

Daily System Generation Summary on Monday

Monday, August 21, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,152 MW
Distillate	0 MW
Total TNB	2,152 MW
Total IPP	17,962 MW
Total Co-Gen	0 MW
Total System	23,680 MW

Generation Mix

Type	MWh	Percentage
Hydro	17,810	4.75 %
Gas	51,308	13.68 %
Total TNB	69,118	18.43 %
ST-Coal	222,311	59.26 %
LSS	5,713	1.52 %
Gas	77,187	20.58 %
Total IPP	305,211	81.36 %
Co-Gen	93	0.02 %
Total Co-Gen	93	0.02 %
Total Generation	374,422	99.81 %
PLTG	10	0.00 %
HVDC	-707	-0.19 %
Interconnection	-697	-0.19 %
Net Energy	375,119	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	19,194 MW
TNB Generation	3,524 MW
IPP Generation	14,045 MW
Spinning Reserve	1,642 MW
Maximum Demand	17,583 MW
Net Energy	375,119 MWH
Load Factor	88.89 %

Fuel Cost

Total Cost:	79,304,623.68 RM
Cost per Unit	21.14 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	680
Hydro	614
Syncon	302
Thermal	176
Total	1,772

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	2
TJGS	122
Total TNB	124
CBPS	4
EMPP	264
NPRI	139
PCGP	86
SPGP	209
Total IPP	702
Total Gas	827
Total Gas Required	827

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	14954	14127	13619	13247	12913	12738	13082	13298	13957	15762	16515	17011	16814	16510	17003	17384	17477	17292	16332	16370	17497	17345	16792	16357

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, August 29, 2023 2:29:23 PM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Monday

