

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,081 MW
Distillate	0 MW
Total TNB	2,081 MW
Total IPP	20,214 MW
Total Co-Gen	0 MW
Total System	25,105 MW

Generation Mix

Type	MWh	Percentage
Hydro	23,668	6.53 %
Gas	45,635	12.59 %
Total TNB	69,303	19.13 %
ST-Coal	189,446	52.28 %
ST-Gas	7,566	2.09 %
LSS	5,826	1.61 %
Gas	89,861	24.80 %
Total IPP	292,699	80.78 %
Co-Gen	710	0.20 %
Total Co-Gen	710	0.20 %
Total Generation	362,712	100.10 %
PLTG	1,792	0.49 %
HVDC	-1,439	-0.40 %
Interconnection	353	0.10 %
Net Energy	362,359	100.00 %

Maximum Demand Record

Date: 5/24/2022	19,183 MW
Date: 5/24/2022	398,523 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:30:00 Hour
Total Set On Bus	18,500 MW
TNB Generation	3,365 MW
IPP Generation	14,168 MW
Spinning Reserve	928 MW
Maximum Demand	17,527 MW
Net Energy	362,359 MWH
Load Factor	86.14 %

Fuel Cost

Total Cost:	111,757,181.86 RM
Cost per Unit	30.81 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	893
Hydro	357
Syncon	166
Thermal	190
Total	1,606

Time	Weather	Temperature
Afternoon	Hot	34
Morning	Sunny	24

Gas Usage

Station	(mmscfd)
GLGR	29
SRDG	2
TJGS	57
Total TNB	88
CBPS	39
EMPP	245
NPRI	64
PCGP	87
PGLA	55
PLPS	43
SGRI	82
SPGP	210
PKLG	72
Total IPP	896
Total Gas	984

Alternate Fuel Usage

Station	(mmscfd)
Total	0

Total Gas Required 984

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	13630	13107	12556	12216	12154	11942	12209	12514	13208	14880	15739	16374	16290	16035	16753	17152	17421	17281	16311	16290	17327	17169	16655	16079

