

Daily System Generation Summary on Wednesday

Wednesday, August 2, 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	19,366 MW
Total Co-Gen	0 MW
Total System	25,598 MW

Generation Mix

Type	MWh	Percentage
Hydro	17,250	4.34 %
Gas	36,841	9.26 %
Total TNB	54,091	13.59 %
ST-Coal	263,307	66.17 %
LSS	5,994	1.51 %
Gas	73,430	18.45 %
Total IPP	342,731	86.13 %
Co-Gen	588	0.15 %
Total Co-Gen	588	0.15 %
Total Generation	397,410	99.87 %
PLTG	190	0.05 %
HVDC	-696	-0.17 %
Interconnection	-506	-0.13 %
Net Energy	397,916	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	20,169 MW
TNB Generation	2,549 MW
IPP Generation	16,103 MW
Spinning Reserve	1,501 MW
Maximum Demand	18,678 MW
Net Energy	397,916 MWH
Load Factor	88.77 %

Fuel Cost

Total Cost:	84,757,354.85 RM
Cost per Unit	21.29 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	1,102
Hydro	222
Syncon	675
Thermal	229
Total	2,228

Time	Weather	Temperature
Afternoon	Cloudy	34
Morning	Cloudy	28

Gas Usage

Station	(mmscfd)
GLGR	41
TJGS	41
Total TNB	82
CBPS	41
EMPP	243
NPRI	123
PCGP	75
SPGP	169
Total IPP	651
Total Gas	733
Total Gas Required	733

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	16469	15654	14916	14477	14123	13850	14097	14125	14487	16110	16874	17359	17199	16904	17813	18511	18674	18402	17337	17127	18351	18585	18205	17855

