

Daily System Generation Summary on Saturday

Saturday, March 02, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,207 MW
Distillate	0 MW
Total TNB	2,207 MW
Total IPP	16,461 MW
Total Co-Gen	80 MW
Total System	21,827 MW

Generation Mix

Type	MWh	Percentage
Hydro	7,126	2.03 %
Gas	34,393	9.82 %
Total TNB	41,519	11.85 %
ST-Coal	213,518	60.96 %
LSS	1,728	0.49 %
Gas	91,702	26.18 %
Total IPP	306,948	87.64 %
Co-Gen	1,933	0.55 %
Total Co-Gen	1,933	0.55 %
Total Generation	350,400	100.04 %
PLTG	-571	-0.16 %
HVDC	722	0.21 %
Interconnection	151	0.04 %
Net Energy	350,249	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:	20:00:00 Hour
Total Set On Bus	17,809 MW
TNB Generation	2,024 MW
IPP Generation	14,053 MW
Spinning Reserve	1,650 MW
Maximum Demand	16,143 MW
Net Energy	350,249 MWH
Load Factor	90.40 %

Fuel Cost

Total Cost:	70,895,712.96 RM
Cost per Unit	20.65 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	557
Hydro	275
Syncon	742
Thermal	198
Total	1,772

Time	Weather	Temperature
Afternoon	Hot	34
Morning	Sunny	27

Gas Usage

Station	(mmcsfd)
GLGR	48
TJGS	198
Total TNB	246
CBPS	52
KLPP	81
NPRI	151
PGLA	88
PLPS	62
PTEK	2
SGRI	37
SKSP	47
YPKA	42
Total IPP	562
Total Gas	808
Total Gas Required	808

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	15327	14517	14160	13601	13266	13031	12931	12890	12489	13629	14575	15090	15007	14744	15247	15415	15606	15418	14853	14833	16143	15996	15759	15611

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, March 27, 2019 10:57:36 AM

