

Daily System Generation Summary on Tuesday

Tuesday, July 11, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,043 MW
Distillate	0 MW
Total TNB	2,043 MW
Total IPP	18,285 MW
Total Co-Gen	0 MW
Total System	24,330 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,772	3.62 %
Gas	51,469	13.51 %
Total TNB	65,241	17.13 %
ST-Coal	231,096	60.67 %
LSS	5,308	1.39 %
Gas	79,165	20.78 %
Total IPP	315,569	82.85 %
Co-Gen	667	0.18 %
Total Co-Gen	667	0.18 %
Total Generation	381,477	100.15 %
PLTG	-203	-0.05 %
HVDC	790	0.21 %
Interconnection	587	0.15 %
Net Energy	380,890	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	19,083 MW
TNB Generation	2,905 MW
IPP Generation	14,671 MW
Spinning Reserve	1,493 MW
Maximum Demand	17,608 MW
Net Energy	380,890 MWH
Load Factor	90.13 %

Fuel Cost

Total Cost:	91,492,549.66 RM
Cost per Unit	23.96 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	763
Hydro	300
Syncon	627
Thermal	135
Total	1,825

Time Weather Temperature

Afternoon	Sunny	32
Morning	Rainy	26

Gas Usage

Station	(mmscfd)
GLGR	54
TJGS	99
Total TNB	153

CBPS	42
EMPP	261
NPRI	122
PCGP	82
SPGP	196
Total IPP	704
Total Gas	856

Total Gas Required 856

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	16048	15383	14439	13935	13611	13426	13756	13698	14053	15670	16502	16871	16652	16277	17050	17438	17604	17446	16467	16349	17470	17364	16783	16336

