

Daily System Generation Summary on Saturday

Saturday, November 24, 2018

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	1,831 MW
Hydro	2,454 MW
Distillate	0 MW
Total TNB	4,285 MW
Total IPP	17,112 MW
Total Co-Gen	0 MW
Total System	21,969 MW

Generation Mix

Type	MWh	Percentage
Gas	21,298	6.17 %
Hydro	9,997	2.89 %
Total TNB	31,295	9.06 %
ST-Coal	219,391	63.51 %
Gas	94,020	27.22 %
Total IPP	313,411	90.73 %
Co-Gen	1,447	0.42 %
Total Co-Gen	1,447	0.42 %
Total Generation	346,153	100.21 %
PLTG	-14	0.00 %
HVDC	731	0.21 %
Interconnection	717	0.21 %
Net Energy	345,436	100.00 %

Maximum Demand Record

Date: 8/15/2018	18,338 MW
Date: 8/15/2018	388,524 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	19:30:00 Hour
Total Set On Bus	17,425 MW
TNB Generation	2,230 MW
IPP Generation	13,846 MW
Spinning Reserve	1,291 MW
Maximum Demand	16,134 MW
Net Energy	345,436 MWH
Load Factor	89.21 %

Fuel Cost

Total Cost:	66,148,137.55 RM
Cost per Unit	19.68 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	372
Hydro	309
Syncon	906
Thermal	146
Total	1,733

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Cloudy	26

Gas Usage

Station	(mmscfd)
GLGR	51
TJGS	104
Total TNB	155
CBPS	53
KLPP	72
NPRI	152
PGLA	108
PLPS	63
SGRI	38
SKSP	48
YPKA	77
Total IPP	611
Total Gas	766
Total Gas Required	766

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	14784	14228	13807	13221	12902	12763	12700	12493	12483	13699	14548	15004	15048	14776	15092	15203	15281	15168	14801	15342	15999	15810	15418	15165

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, November 27, 2018 9:49:52 AM