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, October 4, 2022 3:32:59 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	240	212	216	214	213	215	214	214	212	214	215	216	212	213	214	214	213	215	377	611	705	707	703	709	704	706	704	704	704	706	706	705	707	707	705	706	704	706	705	705	701	704	705	705	707	705			
JMHE	U001	880	832	855	849	847	801	799	798	801	796	800	800	798	800	802	800	801	963	974	975	973	975	977	980	977	975	981	979	978	977	975	976	976	977	978	978	977	978	977	975	978	974	978	979	978	978			
JMHE	U002	880	850	855	849	848	800	801	797	801	797	800	800	799	799	797	799	801	800	951	980	975	978	979	980	976	975	979	981	979	981	979	979	973	976	978	978	980	977	977	980	982	977	980	978	976	980	979	978	
JMJG	U001	598	602	598	598	596	607	677	674	672	671	669	673	671	672	667	666	634	532	510	453	407	420	420	420	420	419	420	420	422	417	416	417	421	420	0	0	0	0	0	0	0	0	0	0	0	0	0		
JMJG	U002	669	667	669	674	669	673	668	671	667	664	673	669	668	670	671	667	667	668	663	665	668	666	667	671	670	669	670	667	671	671	666	671	672	669	668	675	670	674	666	673	671	671	673	664	667	669	668	670	
JMJG	U004	905	856	855	860	854	812	806	807	812	809	808	809	808	810	810	813	809	862	905	905	903	906	903	902	904	904	908	906	908	906	906	904	906	906	909	904	903	904	906	904	904	906	907	905	902	906	905	889	848
JMJG	U005	894	846	847	848	848	798	798	797	798	799	800	801	801	796	797	797	796	930	979	983	981	977	983	980	978	973	974	978	971	972	971	976	975	973	975	973	972	977	973	975	972	974	972	973	971	975	972	976	
TBIN	U001	698	660	388	249	210	212	210	212	210	211	213	211	212	274	412	616	702	698	699	699	698	696	697	701	697	699	696	698	697	698	697	697	699	696	698	696	697	696	700	698	697	695	697	700	694	698			
TBIN	U002	702	703	702	705	702	704	701	703	706	700	706	696	701	705	701	704	702	701	702	700	706	702	698	703	701	699	705	697	701	703	701	699	701	701	701	705	702	699	700	703	702	705	702	703	701	702	700	701	
TBIN	U003	699	699	702	569	347	230	183	210	211	210	212	211	211	212	207	210	210	202	250	382	554	682	740	712	697	700	697	697	702	701	710	693	695	704	700	698	703	697	697	700	701	701	697	701	701	703	697	702	
TBIN	U004	898	854	853	854	851	801	802	803	803	803	804	802	802	804	803	802	802	889	938	938	940	939	937	940	940	939	940	940	939	936	938	937	939	940	937	934	935	940	937	937	937	936	938	937	940	939	940	938	
Total ST-Coal		8063	7781	7540	7269	6986	6651	6662	6684	6697	6675	6699	6682	6688	6757	6884	7088	7170	7561	7806	7952	8228	8539	8706	8696	8663	8662	8673	8664	8673	8668	8665	8657	8656	8671	8665	8246	8247	8250	8232	8252	8253	8249	8243	8231	8242	8257	8224	8194	
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		
PKLG	U006	269	269	269	269	269	269	269	269	269	269	268	269	269	268	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	277	364	440	445	448	448	449	449	448	448	448	448	448	393	304	269	
Total ST-Gas		269	269	269	269	269	269	269	269	269	268	269	269	269	268	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	277	364	440	445	448	448	449	449	448	448	448	448	448	393	304	269		
CBPS	BLK2	193	205	198	200	201	204	198	198	201	197	195	202	205	208	191	195	202	201	203	202	198	204	195	198	196	193	197	201	201	201	198	293	297	302	295	300	301	299	300	300	298	297	301	299	201	201	201	196	
EMPP	BLK1	402	410	407	410	406	415	409	374	374	374	371	378	381	437	400	406	410	501	490	569	486	555	503	510	426	403	408	468	532	708	667	710	705	712	693	710	704	611	518	710	707	702	709	709	520	413	412	406	
EMPP	BLK2	402	421	407	409	413	413	408	375	374	374	370	378	380	423	401	408	409	501	491	572	487	549	520	523	436	402	408	471	535	708	680	710	708	712	708	709	711	630	518	711	710	706	710	710	698	710	551	543	
EMPP	BLK3	401	425	407	409	429	436	408	374	374	374	371	377	381	490	399	408	417	550	548	627	541	614	553	568	493	467	412	545	609	708	667	710	704	712	693	710	703	609	536	710	707	701	709	710	704	710	708	688	
GLGR	GT02	91	91	91	90	90	91	91	91	91	91	90	91	91	91	90	90	91	91	91	91	90	90	91	91	91	91	91	91	91	92	91	92	92	90	91	91	91	91	91	91	107	107	107	107	107	107	90	91	
GLGR	ST1C	41	41	40	41	40	40	40	40	40	40	40	40	40	40	40	40	40	41	40	40	40	41	41	40	41	41	40	40	40	40	40	40	40	40	40	40	40	40	40	47	47	48	47	47	47	40	40		
NPRI	BLK2	298	310	304	305	307	309	304	304	310	303	301	310	314	318	297	300	309	309	409	397	394	312	301	305	301	298	303	310	309	309	514	518	514	520	511	518	520	514	518	520	518	514	519	518	520	520	521	510	
PCGP	PGRG	600	600	600	600	600	600	600	500	500	500	500	500	500	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	
PGLA	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	0	0	0	0	0	0	0	0	0	0	0	0	130	191	131	134	133	134	134	135	134	36	180		
PGLA	GT12	150	155	152	153	153	156	152	153	154	153	151	155	157	158	150	151	154	155	155	154	151	155	152	152	151	150	151	154	153	154	152	154	213	218	217	219	225	166	193	133	136	136	137	137	136	136	176	142	
PGLA	ST10	82	83	82	81	83	84	82	82	82	82	84	84	85	82	82	84	84	84	84	83	83	84	83	83	84	82	82	83	84	84	84	84	84	93	106	106	106	107	89	208	185	180	180	179	179	179	179	211	181
PLPS	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	67	143	142	143	143	143	139			
PLPS	GT13	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	125	124	125	124	124	125	122	123	146	146	145	145	145	141		
PLPS	ST18	58	58	57	58	57	58	58	58	58	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	59	59	59	58	58	58	58	60	79	145	145	144	144	144	144		
SGRI	GT21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	47	139	144	148	149	149	149	149	149	148	147	146	146	147	140	140	140	140	141	141	141	142	141	142	140	141	142	142	142	
SGRI	GT22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	138	117	118	118	115	116	111	114	114	110	109	111	106	105	108	109	114	114	113	116	113	109	140	140									

