

Daily System Generation Summary on Thursday

Thursday, March 07, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,467 MW
Distillate	0 MW
Total TNB	2,467 MW
Total IPP	16,895 MW
Total Co-Gen	55 MW
Total System	22,496 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,649	3.58 %
Gas	35,717	9.37 %
Total TNB	49,366	12.95 %
ST-Coal	221,416	58.07 %
LSS	1,577	0.41 %
Gas	106,699	27.98 %
Total IPP	329,692	86.47 %
Co-Gen	1,776	0.47 %
Total Co-Gen	1,776	0.47 %
Total Generation	380,834	99.88 %
PLTG	259	0.07 %
HVDC	-698	-0.18 %
Interconnection	-439	-0.12 %
Net Energy	381,273	100.00 %

Maximum Demand Record

Date: 3/19/2019	18,402 MW
Date: 3/20/2019	390,048 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	15:30:00 Hour
Total Set On Bus	19,836 MW
TNB Generation	2,751 MW
IPP Generation	15,215 MW
Spinning Reserve	1,792 MW
Maximum Demand	18,041 MW
Net Energy	381,273 MWH
Load Factor	88.06 %

Fuel Cost

Total Cost:	76,278,979.21 RM
Cost per Unit	20.77 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	528
Hydro	443
Syncon	733
Thermal	195
Total	1,899

Time Weather Temperature

Afternoon	Hot	35
Morning	Sunny	25

Gas Usage

Station	(mmscfd)
GLGR	48
SRDG	3
TJGS	205
Total TNB	256
CBPS	54
KLPP	93
NPRI	154
PGLA	91
PLPS	88
PTEK	3
SGRI	83
SKSP	48
YPKA	65
Total IPP	680
Total Gas	936

Total Gas Required 936

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	15768	14966	14416	14052	13660	13509	13740	13629	13875	15628	16557	17258	17195	16972	17563	17970	17916	17512	16230	15835	16902	16881	16479	16172

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, March 27, 2019 11:01:19 AM