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, July 12, 2023 9:18:07 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	706	707	706	706	706	708	705	707	705	704	706	708	705	704	704	706	703	707	704	706	707	705	704	706
JMAH	U002	709	708	701	701	704	707	704	705	705	705	705	711	705	704	701	708	699	706	707	703	705	704	707	707
JMHE	U001	978	981	979	980	968	904	751	701	699	701	701	697	700	699	702	700	819	882	977	983	977	977	977	977
JMHE	U002	500	501	500	501	498	499	500	500	500	501	501	500	501	500	500	501	498	498	499	503	656	794	902	898
JMJG	U002	684	683	683	678	679	677	682	681	682	681	678	680	673	679	679	684	677	683	675	683	682	682	679	676
JMJG	U003	679	679	677	678	676	679	682	679	679	678	678	677	678	683	679	677	678	680	676	678	683	674	682	688
JMJG	U004	981	975	976	972	967	913	899	903	890	871	870	876	873	873	873	872	873	892	953	975	977	976	977	976
JMJG	U005	983	983	983	981	963	900	899	899	904	902	900	901	900	899	895	900	901	948	983	982	983	981	983	979
PKLG	U003	276	277	275	275	276	277	276	276	276	275	275	276	277	275	276	277	275	275	275	275	275	275	277	275
PKLG	U005	469	464	468	465	465	468	475	466	456	376	359	359	358	357	359	426	470	468	482	465	470	477	466	467
PKLG	U006	446	447	449	447	448	451	447	450	447	445	446	449	449	449	447	451	449	448	448	450	447	449	450	449
TBIN	U001	699	696	698	696	699	703	697	703	699	696	701	695	700	698	696	691	696	698	698	700	699	697	699	698
TBIN	U003	695	693	691	694	694	695	694	695	692	693	693	694	694	693	695	694	695	695	694	695	694	694	694	695
TBIN	U004	981	981	977	979	972	902	903	905	887	873	873	873	873	873	873	872	903	979	988	984	982	981	982	983
Total ST-Coal		9786	9775	9763	9753	9715	9483	9314	9270	9221	9101	9086	9096	9089	9087	9079	9157	9310	9479	9753	9780	9788	9932	10068	10171
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
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
CBPS	BLK2	222	221	221	222	221	220	221	222	221	221	221	221	221	221	221	221	221	222	222	272	308	336	342	342
EMPP	BLK1	701	500	375	375	375	375	375	375	375	375	375	375	375	376	376	376	376	450	550	650	710	710	710	659
EMPP	BLK2	709	650	650	375	375	375	375	375	375	375	375	375	375	375	375	375	450	550	650	711	710	710	653	552
EMPP	BLK3	701	701	701	375	375	375	375	375	375	375	375	375	375	376	376	376	376	450	550	650	711	710	709	653
GLGR	GT01	83	86	84	85	84	85	84	83	85	84	84	83	85	85	85	83	86	83	84	84	84	84	84	85
GLGR	GT02	84	84	84	84	84	84	84	83	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	85
GLGR	ST1C	83	82	83	83	83	83	84	83	84	83	83	83	83	82	83	83	83	83	83	83	83	83	83	83
NPRI	BLK1	322	332	319	328	322	332	325	329	329	331	329	328	371	326	326	319	356	383	323	342	362	465	359	332
NPRI	BLK2	386	326	314	324	316	328	321	321	325	326	324	320	360	320	319	313	338	361	319	323	353	451	353	328
PCGP	PGRG	590	600	588	597	392	401	395	395	396	400	397	396	401	400	395	394	408	587	590	599	602	603	601	600
SGRI	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
SPGP	BLK1	715	713	714	715	637	634	566	566	440	364	361	364	500	635	535	439	514	714	719	720	719	716	714	716
SPGP	BLK2	717	715	717	717	639	638	610	491	443	443	440	444	491	589	539	491	516	724	730	729	730	727	727	727
TJGS	GT1A	136	134	131	136	137	136	135	135	135	137	139	134	139	135	135	135	135	131	138	135	135	135	138	134
TJGS	GT1B	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	ST1C	79	79	78	77	77	77	77	77	78	77	77	78	78	77	77	78	77	78	78	79	78	78	78	79
TJGS	GT2B	160	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159
TJGS	ST2C	93	93	93	93	93	93	93	93	93	93	93	93	93	92	93	93	93	93	93	93	93	93	93	93
Total CCGT-Gas		5781	5475	5311	4745	4369	4395	4279	4161	3996	3928	3916	3912	4190	4331	4179	4019	4199	5050	5271	5598	5835	6026	5822	5605
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
BSIA	HY01	21	21	22	21	21	22	21	22	21	21	21	21	12	12	12	11	12	12	12	12	12	12	12	12
BSIA	HY02	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BSIA	HY03	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CEND	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7
CEND	HY02	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	8	8
CEND	HY03	6	6	6	7	6	6	6	6	6	6	6	6	7	6	6	6	7	7	7	7	7	7	7	7
HTRG	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
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
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
KNRG	HY01	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
KNRG	HY02	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KNRG	HY03	21	21	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
KNYR	HY02	98	0	0	0	0	0	57	56	56	58	100	98	97	97	99	100	100	100	100	100	100	100	100	97
KNYR	HY03	95	94	93	92	91	91	90	90	89	90	91	92	93	93	93	94	93	92	92	91	91	91	91	94
KNYR	HY04	99	99	97	97	97	100	99	99	97	98	98	99	100	98	97	97	100	100	96	99	100	100	100	100
LPIA	HY01	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	18	18	18	18	18	18
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
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	18	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	149	-1
