

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,213 MW
Distillate	0 MW
Total TNB	2,213 MW
Total IPP	17,966 MW
Total Co-Gen	0 MW
Total System	24,181 MW

Generation Mix

Type	MWh	Percentage
Hydro	12,040	3.12 %
Gas	50,354	13.03 %
Total TNB	62,394	16.15 %
ST-Coal	231,922	60.01 %
LSS	6,114	1.58 %
Gas	85,768	22.19 %
Total IPP	323,804	83.79 %
Co-Gen	359	0.09 %
Total Co-Gen	359	0.09 %
Total Generation	386,557	100.03 %
PLTG	114	0.03 %
Interconnection	114	0.03 %
Net Energy	386,443	100.00 %

Maximum Demand Record

Date: 5/8/2023	19,191 MW
Date: 4/13/2023	407,278 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:00:00 Hour
Total Set On Bus	19,720 MW
TNB Generation	3,883 MW
IPP Generation	14,713 MW
Spinning Reserve	1,116 MW
Maximum Demand	18,629 MW
Net Energy	386,443 MWH
Load Factor	86.43 %

Fuel Cost

Total Cost:	98,941,237.19 RM
Cost per Unit	25.59 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	505
Hydro	363
Syncon	670
Thermal	132
Total	1,670

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	28

Gas Usage

Station	(mmcsfd)
GLGR	29
TJGS	117
Total TNB	146
CBPS	18
EMPP	276
NPRI	137
PCGP	81
SKSP	45
SPGP	187
Total IPP	744
Total Gas	890
Total Gas Required	890

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	15621	14881	14325	13869	13590	13449	13532	13568	14057	15797	16611	17227	17230	17170	18071	18377	18629	18166	17028	16908	17544	17325	16558	16369

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, May 9, 2023 9:35:46 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

