

## Daily System Generation Summary on Sunday

Sunday, March 13, 2016

### Availability at Daily Maximum Demand Hour

ST-Coal	2,950 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	5,504 MW
Hydro	1,710 MW
Distillate	0 MW
<b>Total TNB</b>	<b>10,164 MW</b>
<b>Total IPP</b>	<b>9,411 MW</b>
<b>Total Co-Gen</b>	<b>0 MW</b>
<b>Total System</b>	<b>19,857 MW</b>

### Maximum Demand Record

Date: 3/9/2016	17,175 MW
Date: 3/10/2016	359,307 MWH

### Gas Usage

Station	(mmscfd)
CBPS	51
GLGR	57
NPRI	146
PAKA	5
PGPS	26
TJGS	213
<b>Total TNB</b>	<b>499</b>
KLPP	81
MPSS	2
PDPS	9
PGLA	109
PLPS	57
SGRI	53
<b>Total IPP</b>	<b>311</b>
<b>Total Gas</b>	<b>810</b>

### Alternate Fuel Usage

Station	(mmscfd)
<b>Total</b>	<b>0</b>

### Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	21:00:00 Hour
Total Set On Bus	15,232 MW
TNB Generation	6,140 MW
IPP Generation	8,066 MW
Spinning Reserve	983 MW
Maximum Demand	14,342 MW
Net Energy	308,722 MWH
Load Factor	89.69 %

### Generation Mix

Type	MWh	Percentage
ST-Coal	64,988	21.05 %
Gas	71,258	23.08 %
Hydro	5,053	1.64 %
<b>Total TNB</b>	<b>141,299</b>	<b>45.77 %</b>
ST-Coal	125,840	40.76 %
Gas	39,826	12.90 %
<b>Total IPP</b>	<b>165,666</b>	<b>53.66 %</b>
Co-Gen	1,072	0.35 %
<b>Total Co-Gen</b>	<b>1,072</b>	<b>0.35 %</b>
<b>Total Generation</b>	<b>308,037</b>	<b>99.78 %</b>
PLTG	24	0.01 %
EGAT	-5	0.00 %
HVDC	-704	-0.23 %
<b>Interconnection</b>	<b>-685</b>	<b>-0.22 %</b>
<b>Net Energy</b>	<b>308,722</b>	<b>100.00 %</b>

### Fuel Cost

Total Cost:	38,639,711.15 RM
Cost per Unit	12.75 cents/kWH

### Average Spinning Reserve During Peak Hour

Type	MW
GT	325
Hydro	143
Syncon	642
Thermal	138
<b>Total</b>	<b>1,248</b>

**Total Gas Required 810**

### Time Weather Temperature

Afternoon	Hot	35
Morning	Sunny	27

### 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	14057	13510	13007	12612	12280	12018	11872	11564	10977	11414	12073	12687	12741	12721	13090	13243	13340	13090	12653	12863	14212	14342	14189	14087

