

Daily System Generation Summary on Thursday

Thursday, January 13, 2022

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,542 MW
Distillate	0 MW
Total TNB	2,542 MW
Total IPP	18,068 MW
Total Co-Gen	0 MW
Total System	23,470 MW

Generation Mix

Type	MWh	Percentage
Hydro	21,496	5.90 %
Gas	48,194	13.22 %
Total TNB	69,690	19.11 %
ST-Coal	198,287	54.39 %
ST-Gas	712	0.20 %
ST-Oil	3,736	1.02 %
LSS	3,694	1.01 %
Gas	86,692	23.78 %
Total IPP	293,121	80.40 %
Co-Gen	1,286	0.35 %
Total Co-Gen	1,286	0.35 %
Total Generation	364,097	99.87 %
PLTG	-1,207	-0.33 %
HVDC	718	0.20 %
Interconnection	-489	-0.13 %
Net Energy	364,586	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	18,447 MW
TNB Generation	4,141 MW
IPP Generation	12,960 MW
Spinning Reserve	1,293 MW
Maximum Demand	17,152 MW
Net Energy	364,586 MWH
Load Factor	88.57 %

Fuel Cost

Total Cost:	88,012,653.19 RM
Cost per Unit	24.17 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	302
Hydro	468
Syncon	391
Thermal	631
Total	1,792

Time	Weather	Temperature
Afternoon	Cloudy	35
Morning	Cloudy	26

Gas Usage

Station	(mmscfd)
GLGR	36
TJGS	113
Total TNB	149
CBPS	54
NPRI	152
PGLA	111
SKSP	56
PKLG	7
Total IPP	381
Total Gas	530
Total Gas Required	566

Alternate Fuel Usage

Station	(mmscfd)
PKLG	36
Total	36

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	15051	14211	13699	13272	13090	12740	12825	13020	13278	14750	15597	16038	15948	15716	16499	16947	17152	16973	15941	15851	16947	16774	16184	15756

