

Daily System Generation Summary on Thursday

Thursday, April 22, 2021

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,336 MW
Distillate	0 MW
Total TNB	2,336 MW
Total IPP	15,409 MW
Total Co-Gen	0 MW
Total System	21,724 MW

Generation Mix

Type	MWh	Percentage
Hydro	21,775	5.76 %
Gas	69,095	18.28 %
Total TNB	90,870	24.04 %
ST-Coal	202,441	53.56 %
LSS	2,496	0.66 %
Gas	78,638	20.81 %
Total IPP	283,575	75.03 %
Co-Gen	198	0.05 %
Total Co-Gen	198	0.05 %
Total Generation	374,643	99.13 %
PLTG	-775	-0.21 %
HVDC	-2,519	-0.67 %
Interconnection	-3,294	-0.87 %
Net Energy	377,937	100.00 %

Maximum Demand Record

Date: 3/10/2020	18,808 MW
Date: 3/10/2020	394,238 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	14:30:00 Hour
Total Set On Bus	18,794 MW
TNB Generation	4,252 MW
IPP Generation	12,849 MW
Spinning Reserve	1,679 MW
Maximum Demand	17,505 MW
Net Energy	377,937 MWH
Load Factor	89.96 %

Fuel Cost

Total Cost:	58,355,289.21 RM
Cost per Unit	15.57 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	771
Hydro	217
Syncon	445
Thermal	178
Total	1,611

Time Weather Temperature

Afternoon	Hot	31
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	54
TJGS	202
Total TNB	256
CBPS	53
KLPP	65
NPRI	158
PLPS	62
SKSP	25
YPKA	48
Total IPP	412
Total Gas	668

Total Gas Required 668

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	15725	15003	14538	14094	13753	13739	13857	13668	14145	15864	16668	17178	16929	16663	17238	17350	17139	16660	16035	16034	16529	16667	16308	15896

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Friday, May 7, 2021 1:55:14 PM

