

## Daily System Generation Summary on Monday

Monday, August 15, 2016

### Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	3,624 MW
Hydro	1,927 MW
Distillate	0 MW
<b>Total TNB</b>	<b>5,551 MW</b>
<b>Total IPP</b>	<b>14,442 MW</b>
<b>Total Co-Gen</b>	<b>15 MW</b>
<b>Total System</b>	<b>20,572 MW</b>

### Generation Mix

Type	MWh	Percentage
Gas	57,635	16.37 %
Hydro	8,094	2.30 %
<b>Total TNB</b>	<b>65,729</b>	<b>18.67 %</b>
ST-Coal	172,143	48.90 %
Gas	113,326	32.19 %
<b>Total IPP</b>	<b>285,469</b>	<b>81.09 %</b>
Co-Gen	324	0.09 %
<b>Total Co-Gen</b>	<b>324</b>	<b>0.09 %</b>
<b>Total Generation</b>	<b>351,522</b>	<b>99.85 %</b>
PLTG	170	0.05 %
HVDC	-692	-0.20 %
<b>Interconnection</b>	<b>-522</b>	<b>-0.15 %</b>
<b>Net Energy</b>	<b>352,044</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:	16:00:00 Hour
Total Set On Bus	18,588 MW
TNB Generation	3,211 MW
IPP Generation	13,726 MW
Spinning Reserve	1,638 MW
Maximum Demand	16,954 MW
Net Energy	352,044 MWH
Load Factor	86.52 %

### Fuel Cost

#### Average Spinning Reserve During Peak Hour

Type	MW
GT	497
Hydro	377
Syncon	604
Thermal	148
<b>Total</b>	<b>1,626</b>

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

### Gas Usage

Station	(mmscfd)
CBPS	6
GLGR	60
PAKA	80
PGGS	8
PGPS	41
SRDG	13
TJGS	222
<b>Total TNB</b>	<b>429</b>

CBPS	54
KLPP	97
MPSS	39
NPRI	156
PDPS	25
PGLA	91
PKLG	14
PLPS	97
PTEK	33
SGB3	42
SGRI	194
SKSP	33
<b>Total IPP</b>	<b>875</b>
<b>Total Gas</b>	<b>1,304</b>

**Total Gas Required 1,304**

### Alternate Fuel Usage

Station	(mmscfd)
<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	13782	13065	12620	12283	11947	11845	11878	11969	12458	14551	15572	16308	16298	16028	16630	16935	16954	16572	15273	14796	16112	16188	15724	15408

Prepared By: Mohd Yusof bin Ismail

Checked By: Siti Nurhamizatul Aini

Printed on: Tuesday, August 16, 2016 8:18:10 AM  
(Gurcharan Singh)  
Pengurus Besar Kanan  
Jabatan Sistem Operasi