(Ir. Shanmugam Thoppalan)
Pengurus Besar Kanan
Jabatan Sistem Operasi

Daily MW Generation on Saturday

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	U002	694	693	695	694	695	694	692	696	693	694	693	693	695	694	695	695	695	695	695	694	692	694	693	695	695	695	692	691																				
JMHE	U001	523	517	519	517	522	522	522	519	523	523	522	523	521	351	324	323	522	519	517	330	323	327	521	521	517	321	321	329	520	519	381	321	322	323	321	525	518	392	320	321	320	322	321					
JMJG	U001	671	674	672	672	671	678	670	672	672	671	673	671	670	674	672	669	671	671	672	677	670	671	671	673	669	670	676	668	674	672	676	678	660	677	668	675	670	672	672	674	674	668	677	671	672	670		
JMJG	U002	672	671	672	669	668	672	674	672	672	672	668	674	672	673	671	671	673	671	674	672	671	668	671	671	672	667	673	671	673	669	673	671	672	669	672	674	674	672	674	672	670	672	675	673	671	672	672	
JMJG	U003	670	668	668	668	670	668	670	669	666	667	669	671	671	671	669	670	671	669	671	672	671	666	668	668	667	667	666	671	668	668	668	670	670	668	668	668	662	671	668	667	668	667	673	668	666	668	668	669
JMJG	U004	973	889	801	785	785	782	785	781	782	785	785	783	782	785	782	785	785	785	856	941	977	978	978	981	982	979	980	980	980	982	981	979	980	979	977	978	979	977	980	978	977	978	979	978	978	977	978	
JMJG	U005	974	834	785	781	783	781	777	781	782	773	783	780	779	781	785	781	781	782	782	900	979	978	981	982	977	977	972	977	977	978	979	977	976	977	981	982	982	980	982	980	982	988	983	980	981	986	985	979
PKLG	U003	283	283	287	279	281	281	283	279	283	279	285	279	281	284	279	194	157	152	140	149	145	145	146	139	141	142	142	142	143	141	149	144	143	147	173	237	266	265	267	283	288	284	285	283	283	285	284	
PKLG	U004	282	280	283	283	284	281	280	280	280	281	280	282	281	281	280	282	282	282	280	280	280	280	281	282	278	279	281	281	282	280	280	280	279	280	282	279	282	282	280	283	281	279	281	277	281	279	281	
PKLG	U005	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466		
TBIN	U001	690	690	689	689	687	689	688	689	688	690	690	689	689	688	691	691	690	690	690	690	687	689	687	691	689	691	689	690	689	684	689	690	690	688	688	689	689	687	687	688	686	690	690	690	687	690	689	
TBIN	U002	694	692	692	693	691	693	692	691	694	692	695	694	694	693	693	694	691	692	693	691	695	692	692	693	689	693	692	691	691	692	690	690	691	692	690	690	691	693	693	690	692	692	692	693	693	693	693	
TBIN	U003	693	691	692	689	690	688	690	690	690	690	689	689	691	692	691	689	690	690	689	690	688	689	690	688	689	690	690	690	690	690	690	690	691	690	691	690	689	689	691	689	690	691	689	690	691	690		
TBIN	U004	953	954	898	808	803	803	802	802	804	800	802	804	803	803	803	803	803	803	876	951	952	951	953	953	953	952	951	952	953	953	952	951	952	953	952	951	952	952	952	952	952	952	952	951	951	951	951	
Total ST-Coal		9238	9002	8819	8693	8695	8701	8693	8684	8696	8680	8705	8693	8695	8701	8698	8614	8578	8566	8392	8635	8863	9098	9090	9093	8907	8903	8887	9095	9098	9089	8897	8908	8910	9098	9081	8994	8977	9033	9018	9022	9247	9240	9118	9042	9040	9040	9043	9034
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		
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		
CBPS	BLK2	358	360	357	362	362	360	357	358	359	358	255	221	220	221	223	216	222	250	302	361	357	361	360	353	354	357	360	361	360	362	359	360	356	365	357	300	352	357	362	362	357	357	357	357	359	367	359	364
GLGR	GT01	67	67	67	67	69	69	68	68	69	68	66	68	68	68	69	68	69	69	68	69	67	67	68	68	67	67	68	67	67	72	104	103	82	67	67	66	68	68	72	103	101	104	103	105	104	103	82	
GLGR	GT02	67	68	68	68	68	68	69	69	68	68	67	67	67	68	69	68	68	69	68	68	69	68	68	68	69	68	68	68	74	103	102	81	68	68	67	68	68	75	104	104	104	104	104	104	80			
GLGR	ST1C	77	69	70	70	70	70	70	70	70	71	71	71	71	70	70	70	70	70	70	70	70	70	70	71	71	71	71	71	71	92	93	82	71	71	71	71	72	71	91	92	92	93	93	92	83			
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	138	139	133	139	116	129	112	112	112	140	137	135	129	117	119	140	134	53		
KLPP	GT14	150	152	152	151	152	151	111	76	76	80	77	75	75	76	79	75	76	75	139	150	151	153	152	152	153	153	121	121	151	152	152	142	147	124	147	122	122	122	122	151	148	147	140	127	128	152	143	150
KLPP	GT15	142	142	143	143	142	142	113	72	72	72	72	72	69	69	72	71	71	73	107	139	143	143	144	144	145	145	115	116	151	151	0	0	0	0	77	147	146	146	146	148	144	143	138	126	123	150	140	148
KLPP	ST17	130	129	129	129	129	129	113	84	83	83	83	83	83	85	84	86	89	117	133	131	133	130	130	129	129	118	118	120	193	131	133	124	186	186	187	187	187	194	194	194	194	190	186	198	194	178		
NPRI	BLK1	505	499	497	500	506	506	503	505	473	439	415	379	430	358	353	328	341	490	505	508	527	495	503	499	502	507	509	509	509	510	511	506	510	505	501	510	503	499	510	511	511	504	509	504	510	510	509	509
NPRI	BLK2	507	500	497	502	509	508	505	504	483	440	415	376	431	359	348	325	338	492	506	509	534	495	503	488	503	510	512	512	512	512	512	508	512	508	500	512	505	501	511	512	511	505	511	506	511	512	509	512
PCGP	PGRG	600	595	590	596	600	604	601	602	604	604	602	600	592	604	604	395	405	598	601	598	603	593	596	595	593	596	599	604	604	603	602	597	600	597	588	603	594	585	600	602	595	602	595	603	597	605		
PGLA	GT11	180	182	200	214	167	0	0	0	0	0	0	0	0	0	0	0	0	56	147	210	224	222	212	162	170	200	175	203	184	195	210	200	185	167	165	163	175	215	209	208	197	205	206	214	207	213		
PGLA	GT12	182	185	203	218	160	156	231	230	153	159	158	157	156	159	159	156	158	160	235	198	178	215	231	228	215	166	171	204	180	207	187	198	215	204	188	171	169	167	178	219	214	208	202	210	211	215	210	217
PGLA	ST10	224	205	226	226	103	90	114	114	96	91	91	91	91	91	89	90	91	114	106	90	225	250	250	251	215	217	229	223	232	227	228	242	233	222	205	206	206	206	228	231	235	233	233	230	238	231	229	
PLPS	GT11	112	128	124	130	129	129	129	130	129	127	128	129	129	128	129	125	129	126	129	128	129	125	127	125	126	12																						

