

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,533 MW
Distillate	0 MW
Total TNB	2,533 MW
Total IPP	15,740 MW
Total Co-Gen	0 MW
Total System	21,116 MW

Generation Mix

Type	MWh	Percentage
Hydro	11,119	3.02 %
Gas	44,579	12.10 %
Total TNB	55,698	15.11 %
ST-Coal	202,583	54.97 %
LSS	2,758	0.75 %
Gas	106,948	29.02 %
Total IPP	312,289	84.73 %
Co-Gen	1,269	0.34 %
Total Co-Gen	1,269	0.34 %
Total Generation	369,256	100.19 %
PLTG	-15	0.00 %
HVDC	722	0.20 %
Interconnection	707	0.19 %
Net Energy	368,549	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	18,559 MW
TNB Generation	2,945 MW
IPP Generation	14,329 MW
Spinning Reserve	1,231 MW
Maximum Demand	17,295 MW
Net Energy	368,549 MWH
Load Factor	88.79 %

Fuel Cost

Total Cost:	77,808,741.88 RM
Cost per Unit	21.07 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	157
Hydro	391
Syncon	779
Thermal	308
Total	1,635

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	26

Gas Usage

Station	(mmcsfd)
GLGR	58
PGPS	31
TJGS	110

Total TNB 199

CBPS	54
NPRI	158
PGLA	112
PLPS	93

Total IPP 418

Total Gas 617

Total Gas Required 617

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	14913	14352	13833	13519	13110	12879	12853	12978	13498	15300	16078	16671	16680	16444	16853	17261	17284	16832	15930	16105	16758	16402	15884	15559

