

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,197 MW
Distillate	0 MW
Total TNB	2,197 MW
Total IPP	16,538 MW
Total Co-Gen	0 MW
Total System	21,558 MW

Generation Mix

Type	MWh	Percentage
Hydro	22,932	6.15 %
Gas	40,287	10.81 %
Total TNB	63,219	16.96 %
ST-Coal	243,737	65.37 %
LSS	2,978	0.80 %
Gas	63,413	17.01 %
Total IPP	310,128	83.18 %
Co-Gen	246	0.07 %
Total Co-Gen	246	0.07 %
Total Generation	373,593	100.20 %
PLTG	23	0.01 %
HVDC	719	0.19 %
Interconnection	742	0.20 %
Net Energy	372,851	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:	16:00:00 Hour
Total Set On Bus	18,882 MW
TNB Generation	3,782 MW
IPP Generation	13,997 MW
Spinning Reserve	1,056 MW
Maximum Demand	17,801 MW
Net Energy	372,851 MWH
Load Factor	87.27 %

Fuel Cost

Total Cost:	51,603,062.39 RM
Cost per Unit	13.82 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	573
Hydro	392
Syncon	357
Thermal	154
Total	1,476

Time	Weather	Temperature
Afternoon	Sunny	28
Morning	Hot	32

Gas Usage

Station	(mmscfd)
GLGR	43
TJGS	188
Total TNB	231
CBPS	0
KLPP	64
NPRI	133
PGLA	103
PLPS	39
SGB3	1
YPKA	22
Total IPP	361
Total Gas	593
Total Gas Required	593

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	14888	14118	13628	13295	12851	12739	13147	13232	13710	15456	16342	16877	16869	16710	17281	17702	17801	17186	16224	16063	17013	16947	16470	16084

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, October 5, 2020 2:01:53 PM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Tuesday

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	695	689	691	693	691	693	692	611	534	501	502	502	616	693	691	692	691	692	692	693	693	691	692	694	691
JMAH	U002	693	694	688	693	694	695	693	618	603	603	603	604	688	696	692	695	694	697	693	695	694	694	694	694	694
JMHE	U002	980	875	798	799	800	796	801	800	801	802	801	798	800	803	798	803	799	797	971	982	980	979	980	979	980
JMJG	U001	678	682	683	678	680	680	683	685	678	678	681	677	681	682	683	674	679	680	678	677	677	678	677	677	679
JMJG	U002	687	690	679	679	678	677	678	676	682	677	681	684	683	680	682	675	675	680	679	677	677	677	677	677	679
JMJG	U003	678	678	677	680	675	682	685	677	634	581	579	581	584	608	669	671	671	671	676	666	671	667	667	664	667
JMJG	U004	981	892	806	807	808	806	805	808	804	807	809	805	807	806	806	807	805	805	835	892	949	975	979	979	977
JMJG	U005	724	726	725	727	727	725	725	728	728	727	726	727	725	726	726	726	725	726	728	725	728	726	727	727	728
PKLG	U003	0	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	U004	283	281	282	282	281	280	277	282	281	283	283	280	277	281	281	280	281	282	281	280	280	280	280	276	280
PKLG	U005	466	470	467	468	467	466	468	466	464	470	467	467	460	470	466	471	461	470	462	464	463	462	462	459	467
PKLG	U006	449	450	446	449	448	446	446	449	446	448	445	446	448	450	451	449	446	448	449	446	448	445	446	449	449
TBIN	U001	689	689	689	689	691	689	690	689	687	690	688	687	688	690	689	689	689	686	687	686	688	689	689	687	689
TBIN	U002	694	694	692	692	694	692	693	691	690	693	694	691	685	693	696	692	693	695	689	705	719	719	717	716	719
TBIN	U003	694	693	691	689	692	691	692	690	694	691	690	692	692	692	692	689	692	691	690	693	695	690	690	688	687
TBIN	U004	983	899	809	803	803	802	803	804	802	802	804	803	802	803	802	802	803	855	946	983	983	983	984	984	981
Total ST-Coal		10374	10102	9823	9828	9829	9820	9831	9674	9528	9453	9453	9444	9636	9773	9825	9815	9803	9823	10067	10236	10367	10394	10382	10380	10380
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
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
CBPS	BLK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GLGR	GT01	68	67	67	68	68	67	68	68	67	69	69	68	68	66	66	67	69	67	67	67	68	65	67	67	68
GLGR	GT02	68	68	67	69	68	68	67	67	67	67	68	67	67	67	67	68	67	67	67	66	67	66	66	66	67
GLGR	ST1C	73	73	72	72	72	72	72	72	72	72	72	73	72	72	73	72	72	73	73	73	73	72	73	72	92
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	128	128	128	129	109	108	
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	53	131	111	115	115	153	
KLPP	GT15	136	133	133	133	133	133	133	133	133	133	133	133	133	134	134	134	134	137	137	146	146	156	156	152	
KLPP	ST17	53	53	53	54	54	52	52	53	53	51	51	52	52	52	50	50	49	49	51	51	54	128	130	123	
NPRI	BLK1	490	436	391	353	320	311	319	320	321	320	317	317	322	319	310	318	328	517	515	513	516	515	511	512	495
NPRI	BLK2	481	436	398	398	342	311	317	320	318	317	316	316	319	319	307	316	326	518	519	515	518	515	517	512	515
PCGP	PGRG	591	589	595	401	302	182	182	180	182	181	182	181	180	402	302	181	492	604	603	603	604	602	603	598	600
PGLA	GT11	164	163	163	167	167	163	171	167	166	165	166	166	182	165	162	165	177	205	171	165	182	180	168	214	
PGLA	GT12	191	192	193	196	196	193	201	195	196	196	195	195	212	195	191	194	207	238	200	193	213	209	196	240	
PGLA	ST10	204	202	204	203	204	203	205	203	205	202	205	205	207	205	202	200	215	220	205	213	208	215	206	230	
PLPS	GT11	126	128	129	129	130	128	129	129	129	128	129	129	128	129	128	129	128	128	128	128	126	126	126	126	
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	
PLPS	ST18	58	58	57	58	58	58	58	58	58	58	58	58	58	59	59	58	58	57	58	58	58	58	57	58	
SGB3	GT32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SGB3	GT33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SPGP	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	
SPGP	BLK2	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	85	85	150	165	236	293	356	435	484	
TJGS	GT1A	145	137	141	147	153	141	176	164	161	144	141	159	182	142	139	138	187	234	211	212	195	232	205	229	172
TJGS	GT1B	131	127	132	134	140	131	160	155	154	135	137	149	174	138	128	134	174	216	201	201	181	215	200	211	168
TJGS	ST1C	196	173	178	177	173	176	186	183	187	179	186	186	192	185	174	171	199	234	220	222	196	231	230	242	217
TJGS	GT2A	146	146	146	146	147	147	149	147	147	147	147	147	147	147	149	147	147	164	213	212	160	165	165	166	
TJGS	GT2B	144	144	144	144	144	144	144	144	144	144	141	144	144	143	143	143	144	160	210	210	158	161	161	161	
TJGS	ST2C	212	212	212	212	212	212	212	212	212	212	212	212	212	212	212	212	212	258	258	234	225	225	225	225	
YPKA	GT21	65	65	65	65	64	65	65	64	64	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65

