

Daily System Generation Summary on Saturday

Saturday, July 22, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,268 MW
Distillate	0 MW
Total TNB	2,268 MW
Total IPP	17,063 MW
Total Co-Gen	0 MW
Total System	23,178 MW

Generation Mix

Type	MWh	Percentage
Hydro	18,590	5.20 %
Gas	50,258	14.05 %
Total TNB	68,848	19.24 %
ST-Coal	214,975	60.08 %
LSS	5,544	1.55 %
Gas	67,647	18.91 %
Total IPP	288,166	80.54 %
Co-Gen	189	0.05 %
Total Co-Gen	189	0.05 %
Total Generation	357,203	99.84 %
PLTG	99	0.03 %
HVDC	-689	-0.19 %
Interconnection	-590	-0.16 %
Net Energy	357,793	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:	20:30:00 Hour
Total Set On Bus	17,641 MW
TNB Generation	3,928 MW
IPP Generation	12,677 MW
Spinning Reserve	1,049 MW
Maximum Demand	16,633 MW
Net Energy	357,793 MWH
Load Factor	89.63 %

Fuel Cost

Total Cost:	81,657,608.07 RM
Cost per Unit	22.81 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	1,109
Hydro	702
Syncon	356
Thermal	369
Total	2,536

Time	Weather	Temperature
Afternoon	Rainy	32
Morning	Rainy	27

Gas Usage

Station	(mmscfd)
GLGR	30
TJGS	102
Total TNB	131
CBPS	45
EMPP	176
NPRI	135
PCGP	82
SPGP	201
Total IPP	639
Total Gas	770
Total Gas Required	770

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	16118	15336	14736	14353	13829	13522	13315	13254	12991	13977	14746	15046	14959	14577	14951	15088	15423	15467	15132	15334	16587	16625	16200	16083

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, July 24, 2023 10:55:15 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Saturday

		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	695	695	696	697	694	695	698	695	696	694	695	696	696	695	695	696	696	694	694	696	695	697	694	691	697	695	694	698	695	697																	
JMAH	U002		351	354	353	353	354	353	354	355	353	353	353	353	356	353	352	354	354	353	354	353	226	216	214	185	187	189	170	219	216	220	217	214	210	213	209	210	212	214	219	220	222							
JMHE	U001		975	976	977	971	899	901	896	900	844	849	852	849	843	846	851	845	843	850	851	950	947	950	948	947	948	944	942	940	944	948	953	954	948	949	947	949	951	976	980	978	975	980	978	977	980	981	980	
JMHE	U002		700	699	701	700	700	700	698	703	700	700	701	701	699	698	699	696	700	701	698	701	700	701	699	701	701	701	701	702	699	699	698	700	701	700	698	697	698	698	698	698	699	700	700					
JMJG	U002		513	422	422	421	423	422	423	420	420	426	420	421	422	430	502	533	573	576	591	596	601	598	541	546	552	574	599	657	680	673	662	664	682	679	673	675	679	671	668	672	678	672	674	673	672	677		
JMJG	U003		679	668	667	668	668	672	673	666	656	679	667	666	666	669	700	669	667	660	667	664	674	654	673	669	672	667	664	671	667	667	662	628	585	603	598	604	612	608	623	686	671	677	672	678	668	670	660	
JMJG	U004		979	982	975	980	957	906	907	904	902	900	905	904	906	905	902	904	901	903	900	952	952	954	951	949	952	950	952	951	950	950	950	949	950	952	950	949	950	951	979	985	982	981	980	979	977	980	981	925
JMJG	U005		979	981	982	980	910	900	900	898	872	849	850	849	849	850	852	850	853	853	850	956	952	951	947	950	945	950	945	951	946	952	950	952	952	950	952	948	952	947	981	983	982	979	976	977	977	978	977	973
PKLG	U003		276	276	276	278	277	277	276	277	278	278	276	278	278	276	277	279	280	278	277	277	275	276	276	276	277	275	274	277	276	275	276	223	161	143	150	150	151	150	154	263	287	281	275	276	275	273	275	
PKLG	U004		274	275	277	274	276	278	274	275	275	271	276	274	276	274	275	276	277	274	275	274	275	272	276	278	279	278	274	235	178	148	149	148	149	148	149	150	148	235	308	266	271	280	276	272	273	279		
PKLG	U006		449	449	447	447	450	447</																																										

