

Daily System Generation Summary on Thursday

Thursday, November 12, 2020

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,211 MW
Distillate	0 MW
Total TNB	2,211 MW
Total IPP	17,233 MW
Total Co-Gen	0 MW
Total System	22,141 MW

Generation Mix

Type	MWh	Percentage
Hydro	17,453	4.88 %
Gas	37,182	10.39 %
Total TNB	54,635	15.26 %
ST-Coal	241,649	67.51 %
LSS	2,173	0.61 %
Gas	61,308	17.13 %
Total IPP	305,130	85.25 %
Co-Gen	203	0.06 %
Total Co-Gen	203	0.06 %
Total Generation	359,968	100.57 %
PLTG	1,300	0.36 %
HVDC	725	0.20 %
Interconnection	2,025	0.57 %
Net Energy	357,943	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:	14:30:00 Hour
Total Set On Bus	18,425 MW
TNB Generation	3,219 MW
IPP Generation	14,069 MW
Spinning Reserve	1,108 MW
Maximum Demand	17,219 MW
Net Energy	357,943 MWH
Load Factor	86.62 %

Fuel Cost

Total Cost:	46,588,529.47 RM
Cost per Unit	12.66 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	254
Hydro	492
Syncon	344
Thermal	340
Total	1,430

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	26

Gas Usage

Station	(mmcsfd)
GLGR	52
SRDG	3
TJGS	210
Total TNB	265
CBPS	53
NPRI	124
PLPS	88
SGRI	15
SKSP	50
YPKA	51
Total IPP	381
Total Gas	646
Total Gas Required	646

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	14703	14090	13540	13187	12924	12796	12766	12860	13272	15055	15925	16480	16461	16236	16812	17189	17131	16707	15824	16353	16838	16569	16018	15758

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, December 1, 2020 9:51:24 AM

