

Daily System Generation Summary on Sunday

Sunday, December 20, 2020

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,247 MW
Distillate	0 MW
Total TNB	2,247 MW
Total IPP	15,397 MW
Total Co-Gen	0 MW
Total System	20,189 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,749	4.51 %
Gas	32,063	10.53 %
Total TNB	45,812	15.04 %
ST-Coal	189,574	62.24 %
LSS	1,655	0.54 %
Gas	66,668	21.89 %
Total IPP	257,897	84.67 %
Co-Gen	168	0.06 %
Total Co-Gen	168	0.06 %
Total Generation	303,877	99.76 %
PLTG	-16	-0.01 %
HVDC	-704	-0.23 %
Interconnection	-720	-0.24 %
Net Energy	304,597	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:	19:30:00 Hour
Total Set On Bus	15,577 MW
TNB Generation	2,618 MW
IPP Generation	11,586 MW
Spinning Reserve	1,367 MW
Maximum Demand	14,298 MW
Net Energy	304,597 MWH
Load Factor	88.76 %

Fuel Cost

Total Cost:	36,718,565.60 RM
Cost per Unit	12.08 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	320
Hydro	432
Syncon	596
Thermal	315
Total	1,663

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	30
TJGS	196
Total TNB	226
CBPS	52
NPRI	136
PGLA	55
PLPS	74
SKSP	7
YPKA	43
Total IPP	365
Total Gas	591

Total Gas Required 591

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	13454	12978	12651	12087	11938	11710	11651	11602	11276	11853	12422	12708	12874	12587	12645	12808	12777	12895	12620	13267	14274	14100	13948	13597

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, January 5, 2021 10:23:15 AM Head
Grid System Operator

(Ir. Shanmugam Thoppalan)

