

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,125 MW
Distillate	0 MW
Total TNB	2,125 MW
Total IPP	18,474 MW
Total Co-Gen	0 MW
Total System	24,248 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,875	4.62 %
Gas	66,537	22.15 %
Total TNB	80,412	26.76 %
ST-Coal	172,492	57.41 %
LSS	1,766	0.59 %
Gas	44,731	14.89 %
Total IPP	218,989	72.89 %
Co-Gen	155	0.05 %
Total Co-Gen	155	0.05 %
Total Generation	299,556	99.71 %
PLTG	-184	-0.06 %
HVDC	-698	-0.23 %
Interconnection	-882	-0.29 %
Net Energy	300,438	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:	20:00:00 Hour
Total Set On Bus	15,534 MW
TNB Generation	3,583 MW
IPP Generation	10,318 MW
Spinning Reserve	1,627 MW
Maximum Demand	13,925 MW
Net Energy	300,438 MWH
Load Factor	89.90 %

Fuel Cost

Total Cost:	46,140,705.21 RM
Cost per Unit	15.40 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	96
Hydro	297
Syncon	611
Thermal	703
Total	1,707

Time	Weather	Temperature
Afternoon	Hot	31
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
SRDG	4
TJGS	213
Total TNB	217
CBPS	55
NPRI	150
Total IPP	205
Total Gas	423
Total Gas Required	423

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	12457	11992	11612	11292	11008	10858	10931	11068	11253	12343	12800	13075	13054	12946	13179	13400	13349	13245	12797	12991	13925	13749	13516	13389

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, August 5, 2021 10:49:38 PM Head
Grid System Operator
(Ir. Shanmugam Thoppalan)

