

Daily System Generation Summary on Sunday

Sunday, June 30, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,432 MW
Distillate	0 MW
Total TNB	2,432 MW
Total IPP	14,963 MW
Total Co-Gen	0 MW
Total System	20,170 MW

Generation Mix

Type	MWh	Percentage
Hydro	4,646	1.40 %
Gas	33,693	10.16 %
Total TNB	38,339	11.56 %
ST-Coal	205,656	62.03 %
LSS	1,726	0.52 %
Gas	83,477	25.18 %
Total IPP	290,859	87.72 %
Co-Gen	1,575	0.48 %
Total Co-Gen	1,575	0.48 %
Total Generation	330,773	99.76 %
PLTG	-96	-0.03 %
HVDC	-698	-0.21 %
Interconnection	-794	-0.24 %
Net Energy	331,567	100.00 %

Maximum Demand Record

Date: 4/18/2019	18,566 MW
Date: 4/18/2019	391,845 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	21:30:00 Hour
Total Set On Bus	17,215 MW
TNB Generation	1,927 MW
IPP Generation	13,753 MW
Spinning Reserve	1,472 MW
Maximum Demand	15,766 MW
Net Energy	331,567 MWH
Load Factor	87.63 %

Fuel Cost

Total Cost:	59,919,911.76 RM
Cost per Unit	18.09 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	490
Hydro	211
Syncon	916
Thermal	237
Total	1,854

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	29
TJGS	208
Total TNB	237
NPRI	156
PGLA	105
PLPS	86
PTEK	5
SGRI	110
YPKA	43
Total IPP	504
Total Gas	741
Total Gas Required	741

Alternate Fuel Usage

Station	(mmscfd)
Total	0

Hourly System MW Generation

	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
System Total	15001	14528	13938	13427	13107	12877	12775	12418	11749	12390	12987	13458	13536	13550	13854	14129	14127	14136	13679	13916	15470	15685	15456	15498

