

Daily System Generation Summary on Monday

Monday, November 28, 2016

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Gas	2,999 MW
Hydro	2,171 MW
Distillate	0 MW
Total TNB	5,170 MW
Total IPP	13,890 MW
Total Co-Gen	0 MW
Total System	19,060 MW

Generation Mix

Type	MWh	Percentage
Gas	55,231	16.56 %
Hydro	16,706	5.01 %
Total TNB	71,937	21.58 %
ST-Coal	156,301	46.88 %
Gas	103,606	31.07 %
Total IPP	259,907	77.95 %
Co-Gen	1,190	0.36 %
Total Co-Gen	1,190	0.36 %
Total Generation	333,034	99.88 %
PLTG	392	0.12 %
HVDC	-782	-0.23 %
Interconnection	-390	-0.12 %
Net Energy	333,424	100.00 %

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:	14:30:00 Hour
Total Set On Bus	17,564 MW
TNB Generation	3,984 MW
IPP Generation	12,102 MW
Spinning Reserve	1,427 MW
Maximum Demand	16,169 MW
Net Energy	333,424 MWH
Load Factor	85.92 %

Fuel Cost

Total Cost:	45,581,105.65 RM
Cost per Unit	14.41 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	467
Hydro	485
Syncon	478
Thermal	166
Total	1,596

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
CBPS	47
GLGR	32
PAKA	82
PGPS	26
SRDG	19
TJGS	216
Total TNB	423
CBPS	51
KLPP	98
MPSS	50
NPRI	154
PGLA	111
PKLG	5
PLPS	90
PTEK	10
SGRI	179
SKSP	32
Total IPP	779
Total Gas	1,202
Total Gas Required	1,202

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	12480	12015	11641	11320	11114	11032	11201	11434	12097	14054	15026	15687	15720	15443	15912	16048	15968	15685	14590	14979	15331	15053	14552	14019

Prepared By: Kannathason a/l Karuppiah

Checked By: Abu Bakar bin K.K. Ibrahim

Printed on: Tuesday, November 29, 2016 8:03:40 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																																
SGRI	GT12	118	125	118	115	115	118	118	118	114	73	71	71	70	70	70	70	71	78	116	146	147	144	119	126	120	120	119	120	119	123	120	120	117	117	116	116	116	116	117	117	118	118	122	150	114	114	118	127								
SGRI	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	138	135	135	135	113	120	117	117	118	114	116	116	116	118	115	115	113	113	113	113	113	114	115	115	112	119	134	107	107	110	118								
SGRI	ST14	135	136	129	132	138	137	132	132	133	98	97	96	96	99	98	98	99	110	195	220	216	219	201	205	201	195	207	201	206	201	203	199	194	194	198	198	198	200	198	194	199	197	198	169	142	138	140	140								
SGRI	GT21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	138	135	135	115	119	116	116	114	116	115	115	115	115	113	113	113	112	112	112	113	115	112	112	134	114	33	0	0									
SGRI	GT22	117	117	116	116	116	114	114	114	114	114	116	116	115	115	114	118	117	143	143	139	141	141	118	133	122	120	128	120	119	128	120	127	117	124	117	117	116	116	123	119	124	116	118	140	115	143	144	111								
SGRI	GT23	109	110	109	109	109	109	109	109	109	110	110	109	109	110	110	113	136	143	143	141	139	112	123	116	116	115	116	115	119	119	119	113	112	113	113	113	113	113	113	113	113	113	114	136	111	140	140	106								
SGRI	ST24	133	133	135	131	131	133	134	137	134	133	134	133	136	136	133	132	132	141	167	215	217	216	199	202	198	195	211	201	201	205	205	203	201	199	200	196	198	198	200	196	197	198	193	205	200	188	144	129								
SKSP	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	74	146	344	341	343	342	337	338	339	338	340	339	341	342	339	279	273	274	340	298	329	327	320	340	325	218	227	232									
TJGS	CT1A	226	225	228	225	226	215	222	226	217	190	201	220	225	228	225	216	227	231	223	226	226	226	226	226	226	226	228	228	228	228	228	231	231	227	226	216	218	230	225	226	220	220	228	222	224	224	226									
TJGS	CT1B	216	214	216	211	222	207	217	215	206	181	196	211	219	218	219	205	221	222	215	218	218	218	221	217	217	217	217	221	218	219	219	219	219	222	222	217	217	208	210	222	215	210	213	212	220	213	217	217	217							
TJGS	ST1C	244	244	244	244	244	246	243	246	241	205	213	218	242	246	246	242	249	248	252	249	249	249	249	249	249	249	252	252	252	255	255	251	251	251	255	255	255	251	247	241	241	248	249	245	252	244	252	248	244	248	244	217	217			
TJGS	GT2A	215	215	215	215	215	215	215	142	143	146	144	145	145	145	184	184	184	215	215	215	215	215	215	215	215	215	215	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	217	217					
TJGS	GT2B	211	211	211	210	210	210	210	138	140	140	140	140	140	140	140	141	181	181	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	210	210	210	210	210	210	210	210	210					
TJGS	ST2C	256	256	256	256	256	256	219	217	217	217	217	217	217	217	217	237	237	237	255	255	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	255	255	255	257	257	257	257	257	257	257	257	255				
Total CCGT-Gas		5566	5612	5315	5146	4950	4729	4596	4466	4284	4253	4298	4352	4446	4682	4697	4866	5289	5917	6791	7088	7221	7464	7488	7545	7500	7597	7685	7693	7722	7744	7699	7738	7710	7751	7723	7639	7468	7526	7761	7673	7671	7721	7622	7533	7273	7158	6916	6634								
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	0	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	109	109	108	109	109	100	96	99	99	84	100	96	97	76	71	70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
SRDC	GT04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	122	120	120	122	122	124	124	120	122	122	124	124	123	123	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SRDC	GT05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	122	121	122	121	121	122	122	122	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	122	231	229	228	231	224	224	327	433	430	419	434	432	435	413	401	190	71	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	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	0	0	0	0	0	13	12	12	12	12	12	12	0	0	0	0				
BSIA	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	0	0	0	0	13	12	12	12	12	12	12	0	0	0	0			
BSIA	HY03	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	12	12	12				
CEND	HY01	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	6	6	6	6	6	6	6	6				
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	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	HY03	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	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	64	64	120	120	120	118	104	120	72	-1	66	68	103	78	112	114	113	89	66	66	66	66	66	118	120	120	120	-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	64	64	120	120	120	118	101	120	71	112	70	71	105	80	113	103	113	89	65	64	-1	-1	65	118	120	120	119	124	124	124	124	124	124	124	124	124	124	124
KNRG	HY01	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22		
KNRG	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
KNRG	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
KNYR	HY01	-1	-1																																																						