**Daily MW Generation on Monday**

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	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690
JMAH	U002	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695
JMJG	U001	678	678	677	677	687	677	679	677	677	677	677	678	678	678	678	678	678	678	678	678	678	678	678	678
JMJG	U003	665	666	662	663	666	663	666	667	666	664	667	662	667	667	657	667	671	675	678	683	684	682	670	666
JMJG	U004	899	810	780	790	781	781	782	781	782	783	783	782	781	780	781	782	781	782	782	783	782	781	781	781
PKLG	U003	283	281	281	281	281	281	281	281	283	281	281	281	281	281	281	281	281	281	281	281	281	281	281	281
PKLG	U004	282	282	280	280	281	280	278	280	280	282	282	280	282	280	279	278	280	279	281	281	279	281	279	281
PKLG	U005	469	466	465	466	469	469	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466
PKLG	U006	470	470	470	469	470	469	472	472	469	469	472	472	472	472	472	472	472	472	472	472	472	472	472	472
TBIN	U002	694	693	692	692	692	692	694	692	692	693	693	692	689	692	693	693	692	692	692	692	692	692	692	692
TBIN	U003	693	693	694	691	691	694	693	690	694	693	694	692	689	692	693	693	691	690	693	692	690	689	692	690
TBIN	U004	900	900	900	901	900	902	899	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781
Total ST-Coal		7418	7324	7287	7285	7303	7293	7298	7292	7173	7174	7177	7178	7178	7176	7170	7172	7185	7188	7112	7207	7181	7184	7138	7124
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
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
CBPS	GT1A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CBPS	ST1C	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	362	358	362	362	360	359	359	359	254	204	197	380	359	363	363	362	361	361	359	359	359	359	359	359
GLGR	GT01	110	109	109	109	108	109	108	109	108	106	110	108	108	108	109	109	108	108	108	108	108	108	108	108
GLGR	GT02	108	108	107	107	107	108	107	108	108	108	109	109	109	108	109	108	109	108	108	108	108	108	108	108
GLGR	ST1C	97	97	98	98	97	97	97	97	97	97	97	97	97	98	98	97	97	97	97	97	97	97	97	
KLPP	GT13	110	110	110	110	110	69	70	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	
KLPP	GT14	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
KLPP	GT15	116	120	116	116	119	116	95	77	78	76	78	78	76	82	78	78	81	158	154	154	155	150	151	
KLPP	ST17	177	144	120	117	121	118	106	94	94	94	94	90	91	94	91	93	83	195	199	199	201	201	201	
MPSS	GT01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MPSS	GT02	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	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	475	514	492	487	489	459	483	475	465	503	511	488	425	514	463	361	517	518	521	526	524	522	515	
NPRI	BLK2	474	514	494	487	485	454	485	476	464	507	512	487	431	517	464	360	519	517	523	529	525	520	513	
PAKA	GT1A	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PAKA	GT4A	95	95	95	95	95	95	95	95	95	95	95	95	95	94	95	95	95	95	95	94	95	94	94	
PAKA	GT4B	81	81	82	82	82	81	82	82	81	81	81	82	82	80	80	80	80	80	80	80	80	80	80	
PAKA	ST4C	91	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	
PGLA	GT11	168	170	156	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PGLA	GT12	167	170	157	165	166	160	160	160	160	160	160	160	160	162	161	166	196	186	224	222	222	222	221	
PGLA	ST10	211	204	177	90	92	91	92	92	91	91	91	91	91	91	91	102	94	190	248	248	248	247	245	
PGPS	GT3A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PGPS	GT3B	76	76	76	75	75	75	75	75	75	74	75	75	75	75	75	75	75	75	75	75	75	75	75	
PGPS	ST3C	34	34	34	34	33	33	34	34	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	
PLPS	CT11	114	116	116	115	116	116	89	65	66	65	64	65	65	66	64	65	69	146	147	140	140	134	134	
PLPS	CT12	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PLPS	CT13	112	112	113	112	112	112	112	65	65	64	63	64	64	63	61	64	68	145	144	136	135	129	129	
PLPS	ST18	197	134	133	133	133	133	130	92	92	91	94	91	92	93	95	96	97	153	179	210	211	209	209	
SCB3	GT32	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 Monday**

