	776.9799
2/1/2556 8:47	3405.82	1075.721	3493.7	3054.824	219.164	244.686	-0.352794	796.7729	776.9799
2/1/2556 8:48	3404.581	1075.721	3493.339	3054.928	219.212	245.229	-0.352794	796.6308	777.3428
2/1/2556 8:49	3403.617	1075.721	3493.398	3054.72	218.514	244.867	-0.352758	796.4871	779.3304
2/1/2556 8:50	3403.727	1075.721	3494.253	3054.407	218.706	246.464	-0.352706	796.7236	779.3304
2/1/2556 8:51	3405.159	1075.72	3495.515	3054.538	218.163	247.456	-0.352706	796.8611	779.3304
2/1/2556 8:52	3407.223	1075.719	3496.8	3054.616	217.67	244.895	-0.352706	796.8762	779.3304
2/1/2556 8:53	3409.481	1075.719	3497.725	3054.616	216.602	247.489	-0.352706	796.6847	779.3304
2/1/2556 8:54	3410.687	1075.719	3496.657	3054.616	216.311	242.941	-0.352706	796.4346	779.3304
2/1/2556 8:55	3409.862	1075.11	3494.895	3054.85	216.768	242.14	-0.352706	796.1199	779.3304
2/1/2556 8:56	3408.753	1074.735	3494.243	3054.668	217.164	247.17	-0.352706	796.0128	779.3304
2/1/2556 8:57	3408.417	1074.735	3494.005	3054.563	218.059	245.896	-0.352706	796.0438	779.3304
2/1/2556 8:58	3407.895	1074.735	3493.667	3054.98	218.119	247.829	-0.352706	795.9279	779.3304
2/1/2556 8:59	3407.316	1074.735	3493.859	3054.59	217.311	248.641	-0.352706	795.8906	779.3304
2/1/2556 9:00	3407.151	1074.735	3494.075	3053.965	217.378	245.448	-0.352706	795.9216	779.1504

Date/Time	BFP Outlet Enthalpy	Main Steam Flow RA20	Main Steam Flow RA10	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Temp RA20	Main Steam Temp RA10	RH Inlet Temp DESH	RH Inlet Temp DESH
4	U08BF08 U012	U0880RA20 F001	U0880RA10 F001	U0880RA20 P003	U0880RA10 P003	U0880RA20 T003	U0880RA10 T003	U0880RC10 T001	U0880RC20 T001
2/1/2556 8:00	796.1288	129.295	128.042	159.692	160.095	535.637	541.649	336.075	335.873
2/1/2556 8:01	796.3538	130.292	129.491	159.692	160.095	535.809	541.392	336.25	335.999
2/1/2556 8:02	796.2972	129.36	128.04	159.692	160.095	535.941	541.095	336.25	335.999
2/1/2556 8:03	795.9935	129.36	128.04	159.692	160.095	536.187	541.215	336.25	335.999
2/1/2556 8:04	795.8256	129.36	128.04	159.692	160.095	536.626	541.725	336.25	335.999
2/1/2556 8:05	795.9463	129.36	128.04	159.692	160.095	536.651	541.811	336.25	335.999
2/1/2556 8:06	795.8157	129.36	128.04	159.692	160.095	536.271	541.442	336.25	335.999
2/1/2556 8:07	795.6851	129.36	128.04	159.692	160.032	535.932	540.676	336.25	335.999
2/1/2556 8:08	795.8157	129.36	128.04	159.692	159.943	535.741	540.186	336.25	335.999
2/1/2556 8:09	795.8561	129.36	128.04	159.692	159.943	535.845	539.784	336.25	335.999
2/1/2556 8:10	795.877	129.36	128.04	159.692	159.943	536.269	539.959	336.25	335.999
2/1/2556 8:11	795.9872	129.36	128.04	159.692	159.943	536.528	540.091	336.25	335.999
2/1/2556 8:12	796.0056	129.36	128.04	159.692	159.943	536.416	539.985	335.951	335.797
2/1/2556 8:13	795.96	129.308	128.052	159.692	159.943	536.112	539.728	335.876	335.747
2/1/2556 8:14	795.962	129.204	128.803	159.692	159.943	536.017	539.425	335.876	335.747
2/1/2556 8:15	796.1881	129.204	128.803	159.692	159.943	536.136	539.451	335.876	335.747
2/1/2556 8:16	796.197	129.204	128.803	159.692	159.943	536.378	540.02	335.876	335.747
2/1/2556 8:17	796.0664	129.204	128.803	159.692	159.943	536.781	540.772	335.876	335.747
2/1/2556 8:18	795.8923	129.204	128.803	159.692	159.943	537.211	541.422	335.876	335.747
2/1/2556 8:19	795.9551	129.204	128.803	159.692	160.161	537.461	541.921	335.876	335.747
2/1/2556 8:20	796.241	129.204	128.803	160.222	160.467	537.706	542.481	335.876	335.747
2/1/2556 8:21	796.1912	129.204	128.803	160.467	160.467	537.771	542.673	335.876	335.747
2/1/2556 8:22	795.8366	129.204	128.803	160.467	160.467	537.766	542.773	335.876	335.747
2/1/2556 8:23	795.7941	130.226	128.803	160.467	160.467	537.792	542.612	335.876	335.747
2/1/2556 8:24	796.0726	130.737	128.803	160.467	160.467	537.68	542.304	336.659	336.53
2/1/2556 8:25	796.3632	130.737	128.808	160.467	160.467	537.296	541.69	336.876	336.746
2/1/2556 8:26	796.3139	130.737	129.07	160.467	160.467	536.977	541.245	336.876	336.746
2/1/2556 8:27	796.1398	130.121	129.07	160.467	160.467	536.891	541.15	336.876	336.746
2/1/2556 8:28	796.262	129.13	128.194	160.467	160.467	536.728	541.362	336.876	336.746
2/1/2556 8:29	796.3701	129.13	127.568	160.467	160.467	536.371	541.357	336.876	336.746
2/1/2556 8:30	796.3307	129.13	128.029	160.467	160.467	536.094	541.104	336.876	336.746
2/1/2556 8:31	796.2883	129.13	129.105	160.467	160.221	536.142	540.897	336.876	336.746
2/1/2556 8:32	796.2609	129.508	129.105	159.904	159.876	536.321	540.529	336.876	336.746
2/1/2556 8:33	796.2174	129.179	129.105	159.644	159.876	536.734	540.393	336.876	336.746
2/1/2556 8:34	796.1739	129.179	129.105	159.644	159.876	537.03	540.605	336.876	336.746
2/1/2556 8:35	796.178	129.179	129.105	159.644	159.876	537.069	540.908	336.876	336.746
2/1/2556 8:36	796.4539	129.179	129.105	159.644	159.876	536.961	541.316	336.203	336.079
2/1/2556 8:37	796.4497	129.179	129.105	159.644	159.876	536.716	541.77	335.999	335.876
2/1/2556 8:38	796.0433	129.179	129.105	159.644	159.876	536.404	541.906	335.999	335.876
2/1/2556 8:39	795.7821	129.179	129.105	159.644	159.876	536.101	541.599	335.999	335.876
2/1/2556 8:40	795.8167	129.179	129.105	159.644	159.876	535.784	541.351	335.999	335.876

Date/Time	BFP Outlet Enthalpy	Main Steam Flow RA20	Main Steam Flow RA10	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Temp RA20	Main Steam Temp RA10	RH Inlet Temp DESH	RH Inlet Temp DESH
4	U08BF08 U012	U0880RA20 F001	U0880RA10 F001	U0880RA20 P003	U0880RA10 P003	U0880RA20 T003	U0880RA10 T003	U0880RC10 T001	U0880RC20 T001
2/1/2556 8:41	796.0433	129.179	129.105	159.644	159.876	535.521	541.407	335.999	335.876
2/1/2556 8:42	796.1802	130.479	129.151	159.644	159.876	535.301	541.569	335.999	335.876
2/1/2556 8:43	796.1424	130.501	129.258	159.644	160.092	535.146	541.513	335.999	335.876
2/1/2556 8:44	796.0417	130.727	129.258	159.802	160.394	535.041	541.563	335.999	335.876
2/1/2556 8:45	796.068	130.929	129.837	159.876	160.394	534.881	541.286	335.999	335.876
2/1/2556 8:46	796.4062	130.503	129.657	159.876	160.394	534.975	540.948	335.999	335.876
2/1/2556 8:47	796.7729	130.503	129.657	159.876	160.394	535.118	540.64	335.999	335.876
2/1/2556 8:48	796.6308	130.503	129.657	159.876	160.394	535.051	539.814	336.285	336.163
2/1/2556 8:49	796.4871	130.503	129.657	159.876	160.394	535.298	538.866	336.372	336.25
2/1/2556 8:50	796.7236	130.503	129.657	159.876	160.394	535.656	538.583	336.372	336.25
2/1/2556 8:51	796.8611	130.503	129.657	159.876	160.394	536.169	539.107	336.372	336.25
2/1/2556 8:52	796.8762	130.24	129.657	159.876	160.394	536.809	539.98	336.372	336.25
2/1/2556 8:53	796.6847	129.072	128.23	159.876	160.394	537.512	540.998	336.372	336.25
2/1/2556 8:54	796.4346	129.072	128.1	159.876	160.394	537.716	541.835	336.372	336.25
2/1/2556 8:55	796.1199	129.072	128.1	159.876	160.425	537.315	541.644	336.372	336.25
2/1/2556 8:56	796.0128	129.072	128.1	160.059	160.467	536.955	541.351	336.372	336.25
2/1/2556 8:57	796.0438	129.906	128.1	160.144	160.467	536.663	541.407	336.372	336.25
2/1/2556 8:58	795.9279	130.424	128.1	160.144	160.467	536.256	541.452	336.372	336.25
2/1/2556 8:59	795.8906	129.935	128.1	160.144	160.467	535.924	541.357	336.372	336.25
2/1/2556 9:00	795.9216	128.958	128.1	160.144	160.467	535.847	541.316	335.812	335.69

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
2/1/2556 8:00	37.7478	37.6757	129.295	128.042	247.854	521.162	520.636	3493.789	2601.89
2/1/2556 8:01	37.7623	37.6795	130.292	129.491	247.854	521.37	520.42	3493.756	2604.49
2/1/2556 8:02	37.5652	37.4853	129.36	128.04	247.854	521.62	520.391	3494.227	2609.11
2/1/2556 8:03	37.5865	37.5141	129.36	128.04	247.854	521.997	520.791	3495.067	2606.58
2/1/2556 8:04	37.5168	37.4363	129.36	128.04	247.854	522.469	520.95	3495.865	2619.14
2/1/2556 8:05	37.577	37.5004	129.36	128.04	247.854	522.342	520.565	3495.214	2617.44
2/1/2556 8:06	37.6399	37.5583	129.36	128.04	247.854	521.909	519.995	3494.018	2615.66
2/1/2556 8:07	37.6918	37.6099	129.36	128.04	247.717	521.703	519.643	3493.331	2611.26
2/1/2556 8:08	37.654	37.5739	129.36	128.04	247.644	521.823	519.553	3493.418	2610.85
2/1/2556 8:09	37.7215	37.6389	129.36	128.04	247.644	522.12	519.565	3493.685	2598.88
2/1/2556 8:10	37.6747	37.5977	129.36	128.04	247.644	522.826	519.659	3494.633	2606.35
2/1/2556 8:11	37.7438	37.6733	129.36	128.04	247.644	522.758	519.593	3494.424	2607.11
2/1/2556 8:12	37.6922	37.6232	129.36	128.04	247.644	522.08	518.864	3492.867	2602.22
2/1/2556 8:13	37.6818	37.6108	129.308	128.052	247.644	521.717	518.31	3491.835	2593.54
2/1/2556 8:14	37.7304	37.6592	129.204	128.803	247.644	521.882	518.647	3492.36	2587.61

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
2/1/2556 8:15	37.8322	37.7607	129.204	128.803	247.644	522.121	519.105	3493.037	2570.37
2/1/2556 8:16	37.6175	37.545	129.204	128.803	247.644	522.522	519.655	3494.356	2565.06
2/1/2556 8:17	37.6094	37.5269	129.204	128.803	247.644	523.265	520.125	3495.749	2571.1
2/1/2556 8:18	37.6432	37.5606	129.204	128.803	247.644	523.462	520.56	3496.42	2576.05
2/1/2556 8:19	37.6822	37.602	129.204	128.803	247.644	523.404	521.024	3496.832	2583.62
2/1/2556 8:20	37.6914	37.612	129.204	128.803	247.644	523.497	521.429	3497.388	2601.63
2/1/2556 8:21	37.7538	37.673	129.204	128.803	247.644	523.226	521.499	3497.098	2608.38
2/1/2556 8:22	37.7072	37.6332	129.204	128.803	247.644	522.937	521.401	3496.709	2608.76
2/1/2556 8:23	37.7969	37.7337	130.226	128.803	247.644	522.702	521.44	3496.378	2615.39
2/1/2556 8:24	37.7841	37.7159	130.737	128.803	247.644	522.703	521.158	3496.082	2621.97
2/1/2556 8:25	37.8899	37.8119	130.737	128.808	247.644	522.58	520.83	3495.479	2613.17
2/1/2556 8:26	37.8368	37.7594	130.737	129.07	247.644	522.607	520.814	3495.531	2610.9
2/1/2556 8:27	37.7681	37.6936	130.121	129.07	247.644	522.928	521.253	3496.465	2614.6
2/1/2556 8:28	37.615	37.5364	129.13	128.194	247.644	522.7	521.357	3496.486	2616.02
2/1/2556 8:29	37.6895	37.6131	129.13	127.568	247.644	522.067	521.297	3495.62	2608.98
2/1/2556 8:30	37.7632	37.6853	129.13	128.029	247.644	521.653	520.917	3494.663	2604.88
2/1/2556 8:31	37.7885	37.7097	129.13	129.105	247.775	521.514	520.432	3493.906	2598.32
2/1/2556 8:32	37.7681	37.6884	129.508	129.105	247.846	521.908	520.34	3494.267	2591.89
2/1/2556 8:33	37.7119	37.632	129.179	129.105	247.846	522.468	520.66	3495.327	2588.82
2/1/2556 8:34	37.6823	37.6062	129.179	129.105	247.846	522.558	520.695	3495.517	2593.2
2/1/2556 8:35	37.5989	37.5209	129.179	129.105	247.846	522.184	520.641	3495.102	2598.47
2/1/2556 8:36	37.6641	37.5934	129.179	129.105	247.846	521.901	520.938	3495.052	2609.45
2/1/2556 8:37	37.7176	37.6416	129.179	129.105	247.846	521.463	520.824	3494.365	2616.81
2/1/2556 8:38	37.6796	37.6194	129.179	129.105	247.846	520.848	520.563	3493.421	2615.58
2/1/2556 8:39	37.6174	37.5507	129.179	129.105	247.846	520.592	520.226	3492.815	2615.35
2/1/2556 8:40	37.6892	37.6193	129.179	129.105	247.846	520.302	520.085	3492.243	2612.73
2/1/2556 8:41	37.7381	37.6604	129.179	129.105	247.846	520.309	520.574	3492.757	2611.72
2/1/2556 8:42	37.8013	37.7395	130.479	129.151	247.846	520.227	521.05	3493.137	2608.9
2/1/2556 8:43	37.7012	37.6319	130.501	129.258	247.76	520.401	521.19	3493.604	2612.76
2/1/2556 8:44	37.8179	37.7403	130.727	129.258	247.714	520.268	521.149	3493.285	2610.37
2/1/2556 8:45	38.0409	37.9617	130.929	129.837	247.714	520.108	520.81	3492.487	2603.71
2/1/2556 8:46	37.8294	37.7526	130.503	129.657	247.714	520.443	520.865	3493.138	2605.47
2/1/2556 8:47	37.8971	37.8196	130.503	129.657	247.714	520.769	521.089	3493.7	2603.93
2/1/2556 8:48	37.9203	37.8384	130.503	129.657	247.714	520.871	520.687	3493.339	2592.59
2/1/2556 8:49	37.8211	37.7438	130.503	129.657	247.714	521.338	520.18	3493.398	2585.02
2/1/2556 8:50	37.8666	37.7872	130.503	129.657	247.714	521.914	520.397	3494.253	2588.16
2/1/2556 8:51	37.7831	37.7072	130.503	129.657	247.714	522.415	520.955	3495.515	2579.76
2/1/2556 8:52	37.7034	37.631	130.24	129.657	247.714	522.817	521.602	3496.8	2580.41
2/1/2556 8:53	37.5384	37.4681	129.072	128.23	247.714	523.201	521.882	3497.725	2599.01
2/1/2556 8:54	37.4992	37.4213	129.072	128.1	247.714	522.668	521.422	3496.657	2613.49
2/1/2556 8:55	37.5606	37.4821	129.072	128.1	247.577	521.866	520.732	3494.895	2620.08

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
2/1/2556 8:56	37.6146	37.5375	129.072	128.1	247.504	521.528	520.55	3494.243	2625.28
2/1/2556 8:57	37.7625	37.6816	129.906	128.1	247.504	521.27	520.732	3494.005	2624.16
2/1/2556 8:58	37.7735	37.6973	130.424	128.1	247.504	520.89	520.834	3493.667	2613.76
2/1/2556 8:59	37.6283	37.5659	129.935	128.1	247.504	520.738	521.027	3493.859	2613.33
2/1/2556 9:00	37.6509	37.5718	128.958	128.1	247.504	521.005	520.955	3494.075	2617.71

Date/Time	Pulv#5 Coal Feed Rate	Pulv#4 Coal Feed Rate	Pulv#3 Coal Feed Rate	Pulv#2 Coal Feed Rate	Pulv#1 Coal Feed Rate
6	U0880NL85 U005	U0880NL84 U005	U0880NL83 U005	U0880NL82 U005	U0880NL81 U005
2/1/2556 8:00	60.6586	0	60.7779	60.8024	60.0195
2/1/2556 8:01	60.7565	0	60.9588	60.9385	60.4288
2/1/2556 8:02	60.1849	0	60.2724	60.538	59.7811
2/1/2556 8:03	60.0519	0	60.4578	60.2833	59.4093
2/1/2556 8:04	59.3781	0	59.9201	60.1127	59.4834
2/1/2556 8:05	60.6901	0	61.1849	60.843	60.4307
2/1/2556 8:06	60.0077	0	60.7011	60.5044	59.8667
2/1/2556 8:07	60.3111	0	61.0474	60.5934	60.3804
2/1/2556 8:08	60.8656	0	61.2886	61.1488	60.8491
2/1/2556 8:09	61.2864	0	61.7743	60.7196	60.5336
2/1/2556 8:10	59.7482	0	59.8979	59.8872	59.6663
2/1/2556 8:11	60.7607	0	61.7758	62.0254	61.2701
2/1/2556 8:12	61.6781	0	62.1475	62.0892	61.5148
2/1/2556 8:13	61.7107	0	62.2213	61.9666	61.6185
2/1/2556 8:14	61.6921	0	62.1813	61.9077	61.6407
2/1/2556 8:15	61.6348	0	62.1436	61.8428	61.6621
2/1/2556 8:16	60.8272	0	61.1471	61.0546	60.7921
2/1/2556 8:17	60.9959	0	61.3652	61.1947	60.6475
2/1/2556 8:18	61.4297	0	61.5596	61.2678	60.9051
2/1/2556 8:19	60.7249	0	61.4072	60.7416	60.4607
2/1/2556 8:20	59.9607	0	60.5227	60.1871	59.868
2/1/2556 8:21	60.7984	0	61.2334	60.8287	60.5368
2/1/2556 8:22	60.7197	0	61.5088	61.5186	60.7451
2/1/2556 8:23	60.523	0	61.3579	61.2126	60.7458
2/1/2556 8:24	60.2624	0	60.8718	60.7403	60.8447
2/1/2556 8:25	60.9944	0	61.5731	61.2641	60.795
2/1/2556 8:26	61.3922	0	61.6601	61.197	61.1803

Date/Time	Pulv#5 Coal Feed Rate	Pulv#4 Coal Feed Rate	Pulv#3 Coal Feed Rate	Pulv#2 Coal Feed Rate	Pulv#1 Coal Feed Rate
6	U0880NL85 U005	U0880NL84 U005	U0880NL83 U005	U0880NL82 U005	U0880NL81 U005
2/1/2556 8:27	60.3164	0	60.8165	60.6235	60.2093
2/1/2556 8:28	59.9906	0	60.2983	60.3861	59.7909
2/1/2556 8:29	61.0916	0	61.5591	61.6109	61.1079
2/1/2556 8:30	61.6194	0	62.0741	62.1346	61.5532
2/1/2556 8:31	61.6592	0	62.0516	61.8833	61.4512
2/1/2556 8:32	61.3316	0	61.7883	61.2995	61.298
2/1/2556 8:33	60.3807	0	60.6348	60.75	60.3474
2/1/2556 8:34	60.5387	0	61.2981	61.2141	60.8325
2/1/2556 8:35	59.5414	0	59.6628	59.9057	59.0066
2/1/2556 8:36	59.8841	0	60.2689	60.0714	59.5448
2/1/2556 8:37	60.7715	0	61.2036	61.181	60.8642
2/1/2556 8:38	60.6377	0	61.082	60.773	60.4738
2/1/2556 8:39	60.8891	0	61.3439	60.8223	60.1656
2/1/2556 8:40	60.9987	0	61.4985	61.6239	60.0195
2/1/2556 8:41	61.145	0	61.3327	60.7475	60.0195
2/1/2556 8:42	60.6192	0	60.9515	60.6572	59.8557
2/1/2556 8:43	59.8581	0	60.4106	60.0276	59.7194
2/1/2556 8:44	61.7345	0	62.0962	61.8694	61.5
2/1/2556 8:45	61.3609	0	61.7739	61.4635	61.2001
2/1/2556 8:46	59.9083	0	60.0592	60.1604	59.852
2/1/2556 8:47	61.7341	0	61.6635	61.7857	61.4938
2/1/2556 8:48	61.9404	0	62.383	62.3322	61.8327
2/1/2556 8:49	61.6229	0	62.1344	62.1983	61.5902
2/1/2556 8:50	61.617	0	62.034	62.5723	61.6104
2/1/2556 8:51	60.8601	0	61.3726	61.5277	60.7182
2/1/2556 8:52	60.1268	0	60.4922	59.8931	59.5754
2/1/2556 8:53	58.9593	0	59.5271	59.3158	58.8384
2/1/2556 8:54	60.1762	0	60.4886	60.284	59.396
2/1/2556 8:55	60.3484	0	60.8563	60.4924	60.2973
2/1/2556 8:56	60.2003	0	60.6602	60.611	60.2117
2/1/2556 8:57	60.6774	0	61.1316	61.0603	60.714
2/1/2556 8:58	60.3978	0	60.9823	60.7424	60.4777
2/1/2556 8:59	59.5025	0	60.0674	59.9594	59.5951
2/1/2556 9:00	60.2423	0	60.7553	60.099	59.9903

ตาราง ข2 ข้อมูลสภาวะการเดินเครื่องโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ที่กำลังการผลิต 240 MW

Date/Time	Main Steam Pressure RA20	Main Steam Temp RA10	Main Steam Temp RA20	TB HP Outlet Pressure	RH Steam Pressure RB10 (P002)	RH Steam Pressure RB20 (P002)	RH IP TB Inlet Temp RB10	RH IP TB Inlet Temp RB20	Condenser Pressure
	U0880RA20 P004	U0880RA10 T003	U0880RA20 T003	U0880RC01 P001	U0880RB10 P002	U0880RB20 P002	U0880RB10 T010	U0880RB20 T010	U0880SD11 P001
20/12/2555 21:40	158.899	524.942	523.133	31.7749	30.0357	29.9724	500.546	508.2	0.059701
20/12/2555 21:41	158.899	524.629	523.144	31.7749	30.5159	30.2605	500.546	508.2	0.059701
20/12/2555 21:42	158.899	524.146	522.999	31.7749	30.5159	30.2605	500.546	508.2	0.059776
20/12/2555 21:43	159.533	523.257	522.864	31.7749	30.5159	30.2605	500.546	508.2	0.0606005
20/12/2555 21:44	160.901	522.066	522.77	31.7749	30.5159	30.2605	500.546	508.2	0.0606005
20/12/2555 21:45	160.901	521.452	522.724	31.7749	30.5159	30.2605	500.546	508.2	0.0606005
20/12/2555 21:46	160.901	521.019	522.774	31.7749	30.5159	30.2605	506.152	508.2	0.0606005
20/12/2555 21:47	160.901	520.898	522.569	31.7749	30.5159	30.2605	506.552	508.2	0.0606005
20/12/2555 21:48	160.901	521.21	522.29	31.7749	30.5159	30.2605	506.552	508.2	0.0606005
20/12/2555 21:49	160.901	521.644	521.589	31.7749	30.5159	30.2605	506.552	511.997	0.0606005
20/12/2555 21:50	160.901	521.785	520.857	32.129	30.5159	30.2605	506.552	513.153	0.0606005
20/12/2555 21:51	160.497	521.763	520.449	32.6248	30.5159	30.2605	506.552	513.153	0.0607506
20/12/2555 21:52	158.881	521.328	520.83	32.6248	30.5128	30.2334	506.552	513.153	0.0615012
20/12/2555 21:53	157.745	520.859	521.561	32.6248	30.3281	30.1979	506.552	513.153	0.0613361
20/12/2555 21:54	156.711	520.083	522.797	32.6248	30.3281	30.1979	506.552	513.153	0.0606005
20/12/2555 21:55	154.901	519.324	523.598	32.6248	30.3281	30.1979	501.347	513.153	0.0606005
20/12/2555 21:56	153.297	518.76	523.564	32.6248	30.3281	30.1979	500.546	513.153	0.0606005
20/12/2555 21:57	152.896	518.881	522.817	32.6248	30.3281	30.1979	500.546	513.153	0.061201
20/12/2555 21:58	152.896	520.412	522.626	32.6248	30.3281	30.1979	500.546	513.153	0.0615012
20/12/2555 21:59	152.896	522.791	523.336	32.6248	30.3281	30.1979	500.546	513.153	0.0610659
20/12/2555 22:00	152.896	524.697	524.335	32.6248	30.3281	30.1979	500.546	513.153	0.0606005
20/12/2555 22:01	152.896	525.409	524.748	32.6248	30.3281	30.1979	500.546	512.346	0.0606005
20/12/2555 22:02	154.418	525.268	524.675	32.5625	30.3281	30.1979	500.546	512.1	0.0606005
20/12/2555 22:03	154.926	524.928	524.326	32.4753	30.3281	30.1979	500.947	512.1	0.0606005
20/12/2555 22:04	154.926	523.877	523.229	32.4753	30.331	30.2869	506.552	512.1	0.0606005
20/12/2555 22:05	154.926	522.526	521.512	32.4753	30.5034	30.4032	506.552	512.1	0.0606005
20/12/2555 22:06	154.926	521.477	519.835	32.4753	30.5034	30.4032	506.552	512.1	0.0606005
20/12/2555 22:07	154.926	520.696	518.716	32.4753	30.5034	30.4032	506.552	512.1	0.0606005
20/12/2555 22:08	154.926	520.101	518.521	32.4753	30.5034	30.4032	506.552	512.1	0.0606005
20/12/2555 22:09	154.926	519.494	519.223	32.4753	30.5034	30.4032	506.552	512.1	0.0606005
20/12/2555 22:10	154.926	519.087	520.152	32.4753	30.5034	30.4032	506.552	512.1	0.0606005
20/12/2555 22:11	154.926	519.249	521.514	32.4753	30.5034	30.4032	506.552	512.1	0.0607454
20/12/2555 22:12	154.926	520.308	522.924	32.4753	30.5034	30.4032	506.552	512.1	0.0609003
20/12/2555 22:13	154.926	521.341	523.892	32.4753	30.5034	30.4032	506.552	512.1	0.0609003
20/12/2555 22:14	155.802	521.939	523.973	32.4951	30.5034	30.4032	506.552	512.1	0.0609003
20/12/2555 22:15	156.094	522.083	523.699	32.5249	30.5034	30.4032	506.312	512.1	0.0609003
20/12/2555 22:16	156.094	521.786	523.161	32.5249	30.5032	30.3522	502.954	512.1	0.0609003
20/12/2555 22:17	156.094	521.813	523.074	32.5249	30.4909	30.2856	502.954	512.1	0.0609003
20/12/2555 22:18	157.769	522.266	523.119	32.5249	30.4909	30.2856	502.954	512.1	0.0609003

