

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	1,787 MW
Distillate	0 MW
Total TNB	1,787 MW
Total IPP	16,841 MW
Total Co-Gen	0 MW
Total System	22,336 MW

Generation Mix

Type	MWh	Percentage
Hydro	11,888	3.15 %
Gas	64,786	17.19 %
Total TNB	76,674	20.35 %
ST-Coal	195,841	51.97 %
LSS	7,317	1.94 %
Gas	96,616	25.64 %
Total IPP	299,774	79.55 %
Co-Gen	714	0.19 %
Total Co-Gen	714	0.19 %
Total Generation	377,162	100.08 %
PLTG	302	0.08 %
Interconnection	302	0.08 %
Net Energy	376,860	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	19,163 MW
TNB Generation	3,826 MW
IPP Generation	13,875 MW
Spinning Reserve	1,424 MW
Maximum Demand	17,711 MW
Net Energy	376,860 MWH
Load Factor	88.66 %

Fuel Cost

Total Cost:	105,176,754.93 RM
Cost per Unit	27.88 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	752
Hydro	420
Syncon	542
Thermal	201
Total	1,915

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	47
TJGS	178
Total TNB	225
EMPP	286
NPRI	144
PCGP	87
PLPS	37
SGRI	37
SKSP	47
SPGP	208
Total IPP	845
Total Gas	1,071
Total Gas Required	1,071

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	15712	14862	14301	13781	13401	13279	13345	13459	13819	15274	15980	16318	16192	16166	16966	17385	17662	17534	16540	16318	17421	17374	16870	16492

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, April 4, 2023 9:32:24 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Thursday

