

Daily System Generation Summary on Sunday

Sunday, June 23, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,320 MW
Distillate	0 MW
Total TNB	2,320 MW
Total IPP	14,939 MW
Total Co-Gen	0 MW
Total System	19,638 MW

Generation Mix

Type	MWh	Percentage
Hydro	7,913	2.43 %
Gas	36,754	11.27 %
Total TNB	44,667	13.70 %
ST-Coal	210,123	64.45 %
LSS	1,755	0.54 %
Gas	67,106	20.58 %
Total IPP	278,984	85.57 %
Co-Gen	1,569	0.48 %
Total Co-Gen	1,569	0.48 %
Total Generation	325,220	99.75 %
PLTG	-111	-0.03 %
HVDC	-695	-0.21 %
Interconnection	-806	-0.25 %
Net Energy	326,026	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	16,743 MW
TNB Generation	2,139 MW
IPP Generation	13,116 MW
Spinning Reserve	1,425 MW
Maximum Demand	15,359 MW
Net Energy	326,026 MWH
Load Factor	88.45 %

Fuel Cost

Total Cost:	58,455,383.01 RM
Cost per Unit	17.95 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	299
Hydro	241
Syncon	792
Thermal	342
Total	1,674

Time	Weather	Temperature
Afternoon	Rainy	32
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
GLGR	30
PAKA	2
PGPS	24
TJGS	208
Total TNB	264
MPSS	30
NPRI	155
PGLA	87
SGRI	49
SKSP	7
YPKA	62
Total IPP	390
Total Gas	654
Total Gas Required	654

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	14392	13962	13476	13010	12760	12450	12429	12170	11806	12280	13054	13606	13557	13569	13810	13844	13878	13778	13478	14006	15183	15359	15167	14918

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, June 24, 2019 10:59:01 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	690	692	687	691	690	691	690	689	689	689	690	691	688	691	693	692	693	691	692	695	692	693	694	693	693	693	680	675	676	671	674	672	674	673	674	670	671	673	672	672	673							
JMAH	U002	693	693	695	696	693	694	694	695	693	697	694	694	693	694	694	694	695	688	698	694	693	694	699	695	693	696	691	691	689	690	688	690	687	678	678	673	670	672	673	673	673	680	679	679	678	675	678	679
JMHE	U002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	49	139	140	156	313	461	515	516	515	516	518	517	520	517	518	516	516	512	516	516	517	
JMJG	U001	668	672	673	668	671	673	679	671	672	672	668	672	675	672	669	671	672	671	666	671	667	667	668	675	668	662	671	671	669	673	672	674	671	673	677	675	673	672	678	672	673	669	672	671				
JMJG	U003	668	667	667	668	672	666	666	666	664	667	667	667	667	666	667	669	665	674	668	667	668	666	667	666	667	666	667	666	667	666	667	666	667	667	668	668	666	668	666	666	667	667	672					
JMJG	U004	979	895	810	781	782	782	782	783	783	783	785	783	783	782	782	783	781	782	783	782	830	863	862	864	857	860	860	858	857	858	859	858	863	863	864	864	865	866	960	963	964	963	964	963	964	965		
JMJG	U005	977	852	777	780	779	782	781	782	777	781	667	648	573	502	500	552	603	594	699	707	790	821	863	862	860	862	863	864	859	863	857	862	865	856	862	861	860	860	858	957	963	962	960	959	961	963	964	961
PKLG	U003	282	285	285	283	281	282	283	283	279	284	240	155	150	151	151	150	151	149	149	150	150	151	150	152	150	150	148	151	151	150	150	151	160	267	248	153	191	263	281	280	282	282	281	281	282	280	281	
PKLG	U004	150	151	151	150	150	150	150	152	151	152	149	150	151	150	151	151	149	149	150	150	150	151	150	152	150	150	142	148	151	151	150	150	151	160	261	248	153	191	263	281	280	282	282	281	281	282	280	281
PKLG	U005	471	470	469	470	471	470	468	470	470	470	429	346	269	268	267	269	269	273	345	349	368	428	474	469	470	442	447	473	468	470	436	365	281	269	269	296	379	460	472	470	469	473	469	470	471	471		
PKLG	U006	471	470	476	472																																												