Date/Time	Main Steam Pressure RA20	Main Steam Temp RA10	Main Steam Temp RA20	TB HP Outlet Pressure	RH Steam Pressure RB10 (P002)	RH Steam Pressure RB20 (P002)	RH IP TB Inlet Temp RB10	RH IP TB Inlet Temp RB20	Condenser Pressure
1	U0880RA20 P004	U0880RA10 T003	U0880RA20 T003	U0880RC01 P001	U0880RB10 P002	U0880RB20 P002	U0880RB10 T010	U0880RB20 T010	U0880SD11 P001
20/12/2555 22:19	158.145	522.693	523.057	32.5249	30.4909	30.2856	502.954	512.1	0.0609003
20/12/2555 22:20	158.145	522.715	522.867	32.5249	30.4909	30.2856	502.954	512.1	0.0609003
20/12/2555 22:21	158.145	522.866	522.696	32.5249	30.4909	30.2856	502.954	512.1	0.0609003
20/12/2555 22:22	158.145	522.988	523.161	32.5249	30.4909	30.2856	502.954	512.1	0.0609003
20/12/2555 22:23	159.633	522.532	523.96	32.5249	30.4909	30.2856	502.954	512.1	0.0610403
20/12/2555 22:24	160.175	521.937	524.615	32.5249	30.4909	30.2856	502.954	512.1	0.0612002
20/12/2555 22:25	161.749	520.424	524.84	32.5249	30.4909	30.2856	502.954	514.462	0.0612002
20/12/2555 22:26	162.143	518.76	524.266	32.6048	30.4909	30.2856	502.954	515.25	0.0612002
20/12/2555 22:27	162.143	516.944	522.849	32.7248	30.4909	30.2856	502.781	515.25	0.0612002
20/12/2555 22:28	160.649	516.036	521.615	32.7248	30.494	30.392	499.503	515.25	0.0612002
20/12/2555 22:29	159.845	516.036	520.465	32.7248	30.6787	30.541	499.503	515.25	0.0612002
20/12/2555 22:30	159.845	517.095	519.288	32.7248	30.6787	30.541	499.503	515.25	0.0612002
20/12/2555 22:31	159.845	518.911	518.538	32.7248	30.6787	30.541	499.503	515.25	0.0612002
20/12/2555 22:32	159.845	521.18	518.548	32.7248	30.6787	30.541	499.503	510.943	0.0612002
20/12/2555 22:33	159.845	523.147	518.598	32.7248	30.6787	30.541	499.503	509.097	0.0612002
20/12/2555 22:34	159.845	524.055	518.78	32.7248	30.6787	30.541	499.503	509.097	0.0612002
20/12/2555 22:35	159.845	524.074	518.99	32.7248	30.6787	30.541	499.503	509.097	0.0610603
20/12/2555 22:36	159.845	523.903	519.583	32.7248	30.6787	30.541	499.503	509.097	0.0609003
20/12/2555 22:37	159.845	523.601	521.065	32.7248	30.6787	30.541	499.503	509.097	0.0609003
20/12/2555 22:38	159.845	523.298	522.812	32.6961	30.6787	30.541	499.503	509.097	0.0609003
20/12/2555 22:39	159.845	522.542	524.271	32.65	30.6787	30.541	499.337	509.097	0.0609003
20/12/2555 22:40	160.389	521.371	524.963	32.65	30.6789	30.5009	496.198	509.097	0.0609003

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
20/12/2555 21:40	-0.368829	3.37997	99.8874	0.999969	238.114	159.174	38.7749	27.91555	208.4091
20/12/2555 21:41	-0.373659	3.37997	99.8874	0.999969	239.494	159.174	38.7749	27.91555	213.547
20/12/2555 21:42	-0.373659	3.37997	99.8874	0.99978	239.423	159.226	38.8179	27.91555	213.2428
20/12/2555 21:43	-0.373659	3.38258	99.8804	0.999497	239.437	160.751	38.887	27.91785	212.8617
20/12/2555 21:44	-0.373659	3.38501	99.8801	0.999497	239.437	160.751	38.887	27.9499	213.4059
20/12/2555 21:45	-0.373659	3.38501	99.8801	0.999497	239.466	160.751	38.887	27.9499	212.1784
20/12/2555 21:46	-0.373659	3.38501	99.8801	0.999497	239.453	160.751	38.887	27.9499	211.4786
20/12/2555 21:47	-0.373659	3.38501	99.8801	0.999497	239.466	160.751	38.887	27.9499	212.183
20/12/2555 21:48	-0.373659	3.38501	99.8801	0.999497	239.438	160.751	38.887	27.9499	213.6566
20/12/2555 21:49	-0.373659	3.38501	99.8801	0.999497	239.501	160.751	38.887	27.9499	211.1544
20/12/2555 21:50	-0.373659	3.38501	99.8801	0.999497	239.468	160.751	38.887	27.9499	219.278
20/12/2555 21:51	-0.373659	3.38501	99.8801	0.999497	239.466	160.751	38.887	27.9499	195.6363
20/12/2555 21:52	-0.368887	3.38501	99.8801	0.999497	239.439	159.001	38.887	27.9499	200.6388

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
20/12/2555 21:53	-0.366675	3.38501	99.8801	0.999497	239.35	158.419	38.887	27.9499	211.9351
20/12/2555 21:54	-0.366675	3.38501	99.8801	0.999686	239.418	156.65	38.942	27.9499	216.5058
20/12/2555 21:55	-0.366675	3.38501	99.8801	0.999969	239.423	155.478	39.0369	27.9468	216.4349
20/12/2555 21:56	-0.366675	3.38501	99.8801	0.999969	239.461	154.137	39.0369	27.9125	209.4906
20/12/2555 21:57	-0.366675	3.38501	99.8801	0.999969	239.477	152.624	39.0369	27.9125	204.3997
20/12/2555 21:58	-0.366675	3.38501	99.8801	0.999969	239.417	152.624	39.0369	27.9125	206.5584
20/12/2555 21:59	-0.366675	3.38501	99.8801	0.999969	239.387	152.624	39.0369	27.9125	213.417
20/12/2555 22:00	-0.366675	3.38501	99.8801	0.999969	239.508	152.624	39.0369	27.9125	209.4913
20/12/2555 22:01	-0.366675	3.38501	99.8801	0.999969	239.5	152.86	39.0369	27.9369	213.8174
20/12/2555 22:02	-0.36004	3.38501	99.8801	0.999969	239.551	154.642	39.0369	27.9373	208.6595
20/12/2555 22:03	-0.352939	3.38501	99.8801	0.999969	239.488	156.382	39.0369	27.9373	214.6868
20/12/2555 22:04	-0.356198	3.38501	99.8801	0.999969	239.424	156.65	39.0369	27.9373	211.1394
20/12/2555 22:05	-0.356198	3.38501	99.8801	0.999969	239.421	156.65	39.0369	27.9373	211.1455
20/12/2555 22:06	-0.356198	3.38501	99.8801	0.999786	239.45	156.65	39.0241	27.9373	213.4451
20/12/2555 22:07	-0.356198	3.38371	99.887	0.999512	239.473	156.65	39.0003	27.9386	209.4049
20/12/2555 22:08	-0.356198	3.38249	99.8874	0.999512	239.376	156.65	39.0003	27.9499	211.6722
20/12/2555 22:09	-0.356198	3.38249	99.8874	0.999512	239.448	156.65	39.0003	27.9499	209.7182
20/12/2555 22:10	-0.356198	3.38249	99.8874	0.999512	239.447	156.65	39.0003	27.9499	213.2305
20/12/2555 22:11	-0.356198	3.38249	99.8874	0.999512	239.409	156.65	39.0003	27.9499	212.0321
20/12/2555 22:12	-0.356198	3.38249	99.8874	0.999512	239.522	156.65	39.0003	27.9499	210.5744
20/12/2555 22:13	-0.356198	3.38249	99.8874	0.999512	239.443	156.65	39.0003	27.9379	211.5939
20/12/2555 22:14	-0.356198	3.38249	99.8874	0.999512	239.498	156.65	39.0003	27.9377	208.9083
20/12/2555 22:15	-0.357363	3.38249	99.8874	0.999512	239.459	156.824	39.0003	27.9377	207.0643
20/12/2555 22:16	-0.359691	3.38249	99.8874	0.999512	239.51	156.851	39.0003	27.9377	203.4851
20/12/2555 22:17	-0.359691	3.38249	99.8874	0.999512	239.433	156.851	39.0003	27.9377	221.1256
20/12/2555 22:18	-0.359691	3.38249	99.8874	0.999304	239.401	157.124	38.9877	27.9377	222.9801
20/12/2555 22:19	-0.359691	3.38119	99.8874	0.998993	239.525	158.899	38.9626	27.93915	219.2826
20/12/2555 22:20	-0.359691	3.37997	99.8874	0.998993	239.381	158.899	38.9626	27.9503	214.345
20/12/2555 22:21	-0.359691	3.37997	99.8874	0.998993	239.516	158.899	38.9626	27.9503	206.706
20/12/2555 22:22	-0.359691	3.37997	99.8874	0.998993	239.428	158.899	38.9626	27.9503	199.2693
20/12/2555 22:23	-0.359691	3.37997	99.8874	0.998993	239.445	159.971	38.9626	27.9503	202.5277
20/12/2555 22:24	-0.359691	3.37997	99.8874	0.998993	239.478	160.849	38.9626	27.9503	210.7452
20/12/2555 22:25	-0.359691	3.37997	99.8874	0.998993	239.66	160.849	38.9626	27.9623	216.7187
20/12/2555 22:26	-0.359691	3.37997	99.8874	0.998993	240.366	160.849	38.9626	27.9625	215.9677
20/12/2555 22:27	-0.359691	3.37997	99.8874	0.998993	240.382	160.849	38.9626	27.9482	214.0528
20/12/2555 22:28	-0.359691	3.37997	99.8874	0.998993	240.378	160.849	38.9626	27.9503	215.6676
20/12/2555 22:29	-0.359691	3.37997	99.8874	0.998993	240.308	160.849	38.9626	27.9503	214.6861
20/12/2555 22:30	-0.359691	3.37997	99.8874	0.998993	240.383	160.849	38.9861	27.9503	213.8334
20/12/2555 22:31	-0.359691	3.38258	99.873	0.998993	240.398	160.849	39.0369	27.9486	209.1573
20/12/2555 22:32	-0.359691	3.38501	99.8723	0.998993	240.34	160.849	39.0369	27.9377	211.0492
20/12/2555 22:33	-0.359691	3.38501	99.8723	0.998993	240.358	160.849	39.0369	27.9377	214.231

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
20/12/2555 22:34	-0.359691	3.38501	99.8723	0.998993	240.334	160.849	39.0369	27.9377	212.9552
20/12/2555 22:35	-0.359691	3.38501	99.8723	0.998993	240.388	160.544	39.0369	27.9377	214.4899
20/12/2555 22:36	-0.353463	3.38501	99.8723	0.998993	240.415	160.294	39.0369	27.9377	215.1167
20/12/2555 22:37	-0.352706	3.38501	99.8723	0.998993	240.409	160.294	39.0369	27.9377	210.5098
20/12/2555 22:38	-0.352706	3.38501	99.8723	0.998993	240.339	160.294	39.0369	27.9377	216.0523
20/12/2555 22:39	-0.352706	3.38501	99.8723	0.998993	240.396	160.294	39.0369	27.93435	209.144
20/12/2555 22:40	-0.352706	3.38501	99.8723	0.998993	240.411	160.294	39.0369	27.9305	214.3719

Date/Time	HP Turbine Inlet Enthalpy(Hi)	Feed Water Enthalpy	Hot RH Enthalpy	Cold RH Enthalpy	Total RH Steam Flow	FW Flow to Eco	RH Spray Water Flow	RH Spray Water Enthalpy	BFP Inlet Enthalpy
3	U08TB08 U001_k	U08BE08 U005	U08BE08 U006	U08CRH08 U001	U0880RB10 U001	U0880NB01 F001	U0880NB60 F001	U08BE08 U007	U08BF08 U011
20/12/2555 21:40	3367.139	1017.459	3471.804	3021.798	178.896	192.933	-0.368829	748.8201	735.4771
20/12/2555 21:41	3366.719	1017.452	3472.943	3022.31	180.17	198.095	-0.373659	749.7866	735.4771
20/12/2555 21:42	3365.797	1017.445	3473.536	3022.642	180	198.06	-0.373659	750.4029	735.4771
20/12/2555 21:43	3363.062	1017.445	3474.274	3022.412	179.696	197.952	-0.373659	750.7813	738.2419
20/12/2555 21:44	3360.424	1017.445	3474.947	3021.644	179.733	199.069	-0.373659	750.9373	738.8755
20/12/2555 21:45	3359.493	1017.445	3475.351	3020.825	179.796	198.816	-0.373659	750.6981	738.8755
20/12/2555 21:46	3358.957	1017.445	3475.128	3020.159	179.888	199.113	-0.373659	750.8059	738.8755
20/12/2555 21:47	3358.477	1017.445	3474.354	3019.518	179.923	200.734	-0.373659	751.3358	738.8755
20/12/2555 21:48	3358.534	1017.445	3471.991	3019.133	179.939	202.997	-0.373659	751.8809	738.8755
20/12/2555 21:49	3358.167	1017.445	3468.553	3018.954	180.161	201.489	-0.373659	752.1886	738.8755
20/12/2555 21:50	3357.319	1017.479	3465.003	3017.698	180.298	210.018	-0.373659	752.6669	738.8755
20/12/2555 21:51	3356.982	1019.378	3462.652	3016.186	180.166	187.068	-0.373659	754.8428	740.5574
20/12/2555 21:52	3358.944	1022.324	3461.205	3017.065	179.289	190.758	-0.368887	754.08	742.2279
20/12/2555 21:53	3360.356	1022.28	3459.862	3017.659	179.66	201.355	-0.366675	753.6151	742.2279
20/12/2555 21:54	3362.699	1022.264	3458.812	3018.305	180.59	205.747	-0.366675	753.3463	739.0864
20/12/2555 21:55	3364.558	1022.236	3458.263	3019.208	180.601	205.902	-0.366675	753.357	738.8755
20/12/2555 21:56	3365.498	1022.204	3457.366	3019.956	179.826	198.141	-0.366675	753.3809	738.8755
20/12/2555 21:57	3365.795	1022.147	3457.937	3020.806	179.388	191.134	-0.366675	753.187	739.0864
20/12/2555 21:58	3367.657	1022.147	3461.607	3021.964	179.446	190.876	-0.366675	753.3146	742.2279
20/12/2555 21:59	3371.93	1022.147	3467.151	3023.506	179.805	196.054	-0.366675	753.6393	739.7179
20/12/2555 22:00	3375.972	1022.147	3472.482	3025.482	179.71	191.291	-0.366675	753.8408	738.8755
20/12/2555 22:01	3377.379	1022.147	3476.365	3026.866	179.025	195.173	-0.366675	754.0801	738.8755
20/12/2555 22:02	3375.117	1022.196	3479.355	3027.292	178.816	190.323	-0.36004	754.1098	738.8755
20/12/2555 22:03	3372.84	1023.219	3481.072	3026.547	179.104	197.562	-0.352939	754.3142	738.8755
20/12/2555 22:04	3369.666	1024.74	3480.279	3025.318	179.3	195.617	-0.356198	754.6288	738.8755
20/12/2555 22:05	3365.397	1024.74	3477.018	3024.138	179.281	197.2	-0.356198	754.8512	738.8755
20/12/2555 22:06	3361.595	1024.74	3472.952	3022.239	179.447	201.035	-0.356198	755.0298	738.8755
20/12/2555 22:07	3358.935	1024.74	3469.235	3020.31	179.826	198.057	-0.356198	755.0176	738.8755

Date/Time	HP Turbine Inlet Enthalpy(Hi)	Feed Water Enthalpy	Hot RH Enthalpy	Cold RH Enthalpy	Total RH Steam Flow	FW Flow to Eco	RH Spray Water Flow	RH Spray Water Enthalpy	BFP Inlet Enthalpy
3	U08TB08 U001_k	U08BE08 U005	U08BE08 U006	U08CRH08 U001	U0880RB10 U001	U0880NB01 F001	U0880NB60 F001	U08BE08 U007	U08BF08 U011
20/12/2555 22:08	3357.814	1024.74	3466.055	3018.919	180.056	201.044	-0.356198	755.0786	738.8755
20/12/2555 22:09	3357.954	1024.74	3463.502	3018.171	179.924	198.91	-0.356198	755.1878	738.8755
20/12/2555 22:10	3358.683	1024.74	3462.18	3018.016	179.889	201.623	-0.356198	755.347	738.8755
20/12/2555 22:11	3360.811	1024.74	3462.684	3018.584	179.796	198.853	-0.356198	755.4824	739.7179
20/12/2555 22:12	3364.28	1024.74	3464.61	3019.563	179.807	196.576	-0.356198	755.4452	739.928
20/12/2555 22:13	3367.072	1024.74	3466.457	3020.799	179.57	197.184	-0.356198	755.4602	739.928
20/12/2555 22:14	3367.492	1024.77	3467.643	3021.641	179.544	194.678	-0.356198	755.4619	739.928
20/12/2555 22:15	3367.02	1024.636	3468.696	3022.046	179.583	193.664	-0.357363	755.5995	739.928
20/12/2555 22:16	3365.834	1024.442	3469.278	3022.252	179.456	189.382	-0.359691	755.2883	739.928
20/12/2555 22:17	3365.751	1024.461	3470.4	3022.046	179.969	206.972	-0.359691	754.537	739.928
20/12/2555 22:18	3365.269	1024.495	3471.588	3021.455	180.135	209.41	-0.359691	755.0187	739.928
20/12/2555 22:19	3364.511	1024.495	3472.07	3020.992	180.006	206.22	-0.359691	754.8523	739.928
20/12/2555 22:20	3364.259	1024.495	3472.301	3020.683	179.26	201.424	-0.359691	754.3821	739.928
20/12/2555 22:21	3364.231	1024.495	3472.436	3020.606	179.206	193.257	-0.359691	754.4452	739.928
20/12/2555 22:22	3365.044	1024.495	3472.447	3020.915	179.231	185.002	-0.359691	755.0641	739.928
20/12/2555 22:23	3364.007	1024.509	3472.885	3021.223	179.444	188.245	-0.359691	755.498	740.5574
20/12/2555 22:24	3363.235	1024.552	3472.192	3020.966	179.72	197.417	-0.359691	755.9215	740.7668
20/12/2555 22:25	3360.447	1024.552	3470.76	3019.936	180.126	205.222	-0.359691	756.0693	740.7668
20/12/2555 22:26	3357.04	1024.552	3467.302	3018.131	180.825	206.709	-0.359691	756.0244	740.7668
20/12/2555 22:27	3352.48	1024.69	3462.239	3015.762	180.942	206.805	-0.359691	755.8251	740.7668
20/12/2555 22:28	3350.37	1024.874	3457.637	3013.87	181.162	209.61	-0.359691	755.6371	740.7668
20/12/2555 22:29	3349.219	1024.874	3453.875	3012.39	181.674	209.176	-0.359691	755.9026	740.7668
20/12/2555 22:30	3349.049	1024.874	3450.583	3011.714	181.749	208.004	-0.359691	756.0754	740.7668
20/12/2555 22:31	3350.552	1024.874	3449.173	3011.896	181.535	202.463	-0.359691	756.0909	740.7668
20/12/2555 22:32	3353.779	1024.874	3448.546	3012.78	181.28	203.266	-0.359691	756.1126	740.7668
20/12/2555 22:33	3356.634	1024.874	3448.714	3013.766	181.337	207.457	-0.359691	756.3506	740.7668
20/12/2555 22:34	3358.186	1024.874	3448.859	3014.648	181.696	206.418	-0.359691	756.6096	740.7668
20/12/2555 22:35	3358.691	1024.874	3449.755	3015.322	181.486	207.521	-0.359691	756.6252	740.138
20/12/2555 22:36	3359.429	1024.874	3451.121	3015.607	181.26	207.515	-0.353463	756.4301	739.7179
20/12/2555 22:37	3361.092	1024.874	3453.472	3016.177	181.245	202.704	-0.352706	756.3806	739.7179
20/12/2555 22:38	3363.119	1024.874	3455.173	3017.141	180.957	207.748	-0.352706	756.4894	739.7179
20/12/2555 22:39	3364.131	1024.874	3456.047	3018.217	181.059	201.438	-0.352706	756.6226	739.7179
20/12/2555 22:40	3363.13	1024.92	3456.226	3018.579	181.1	206.776	-0.352706	756.6669	739.7179

Date/Time	BFP Outlet Enthalpy	Main Steam Flow RA20	Main Steam Flow RA10	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Temp RA20	Main Steam Temp RA10	RH Inlet Temp DESH	RH Inlet Temp DESH
4	U08BF08 U012	U0880RA20 F001	U0880RA10 F001	U0880RA20 P003	U0880RA10 P003	U0880RA20 T003	U0880RA10 T003	U0880RC10 T001	U0880RC20 T001
20/12/2555 21:40	748.8201	105.104	105.901	160.425	160.8	523.133	524.942	312.248	313.248
20/12/2555 21:41	749.7866	105.982	107.245	160.425	160.8	523.144	524.629	312.248	313.248
20/12/2555 21:42	750.4029	105.982	107.245	160.425	160.8	522.999	524.146	315.177	313.248
20/12/2555 21:43	750.7813	105.982	107.245	160.425	160.8	522.864	523.257	315.628	313.248
20/12/2555 21:44	750.9373	105.982	107.245	161.409	161.552	522.77	522.066	315.628	313.248
20/12/2555 21:45	750.6981	105.982	107.245	162.393	162.851	522.724	521.452	315.628	313.248
20/12/2555 21:46	750.8059	105.982	107.245	162.393	162.851	522.774	521.019	315.628	313.248
20/12/2555 21:47	751.3358	105.982	107.245	162.393	162.851	522.569	520.898	315.628	313.526
20/12/2555 21:48	751.8809	105.982	107.245	162.393	162.851	522.29	521.21	315.628	314.125
20/12/2555 21:49	752.1886	105.982	107.245	162.393	162.851	521.589	521.644	315.628	314.125
20/12/2555 21:50	752.6669	106.598	107.245	162.393	162.851	520.857	521.785	315.628	314.125
20/12/2555 21:51	754.8428	105.448	106.239	161.915	162.284	520.449	521.763	315.628	314.125
20/12/2555 21:52	754.08	104.518	105.47	160.342	160.849	520.83	521.328	315.628	314.125
20/12/2555 21:53	753.6151	105.794	106.369	158.93	159.245	521.561	520.859	315.628	314.125
20/12/2555 21:54	753.3463	105.822	107.057	157.857	158.181	522.797	520.083	314.868	314.125
20/12/2555 21:55	753.357	105.773	107.633	156.32	156.732	523.598	519.324	314.751	314.125
20/12/2555 21:56	753.3809	105.773	107.389	154.429	154.798	523.564	518.76	314.751	314.125
20/12/2555 21:57	753.187	105.773	107.096	154.294	154.697	522.817	518.881	314.751	314.125
20/12/2555 21:58	753.3146	105.773	106	154.294	154.697	522.626	520.412	314.751	314.125
20/12/2555 21:59	753.6393	105.773	106.929	154.294	154.697	523.336	522.791	314.751	315.154
20/12/2555 22:00	753.8408	105.773	106.929	154.294	154.697	524.335	524.697	314.751	317.375
20/12/2555 22:01	754.0801	105.773	106.929	154.294	154.697	524.748	525.409	314.751	317.375
20/12/2555 22:02	754.1098	105.773	105.641	155.695	156.065	524.675	525.268	314.751	317.375
20/12/2555 22:03	754.3142	105.773	105.414	156.345	156.699	524.326	524.928	314.751	317.375
20/12/2555 22:04	754.6288	105.773	105.414	156.345	156.699	523.229	523.877	314.751	317.375
20/12/2555 22:05	754.8512	105.773	105.414	156.345	156.699	521.512	522.526	314.751	317.375
20/12/2555 22:06	755.0298	105.591	105.609	156.345	156.699	519.835	521.477	315.6	317.375
20/12/2555 22:07	755.0176	105.585	106.876	156.345	156.699	518.716	520.696	315.75	317.375
20/12/2555 22:08	755.0786	105.585	106.876	156.345	156.699	518.521	520.101	315.75	317.375
20/12/2555 22:09	755.1878	105.585	106.876	156.345	156.699	519.223	519.494	315.75	317.375
20/12/2555 22:10	755.347	105.585	106.876	156.345	156.699	520.152	519.087	315.75	317.375
20/12/2555 22:11	755.4824	105.585	106.876	156.345	156.699	521.514	519.249	315.75	316.588
20/12/2555 22:12	755.4452	105.585	106.876	156.345	156.699	522.924	520.308	315.75	314.751
20/12/2555 22:13	755.4602	105.585	106.876	156.345	156.699	523.892	521.341	315.75	314.751
20/12/2555 22:14	755.4619	105.585	106.876	157.164	157.516	523.973	521.939	315.75	314.751
20/12/2555 22:15	755.5995	105.585	106.876	157.544	157.895	523.699	522.083	315.75	314.751
20/12/2555 22:16	755.2883	104.868	105.615	157.544	157.895	523.161	521.786	315.75	314.751
20/12/2555 22:17	754.537	106.004	106.743	157.544	157.895	523.074	521.813	315.75	314.751
20/12/2555 22:18	755.0187	106.887	106.743	158.981	159.124	523.119	522.266	315.536	314.751
20/12/2555 22:19	754.8523	106.365	106.743	159.549	159.943	523.057	522.693	315.498	314.751
20/12/2555 22:20	754.3821	105.463	106.743	159.549	159.943	522.867	522.715	315.498	314.751

Date/Time	BFP Outlet Enthalpy	Main Steam Flow RA20	Main Steam Flow RA10	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Temp RA20	Main Steam Temp RA10	RH Inlet Temp DESH	RH Inlet Temp DESH
4	U08BF08 U012	U0880RA20 F001	U0880RA10 F001	U0880RA20 P003	U0880RA10 P003	U0880RA20 T003	U0880RA10 T003	U0880RC10 T001	U0880RC20 T001
20/12/2555 22:21	754.4452	105.463	106.743	159.549	159.943	522.696	522.866	315.498	314.751
20/12/2555 22:22	755.0641	105.463	105.343	159.549	159.943	523.161	522.988	315.498	314.751
20/12/2555 22:23	755.498	105.463	105.294	160.984	161.277	523.96	522.532	315.498	314.975
20/12/2555 22:24	755.9215	105.463	106.792	161.551	161.945	524.615	521.937	315.498	315.498
20/12/2555 22:25	756.0693	105.63	107.082	162.98	163.348	524.84	520.424	315.498	315.498
20/12/2555 22:26	756.0244	107.131	108.469	163.592	163.95	524.266	518.76	315.498	315.498
20/12/2555 22:27	755.8251	107.131	108.469	163.592	163.95	522.849	516.944	315.498	315.498
20/12/2555 22:28	755.6371	107.131	108.469	163.592	163.95	521.615	516.036	315.498	315.498
20/12/2555 22:29	755.9026	107.131	108.469	162.293	162.552	520.465	516.036	315.498	315.498
20/12/2555 22:30	756.0754	107.131	108.469	161.594	161.999	519.288	517.095	312.418	315.498
20/12/2555 22:31	756.0909	107.131	107.747	161.594	161.999	518.538	518.911	311.874	315.498
20/12/2555 22:32	756.1126	107.131	106.922	161.594	161.999	518.548	521.18	311.874	315.498
20/12/2555 22:33	756.3506	107.131	106.922	161.594	161.999	518.598	523.147	311.874	315.498
20/12/2555 22:34	756.6096	107.131	106.922	161.594	161.999	518.78	524.055	311.874	315.498
20/12/2555 22:35	756.6252	107.131	106.922	161.594	161.999	518.99	524.074	311.874	314.935
20/12/2555 22:36	756.4301	107.131	106.922	161.594	161.999	519.583	523.903	311.874	313.621
20/12/2555 22:37	756.3806	107.066	106.922	161.594	161.999	521.065	523.601	311.874	313.621
20/12/2555 22:38	756.4894	106.484	106.922	161.594	161.999	522.812	523.298	311.874	313.621
20/12/2555 22:39	756.6226	106.484	106.922	161.594	161.999	524.271	522.542	311.874	313.621
20/12/2555 22:40	756.6669	106.484	107.641	161.594	161.999	524.963	521.371	311.874	313.621

