

Daily System Generation Summary on Sunday

Sunday, November 21, 2021

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,497 MW
Distillate	0 MW
Total TNB	2,497 MW
Total IPP	14,039 MW
Total Co-Gen	0 MW
Total System	19,379 MW

Generation Mix

Type	MWh	Percentage
Hydro	10,945	3.31 %
Gas	30,513	9.23 %
Total TNB	41,458	12.54 %
ST-Coal	204,808	61.93 %
LSS	3,193	0.97 %
Gas	80,811	24.44 %
Total IPP	288,812	87.33 %
Co-Gen	1,140	0.34 %
Total Co-Gen	1,140	0.34 %
Total Generation	331,410	100.21 %
PLTG	-22	-0.01 %
HVDC	716	0.22 %
Interconnection	694	0.21 %
Net Energy	330,716	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:	20:30:00 Hour
Total Set On Bus	17,218 MW
TNB Generation	2,172 MW
IPP Generation	13,249 MW
Spinning Reserve	1,747 MW
Maximum Demand	15,493 MW
Net Energy	330,716 MWH
Load Factor	88.94 %

Fuel Cost

Total Cost:	71,699,766.66 RM
Cost per Unit	21.62 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	768
Hydro	182
Syncon	978
Thermal	331
Total	2,259

Time Weather Temperature

Afternoon	Thunder St	29
Morning	Sunny	24

Gas Usage

Station	(mmcsfd)
GLGR	47
TJGS	81
Total TNB	128
CBPS	26
KLPP	48
NPRI	133
PGLA	72
SGB3	8
SGRI	34
Total IPP	321
Total Gas	449

Total Gas Required 449

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	14662	14058	13571	13110	12771	12553	12511	12155	11840	12425	13148	13603	13696	13913	14263	14495	14467	14215	13990	14854	15426	15310	14993	14677

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, December 6, 2021 6:57:42 PM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