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, February 3, 2022 5:14:39 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	696	647	555	504	504	457	407	402	355	304	305	305	354	405	402	403	404	429	556	606	606	604	607	604	607	604	607	499	405	403	404	448	504	529	554	555	554	556	519	507	505	562	697	695	698	695	604	556	502	506
JMAH	U002	694	644	554	504	501	452	402	397	355	302	304	303	355	407	403	404	403	417	587	603	605	604	607	605	610	502	405	404	404	433	507	523	554	557	557	555	529	506	507	541	689	685	697	694	607	556	505	504		
JMHE	U001	750	751	747	745	750	750	750	751	752	751	748	751	751	751	751	753	751	751	754	752	750	753	748	753	748	750	750	748	751	746	748	753	751	748	749	749	751	750	753	747	752	747	752	748	753	750	750	752		
JMHE	U002	750	751	747	747	752	751	753	749	750	753	751	751	750	751	750	750	752	751	748	749	749	752	748	749	752	750	747	750	751	751	752	751	750	752	750	752	750	751	748	749	751	748	749	751	752	750	752	750		
JMJG	U001	672	672	672	672	641	638	638	638	638	600	600	600	600	600	649	649	649	671	671	671	671	671	671	671	671	671	671	671	671	671	669	671	671	670	671	672	671	671	671	677	670	673	673	673	672	678	671	672		
JMJG	U002	673	673	673	673	645	634	634	634	634	600	600	600	600	600	645	645	645	667	667	672	672	672	672	672	672	672	672	672	672	681	667	670	670	668	668	676	670	667	671	665	666	667	666	668	669	661	673	668	666	
JMJG	U004	799	799	799	799	805	757	757	757	757	757	757	757	757	757	760	760	760	756	756	758	758	758	758	758	758	758	758	758	758	757	758	759	759	759	758	758	758	758	760	759	760	758	758	759	762	761	760	759	758	
JMJG	U005	801	801	801	801	800	800	800	800	800	798	798	798	798	798	798	800	800	799	799	799	799	799	799	799	799	799	799	801	801	801	799	804	796	800	791	801	798	801	846	855	800	801	800	801	798	800				
PKLG	U003	279	277	279	280	282	279	278	278	277	277	278	279	278	279	278	279	276	279	278	279	280	278	279	278	278	273	278	278	273	278	277	275	276	280	275	279	276	278	274	273	275	272	276	275	276	276	279	280	281	255
PKLG	U004	280	278	278	276	279	279	277	278	277	276	278	276	275	277	276	280	278	278	277	281	277	277	282	277	272	271	266	269	277	274	280	275	276	280	280	280	284	283	278	276	278	275	276	281	277	278	276	236		
PKLG	U006	449	448	448	448	449	448	448	447	449	448	446	450	449	449	446	450	452	447	450	446	449	450	446	448	449	449	449	448	446	449	448	447	451	449	448	449	448	449	447	449	449	450	448	448	449	448	448			
TBIN	U001	687	687	648	619	579	579	550	550	550	449	449	449	480	500	500	500	500	611	672	672	690	690	690	690	690	592	549	550	692	690	688	689	688	690	690	689	689	690	690	689	692	689	689	689	689	628	597	553	501	
TBIN	U002	691	691	659	622	583	583	556	553	553	468	468	454	469	506	506	506	506	617	666	666	691	691	691	691	691	615	548	543	692	691	689	689	692	690	691	689	693	691	692	693	691	690	692	692	632	602	551	488		
TBIN	U003	696	696	654	622	582	582	552	556	556	453	453	454	468	501	501	501	501	611	669	669	690	690	690	690	690	622	551	557	665	693	687	690	689	690	692	690	692	690	695	687	689	690	690	689	689	628	602	552	485	
Total ST-Coal		8917	8815	8514	8312	8152	7989	7802	7790	7704	7236	7234	7226	7385	7580	7668	7677	7680	8085	8556	8625	8686	8688	8691	8687	8678	8227	7848	7851	8269	8344	8479	8522	8582	8577	8595	8572	8525	8500	8477	8574	8906	8898	8870	8868	8500	8334	8066	7821		
PKLG	U002	0	0	0	0	0	0	0	0	0	0	0	0	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	252	260	261	261	261	261	261	238	228	205	205	205	205	204	204	225	235	236	246	254	260	
Total ST-Oil		0	0	0	0	0	0	0	0	0	0	0	0	151	151	151	151	151	151	151	151	151	151	151	151	171	224	252	260	261	261	261	261	261	261	238	228	205	205	205	205	204	204	225	235	236	246	254	260		
PKLG	U002	60	79	100	139	146	146	146	151	152	150	156	0	0	0	0	0	0	0	0	0	0	0	0	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		60	79	100	139	146	146	146	151	152	150	156	0	0	0	0	0	0	0	0	0	0	0	0	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	369	365	365	367	366	364	363	352	357	370	367	364	363	362	356	361	370	367	367	369	370	365	365	367	367	356	363	364	364	366	366	365	365	364	365	360	358	354	363	371	360	359	364	367	369	365	364	360		
EMPP	BLK1	710	709	705	707	712	710	709	694	703	714	710	710	710	707	694	711	712	717	711	710	710	711	709	711	704	695	710	712	710	719	714	722	709	711	710	698	704	699	708	723	706	706	710	709	711	710	710	706		
EMPP	BLK2	551	320	328	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
GLGR	GT01	109	108	109	107	110	110	107	108	108	110	109	108	108	110	109	109	109	109	108	107	109	108	108	107	102	89	108	108	108	107	107	107	107	106	106	108	106	107	107	108	106	107	107	107	107	107	107	106		
GLGR	GT02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
GLGR	ST1C	45	45	45	44	45	44	44	44	44	45	44	45	45	43	44	45	44	45	44	45	45	44	44	45	45	38	95	97	97	97	97	97	97	96	96	95	95	44	44	45	44	45	45	45	44	45	45			
NPRI	BLK1	520	519	510	515	520	520	520	502	511	521	523	521	517	519	502	522	525	527	520	521	521	520	520	521	510	505	517	521	521	518	518	515	517	518	517	505	512	506	511	526	512	512	517	518	518	517	517	509		
NPRI	BLK2	519	520	511	514	520	519	518	503	511	519	521	519	515	518	504	520	524	527	520	520	520	520	509	506	517	520	520	527	526	523	520	525	519	506	512	507	516	529	514	513	516	519	519	519	519	517	509			
PCGP	PGRG	261	261	262	261	261	260	261	261	261	262	260	264	262	260	260	306	609	604	603	601	599	602	603	589	583	599	603	602	616	612	622	602	607	601	584	592	586	598	623	595	593	600	602	604	601	599	589			
PGLA	GT11	219	219	216	216	218	218	219	211	216	219	219	218	218	213	199	201	219	218	217	217	215	216	216	212	203	214	216	214	218	217	219	214	216	215	210	207	206	214	219	210	214	215	216	217	217	216	214			
PGLA	GT12	223	223	219	221	223	223	223	216	220	222	223	223	221	223	217	203	205	223	221	221	220	220	220	219	217	220	218	220	218	221	220	223	218	220	218	215	223	222	219	224	219	217	219	220	221	221	220	217		
PGLA	ST10	238	237	238	239	238	237	237	232	233	237	238	238	237	237	234	222	223	237	237																															