Daily MW Generation on Sunday

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	693	692	693	693	693	694	692	692	692	693	693	694	692	694	694	686	694	690	719	691	684	683	683	687	693	691	693	692	694	692	693	693	695	693	691	692	692	693	693										
JMAH	U002	697	693	697	694	696	695	695	694	695	693	696	688	686	695	695	696	695	693	689	697	698	694	695	690	693	695	705	694	694	697	694	696	692	694	687	695	690	694	692	695	694	693	695	695	696	693	696	694	
JMHE	U001	0	136	39	128	128	128	127	128	153	314	501	506	607	599	709	760	801	800	800	801	801	799	800	842	835	833	839	834	838	838	842	840	837	839	839	841	841	918	942	940	942	936	942	938	940	943	941		
JMJG	U002	599	600	607	573	568	605	643	668	672	667	670	673	677	669	674	676	675	668	673	678	673	677	673	668	672	676	670	673	672	672	670	672	676	666	673	673	676	675	674	678	672	672	674	678	668	672	673	683	
JMJG	U003	282	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	U004	943	922	866	845	846	846	814	810	808	808	808	809	807	810	810	809	808	809	809	809	809	808	809	817	846	848	848	848	848	848	846	848	846	847	848	845	848	848	854	910	925	925	924	924	922	925	925	925	926
PKLG	U003	280	280	282	279	280	276	278	277	277	279	278	281	279	280	281	281	282	280	279	282	281	282	280	281	280	279	278	278	279	277	279	277	279	278	279	278	279	279	281	279	281	279	283	282	282				
PKLG	U004	279	280	277	279	279	280	275	278	276	280	279	280	278	276	277	278	278	280	281	278	279	277	278	279	276	278	279	277	279	277	279	277	279	278	279	279	278	279	279	278	279	279	278	279	278	280			
PKLG	U005	466	465	466	466	466	468	469	467	467	466	467	467	467	466	464	466	466	468	474	462	469	468	468	468	467	468	466	467	468	467	469	467	469	467	466	468	468	468	467	467	470	469	470	468	468	466	467		
PKLG	U006	447	451	447	449	446	449	450	448	449	451	452	447	447	448	449	448	451	448	452	449	449	448	447	449	448	447	449	448	448	448	445	449	447	448	450	449	448	449	445	445	447	447	451	449	445	449	449	447	
TBIN	U001	690	691	691	691	691	691	692	686	690	691	690	690	690	690	690	689	692	690	691	691	691	693	689	691	685	641	401	500	497	499	500	500	500	500	500	500	500	500	500	499	499	502	510	500	499	499	500	500	499
TBIN	U002	692	695	690	693	696	693	693	688	692	695	693	694	692	693	689	694	690	698	695	691	692	693	694	694	693	693	690	694	694	691	692	693	692	690	694	692	690	692	694	691	692	694	691	698	694	694	696		
TBIN	U003	692	692	694	692	691	691	689	693	692	689	692	692	692	692	692	692	690	692	691	691	692	692	690	688	691	693	692	691	691	691	695	692	690	693	688	689	692	690	691	691	691	694	693	692	691	692	694	691	
TBIN	U004	941	910	842	844	840	801	802	804	805	803	801	803	802	803	804	803	803	802	804	805	802	802	803	827	842	842	843	843	843	843	843	843	843	843	842	842	843	843	854	923	923	923	923	923	922	923	922	925	
Total ST-Coal		7701	7694	7291	7326	7320	7317	7319	7338	7364	7526	7722	7723	7818	7812	7935	7982	8024	8009	8025	8043	8033	8017	8025	8084	8125	8133	8092	7870	7939	7933	7933	7940	7943	7938	7931	7951	7947	7967	8162	8209	8204	8219	8212	8208	8200	8212	8215	8224	
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	359	351	364	363	364	359	360	365	362	358	322	223	281	303	219	228	214	220	223	227	250	329	363	369	354	361	346	361	346	361	354	361	360	360	359	361	360	360	360	367	361	361	363	363	366	360	364	360	
GLGR	GT01	110	108	109	108	108	108	108	109	108	96	95	95	95	95	95	95	96	96	96	97	96	96	95	96	95	94	94	96	95	95	95	96	96	94	96	95	96	110	109	108	109	107	109	108	109	109	108		
GLGR	ST1C	44	44	44	44	44	44	45	44	44	41	40	40	40	39	39	40	40	40	40	39	39	40	40	40	40	40	40	40	40	39	40	39	40	41	40	40	44	45	45	45	45	45	45	44	44	45	45		
NPRI	BLK1	515	506	517	511	513	514	512	518	515	515	514	515	512	514	434	322	319	495	529	502	525	483	0	0	0	0	0	0	0	0	0	0	0	320	327	302	531	530	532	530	519	516	515	515	515	516	515	515	506
NPRI	BLK2	518	505	517	512	515	514	516	520	516	517	516	517	515	517	512	414	305	318	512	522	511	511	513	511	501	502	488	512	489	509	494	512	511	511	502	396	397	502	519	520	517	516	517	517	515	516	517	508	
PCGP	PGRG	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602	602			
PGLA	GT11	227	223	227	226	225	226	208	210	210	163	162	163	162	163	160	157	157	161	163	162	161	224	223	224	219	220	209	223	207	223	219	224	224	224	219	161	163	161	224	225	225	225	227	222	224	222	224	221	
PGLA	ST10	115	114	117	117	116	116	109	109	108	93	92	92	93	93	93	91	92	93	93	93	94	117	117	117	116	116	112	116	114	116	117	114	116	116	116	91	94	94	114	117	116	116	114	115	115	114	114		
PLPS	GT11	148	141	144	144	146	147	146	146	146	129	129	129	129	129	126	124	124	128	128	129	129	129	127	127	123	128	123	131	109	115	111	122	117	116	113	119	125	131	118	145	135	143	142	148	149	149	148	145	
PLPS	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	5	124	134	112	119	116	126	119	121	116	122	130	136	121	150	139	146	146	101	0	0	0	0	
PLPS	GT13	147	115	115	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	139	140	137	127	107	118	112	110	116	121	126	115	141	131	139	138	148	147	147	147	145			
PLPS	ST18	147	139	140	122	59	60	60	60	59	58	58	58	58	58	57	57	58	57	57	58	59	57	58	59	133	142	194	208	194	198	195	204	198	198	196	198	203	208	198	213	210	212	213	206	146	146	146	144	
SKSP	BLK1	287	260	332	265	272	270	208	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TJGS	GT1A	226	222	226	223	224	224	225	226	224	185	196	198	148	149	136	133	135	139	144	137	221	189	184	222	194	139	127	163	159	200	176	173	140	142	136	162	189	199	145	234	215	232	229	216	230	228	201	140	
TJGS	GT1B	217	213	218	215	217	219	219	217	215	180	188	188	139	141	130	125																																	

