

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,435 MW
Distillate	0 MW
Total TNB	2,435 MW
Total IPP	15,125 MW
Total Co-Gen	0 MW
Total System	21,119 MW

Generation Mix

Type	MWh	Percentage
Hydro	18,187	4.93 %
Gas	46,888	12.70 %
Total TNB	65,075	17.63 %
ST-Coal	190,807	51.70 %
LSS	3,422	0.93 %
Gas	108,524	29.40 %
Total IPP	302,753	82.03 %
Co-Gen	1,260	0.34 %
Total Co-Gen	1,260	0.34 %
Total Generation	369,088	100.00 %
PLTG	705	0.19 %
HVDC	-697	-0.19 %
Interconnection	8	0.00 %
Net Energy	369,080	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	19,027 MW
TNB Generation	3,582 MW
IPP Generation	13,861 MW
Spinning Reserve	1,530 MW
Maximum Demand	17,523 MW
Net Energy	369,080 MWH
Load Factor	87.76 %

Fuel Cost

Total Cost:	89,342,349.03 RM
Cost per Unit	24.20 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	624
Hydro	605
Syncon	405
Thermal	211
Total	1,845

Time	Weather	Temperature
Afternoon	Hot	37
Morning	Cloudy	27

Gas Usage

Station	(mmcsfd)
GLGR	45
TJGS	168
Total TNB	213
CBPS	53
EMPP	311
KLPP	2
NPRI	80
PCGP	87
PGLA	99
PLPS	57
SKSP	2
SPGP	104
Total IPP	794
Total Gas	1,007
Total Gas Required	1,007

Alternate Fuel Usage

Station	(mmcsfd)
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	14700	13985	13545	13169	12853	12721	12963	13187	13708	15223	16149	16547	16421	16367	17006	17420	17448	17265	16212	16147	17037	16816	16218	15697

