

Daily System Generation Summary on Sunday

Sunday, January 19, 2020

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,283 MW
Distillate	0 MW
Total TNB	2,283 MW
Total IPP	17,735 MW
Total Co-Gen	0 MW
Total System	22,493 MW

Generation Mix

Type	MWh	Percentage
Hydro	8,609	2.59 %
Gas	27,237	8.19 %
Total TNB	35,846	10.78 %
ST-Coal	232,313	69.85 %
LSS	2,369	0.71 %
Gas	62,946	18.93 %
Total IPP	297,628	89.48 %
Co-Gen	207	0.06 %
Total Co-Gen	207	0.06 %
Total Generation	333,681	100.32 %
PLTG	605	0.18 %
HVDC	473	0.14 %
Interconnection	1,078	0.32 %
Net Energy	332,603	100.00 %

Maximum Demand Record

Date: 4/18/2019	18,566 MW
Date: 4/18/2019	391,845 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	21:00:00 Hour
Total Set On Bus	17,453 MW
TNB Generation	2,032 MW
IPP Generation	13,603 MW
Spinning Reserve	1,809 MW
Maximum Demand	15,613 MW
Net Energy	332,603 MWH
Load Factor	88.76 %

Fuel Cost

Total Cost:	52,749,630.59 RM
Cost per Unit	15.80 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	479
Hydro	609
Syncon	588
Thermal	468
Total	2,144

Time Weather Temperature

Afternoon	Rainy	32
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	51
TJGS	147
Total TNB	197
CBPS	49
KLPP	43
NPRI	144
PGLA	81
YPKA	21
Total IPP	339
Total Gas	536
Total Gas Required	536

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	15026	14354	13673	13296	12900	12624	12658	12421	11844	12458	13124	13520	13762	13727	14104	14423	14561	14359	13952	14205	15443	15613	15455	15137