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
20/12/2555 21:40	30.4598	30.4371	105.104	105.901	235.166	510.215	505.18	3471.804	2093.49
20/12/2555 21:41	30.6918	30.6741	105.982	107.245	235.166	510.628	506.011	3472.943	2090.31
20/12/2555 21:42	30.6778	30.6621	105.982	107.245	235.166	511.025	506.126	3473.536	2086.33
20/12/2555 21:43	30.6344	30.6201	105.982	107.245	235.166	511.815	505.969	3474.274	2085.17
20/12/2555 21:44	30.6593	30.6398	105.982	107.245	235.166	512.604	505.797	3474.947	2098.14
20/12/2555 21:45	30.681	30.6593	105.982	107.245	235.166	512.965	505.807	3475.351	2113.84
20/12/2555 21:46	30.697	30.6751	105.982	107.245	235.166	512.846	505.747	3475.128	2135.33
20/12/2555 21:47	30.6909	30.6689	105.982	107.245	235.166	512.417	505.478	3474.354	2161.64
20/12/2555 21:48	30.6824	30.6549	105.982	107.245	235.166	511.069	504.72	3471.991	2189.95
20/12/2555 21:49	30.6929	30.6693	105.982	107.245	235.166	509.218	503.496	3468.553	2213.38
20/12/2555 21:50	30.6969	30.6755	106.598	107.245	235.166	507.206	502.346	3465.003	2231.9
20/12/2555 21:51	30.6975	30.6818	105.448	106.239	235.591	506.234	501.223	3462.652	2242.83
20/12/2555 21:52	30.525	30.5068	104.518	105.47	236.228	506.163	499.835	3461.205	2247.85
20/12/2555 21:53	30.5717	30.5513	105.794	106.369	236.228	506.543	498.293	3459.862	2247.19
20/12/2555 21:54	30.7079	30.6845	105.822	107.057	236.228	507.202	496.834	3458.812	2242.45

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
20/12/2555 21:55	30.7047	30.6803	105.773	107.633	236.228	507.318	496.22	3458.263	2236.36
20/12/2555 21:56	30.5856	30.5599	105.773	107.389	236.228	506.226	496.397	3457.366	2225.85
20/12/2555 21:57	30.5062	30.486	105.773	107.096	236.228	505.594	497.471	3457.937	2200.16
20/12/2555 21:58	30.5114	30.4939	105.773	106	236.228	506.809	499.525	3461.607	2168.43
20/12/2555 21:59	30.6018	30.5795	105.773	106.929	236.228	509.639	501.742	3467.151	2139.76
20/12/2555 22:00	30.625	30.604	105.773	106.929	236.228	512.359	503.802	3472.482	2112.5
20/12/2555 22:01	30.5318	30.511	105.773	106.929	236.228	514.002	505.53	3476.365	2089.31
20/12/2555 22:02	30.548	30.5212	105.773	105.641	236.228	515.257	506.964	3479.355	2082.88
20/12/2555 22:03	30.5919	30.5693	105.773	105.414	236.448	515.837	507.956	3481.072	2093.73
20/12/2555 22:04	30.6434	30.6219	105.773	105.414	236.778	515.234	507.896	3480.279	2114.39
20/12/2555 22:05	30.6275	30.6045	105.773	105.414	236.778	513.384	506.837	3477.018	2135.61
20/12/2555 22:06	30.6243	30.5974	105.591	105.609	236.778	511.309	505.267	3472.952	2156.78
20/12/2555 22:07	30.6662	30.6378	105.585	106.876	236.778	509.647	503.651	3469.235	2173.22
20/12/2555 22:08	30.6645	30.6453	105.585	106.876	236.778	508.677	501.782	3466.055	2176.29
20/12/2555 22:09	30.6548	30.6361	105.585	106.876	236.778	508.165	500.017	3463.502	2165.93
20/12/2555 22:10	30.6381	30.6152	105.585	106.876	236.778	508.086	498.897	3462.18	2151.01
20/12/2555 22:11	30.6233	30.607	105.585	106.876	236.778	508.678	498.736	3462.684	2133.38
20/12/2555 22:12	30.6308	30.61	105.585	106.876	236.778	509.586	499.557	3464.61	2118.43
20/12/2555 22:13	30.5988	30.5712	105.585	106.876	236.778	510.138	500.615	3466.457	2107.65
20/12/2555 22:14	30.5972	30.5735	105.585	106.876	236.778	510.531	501.292	3467.643	2100.77
20/12/2555 22:15	30.6014	30.5838	105.585	106.876	236.75	510.757	501.999	3468.696	2097.68
20/12/2555 22:16	30.5989	30.5753	104.868	105.615	236.708	510.99	502.299	3469.278	2097.32
20/12/2555 22:17	30.6635	30.6437	106.004	106.743	236.708	511.483	502.862	3470.4	2097.59
20/12/2555 22:18	30.7024	30.679	106.887	106.743	236.708	512.054	503.385	3471.588	2097.85
20/12/2555 22:19	30.6947	30.6707	106.365	106.743	236.708	512.184	503.676	3472.07	2097.66
20/12/2555 22:20	30.5778	30.5566	105.463	106.743	236.708	512.016	503.943	3472.301	2097.63
20/12/2555 22:21	30.5774	30.5533	105.463	106.743	236.708	512.227	503.858	3472.436	2096.63
20/12/2555 22:22	30.5973	30.571	105.463	105.343	236.708	512.943	503.158	3472.447	2091.85
20/12/2555 22:23	30.619	30.5985	105.463	105.294	236.708	513.924	502.592	3472.885	2096.9
20/12/2555 22:24	30.6594	30.6377	105.463	106.792	236.708	514.415	501.526	3472.192	2104.09
20/12/2555 22:25	30.7204	30.6936	105.63	107.082	236.708	514.611	500.1	3470.76	2118.78
20/12/2555 22:26	30.8303	30.8044	107.131	108.469	236.708	513.623	498.118	3467.302	2140.88
20/12/2555 22:27	30.8128	30.7896	107.131	108.469	236.736	511.809	495.392	3462.239	2167.33
20/12/2555 22:28	30.8	30.7811	107.131	108.469	236.778	510.139	492.95	3457.637	2183.56
20/12/2555 22:29	30.8222	30.805	107.131	108.469	236.778	508.024	491.725	3453.875	2194.76
20/12/2555 22:30	30.8613	30.84	107.131	108.469	236.778	505.419	491.417	3450.583	2193.21
20/12/2555 22:31	30.8015	30.778	107.131	107.747	236.778	503.392	492.122	3449.173	2181.29
20/12/2555 22:32	30.76	30.7423	107.131	106.922	236.778	502.023	492.906	3448.546	2166.55
20/12/2555 22:33	30.7687	30.7498	107.131	106.922	236.778	501.495	493.591	3448.714	2152.41
20/12/2555 22:34	30.8228	30.8037	107.131	106.922	236.778	501.393	493.865	3448.859	2141.33
20/12/2555 22:35	30.7962	30.7752	107.131	106.922	236.778	501.688	494.352	3449.755	2135.68

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
20/12/2555 22:36	30.7656	30.7418	107.131	106.922	236.778	502.365	494.846	3451.121	2134.02
20/12/2555 22:37	30.7773	30.7576	107.066	106.922	236.778	503.909	495.435	3453.472	2137.3
20/12/2555 22:38	30.7383	30.7175	106.484	106.922	236.778	505.469	495.359	3455.173	2142.59
20/12/2555 22:39	30.7628	30.7392	106.484	106.922	236.782	506.603	495.017	3456.047	2147.81
20/12/2555 22:40	30.7608	30.7388	106.484	107.641	236.788	507.267	494.515	3456.226	2152.48

Date/Time	Pulv#5 Coal Feed Rate	Pulv#4 Coal Feed Rate	Pulv#3 Coal Feed Rate	Pulv#2 Coal Feed Rate	Pulv#1 Coal Feed Rate
6	U0880NL85 U005	U0880NL84 U005	U0880NL83 U005	U0880NL82 U005	U0880NL81 U005
20/12/2555 21:40	61.4805	61.916	61.7725	61.6563	0
20/12/2555 21:41	61.4805	61.916	61.7725	61.6563	0
20/12/2555 21:42	61.4805	61.916	61.7725	61.6563	0
20/12/2555 21:43	61.4805	61.8153	61.7725	61.6563	0
20/12/2555 21:44	61.4805	59.9023	61.7725	61.6563	0
20/12/2555 21:45	58.1599	59.6189	60.1523	59.5764	0
20/12/2555 21:46	57.7217	59.0024	59.4677	58.0156	0
20/12/2555 21:47	57.7217	57.4941	58.1963	58.0156	0
20/12/2555 21:48	57.7217	57.4941	56.6875	56.8162	0
20/12/2555 21:49	57.7217	57.4941	56.1846	56.6045	0
20/12/2555 21:50	57.7217	57.4941	56.1846	56.6045	0
20/12/2555 21:51	57.7217	57.4941	56.1846	56.6045	0
20/12/2555 21:52	57.7217	57.4941	56.3381	56.6045	0
20/12/2555 21:53	57.7217	57.4941	57.2429	56.7751	0
20/12/2555 21:54	57.7217	57.4941	58.2832	59.2866	0
20/12/2555 21:55	57.7217	57.4941	58.2832	59.5957	0
20/12/2555 21:56	57.7217	58.5658	59.9681	60.3035	0
20/12/2555 21:57	58.6496	59.2588	63.8167	63.9037	0
20/12/2555 21:58	58.9063	59.2588	64.1543	64.2324	0
20/12/2555 21:59	58.9063	59.2588	64.1543	64.2324	0
20/12/2555 22:00	58.9063	59.2588	64.1543	64.2324	0
20/12/2555 22:01	58.9063	59.2588	64.1543	64.2324	0
20/12/2555 22:02	58.9063	59.2588	64.1216	63.6248	0
20/12/2555 22:03	58.9063	59.2588	60.096	59.6351	0
20/12/2555 22:04	58.9063	59.2588	59.9443	59.5146	0
20/12/2555 22:05	58.9063	59.2588	59.9443	59.5146	0
20/12/2555 22:06	58.9063	59.2588	59.8264	59.4498	0

Date/Time	Pulv#5 Coal Feed Rate	Pulv#4 Coal Feed Rate	Pulv#3 Coal Feed Rate	Pulv#2 Coal Feed Rate	Pulv#1 Coal Feed Rate
6	U0880NL85 U005	U0880NL84 U005	U0880NL83 U005	U0880NL82 U005	U0880NL81 U005
20/12/2555 22:07	58.9063	59.2588	59.5019	59.2715	0
20/12/2555 22:08	58.9063	59.3058	60.0141	59.8472	0
20/12/2555 22:09	58.9659	59.335	61.209	61.1904	0
20/12/2555 22:10	58.9824	59.335	62.0258	61.9832	0
20/12/2555 22:11	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:12	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:13	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:14	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:15	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:16	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:17	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:18	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:19	58.9824	59.335	62.5703	62.5117	0
20/12/2555 22:20	58.9824	59.3006	62.5703	62.5117	0
20/12/2555 22:21	59.8211	60.8623	62.5703	62.5117	0
20/12/2555 22:22	60.8564	61.6971	62.0518	61.843	0
20/12/2555 22:23	60.6631	61.708	61.8789	61.6201	0
20/12/2555 22:24	59.9074	60.1324	60.8005	60.4143	0
20/12/2555 22:25	59.2891	59.0762	60.0303	59.6104	0
20/12/2555 22:26	59.2891	59.0762	60.0303	59.6104	0
20/12/2555 22:27	59.2891	59.0762	60.0303	59.6104	0
20/12/2555 22:28	59.2891	59.0762	60.0303	59.6104	0
20/12/2555 22:29	59.2891	59.087	60.0303	59.6104	0
20/12/2555 22:30	59.2891	59.7256	60.0303	59.6104	0
20/12/2555 22:31	59.2891	59.7256	60.0303	59.6104	0
20/12/2555 22:32	59.2891	59.7256	60.0303	59.6104	0
20/12/2555 22:33	59.2891	59.7256	60.0303	59.6104	0
20/12/2555 22:34	59.2891	59.7256	60.0303	59.6104	0
20/12/2555 22:35	59.2891	59.7256	60.0303	59.6104	0
20/12/2555 22:36	59.5396	59.7256	60.1194	59.8496	0
20/12/2555 22:37	59.7588	59.7256	60.1875	60.0205	0
20/12/2555 22:38	59.7588	59.7256	60.1875	60.0205	0
20/12/2555 22:39	59.7588	59.7256	60.1875	60.0205	0
20/12/2555 22:40	59.7588	59.7256	60.1875	60.0205	0

ตาราง ข3 ข้อมูลสภาวะการเดินเครื่องโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ที่กำลังการผลิต 180 MW

Date/Time	Main Steam Pressure RA20	Main Steam Temp RA10	Main Steam Temp RA20	TB HP Outlet Pressure	RH Steam Pressure RB10 (P002)	RH Steam Pressure RB20 (P002)	RH IP TB Inlet Temp RB10	RH IP TB Inlet Temp RB20	Condenser Pressure
	U0880RA20 P004	U0880RA10 T003	U0880RA20 T003	U0880RC01 P001	U0880RB10 P002	U0880RB20 P002	U0880RB10 T010	U0880RB20 T010	U0880SD11 P001
20/12/2555 18:45	155.151	480.082	483.682	25.8247	24.4865	24.0922	450.147	450.147	0.0585005
20/12/2555 18:46	154.771	480.378	483.366	25.8247	24.4865	24.0922	450.147	450.147	0.0585005
20/12/2555 18:47	153.076	480.393	483.905	25.8247	24.4865	24.0922	450.147	450.147	0.0585005
20/12/2555 18:48	150.593	480.336	485.396	25.8247	24.0302	24.0922	449.259	450.147	0.0585005
20/12/2555 18:49	148.593	480.074	487.208	25.8247	23.9795	24.0922	449.103	450.147	0.0585005
20/12/2555 18:50	146.691	480.348	489.034	25.8247	23.9795	24.0922	449.103	450.147	0.0585005
20/12/2555 18:51	145.09	481.656	490.903	25.8247	23.9795	24.0922	449.103	455.151	0.0585005
20/12/2555 18:52	143.42	483.277	492.977	25.8247	23.9795	24.0922	449.103	456.152	0.0582756
20/12/2555 18:53	143.045	485.514	494.615	25.8247	23.9795	24.0922	449.103	456.152	0.0574659
20/12/2555 18:54	143.045	488.242	496.079	25.8247	23.9795	23.633	449.103	456.152	0.0567003
20/12/2555 18:55	143.045	491.684	497.786	25.8247	23.9795	23.5913	452.462	461.681	0.0567003
20/12/2555 18:56	143.045	495.281	499.546	25.7873	23.9795	23.5913	455.402	462.296	0.0567003
20/12/2555 18:57	144.715	498.504	501.353	25.4501	23.9795	23.5913	459.093	464.998	0.0567003
20/12/2555 18:58	145.924	501.227	502.84	25.4501	23.9795	23.5913	461.554	468.301	0.0567003
20/12/2555 18:59	147.859	502.799	504.352	25.4501	23.9795	23.5913	465.649	468.301	0.0567003
20/12/2555 19:00	149.398	503.162	505.68	25.4501	23.9905	23.5913	467.697	471.031	0.0567003
20/12/2555 19:01	151.126	502.458	507.196	25.4501	23.992	23.5913	467.697	474.6	0.0559807
20/12/2555 19:02	151.126	501.007	508.535	25.4501	23.992	23.5913	467.697	474.6	0.055501
20/12/2555 19:03	152.93	499.328	509.603	25.4501	23.992	23.6497	467.697	474.6	0.055501
20/12/2555 19:04	153.506	497.806	510.205	25.4501	23.992	24.0922	467.697	480.137	0.055501
20/12/2555 19:05	155.151	496.006	510.258	25.4501	23.992	24.0922	467.697	480.753	0.055501
20/12/2555 19:06	155.151	494.047	509.724	25.4501	23.992	24.0922	467.697	480.753	0.055501
20/12/2555 19:07	155.151	491.962	508.761	25.4501	23.992	24.0922	467.697	480.753	0.055501
20/12/2555 19:08	155.151	490.251	507.713	25.4951	23.992	24.0922	467.697	480.753	0.055501
20/12/2555 19:09	155.151	489.017	506.639	25.9003	23.992	24.0922	467.697	480.753	0.055501
20/12/2555 19:10	155.151	488.121	505.397	25.9003	23.992	24.0922	467.697	480.753	0.055501
20/12/2555 19:11	155.151	487.762	504.464	25.9003	23.992	24.0922	466.898	480.753	0.055501
20/12/2555 19:12	155.151	487.369	503.9	25.9003	24.2307	24.0922	466.498	480.753	0.0553359
20/12/2555 19:13	155.151	487.466	503.49	25.9003	24.2675	24.0922	466.498	480.753	0.0546003
20/12/2555 19:14	155.151	487.759	503.527	25.9003	24.2675	24.0922	466.498	480.753	0.0546003
20/12/2555 19:15	154.37	487.487	503.62	25.9003	24.2675	24.0596	466.498	480.753	0.0546003
20/12/2555 19:16	153.198	486.439	503.978	25.9003	24.2675	23.7666	466.498	481.832	0.0546003
20/12/2555 19:17	152.495	484.228	503.481	25.9003	24.2675	23.7666	465.267	481.952	0.0546003
20/12/2555 19:18	151.19	482.159	502.883	25.9003	24.2675	23.7666	460.345	481.952	0.0546003
20/12/2555 19:19	149.825	480.448	502.579	25.9003	24.2675	23.7666	460.345	481.952	0.0546003
20/12/2555 19:20	149.143	479.328	502.341	25.8727	24.2675	23.7666	460.345	481.952	0.0546003
20/12/2555 19:21	147.331	479.475	502.171	25.6248	24.2675	23.7666	460.345	481.952	0.0546003
20/12/2555 19:22	145.824	482.303	501.985	25.6248	24.2675	23.7666	460.345	481.952	0.0546003
20/12/2555 19:23	145.09	487.077	501.713	25.6248	24.2675	23.7666	460.345	481.952	0.0546003

Date/Time	Main Steam Pressure RA20	Main Steam Temp RA10	Main Steam Temp RA20	TB HP Outlet Pressure	RH Steam Pressure RB10 (P002)	RH Steam Pressure RB20 (P002)	RH IP TB Inlet Temp RB10	RH IP TB Inlet Temp RB20	Condenser Pressure
1	U0880RA20 P004	U0880RA10 T003	U0880RA20 T003	U0880RC01 P001	U0880RB10 P002	U0880RB20 P002	U0880RB10 T010	U0880RB20 T010	U0880SD11 P001
20/12/2555 19:24	145.09	492.324	501.226	25.6248	23.9269	23.7666	460.345	481.952	0.0544904
20/12/2555 19:25	145.09	496.78	501.328	25.6248	23.8668	23.7666	460.756	481.952	0.0540006
20/12/2555 19:26	145.09	500.712	501.73	25.6248	23.8668	23.7666	466.498	481.952	0.0540006
20/12/2555 19:27	145.09	503.064	502.862	25.6248	23.8668	23.7678	466.498	481.952	0.0540006
20/12/2555 19:28	146.691	504.327	504.289	25.6248	23.8668	23.7791	468.099	482.759	0.0540006
20/12/2555 19:29	147.092	504.675	505.904	25.6248	23.8668	23.7791	472.504	482.849	0.0540006
20/12/2555 19:30	148.782	504.402	507.081	25.6248	23.8668	23.7791	472.504	482.849	0.0540006
20/12/2555 19:31	149.042	503.237	507.614	25.6248	23.8668	23.7791	472.504	482.849	0.0540006
20/12/2555 19:32	149.909	500.878	507.414	25.5974	23.8668	23.7791	472.504	482.849	0.0540006
20/12/2555 19:33	151.044	497.738	506.577	25.3502	23.8668	23.7791	472.504	482.849	0.0540006
20/12/2555 19:34	151.044	494.73	505.437	25.3502	23.8668	23.7791	472.504	482.849	0.053145
20/12/2555 19:35	151.812	492.425	504.389	25.3502	23.8668	23.7791	472.504	482.849	0.0531
20/12/2555 19:36	153.049	491.423	503.514	25.3502	23.8717	23.7791	472.504	482.849	0.0531
20/12/2555 19:37	153.049	491.089	502.635	25.3502	23.8727	23.7791	472.504	482.849	0.0531
20/12/2555 19:38	153.049	491.793	502.004	25.3502	23.8727	23.7791	472.504	482.849	0.0531
20/12/2555 19:39	153.117	492.837	501.834	25.3502	23.8727	23.7753	472.504	482.849	0.0531
20/12/2555 19:40	155.093	493.921	501.954	25.3502	23.8727	23.7224	474.022	484.442	0.0531
20/12/2555 19:41	155.093	495.531	502.229	25.3502	23.8727	23.7224	478.198	484.653	0.0531
20/12/2555 19:42	156.901	496.787	502.663	25.3502	23.8727	23.7224	478.198	484.653	0.0531
20/12/2555 19:43	157.101	497.855	503.235	25.3502	23.8727	23.7224	478.198	484.653	0.0531
20/12/2555 19:44	158.398	498.171	503.573	25.3564	23.8727	23.7224	478.198	484.653	0.0531
20/12/2555 19:45	159.149	497.753	503.831	25.425	23.8727	23.7224	478.198	484.653	0.0531

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
20/12/2555 18:45	-0.368887	3.38249	99.8801	0.998993	180.313	155.545	39.4501	28.73645	163.2597
20/12/2555 18:46	-0.370167	3.38249	99.8801	0.998993	180.305	155.245	39.4501	28.73645	167.8916
20/12/2555 18:47	-0.370167	3.38249	99.8801	0.998993	180.172	153.543	39.4501	28.73645	170.5651
20/12/2555 18:48	-0.370167	3.38249	99.8801	0.998993	179.411	151.939	39.4501	28.7298	170.2333
20/12/2555 18:49	-0.370167	3.38249	99.8801	0.998993	181.298	149.818	39.4501	28.6865	171.484
20/12/2555 18:50	-0.370167	3.38249	99.8801	0.998993	180.381	147.342	39.4501	28.6865	170.9083
20/12/2555 18:51	-0.370167	3.38249	99.8801	0.998993	180.323	145.355	39.4501	28.6865	167.1807
20/12/2555 18:52	-0.370167	3.38249	99.8801	0.998993	180.342	143.935	39.4501	28.6865	169.5821
20/12/2555 18:53	-0.368596	3.38249	99.8801	0.998993	180.333	143.292	39.4501	28.6865	170.156
20/12/2555 18:54	-0.347643	3.38249	99.8801	0.998993	178.505	143.292	38.6625	28.6865	174.6143
20/12/2555 18:55	-0.338738	3.37825	99.8801	0.998993	179.785	143.292	38.1374	28.6865	174.6856
20/12/2555 18:56	-0.338738	3.37502	99.8801	0.998993	180.408	143.292	38.1374	28.54905	171.6357
20/12/2555 18:57	-0.0527897	3.37502	99.8801	0.998993	180.372	145.272	38.1374	28.5248	170.5236

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
20/12/2555 18:58	-0.0498795	3.37502	99.8801	0.998993	180.353	146.608	38.1374	28.5248	168.8365
20/12/2555 18:59	0.25644	3.37502	99.8801	0.998993	180.343	148.378	38.1374	28.5248	161.8704
20/12/2555 19:00	0.120757	3.37502	99.8801	0.998993	180.353	150.132	38.1374	28.49985	166.2156
20/12/2555 19:01	0.133843	3.37502	99.8801	0.998993	180.366	151.395	38.1374	28.3375	170.2158
20/12/2555 19:02	0.320579	3.37502	99.8801	0.998993	180.338	152.175	38.1374	28.3375	175.9161
20/12/2555 19:03	1.64538	3.37502	99.8801	0.998993	180.35	153.345	38.1374	28.3375	178.5022
20/12/2555 19:04	1.30634	3.37502	99.8801	0.998993	180.308	154.406	38.1374	28.3375	175.5524
20/12/2555 19:05	1.57834	3.37502	99.8801	0.998993	180.338	155.399	38.1374	28.3375	178.3175
20/12/2555 19:06	1.80532	3.37502	99.8801	0.999433	180.338	155.399	37.831	28.3375	169.4434
20/12/2555 19:07	1.03268	3.37502	99.8801	0.999969	180.279	155.399	37.6121	28.3375	170.6223
20/12/2555 19:08	1.76976	3.37502	99.8801	0.999969	180.314	155.399	37.6121	28.19895	169.7984
20/12/2555 19:09	0.393273	3.37502	99.8801	0.999969	180.256	155.399	37.6121	28.17765	164.9782
20/12/2555 19:10	1.9705	3.37502	99.8801	0.999969	180.39	155.399	37.6121	28.17765	165.1076
20/12/2555 19:11	0.621194	3.37502	99.8801	0.999969	180.281	155.399	37.6121	28.17765	171.8854
20/12/2555 19:12	1.56832	3.37502	99.8801	0.999969	180.327	155.399	37.6121	28.15095	169.0564
20/12/2555 19:13	0.614791	3.37502	99.8801	0.999969	180.318	155.399	37.6121	27.9774	169.0391
20/12/2555 19:14	1.98243	3.37502	99.8801	0.999969	180.421	155.399	37.6121	27.9774	165.0483
20/12/2555 19:15	0.70291	3.37502	99.8801	0.999969	180.206	155.198	37.6121	27.9774	165.1666
20/12/2555 19:16	0.887761	3.37502	99.8801	0.999969	180.263	153.397	37.6121	27.9774	168.0625
20/12/2555 19:17	0.983446	3.37502	99.8801	0.999969	180.299	153.163	37.6121	27.9774	167.4899
20/12/2555 19:18	0.356198	3.37502	99.8801	0.999764	180.249	151.395	37.4422	27.9774	166.6774
20/12/2555 19:19	0.098944	3.37502	99.8801	0.999512	180.236	150.517	37.3123	27.9774	170.6722
20/12/2555 19:20	-0.291943	3.37502	99.8801	0.999512	180.348	149.445	37.3123	27.8096	170.3754
20/12/2555 19:21	-0.339378	3.37502	99.8801	0.999512	180.232	147.776	37.3123	27.7874	177.615
20/12/2555 19:22	-0.164247	3.37502	99.8801	0.999512	180.31	146.376	37.3123	27.7874	179.028
20/12/2555 19:23	-0.0388211	3.37502	99.8801	0.999512	180.241	145.444	37.3123	27.7874	171.5827
20/12/2555 19:24	-0.0623349	3.37502	99.8801	0.999512	180.322	145.444	37.3123	27.7757	169.9095
20/12/2555 19:25	4.66E-04	3.37502	99.8801	0.999512	180.328	145.444	37.3123	27.68745	170.8986
20/12/2555 19:26	0.0765943	3.37502	99.8801	0.999512	180.256	145.444	37.3123	27.68745	175.2112
20/12/2555 19:27	0.166517	3.37502	99.8801	0.999512	180.432	145.444	37.3123	27.68745	171.9507
20/12/2555 19:28	0.240143	3.37502	99.8801	0.999512	180.35	147.324	37.3123	27.68745	170.3211
20/12/2555 19:29	0.281001	3.37502	99.8801	0.999512	180.395	147.657	37.3123	27.68745	167.2362
20/12/2555 19:30	0.341124	3.37502	99.8801	0.999512	180.294	149.445	37.2324	27.68745	165.9346
20/12/2555 19:31	-0.273234	3.37502	99.8872	0.999512	180.352	149.445	37.1624	27.68745	157.7115
20/12/2555 19:32	0.897987	3.37502	99.8874	0.999512	180.255	150.412	37.1624	27.6648	166.793
20/12/2555 19:33	-0.244625	3.37502	99.8874	0.999512	180.302	151.447	37.1624	27.6623	175.4515
20/12/2555 19:34	-0.261911	3.37502	99.8874	0.999512	180.365	151.447	37.1624	27.6623	180.7815
20/12/2555 19:35	-0.28007	3.37502	99.8874	0.999512	180.329	152.346	37.1624	27.6623	178.607
20/12/2555 19:36	-0.289848	3.37502	99.8874	0.999512	180.343	153.445	37.1624	27.6579	174.8604
20/12/2555 19:37	-0.261329	3.37502	99.8874	0.999512	180.271	153.445	37.1624	27.6249	176.0654
20/12/2555 19:38	-0.287695	3.37502	99.8874	0.999512	180.288	153.445	37.1624	27.6249	166.34

