

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,265 MW
Distillate	0 MW
Total TNB	2,265 MW
Total IPP	15,984 MW
Total Co-Gen	0 MW
Total System	20,443 MW

Generation Mix

Type	MWh	Percentage
Hydro	25,116	6.88 %
Gas	27,616	7.56 %
Total TNB	52,732	14.44 %
ST-Coal	210,904	57.75 %
LSS	1,833	0.50 %
Gas	99,714	27.31 %
Total IPP	312,451	85.56 %
Co-Gen	613	0.17 %
Total Co-Gen	613	0.17 %
Total Generation	365,796	100.17 %
PLTG	241	0.07 %
HVDC	372	0.10 %
Interconnection	613	0.17 %
Net Energy	365,183	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	18,387 MW
TNB Generation	2,709 MW
IPP Generation	14,168 MW
Spinning Reserve	1,476 MW
Maximum Demand	16,949 MW
Net Energy	365,183 MWH
Load Factor	89.77 %

Fuel Cost

Total Cost:	51,885,588.62 RM
Cost per Unit	14.19 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	515
Hydro	577
Syncon	334
Thermal	137
Total	1,563

Time Weather Temperature

Afternoon	Hot	33
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
GLGR	48
PGPS	6
TJGS	149
Total TNB	203
CBPS	50
KLPP	88
NPRI	143
PGLA	101
PLPS	81
SGB3	52
SGRI	34
SKSP	48
YPKA	25
Total IPP	623
Total Gas	826

Total Gas Required 826

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	15027	14312	13918	13429	13199	13010	13206	13221	13682	15378	16277	16781	16793	16397	16692	16900	16949	16375	15406	15697	16324	15956	15359	14799

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, November 5, 2020 8:28:55 AM

