

Daily System Generation Summary on Tuesday

Tuesday, November 13, 2018

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	2,094 MW
Hydro	2,454 MW
Distillate	0 MW
Total TNB	4,548 MW
Total IPP	17,106 MW
Total Co-Gen	63 MW
Total System	22,289 MW

Generation Mix

Type	MWh	Percentage
Gas	20,320	5.63 %
Hydro	12,172	3.37 %
Total TNB	32,492	9.00 %
ST-Coal	225,444	62.45 %
Gas	101,239	28.05 %
Total IPP	326,683	90.50 %
Co-Gen	832	0.23 %
Total Co-Gen	832	0.23 %
Total Generation	360,007	99.73 %
PLTG	-274	-0.08 %
HVDC	-698	-0.19 %
Interconnection	-972	-0.27 %
Net Energy	360,979	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:	14:30:00 Hour
Total Set On Bus	18,390 MW
TNB Generation	1,893 MW
IPP Generation	14,985 MW
Spinning Reserve	1,476 MW
Maximum Demand	17,024 MW
Net Energy	360,979 MWH
Load Factor	88.35 %

Fuel Cost

Total Cost:	69,062,520.69 RM
Cost per Unit	19.85 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	451
Hydro	222
Syncon	929
Thermal	158
Total	1,760

Time Weather Temperature

Afternoon	Rainy	32
Morning	Sunny	24

Gas Usage

Station	(mmscfd)
GLGR	49
TJGS	99
Total TNB	149
KLPP	95
MPSS	34
NPRI	147
PGLA	94
PLPS	83
SGB3	71
SKSP	46
YPKA	76
Total IPP	646
Total Gas	794
Total Gas Required	794

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	14292	13746	13279	12989	12615	12555	12778	12860	13434	15160	16127	16757	16651	16378	16790	16878	16874	16502	15611	16026	16251	15988	15473	15081

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, November 27, 2018 9:41:36 AM

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

Daily MW Generation on Tuesday

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	693	690	694	693	692	693	692	693	693	694	692	690	693	691	694	692	693	692	693	689	691	692	693	692	694	693	692	695	692																				
JMAH	U002	695	693	692	692	695	692	694	692	695	696	694	695	694	694	695	694	694	693	692	694	694	695	694	695	693	694	693	697	695	692																			
JMJG	U001	671	674	643	598	685	671	672	672	672	668	672	673	671	667	670	674	667	677	672	668	672	672	671	677	557	548	547	548	645	678																			
JMJG	U002	672	673	671	671	672	673	669	671	667	672	678	666	676	666	674	671	676	670	671	682	677	669	672	671	672	668	679	678	673	672	678																		
JMJG	U003	662	664	664	662	665	666	662	664	664	662	663	664	662	666	664	662	666	662	662	662	666	662	666	662	662	662	662	663	662	666	667																		
JMJG	U004	985	976	891	801	782	780	785	782	783	782	783	785	788	785	785	792	879	964	977	977	977	976	977	977	977	977	977	977	979	977	977																		
JMJG	U005	929	796	775	778	782	779	781	779	779	780	782	782	781	781	779	783	804	920	983	983	985	979	981	982	978	981	979	980	982	983	981																		
PKLG	U004	283	283	281	283	280	280	280	280	277	281	280	280	281	280	280	280	282	283	280	282	279	281	281	280	279	280	279	279	280	280	280	280																	
PKLG	U005	468	468	469	469	466	467	471	475	470	468	468	469	470	470	469	468	464	462	462	425	429	424	425	424	422	424	425	424	448	454	464	464																	
PKLG	U006	472	469	472	468	470	470	469	468	468	470	468	470	473	471	467	470	472	468	470	469	468	472	469	470	470	470	471	468	474	470	471	469																	
TBIN	U001	690	690	689	692	690	689	690	689	690	685	688	690	687	689	689	691	690	686	686	688	690	689	689	691	689	689	690	691	685	688	689	688																	
TBIN	U002	693	689	690	687	691	690	689	690	691	692	689	693	690	691	691	691	693	689	693	690	694	691	689	690	692	691	689	691	691	691	690																		
TBIN	U003	692	690	690	693	689	690	688	691	691	690	692	691	691	691	691	691	692	687	691	693	692	689	691	693	692	690	691	689	690	692	689																		
TBIN	U004	952	950	951	899	810	801	803	802	801	802	803	801	803	803	802	802	829	919	950	952	952	953	952	952	952	951	952	953	952	951	952	954																	
Total ST-Coal		9557	9405	9272	9086	9069	9041	9045	9048	9041	9042	9055	9051	9056	9046	9053	9056	9112	9390	9570	9562	9575	9540	9553	9555	9536	9551	9537	9551	9550	9528	9578	9575	9580	9565	9573	9591	9453	9457	9457	9456	9448	9572	9597	9590	9594	9604	9580	9591	
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GLGR	GT01	69	68	68	68	68	68	69	69	68	68	69	68	69	67	68	90	105	104	103	104	104	103	103	105	104	105	103	103	102	87	68	68	68	67	68	67	70	68	67	67	69	68	68						
GLGR	GT02	69	69	69	69	69	69	69	69	70	69	69	70	69	69	69	68	91	105	104	104	104	104	104	104	104	104	104	104	105	105	88	69	69	69	69	69	69	69	69	69	70	69	69	69	69	69			
GLGR	ST1C	70	70	70	70	70	70	70	70	70	71	70	70	70	70	70	79	92	92	92	92	92	93	92	92	93	92	93	92	93	87	70	70	70	70	69	70	70	70	70	70	70	70	70	70	70	70	70		
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	126	115	117	121	143	141	141	141	139	132	141	140	142	138	139	138	142	134	122	117	118	147	147	147	145	148	147	147	147	147	147	147	147	
KLPP	GT14	148	114	113	110	102	75	78	75	76	76	76	82	80	79	76	75	136	149	125	127	134	153	152	152	150	150	142	153	150	152	148	150	148	154	146	134	127	128	156	154	153	153	153	153	153	153	153	153	
KLPP	GT15	143	112	109	108	92	69	68	69	67	67	69	71	69	70	69	70	131	147	122	122	133	149	148	149	149	146	139	148	147	147	146	145	145	154	142	131	124	121	124	125	154	155	154	152	152	153	155	151	151
KLPP	ST17	130	114	113	113	106	86	82	82	83	83	81	81	82	86	74	86	118	190	190	189	193	201	204	201	201	201	197	197	201	201	197	201	197	197	197	193	192	188	200	209	205	208	206	203	206	206	206	206	206
MPSS	GT01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	85	105	104	104	104	103	104	104	104	103	104	105	107	92	68	69	71	98	110	107	18	0	0	0	0	0	0	0	0	0		
MPSS	GT02	0	0	0	0	0	0	0	0	0	0	0	16	33	43	72	80	83	98	109	108	107	102	87	107	107	107	106	105	105	105	105	105	105	107	107	107	70	71	71	98	106	105	108	109	109	89	89	90	90
MPSS	ST01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	51	52	52	46	54	113	114	114	114	114	113	113	113	113	113	114	112	66	66	65	89	112	112	57	51	51	40	38	38	38	
NPRI	BLK1	516	521	519	521	478	494	426	398	329	322	325	361	413	508	463	371	344	318	487	505	506	509	506	508	509	505	504	511	505	503	509	505	509	503	503	506	511	515	508	508	503	511	501	499	509	507	506	506	
NPRI	BLK2	518	523	524	524	476	504	427	406	328	316	325	357	410	516	464	370	344	316	479	505	506	510	508	510	512	509	506	509	508	514	506	510	508	511	505	503	507	513	518	512	509	503	514	502	500	501	510	511	511
PCGP	PGRG	572	577	578	576	568	577	577	455	453	447	455	462	449	457	456	458	577	607	612	617	617	618	619	616	621	614	615	621	619	622	616	621	618	624	617	613	616	622	621	624	613	625	610	608	616	618	578	578	
PGLA	GT11	209	148	0	0	0	0	0	0	0	0	0	0	0	0	104	145	234	217	217	191	215	224	225	226	225	223	225	225	225	224	224	224	227	212	215	198													