Daily MW Generation on Saturday

		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																									
YPKA	ST10		52	52	52	52	51	33	33	33	33	33	33	32	32	33	33	33	52	54	54	55	55	55	56	35	34	56	57	54	118	123	112	82	81	80	80	81	91	123	123	123	123	123	124	122	122				
YPKA	GT21		137	136	139	135	137	131	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
YPKA	ST20		64	64	63	63	63	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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			5678	5553	5373	5440	5156	4991	4624	4543	4286	4168	4007	3892	3985	3852	3858	3565	3622	4155	4865	4942	5252	5245	5498	5469	5403	5283	5130	5240	5381	5637	5498	5806	6021	5767	5752	5605	5606	5366	5548	6275	6389	6351	6386	6350	6370	6434	6259	6036	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	94	70	65	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	94	70	65	0	0	0	0		
BSIA	HY02		11	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	HY01		9	10	10	10	10	9	9	9	9	10	9	9	9	10	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9		
CEND	HY02		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CEND	HY03		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
KNRG	HY02		26	26	25	26	26	26	26	26	26	26	26	26	26	25	25	26	26	25	26	25	26	25	26	2	0	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	HY03		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	24	24	24	24	24	24	24	24	24	23	24	24	23	24	24	23	24	24	23	24	23	24	23	24	
KNYR	HY01		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	97	98	98	98	98	99	99	99	99	99	99	99	99	98	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	98	98	99	98	99	99	99	99	99	99	99	99	99	99	99	98	97	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
KNYR	HY04		58	59	59	59	60	58	57	59	58	60	59	59	59	60	57	55	55	60	59	59	58	59	60	99	99	99	99	100	100	100	100	100	99	97	58	58	58	61	59	59	59	59	59	60	60	60	60		
LPJA	HY02		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21			
MNOR	HY01		5	5	5	5	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PGAU	HY02		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	22	-1	-1	-1	-1	-1	-1	-1	-1	109	-1	22	22	-1	-1	-1	-1	-1	-1	-1	-1	21	21	21	-1	-1	-1	-1	
PGAU	HY04		20	20	0	0	0	22	22	22	22	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	109	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	21	
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	50	25	0	0	0	0	0	0	0	0	0	51	31	50	51	31	31	0	0	
SIHY	HY02		50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY03		51	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	51	0	0	0	0	0	0	0	0	0	51	31	51	51	31	31	31	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	25	17	17	25	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	
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		
TMGR	HY02		41	41	39	40	41	40	40	40	41	40	40	40	40	39	41	40	40	40	41	40	40	39	40	40	40	41	41	41	41	35	36	36	34	36	36	34	36	44	44	44	44	39	39	39	38	39	38	39	
UJLI	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		
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	-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		7	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	6	6	6	7	6	7	6	6	7	7	7	6	7	7	7	7	7	7	
Total Hydro			301	301	278	181	179	198	197	199	198	201	198	199	198	200	198	193	195	199	199	199	198	198	222	435	434	435	435	437	437	437	437	769	560	455	455	425	337	190	188	190	201	375	320	359	347	258	260	226	198
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
BDLS	LSS1		0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	13	17	20	23	25	26	27	28	29	28	29	28	27	26	25	23	17	17	13	8	6	2	0	0	0	0	0	0	0	0	0	0	0
CHLS	LSS1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	14	21	27	31	35	38	41	42	34	26	35	39	14	21	22	35	28	20	11	8	3	0	0	0	0	0	0	0	0	0	0	0	0
GNLS	LSS1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	42	50	50	42	37	39	22	31	31	22	14	4	1	0	0	0	0	0	0	0	0	0	0	0	0
KKLS	LSS1		0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	14	20	27	33	39	41	23	27	49	37	48	43	39	41	41	28	20	20	7	4	1	0	0	0	0	0	0	0	0	0	0	0		