Date/Time	RH Spray Water Flow	H2 Gas Pressure	Hydrogen in Air Purity Percent	Gen Power Factor	Gen Active Power	Main Steam Pressure RA10	LP Exhaust Condenser Temp	CW Inlet Temperature	Calculate Main Steam Flow
2	U0880NB60 F001	U0880ST10 P001	U0880SW10 Q001	U0880SP01 E161	U0880SP01 E131	U0880RA10 P004	U0880SD11 T001	U08CW08 U014	U08MSF08 U013
20/12/2555 19:39	-0.293224	3.37502	99.8874	0.999512	180.349	153.846	37.1624	27.6249	168.9099
20/12/2555 19:40	-0.238397	3.37502	99.8874	0.999512	180.23	155.45	37.1624	27.6249	173.2727
20/12/2555 19:41	-0.0180429	3.37502	99.8874	0.999512	180.29	155.484	37.1624	27.6249	174.1261
20/12/2555 19:42	-0.158136	3.37502	99.8874	0.999512	180.315	157.495	37.0623	27.6249	172.8556
20/12/2555 19:43	-0.299262	3.37502	99.8874	0.999512	180.354	157.495	36.9747	27.6249	174.7609
20/12/2555 19:44	-0.296758	3.37502	99.8874	0.999512	180.373	159.001	36.9747	27.5448	171.1143
20/12/2555 19:45	-0.296758	3.37502	99.8874	0.999512	180.361	159.549	36.9747	27.53755	164.3096

Date/Time	HP Turbine Inlet Enthalpy(Hi)	Feed Water Enthalpy	Hot RH Enthalpy	Cold RH Enthalpy	Total RH Steam Flow	FW Flow to Eco	RH Spray Water Flow	RH Spray Water Enthalpy	BFP Inlet Enthalpy
3	U08TB08 U001_k	U08BE08 U005	U08BE08 U006	U08CRH08 U001	U0880RB10 U001	U0880NB01 F001	U0880NB60 F001	U08BE08 U007	U08BF08 U011
20/12/2555 18:45	3250.064	980.668	3344.866	2912.726	148.962	151.67	-0.368887	714.7726	702.2805
20/12/2555 18:46	3250.539	980.668	3347.366	2923.702	149.197	157.2	-0.370167	715.1235	702.2805
20/12/2555 18:47	3253.896	980.6022	3350.674	2928.159	149.467	161.156	-0.370167	715.6556	702.2805
20/12/2555 18:48	3259.04	980.5651	3354.201	2930.972	148.521	161.59	-0.370167	715.8643	702.2805
20/12/2555 18:49	3264.32	976.5872	3357.042	2933.291	149.295	163.368	-0.370167	715.5721	702.2805
20/12/2555 18:50	3270.564	968.0214	3359.393	2936.274	148.033	161.792	-0.370167	714.9704	702.2805
20/12/2555 18:51	3277.759	967.9461	3361.751	2939.941	147.331	157.027	-0.370167	714.7749	702.2805
20/12/2555 18:52	3285.268	967.9302	3365.114	2944.044	146.973	158.016	-0.370167	714.9124	702.2805
20/12/2555 18:53	3291.507	967.8636	3369.064	2948.075	146.887	157.17	-0.368596	714.897	702.2805
20/12/2555 18:54	3297.495	967.8636	3375.503	2950.452	145.206	160.103	-0.347643	714.7446	701.7884
20/12/2555 18:55	3304.821	967.8636	3384.516	2948.313	145.945	159.128	-0.338738	714.6139	701.7884
20/12/2555 18:56	3312.367	967.8636	3394.377	2949.85	145.733	155.316	-0.338738	714.3628	701.7884
20/12/2555 18:57	3317.054	967.9277	3402.858	2952.647	145.176	153.464	-0.0527897	714.1258	701.7884
20/12/2555 18:58	3321.289	967.9421	3409.612	2947.754	145.056	151.315	-0.0498795	714.2904	701.7884
20/12/2555 18:59	3323.241	968.0189	3414.22	2942.276	145.324	144.56	0.25644	714.6755	701.7884
20/12/2555 19:00	3323.477	968.071	3417.311	2938.792	145.584	148.557	0.120757	715.0043	701.7884
20/12/2555 19:01	3322.684	968.3231	3418.89	2939.244	145.363	152.391	0.133843	714.7397	701.7884
20/12/2555 19:02	3322.004	968.8196	3418.461	2938.045	145.273	158.019	0.320579	714.0728	699.8098
20/12/2555 19:03	3319.201	968.8563	3417.287	2936.175	145.543	160.962	1.64538	713.2599	698.0644
20/12/2555 19:04	3316.81	968.8563	3415.687	2925.543	145.333	158.603	1.30634	712.8514	698.0644
20/12/2555 19:05	3312.544	968.9319	3413.705	2925.923	145.743	161.582	1.57834	712.6929	698.0644
20/12/2555 19:06	3308.976	968.9332	3410.565	2926.329	145.921	153.408	1.80532	712.5138	698.0644
20/12/2555 19:07	3304.561	968.9332	3406.779	2926.112	145.939	154.795	1.03268	712.2552	698.0644
20/12/2555 19:08	3300.569	968.9332	3403.495	2926.454	146.372	154.204	1.76976	712.2039	698.0644
20/12/2555 19:09	3297.234	968.9332	3400.716	2924.334	146.085	149.561	0.393273	712.3041	698.0644
20/12/2555 19:10	3294.125	968.9332	3398.083	2924.361	146.405	149.787	1.9705	712.584	698.0644
20/12/2555 19:11	3292.232	968.9332	3396.586	2922.151	146.262	156.509	0.621194	712.7584	698.0644
20/12/2555 19:12	3290.834	968.9332	3395.869	2922.588	146.907	154.129	1.56832	712.7914	698.0644

Date/Time	HP Turbine Inlet Enthalpy(Hi)	Feed Water Enthalpy	Hot RH Enthalpy	Cold RH Enthalpy	Total RH Steam Flow	FW Flow to Eco	RH Spray Water Flow	RH Spray Water Enthalpy	BFP Inlet Enthalpy
3	U08TB08 U001_k	U08BE08 U005	U08BE08 U006	U08CRH08 U001	U0880RB10 U001	U0880NB01 F001	U0880NB60 F001	U08BE08 U007	U08BF08 U011
20/12/2555 19:13	3290.396	968.9332	3395.582	2922.451	146.202	153.945	0.614791	712.7289	698.0644
20/12/2555 19:14	3290.863	968.8878	3394.627	2923.679	146.367	150.175	1.98243	712.5693	698.5644
20/12/2555 19:15	3291.289	968.8752	3393.887	2921.194	145.945	149.864	0.70291	712.7067	699.0634
20/12/2555 19:16	3292.337	968.8109	3392.746	2924.361	146.142	153.007	0.887761	712.7963	699.0634
20/12/2555 19:17	3289.035	968.8109	3390.463	2927.352	146.692	153.237	0.983446	712.7876	699.0634
20/12/2555 19:18	3287.307	968.7544	3389.588	2928.193	146.394	152.387	0.356198	712.6275	699.0634
20/12/2555 19:19	3285.936	968.7318	3389.969	2932.628	146.195	156.547	0.098944	712.3199	699.0634
20/12/2555 19:20	3285.194	968.7199	3391.035	2937.1	146.392	156.583	-0.291943	712.1374	699.0634
20/12/2555 19:21	3287.594	968.6524	3393.838	2943.573	145.822	162.961	-0.339378	711.9778	699.0634
20/12/2555 19:22	3293.403	968.634	3397.358	2946.356	145.776	163.361	-0.164247	711.5142	699.0634
20/12/2555 19:23	3301.001	968.5735	3401.056	2939.902	145.694	154.981	-0.0388211	710.8924	699.0634
20/12/2555 19:24	3307.769	968.5735	3404.155	2938.862	145.189	152.081	-0.0623349	710.264	699.0634
20/12/2555 19:25	3314.198	968.0737	3407.578	2939.449	145.06	151.964	4.66E-04	710.0341	699.0634
20/12/2555 19:26	3320.321	966.9833	3411.367	2939.555	144.946	155.521	0.0765943	710.1678	697.814
20/12/2555 19:27	3325.214	966.9833	3414.897	2939.342	145.149	152.083	0.166517	710.2061	696.5579
20/12/2555 19:28	3326.745	967.0027	3418.16	2938.701	144.568	150.268	0.240143	709.9591	696.5579
20/12/2555 19:29	3329.035	967.0609	3420.449	2938.087	144.085	147.214	0.281001	709.9185	696.5579
20/12/2555 19:30	3328.052	967.0609	3420.42	2939.769	143.763	145.975	0.341124	710.0982	696.5579
20/12/2555 19:31	3327.009	967.0609	3418.689	2949.131	143.552	138.269	-0.273234	710.3851	696.5579
20/12/2555 19:32	3322.19	967.1329	3416.134	2952.416	143.999	147.218	0.897987	710.8247	696.5579
20/12/2555 19:33	3315.099	967.1396	3414.232	2953.011	144.231	156.173	-0.244625	711.1558	696.5579
20/12/2555 19:34	3309.155	967.15	3413.52	2955.915	144.678	162.121	-0.261911	711.2625	696.5579
20/12/2555 19:35	3303.248	967.2186	3413.882	2955.497	144.837	160.941	-0.28007	710.8206	696.5579
20/12/2555 19:36	3298.952	967.2186	3414.671	2954.425	144.569	157.845	-0.289848	710.2393	696.5579
20/12/2555 19:37	3297.188	966.9464	3415.964	2953.011	144.491	159.31	-0.261329	709.9607	696.5579
20/12/2555 19:38	3297.304	966.3113	3417.585	2951.963	144.297	150.008	-0.287695	710.1504	697.0612
20/12/2555 19:39	3298.264	966.3113	3418.834	2951.805	144.146	152.167	-0.293224	710.4738	697.5633
20/12/2555 19:40	3297.567	966.3654	3419.985	2951.307	144.132	156.286	-0.238397	710.9097	697.5633
20/12/2555 19:41	3300.266	966.3871	3421.264	2950.335	144.365	156.947	-0.0180429	711.2244	697.5633
20/12/2555 19:42	3300.119	966.4146	3422.491	2949.862	144.114	155.51	-0.158136	711.1132	697.5633
20/12/2555 19:43	3302.366	966.4665	3423.323	2951.044	143.749	157.044	-0.299262	711.1221	697.5633
20/12/2555 19:44	3301.439	966.4665	3423.312	2952.66	143.785	153.462	-0.296758	711.1946	697.5633
20/12/2555 19:45	3300.33	966.4665	3422.824	2953.176	143.919	146.872	-0.296758	711.3584	697.5633

Date/Time	BFP Outlet Enthalpy	Main Steam Flow RA20	Main Steam Flow RA10	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Temp RA20	Main Steam Temp RA10	RH Inlet Temp DESH	RH Inlet Temp DESH
4	U08BF08 U012	U0880RA20 F001	U0880RA10 F001	U0880RA20 P003	U0880RA10 P003	U0880RA20 T003	U0880RA10 T003	U0880RC10 T001	U0880RC20 T001
20/12/2555 18:45	714.7726	87.814	88.4835	156.494	156.732	483.682	480.082	276.749	274.124
20/12/2555 18:46	715.1235	87.814	88.4835	156.123	156.461	483.366	480.378	276.749	274.124
20/12/2555 18:47	715.6556	87.814	88.4835	154.471	154.697	483.905	480.393	276.749	274.124
20/12/2555 18:48	715.8643	88.2547	88.0584	151.982	153.056	485.396	480.336	276.749	274.124
20/12/2555 18:49	715.5721	88.21	88.2227	149.945	150.938	487.208	480.074	276.749	274.124
20/12/2555 18:50	714.9704	86.3298	88.2009	148.137	148.457	489.034	480.348	276.749	274.124
20/12/2555 18:51	714.7749	86.2493	88.1674	146.396	146.545	490.903	481.656	276.749	274.124
20/12/2555 18:52	714.9124	86.2493	88.1674	144.777	145.011	492.977	483.277	276.749	276.456
20/12/2555 18:53	714.897	86.2493	88.1674	144.373	144.544	494.615	485.514	276.749	279.121
20/12/2555 18:54	714.7446	84.673	85.943	144.373	144.544	496.079	488.242	281.754	279.121
20/12/2555 18:55	714.6139	84.6187	85.8663	144.373	144.544	497.786	491.684	281.754	281.457
20/12/2555 18:56	714.3628	84.6187	85.8663	144.373	144.544	499.546	495.281	281.839	284.126
20/12/2555 18:57	714.1258	84.6187	85.8663	146.126	146.359	501.353	498.504	286.873	284.126
20/12/2555 18:58	714.2904	84.6187	85.8663	147.283	147.704	502.84	501.227	286.873	286.69
20/12/2555 18:59	714.6755	84.6187	85.3208	149.244	149.459	504.352	502.799	286.873	289.253
20/12/2555 19:00	715.0043	84.6187	84.3785	150.776	151.247	505.68	503.162	287.624	289.253
20/12/2555 19:01	714.7397	84.6187	84.3785	152.426	152.594	507.196	502.458	291.878	289.253
20/12/2555 19:02	714.0728	83.0083	84.3785	152.594	152.935	508.535	501.007	291.878	289.253
20/12/2555 19:03	713.2599	82.9528	85.6696	154.443	154.642	509.603	499.328	291.878	289.253
20/12/2555 19:04	712.8514	82.9528	86.0626	155.176	155.612	510.205	497.806	291.878	289.253
20/12/2555 19:05	712.6929	82.9528	86.0626	156.442	156.65	510.258	496.006	291.878	289.253
20/12/2555 19:06	712.5138	82.9528	86.0626	156.442	156.65	509.724	494.047	291.878	289.253
20/12/2555 19:07	712.2552	82.9528	86.0626	156.442	156.65	508.761	491.962	291.878	289.253
20/12/2555 19:08	712.2039	82.9528	86.0626	156.442	156.65	507.713	490.251	291.878	289.253
20/12/2555 19:09	712.3041	82.9528	86.0626	156.442	156.65	506.639	489.017	291.878	289.253
20/12/2555 19:10	712.584	82.9528	86.0626	156.442	156.65	505.397	488.121	289.792	288.376
20/12/2555 19:11	712.7584	83.9634	86.0626	156.442	156.65	504.464	487.762	286.873	287.499
20/12/2555 19:12	712.7914	84.517	86.0626	156.442	156.65	503.9	487.369	286.873	287.499
20/12/2555 19:13	712.7289	84.517	86.0626	156.442	156.65	503.49	487.466	286.873	287.499
20/12/2555 19:14	712.5693	83.795	86.0626	156.442	156.65	503.527	487.759	286.873	287.499
20/12/2555 19:15	712.7067	83.8321	86.2468	156.135	156.349	503.62	487.487	286.873	287.499
20/12/2555 19:16	712.7963	84.0891	86.3028	154.391	154.642	503.978	486.439	286.873	287.499
20/12/2555 19:17	712.7876	84.0891	86.8751	154.022	154.272	503.481	484.228	286.873	287.499
20/12/2555 19:18	712.6275	84.0891	87.7336	152.374	152.624	502.883	482.159	286.873	287.499
20/12/2555 19:19	712.3199	84.0891	87.7336	151.326	151.568	502.579	480.448	286.873	287.499
20/12/2555 19:20	712.1374	84.0891	87.7336	150.345	150.644	502.341	479.328	286.873	287.499
20/12/2555 19:21	711.9778	84.0891	87.7336	148.667	148.901	502.171	479.475	286.873	287.499
20/12/2555 19:22	711.5142	84.0891	87.6274	147.214	147.467	501.985	482.303	285.823	285.99
20/12/2555 19:23	710.8924	84.0891	86.1405	146.271	146.545	501.713	487.077	284.248	284.378
20/12/2555 19:24	710.264	84.0891	86.1405	146.271	146.545	501.226	492.324	284.248	284.378
20/12/2555 19:25	710.0341	84.0891	84.9203	146.271	146.545	501.328	496.78	286.918	285.759

Date/Time	BFP Outlet Enthalpy	Main Steam Flow RA20	Main Steam Flow RA10	Main Steam Pressure RA20	Main Steam Pressure RA10	Main Steam Temp RA20	Main Steam Temp RA10	RH Inlet Temp DESH	RH Inlet Temp DESH
4	U08BF08 U012	U0880RA20 F001	U0880RA10 F001	U0880RA20 P003	U0880RA10 P003	U0880RA20 T003	U0880RA10 T003	U0880RC10 T001	U0880RC20 T001
20/12/2555 19:26	710.1678	84.0891	84.705	146.271	146.545	501.73	500.712	289.253	289.253
20/12/2555 19:27	710.2061	83.9806	84.705	146.271	146.545	502.862	503.064	289.253	289.253
20/12/2555 19:28	709.9591	83.9588	84.705	148.141	148.447	504.289	504.327	289.253	289.253
20/12/2555 19:29	709.9185	83.7587	84.4929	148.479	148.747	505.904	504.675	289.253	289.253
20/12/2555 19:30	710.0982	82.458	83.1148	150.296	150.543	507.081	504.402	291.609	289.253
20/12/2555 19:31	710.3851	82.458	84.3762	150.296	150.543	507.614	503.237	294.128	289.253
20/12/2555 19:32	710.8247	82.458	84.4909	151.265	151.544	507.414	500.878	294.128	289.253
20/12/2555 19:33	711.1558	83.6398	85.0462	152.301	152.545	506.577	497.738	294.128	289.253
20/12/2555 19:34	711.2625	83.9668	86.0053	152.301	152.545	505.437	494.73	294.128	289.253
20/12/2555 19:35	710.8206	83.9668	86.0053	153.255	153.533	504.389	492.425	291.292	289.253
20/12/2555 19:36	710.2393	83.9668	86.0053	154.346	154.59	503.514	491.423	289.124	289.253
20/12/2555 19:37	709.9607	83.9668	86.0053	154.346	154.59	502.635	491.089	289.124	288.721
20/12/2555 19:38	710.1504	83.9668	86.0053	154.346	154.59	502.004	491.793	289.124	287.376
20/12/2555 19:39	710.4738	83.9668	86.0053	154.585	154.98	501.834	492.837	289.124	287.376
20/12/2555 19:40	710.9097	83.9668	86.0053	156.393	156.543	501.954	493.921	289.124	287.376
20/12/2555 19:41	711.2244	83.9668	86.0053	156.393	156.777	502.229	495.531	289.124	287.376
20/12/2555 19:42	711.1132	83.9668	86.0053	158.275	158.545	502.663	496.787	289.124	287.376
20/12/2555 19:43	711.1221	83.9668	86.0053	158.374	158.679	503.235	497.855	289.124	287.376
20/12/2555 19:44	711.1946	83.9668	86.0053	159.957	160.55	503.573	498.171	289.124	287.376
20/12/2555 19:45	711.3584	84.1527	85.8009	160.394	160.55	503.831	497.753	289.124	287.376

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
20/12/2555 18:45	24.1537	24.142	87.814	88.4835	227.18	447.603	446.784	3344.866	2103.08
20/12/2555 18:46	24.1914	24.1739	87.814	88.4835	227.18	449.204	447.467	3347.366	2109.76
20/12/2555 18:47	24.2625	24.2439	87.814	88.4835	227.18	451.676	448.076	3350.674	2110.01
20/12/2555 18:48	24.1302	24.1142	88.2547	88.0584	227.18	454.207	448.593	3354.201	2108.81
20/12/2555 18:49	24.2665	24.25	88.21	88.2227	226.315	456.696	448.848	3357.042	2109.27
20/12/2555 18:50	24.1018	24.0886	86.3298	88.2009	224.448	458.307	449.168	3359.393	2109.87
20/12/2555 18:51	24.0097	23.992	86.2493	88.1674	224.448	459.699	449.808	3361.751	2107.81
20/12/2555 18:52	23.9636	23.9536	86.2493	88.1674	224.448	461.411	451.079	3365.114	2097.96
20/12/2555 18:53	23.9675	23.9522	86.2493	88.1674	224.448	463.332	452.749	3369.064	2076.65
20/12/2555 18:54	23.7309	23.7104	84.673	85.943	224.448	465.835	455.797	3375.503	2040.15
20/12/2555 18:55	23.8826	23.8618	84.6187	85.8663	224.448	469.411	460.577	3384.516	1999.6
20/12/2555 18:56	23.9138	23.9017	84.6187	85.8663	224.448	473.095	465.872	3394.377	1964.79
20/12/2555 18:57	23.8983	23.88	84.6187	85.8663	224.448	476.072	470.554	3402.858	1938
20/12/2555 18:58	23.9367	23.9158	84.6187	85.8663	224.448	478.167	474.623	3409.612	1924.24
20/12/2555 18:59	24.0386	24.0222	84.6187	85.3208	224.448	479.73	477.326	3414.22	1924.02

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
20/12/2555 19:00	24.0782	24.0599	84.6187	84.3785	224.448	481.538	478.371	3417.311	1932.88
20/12/2555 19:01	24.0859	24.0642	84.6187	84.3785	224.497	483.318	478.013	3418.89	1942.49
20/12/2555 19:02	24.0548	24.0363	83.0083	84.3785	224.602	484.556	476.374	3418.461	1951.45
20/12/2555 19:03	24.0956	24.0828	82.9528	85.6696	224.602	485.316	474.589	3417.287	1960.43
20/12/2555 19:04	24.0718	24.0555	82.9528	86.0626	224.602	485.695	472.716	3415.687	1969.58
20/12/2555 19:05	24.1187	24.0977	82.9528	86.0626	224.602	485.755	470.922	3413.705	1976.17
20/12/2555 19:06	24.135	24.12	82.9528	86.0626	224.602	485.116	468.747	3410.565	3.70E+15
20/12/2555 19:07	24.1043	24.0861	82.9528	86.0626	224.602	484.3	466.1	3406.779	1.38E+16
20/12/2555 19:08	24.1395	24.1184	82.9528	86.0626	224.602	483.238	464.225	3403.495	2.41E+16
20/12/2555 19:09	24.0985	24.0846	82.9528	86.0626	224.602	481.739	463.166	3400.716	3.43E+16
20/12/2555 19:10	24.1417	24.124	82.9528	86.0626	224.602	480.067	462.494	3398.083	4.46E+16
20/12/2555 19:11	24.0959	24.0796	83.9634	86.0626	224.602	479.254	461.901	3396.586	5.11E+16
20/12/2555 19:12	24.1838	24.1629	84.517	86.0626	224.602	479.094	461.497	3395.869	5.13E+16
20/12/2555 19:13	24.0873	24.0749	84.517	86.0626	224.598	479.137	461.112	3395.582	5.13E+16
20/12/2555 19:14	24.1255	24.1121	83.795	86.0626	224.589	479.012	460.413	3394.627	5.13E+16
20/12/2555 19:15	24.0528	24.0355	83.8321	86.2468	224.589	479.662	459.008	3393.887	5.12E+16
20/12/2555 19:16	24.084	24.0646	84.0891	86.3028	224.589	480.531	457.132	3392.746	5.11E+16
20/12/2555 19:17	24.1352	24.1163	84.0891	86.8751	224.589	480.521	455.14	3390.463	5.09E+16
20/12/2555 19:18	24.0819	24.059	84.0891	87.7336	224.589	481.054	453.751	3389.588	5.07E+16
20/12/2555 19:19	24.0417	24.0215	84.0891	87.7336	224.589	482.294	452.801	3389.969	5.03E+16
20/12/2555 19:20	24.0644	24.0515	84.0891	87.7336	224.589	483.247	452.857	3391.035	4.99E+16
20/12/2555 19:21	24.0009	23.988	84.0891	87.7336	224.589	483.726	454.839	3393.838	4.95E+16
20/12/2555 19:22	24.012	23.9913	84.0891	87.6274	224.589	482.875	458.891	3397.358	4.89E+16
20/12/2555 19:23	24.0233	24.0022	84.0891	86.1405	224.589	481.367	463.756	3401.056	4.83E+16
20/12/2555 19:24	23.9651	23.9428	84.0891	86.1405	224.589	479.95	467.914	3404.155	4.76E+16
20/12/2555 19:25	23.9589	23.9428	84.0891	84.9203	224.477	479.568	471.387	3407.578	4.68E+16
20/12/2555 19:26	23.948	23.9285	84.0891	84.705	224.238	480.05	474.323	3411.367	4.66E+16
20/12/2555 19:27	24.0124	23.9901	83.9806	84.705	224.238	481.175	476.459	3414.897	4.66E+16
20/12/2555 19:28	23.9555	23.9376	83.9588	84.705	224.238	482.572	477.974	3418.16	4.67E+16
20/12/2555 19:29	23.9273	23.9121	83.7587	84.4929	224.238	483.839	478.733	3420.449	4.69E+16
20/12/2555 19:30	23.881	23.8578	82.458	83.1148	224.238	484.092	478.403	3420.42	4.74E+16
20/12/2555 19:31	23.8284	23.8092	82.458	84.3762	224.238	483.737	477.144	3418.689	4.75E+16
20/12/2555 19:32	23.8803	23.857	82.458	84.4909	224.238	483.554	475.076	3416.134	4.75E+16
20/12/2555 19:33	23.8956	23.8787	83.6398	85.0462	224.238	482.97	473.948	3414.232	4.75E+16
20/12/2555 19:34	23.9592	23.9434	83.9668	86.0053	224.238	482.695	473.637	3413.52	4.75E+16
20/12/2555 19:35	23.9914	23.9729	83.9668	86.0053	224.238	482.755	473.952	3413.882	4.75E+16
20/12/2555 19:36	23.9411	23.9185	83.9668	86.0053	224.238	482.457	474.898	3414.671	4.75E+16
20/12/2555 19:37	23.9346	23.9124	83.9668	86.0053	224.176	482.264	476.259	3415.964	4.75E+16
20/12/2555 19:38	23.9646	23.9451	83.9668	86.0053	224.042	482.517	477.509	3417.585	4.75E+16
20/12/2555 19:39	23.9494	23.9276	83.9668	86.0053	224.042	482.842	478.288	3418.834	4.75E+16
20/12/2555 19:40	23.9318	23.9139	83.9668	86.0053	224.042	482.989	479.175	3419.985	4.75E+16

Date/Time	RH Steam Pressure RB20	RH Steam Pressure RB10	Main Steam Flow RA20	Main Steam Flow RA10	FW Temp to Eco	RH Steam Temp RB20	RH Steam Temp RB10	Hot RH Enthalpy	Coal LHV
5	U0880RB20 P001	U0880RB10 P001	U0880RA20 F001	U0880RA10 F001	U0880NB01 T002	U0880RB20 T002	U0880RB10 T002	U08BE08 U006	U0880NL00 Z001
20/12/2555 19:41	23.9728	23.9534	83.9668	86.0053	224.042	483.147	480.21	3421.264	4.75E+16
20/12/2555 19:42	23.9569	23.9396	83.9668	86.0053	224.042	483.288	481.176	3422.491	4.76E+16
20/12/2555 19:43	23.9142	23.8957	83.9668	86.0053	224.042	483.511	481.659	3423.323	4.77E+16
20/12/2555 19:44	23.9196	23.8981	83.9668	86.0053	224.042	483.581	481.572	3423.312	4.79E+16
20/12/2555 19:45	23.9359	23.9196	84.1527	85.8009	224.042	483.434	481.298	3422.824	4.81E+16

