

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,537 MW
Distillate	0 MW
Total TNB	2,537 MW
Total IPP	12,975 MW
Total Co-Gen	0 MW
Total System	19,514 MW

Maximum Demand Record

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

Gas Usage

Station	(mmscfd)
GLGR	29
TJGS	176
Total TNB	205
CBPS	47
EMPP	114
KLPP	87
PCGP	83
PLPS	87
SGRI	115
SKSP	48
SPGP	199
Total IPP	781
Total Gas	986
Total Gas Required	986

Alternate Fuel Usage

Station	(mmscfd)
Total	0

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:30:00 Hour
Total Set On Bus	17,651 MW
TNB Generation	5,139 MW
IPP Generation	11,661 MW
Spinning Reserve	851 MW
Maximum Demand	16,849 MW
Net Energy	364,841 MWH
Load Factor	90.22 %

Generation Mix

Type	MWh	Percentage
Hydro	41,877	11.48 %
Gas	60,988	16.72 %
Total TNB	102,865	28.19 %
ST-Coal	176,765	48.45 %
LSS	4,702	1.29 %
Gas	79,695	21.84 %
Total IPP	261,162	71.58 %
Co-Gen	190	0.05 %
Total Co-Gen	190	0.05 %
Total Generation	364,217	99.83 %
PLTG	73	0.02 %
HVDC	-697	-0.19 %
Interconnection	-624	-0.17 %
Net Energy	364,841	100.00 %

Fuel Cost

Total Cost:	83,555,211.98 RM
Cost per Unit	22.89 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	739
Hydro	345
Syncon	92
Thermal	89
Total	1,265

Time Weather Temperature

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

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	15102	14507	14032	13612	13182	13039	13074	13401	13676	15014	15774	16160	16222	15864	15925	16707	16808	16572	15877	15989	16567	16183	15688	15491

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, January 3, 2024 11:57:15 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Friday