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	698	586	605	607	605	607	504	504	501	405	406	404	466	690	695	695	690	700	693	697	695	695	695	695	696	696	694	696	695	697	696	695	695	693	697	697	693	697										
JMAH	U002	694	695	603	604	605	606	604	504	503	501	406	405	404	454	694	695	694	696	697	693	696	695	693	694	694	696	695	695	695	695	695	695	695	694	694	694	695	698	696	695									
JMHE	U001	966	970	972	897	900	852	849	849	849	851	849	852	850	853	848	850	851	970	975	974	976	975	980	975	973	976	979	976	976	977	975	976	977	978	979	978	984	977	977	975	970	981	978	976	978				
JMHE	U002	950	745	669	497	499	501	497	501	498	500	501	500	500	500	619	771	854	968	977	973	978	970	977	975	972	974	976	976	974	977	981	982	981	984	980	976	979	982	979	985	983	980	977	976	983	983	977	980	
JMJG	U001	677	677	679	675	670	685	679	672	672	672	672	672	672	668	668	676	671	676	671	666	662	669	673	683	671	673	670	675	668	685	671	668	669	670	667	675	677	682	682	668	673	677	677	671	678	667	667		
JMJG	U002	673	673	672	677	677	678	673	673	673	673	673	673	673	673	678	678	673	679	673	673	676	672	685	675	671	676	673	675	677	673	675	681	675	671	674	676	677	678	675	676	675	674	674	677	678	676	678	676	
JMJG	U004	980	980	900	900	900	850	850	850	850	850	850	850	850	850	850	850	850	852	912	972	980	979	978	928	868	855	854	881	932	980	980	977	980	979	981	982	979	980	979	980	977	975	977	976	982	975	975		
PKLG	U003	163	159	156	156	155	156	156	155	158	157	155	154	155	195	276	278	278	277	276	275	278	279	277	277	277	280	276	277	279	276	276	280	278	278	276	277	276	280	277	278	278	275	277	278	278	278	279		
PKLG	U004	189	140	144	150	148	148	148	148	148	146	146	147	152	147	160	243	281	275	273	275	275	275	276	275	273	274	272	273	275	272	277	276	273	277	278	276	275	276	277	272	278	280	278	275	277	278	277		
PKLG	U005	260	260	260	260	260	260	260	260	260	260	260	260	260	260	373	393	470	470	470	470	470	470	470	470	470	470	470	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471	471		
TBIN	U001	686	689	691	689	689	689	686	689	688	689	689	688	690	689	692	686	689	690	690	710	710	709	708	712	706	711	710	707	712	688	689	691	690	690	691	689	691	690	685	689	690	691	692	691	691	691	690	693	
TBIN	U002	690	694	694	689	691	691	690	692	689	692	691	691	692	691	691	692	691	690	692	709	710	716	712	712	712	715	711	709	711	691	693	692	692	689	694	692	691	690	692	693	690	692	690	690	692	693	689	693	
TBIN	U003	687	688	690	688	687	688	690	690	688	690	689	689	690	687	687	690	689	688	686	687	688	688	686	687	688	688	688	687	687	690	690	690	688	687	687	689	689	688	690	689	688	689	688	689	687	688	689	687	
TBIN	U004	983	983	951	903	905	852	853	852	851	852	852	854	855	854	854	854	854	943	983	983	985	1013	1003	983	982	983	984	984	984	983	983	984	982	982	982	982	982	983	982	981	984	984	985	984	982	983	984	983	984
Total ST-Coal		9292	9051	8667	8390	8393	8261	8242	8040	8028	8035	7840	7842	7846	7951	8586	9021	9170	9620	9741	9768	9781	9796	9761	9671	9652	9661	9687	9727	9791	9739	9763	9763	9746	9744	9750	9743	9758	9758	9760	9778	9748	9754	9750	9740	9757	9774	9740	9752	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	34	42	42	42	43	42	43	42	42	42	52	71	152	151	222
EMPP	BLK1	681	706	578	619	498	480	435	443	405	396	410	412	510	552	397	407	413	519	668	710	716	705	710	684	682	648	462	439	409	443	546	603	704	710	687	652	558	525	613	719	700	696	680	687	698	687	681	664	
EMPP	BLK2	682	705	577	618	494	475	435	441	405	396	408	411	514	551	397	406	411	527	668	708	715	706	710	701	698	645	459	445	409	445	551	608	708	708	686	654	557	527	612	719	700	696	679	688	701	686	681	664	
EMPP	BLK3	682	707	577	617	498	476	437	439	405	396	408	411	515	552	396	407	411	528	675	708	715	705	710	684	682	645	459	444	409	445	553	610	709	709	686	655	556	528	612	719	699	696	679	688	700	686	679	671	
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	0	0	0	0	0	0	0	0	0	0	0	0	25	34	46	50	49	55	78				
GLGR	ST1C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25		
NPRI	BLK1	466	316	322	322	322	320	322	323	316	307	319	322	323	322	308	312	322	325	322	414	520	514	517	506	505	515	516	517	512	517	515	515	516	515	506	515	515	515	509	523	512	511	503	509	514	507	502	427	
NPRI	BLK2	314	323	356	355	357	325	328	327	318	311	323	327	329	328	311	316	326	329	327	362	416	516	521	510	509	488	520	521	516	521	521	520	519	518	511	520	517	520	512	525	515	515	507	511	518	509	505	305	
PCGP	PGRG	439	443	605	602	602	602	604	603	591	573	597	604	605	604	495	385	400	611	602	601	608	598	602	586	578	596	603	600	594	602	605	602	602	603	583	601	604	604	585	608	595	594	576	585	599	586	573	558	
SPGP	BLK1	714	716	716	714	715	716	716	715	717	717	717	716	717	718	720	500	674	656	705	716	717	719	717	720	722	720	718	717	720	722	715	714	716	714	716	714	713	713	715	715	714	714	715	716	714	716	719	718	720
SPGP	BLK2	701	712	724	724	723	725	725	724	717	704	718	724	724	726	708	530	713	727	728	728	729	731	727	718	710	724	728	725	720	730	726	726	724	713	719	720	725	709	727	715	715	701	710	717	703	699	687		
TJGS	GT1A	124	129	132	130	133	131	129	133	134	124	129	129	133	133	120	128	132	129	133	131	131	130	217	149	118	118	118	119	118	119	119	118	120	154	144	119	120	119	117	220	218	218	210	185	119	118	113	105	
TJGS	GT1B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	131	214	150	122	118	122	121	118	117	119	119	152	143	116	121	122	117	219	217	217	211	187	120	117	113	104		
TJGS	ST1C	78	79	79	78	79	79	78	78	78	76	78	79	79	77	78	78	78	79	79	80	82	143	246	206	166	166	166	166	165	166	166	165	193	193	166	166	166	166	241	250	250	247	243	166	164	164	157		
TJGS	GT2A	164	164	162	163	163	163	164	163	164	163	164	162	163	163	163	164																																	