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

Daily MW Generation on Thursday

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	694	695	692	694	696	694	694	695	690	695	697	694	697	692	695	693	695	692	694	694	696	693	695	697
JMHE	U001	520	520	519	521	522	521	519	519	520	519	521	520	519	520	521	524	746	749	908	1006	1008	995	909	908	748
JMJG	U001	673	669	673	669	671	677	673	669	671	669	669	673	674	678	675	671	676	677	667	672	672	673	672	669	673
JMJG	U002	678	677	673	685	676	675	678	675	678	678	677	675	680	673	679	673	674	674	673	672	674	671	668	673	671
JMJG	U003	668	671	668	668	671	666	671	669	671	672	670	671	672	671	668	668	670	671	673	674	681	669	670	668	671
JMJG	U004	983	980	919	837	833	835	835	833	834	834	837	835	836	835	835	834	835	904	980	983	988	985	986	985	986
JMJG	U005	972	978	873	831	829	831	829	831	833	830	831	831	829	831	830	890	963	976	973	974	972	976	972	974	974
PKLG	U003	283	283	284	284	283	284	282	281	280	280	280	282	282	284	282	283	283	283	281	281	281	282	283	283	282
PKLG	U004	280	280	278	278	279	278	279	273	279	279	278	281	281	280	281	281	281	281	280	280	279	280	279	277	280
PKLG	U005	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466	466
TBIN	U001	691	689	691	689	689	691	691	690	690	690	687	691	689	690	688	690	691	687	689	687	689	689	690	688	687
TBIN	U002	693	693	694	694	693	692	693	692	692	694	690	691	696	692	692	694	694	692	692	692	693	690	692	692	692
TBIN	U003	687	691	690	690	692	688	690	692	691	691	691	689	693	693	690	692	692	692	692	694	689	692	692	692	692
TBIN	U004	952	952	890	832	832	833	831	833	832	833	832	833	832	833	832	875	953	952	953	952	952	952	951	951	952
Total ST-Coal		9241	9243	9013	8836	8830	8833	8831	8817	8829	8831	8821	8831	8846	8841	8843	8823	8837	9005	9228	9460	9472	9642	9722	9731	9706
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
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
CBPS	BLK2	354	351	360	356	356	350	359	356	351	355	360	359	357	358	360	354	356	357	358	355	355	355	357	358	355
GLGR	GT01	68	68	68	69	68	66	67	67	67	67	69	69	69	68	69	67	69	66	67	68	86	100	100	99	
GLGR	GT02	68	68	68	68	68	68	68	68	68	68	68	69	68	68	68	68	68	87	101	101	101	67	68	68	
GLGR	ST1C	70	70	70	71	70	70	70	70	70	70	70	69	70	71	70	70	70	69	70	77	89	90	89	73	
KLPP	GT13	113	65	0	0	0	0	0	0	0	0	0	0	0	0	0	50	144	144	144	146	146	145	145	145	
KLPP	GT14	124	131	133	133	128	75	75	74	75	76	75	74	79	79	75	76	75	153	150	151	150	152	151	151	
KLPP	GT15	121	132	131	128	123	72	72	72	71	72	72	72	72	72	141	147	144	147	145	147	146	146	146	145	
KLPP	ST17	187	183	126	126	125	93	89	86	84	84	86	86	84	84	77	90	88	135	128	196	200	200	200	201	
NPRI	BLK1	506	502	511	510	505	498	505	508	500	492	505	485	521	506	482	482	505	506	506	505	497	505	503	505	
NPRI	BLK2	508	503	513	511	506	500	507	507	451	332	332	330	338	507	482	484	503	500	508	489	517	499	505	504	
PCGP	PGRG	597	589	603	606	594	587	601	604	591	604	602	603	602	600	602	601	602	593	604	580	599	591	599	598	
PGLA	GT11	164	164	194	164	0	0	0	0	0	0	0	0	0	0	0	0	110	139	212	229	228	217	217	215	
PGLA	GT12	168	167	197	167	168	226	229	161	157	162	161	161	161	162	164	164	164	171	171	216	234	233	220	219	
PGLA	ST10	208	206	220	121	93	115	115	92	92	92	92	92	93	93	92	92	93	90	95	227	251	251	242	240	
PLPS	GT11	119	115	66	112	111	107	65	65	61	64	64	65	65	64	64	65	122	122	129	135	133	135	134	130	
PLPS	GT12	124	123	64	119	120	114	64	64	61	64	65	64	65	63	65	64	64	129	129	132	138	139	139	132	
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	70	125	131	130	130	127		
PLPS	ST18	135	135	97	130	133	134	92	93	93	92	93	93	93	93	93	93	93	139	211	212	212	211	212	211	
SGRI	GT11	120	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
SGRI	GT12	129	140	140	140	140	107	71	70	70	70	70	70	70	70	70	117	141	110	135	141	141	140	140	138	
SGRI	GT13	125	128	128	128	128	104	63	63	63	64	64	62	63	68	64	64	64	108	129	100	128	129	126	128	
SGRI	ST14	210	187	151	152	152	133	102	103	100	103	104	104	102	98	101	102	102	133	153	133	151	152	150	149	
SKSP	BLK1	297	219	226	218	218	217	218	219	220	219	226	218	228	221	219	219	230	276	345	219	318	340	317	293	
TJGS	GT1A	202	184	227	207	186	179	194	173	151	168	169	151	209	200	149	158	229	218	220	174	221	220	218	208	
TJGS	GT1B	192	179	214	200	179	169	185	165	143	158	163	142	203	187	140	146	217	211	212	165	214	211	208	207	
TJGS	ST1C	227	209	237	231	220	218	236	201	187	214	195	193	224	223	202	189	225	236	240	207	242	242	238	230	
TJGS	GT2A	213	213	213	213	213	213	214	214	214	146	146	147	148	147	146	146	209	209	209	208	209	209	209	209	
TJGS	GT2B	211	211	211	211	211	209	210	210	210	144	144	144	144	144	144	206	206	206	206	207	207	207	207	207	
TJGS	ST2C	259	259	259	259	259	259	259	259	259	259	211	211	211	211	211	256	256	256	256	258	258	258	258	258	
YPKA	GT11	123	65	66	65	65	66	66	66	65	66	65	65	66	66	65	94	125	125	67	124	124	125	125	66	