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, August 9, 2023 8:23:32 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	694	697	694	695	695	697	696	696	697	695	656	656	656	656	655	695	696	695	694	691	697	695	695	656	656	656	656	655	695	696	695	695	643																
JMAH	U002	697	695	694	697	690	694	698	697	696	697	657	655	654	656	653	654	692	697	699	693	694	696	696	698	696	696	692	697	694	697	699	698	702	694	694	697	694	697	695	690	696	694	695	693	696	695	655		
JMHE	U001	972	970	972	974	929	929	910	901	903	902	882	880	881	878	883	879	884	883	972	972	975	976	979	981	976	975	979	980	980	964	969	967	975	975	973	970	977	971	976	970	975	972	973	970	974	973	971	976	
JMHE	U002	971	972	969	975	929	928	917	902	901	901	883	882	878	879	884	878	883	882	946	973	972	973	977	977	979	975	979	979	977	974	978	978	976	975	981	976	980	977	979	976	974	975	979	978	977	978	980		
JMJG	U001	517	517	517	517	517	517	517	517	530	550	550	550	550	550	546	549	549	550	550	567	568	568	568	640	692	692	682	683	684	679	683	682	682	673	678	678	679	679	676	680	680	686	686	664	664				
JMJG	U002	670	620	620	420	420	420	420	420	420	420	420	420	420	500	500	600	600	673	678	678	674	674	677	674	676	676	678	677	677	672	672	675	675	672	675	677	677	677	678	678	672	672	675	675	672	672	682	682	
JMJG	U003	668	668	668	668	668	668	668	668	668	668	668	668	668	668	666	668	668	668	668	668	668	673	672	672	672	667	667	668	668	674	670	683	676	669	669	670	670	670	670	669	669	669	669	673	673	668	668		
JMJG	U004	975	975	975	975	930	930	930	900	900	900	900	900	900	900	906	906	963	975	977	980	977	976	971	977	975	977	977	977	980	975	973	977	983	977	978	977	973	972	971	970	975	972	972	973	974	973	973		
JMJG	U005	979	979	979	979	930	930	930	900	900	900	880	880	880	880	886	884	980	985	980	975	980	980	978	981	981	983	978	978	980	982	979	985	979	982	979	980	981	976	979	981	980	977	974	975	980	977			
PKLG	U003	277	273	279	277	239	210	201	156	153	151	151	150	150	150	150	237	281	281	277	276	276	277	276	277	277	275	278	274	279	277	275	273	275	274	274	274	274	273	276	275	273	273	272	274	171	185	157		
PKLG	U004	274	279	276	276	230	206	197	136	147	148	149	150	150	149	149	150	148	227	268	277	276	277	277	275	278	274	279	277	275	273	275	276	272	273	275	276	278	274	273	275	269	278	275	274	274	220	157	146	
PKLG	U005	470	466	470	432	334	264	267	268	269	267	268	269	268	269	268	269	270	269	336	418	467	467	466	466	464	468	464	466	468	464	462	467	466	466	469	466	468	466	467	469	466	471	467	469	475	473	412	326	266
TBIN	U001	689	691	690	691	691	690	688	690	691	690	674	646	650	651	651	650	692	690	689	689	690	690	689	689	688	690	690	690	687	690	688	688	690	690	690	689	689	689	689	690	690	690	689	689	689	692	688	689	689
TBIN	U002	690	688	688	689	686	687	686	689	688	690	682	651	652	650	652	650	692	691	692	692	689	693	692	687	691	689	692	692	691	691	693	692	690	687	691	696	690	691	689	685	690	692	692	690	691	693	691	694	
TBIN	U003	688	684	688	688	687	686	686	687	687	682	658	647	647	646	647	648	688	687	689	687	688	684	689	688	687	686	687	686	684	685	687	686	686	689	690	685	686	688	687	686	689	685	685	687	686	686	686		
TBIN	U004	982	983	982	982	934	934	927	905	905	902	882	884	884	885	882	884	885	884	971	983	983	984	982	982	985	985	984	985	982	982	983	984	982	981	986	981	983	983	984	985	982	983	981	985	985	987	982	986	
Total ST-Coal		1121311571116110935105091039010338101321014210143 9960 9888 9968 9967 10075100661035510595111581126011251112791129011285112861134911418114161139211367113941138911398114111139711399113881137511396113751137911377113801138611394111781102210842																																																
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				
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			
CBPS	BLK2	222	221	220	221	220	221	221	221	221	220	220	221	221	220	221	221	221	221	221	220	221	221	221	221	221	221	220	220	221	264	353	332	222	222	222	225	301	338	356	339	334	322	359	333	221				
EMPP	BLK1	362	372	374	375	375	375	374	374	377	373	376	374	380	375	373	357	379	441	397	750	751	747	749	745	745	745	741	745	744	742	706	703	723	715	701	708	500	409	438	613	710	710	710	710	710	714	705	713	
EMPP	BLK2	363	373	377	376	375	374	375	375	377	373	376	375	380	375	374	358	380	444	396	392	391	562	415	513	387	394	443	557	471	709	707	699	724	715	701	706	506	410	437	638	710	710	710	711	713	707	712		
EMPP	BLK3	363	373	377	376	376	375	375	376	377	374	376	376	380	375	375	358	381	376	362	357	356	375	376	375	352	359	379	375	710	708	707	718	712	709	708	706	709	715	710	710	710	710	710	713	710	712			
GLGR	GT01	94	94	95	95	96	95	95	96	96	95	97	95	96	95	95	95	95	96	95	97	68	67	65	65	65	65	66	67	66	65	66	66	67	66	66	67	66	67	66	93	107	107	105	108	75	67	68		
GLGR	GT02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	51	90	107	66	66	66	66	66	65	66	66	65	65	65	65	65	65	66	66	66	67	67	66	66	92	106	106	106	106	73	66	67	
GLGR	ST1C	42	40	41	41	42	41	42	42	42	41	42	42	42	41	41	41	41	41	42	39	95	78	70	71	70	70	71	71	71	70	71	71	71	71	71	71	71	71	71	71	82	96	97	97	96	81	71	70	
NPRI	BLK1	320	328	331	332	332	331	328	333	330	326	336	330	345	342	330	317	336	332	317	312	313	334	332	332	309	315	332	336	332	358	421	439	512	514	510	326	331	326	339	504	501	519	499	477	478	526	522	522	
NPRI	BLK2	291	303	305	306	307	307	298	305	304	300	309	307	310	306	303	289	310	307	291	286	286	311	307	305	283	291	305	310	306	320	321	518	520	521	512	521	321	326	320	525	518	512	515	478	527	522	494		
PCGP	PGRG	438	395	402	400	401	402	395	400	397	394	407	403	407	399	397	409	401	393	395	395	406	404	401	409	430	403	408	601	605	597	595	625	614	592	591	603	597	607	604	608	608	600	609	602	613				
SPGP	BLK1	719	362	361	362	363	361	363	363	362	363	363	363	362	364	361	363	363	551	602	507	505	507	655	655	629	456	405	556	700	693	693	692	688	689	695	692	695	697	696	700	703	706	707	709	707	713	714	711	
SPGP	BLK2	729	607	362	363	363	363	368	366	366	367	368	368	366	367	365	366	367	551	596	500	498	499	648	645	622	450	395	559	728	714	713	712	710	711	713	713	714	718	717	715	717	719	722	722	723	724	723	724	
TJGS	GT1A	128	136	137	135	136	132	133	130	137	133	133	136	138	134	135	120	135	134	128	124	122	134	137	131	119	127	134	132	131	136	134	133	139	136	132	133	135	132	137	226	226	226	226	127	135	135	133		
TJGS	ST1C	78	79	79	78																																													