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	494	548	556	557	629	608	604	605	605	604	606	607	605	606	603	706	560	597	604	697	697	698	655	693	696	694	694	696	696	696	695	696	696	695	696	696	694	697	695	696	695	696	694						
JMAH	U002	693	695	696	693	696	697	696	694	694	695	606	606	606	605	604	555	502	606	603	689	691	697	655	698	696	699	697	698	693	696	695	693	697	694	703	696	694	695	698	695	695	697	685	695	694	694	696	697	
JMHE	U001	976	897	899	901	849	852	851	849	852	850	852	853	851	849	848	850	857	851	852	851	852	850	852	846	854	849	852	853	914	908	910	908	910	912	912	906	908	910	907	915	928	932	936	930	930	928	926	927	
JMHE	U002	979	900	903	901	850	851	852	850	851	849	850	853	852	849	847	849	855	849	851	853	848	851	851	846	852	756	550	501	501	500	500	500	500	501	502	499	499	500	499	499	500	501	503	500	502	500	501	499	
JMJG	U002	672	672	671	675	673	673	672	671	673	673	674	671	667	668	673	645	649	671	676	673	668	667	676	669	677	674	672	671	672	675	672	673	675	673	673	670	676	677	671	673	671	678	673	669	677	675	675	675	
JMJG	U003	663	669	666	666	664	666	662	657	667	668	671	669	668	666	670	640	644	667	664	657	604	562	570	613	679	669	668	667	668	676	660	672	662	682	671	667	671	670	677	663	671	672	667	664	657	657	657	657	
JMJG	U004	898	895	896	897	854	848	849	848	851	849	851	848	851	851	851	851	849	851	851	851	851	853	850	852	853	850	851	873	909	908	907	908	909	907	908	907	908	906	907	907	908	907	911	911	909	909	909	909	
JMJG	U005	892	892	892	894	850	848	853	847	852	849	848	851	849	850	851	849	848	848	854	850	850	852	854	849	850	853	851	849	887	888	890	891	890	891	892	887	895	891	889	891	887	888	888	888	888	888	888	888	
PKLG	U003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	20	23	25	25	38	62	61	67	69	80	124	130	126	152	179	226
PKLG	U004	149	149	149	152	150	149	149	153	150	152	152	153	152	151	151	151	152	151	149	150	151	227	265	276	280	277	277	280	279	280	278	279	280	267	274	273	275	274	274	274	275	278	272	275	274	274	269	276	
PKLG	U006	446	449	449	447	446	372	311	274	268	266	270	268	269	269	269	270	266	267	269	267	270	341	388	423	446	450	450	448	448	447	450	446	447	449	447	447	455	453	450	449	448	448	446	448	446	449	448	449	
TBIN	U001	687	689	689	690	686	661	599	599	550	549	532	518	499	552	549	448	423	449	501	551	600	649	649	686	686	684	684	685	685	686	686	686	685	686	686	686	687	689	689	688	689	688	688	687	689	687	687	688	
TBIN	U002	694	691	693	691	694	682	603	603	556	552	535	503	503	553	552	447	422	443	500	501	608	652	651	688	690	692	691	692	693	690	688	691	692	693	695	692	692	692	691	693	690	691	692	694	692	689	691	693	693
TBIN	U003	693	691	689	689	690	678	601	601	552	550	533	503	501	553	552	447	411	442	499	500	608	652	651	692	692	691	691	692	691	690	691	692	692	694	691	693	691	691	690	693	691	690	690	691	693	690	692	692	
Total ST-Coal		8936	8837	8848	8853	8731	8585	8302	8251	8121	8106	7980	7903	7873	8022	8020	7708	7438	7692	7873	8090	8298	8549	8570	8829	8950	8841	8627	8585	8700	8742	8719	8756	8752	8767	8776	8744	8786	8807	8797	8801	8821	8849	8869	8875	8872	8889	8916	8970	
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	
CBPS	BLK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	54	73	65	84	171	360	361	364	368	365	364	365	364	369	365	369	216	217	255	357	357	362	354	303	275	297	364	363		
EMPP	BLK1	758	758	757	758	757	759	757	756	757	689	625	527	461	395	364	364	363	364	431	431	461	461	494	496	494	495	529	528	561	561	593	593	627	660	692	723	722	743	755	755	754	756	673	748	355	377	350	0	
EMPP	BLK3	377	375	428	480	581	761	774	772	772	773	774	772	773	777	777	773	771	769	755	752	750	749	750	179	0	0	0	0	0	0	0	0	0	0	0	0	0	375	709	748	754	763	769	766	771	769	353	0	0
GLGR	GT01	68	67	68	69	68	68	67	66	68	68	67	69	67	69	67	68	68	68	68	69	69	69	67	69	68	67	67	89	105	105	67	69	69	69	67	68	67	68	67	69	69	69	68	68	69				
GLGR	GT02	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	67	68	68	68	68	67	67	90	105	105	67	67	67	67	67	67	68	68	67	69	68	68	67	68				
GLGR	ST1C	71	71	71	71	71	71	71	71	71	72	71	71	71	71	71	72	71	72	72	71	71	72	71	71	71	72	72	72	82	95	95	71	72	72	72	72	72	71	71	72	71	71	71	71	71				
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	88	132	110	110	0	0	0	0	0	0	0		
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	0	0	0	0	0	0	0	0	0	65	152	152	154	155	122	126	122	121	121	
KLPP	GT15	145	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	110	110	110	110	110	110	110	110		
KLPP	ST17	64	68	69	69	68	68	67	68	67	68	68	69	68	68	67	65	67	66	66	69	69	69	69	65	65	64	67	65	65	69	69	69	62	61	116	140	121	201	160	140	132	133	133	132	133				
NPRI	BLK1	505	518	346	325	329	319	327	325	327	320	329	336	349	337	310	317	352	331	336	345	330	332	347	325	330	331	443	487	435	514	521	521	521	511	506	385	341	512	518	518	520	524	520	521	520	512	519		
NPRI	BLK2	484	516	345	329	334	322	333	329	332	325	334	341	354	343	314	322	342	335	335	334	335	334	336	329	333	333	334	523	496	518	523	518	522	525	490	492	329	336	404	482	520	525	498	524	524	523	509	525	
PCGP	PGRG	576	594	602	351	261	262	264	263	263	262	262	272	264	265	262	262	270	262	263	261	263	262	266	261	301	374	603	610	591	596	602	606	603	607	590	585	587	312	597	600	597	603	595	604	604	603	593	603	
PGLA	GT11	198	166	167	167	169	164	168	168	170	166	169	172	170	170	162	164	170	169	169	169	169	168	168	166	169	168	167	170	166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PGLA	GT12	203	170	172	171	173	168	172	171	172	169	172	176	174	175	167	168	175	173	174																														