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, July 09, 2019 2:42:45 PM

(Ir. Shanmugam Thoppalan)
Pengurus Besar Kanan
Jabatan Sistem Operasi

Daily MW Generation on Sunday

Station	Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300					
JMAH	U001	694	689	692	689	693	693	692	691	692	691	693	695	690	691	693	692	693	693	692	693	694	695	692	697	693	689	694	693	
JMAH	U002	695	694	693	692	695	692	695	695	695	694	697	695	695	693	694	690	579	583	584	583	576	581	600	584	582	583	581	584	584
JMHE	U002	508	510	504	509	508	507	507	508	508	507	508	508	510	508	509	505	509	506	509	506	507	510	508	632	721	762	764	760	759
JMJG	U001	672	672	673	671	675	667	672	671	677	673	666	671	671	671	672	671	669	677	670	671	672	668	667	672	672	670	671	665	673
JMJG	U004	982	978	980	979	980	980	981	905	815	788	787	787	785	787	786	787	789	789	787	788	786	786	901	905	905	903	903	906	905
JMJG	U005	975	974	977	977	976	975	977	851	779	781	779	781	781	778	780	779	781	780	777	782	777	781	891	903	897	899	899	898	900
PKLG	U003	287	286	282	284	283	282	282	284	210	244	277	279	283	267	182	135	148	155	239	281	282	283	286	279	282	281	282	284	284
PKLG	U005	468	473	470	470	472	471	465	471	470	471	470	469	471	464	382	308	273	279	371	452	470	470	472	471	466	469	469	465	459
PKLG	U006	471	470	470	468	470	471	472	471	471	470	471	472	470	471	470	468	470	471	470	471	468	470	472	472	470	470	471	469	470
TBIN	U001	691	691	691	690	689	690	691	691	690	691	691	691	694	690	690	691	689	692	690	691	691	691	690	690	691	690	687	688	688
TBIN	U002	694	690	692	694	689	693	692	691	692	700	694	693	692	689	693	692	691	694	695	687	690	692	695	690	690	692	693	694	696
TBIN	U003	694	693	691	692	690	690	694	689	691	692	691	692	695	695	690	691	690	693	695	693	690	692	692	693	691	693	693	690	692
TBIN	U004	980	987	982	985	979	980	982	944	856	802	804	804	807	806	806	804	802	808	806	804	803	804	894	903	904	903	902	902	903
Total ST-Coal		8811	8807	8797	8800	8799	8791	8802	8562	8246	8204	8228	8237	8244	8213	8042	7918	7899	7921	8101	8221	8217	8236	8551	8655	8542	8580	8580	8572	8565
Total ST-Oil		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total ST-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GLGR	GT02	108	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
GLGR	ST1C	46	40	39	39	39	40	40	39	39	39	40	39	40	40	40	40	39	39	39	39	39	39	39	39	39	39	39	39	39
NPRI	BLK1	507	515	505	515	515	515	514	517	515	515	515	515	515	514	515	448	343	490	511	502	510	512	495	496	498	501	503	509	502
NPRI	BLK2	510	516	507	520	517	518	517	518	515	516	515	517	517	516	512	437	346	490	482	521	512	511	496	500	500	505	503	511	504
PCGP	PGRG	594	600	591	609	602	601	602	603	604	605	601	601	597	600	603	586	603	605	611	591	602	603	585	576	575	589	590	603	589
PGLA	GT11	219	223	173	186	166	167	170	169	197	172	167	170	166	174	169	164	167	167	167	165	173	212	175	164	185	163	165	167	174
PGLA	GT12	224	227	178	190	171	172	176	175	202	179	171	176	171	179	172	168	173	173	173	169	178	219	180	169	189	169	169	171	178
PGLA	ST10	246	246	210	210	210	207	207	206	235	220	208	208	208	210	206	203	203	208	205	205	205	234	213	206	219	205	206	207	214
PLPS	GT11	133	116	113	115	115	126	128	141	142	141	142	128	125	127	128	124	130	129	124	123	115	115	121	111	70	70	71	116	131
PLPS	GT12	137	120	116	120	120	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLPS	GT13	130	111	109	111	112	0	0	0	0	0	0	0	0	0	0	0	0	0	65	120	111	119	109	108	110	109	111	122	128
PLPS	ST18	209	198	199	198	199	132	59	58	59	60	57	56	57	58	57	57	56	57	58	54	139	134	138	188	182	181	181	197	206
SGRI	GT11	109	114	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	GT12	110	113	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	GT13	110	109	106	110	110	107	111	130	131	131	131	107	105	106	105	106	106	105	105	105	105	105	105	105	105	105	105	105	105
SGRI	ST14	201	203	168	91	68	68	64	73	74	74	75	63	65	65	66	65	65	66	65	66	67	62	63	65	66	66	65	66	65
SGRI	GT21	107	114	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	GT22	113	116	141	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	GT23	109	114	142	110	110	110	110	142	142	142	142	110	109	110	109	109	107	111	109	107	107	107	111	111	110	113	113	113	139
SGRI	ST24	199	193	191	127	59	60	60	69	70	70	68	59	60	59	60	60	62	58	60	62	63	63	60	60	61	62	62	62	61
TJGS	GT1A	199	166	223	175	186	160	177	228	219	225	196	203	167	211	173	140	147	142	142	141	222	229	192	194	203	190	204	219	202
TJGS	GT1B	189	155	216	166	172	155	169	219	208	214	186	190	156	198	167	131	139	131	132	130	208	215	182	183	195	182	190	212	194
TJGS	ST1C	237	207	219	191	223	202	209	239	246	242	198	216	195	211	200	179	176	182	182	181	224	242	223	222	233	223	232	233	224
TJGS	GT2A	220	223	223	221	220	220	222	222	221	221	221	222	220	209	148	145	145	184	184	182	214	211	183	184	184	184	213	213	212
TJGS	GT2B	204	204	204	204	204	202	205	204	202	205	205	205	202	204	204	142	145	144	180	181	181	211	211	181	179	179	211	210	207
TJGS	ST2C	258	258	258	258	258	258	258	258	258	261	261																		