Daily MW Generation on Wednesday

		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		604	497	301	302	301	305	304	304	304	301	304	304	304	303	303	305	351	376	555	612	605	688	699	698	696	684	654	654	691	695	690	689	703	604	552	400	406	426	590	697	693	695	697	697	697	696	693	655	
JMHE	U001		778	779	781	781	785	781	781	778	780	778	779	779	779	779	779	780	780	781	824	830	833	831	827	828	832	832	830	850	853	848	847	845	852	853	851	850	870	866	870	867	867	869	871	870	869				
JMHE	U002		780	779	781	776	781	781	781	778	777	779	782	780	779	781	778	777	778	781	784	779	782	818	831	830	829	824	831	831	831	833	850	849	849	848	846	851	849	852	850	871	868	869	868	869	870	870	870	869	
JMJG	U001		673	671	672	678	668	673	601	572	506	508	508	505	508	506	508	564	594	609	670	670	672	657	673	672	669	675	673	678	674	663	675	672	672	619	597	698	676	668	667	672	667	672	673	670	673	669	671		
JMJG	U002		668	678	674	667	679	675	614	565	500	512	509	508	509	512	509	508	547	597	614	671	673	672	671	676	673	673	674	673	673	672	675	673	672	675	668	674	673	673	668	671	675	673	678	672	677	678			
JMJG	U004		788	786	785	789	788	789	787	786	788	785	788	789	788	791	790	789	787	789	789	787	787	797	837	837	836	836	835	839	835	836	854	856	855	855	855	855	855	876	872	876	873	876	874	876	874	874			
JMJG	U005		797	798	801	798	800	804	797	799	799	800	801	798	801	799	796	796	795	801	796	801	800	800	798	829	832	823	833	831	833	830	851	854	849	854	850	851	852	855	852	874	869	869	870	873	869	868	870	872	
PKLG	U006		449	450	436	356	278	267	268	271	268	271	268	271	267	271	268	268	306	391	445	449	449	447	448	449	448	448	448	446	449	449	448	446	445	448	447	447	449	450	447	447	449	450	449	448	449				
TBIN	U001		398	299	303	301	301	302	302	301	302	303	301	302	302	302	304	302	352	351	401	402	402	402	401	401	351	303	302	301	301	301	249	209	212	212	212	224	355	402	451	500	500	450	401	386	352	351	319		
TBIN	U002		401	299	304	303	303	305	302	303	302	303	304	304	302	303	303	303	354	353	404	403	403	402	403	404	362	313	303	302	307	302	249	210	212	219	213	223	349	404	442	453	454	453	402	386	342	350	201		
TBIN	U003		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	189	224	287	306	303	352	399	510	627	685	675	537	456	454	555	501	449	393	392	351	351	303
TBIN	U004		853	853	853	855	853	852	857	851	848	852	852	853	855	854	851	852	851	854	853	853	855	853	852	853	852	853	855	853	854	852	855	852	856	854	854	854	854	851	873	872	873	874	872	874	874	874	873		
Total ST-Coal			7189	6889	6691	6606	6537	6532	6397	6307	6175	6194	6192	6193	6196	6202	6186	6187	6317	6643	6750	7150	7212	7296	7416	7477	7476	7434	7465	7465	7528	7582	7643	7603	7555	7688	7642	7646	7603	7710	7737	8091	8339	8290	8195	8046	8015	7894	7777	7633	
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		
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	
CBPS	BLK2		351	351	358	362	362	351	351	356	358	359	359	362	365	364	364	358	358	360	360	360	353	359	354	362	355	362	355	362	362	362	362	362	362	362	362	362	362	355	361	361	362	362	362	355	362	352	354		
NPRI	BLK1		494	502	517	505	511	503	505	496	510	514	515	515	519	515	523	513	515	514	514	511	517	513	511	514	509	509	503	510	514	513	511	514	515	511	508	514	515	516	509	515	509	515	510	511	503	512	512	509	
NPRI	BLK2		499	505	518	507	512	506	508	498	512	518	518	518	522	518	525	517	517	514	516	514	516	512	512	512	508	512	515	515	511	517	517	514	510	515	517	518	511	518	511	515	512	514	506	515	515	512			
PCGP	PGRG		261	264	261	262	263	262	260	262	262	262	262	262	263	262	262	262	261	601	601	598	595	600	599	600	599	600	596	600	601	600	601	601	602	599	598	602	604	604	597	601	598	600	598	602	594	600	601	600	
SPGP	BLK1		727	727	725	726	724	727	724	726	726	725	725	726	727	727	725	726	724	725	724	725	726	725	724	725	725	724	724	725	725	724	724	724	726	725	725	725	725	724	726	724	726	727	724	725	726	725	724		
SPGP	BLK2		728	728	726	727	724	726	726	727	726	725	727	727	728	727	727	727	725	725	725	726	724	728	725	726	724	725	724	724	727	727	726	726	725	727	727	725	726	725	726	727	725	726	728	726	727	727	727	726	
TJGS	GT1A		212	217	231	222	223	221	222	219	228	224	228	224	229	227	224	225	228	224	227	224	221	230	228	228	224	224	229	223	223	223	226	222	222	226	226	229	229	225	223	224	226	223	223	227	219	229	224	224	
TJGS	GT1B		201	210	216	212	216	211	216	210	214	220	218	220	219	218	219	215	219	215	219	219	219	219	217	215	214	213	216	213	216	216	219	218	217	218	217	218	217	218	212	214	216	218	217	220	215	214	216	216	
TJGS	ST1C		237	240	240	240	240	240	237	233	241	241	241	241	241	241	241	241	241	241	241	241	241	241	241	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	244	241	241	241	241	241	241	241	241		
TJGS	GT2A		216	216	216	216	216	216	216	216	186	105	107	107	107	107	149	147	186	216	216	217	217	217	214	216	216	216	216	216	216	216	216	216	216	215	167	102	173	216	215	215	218	217	217	217	217	217			
TJGS	GT2B		213	213	213	213	213	213	213	183	102	104	102	104	104	104	146	145	181	214	214	213	213	213	213	211	211	211	211	211	211	211	211	211	211	211	214	162	98	169	212	214	212	212	212	212	212	211	211		
TJGS	ST2C		253	253	253	253	253	253	253	235	194	192	192	192	192	192	208	208	233	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	223	200	212	253	253	253	253	253	253	253	253		
Total CCGT-Gas			4392	4426	4474	4445	4457	4429	4431	4409	4381	4189	4198	4194	4217	4201	4217	4291	4284	4726	4813	4802	4782	4817	4800	4809	4790	4796	4777	4796	4808	4806	4796	4810	4810	4807	4798	4813	4681	4534	4652	4811	4796	4802	4801	4809	4767	4808	4804	4787	
SRDG	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	0	0	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	0	0	0	0	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		11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	HY02		11	11	12	11	11	11	11	11	12	12	12	12	23	23	23	13	13	12	12	13	13	12	13	13	12																								

