

Daily System Generation Summary on Tuesday

Tuesday, August 1, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,230 MW
Distillate	0 MW
Total TNB	2,230 MW
Total IPP	18,676 MW
Total Co-Gen	0 MW
Total System	24,753 MW

Generation Mix

Type	MWh	Percentage
Hydro	21,780	5.56 %
Gas	37,345	9.53 %
Total TNB	59,125	15.09 %
ST-Coal	255,704	65.27 %
LSS	5,555	1.42 %
Gas	70,480	17.99 %
Total IPP	331,739	84.68 %
Co-Gen	386	0.10 %
Total Co-Gen	386	0.10 %
Total Generation	391,250	99.87 %
PLTG	200	0.05 %
HVDC	-700	-0.18 %
Interconnection	-500	-0.13 %
Net Energy	391,750	100.00 %

Maximum Demand Record

Date: 5/11/2023	19,716 MW
Date: 5/11/2023	416,902 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:30:00 Hour
Total Set On Bus	19,500 MW
TNB Generation	3,066 MW
IPP Generation	14,956 MW
Spinning Reserve	1,478 MW
Maximum Demand	18,014 MW
Net Energy	391,750 MWH
Load Factor	90.61 %

Fuel Cost

Total Cost:	82,936,182.36 RM
Cost per Unit	21.16 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	1,079
Hydro	244
Syncon	575
Thermal	224
Total	2,122

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	29
TJGS	39
Total TNB	69
CBPS	38
EMPP	236
NPRI	113
PCGP	78
SPGP	181
Total IPP	647
Total Gas	715
Total Gas Required	715

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	16441	15588	15057	14476	14126	13908	14008	14055	14362	16030	16916	17366	17289	16909	17468	17842	17953	17725	16700	16531	17848	17910	17514	17146

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, August 9, 2023 8:21:39 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Tuesday

