

Daily System Generation Summary on Saturday

Saturday, July 17, 2021

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,252 MW
Distillate	0 MW
Total TNB	2,252 MW
Total IPP	17,089 MW
Total Co-Gen	0 MW
Total System	22,990 MW

Generation Mix

Type	MWh	Percentage
Hydro	21,583	6.76 %
Gas	68,042	21.31 %
Total TNB	89,625	28.06 %
ST-Coal	178,251	55.82 %
LSS	3,692	1.16 %
Gas	47,188	14.78 %
Total IPP	229,131	71.75 %
Co-Gen	163	0.05 %
Total Co-Gen	163	0.05 %
Total Generation	318,919	99.86 %
PLTG	259	0.08 %
HVDC	-697	-0.22 %
Interconnection	-438	-0.14 %
Net Energy	319,357	100.00 %

Maximum Demand Record

Date: 3/10/2020	18,808 MW
Date: 3/10/2020	394,238 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	21:00:00 Hour
Total Set On Bus	15,788 MW
TNB Generation	5,083 MW
IPP Generation	10,193 MW
Spinning Reserve	505 MW
Maximum Demand	15,285 MW
Net Energy	319,357 MWH
Load Factor	87.06 %

Fuel Cost

Total Cost:	48,502,899.82 RM
Cost per Unit	15.20 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	114
Hydro	296
Syncon	397
Thermal	411
Total	1,218

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	26

Gas Usage

Station	(mmcsfd)
GLGR	3
SRDG	6
TJGS	219
Total TNB	228
NPRI	154
PLPS	21
SKSP	32
Total IPP	207
Total Gas	435
Total Gas Required	435

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	14453	13727	13164	12629	12273	11984	11884	11605	11181	11908	12460	12802	13002	13134	13497	13877	14010	13994	13625	13655	15079	15285	15133	15095

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, August 5, 2021 10:51:52 PM Head
Grid System Operator

(Ir. Shanmugam Thoppalan)

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	699	699	696	696	696	698	696	693	690	697	642	603	557	450	405	405	404	405	454	557	556	555	651	696	696	695	696	697	694	694	691	694	694	695	697	695	694	696	697	696	696	693	704	696	696	695	697		
JMHE	U001	930	934	881	847	851	848	849	776	778	781	781	778	759	784	774	780	782	779	782	780	780	782	777	779	780	859	849	847	874	867	869	872	869	868	870	873	870	871	928	973	981	981	982	980	981	978	975		
JMHE	U002	936	934	907	851	847	852	849	776	777	780	779	778	781	782	779	778	781	782	780	780	780	781	781	777	778	782	856	848	849	875	871	871	873	870	872	870	867	870	872	931	972	978	980	982	979	981	978	976	
JMJG	U001	697	668	672	666	669	672	645	598	674	666	671	672	670	671	673	668	671	675	673	676	671	672	671	672	661	670	666	669	665	667	670	673	672	665	668	672	673	672	674	668	679	664	662	667	679	681	678	674	
JMJG	U002	673	675	671	678	673	673	678	676	671	667	678	672	669	672	673	669	674	674	671	673	675	672	676	672	669	671	672	673	674	671	673	672	675	673	672	672	679	673	675	673	682	684	687	684	686	684	682	685	
JMJG	U004	934	933	918	860	856	855	857	836	787	791	787	789	791	788	790	789	789	789	790	786	790	786	840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261	356	409	
JMJG	U005	891	891	889	887	890	842	804	800	826	825	823	823	824	824	819	814	822	819	823	820	822	818	822	814	820	818	849	850	849	866	877	868	871	873	872	869	873	868	872	895	892	888	887	885	889	890	894	887	
PKLG	U006	449	448	446	448	449	449	449	447	449	448	448	449	449	449	448	450	448	448	448	450	449	446	449	446	449	450	450	447	448	449	446	449	450	450	450	449	449	448	449	446	450	449	447	449	446	446			
TBIN	U001	689	693	599	599	548	448	451	451	453	397	349	301	302	302	301	301	301	314	402	400	503	500	564	676	687	675	649	649	693	688	689	689	694	688	687	689	687	687	688	688	689	687	689	687	687	689	689		
TBIN	U003	690	692	634	600	551	482	480	481	484	407	404	302	306	302	306	304	304	304	311	408	403	511	505	571	671	691	688	656	658	696	693	690	693	694	692	697	693	693	696	693	691	696	696	691	691	697	687	690	
TBIN	U004	933	932	905	856	855	854	852	854	853	852	853	853	855	855	854	852	852	852	853	853	852	853	853	852	855	855	853	853	852	875	872	874	872	874	874	871	873	872	875	931	961	981	982	983	985	982	982	984	
Total ST-Coal		8521	8499	8218	7988	7885	7673	7610	7388	7442	7311	7270	7059	7009	6986	6868	6808	6831	6827	6850	7080	7180	7382	7430	6800	7051	7099	7262	7193	7190	7358	7353	7346	7357	7355	7351	7355	7365	7348	7367	7552	7683	7703	7705	7716	7719	7989	8065	8112	
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	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	0	0	0
GLGR	GT01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	530	530	529	530	525	531	527	531	524	529	518	530	531	531	521	523	529	529	530	528	530	529	521	524	526	529	520	526	525	525	527	526	525	527	526	527	530	529	517	531	527	531	532	524	530	532	525	521	525
NPRI	BLK2	530	529	529	529	529	529	533	527	533	521	533	535	533	526	528	532	533	529	527	528	527	523	524	523	523	522	518	520	520	520	519	518	520	520	522	523	524	520	526	527	526	527	528	529	528	526	526	526	
PCGP	PGRG	616	614	622	616	607	616	609	615	606	615	598	620	620	614	603	606	611	615	614	620	622	611	602	606	606	618	599	620	617	617	613	615	631	620	621	626	615	622	595	617	611	614	616	610	612	614	605	606	
PLPS	GT11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	46	45	45	45	46	45	56	141	138	137	136	138	136	139	138	138	134
PLPS	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PLPS	ST18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	59	122	142	143	143	211	213	210	210	208
SKSP	BLK1	333	243	225	218	207	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SPGP	BLK1	725	726	725	727	726	724	727	727	726	725	726	724	726	725	726	726	726	725	726	727	727	725	724	724	722	719	722	718	718	716	716	714	716	714	717	716	722	723	725	723	724	725	727	726	727	726	724		
SPGP	BLK2	725	726	725	725	726	724	726	727	725	724	726	725	726	726	726	726	725	726	726	725	726	726	724	724	725	723	725	724	726	725	726	724	725	724	726	725	725	725	726	726	725	726	726	725	725	725	725	724	
TJGS	GT1A	227	227	227	228	223	226	223	228	223	228	219	228	225	226	221	148	147	231	228	223	227	226	223	225	224	224	223	222	222	223	226	226	225	222	223	225	223	222	217	222	228	229	230	234	229	233	232	229	
TJGS	GT1B	217	218	217	215	219	217	218	217	219	218	211	216	214	214	216	142	136	220	214	213	218	217	216	218	215	217	214	212	216	217	216	216	214	215	212	217	218	211	217	221	222	220	218	223	218	222	222		
TJGS	ST1C	242	242	242	242	242	242	242	242	242	239	240	243	243	243	195	176	235	242	242	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245		
TJGS	GT2A	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216			
TJGS	GT2B	212	212	212	212	212	212	212	213	213	213	213	213	213	213	213	101	104	145	216	213	213	213	213	213	213	213	213	214	214	212	212	212	212	212	212	214	214	211	211	213	221	221	221	221	221	221	221	221	
TJGS	ST2C	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	194	192	210	249	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	256	256	256	256	256	261	261	261	261	261	261	261	261	
Total CCGT-Gas		4827	4737	4723	4712	4686	4630	4483	4502	4475	4497	4																																						