Date/Time	Pulv#5 Coal Feed Rate	Pulv#4 Coal Feed Rate	Pulv#3 Coal Feed Rate	Pulv#2 Coal Feed Rate	Pulv#1 Coal Feed Rate
6	U0880NL85 U005	U0880NL84 U005	U0880NL83 U005	U0880NL82 U005	U0880NL81 U005
20/12/2555 18:45	-0.510544	57.4746	57.668	58.3545	0
20/12/2555 18:46	-0.510544	57.4746	57.668	58.3545	0
20/12/2555 18:47	-0.510544	57.4746	57.5732	57.8452	0
20/12/2555 18:48	-0.516673	57.4277	57.2617	57.3008	0
20/12/2555 18:49	-0.530975	57.4277	57.2617	57.3008	0
20/12/2555 18:50	-0.530975	57.4277	57.2617	57.3008	0
20/12/2555 18:51	-0.530975	57.4277	57.2617	57.3008	0
20/12/2555 18:52	-0.530975	58.36	58.2263	58.6048	0
20/12/2555 18:53	-0.530975	61.3423	60.208	60.9551	0
20/12/2555 18:54	-0.504763	62.0781	60.208	62.3086	0
20/12/2555 18:55	-0.490128	62.0781	60.208	62.3086	0
20/12/2555 18:56	-0.490128	62.0781	60.208	62.3086	0
20/12/2555 18:57	-0.490128	62.0781	60.208	62.3086	0
20/12/2555 18:58	-0.490128	62.0781	60.208	62.3086	0
20/12/2555 18:59	-0.490128	61.8592	60.208	62.2189	0
20/12/2555 19:00	-0.490128	59.7813	60.208	59.8313	0
20/12/2555 19:01	-0.490128	59.7813	60.208	59.6309	0
20/12/2555 19:02	-0.491489	59.7813	60.208	59.6309	0
20/12/2555 19:03	-0.530975	59.7813	60.208	59.6309	0
20/12/2555 19:04	-0.530975	59.7813	60.208	59.6309	0
20/12/2555 19:05	-0.530975	59.7813	59.8828	59.6309	0
20/12/2555 19:06	-0.530975	59.7813	59.8828	59.6309	0
20/12/2555 19:07	-0.530975	59.7813	59.8828	59.6309	0
20/12/2555 19:08	-0.530975	59.7813	59.8828	59.6309	0
20/12/2555 19:09	-0.530975	59.7813	59.8828	59.6309	0
20/12/2555 19:10	-0.530975	59.7813	59.8828	59.6309	0
20/12/2555 19:11	-0.530975	59.8138	59.8828	59.6309	0

Date/Time	Pulv#5 Coal Feed Rate	Pulv#4 Coal Feed Rate	Pulv#3 Coal Feed Rate	Pulv#2 Coal Feed Rate	Pulv#1 Coal Feed Rate
6	U0880NL85 U005	U0880NL84 U005	U0880NL83 U005	U0880NL82 U005	U0880NL81 U005
20/12/2555 19:12	-0.530975	60.1719	59.8828	59.8137	0
20/12/2555 19:13	-0.530975	60.1719	59.8828	59.8379	0
20/12/2555 19:14	-0.531665	60.1719	59.8828	59.8379	0
20/12/2555 19:15	-0.551666	60.1719	59.8828	59.8379	0
20/12/2555 19:16	-0.551666	60.1719	59.8828	59.9326	0
20/12/2555 19:17	-0.551666	60.1719	60.96	60.7852	0
20/12/2555 19:18	-0.551666	60.2406	61.0738	61.1565	0
20/12/2555 19:19	-0.551666	62.2216	61.8135	62.8106	0
20/12/2555 19:20	-0.551666	63.6269	62.1114	62.819	0
20/12/2555 19:21	-0.551666	65.0742	63.4385	63.3164	0
20/12/2555 19:22	-0.551666	65.0742	63.4385	64.2859	0
20/12/2555 19:23	-0.551666	65.1594	63.5248	65.3223	0
20/12/2555 19:24	-0.551666	70.1285	69.0594	69.0055	0
20/12/2555 19:25	-0.551666	66.9593	67.0142	66.7963	0
20/12/2555 19:26	-0.550981	66.0723	65.998	65.8926	0
20/12/2555 19:27	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:28	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:29	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:30	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:31	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:32	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:33	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:34	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:35	-0.531097	66.0723	65.998	65.8926	0
20/12/2555 19:36	-0.530755	66.0723	65.998	65.8926	0
20/12/2555 19:37	-0.510544	65.0886	65.1179	64.9043	0
20/12/2555 19:38	-0.510544	64.6328	64.6777	64.4102	0
20/12/2555 19:39	-0.510544	64.6328	64.6777	64.4102	0
20/12/2555 19:40	-0.510544	64.6328	64.6777	64.4102	0
20/12/2555 19:41	-0.510544	64.6328	64.6777	64.4102	0
20/12/2555 19:42	-0.510544	64.6328	64.6777	64.4102	0
20/12/2555 19:43	-0.510544	64.6328	64.6777	64.4102	0
20/12/2555 19:44	-0.153163	63.3831	63.8144	63.8528	0
20/12/2555 19:45	0	63.2695	63.1543	63.2158	0

ตาราง ข4 ข้อมูล Cooling water flow rate ของโรงไฟฟ้าแม่เมาะหน่วยที่ 8 จากการวัดด้วยอุปกรณ์
Ultrasonic Flow Meter (ตัวอย่าง 5 นาที)

Date/Time	Flow (m3/s)
2/8/2013 14:14:00	8.13660
2/8/2013 14:14:01	8.13660
2/8/2013 14:14:02	8.13660
2/8/2013 14:14:03	8.13976
2/8/2013 14:14:04	8.13976
2/8/2013 14:14:06	8.16156
2/8/2013 14:14:07	8.16156
2/8/2013 14:14:09	8.16429
2/8/2013 14:14:10	8.16429
2/8/2013 14:14:11	8.16429
2/8/2013 14:14:13	8.15979
2/8/2013 14:14:14	8.15979
2/8/2013 14:14:15	8.15758
2/8/2013 14:14:16	8.15758
2/8/2013 14:14:17	8.15758
2/8/2013 14:14:18	8.15758
2/8/2013 14:14:19	8.15758
2/8/2013 14:14:20	8.13479
2/8/2013 14:14:21	8.13479
2/8/2013 14:14:22	8.13479
2/8/2013 14:14:23	8.15334
2/8/2013 14:14:25	8.15334
2/8/2013 14:14:26	8.15199
2/8/2013 14:14:27	8.15199
2/8/2013 14:14:28	8.15736
2/8/2013 14:14:30	8.15736
2/8/2013 14:14:31	8.15736
2/8/2013 14:14:33	8.15736
2/8/2013 14:14:34	8.15736
2/8/2013 14:14:35	8.15736
2/8/2013 14:14:36	8.15736
2/8/2013 14:14:37	8.15736
2/8/2013 14:14:38	8.15736
2/8/2013 14:14:39	8.15736
2/8/2013 14:14:41	8.15736

Date/Time	Flow (m3/s)
2/8/2013 14:14:42	8.15736
2/8/2013 14:14:43	8.15736
2/8/2013 14:14:44	8.17464
2/8/2013 14:14:45	8.17464
2/8/2013 14:14:47	8.17464
2/8/2013 14:14:49	8.17464
2/8/2013 14:14:50	8.17464
2/8/2013 14:14:51	8.17464
2/8/2013 14:14:52	8.17464
2/8/2013 14:14:54	8.17464
2/8/2013 14:14:55	8.17464
2/8/2013 14:14:57	8.17609
2/8/2013 14:14:59	8.18416
2/8/2013 14:15:01	8.18416
2/8/2013 14:15:02	8.19218
2/8/2013 14:15:03	8.19218
2/8/2013 14:15:04	8.19218
2/8/2013 14:15:05	8.21384
2/8/2013 14:15:06	8.21384
2/8/2013 14:15:08	8.20235
2/8/2013 14:15:09	8.20235
2/8/2013 14:15:11	8.19202
2/8/2013 14:15:12	8.19202
2/8/2013 14:15:13	8.18407
2/8/2013 14:15:14	8.18407
2/8/2013 14:15:16	8.17847
2/8/2013 14:15:18	8.17847
2/8/2013 14:15:19	8.14922
2/8/2013 14:15:20	8.14922
2/8/2013 14:15:21	8.14922
2/8/2013 14:15:22	8.14975
2/8/2013 14:15:24	8.10471
2/8/2013 14:15:25	8.10471
2/8/2013 14:15:26	8.10471
2/8/2013 14:15:28	8.13290
2/8/2013 14:15:29	8.13290
2/8/2013 14:15:30	7.89373
2/8/2013 14:15:33	7.90647

Date/Time	Flow (m3/s)
2/8/2013 14:15:35	7.90647
2/8/2013 14:15:36	7.93008
2/8/2013 14:15:37	7.93008
2/8/2013 14:15:38	7.93008
2/8/2013 14:15:40	7.94843
2/8/2013 14:15:41	7.96537
2/8/2013 14:15:43	7.96537
2/8/2013 14:15:45	7.99526
2/8/2013 14:15:46	7.99526
2/8/2013 14:15:47	8.23445
2/8/2013 14:15:48	8.23445
2/8/2013 14:15:50	8.25026
2/8/2013 14:15:51	8.25026
2/8/2013 14:15:53	8.22432
2/8/2013 14:15:54	8.22432
2/8/2013 14:15:56	8.22710
2/8/2013 14:15:57	8.22710
2/8/2013 14:15:59	8.23547
2/8/2013 14:16:00	8.23547
2/8/2013 14:16:02	8.23015
2/8/2013 14:16:03	8.23015
2/8/2013 14:16:04	8.22378
2/8/2013 14:16:05	8.22378
2/8/2013 14:16:07	8.21609
2/8/2013 14:16:08	8.21609
2/8/2013 14:16:10	8.22582
2/8/2013 14:16:11	8.22582
2/8/2013 14:16:13	8.23048
2/8/2013 14:16:15	8.22630
2/8/2013 14:16:16	8.22630
2/8/2013 14:16:17	8.22630
2/8/2013 14:16:19	8.23704
2/8/2013 14:16:20	8.23704
2/8/2013 14:16:21	8.21872
2/8/2013 14:16:22	8.21872
2/8/2013 14:16:24	8.25733
2/8/2013 14:16:28	8.23152
2/8/2013 14:16:29	8.23152

Date/Time	Flow (m3/s)
2/8/2013 14:16:30	8.23991
2/8/2013 14:16:31	8.23991
2/8/2013 14:16:32	8.23991
2/8/2013 14:16:35	8.25629
2/8/2013 14:16:36	8.27569
2/8/2013 14:16:37	8.27569
2/8/2013 14:16:38	8.27569
2/8/2013 14:16:39	8.27569
2/8/2013 14:16:40	8.27569
2/8/2013 14:16:42	8.27569
2/8/2013 14:16:43	8.25883
2/8/2013 14:16:45	8.25883
2/8/2013 14:16:46	8.26233
2/8/2013 14:16:47	8.26233
2/8/2013 14:16:48	8.26233
2/8/2013 14:16:50	8.23233
2/8/2013 14:16:51	9.20109
2/8/2013 14:16:52	9.20109
2/8/2013 14:16:53	9.20109
2/8/2013 14:16:54	9.20109
2/8/2013 14:16:55	9.20109
2/8/2013 14:16:56	9.20109
2/8/2013 14:16:58	9.20109
2/8/2013 14:17:00	9.05862
2/8/2013 14:17:01	9.05862
2/8/2013 14:17:03	15.82564
2/8/2013 14:17:04	15.82564
2/8/2013 14:17:06	14.96970
2/8/2013 14:17:07	14.96970
2/8/2013 14:17:09	14.55630
2/8/2013 14:17:10	14.55630
2/8/2013 14:17:11	14.55630
2/8/2013 14:17:12	14.55630
2/8/2013 14:17:13	14.55630
2/8/2013 14:17:14	14.55630
2/8/2013 14:17:15	14.55630
2/8/2013 14:17:17	14.55630
2/8/2013 14:17:19	14.55630

Date/Time	Flow (m3/s)
2/8/2013 14:17:20	14.55630
2/8/2013 14:17:21	14.16873
2/8/2013 14:17:22	14.16873
2/8/2013 14:17:23	14.16873
2/8/2013 14:17:25	13.81704
2/8/2013 14:17:26	13.14157
2/8/2013 14:17:27	13.14157
2/8/2013 14:17:28	13.14157
2/8/2013 14:17:29	13.14157
2/8/2013 14:17:30	13.14157
2/8/2013 14:17:31	13.14157
2/8/2013 14:17:33	7.73783
2/8/2013 14:17:35	8.37774
2/8/2013 14:17:36	8.37774
2/8/2013 14:17:38	7.87585
2/8/2013 14:17:39	7.87585
2/8/2013 14:17:40	7.88151
2/8/2013 14:17:41	7.88151
2/8/2013 14:17:42	7.88151
2/8/2013 14:17:44	7.92535
2/8/2013 14:17:45	7.92535
2/8/2013 14:17:46	7.94881
2/8/2013 14:17:47	7.94881
2/8/2013 14:17:48	7.94881
2/8/2013 14:17:49	7.96944
2/8/2013 14:17:50	7.96944
2/8/2013 14:17:52	7.99503
2/8/2013 14:17:53	7.99503
2/8/2013 14:17:55	8.00427
2/8/2013 14:17:56	8.00427
2/8/2013 14:17:57	8.02492
2/8/2013 14:17:58	8.02492
2/8/2013 14:18:00	8.03696
2/8/2013 14:18:01	8.03696
2/8/2013 14:18:02	8.03696
2/8/2013 14:18:03	8.07113
2/8/2013 14:18:04	8.07113
2/8/2013 14:18:05	8.07113

Date/Time	Flow (m3/s)
2/8/2013 14:18:06	8.06958
2/8/2013 14:18:08	8.09078
2/8/2013 14:18:09	8.09078
2/8/2013 14:18:10	8.09078
2/8/2013 14:18:12	8.15775
2/8/2013 14:18:13	8.15775
2/8/2013 14:18:14	8.69357
2/8/2013 14:18:16	8.69357
2/8/2013 14:18:17	8.67376
2/8/2013 14:18:18	8.67376
2/8/2013 14:18:19	8.67376
2/8/2013 14:18:20	8.68690
2/8/2013 14:18:21	8.68690
2/8/2013 14:18:22	8.68690
2/8/2013 14:18:23	8.66973
2/8/2013 14:18:24	8.66973
2/8/2013 14:18:25	8.60763
2/8/2013 14:18:28	8.60763
2/8/2013 14:18:30	8.59956
2/8/2013 14:18:31	8.59956
2/8/2013 14:18:32	8.55820
2/8/2013 14:18:33	8.55820
2/8/2013 14:18:35	8.53394
2/8/2013 14:18:36	8.53394
2/8/2013 14:18:37	8.53394
2/8/2013 14:18:38	8.51894
2/8/2013 14:18:39	8.51894
2/8/2013 14:18:40	8.51894
2/8/2013 14:18:41	8.48801
2/8/2013 14:18:43	8.42906
2/8/2013 14:18:44	8.42906
2/8/2013 14:18:45	8.42906
2/8/2013 14:18:47	8.39872
2/8/2013 14:18:48	8.39872
2/8/2013 14:18:49	8.37176
2/8/2013 14:18:52	8.38929
2/8/2013 14:18:54	8.38929
2/8/2013 14:18:55	8.38715

Date/Time	Flow (m3/s)
2/8/2013 14:18:56	8.38715
2/8/2013 14:18:57	8.38715
2/8/2013 14:18:59	8.38182
2/8/2013 14:19:00	8.38750

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ภาคผนวก ค

สรุปผลการทางคณิตศาสตร์ของค่าประสิทธิภาพอุปกรณ์ Steam Turbine – Generator
ที่เบี่ยงเบนไปเมื่อปัจจัยที่พิจารณาเปลี่ยนแปลง และ Correction Factor ของแต่ละปัจจัย

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ตาราง ก1 สรุปสมการทางคณิตศาสตร์ค่าประสิทธิภาพอุปกรณ์ Steam Turbine – Generator ที่
เบี่ยงเบนไป เมื่อปัจจัยที่พิจารณาเปลี่ยนแปลง

Parameters	100% Load	80% Load	60% Load
1. Main Steam Pressure	$y = 0.000526x^2 - 0.210660x + 20.280091$	$y = 0.000629x^2 - 0.236360x + 21.742538$	$y = 0.000304x^2 - 0.125912x + 12.396135$
2. Main Steam Temperature	$y = 0.000051x^2 - 0.081902x + 29.319210$	$y = 0.000054x^2 - 0.086672x + 30.987447$	$y = 0.000033x^2 - 0.063945x + 24.858080$
3. Reheat Steam Temperature at Intercept valve	$y = 0.000002x^2 - 0.035347x + 18.346271$	$y = 0.000029x^2 - 0.061884x + 25.020022$	$y = -0.000018x^2 - 0.014305x + 12.774507$
4. Reheat Pressure Drop	$y = 0.000062x^2 + 0.080606x - 0.738498$	$y = 0.000773x^2 + 0.065603x - 0.660660$	$y = 0.000798x^2 + 0.054175x - 0.559238$
5. Reheat At temperature water flow	$y = 0.064428x - 0.000340$	$y = 0.088237x - 0.000048$	$y = 0.107221x - 0.000981$
6. Condenser Pressure	$y = 555.785897x^2 - 39.534829x - 0.258165$	$y = 614.646120x^2 - 15.902369x - 2.435466$	$y = 213.968913x^2 + 86.994659x - 8.006310$
7. Cooling Water Temperature to Condenser	$y = 0.013193x^2 - 0.540735x + 4.797221$	$y = 0.015491x^2 - 0.609214x + 4.924128$	$y = 0.017455x^2 - 0.623339x + 3.788866$
8. Cooling Water Flow to Condenser	$y = 0.062406x^2 - 1.379783x + 7.218347$	$y = 0.043444x^2 - 1.025853x + 5.581487$	$y = 0.045099x^2 - 1.043688x + 5.612589$

ตาราง ก2 สรุปสมการทางคณิตศาสตร์ค่า Correction Factor

Parameters	100% Load	80% Load	60% Load
1. Main Steam Pressure	$y = 0.000005x^2 - 0.002107x + 1.202801$	$y = 0.000006x^2 - 0.002364x + 1.217425$	$y = 0.000003x^2 - 0.001259x + 1.123961$
2. Main Steam Temperature	$y = 0.000001x^2 - 0.000819x + 1.293192$	$y = 0.000001x^2 - 0.000867x + 1.309874$	$y = 0.000000x^2 - 0.000639x + 1.248581$
3. Reheat Steam Temperature at Intercept valve	$y = 0.000000x^2 - 0.000353x + 1.183463$	$y = 0.000000x^2 - 0.000619x + 1.250200$	$y = -0.000000x^2 - 0.000143x + 1.127745$
4. Reheat Pressure Drop	$y = 0.000001x^2 + 0.000806x + 0.992615$	$y = 0.000008x^2 + 0.000656x + 0.993393$	$y = 0.000008x^2 + 0.000542x + 0.994408$
5. Reheat At temperature water flow	$y = 0.000644x + 0.999997$	$y = 0.000882x + 1.000000$	$y = 0.001072x + 0.999990$
6. Condenser Pressure	$y = 5.557859x^2 - 0.395348x + 0.997418$	$y = 6.146461x^2 - 0.159024x + 0.975645$	$y = 2.139689x^2 + 0.869947x + 0.919937$
7. Cooling Water Temperature to Condenser	$y = 0.000132x^2 - 0.005407x + 1.047972$	$y = 0.000155x^2 - 0.006092x + 1.049241$	$y = 0.000175x^2 - 0.006233x + 1.037889$
8. Cooling Water Flow to Condenser	$y = 0.000624x^2 - 0.013798x + 1.072183$	$y = 0.000434x^2 - 0.010259x + 1.055815$	$y = 0.000451x^2 - 0.010437x + 1.056126$

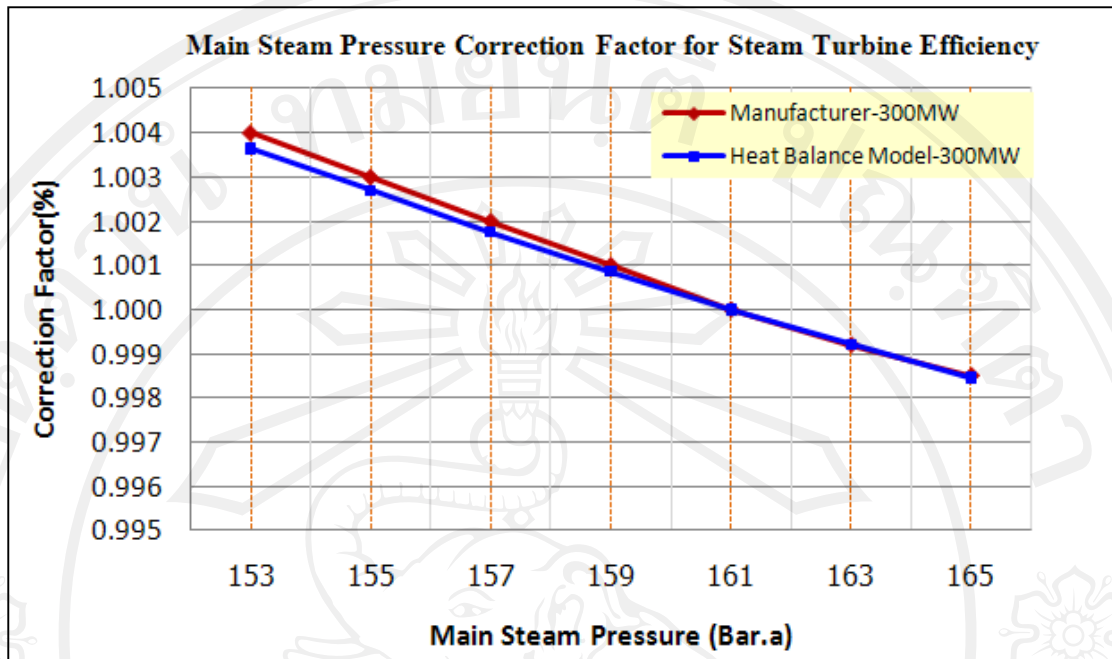


ภาคผนวก ง

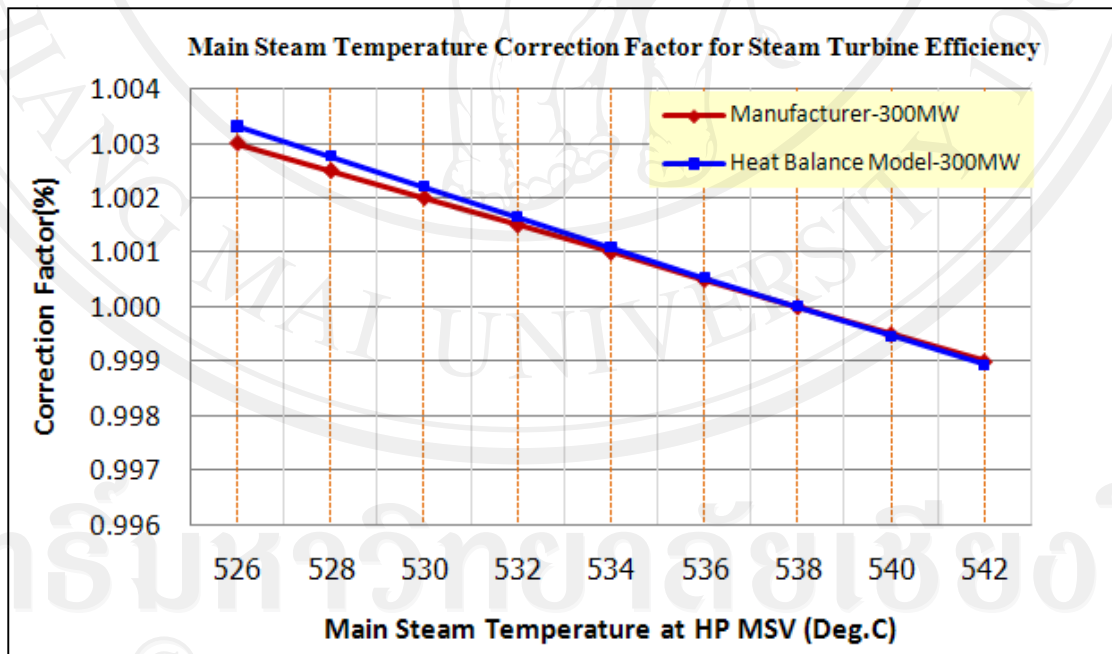
เปรียบเทียบความแตกต่างของ Correction Factor ในแต่ปัจจัย ระหว่างค่าเดิมตั้งแต่
First Synchronization กับค่าใหม่ที่สภาวะอุปกรณ์ปัจจุบันเป็นผลงานวิจัย
ที่ 100%Load(300 MW) และ 80%Load(240 MW)

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

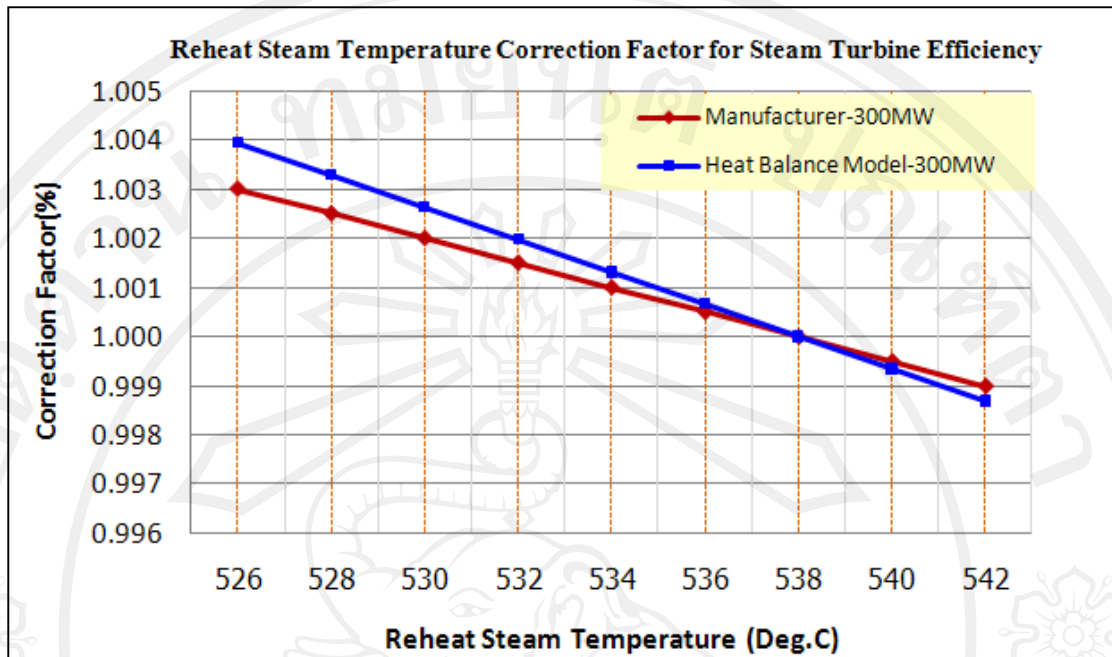
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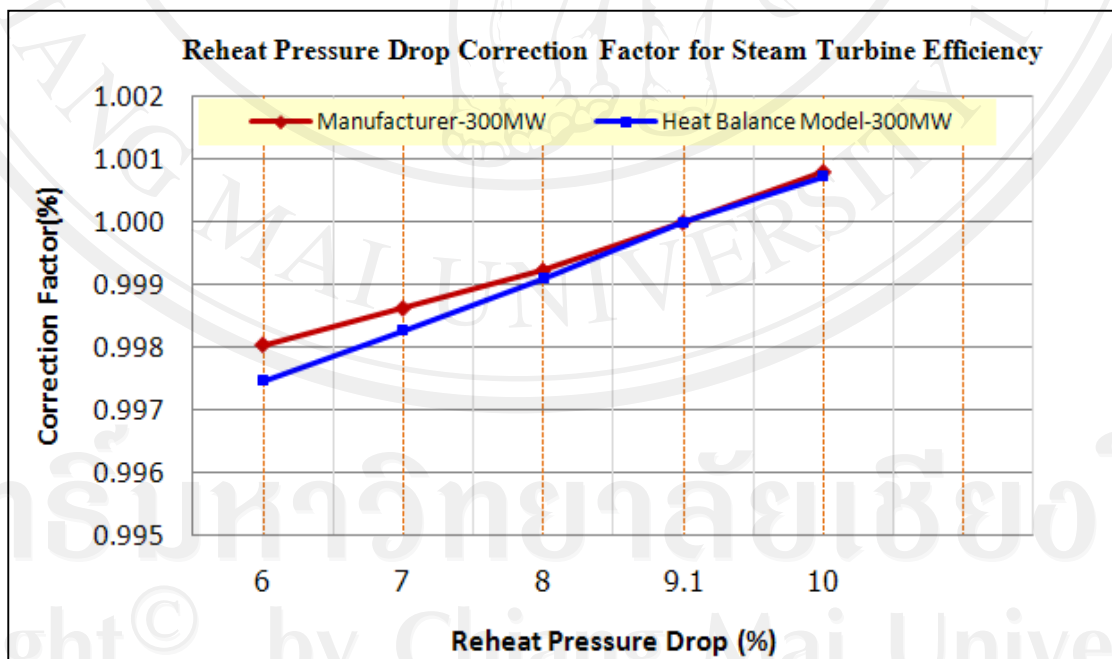
รูปที่ ๓1 เปรียบเทียบ Main Steam Pressure Correction Factor ที่ 100%Load (300MW)



