

Daily System Generation Summary on Sunday

Sunday, December 23, 2018

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,441 MW
Distillate	0 MW
Total TNB	2,441 MW
Total IPP	15,904 MW
Total Co-Gen	65 MW
Total System	21,784 MW

Generation Mix

Type	MWh	Percentage
Hydro	10,499	3.32 %
Gas	35,731	11.29 %
Total TNB	46,230	14.60 %
ST-Coal	202,147	63.85 %
LSS	704	0.22 %
Gas	66,489	21.00 %
Total IPP	269,340	85.08 %
Co-Gen	1,509	0.48 %
Total Co-Gen	1,509	0.48 %
Total Generation	317,079	100.16 %
PLTG	-232	-0.07 %
HVDC	731	0.23 %
Interconnection	499	0.16 %
Net Energy	316,580	100.00 %

Maximum Demand Record

Date: 8/15/2018	18,338 MW
Date: 8/15/2018	388,524 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	20:30:00 Hour
Total Set On Bus	15,931 MW
TNB Generation	2,622 MW
IPP Generation	11,946 MW
Spinning Reserve	1,301 MW
Maximum Demand	14,645 MW
Net Energy	316,580 MWH
Load Factor	90.07 %

Fuel Cost

Total Cost:	57,375,954.30 RM
Cost per Unit	19.54 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	254
Hydro	427
Syncon	680
Thermal	225
Total	1,586

Time	Weather	Temperature
Afternoon	Hot	34
Morning	Sunny	25

Gas Usage

Station	(mmscfd)
GLGR	54
TJGS	202
Total TNB	256
CBPS	54
KLPP	49
NPRI	154
PGLA	54
PLPS	77
PTEK	2
SGRI	5
Total IPP	395
Total Gas	651
Total Gas Required	651

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	14181	13619	13131	12744	12443	12151	12122	11869	11404	11969	12642	13103	13155	13141	13427	13661	13783	13564	13395	13700	14583	14515	14269	14069

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, December 27, 2018 9:49:35 AM

