

Daily System Generation Summary on Sunday

Sunday, February 10, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,227 MW
Distillate	0 MW
Total TNB	2,227 MW
Total IPP	15,579 MW
Total Co-Gen	0 MW
Total System	20,484 MW

Generation Mix

Type	MWh	Percentage
Hydro	7,223	2.28 %
Gas	36,468	11.49 %
Total TNB	43,691	13.77 %
ST-Coal	180,290	56.81 %
LSS	1,359	0.43 %
Gas	90,610	28.55 %
Total IPP	272,259	85.79 %
Co-Gen	1,319	0.42 %
Total Co-Gen	1,319	0.42 %
Total Generation	317,269	99.97 %
PLTG	609	0.19 %
HVDC	-694	-0.22 %
Interconnection	-85	-0.03 %
Net Energy	317,354	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:	21:30:00 Hour
Total Set On Bus	16,610 MW
TNB Generation	2,382 MW
IPP Generation	12,350 MW
Spinning Reserve	1,823 MW
Maximum Demand	14,790 MW
Net Energy	317,354 MWH
Load Factor	89.41 %

Fuel Cost

Total Cost:	63,716,884.17 RM
Cost per Unit	20.88 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	420
Hydro	144
Syncon	870
Thermal	285
Total	1,719

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	52
TJGS	208
Total TNB	260
CBPS	53
KLPP	94
NPRI	157
PGLA	107
PLPS	76
SGRI	1
SKSP	21
YPKA	38
Total IPP	547
Total Gas	806
Total Gas Required	806

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	14386	13855	13324	12983	12604	12337	12285	12017	11423	11816	12522	12931	13035	13008	13493	13662	13649	13331	12988	13215	14701	14767	14594	14376