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	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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
KNRG	HY01	34	35	35	34	35	34	35	34	34	34	35	35	34	34	34	34	34	34	34	34	34	34	24	23	
KNRG	HY02	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	23	22	
KNRG	HY03	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	21	22	
KNYR	HY01	59	63	64	63	64	61	64	63	64	63	62	98	88	73	59	60	83	68	70	77	65	68	84	64	
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	57	56	
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	58	58	-1	60	62	-1	-1	-1	
KNYR	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LPIA	HY01	25	25	25	12	12	12	12	12	12	12	12	12	12	15	17	17	17	17	18	20	21	21	21	27	
LPIA	HY02	22	22	22	12	12	12	12	12	12	12	12	12	10	10	8	12	14	15	17	17	17	19	19	19	
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	19	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
SIHY	HY01	47	47	47	47	47	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	31	31	
SIHY	HY02	50	50	50	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	
SIHY	HY03	50	50	50	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	35	36	36	86	33	32	31	
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	35	41	45	42	41	40	42	42	40	41	83	61	47	36	39	57	41	48	54	41	44	56	41	44	
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	-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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	5	5	5	6	
UPIA	HY02	3	3	3	2	2	2	2	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	5	
Total Hydro		438	449	454	445	426	421	427	276	277	274	275	354	342	294	266	227	273	277	302	319	297	325	334	299	
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	2	4	6	13	13	22	25	20	11	18	
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7	11	23	26	29	31	32	30	26	
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	13	18	23	22	24	24	25	25	32	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	6	11	25	29	35	41	32	44	42	
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	10	13	14	19	24	10	12	7	8	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	11	17	20	28	33	32	31	16	48	
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	8	13	18	19	6	21	26	23	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	14	20	14	31	37	41	41	47	19	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	16	23	26	31	35	36	37	42	
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	4	6	13	18	29	11	30	15	29	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	30	46	50	50	50	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10	20	28	20	45	47	44	47	52	50	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	14	16	19	15	39	39	41	41	
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	11	16	19	22	28	18	7	18	
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	20	14	30	30	15	30	28	10	13	
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	21	62	134	182	239	373	396	473	439	440	441	
PCUF	CUFG	24	25	22	22	23	23	22	23	23	24	25	24	24	23	22	21	21	19	22	20	20	21	20	19	20
PCUF	CUFK	26	28	27	27	25	25	26	26	25	26	27	25	25	26	23	24	22	28	26	26	26	24	24	24	26

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		
Total Co-Gen		50	53	49	49	48	48	48	49	48	50	52	49	51	49	48	48	50	47	47	46	47	42	46	42	48	47	46	47	44	43	44	45	42	44	48	47	46	47	46	49	48	50	49	47	48	51	50	48	
Total Gen		14721	14344	14081	13842	13589	13343	13117	12908	12786	12675	12523	12448	12491	12505	12200	11908	11814	12235	12417	12724	13102	13417	13575	13731	13672	13779	13964	14168	14329	14492	14545	14564	14548	14616	14275	14097	14042	14115	14909	15453	15431	15471	15298	15201	14958	14869	14705	14497	
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	30	29	31	29	29	29	31	29	30	29	31	29	29	29	32	31	30	29	29	29	30	29	31	31	30	29	31	29	29	31	30	30	29	29	30	32	31	31	29	31	29	29	31	29	29	31	
TIE-PLTG		41	44	5	8	-2	9	-11	6	-5	30	-49	-77	-41	-24	27	0	-47	34	-27	-60	-64	22	-47	33	-44	13	31	16	46	68	32	-6	62	31	42	38	33	-10	35	-26	-13	-42	-30	-37	-55	-26	10	-22	
Interconnection		70	73	34	37	29	38	18	35	26	59	-19	-48	-9	5	56	29	-15	65	3	-31	-35	51	-17	62	-13	44	62	45	77	96	61	25	92	61	71	67	63	22	66	6	16	-11	-1	-8	-24	3	39	10	
System Total		14662	14282	14058	13816	13571	13316	13110	12884	12771	12627	12553	12507	12511	12515	11890	11840	12181	12425	12766	13148	13377	13603	13680	13696	13746	13913	14134	14263	14407	14495	14550	14467	14566	14215	14041	13990	14104	14854	15458	15426	15493	15310	15220	14993	14877	14677	14498		
SRev ST-Coal		427	523	512	510	488	606	766	781	762	768	825	831	832	834	827	782	854	808	805	688	729	625	682	490	396	415	426	346	303	297	320	336	341	227	218	250	208	187	217	213	193	165	220	184	187	100	203	251	
SRev CCGT-Gas		404	692	1024	1308	1518	1797	1756	1763	1758	1784	1749	1723	1576	1592	1838	1805	1711	1617	1753	1777	1745	1768	1754	1783	1554	1297	957	688	712	226	151	152	248	354	460	449	1342	1513	1040	605	480	406	460	702	724	523	411	370	
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	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		1153	1153	1153	1002	1153	1153	1153	1153	1153	1153	1153	1153	1002	1153	1153	1153	1153	1153	1153	1153	1153	1002	1153	1153	1153	1153	1052	1052	1052	864	713	878	777	590	965	965	965	965	965	814	965	965	965	878	878	777	500	626	
Hydro		151	140	135	295	163	168	162	156	155	158	157	78	241	138	166	205	159	155	130	113	135	258	98	133	132	121	121	120	133	222	351	200	171	396	238	280	305	281	219	348	216	216	270	293	118	144	435	260	
S.Reserve Total		2135	2508	2824	3115	3322	3724	3837	3860	3835	3870	3891	3792	3658	3724	3991	3952	3884	3733	3841	3731	3762	3653	3687	3559	3235	2986	2556	2206	2200	1609	1535	1566	1537	1567	1881	1944	2820	2946	2441	1980	1854	1752	1915	2057	1907	1544	1549	1507	