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, March 2, 2022 3:38:14 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	455	405	406	408	355	351	354	303	305	303	302	305	356	455	458	403	411	615	688	696	694	695	695	694	696	697	696	695	694	692	693	695	696	695	698	698	696	694	695	697	697	695	697	696	697	696	695	694	696
JMAH	U002	454	405	405	409	358	354	352	304	303	304	303	305	354	456	454	403	442	621	697	698	698	696	696	693	696	696	696	696	695	696	696	696	696	694	694	695	698	695	694	693	693	694	698	695	696	694	694	696	
JMHE	U001	948	900	901	899	848	851	850	851	848	801	797	800	799	797	795	801	799	833	946	950	953	953	952	950	948	951	952	952	950	951	949	951	947	950	947	953	952	951	951	949	946	949	950	950	950	949	950	949	
JMJG	U001	603	598	593	550	550	550	550	550	550	550	550	550	550	550	600	600	600	600	600	600	672	668	645	666	668	673	671	668	672	675	672	671	671	673	671	606	570	574	576	579	579	576	579	577	576	607	681		
JMJG	U002	596	597	598	550	550	550	550	550	550	550	550	550	550	550	600	600	600	600	600	600	601	601	596	596	601	599	599	598	602	599	598	599	601	596	601	599	607	596	598	601	596	598	596	598	598	601	599	599	
JMJG	U004	830	831	831	831	831	831	832	800	800	800	800	800	800	800	800	800	800	800	800	800	860	861	861	863	877	879	898	900	917	922	923	952	952	951	979	976	977	977	977	977	944	945	944	945	947	944	946	945	
JMJG	U005	939	900	900	900	850	850	850	800	800	800	800	800	800	800	800	800	800	800	800	800	945	940	939	941	939	944	941	942	939	940	941	938	941	941	944	944	945	939	942	939	939	939	941	938	939	938	939	942	
PKLG	U003	205	207	206	208	203	151	154	154	153	156	158	160	157	157	185	207	215	251	252	255	253	255	254	254	251	253	196	201	252	248	250	250	250	251	252	252	253	249	245	252	253	250	252	253	250	254	255		
PKLG	U004	206	204	206	205	204	162	153	154	156	153	155	156	155	155	182	209	215	258	275	277	277	278	276	275	277	274	274	275	272	279	274	276	278	275	275	274	275	280	276	275	272	274	286	278	276	271	275	276	
PKLG	U006	406	406	406	404	406	385	318	271	268	269	270	268	268	268	300	357	398	446	447	449	448	447	450	449	448	448	448	425	370	358	358	358	360	358	359	358	360	359	356	358	358	375	438	449	448	449	449		
TBIN	U001	499	483	422	398	399	399	347	349	350	300	301	298	399	450	447	451	495	615	685	687	686	687	689	686	688	687	684	686	687	687	687	689	687	686	690	688	688	687	687	689	687	686	689	687	687	687	687		
TBIN	U003	504	491	436	403	405	403	355	353	352	310	302	302	390	450	451	451	484	614	675	683	696	691	694	690	687	695	689	690	691	690	691	689	692	690	688	686	692	692	687	689	691	686	693	682	690	687	690	692	
TBIN	U004	931	905	905	906	872	853	853	852	829	804	803	803	803	803	803	804	801	819	921	932	932	929	931	931	931	931	931	930	929	930	931	929	930	932	932	931	930	932	931	930	932	929	931	932	930	932	932		
Total ST-Coal		7576	7332	7215	7071	6831	6690	6518	6291	6264	6100	6091	6097	6381	6691	6875	6886	7060	7872	8386	8427	8715	8701	8678	8688	8703	8728	8678	8657	8671	8667	8661	8692	8704	8690	8724	8728	8681	8621	8612	8625	8588	8586	8623	8669	8691	8671	8717	8797	
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	
CBPS	BLK2	359	349	355	358	357	363	360	358	361	358	359	360	362	356	353	358	365	365	364	363	366	366	364	364	364	354	359	245	260	361	361	360	358	356	357	356	357	357	361	361	361	360	356	357	355	357	356	362	347
EMPP	BLK1	706	697	695	712	709	710	712	710	709	710	713	710	710	698	698	704	710	709	709	711	709	710	709	710	695	705	706	719	711	709	709	709	709	709	706	708	704	712	709	714	708	711	711	706	706	701	710	699	
EMPP	BLK2	706	697	696	711	709	711	712	709	710	712	710	712	710	697	698	704	710	709	708	709	709	709	709	710	694	707	706	721	711	710	709	709	709	706	708	706	712	710	715	709	711	711	706	705	701	711	699		
EMPP	BLK3	764	763	763	762	761	760	761	760	758	760	762	762	761	764	765	764	762	761	761	757	756	751	748	746	744	743	743	745	753	752	744	755	751	753	754	375	743	752	754	754	759	761	761	763	761	762	761	765	
GLGR	GT01	67	68	69	67	69	70	69	69	68	68	70	69	69	66	68	67	68	68	68	70	68	68	69	68	66	67	68	68	67	68	68	67	67	66	68	67	67	68	69	67	69	68	68	68	68	68	68		
GLGR	GT02	68	68	69	68	68	69	69	68	68	68	68	69	68	68	69	69	68	68	68	69	69	68	68	68	68	67	67	68	67	67	67	67	66	67	67	67	67	68	67	68	68	68	68	68	68	68			
GLGR	ST1C	71	71	71	71	71	71	71	71	71	71	71	71	70	71	71	70	71	70	71	70	71	71	71	71	71	71	71	72	71	71	72	72	71	71	72	71	71	71	71	71	71	71	71	71	71	71	71		
KLPP	GT13	122	119	123	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
KLPP	ST17	66	65	66	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NPRI	BLK2	514	508	506	518	514	517	518	518	515	518	518	518	518	507	506	511	517	518	517	520	519	520	519	518	505	514	512	523	518	519	518	518	518	518	513	512	510	515	517	523	518	517	513	511	510	508	517	507	
PCGP	PGRG	597	586	585	601	601	602	603	604	598	601	602	604	603	587	587	593	602	603	602	601	601	601	605	601	584	595	593	614	602	601	602	601	601	603	595	597	599	599	603	609	601	602	597	596	592	590	603	587	
PGLA	GT11	170	170	170	169	170	170	169	170	170	169	170	170	170	170	170	171	169	170	170	170	170	168	169	170	169	169	166	171	169	217	214	216	216	218	215	204	166	169	170	169	216	216	168	168	167	171	167		
PGLA	GT12	173	174	173	173	173	173	174	174	174	174	173	174	173	174	173	174	173	174	172	173	174	173	173	173	173	172	171	170	174	172	220	218	220	220	218	217	207	171	173	174	173	221	219	172	172	172	176	171	
PGLA	ST10	203	203	203	204	204	204	204	204	204	203	204	203	203	204	203	203	204	205	205	205	205	206	204	206	206	203	206	204	240	237	240	240	240	240	240	237	203	205	204	205	240	237	235	202	204	202	205	203	
PLPS	GT11	127	128	129	129	129	129	128	129	129	129	129	129	129	129	128	130	126	127	130	116	115	116	115	111	111	115	118	115	116	142	142	143	141	142	141	113	115												