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																													
JMHE	U001	976	976	974	974	895	900	899	896	849	849	850	851	851	849	850	852	852	964	973	976	977	975	975	973	969	969	974	976	981	975	974	976	975	976	972	974	973	976	972	979	971	978	974	973	976	977	974	976	972				
JMHE	U002	975	977	974	977	903	900	900	894	849	852	851	850	849	850	850	852	853	940	969	976	978	979	979	974	974	970	974	976	983	977	977	978	976	977	977	977	976	977	977	977	973	977	976	971	975	974	973	972					
JMJG	U001	677	678	676	678	676	677	677	676	678	677	676	678	675	681	680	678	683	677	680	675	677	577	585	662	677	681	678	677	674	676	677	679	681	677	682	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678			
JMJG	U002	683	683	680	679	682	683	679	676	680	678	679	678	682	677	680	679	682	677	680	680	677	680	680	679	680	679	680	679	682	681	678	682	681	678	682	681	679	676	682	682	682	682	682	682	682	682	682	682	682	682	678	678	678
JMJG	U003	675	674	673	679	677	677	678	677	678	678	685	674	672	685	672	640	677	677	683	674	674	678	675	677	680	671	677	676	674	679	678	673	679	678	679	673	673	673	673	673	673	673	673	673	673	673	673	663	663	663			
JMJG	U004	975	974	977	976	960	901	901	900	850	848	851	851	849	850	851	850	851	892	952	975	977	975	980	978	977	974	977	977	975	976	973	976	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	969	971	971	971		
JMJG	U005	706	443	444	448	448	448	452	453	447	471	512	552	582	697	711	717	712	713	709	709	810	923	982	976	976	972	975	976	975	977	974	972	973	973	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	
PKLG	U003	262	262	254	255	274	278	278	278	280	277	277	277	278	277	278	278	278	277	277	277	277	277	277	277	275	276	275	276	275	277	277	276	276	278	278	276	277	277	275	275	277	278	276	277	276	277	276	277	276				
PKLG	U004	274	272	274	272	272	271	270	271	271	278	275	274	272	273	274	274	273	269	271	273	274	273	270	277	276	272	270	271	274	270	281	276	274	271	274	272	271	274	277	275	275	275	273	271	272	274	273	273	277				
PKLG	U006	269	269	268	268	269	269	268	258	269	268	268	268	268	259	265	269	268	269	269	269	269	271	269	268	267	269	269	269	268	269	305	331	330	329	330	331	332	331	364	422	451	448	446	445	446	451	449	449	448				
TBIN	U001	468	364	519	662	701	693	696	699	698	700	696	699	693	697	698	698	699	703	701	697	700	698	698	697	698	699	695	703	696	699	696	700	699	697	700	693	699	699	698	700	698	696	699	697	698	700	698	700					
TBIN	U004	982	984	983	983	954	902	903	902	852	852	852	852	852	851	853	852	852	921	985	983	984	982	981	982	982	984	983	981	984	981	984	985	983	982	983	982	983	982	983	982	981	984	981	982	981	982	981	982					
Total ST-Coal		7922	7556	7696	7851	7711	7599	7601	7580	7401	7428	7472	7504	7523	7646	7662	7639	7680	7979	8149	8164	8276	8286	8350	8419	8433	8416	8427	8436	8442	8473	8500	8504	8495	8485	8496	8484	8486	8526	8583	8616	8598	8608	8601	8594	8609	8596	8590	8596					
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					
EMPP	BLK1	710	704	700	674	693	658	584	492	445	445	469	410	445	426	441	436	497	639	696	712	694	710	686	688	680	693	709	712	684	710	686	714	710	710	699	712	710	710	692	720	708	711	696	685	708	710	703	690					
EMPP	BLK2	710	708	697	675	695	662	588	495	482	443	470	411	445	425	441	437	496	639	698	712	694	710	687	688	680	687	709	712	614	711	703	714	709	710	697	711	709	709	692	720	709	710	690	685	711	709	705	688					
EMPP	BLK3	710	707	703	682	694	663	583	496	483	441	472	409	442	423	441	435	497	638	703	711	696	710	693	695	710	473	468	468	411	709	714	721	717	721	700	712	710	709	691	719	710	693	685	713	711	710	688						
GLGR	GT01	66	65	67	66	66	65	66	65	67	65	66	66	66	68	66	65	67	66	66	68	66	66	66	66	65	65	65	65	65	79	64	65	66	92	102	101	66	65	65	66	72	104	104	103	104	70	65	65	41				
GLGR	GT02	65	66	66	66	66	65	66	65	66	65	66	66	66	67	66	66	66	67	66	67	66	67	66	66	65	65	65	65	78	65	65	65	93	103	103	65	65	65	65	65	72	103	102	103	103	69	65	66	93				
GLGR	ST1C	71	70	70	70	70	70	70	71	70	70	70	70	70	70	69	70	69	69	70	69	70	69	70	70	70	70	70	70	70	81	71	70	71	83	94	93	74	71	71	71	93	94	93	94	80	71	70	71					
NPRI	BLK1	520	515	516	452	331	331	331	328	329	332	330	331	330	331	329	334	331	330	330	439	512	515	505	487	316	501	514	515	475	515	505	517	513	514	513	518	520	519	518	521	522	518	511	520	521	516	515						
NPRI	BLK2	521	517	516	454	325	329	329	323	329	328	328	330	327	330	329	331	329	330	327	435	514	516	505	507	501	498	508	516	479	515	506	518	514	516	515	524	521	521	517	527	523	523	520	511	520	522	519	516					
PCGP	PGRG	601	592	593	574	597	601	601	593	602	605	504	502	502	504	600	610	604	601	593	612	595	599	581	590	570	582	604	600	581	600	584	614	614	602	591	610	604	603	594	626	606	604	603	593	593	593	593	593					
PLPS	GT13	125	124	125	125	124	125	125	124	125	125	125	125	124	125	125	125	125	124	125	125	125	124	126	124	125	125	125	124	125	125	125	124	137	137	137	135	138	138	141	141	142	143	143	144	125	125	124	125					
PLPS	ST18	57	57	56	57	58	58	58	57	58	58	58	58	58	58	58	58	57	58	59	58	58	58	58	58	59	58	58	58	58	60	59	59	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58						
SGRI	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	135	122	119	120	139	145	142	115	116	115	116	132	132	132	133	133	8	0	0	0					
SGRI	GT13	0	0	0	0	0	0	0	0	0	7	27	55	35	30	30	31	34	65	64	136	135	136	135	136	111	110	110	104	110	110	113	137	138	134	114	109	113	110	131	130	127	127	128	128	128	106	105						
SGRI	ST14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	38	41	65	68	66	64	67	62	58	64	130	131	137	134	143	146	130	126	126	130	142	140	142	140	140	94	67	60	62							
SKSP	BLK1	223	218	220	220	220	219	219	218	218	220	217	219	218	220	216	219	220	219	219	220	220	217	219	219	219	219	219	220	219	300	216	218	279	338	340	336	221	219	217	219	338	337	335	335	335	316	268	220	219				
SPGP	BLK1	719	718	720	719	719	720	720	719	720	720	719	719	718	720	719	719	721	719	719	719	719																																