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
SGB3	GT33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGB3	ST34	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	GT11	128	132	116	116	66	66	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
SGRI	GT12	132	149	123	121	71	71	71	71	71	70	70	70	70	70	70	71	152	148	145	145	145	137	137	137
SGRI	GT13	130	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	68	133	132	132	130	131	131
SGRI	ST14	209	192	138	138	102	97	99	99	98	99	100	99	99	99	98	98	151	177	217	218	221	215	217	213
SGRI	GT21	121	136	129	116	0	0	0	0	0	0	0	0	0	0	0	0	38	135	135	134	138	139	139	140
SGRI	GT22	125	141	134	121	139	111	71	71	71	71	71	73	73	71	140	139	139	139	139	139	139	139	139	139
SGRI	GT23	122	137	130	118	137	101	65	67	65	65	64	64	64	65	140	138	138	138	137	137	137	136	134	134
SGRI	ST24	203	217	214	206	175	132	100	97	99	99	97	97	100	96	97	95	99	147	215	215	216	218	216	214
SKSP	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	43	85	156	339	341	342	342
TJGS	GT1A	229	230	222	228	231	219	222	222	223	228	223	223	230	225	220	230	228	226	231	232	227	221	210	221
TJGS	GT1B	220	221	222	223	222	208	205	217	220	218	219	221	214	225	217	211	225	224	224	226	227	223	216	208
TJGS	ST1C	251	251	247	251	251	251	245	246	246	243	244	247	242	250	250	243	250	250	253	250	253	249	249	252
TJGS	GT2A	218	218	218	218	218	218	218	218	203	203	164	205	202	225	225	225	223	225	225	223	221	221	221	221
TJGS	GT2B	213	216	216	215	215	215	215	214	200	200	159	202	200	222	222	222	222	222	222	222	222	222	222	222
TJGS	ST2C	259	259	259	259	259	259	259	259	247	247	230	245	248	262	262	262	262	262	262	262	262	262	262	262
Total CCGT-Gas		6178	5877	5607	5322	5079	4866	4706	4563	4549	4478	4438	4352	4486	4690	4632	4495	5020	6150	6718	7307	7474	7804	7805	
PDPS	CT01	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	CT02	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	CT03	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	CT04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PGGS	GT6A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PGGS	GT6B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PKLG	CT08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PKLG	CT09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTEK	GT1A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTEK	GT1B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PTEK	GT2A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRDG	GT04	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 CCGT-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	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
BSIA	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
BSIA	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
CEND	HY01	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	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	HY03	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
HTRG	HY01	-1	-1	-1	-1	-1	-1	-1	-1	61	-1	-1	67	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
HTRG	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
KNRG	HY02	24	24	24	24	23	24	23	24	24	24	23	24	24	24	25	39	38	38	38	38	38	38	38	38
KNRG	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
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
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
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
KNYR	HY04	63	90	65	67	94	60	75	68	61	85	90	74	62	98	60	65	102	102	101	101	101	101	87	62
LPIA	HY02	15	15	15	15	15	15	15	15	18	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18
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

**Daily MW Generation on Monday**

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
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
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
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
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
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
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
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
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
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
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
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
TMGR	HY02	34	35	33	34	35	33	34	35	33	36	37	34	34	37	34	35	35	38	41	41	83	39	83	80
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
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
UJLI	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
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	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		167	195	168	171	199	162	179	172	164	256	199	181	236	208	167	192	211	250	654	572	847	729	971	742
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PCUF	CUFK	13	13	12	14	13	14	14	13	15	13	12	14	13	13	14	14	14	14	14	14	13	13	14	13
Total Co-Gen		12	12	11	13	12	13	13	12	14	12	11	13	12	12	13	13	13	13	13	12	12	12	12	12
Total Gen		13775	13468	13073	12791	12593	12334	12196	12039	11900	11920	11825	11724	11912	12086	11982	11872	12429	13601	14497	15099	15515	15945	16287	
TIE-BGAT		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	-30	-30	-29	-29	-28	-28	-29	-30	-28	-28	-29	-29	-29	-29	-29	-29	
TIE-PLTG		23	-15	38	-8	4	-4	-57	51	-16	81	9	-13	62	32	43	-21	0	-5	-24	-74	-27	-58	9	
Interconnection		-6	-44	9	-38	-26	-33	-86	21	-46	51	-19	42	35	4	14	-51	-28	-33	-53	-103	-56	-87	-20	
System Total		13781	13452	13064	12829	12619	12367	12282	12018	11946	11969	11844	11766	11877	12082	11968	11923	12457	13634	14550	15202	15571	16032	16307	
SRev ST-Coal		153	247	284	286	268	278	273	279	398	397	394	393	393	395	401	399	386	383	177	82	108	105	151	
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	
SRev CCGT-Gas		723	582	635	920	589	802	962	1105	1119	1190	1230	1400	1266	1062	1120	1360	1218	1189	1069	623	575	246	468	
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	
SRev Co-Gen		13	13	14	12	13	12	12	13	11	13	14	12	13	13	12	12	12	12	12	12	12	12	12	
Syncon		957	957	957	957	957	957	957	957	831	957	957	831	957	957	806	957	806	403	403	318	318	192	192	
Hydro		121	93	120	117	89	126	109	116	124	158	89	107	178	80	121	247	77	189	338	420	280	738	432	
S.Reserve Total		1967	1892	2010	2292	1916	2175	2313	2470	2609	2589	2684	2869	2681	2507	2611	2824	2650	2579	1890	1540	1294	1435	1332	