

## Daily System Generation Summary on Friday

Friday, November 18, 2016

### Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	3,255 MW
Hydro	2,137 MW
Distillate	0 MW
<b>Total TNB</b>	<b>5,392 MW</b>
<b>Total IPP</b>	<b>15,297 MW</b>
<b>Total Co-Gen</b>	<b>20 MW</b>
<b>Total System</b>	<b>21,273 MW</b>

### Generation Mix

Type	MWh	Percentage
Gas	36,738	10.82 %
Hydro	9,071	2.67 %
<b>Total TNB</b>	<b>45,809</b>	<b>13.49 %</b>
ST-Coal	196,094	57.75 %
Gas	97,674	28.77 %
<b>Total IPP</b>	<b>293,768</b>	<b>86.52 %</b>
Co-Gen	432	0.13 %
<b>Total Co-Gen</b>	<b>432</b>	<b>0.13 %</b>
<b>Total Generation</b>	<b>340,009</b>	<b>100.14 %</b>
PLTG	-71	-0.02 %
HVDC	540	0.16 %
<b>Interconnection</b>	<b>469</b>	<b>0.14 %</b>
<b>Net Energy</b>	<b>339,540</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:	15:00:00 Hour
Total Set On Bus	17,754 MW
TNB Generation	2,558 MW
IPP Generation	13,423 MW
Spinning Reserve	1,755 MW
Maximum Demand	15,980 MW
Net Energy	339,540 MWH
Load Factor	88.53 %

### Fuel Cost

Total Cost:	45,525,562.10 RM
Cost per Unit	13.76 cents/kWH

### Average Spinning Reserve During Peak Hour

Type	MW
GT	463
Hydro	382
Syncon	805
Thermal	192
<b>Total</b>	<b>1,842</b>

### Time Weather Temperature

Afternoon	Hot	32
Morning	Sunny	28

### Gas Usage

Station	(mmscfd)
GLGR	29
PAKA	0
PGPS	24
SRDG	20
TJGS	196
<b>Total TNB</b>	<b>269</b>
CBPS	3
KLPP	92
MPSS	45
NPRI	156
PGLA	106
PKLG	3
PLPS	87
PTEK	21
SGRI	177
SKSP	50
<b>Total IPP</b>	<b>741</b>
<b>Total Gas</b>	<b>1,010</b>
<b>Total Gas Required</b>	<b>1,010</b>

### 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	13643	12985	12564	12263	11963	11824	11993	12026	12453	14156	15157	15645	15647	15225	15526	15980	15912	15503	14718	14926	15285	15030	14489	14144

Prepared By: Kannathason a/i Karuppiyah

Checked By: Ibrahim bin Said

Printed on: Saturday, November 19, 2016 9:34:04 AM

(Gurcharan Singh)  
Pengurus Besar Kanan  
Jabatan Sistem Operasi



**Daily MW Generation on Friday**

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	GT1A	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228
TJGS	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	0
TJGS	ST1C	118	118	118	118	118	118	118	118	81	81	81	81	113	116	121	94	94	178	250	253	253	253	253	253	253
TJGS	GT2A	220	220	220	220	220	220	220	220	144	143	145	145	145	144	145	164	213	213	213	213	213	213	213	213	213
TJGS	GT2B	222	225	223	223	223	223	223	223	142	142	142	142	142	142	162	210	213	212	212	212	212	212	212	212	212
TJGS	ST2C	261	261	261	261	261	261	261	261	216	216	216	216	216	216	224	257	257	257	257	257	257	257	257	257	257
Total CCGT-Gas		4932	4572	4506	4285	4051	3989	4010	3973	3856	3844	3679	3788	3882	4124	3966	3977	4320	5312	5940	6410	6312	6335	6252	6321	6364
PKEG	GT08	0	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	108	107	107	98	100	102	99	100
PTEK	GT1B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	108	109	109	109
PTEK	GT2A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	109	110	111	100	100	102	103
SRDG	GT04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	127	127	123	123	115	115	117
SRDG	GT05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	122	123	124	114	114	116	116
Total CCGT-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	464	465	465	427	435	441	632
BSIA	HY03	13	12	13	13	13	13	13	12	13	13	13	14	14	14	14	14	14	13	14	13	13	14	14	14	14
CEND	HY01	7	7	7	7	7	7	7	7	7	7	7	7	7	9	9	9	9	10	10	10	9	9	9	9	9
CEND	HY02	7	7	7	7	7	7	7	7	7	7	7	7	7	9	9	9	9	10	10	10	9	9	9	9	9
CEND	HY03	7	7	7	7	7	7	7	7	7	7	7	7	7	9	9	9	9	10	10	10	10	10	10	10	10
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
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
KNRC	HY01	25	24	24	24	25	24	24	25	24	24	24	24	24	23	24	23	23	23	24	24	24	24	24	0	0
KNRC	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	23	22	22	23	22	22	22	22	22	0
KNRC	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	24	24	23	24	22	23	23	24	23	23
KNYR	HY01	58	55	-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	59	58	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	96	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KNYR	HY04	60	57	64	60	65	60	60	62	60	65	61	68	60	64	61	64	70	70	103	84	102	103	103	103	68
LPIA	HY01	20	20	17	17	17	17	17	17	11	11	11	11	11	11	11	11	16	16	16	16	14	14	14	14	14
LPIA	HY02	13	13	17	13	17	13	17	17	10	10	10	10	10	9	10	12	12	8	12	12	12	9	12	12	12
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	2	2	2	2	6	6	6	6	6	6
PGAU	HY01	-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
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
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
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	22	21	21	20	20	21	21	22	20	20
SHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	49	50	50	50	50	0	0	0	0	0	0	0
SHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	50	0	0	0	0	0	0	0
SHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	51	50	49	49	49	0	0	0	0	0	0	0
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	0	0	0	0	0	0	0
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	0	0	0	0	0	0	0
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	0	0	0	0	0	0	0
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	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
TMGR	HY02	34	31	35	33	35	34	35	35	32	35	34	34	36	36	36	37	35	39	36	41	44	43	36	37	36
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	40	39	39	40	35	34	34	32	34	39	39	38
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
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	0
UJLI	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