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
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	-1	-1	-1	-1	-1	-1	-1
HTRG	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
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	HY01	21	21	21	33	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
KNRG	HY02	24	24	24	35	22	22	22	21	21	22	22	22	22	22	22	22	22	22	22	21	21	21	22	21
KNRG	HY03	23	23	22	34	21	21	21	20	21	22	21	22	22	22	22	22	21	22	21	20	21	21	22	21
KNYR	HY01	63	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	98	98	98	98	96	98	100	100	101	99
KNYR	HY02	-1	-1	-1	101	35	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	97	99	101	102	104	104	101	101	101
KNYR	HY03	57	58	0	0	0	0	0	0	0	0	0	0	0	0	0	56	98	100	100	101	101	101	101	101
KNYR	HY04	62	99	60	61	63	64	72	56	59	88	65	77	59	81	58	57	99	102	101	99	100	93	99	99
LPIA	HY01	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	22	22	22
LPIA	HY02	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	22	22	22
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	-1	-1	-1	14	-1	-1	-1	-1	-1	-1	16	18	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1
PGAU	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	20	21	19	20	80	80
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	21	21	21	80	80	81
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	48	48	47
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	50	50	50
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	50	50	50
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25
TMGR	HY01	34	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	28	83	84	83	84	83	84	83	83
TMGR	HY02	44	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	89	90	91	89	85	88	89	89	90	89
TMGR	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
TMGR	HY04	42	85	41	41	41	49	37	39	71	42	51	42	61	37	42	81	86	85	64	85	42	42	41	40
UJLI	HY01	-1	-1	-1	90	-1	-1	-1	-1	-1	-1	-1	91	-1	-1	-1	-1	-1	-1	-1	-1	-1	92	92	92
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	91	94	92	86	84	92	93	94	98
UPIA	HY01	5	5	5	5	5	5	5	5	5	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5
UPIA	HY02	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5
Total Hydro		512	449	307	536	358	308	324	292	299	364	310	332	332	421	292	267	350	443	441	418	438	708	738	717
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	5	10	4	12	17	20	19	21	23	23
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	12	17	20	25	28	30	32	31	32
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	10	15	20	24	28	31	32	32	32
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10	17	25	29	34	39	42	44	46	47
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	10	14	17	18	26	25	29	29	30
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	16	22	30	35	40	44	47	49	46
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	12	15	21	26	27	31	32	32
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	11	17	23	31	35	40	43	46	47
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15	21	27	32	37	41	43	46	46
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	10	15	19	23	26	30	30	30	30
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	11	5	25	28	27	26	46	51	49	46
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	14	21	27	32	35	37	42	43	44