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, March 09, 2020 1:19:47 PM

(Ir. Shanmugam Thoppalan)
Pengurus Besar Kanan
Jabatan Sistem Operasi

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	U002	695	696	697	695	694	694	695	695	693	695	694	693	695	693	692	662	602	680	691	694	692	694	694	694	694	694	692	706	691	693	695	694	693	693	695	696	689	694	693	693	695	693	688	696	699	693	695	693	691
JMHE	U001	981	914	899	901	899	898	831	776	779	781	780	780	780	778	781	780	782	782	778	783	781	776	778	782	779	779	782	781	778	781	782	779	779	781	780	781	777	780	846	918	970	969	972	970	969	970	972		
JMHE	U002	980	900	899	899	900	899	804	777	778	781	778	781	779	781	782	778	778	778	778	783	782	774	779	782	780	779	780	780	777	780	779	781	780	781	782	783	777	797	865	916	970	968	970	970	970	971	973		
JMJG	U001	667	669	664	667	666	667	667	666	665	668	679	664	663	664	673	592	599	640	677	685	653	677	666	666	672	675	669	676	678	655	683	684	660	668	667	639	618	618	634	691	667	675	669	677	670	668	674	668	
JMJG	U003	667	663	668	677	668	661	668	673	672	672	670	671	672	672	694	591	596	629	672	673	667	667	671	669	677	670	679	669	667	669	673	667	678	668	668	673	670	665	670	667	672	670	677	671	672	670	671	671	
JMJG	U004	889	891	889	888	860	787	788	785	787	788	787	788	786	787	786	786	785	788	788	786	787	785	787	785	788	787	787	788	786	787	791	787	786	788	786	786	788	785	787	859	862	891	892	894	895	894	892		
JMJG	U005	980	932	900	901	863	771	781	781	779	781	777	781	781	778	782	780	783	777	782	779	778	779	782	780	778	780	780	782	782	778	778	782	785	777	785	780	793	868	868	958	967	965	965	970	972	972			
PKLG	U003	285	281	281	284	282	283	282	284	282	283	285	283	277	283	287	252	207	248	788	276	282	281	292	282	280	278	281	282	287	284	278	282	282	277	286	281	281	280	286	282	279	279	281	283	285	280	286		
PKLG	U004	281	283	279	280	279	280	279	276	280	280	280	280	279	278	281	279	248	202	231	281	277	263	261	258	261	260	263	262	261	265	265	260	262	261	280	281	282	282	283	286	283	281	278	283	283	281	282	281	
PKLG	U005	467	470	466	467	468	466	465	468	467	466	469	467	464	472	468	413	327	340	431	467	468	467	468	468	465	468	466	466	466	466	466	467	467	467	468	468	467	466	464	465	468	468	468	464	463	468	466		
PKLG	U006	450	449	446	448	449	449	448	450	449	449	448	446	449	450	448	448	448	448	448	448	450	448	446	449	448	449	446	448	447	448	446	446	448	449	446	446	446	449	449	449	449	449	449	449	447	450			
TBIN	U001	691	689	691	689	690	690	690	691	691	690	691	690	691	690	692	692	690	691	690	690	691	690	692	691	690	691	692	690	690	692	694	689	696	691	690	692	691	691	690	692	689	693	689	690	691				
TBIN	U002	693	697	692	691	691	693	692	693	690	689	689	692	696	695	691	692	694	690	690	690	692	691	693	690	692	691	687	692	691	690	690	692	694	689	696	691	690	691	690	692	691	691	692	692	693	689	691	691	
TBIN	U003	689	691	686	691	692	688	691	689	691	691	691	693	690	691	692	692	693	693	688	693	689	692	689	691	691	692	692	691	689	692	690	692	691	690	691	690	691	691	690	691	691	692	693	691	691	690			
TBIN	U004	981	945	906	902	873	782	783	782	783	783	784	782	782	784	783	782	782	783	783	783	784	785	782	782	781	783	784	781	782	782	783	781	782	782	781	783	782	795	864	897	970	972	974	972	974	972	972		
Total ST-Coal		10396	10170	10063	10080	9974	9708	9564	9485	9486	9498	9501	9491	9482	9502	9524	9194	8972	9201	9460	9499	9463	9483	9464	9468	9479	9486	9479	9482	9486	9456	9484	9497	9466	9467	9503	9460	9450	9432	9499	9834	10041	10312	10363	10372	10364	10363	10366	10366	
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		
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	354	361	360	352	362	362	362	355	329	222	222	221	226	221	214	219	223	223	223	216	357	362	357	359	221	214	223	358	357	356	356	359	357	355	358	358	354	354	359	365	369	360	365	365	364	362	360	357	
GLGR	GT01	101	102	102	102	66	68	67	67	67	68	69	67	68	69	68	69	68	67	68	67	68	68	67	68	67	68	68	68	67	100	103	103	103	103	104	103	104	103	103	105	103	103	104	103	103	103	105		
GLGR	GT02	99	100	100	100	67	67	68	68	68	68	68	68	68	68	68	68	68	67	68	68	68	68	67	68	68	68	68	67	100	100	100	100	100	101	101	101	101	101	101	101	101	101	101	101	101	102	102		
GLGR	ST1C	87	89	89	88	73	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	85	92	92	92	92	92	92	92	93	91	91	91	91	91	91	91	91	90				
KLPP	GT13	111	121	117	114	117	116	117	117	113	118	116	116	116	117	118	118	118	122	116	117	117	118	118	117	114	116	118	116	121	117	120	117	116	117	121	121	111	132	136	138	118	117	114	113	120	117			
KLPP	GT14	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
KLPP	GT15	116	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	105	118	141	149	150	126	126	123	121	84	8			
KLPP	ST17	166	104	55	51	55	53	51	53	53	52	52	53	53	55	52	52	54	51	53	51	55	55	55	54	55	55	55	55	55	55	56	55	53	51	54	54	108	120	134	134	134	120	127	121	124	109	54		
NPRI	BLK1	507	508	499	430	522	513	515	451	425	378	406	449	406	400	381	326	330	398	379	327	345	470	453	464	365	337	421	485	481	492	513	515	515	515	516	517	509	507	512	525	520	515	520	521	516	514	515	514	
NPRI	BLK2	507	508	515	507	515	514	515	509	502	395	308	309	309	309	303	310	309	309	309	511	507	506	504	505	498	512	511	505	511	517	518	516	516	518	510	508	514	524	525	515	520	521	517	514	516	514			
PCGP	PGRG	584	592	602	580	603	602	601	589	574	600	502	502	604	603	436	395	390	401	401	585	597	595	594	591	593	579	596	603	603	591	602	602	602	602	602	602	602	583	595	617	610	603	611	615	604	601	598		
PGLA	GT11	165	188	172	166	158	159	158	156	153	158	159	158	160	158	156	157	155	158	158	154	157	155	161	159	217	215	183	168	164	179	189	193	206	211	172	165	163	163	182	194	216	202	216	212	196	201	171	166	
PGLA	GT12	186	208	193	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PGLA	ST10	218	218	221	92	94	93	91	92	92	90	90	92	92	91	91																																		

