

Daily System Generation Summary on Sunday

Sunday, March 24, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,217 MW
Distillate	0 MW
Total TNB	2,217 MW
Total IPP	16,479 MW
Total Co-Gen	78 MW
Total System	21,853 MW

Generation Mix

Type	MWh	Percentage
Hydro	6,570	1.96 %
Gas	34,843	10.41 %
Total TNB	41,413	12.37 %
ST-Coal	203,579	60.83 %
LSS	1,473	0.44 %
Gas	85,577	25.57 %
Total IPP	290,629	86.84 %
Co-Gen	1,939	0.58 %
Total Co-Gen	1,939	0.58 %
Total Generation	333,981	99.80 %
PLTG	16	0.00 %
HVDC	-695	-0.21 %
Interconnection	-679	-0.20 %
Net Energy	334,660	100.00 %

Maximum Demand Record

Date: 3/19/2019	18,402 MW
Date: 3/20/2019	390,048 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	20:30:00 Hour
Total Set On Bus	17,438 MW
TNB Generation	2,121 MW
IPP Generation	13,195 MW
Spinning Reserve	2,044 MW
Maximum Demand	15,367 MW
Net Energy	334,660 MWH
Load Factor	90.74 %

Fuel Cost

Total Cost:	68,059,921.55 RM
Cost per Unit	20.79 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	619
Hydro	432
Syncon	672
Thermal	297
Total	2,020

Time	Weather	Temperature
Afternoon	Hot	36
Morning	Sunny	26

Gas Usage

Station	(mmcsfd)
GLGR	53
PGPS	24
TJGS	176
Total TNB	254
CBPS	54
KLPP	56
MPSS	31
NPRI	155
PGLA	90
PLPS	51
SGRI	56
SKSP	10
YPKA	32
Total IPP	535
Total Gas	788

Total Gas Required 788

Alternate Fuel Usage

Station	(mmcsfd)
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	15078	14588	14072	13619	13238	12873	12836	12532	11964	12539	13232	13873	13995	13998	14462	14441	14541	14130	13749	14081	15236	15274	15053	15024

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, March 27, 2019 11:14:00 AM

