

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,316 MW
Distillate	0 MW
Total TNB	2,316 MW
Total IPP	16,544 MW
Total Co-Gen	0 MW
Total System	21,957 MW

Generation Mix

Type	MWh	Percentage
Hydro	23,364	7.04 %
Gas	47,509	14.31 %
Total TNB	70,873	21.35 %
ST-Coal	197,268	59.43 %
LSS	3,237	0.98 %
Gas	61,548	18.54 %
Total IPP	262,053	78.95 %
Co-Gen	164	0.05 %
Total Co-Gen	164	0.05 %
Total Generation	333,090	100.35 %
PLTG	445	0.13 %
HVDC	719	0.22 %
Interconnection	1,164	0.35 %
Net Energy	331,926	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:	20:30:00 Hour
Total Set On Bus	16,094 MW
TNB Generation	4,594 MW
IPP Generation	10,988 MW
Spinning Reserve	505 MW
Maximum Demand	15,540 MW
Net Energy	331,926 MWH
Load Factor	89.00 %

Fuel Cost

Total Cost:	50,448,900.05 RM
Cost per Unit	15.14 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	310
Hydro	322
Syncon	329
Thermal	346
Total	1,307

Time Weather Temperature

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	26

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	14861	14200	13564	13097	12749	12444	12324	12192	11794	12641	13182	13599	13906	13767	14204	14333	14480	14362	14031	14158	15526	15482	15296	15283

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, September 2, 2021 8:55:52 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

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	U001	694	691	600	601	602	603	601	691	693	692	694	692	679	600	601	602	695	693	691	693	691	693	693	688	693	692	693	693	692	692	692	692	693	693	701	702	702	700	711	702	703	703	702	703						
JMHE	U001	981	973	903	903	901	904	892	898	901	780	777	780	780	780	784	782	783	779	780	781	803	879	882	883	879	868	881	911	911	908	912	908	909	908	912	909	912	912	946	965	979	979	975	972	982	978	975	975		
JMHE	U002	903	890	898	898	898	902	897	896	897	780	778	779	780	781	782	786	783	783	780	782	808	879	881	884	880	877	881	900	901	899	901	898	898	899	897	892	853	852	852	797	803	802	801	800	804	803	802	798		
JMJG	U001	677	671	671	667	672	676	678	674	667	668	630	598	609	598	608	609	596	595	596	644	668	677	678	666	679	669	671	671	674	666	672	668	667	671	668	671	672	672	673	679	677	682	680	682	682	683	682	683		
JMJG	U003	666	662	662	653	664	662	668	662	540	486	349	332	283	296	288	289	296	305	307	330	280	211	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
JMJG	U004	979	981	961	905	903	904	904	853	795	789	788	791	789	789	790	789	790	788	788	787	789	847	885	885	887	885	885	884	887	915	915	913	915	916	918	914	914	939	980	980	979	980	982	981	979	982	982	981		
JMJG	U005	892	890	891	892	889	892	890	796	801	801	798	799	800	798	799	798	800	799	801	800	807	891	890	888	892	890	888	889	880	887	887	890	890	890	890	894	883	892	888	891	887	891	890	890	888	890	894	891	889	
PKLG	U006	447	446	447	448	449	450	451	449	449	446	447	447	450	449	448	449	449	450	449	448	449	449	446	446	450	446	447	449	448	446	447	446	446	446	449	446	446	446	448	449	449	452	450	449	449	449				
TBIN	U001	499	497	500	500	500	500	501	501	500	500	587	598	598	599	508	496	499	500	499	602	657	690	689	690	688	689	689	689	689	689	689	689	689	689	689	685	687	688	695	700	703	700	699	700	699	700	698	699		
TBIN	U002	604	602	484	504	502	503	501	502	502	503	503	501	501	503	414	402	403	403	578	655	694	690	691	686	687	691	690	701	692	693	693	693	691	691	690	693	691	701	702	702	703	701	703	703	705	700	702	702	702	
TBIN	U003	600	600	496	501	398	404	402	402	414	497	498	500	499	499	442	403	399	401	400	552	649	691	689	692	687	687	686	692	690	691	691	688	690	687	690	691	692	691	698	694	700	698	699	698	697	699	696	700		
TBIN	U004	983	982	982	931	851	853	854	855	854	853	854	852	854	853	852	852	852	853	854	853	859	883	884	885	883	884	884	914	913	913	912	913	913	912	913	914	955	983	983	983	981	980	981	983	984	983	982	982		
Total ST-Coal		8925	8885	8495	8403	8228	8252	8241	8089	8011	7795	7703	7673	7635	7481	7268	7251	7256	7352	7851	8116	8484	8310	8306	8305	8272	8295	8382	8400	8399	8412	8402	8404	8401	8411	8389	8369	8427	8566	8538	8565	8561	8566	8556	8571	8583	8561	8561			
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	0
CBPS	BLK2	298	305	363	368	363	367	370	372	372	373	373	368	368	370	370	370	304	218	222	240	221	228	313	355	357	355	361	361	361	362	360	362	362	355	355	355	360	362	359	354	350	347	359	362	361	361				
EMPP	BLK1	150	185	179	178	179	174	174	174	173	174	174	174	173	174	174	173	174	173	174	174	174	174	174	174	174	174	174	174	174	174	174	189	245	191	189	242	298	383	402	426	435	435	385	384	329	304				
EMPP	BLK2	742	740	745	742	741	739	741	741	743	741	741	740	742	743	741	739	741	739	733	730	742	722	721	734	0	0	0	0	0	0	0	0	0	0	171	0	0	0	0	0	0	0	0	0	168	305	304	304		
EMPP	BLK3	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	99	115	115	164	173	175	171	189	191	200	200	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	16	35	41	90	106	100	99	100	101	99	107	106	106	108	107	107	107	106	107	106	107			
GLGR	GT02	109	106	94	94	94	94	94	94	94	94	94	95	94	94	94	95	95	95	95	95	95	95	95	95	94	106	108	107	100	93	90	104	100	100	99	100	99	99	106	106	106	106	106	106	106	106				
GLGR	ST1C	47	45	41	40	40	39	39	40	40	40	40	41	41	40	40	40	40	41	40	41	40	41	41	41	41	47	46	47	42	42	36	95	91	91	91	92	91	92	98	98	97	98	97	98	97	98				
NPRI	BLK1	501	506	524	513	505	517	515	520	514	513	512	516	515	514	513	515	514	515	512	512	515	514	515	514	511	514	514	509	515	513	511	515	515	515	509	511	508	514	520	517	509	513	508	515	517	524	524			
NPRI	BLK2	485	499	521	526	494	510	524	529	524	523	520	526	525	524	529	527	512	527	527	491	497	332	515	515	517	514	516	517	511	517	515	511	518	518	518	517	510	514	509	518	523	520	512	514	511	518	520	525		
PCGP	PGRG	262	260	271	262	263	260	262	267	261	261	262	262	260	262	262	262	261	263	402	603	597	598	601	602	600	601	597	602	601	595	602	599	596	603	603	602	601	593	596	595	602	592	584	576	577	572	580	584	593	
PGLA	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	0	0	0	0	0	0	0	0	0	0	0	14	14	18	18	35	86		
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	44	44	45	44	44	45	44	45	45	45		
SKSP	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SPGP	BLK1	707	717	737	721	714	724	727	732	726	724	723	726	724	727	725	723	722	725	724	720	721	724	718	717	721	710	713	712	709	723	721	717	724	723	725	724	715	719	716	725	718	707	699	704	697	707	708	714		
SPGP	BLK2	709	718	375	357	350	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TJGS	GT1A	221	226	228	226	192	199	180	0	0	0	0	0	0	0	0	0	0	0	0	0	125	232	226	200	224	226	223	222	223	223	222	223	225	223	224	225	227	226	227	227	222	225	221	226	226	226				
TJGS	GT1B	211	214	217	219	184	191	168	168	219	223	219	219	217	218	219	218	221	217	220	153	161	156	161	213	213	185																								