(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	U001	693	690	698	691	691	693	692	691	693	694	694	692	691	692	695	694	692	696	692	693	693	695	693	688	692	689																								
JMAH	U002	700	694	693	694	692	693	692	694	692	694	700	695	696	694	693	694	685	695	694	695	694	693	694	694	694	692																								
JMHE	U001	510	515	515	515	512	513	509	512	511	513	512	513	511	513	514	512	515	512	511	510	512	510	514	511	512	512																								
JMJG	U001	672	673	671	670	671	669	671	671	669	667	671	671	669	669	672	671	665	672	671	677	671	668	671	672	673	672																								
JMJG	U002	671	672	672	671	672	668	671	673	671	671	671	672	676	672	671	670	667	677	671	678	671	669	671	672	672	679																								
JMJG	U003	661	551	504	498	497	500	427	405	255	289	321	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0																								
JMJG	U004	966	945	857	782	782	782	781	786	782	783	785	785	785	783	782	783	786	785	783	782	787	785	785	873	909	911																								
JMJG	U005	972	945	803	781	779	786	777	780	782	782	779	779	782	782	780	782	782	780	778	779	782	780	781	779	781	913																								
PKLG	U003	255	258	261	260	258	254	255	257	255	259	259	257	258	256	255	255	256	255	255	254	257	276	281	281	280	284																								
PKLG	U004	284	284	281	281	280	280	280	279	279	278	280	280	282	282	281	281	281	281	280	280	282	283	277	279	282	283																								
TBIN	U001	689	688	689	688	689	687	690	689	689	688	689	690	688	689	687	687	689	688	688	689	690	688	688	686	687	689																								
TBIN	U002	689	690	688	689	690	685	690	690	687	690	692	692	690	687	691	694	691	690	690	691	690	691	690	689	689	688																								
TBIN	U003	691	690	691	690	691	690	689	689	690	691	691	690	691	690	690	691	690	690	691	690	691	690	689	689	689	689																								
TBIN	U004	949	921	833	803	803	802	803	802	802	803	803	802	803	802	803	804	803	802	804	802	802	801	802	802	804	912																								
Total ST-Coal		9402	9216	8856	8713	8707	8702	8627	8618	8457	8502	8547	8483	8228	8212	8210	8217	8213	8219	8216	8225	8209	8213	8215	8200	8231	8240	8241	8234	8228	8249	8239	8244	8232	8243	8253	8235	8242	8237	8419	8475	8432	8584	8607	8605	8611	8594	8605	8613		
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	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	0
CBPS	BLK2	358	356	359	357	365	365	359	361	360	360	360	360	365	365	366	218	222	223	221	365	362	362	358	359	357	358	355	359	362	365	361	366	365	362	361	356	361	357	360	362	360	363	354	361	361	365	363	364		
GLGR	GT01	104	84	86	85	68	69	68	68	68	67	68	69	70	68	68	70	69	69	97	104	105	104	103	104	104	104	104	104	103	104	104	104	104	101	103	103	105	101	104	103	104	104	102	103	103	103	104	102		
GLGR	GT02	104	84	85	86	67	68	68	68	68	69	69	69	68	68	69	69	69	68	97	104	104	105	104	104	104	104	103	103	104	105	105	105	105	106	105	105	105	105	105	105	105	105	106	105	106	105	105	105	105	
GLGR	ST1C	92	82	82	81	74	70	70	71	70	70	70	70	70	70	70	70	70	83	93	93	93	93	93	93	93	94	94	93	94	94	94	94	93	93	93	93	93	93	92	93	92	93	93	93	93	93	93			
KLPP	GT13	121	125	139	141	121	121	121	121	120	121	121	121	121	121	116	125	120	120	121	121	121	121	121	121	121	121	122	121	124	124	140	145	146	110	111	109	109	149	149	148	148	148	148	148	148	148	148	148	148	
KLPP	GT15	123	78	0	0	0	0	0	0	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	145	113	118	113	117	150	154	135	153	153	152	131	155	156			
KLPP	ST17	124	113	59	59	54	54	53	53	53	53	52	52	53	53	53	53	50	54	54	53	53	59	59	58	53	57	53	56	56	53	53	61	57	140	118	118	118	121	138	136	130	136	136	137	123	135	135			
NPRI	BLK1	483	482	516	487	493	496	488	492	498	462	401	418	512	515	413	302	301	335	513	503	511	512	516	506	505	509	511	513	509	513	515	515	515	511	514	511	512	508	514	512	520	523	523	529	522	529	528	532		
NPRI	BLK2	485	479	518	490	493	498	490	496	500	464	401	417	514	523	443	337	311	456	514	508	512	515	517	508	510	510	515	517	509	518	518	517	515	515	514	515	515	509	521	517	523	527	524	531	527	532	532	532	535	
PCGP	PGRG	503	503	503	503	503	503	367	362	365	362	357	364	373	367	370	358	354	369	377	370	373	372	370	365	365	368	372	370	500	502	504	505	502	503	500	501	504	499	506	504	500	498	499	501	502	502	506	504		
PGLA	GT12	181	178	214	183	194	180	178	183	217	171	171	171	180	184	173	168	165	191	177	188	212	210	202	180	208	201	192	217	208	226	232	228	222	226	190	188	191	228	227	225	220	229	231	202	231	203				
PGLA	ST10	95	93	107	104	102	96	96	96	101	94	94	94	98	94	92	91	89	96	96	95	102	104	102	99	104	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106	106
PLPS	GT11	128	127	145	145	128	128	129	127	128	127	126	127	129	133	132	129	128	132	133	132	140	142	144	141	140	144	140	136	136	136	136	137	134	135	135	135	137	137	137	138	130	135	136	136	136	136	136	137	136	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLPS	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLPS	ST18	60	58	62	60	60	59	59	59	59	59	59	59	59	58	59	60	59	59	58	60	60	60	60	143	146	147	145	180	215	215	214	214	214	215	213	212	211	213	212	215	214	211	212	212	213	211	213	213	148	
SGRI	GT11	135	135	137	137	107	107	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	66	66	67	68	57	57	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	218	217	226	200	186	149	142	173	196	141	141	140	137	147	142	139	139	154	143	152	229	218	178	209	205	226	212	225	226	222	224	218	223	225	185	174	175	226	188	228	202	222	218	227	221	209	229	229	229	
TJGS	GT1B	214	211	220	192	182	144	134	162	193	132	134	135	137	139	136	134	137	152	138	140	208	209	175	203	199	212	202	209	212	219	216	208	217	219	177	167	169	215	184	214	191	216	208	220	214	207	221	224		
TJGS	ST1C	240	236	248	251	213	190</																																												