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																								
KNYR	HY03	57	57	57	99	99	97	99	59	9	0	0	0	0	0	0	98	97	97	97	96	98	99	97	99	99	99	99	99	99	99	98	97	94	97	97													
KNYR	HY04	98	98	98	100	100	77	79	92	-1	-1	-1	-1	-1	-1	-1	100	99	99	98	98	100	100	99	100	100	100	100	100	100	98	96	100	100	99	96	99	99											
LPIA	HY01	16	16	16	16	16	16	16	16	16	15	15	15	15	16	16	18	18	18	18	18	15	15	15	15	16	16	16	16	16	16	16	15	15	15	15	15												
LPIA	HY02	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	15	15	15	15	15	15												
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3												
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	111	110	110	81	21	20	20	21										
PGAU	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	0	0	0	0	0	22	81	81	81	20	21	20	20	20										
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	0	0	0	0	0	110	111	110	81	20	20	20	20											
SIHY	HY01	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	48	47	47	48	47	31	31	0										
SIHY	HY02	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	50	50	50	50	50	30	30	30										
SIHY	HY03	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	50	50	50	50	50	30	30	0										
SYPS	HY02	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25	25	25	16	16	16										
SYPS	HY03	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25	25	25	16	16	16										
SYPS	HY04	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25	25	25	0	0	0										
TMGR	HY01	35	35	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	84	62	72	72	77	77	77	77	77	77	77	77	77	77	75	77	77	77	77	77	77	77	77										
TMGR	HY03	33	33	33	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	84	84	60	30	82	82	82	82	82	82	82	82	82	82	82	79	82	82	82	82	82	82	81	81									
TMGR	HY04	41	80	84	77	42	80	62	61	42	42	39	67	49	42	41	42	42	43	43	42	56	42	40	41	42	42	39	71	73	52	70	82	84	66	83	73	47	84	39	77								
UJLI	HY01	92	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	179	-1	-1	-1	-1	93	91	91	93	95	183	182	91	93	93	81	181	182	182	182	180	180	182	-1	-1								
UJLI	HY02	93	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	88	91	-1	-1	-1	93	92	94	93	96	94	94	94	93	-1	84	93	184	184	186	182	182	94	90	-1								
UPIA	HY01	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	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		1053	736	670	691	556	546	502	332	271	260	350	287	264	269	288	268	292	317	323	348	316	465	1252	992	681	578	776	1029	1074	1192	1224	1353	1464	1500	1331	1281	1132	1313	1586	1995	1961	1983	1815	1688	1473	1297	1125	
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			
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	7	10	9	13	18	15	18	21	26	27	27	25	25	20	23	12	17	15	11	8	4	1	0	0	0	0	0	0	0	0	0	
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	11	15	19	21	25	30	31	31	31	31	31	32	32	29	27	23	19	15	10	5	2	0	0	0	0	0	0	0	0	0	0	
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	11	15	19	23	26	29	30	27	28	32	32	32	19	28	25	21	17	13	9	5	2	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	1	5	8	12	17	20	24	17	31	18	22	45	31	15	29	32	23	30	26	19	12	12	8	3	1	0	0	0	0	0	0	0	0	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	12	19	21	33	36	21	39	41	15	46	36	35	33	35	28	26	17	14	8	4	2	0	0	0	0	0	0	0	0	0	
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	10	13	6	13	9	16	8	11	17	25	24	28	25	23	21	18	15	10	7	4	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	1	3	8	14	20	24	31	36	41	33	21	39	23	46	44	42	38	34	22	25	18	11	6	2	0	0	0	0	0	0	0	0	0	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	11	14	24	26	27	22	39	28	24	44	48	37	36	44	37	35	32	18	17	13	4	2	0	0	0	0	0	0	0	0	0	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	8	13	19	25	29	33	34	40	40	39	42	38	41	39	32	21	27	22	17	12	7	3	1	0	0	0	0	0	0	0	0	
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	12	17	18	25	27	30	30	30	30	30	30	30	21	22	29	27	23	19	15	10	6	2	0	0	0	0	0	0	0	0	0	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	10	15	22	28	30	35	40	25	37	26	38	48	17	25	38	34	28	21	15	12	2	1	0	0	0	0	0	0	0	0	0	0
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	15	18	21	33	39	47	23	34	36	41	37	46	52	51	47	37	29	21	13	7	2	1	0	0	0	0	0	0	0	0	0	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	14	20	25	29	33	36	34	29	37	40	21	24	18	12	25	29	18	14	8	4	2	0	0	0	0	0	0	0	0	0	
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	10	14	15	18	24	26	26	11	14	20	14	23	26	23	14	17	13	10	6	3	0	0	0	0	0	0	0	0	0	0	
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	11	21	28	26	26	26	30	30	19	30	30	31	26	30	30	30	24	17	12	11	7	1	0	0	0	0	0	0	0	0	0	
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	61	126	197	273	318	386	411	444	427	405	463	500	474	465	458	447	400	370	284	214	150	76	25	3	0	0	0	0	0	0	0	0	0
PCUF	CUFG	4	4	4	3	3	4	2	1	3	4	4	3	4	4	4	4	4	3	3	4	4	4	3	3	4	4	4	4	3	3	4	5	3	4	5	3	4	3	4	4	3	4	3	3	4	3		
PCUF	CUFK	4	4	3	3	3	4	3	2	3	3	2	4	2	3	3	3	4	4	5	3	4	4	4	4	5																							