Daily MW Generation on Tuesday

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			
YPKA	ST10		54	34	33	34	33	34	34	34	34	34	34	33	33	33	33	33	33	33	33	33	33	33	123	123	124	124	124	124	125	125	126	126	124	124	124	125	124	124	124	102	124	127	128	127	128	127	100	58	57	58
YPKA	GT21		86	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	123	66	66	124	125	125	124	124	124	124	124	124	124	124	124	124	125	124	124	124	66	133	132	134	135	133	135	133	135	133		
YPKA	ST20		51	38	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	59	40	39	58	60	60	60	59	61	60	60	61	60	60	61	60	60	60	60	39	61	62	63	63	63	63	64	63	64	65		
Total CCGT-Gas			4273	4119	3944	3872	3752	3577	3443	3237	3109	3043	3050	3207	3307	3576	3423	3393	3958	4658	5035	5405	5774	6077	6240	6315	6269	6211	6121	6234	6307	6440	6247	6277	6320	6391	6261	6011	5683	5600	6125	6257	6199	6069	5794	5631	5505	5390	5210	4799		
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
BSIA	HY02		23	23	23	23	23	23	23	23	23	23	23	23	13	13	13	13	13	13	13	13	13	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	12	12	12	12	12					
CEND	HY01		8	8	8	8	9	8	8	9	8	8	8	8	9	9	8	9	8	8	8	8	8	8	8	9	9	8	8	8	8	9	9	8	8	8	8	9	8	8	9	8	8	9	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	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8						
CEND	HY04		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6						
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	-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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1						
KNRG	HY02		25	26	25	25	25	25	26	25	25	25	25	25	26	25	25</																																			

Daily MW Generation on Tuesday

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 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	0
SRev CCGT-Gas		940	1094	1269	980	1100	1275	1409	1615	1608	1674	1667	1616	1516	1247	1400	1660	1125	1041	1083	864	525	309	328	329	375	463	553	410	337	204	397	367	324	253	383	633	961	1044	519	387	445	575	507	421	547	467	647	1013
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	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	0
SRev Co-Gen		34	30	31	29	31	27	28	28	27	30	30	29	27	24	26	28	28	29	29	27	26	28	30	30	29	28	29	27	29	27	29	30	32	30	30	31	29	27	28	28	29	26	24	27	27	25	27	26
Syncon		1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1049	1049	1200	1200	1200	1200	1099	912	912	640	741	1013	1200	1200	1200	1013	675	573	573	760	760	1049	1049	1049	1200	1200	1099	1099	1200	1200	1200	1049	1200	1200	1200
Hydro		167	140	136	168	166	166	162	166	167	171	168	127	129	260	282	182	182	148	105	93	182	161	311	279	193	139	146	86	133	350	364	376	275	271	168	179	222	94	90	204	280	199	121	123	235	136	136	137
S.Reserve Total		2578	2749	3015	2667	2482	2771	2898	3105	3105	3177	3154	3065	2960	2678	2848	3158	2567	2464	2283	2169	1818	1618	1474	1522	1772	2027	2139	1921	1710	1476	1533	1519	1584	1522	1830	2074	2441	2541	2013	1895	2038	2061	2049	1975	2058	2018	2229	2584