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			
KNRG	HY03	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	39	38	38	38	20	20	20
KNYR	HY01	99	99	100	98	102	99	98	54	97	96	99	100	97	99	98	99	100	100	100	101	102	102	102	100	102	101	
KNYR	HY02	98	98	99	98	99	99	98	56	96	96	99	99	97	97	98	99	99	99	99	99	99	99	99	99	99	99	
KNYR	HY03	93	93	92	91	92	90	89	49	88	88	90	91	90	92	92	91	92	92	91	90	89	90	91	91	92	93	
KNYR	HY04	98	98	98	98	98	98	98	56	95	95	98	98	95	98	96	98	98	98	98	98	98	98	98	98	98	98	
LPIA	HY01	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
LPIA	HY02	11	11	11	11	11	11	11	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
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	3	3	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	21	21	21	21	21	21	21	21	
PGAU	HY02	21	20	21	19	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	22	21	21	21	21	21	21	21	21	
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	21	22	21	21	19	21	22	21		
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TMGR	HY01	34	32	-1	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	0	-1	0	0	0	0	-1	0	0	0	-1	-1	
TMGR	HY03	32	31	32	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	84	48	84	45	84	79	61	41	69	39	82	41	40	42	40	41	43	42	43	48	41	40	42	47	42	42	
UJLI	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	
UJLI	HY02	-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	
UPIA	HY02	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Total Hydro		718	610	616	540	566	556	534	345	556	504	558	518	508	519	512	513	516	535	524	523	684	728	729	735	727	716	
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	1	3	5	8	9	9	8	10	11	13	14	
BKLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	11	9	10	13	19	14	21	25	17	32	
BSLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	9	24	12	27	28	26	32	20	20	30	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	10	17	22	17	24	12	18	21	31	12	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	8	11	14	17	21	24	29	28	30	29	
GELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	6	8	10	11	13	15	15	16	20	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	8	12	25	32	23	32	42	43	32	36	
JELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	8	8	19	14	23	26	31	26	29	31	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	11	14	28	21	24	25	19	37	47	43	
KDLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	11	13	70	63	79	83	91	76	57	71	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	10	21	36	36	39	40	43	46	36	
KMLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	5	13	21	24	27	21	17	21	29	
KNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	18	28	50	71	97	90	100	97	95	74	
KRLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	10	14	18	30	26	27	30	28	28	
MALS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	8	16	23	29	15	21	26	29	29	26	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	10	15	18	23	26	25	24	22	22	
MNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	14	24	32	42	48	43	44	37	39	
PKLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	24	24	50	50	60	76	81	76	91	91	101	
SNLS	LSS4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	10	10	25	25	50	10	43	37	44	34	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	12	11	13	26	0	4	1	2	3	7	13	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	11	17	19	21	19	30	30	40	29	
STLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	6	7	10	12	14	16	17	16	19	