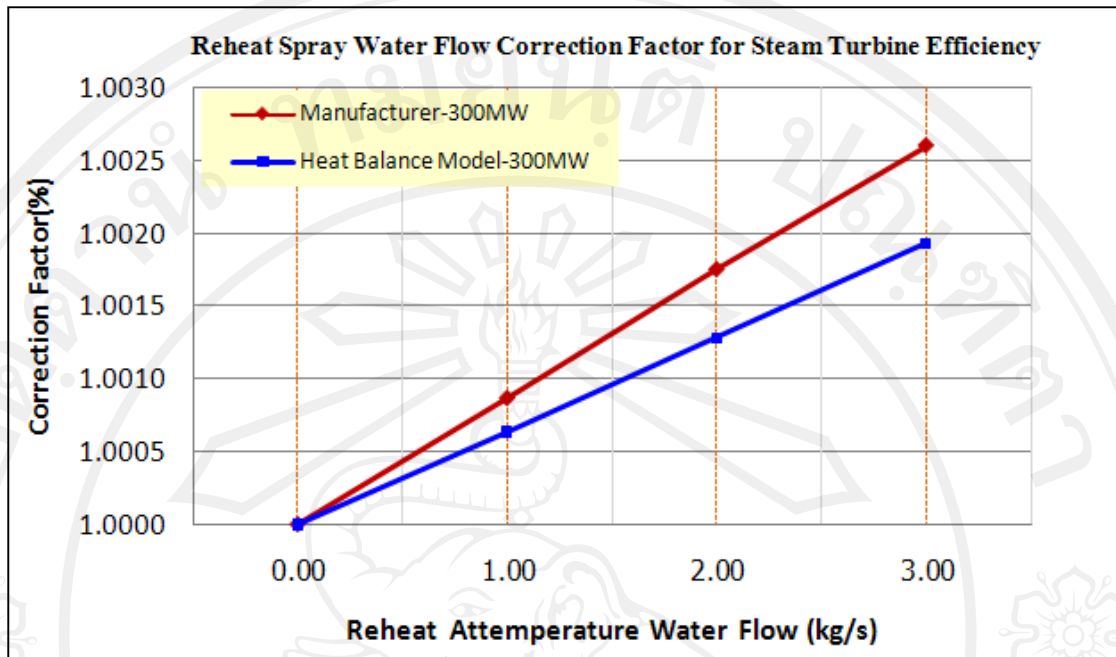
รูปที่ ๓2 เปรียบเทียบ Main Steam Temperature Correction Factor ที่ 100%Load (300MW)



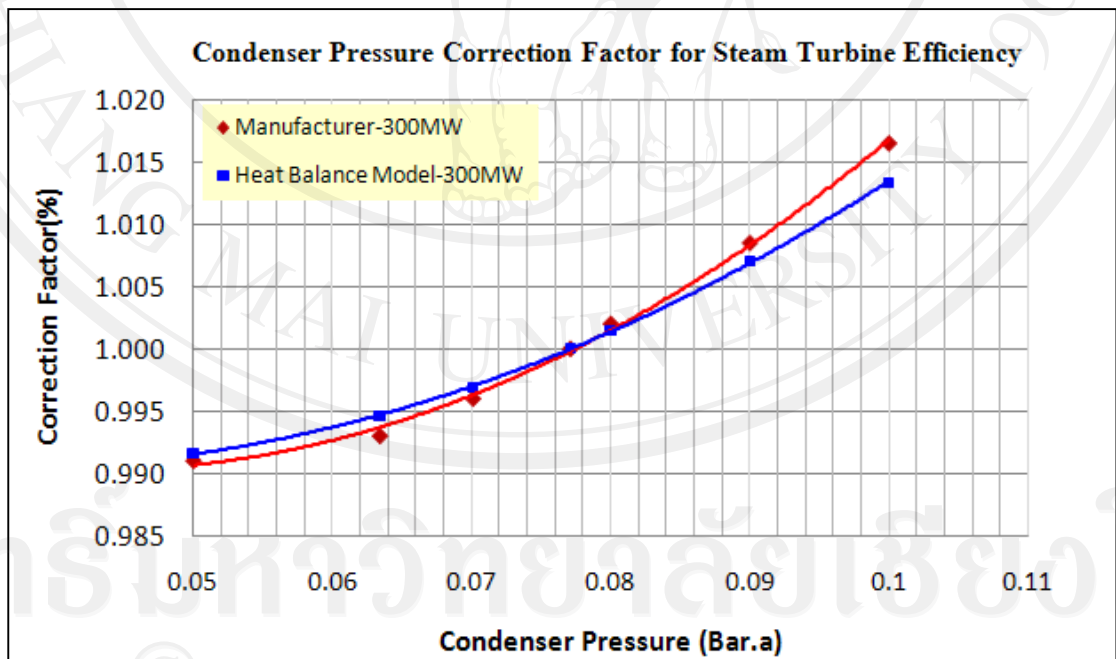
รูปที่ ๓3 เปรียบเทียบ Reheat Steam Temperature at Intercept valve Correction Factor
ที่ 100%Load (300MW)



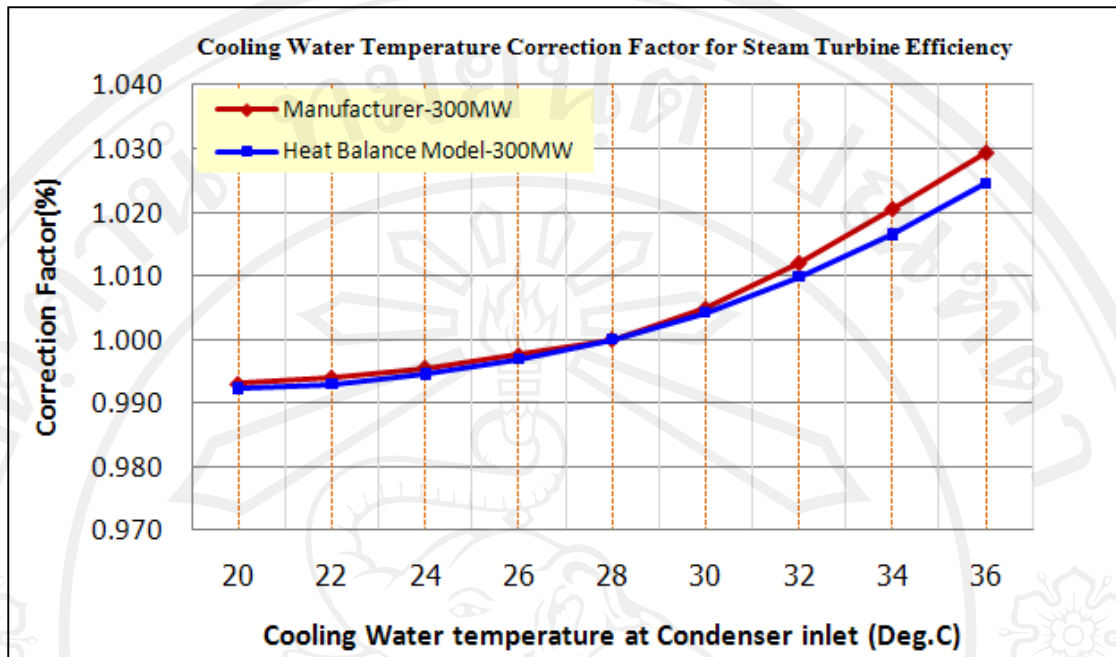
รูปที่ ๓4 เปรียบเทียบ Reheat Pressure Drop Correction Factor ที่ 100%Load (300MW)



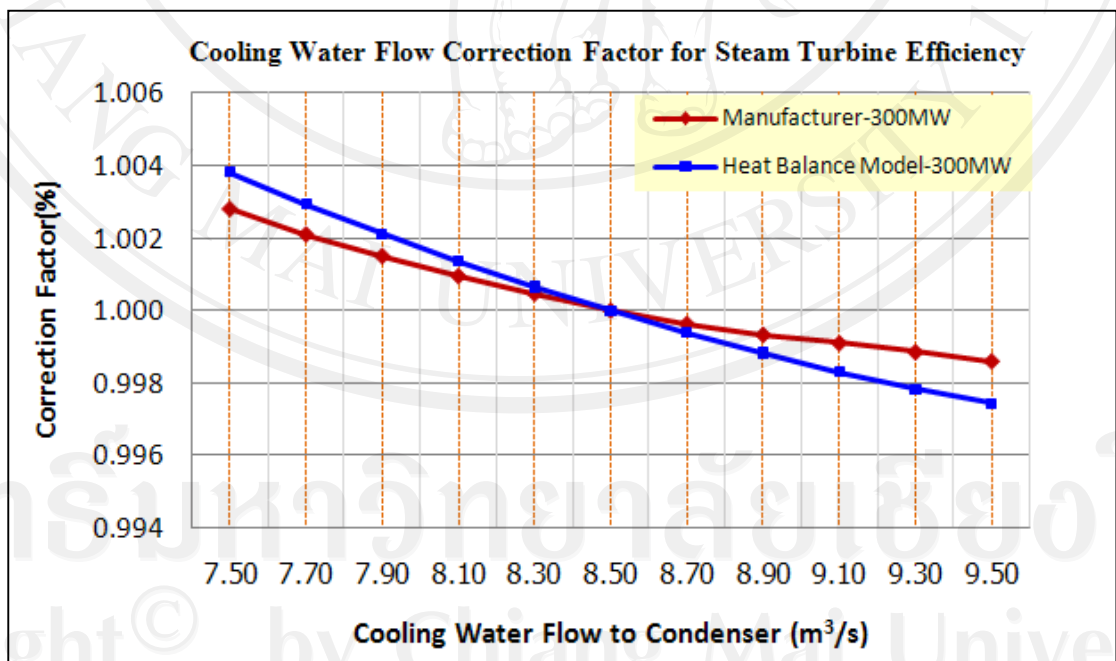
รูปที่ ๓5 เปรียบเทียบ Reheat at temperature water flow Correction Factor ที่ 100%Load (300MW)



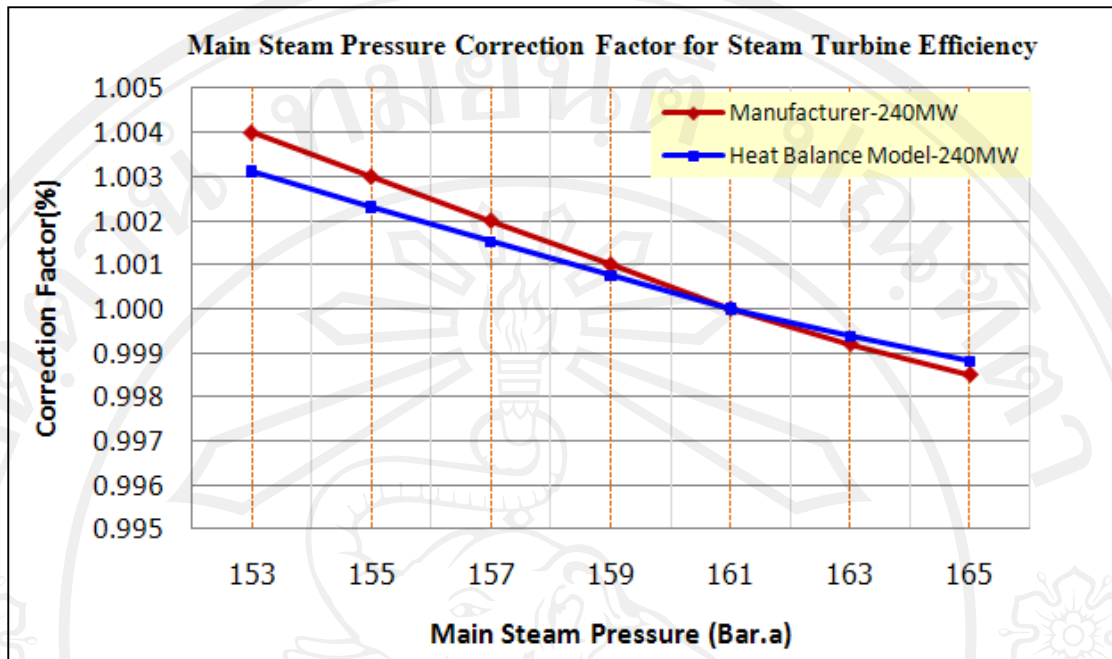
รูปที่ ๓6 เปรียบเทียบ Condenser Pressure Correction Factor ที่ 100%Load (300MW)



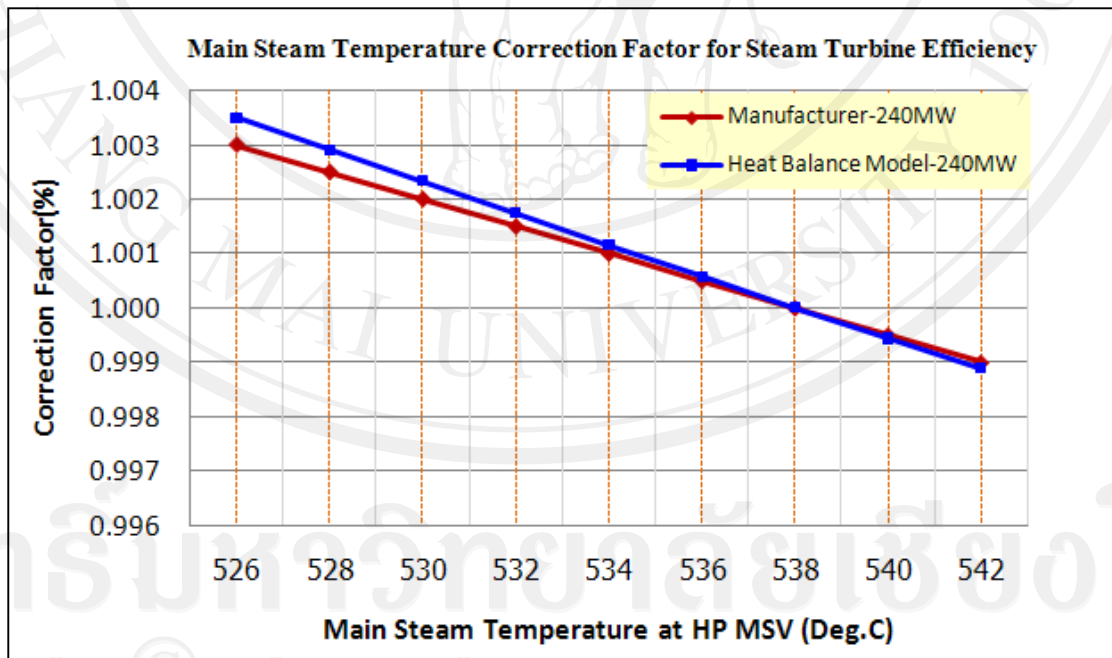
รูปที่ ๓7 เปรียบเทียบ Cooling Water Temperature to Condenser Correction Factor
ที่ 100%Load (300MW)



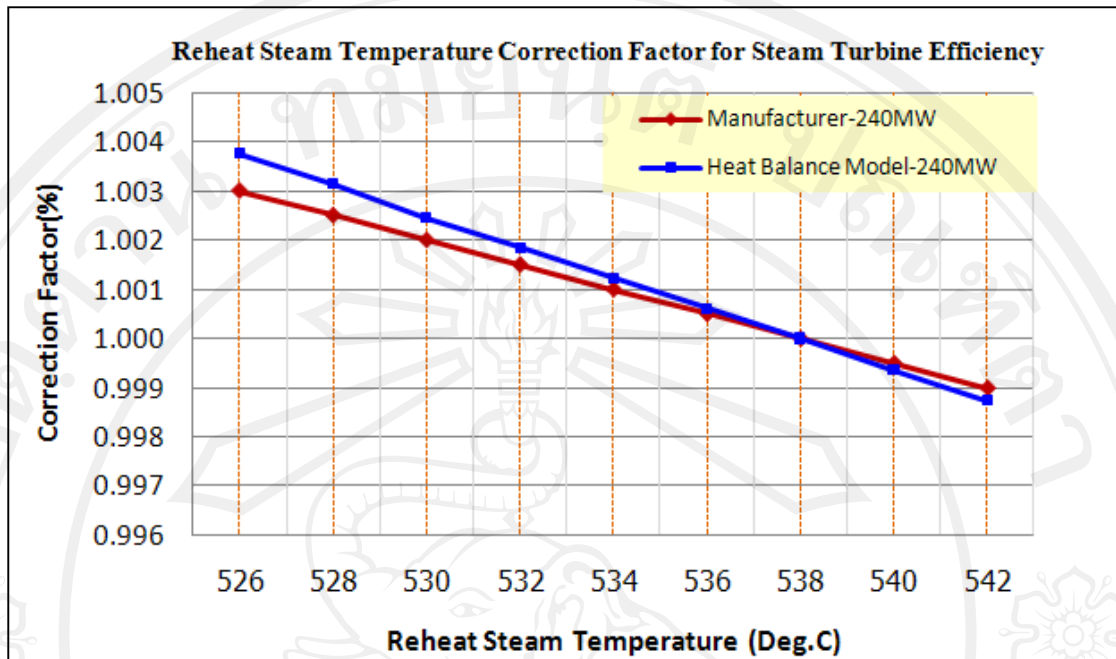
รูปที่ ๓๘ เปรียบเทียบ Cooling Water Flow Correction Factor ที่ 100%Load (300MW)



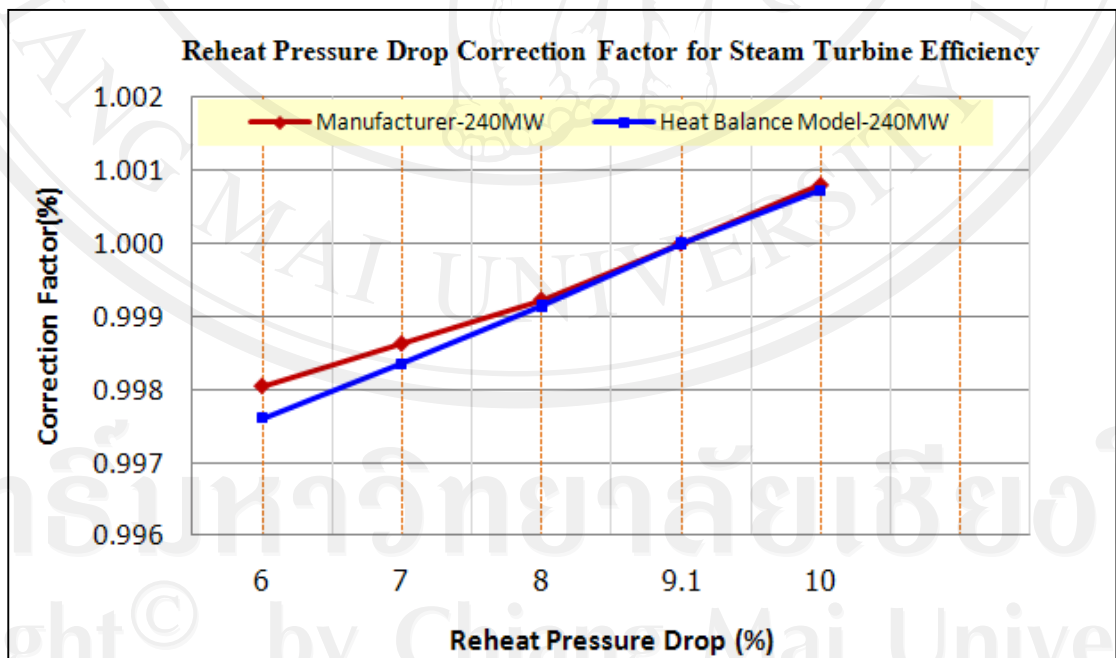
รูปที่ ๙9 เปรียบเทียบ Main Steam Pressure Correction Factor ที่ 80%Load (240MW)



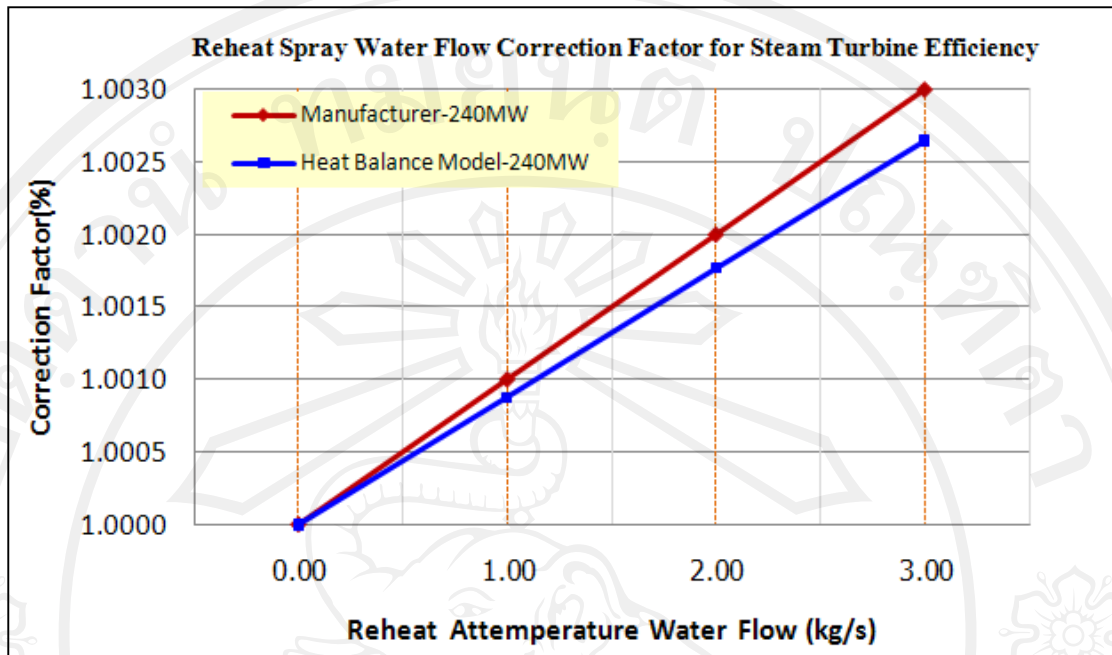
รูปที่ ๙10 เปรียบเทียบ Main Steam Temperature Correction Factor ที่ 80%Load (240MW)



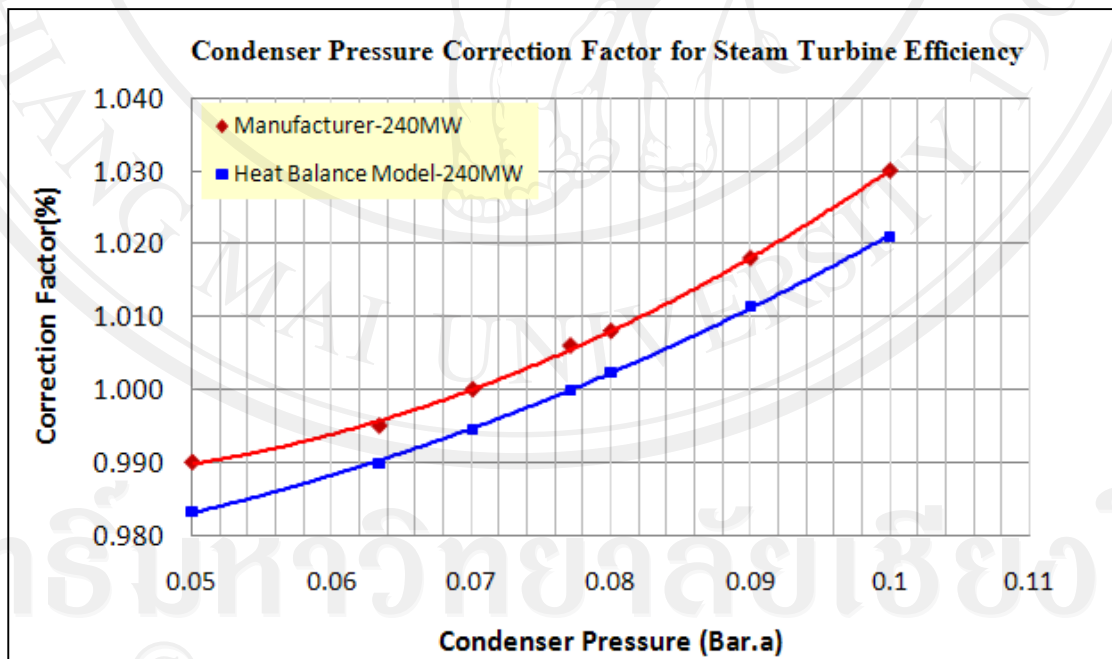
รูปที่ ๓11 เปรียบเทียบ Reheat Steam Temperature at Intercept valve Correction Factor
ที่ 80%Load (240MW)



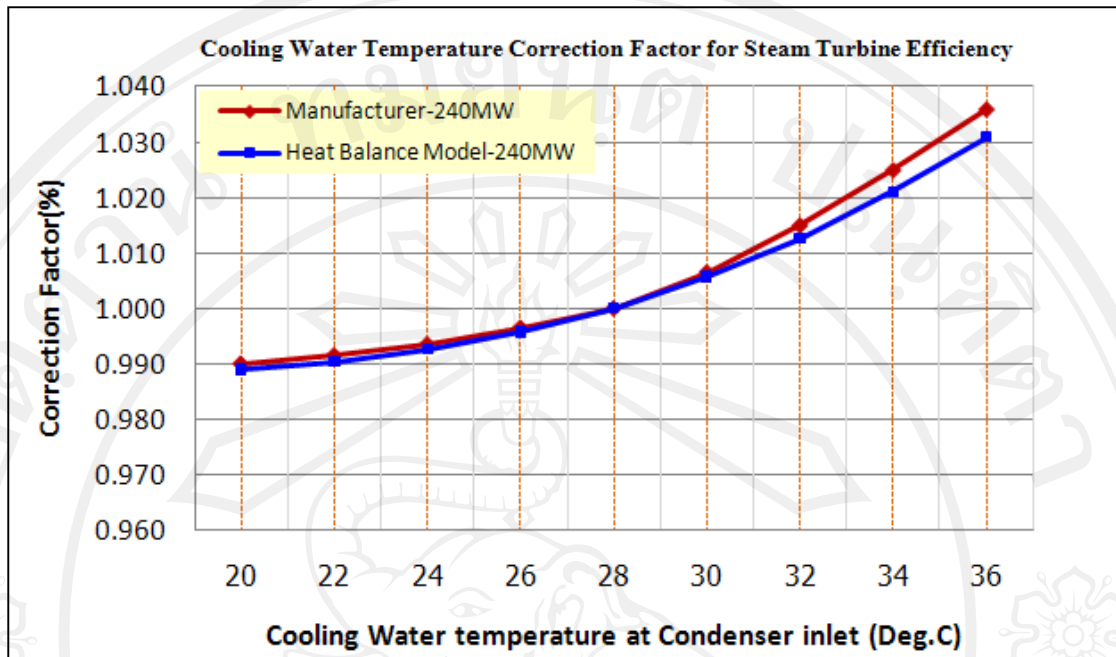
รูปที่ ๓12 เปรียบเทียบ Reheat Pressure Drop Correction Factor ที่ 80%Load (240MW)