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		
HTRG	HY01	62	62	63	63	63	63	62	62	62	62	62	62	62	62	62	123	123	123	123	123	123	123	124	124	123	124
HTRG	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	7	
KNRG	HY02	24	25	24	24	25	25	25	24	25	25	24	25	37	37	24	24	25	25	25	25	37	37	37	37	37	
KNRG	HY03	21	22	21	21	22	23	22	21	22	22	21	22	36	36	21	21	22	22	23	22	35	35	35	35	35	
KNYR	HY01	100	100	100	100	100	100	100	100	100	101	101	101	100	100	100	100	100	100	100	100	100	100	100	100	100	
KNYR	HY02	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	103	103	104	103	103	
KNYR	HY03	102	101	101	101	101	101	101	101	101	60	60	101	101	101	59	60	102	101	101	101	101	101	101	101	101	
KNYR	HY04	101	101	101	101	101	101	101	101	101	59	59	60	101	101	101	60	61	101	101	101	101	101	101	101	101	
LPIA	HY01	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	
LPIA	HY02	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16	17	18	18	18	18	17	17	17	17	
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	21	21	21	21	21	22	22	22	22	22	22	22	21	22	23	23	23	22	22	22	112	22	22	80	82	
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	0	0	
SIHY	HY01	50	50	50	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	30	30	30	30	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	30	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	30	50	50		
SYPS	HY01	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	17	25	25	
SYPS	HY03	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25		
SYPS	HY04	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25		
TMGR	HY01	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	34	34	34	34	81	81	81	34	34	
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	84	83	83	83	83	84	83	83	83	
TMGR	HY03	38	49	40	41	48	72	41	41	73	41	40	40	83	80	39	40	46	81	80	82	79	81	59	62	82	
TMGR	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	82	82	82	82	81	81	83	83	
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	86	88	88	-1	-1	-1	92	93	88	
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	5	
UPIA	HY02	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Total Hydro		765	777	715	716	725	752	668	666	700	586	583	627	747	741	662	516	591	718	1003	1004	1048	1084	1177	1183	1201	1070
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	0	0	1	2	5	7	8	12	17	12	21	25
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	10	15	14	16	31	19	29	
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	8	10	16	20	20	30	32	13	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	7	9	18	31	34	38	37	43	41	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	12	11	17	19	30	36	39		
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	17	17	13	15	10	8	11	16	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	10	13	17	32	11	34	41	51	
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	7	15	18	23	19	21	8	20	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	23	17	28	38	30	43	45	
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	12	19	27	45	50	54	84	26	28	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	9	13	18	18	30	41	17	45	
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0													

