

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,363 MW
Distillate	0 MW
Total TNB	2,363 MW
Total IPP	15,558 MW
Total Co-Gen	0 MW
Total System	20,627 MW

Generation Mix

Type	MWh	Percentage
Hydro	19,749	5.26 %
Gas	33,780	9.00 %
Total TNB	53,529	14.26 %
ST-Coal	212,188	56.53 %
LSS	2,940	0.78 %
Gas	107,354	28.60 %
Total IPP	322,482	85.91 %
Co-Gen	1,220	0.33 %
Total Co-Gen	1,220	0.33 %
Total Generation	377,231	100.49 %
PLTG	1,130	0.30 %
HVDC	718	0.19 %
Interconnection	1,848	0.49 %
Net Energy	375,383	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	19,058 MW
TNB Generation	3,047 MW
IPP Generation	14,768 MW
Spinning Reserve	1,196 MW
Maximum Demand	17,751 MW
Net Energy	375,383 MWH
Load Factor	88.11 %

Fuel Cost

Total Cost:	79,878,867.77 RM
Cost per Unit	21.17 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	413
Hydro	558
Syncon	339
Thermal	141
Total	1,451

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	24

Gas Usage

Station	(mmcsfd)
GLGR	46
TJGS	90

Total TNB 137

CBPS	48
KLPP	65
NPRI	142
PGLA	101
PLPS	69

Total IPP 425

Total Gas 562

Total Gas Required 562

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	15182	14428	13918	13472	13222	12945	13182	13356	13735	15342	16143	16764	16665	16522	17198	17540	17751	17357	16329	16459	17233	17042	16610	16401

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, January 3, 2022 12:28:37 PM Head
Grid System Operator
(Ir. Shanmugam Thoppalan)

