

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,322 MW
Distillate	0 MW
Total TNB	2,322 MW
Total IPP	17,425 MW
Total Co-Gen	0 MW
Total System	22,216 MW

Generation Mix

Type	MWh	Percentage
Hydro	25,673	7.01 %
Gas	24,551	6.71 %
Total TNB	50,224	13.72 %
ST-Coal	244,024	66.65 %
LSS	2,746	0.75 %
Gas	69,591	19.01 %
Total IPP	316,361	86.41 %
Co-Gen	160	0.04 %
Total Co-Gen	160	0.04 %
Total Generation	366,745	100.17 %
PLTG	-96	-0.03 %
HVDC	717	0.20 %
Interconnection	621	0.17 %
Net Energy	366,124	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:	15:30:00 Hour
Total Set On Bus	19,005 MW
TNB Generation	3,006 MW
IPP Generation	14,797 MW
Spinning Reserve	1,197 MW
Maximum Demand	17,793 MW
Net Energy	366,124 MWH
Load Factor	85.74 %

Fuel Cost

Total Cost:	54,450,113.15 RM
Cost per Unit	14.86 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	461
Hydro	476
Syncon	292
Thermal	203
Total	1,432

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
GLGR	40
SRDG	3
TJGS	137
Total TNB	180
CBPS	50
KLPP	73
NPRI	141
PGLA	81
SKSP	28
YPKA	20
Total IPP	393
Total Gas	573
Total Gas Required	573

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	13949	13343	12745	12403	12095	11903	12188	12421	13184	15266	16288	16878	16970	16686	17249	17668	17724	17263	16164	16001	17040	16981	16539	16185

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, October 5, 2020 1:59:37 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	693	692	693	693	693	691	694	690	692	692	610	602	602	695	692	694	694	693	694	693	694	693	689	694	692	693	694	690			
JMAH	U002	695	696	694	696	691	692	695	692	694	696	603	604	603	693	694	695	694	695	694	692	694	695	694	697	692	693	695	694	696	694	
JMHE	U001	952	949	946	845	846	847	780	779	778	781	780	782	777	783	780	780	777	887	979	978	981	977	981	978	981	982	981	982	980		
JMHE	U002	953	950	946	848	847	849	781	778	779	781	783	780	778	785	782	776	884	976	981	981	979	980	981	980	982	979	981	980	982	978	
JMJG	U001	674	673	672	667	671	672	659	678	671	678	672	665	673	672	671	674	672	667	679	671	663	671	669	667	673	667	673	680	673	668	
JMJG	U002	666	638	683	683	667	687	673	679	673	673	673	675	587	617	679	663	678	672	675	677	674	678	662	675	671	677	673	672	674	668	
JMJG	U003	661	666	662	666	660	657	661	665	666	671	662	663	662	663	664	662	662	660	621	682	675	664	665	665	665	668	667	665	668	668	668
JMJG	U004	810	807	807	809	817	876	895	828	783	782	785	782	785	785	783	785	783	821	899	977	975	980	977	979	980	975	980	977	977	972	
PKLG	U003	280	278	276	278	278	276	275	278	278	277	277	276	276	278	277	277	277	277	276	277	276	275	276	276	275	275	276	276	278	278	
PKLG	U004	280	289	280	279	279	277	271	277	278	277	278	277	278	277	278	278	277	278	289	283	280	275	279	279	278	276	278	279	279	277	
PKLG	U005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	72	87	85	84	84	
PKLG	U006	449	449	449	451	448	449	363	360	358	383	438	449	448	447	449	447	443	448	448	449	451	451	449	449	450	449	447	449	444	449	
TBIN	U001	691	687	691	691	692	689	692	687	689	690	690	692	687	689	691	690	689	689	690	690	692	690	690	690	690	690	690	690	690	691	
TBIN	U002	697	694	696	695	696	694	695	694	695	693	696	694	694	694	696	694	694	693	694	695	695	694	693	694	695	692	695	695	698	694	
TBIN	U003	688	690	690	694	691	690	691	692	690	692	690	690	695	692	689	691	692	689	692	690	690	696	691	693	692	693	691	691	693	691	
TBIN	U004	953	954	951	920	855	853	783	781	783	782	781	783	781	785	781	783	783	837	930	981	983	982	981	981	983	982	982	982	982	982	
Total ST-Coal		101421011210136 9915 9831 9899 9608 9558 9507 9548 9418 9414 9320 9558 9601 9599 9596 9885 102251042110400104091038910384103991039210407103871040410398104321046410494104711047210484104851047410486104801047810491104671049210504105261055110546																														
Total ST-Oil		0 0																														

