

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,488 MW
Distillate	0 MW
Total TNB	2,488 MW
Total IPP	16,144 MW
Total Co-Gen	0 MW
Total System	22,911 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,157	3.66 %
Gas	53,694	14.94 %
Total TNB	66,851	18.60 %
ST-Coal	220,116	61.25 %
LSS	2,298	0.64 %
Gas	69,347	19.30 %
Total IPP	291,761	81.18 %
Co-Gen	1,249	0.35 %
Total Co-Gen	1,249	0.35 %
Total Generation	359,861	100.13 %
PLTG	-240	-0.07 %
HVDC	716	0.20 %
Interconnection	476	0.13 %
Net Energy	359,385	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:	11:30:00 Hour
Total Set On Bus	18,570 MW
TNB Generation	3,253 MW
IPP Generation	13,134 MW
Spinning Reserve	2,130 MW
Maximum Demand	16,464 MW
Net Energy	359,385 MWH
Load Factor	90.95 %

Fuel Cost

Total Cost:	86,102,774.87 RM
Cost per Unit	23.93 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	1,177
Hydro	316
Syncon	707
Thermal	178
Total	2,378

Time	Weather	Temperature
Afternoon	Sunny	32
Morning	Cloudy	27

Gas Usage

Station	(mmscfd)
GLGR	54
TJGS	146
Total TNB	201
CBPS	45
EMPP	179
PCGP	53
PGLA	45
PLPS	77
SGB3	21
SKSP	55
SPGP	162
Total IPP	638
Total Gas	839
Total Gas Required	839

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	14989	14209	13733	13230	13035	12899	13081	13220	13855	15386	16066	16331	16238	15673	16154	16383	16222	15975	15272	15339	16184	15900	15197	14757