(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	626	633	632	632	633	632	633	633	630	631	632	631	632	630	632	634	632	632	632	631	632	631	632	630	633	633	632	633	632	631	632	631	632	631	632	633	632	630												
JMAH	U002	372	372	373	373	373	373	371	373	370	373	374	372	372	371	374	373	374	372	373	376	372	374	409	424	424	422	423	421	424	422	423	424	424	419	422	425	422	423	423	425										
JMHE	U001	977	980	895	906	773	778	780	779	780	780	783	782	776	778	780	780	780	976	981	980	980	974	971	975	975	976	977	973	980	980	982	979	979	979	980	975	975	979	977	976	976	977	973	977						
JMHE	U002	979	981	898	904	774	779	781	781	780	779	779	783	776	778	780	781	778	956	978	980	982	979	975	984	979	976	977	984	981	977	982	979	983	983	980	981	988	981	979	986	979	980	983	981	976	980				
JMJG	U002	672	681	672	668	677	674	675	675	672	673	668	674	676	680	670	671	675	673	677	677	668	668	674	670	677	681	671	673	672	678	672	673	673	677	672	668	660	670	671	673	673	665	677							
JMJG	U003	667	668	668	663	670	668	671	668	670	670	669	662	672	665	671	668	667	669	668	667	670	667	671	662	667	668	666	668	670	667	663	668	666	666	670	674	667	668	668	673	667	668	670	666	669	663	666	668		
JMJG	U004	933	934	906	853	823	793	763	735	709	708	708	708	709	709	711	711	708	740	796	857	914	971	977	971	971	973	970	972	969	971	970	968	971	970	968	968	971	968	973	970	972	971	972	968	970	969	972	972		
JMJG	U005	807	807	809	808	809	809	721	698	700	698	702	703	698	700	701	701	701	752	798	801	796	796	791	790	796	796	794	798	794	797	796	796	796	795	796	796	796	794	791	793	794	794	792	791	793	793	793			
PKLG	U003	281	284	284	283	282	282	280	281	281	280	281	283	280	282	281	282	281	280	280	280	281	279	279	281	279	276	277	278	277	277	273	280	280	280	281	282	281	282	282	281	276	281	279	281	281	284	282	283		
PKLG	U005	468	466	470	468	468	468	466	467	466	466	466	467	468	468	466	465	470	469	467	468	469	465	466	466	466	466	466	466	469	467	469	467	469	467	467	467	466	467	466	468	466	462	464	466	470					
PKLG	U006	448	447	448	450	447	449	445	449	449	449	449	449	447	448	448	449	448	450	448	447	449	449	447	449	447	449	447	449	447	449	448	446	449	448	447	448	449	448	447	446	448	446	448	447	444	449				
TBIN	U001	689	690	691	687	690	689	689	690	692	690	691	689	689	689	691	690	690	690	690	689	687	687	690	689	690	689	689	689	691	691	690	690	690	690	689	685	688	689	689	690	689	690	688	689	690	689	689			
TBIN	U002	701	690	695	686	691	694	692	690	694	690	691	691	693	690	692	691	690	696	691	691	689	693	690	693	692	693	691	689	694	689	695	693	691	693	692	692	691	690	689	691	692	692	690	687	690	693	673	695		
TBIN	U003	688	689	697	687	690	689	690	693	691	686	689	690	694	691	687	690	689	690	687	692	690	689	693	689	689	687	689	691	694	689	694	689	694	689	684	692	689	686	696	691	689	687	687	690	691	690	688	690	690	693
TBIN	U004	983	982	937	905	856	783	783	783	782	783	783	783	783	781	782	782	783	865	954	983	982	983	982	984	983	983	982	983	984	983	983	983	984	982	983	982	978	975	976	977	977	978	982	978	983	982	981	983	983	
Total ST-Coal		10291	10304	10075	9973	9656	9560	9445	9395	9366	9356	9365	9367	9367	9364	9365	9366	9368	9910	10120	10218	10260	10308	10346	10360	10369	10363	10345	10367	10369	10421	10419	10358	10365	10371	10375	10374	10359	10361	10370	10357	10345	10373	10366	10347	10357	10360	10327	10384		
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	0	
CBPS	BLK2	351	360	357	358	358	359	362	355	362	298	304	299	300	300	302	240	226	270	315	359	376	376	333	252	282	325	363	359	363	364	362	357	356	362	360	328	365	366	363	364	362	361	364	362	366	365	354	363		
GLGR	GT01	71	67	67	69	68	67	69	67	67	66	68	68	67	68	68	68	69	102	101	100	101	100	99	100	99	83	99	101	101	100	99	101	101	100	99	101	101	84	102	101	100	102	101	100	99	101	100	67		
GLGR	GT02	71	68	68	67	68	68	68	68	68	68	68	68	68	67	68	68	67	103	100	101	100	100	100	100	100	83	100	100	100	100	99	100	100	100	100	99	83	101	100	100	100	100	100	100	100	98	67			
GLGR	ST1C	80	72	72	73	72	73	72	72	72	72	72	72	72	72	72	72	72	88	91	91	91	91	91	91	91	84	91	91	91	91	91	91	91	91	91	91	85	90	91	91	91	91	91	91	73					
NPRI	BLK1	503	501	510	510	506	496	505	500	504	499	505	504	494	502	500	494	505	491	503	505	503	511	500	517	497	503	504	505	508	506	505	505	499	505	505	505	502	504	505	507	502	497	513	509	511	511	509	503	509	
NPRI	BLK2	0	0	0	0	0	0	121	120	121	121	131	132	193	229	236	270	299	300	299	301	301	298	299	300	300	300	300	299	301	325	459	542	542	254	538	274	301	411	244	542	514	513	515	515	513	517	515			
PCGP	PGRG	594	596	599	600	597	596	603	600	602	600	602	602	595	600	600	596	603	593	600	604	603	601	599	618	596	598	601	601	608	602	604	603	599	601	602	603	603	609	607	603	601	608	604	605	603	602	591	601		
PLPS	GT11	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	134	139	143	113	140	142	138	142	139	143	122	117	115	117	126	140	115	135	134	133	134	134	137	136	135	130	135		
PLPS	GT12	115	111	119	64	60	60	63	61	65	64	63	65	60	64	63	59	64	125	129	128	129	137	143	151	117	145	147	142	145	143	147	126	121	119	121	131	146	124	139	138	139	139	139	142	140	137	136	138		
PLPS	GT13	109	99	108	104	57	56	60	58	59	60	60	59	57	59	61	56	59	114	119	116	116	129	134	142	108	137	137	134	139	135	138	118	114	112	114	121	137	67	129	131	130	130	131	133	132	131	128	129		
PLPS	ST18	196	133	131	119	90	89	88	87	87	88	88	85	87	88	85	86	87	136	139	137	138	208	214	213	199	215	213	208	214	211	214	201	197	204	206	203	214	183	209	209	210	210	210	210	210	209	209			
SGRI	GT11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	30	30	70	70	70	70	0	0	0					
SGRI	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
SGRI	ST14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	67	71	67	71	68	68	67	66	58	47	85	73	115	101	111	66	0	0	0	0		
SKSP	BLK1	218	220	242	218	314	219	248	217	284	269	238	226	226	257	218	22																																		