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	696	699	696	695	696	696	694	696	695	696	694	696	695	696	695	697	695	697	698	696	695	695	693	696	696	705	705	706	706	709	707	708	706	708	706	705													
JMAH	U002	696	696	690	695	697	695	695	698	695	696	697	696	699	698	694	696	696	697	698	695	696	694	693	704	707	703	700	700	706	705	705	706	702	711	705														
JMHE	U001	967	963	910	906	895	898	900	847	852	848	848	848	849	852	849	852	854	932	938	968	975	977	977	980	972	975	967	974	970	975	976	977	977	973	975	969	967	969	966	974	973	966	958	972	974	967	973	974	
JMJG	U001	670	671	668	671	671	672	668	662	667	664	667	665	667	666	663	662	665	667	659	662	662	662	660	662	672	667	673	671	671	671	672	671	673	669	668	668	672	675	668	671	676	675	677	675	673	670	678	675	
JMJG	U002	678	660	672	668	666	667	666	668	667	667	666	671	666	668	663	670	678	670	675	671	678	675	672	673	671	677	674	673	667	667	667	671	672	666	671	661	676	672	677	682	676	678	679	675	681	682	673	673	
JMJG	U003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	167	234	326	366	435	475	518	508	506	502	501	507	534	618	682	665	673	667	672	672	663	678	680	679	670	679	676	673	675	673	673		
JMJG	U004	854	857	854	854	854	852	853	854	855	854	854	855	855	854	853	858	854	854	854	854	855	854	854	855	854	853	853	856	854	853	855	855	854	852	854	854	854	853	855	852	853	853	854	854	854	856	856	854	
JMJG	U005	889	891	891	891	887	889	888	848	854	852	851	850	848	853	854	860	850	892	891	892	892	891	892	892	891	892	892	892	890	889	889	890	892	892	888	888	883	892	889	889	892	894	892	891	892	891	892	892	
PKLG	U003	278	279	278	280	278	277	275	279	273	210	156	154	207	276	279	281	282	282	279	277	280	278	281	279	276	276	278	277	275	277	278	277	278	278	279	279	280	280	278	278	278	279	280	279	280				
PKLG	U004	277	278	280	279	276	276	276	274	268	218	151	152	222	265	278	279	272	278	276	277	278	277	277	276	280	279	281	278	276	273	272	272	272	273	270	276	272	276	275	277	276	273	276	272	278	275	277		
PKLG	U006	446	446	448	448	449	445	451	449	449	440	398	377	430	449	448	446	447	446	446	448	448	449	449	449	450	449	448	449	446	448	450	448	449	448	449	449	449	449	449	449	449	449	449	449	449	449	450	451	
TBIN	U001	688	688	689	688	686	689	687	689	686	687	687	686	688	689	685	688	691	689	689	689	686	687	687	689	685	688	689	687	688	686	687	687	687	687	687	687	686	696	697	696	696	698	697	699	693	697	692	694	697
TBIN	U002	691	692	690	691	695	691	689	696	691	691	692	694	693	693	693	692	694	694	693	694	692	690	694	693	694	694	691	693	689	694	692	690	693	690	695	689	699	701	700	704	700	701	702	699	700	702	699	701	
TBIN	U003	698	692	691	692	689	686	690	694	690	689	692	689	691	690	690	692	689	689	690	689	691	690	689	691	690	689	691	690	691	690	691	692	688	692	691	692	699	700	702	705	700	702	700	702	700	699	699	701	702
Total ST-Coal		8528	8512	8457	8458	8439	8433	8432	8354	8342	8212	8053	8035	8212	8347	8345	8367	8472	8655	8715	8838	8895	8948	9000	9047	9035	9035	9030	9029	9019	9049	9139	9209	9189	9184	9183	9173	9227	9240	9244	9263	9258	9254	9250	9255	9250	9260	9259		
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		
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		
CBPS	BLK2	366	373	320	238	222	226	219	219	220	212	219	224	225	227	217	217	224	224	362	362	364	364	365	365	357	365	365	365	369	362	362	362	361	361	362	304	223	238	317	360	357	364	361	368	360	366	362	362	
EMPP	BLK1	753	751	764	762	766	763	765	766	767	766	768	764	768	769	772	768	769	766	763	763	761	759	759	757	757	755	756	753	753	496	496	496	495	196	376	375	375	356	356	354	354	354	375	375	375	460	460		
EMPP	BLK2	434	433	407	185	173	0	0	0	0	0	0	0	0	0	0	161	163	231	234	332	332	545	556	561	557	558	558	559	562	557	232	555	374	160	163	529	554	208	0	0	0	0	0	0	0	0			
EMPP	BLK3	124	200	201	752	759	747	755	755	753	752	750	748	745	754	755	752	752	748	745	733	720	719	720	735	374	725	374	739	739	736	735	738	728	736	727	737	735	734	736	743	742	745	743	496	331	196	312		
GLGR	GT01	69	69	69	67	67	69	67	69	67	69	67	68	69	68	68	68	68	68	69	69	67	101	100	74	67	68	67	67	67	67	68	68	84	82	75	66	68	68	66	67	66	69	67	67	67	68			
GLGR	GT02	68	68	68	68	69	68	68	68	69	68	68	68	68	68	68	68	68	68	68	68	69	101	102	72	68	67	68	68	67	67	67	68	85	84	74	67	68	67	67	66	67	68	67	68	67	67			
GLGR	ST1C	72	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	90	91	80	71	72	71	72	71	72	72	72	78	83	81	72	71	72	72	75	72	72	72	72	71	72	72	72			
KLPP	GT13	119	124	120	120	120	124	120	120	120	116	120	123	120	123	119	120	129	132	129	129	134	133	133	132	132	132	132	131	133	133	132	123	134	133	133	133	135	133	133	136	132	136	132	135	132	133	132	128	
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	63	149	122	132	122	126	123	123	126	141	128	123	126	123	127	123	122		
KLPP	GT15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	145	145	145	125	125	125	125	125	125	125	135	135	135	135	135	135	0		
KLPP	ST17	65	66	65	64	65	66	64	64	65	65	65	65	65	65	65	65	68	67	66	67	67	67	67	67	67	67	62	62	148	139	141	145	212	206	210	205	207	206	205	207	209	206	204	207	203	143			
NPRI	BLK1	518	527	521	330	325	337	327	325	331	319	329	335	329	332	329	330	331	448	514	515	514	508	514	511	508	515	509	515	515	516	515	515	517	509	515	509	400	329	422	520	510	521	509	519	514	517	515	518	
NPRI	BLK2	523	532	523	335	331	346	331	329	334	323	334	336	333	335	333	331	335	413	518	515	516	509	518	510	493	520	500	518	518	520	518	518	520	511	518	510	398	333	355	447	515	523	511	522	517	519	518	518	
PCGP	PGRG	604	611	602	502	347	274	262	261	263	263	263	265	261	266	262	262	274	547	605	601	600	594	604	598	591	611	599	601	602	605	603	602	602	595	604	592	503	263	330	610	601	608	592	607	603	604	588	260	
PGLA	GT11	169	171	206	170	169	172	168	168	169	165	169	170	169	171	169	169	169	170	169	184	214	214	216	190	176																								