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	
KNRG	HY03	21	21	21	21	21	21	21	21	21	21	39	39	39	39	39	39	39	39	39	39	39	39	39	39	
KNYR	HY01	96	96	96	96	96	96	97	97	63	-1	-1	-1	-1	97	97	55	59	97	94	94	94	96	96	96	96
KNYR	HY02	97	98	98	98	98	98	-1	-1	-1	-1	-1	-1	-1	97	97	94	97	97	97	97	97	97	97	97	97
KNYR	HY03	92	92	92	90	90	90	88	88	88	88	52	91	92	92	51	49	53	91	89	89	88	89	88	88	86
KNYR	HY04	97	100	101	100	102	102	99	99	101	100	59	104	103	102	57	55	59	101	96	96	96	102	99	101	95
LPIA	HY01	12	12	12	12	12	12	12	12	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	11
LPIA	HY02	11	11	11	11	11	11	11	11	10	10	10	10	10	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
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	21	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1
PGAU	HY02	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	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	30	30	30	
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	
SYPS	HY01	23	23	23	23	23	23	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	
SYPS	HY03	25	25	25	25	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	
SYPS	HY04	25	25	25	25	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	16	17	17	17	
TMGR	HY01	80	81	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
TMGR	HY02	79	82	82	33	0	0	0	0	0	0	0	0	0	0	80	35	35	35	29	32	0	0	0	0	
TMGR	HY03	77	80	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TMGR	HY04	39	41	41	42	84	55	41	41	40	40	56	44	84	84	43	39	69	41	38	36	37	41	41	41	
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	
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	
UPIA	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Total Hydro		1059	1072	991	862	872	842	667	615	470	405	344	455	595	725	541	452	498	626	611	608	766	771	737	739	
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	1	2	6	10	14	18	18	22	23	25	
BKLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	8	10	9	11	12	11	28	16	
BSLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	11	14	18	21	24	16	22	18	18	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	12	21	24	30	24	39	39	40	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	9	14	20	25	25	29	24	24	22	
GELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	11	15	17	20	24	25	25	29	30	27	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	6	11	10	18	21	27	27	29	33	
JELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	11	13	15	12	21	19	22	29	29	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	5	8	13	22	27	33	40	44	45	
KDLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13	32	41	59	48	60	43	62	52	56	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	13	25	26	23	32	44	40	44	33	
KMLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	11	18	21	16	16	17	20	24	
KNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13	28	55	35	50	56	49	47	35	48	
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	12	
MALS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	7	11	19	23	21	18	28	29	21	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	11	14	21	27	39	41	47	28	
MNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	11	16	18	31	85	95	93	88	82	74	
PKLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	25	41	56	70	80	91	85	95	106	89	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	12	19	25	23	35	48	49	50	55	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	12	26	32	22	30	30	27	33	
STLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	6	8	13	14	24	25	27	21	
TBLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	9	19	14	30	30	30	24	30	30	