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	698	694	695	695	697	689	695	695	698	695	694	697	696	696	698	699	697	695	698	696	689	695	696	697	694	695	696	696	698	694	693	697	696	696	695	696	695	696	691	693	695	692	695	692	695	692	698				
JMAH	U002	694	695	696	688	693	695	696	695	696	692	695	697	697	694	698	700	694	695	693	697	695	693	695	696	695	695	689	696	694	697	694	697	695	695	696	695	692	696	695	696	691	693	695	692	695	692	695	692	698		
JMHE	U001	948	948	899	898	899	901	899	901	903	902	900	900	898	899	898	903	902	904	947	948	947	946	951	942	946	946	941	947	950	951	950	945	947	946	949	948	941	944	949	944	945	947	942	944	951	945	943	946			
JMIG	U002	679	673	675	677	677	676	667	677	673	668	669	666	672	668	673	656	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192	256	327	400	440	480	
JMIG	U003	649	651	640	656	643	653	648	590	579	562	579	568	573	573	596	619	594	601	601	595	598	597	598	601	596	596	601	596	598	601	596	600	593	598	599	596	600	599	598	596	596	596	600	597	601	593	599	598			
JMIG	U005	977	976	892	899	904	900	900	899	902	902	899	900	898	905	901	901	900	901	949	977	977	976	979	976	976	977	977	976	978	975	978	974	977	976	977	979	977	979	977	977	977	978	979	975	975	977	975	977			
PKLG	U003	276	276	277	275	275	276	275	256	204	228	267	276	275	277	276	274	275	276	278	277	277	276	278	278	276	276	276	280	279	275	272	273	275	275	273	275	275	277	278	277	277	277	275	280	278	277	277				
PKLG	U004	276	275	276	275	274	275	273	276	273	275	274	276	274	276	274	275	274	275	274	276	272	279	278	277	278	275	274	274	276	274	275	276	273	275	274	278	277	278	275	274	275	276	275	276							
PKLG	U005	469	466	462	466	459	464	461	455	462	465	464	462	465	463	460	461	464	459	456	466	472	471	465	489	463	468	470	466	469	467	466	467	470	468	461	465	470	467	466	468	463	464	473	456	470	468	462	453			
TBIN	U001	689	688	687	689	686	669	688	689	689	690	687	689	688	689	691	687	692	688	689	687	689	688	689	688	690	687	689	688	689	684	679	689	688	689	689	687	689	690	688	688	689	687	688	688	689	687	688	688	689		
TBIN	U002	687	687	692	685	688	689	689	686	689	689	689	686	690	689	692	688	689	687	684	687	688	691	689	690	687	683	689	689	689	691	688	684	688	688	689	689	688	691	690	688	690	693	688	689	692	689	687	686			
TBIN	U003	685	687	684	687	685	686	685	686	688	685	687	686	686	690	685	687	685	686	690	684	688	685	686	687	685	687	686	686	685	687	686	685	690	686	686	686	680	688	685	686	686	688	686	686	688	686	685	686	687		
TBIN	U004	977	903	834	801	749	684	603	603	535	405	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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-Coal		8704	8619	8409	8391	8329	8257	8181	8105	7993	7860	7502	7500	7512	7522	7539	7549	6873	6865	6963	6986	6996	6995	6998	7018	6985	6986	6992	6988	7009	7007	6996	6969	6991	6990	6997	6994	6981	6997	6997	6991	6987	6997	7187	7234	7332	7388	7416	7462			
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	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	0	0	0
CBPS	BLK2	282	208	210	206	203	212	212	209	206	210	210	211	209	211	208	210	237	362	363	350	361	365	362	363	361	351	357	358	363	357	365	364	368	362	357	362	354	360	370	361	359	361	353	356	315	214	214	210			
EMPP	BLK1	399	410	409	408	400	429	436	410	408	417	411	411	440	462	414	414	550	712	709	678	710	715	703	709	709	680	693	687	695	691	712	709	717	710	689	710	681	701	720	709	691	708	682	693	405	703	711	687			
EMPP	BLK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	76	179	118	179	185	207	374	373	375	374	375	374	375	374	450	450	449	501	500	500	549	632		
GLGR	GT02	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95			
GLGR	ST1C	42	41	42	42	42	42	42	42	42	43	42	43	41	40	41	42	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	43	41			
KLPP	GT13	104	107	107	107	67	69	70	70	69	70	69	70	70	70	137	138	140	108	113	136	136	113	109	112	113	113	113	116	116	118	138	140	112	109	112	117	140	141	107	104	107	107	105	107	103						
KLPP	GT14	111	9	0	0	0	0	0	0	0	0	0	0	0	0	0	51	146	111	113	134	116	112	114	115	115	119	116	120	120	119	154	157	121	116	125	129	156	157	111	109	111	116	113	0	0						
KLPP	GT15	112	111	112	112	73	73	73	73	74	73	73	73	74	73	74	100	149	148	147	111	117	127	116	112	109	111	111	116	111	116	117	117	134	139	121	116	117	123	135	140	107	111	112	115	117	119	115				
KLPP	ST17	192	167	132	132	100	99	100	98	98	98	98	98	99	100	99	99	106	145	137	207	194	196	210	200	195	195	196	195	198	196	197	199	212	213	197	195	198	201	214	213	194	191	193	193	194	151	131				
PCGP	PGRG	579	497	499	485	479	402	400	395	387	394	499	501	494	503	489	398	584	605	603	575	602	615	604	609	600	571	592	590	610	590	613	609	619	602	588	602	578	599	626	600	590	600	578	588	586	605	610	597			
PLPS	GT11	111	109	112	62	61	66	66	64	63	66	65	65	64	63	133	135	135	117	118	117	114	116	116	115	116	117	116	116	115	116	115	138	139	117	115	116	117	136	137	115	115	113	111	116	115	115					
PLPS	GT12	114	116	119	65	64	69	70	67	65	70	69	69	69	69	68	65	143	142	139	120	122	122	122	121	114	119	118	121	116	121	120	124	142	137	120	115	120	125	141	139	120	116	118	83	0	0					
PLPS	GT13	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PLPS	ST18	194	160	132	97	91	93	93	90	91	95	94	94	95	95	94	93	96	143	145	197	198	198	200	199	197	196	198	195	198	197	198	198	199	209	209	198	195	196	199	211	210	197	196	197	191	133	134	134			
SGRI	GT11	106	107	107	106	106	107	108	106	107	107	106	107	106	107	106	107	110	109	109	109	115	109	110	108	108	108	108	113	108	113	114	108	108	111	108	108	115	111	108	108	108	108	108	108	108	113	113	109			
SGRI	GT12																																																			