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, March 2, 2022 3:51:48 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	564	599	655	657	654	617	585	589	587	546	546	549	594	604	607	635	696	695	697	698	693	695	697	697	695	694	697	695	694	696	695	697	698	694	696	695	695	696	696	696	697									
JMAH	U002	565	596	655	654	657	621	587	587	583	545	545	544	592	605	605	634	693	694	699	697	694	697	696	695	694	696	695	693	698	695	697	693	694	695	695	655	655	606	695	694	697	696	693	695	694	694	694	696		
JMHE	U001	974	917	920	921	912	864	852	852	849	853	850	846	850	852	853	851	850	883	955	968	969	972	972	968	970	968	970	973	969	970	971	969	973	967	971	970	967	971	971	972	970	970	972	949	948	951	950	948		
JMHE	U002	980	918	919	921	908	852	852	852	847	850	850	848	846	851	851	851	850	898	980	979	976	980	981	981	981	978	981	981	979	979	982	978	982	977	979	984	979	980	980	983	978	981	984	980	980	980	979	978		
JMIG	U001	598	592	598	601	595	598	598	598	596	596	593	596	598	625	626	629	628	626	628	652	673	677	678	674	676	675	676	673	676	677	677	677	677	674	674	671	590	596	599	598	596	594	597	598	597	604	595	595	596	
JMIG	U002	600	598	598	601	596	596	596	600	595	599	598	600	601	623	622	623	630	626	629	653	677	673	671	673	671	671	671	672	671	668	673	673	674	672	662	590	596	600	596	596	598	597	598	598	599	598	601	598		
JMIG	U004	864	862	862	866	865	866	861	863	865	865	865	862	865	864	865	864	865	864	857	855	856	857	861	857	857	856	858	858	857	855	858	856	857	872	905	963	1006	982	977	976	980	976	979	977	976	975	977	977		
JMIG	U005	963	934	906	896	900	852	848	849	853	847	850	848	848	849	849	847	850	798	796	796	799	794	801	800	796	800	805	861	883	925	970	967	965	980	964	973	977	977	976	977	976	973	974	975	972					
PKLG	U004	275	275	274	274	273	256	181	157	143	154	154	154	156	155	159	176	153	246	278	276	276	282	278	276	273	273	274	272	273	277	275	277	277	277	277	278	277	276	277	273	274	274	276	270	276	273	274	210		
PKLG	U006	446	447	449	450	447	447	442	444	441	444	445	445	445	445	440	449	446	447	446	448	449	451	449	450	447	446	448	450	449	446	446	449	450	446	449	447	447	442	449	450	450	446	448	450	452	449	449	388		
TBIN	U001	688	689	690	689	687	689	687	639	639	547	552	550	582	630	629	689	689	687	689	689	687	687	687	687	686	684	688	687	687	687	686	687	689	687	650	690	690	689	689	687	690	688	686	690	689	689	689	689		
TBIN	U003	691	690	689	690	690	687	690	653	643	554	555	553	565	633	631	689	687	687	690	689	685	687	689	692	687	691	689	689	691	689	688	687	689	689	689	650	690	690	692	693	689	693	689	690	691	690	689	692		
TBIN	U004	939	941	903	904	902	880	852	852	853	855	852	854	852	852	853	854	854	867	943	946	941	943	942	943	942	943	945	943	943	944	944	943	944	944	943	941	944	943	941	941	943	942	944	942	944	943	945	943	939	942
Total ST-Coal		9147	9058	9118	9124	9086	8825	8631	8535	8494	8255	8255	8249	8394	8588	8590	8791	8891	9018	9287	9346	9375	9401	9397	9393	9378	9369	9393	9387	9385	9385	9398	9445	9475	9521	9595	9342	9463	9363	9523	9533	9536	9533	9541	9507	9523	9507	9507	9383		
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	219	223	222	223	222	224	226	224	216	223	220	220	222	222	220	221	228	228	256	357	364	362	363	363	294	220	208	226	362	362	362	362	362	362	361	361	361	365	361	366	365	362	360	352	355	295	219	220		
EMPP	BLK2	450	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	536	708	600	499	501	500	556	600	596	592	553	601	602	600	602	599	600	602	600	602	488	436	448	713	708	530	687	687	592	584	407	408		
EMPP	BLK3	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	770	769	769	710	712	707	669	660	638	633	618	653	650	659	648	658	641	657	642	655	654	694	711	712	708	712	707	707	735	733	753	758		
GLGR	GT01	109	111	110	79	67	67	67	67	67	67	67	67	67	67	67	67	69	102	107	109	107	107	108	108	107	107	108	108	108	107	109	109	109	109	109	110	109	109	109	108	110	109	108	107	110	109	65			
GLGR	GT02	107	107	107	77	64	64	64	64	64	64	64	64	64	64	64	68	67	102	107	106	106	105	106	106	106	106	106	106	106	106	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	64			
GLGR	ST1C	97	96	96	87	78	78	78	78	78	78	78	78	78	78	78	78	78	78	96	96	97	96	97	96	97	96	97	96	97	95	96	95	95	94	95	95	95	95	95	95	95	95	95	95	95	95	75			
PCGP	PGRG	261	261	262	263	261	260	260	261	261	262	261	261	260	262	261	261	261	261	605	597	599	604	612	603	592	301	261	260	351	351	350	351	352	264	261	266	261	261	259	264	277	266	261	262	260	260	261	262		
PGLA	GT11	157	159	158	159	157	159	159	157	153	159	159	157	159	158	157	158	159	160	160	158	160	159	163	159	156	155	151	159	159	160	159	159	160	159	160	160	159	160	160	162	159	160	158	159	157	155	157	156	156	157
PGLA	ST10	87	88	87	88	88	88	88	88	86	87	88	88	88	88	88	88	88	88	88	87	88	88	88	88	87	87	86	87	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88		
PLPS	GT11	137	142	140	115	116	116	115	116	111	115	115	115	114	116	111	115	116	140	140	141	139	140	143	140	136	136	134	140	141	140	139	143	141	139	141	139	141	140	141	140	141	139	143	136	136	141	141	138	139	
PLPS	GT13	139	142	141	112	112	112	112	111	106	113	113	112	113	112	109	112	112	136	136	136	137	135	139	136	133	132	131	136	135	136	136	137	139	135	136	135	137	136	135	137	136	133	133	136	136	134	137			
PLPS	ST18	143	143	143	132	133	132	131	131	131	133	133	132	133	134	133	134	143	143	142	142	142	143	140	140	141	140	141	142	144	142	143	143	142	142	143	143	143	143	143	143	143	143	142	142	142	143	143			
SGB3	GT33	140	142	143	117	115	115	117	118	111	117	117	118	118	114	117	118	118	120	146	144	144	146	143	144	144	140	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SGB3	ST34	66	66	64	58	57	57	56	54	58	62	59	59	58	58	56	56	59	62	59	67	64	62	63	63	62	62	61	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SKSP	BLK1	336	339	335	300	218	223	222	221	220	219	219	238	218	218	218	254	338	339	308	336	337	337	338	31																										