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			
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	9	11	15	24	21	16	13	14	13	17	18	16	14	19	10	12	7	5	3	1	0	0	0	0	0	0	0	0	0	0		
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10	18	24	29	30	30	30	30	30	29	27	30	30	17	29	28	17	15	8	6	6	2	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	0	0	0	0	10	105	205	327	413	556	692	699	787	701	768	800	813	828	811	791	670	547	427	282	209	136	68	13	2	0	0	0	0	0	0	0	0	0	0
KHTC	BLK1	3	4	2	2	3	3	1	4	3	2	0	3	3	2	1	3	1	3	0	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	0	1				
PCUF	CUFG	14	13	15	15	13	13	13	14	14	12	15	14	13	14	13	14	15	15	12	14	13	13	13	14	13	14	14	15	14	13	13	13	14	14	14	14	14	14	14	14	14	14	12	13	14	13				
PCUF	CUFK	27	25	27	25	24	27	26	27	26	14	5	5	3	3	5	4	5	4	5	2	3	3	3	6	5	3	5	4	6	8	27	29	27	26	26	27	28	27	27	26	27	25	26	25	7	4	4	4		
Total Co-Gen		44	42	44	42	40	43	40	45	43	28	20	22	19	19	19	20	20	22	20	14	17	16	16	19	19	16	18	18	20	23	41	42	40	39	39	40	41	41	41	40	41	38	40	39	19	18	18	18		
Total Gen		13649	13487	13124	12864	12617	12347	12249	12078	12123	11942	11933	11925	12227	12628	12540	12672	13160	14122	14839	15345	15705	16347	16426	16547	16191	16019	15939	16336	16691	17131	17150	17471	17490	17572	17360	16889	16349	16080	16330	17225	17333	17378	17184	17069	16676	16511	16098	15999		
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	0			
TIE-HVDC		-28	-29	-31	-31	-30	-28	-28	-30	-28	-28	-18	-28	-30	-30	-28	-28	-97	-97	-97	-97	199	-29	-29	-96	-97	-99	-97	-99	-97	-99	-97	-97	-97	-97	-98	-98	-98	-99	-96	-98	-97	-98	-97	-98	-98	-27	-28	-28		
TIE-PLTG		47	23	27	21	91	31	62	36	-3	68	19	40	49	48	56	17	-19	92	55	108	63	83	81	78	-3	3	4	-32	37	28	97	108	166	142	178	180	135	199	137	141	102	198	112	133	120	56	48	100		
Interconnection		19	-6	17	-10	61	3	33	6	-31	39	-9	12	18	17	26	-11	-48	-5	10	-34	282	52	49	-39	-94	-94	-6	-129	-62	-68	-2	12	69	145	79	82	38	101	40	43	6	99	15	35	21	29	19	71		
System Total		13630	13493	13107	12874	12556	12344	12216	12072	12154	11903	11942	11913	12209	12611	12514	12683	13208	14127	14880	15335	15739	16065	16374	16498	16290	16113	16035	16465	16753	17200	17152	17459	17421	17527	17281	16807	16311	15979	16290	17182	17327	17279	17169	17034	16655	16482	16079	15928		
SRev ST-Coal		433	561	592	650	669	782	725	725	726	737	725	741	732	723	727	733	667	415	328	316	272	273	176	185	88	89	78	87	78	83	111	119	120	105	86	85	84	81	99	79	78	82	88	100	89	74	107	87		
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	6	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0			
SRev CCGT-Gas		1695	1615	1677	1665	1636	1601	1763	1959	1959	1989	2011	2062	1960	1622	1763	1842	1675	1557	1292	1211	1324	1164	1352	1318	1573	1677	1803	1413	1225	776	727	407	335	308	391	510	637	1201	972	706	632	577	656	696	993	1082	1274	1270		
SRev ST-Gas		44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	174	166	79	3	-2	-5	-5	-6	-6	-5	-5	-5	-5	-5	44	44	44				
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Syncon		514	514	514	514	514	426	514	514	514	514	514	514	514	514	363	514	514	338	338	338	338	151	151	151	338	338	338	151	151	151	0	151	151	151	151	151	152	338	151	0	0	0	151	151	151	0	0	0		
Hydro		336	324	311	310	301	275	308	310	276	390	393	349	229	235	314	611	385	258	284	283	239	303	397	391	373	317	316	313	359	374	427	449	210	279	329	301	466	466	560	395	384	387	371	433	520	493	422	460		
S.Reserve Total		3022	3058	3138	3183	3164	3215	3354	3552	3519	3674	3687	3710	3479	3138	3362	3593	3285	2788	2286	2192	2217	2122	2119	2089	2229	2465	2579	2195	1857	1428	1460	1149	988	928	970	1045	1334	2081	1776	1174	1089	1041	1261	1375	1748	1693	1847	1861		