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	695	696	696	696	698	695	696	696	693	697	694	694	696	694	693	695	695	695	698	695	696	696	696	695	695	699	696	
JMAH	U002	696	694	695	694	699	697	697	692	695	696	696	693	695	698	700	693	695	693	694	696	696	696	696	695	696	693	699	696
JMHE	U001	974	972	971	972	969	930	928	900	898	881	879	876	881	881	883	886	883	878	979	978	977	980	983	980	979	975	977	973
JMHE	U002	973	972	967	972	970	931	930	899	894	880	878	876	880	880	882	882	881	877	969	977	981	979	980	977	980	979	981	978
JMJG	U001	0	0	0	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	U002	677	669	677	679	673	678	677	674	674	673	667	678	675	679	676	670	673	679	675	677	670	680	676	671	679	671	674	682
JMJG	U003	669	672	667	669	671	674	667	668	671	670	666	668	672	663	666	662	671	669	666	663	665	675	667	669	671	671	666	667
JMJG	U004	979	978	985	987	985	936	938	905	904	905	908	907	906	904	904	906	906	907	960	975	977	981	980	978	980	977	979	978
JMJG	U005	982	982	981	982	978	929	933	900	901	882	881	881	879	881	879	880	881	882	979	978	987	983	980	979	982	983	979	982
PKLG	U003	279	278	280	278	279	279	281	278	278	278	279	278	279	279	278	277	278	276	276	279	276	276	275	274	275	277	275	276
PKLG	U004	273	279	274	279	278	276	269	275	278	276	274	276	277	277	274	276	279	276	276	277	274	280	277	280	278	274	278	279
PKLG	U005	466	468	466	467	468	468	465	470	468	399	357	359	359	359	361	357	420	466	466	466	466	466	466	466	468	467	466	464
TBIN	U001	688	689	690	688	690	691	689	688	689	690	689	689	690	689	689	689	690	686	689	689	688	688	690	689	690	690	693	692
TBIN	U002	681	687	685	686	687	689	687	686	687	687	685	685	687	687	686	688	690	686	687	687	690	687	687	688	689	687	687	688
TBIN	U003	686	687	687	686	685	688	686	686	687	687	687	688	686	687	688	686	687	685	684	685	688	687	687	688	684	684	688	685
TBIN	U004	986	982	984	984	981	933	934	905	902	885	882	885	883	884	881	884	882	883	945	983	984	979	981	984	981	983	983	985
Total ST-Coal		10704	10705	10705	10719	10711	11049	10477	10322	10319	10186	10122	10133	10145	10139	10152	10137	10210	10249	10645	10700	10713	10727	10722	10710	10719	10713	10715	10726
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
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
CBPS	BLK2	221	221	221	222	222	221	221	221	222	221	220	220	221	221	221	222	222	221	221	222	222	222	221	221	221	222	221	221
EMPP	BLK1	406	372	360	370	370	375	365	375	363	367	365	364	374	375	369	370	409	590	416	528	542	501	588	640	502	412	407	478
EMPP	BLK2	405	373	361	370	370	376	366	374	364	368	366	364	374	376	370	373	407	598	417	529	546	501	587	641	498	411	406	485
EMPP	BLK3	493	374	361	371	371	376	365	375	365	367	366	363	374	376	370	372	373	374	376	375	373	549	549	549	546	552	369	375
GLGR	GT01	93	94	94	93	94	93	93	95	94	94	94	94	95	94	94	95	95	95	95	94	93	93	93	94	95	96	94	94
GLGR	ST1C	41	41	40	41	41	41	41	41	41	41	41	42	41	41	42	42	42	40	42	42	42	41	41	41	42	42	42	42
NPRI	BLK1	324	329	317	324	325	331	320	331	319	320	321	320	332	329	322	325	329	331	335	332	331	332	331	335	329	329	325	335
NPRI	BLK2	319	323	311	318	327	328	314	328	313	316	316	314	326	325	317	319	323	326	328	326	327	326	326	329	325	325	318	330
PCGP	PGRG	584	397	385	386	387	405	380	402	380	383	382	382	403	401	386	388	392	400	402	399	603	603	602	604	598	598	586	601
SPGP	BLK1	714	712	501	363	363	363	363	363	363	361	364	362	363	362	362	363	518	707	704	703	700	697	697	693	695	692	687	690
SPGP	BLK2	714	715	704	455	368	368	368	368	368	366	368	367	368	366	367	366	365	500	717	714	713	716	714	714	715	714	713	707
TJGS	GT1A	135	136	125	131	135	135	128	133	130	130	133	129	133	135	133	131	132	135	137	132	131	134	132	134	135	136	131	132
TJGS	ST1C	79	78	78	78	78	79	77	78	78	77	77	78	78	79	77	77	78	79	79	79	79	79	79	79	79	79	83	79
Total CCGT-Gas		4528	4165	3858	3522	3451	3491	3401	3484	3400	3411	3414	3398	3482	3480	3429	3441	3528	4208	4271	4474	4705	4797	4960	5079	4777	4607	4383	4568
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
BSIA	HY01	22	22	22	22	22	22	22	21	22	21	22	22	22	22	22	22	22	22	21	21	21	21	21	21	21	21	21	21
BSIA	HY02	20	20	20	20	20	20	20	20	20	5	0	0	0	0	0	0	0	0	0	0	11	11	20	20	20	20	20	20
BSIA	HY03	24	24	24	24	24	24	24	24	24	0	0	0	0	0	0	0	0	0	0	0	10	24	24	24	23	23	24	24
CEND	HY01	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	HY02	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9
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
CEND	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	7	7	7	7	7
HTRG	HY01	124	124	124	124	124	124	63	68	68	68	68	68	68	123	68	69	68	68	68	68	124	124	124	124	123	124	124	124
HTRG	HY03	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
HTRG	HY04	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
KNRG	HY01	21	21	21	21	21	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	22	23	23	23	23	23
KNRG	HY02	22	22	22	22	22	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	24	24	25	24	24	25
KNRG	HY03	38	38	38	38	38	38	39	39	39	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21

[illegible]