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

Daily MW Generation on Saturday

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	691	694	693	692	692	689	691	693	693	692	694	692	693	691	693	692	696	691	694	692	691	693	692	693	694
JMAH	U002	693	693	692	694	692	692	694	693	695	695	692	696	693	695	693	692	695	695	694	692	692	696	694	694	693
JMJG	U001	669	668	671	673	671	673	672	670	671	671	672	672	671	680	672	672	671	671	671	668	672	670	672	672	671
JMJG	U002	672	671	672	672	671	522	439	443	444	470	587	671	672	670	673	672	671	671	671	671	674	673	676	673	670
JMJG	U003	663	664	663	662	665	663	662	663	664	664	663	664	665	663	666	662	665	662	662	664	661	663	661	664	662
JMJG	U004	977	903	854	810	811	809	808	810	810	785	785	782	783	785	783	782	815	901	959	959	961	962	962	961	963
JMJG	U005	983	981	906	785	780	774	774	781	777	780	779	782	782	778	782	777	782	782	782	829	963	960	967	966	960
PKLG	U003	281	279	282	281	279	279	278	279	278	280	284	283	282	282	281	247	203	279	281	284	280	283	282	282	282
PKLG	U004	279	278	279	278	278	274	267	264	267	267	270	274	275	274	277	231	206	273	277	277	278	281	280	280	279
PKLG	U006	469	470	468	471	472	471	470	468	470	468	470	468	471	469	470	467	469	470	469	472	472	474	474	473	476
TBIN	U001	689	688	686	686	689	689	688	687	687	688	688	690	689	684	685	692	687	688	689	689	689	689	689	689	689
TBIN	U002	693	691	688	691	691	691	693	691	694	692	690	693	693	691	686	692	693	691	693	690	691	693	692	692	691
TBIN	U003	692	692	690	689	690	689	692	690	690	692	690	689	688	689	692	692	693	690	689	693	691	691	693	689	690
TBIN	U004	954	954	906	818	803	804	802	802	803	804	804	802	801	802	804	801	802	803	805	802	856	943	953	951	950
Total ST-Coal		9405	9326	9150	8902	8884	8719	8630	8636	8641	8650	8768	8858	8855	8847	8788	8710	8850	8858	8862	8988	9313	9369	9371	9372	9369
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
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
CBPS	BLK2	361	362	359	358	361	362	356	359	362	354	223	224	224	226	215	219	221	358	363	360	359	357	357	364	354
GLGR	GT01	68	68	68	69	69	68	68	69	69	68	69	69	68	68	68	70	106	106	104	103	103	104	84	86	85
GLGR	GT02	68	68	68	69	69	68	68	68	68	68	69	69	68	68	68	69	106	105	105	105	104	105	85	85	85
GLGR	ST1C	70	70	70	70	70	71	71	71	71	71	71	70	71	70	70	90	92	92	92	92	92	82	82	81	83
KLPP	GT13	141	142	141	142	141	142	68	69	68	68	66	68	68	63	67	66	92	141	121	141	127	122	145	140	123
KLPP	GT14	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KLPP	GT15	150	150	153	153	153	152	120	76	76	75	79	75	76	75	75	76	129	147	128	150	133	133	150	148	131
KLPP	ST17	184	135	135	135	135	135	114	86	86	85	90	86	86	87	87	85	110	135	130	138	130	126	135	135	126
NPRI	BLK1	511	513	515	520	520	510	511	520	476	447	509	458	450	479	422	322	450	475	505	506	508	506	510	506	501
NPRI	BLK2	512	517	517	522	522	513	515	522	471	435	511	449	459	479	421	319	398	474	509	520	511	509	511	511	503
PCGP	PGRG	396	399	398	403	402	397	399	402	266	261	266	266	265	267	255	261	264	262	401	401	400	399	406	401	396
PGLA	GT11	231	233	234	216	208	191	192	170	168	166	171	168	169	169	164	166	167	167	202	194	210	200	205	211	208
PGLA	GT12	231	233	236	219	212	193	194	172	170	170	171	170	171	166	168	170	169	205	195	211	201	207	212	208	193
PGLA	ST10	255	256	255	231	226	219	221	205	210	205	207	205	205	207	205	207	221	226	238	232	234	241	234	229	225
PLPS	GT11	124	126	129	129	129	129	127	129	129	125	128	129	129	130	124	123	128	120	127	133	137	133	135	136	132
PLPS	GT12	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	142	144	142	142	145	141	142	
PLPS	ST18	130	86	60	59	59	59	57	59	59	58	58	58	58	59	57	58	59	57	145	146	145	146	146	146	145
SGRI	GT21	65	65	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	113	113	108	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	137	142	140	140	140	140
SGRI	ST24	117	116	65	63	62	63	63	63	63	63	64	59	60	60	63	63	62	62	65	62	68	70	73	70	70
SKSP	BLK1	216	219	231	231	224	219	217	216	218	218	220	218	225	222	217	219	218	218	229	220	344	229	219	316	265
TJGS	GT1A	187	190	230	229	233	223	214	210	222	198	142	138	140	137	134	137	135	150	204	196	226	201	194	222	225
TJGS	GT1B	183	184	216	210	216	210	204	205	209	189	129	131	130	133	126	126	132	142	190	187	220	197	182	212	214
TJGS	ST1C	232	226	245	244	236	229	232	229	241	229	177	177	173	173	173	178	199	221	220	249	242	226	246	246	246
YPKA	GT11	131	131	131	133	132	124	65	66	65	66	65	66	65	66	66	66	65	124	124	124	129	129	127	127	129
YPKA	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	129	128	131	130	130	129	130
YPKA	ST10	56	56	57	57	56	56	32	32	32	32	32	32	32	32	32	32	32	52	53	109	124	126	126	125	126
YPKA	GT21	134	135	138	137	65	65	66	66	66	66	66	66	66	66	66	66	66	66	125	125	125	125	125	129	128
YPKA	ST20	64	64	65	64	43	37	37	38	38	38	38	38	38	38	38	38	38	60	61	61	61	62	39	39	
Total CCGT-Gas		5075	4857	4824	4772	4652	4543	4319	4211	4012	3864	3735	3599	3609	3658	3486	3303	3532	3911	4510	4858	5218	5144	5135	5381	5277