Prepared By: -Select Name-

Checked By: -Select Name-

 Printed on: Monday, January 3, 2022 12:44:56 PM 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	606	607	503	503	451	453	454	410	405	361	354	354	357	355	356	355	462	604	654	657	656	698	698	697	698	698	657	696	697	695	695	696	697	694	696	694	696	694	655	654	697	698	694	696	695	695	655	656	655	656	605
JMAH	U002	606	606	504	504	455	454	454	403	404	358	355	354	354	354	354	354	457	608	655	653	656	695	695	692	697	697	657	696	694	697	697	698	695	698	694	692	655	655	695	697	695	693	700	656	655	652	656	599			
JMHE	U001	980	897	899	902	899	849	848	825	819	822	819	822	821	819	816	823	822	899	970	971	970	975	979	974	976	972	975	977	978	976	974	978	977	978	975	973	977	970	976	973	973	974	976	973	969	974	973	970			
JMHE	U002	974	900	900	900	897	850	849	819	819	820	819	822	818	819	819	822	822	899	959	978	978	979	978	978	980	976	976	980	982	981	979	975	974	973	974	973	968	975	972	972	974	976	974	970	974	973	972				
JMJG	U001	584	589	586	587	589	587	591	587	591	582	510	508	506	508	507	509	509	504	536	626	668	672	672	668	671	668	673	670	670	671	672	667	670	673	673	674	672	680	658	673	671	667	670	672	668	672	668	669			
JMJG	U002	588	526	431	399	366	360	353	366	283	188	187	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
JMJG	U003	580	584	581	581	581	578	581	581	582	579	523	525	524	524	525	512	511	512	556	631	667	670	671	672	673	663	670	666	669	664	669	668	674	667	664	668	672	667	669	662	672	662	678	673	657	667	674	672			
JMJG	U004	975	937	899	899	900	855	849	840	819	817	819	820	818	817	816	819	820	834	867	904	914	966	976	976	977	976	974	973	975	972	972	972	974	970	972	973	976	974	976	978	977	977	976	975	977	976	974				
JMJG	U005	895	892	892	888	900	848	852	820	817	818	818	822	821	823	819	823	822	889	887	891	889	889	889	890	887	886	890	894	895	888	887	890	890	890	887	892	891	890	891	889	890	894	892	888	889	892	891				
PKLG	U003	155	156	158	158	157	157	155	159	157	155	156	158	157	157	156	157	156	157	156	159	259	282	276	272	206	207	253	255	276	278	278	279	251	162	151	153	188	267	279	253	185	252	254	208	170	152					
PKLG	U006	276	267	271	267	268	269	269	269	270	267	269	269	269	267	260	269	268	265	269	267	267	280	350	437	424	376	358	401	400	435	447	450	450	445	419	341	275	267	300	381	441	423	395	406	405	368	358	330			
TBIN	U001	603	603	549	501	501	501	450	450	401	401	401	401	352	352	352	351	405	504	599	601	598	653	649	648	658	648	649	691	690	689	688	690	688	688	689	628	598	602	652	689	690	690	690	649	649	649	597				
TBIN	U002	652	652	550	502	502	502	453	453	403	403	403	403	354	354	354	353	405	504	593	606	604	655	650	653	695	650	652	695	691	684	692	692	690	696	632	602	602	653	692	689	692	690	651	655	649	652	603				
TBIN	U003	606	606	549	500	500	500	451	451	399	399	399	399	352	352	352	353	408	506	606	605	604	652	651	652	677	654	654	693	696	693	694	696	692	693	693	634	602	602	655	696	691	691	690	652	650	651	651	601			
Total ST-Coal		9080	8822	8272	8091	7967	7763	7611	7429	7171	6972	6831	6844	6505	6503	6500	6867	7685	8307	8547	8628	8944	9110	9212	9288	9071	8988	9281	9291	9328	9345	9347	9350	9344	9283	8931	8697	8687	8982	9267	9334	9282	9216	9081	9051	8985	8948	8635				
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					
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					
CBPS	BLK2	346	358	373	330	359	373	357	308	370	313	354	319	325	338	317	352	301	313	363	363	365	365	365	363	365	357	359	352	366	359	356	363	363	363	363	366	370	356	365	369	357	359	355	364	338	368	349	344			
EMPP	BLK1	759	760	759	759	760	761	760	760	760	763	765	767	770	768	768	767	768	764	763	761	760	759	759	761	761	764	767	765	761	747	747	753	753	754	754	758	759	761	765	766	764	763	764	765	766	766	766				
EMPP	BLK3	0	0	0	0	0	0	0	0	0	196	197	375	550	750	761	760	760	758	757	755	754	752	751	749	751	753	753	757	761	758	753	745	746	749	748	750	750	751	755	755	759	759	760	753	506	506	506	507			
GLGR	GT01	101	102	102	102	102	102	103	104	101	103	101	102	102	102	102	102	102	101	101	101	102	101	101	102	101	102	101	102	102	101	102	102	102	100	101	101	102	101	100	100	101	100	100	100	102	101	102				
GLGR	GT02	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	105	106	105	106	105	106	106	106	105	105	105	106	105	106	105	105	105	105	105	105	105	106	105	105	106	105	106	106	106	105					
GLGR	ST1C	94	93	94	93	94	93	93	94	93	93	93	93	93	93	93	93	93	93	93	93	94	94	94	94	94	94	95	95	96	94	94	95	94	95	95	95	94	95	94	95	94	94	94	94	94						
NPRI	BLK1	525	523	535	524	525	527	525	524	526	524	523	484	499	499	479	488	442	479	518	523	527	527	524	526	520	519	520	511	515	517	517	521	520	521	520	519	518	519	523	522	516	520	522	527	530	532	524	520			
NPRI	BLK2	527	529	536	528	528	531	530	518	529	527	527	529	523	527	526	528	499	527	501	506	524	527	522	527	518	509	511	502	518	514	510	520	517	518	516	520	520	511	518	518	508	509	512	516	517	523	518	524			
PCGP	PGRG	602	603	615	600	601	606	605	604	603	603	600	602	598	604	600	600	592	604	593	599	597	599	593	602	596	591	592	583	602	598	592	601	602	602	600	603	607	596	602	602	590	591	596	603	601	609	604	603			
PGLA	GT11	217	217	220	216	217	218	217	217	217	218	183	169	169	168	213	216	214	215	214	216	214	215	215	213	213	211	216	215	214	216	214	215	215	216	215	214	217	217	214	213	215	216	217	217	217	217					
PGLA	GT12	221	221	225	221	222	221	221	221	221	221	220	221	187	173	172	173	217	220	217	219	218	220	218	220	219	216	217	215	221	218	220	219	219	219	219	221	218	221	220	218	219	221	222	222	221	222					
PGLA	ST10	239	239	242	238	238	240	239	238	239	239	238	223	204	205	237	236	236	239	241	241	240	237	239	237	234	235	235	235	237	240	240	241	242	242	238	238	238	236	238	238	238	238	238	238	238						
PGPS	GT3A	0	0	0	0	0	0	0	0	0	70	70	70	69	69	74	72	72	70	71	71	94	93	93	96	96	96	96	95	95	95	96	96	95	96	95	96	95	95	95	95	95	95	94	95	94	70	69				
PGPS	GT3B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	74	75	94	94	95	96	97	96	96	97	96	96	97	96	97	96	97	96	95	12	0	0	0	0	0	0	0	0	0	0				
PGPS	ST3C	0	0	0	0	0	0	0	0	0	0	0	0	0	6	29	30	29	29	44	88	91	91	93	94	94	94	93	93	93	93	93	93	93	93	92																

