

Daily System Generation Summary on Thursday

Thursday, March 14, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,391 MW
Distillate	0 MW
Total TNB	2,391 MW
Total IPP	16,015 MW
Total Co-Gen	55 MW
Total System	20,963 MW

Generation Mix

Type	MWh	Percentage
Hydro	26,947	7.06 %
Gas	49,357	12.94 %
Total TNB	76,304	20.00 %
ST-Coal	177,060	46.41 %
ST-Gas	8,480	2.22 %
LSS	1,531	0.40 %
Distillate	980	0.26 %
Gas	114,828	30.10 %
Total IPP	302,879	79.40 %
Co-Gen	1,906	0.50 %
Total Co-Gen	1,906	0.50 %
Total Generation	381,089	99.90 %
PLTG	-112	-0.03 %
HVDC	-279	-0.07 %
Interconnection	-391	-0.10 %
Net Energy	381,480	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:	16:30:00 Hour
Total Set On Bus	19,202 MW
TNB Generation	3,857 MW
IPP Generation	13,983 MW
Spinning Reserve	1,283 MW
Maximum Demand	17,963 MW
Net Energy	381,480 MWH
Load Factor	88.49 %

Fuel Cost

Total Cost:	77,970,092.88 RM
Cost per Unit	22.01 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	539
Hydro	291
Syncon	568
Thermal	134
Total	1,532

Time	Weather	Temperature
Afternoon	Hot	35
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	53
PAKA	50
PGPS	41
SRDG	3
TJGS	216
Total TNB	362
CBPS	55
KLPP	88
MPSS	51
NPRI	150
PGLA	107
PLPS	63
SGRI	111
SKSP	35
YPKA	83
PKLG	86
Total IPP	829
Total Gas	1,191
Total Gas Required	1,200

Alternate Fuel Usage

Station	(mmscfd)
PLPS	3
SGRI	5
Total	8

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	15776	14974	14382	13879	13542	13293	13421	13434	13789	15585	16509	17013	16949	16684	17491	17917	17957	17710	16494	16073	17376	17445	16898	16616