Daily MW Generation on Thursday

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
YPAK	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
YPAK	ST10	51	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
YPAK	GT21	65	65	65	117	115	65	65	65	65	65	65	65	65	84	125	121	89	124	125	124	122	124	125	121
YPAK	ST20	37	37	36	57	58	37	37	37	37	37	36	36	36	37	37	37	38	60	59	43	61	61	61	61
Total CCGT-Gas		6095	5719	5626	5621	5344	5083	4930	4764	4608	4391	4406	4330	4542	4656	4481	4490	4724	5579	5995	6151	6467	6624	6628	6596
PTEK	GT2B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRDG	GT04	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 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	21	0	0	0	0	0	0	0	0	0	0	0	0	10	11	11	11	11	20	19	20	20	20	20
BSIA	HY02	22	23	23	23	23	23	23	23	23	23	23	22	23	22	11	10	11	11	11	22	22	22	22	22
BSIA	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	12	12	12	22	22	22	22	22	22
CEND	HY01	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8
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
CEND	HY03	8	7	8	8	7	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
KNRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	34	34	34	34
KNRG	HY02	35	35	25	24	23	24	25	25	24	25	25	25	25	25	24	25	24	25	23	35	35	35	35	35
KNRG	HY03	34	34	26	25	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	34	34	34	34
KNYR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	98	98	99	97
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	101	99	99	99	0
KNYR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	100	99	98	98	98
KNYR	HY04	59	57	60	60	58	60	60	60	61	61	61	61	60	59	60	61	61	61	58	59	59	99	98	98
LPIA	HY02	11	11	11	11	11	11	11	11	11	11	11	11	11	15	15	15	15	15	15	15	15	15	15	15
MNOR	HY01	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PGAU	HY01	0	0	0	0	0	0	0	0	0	0	0	0	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PGAU	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
PGAU	HY04	22	22	22	22	22	22	22	22	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31	31	31
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	0	0	0
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	0	0	0
SYPS	HY01	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	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	0	0	0
SYPS	HY04	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	50	52	51	62	62	61	62	61	62
TMGR	HY02	33	32	34	33	33	31	33	33	32	33	33	34	33	33	33	34	51	55	54	65	65	63	65	63
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	60	60	59	60	60	80	60
TMGR	HY04	34	32	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	47	51	51	61	61	59	61	58	61
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	104	-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	95	105	-1	-1	-1
UPIA	HY01	0	0	0	0	0	0	0	0	0	0	4	6	6	6	6	6	6	6	6	6	6	6	6	6
Total Hydro		339	313	218	215	212	186	191	188	192	197	198	218	195	216	196	195	200	323	340	403	598	815	698	647
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	3	6	6	10	16	19	21	24	28	22	25	28
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	17	15	25	35	24	27	25	29	39
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	3	8	16	24	31	34	39	44	47	49	50	49
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15	21	27	33	37	36	43	44	33	34
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	2	9	13	34	17	19	23	12	51	34	33	25

