

## Daily System Generation Summary on Sunday

Sunday, November 13, 2016

### Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	2,254 MW
Hydro	2,139 MW
Distillate	0 MW
<b>Total TNB</b>	<b>4,393 MW</b>
<b>Total IPP</b>	<b>14,475 MW</b>
<b>Total Co-Gen</b>	<b>20 MW</b>
<b>Total System</b>	<b>19,452 MW</b>

### Generation Mix

Type	MWh	Percentage
Gas	25,048	8.40 %
Hydro	7,333	2.46 %
<b>Total TNB</b>	<b>32,381</b>	<b>10.86 %</b>
ST-Coal	175,638	58.92 %
Gas	89,076	29.88 %
<b>Total IPP</b>	<b>264,714</b>	<b>88.80 %</b>
Co-Gen	432	0.14 %
<b>Total Co-Gen</b>	<b>432</b>	<b>0.14 %</b>
<b>Total Generation</b>	<b>297,527</b>	<b>99.80 %</b>
PLTG	111	0.04 %
HVDC	-698	-0.23 %
<b>Interconnection</b>	<b>-587</b>	<b>-0.20 %</b>
<b>Net Energy</b>	<b>298,114</b>	<b>100.00 %</b>

### Maximum Demand Record

Date: 4/20/2016	17,788 MW
Date: 4/20/2016	372,457 MWH

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

Daily Maximum Demand Hour at:	21:00:00 Hour
Total Set On Bus	15,522 MW
TNB Generation	1,632 MW
IPP Generation	12,474 MW
Spinning Reserve	1,402 MW
Maximum Demand	14,108 MW
Net Energy	298,114 MWH
Load Factor	88.05 %

### Fuel Cost

Total Cost:	39,500,272.60 RM
Cost per Unit	13.61 cents/kWH

### Average Spinning Reserve During Peak Hour

Type	MW
GT	318
Hydro	289
Syncon	797
Thermal	124
<b>Total</b>	<b>1,528</b>

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	27

### Gas Usage

Station	(mmscf/d)
PAKA	51
PGPS	27
TJGS	104
<b>Total TNB</b>	<b>183</b>
KLPP	94
MPSS	44
NPRI	150
PGLA	103
PLPS	74
SGRI	177
SKSP	18
<b>Total IPP</b>	<b>660</b>
<b>Total Gas</b>	<b>843</b>
<b>Total Gas Required</b>	<b>843</b>

### Alternate Fuel Usage

Station	(mmscf/d)
<b>Total</b>	<b>0</b>

### 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	12910	12419	11944	11541	11303	11089	11187	10876	10563	11220	11961	12476	12470	12700	12969	13136	13096	12740	12427	13192	14087	14108	13750	13406