Daily MW Generation on Monday

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	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22																							
KNYR	HY01	95	95	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97																							
KNYR	HY02	95	95	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98																							
KNYR	HY04	95	95	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	97	97																							
LPIA	HY01	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	20	20																							
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	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	20	21	21	22	22	22	21	19	22																							
PGAU	HY02	9	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	21	20	19	21	22	22	22	22	22	21	21	16																							
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22	23	22	23	22	22	22	18	0																							
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	0	0																							
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	0	0																							
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	0	0																							
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	34	81	81	81	81	81	81	33	-1	-1																							
TMGR	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	82	82	82	82	82	80	82	35	0																							
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	81	82	81	81	82	82	32	32	0																							
TMGR	HY04	38	42	42	42	41	42	41	38	42	42	45	42	38	39	74	82	67	82	84	41	48	41	39	41	35																						
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	90	92	-1	-1	-1	-1	52	88	92	91	-1	-1																						
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	94	90	94	95	95	93	93	87	-1	-1	0																						
UPIA	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	6	6																							
Total Hydro		496	479	488	488	507	489	487	486	478	488	488	491	508	480	499	537	546	530	569	548	619	627	524	522	566	804	1178	1287	1323	1325	1137	1134	1132	1117	899	771	768	847	1031	1166	1161	1131	1069	852	725	693	484
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	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	2	5	7	10	16	15	16	14	13	7	2	22	28	19	28	28	8	2	2	2	1	1	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	1	7	9	14	13	22	23	30	28	32	29	33	30	22	35	7	19	24	21	16	7	3	3	0	0	0	0	0	0	0	0		
BSLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	11	10	9	21	25	27	18	32	35	21	11	32	25	24	6	29	7	4	2	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	2	3	4	8	11	17	13	11	23	14	12	21	24	24	17	23	17	12	9	7	6	5	2	1	0	0	0	0	0	0	0	0	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	11	10	17	26	34	24	31	30	31	22	27	14	7	16	32	15	14	11	11	5	4	1	0	0	0	0	0	0	0	0	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	6	25	28	31	28	38	24	42	47	21	45	40	6	16	37	9	9	13	8	4	1	0	0	0	0	0	0	0	0		
JELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	13	9	23	19	17	22	30	30	24	21	30	21	6	18	5	3	11	5	2	1	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	1	3	5	12	13	19	17	10	15	17	23	25	27	23	20	18	16	13	11	12	7	3	1	0	0	0	0	0	0	0	0		
KDLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	13	39	27	34	68	74	88	67	92	92	53	90	91	56	74	20	57	29	16	5	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	2	2	6	18	23	26	30	31	40	34	28	48	15	45	45	46	5	16	17	14	4	4	2	1	0	0	0	0	0	0	0	0	
KMLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	10	8	17	22	26	30	23	12	27	9	29	25	27	23	5	12	9	5	1	1	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	7	21	48	62	77	67	88	88	33	23	59	75	100	38	32	100	65	56	14	13	18	16	4	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	2	5	15	19	24	19	30	30	22	30	26	30	19	5	15	30	26	7	4	4	6	6	3	0	0	0	0	0	0	0	0		
MALS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	14	23	28	22	23	15	21	29	29	29	29	29	29	29	29	29	29	29	28	17	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	1	5	8	13	16	21	25	38	50	33	50	50	37	35	32	22	30	26	5	6	1	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	2	9	14	21	24	34	60	94	91	86	97	94	90	64	51	35	66	15	16	8	2	1	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	6	16	36	47	58	68	52	66	71	61	94	83	50	67	67	51	48	46	36	26	20	10	5	5	0	0	0	0	0	0	0	0	
SNLS	LSS4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	21	31	36	28	47	48	50	28	49	38	44	36	50	36	46	15	42	22	20	7	2	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	1	3	5																														