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			
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	10	16	15	14	14	21	10	24	25	18	18	28	6	21	16	17	12	10	5	2	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	4	13	15	16	30	30	30	30	30	30	30	30	30	30	30	30	30	30	22	10	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	1	33	103	164	241	317	362	412	464	486	512	510	496	488	502	465	447	396	339	280	189	122	53	12	0	0	0	0	0	0	0	0	0	0	0
PCUF	CUFG	28	28	28	29	29	31	27	29	29	29	27	28	28	28	27	27	29	29	28	27	28	27	29	28	28	28	28	27	29	28	29	28	28	29	28	29	28	29	29	29	29	28	28	27	28	30	28	28		
PCUF	CUFK	27	23	25	25	27	27	26	26	25	26	26	24	24	24	26	25	24	25	25	24	25	26	25	25	25	26	25	26	27	26	26	26	25	25	25	25	25	24	27	25	25	27	25	26	26	26	25	25		
Total Co-Gen		55	51	53	54	56	58	53	54	54	55	53	52	52	52	53	52	53	54	53	53	53	54	53	53	54	53	53	56	54	55	54	53	54	53	54	53	54	53	56	54	55	53	53	54	56	53	53			
Total Gen		15055	14657	14219	13977	13664	13446	13267	13131	13102	12767	12713	12714	12855	13144	13010	12952	13224	14159	14658	15157	15511	15845	16022	16099	15919	15757	15676	15983	16481	16797	16875	17008	17154	17114	16981	16501	15971	15689	15814	16581	16944	16930	16753	16434	16153	16083	15759	15321		
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		
TIE-HVDC		29	29	29	29	31	31	30	30	31	31	30	30	30	30	30	30	30	30	30	29	29	31	31	29	29	29	29	31	30	29	30	29	30	31	31	29	29	29	31	29	29	31	31	31	31	30	30	30		
TIE-PLTG		-25	-57	-21	-21	-66	-74	-35	-21	-19	-96	-57	-46	0	-10	-40	-53	-84	-114	-122	-73	-115	-63	-47	-67	-58	-66	-69	-80	-49	-72	-101	-50	-27	-48	-22	29	1	-19	-66	-67	-32	-32	-52	-60	-63	-72	-27	13		
Interconnection		4	-28	8	8	-35	-43	-5	10	12	-65	-27	-16	30	20	-10	-24	-54	-84	-92	-43	-86	-34	-16	-37	-29	-37	-40	-51	-18	-42	-72	-19	2	-17	8	60	30	10	-37	-36	-3	-3	-21	-29	-31	-42	3	44		
System Total		15051	14685	14211	13969	13699	13489	13272	13121	13090	12832	12740	12730	12825	13124	13020	12976	13278	14243	14750	15200	15597	15879	16038	16136	15948	15794	15716	16034	16499	16839	16947	17027	17152	17131	16973	16441	15941	15679	15851	16617	16947	16933	16774	16463	16184	16125	15756	15277		
SRev ST-Coal		489	593	734	807	859	880	882	881	880	909	913	911	910	907	860	856	854	819	694	688	626	625	628	631	637	816	822	820	647	637	634	637	635	632	619	635	632	621	639	630	418	428	409	404	723	705	724	858		
SRev CCGT-Gas		1230	1248	1274	1255	1239	1246	1249	1347	1298	1229	1231	1238	1256	1251	1345	1387	1233	868	898	520	325	308	214	269	477	505	288	181	183	142	161	134	195	176	202	289	255	330	237	107	223	215	207	470	421	270	205	244		
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-Oil		0	0	0	0	0	0	0	0	0	0	0	39	39	39	39	39	39	39	39	39	39	39	39	39	39	40	43	41	33	32	32	32	32	44	44	42	42	42	42	43	43	22	12	11	1	39	33			
SRev ST-Gas		40	21	0	11	4	39	39	39	39	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	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		652	1029	1029	741	777	1029	1029	1029	1029	1029	1029	1029	878	691	1029	1029	1029	1029	1029	1029	1029	653	502	653	653	464	464	464	464	338	338	187	0	0	0	313	313	313	0	0	187	187	187	374	374	374				
Hydro		337	123	165	224	366	164	148	180	173	108	162	140	315	365	243	181	98	105	107	130	110	516	637	507	542	696	545	362	433	372	374	443	431	429	471	771	734	741	719	628	615	630	639	703	809	665	437	372		
S.Reserve Total		2748	3014	3202	3038	3245	3358	3347	3476	3419	3314	3374	3357	3398	3253	3516	3492	3253	2860	2767	2406	2129	2141	2020	2099	2348	2521	2162	1868	1760	1521	1539	1433	1293	1269	1336	1739	1976	2047	1950	1407	1299	1316	1464	1776	2151	2015	1779	188		