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			
JMAH	U001	705	706	705	705	705	706	703	706	706	706	705	705	707	705	704	704	706	704	707	714	704	705	705	707	705	705	704	708	705	707	705	707	705	707	705	704	706	705	706	706	706	706	703	707	707	706	708	706	705	
JMAH	U002	707	706	701	704	705	707	705	708	707	708	706	704	706	702	706	704	705	709	704	704	705	705	543	602	710	706	702	706	704	708	708	704	707	704	706	705	706	708	705	704	704	706	705	708	705	707	707	708		
JMHE	U001	975	972	969	974	962	896	901	901	898	903	901	901	901	898	897	900	900	971	972	976	973	975	969	974	972	974	974	976	977	973	975	973	978	975	972	974	971	974	977	972	973	977	973	975	975	974	973	971		
JMHE	U002	975	978	974	978	970	900	900	904	900	902	900	901	900	900	898	901	899	944	973	975	975	975	972	975	976	975	979	977	974	976	975	977	971	973	973	978	977	974	976	977	974	976	974	975	974	974	974			
JMJG	U002	675	674	678	674	674	673	675	676	676	676	676	676	676	676	677	676	673	673	673	673	676	674	674	673	675	671	673	672	674	675	673	670	679	675	673	672	672	674	673	670	673	673	677	674	673					
JMJG	U004	900	897	900	900	900	899	899	900	900	900	900	900	900	900	900	900	899	895	899	898	900	896	899	897	900	897	898	947	979	978	977	980	977	978	977	973	969	964	971	966	971	966	969	971	965	968	971	972		
JMJG	U005	977	973	977	977	968	897	900	900	900	900	900	900	900	899	902	899	971	976	985	980	983	983	977	978	982	981	980	980	982	978	986	985	979	982	978	983	983	980	983	980	978	980	978	980	977	979	979			
PKLG	U003	206	166	199	250	281	280	279	279	276	278	280	278	279	280	276	278	277	279	275	276	278	277	277	278	278	276	276	277	280	280	280	280	271	280	279	280	280	280	281	280	280	281	278	280	279	281	281			
PKLG	U004	274	275	277	274	275	275	270	272	274	274	273	275	275	273	274	274	270	275	275	272	275	279	277	272	271	274	273	282	278	277	280	279	278	275	275	276	276	273	277	273	271	276	272	279	278	274	276			
PKLG	U005	473	469	470	466	468	466	469	412	323	263	269	268	269	268	275	355	415	468	467	466	466	466	461	465	470	468	456	466	467	469	464	470	470	474	464	468	468	467	466	471	470	468	466	467	464	466	465	466		
PKLG	U006	449	449	449	447	445	450	447	450	447	447	447	450	449	449	449	449	447	451	448	448	448	447	449	446	445	445	450	440	445	447	440	447	446	449	449	447	449	449	449	449	448	449	450	450	450	448				
TBIN	U001	698	698	698	693	697	699	700	698	697	699	698	699	698	694	695	697	692	697	699	693	693	697	699	698	699	699	696	699	697	699	699	699	699	699	697	698	699	698	701	698	693	698	698	698	697	698	698	699	703	697
TBIN	U002	697	699	697	699	701	703	697	698	698	694	700	698	701	697	697	698	697	698	699	698	699	698	700	699	697	700	695	700	699	698	698	696	700	696	697	701	698	697	696	697	695	702	698	698	697	698	700	699	698	698
TBIN	U004	982	984	983	985	982	904	902	902	904	903	900	904	903	903	903	903	983	984	983	982	983	982	983	984	982	984	984	982	983	981	979	979	977	977	977	977	977	977	977	978	982	983	983	981	983	984	982	982	984	
Total ST-Coal		9693	9646	9677	9726	9733	9455	9447	9406	9306	9253	9255	9259	9264	9246	9243	9259	9326	9662	9754	9760	9754	9763	9591	9641	9752	9764	9741	9808	9843	9835	9846	9836	9848	9842	9825	9820	9825	9830	9824	9832	9834	9827	9827	9833	9833	9839	9837	9832		
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		
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	0	0	0	0	0	0	0	0	0	0	0	0	110	222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	14	78	93	210	354	357	357	357	340	307	349	350	350	350	316	215	222	222	222		
EMPP	BLK1	673	639	401	460	483	497	441	410	411	410	408	410	411	445	401	414	466	532	635	708	709	718	698	704	686	705	703	712	697	693	703	709	705	711	689	689	681	652	717	711	709	697	682	683	701	710	710	674		
EMPP	BLK2	673	650	402	461	486	494	443	409	411	410	408	410	410	450	401	414	469	532	645	708	708	718	698	703	686	706	700	709	695	692	700	709	710	711	689	689	683	710	716	711	710	702	683	683	699	710	711	678		
EMPP	BLK3	674	677	684	462	485	494	440	411	410	410	408	411	409	446	401	415	468	531	644	709	710	718	698	704	685	707	700	711	695	692	703	709	706	710	689	688	683	709	717	710	710	696	683	675	699	710	710	680		
GLGR	GT02	94	92	92	92	92	92	93	92	92	92	92	93	93	93	94	94	95	95	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94			
GLGR	ST1C	42	41	41	41	41	41	41	41	40	40	41	41	41	41	41	41	41	41	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	41				
NPRI	BLK1	455	311	315	328	334	328	328	329	328	327	322	320	328	328	316	329	329	326	332	361	512	518	504	509	500	509	504	511	509	507	507	508	506	510	502	502	499	345	463	502	517	511	505	503	397	391	350	326		
NPRI	BLK2	416	320	322	333	335	334	334	335	334	329	326	333	331	322	335	335	333	335	378	523	529	514	520	510	520	514	521	520	517	517	521	518	519	514	511	509	375	532	528	532	517	508	511	447	433	394	331			
PCGP	PGRG	566	573	577	398	400	401	402	404	400	400	393	387	402	400	380	403	403	600	604	600	604	617	587	598	581	600	589	603	603	594	597	604	597	600	589	581	580	601	610	598	601	594	576	582	597	603	604	595		
SKSP	BLK1	217	219	218	215	218	219	219	218	219	219	221	219	217	218	217	218	217	220	219	218	219	218	219	338	336	334	335	337	338	336	336	337	340	338	338	335	333	218	218	220	309	223	219	220	207	118	0	0	0	
SPGP	BLK1	694	694	702	678	490	496	468	418	425	401	398	395	412	470	386	410	620	712	709	713	709	715	710	710	707	703	699	687	683	680	702	695	697	704	694	702	691	690	691	701	703	704	705	697	696	689	702	708	707	704
SPGP	BLK2	683	682	691	679	494	496	467	421	425	401	397	395	428	470	387	409	549	717	702	703	702	699	694	694	690	687	683	680	702	699	697	704	694	702	691	690	691	701	703	704	705	697	696	689	702	708	707	704		
TJGS	GT1A	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179	182	125	125	126	126	150	205	225	224	223	223	223	223	224	221	223	223	223	223	223	223	223	175	105	105	229	229	223	223	182	182	146	146	142	
TJGS	GT1B	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	172	115	115	115	116	138	195	215	211	212	213	210	214	210	213	213	210	210	210	210	210	166													