Daily MW Generation on Tuesday

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		
TBLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	8	19	30	30	19	21	16	23	27	30	30	30	30	7	30	7	5	16	13	4	0	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	0	17	94	187	290	389	503	619	612	667	764	738	776	864	826	691	569	607	535	436	312	285	191	116	31	2	2	1	0	0	0	0	0	0	
ESTL	ESTL	20	20	23	23	12	18	16	1	16	19	21	26	23	28	26	26	24	24	22	26	13	13	22	17	18	17	19	15	13	26	18	18	-7	-1	-5	-4	0	0	1	12	17	18	18	22	16	15	13		
KHTC	BLK1	-25	-20	-17	-18	-18	-15	-15	-18	-17	-16	-17	-16	-20	-19	-18	-15	-18	-18	-21	-22	-29	-29	-32	-30	-33	-34	-32	-38	-40	-40	-43	-41	-39	-38	-40	-34	-33	-29	-26	-28	-25	-26	-24	-26	-23	-20	-19		
PCUF	CUFG	6	5	6	6	6	5	5	6	6	6	7	6	6	7	7	6	6	4	4	5	5	5	8	17	15	15	16	16	17	15	14	15	15	15	16	15	17	16	16	16	16	15	17	15	17	16			
PCUF	CUFK	14	2	2	2	3	1	2	3	1	2	3	2	4	1	3	2	3	2	3	3	2	2	17	25	26	26	25	25	26	23	25	25	27	25	25	25	25	27	27	25	26	26	25	29	25	25	25		
PFTZ	PFTZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	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		15	7	14	13	3	9	8	-8	6	11	14	18	13	17	18	19	15	12	11	13	-2	-9	18	29	31	25	26	24	18	24	18	14	-6	0	-3	-3	6	11	15	29	30	35	34	34	42	33	37	35	
Total Gen		16436	15962	15589	15257	15013	14761	14458	14266	14108	13971	13895	13867	13971	14196	14038	13956	14349	15430	15988	16435	16866	17128	17310	17484	17286	17079	16884	17181	17447	17868	17828	17866	17936	18022	17699	17213	16690	16427	16530	17419	17830	17945	17893	17805	17479	17329	17111	16837	
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		-29	-31	-30	-31	-28	-30	-28	-30	-29	-31	-30	-29	-30	-29	-29	-28	-28	-30	-30	-28	-28	-29	-29	-29	-29	-29	-29	-28	-28	-31	-31	-29	-30	-30	-29	-29	-29	-29	-29	-30	-28	-30	-27	-30	-29	-28	-30		
TIE-PLTG		24	11	31	1	-16	4	11	-12	11	27	18	15	-7	7	12	2	15	-1	-12	-17	-22	-47	-27	39	26	20	4	7	7	33	18	30	12	38	5	4	19	18	28	8	12	13	13	19	-5	-3	-7	17	
Interconnection		-5	-20	1	-30	-44	-26	-18	-42	-18	-3	-13	-14	-37	-22	-17	-27	-13	-29	-42	-47	-50	-75	-56	10	-3	-9	-25	-22	-21	5	-14	-2	-17	8	-26	-25	-10	-11	-1	-21	-18	-15	-17	-9	-35	-32	-35	-13	
System Total		16441	15982	15588	15287	15057	14787	14476	14308	14126	13974	13908	13881	14008	14218	14055	13983	14362	15459	16030	16482	16916	17203	17366	17474	17289	17088	16909	17203	17468	17863	17842	17868	17953	18014	17725	17238	16700	16438	16531	17440	17848	17960	17910	17814	17514	17361	17146	16850	
SRev ST-Coal		228	227	227	213	221	438	455	605	600	645	662	650	642	652	643	660	641	600	287	232	219	205	210	222	213	219	217	206	215	201	210	218	215	242	232	235	232	242	221	226	221	228	239	237	224	229	245	-35	
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		1700	2063	2370	2706	2777	2737	2827	2744	2828	2817	2814	2830	2746	2748	2799	2787	2700	2020	1957	1754	1523	1431	1268	1149	1451	1621	1845	1660	1366	809	715	792	736	577	814	999	1432	1667	1556	789	673	774	838	889	999	1138	1361	1693	
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	1	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Syncon		489	676	525	676	764	764	714	865	966	966	966	966	966	865	865	815	865	676	676	676	525	676	676	676	676	676	676	525	676	676	676	676	489	338	489	676	676	676	676	489	489	338	489	676	676	525	525		
Hydro		270	166	315	173	240	147	312	265	249	269	287	266	253	125	246	393	183	195	198	301	388	190	186	185	189	188	200	185	311	181	178	189	273	321	195	179	187	185	183	161	364	195	321	279	209	206	340	360	
S.Reserve Total		2687	3132	3437	3768	4002	4086	4309	4480	4643	4697	4730	4712	4607	4390	4553	4655	4390	3492	3118	2963	2655	2502	2340	2233	2529	2704	2939	2728	2417	1868	1779	1875	1714	1478	1730	2090	2527	2770	2636	1851	1747	1686	1736	1893	2108	2249	2471	2542	