 (Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Wednesday

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	692	694	688	694	692	691	695	693	694	692	690	693	696	692	693	692	691	692	694	694	693	691	693	692	694	694	693	692																						
JMAH	U002	696	694	694	696	695	697	694	694	694	695	696	695	695	696	691	695	694	694	695	694	694	696	695	698	694	693	692	693	692																					
JMHE	U002	976	984	975	980	982	980	877	798	801	802	801	798	800	800	802	800	799	800	983	984	980	979	980	980	979	980	978	978	983	976																				
JMJG	U001	669	671	673	671	672	671	673	672	668	671	675	673	673	673	673	677	672	672	673	671	671	668	673	671	673	673	672	672	672																					
JMJG	U002	670	673	669	671	677	672	666	680	677	679	673	672	680	672	675	668	673	673	675	676	677	667	668	660	674	600	597	596	591	597																				
JMJG	U004	979	980	979	972	917	839	805	805	804	808	805	804	804	804	807	807	805	821	878	937	981	978	981	979	983	978	982	980	982	980																				
PKLG	U004	283	280	279	277	279	273	281	280	277	279	276	282	283	280	277	277	277	278	279	276	275	277	279	277	279	279	277	279	278	280																				
PKLG	U005	466	469	466	465	466	469	466	467	465	468	468	466	469	468	468	466	467	467	466	466	464	466	467	467	468	468	468	468	466	466																				
PKLG	U006	449	449	453	446	448	449	446	445	446	449	447	446	448	445	450	446	449	449	449	449	448	450	448	448	449	448	449	448	445	450																				
TBIN	U001	688	689	687	689	689	689	689	691	690	689	690	689	690	689	691	689	690	689	690	689	691	688	684	687	687	687	691	691	689	689																				
TBIN	U002	693	690	693	693	694	691	690	691	694	695	693	688	693	691	694	692	692	691	689	692	693	694	694	691	692	690	691	689	695	691																				
TBIN	U003	692	691	688	692	694	690	689	692	693	690	690	690	690	691	690	690	692	694	690	691	689	690	692	689	690	694	691	690	687	687																				
TBIN	U004	981	983	983	970	884	803	803	803	803	804	802	804	803	801	804	802	829	917	983	985	984	984	983	982	983	982	983	983	983	982																				
Total ST-Coal		8934	8947	8927	8916	8789	8614	8474	8411	8406	8420	8408	8398	8425	8404	8412	8405	8401	8449	8792	8922	8972	8960	8959	8942	8964	8883	8889	8878	8874	8864	8856	8875	8910	8939	8930	8939	8949	8942	8956	8938	8931	8932	8945	8946	8953	8943	8943	8946		
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	361	360	346	356	363	363	310	218	223	223	222	224	222	223	215	224	242	290	336	351	357	360	357	357	357	357	354	356	357	357	357	357	357	357	356	354	226	304	221	320	359	359	360	360	363	352	360	360	358	
GLGR	GT01	67	68	66	67	70	68	67	67	68	69	67	66	68	67	68	68	68	67	68	67	68	89	100	100	101	83	68	67	84	93	101	100	101	100	76	69	68	67	68	68	101	102	98	68	68	68	68	68		
GLGR	GT02	68	67	68	68	68	68	68	68	67	68	68	68	68	68	69	68	68	68	68	68	68	89	100	100	100	84	68	68	85	93	100	100	101	100	74	68	68	68	68	68	102	101	97	68	68	67	68	68		
GLGR	ST1C	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	83	91	91	91	83	73	72	82	86	91	90	91	81	72	72	72	71	72	90	91	90	73	72	72	72	72			
KLPP	GT13	135	77	64	69	69	68	69	68	68	69	68	68	69	70	63	68	92	100	125	130	131	131	135	130	130	131	130	132	130	131	131	132	130	127	113	112	111	108	120	120	119	136	135	131	108	90	62	64		
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	150	151	145	149	151	145	148	145	146	151	151	153	152	148	147	117	112	112	134	150	145	144	157	157	157	112	103	77
KLPP	GT15	160	129	84	88	87	87	86	84	84	84	88	84	85	85	79	83	120	121	138	146	157	158	157	153	157	152	151	154	151	154	155	155	153	152	152	131	128	127	127	155	151	151	160	52	0	0	0	0		
KLPP	ST17	133	117	90	86	90	90	86	90	88	86	90	90	86	90	86	86	102	118	123	193	202	206	204	200	200	194	194	200	200	202	202	204	200	197	200	185	184	185	185	196	200	196	200	180	132	119	115	86		
NPRI	BLK1	506	515	495	511	365	320	319	316	322	320	320	322	491	508	496	511	486	494	494	495	495	493	494	493	495	495	494	494	494	494	494	494	495	494	487	496	491	491	488	494	489	477	473	476	466	478	473	465		
NPRI	BLK2	506	515	494	329	355	364	331	507	369	332	502	517	329	506	429	339	388	497	497	496	504	504	511	503	500	499	499	498	499	499	500	503	505	498	493	502	497	429	502	511	509	509	504	509	479	509	499	478		
PCGP	PGRG	592	604	575	598	604	602	599	592	603	602	402	401	597	599	581	598	594	603	601	600	604	622	612	603	605	601	603	604	604	602	605	608	610	604	593	603	600	599	596	603	599	603	598	603	590	601	599	591		
PGLA	GT11	161	165	157	163	166	165	164	162	164	164	166	165	163	163	159	163	162	198	162	167	197	211	212	210	204	207	193	207	207	213	205	213	205	208	165	164	163	165	171	215	199	200	189	180	160	165	164	160		
PGLA	GT12	165	168	160	167	168	168	166	165	168	167	167	168	167	167	163	166	165	201	165	165	199	213	215	214	208	210	195	211	211	215	208	217	210	212	167	168	167	167	174	217	202	204	191	183	164	170	166	164		
PGLA	ST10	203	203	200	203	203	202	203	203	203	203	203	203	203	205	198	203	203	223	208	203	220	236	238	239	222	236	230	239	237	237	234	236	233	235	204	217	203	203	215	232	219	224	218	209	205	203	201	200		
PGPS	GT3B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	GT11	106	64	59	65	66	66	65	63	65	66	65	64	65	64	59	66	61	110	112	127	141	123	146	143	126	139	117	144	123	139	123	142	135	132	113	115	116	116	113	116	115	117	116	115	112	115	80	62		
PLPS	GT12	111	69	63	70	70	68	68	66	70	69	69	69	69	68	63	69	65	120	120	132	146	125	151	146	131	142	120	148	127	143	124	148	138	136	116	121	120	120	117	121	120	121	0	0	0	0	0	0	0	0
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	156	105	92	95	92	95	96	96	93	95	94	94	93	96	90	96	92	129	133	207	213	206	216	215	200	212	201	214	210	212	206	213	209	211	196	197	198	199	199	200	198	135	134	131	134	107	89			
SGB3	GT31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	139	113	113	113	132	132	129	135	127	109	112	108																

Daily MW Generation on Wednesday

[illegible]