(Ir. Shanmugam Thoppalan)
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	702	703	701	706	701	705	703	702	701	702	707	703	704	701	705	702	703	703	701	705	701	703	701	702	702
JMAH	U002	702	706	703	703	703	706	702	705	705	705	703	705	702	703	703	705	706	698	701	708	703	701	701	703	707
JMJG	U001	672	685	686	667	683	682	688	682	682	684	678	681	683	680	675	679	684	687	683	679	681	682	681	682	681
JMJG	U002	678	680	682	683	686	683	682	679	682	679	683	681	682	678	679	689	681	688	679	678	680	682	678	672	679
JMJG	U003	672	680	669	677	671	672	672	673	674	672	673	672	673	668	676	671	671	687	671	673	672	671	672	673	671
JMJG	U004	966	964	965	961	877	789	785	788	788	788	789	787	788	787	786	788	786	786	789	830	901	903	904	905	905
JMJG	U005	974	977	972	855	779	777	779	771	774	787	778	782	783	778	779	781	782	782	780	849	904	903	901	901	901
PKLG	U004	281	280	282	282	280	279	276	277	277	277	280	279	279	277	278	278	278	277	278	277	279	281	280	279	263
PKLG	U005	467	468	467	466	466	468	467	467	466	468	468	466	467	474	466	467	466	470	466	466	466	466	468	465	405
TBIN	U001	698	700	698	705	699	700	700	699	699	700	700	701	699	701	700	699	701	700	701	698	699	699	698	699	700
TBIN	U002	701	702	700	703	700	703	702	701	700	701	700	700	699	702	701	701	700	701	702	701	702	701	701	702	700
TBIN	U003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	206	298	404	518	
TBIN	U004	951	951	950	951	904	894	852	853	852	804	803	804	802	802	802	803	803	803	803	852	902	903	902	901	903
Total ST-Coal		8464	8496	8475	8359	8149	8058	8008	7997	8000	7970	7953	7967	7958	7966	7941	7950	7969	7968	7954	7960	8113	8246	8261	8295	8373
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
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
CBPS	BLK2	365	366	369	367	367	368	366	365	364	371	366	371	364	365	366	282	220	262	363	362	365	368	365	365	362
GLGR	GT01	100	101	100	102	100	99	100	101	100	102	83	68	68	69	66	67	68	68	68	67	87	100	101	101	100
GLGR	GT02	101	101	101	101	101	101	101	101	101	101	85	68	68	68	68	69	68	68	68	86	100	101	101	101	100
GLGR	ST1C	89	90	90	90	90	90	90	90	89	90	82	70	70	70	71	70	70	70	82	91	90	90	90	91	90
KLPP	GT13	114	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	51	124	112	120	
KLPP	GT14	127	151	150	151	151	150	151	151	152	151	137	135	133	137	133	132	133	138	134	151	151	150	150	141	128
KLPP	ST17	122	130	79	54	55	55	56	56	55	55	50	53	54	54	54	50	50	51	51	59	59	59	58	58	131
MPSS	GT01	108	108	107	108	108	108	108	109	108	108	94	97	95	98	94	95	96	94	96	98	96	97	103	102	102
MPSS	ST01	51	51	51	51	52	52	52	52	51	51	42	44	41	44	41	43	43	42	44	44	45	46	45	50	50
NPRI	BLK1	518	520	520	526	526	518	521	520	520	526	516	518	520	523	510	470	400	454	507	495	505	527	524	521	514
NPRI	BLK2	523	521	521	529	527	520	523	522	522	527	518	521	521	524	514	469	400	455	508	501	505	529	520	521	517
PCGP	PGRG	599	600	601	615	612	601	600	602	600	610	598	606	600	603	595	602	602	599	604	601	401	408	404	418	402
PGLA	GT11	202	207	207	219	217	214	167	0	0	0	0	0	0	0	0	0	0	0	0	108	128	128	214	208	166
PGLA	GT12	204	209	210	222	222	218	171	175	200	229	224	230	231	223	153	157	158	160	157	157	198	177	177	218	211
PGLA	ST10	229	238	232	242	235	239	135	94	110	112	110	112	105	107	93	91	91	90	90	93	109	90	185	248	226
PGPS	GT3A	94	94	93	95	93	93	94	93	94	94	72	71	72	72	72	71	71	72	71	71	71	72	72	72	94
PGPS	GT3B	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PGPS	ST3C	90	43	43	43	43	43	43	43	43	42	30	30	30	30	30	30	30	30	30	31	31	31	31	44	44
PLPS	GT11	116	141	141	145	145	143	142	143	142	148	147	147	147	129	128	127	128	128	142	141	139	140	139	138	138
PLPS	GT12	119	150	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLPS	GT13	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLPS	ST18	202	144	143	61	60	59	62	60	60	61	61	61	60	61	61	59	58	58	58	58	60	60	61	61	61
SGRI	GT11	120	124	108	133	134	134	135	137	135	135	136	112	108	111	108	108	109	108	112	116	134	134	133	133	132
SGRI	GT12	124	130	111	70	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	GT13	80	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	ST14	203	171	137	128	104	74	73	72	72	72	74	64	64	69	64	67	66	66	63	64	74	73	71	72	73
SKSP	BLK1	314	329	330	341	346	344	305	293	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TJGS	GT1A	235	234	235	235	235	236	233	236	231	236	233	235	235	236	200	142	144	143	161	229	219	231	230	229	235
TJGS	GT1B	214	217	214	217	217	217	214	214	214	214	215	215	215	214	191	136	134	135	149	215	208	207	212	208	208
TJGS	ST1C	251	251	251	251	251	251	251	251	251	251	251	251	251	251	240	181	181	181	188	229	231	244	248	237	248
TJGS	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	0