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
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
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
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	8	8	8	8	8	8	7	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	119	119	118	119	119
HTRG	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	118	118	118	118	118
HTRG	HY03	4	4	4	4	4	4	3	3	3	3	4	4	4	4	4	3	3	3	3	4	4	4	3	3
HTRG	HY04	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	3
KNRG	HY01	34	34	34	34	34	34	34	34	34	34	34	34	23	23	23	21	21	21	21	22	22	22	34	34
KNRG	HY02	35	35	35	35	35	35	35	35	35	35	35	35	22	23	23	22	22	21	22	21	24	24	24	35
KNRG	HY03	35	34	34	34	34	34	34	34	34	34	34	34	21	22	22	22	21	21	21	21	21	34	34	34
KNYR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	58	59	58	58	57	1	0	0
KNYR	HY02	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	59	59	59	59	60	57	99
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	51	-1	51	-1	97	50	50	52	50
KNYR	HY04	60	90	59	63	61	94	62	60	59	58	66	97	88	68	59	57	65	60	91	82	65	59	60	59
LPIA	HY01	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	23	23	22	22
LPIA	HY02	25	25	24	24	24	24	24	24	24	24	24	24	24	24	24	25	26	26	25	25	25	25	28	28
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	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	20	19
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0
SIHY	HY01	51	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	50	50	50	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	50	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30	30	30	30
SYPS	HY01	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	17	17	17	17
TMGR	HY01	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	35	34	35	35	33	35	35
TMGR	HY02	44	69	44	45	44	74	46	47	45	43	45	79	68	51	44	44	82	47	75	63	50	43	64	56
TMGR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	81	60	52
TMGR	HY04	31	31	83	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	34	82	82	-1
UJLI	HY01	93	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	93	93	92	93	93	91	86
UJLI	HY02	94	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	95	92	88	95
UPIA	HY01	6	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	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Total Hydro		788	482	410	331	328	391	331	329	326	323	333	399	379	342	327	275	324	283	343	411	585	752	698	595
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	1	3	5	8	11	15	16	20	25	20	18
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	16	9	10	11	22	17	15	19
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	9	10	17	24	23	20	20	32	29
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	15	22	27	33	27	24	43	36	18
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	7	9	12	14	15	14	12
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	19	16	19	26	29	37	43	50	50
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	15	11	15	15	13	11	29	26	22
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	20	21	24	28	34	32	29	12	16
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	15	14	19	25	27	27	34	29	40
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	6	9	9	15	27	13	24	30	29
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	11	14	31	23	24	36	30	30	30