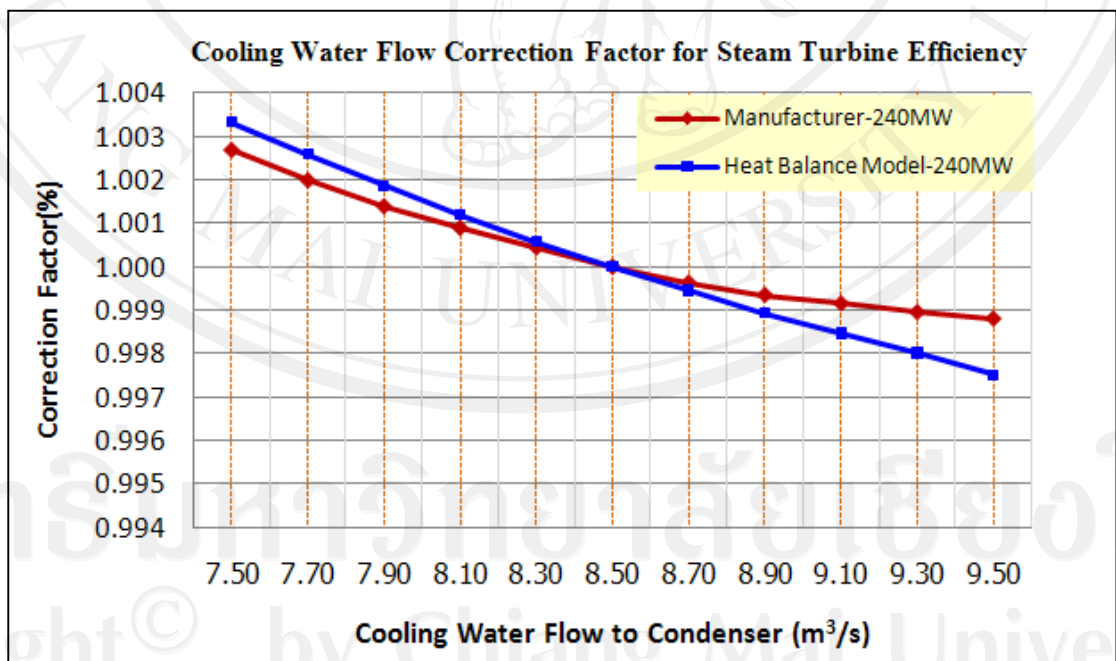
รูปที่ 13 เปรียบเทียบ Reheat at temperature water flow Correction Factor ที่ 80%Load (240MW)



รูปที่ 14 เปรียบเทียบ Condenser Pressure Correction Factor ที่ 80%Load (240MW)



รูปที่ ๑15 เปรียบเทียบ Cooling Water Temperature to Condenser Correction Factor
ที่ 80%Load (240MW)



รูปที่ ๑16 เปรียบเทียบ Cooling Water Flow Correction Factor ที่ 80%Load (240MW)



ภาคผนวก จ

เอกสารการประชุมทางวิชาการ

1. การถ่ายเทพลังงานความร้อนและมวลในอุปกรณ์ด้านความร้อนและกระบวนการ (ครั้งที่ 12) วันที่ 14-15 มีนาคม 2556
2. International Conference on Mechanical and Industrial Engineering, Issue 81 September 2013 Rome

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การถ่ายเท พลังงานความร้อนและมวล

ในอุปกรณ์ด้านความร้อนและกระบวนการ (ครั้งที่ 12)

ระหว่างวันที่ 14-15 มีนาคม 2556

ณ โรงแรมอิมพีเรียลโกลด์เอ็นไทรแองเกิ้ล รีสอร์ท

อำเภอเชียงแสน จังหวัดเชียงราย

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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**การพัฒนาแบบจำลองการวิเคราะห์สมรรถนะของอุปกรณ์หลัก
สำหรับโรงไฟฟ้าถ่านหินแม่เมาะกรณีศึกษา การเปลี่ยนกังหันไอน้ำแรงดันต่ำ
PERFORMANCE ANALYSIS MODEL DEVELOPMENT OF A MAIN COMPONENT
FOR MAE MOH COAL-FIRED POWER PLANT : A CASE STUDY OF LP TURBINE
REPLACEMENT**

จิตติพร สุภาณี

ณัฐณี วรยศ

ภาควิชาวิศวกรรมเครื่องกล

คณะวิศวกรรมศาสตร์มหาวิทยาลัยเชียงใหม่

อ.เมือง จ. เชียงใหม่ 50200

พิริยะ ทองเชื้อ

แผนกประสิทธิภาพ2 กองการผลิต2

ฝ่ายการผลิตโรงไฟฟ้าแม่เมาะ

การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย

อ. แม่เมาะ จ. ลำปาง 52220

บทคัดย่อ

การประเมินสมรรถนะเป็นสิ่งจำเป็นสำหรับโรงไฟฟ้าทุกประเภท ในกรณีของโรงไฟฟ้าแม่เมาะ ได้มีการประเมินสมรรถนะอุปกรณ์หลักต่างๆ อาทิ เช่น หม้อไอน้ำ (Boiler), กังหันไอน้ำ, เครื่องกำเนิดไฟฟ้า (Steam turbine – Generator) และชุดควบแน่น (Condenser) ตลอดจนการประเมินประสิทธิภาพของการผลิตไฟฟ้าในภาพรวม ดังนั้น แบบจำลองที่ใช้วิเคราะห์สมรรถนะของอุปกรณ์ต่างๆ จึงมีความสำคัญ และต้องมีการปรับปรุงแก้ไขให้เหมาะสมอย่างสม่ำเสมอ ทั้งนี้เนื่องจากอุปกรณ์ในโรงไฟฟ้ามีการเสื่อมสภาพตามอายุการใช้งาน รวมทั้งมีการเปลี่ยนอุปกรณ์ใหม่ งานวิจัยนี้เป็นกรณีศึกษาของการปรับปรุงแบบจำลองที่ใช้วิเคราะห์สมรรถนะของชุดอุปกรณ์กังหัน-เครื่องกำเนิดไฟฟ้าของโรงไฟฟ้าแม่เมาะขนาด 300MW ซึ่งมีการติดตั้งกังหันไอน้ำแรงดันต่ำเครื่องใหม่แทนอุปกรณ์เดิมเพื่อกำหนดค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนแก่กังหันไอน้ำที่เหมาะสมอันจะส่งผลให้การประเมินสมรรถนะของโรงไฟฟ้าสามารถทำได้อย่างแม่นยำมากยิ่งขึ้น

Abstract

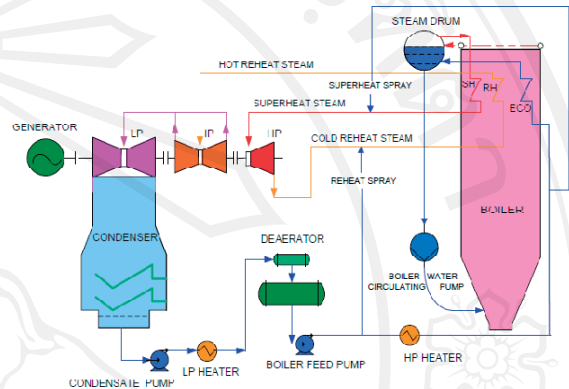
The performance evaluation is necessary for all types of power plants. In case of Mae Moh power plant, the performances of main equipments, for example boiler, turbine & generator and condenser, have to be evaluated and used for calculating the efficiency of power plant. Therefore, the model for predicting each equipment performance is very importance and has to be modified along with the deterioration and the renovation of the machine for more accuracy. In research work, since the low pressure turbine of 300 MW- Mae Moh power plant has been replaced, the new model of steam turbine-generator is developed to find a new target of heat input rate. The new target value will be used further for evaluating the power plant efficiency.

อนึ่งงานวิจัยที่เกี่ยวข้องได้มีการศึกษาปัจจัยที่มีผลต่อค่าสมรรถนะในกระบวนการผลิตไฟฟ้าของโรงไฟฟ้า โดย Usón and Correas[1] ศึกษาปัจจัยที่ส่งผลกระทบต่อค่าสมรรถนะโรงไฟฟ้าลดต่ำลง พบว่าปัจจัยหลักคือความเสื่อมสภาพใช้งานตามอายุอุปกรณ์ (Degradation), Oman และคณะ[2]และ Arauzo และคณะ [3]พบว่าคุณสมบัติของถ่านหิน (Coal specification) ที่ใช้เป็นเชื้อเพลิงเผาไหม้ที่เปลี่ยนแปลงไป เป็นปัจจัยหนึ่งที่มีอิทธิพลต่อค่าสมรรถนะในกระบวนการผลิตไฟฟ้าที่เปลี่ยนแปลงไปด้วย และ Kopac and Hilalci[4]พบว่าอุณหภูมิบรรยากาศ (Ambient temperature) มีอิทธิพลต่อสมรรถนะในกระบวนการผลิตไฟฟ้าของโรงไฟฟ้าพลังความร้อนเชื้อเพลิงถ่านหินให้เปลี่ยนแปลงไปด้วย

2. កម្មវិធី

2.1 ทฤษฎีระบบการผลิตของโรงไฟฟ้าพลังความร้อน

จากกังหันจะไหลต่อไปยังชุดควบแน่น (Condenser) ซึ่งที่อุปกรณ์นี้ไอน้ำจะควบแน่นเปลี่ยนสถานะกลับมาเป็นของเหลว และถูกสูบกลับไปยังหม้อไอน้ำด้วยเครื่องสูบลูก (Boiler Feed Pump) เพื่อให้ระบบทำงานวนเป็นวัฏจักร นอกจากนี้เป็นอุปกรณ์ช่วยเสริมระบบ เช่น เครื่องอุ่นน้ำป้อนเข้าหม้อไอน้ำ (Heater) เป็นต้น



รูปที่ 1ผังการทำงานและอุปกรณ์ติดตั้งในระบบการผลิต

2.2 ทฤษฎีการคำนวณค่า Heat Rate โรงไฟฟ้าถ่านหิน

ค่า Heat Rate มีหน่วย kcal/kWh คือค่าอัตราส่วนระหว่างผลรวมปริมาณความร้อนจากเชื้อเพลิง ได้แก่ ถ่านหินลิกไนต์และน้ำมันดีเซล ที่ใช้ในการเผาไหม้ ซึ่งเป็นพลังงานที่เข้าสู่ระบบ (Input) มีหน่วย kcal กับพลังงานไฟฟ้าที่ผลิตได้จำนวนหนึ่งหน่วยไฟฟ้า ซึ่งเป็นพลังงานที่ออกจากระบบ (Output) มีหน่วย kWh ดังสมการที่ 1

$$HeatRate \left[\frac{kcal}{kWh} \right] = \frac{\left(\text{ปริมาณกากในดี}[kg] \times \text{ค่าความร้อนกากในดี} \left[\frac{kcal}{kg} \right] \right) + \left(\text{ปริมาณนํ้ามันดีเซล}[Liters] \times \text{ค่าความร้อนนํ้ามันดีเซล} \right)}{\text{พลังงานไฟฟ้าที่ผลิตได้}[kWh]}$$

2.3 ทฤษฎีการคำนวณค่า STEP Factor[5]

ดัชนีที่บ่งบอกถึงสมรรถนะในการปรับปรุงประสิทธิภาพของกระบวนการผลิตไฟฟ้าหรือ STEP Factor คำนวณได้โดยการเปรียบเทียบค่า Heat Rate ระหว่างค่า Target Heat Rate กับค่า Actual Heat Rate และนำมาแสดงในรูปอัตราส่วนร้อยละ ดังสมการที่ 2

$$\begin{aligned} & \text{STEP Factor} [\%] \\ &= \frac{\text{Target Heat Rate} \left[\frac{\text{kJ}}{\text{kWh}} \right]}{\text{Actual Heat Rate} \left[\frac{\text{kJ}}{\text{kWh}} \right]} \\ & \times 100 \end{aligned} \quad (2)$$

ค่า STEP Factor ที่คำนวณได้นี้หากมีค่าเท่ากับร้อยละ 100 แสดงว่าการเดินเครื่องผลิตไฟฟ้าขณะนั้นอยู่ในภาวะที่เหมาะสม, หาก STEP Factor มีค่าน้อยกว่าร้อยละ 100 แสดงว่าสภาวะการเดินเครื่องขณะนั้นอาจเกิดความสูญเสียขึ้นในกระบวนการผลิต และหาก STEP Factor มีค่ามากกว่าร้อยละ 100 แสดงว่าสภาวะการเดินเครื่องขณะนั้นดีกว่าเป้าหมายที่กำหนดไว้ หรือจะถือว่าดัชนีชี้วัดนี้ไม่สามารถนำมาใช้ติดตามความสูญเสียในกระบวนการผลิตไฟฟ้าตามวัตถุประสงค์ได้ซึ่งเป็นสภาวะที่โรงไฟฟ้าประสบอยู่ ณ ปัจจุบัน

2.4 ทฤษฎีการคำนวณสมรรถนะของ Steam Turbine – Generator โดยหลักการของ STEP Factor

ในการคำนวณสมรรถนะของ Steam Turbine – Generator สามารถคำนวณได้จากอัตราอัตราการป้อนพลังงานความร้อนเข้าสู่กังหันไอน้ำต่อการผลิตไฟฟ้าของเครื่องกำเนิดไฟฟ้า (Steam Turbine-Generator Heat Rate) ซึ่งสามารถคำนวณได้ดังสมการที่ 3

$$\text{Steam Turbine – Generator Heat Rate} \left[\frac{\text{kJ}}{\text{kWh}} \right] = \frac{\text{Heat Input to Steam Turbine} [\text{kJ}]}{\text{Generator Output} [\text{kW}] \times \text{Time} [\text{h}]} \quad (3)$$

โดยที่ Heat Input to Steam Turbine ได้แก่พลังงานความร้อนที่ป้อนเข้าสู่กังหันไอน้ำ [kJ] ซึ่งจะคำนวณจากอัตราการไหลเชิงมวล (Mass flow rate) และเอนทาลปี (Enthalpy) ของสารทำงาน ณ ตำแหน่งทางเข้าและออกของอุปกรณ์ต่างๆ ดังสมการที่ 4

$$\begin{aligned} \text{Heat Input to Steam Turbine} [\text{kJ}] &= [\dot{m}_{MS} \times (h_{MS} - h_{FW-in})] + [\dot{m}_{RH} \times (h_{RH} - h_{Cold-RH})] \\ &+ [\dot{m}_{RH-Spray} \times (h_{RH} - h_{RH-Spray})] \\ &+ [\dot{m}_{BFP-outlet} \times (h_{BFP-outlet} - h_{BFP-inlet})] \end{aligned} \quad (4)$$

เมื่อ

- $\dot{m}_{MS}$ = อัตราการไหลของไอน้ำร้อนยวดยิ่ง [kg/s]
- h_{MS} = เอนทาลปีของไอน้ำร้อนยวดยิ่ง [kJ/kg]
- h_{FW-in} = เอนทาลปีของน้ำที่ป้อนเข้าสู่หม้อไอน้ำ [kJ/kg]
- $\dot{m}_{RH}$ = อัตราการไหลของไอน้ำหลังให้ความร้อนซ้ำ [kg/s]
- h_{RH} = เอนทาลปีของไอน้ำหลังให้ความร้อนซ้ำ [kJ/kg]
- $h_{Cold-RH}$ = เอนทาลปีของไอน้ำก่อนให้ความร้อนซ้ำ [kJ/kg]

$\dot{m}_{RH-Spray}$ = อัตราการไหลของน้ำสำหรับลดอุณหภูมิไอน้ำก่อนให้ความร้อนซ้ำ [kg/s]

$h_{RH-Spray}$ = เอนทาลปีของน้ำสำหรับลดอุณหภูมิไอน้ำก่อนให้ความร้อนซ้ำ [kJ/kg]

$\dot{m}_{BFP-outlet}$ = อัตราการไหลของน้ำออกจาก Boiler Feed Pump [kg/s]

$h_{BFP-inlet}$ = เอนทาลปีของน้ำก่อนเข้าสู่ Boiler Feed Pump [kJ/kg]

$h_{BFP-outlet}$ = เอนทาลปีของน้ำออกจาก Boiler Feed Pump [kJ/kg]

ในขณะที่ Generator Output ได้แก่กำลังไฟฟ้าที่โรงไฟฟ้าสามารถผลิตได้ [kW] และ Time ได้แก่ระยะเวลาที่โรงไฟฟ้าเดินเครื่องผลิตไฟฟ้าหรือจ่าย load

หากต้องการคำนวณ STEP Factor ของโรงไฟฟ้า นอกจากจะต้องอาศัยค่า Heat Rate ที่เกิดขึ้นจริงของไฟฟ้าแล้วจะต้องอาศัยค่า Heat Rate ที่กำหนดเป็นเป้าหมาย (Target Heat Rate) ด้วย และจากการที่ค่า Target Heat Rate ของโรงไฟฟ้าจะสัมพันธ์กับการตั้งค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนเข้าสู่กังหันไอน้ำ และค่ากำลังการผลิตของไฟฟ้าที่ได้รับการปรับแก้แล้ว (Corrected Generator ดังนั้นในการศึกษานี้จึงมุ่งเน้นไปที่การคำนวณค่าดังกล่าว โดยเริ่มจากการหาความสัมพันธ์ระหว่างประสิทธิภาพกับพารามิเตอร์ต่าง ๆ ที่เกี่ยวข้อง และคำนวณหาตัวปรับแก้ หรือ Correction Factor สำหรับพารามิเตอร์ต่าง ๆ ภายใต้งานของโรงไฟฟ้าในปัจจุบัน ซึ่งในที่นี้จะเลือกใช้เงื่อนไขของโรงไฟฟ้าภายหลังการซ่อมบำรุงในปี 2555 ซึ่งถือว่าเป็นเงื่อนไขที่ดีที่สุดในปัจจุบัน แล้วจึงนำค่าที่ได้มาคำนวณหาค่า Corrected Generator Output จากสมการที่ (5)

$$\begin{aligned} \text{Corrected Generator Output} [\text{kW}] &= (M) \times \left(1 + \frac{\text{Corr}_1}{100}\right) \times \left(1 + \frac{\text{Corr}_2}{100}\right) \times \\ &\left(1 + \frac{\text{Corr}_3}{100}\right) \times \dots \times \left(1 + \frac{\text{Corr}_{12}}{100}\right) \end{aligned} \quad (5)$$

โดยที่ M = ค่า Generator Output ที่วัดได้ [kW]

Corr = ค่า Correction Factor สำหรับตัวแปรต่าง ๆ

เมื่อตัวห้อย 1 – 12 แทนค่าความดันของไอน้ำร้อนยวดยิ่ง, ค่าอุณหภูมิของไอน้ำร้อนยวดยิ่ง, ค่าร้อยละของความดันของไอน้ำหลังให้ความร้อนซ้ำที่ลดลง, ค่าอุณหภูมิของไอน้ำหลังให้ความร้อนซ้ำ, ค่าความดันในชุดควบแน่น, ค่าอัตราการไหลของน้ำหล่อเย็นชุดควบแน่น, ค่าอุณหภูมิของน้ำหล่อเย็นขาเข้าชุดควบแน่น, ค่าอัตราการไหลของน้ำสำหรับลดอุณหภูมิไอน้ำหลังให้ความร้อนซ้ำ, ค่า Power Factor (ตัวประกอบกำลังไฟฟ้า), ค่าความดันก๊าซไฮโดรเจนภายในเครื่องกำเนิดไฟฟ้า, ค่าความบริสุทธิ์ของก๊าซไฮโดรเจนภายในเครื่องกำเนิดไฟฟ้าและค่า Unknown Loss ตามลำดับ

จากนั้นทำการปรับค่า Heat Rate ของ Steam-Turbine Generator โดยอาศัยความสัมพันธ์ระหว่างประสิทธิภาพและพารามิเตอร์ต่าง ๆ

ร่วมกับค่าปรับแก้หรือ Correction Factor ของประสิทธิภาพที่สัมพันธ์กับ พารามิเตอร์เหล่านั้น และเมื่อได้ค่า Heat Rate ที่ทำการปรับแก้แล้ว (Corrected Steam Turbine- Generator Heat Rate) ก็นำมาคำนวณหา ค่าที่กำหนดเป็นเป้าหมายของอัตราการป้อนพลังงานความร้อนแก่กังหัน (Target Heat Input to Steam Turbine) โดยอาศัยสมการที่ (6)

Corrected Steam Turbine

$$- \text{Generator Heat Rate} \left[\frac{\text{kJ}}{\text{kWh}} \right] = \frac{\text{Target Heat Input to Steam Turbine} [\text{kJ}]}{\text{Corrected Generator Output} [\text{kW}] \times \text{Time} [\text{h}]} \quad (6)$$

3. ผลของการเปลี่ยนกังหันไอน้ำแรงดันต่ำที่มีต่อค่าสมรรถนะ

Steam Turbine – Generator

เนื่องจากโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ได้ดำเนินการเปลี่ยนกังหันไอน้ำแรงดันต่ำ (Low Pressure Turbine: LP Turbine) ในปี 2551 ซึ่งเมื่อเปลี่ยนแล้วมีผลทำให้สภาวะการเดินเครื่อง Steam Turbine – Generator มีค่าเปลี่ยนแปลงไป ส่งผลทำให้ ค่า Heat Rate ของชุดอุปกรณ์ดังกล่าวมีการเปลี่ยนแปลงไปด้วย ซึ่งผลของการเปรียบเทียบสภาวะของสารทำงานที่ทางเข้าและออกต่าง ๆ ของชุดอุปกรณ์ รวมไปถึงค่า Heat Rate ระหว่างก่อนและหลังการเปลี่ยน LP Turbine เป็นดังแสดงในตารางที่ 1

ตารางที่ 1 ผลการเปรียบเทียบสภาวะการเดินเครื่องและค่า Heat Rate ของ Steam Turbine-Generator โดยเฉลี่ยระหว่างก่อนและหลังเปลี่ยน LP Turbine ในปี 2551

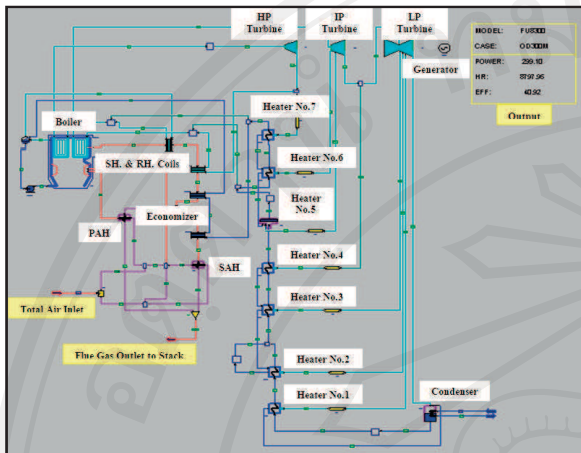
Measurement Value	Unit	ก่อน	หลัง
$\dot{m}_{MS}$	kg/s	263.66	258.18
P_{MS}	Bar a.	160.24	160.69
T_{MS}	°C	538.71	536.06
P_{FW-in}	Bar a.	180.10	178.64
T_{FW-in}	°C	249.33	238.31
$\dot{m}_{RH}$	kg/s	224.27	221.24
P_{RH}	Bar a.	40.01	39.24
T_{RH}	°C	533.12	517.28
$P_{Cold-RH}$	Bar a.	42.53	41.96
$T_{Cold-RH}$	°C	336.94	338.20
$\dot{m}_{RH-Spray}$	kg/s	0.29	0.00
$P_{RH-Spray}$	Bar a.	187.94	186.58
$T_{RH-Spray}$	°C	185.58	185.86
$\dot{m}_{BFP outlet}$	kg/s	245.28	243.44
$P_{sat-BFP inlet}$	Bar a.	10.84	10.92

$P_{BFP outlet}$	Bar a.	187.94	186.58
$T_{BFP outlet}$	°C	185.58	185.86
M	kW	300,563.53	299,736.53
Heat Input to Steam Turbine	GJ/h	2,598.86	2,554.01
Steam Turbine-Generator Heat Rate	kJ/kWh	8,646.63	8,520.84

จะเห็นได้ว่าการเปลี่ยนชุดอุปกรณ์ LP Turbine ที่มีเทคโนโลยีผลิตทันสมัยกว่าเดิมนั้น ส่งผลให้ค่าประสิทธิภาพของอุปกรณ์หรือ Steam Turbine-Generator Heat Rate ลดต่ำลง จาก 8,646.63 kJ/kWh เป็น 8,520.84 kJ/kWh หรือลดลง 1.45 เปอร์เซ็นต์ แต่ทั้งนี้เนื่องจากนับตั้งแต่ปี 2551 อุปกรณ์อื่น ๆ ที่มีอยู่ในระบบได้มีการเสื่อมสภาพตามอายุการใช้งานซึ่งมีการใช้งานมากกว่า 20 ปี รวมถึงได้มีการปรับเปลี่ยนอุปกรณ์ต่าง ๆ อีกหลายอุปกรณ์ และจากการเปลี่ยนแปลงเหล่านี้ก็จะส่งผลทำให้ค่าอัตราการป้อนพลังงานความร้อนแก่กังหันไอน้ำและ Steam Turbine-Generator Heat Rate เปลี่ยนแปลงเพิ่มมากขึ้น โดยบางปัจจัยจะทำให้ค่าสูงขึ้นในขณะที่บางปัจจัยทำให้ค่าลดลง ดังนั้นหากโรงไฟฟ้าต้องการที่จะประเมินประสิทธิภาพของโรงไฟฟ้าว่ามีการสูญเสียพลังงานหรือมีส่วนใดที่ต้องทำการปรับปรุงแก้ไข จึงควรที่จะตั้งอยู่บนพื้นฐานของสภาพของโรงไฟฟ้าในปัจจุบัน ไม่ควรที่จะใช้เงื่อนไข ณ เริ่มต้นโรงไฟฟ้าในการศึกษาครั้งนี้จึงได้มีการประเมินหาค่าเป้าหมายที่เหมาะสมเพื่อใช้สำหรับเป็นค่าเป้าหมายในการติดตามการสูญเสียของกระบวนการต่อไป

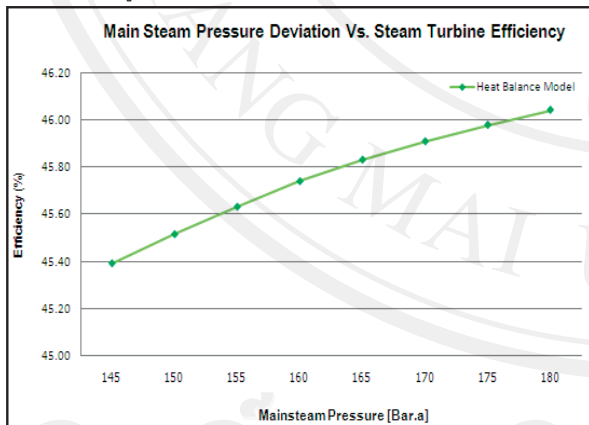
4. ผลการคำนวณหาค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนเข้าสู่กังหันไอน้ำ

จากสมการที่ (5) และ สมการที่ (6) การคำนวณหาค่า ที่จะนำมากำหนดเป็นค่าเป้าหมายสำหรับค่าอัตราการป้อนพลังงานความร้อนเข้าสู่กังหัน (Target Heat Input to Steam Turbine) ต้องอาศัยความสัมพันธ์ระหว่างค่าประสิทธิภาพของกังหันกับค่าพารามิเตอร์ต่าง ๆ ที่มีผลรวมไปถึงค่าปรับแก้หรือ Correction Factor สำหรับพารามิเตอร์ต่าง ๆ เหล่านั้น โดยในการศึกษานี้จะอาศัยโปรแกรม Gate Cycle & Cycle Link ซึ่งเป็นโปรแกรมที่ใช้สำหรับการสร้างแบบจำลองกระบวนการผลิตไฟฟ้าหรือ Heat Balance Model ของอุปกรณ์ต่าง ๆ และสร้างแบบจำลอง Simulation ของการเดินเครื่องโรงไฟฟ้า ในการหาความสัมพันธ์และค่า Correction Factor ต่าง ๆ ที่กล่าวมาข้างต้น โดยเงื่อนไขต่าง ๆ ที่ใช้ในการคำนวณจะถูกกำหนดให้มีสภาวะการเดินเครื่อง (Operating Condition) เป็นไปตามเงื่อนไขของโรงไฟฟ้าในปัจจุบัน (ปี 2555) ซึ่งลักษณะของแบบจำลองที่สร้างขึ้นในโปรแกรมเป็นดังแสดงในรูปที่ 2



รูปที่ 2 Heat Balance Model ของโรงไฟฟ้าแม่เมาะหน่วยที่ 8 เงื่อนไข Operating Data ปัจจุบัน, เติบโตเครื่องที่ Base Load