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
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
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
HTRG	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	63	62	125	-1	-1	-1	125
HTRG	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	62	62	62	63	63	62	63	63
HTRG	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	7	7
KNRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	22	22	21	22	22	22	22	21
KNRG	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	23	22	22	22	23	35	35
KNRG	HY03	36	21	22	22	23	22	22	22	22	22	22	36	36	36	36	36	35	35	35	34	34	34	34	34
KNYR	HY01	78	60	63	66	89	75	63	81	64	84	98	98	71	63	62	66	90	66	64	64	90	84	91	72
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	99	98	99	99	99	98	98
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	100	98	101	100	100	101	100	98	96
KNYR	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	84	60	60	62	62	100	95	95
LPJA	HY01	21	20	19	18	18	18	18	16	16	16	16	16	16	16	18	21	22	25	27	27	27	27	25	25
LPJA	HY02	21	21	19	18	18	18	18	16	16	16	16	16	16	20	20	21	22	23	23	25	25	26	26	24
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
PGAU	HY01	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	21	21	-1	-1	-1	-1	-1
PGAU	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	21	21	21	22	21	21
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	21	21	21	21	21	21
SIHY	HY01	51	51	51	51	51	51	51	51	31	31	31	31	31	0	0	0	0	0	0	30	30	30	30	30
SIHY	HY02	50	50	50	50	50	50	50	50	30	30	30	30	0	0	0	0	0	0	0	0	0	30	30	30
SYPS	HY01	25	25	25	25	25	25	25	25	17	17	17	17	0	0	0	0	0	0	0	0	17	17	17	17
SYPS	HY03	25	25	25	25	25	25	25	25	17	17	17	17	0	0	0	0	0	0	0	0	17	17	17	17
SYPS	HY04	25	25	25	25	25	25	25	25	17	17	17	17	0	0	0	0	0	0	0	0	17	17	17	17
TMGR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	61	42	40	45	44	80	42	42
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	88	88	88	88	88	88	88	88	36
TMGR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	83	84	84	84	83	83	84	84	-1
TMGR	HY04	64	40	41	42	72	55	42	66	41	68	85	86	46	38	39	39	67	43	40	41	74	59	67	46
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	92	92	91	83	88	87	95	91	92	92	93	92	88
UJLI	HY02	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	95	95	84	0	0	95	94	94	90
UPIA	HY01	5	5	5	5	4	5	5	4	4	4	4	5	5	5	5	4	4	6	6	6	6	5	5	5
UPIA	HY02	6	6	5	4	4	3	3	3	3	2	2	2	2	2	2	5	5	5	5	5	5	5	5	5
Total Hydro		462	411	391	394	448	413	391	432	384	367	399	419	332	316	202	232	378	336	332	334	427	592	728	647
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	1	5	9	13	16	13	14	26	14	22	20	23
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	11	9	11	20	18	18	20	19	23
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	3	9	11	19	17	32	23	30	23	29	25	23
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	4	10	16	22	29	33	36	42	38	48	16	12
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	4	6	6	6	4	9	30	27	24
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	15	9	18	20	33	35	43	43	50	38
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	8	18	23	27	24	21	24	26	22
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	5	9	16	24	29	35	36	30	40	31	26	29
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	6	10	21	25	36	58	81	63	66	53	92	94
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	9	16	34	36	21	35	44	45	36
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	6	0	0	0	0	0	0	0	0
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	2	7	5	14	11	23	24	29	30	30	30	30
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	9	7	8	17	30	34	33	37	45
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	4	11	21	24	31	36	43	36	45	19	49	26