Prepared By: Siti Nurhamizatul Aini

Checked By: -Select Name-

Printed on: Monday, February 11, 2019 4:24:14 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	692	693	692	692	692	692	693	693	691	693	693	691	691	694	694	693	694	693	691	692	692	693	692	694	692	693	693	693	693	693	693		
JMAH	U002	694	693	692	696	692	694	692	695	693	694	694	694	694	694	694	695	692	695	694	694	693	693	693	694	693	693	692	693	692	694	696	693	
JMHE	U001	762	763	763	763	762	763	762	764	762	764	762	763	764	764	764	764	764	764	511	510	510	509	509	510	510	512	512	512	512	510	512	511	
JMJG	U001	665	668	664	668	666	667	668	667	671	671	670	673	669	670	670	672	667	673	676	671	676	673	667	671	671	668	673	668	673	671	673	677	
JMJG	U002	673	668	673	668	671	673	671	677	670	670	670	672	671	666	670	670	672	675	672	671	673	672	673	671	673	675	677	668	670	671	672	675	673
JMJG	U003	668	677	671	671	672	670	668	671	668	667	668	671	668	668	669	668	669	668	672	667	668	667	667	669	671	667	662	672	667	668	669	667	671
JMJG	U004	955	955	932	844	783	782	782	781	785	782	782	782	781	782	782	785	783	783	783	783	785	783	816	856	856	855	854	855	855	856	855	854	856
PKLG	U003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	38	61	79	71	103	75	91	99	106	101	95	104	103	118	
PKLG	U004	280	279	279	280	278	278	280	274	279	277	279	279	282	281	281	280	281	281	277	277	278	281	280	278	280	280	275	276	275	277	278	279	276
PKLG	U005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	17	69	80	114	140	140	140	140	
TBIN	U001	687	689	688	689	688	691	691	687	691	691	690	689	692	691	691	689	689	689	689	690	690	692	689	689	689	689	692	690	690	690	689	690	
TBIN	U003	689	688	689	691	694	690	690	693	692	689	686	690	692	690	690	690	690	690	690	690	690	690	690	690	690	690	692	692	690	690	691	693	
TBIN	U004	951	953	916	826	802	802	801	803	804	802	801	799	804	803	801	804	804	801	802	802	804	730	642	602	602	602	602	602	601	601	601	636	
Total ST-Coal		7716	7726	7659	7488	7400	7402	7398	7405	7406	7400	7395	7403	7410	7406	7399	7404	7406	7411	7405	7430	7447	7401	7356	7363	7398	7415	7436	7490	7270	7253	7245	7272	
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	
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	
CBPS	BLK2	358	361	362	365	357	361	363	361	362	361	362	362	360	362	363	216	222	215	222	362	362	361	357	359	363	361	365	361	368	363	362	364	
GLGR	GT01	95	95	97	97	97	98	98	81	69	68	67	69	69	68	68	68	68	70	68	73	101	101	69	67	69	101	101	100	100	99	99	101	
GLGR	GT02	97	97	97	97	97	97	97	80	68	68	68	68	68	68	68	68	68	68	74	101	101	68	68	68	103	100	100	100	100	100	100	78	
GLGR	ST1C	88	87	88	88	88	88	88	82	70	71	71	71	71	70	71	70	71	71	90	90	77	71	72	87	91	91	91	91	91	91	81	72	
KLPP	GT13	136	136	137	138	139	35	0	0	0	0	0	0	0	0	0	0	0	0	0	49	145	143	110	115	116	127	136	131	138	136	126	114	
KLPP	GT14	147	146	147	153	148	152	152	150	135	129	104	81	80	81	77	76	76	77	82	82	145	144	140	139	122	124	125	142	150	147	151	146	
KLPP	GT15	144	141	143	148	143	147	143	142	128	121	109	72	76	76	72	73	71	73	72	77	76	133	143	153	152	121	122	138	145	148	143	136	
KLPP	ST17	196	200	200	200	196	179	135	126	125	120	120	87	86	86	87	87	84	84	85	85	86	128	128	202	203	189	185	185	193	197	193	193	
NPRI	BLK1	505	504	503	503	503	503	506	504	505	503	503	505	502	508	503	413	329	428	479	508	513	503	519	485	511	509	514	514	515	514	518		
NPRI	BLK2	506	507	506	506	507	506	508	506	506	507	507	508	505	508	506	423	327	401	483	514	518	506	524	488	512	509	514	514	516	512	517		
PCGP	PGRG	606	598	609	600	597	602	605	604	606	600	603	604	599	604	604	582	597	594	598	603	599	604	608	600	594	596	600	600	606	600	608		
PGLA	GT11	212	215	215	217	216	196	213	216	199	170	195	169	179	203	172	164	167	166	180	166	200	217	207	203	189	198	188	192	215	216	219		
PGLA	GT12	215	217	219	219	220	200	218	220	201	174	198	174	181	207	175	167	171	171	184	170	204	219	212	206	194	201	192	197	220	219	219		
PGLA	ST10	237	237	239	242	237	222	240	229	232	208	215	208	214	225	215	206	206	210	213	220	239	239	233	231	236	225	234	241	241	240	241		
PLPS	GT11	132	130	131	130	126	144	143	143	144	144	128	127	127	128	124	126	124	127	128	128	127	123	139	113	115	116	140	138	137	137	134		
PLPS	GT12	136	135	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	141	137		
PLPS	GT13	128	128	131	131	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	110	111	112	137	135	136	131	129	129	130		
PLPS	ST18	211	211	200	143	101	61	61	60	60	61	57	59	58	58	56	58	60	58	59	59	59	60	89	134	134	135	145	146	147	213	213	213	
SGRI	GT13	133	34	29	27	6	0	0	0	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	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SKSP	BLK1	269	322	316	338	320	278	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	214	
TJGS	GT1A	222	225	223	221	228	227	227	227	229	229	186	193	196	214	174	164	149	146	142	167	223	221	219	187	182	205	197	208	221	221	222		
TJGS	GT1B	210	213	209	211	213	213	214	214	206	213	169	181	184	198	160	156	139	135	131	155	208	215	211	179	181	200	192	202	210	211	210		
TJGS	ST1C	240	240	240	240	240	236	241	237	235	221	206	209	224	211	196	181	181	181	235	242	246	229	216	240	229	232	244	244	239	242	242		
TJGS	GT2A	204	206	206	206	207	215	213	213	215	214	213	213	214	184	145	146	149	148	148	219	213	213	213	212	212	212	213	213	213	212	212	165	
TJGS	GT2B	203	202	202	202	202	212	211	211	211	211	210	211	183	142	144	144	144	145	145	145	216	211	211	210	210	210	210	210	210	210	210	158	
TJGS	ST2C	252	252	252	252	252	254	257	257	257	257	257	257	235	217	211	211	211	211	211	211	236	257	257	260	260	260	260	260	260	260	260	226	
YPKA	GT11	120	120	119	120	120	120	71	66	66	65	66	66	66	67	66	66	66	66	66	66	67	66	121	120	65	65	64	64	124	124	124	127	
YPKA	GT12	124	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	109	128		
YPKA	ST10	119	79	53	53	53	52	53	38	34	34	35	35	34	35	35	34	35	35	35	35	35	35	52	52									