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			
HTRG	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	64	-1	-1	-1			
KNRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22	21	0	0	0			
KNRG	HY02	36	22	22	21	22	22	22	21	21	22	22	22	22	22	22	21	22	22	22	21	22	22	22	21	21	22	22	22	22	22	22	22	22	22	21	36	36	36	36	35	35	35	36	36	36				
KNYR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	54	57	57	58	56	54	54	55	58	59	59	59	59	59	59	99	99	57	57	58	-1	-1	-1	-1	-1	-1	-1	-1			
KNYR	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	58	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	60	62	62	60	60	58		
KNYR	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
KNYR	HY04	58	58	59	58	86	59	59	59	57	82	100	85	92	69	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	61	103	70	90	95	63	62	61	59		
LPJA	HY01	20	20	20	20	20	20	20	20	20	20	22	22	22	22	22	22	22	18	18	18	16	15	15	8	8	8	8	8	8	8	10	10	16	18	20	22	22	23	23	23	23	23	23	23	23	23			
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	3	3	3	3	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	6				
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	20	-1	-1	-1	-1	-1	-1			
PGAU	HY02	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	-1	-1	-1	-1	19	0	0	0			
PGAU	HY03	19	-1	-1	-1	-1	-1	-1	-1	17	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	22	22	21	22	23	23	23	23	23	23	23	23	23	23	22	22	23	23	-1	20	-1	-1	-1	-1	-1		
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31	31	31	51	51	30	31	30	31	51	51	51	51	51	51	51	29		
SIHY	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	50	50	50	50	50	50	43			
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	33	33	33	32	34	33	33	33	31	33	33	33	33	33	33	33	33	33	33	33	33	33	34	33	33	32	33	34	33	33	34	33	33	33	33	34	33	33	33	33	33	33	33	34	34	34	34		
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	32	31	33	33	33	33	33	33	33	33	33	33	33	32	32	33	33	-1	-1	-1	-1	-1	-1	-1	-1	
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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	-1	-1	-1	-1	-1	-1	-1	114	136	124	97	-1	-1	-1	-1	94	117	94	118	110	92	91	92	92	
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
UPIA	HY01	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
UPIA	HY02	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	0	0	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 Hydro		209	163	164	183	193	164	164	163	177	187	208	214	200	176	167	163	164	167	103	158	182	156	207	328	317	310	321	392	394	457	395	511	538	528	565	468	401	407	505	672	828	671	713	713	747	639	576	519	
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	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	1	4	8	11	15	18	20	20	26	27	28	27	25	25	23	23	17	18	17	11	8	4	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	4	10	17	23	29	34	37	40	42	46	45	47	46	23	42	41	21	8	6	5	4	2	1	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	8	8	15	26	16	16	14	27	5	27	48	48	38	38	37	27	26	16	16	5	1	1	1	1	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	7	15	22	29	33	40	31	50	40	33	18	32	24	28	14	29	9	4	1	2	1	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	3	8	17	26	24	38	37	45	48	50	33	36	45	24	38	25	32	17	6	8	8	4	3	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	2	6	13	20	26	31	35	38	41	46	16	34	13	15	17	18	13	15	7	20	12	1	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	1	4	23	17	26	26	29	38	46	20	50	47	30	11	19	25	32	33	18	6	5	2	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	4	11	20	28	36	43	46	51	56	57	57	45	49	57	52	19	21	37	36	23	21	6	4	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	3	7	14	20	26	31	35	38	41	42	44	37	44	41	41	23	20	12	4	7	10	5	1	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	18	65	135	182	237	270	295	315	377	333	339	332	258	298	225	212	175	114	100	85	31	11	1	1	1	0	0	0	0	0	0	0	0
PCUF	CUFG	4	4	3	2	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																								
SRev ST-Coal		164	389	494	479	521	579	572	566	570	566	558	571	574	558	536	789	827	747	603	553	604	561	565	568	570	552	557	559	555	579	560	549	573	576	545	596	528	532	511	546	484	248	197	188	196	197	194	194
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 CCGT-Gas		704	495	399	728	673	621	627	716	902	1129	1285	1237	1180	1182	1392	1479	1479	1380	1414	1290	909	599	625	749	738	794	958	799	633	356	288	253	230	218	345	433	560	617	579	263	151	227	226	283	367	376	512	691
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 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 Co-Gen		62	61	61	63	62	60	61	62	60	59	64	60	65	59	60	63	62	60	61	63	63	61	60	63	63	62	61	61	61	61	62	60	59	62	62	60	60	60	62	60	61	62	61	63	63	63	60	61
Syncon		1117	1268	1268	1117	1268	1268	1268	1268	1117	1268	1268	1117	1268	1268	1268	1268	1268	1268	1268	1167	1016	1041	890	500	500	500	500	374	374	374	500	313	313	313	313	500	500	500	500	414	617	804	1026	1026	804	930	930	930
Hydro		256	151	150	282	121	150	150	151	288	127	106	251	114	138	147	151	150	147	111	157	284	146	331	687	698	705	695	750	748	785	716	787	760	770	733	643	710	711	657	856	497	467	300	292	535	347	324	381
S.Reserve Total		2303	2364	2372	2669	2645	2678	2678	2763	2937	3149	3281	3236	3201	3205	3403	3750	3786	3602	3457	3230	2876	2408	2471	2567	2569	2613	2771	2543	2371	2155	2126	1962	1935	1939	1998	2232	2358	2420	2309	2139	1810	1808	1810	1852	1965	1913	2020	2257