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																									
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	13	75	169	299	432	584	658	741	737	794	787	766	754	793	679	711	738	622	548	421	302	215	110	41	6	3	3	0	0	0	0	0					
ESTL	ESTL	18	22	18	19	22	22	22	22	21	21	21	20	17	18	22	24	18	20	26	20	23	16	19	22	20	18	17	16	12	22	22	18	19	11	10	10	16	15	18	16	10	21	21	11	17	18	17		
KHTC	BLK1	-19	-19	-19	-21	-20	-19	-21	-19	-15	-16	-14	-16	-18	-21	-20	-18	-20	-25	-27	-30	-30	-32	-32	-36	-36	-40	-38	-40	-40	-42	-43	-42	-42	-44	-44	-40	-39	-38	-38	-35	-33	-33	-34	-35	-33	-29	-28	-30	
PCUF	CUFG	15	15	15	16	15	15	15	16	16	16	16	16	15	17	16	16	16	16	17	15	16	15	15	15	16	15	16	15	15	16	16	15	15	16	16	17	16	16	15	17	16	17	16	17	17				
PCUF	CUFK	27	25	26	26	24	26	1	2	2	2	3	2	1	2	2	3	2	26	25	25	25	28	26	25	26	26	28	25	26	26	25	26	26	25	26	25	26	25	26	26	27	26	26	26	27	25	26	27	
Total Co-Gen		41	43	40	40	41	44	17	21	24	23	25	23	17	13	21	24	17	13	42	30	34	24	30	27	25	19	22	19	20	10	21	22	16	16	8	11	13	18	19	25	27	19	29	27	22	29	33	31	
Total Gen		16462	15955	15653	15297	14887	14732	14468	14228	14101	14009	13810	13834	14086	14187	14088	13913	14440	15402	16076	16470	16858	17119	17324	17392	17167	16933	16851	17344	17791	18220	18496	18542	18643	18668	18414	17894	17310	17031	17116	18007	18340	18596	18558	18449	18174	18061	17820	17419	
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	-31	-28	-31	-28	-29	-29	-29	-31	-29	-28	-28	-31	-27	-28	-28	-30	-30	-28	-28	-29	-29	-28	-29	-31	-28	-30	-29	-29	-28	-31	-28	-30	-30	-28	-28	-29	-30	-29	-30	-30	-28	-28	-29	-29	-29	-29		
TIE-PLTG		22	36	28	22	-1	27	20	13	9	23	-12	2	20	5	-9	13	-17	-15	-6	12	12	-20	-6	8	-5	6	-22	-25	8	6	14	6	-1	17	42	21	1	11	18	32	18	26	3	21	-3	0	-6	5	
Interconnection		-7	5	-1	-9	-29	-2	-9	-16	-22	-6	-40	-25	-11	-22	-37	-14	-47	-45	-34	-18	-16	-48	-35	-20	-32	-22	-53	-53	-22	-23	-15	-23	-31	-10	12	-9	-27	-18	-11	3	-11	-4	-27	-7	-31	-28	-35	-24	
System Total		16469	15950	15654	15306	14916	14734	14477	14244	14123	14015	13850	13859	14097	14209	14125	13927	14487	15447	16110	16488	16874	17167	17359	17412	17199	16955	16904	17397	17813	18243	18511	18565	18674	18678	18402	17903	17337	17049	17127	18004	18351	18600	18585	18456	18205	18089	17855	17443	
SRev ST-Coal		229	225	221	247	538	536	571	673	742	688	803	1139	1059	1057	960	961	688	679	318	222	231	203	192	197	196	133	204	206	230	255	228	233	224	211	225	223	234	247	226	247	243	245	242	236	228	310	331	410	
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		2079	2545	2767	2768	2763	2772	2782	2768	2763	2790	2747	2760	2722	2746	2777	2870	2733	2384	2417	2243	2160	1996	1857	1779	2030	2317	2349	1898	1492	895	683	683	477	420	506	981	1363	1560	1409	536	252	168	218	239	424	341	427	544	
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	1	0	0	0	0	-1	0	-2	0	0	0	0	0	0	0	0	1	-2	0	0	-1	0	0	-1	1	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	1	1	0	0	1
Syncon		676	676	764	764	764	764	865	714	865	966	966	815	714	764	764	764	764	764	764	676	525	676	676	676	613	764	764	764	764	764	764	764	613	577	764	613	764	764	764	390	390	577	764	764	764	764	764		
Hydro		200	187	180	222	125	155	229	357	223	187	248	288	249	69	253	342	296	168	183	186	203	349	232	230	260	320	183	124	124	118	124	151	143	106	276	243	162	282	150	182	211	403	401	306	212	124	127	129	
S.Reserve Total		3184	3634	3932	4001	4190	4227	4446	4512	4591	4631	4764	5002	4744	4636	4754	4937	4481	3996	3680	3415	3270	3072	2957	2882	3161	3384	3498	2992	2610	2032	1799	1831	1608	1501	1620	2024	2523	2702	2549	1729	1470	1205	1252	1359	1628	1539	1649	1848	