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	1	4	11	14	23	22	29	38	37	43	44	42	36	35	32	39	15	8	9	8	2	5	1	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	4	9	6	4	8	15	18	19	15	15	15	15	13	19	7	2	5	5	5	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	1	5	6	7	2	9	11	12	12	30	14	30	24	26	18	18	17	30	23	3	2	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	30	75	157	210	285	342	433	434	486	493	546	490	496	380	437	419	322	332	224	139	67	42	13	0	0	0	0	0	0	0	0	0		
PCUF	CUFG	27	28	27	27	25	26	26	28	28	29	28	29	29	27	25	26	29	27	28	23	24	26	24	26	26	24	24	24	23	24	24	23	24	24	24	24	24	26	26	26	26	26	26					
PCUF	CUFK	26	27	26	27	26	28	28	25	26	26	28	25	25	27	27	26	25	27	25	26	27	25	24	26	27	26	27	26	24	28	26	26	24	25	26	29	27	24	25	26	26	26	26	27				
Total Co-Gen		53	55	53	54	51	54	54	53	54	55	54	57	54	53	56	54	55	54	51	50	56	54	51	54	50	50	53	54	50	50	51	49	48	48	51	53	50	51	49	50	52	52	52	53				
Total Gen		14682	14309	14022	13742	13505	13349	13153	12958	12876	12700	12725	12755	12956	13183	13251	13324	13709	14521	15178	15446	16085	16363	16510	16579	16458	16432	16348	16624	16986	17363	17464	17497	17430	17483	17313	16798	16262	16016	16143	16774	17043	17021	16842	16574	16210	15960	15703	15359
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			
TIE-HVDC		-29	-29	-28	-28	-29	-29	-29	-28	-28	-29	-29	-29	-29	-28	-28	-29	-29	-29	-31	-29	-31	-31	-31	-31	-31	-28	-28	-28	-29	-30	-28	-28	-30	-28	-28	-30	-28	-28	-30	-30	-30	-28	-28					
TIE-PLTG		11	56	65	61	-11	35	14	13	51	19	32	50	22	74	94	64	30	36	-16	-11	-35	-28	-9	-43	66	18	9	-52	9	87	75	4	13	29	76	38	79	55	24	-6	36	5	54	31	22	84	34	46
Interconnection		-18	27	37	33	-40	7	-16	-16	23	-9	4	22	-7	45	64	34	1	6	-45	-41	-64	-58	-37	-71	37	-12	-19	-83	-20	57	44	-26	-18	1	48	9	50	25	-4	-34	6	-23	56	1	-8	53	6	18
System Total		14700	14282	13985	13709	13545	13342	13169	12974	12853	12709	12721	12733	12963	13138	13187	13290	13708	14515	15223	15487	16149	16421	16547	16650	16421	16367	16707	17006	17306	17420	17523	17448	17482	17265	16789	16212	15991	16147	16808	17037	17044	16816	16573	16218	15907	15697	15341	
SRev ST-Coal		565	674	672	723	756	780	783	812	837	861	862	861	862	812	813	727	335	294	147	161	184	174	179	149	219	192	198	202	208	207	195	209	225	221	228	288	297	284	261	203	249	203	181	201	265	185		
SRev CCGT-Gas		1155	1235	1383	1173	994	976	979	986	993	990	989	987	980	1050	1053	1019	982	1127	1138	960	776	701	753	609	756	747	829	741	692	366	313	337	347	345	361	461	1049	1031	1026	894	584	549	557	765	965	1090	980	1054
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		
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		
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		
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		
Syncon		842	691	842	842	842	842	842	842	1029	1029	878	1029	1029	1029	1029	842	842	842	842	691	842	655	655	655	655	655	554	277	126	126	277	277	151	151	151	464	739	401	151	151	151	277	277	277	464	552	777	
Hydro		71	273	142	139	85	120	142	101	149	165	133	264	200	216	155	125	166	208	212	210	268	543	594	675	721	599	603	441	554	795	894	709	675	747	828	789	673	586	769	523	528	586	664	650	659	580	602	331
S.Reserve Total		2633	2873	3039	2877	2677	2718	2746	2741	2821	3045	3013	2990	3070	3157	3049	2985	2803	2904	2527	2306	1882	2247	2186	2113	2311	2150	2306	1928	1721	1489	1541	1530	1494	1452	1565	1622	2414	2644	2493	1852	1524	1489	1747	1895	2082	2335	2399	2347