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, March 27, 2019 11:06:39 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	U001	692	695	707	703	704	705	699	705	706	706	704	706	702	704	701	706	703	705	703	705	705	703	704	705	704	704	705	703	700	706	703	705	705	705	704	705	704	698	684	703	702	702	702	703				
JMAH	U002	693	695	697	706	700	706	701	705	707	701	704	699	702	705	703	704	705	700	702	706	703	704	705	703	702	703	706	704	703	702	700	705	704	703	706	702	705	701	706	702	706	702	704	703	706	702	703	
JMJG	U002	673	674	685	689	694	683	676	683	682	680	683	682	684	683	682	679	682	683	683	684	683	682	682	679	680	685	682	680	680	680	685	680	690	677	685	683	679	689	684	685	690	678	677	687	688	686	688	679
JMJG	U003	673	674	674	679	678	679	685	682	678	676	678	678	678	675	679	678	678	677	677	678	673	675	677	675	677	679	674	678	677	681	673	683	673	676	677	669	674	677	682	675	679	672	675	676	683	673	677	672
JMJG	U004	795	791	796	790	791	794	794	790	796	787	786	791	794	804	796	801	813	815	817	811	806	812	809	806	793	806	797	795	800	799	798	794	799	793	798	798	801	795	797	798	794	797	796	795	796	801	799	795
JMJG	U005	983	980	978	979	993	815	820	815	823	821	820	821	822	821	822	819	821	823	976	976	972	973	973	972	969	970	973	971	972	972	972	973	975	985	975	974	974	975	975	976	973	977	975	981	979	980	980	
PKLG	U003	285	287	279	283	285	282	283	282	281	281	282	286	282	283	282	281	283	283	284	278	282	282	281	284	283	283	281	279	279	279	279	280	282	281	283	283	282	283	282	280	281	279	279	279	283	283	283	282
PKLG	U004	282	280	282	280	281	279	279	279	279	279	280	280	280	281	280	281	280	280	278	280	281	279	282	282	278	281	279	280	280	280	281	279	280	281	281	282	281	281	279	279	282	281	279	278	280	280	281	
TBIN	U001	692	691	701	698	700	700	699	696	701	699	699	699	700	700	700	697	700	702	700	699	696	699	698	700	698	701	700	697	698	699	698	699	697	700	697	699	699	699	699	698	701	699	698	698	699	699	698	
TBIN	U002	693	692	702	701	701	702	701	702	702	700	699	700	701	699	698	701	702	698	701	702	698	701	701	705	701	706	702	701	700	701	700	699	700	702	702	701	699	700	699	699	699	700	700	702	702	702	702	699
TBIN	U004	952	952	953	951	923	836	823	823	822	822	823	823	823	822	822	914	953	952	951	951	951	951	951	953	951	953	952	951	951	951	951	952	951	952	953	953	951	950	951	952	952	952	951	953	953	953	953	951
Total ST-Coal		7413	7411	7454	7459	7391	7180	7166	7154	7176	7152	7159	7165	7172	7177	7169	7160	7192	7382	7475	7466	7453	7469	7459	7463	7448	7459	7443	7445	7444	7447	7443	7446	7451	7446	7466	7453	7448	7458	7455	7454	7455	7440	7423	7448	7467	7464	7465	7443
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
PKLG	U001	204	147	147	147	147	147	147	147	147	146	146	146	146	147	147	147	147	146	146	190	250	283	287	234	153	147	183	227	253	230	231	230	229	230	230	180	146	146	180	203	203	203	146	146	146	146	146	
PKLG	U002	205	152	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146	148	148	192	246	234	246	179	146	147	179	227	231	230	231	233	232	233	233	189	146	145	171	203	203	203	144	145	145	145	145	
Total ST-Gas		409	299	293	293	293	293	293	293	293	292	292	292	292	293	293	293	293	294	294	382	496	517	533	413	299	294	362	454	484	460	462	463	461	463	463	369	292	291	351	406	406	406	290	291	291	291	291	
CBPS	BLK2	356	360	358	360	364	370	362	359	366	367	365	366	364	362	364	365	357	364	360	363	370	367	363	365	358	364	357	364	361	362	361	361	362	362	362	357	362	362	364	364	365	367	361	362	363	369		
GLGR	GT01	85	86	87	86	91	106	96	86	67	69	67	68	68	68	68	68	66	68	66	104	103	101	100	67	67	102	102	103	100	100	101	99	103	73	67	66	68	92	104	102	103	101	102	101	102	70		
GLGR	GT02	84	87	87	87	93	105	98	86	68	69	68	69	68	68	68	68	68	68	68	104	103	103	102	102	67	68	105	102	102	100	100	101	101	102	71	68	68	68	94	102	103	103	102	102	102	103	70	
GLGR	ST1C	82	83	83	83	82	94	86	82	71	70	70	70	70	70	70	70	89	91	91	92	92	91	71	71	88	92	92	90	90	91	90	92	78	71	71	71	82	92	91	91	91	91	92	91	77			
KLPP	GT13	119	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	126	115	117	119	115	121	115	119	116	117	149	148	147	148	147	147	147	145	122	116	116	132	135	142	143	95	0	0	0		
KLPP	GT14	112	112	112	112	125	113	119	125	124	129	125	125	126	125	125	127	125	124	124	122	125	127	127	129	122	128	144	150	151	151	151	154	153	151	130	125	122	140	143	150	153	152	152	152	151	150		
KLPP	GT15	128	128	125	124	95	0	0	0	0	0	0	0	0	0	55	146	146	144	121	125	127	127	128	122	128	121	125	146	146	147	147	147	146	147	129	121	138	138	145	147	146	142	142	142	142			
KLPP	ST17	187	187	126	121	115	68	49	49	51	51	50	50	49	49	54	59	131	122	197	185	185	189	185	193	185	185	185	201	202	205	206	206	206	206	199	189	185	185	197	197	197	197	197	193	132	132	132	
MPSS	GT01	100	95	95	95	99	97	95	94	99	97	95	96	97	97	96	98	96	96	96	89	107	107	104	103	103	101	105	105	104	103	102	100	102	102	103	103	104	105	106	106	103	105	106	105	108	107	108	108
MPSS	GT02	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	51	74	108	107	106	105	105	104	104	104	104	103	104	104	104	104	104	105	105	106	104	105	106	103	107	107	107	106		
MPSS	ST01	67	40	40	41	43	45	42	42	44	40	40	39	43	41	40	43	39	43	46	41	112	114	114	114	114	113	114	114	113	113	113	113	111	112	112	112	112	113	114	114	114	113	113	115	114	114	113	115
NPRI	BLK1	494	493	495	496	504	505	497	491	356	344	406	373	484	443	374	356	335	338	487	499	506	506	505	502	497	504	495	499	497	505	509	506	511	497	505	503	503	491	497	505	505	506	505	505	505	505	505	
NPRI	BLK2	497	496	496	499	506	506	497	493	367	340	405	375	488	443	380	353	334	340	484	496	507	506	505	503	499	504	498	499	500	506	511	508	511	499	507	506	504	492	497	507	506	508	506	505	507	506	507	
PAKA	GT4A	85	85	85	85	85	84	85	84	85	84	85	85	85	85	85	85	84	85	95	94	94	94	94	94	94	95	94	94	94	94	94	94	95	94	95	95	95	95	94	95	95	94	95	95	95	95		
PAKA	GT4B	75	75	75	75	75	75	75	75	75	75	75	74	75	75	75	75	75	83	83	82	82	82	82	82	82	82	82	81	81	81	82	81	81	82	81	82	82	82	82	82	82	82	82	82	82	82		
PAKA	ST4C	88	81	80	79	79	79	79	79	78	78	78	78	78	78	78	78	78	78	79	89	90	91	91	91	91	91	91	91	91	91	91	91	91															