Daily MW Generation on Thursday

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	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	4	3	3	3	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	4	4	4	4
HTRG	HY04	3	3	3	3	4	4	4	4	3	3	3	3	3	3	3	3	3	4	4	3	3	3	3	3
KNRG	HY03	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
KNYR	HY01	100	97	96	96	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	61	60	59	61	61
KNYR	HY02	94	68	61	62	62	63	62	61	62	61	61	61	63	61	74	71	95	61	61	61	60	60	90	99
KNYR	HY03	60	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	54	55	55	55
KNYR	HY04	60	101	60	60	60	60	61	61	61	61	61	61	61	60	61	61	61	61	61	61	61	61	61	61
LPJA	HY02	20	20	20	20	20	20	20	20	20	20	20	21	22	22	22	22	22	22	22	22	22	22	22	22
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
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	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	30	30	30	30	30
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	16	16
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25
TMGR	HY02	89	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	35	0	46	89
TMGR	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
TMGR	HY04	83	47	42	38	42	42	44	41	43	44	41	41	41	41	60	56	86	61	80	39	54	40	71	84
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	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		576	588	348	345	312	316	318	314	317	316	313	313	316	315	286	280	334	275	295	252	291	278	339	362
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	5	10	9	16	19	22	23	25
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	9	12	14	12	21	23	25	26
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	11	16	20	26	26	29	25	30
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	9	12	18	37	37	39	41	44
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	13	18	25	23	9	12	24	43
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	8	16	8	28	23	20	26	30
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	14	17	26	29	39	41	43	47
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	11	12	22	26	28	30	31	31
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	11	17	24	31	39	41	37	36
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	17	25	35	53	60	75	86	61	74
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	15	22	29	31	36	29	27	30
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	7	12	19	23	27	29	23	26
KNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	25	37	37	34	28	44	49	70
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	13	9	10	8	12	20	19	28
MALS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	12	22	29	22	30	29	29	14	19
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	16	21	23	12	25	44	50	49
MNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13	59	72	64	87	89	84	94	88
PKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	22	43	48	38	29	93	103	106	111
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	11	21	27	32	52	52	52	52
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	22	23	31	33	28	42	40
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	6	11	8	11	9	23	13
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	13	21	8	24	30	30	30	30