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																								
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15	28	35	37	27	36	46	52	37	52	52	52	52	51	46	41	35	27	18	10	3	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	1	5	6	12	23	27	34	28	24	32	44	34	42	17	27	36	13	8	6	6	9	5	2	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	1	2	5	12	16	18	9	25	15	12	13	23	29	13	18	9	14	10	1	1	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	1	3	4	7	11	15	16	18	17	22	22	27	21	27	15	24	28	19	17	7	3	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	12	55	123	205	249	288	311	370	369	391	398	467	457	412	376	336	329	221	198	142	100	57	20	2	0	0	0	0	0	0	0	0	0	0	
PCUF	CUFG	28	29	29	27	28	23	23	24	25	27	28	27	28	26	27	27	29	27	26	26	25	26	25	25	23	23	23	23	23	23	23	25	23	23	24	23	24	23	24	24	23	24	26	26	25			
PCUF	CUFK	27	26	27	26	25	26	24	26	27	25	28	26	29	25	25	25	27	26	26	27	24	26	25	26	26	23	27	24	24	24	24	23	25	26	25	26	26	26	28	28	25	26	25	27	25			
Total Co-Gen		55	55	56	53	53	49	47	50	52	52	56	53	57	51	52	52	56	53	52	53	49	52	50	50	49	49	50	48	49	46	50	47	47	47	50	50	49	48	49	50	49	52	52	48	50	51	53	50
Total Gen		15275	14773	14461	14199	13999	13760	13544	13418	13276	13093	12994	13063	13200	13398	13419	13298	13785	14697	15378	15867	16214	16637	16821	16870	16688	16623	16583	17053	17288	17640	17595	17786	17862	17861	17450	16893	16424	16171	16652	17321	17341	17356	17179	17076	16724	16670	16522	16111
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	31	31	30	30	30	30	31	31	30	30	31	29	29	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	29	29	29	29	29	29	31	31	30	30	30	30	31	31			
TIE-PLTG		63	6	2	16	51	-4	42	50	23	68	18	10	-13	-4	33	-4	20	49	7	-19	40	65	28	11	-7	-27	31	35	61	44	25	41	81	113	64	110	65	79	164	90	77	79	107	78	84	88	90	128
Interconnection		93	36	33	47	81	26	72	80	54	99	49	41	18	27	63	26	50	79	36	11	71	95	57	40	23	3	61	65	90	74	55	71	111	143	93	139	95	108	193	119	108	109	137	107	114	119	121	159
System Total		15182	14737	14428	14152	13918	13734	13472	13338	13222	12994	12945	13022	13182	13371	13356	13272	13735	14618	15342	15856	16143	16542	16764	16830	16665	16620	16522	16988	17198	17566	17540	17715	17751	17718	17357	16754	16329	16063	16459	17202	17233	17247	17042	16969	16610	16551	16401	15952
SRev ST-Coal		123	139	194	193	207	218	219	244	261	307	341	337	307	256	255	235	231	196	216	213	156	153	151	154	166	166	121	172	182	132	132	132	152	157	158	168	114	101	97	78	83	87	91	87	86	91	81	82
SRev CCGT-Gas		579	696	430	1299	1477	1579	1741	1792	1921	1970	1919	1900	1918	1813	1784	1887	1604	1059	569	382	286	323	284	390	504	352	679	425	568	366	370	524	242	453	335	787	1252	1830	1421	635	353	300	387	599	630	565	524	818
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	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	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		541	915	915	1002	1002	1002	1002	1002	1002	1002	1002	1002	1002	1002	901	901	901	901	901	901	727	626	601	688	688	674	775	313	313	313	313	126	0	126	126	126	374	374	187	0	0	0	0	0	0	0	0	0
Hydro		454	152	124	116	119	56	116	118	121	124	114	48	68	105	120	172	124	165	105	223	423	405	359	375	478	302	330	360	619	529	539	619	802	751	603	615	392	412	509	640	694	728	819	729	805	519	668	668
S.Reserve Total		1697	1902	1663	2610	2805	2855	3078	3156	3305	3403	3376	3287	3295	3176	3161	3296	2860	2321	1791	1719	1592	1507	1395	1607	1836	1494	1905	1270	1682	1340	1354	1401	1196	1487	1222	1696	2132	2717	2214	1353	1130	1115	1297	1415	1521	1175	1273	1568