Daily MW Generation on Tuesday

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																													
YPKA	ST20	39	39	38	38	38	38	39	38	39	39	39	39	57	57	57	57	57	56	40	40	40	40	39	40	39	40	39	39	39	39	61	61	61	39	39	39	38	39															
Total CCGT-Gas		3781	3641	3578	3364	3185	2996	3104	3073	3075	3023	3028	3161	3257	3355	3186	3085	3640	4370	4445	4504	4490	4718	4859	5014	4839	4776	4888	4991	5154	5371	5374	5395	5470	5444	5120	5129	4730	4423	4630	5206	5200	5281	5235	4987	4754	4506	4438	4142					
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						
BSIA	HY01	22	22	22	22	22	22	22	22	22	22	21	21	0	0	0	0	0	11	11	21	21	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21							
BSIA	HY02	24	24	24	24	24	23	24	24	23	23	23	23	0	0	0	0	0	12	12	23	23	23	23	23	23	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	12	12	12	12	12	23	12	13	13	12	12	24	24	23	24	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24					
CEND	HY01	9	10	10	9	10	10	10	9	10	10	9	10	9	10	9	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10					
CEND	HY02	9	9	9	9	9	9	9	9	9	9	9	9	9	10	9	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10					
CEND	HY03	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10					
CEND	HY04	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8					
HTRG	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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1						
KNRG	HY01	36	36	36	36	36	36	36	0	0	0	0	0	0	0	0	0	0	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36				
KNRG	HY02	37	37	37	37	37	37	37	0	0	0	0	0	0	0	0	0	0	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37				
KNRG	HY03	36	36	36	36	36	36	36	38	38	38	38	38	38	38	37	38	38	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36				
KNYR	HY01	98	99	99	100	98	0	0	0	0	0	0	0	0	0	98	100	100	100	101	101	99	95	98	100	100	101	100	99	99	100	98	96	96	98	97	100	92	98	99	98	97	97	98	95	95	95	95	95	95				
KNYR	HY02	98	99	99	99	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	99	99	99	99	99	99	96	59	99	99	99	99	99	99	99	99	99	97	97	99	99	99	93	99	99	99	98	98	98	98	98	96	96	96				
KNYR	HY03	97	98	99	100	97	98	0	0	0	0	0	0	0	0	0	0	0	102	100	99	99	99	101	101	99	95	98	100	100	101	99	99	99	99	97	96	96	98	97	100	91	98	99	98	97	97	97	94	94	94	94		
KNYR	HY04	97	98	99	100	97	98	100	59	59	59	59	59	59	59	57	55	62	62	100	100	100	100	100	100	100	99	95	99	100	100	100	100	100	100	100	98	97	96	99	98	100	92	99	100	98	97	97	97	95	95	95		
LPJA	HY01	18	18	18	20	20	20	20	20	20	20	20	20	20	20	20	20	20	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18				
LPJA	HY02	19	19	19	19	19	20	20	20	20	20	20	20	20	20	20	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18				
MNOR	HY01	6	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	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	5	5	5	5				
PGAU	HY01	20	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	111	110	110	110	111	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110		
PGAU	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	82	81	81	81	81	75	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81		
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21			
SIHY	HY02	30	30	30	30	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30			
SIHY	HY03	30	30	30	30	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17		
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17			
SYPS	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	0	0	0	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	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	62	83	83	83	83	83	82	62	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	
TMGR	HY02	33	32	34	34	34	33	34	34	34	34	34	34	34	34	32	34	34	34	34	33	61	87	88	88	88	88	84	61	87	87	87	87	86	86	86	85	83	85	85	86	86	86	86	86	86	86	86	86	86	86	86	86	
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	60	82	82	82	82	82	77	60	82	82	82	82	82	82	82	79	78	81	80	82	82	76	81	81	82	82	80	80	80	81	81	81
TMGR	HY04	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	61	83	83	83	83	83	78	61	83	83	83	83	83	83	83	83	81	79	82	82	83	83	78	83	82	83	81	82	81	82	81	82	81

Daily MW Generation on Tuesday

[illegible]