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																										
Total Co-Gen		8	6	6	8	6	8	7	5	6	7	6	10	6	7	9	7	8	5	8	9	3	7	7	6	7	5	5	9	7	6	6	7	6	5	5	8	9	9	7	8	6	7	6	8	7	7	7	6		
Total Gen		14952	14718	14201	13943	13615	13417	13158	12936	12808	12626	12513	12437	12366	12375	12213	11819	11832	12261	12639	13048	13286	13472	13640	13858	13974	14094	13818	14090	14264	14442	14441	14512	14502	14419	14380	14288	14039	14038	14207	14995	15582	15589	15561	15477	15344	15449	15291	15124		
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	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		30	29	29	30	30	31	31	30	30	30	31	29	29	29	30	31	30	31	30	31	31	30	30	29	29	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	31	31	30	30	30	30	31			
TIE-PLTG		61	100	-28	21	21	-5	30	-42	29	-24	39	23	13	24	-7	-3	7	-27	-32	23	74	-29	11	0	39	256	21	-47	30	46	79	46	-8	-54	-12	30	-22	41	19	48	25	18	49	8	18	4	-22	0		
Interconnection		91	130	1	51	51	26	61	-12	59	6	69	54	42	53	21	27	38	3	-2	53	104	0	41	29	68	286	51	-16	60	75	108	76	22	-24	18	60	8	71	49	78	56	49	79	37	48	34	8	31		
System Total		14861	14588	14200	13892	13564	13391	13097	12948	12749	12620	12444	12383	12324	12322	12192	11792	11794	12258	12641	12995	13182	13472	13599	13829	13906	13808	13767	14106	14204	14367	14333	14436	14480	14443	14362	14228	14031	13967	14158	14917	15526	15540	15482	15440	15296	15415	15283	15093		
SRev ST-Coal		244	282	490	604	621	609	612	716	691	718	800	743	750	703	713	760	764	760	736	700	661	451	545	373	370	389	380	328	313	336	323	333	331	334	324	338	316	258	119	97	70	74	80	79	64	52	74	74		
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	5	37	7	2	0	0	1	0	0	0	0	38	
SRev CCGT-Gas		594	539	784	450	597	704	568	501	443	440	445	435	441	439	436	442	464	306	101	263	347	508	461	314	286	304	114	99	125	359	718	293	186	96	93	96	142	109	128	191	165	193	460	445	471	429	217	188		
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	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	0	0	0
Syncon		651	651	738	825	825	825	825	825	825	674	825	825	825	825	926	926	825	825	651	651	738	587	738	738	0	338	338	151	151	151	338	187	374	374	374	525	525	338	187	0	0	0	0	0	0	187	374	525		
Hydro		333	276	87	122	126	126	133	54	128	97	263	92	116	110	124	204	202	97	90	185	137	121	241	131	130	332	462	439	713	623	501	399	348	278	440	413	510	502	1011	511	251	238	257	357	496	385	502	510		
S.Reserve Total		1822	1748	2099	2001	2169	2264	2138	2096	2087	2080	2182	2095	2132	2077	2098	2332	2356	1988	1752	1799	1796	1818	1834	1556	1524	1025	1294	1204	1302	1469	1693	1363	1052	1082	1231	1221	1493	1399	1633	993	488	505	797	882	1031	1053	1167	1335		