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
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
HTRG	HY03	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	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
KNRG	HY03	22	22	22	22	22	22	22	22	23	22	22	23	22	21	21	22	22	23	36	36	36	36	36	36
KNYR	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
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
KNYR	HY04	61	68	69	68	60	61	65	59	57	64	59	60	81	59	59	59	97	101	101	70	96	100	101	101
LPIA	HY01	18	18	17	17	17	16	15	15	15	16	15	15	16	15	15	17	17	17	18	18	18	18	19	19
LPIA	HY02	18	18	18	17	17	17	16	16	16	16	16	16	16	16	17	17	17	17	18	18	19	19	19	19
MNOR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
PGAU	HY01	81	-1	-1	-1	-1	-1	19	19	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	14	-1	109	110	111	111
PGAU	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	81	111	110	110	111	111	111	111
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	80	81	81	80	81	80	79	77
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30	30	30	30	30
SIHY	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
SIHY	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
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	16	16	16	16	16
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
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	16	16	16	16	16	16	16	16
TMGR	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
TMGR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
TMGR	HY04	42	52	58	46	40	43	47	41	38	43	41	42	58	40	42	40	80	42	76	41	71	86	85	83
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	93	91	92	93	91	135
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	93	95	95	94	93	94
UPIA	HY01	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
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
Total Hydro		338	273	278	265	218	222	228	234	229	224	216	218	258	217	216	214	294	262	308	419	597	650	653	646
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	0	0	0	0	0	0	0	0	0	0	0	0
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	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	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	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	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	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	0	0	0	0	0	0	0	0	0
PCUF	CUFG	25	26	25	26	25	26	24	27	26	26	24	25	28	27	27	28	28	27	28	27	25	25	26	27

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	
PCUF	CUFK	26	29	24	27	25	26	23	26	24	25	26	24	25	25	25	24	23	27	24	24	26	24	26	26	24	26	25	26	26	24	27	26	29	22	26	26	27	27	28	26	26	25	26	26	26	26	27	
Total Co-Gen		51	55	49	53	50	52	47	53	50	51	50	49	53	52	52	52	51	54	52	51	51	49	52	53	51	52	51	53	52	52	54	52	56	50	53	53	54	54	55	53	55	52	53	52	51	53	54	52
Total Gen		15037	14591	14278	13950	13741	13489	13305	13215	13120	12932	12916	12904	13124	13251	13229	13441	13884	14709	15394	15784	16097	16220	16315	16440	16209	15808	15654	15918	16152	16406	16409	16299	16272	16249	16073	15722	15327	15191	15388	15974	16187	15930	15941	15555	15187	15009	14752	14454
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		30	30	30	31	31	31	31	30	30	30	30	29	29	30	30	30	30	30	28	28	30	30	30	30	29	29	30	30	29	29	29	29	31	29	29	30	30	31	30	30	29	31	31	30	31	29	29	
TIE-PLTG		18	-8	39	-45	-23	-40	44	19	55	-26	-13	61	13	38	-21	-39	-1	-35	-22	-10	3	-48	-47	-54	-59	-82	-48	-51	-32	-7	-4	16	21	34	69	12	26	-7	18	-2	-27	-54	9	-29	-39	-41	-34	-29
Interconnection		48	22	69	-14	8	-9	75	49	85	4	17	90	43	68	9	-9	29	-5	8	19	31	-18	-16	-24	-29	-53	-19	-22	-2	22	26	45	50	65	98	41	55	23	49	28	3	-25	41	2	-10	-11	-5	0
System Total		14989	14569	14209	13964	13733	13498	13230	13166	13035	12928	12899	12814	13081	13183	13220	13450	13855	14714	15386	15765	16066	16238	16331	16464	16238	15861	15673	15940	16154	16384	16383	16254	16222	16184	15975	15681	15272	15168	15339	15946	16184	15955	15900	15553	15197	15020	14757	14454
SRev ST-Coal		360	506	516	516	543	676	704	792	805	822	823	825	825	816	820	683	560	461	223	164	135	109	113	117	132	141	117	123	125	125	112	125	205	199	175	426	317	375	269	257	254	259	253	286	278	284	287	351
SRev CCGT-Gas		1488	1784	2156	2481	2602	2599	2590	2596	2642	2587	2594	2601	2570	2595	2618	2608	2384	1709	1372	1134	1104	1100	1010	857	988	1370	1516	1340	967	959	958	1102	1106	1181	1343	1184	1450	1497	1492	1142	1079	1334	1269	1580	1932	2003	2265	2367
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	
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	
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	
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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syncon		878	1029	1029	1029	1029	1029	1029	878	878	1029	1029	1029	1029	1029	1029	1029	1029	1029	878	1029	842	842	842	842	842	842	842	842	691	655	504	504	504	504	504	691	691	691	691	691	691	691	691	878	878	878	878	
Hydro		205	119	114	127	150	146	140	285	290	144	152	150	110	151	152	154	74	106	211	324	358	310	307	314	388	399	454	514	441	434	424	384	412	366	460	462	179	174	138	160	163	151	206	247	121	107	125	198
S.Reserve Total		2931	3438	3815	4153	4324	4450	4463	4551	4615	4582	4598	4605	4534	4591	4619	4474	4047	3305	2684	2651	2439	2361	2272	2130	2350	2752	2929	2668	2188	2022	1998	2115	2227	2252	2482	2763	2637	2737	2590	2250	2187	2435	2419	2804	3209	3272	3555	3794