Prepared By: Ibrahim bin Said

Checked By: Siti Nurhamizatul Aini

Printed on: Monday, November 14, 2016 7:51:30 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	684	692	693	694	688	686	695	697	698	706	699	706	703	701	703	671	672	671	687	691	688	685	687	688	691	692	689	692	686	688	686	692	689	672	692	688	691	707	693	698	692	692	689	702	701	693	695	696			
JMAH	U002	0	0	0	0	0	27	0	0	102	200	198	233	301	356	353	390	502	504	504	609	605	345	351	231	208	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JMJG	U001	670	669	662	668	672	667	666	666	666	671	668	668	667	667	667	656	653	657	680	676	677	677	676	673	673	675	673	676	676	671	675	673	676	675	672	673	673	675	673	674	671	677	673	673	673	676	675	676			
JMJG	U002	590	586	678	674	678	672	675	672	677	673	678	676	677	674	677	654	655	654	675	673	672	676	675	675	673	675	673	676	676	674	673	675	674	674	679	673	677	675	678	672	678	677	675	671	677	673	681	672			
JMJG	U003	666	665	664	667	646	450	403	410	410	411	412	411	412	409	409	410	413	412	411	411	414	412	414	415	413	414	414	414	413	412	412	414	414	414	475	623	673	672	673	659	662	663	661	667	661						
JMJG	U004	790	782	782	785	782	785	782	781	783	785	782	783	782	785	783	705	702	703	703	702	701	739	804	804	804	804	804	805	805	805	804	805	804	806	803	804	804	804	854	882	885	883	880	884	883	882	882	282			
PKLG	U003	283	261	189	201	203	274	279	281	282	280	282	284	283	283	283	283	282	281	282	284	282	280	282	282	280	279	281	281	283	283	283	281	283	283	283	283	283	282	280	278	280	282	281	284	282	282					
PKLG	U004	282	279	277	277	277	275	274	273	275	277	279	280	280	280	280	281	281	280	282	282	282	280	282	280	280	275	273	271	267	277	277	275	277	274	273	274	278	279	279	277	277	275	276	277	279	281	280	280			
PKLG	U006	453	453	453	453	453	453	453	453	452	452	453	453	453	453	453	456	453	453	452	452	451	449	453	449	453	453	453	453	453	453	453	453	451	449	453	453	451	449	453	453	456	453	456	453	453	452	449				
TBIN	U001	691	690	689	689	690	689	689	689	689	686	691	689	687	689	686	670	672	669	690	689	687	690	688	689	690	689	688	691	691	689	689	690	685	690	692	690	689	689	689	690	689	690	691	691	687	687	687	687	687		
TBIN	U002	691	693	691	691	691	694	692	691	693	691	691	694	695	690	692	673	670	674	690	690	694	690	696	693	692	692	690	693	692	690	692	690	693	691	692	694	691	691	690	691	690	693	691	691	690	693	694	691	692	690	691
TBIN	U003	691	691	694	692	690	692	691	692	694	693	691	691	693	693	671	673	673	689	692	693	691	692	690	691	694	692	694	690	691	692	690	693	691	692	693	691	691	691	690	693	694	691	692	690	693	690	691	694	692	693	
TBIN	U004	782	782	780	781	782	783	781	782	781	782	781	780	782	701	701	705	701	701	700	803	800	803	799	801	801	800	802	801	804	802	800	801	802	801	802	801	802	801	802	850	881	883	881	882	882	880	883	850			
Total ST-Coal		7273	7243	7252	7272	7252	7120	7108	7086	7098	7210	7309	7315	7344	7405	7465	7181	7221	7336	7448	7446	7550	7682	7491	7491	7369	7350	7197	7140	7128	7136	7143	7140	7142	7121	7141	7139	7147	7220	7358	7503	7562	7572	7542	7559	7561	7521	7569	7425			
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	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	0
KLPP	CT13	142	140	141	141	142	141	107	108	107	107	110	108	108	107	102	71	71	70	71	84	134	134	134	134	135	135	140	135	135	135	134	134	134	133	134	134	134	135	134	135	134	133	134	134	131	135	134	134			
KLPP	CT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	156	154	153	154	152	154	120	119	121	119	120	120	120	119	117	78	80	79	80	117	150	145	145	145	146	138	142	138	140	139	140	141	143	141	142	142	143	142	143	141	141	142	144	142	140	142	141	148			
KLPP	ST17	138	138	137	137	137	139	123	119	120	124	120	124	120	123	123	94	94	93	93	106	133	133	133	118	201	204	204	203	201	200	200	200	203	203	202	202	200	200	201	201	202	202	203	203	201	201	203				
MPSS	GT01	107	107	108	108	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	CT02	106	107	107	107	107	107	91	92	90	92	93	91	91	90	88	89	89	90	91	90	92	107	106	106	106	106	106	106	106	106	103	90	105	105	91	69	70	70	92	107	107	106	107	107	107	107	107	107			
MPSS	ST01	114	114	114	114	114	52	39	39	39	39	39	40	40	40	38	38	38	39	40	40	39	50	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51		
NPRI	BLK1	517	523	515	523	518	524	521	523	499	523	521	515	523	507	428	304	309	309	443	492	478	478	524	503	449	482	523	471	493	518	495	523	493	501	498	512	471	483	386	518	520	504	520	524	490	523	523	520			
NPRI	BLK2	520	526	518	526	520	527	525	527	505	527	523	518	527	509	408	304	307	308	446	496	480	483	525	507	452	489	524	469	497	521	497	524	494	501	504	512	473	487	386	517	518	511	524	527	496	520	524	524			
PAKA	CT4A	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	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95		
PAKA	CT4B	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	
PAKA	ST4C	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	
PGLA	CT11	226	227	191	157	172	217	212	172	155	157	155	161	155	154	145	149	166	210	159	218	175	206	225	221	197	211	225	214	223	222	218	222	223	216	174	151	149	151	212	168	148	149	211	158	149	153	185	174			
PGLA	GT12	224	226	190	156	173	218	212	172	154	156	154	161	155	154	146	149	165	211	159	221	174	209	222	220	196	210	220	215	221	220	218	221	219	218	175	151	150	150	213	170	150	150	213	159	150	154	187	173			
PGLA	ST10	244	243	224	196	204	227	243	217	199	195	195	199	197	197	193	199	196	234	201	246	205</																														

### 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	218	221	220	199	220	220	219	217	220	157	121	172	144	155	124	195	171	220	216	215	217	217	217	217	216	213	216	216	216	216	216	216	215	216	217	217	215	221	219	219	219	212	127	84	91							
TJGS	ST1C	255	255	251	236	253	252	252	252	251	202	188	189	202	208	172	210	200	250	246	253	253	253	253	253	249	252	252	252	252	252	252	252	243	248	250	250	247	251	251	251	251	251	251	251	190	131	123					
Total CCGT-Gas		5180	5233	4925	4651	4497	4388	4205	4110	4002	3721	3529	3632	3595	3579	3259	3132	3122	3401	3512	3971	4170	4289	4480	4639	4713	4912	5104	4997	5242	5515	5476	5559	5520	5634	5370	5252	5103	5176	5449	5911	5861	5813	6036	5912	5722	5620	5591	5550				
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			
BSIA	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			
BSIA	HY02	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
CEND	HY01	9	9	10	9	9	10	10	9	10	10	10	10	9	10	10	9	10	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
CEND	HY02	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	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
CEND	HY03	10	10	10	10	9	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	10	10	10	10	10	10	10	10	10	10		
HTRG	HY01	122	-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			
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	-1	-1	-1	-1	-1			
KNRG	HY02	27	27	27	27	28	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27			
KNYR	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	0	
KNYR	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	0	
KNYR	HY03	102	-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	HY04	101	59	59	58	59	59	60	58	59	59	60	60	60	55	59	60	60	60	62	72	61	65	94	61	58	101	68	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LPJA	HY01	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
PGAU	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	-1	-1		
PGAU	HY02	-1	-1	-1	-1	-1	21	-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	-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	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	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	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	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	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	0	0
SYPS	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	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	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	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	-1	-1		
TMGR	HY02	33	35	34	34	35	35	35	34	34	35	35	35	35	35	35	35	35	35	36	36	35	34	36	36	35	34	36	36	36	39	34	36	37	35	32	34	33	32	36	31	32	29	34	35	31	35	32	39	32	39		
TMGR	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	-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	5	5	
UPIA	HY02	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	3	3	
Total Hydro		445	179	179	177	179	202	181	177	179	180	181	181	180	180	169	178	181	170	193	173	182	310	491</																													