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																													
YPKA	ST20	56	57	57	57	57	57	40	36	36	36	37	36	36	37	37	37	37	37	37	39	38	47	62	59	58	57	57	57	57	58																							
Total CCGT-Gas		5003	5093	5083	4857	4662	4471	4166	4069	3961	3882	3676	3687	3843	4032	3598	3560	3426	3625	3331	3715	3863	4004	4106	4226	4354	4318	4413	4462	4452	4468	4406	4266	4318	4396	4348	4312	4289	4239	4355	4674	4971	5029	5091	5085	5038	4901	4791	4817					
Total 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					
BSIA	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	0					
BSIA	HY02	10	10	11	10	10	10	11	10	10	11	11	10	11	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				
CEND	HY01	7	7	8	7	7	8	8	7	7	7	8	8	8	8	7	7	7	7	7	8	8	7	7	7	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7					
CEND	HY02	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	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	-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					
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	-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	HY02	21	22	23	22	22	22	23	23	22	22	22	22	23	23	23	22	22	22	21	22	23	22	23	21	23	23	22	23	22	21	22	22	22	22	22	22	23	23	23	22	22	23	23	22	22	22	22	22	22				
KNYR	HY01	0	0	0	0	0	0	0	0	0	97	97	97	97	97	97	97	97	97	92	97	97	97	55	0	0	0	0	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	HY02	57	57	60	59	58	59	60	81	63	62	58	100	100	100	100	100	99	94	100	100	100	98	101	56	63	61	63	60	61	59	59	58	58	58	59	59	61	59	61	58	61	62	61	61	61	61	60	60	60				
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	97	97	97	97	97	97	97	97	97	97	97	-1	-1	0	0	0	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	0	0	0	0	0	0	0	0	0	99	98	98	98	98	98	98	98	94	97	97	97	98	99	64	-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		
LPJA	HY02	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16					
MNOR	HY01	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
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	-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				
PGAU	HY02	21	-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	-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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	0	0	0	0		
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	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	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	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	0	0	0	0		
TMGR	HY01	37	38	38	38	37	37	38	37	37	38	38	38	38	38	38	38	38	37	38	37	38	36	38	37	38	38	38	38	38	38	37	37	37	37	37	38	37	38	37	38	37	38	37	38	37	38	37	38	37	38			
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	-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			
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	-1	-1	-1	-1			
UPIA	HY01	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
Total Hydro		181	161	167	163	161	163	167	185	166	167	360	498	500	500	587	496	498	516	479	496	498	597	516	503	309	270	168	264	345	230	227	162	162	163	162	174	173	166	241	348	461	485	490	488	399	384	360	177					
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	0	0			
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	11	15	18	16	19	24	20	24	27	25	15	16	12	22	21	4	5	4	4	3	1	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	1	7	7	2	28	10	17	22	21	34	38	33	30	36	34	27	29	24	24	13	5	1	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	1	1	1	1	21	21	32	22	22	32	32	11	32	22	32	22	33	23	12	12	16	12	12	1	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	2	5	10	15	24	30	34	30	25	42	28	21	20	43	21	30	19	24	11	5	2	1	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	1	3	6	10	20	24	43	39	41	29	21	14	22	12																									

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																								
Interconnection		-47	-95	-91	-74	-65	-46	-77	-89	-53	-15	-27	-64	-34	-41	-12	-17	-28	-29	-26	-33	-25	6	-54	-41	9	-38	-47	-26	-9	-59	-18	-30	1	-47	-20	-16	47	13	-56	-68	-4	-24	-35	-25	-4	-22	-23	-37
System Total		14392	14221	13962	13685	13476	13276	13010	12935	12760	12665	12450	12457	12429	12557	12170	11836	11806	12162	12280	12765	13054	13415	13606	13633	13557	13524	13569	13653	13810	13782	13844	13801	13878	13933	13778	13589	13478	13580	14006	14819	15183	15283	15359	15343	15167	15049	14918	14786
SRev ST-Coal		172	370	368	368	371	362	367	368	378	360	329	350	324	343	348	475	519	487	237	305	303	352	337	359	360	354	395	394	378	371	389	389	417	450	519	523	534	513	474	255	235	269	269	270	287	272	239	259
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 CCGT-Gas		521	431	386	612	548	508	813	563	671	750	956	945	789	600	1034	1072	1077	878	1172	788	640	530	428	368	369	437	342	201	211	195	257	397	425	347	395	431	580	835	919	600	303	245	183	189	236	373	353	262
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 LSS		0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SRev Co-Gen		-28	-20	-22	-20	-19	-19	-23	-19	-19	-19	-20	-21	-22	-19	-19	-23	-23	-22	-21	-18	-18	-16	-15	-15	-15	-16	-14	-18	-16	-16	-15	-16	-18	-15	-15	-15	-19	-19	-17	-18	-16	-19	-17	-18	-17			
Syncon		777	928	928	928	928	928	928	928	928	928	827	827	827	827	827	676	827	827	827	827	827	827	827	741	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	
Hydro		271	140	134	138	140	138	134	116	135	134	141	104	102	102	259	106	104	237	123	106	104	105	186	185	192	131	133	225	395	172	175	139	139	138	139	151	152	135	184	228	242	369	364	366	455	319	192	174
S.Reserve Total		1713	1851	1796	2026	1968	1917	2219	1956	2093	2153	2335	2206	2021	1850	2205	2461	2504	2255	2337	2005	1856	1796	1760	1635	1834	1835	1783	1545	1560	1648	1733	1836	1894	1847	1963	2018	2179	2396	2488	1994	1542	1493	1428	1434	1589	1725	1697	1608