Daily MW Generation on Saturday

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																									
Interconnection		-21	30	40	45	-39	-13	3	-31	3	-48	-30	22	35	5	-45	-9	8	-22	-15	-17	-39	-22	-9	6	12	17	26	-44	9	-1	41	38	52	52	79	17	77	34	25	-19	24	32	26	-8	-2	8	10	-40	
System Total		15327	14911	14517	14357	14160	13991	13601	13546	13266	13188	13031	12850	12931	12840	12890	12471	12489	13070	13629	13983	14575	14808	15090	15277	15007	14930	14744	15140	15247	15475	15415	15531	15606	15534	15418	15123	14853	14681	14833	15606	16143	16060	15996	15901	15759	15816	15611	15399	
SRev ST-Coal		195	346	388	403	400	390	396	404	397	400	389	400	393	387	396	169	121	133	142	171	253	190	198	195	276	280	199	192	189	198	202	178	176	171	188	95	112	56	71	67	166	173	245	171	173	173	170	179	
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	0	0	0
SRev CCGT-Gas		862	987	735	668	952	757	1059	1010	1267	1385	1546	1661	1568	1701	1695	1988	1931	1398	688	842	532	668	415	444	510	630	783	673	757	501	753	518	303	700	936	1155	1154	1394	1212	491	377	415	380	416	396	332	507	513	
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	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	0	0	0
SRev Co-Gen		-2	2	0	-1	-4	-1	-3	-2	-1	-3	-3	0	0	-4	-3	-2	-2	-2	-3	0	-1	1	0	0	2	3	1	3	3	2	2	4	0	1	0	1	0	0	-1	-1	-2	1	-1	-1	-1	-2	-5	-3	
Syncon		989	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	838	687	737	737	737	737	737	737	737	586	737	586	586	737	737	838	838	838	838	687	687	687	838	838	838	838		
Hydro		253	254	127	124	126	257	258	256	256	253	256	255	256	254	256	261	259	256	257	257	258	258	385	222	223	222	222	220	220	220	189	247	353	352	231	228	263	265	263	252	379	434	395	256	295	293	277	255	
S.Reserve Total		2297	2427	2088	2032	2312	2241	2548	2506	2757	2873	3026	3154	3055	3176	3182	3254	3147	2623	1922	2108	1880	1955	1685	1598	1748	1872	1942	1824	1906	1658	1732	1684	1418	1810	2092	2216	2367	2553	2383	1647	1650	1725	1745	1724	1701	1634	1787	1782	