Daily MW Generation on Thursday

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		
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	11	20	25	33	27	39	40	29	19	46	42	43	41	39	24	14	15	6	6	2	1	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	15	44	69	126	131	163	182	179	236	203	189	221	230	196	197	191	175	170	102	69	41	21	7	0	0	0	0	0	0	0	0	0	0
PCUF	CUFG	46	45	46	46	46	46	46	46	46	47	46	48	47	47	48	47	47	45	45	45	46	46	46	46	45	45	45	45	45	45	45	46	44	45	45	46	45	46	46	46	48	48	46	46	47	47			
PCUF	CUFK	8	8	8	10	9	8	8	7	16	19	33	34	35	35	33	32	33	32	32	32	33	31	33	32	32	33	33	32	33	32	33	32	32	32	32	32	32	33	32	32	34	34	33	32	33	33			
Total Co-Gen		54	53	54	56	55	54	54	53	62	66	79	82	82	81	79	80	77	77	77	79	77	79	78	77	78	79	78	79	79	77	78	78	78	76	77	77	79	77	78	78	78	82	82	79	78	80	80		
Total Gen		15729	15328	14911	14728	14441	14156	14006	13825	13687	13480	13498	13440	13668	13797	13600	13608	13852	14900	15569	16137	16489	16909	17209	17399	17173	16990	16921	17212	17548	18067	18003	18044	17968	17868	17549	16767	16223	15832	15800	16668	16890	16973	16867	16761	16519	16485	16160	15756	
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		
TIE-HVDC		-29	-30	-30	-29	-29	-29	-29	-29	-29	-29	-29	-29	-28	-28	-30	-30	-29	-29	-30	-29	-29	-29	-29	-29	-29	-30	-30	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-28	-28	-29	-29	-29	-29	-29	-29		
TIE-PLTG		-10	22	-25	-57	54	59	-17	-32	56	-36	18	-1	-43	-12	0	24	6	43	-30	6	-38	35	-20	-4	7	-10	-21	-21	15	63	63	32	81	15	78	23	34	-13	5	-21	29	38	19	-22	73	65	20	-35	
Interconnection		-39	-8	-55	-86	25	30	-46	-60	27	-64	-11	-30	-72	-41	-29	-6	-23	14	-59	-24	-68	6	-49	-33	-22	-40	-51	-50	-15	33	33	3	52	-14	49	-6	5	-42	-23	-49	0	9	-10	-51	44	35	-8	-63	
System Total		15768	15336	14966	14814	14416	14126	14052	13885	13660	13544	13509	13470	13740	13838	13629	13614	13875	14886	15628	16161	16557	16903	17258	17432	17195	17030	16972	17262	17563	18034	17970	18041	17916	17894	17512	16785	16230	15886	15835	16729	16902	16968	16881	16816	16479	16454	16172	15823	
SRev ST-Coal		198	196	383	391	389	89	91	107	95	93	103	93	78	83	81	101	87	387	205	203	191	171	191	182	107	182	186	336	352	176	194	189	184	189	191	207	188	337	194	185	201	193	208	206	185	203	203	178	
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	7	1	8	44	70	51	0	0	0	0	0	0	0	0	0	0	0		
SRev CCGT-Gas		889	1265	917	922	840	1101	1254	1420	1576	1793	1778	1854	1642	1528	1703	1694	1460	979	716	560	518	361	357	389	529	554	483	570	458	402	549	505	519	524	663	1340	1816	2005	2106	1063	694	377	520	482	734	748	1071	976	
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 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	0
SRev Co-Gen		1	2	1	-1	0	1	1	2	-7	-11	-24	-27	-27	-27	-26	-24	-25	-22	-22	-22	-24	-22	-24	-23	-22	-23	-24	-23	-24	-24	-22	-23	-23	-23	-21	-22	-22	-24	-22	-23	-23	-27	-27	-24	-23	-25	-25		
Syncon		939	939	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1025	1176	1025	1176	1176	1176	1004	1004	752	752	414	601	702	853	666	479	277	651	651	651	500	500	651	802	802	802	802	802	903	817	1004	1004	1004	1004	1004	
Hydro		316	318	277	280	283	269	264	264	268	264	264	259	258	388	260	396	265	266	285	358	341	515	519	640	570	620	472	432	580	580	466	462	427	544	566	414	307	342	290	268	274	315	353	312	320	321	325	263	
S.Reserve Total		2343	2720	2603	2617	2537	2485	2635	2818	2957	3164	3146	3204	2976	2997	3194	3192	2963	2786	2360	2103	2030	1777	1795	1601	1785	2035	1970	1981	1845	1418	1839	1792	1802	1804	1950	2590	3091	3462	3370	2295	1949	1766	1872	1978	2220	2254	2579	2397	