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	
BSIA	HY03	24	12	22	12	22	21	22	22	22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23	
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	10	9	10	10	10	9	10	9	9	10	10	9	10	10	9	9	9	9	9	9	9	9	9	9	
CEND	HY04	8	8	8	8	8	8	8	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	125	125	124	124	124	125	125	125	125	
HTRG	HY02	63	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	122	122	122	123	122	122	123	122	123	
KNRG	HY01	36	22	36	24	36	36	0	0	0	0	0	0	22	23	36	37	37	36	37	36	37	36	37	36	
KNRG	HY02	37	24	37	24	37	37	0	0	0	0	0	0	24	23	38	38	38	38	38	38	38	38	38	38	
KNRG	HY03	36	23	36	21	36	36	38	38	38	38	38	38	38	37	37	36	36	36	36	36	36	36	36	36	
KNYR	HY01	57	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	56	59	61	99	99	99	98	99	98	99	98	99	
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	97	99	99	99	99	99	99	99	99	99	99	99	
KNYR	HY04	57	57	60	57	59	58	62	58	58	62	60	58	61	58	57	98	56	81	69	61	59	88	98	61	
LPIA	HY01	26	26	26	26	26	20	20	20	20	20	20	20	21	22	22	22	22	22	22	22	22	22	22	22	
LPIA	HY02	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	25	
MNOR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	5	5	5	5	5	3	3	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	18	-1	-1	-1	-1	-1	-1	-1	81	81	81	81	81	-1	-1	
PGAU	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	21	21	0	0	
PGAU	HY03	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	80	79	79	79	80	80	20	
PGAU	HY04	0	0	0	0	21	21	21	21	0	0	0	0	0	0	0	0	0	21	21	21	21	21	0	0	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	51	30	50	49	49	49	31	31	0	0	0	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	50	30	50	50	50	31	31	31	31	0	0	
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	31	31	31	31	0	0	
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	0	0	
SYPS	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	
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	
TMGR	HY01	30	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	33	33	33	34	33	33	-1	-1	-1	
TMGR	HY02	32	33	34	34	33	32	34	34	34	34	34	33	34	32	34	31	34	0	26	32	32	32	32	32	
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
UJLI	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	93	87	91		
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	95	149	97	97	93	97	147		
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		508	302	359	283	378	368	260	255	234	234	258	237	233	237	236	279	321	561	573	673	955	962	1182	1238	1261
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	0
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	11	7	9	10	12	16	19	
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	9	5	10	14	14	17	16	19	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	15	21	27	28	37	25	42	41	35	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	5	10	13	18	22	23	30	32	
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	5	7	9	13	11	10	16	13	30	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	7	8	10	24	21	25	27	17	14	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	16	23	30	34	38	40	25	37	45	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	6	6	12	13	21	20	22	28	
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	5	14	16	15	14	22	30	30	26	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5	8	16	19	19	18	21	28	36	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	19	29	36	41	48	51	52	56	53	
		0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	19	29	36	41	48	51	52	56	53	