Daily MW Generation on Monday

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	
PCUF	CUFK	10	9	8	10	9	11	10	9	11	11	11	12	12	12	10	11	12	11	11	8	6	5	6	4	3	2	3	2	2	2	2	1	1	2	6	4	3	5	6	5	6	6	6	6	8	7	7	
PFTZ	PFTZ	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Total Co-Gen		13	19	11	9	17	21	23	20	28	26	29	32	30	29	22	27	23	16	14	5	-2	0	-2	-10	-14	-18	-11	-16	-16	-19	-16	-8	-10	-17	-8	-15	-18	-7	-6	-6	7	-16	-15	3	-3	6	4	6
Total Gen		14938	14641	14086	13921	13574	13372	13219	13027	12884	12795	12718	12753	13070	13308	13271	13284	13925	15033	15764	16177	16470	16882	17007	17091	16743	16623	16450	16777	16932	17231	17328	17323	17433	17552	17267	16787	16320	16159	16387	17237	17479	17470	17331	17067	16746	16637	16331	15889
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		-29	-30	-30	-29	-29	-29	-30	-30	-30	-30	-28	-28	-29	-29	-29	-30	-29	-30	-30	-30	-30	-29	-29	-29	-29	-29	-30	-29	-31	-31	-29	-29	-29	-29	-30	-28	-28	-29	-31	-29	-30	-29	-30	-30	-30	-30		
TIE-PLTG		13	31	-11	8	-16	11	2	0	0	19	11	-2	16	-17	2	-20	-2	20	30	22	-15	26	25	4	-42	-30	-30	-14	-41	-37	-26	-14	-15	-3	4	-4	18	22	45	-8	13	25	16	3	-17	-14	4	10
Interconnection		-16	1	-41	-22	-45	-19	-28	-30	-29	-12	-20	-30	-12	-46	-27	-49	-32	-9	2	-8	-45	-4	-4	-26	-71	-59	-60	-44	-71	-67	-56	-45	-44	-31	-25	-33	-12	-7	17	-37	-18	-4	-14	-26	-46	-44	-26	-19
System Total		14954	14640	14127	13943	13619	13391	13247	13057	12913	12807	12738	12783	13082	13354	13298	13333	13957	15042	15762	16185	16515	16886	17011	17117	16814	16682	16510	16821	17003	17298	17384	17368	17477	17583	17292	16820	16332	16166	16370	17274	17497	17474	17345	17093	16792	16681	16357	15908
SRev ST-Coal		314	347	578	707	705	694	705	706	717	708	712	711	710	707	585	561	539	312	191	184	171	156	131	171	190	181	84	225	161	193	169	169	186	188	182	189	174	174	172	154	184	178	182	192	175	158	192	180
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		925	970	1142	1028	1386	1479	1597	1582	1720	1806	1701	1671	1359	1242	1879	2337	1927	1384	905	649	461	436	325	284	560	764	1288	1523	1572	1163	1149	1012	736	615	746	882	1163	1244	1044	376	246	283	389	629	774	938	822	1278
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 Co-Gen		0	0	0	0	0	-2	0	0	0	1	-1	1	0	2	2	1	2	0	1	1	0	0	0	1	0	0	0	0	0	-1	0	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0
Syncon		739	890	890	890	890	739	890	890	890	890	890	890	890	739	890	890	890	890	890	739	890	552	552	739	739	739	374	0	0	0	0	0	0	0	0	374	462	462	275	187	0	0	0	187	462	275	275	401
Hydro		308	174	165	165	165	297	164	166	167	175	165	165	162	296	173	304	116	107	123	235	105	372	364	280	282	238	713	793	684	648	646	834	837	839	854	698	738	741	849	903	955	960	990	865	807	698	580	476
S.Reserve Total		2286	2381	2775	2790	3146	3207	3356	3344	3494	3580	3467	3438	3121	2986	3529	4093	3474	2693	2110	1808	1627	1516	1372	1475	1771	1922	2459	2541	2417	2004	1963	2015	1760	1642	1782	2143	2539	2621	2340	1621	1385	1421	1561	1873	2218	2069	1869	2335