Daily MW Generation on Saturday

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	0	0	0	0	
BSIA	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	22	22	23	22	
BSIA	HY02	24	24	24	24	23	24	24	23	23	23	23	23	23	23	23	23	23	23	23	23	22	22	22	23	
BSIA	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	23	23	23	
CEND	HY01	6	6	6	6	6	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
CEND	HY02	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	0	0	0	0	
CEND	HY03	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
CEND	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	7	
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	
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	
KNRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	36	36	36	36	
KNRG	HY02	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	37	37	37	37	
KNRG	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	36	36	37	37	
KNYR	HY01	59	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	94	95	94	94	59	
KNYR	HY02	59	57	58	59	58	58	58	57	58	59	59	60	57	56	60	58	59	57	64	59	85	60	59	69	
KNYR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	96	95	95	0	
KNYR	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	95	95	95	0	
LPIA	HY01	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	
LPIA	HY02	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
MNOR	HY01	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	5	5	5	5	6	6	5	5	
PGAU	HY01	-1	-1	22	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	21	21	21	20	-1	-1	-1	
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	22	-1	-1	-1	-1	-1	-1	21	21	21	21	21	-1	-1	-1	-1	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	51	51	51	51	51	51	51	0	
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	31	31	31	51	
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	0	
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	0	
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	0	
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	0	
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	62	80	80	33	-1	
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	66	85	84	85	36	
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	0	0	0	0	0	0	32	80	32	
TMGR	HY04	33	33	34	34	34	34	34	34	33	34	34	34	34	32	33	34	34	34	34	34	34	34	34	33	
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	92	113	90	-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	
UPIA	HY01	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
UPIA	HY02	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Total Hydro		274	213	237	214	212	213	213	212	212	234	213	213	214	214	207	185	191	188	210	210	223	274	338	354	269
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	
PCUF	CUFG	26	26	26	27	26	28	26	28	27	28	28	28	27	26	24	23	25	23	24	23	23	24	24	25	
PCUF	CUFK	36	36	36	36	37	37	36	37	37	37	38	36	37	36	39	38	37	38	39	36	36	33	32	31	
Total Co-Gen		62	62	62	63	63	65	62	65	64	65	66	64	66	64	69	66	65	65	60	59	61	56	56	54	
Total Gen		14816	14458	14273	13951	13811	13540	13224	13124	12929	12813	12782	12734	12745	12793	12604	12345	12499	13014	13643	13995	14489	14790	14903	15162	
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	
TIE-HVDC		30	31	31	30	30	30	30	31	31	31	31	31	31	31	30	30	30	30	30	31	31	30	30	31	
TIE-PLTG		2	-3	14	17	-26	47	-27	-6	-4	-12	-12	29	15	-11	80	17	-8	17	-53	-25	-49	-20	-62	0	
Interconnection		32	28	45	47	4	78	3	25	27	18	19	60	45	21	111	48	23	47	-23	5	-19	10	-31	29	
System Total		14784	14430	14228	13904	13807	13462	13221	13099	12902	12795	12763	12674	12700	12772	12493	12299	12483	12985	13699	14018	14548	14824	15004	15203	

Daily MW Generation on Saturday

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 ST-Coal		206	279	406	410	392	467	422	417	411	382	259	411	413	416	417	451	461	422	103	99	410	108	102	100	99	102	106	100	104	107	136	103	110	143	153	156	146	151	208	210	204	220	217	202	200	224	241	221
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	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		855	558	375	427	547	656	880	988	1187	1335	1464	1600	1590	1541	1713	1896	1667	1288	759	557	327	466	475	229	333	592	552	440	360	197	228	213	266	153	290	402	508	713	432	174	312	270	251	249	378	229	331	382
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SRev 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SRev Co-Gen		1	1	1	0	0	-2	1	-2	-1	-2	-3	-1	-1	-3	-1	-6	-3	-2	-2	-2	3	4	2	7	7	9	10	8	7	8	9	7	6	7	6	8	6	6	4	5	5	4	5	4	4	4	0	2
Syncon		1099	1200	1049	1200	1200	1200	1200	1200	1200	1049	1200	1200	1200	1200	1200	1200	1200	1200	1285	1200	1200	963	812	911	911	1200	1049	963	812	812	812	711	711	812	1049	1200	1200	1029	439	439	439	777	777	862	1013	1013	1013	
Hydro		163	123	250	122	124	123	123	124	124	253	123	123	122	122	129	151	145	148	126	125	163	194	367	402	304	304	113	245	299	412	401	412	462	424	450	298	176	178	142	464	435	551	270	297	307	145	183	210
S.Reserve Total		2324	2161	2081	2159	2263	2444	2626	2727	2921	3017	3043	3333	3324	3276	3458	3692	3470	3056	2186	2064	2103	1972	1909	1550	1654	1918	1981	1842	1733	1536	1586	1547	1555	1438	1711	1913	2036	2248	1815	1292	1395	1484	1520	1529	1751	1615	1768	1828