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	GT2B	224	224	224	224	224	221	221	221	221	223	220	223	220	223	222	165	165	165	165	215	216	216	213	214	214	204	204	203	219	218	218	217	214	120	208	182	182	144	144	144	211	211	211	211	211	209	210	212		
TJGS	ST2C	125	125	125	125	125	128	128	128	128	128	128	128	128	128	108	104	104	104	126	126	126	126	126	122	122	122	129	127	127	122	122	119	113	245	239	236	209	209	209	259	259	257	257	257	257	257	257			
YPKA	GT21	134	135	135	135	135	133	135	135	135	137	134	65	127	65	65	65	65	132	129	128	128	129	129	129	128	128	127	127	127	128	128	126	128	96	66	66	66	66	66	129	130	131	131	132	130	130	131			
YPKA	ST20	63	63	64	63	63	63	63	63	63	63	63	41	60	38	36	36	36	57	61	61	61	62	62	62	62	62	62	61	62	62	62	62	63	62	54	39	39	39	39	39	61	62	62	63	62	63	62	62		
Total CCGT-Gas		6368	6057	5815	5643	5551	5472	5240	5027	4878	4837	4674	4532	4587	4530	4322	3897	3691	3924	4181	4407	4497	4597	4673	4863	4862	4759	4715	4739	4962	4853	4971	5052	5079	5010	4870	4737	4665	4642	4858	5451	5630	5711	5837	5908	5900	5865	5908	5618		
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			
BSIA	HY01	12	12	12	12	22	22	22	22	22	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	11	11	11	11	11	11	11	11	11	11			
CEND	HY01	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
CEND	HY03	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
HTRG	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1		
KNRG	HY02	28	28	28	29	29	28	29	29	29	29	28	29	28	29	28	28	28	28	29	28	29	28	29	29	28	28	29	29	29	28	2																			

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																								
System Total		15078	14826	14588	14392	14072	13877	13619	13356	13238	13169	12873	12893	12836	12825	12532	12157	11964	12238	12539	12764	13232	13558	13873	14025	13995	13895	13998	14243	14462	14397	14441	14597	14541	14459	14130	13940	13749	13794	14081	14844	15236	15367	15274	15230	15053	15080	15024	14721
SRev ST-Coal		115	133	154	225	327	325	330	337	333	329	337	326	335	323	347	339	321	330	336	332	357	398	366	396	414	412	344	265	323	337	316	312	349	328	375	395	421	407	409	218	172	128	240	195	189	196	190	126
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	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		495	312	253	209	301	237	469	322	471	165	328	394	339	396	604	1029	1235	1002	745	519	449	689	613	423	444	577	796	772	549	658	540	459	492	651	995	1128	1483	1655	1583	1065	886	805	679	608	616	651	608	970
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		
SRev LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		-3	-3	-6	-3	-5	-5	-4	-5	-8	-8	-4	-6	-3	-5	-5	-6	-6	-4	-3	-2	-2	-2	-3	-4	0	0	-2	-3	-1	0	0	-1	0	-3	-1	0	0	0	-1	-1	-2	0	-2	-2	-3	-2	-4	-3
Syncon		989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989	989		
Hydro		263	264	264	261	223	225	213	239	249	221	264	226	255	239	302	263	262	264	262	262	356	367	402	347	250	420	292	292	509	706	555	517	516	517	402	266	267	276	315	262	450	424	414	412	413	414	264	267
S.Reserve Total		1859	1695	1654	1681	1835	1771	1997	1882	2034	1696	1914	1929	1915	1942	2237	2614	2801	2581	2329	2100	1962	2254	1993	1838	1971	2121	2293	2189	1905	2075	1972	1848	1918	2054	2483	2652	3034	3327	3295	2533	2344	2044	2018	1900	1902	1946	1921	2198