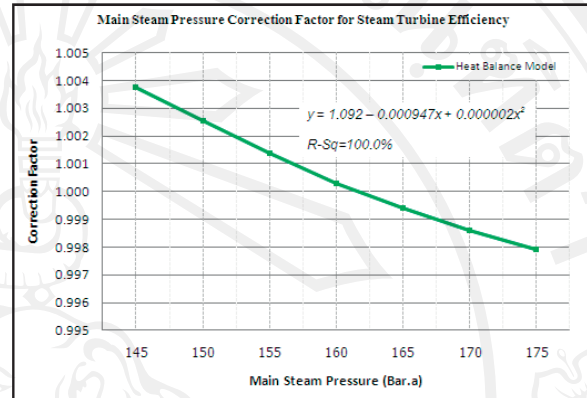
จาก Heat Balance Model และ Simulation ที่สร้างขึ้นจะสามารถหาความสัมพันธ์ระหว่างประสิทธิภาพกับตัวแปรต่างๆ และค่า Correction Factor สำหรับตัวแปรต่าง ๆ ได้ ยกตัวอย่างเช่น ในกรณีของพารามิเตอร์ค่าความดันไอน้ำร้อนยวดยิ่ง ณ ทางออกของหม้อไอน้ำ หรือทางเข้าของกังหัน หากค่าดังกล่าวมีการเปลี่ยนแปลง ประสิทธิภาพของกังหันไอน้ำจะมีการเปลี่ยนแปลงไปตามไปด้วย ซึ่งความสัมพันธ์ระหว่างประสิทธิภาพของกังหันไอน้ำและค่าความดันของไอน้ำร้อนยวดยิ่งเป็นดังแสดงในรูปที่ 3



รูปที่ 3 แผนภาพความสัมพันธ์ระหว่างประสิทธิภาพของ Steam Turbine กับความดันของไอน้ำ ณ ทางเข้าของ Steam Turbine

และค่าปรับแก้หรือ Correction Factor ของค่าประสิทธิภาพของ Steam Turbine เมื่อพิจารณาในกรณีของค่าความดันไอน้ำ ณ ที่ความดันต่าง ๆ ซึ่งจะถูกนำไปใช้ในการคำนวณหาค่า Corrected Generator Output และ ค่า STEP Factor ของโรงไฟฟ้าต่อไป เป็นดังแสดงในรูปที่ 4 โดยค่าที่แสดงในรูป คำนวณมาจาก

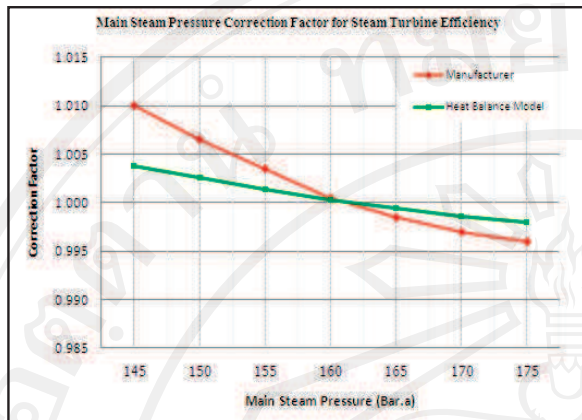
$$\text{Correction Factor} = 1 + \left(\frac{\% \text{Change in Thermal Efficiency}}{100} \right) \quad (7)$$



รูปที่ 4 ค่าปรับแก้ประสิทธิภาพ Steam Turbine ภายใต้เงื่อนไขของความดันไอน้ำร้อนยวดยิ่งต่าง ๆ

โดยค่าปรับแก้หรือ Correction Factor ที่คำนวณได้นี้จะมีความแตกต่างกับค่า Correction Factor ที่โรงไฟฟ้าใช้อยู่ในปัจจุบัน ซึ่งเป็นข้อมูลที่ได้รับจากผู้ผลิตอุปกรณ์ต่าง ๆ ตั้งแต่เริ่มต้น Commissioning โรงไฟฟ้า โดยผลการเปรียบเทียบค่า Correction Factor ที่คำนวณได้กับค่าที่โรงไฟฟ้าใช้อยู่ในปัจจุบันเป็นดังแสดงในรูปที่ 5

และเมื่อได้ข้อมูล Correction Factor ด้วยการ Simulation ใน Heat Balance Model ของทุกพารามิเตอร์ที่เกี่ยวข้อง จะสามารถคำนวณหาค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนเข้าสู่กังหันไอน้ำ (kJ/h), ค่ากำลังไฟฟ้าที่โรงไฟฟ้าสามารถผลิตได้ที่ได้รับการปรับแก้แล้ว (kW) และค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนต่อหน่วยการผลิตไฟฟ้าหรือ Heat Rate (kJ/kW) ที่เงื่อนไขการเดินเครื่องต่าง ๆ ได้ ยกตัวอย่างเช่น ในกรณีที่พิจารณาภาวะการเดินเครื่องของเดือนมกราคม ปี 2556 ซึ่งเป็นดังแสดงในตารางที่ 2



รูปที่ 5 แผนภาพเปรียบเทียบค่า Correction Factor ระหว่างผลลัพธ์จาก Heat Balance Model กับข้อมูลผู้ผลิตตั้งแต่ Commissioning โรงไฟฟ้า

ตารางที่ 2 ตัวอย่างสภาวะการเดินเครื่องของโรงไฟฟ้าแม่เมาะหน่วยที่ 8 ในเดือนมกราคม 2556

Measurement Value	Unit	สภาวะในการเดินเครื่อง
$\dot{m}_{MS}$	kg/s	260.55
P_{MS}	Bar a.	161.00
T_{MS}	$^{\circ}\text{C}$	535.24
P_{FW-in}	Bar a.	179.88
T_{FW-in}	$^{\circ}\text{C}$	247.73
$\dot{m}_{RH}$	kg/s	219.53
P_{RH}	Bar a.	38.65
T_{RH}	$^{\circ}\text{C}$	519.27
$P_{Cold-RH}$	Bar a.	41.32
$T_{Cold-RH}$	$^{\circ}\text{C}$	333.11
$P_{RH-Spray}$	Bar a.	187.68
$T_{RH-Spray}$	$^{\circ}\text{C}$	185.70
$\dot{m}_{BFP\ outlet}$	kg/s	247.99
$P_{sat-BFP\ inlet}$	Bar a.	10.87
$P_{BFP\ outlet}$	Bar a.	187.68
$T_{BFP\ outlet}$	$^{\circ}\text{C}$	185.70

ในกรณีนี้พบว่าหากโรงไฟฟ้ามีการเดินเครื่องภายใต้สภาวะการทำงานดังแสดงในตารางและนำค่าสภาวะดังกล่าวไปคำนวณหาค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนแก่กังหันจากความสัมพัทธ์และค่า Correction Factor ต่างๆ ที่ได้คำนวณขึ้นมาใหม่พบว่าจะมีค่าเท่ากับ 2,535,339,412.13 kJ/h หรือประมาณ 2,535.34 GJ/hr ซึ่งหากพิจารณาจากอัตราการป้อนพลังงานความร้อนเข้าสู่กังหันไอน้ำที่เกิดขึ้นจริง (Actual Value) พบว่ามีค่าอยู่ที่ 2,539,517,098.96 kJ/hr หรือ

2,539.52 GJ/hr เมื่อค่าที่เกิดขึ้นจริงมาเปรียบเทียบกับค่าเป้าหมายที่คำนวณได้ จะเห็นว่ามีความอัตราการป้อนพลังงานให้แก่กังหันไอน้ำที่เกิดขึ้นจริงจะสูงกว่าค่าเป้าหมายประมาณ 4.18 GJ/hr แสดงว่าในกระบวนการมีการสูญเสียเกิดขึ้น ควรที่จะมีการตรวจสอบและประเมินหาแนวทางแก้ไขต่อไป ในทางกลับกันหากโรงไฟฟ้าใช้ค่าเป้าหมายที่มีการใช้ข้อมูลเดิม (อาศัยข้อมูลจากผู้ผลิต) ซึ่งมีค่าสูงถึงประมาณ 2,633.70 GJ/hr ภายใต้เงื่อนไขการทำงานเดียวกัน จะพบว่าอัตราการป้อนพลังงานที่เกิดขึ้นนั้นต่ำกว่าค่าเป้าหมาย ไม่จำเป็นต้องได้รับการแก้ไขส่งผลให้โรงไฟฟ้าไม่สามารถประเมินปัญหาที่เกิดขึ้นได้และสูญเสียพลังงานในการผลิตไฟฟ้าโดยเปล่าประโยชน์

7. สรุปผลการดำเนินงาน

จากการเปลี่ยนชุดอุปกรณ์ LP Turbine ที่มีเทคโนโลยีผลิตทันสมัยกว่าเดิมทำให้สมรรถนะอุปกรณ์ Steam Turbine-Generator สูงขึ้น ประกอบกับปัจจัยความเสื่อมสภาพตามอายุการใช้งานตลอด 20 ปีที่ผ่านมาของโรงไฟฟ้าถ่านหินแม่เมาะนี้ตลอดจนการปรับปรุงอุปกรณ์ย่อยในระบบอื่นๆ ส่งผลให้สภาวะเดินเครื่องและสมรรถนะโรงไฟฟ้าเปลี่ยนแปลงไปจากสภาวะดั้งเดิม ซึ่งงานวิจัยนี้ได้ทำการพัฒนาแบบจำลองของกระบวนการผลิตไฟฟ้า รวมถึงปรับปรุงค่าแก้ไขสำหรับพารามิเตอร์ต่าง ๆ ที่เกี่ยวข้องให้เหมาะสมภายใต้สภาวะการเดินเครื่องปัจจุบันและพบว่าในกรณีของชุดอุปกรณ์ Steam Turbine-Generator แบบจำลองที่พัฒนาขึ้นมีความสัมพันธ์ระหว่างพารามิเตอร์ต่างๆ รวมไปถึงค่าปรับแก้หรือ Correction Factor ที่คำนวณได้ สามารถนำมาใช้คำนวณหาค่าเป้าหมายของอัตราการป้อนพลังงานความร้อนแก่เครื่องกังหันที่มีความเหมาะสมกว่าค่าที่โรงไฟฟ้าใช้ข้อมูลเดิม ซึ่งมาจากข้อมูลที่ได้รับการจากผู้ผลิต แต่ทั้งนี้ในการประเมินค่าเป้าหมายหรือดัชนีชี้วัดสำหรับทั้งโรงไฟฟ้าจำเป็นต้องทำการพัฒนาแบบจำลองของอุปกรณ์หลักทั้งหมด เพื่อให้ได้ค่าที่เหมาะสมเพื่อให้ค่า Target Heat Rate ที่กำหนดขึ้นมาใหม่นั้นสอดคล้องกับสภาพปัจจุบันของโรงไฟฟ้า และจะจุดต่อการรักษาสสมรรถนะโรงไฟฟ้าทั้งงานซ่อมบำรุงอุปกรณ์กับงานเดินเครื่องผลิตไฟฟ้าอย่างมีประสิทธิภาพต่อเนื่องไปจนถึงช่วงบำรุงรักษาใหญ่ตามวาระ

กิตติกรรมประกาศ

ผู้เขียนขอขอบพระคุณ การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย ที่ให้ทุนสนับสนุนการวิจัยในครั้งนี้

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ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
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Performance Analysis Model Development for Mae Moh Coal-Fired Power Plant

Thitiporn Supasri, Natanee Vorayos, and Piriya Thongchiew

Abstract—Electrification is a complex process and governed by various parameters. Modeling of power plant's target efficiency or target heat rate is often formulated and compared with the actual values. This comparison not only implies the performance of the power plant but also reflects the energy losses possibly inherited in some of related equipment and processes. The current modeling of Coal-fired Mae Moh power plant was formulated at the first commissioning. Some of equipments were replaced due to its life time. Relatively outdated for 20 years, the utilization of the model is not accomplished. This work has focused on the development of the performance analysis model of aforementioned power plant according to the most updated and current working conditions. The model is more appropriate and shows accuracy in its analysis. Losses are detected and measures are introduced such that reduction in energy consumption, related cost, and also environment impacts can be anticipated.

Keywords—Performance analysis model, Power plant modeling, Target heat rate, Target efficiency.

I. INTRODUCTION

NORMALLY, the performance of Mae Moh power plant is evaluated from the plant heat rate. However, this factor does not indicate the suitability of plant operation. Therefore, the target heat rate which is the efficiently heat rate is selected as a factor for evaluating the plant performance. Thus, the actual plant heat rate should be closed to the target heat rate. The indicator for showing the variation of actual heat rate from the target heat rate is called the Station Thermal Efficiency Performance factor (STEP factor) which is the ratio of actual to target heat rates. Normally, the target heat rate was calculated when the power plant was commissioning. Since, at that time, the new equipments were installed and the performance of each equipment was extremely high. However, in case of Mae Moh power plant which having more than 20 years in operation, the deterioration of equipments is observed and it brings to get the increasing of heat consumption. Therefore, at present, the actual heat rate is far from that of the target and lower performance of power plant is obtained. This mean, the reference target heat rate is not suitable for current

situation. Thus, the modification of target heat rate is necessary for Mae Moh power plant. In this work, Mae Moh power plant unit 8, a 300 MW coal fired power plant, is selected as a case study for tunings the target heat rate. The result of this study aims to serve the requirement of power plant.

There are many research works deal with the power plant performance, for example, Uson et al. [1] studied the parameter affecting the plant performance and found the degradation of main equipment is the main parameter for the decreasing of plant performance. Omen et al. [2] and Arauzo et al. [3] reported the variation of plant performance with the specification of fuel. Kopac et al. [4] investigated the effect of ambient temperature on the power plant performance. From the previous literatures, it can be conclude that there are many parameters affecting the performance of power plant. The main parameter is the deterioration of equipment. Therefore, in this research, this parameter is focused and the new model of target plant heat rate is also reported.

II. RESEARCH METHODOLOGY

Fig. 1 shows the method for evaluating the STEP factor. It can be seen that the target heat rate actually can be calculated from 2 groups of correction factors which are the basic steam turbine heat consumption and the steam turbine exhaust pressure correction factors. Therefore, the shortest method for correcting the target heat rate is the improvement of all correction factors. In this work, the basic steam turbine heat consumption correction factor which is the main parameter affecting on the target heat rate is considered for improvement.

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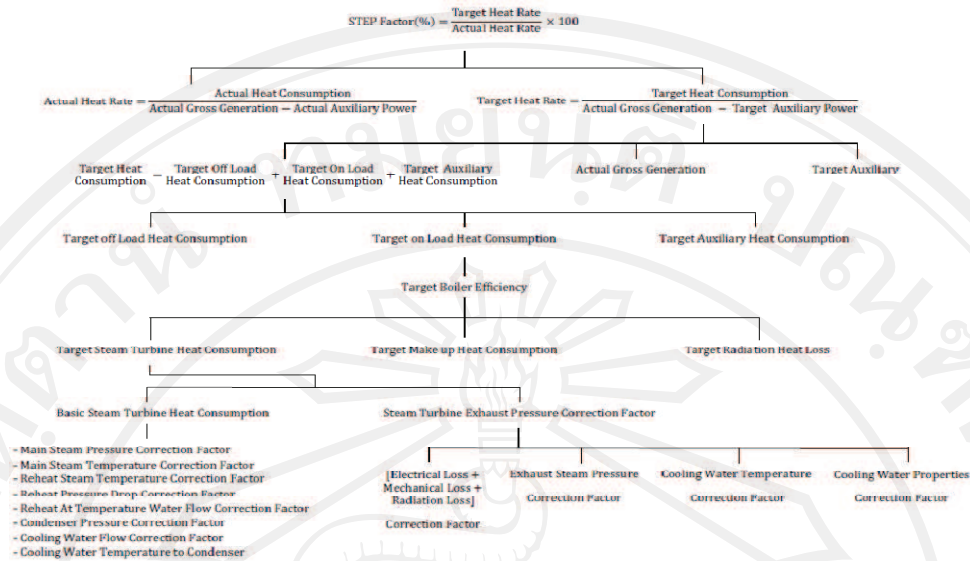


Fig. 1 Calculation diagram for STEP factor

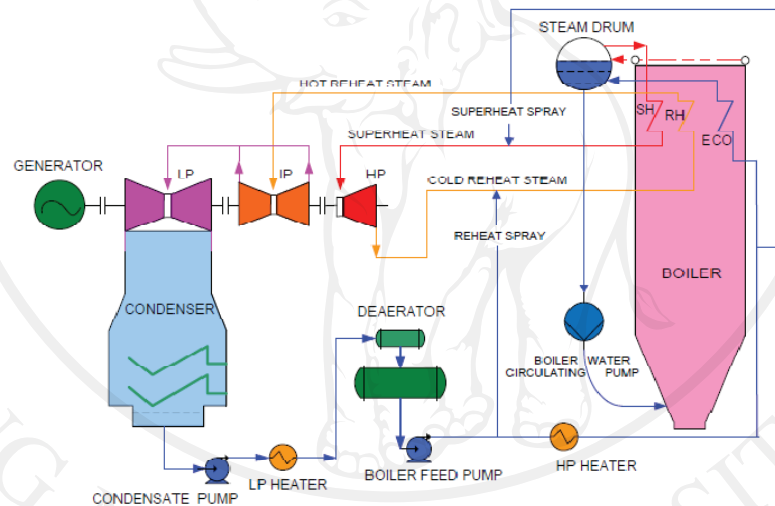


Fig. 2 Power plant cycle for 300 MW

To finding out the basic steam turbine heat consumption correction factor, the thermal efficiency of steam turbine has to be calculated by simulate the power plant cycle on the simulation program called the Gate Cycle & Cycle Link. The detail of plant cycle is shown in Fig. 2. The up-to-date operation data is filled in the program and then calculate the thermal efficiency. By vary the interested parameter from the rated value, the %change in thermal efficiency could be evaluated and then the correction factor could be calculated from

$$\text{Correction Factor} = 1 + \left(\frac{\% \text{Change in Thermal Efficiency}}{100} \right) \quad (1)$$

It should be notice that the correction factor is find out for 3 step loads which are 100%, 80% and 60% from the rated load (300 MW).

III. RESULTS AND DISCUSSION

To understanding the methodology for finding out the new correction factor, the cooling water flow to condenser correction factor is selected for describing the methodology. From the simulation program, the cooling water flow to condenser is varied from the rated value (8.5 m³/s) and then calculates the thermal efficiency of steam turbine. After that, the %change in thermal efficiency of steam turbine is evaluated by compared with that of rated value. Fig. 3 shows the %change in thermal efficiency of steam turbine at various cooling water flow to condenser. The correction factor can be calculated from (1) and the calculation result for 60%, 80% and 100% loads is shown in Fig. 4.

Following the description methodology, the correction factors for basic steam turbine heat consumption are shown in table I. Comparison with the correction factor from the

commissioning state shown in Fig. 5, it is found that the present correction factor differs from that of previous one.

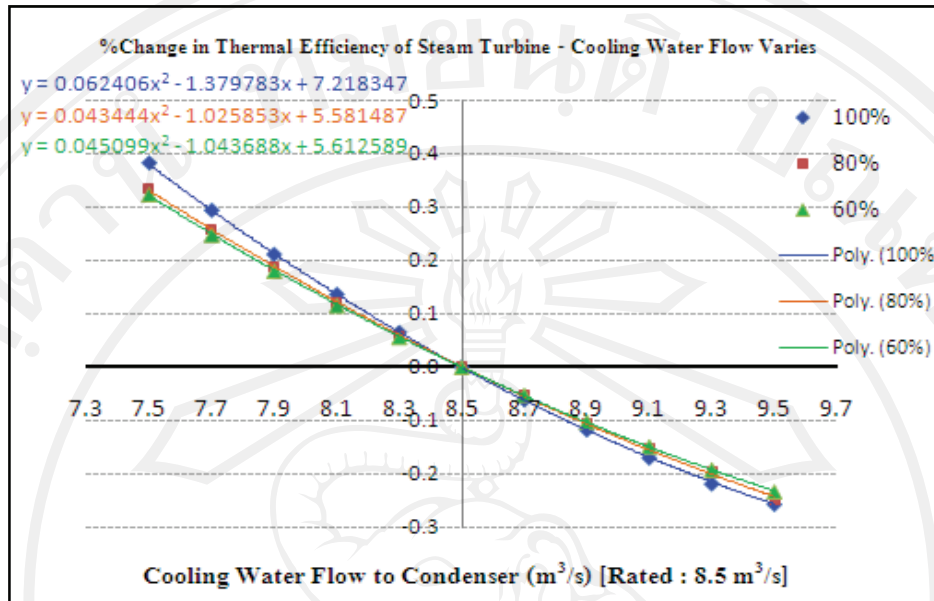


Fig. 3 The %change in thermal efficiency of steam turbine at various cooling water flow to condenser

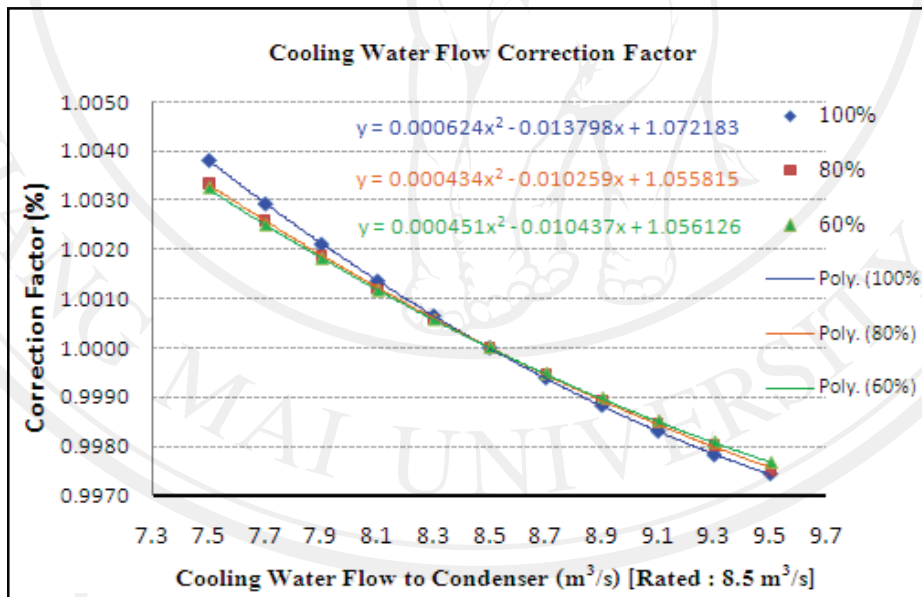


Fig. 4 Correction factor at various cooling water flow to condenser

TABLE I
CORRECTION FACTOR EQUATION

Parameter (x)	Correction Factor (y)		
	100% Load	80% Load	60% Load
1. Main Steam Pressure	$y = 0.000005x^2 - 0.002107x + 1.202801$	$y = 0.000006x^2 - 0.002364x + 1.217425$	$y = 0.000003x^2 - 0.001259x + 1.123961$
2. Main Steam Temperature	$y = 0.000001x^2 - 0.000819x + 1.293192$	$y = 0.000001x^2 - 0.000867x + 1.309874$	$y = 0.000000x^2 - 0.000639x + 1.248581$
3. Reheat Steam Temperature at Intercept valve	$y = 0.000000x^2 - 0.000353x + 1.183463$	$y = 0.000000x^2 - 0.000619x + 1.250200$	$y = -0.000000x^2 - 0.000143x + 1.127745$
4. Reheat Pressure Drop	$y = 0.000001x^2 + 0.000806x + 0.992615$	$y = 0.000008x^2 + 0.000656x + 0.993393$	$y = 0.000008x^2 + 0.000542x + 0.994408$
5. Reheat At temperature water flow	$y = 0.000644x + 0.999997$	$y = 0.000882x + 1.000000$	$y = 0.001072x + 0.999990$
6. Condenser Pressure	$y = 5.557859x^2 - 0.395348x + 0.997418$	$y = 6.146461x^2 - 0.159024x + 0.975645$	$y = 2.139689x^2 + 0.869947x + 0.919937$
7. Cooling Water Temperature to Condenser	$y = 0.000132x^2 - 0.005407x + 1.047972$	$y = 0.000155x^2 - 0.006092x + 1.049241$	$y = 0.000175x^2 - 0.006233x + 1.037889$
8. Cooling Water Flow to Condenser	$y = 0.000624x^2 - 0.013798x + 1.072183$	$y = 0.000434x^2 - 0.010259x + 1.055815$	$y = 0.000451x^2 - 0.010437x + 1.056126$

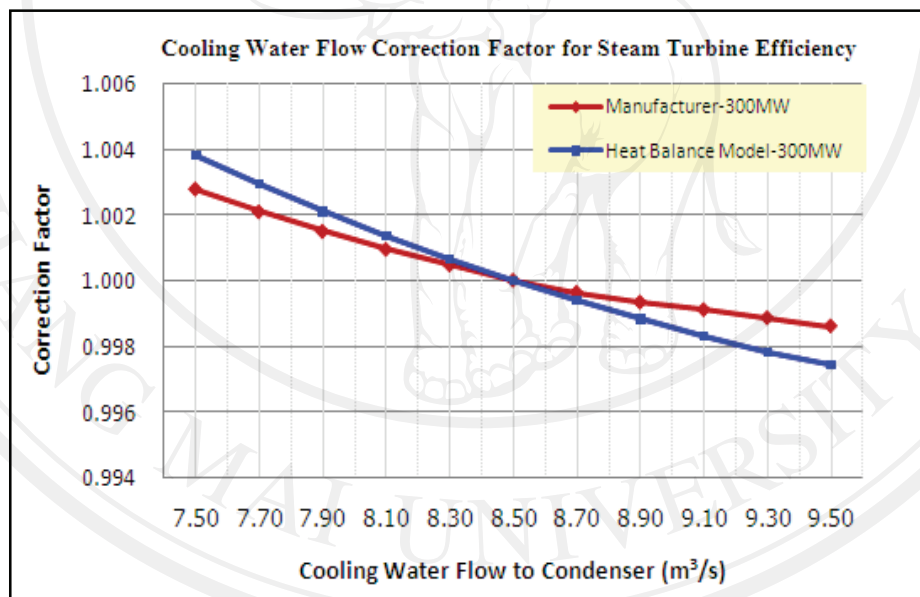


Fig. 5 Comparison of correction factor from commissioning state and present state

The validation of correction factor is done to find out the suitability for the power plant. The tested operation data from Mae Moh power plant unit 8 shown in table II is used for validation. It is found that the STEP factor calculated from the new correction factor is 100.13% with the standard deviation less than 0.44. Because of the new renovation of this power plant unit, therefore, this STEP factor value is acceptable for real application.

TABLE II
VALIDATION DATA FOR MAE MOH POWER PLANT UNIT 8

Measurement Value	Unit	Operating Condition		
		100%Load	80%Load	60%Load
$\dot{m}_{MS}$	kg/s	260.55	212.91	170.53
P_{MS}	Bar a.	161.00	159.09	151.98
T_{MS}	°C	535.24	521.89	496.81
P_{FW-in}	Bar a.	179.88	172.71	161.61
T_{FW-in}	°C	247.73	236.35	224.62
$\dot{m}_{RH}$	kg/s	219.53	180.10	145.69
P_{RH}	Bar a.	38.65	31.41	24.94
T_{RH}	°C	519.27	507.23	470.02
$P_{Cold-RH}$	Bar a.	41.32	33.45	26.63
$T_{Cold-RH}$	°C	333.11	317.33	286.63
$P_{RH-Spray}$	Bar a.	187.68	180.19	167.54
$T_{RH-Spray}$	°C	185.70	175.92	166.38
$\dot{m}_{BFP\ outlet}$	kg/s	247.99	199.86	154.72
$P_{sat-BFP\ inlet}$	Bar a.	10.87	8.85	7.08
$P_{BFP\ outlet}$	Bar a.	187.68	180.19	167.54
$T_{BFP\ outlet}$	°C	185.70	175.92	166.38

IV. CONCLUSION

Mae Moh power plant faces with the unacceptable of STEP factor calculated from the commissioning data because of the deterioration of power plant. The solution for this problem is to find out the new correction factor which matching with the status of power plant. From the research, it is found that the STEP factor calculated from the new correction factor is acceptable for a 300 MW Mae Moh power plant.

ACKNOWLEDGMENT

The author gratefully indebts the financial support provided by the Electricity Generating Authority of Thailand (EGAT) for carry out this study.

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ประวัติผู้เขียน

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นาง รุติพร สุภานี

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5 ธันวาคม 2525

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