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
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	32	34	33	32	35	32	32	34	33	33	33	33	35	32	34	37	34	39	37	39	80	80	37	34
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	HY02	94	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	94	92	98	-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
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
Total Hydro		288	200	187	191	195	193	191	219	214	193	193	193	194	187	190	199	202	740	680	981	980	1061	1168	
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	33	32	32	32	32	31	33	31	31	31	32	33	33	34	35	33	32	31	32	29	31	31	35	
PCUF	CUFK	19	18	17	16	18	18	18	20	17	16	17	19	17	18	18	17	18	18	18	17	17	18	19	
Total Co-Gen		52	50	49	48	50	49	51	51	48	47	49	52	50	51	52	53	50	50	51	48	49	47	58	
Total Gen		12468	12302	12015	11846	11647	11436	11302	11227	11068	10995	11045	11103	11200	11420	11457	11623	12653	13223	14032	14661	15014	15463	15689	
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
TIE-HVDC		-29	-29	-29	-29	-29	-30	-28	-28	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29
TIE-PLTG		17	16	29	90	35	13	12	30	-18	31	42	42	28	21	52	9	-15	28	7	-54	16	37	31	
Interconnection		-12	-13	0	62	6	-17	-18	2	-46	2	13	13	-1	-8	23	-19	-44	-1	-22	-82	-12	7	2	
System Total		12480	12315	12015	11784	11641	11453	11320	11225	11114	10993	11032	11090	11201	11437	11434	11642	12097	13224	14054	14743	15026	15456	15687	
SRev ST-Coal		161	233	159	162	171	159	157	132	154	172	166	164	165	163	154	167	164	165	162	160	182	163	164	
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
SRev CCGT-Gas		558	359	656	825	1021	1242	1375	1505	1687	1978	1933	1879	1785	1549	1534	1616	1252	907	522	650	655	582	558	
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
SRev Co-Gen		-2	0	1	2	0	0	1	-1	-1	2	3	1	-2	0	-1	-2	-3	0	-1	2	1	3	-8	
Syncon		1076	1263	1263	1263	1263	1263	1112	1112	1263	1263	1263	1263	1263	1263	1263	622	622	471	422	422	573	573	573	
Hydro		233	134	120	143	139	141	143	266	271	141	141	141	140	120	117	135	132	485	545	544	857	776	491	
S.Reserve Total		2026	1889	2199	2385	2594	2805	2939	3014	3223	3556	3506	3448	3351	3065	3067	3179	2808	2171	1851	1796	2117	1946	1793	