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	21
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	25
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	25
TMGR	HY01	-1	-1	0	0	-1	-1	0	-1	0	-1	0	-1	-1	-1	-1	0	-1	-1	0	0	-1	-1	81	79
TMGR	HY03	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TMGR	HY04	39	53	40	41	40	64	42	44	43	42	41	80	43	40	38	84	61	39	41	80	81	80	83	80
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	89	85	83
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	95	89	88
UPIA	HY02	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total Hydro		507	423	336	337	333	361	337	396	391	391	412	415	479	437	432	421	475	451	419	428	469	470	468	492
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
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BKLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BSLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
JELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
KDLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
KMLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KRLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
MNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PKLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNLS	LSS4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	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	0	0	0	0	0	0	0	0	0	0
STLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TBLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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																								
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	7	46	98	217	309	406	422	514	645	727	665	690	823	826	804	761	672	547	412	350	286	240	108	48	1	0	0	0	0	0	0	0				
ESTL	ESTL	16	15	20	18	18	16	16	19	15	17	18	16	14	20	20	27	19	22	22	21	18	18	9	17	24	24	16	18	17	18	16	17	15	14	14	14	16	21	22	21	21	16	18	19	16	10	10	
KHTC	BLK1	-25	-22	-22	-21	-20	-17	-17	-17	-14	-14	-12	-16	-16	-16	-18	-14	-21	-21	-20	-22	-24	-24	-25	-28	-29	-32	-31	-34	-35	-34	-36	-34	-36	-37	-38	-34	-29	-31	-28	-28	-27	-24	-25	-23	-24	-22	-22	
PCUF	CUFG	6	5	3	4	5	5	5	5	4	6	5	4	5	5	4	5	6	4	5	6	4	5	4	5	4	4	5	6	4	4	4	5	6	5	5	5	4	4	6	4	4	5	4					
PCUF	CUFK	27	27	27	26	28	27	25	26	25	27	28	27	26	25	26	25	25	27	26	26	24	26	26	24	27	26	26	26	25	27	25	26	25	26	27	26	25	27	26	27	26	26	27	25				
PFTZ	PFTZ	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4					
Total Co-Gen		28	29	32	31	35	35	33	37	34	40	43	35	33	38	39	42	39	33	36	36	33	26	29	18	24	27	27	20	20	16	17	15	16	14	12	11	16	22	24	27	27	29	26	30	30	26	24	21
Total Gen		16102	15702	15442	14866	14452	14274	13963	13864	13642	13460	13457	13458	13791	13893	13729	13646	14069	15111	15696	16151	16531	16876	16901	16931	16689	16463	16305	16754	17079	17389	17458	17583	17592	17590	17453	16879	16479	16199	16361	17162	17486	17486	17389	17089	16806	16684	16337	16044
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		
TIE-HVDC		31	31	32	32	31	32	31	32	33	32	32	33	32	30	31	29	32	32	33	32	31	31	32	31	32	32	31	34	34	35	32	33	36	35	36	33	35	33	34	34	32	32	40	38	37	35	37	
TIE-PLTG		23	-9	26	5	-19	-14	-4	-2	-1	4	-1	14	4	7	-1	2	-16	21	-6	-4	-2	35	-1	27	5	-12	-4	-2	-5	-14	-16	-27	-45	-53	-28	-30	-20	-35	-21	-6	-18	-4	-7	-51	-15	-26	-33	-25
Interconnection		54	22	59	37	13	18	28	30	31	36	31	47	35	37	31	31	16	54	26	29	29	66	30	58	37	20	28	29	29	19	20	5	-12	-18	7	6	12	0	12	28	16	28	25	-10	23	11	1	12
System Total		16048	15680	15383	14829	14439	14256	13935	13834	13611	13424	13426	13411	13756	13856	13698	13615	14053	15057	15670	16122	16502	16810	16871	16873	16652	16443	16277	16725	17050	17370	17438	17578	17604	17608	17446	16873	16467	16199	16349	17134	17470	17458	17364	17099	16783	16673	16336	16032
SRev ST-Coal		104	115	127	137	175	407	419	411	438	477	475	474	470	489	470	438	376	146	110	202	158	122	119	125	99	139	124	130	119	133	102	120	121	100	176	160	423	156	253	233	163	159	135	76	88	132	79	
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		
SRev CCGT-Gas		976	1282	1446	2012	2388	2362	2478	2596	2761	2829	2841	2845	2567	2426	2578	2738	2558	1707	1486	1159	922	731	935	1152	1454	1676	1789	1488	1157	827	755	585	535	501	545	826	1124	1004	1129	418	308	362	375	344	367	291	374	538
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 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 Co-Gen		-1	0	-1	0	1	0	-1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	
Syncon		978	890	802	802	890	890	802	890	802	890	739	651	890	890	890	890	890	890	890	802	890	802	890	651	802	739	890	890	890	802	890	890	615	428	516	704	739	890	739	577	302	302	390	88	88	88	214	739
Hydro		153	138	98	97	100	72	97	137	143	142	272	270	54	96	101	112	58	82	114	106	64	64	65	193	64	195	64	57	60	66	112	97	184	269	318	96	234	94	225	261	341	359	356	177	446	628	740	244
S.Reserve Total		2210	2512	2646	3222	3641	3818	3969	4121	4318	4425	4415	4414	4072	3969	4145	4297	4031	3142	2723	2350	2165	1928	2099	2289	2619	2796	2969	2647	2324	1988	1977	1761	1629	1493	1566	1889	2345	2498	2336	1596	1272	1273	1367	831	1064	1182	1547	1686