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	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	0	0	0	0	0	63	-1	-1	-1	-1	-1	-1	-1	-1
HTRG	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
HTRG	HY03	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3
HTRG	HY04	3	3	3	3	3	3	3	3	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3
KNRG	HY01	22	22	23	22	22	23	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21	21	21
KNRG	HY02	23	23	24	23	23	23	23	23	23	23	23	23	23	23	22	22	23	35	35	35	35	22	23	23
KNRG	HY03	21	21	22	21	22	22	22	21	21	21	21	21	21	21	21	21	21	20	21	21	21	21	21	21
KNYR	HY01	67	65	94	65	65	68	65	63	83	65	65	63	63	63	63	63	65	65	64	0	0	0	0	0
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	58	59	59	60	61	60	60	57	59	58
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	58	50	-1	53	53	54	-1
KNYR	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LPIA	HY01	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
LPIA	HY02	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	21	21	21	21
MNOR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	4	4	5
PGAU	HY01	-1	-1	-1	-1	-1	-1	18	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	154	21	21	-1	-1	-1
PGAU	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	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	48	48	48	30	30
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	50	50	50	50
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	50	50	50	50
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	17	17
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	25	25	25	17
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	17	17
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	17	17	0	0	0
TMGR	HY01	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	35	34	35	35	35	35	35	34	-1	32	35	35	34
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	43	72	84	41	66	84	84	45	84	49	57	51	55	42	42	41	39	41	41	41	41	41	40	40
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	89	-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
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		270	297	343	301	294	315	312	288	330	275	284	276	292	278	277	278	272	391	371	371	372	475	470	473
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	2	7	9	8	13	14	16	26	24	28	23
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	10	11	20	28	29	28	31	31	25
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	12	14	25	13	12	24	9	23	16
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	11	20	25	26	36	24	15	4	19
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	7	9	19	24	27	19	8	10	14
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	8	10	32	19	29	47	46	50	17
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	3	7	15	8	9	15	15	13
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	11	20	24	31	35	18	12	25	25
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	14	6	15	19	22	24	45	43	44	45
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	8	15	19	22	25	26	24	25	27
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	12	2	10	19	16	9	32	21	29
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	8	9	32	38	42	42	52	52	52