Daily MW Generation on Sunday

Station	Unit	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300		
Total OCGT-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	110	110	110	111	5
BSIA	HY02	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
CEND	HY01	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
CEND	HY03	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
HTRG	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
HTRG	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
KNRG	HY02	24	25	24	25	24	25	24	25	24	24	24	24	24	24	24	25	24	24	24	25	25	25	24	25	25	
KNYR	HY02	58	60	60	60	60	59	59	61	60	61	61	60	65	60	58	58	59	59	59	58	59	60	62	62	63	
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
LPIA	HY02	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
MNOR	HY01	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	21	21	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	0	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	0	
SIHY	HY03	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SYPS	HY01	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	0	
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	0	
SYPS	HY03	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TMGR	HY01	33	33	33	34	34	34	33	34	34	34	34	33	34	34	34	33	34	34	34	34	34	34	33	34	33	
TMGR	HY04	32	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
UJLI	HY01	0	0	0	14	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	93	-1	-1	-1	
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
UPIA	HY01	6	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Total Hydro		255	161	160	177	162	162	160	160	185	184	184	162	182	166	161	158	159	160	159	158	218	161	155	176	155	157
Total Distillate		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	7	6	14	15	19	21	23	24	25	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	8	12	16	15	29	37	40	38	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	11	22	21	21	21	33	33	33	33	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	11	15	26	22	32	31	33	36	43	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	11	12	16	23	33	40	25	28	39	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	13	14	14	24	50	50	48	49	56	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	12	11	14	21	34	32	21	20	
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	18	49	71	96	118	146	206	238	221	231	
PCUF	CUFG	38	39	37	37	39	39	38	39	37	38	37	38	36	36	34	35	35	35	34	35	33	34	33	33	34	
PCUF	CUFK	39	32	29	30	31	31	30	29	30	32	30	29	31	29	30	29	29	29	29	30	31	29	29	28	30	
Total Co-Gen		77	71	66	67	70	70	68	68	67	70	67	67	68	66	68	68	69	66	67	65	66	67	63	64	63	64
Total Gen		14951	14720	14505	14072	13886	13615	13376	13275	13053	12962	12850	12787	12705	12702	12419	11861	11706	12047	12361	12564	13003	13207	13412	13555	13431	
TIE-EGAT		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TIE-HVDC		-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-30	-30	-29	-29	-29	-29	-29	-29	-29	-29	-29	-28	-28	-29	-29	
TIE-PLTG		-15	-54	14	-50	-16	-7	-15	-17	-16	-11	8	-3	-33	31	39	43	-6	17	8	30	57	-21	4	34		
Interconnection		-44	-83	-16	-80	-45	-36	-44	-46	-46	-40	-20	-32	-63	1	9	13	-35	-12	-21	1	28	-49	-26	4		
System Total		15001	14810	14528	14159	13938	13658	13427	13328	13107	13009	12877	12826	12775	12709	12418	11856	11749	12065	12390	12575	12987	13272	13458	13576		
SRev ST-Coal		209	113	123	120	121	129	118	305	333	295	268	345	342	369	432	431	426	424	415	365	360	343	345	130		
SRev OCGT-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SRev CCGT-Gas		492	619	818	697	575	695	798	317	247	298	431	481	591	545	654	1087	1241	951	839	921	634	421	581	739		
SRev ST-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Daily MW Generation on Sunday

Station	Unit	0000		0100		0200		0300		0400		0500		0600		0700		0800		0900		1000		1100		1200		1300		1400		1500		1600		1700		1800		1900		2000		2100		2200		2300		
SRev LSS		2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	
SRev Co-Gen		-15	-9	-4	-5	-8	-8	-6	-6	-5	-8	-5	-5	-6	-4	-6	-6	-7	-4	-5	-3	-4	-5	-1	-2	-1	-2	-1	-4	0	-2	0	1	-1	-2	-2	-1	-2	-1	-3	-1	-1	-4	-1	-1	0	-3	-3	-3	
Syncon		842	928	928	928	1029	928	1115	1115	964	964	964	1115	964	1115	1115	1115	1115	1115	989	989	989	989	838	989	989	989	989	989	989	989	989	989	989	989	989	989	989	1055	1055	1055	1055	904	904	717	753	814	964	964	1115
Hydro		232	139	140	223	137	138	139	139	265	267	267	138	269	133	138	141	140	141	142	143	209	139	145	275	145	143	146	142	274	142	143	140	138	139	136	138	142	139	143	143	268	266	358	354	305	262	265	136	
S.Reserve Total		1762	1792	2007	1965	1856	1884	2166	1872	1804	1816	1925	2074	2160	2158	2333	2768	2915	2627	2506	2541	2188	1887	2059	1980	2112	2223	2192	1969	1881	1819	1886	1783	1786	1819	1792	2079	2496	2703	2577	2100	1680	1580	1580	1475	1678	1578	1664	2008	