Daily MW Generation on Wednesday

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			
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	7	9	11	12	17	19	19	28	15	30	17	18	10	17	11	5	1	0	0	0	0	0	0	0	0	0	0	0	0		
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	11	23	21	25	14	30	35	20	13	9	11	12	1	1	3	5	5	3	2	1	0	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	0	2	7	11	13	24	27	38	23	34	30	26	35	25	15	16	13	13	15	10	6	5	2	1	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	0	0	2	4	21	32	36	39	32	3	13	17	25	7	9	18	18	4	7	5	4	2	2	1	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	0	0	0	0	2	5	8	11	21	16	30	18	30	30	18	10	10	7	1	7	6	2	1	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	0	0	2	5	10	12	21	24	30	32	34	37	43	41	36	33	25	37	10	13	5	1	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	0	1	3	8	12	29	38	28	13	1	4	6	13	22	16	18	24	44	49	15	6	4	4	3	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	0	1	3	5	5	10	16	30	27	28	26	41	33	35	26	12	9	14	6	6	4	3	2	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	0	7	28	61	117	208	232	273	233	212	263	266	265	243	226	200	187	157	162	157	89	49	26	11	1	1	0	0	0	0	0	0	0	0	0	
PCUF	CUFG	3	4	3	3	4	3	4	3	5	4	4	3	4	4	4	3	3	36	36	38	38	37	37	36	4	4	4	35	34	4	3	4	4	3	4	3	4	3	4	4	7	6	6	4	4	5	3			
PCUF	CUFK	4	4	1	3	4	2	4	2	4	4	2	3	3	3	3	2	29	29	30	38	29	29	30	28	29	29	2	5	4	28	28	30	29	30	29	30	29	2	3	30	29	30	28	30	28	5	3			
Total Co-Gen		7	8	4	6	8	5	8	5	9	8	6	6	7	7	8	6	5	65	65	68	68	65	66	65	6	9	8	63	62	34	32	34	33	32	34	32	6	5	34	33	37	35	34	34	32	10	6			
Total Gen		15135	14745	14445	14188	13960	13737	13505	13383	13208	13147	13039	13043	13231	13463	13230	13225	13664	14843	15349	15851	16212	16573	16738	16914	16717	16504	16362	16598	16720	16901	16931	16881	16911	16786	16421	15777	15458	15254	15780	16260	16321	16159	15998	15789	15415	15253	14810	14653		
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		31	30	30	31	31	29	29	29	29	30	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			
TIE-PLTG		84	22	110	20	18	70	54	57	-14	12	5	16	1	44	-15	-15	-41	7	-22	-55	-59	-50	-36	-4	-69	43	-27	-13	35	11	38	58	-31	-18	52	-7	58	32	89	-27	-25	4	20	25	33	-25	-11	27		
Interconnection		115	52	140	51	49	100	83	86	15	42	35	46	31	74	15	14	-11	7	-22	-55	-59	-50	-36	-4	-69	43	-27	-13	35	11	38	58	-31	-18	52	-7	58	32	89	-26	3	33	49	54	63	4	18	58		
System Total		15027	14700	14312	14144	13918	13644	13429	13303	13199	13111	13010	13003	13206	13395	13221	13218	13682	14843	15378	15912	16277	16629	16781	16925	16793	16468	16397	16618	16692	16897	16900	16830	16949	16811	16375	15790	15406	15228	15697	16292	16324	16132	15956	15742	15359	15256	14799	14602		
SRev ST-Coal		148	135	155	166	277	302	384	369	375	363	374	381	356	374	371	379	379	373	260	160	110	122	123	140	118	109	103	114	118	128	136	117	82	143	152	143	133	140	126	144	151	150	137	136	129	139	139	136		
SRev CCGT-Gas		901	1089	1345	1594	1695	1739	1833	1724	1897	1936	1963	1947	1776	1574	1770	1747	1601	649	905	807	530	345	285	200	529	557	706	437	468	388	524	362	462	516	807	1313	1400	1554	1079	658	452	428	441	650	692	830	1127	1303		
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 CCGT-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 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	676	676	676	676	676	676	914	914	1001	1001	1001	1001	1001	850	850	827	374	374	374	374	374	374	374	374	374	374	374	374	374	374	187	0	374	187	374	374	374	374	374	374	374	374	374	374	374	374	374		
Hydro		314	314	334	323	325	326	327	168	169	117	184	186	197	146	342	370	156	612	605	569	562	565	558	560	568	616	616	616	616	616	557	646	735	647	746	658	655	464	468	470	522	524	529	496	437	437	451	333	332	462
S.Reserve Total		2039	2214	2510	2759	2973	3043	3220	3175	3355	3417	3522	3515	3330	3095	3333	3346	2963	2008	2144	1910	1576	1406	1340	1274	1589	1656	1799	1541	1517	1349	1395	1500	1477	1691	1988	2294	2375	2538	2101	1700	1506	1448	1389	1597	1646	1676	1972	2275		