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			
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	13	23	29	32	29	30	18	37	29	29	22	10	13	16	36	8	11	11	7	3	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	1	1	3	4	6	14	4	13	15	19	10	12	13	19	14	7	5	3	4	2	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	0	0	2	11	7	4	9	15	25	28	26	29	30	20	19	13	19	22	8	20	15	7	2	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	4	42	106	142	200	302	332	336	386	373	419	440	395	382	281	304	246	285	196	145	112	64	24	2	1	0	0	0	0	0	0	0	0	0	0
PCUF	CUFG	28	27	28	28	28	29	29	28	29	28	29	28	29	29	29	28	28	28	28	28	29	27	28	29	28	29	28	28	29	28	28	29	28	28	29	28	29	28	28	29	28	29	30	28	29	29	29			
PCUF	CUFK	25	24	24	26	25	25	24	26	23	24	22	25	24	25	24	25	26	24	25	26	24	23	24	24	24	24	26	25	28	25	23	25	26	23	25	26	25	26	25	24	25	26	24	29	24	21	21	25	25	
Total Co-Gen		53	51	52	54	53	54	53	54	52	53	50	53	53	54	53	54	54	52	53	52	53	55	53	50	52	53	52	55	53	53	51	54	54	51	53	53	53	54	54	54	53	53	54	54	49	50	54	54		
Total Gen		14955	14739	14309	13984	13879	13721	13546	13270	13153	13044	12933	13058	12840	13008	12989	13047	13496	14591	15294	15759	16089	16541	16704	16850	16728	16534	16478	16769	16866	17166	17258	17328	17345	17273	16937	16411	15948	15815	16168	16832	16822	16557	16404	16229	15926	15799	15575	15248		
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	0	0	
TIE-HVDC		29	31	31	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	29	29	31	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	30	30	30	30	30	30	31			
TIE-PLTG		13	-9	-74	19	17	-19	-3	-26	14	-15	24	12	-42	-20	-19	-21	-32	-5	-35	-29	-18	27	2	33	17	-19	3	45	-17	-39	-33	3	31	25	74	46	-12	20	30	33	29	33	7	-28	-48	12	-21	-15	29	
Interconnection		42	22	-43	49	46	11	27	3	43	16	54	42	-13	10	-2	24	-6	1	11	57	33	63	48	11	34	75	13	-9	-3	33	61	55	105	76	18	50	63	59	64	37	2	-18	42	10	16	59				
System Total		14913	14717	14352	13935	13833	13710	13519	13267	13110	13028	12879	13016	12853	12998	12978	13037	13498	14567	15300	16078	16484	16671	16787	16680	16523	16444	16694	16853	17175	17261	17295	17284	17218	16832	16335	15930	15765	16105	16773	16758	16520	16247	15884	15789	15559	15189				
SRev ST-Coal		684	878	928	931	922	973	968	1000	1004	1002	1003	1000	932	929	930	929	930	863	687	648	565	348	345	295	219	364	429	225	215	179	162	160	157	163	221	423	494	502	358	220	173	224	216	424	456	443	433	554		
SRev CCGT-Gas		128	112	53	143	117	92	111	182	157	207	191	252	324	430	456	405	448	347	281	241	136	130	132	134	159	186	205	249	146	139	182	129	132	120	130	123	244	191	127	114	191	173	167	128	144	102	207	223		
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	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	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	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	0	
Syncon		1029	1029	1029	1029	1029	1029	878	1029	1029	1029	1029	1029	1029	1029	1029	903	903	689	840	841	941	754	941	941	941	941	1029	856	1007	779	590	540	439	439	590	878	966	966	966	590	591	691	815	1067	1067	1155	1155	1155		
Hydro		176	149	103	179	152	131	134	309	116	171	162	170	154	168	169	169	175	395	264	263	262	371	314	316	228	228	178	424	286	356	443	402	524	521	586	446	369	374	363	374	425	559	527	347	351	170	160	172		
S.Reserve Total		2017	2168	2113	2282	2220	2225	2242	2369	2306	2409	2385	2451	2439	2556	2584	2406	2456	2294	2072	1993	1904	1603	1732	1686	1647	1819	1941	1754	1654	1453	1377	1231	1252	1243	1527	1870	2073	2033	1814	1298	1380	1647	1725	1966	2018	1870	1955	2104		