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	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	12	9	11	14	16	16	13	26	17	18	37	17	17	16	23	14	19	9	4	1	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	12	40	81	125	164	188	245	259	278	319	326	321	336	329	328	312	274	240	185	156	103	56	13	1	1	0	0	0	0	0	0	0	0
PCUF	CUFG	6	6	7	7	5	5	6	6	5	6	5	5	6	5	4	6	5	7	5	5	6	5	4	5	6	6	4	5	7	4	5	5	6	6	5	6	7	6	5	5	7	6	6	6	6	5	6	
PCUF	CUFK	3	2	2	4	3	3	3	4	2	2	3	4	2	2	3	3	3	2	5	3	4	2	2	3	3	0	1	4	3	3	2	2	3	3	3	4	3	3	4	5	4	5	4	3	1	3	4	2
Total Co-Gen		9	8	9	11	8	8	9	9	8	7	8	10	7	6	9	8	10	7	10	9	9	6	7	9	8	6	7	8	8	10	6	7	8	9	9	9	9	10	10	10	9	12	10	9	7	9	9	8
Total Gen		14823	14409	14215	13917	13679	13478	13260	13149	13012	12884	12861	12831	12866	13005	12903	12928	13323	14411	15108	15551	15942	16282	16527	16609	16515	16363	16325	16669	16862	17298	17288	17326	17256	17139	16768	16261	15884	15648	16433	16931	16919	16783	16588	16403	16093	16000	15842	15611
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	31	30	30	30	30	30	30	31	31	30	30	30	30	30	30	31	31	29	29	31	31	30	30	31	31	31	31	31	29	29	31	31	31	31	31	30	30	29	29	30	30	30	30	30	29	29	
TIE-PLTG		102	105	107	64	120	99	55	60	69	76	46	45	81	118	24	48	32	80	35	29	-3	7	29	-29	35	95	70	39	30	59	81	89	106	58	42	49	40	9	61	24	61	5	0	17	55	50	65	62
Interconnection		132	136	137	94	150	129	85	90	100	107	76	75	111	148	54	78	62	110	64	59	28	38	59	1	66	126	101	70	61	90	110	119	137	88	73	79	71	39	91	53	92	36	30	47	85	79	94	92
System Total		14703	14285	14090	13834	13540	13361	13187	13071	12924	12788	12796	12767	12766	12868	12860	12861	13272	14312	15055	15503	15925	16255	16480	16620	16461	16249	16236	16610	16812	17219	17189	17218	17131	17063	16707	16194	15824	15620	16353	16889	16838	16758	16569	16367	16018	15931	15758	15529
SRev ST-Coal		283	274	493	601	608	610	690	694	696	708	701	706	690	698	705	708	697	529	411	378	383	337	334	335	326	330	349	324	326	329	324	334	328	323	317	321	334	333	325	338	345	320	330	346	337	334	367	312
SRev CCGT-Gas		624	627	650	577	590	685	831	887	973	1090	1147	1160	1161	1065	1170	1264	943	675	247	171	336	178	206	223	441	230	149	204	134	169	173	221	249	239	281	321	307	537	160	280	350	252	333	356	285	295	314	376
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 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		803	966	1117	1117	1117	1117	1117	1117	1117	966	1117	1117	1117	1117	1117	1117	1117	1117	915	915	677	576	576	87	87	87	400	789	663	476	87	238	87	87	174	174	699	976	926	663	0	87	325	476	663	663	850	1077
Hydro		287	330	122	199	125	134	114	119	119	120	247	117	121	117	118	155	113	175	193	294	133	193	698	692	669	725	427	345	405	528	683	798	822	817	662	363	153	219	306	547	672	458	266	75	301	319	231	229
S.Reserve Total		2002	2202	2387	2499	2445	2551	2757	2822	2910	3040	3066	3105	3094	3002	3115	3249	2875	2299	1766	1520	1428	1284	1325	1337	1523	1685	1714	1536	1341	1113	1418	1440	1486	1553	1434	1704	1770	2015	1454	1165	1454	1355	1405	1440	1586	1611	1762	1994