Daily MW Generation on Thursday

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	15	108	283	405	461	566	693	834	880	898	983	1030	1016	995	977	948	787	718	652	541	412	268	136	36	4	0	0	0	0	0	0	0	0			
ESTL	ESTL	18	0	15	0	12	15	13	15	15	15	14	15	14	15	17	20	20	18	15	15	16	14	14	16	16	18	14	11	14	16	13	16	17	18	16	23	22	17	15	13	14	0	15	16	16	17	17	
KHTC	BLK1	0	0	0	0	0	3	2	4	6	4	4	2	2	2	2	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	0	0	0	0	0		
PCUF	CUFG	3	4	3	4	4	4	1	3	4	2	2	4	3	3	3	4	4	2	4	4	5	3	4	3	3	3	5	3	3	4	2	5	2	3	3	3	5	4	4	4	3	3	2	3	3			
PCUF	CUFK	3	3	2	3	5	1	1	2	5	3	1	3	4	5	1	3	3	2	3	2	3	4	1	2	1	3	7	3	7	9	9	8	9	9	7	7	7	7	9	10	9	9	6	5	4	3	4	3
PFTZ	PFTZ	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	8	7	7	7	7	6	6	6	6	6	6	6	6	6				
Total Co-Gen		30	13	26	13	27	29	23	30	36	30	27	30	29	32	35	32	34	27	28	31	24	26	26	28	34	26	30	33	35	32	35	38	34	33	40	38	37	35	32	33	15	29	29	27	30	29		
Total Gen		15702	15297	14864	14596	14286	14081	13848	13540	13355	13267	13288	13164	13309	13362	13506	13510	13828	14702	15211	15602	15946	16169	16301	16353	16160	16081	16152	16670	16967	17401	17420	17578	17698	17739	17585	17016	16650	16334	16407	17183	17475	17503	17377	17227	16903	16787	16527	16256
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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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-PLTG		-10	12	2	17	-15	45	67	43	-46	-3	9	-24	-36	-17	47	-13	9	55	-63	-70	-34	-75	-17	-48	-32	-11	-14	51	1	31	35	-21	36	28	51	79	110	85	89	46	54	5	3	-4	33	38	35	39
Interconnection		-10	12	2	17	-15	45	67	43	-46	-3	9	-24	-36	-17	47	-13	9	55	-63	-70	-34	-75	-17	-48	-32	-11	-14	51	1	31	35	-21	36	28	51	79	110	85	89	46	54	5	3	-4	33	38	35	39
System Total		15712	15285	14862	14579	14301	14036	13781	13497	13401	13270	13279	13188	13345	13379	13459	13523	13819	14647	15274	15672	15980	16244	16318	16401	16192	16092	16166	16619	16966	17370	17385	17599	17662	17711	17534	16937	16540	16249	16318	17137	17421	17498	17374	17231	16870	16749	16492	16217
SRev ST-Coal		409	259	274	230	366	475	471	484	469	500	554	522	502	491	474	502	459	347	192	177	255	215	171	212	198	215	204	195	189	228	201	197	206	216	205	217	215	225	211	178	197	187	194	201	186	199	205	199
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		501	535	881	1288	1439	1538	1769	2059	2074	2182	2339	2498	2373	2442	2313	2307	2125	1769	1548	1275	1090	1027	1050	1154	1366	1299	1315	960	876	692	632	502	352	308	383	674	824	1078	917	339	311	315	364	423	626	505	598	709
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		626	626	626	626	626	626	626	626	626	626	626	626	626	626	626	626	626	727	727	727	727	727	727	727	727	727	727	626	626	727	727	626	626	439	252	626	626	626	626	500	126	126	126	313	500	500	500	626
Hydro		148	136	189	192	225	221	219	223	220	221	224	224	222	224	221	222	150	156	102	161	141	184	170	183	122	99	217	406	311	265	302	257	374	536	298	379	347	391	318	538	517	569	480	429	408	347	299	
S.Reserve Total		1771	1643	2144	2510	2830	3034	3259	3566	3563	3703	3917	4044	3897	3957	3811	3830	3606	3167	2797	2455	2407	2284	2306	2437	2648	2537	2519	2172	2184	2045	1999	1714	1528	1424	1463	1902	2131	2363	2232	1422	1172	1145	1253	1417	1741	1612	1650	1920