(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							
JMAH	U001	693	650	600	502	451	402	401	401	401	399	512	600	604	601	567	594	694	691	687	693	693	692	692	693	691	695	692	692	693	694	690
JMAH	U002	694	656	603	495	456	406	407	406	405	405	547	604	605	606	569	615	691	698	695	695	696	695	694	698	691	697	696	697	689	695	694
JMHE	U002	978	979	978	983	977	904	899	900	900	899	896	900	900	890	848	848	853	981	980	983	978	980	981	980	979	979	978	978	979	980	981
JMJG	U001	672	670	668	671	604	668	670	668	672	670	671	673	671	673	673	671	672	674	668	672	671	674	671	671	671	673	666	668	673	671	673
JMJG	U002	673	673	671	677	674	669	671	675	672	674	673	677	675	676	672	668	674	672	673	670	667	671	677	674	672	679	678	671	673	673	669
JMJG	U003	668	672	670	671	671	670	667	669	668	669	672	671	672	669	669	669	670	672	668	668	672	671	673	668	668	670	671	670	668	669	668
JMJG	U005	891	890	895	891	889	892	891	892	890	881	884	884	884	883	849	848	854	889	891	892	889	891	891	836	700	698	529	447	384	362	0
PKLG	U003	233	155	154	154	153	154	153	153	154	154	155	155	155	155	154	155	154	226	258	274	280	279	276	277	277	276	277	276	276	277	276
PKLG	U004	237	145	151	154	154	155	153	155	155	153	155	158	158	156	153	159	153	240	271	273	276	279	280	281	277	277	275	279	278	277	279
PKLG	U006	446	368	281	267	268	267	271	270	272	268	272	272	272	271	267	267	268	328	420	449	446	448	448	446	448	449	449	449	449	446	448
TBIN	U001	548	501	446	450	449	450	454	450	399	399	400	402	401	450	449	451	505	651	678	687	686	688	687	686	688	686	687	689	687	689	687
TBIN	U002	550	500	450	448	450	451	451	453	406	407	402	403	402	453	450	452	511	636	651	688	688	691	687	690	691	689	688	693	686	689	690
TBIN	U003	701	701	700	702	697	690	583	502	502	503	504	503	503	504	503	454	500	696	685	680	685	691	684	692	690	693	687	691	686	689	690
TBIN	U004	983	982	982	982	983	962	905	901	903	903	903	904	904	900	853	853	855	928	984	983	983	983	983	982	983	982	983	985	982	982	984
Total ST-Coal		8967	8542	8249	8047	7876	7740	7576	7495	7399	7384	7646	7806	7887	7678	7708	8048	8984	9208	9310	9316	9325	9318	9276	9131	9135	8964	8895	8798	8793	8740	8670
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
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
CBPS	BLK2	350	362	360	359	358	352	354	362	355	362	362	357	361	354	358	358	350	361	361	364	364	359	360	349	349	363	356	357	359	359	354
EMPP	BLK1	763	760	761	760	763	764	761	761	763	760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EMPP	BLK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	186	189	188	189	200	205	299	426	525
GLGR	GT01	68	67	68	69	68	68	68	67	67	68	68	69	68	67	82	100	104	105	103	103	104	104	104	104	104	105	105	104	103	105	104
GLGR	GT02	68	68	67	68	68	67	67	68	68	67	68	67	68	68	67	82	100	104	104	103	104	104	104	104	104	105	104	104	104	104	104
GLGR	ST1C	72	72	72	72	72	72	72	72	72	72	72	72	72	72	76	91	93	94	94	94	94	94	94	95	93	93	93	93	93	93	
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	72	132	121	115	112	132	
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	65	151	151	153	153	153	154	154	146	113	116	141	
KLPP	GT15	137	137	137	139	139	137	137	137	137	139	138	139	138	138	142	150	149	150	151	155	151	151	147	151	155	160	160	136	134	156	
KLPP	ST17	56	60	60	56	56	58	58	56	56	57	56	56	56	56	60	60	61	64	141	137	138	138	136	131	187	204	204	192	187	200	
NPRI	BLK1	491	503	499	501	506	497	498	499	495	505	504	505	502	497	502	503	505	509	520	518	521	520	519	520	507	511	521	520	521	515	
NPRI	BLK2	494	505	502	505	509	500	501	502	499	508	507	508	506	499	506	505	508	512	523	523	524	523	524	523	524	525	518	512	524	525	508
PCGP	PGRG	583	599	592	597	601	590	590	594	588	600	600	601	597	591	600	597	601	589	400	402	352	351	352	351	351	261	261	260	261	262	263
PLPS	GT11	128	129	129	129	129	128	128	128	129	128	129	129	129	128	145	144	145	144	143	138	140	138	142	138	137	142	142	142	140	137	
PLPS	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	5	109	145	144	140	
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	137	138	133	133	137	137	138	
PLPS	ST18	57	57	57	56	56	57	56	57	56	55	55	56	57	57	59	59	58	58	58	58	60	136	145	142	142	145	144	189	212	210	202
SKSP	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	71	129	340	338	287	
SPGP	BLK1	718	721	720	719	717	719	716	719	719	718	720	719	717	720	717	718	717	720	719	718	717	718	720	721	720	719	720	719	720	719	720
SPGP	BLK2	717	720	719	717	718	717	717	717	717	716	720	719	718	720	716	717	718	720	717	719	716	718	719	719	720	596	400	596	715	718	717
TJGS	GT1A	210	224	228	226	223	227	223	225	226	226	224	226	226	225	222	225	227	223	225	225	224	226	224	225	218	147	140	175	230	223	230
TJGS	GT1B	208	216	216	220	216	217	213	219	217	220	217	219	219	213	216	217	217	211	212	214	214	217	217	217	208	141	125	162	213	214	219
TJGS	ST1C	244	244	241	241	241	238	241	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242	244	244	244	244</			

		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				
YPKA	ST20		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	44	40	40	41	40	41	40	40	40	41	40	40	40	61	61	62	61	43	39	39				
Total CCGT-Gas			6314	6310	6300	6300	6307	6273	6263	6127	6103	6142	5546	5551	5541	5514	5528	5592	5657	5781	5763	5921	5872	5945	6099	6163	6238	6044	5868	6278	6603	6723	6780	6816	6831	6858	6469	6066	5946	5897	6005	6535	6756	6876	6663	6655	6476	6031	5779	5373			
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	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	0	0	0	0	0	0	0	0	11	21	21	21	21	21	21	21	11	11	20	20	20	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
BSIA	HY02		23	24	23	23	16	11	11	11	11	12	12	12	12	12	12	12	11	12	12	23	23	23	23	23	23	12	13	13	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
BSIA	HY03		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	23	23	22	22	22	10	11	10	23	23	23	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
CEND	HY01		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CEND	HY02		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CEND	HY03		9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
CEND	HY04		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	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	7
HTRG	HY01		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	125	125	125	63	15	-1	125	125	125	124	125	125	125	124	125	124	125	-1	125	63	124	123	124</									