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																								
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																								
Total LSS		0	0	0	0	0	0	0	0	0	0	0	3	43	118	199	301	506	549	708	696	775	794	805	792	705	754	674	531	484	532	439	307	222	125	33	1	0	0	0	0	0	0	0	0	0			
ESTL	ESTL	-3	-11	-14	0	-13	-8	-8	-22	-27	-18	-16	-13	-13	-14	-14	0	-4	-4	-3	0	-5	0	0	0	0	0	-10	-11	-9	-14	-8	-11	0	0	-16	-12	-4	-2	-9	-7	-12	0	0	-16	-16	-1		
KHTC	BLK1	-25	-22	-24	-21	-23	-22	-22	-20	-23	-18	-11	-11	-11	-10	-8	-10	-9	-10	-12	-14	-17	-20	-23	-22	-23	-25	-29	-34	-36	-36	-35	-41	-39	-40	-36	-41	-35	-34	-32	-36	-32	-33	-31	-32	-29	-27	-25	-23
PCUF	CUFG	14	16	17	15	16	16	15	16	15	17	15	16	16	15	16	15	15	15	15	15	15	15	15	15	15	15	16	16	17	17	15	17	16	16	16	16	16	16	15	15	16	15	16	16	15	17		
PCUF	CUFK	26	24	27	25	26	24	25	26	26	25	26	25	25	25	25	26	25	26	25	24	25	25	25	26	25	24	23	22	23	22	22	23	23	21	20	14	15	15	13	9	9	9	10	13	16	16		
PFTZ	PFTZ	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	3	4	4	4	3	4	2	0	2	2	2		
Total Co-Gen		16	11	10	23	10	14	14	18	0	1	16	19	17	22	23	21	21	35	29	26	23	23	17	21	20	19	14	8	-5	-6	-2	-12	-4	-9	8	0	-11	-13	-1	-3	-9	-13	-14	-6	-3	-12	-8	11
Total Gen		16105	15685	15265	15013	14678	14427	14340	14006	13814	13640	13495	13348	13290	13350	13255	12882	12968	13604	13955	14429	14745	14932	15000	15226	14971	14755	14522	14794	14975	15025	15029	15128	15365	15433	15459	15285	15138	15090	15303	16091	16579	16592	16613	16496	16196	16135	16049	15801
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		-30	-29	-31	-27	-28	-31	-29	-27	-28	-29	-30	-30	-29	-31	-28	-28	-29	-28	-27	-29	-29	-28	-30	-30	-28	-28	-27	-28	-29	-31	-28	-31	-30	-28	-31	-30	-28	-28	-29	-27	-29	-28	-28	-29	-28	-28		
TIE-PLTG		18	16	-41	3	-29	-1	15	14	13	13	0	6	4	28	31	5	8	-1	6	28	28	-6	-18	25	41	-12	-27	19	54	-6	-31	-83	-30	-25	22	30	36	1	-3	-7	21	-14	17	23	24	-10	-6	-7
Interconnection		-13	-12	-71	-24	-58	-32	-13	-13	-15	-15	-27	-22	-25	-2	1	-23	-23	-29	-22	0	-1	-34	-46	-4	12	-41	-55	-11	24	-35	-59	-110	-58	-54	-8	3	6	-29	-31	-35	-8	-41	-12	-5	-4	-39	-34	-35
System Total		16118	15697	15336	15037	14736	14459	14353	14019	13829	13655	13522	13370	13315	13352	13254	12905	12991	13633	13977	14429	14746	14966	15046	15230	14959	14796	14577	14805	14951	15060	15088	15238	15423	15487	15467	15282	15132	15119	15334	16126	16587	16633	16625	16501	16200	16174	16083	15836
SRev ST-Coal		233	330	337	343	540	623	637	630	655	625	645	645	636	630	557	527	490	493	474	295	266	279	329	331	331	307	377	429	429	419	455	638	570	550	504	508	573	584	456	300	260	314	301	298	296	305	305	328
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	
SRev CCGT-Gas		116	326	744	573	595	528	878	1033	1292	1395	1584	1690	1742	1705	1873	2270	2262	1742	1468	1426	1502	1389	1425	1195	1590	1837	2096	1769	1484	1491	1375	904	425	229	232	210	240	211	232	221	209	121	113	134	244	128	119	118
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		0	0	3	1	-1	-1	0	-2	1	-1	0	0	-1	2	0	3	0	1	1	0	-1	-1	0	0	0	-2	-2	0	-1	0	-2	2	0	0	-2	0	-3	-2	-3	0	-5	-1	-1	0	-1	0	2	-2
Syncon		777	777	865	777	777	777	865	865	626	865	865	1016	1016	1016	1016	928	1016	928	928	613	374	374	462	462	374	462	374	374	374	374	462	187	374	187	374	374	462	462	187	0	0	0	0	0	187	374	374	
Hydro		395	375	281	271	95	105	126	315	256	156	102	141	151	140	147	146	144	124	136	137	378	636	635	628	636	648	647	632	636	637	637	588	711	593	727	591	639	605	632	749	682	615	614	721	916	888	800	703
S.Reserve Total		1521	1808	2230	2139	2180	2206	2593	2928	3004	3127	3283	3579	3631	3580	3680	4049	3998	3463	3181	2960	2845	2851	2937	2703	3106	3338	3667	3378	3096	3095	3013	2681	2067	1920	1822	1857	1997	1947	1866	1457	1146	1049	1027	1153	1455	1508	1600	1608