Prepared By: Siti Nurhamizatul Aini

Checked By: -Select Name-

Printed on: Monday, March 14, 2016 5:47:14 AM

(Gurcharan Singh)  
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	700	693	692	700	696	698	696	698	698	696	697	699	699	696	673	666	681	699	692	704	696	694	697	677	348	351	349	352	349	353	350	351	350	353	353	353	353	349	352	351	351	353								
JMAH	U002	700	698	701	704	705	701	704	705	704	701	703	704	701	677	669	708	705	703	703	705	703	703	707	703	703	704	706	698	705	704	706	705	704	706	705	706	707	705	705	704	704	706								
JMIG	U001	679	691	681	681	678	689	645	667	530	425	415	414	416	415	507	651	666	667	624	629	629	628	629	624	632	636	629	656	651	685	651	661	674	678	679	680	674	679	677	677	678	681	680	681	679	671	679	678		
JMIG	U002	686	688	677	679	678	687	683	677	683	679	679	678	678	678	680	641	610	654	624	624	629	623	624	626	630	629	625	652	649	679	651	660	676	678	651	640	645	642	643	634	644	644	641	643	648	644	645	643		
JMIG	U003	673	686	677	676	677	675	671	672	677	676	674	673	672	678	678	660	659	662	618	620	620	621	617	629	591	589	594	591	588	593	593	589	587	592	589	598	590	590	592	593	596	588	590	591	588	591	609	659		
JMIG	U004	854	854	820	785	783	783	785	783	785	785	781	781	785	783	785	785	785	785	785	785	785	782	786	785	783	783	783	787	785	787	787	785	783	788	788	786	786	786	785	782	782	786	783	782	807	858	857	856	855	
PKLG	U003	283	284	282	281	279	280	284	285	284	279	282	282	282	285	282	282	278	275	282	278	281	281	276	280	282	287	281	285	279	279	279	279	283	281	281	277	279	273	281	275	283	285	283	281	285	285	281	283		
PKLG	U004	0	24	27	29	47	66	62	70	66	74	76	78	86	96	116	118	123	127	144	146	192	136	143	183	205	242	254	282	277	279	277	277	281	285	277	285	281	279	281	281	277	276	278	280	282	280	280			
PKLG	U005	224	233	269	271	315	355	372	422	452	465	428	424	424	424	424	424	424	427	424	424	424	424	424	423	423	427	427	434	441	445	447	447	434	433	435	434	434	434	434	447	461	458	454	454	447	447				
PKLG	U006	468	468	469	469	469	469	472	472	469	469	472	469	466	470	466	472	469	469	469	469	469	469	472	469	469	472	469	469	472	469	472	469	472	469	469	469	469	469	472	469	469	469	469	469	469	469	469			
TBIN	U001	699	700	696	699	697	698	697	698	697	696	698	697	696	672	660	703	698	696	698	698	695	698	696	696	696	698	696	700	697	697	698	696	696	697	697	700	698	696	696	697	697	698	691	696	697	695				
TBIN	U002	700	699	700	703	699	700	701	699	699	700	700	703	701	699	677	674	702	701	699	703	699	700	703	703	700	704	700	701	699	700	698	701	699	700	700	703	694	702	700	701	700	697	697	698	699	700	700			
TBIN	U003	699	699	702	700	700	699	702	703	698	700	704	701	701	700	673	666	700	698	700	698	699	699	699	697	699	701	698	699	700	696	696	700	697	697	701	702	693	698	699	697	699	699	697	698	702	699	698			
TBIN	U004	631	486	406	403	401	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402			
Total ST-Coal		7996	7903	7799	7780	7824	7903	7871	7953	7853	7751	7703	7702	7718	7729	7836	7801	7754	7962	7873	7866	7934	7866	7863	7920	7920	7921	7923	8005	7992	8072	8005	8012	7947	8046	8028	8018	8025	7984	8051	8101	8125	8130	8135	8156	8207	8207	8225	8267		
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	0
CBPS	BLK2	377	377	376	377	378	377	377	378	203	199	205	199	200	200	201	199	200	199	289	377	373	370	373	369	371	368	368	368	367	360	366	364	366	367	369	290	289	291	291	375	375	375	375	374	376	376	376	376		
GLGR	GT01	107	107	106	107	106	107	105	107	107	106	108	106	107	105	76	68	68	68	67	68	81	106	106	105	102	101	100	94	96	96	95	96	95	96	97	99	96	99	100	102	102	102	103	103	106	105	106	106		
GLGR	GT02	106	106	106	106	107	107	106	106	106	107	107	107	106	75	68	68	68	68	68	81	106	104	104	103	101	101	96	96	96	96	96	97	96	97	98	98	99	100	102	103	103	105	104	104	105	104				
GLGR	ST1C	98	98	98	98	98	97	97	98	98	98	98	98	82	71	71	71	71	71	71	70	75	96	97	97	95	95	93	91	89	88	88	88	88	88	89	89	89	90	93	94	94	96	97	97	97	97				
KLPP	GT13	138	137	139	138	136	128	103	62	62	61	63	63	63	57	62	58	63	69	63	71	101	100	105	105	130	120	103	134	135	136	140	141	139	127	102	101	96	107	106	104	138	141	142	141	134	120	137			
KLPP	GT14	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	43	43	148	148	154	119	119	116	116	143	143	158	158	158	158	149	0				
KLPP	GT15	151	151	151	152	152	150	150	115	77	74	73	71	76	72	74	77	73	79	83	79	84	113	119	126	119	144	139	120	149	149	149	152	152	152	140	120	118	110	123	123	118	157	153	153	153	152	135	150		
KLPP	ST17	131	131	131	132	132	131	131	118	85	81	81	84	85	81	81	81	77	85	89	89	89	109	117	121	121	129	125	119	131	130	188	203	208	208	203	183	179	179	183	183	183	203	207	208	208	203	199	179		
MPSS	GT02	107	107	108	55	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			
MPSS	ST01	51	52	52	23	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			
NPRI	BLK1	507	529	522	520	442	528	428	354	446	389	400	329	335	331	331	329	330	331	337	329	448	400	511	532	532	531	527	525	523	522	523	523	522	520	521	497	443	448	400	523	525	527	524	529	532	407	433	434		
NPRI	BLK2	535	534	533	533	534	449	443	419	428	421	412	358	328	326	328	327	327	328	334	327	374	412	470	532	535	535	528	526	523	523	524	525	523	523	523	499	447	451	401	525	527	531	529	532	533	531	532	533		
PAKA	GT1A	80	81	80	82	61	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			
PAKA	GT1B	92	92	92	92	61	17	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			
PAKA	ST1C	77	77	76	76	70	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		
PGLA	GT11	228	226																																																