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																										
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	12	17	12	25	19	19	34	40	25	43	29	16	19	26	26	5	0	1	2	1	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	9	10	28	10	11	26	50	41	46	8	34	36	34	20	18	14	8	4	1	0	0	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	1	4	10	15	22	23	31	36	36	6	5	9	15	24	48	41	19	24	30	10	8	6	1	0	0	0	0	0	0	0	0	0	0	0		
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	10	11	6	9	7	19	23	30	29	12	26	3	4	3	4	2	6	7	6	5	2	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	9	14	28	17	30	34	42	45	33	36	49	49	44	5	16	22	10	19	6	10	3	0	0	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	2	7	8	27	19	37	49	52	37	37	52	44	52	21	48	6	4	2	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0		
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	8	15	21	30	28	38	38	41	43	17	13	11	7	7	8	6	10	6	6	2	1	0	0	0	0	0	0	0	0	0	0	0		
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	7	11	17	17	16	17	23	29	29	29	29	29	17	25	5	1	0	2	2	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	1	3	4	7	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	10	6	1	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	13	50	103	173	220	318	331	324	355	405	379	370	349	316	355	241	216	140	118	92	69	45	16	3	0	0	0	0	0	0	0	0	0	0	0	
PCUF	CUFG	3	1	2	2	3	4	2	2	2	4	3	2	3	4	3	2	4	1	4	3	9	25	26	27	25	27	8	1	2	2	3	3	3	4	1	2	3	4	1	2	3	2	2	4	2	4	3			
PCUF	CUFK	5	1	1	3	3	3	3	3	4	2	2	4	4	3	3	3	2	4	3	5	5	4	3	4	3	5	3	2	4	3	3	2	2	3	2	2	4	2	2	2	2	4	4	4	4	4	4			
Total Co-Gen		8	2	3	5	6	7	5	5	5	8	5	4	7	6	5	4	3	6	6	6	7	6	9	6	5	7	3	8	6	14	30	30	30	29	30	11	3	4	5	5	5	8	3	4	5	6	6	7		
Total Gen		15749	15278	14971	14733	14497	14266	14042	13826	13705	13745	13720	13706	13799	13879	13617	13614	14100	15345	15806	16282	16588	16947	17113	17132	16831	16311	16298	16688	16924	17115	16981	16919	16781	16731	16326	15886	15713	15554	15738	16130	16482	16756	16628	16532	16234	15861	15826	15397		
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	0		
TIE-HVDC		-29	-29	-29	-28	-28	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-290	-291	-289	-288	-288	-289	-291	-289	-291	-289	-291	-289	-291	-289	-291	-288	-29	-29	-30	-30	-29	-29	-28	-28	-29	-29	-28	-29	-29				
TIE-PLTG		57	-18	0	-29	-9	-2	-20	1	-15	4	12	-3	-26	-3	-18	-17	-14	-9	-25	-23	-48	-10	-33	-63	-66	-80	-71	-113	-23	-99	-77	-48	-66	-68	-39	-13	-28	-47	-5	0	-15	-51	-6	-42	-42	-140	-39	-64		
Interconnection		27	-47	-29	-58	-38	-30	-49	-28	-45	-24	-16	-32	-55	-32	-48	-46	-42	-38	-55	-52	-77	-39	-62	-92	-95	-370	-362	-402	-311	-387	-366	-339	-354	-358	-330	-302	-319	-337	-293	-29	-43	-81	-35	-71	-71	-168	-67	-93		
System Total		15725	15328	15003	14794	14538	14299	14094	13857	13753	13772	13739	13741	13857	13914	13668	13663	14145	15386	15864	16337	16668	16989	17178	17227	16929	16684	16663	17093	17238	17505	17350	17262	17139	17093	16660	16191	16035	15894	16034	16163	16529	16841	16667	16606	16308	16032	15896	15493		
SRev ST-Coal		309	434	481	468	535	591	711	710	710	719	712	707	709	714	752	755	627	376	268	166	160	151	158	200	180	146	157	136	173	178	231	201	237	205	147	144	167	154	148	153	144	158	150	137	145	137	150	147		
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	0	0	
SRev CCGT-Gas		503	311	321	320	315	351	358	494	520	477	314	309	319	346	332	270	205	341	349	344	398	400	384	392	713	1163	1441	1178	988	947	895	951	1063	1135	1574	1983	2097	2121	1799	1269	1048	929	721	724	698	1141	1394	1799		
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	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	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	0	0	0
Syncon		929	1117	966	1117	966	1117	1117	1117	1117	742	929	828	828	915	1016	1016	828	828	590	489	151	302	302	302	615	489	489	489	489	489	489	489	489	489	489	588	615	338	437	437	401	302	401	527	615	302	302	302		
Hydro		261	109	265	152	276	187	155	154	155	142	205	196	197	170	149	157	112	171	66	370	221	419	370	401	431	424	203	138	95	66	106	108	109	95	119	118	115	85	280	408	286	157	174	278	264	201	284	311		
S.Reserve Total		2002	1971	2033	2057	2092	2246	2341	2475	2502	2455	1973	2141	2053	2058	2148	2198	1960	1716	1511	1470	1268	1121	1214	1295	1626	2348	2290	1941	1745	1680	1721	1749	1898	1924	2329	2734	2967	2975	2565	2267	1915	1645	1347	1540	1634	2094	2130	2559		