Daily MW Generation on Friday

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 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	0	0	0	0	0	0	0	0	0	19	19	18	19	19	19	19	19	19	19	19	19	19	19	19	
BSIA	HY02	0	0	0	0	0	0	0	0	0	0	0	23	23	23	23	23	23	23	23	23	23	23	23	23	
BSIA	HY03	11	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
CEND	HY01	7	8	8	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
CEND	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	
CEND	HY03	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
CEND	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	
HTRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	68	69	68	69	67	68	68	68	68	68	68	68
HTRG	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	
HTRG	HY03	7	8	8	8	8	7	7	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	
HTRG	HY04	3	3	3	3	3	3	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
KNRG	HY01	22	22	23	23	22	23	22	22	23	22	22	22	22	23	22	22	22	22	22	22	22	22	22	22	
KNRG	HY02	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
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	104	104	105	105	105	105	104	104	104	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	
KNYR	HY02	105	105	105	105	105	105	104	105	105	105	105	105	105	106	105	101	102	102	101	102	102	101	101	101	
KNYR	HY03	104	104	104	105	104	104	105	104	105	104	105	105	105	105	105	105	105	105	105	105	105	105	105	105	
KNYR	HY04	105	105	106	106	106	105	106	106	106	106	106	106	106	107	106	107	107	106	105	105	106	106	106	106	
LPJA	HY01	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	23	23	23	23	23	23	24	24	24	
LPJA	HY02	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	23	23	23	23	
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	142	142	142	142	142	151	149	150	150	150	150	150	147	147	147	148	147	147	120	120	149	130	130	130	
PGAU	HY02	151	151	151	151	151	151	150	150	150	150	150	150	147	147	147	147	147	147	122	122	147	132	132	132	
PGAU	HY03	0	0	0	0	0	0	20	20	20	20	20	20	20	149	149	150	150	149	120	120	149	131	131	131	
PGAU	HY04	154	155	154	154	154	155	153	153	154	153	154	154	154	151	150	151	151	151	150	114	114	151	123	123	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	50	50	50	50	50	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	50	
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	
SYPS	HY01	27	27	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27	27	27	27	
SYPS	HY02	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	25	25	25	25	
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	
TMGR	HY01	-1	81	81	81	82	82	81	81	81	81	81	81	81	81	81	81	81	81	79	81	81	81	81	81	
TMGR	HY02	41	89	88	87	85	88	89	89	87	89	89	89	89	89	88	89	88	89	88	89	88	89	88	89	
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	83	82	83	82	82	
TMGR	HY04	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	82	83	83	80	83	83	83	82	82	80	83	
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	176	99	98	-1	-1	-1	98	99	95	87	93	
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	180	100	99	89	97	101	99	100	97	88	95	
UPIA	HY01	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
UPIA	HY02	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Total Hydro		1116	1260	1261	1208	1203	1209	1218	1232	1233	1237	1238	1238	1238	1243	1444	1379	1912	1803	1790	1603	1692	1801	1972	2013	
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	
BELS	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	
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	
BNLS	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	