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				
TMGR	HY04	59	40	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	81	81	81	81	81	81	80	81	79	81	80	81	81	81	81	81	81	81	81	79	80	81	81	81	81	81	81	81	81	81	81	81	
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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0			
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			
UPIA	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
Total Hydro		1041	957	922	923	870	874	837	830	839	835	833	830	837	793	725	728	721	810	1041	1062	1085	1169	1170	1168	1119	1100	1093	1097	1197	1274	1283	1324	1330	1517	1373	1214	1156	1124	1127	1360	1624	1625	1689	1689	1533	1503	1264	1197		
PLPS	GT13	140	140	139	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	GT11	125	125	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	GT21	125	125	126	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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 Distillate		390	390	389	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	2	6	10	14	18	20	19	24	27	27	27	28	28	26	19	20	21	17	17	8	7	4	2	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	1	2	9	15	22	27	29	31	38	41	41	40	42	38	39	35	33	29	21	19	11	4	2	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	2	7	15	22	28	32	37	40	44	41	40	44	37	36	37	38	39	41	36	31	25	19	12	5	1	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	4	11	19	30	37	46	51	50	50	57	57	57	57	57	56	52	46	31	30	15	10	5	2	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	2	8	14	23	29	34	38	41	44	46	46	45	43	39	42	31	29	24	13	9	5	2	1	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	1	12	41	73	111	139	161	176	193	202	215	208	206	207	198	195	179	165	132	106	70	45	20	8	0	0	0	0	0	0	0	0	0	0	0
PCUF	CUFG	44	44	44	44	45	44	44	44	46	46	45	46	46	46	47	44	44	44	43	43	49	48	48	48	49	48	47	48	49	49	48	49	48	49	48	49	48	49	48	48	48	49	49	49	47	48	47	49	46	
PCUF	CUFK	33	33	34	34	33	35	33	32	33	35	33	34	32	33	34	32	32	32	33	32	34	33	31	32	32	33	32	33	33	32	33	32	31	34	33	33	33	32	32	33	33	32	33	32	32	32	32	33		
Total Co-Gen		77	77	78	78	78	79	77	76	79	81	78	80	78	79	76	76	77	75	77	82	79	80	80	82	80	80	81	82	81	81	81	81	79	83	81	82	80	80	81	82	81	82	79	80	79	81	79			
Total Gen		15799	15381	14991	14674	14365	14108	13946	13785	13551	13379	13350	13273	13456	13697	13483	13388	13810	14921	15593	15978	16346	16677	16881	17055	16847	16674	16546	16960	17364	17696	17751	17773	17871	17919	17609	17118	16512	16077	16096	16884	17397	17427	17471	17257	16930	16950	16648	16370		
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		30	30	30	29	29	30	30	30	30	30	30	30	30	31	31	31	31	30	30	-97	-97	-98	-98	-98	-98	-97	-97	-97	-97	-98	-98	-97	-97	-98	-56	30	30	30	30	30	30	30	30	30	30	30	31	31	30	
TIE-PLTG		1	27	-5	-32	-39	-33	45	33	-12	-59	36	-57	13	17	26	0	-1	-2	-13	48	-58	-33	-26	-31	4	-11	-33	16	-23	-27	-60	-25	19	63	-36	-19	-4	4	0	-39	-1	-3	4	42	11	24	9	15		
Interconnection		31	57	25	-2	-9	-3	75	63	17	-29	65	-27	43	48	57	30	29	28	16	-49	-155	-130	-124	-128	-94	-108	-130	-81	-119	-125	-158	-122	-78	-36	-93	12	26	34	31	-9	29	27	34	71	40	55	40	45		
System Total		15776	15332	14974	14684	14382	14119	13879	13730	13542	13416	13293	13308	13421	13657	13434	13366	13789	14901	15585	16035	16509	16815	17013	17191	16949	16790	16684	17049	17491	17829	17917	17903	17957	17963	17710	17114	16494	16051	16073	16901	17376	17408	17445	17194	16898	16903	16616	16333		
SRev ST-Coal		114	116	73	68	136	199	204	214	196	220	211	203	198	192	198	209	178	145	52	61	74	58	68	64	79	68	84	82	83	80	84	81	76	101	81	74	79	69	72	73	72	127	174	149	80	83	82	104		
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		869	865	902	1115	1015	625	734	875	1143	1289	1319	1401	1230	951	1091	1333	1362	1186	905	735	604	574	550	472	664	730	881	695	627	473	426	524	423	522	420	631	840	1149	1117	614	422	377	389	509	468	414	480	591		
SRev ST-Gas		83	75	75	75	75	75	75	75	75	76	76	76	76	76	76	76	76	76	76	72	77	42	11	44	77	71	71	70	26	-4	0	-2	-3	-1	-3	-3	69	64	64	68	54	54	54	170	169	64	64	65		
SRev Distillate		33	33	34	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		-22	-22	-23	-23	-24	-22	-21	-24	-26	-23	-25	-23	-24	-24	-25	-24	-21	-21	-22	-20	-22	-27	-24	-25	-25	-27	-25	-26	-27	-26	-26	-24	-28	-26	-27	-28	-26	-27	-25	-25	-26	-27	-26	-27	-24	-25	-24	-26	-24	
Syncon		676	676	676	676	762	762	848	848	848																																									