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 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
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
BSIA	HY02	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
CEND	HY01	10	10	10	10	10	10	9	9	10	10	9	10	10	10	10	10	10	10	9	9	9	10	10	10
CEND	HY03	9	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
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	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
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	61	61	61	99	69	79	99	81	75	62	61	61	73	73	60	57	56	58	58	58	60	61	61	59
LPIA	HY01	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
LPIA	HY02	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	6
PGAU	HY01	21	21	21	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	19	-1
PGAU	HY02	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	17	-1	-1	-1	0	0	0	0	0	18
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	18
PGAU	HY04	20	20	20	21	20	20	21	21	20	21	20	21	21	21	21	21	0	0	0	0	0	0	0	0
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	49
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	50
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	50
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	50
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	24
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	25
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	25
TMGR	HY01	34	34	34	34	34	35	35	34	34	34	34	34	34	34	34	-1	-1	-1	-1	-1	-1	-1	-1	0
TMGR	HY02	0	0	0	0	0	34	33	33	33	33	33	33	33	33	31	34	33	33	33	44	43	43	44	43
TMGR	HY03	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	34
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	26
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	90
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	90
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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	4	5	5	5	5
Total Hydro		271	216	215	254	201	245	266	247	239	228	226	225	239	238	226	220	233	234	235	235	231	194	193	192
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
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
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
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
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	23	23	22	22	21	22	22	23	23	22	22	23	22	22	24	21	21	20	21	20	21	20	21	20
PCUF	CUFK	39	32	33	34	34	34	35	35	34	33	34	35	35	33	33	34	35	34	33	33	33	35	32	32
Total Co-Gen		62	55	55	56	55	56	57	58	57	55	56	58	57	55	55	58	56	55	53	54	54	53	52	53
Total Gen		14368	14148	13866	13645	13289	13101	12913	12682	12567	12447	12342	12211	12251	12293	11997	11589	11421	11598	11795	12080	12536	12705	12891	13043
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
TIE-HVDC		-29	-29	-29	-29	-28	-28	-30	-30	-30	-29	-29	-30	-30	-28	-28	-29	-29	-29	-29	-29	-29	-29	-29	-29
TIE-PLTG		19	53	47	44	0	10	-35	8	-1	41	42	-13	4	41	16	41	35	36	14	-36	50	-17	-3	9

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		-10	24	18	16	-28	-18	-64	-22	-31	11	13	-42	-26	11	-12	12	6	8	-14	-64	21	-46	-33	-21	-28	14	1	-11	-10	23	11	25	14	-22	60	12	44	41	-13	-6	6	-40	-4	4	35	-53	32	-18
System Total		14386	14132	13855	13636	13324	13126	12983	12710	12604	12442	12337	12261	12285	12290	12017	11585	11423	11598	11816	12151	12522	12758	12931	13071	13035	12998	13008	13259	13493	13509	13662	13727	13649	13610	13331	13135	12988	12927	13215	14264	14701	14779	14767	14790	14594	14605	14376	14051
SRev ST-Coal		146	136	234	405	341	337	339	333	337	338	342	337	331	337	341	289	285	277	286	309	312	251	301	217	213	217	221	217	279	292	293	275	395	400	351	428	431	429	177	349	322	327	313	351	339	337	339	344
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		447	539	533	415	555	597	577	450	557	658	685	825	805	759	1033	1440	1636	1479	1310	1067	657	430	364	463	633	649	680	494	265	324	383	303	302	394	762	935	1478	1510	1305	371	382	322	437	383	336	343	483	615
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	-2	0	-6	1	-2	-9	-10	-6	-6	-4	-3	-4	-26	-6	4	-18	0	6	-2	-5	-3	-2	0	0	0	0	0	0	0	0	0	
SRev Co-Gen		-7	0	0	-1	0	-1	-2	-3	-2	0	-1	-3	-2	-3	0	0	-3	-1	0	2	1	1	1	2	3	2	0	3	4	2	2	3	2	0	2	1	2	2	1	0	-1	0	0	0	0	-2	-2	-2
Syncon		813	1050	1050	1050	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	1201	966	1050	1050	899	899	899	899	899	611	611	798	798	798	899	813	1050	1201	1201	1201	1014	1014	1014	676	863	1050	1201	1201	1201
Hydro		607	425	427	388	290	276	256	275	283	294	294	295	281	282	294	300	287	286	286	286	365	103	104	105	106	107	108	106	167	169	75	75	117	251	569	121	120	107	103	178	120	116	350	235	248	171	173	169
S.Reserve Total		2006	2150	2244	2257	2387	2410	2371	2256	2376	2491	2521	2655	2616	2576	2869	3230	3408	3240	3083	2859	2302	1833	1811	1827	1848	1868	1904	1716	1322	1372	1545	1458	1596	1944	2503	2533	3227	3246	2785	1912	1837	1779	1776	1832	1973	2050	2194	2327