Daily MW Generation on Friday

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																											
UPIA	HY01	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5																			
UPIA	HY02	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																			
Total Hydro		402	388	193	205	195	184	189	192	180	176	172	178	172	177	171	176	188	212	225	248	635	781	710	829	591	382	337	430	424	716	708	634	684	484	279	194	191	193	367	777	732	429	428	326	317	341	325	347			
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	0	0	0	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	CURK	17	19	17	17	19	19	17	19	18	17	19	19	18	17	19	18	18	19	18	17	18	19	18	19	18	18	17	18	19	15	18	17	17	17	18	18	18	18	19	18	18	19	18	18	19	17	17				
Total Co-Gen		17	19	17	17	19	19	17	19	18	17	19	19	18	17	19	18	18	19	18	17	18	19	18	19	18	18	17	18	19	15	18	17	17	17	18	18	18	18	19	18	18	19	18	18	19	17	17				
Total Gen		13652	13276	13026	12807	12553	12360	12278	12090	12014	11987	11831	11941	12055	12274	12109	12134	12479	13489	14141	14815	15121	15396	15646	15826	15635	15494	15204	15267	15503	15853	15999	15972	15954	15889	15534	15228	14772	14567	14993	15434	15312	15142	15026	14876	14539	14350	14149	13942			
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	0	0	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	30	29	29	30	30	29	29	30	30	29	29	31	31	31	31	31	30	0	0	0	0	0	0	0	0	0	0	0	31	31	31	29	29	30	30	29	29	30	30	30	30	30	30	30	30	30	30	30	30	
TIE-PLTG		-20	-19	12	0	-41	0	-14	-13	21	7	-22	-8	11	24	52	13	-5	28	-45	-24	-36	-49	1	-12	-12	-33	-21	0	-23	-14	19	8	10	9	2	-22	24	36	37	-3	-3	2	-35	12	19	-23	-25	27			
Interconnection		9	11	41	29	-11	29	15	16	51	37	7	22	42	55	83	45	26	59	-15	-24	-36	-49	1	-12	-12	-33	-21	0	-23	-14	19	38	42	40	31	8	54	66	67	26	27	32	-4	42	50	8	5	57			
System Total		13643	13265	12985	12778	12564	12331	12263	12074	11963	11950	11824	11919	11893	12219	12026	12089	12453	13440	14156	14839	15157	15445	15645	15838	15647	15527	15225	15267	15628	15867	15980	15934	15912	15849	15503	15220	14718	14501	14926	15408	15285	15110	15030	14834	14489	14342	14144	13885			
S.Rev ST-Coal		297	301	287	295	298	271	284	288	237	244	234	242	240	299	244	185	194	190	192	207	200	204	199	204	200	211	200	195	193	220	181	122	107	208	204	196	196	206	202	208	192	209	202	201	205	201	208	221			
S.Rev CCGT-Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	-2	-3	-1	-3	35	35	27	21	38	37	36	32	45	16	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
S.Rev CCGT-Gas		873	1018	1082	1303	1537	1599	1578	1615	1732	1744	1909	1663	1559	1327	1485	1474	1585	789	843	373	331	240	323	394	351	275	561	594	363	285	370	370	455	354	491	391	531	797	549	513	606	456	578	628	703	410	589	596			
S.Rev 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	
S.Rev Co-Gen		3	1	3	3	1	1	3	1	2	3	1	1	1	2	3	1	2	2	1	3	2	2	1	2	3	2	1	2	1	2	2	3	2	1	5	2	3	3	3	2	2	2	2	1	2	2	1	3			
Syncon		874	874	975	824	975	975	975	975	975	975	975	975	975	975	975	824	975	824	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	975	975	975	975	874	723	874	1061	1061	1061	1061	1061	1061	1061	1061		
Hydro		235	249	143	282	141	152	147	144	151	155	158	153	159	154	160	155	143	270	106	384	564	418	489	370	608	587	612	519	600	483	491	565	601	378	206	139	142	140	167	308	288	177	178	180	189	165	181	159			
S.Reserve Total		2282	2441	2490	2707	2952	2988	2887	3023	3102	3128	3278	3034	2834	2757	2887	2790	2889	2075	2115	1791	1770	1592	1683	1640	1834	1725	2082	2018	1857	1885	1755	1770	1874	1646	1926	1719	1944	2121	1795	1754	1962	1905	2021	2071	2160	1839	2040	2040			