### 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																										
TJGS	GT1B	214	217	217	218	219	219	208	212	216	214	207	208	183	189	98	101	101	101	169	155	211	214	214	218	218	215	218	215	218	217	217	217	185	190	152	152	116	172	219	216	219	219	219	218	217	215				
TJGS	ST1C	252	252	252	249	252	252	245	252	248	251	236	235	226	219	150	147	147	147	161	189	239	251	251	251	251	251	251	251	251	248	222	194	194	167	191	249	253	253	253	253	253	246	241							
TJGS	GT2A	213	216	216	216	217	217	216	207	217	215	190	209	189	187	137	137	137	136	136	214	209	209	211	214	214	211	214	211	211	211	186	138	144	144	200	211	211	213	215	215	215	215	215	213						
TJGS	GT2B	211	215	215	216	216	217	216	204	217	214	210	188	204	184	182	132	132	133	132	132	212	212	210	210	213	213	210	212	210	213	213	213	210	210	182	136	139	139	192	211	213	213	213	213	213	213				
TJGS	ST2C	264	261	261	261	261	261	255	259	261	261	241	254	243	240	213	213	213	213	213	213	262	262	262	262	262	262	262	262	262	262	262	261	261	244	227	218	218	240	262	262	262	262	262	262	262					
Total CCGT-Gas		5771	5539	5413	5218	4900	4671	4518	4265	4161	4071	4074	3865	3898	3715	3566	3107	3050	3118	3281	3611	3801	4253	4524	4471	4461	4579	4462	4595	4719	4706	4769	4800	4860	4927	4708	4457	4274	4430	4476	5214	5641	5790	5876	5889	5746	5669	5617	5307		
PDPs	GT01	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		
PDPs	GT02	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	
PDPs	GT03	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 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	0	0
BSIA	HY02	21	22	12	12	12	12	12	11	11	11	11	12	12	11	11	11	12	12	12	12	12	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	11	11	11	
CEND	HY01	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
CEND	HY02	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
CEND	HY03	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
KNRG	HY02	21	22	21	21	21	22	21	20	21	21	21	21	20	20	19	20	22	37	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	
KNYR	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	-1	-1	-1	-1		
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
KNYR	HY04	72	103	83	101	62	102	63	58	80	60	61	63	63	59	58	48	46	55	62	60	97	61	57	60	61	54	52	65	61	70	59	57	57	56	54	56	55	47	59	62	60	60	61	60	57	62	61	63		
LPIA	HY01	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
PGAU	HY03	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	19	-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		
PGAU	HY04	20	20	21	21	21	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
SIHY	HY01	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	0
SIHY	HY02	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	0
SIHY	HY03	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	0
SYPS	HY01	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	0
SYPS	HY03	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	0
SYPS	HY04	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	0
TMGR	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	-1	-1	-1	-1		
TMGR	HY02	31	31	28	32	29	33	27	25	31	28	29	31	31	28	23	31	21	30	36	33	39	35	31	37	34	28	27	41	38	89	33	30	29	29	27	31	33	27	38	41	38	38	40	39	36	-1	-1	-1		
TMGR	HY03	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	
TMGR	HY04	-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	-1	-1	-1	-1		
UPIA	HY01	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Total Hydro		210	240	207	229	187	233	165	157	185	162	164	168	169	182	154	152	148	166	203	192	236	196	188	196	215	202	181	209	202	350	362	357	331	213	183	211	211	168	191											

**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 CCGT-Gas		115	143	134	249	271	335	397	650	754	844	841	1050	1017	1200	1349	1808	1865	1797	1634	1304	1114	662	391	444	454	336	453	320	336	349	356	324	264	197	416	810	1216	1280	1303	708	342	193	107	94	237	314	366	416		
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 Co-Gen		-36	-34	-36	-36	-37	-37	-38	-37	-36	-38	-38	-37	-37	-39	-33	-33	-32	-33	-33	-33	-34	-33	-29	-33	-32	-32	-33	-32	-32	-32	-34	-31	-30	-33	-33	-34	-33	-31	-33	-31	-33	-31	-33	-32	-32	-30	-32	-32	-33	-34
Syncon		676	676	676	676	676	525	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676		
Hydro		223	193	226	204	246	201	118	126	98	121	119	115	114	252	129	131	135	117	231	91	47	87	95	87	219	232	102	74	81	69	146	151	278	145	100	223	223	115	92	84	92	87	83	83	91	216	85	81		
S.Reserve Total		1234	1487	1211	1261	1318	1127	1328	1608	1691	1804	1834	2043	1992	2149	2312	2999	3018	2783	2671	2359	2853	1712	1476	1443	1023	1186	1336	1221	1261	1146	1392	1345	1295	1146	1312	1663	2071	2215	2241	1594	1214	1077	983	972	1121	1257	1212	1215		