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		
BSIA	HY02	23	11	0	0	0	0	0	0	0	0	0	0	0	0	23	23	23	23	23	23	23	23	23	23	23	
BSIA	HY03	24	13	13	13	12	12	12	12	12	12	13	12	12	12	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	
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	
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	
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	
HTRG	HY01	122	62	-1	-1	-1	-1	-1	-1	-1	-1	-1	125	-1	-1	123	122	121	122	122	122	121	121	121	63	-1	
HTRG	HY02	122	63	63	0	0	0	0	0	0	0	0	0	0	121	122	121	122	122	122	121	121	122	122	61	0	
KNRG	HY01	36	36	36	36	36	36	36	21	22	0	0	0	0	0	36	36	36	36	36	36	36	36	36	36	36	
KNRG	HY02	37	37	37	37	37	37	37	20	21	0	0	0	0	0	37	37	37	37	37	37	37	37	37	37	37	
KNRG	HY03	36	36	36	36	36	36	36	20	21	22	22	23	21	22	22	36	36	36	36	36	36	36	36	36	36	
KNYR	HY01	98	98	95	98	98	95	99	97	96	99	58	59	99	98	99	94	99	96	100	95	99	101	99	99	99	
KNYR	HY02	100	100	97	100	100	98	100	99	100	58	59	100	100	100	96	101	98	100	98	100	100	100	100	100	100	
KNYR	HY03	100	99	97	100	100	97	101	99	98	101	60	60	100	99	100	55	100	97	101	97	101	101	100	99	100	
KNYR	HY04	100	99	96	100	100	97	100	98	98	101	59	59	100	98	99	54	101	97	101	96	100	101	100	99	100	
LPIA	HY01	18	18	18	18	18	18	18	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	16	17	17	
LPIA	HY02	18	18	18	18	18	18	15	15	15	15	15	15	15	16	16	16	16	14	14	14	14	14	14	14	14	
MNOR	HY01	3	3	3	3	3	1	1	1	1	3	3	3	3	3	3	6	6	6	6	6	6	6	6	6	6	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	22	-1	-1	-1	-1	-1	-1	-1	-1	-1	
PGAU	HY03	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
PGAU	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	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	30	50	50	50	50	50	50	50	50	
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	30	50	50	50	50	50	50	50	50	
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	
SYPS	HY02	0	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	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	0	
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	
TMGR	HY01	84	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	53	74	73	74	74	74	74	74	74	74	74	74
TMGR	HY02	36	0	0	0	0	0	0	0	0	0	0	0	0	0	51	75	72	74	75	75	75	74	75	75	75	75
TMGR	HY03	33	0	0	0	0	0	0	0	0	0	0	0	0	0	49	72	70	72	72	72	71	72	72	72	72	
TMGR	HY04	81	31	31	31	31	27	31	29	28	31	31	31	31	27	31	50	73	71	73	73	73	73	73	73	73	
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	-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	-1	
UPIA	HY01	5	5	5	5	5	4	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
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	5	
Total Hydro		1132	830	678	628	627	609	627	613	561	579	370	372	536	656	534	431	782	1107	1210	1332	1311	1451	1541	1540	1438	1324
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	
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6	9	12	16	19	23	25	29	28	29
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	8	16	15	15	15	15	15	15	15	15
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	15	24	29	35	30	46	25	12	15	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	13	20	25	31	34	41	35	44	42	
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	13	15	19	14	24	20	29	18	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	16	23	29	34	40	28	42	36	27	
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	12	18	27	31	38	41	33	44	35	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	9	23	27	33	34	30	41	41	43	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	11	18	24	29	33	37	39	33	45	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	12	18	33	38	39	29	15	58	58	