Daily MW Generation on Sunday

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	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	-1	-1	-1	-1	125
KNRG	HY01	35	34	34	34	34	35	34	35	34	34	34	34	0	0	0	0	0	0	35	35	35	35	35	35
KNRG	HY02	35	35	36	35	35	35	36	35	36	35	36	35	0	0	0	0	0	0	36	36	36	36	36	36
KNRG	HY03	34	34	34	34	34	34	34	34	34	34	34	34	21	22	23	23	22	24	24	23	23	23	34	34
KNYR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	99	98	53	58	53	59
KNYR	HY02	84	57	103	65	60	73	60	96	64	63	61	59	59	59	57	57	61	60	60	67	60	60	72	59
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	60	57	104	101	100	60	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
LPIA	HY01	21	20	20	20	20	20	20	19	19	19	19	19	19	20	22	22	22	22	22	22	22	22	20	20
LPIA	HY02	21	19	19	19	19	19	19	19	19	19	19	19	19	20	22	22	22	22	22	22	22	22	20	20
MNOR	HY01	6	6	6	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	5	5
PGAU	HY01	-1	-1	-1	-1	20	20	20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PGAU	HY02	-1	-1	-1	-1	21	21	21	20	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PGAU	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
SIHY	HY01	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SIHY	HY02	50	50	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	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SYPS	HY01	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SYPS	HY02	25	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	25	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	25	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	-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	HY02	36	34	86	86	86	86	45	85	47	50	46	45	45	45	44	44	47	49	46	49	45	45	62	45
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	-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	HY02	99	91	150	96	95	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
UPIA	HY01	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
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		728	536	641	545	578	455	341	395	326	305	298	296	295	297	296	210	213	225	226	222	234	461	924	869
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
GBLS	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
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
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
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
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	4	3	3	3	3	4	3	5	4	3	4	5	4	3	4	4	4	4	4	4	4	4	4	4

Daily MW Generation on Sunday

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	2	4	3	3	4	4	2	3	3	1	3	3	2	4	3	3	5	5	1	4	2	3	4	2	2	3	3	5	3	2	4	5	3	4	3	3	3	3	4	3	2	3	4	3	3	4	6	3
Total Co-Gen		6	7	6	6	7	8	5	8	7	4	7	8	6	7	7	7	10	9	5	8	6	8	8	5	5	6	6	10	7	5	7	8	7	8	7	7	7	8	9	6	6	7	7	7	6	9	10	7
Total Gen		13404	13083	12912	12696	12608	12286	12088	11973	11915	11653	11694	11613	11642	11668	11588	11319	11263	11504	11766	11967	12340	12619	12687	12876	12913	12740	12620	12640	12697	12796	12815	12771	12752	12751	12889	12530	12591	12773	13225	14210	14252	14080	14053	13887	13867	13603	13542	13339
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		-29	-29	-29	-29	-29	-30	-30	-29	-29	-29	-29	-29	-30	-30	-29	-29	-29	-30	-29	-30	-29	-29	-28	-28	-29	-29	-29	-29	-29	-29	-29	-30	-30	-29	-29	-29	-29	-30	-30	-30	-30	-30	-30	-29	-29	-30	-30	
TIE-PLTG		-21	-20	-37	-3	-14	10	31	-48	6	-6	13	-19	19	40	16	-17	16	-3	-57	-36	-52	-27	8	-15	74	19	69	17	88	47	43	-17	11	48	31	-9	8	-44	-6	-51	15	-26	-10	-50	-44	-37	-20	28
Interconnection		-50	-49	-66	-32	-43	-21	1	-77	-23	-35	-16	-48	-9	11	-14	-46	-13	-32	-87	-66	-82	-56	-21	-43	46	-10	40	-12	59	18	14	-46	-18	19	1	-38	-22	-73	-35	-81	-15	-55	-40	-80	-74	-65	-48	-2
System Total		13454	13132	12978	12728	12651	12307	12087	12050	11938	11688	11710	11661	11651	11657	11602	11365	11276	11536	11853	12033	12422	12675	12708	12926	12874	12757	12587	12659	12645	12785	12808	12824	12777	12739	12895	12575	12620	12853	13267	14298	14274	14142	14100	13974	13948	13675	13597	13348
SRev ST-Coal		219	290	407	304	308	271	326	406	378	466	270	270	273	282	260	311	269	282	271	249	-540	-525	-533	438	444	438	280	402	433	439	437	432	429	431	438	416	424	422	328	281	286	271	278	282	290	263	260	251
SRev CCGT-Gas		211	302	174	329	227	229	312	153	167	567	718	799	862	833	1035	1268	1386	1175	938	802	453	412	283	251	262	400	460	462	567	390	409	359	498	492	452	1031	929	758	615	96	196	137	129	209	111	124	178	396
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Syncon		764	764	764	764	462	649	750	901	901	1052	1052	1052	1052	1052	1052	1052	1052	1052	1052	1052	1052	951	274	274	274	461	713	713	713	965	965	965	965	965	965	1031	1031	1031	1091	652	309	497	497	476	476	497	497	476
Hydro		228	270	65	161	430	366	379	174	243	113	120	122	123	121	122	128	125	113	112	116	104	153	391	547	598	501	462	433	454	255	266	317	316	316	322	313	320	325	224	339	405	464	492	547	442	498	509	521
S.Reserve Total		1422	1626	1410	1558	1427	1515	1767	1634	1689	2198	2160	2243	2310	2288	2469	2759	2832	2622	2373	2219	1069	991	415	1510	1578	1800	1915	2010	2167	2049	2077	2073	2232	2204	2177	2791	2704	2536	2258	1368	1196	1369	1396	1514	1319	1382	1444	1644