Daily MW Generation on Wednesday

		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
PGAU	HY01	0	0	0	18	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	-1	-1
SIHY	HY01	48	48	31	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SIHY	HY02	50	41	31	31	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30	30	30	30	50	50	50	50
SIHY	HY03	49	50	31	31	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30	30	30	30	50	50	50	50
SYPS	HY02	25	25	25	25	25	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	0	0	17	25	25
SYPS	HY03	25	25	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SYPS	HY04	25	25	25	25	25	1	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	0	17	25	25	25
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
TMGR	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	-1
TMGR	HY04	36	39	62	40	41	39	40	37	42	42	42	42	61	74	85	41	66	74	73	59	40	58	58	74	80	53
UJLI	HY01	76	82	-1	-1	-1	-1	-1	-1	-1	-1	-1	92	96	90	92	89	90	-1	86	89	89	-1	-1	-1	-1	-1
UJLI	HY02	78	84	94	85	88	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	91	89	91	88	92	92	87	89	-1
UPIA	HY01	6	6	5	6	6	6	6	6	6	6	6	5	6	6	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
Total Hydro		856	786	726	670	574	409	410	403	406	442	416	434	473	568	618	534	575	552	636	541	629	619	603	502	489	508
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
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	5	7	10	13	14	20	23	16	23
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	7	11	12	19	19	25	28	23	29
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	14	21	27	26	24	21	22	23	22
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	5	6	8	10	18	13	16	16	29
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	4	8	9	9	13	10	11	9	8
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	7	13	15	20	29	24	18	24	39	
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	9	11	13	21	24	21	18	18	19
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27	27
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	10	11	10	10	14	20	24	23	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	8	11	8	8	9	10	11	13	17
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7	10	12	15	27	35	30	30	39	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	8	11	12	13	15	14	12	17	
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	3	4	4	6	7	6	6	
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	6	7	10	11	11	12	14	10	14	
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22	46	76	108	139	164	203	224	221	228	268
PCUF	CUFG	3	3	4	4	2	3	4	3	4	3	2	5	4	3	4	3	2	3	3	3	4	3	3	4	3	3
PCUF	CUFK	3	2	3	3	3	4	5	2	3	5	4	3	4	5	4	3	2	4	4	3	1	2	4	4	5	
Total Co-Gen		6	5	7	7	5	7	9	5	7	9	7	5	9	9	7	7	6	5	4	6	7	6	4	6	7	7
Total Gen		12443	12106	11898	11728	11573	11377	11247	11124	10969	10834	10813	10826	10895	10980	11028	11022	11204	11972	12279	12607	12769	12902	13030	13018	12982	
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
TIE-HVDC		-29	-30	-30	-28	-28	-29	-29	-29	-30	-30	-29	-29	-30	-30	-29	-29	-29	-29	-30	-30	-29	-29	-30	-30	-29	-29
TIE-PLTG		19	-20	-60	12	-7	14	-12	30	-7	-61	-12	21	-3	12	-7	-8	-16	-31	-31	-17	3	0	-12	-33	-39	
Interconnection		-10	-50	-90	-16	-35	-15	-41	1	-35	-91	-41	-8	-32	-18	-36	-38	-45	-61	-60	-46	-27	-29	-41	-62	-68	
System Total		12457	12160	11992	11748	11612	11396	11292	11127	11008	10929	10858	10838	10931	11002	11068	11064	11253	12037	12343	12657	12800	12935	13075	13084	13054	
SRev ST-Coal		735	726	743	779	779	771	883	885	887	882	883	882	881	839	735	732	691	635	633	713	714	747	739	711	695	
SRev CCGT-Gas		506	472	424	453	441	469	467	489	517	709	700	704	681	697	681	607	614	172	85	96	116	81	98	89	108	
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	
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	
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	
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	
Syncon		300	300	487	487	508	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825	

Daily MW Generation on Wednesday

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	
Hydro		425	367	240	316	241	144	143	150	147	111	137	119	80	172	122	206	165	288	204	162	412	244	260	174	187	168	270	356	322	264	381	335	285	377	378	238	121	265	306	216	303	317	331	269	442	388	179	105
S.Reserve Total		1966	1865	1894	2035	1969	2209	2318	2349	2376	2527	2545	2530	2470	2389	2326	2334	2299	1979	1766	1818	1750	1695	1687	1723	1753	1808	1930	1843	1789	1705	1629	1560	1518	1597	1743	1852	1845	2149	2044	1672	1631	1732	1730	1758	1875	1785	1577	1742