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																								
System Total		14453	14054	13727	13451	13164	12910	12629	12427	12273	12143	11984	11987	11884	11810	11605	11147	11181	11606	11908	12213	12460	12646	12802	12986	13002	13062	13134	13316	13497	13755	13877	13887	14010	14023	13994	13745	13625	13502	13655	14416	15079	15153	15285	15175	15133	15170	15095	14868
SRev ST-Coal		304	326	558	581	579	623	685	653	649	653	643	698	710	709	711	725	668	671	671	674	667	675	621	595	475	430	420	472	475	381	373	383	376	375	377	372	364	379	366	263	132	112	110	99	96	176	200	153
SRev CCGT-Gas		76	166	180	191	217	273	70	51	78	56	112	54	50	58	88	557	569	234	57	66	46	65	93	81	414	100	113	92	94	92	201	197	179	215	189	190	213	210	399	147	68	64	126	94	43	36	52	116
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	
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	
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	
SRev Co-Gen		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Syncon		151	651	738	738	825	825	825	825	926	926	926	926	926	926	775	926	926	926	926	926	926	926	825	0	464	651	651	651	277	277	151	151	151	151	151	151	151	338	151	151	0	0	0	0	0	0	187	374
Hydro		690	307	272	126	174	104	148	144	217	178	189	99	162	185	180	312	181	157	132	126	101	133	185	551	347	271	374	176	297	402	410	378	249	263	227	396	446	258	489	366	258	292	270	438	541	731	720	605
S.Reserve Total		1221	1450	1748	1636	1795	1825	1728	1673	1870	1913	1970	1877	1948	1978	2005	2469	2444	1988	1786	1792	1740	1799	1724	1227	1700	1452	1558	1391	1143	1152	1135	1109	955	1004	944	1109	1174	1185	1405	927	458	468	506	631	680	943	1159	1248