Daily MW Generation on Wednesday

[illegible]

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	
ESTL	ESTL	9	10	11	8	4	5	6	8	10	10	16	16	20	19	18	18	18	17	19	23	2	0	0	5	2	8	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	18	14	14	16	16	16	16
PCUF	CUFG	4	4	4	3	3	3	2	5	3	3	4	4	4	2	3	3	3	3	3	3	1	3	3	3	2	4	4	4	3	2	3	3	4	3	4	3	4	3	3	3	4	3	4	3	4	4	2	
PCUF	CUFK	3	4	2	4	4	2	3	4	5	4	4	4	4	4	4	3	3	3	2	3	2	5	3	4	3	4	2	4	4	4	3	3	4	3	3	3	5	4	4	2	4	3	3	3	4	5	3	3
PFTZ	PFTZ	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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 Co-Gen		16	18	21	15	11	10	11	17	18	17	24	24	28	25	25	24	24	23	24	29	5	8	6	12	7	16	6	8	7	6	6	6	8	6	7	6	9	10	7	5	7	25	20	21	23	25	23	21
Total Gen		15634	15300	14904	14656	14355	14103	13880	13656	13585	13461	13441	13453	13522	13820	13578	13562	14066	15195	15785	16218	16642	16941	17257	17421	17259	17239	17206	17597	18081	18365	18403	18535	18604	18564	18187	17492	17037	16567	16889	17498	17534	17450	17342	17052	16562	16500	16355	16103
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	
TIE-HVDC		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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-PLTG		13	16	23	-2	30	-3	11	-17	-5	3	-8	1	-10	12	10	-13	9	-5	-12	11	31	-8	30	9	29	9	36	1	10	28	26	-18	-25	-6	21	24	9	-22	-19	25	-10	-3	17	3	4	-22	-14	-1
Interconnection		13	16	23	-2	30	-3	11	-17	-5	3	-8	1	-10	12	10	-13	9	-5	-12	11	31	-8	30	9	29	9	36	1	10	28	26	-18	-25	-6	21	24	9	-22	-19	25	-10	-3	17	3	4	-22	-14	-1
System Total		15621	15284	14881	14658	14325	14106	13869	13673	13590	13458	13449	13452	13532	13808	13568	13575	14057	15200	15797	16207	16611	16949	17227	17412	17230	17230	17170	17596	18071	18337	18377	18553	18629	18570	18166	17468	17028	16589	16908	17473	17544	17453	17325	17049	16558	16522	16369	16104
SRev ST-Coal		98	85	54	5	-2	270	283	313	322	317	322	316	313	329	472	468	480	205	122	116	122	113	85	35	124	112	135	68	143	151	140	150	138	144	161	166	161	156	162	154	152	159	159	153	153	147	149	154
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
SRev CCGT-Gas		820	1109	1562	1860	2149	2115	2331	2520	2512	2562	2590	2600	2523	2455	2689	2521	2165	1520	1243	962	620	410	324	290	430	293	463	301	333	403	304	293	289	247	359	381	727	1163	832	301	366	424	515	809	976	756	835	1043
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
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
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
Syncon		1268	1268	1117	1117	1268	1268	1268	1268	1117	1268	1268	1117	1268	1268	1268	1117	1268	1268	1117	1268	1268	1117	554	554	980	1268	1268	1016	590	403	403	277	277	277	277	802	651	802	802	676	676	676	676	676	676	676	676	676
Hydro		169	169	297	290	154	161	161	161	292	161	162	295	161	160	165	290	158	159	297	148	126	203	533	521	344	133	136	303	676	574	506	375	412	383	510	334	482	304	302	325	228	265	277	280	257	237	174	171
S.Reserve Total		2355	2631	3030	3272	3569	3814	4043	4262	4243	4308	4342	4328	4265	4212	4594	4396	4071	3152	2779	2494	2136	1843	1496	1400	1878	1806	2002	1688	1742	1531	1353	1095	1116	1051	1307	1683	2021	2425	2098	1456	1422	1524	1627	1918	2062	1816	1834	2044