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	0	0	0	0	0	0	24	-1	-1	-1	
HTRG	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	63	63	100	100	100	100	-1	-1	-1	-1	
KNRG	HY02	26	26	26	26	26	26	26	26	26	26	26	26	25	25	25	25	25	26	26	26	26	25	25	26	26	
KNYR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	69	98	39	0	0	60	62	61	60	59	58	57	
KNYR	HY02	60	58	77	59	61	64	60	63	66	60	62	63	62	60	56	62	59	61	62	61	61	62	52	0	-1	0
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	58	-1	-1
LPIA	HY01	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
LPIA	HY02	15	15	16	15	16	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
MNOR	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	8	8	5	5	5	5	4	4	4	4	9	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	80	80	80	80	81	21	81	21	81	
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	82	81	20	82	20	-1	-1	-1	-1	111	111	79	
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	0	
PGAU	HY04	22	22	22	22	22	22	22	23	22	22	22	22	21	22	22	21	22	22	21	21	21	23	22	21	21	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	51	51	51	51	50	51	31	31	31	51	51	51	
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	51	51	51	51	51	51	31	31	31	51	51	51	
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	17	17	17	17	
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	24	24	17	17	17	17	
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	17	17	17	17	17	
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	17	17	17	17	17	
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	-1	
TMGR	HY02	35	35	35	35	34	34	34	34	34	34	34	34	35	33	31	35	35	35	35	34	38	37	38	38	39	
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	
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	
UPIA	HY01	7	6	6	6	7	6	6	6	6	7	7	7	7	6	7	7	6	6	6	6	6	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	5	
Total Hydro		222	216	236	217	220	222	217	220	224	216	220	220	221	221	217	219	243	452	609	636	514	536	414	415	468	
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	2	2	8	9	18	13	17	25	26	17	28	15	26	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	3	9	16	23	29	33	38	40	42	44	43	44	45	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	10	21	24	33	38	27	50	33	27	10	46	
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	1	7	21	45	56	80	84	82	115	101	88	81	105	
PCUF	CUFG	35	34	34	34	35	36	34	34	35	35	35	35	35	34	33	32	31	31	31	31	31	32	31	32	31	
PCUF	CUFK	38	32	32	32	30	30	29	31	29	30	31	31	32	30	31	30	30	28	29	28	29	31	30	29	29	
Total Co-Gen		73	66	66	66	65	66	63	65	64	65	65	66	67	65	66	65	65	64	61	61	59	60	62	61	60	
Total Gen		14211	13885	13611	13305	13140	13024	12750	12580	12442	12213	12137	12112	12091	12084	11884	11499	11453	11772	11966	12242	12652	12878	13122	13191	13184	
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	
TIE-HVDC		31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	30	30	30	30	
TIE-PLTG		14	-26	-24	11	-6	-20	-9	-34	-16	12	-28	-9	-45	8	0	-6	34	-6	-19	-2	-5	-39	5	-6	15	
Interconnection		45	5	7	42	25	10	22	-3	15	43	2	21	-16	38	30	24	64	25	12	29	26	-9	35	25	45	
System Total		14181	13895	13619	13278	13131	13030	12744	12599	12443	12186	12151	12107	12122	12061	11869	11490	11404	11762	11969	12228	12642	12903	13103	13182	13155	
SRev ST-Coal		225	280	345	360	364	377	445	364	391	344	298	362	365	386	384	377	382	375	381	147	163	159	157	172	141	
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	
SRev CCGT-Gas		396	523	232	376	537	516	707	657	637	904	1029	991	759	748	947	1336	1376	1087	907	653	273	408	397	372	273	
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	
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	
SRev Co-Gen		-8	-1	-1	-1	0	-1	2	0	1	0	0	-1	-2	0	-1	0	0	1	4	4	6	5	3	4	5	

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	
Syncon		1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	1114	963	963	812	812	812	812	812	963	837	711	711	561	560	560	926	837	988	988	898	520	373	373	499	686	560	686	1114	1114
Hydro		253	259	239	258	254	252	257	254	250	258	254	254	254	254	254	257	265	254	258	256	382	323	357	390	512	390	512	360	533	423	346	418	424	418	419	361	270	292	327	348	380	487	438	309	553	486	255	291
S.Reserve Total		1980	2175	1929	2107	2269	2258	2525	2389	2393	2620	2695	2720	2490	2502	2698	3084	3137	2831	2664	2174	1787	1858	1726	1750	1743	1823	1854	1719	1796	1482	1540	1473	1458	1570	1934	1886	1919	1859	1962	1326	1222	1302	1371	1560	1642	1764	1848	1907