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		
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	12	22	27	31	19	39	25	22	23	12	23	20	17	19	14	8	7	9	6	3	1	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	7	48	107	156	244	291	325	333	325	385	352	369	370	367	315	343	300	282	224	154	111	57	26	8	0	0	0	0	0	0	0	0	0	0
PCUF	CUFG	5	4	4	5	4	4	5	4	2	4	4	4	4	3	5	4	3	4	5	4	4	3	4	3	4	6	3	1	3	4	3	2	3	3	4	3	5	3	4	3	3	4	5	5	3	3			
PCUF	CUFK	3	4	4	1	4	3	5	2	3	2	2	3	2	3	3	3	3	3	3	4	2	2	4	2	3	4	4	2	3	3	3	3	3	2	2	3	4	3	2	2	4	4	1	4	3	3	3	4	
Total Co-Gen		8	8	8	6	8	7	10	6	5	6	6	7	6	6	8	7	6	7	8	8	6	5	8	5	7	10	7	3	6	7	6	5	6	5	6	6	8	6	7	5	8	7	4	8	8	8	6	7	
Total Gen		13928	13620	13348	13031	12781	12694	12416	12378	12152	12044	11940	12050	12228	12492	12443	12501	13203	14496	15299	15898	16303	16686	16905	17128	17022	16834	16725	17091	17256	17648	17691	17808	17753	17775	17292	16754	16176	15782	16020	16899	17054	17031	16997	16823	16540	16352	16195	15872	
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		29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	30	30	29	29	30	30	30	30	30	30	30	30	30	29	29	30	30	29	29	31	31	29	29	29	29	31	31	30	30		
TIE-PLTG		-50	-8	-25	-12	6	26	-17	4	27	-3	7	1	10	-8	-8	10	-12	20	3	28	-14	-7	-3	-1	22	5	9	-6	-23	-38	-3	-11	7	11	6	13	-10	-21	-4	-6	-8	-19	-6	-18	-22	-36	-13	7	
Interconnection		-21	21	5	18	36	56	13	34	57	27	37	31	40	22	22	40	19	50	33	58	15	22	27	30	52	34	39	24	7	-8	27	19	36	41	36	43	19	7	26	25	21	11	23	11	8	-6	17	37	
System Total		13949	13599	13343	13013	12745	12638	12403	12344	12095	12017	11903	12019	12188	12470	12421	12461	13184	14446	15266	15840	16288	16664	16878	17098	16970	16800	16686	17067	17249	17656	17668	17793	17724	17741	17263	16718	16164	15782	16001	16881	17040	17027	16981	16819	16539	16365	16185	15842	
SRev ST-Coal		265	215	241	358	415	409	424	506	515	474	616	638	688	555	503	511	503	520	262	166	187	178	198	203	188	195	180	200	183	189	255	223	193	216	215	203	202	213	201	207	209	196	220	195	183	181	176	212	
SRev CCGT-Gas		265	241	385	429	596	732	740	1094	1216	1513	1379	1268	1159	1253	1544	1387	1304	685	686	886	589	700	533	444	525	533	722	497	455	206	420	226	279	197	380	468	936	1063	632	271	323	354	366	427	585	574	575	633	
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	
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	
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	90	1	34	34	34	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	
Syncon		676	525	889	889	889	889	889	889	889	889	889	889	889	763	889	889	763	525	525	676	676	489	302	302	489	676	676	676	489	302	0	0	0	0	0	500	802	802	802	489	187	187	187	374	374	525	676	802	
Hydro		164	443	183	108	109	127	109	123	175	157	286	284	120	126	122	225	125	340	237	164	185	232	329	330	245	122	136	321	402	487	667	718	719	716	840	534	291	427	420	305	551	555	550	505	623	482	168	102	
S.Reserve Total		1370	1424	1698	1784	2009	2157	2162	2612	2795	3033	3170	3079	2856	2697	3058	3012	2695	2070	1710	1892	1637	1599	1362	1279	1447	1526	1714	1694	1529	1274	1343	1201	1225	1163	1435	1705	2231	2505	2055	1272	1270	1292	1323	1501	1765	1762	1595	1749	