

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	1,995 MW
Distillate	0 MW
Total TNB	1,995 MW
Total IPP	15,690 MW
Total Co-Gen	0 MW
Total System	20,764 MW

Generation Mix

Type	MWh	Percentage
Hydro	8,559	2.27 %
Gas	39,979	10.59 %
Total TNB	48,538	12.85 %
ST-Coal	208,591	55.23 %
LSS	1,956	0.52 %
Gas	117,871	31.21 %
Total IPP	328,418	86.96 %
Co-Gen	1,236	0.33 %
Total Co-Gen	1,236	0.33 %
Total Generation	378,192	100.14 %
PLTG	-93	-0.02 %
HVDC	609	0.16 %
Interconnection	516	0.14 %
Net Energy	377,676	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:	15:00:00 Hour
Total Set On Bus	19,223 MW
TNB Generation	2,591 MW
IPP Generation	15,067 MW
Spinning Reserve	1,517 MW
Maximum Demand	17,768 MW
Net Energy	377,676 MWH
Load Factor	88.57 %

Fuel Cost

Total Cost:	71,609,591.39 RM
Cost per Unit	18.91 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	587
Hydro	303
Syncon	558
Thermal	166
Total	1,614

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	44
PAKA	2
PGPS	40
TJGS	204
Total TNB	290
CBPS	52
KLPP	99
MPSS	48
NPRI	150
PGLA	110
PLPS	82
SGB3	62
SGRI	94
SKSP	48
YPKA	27
Total IPP	771
Total Gas	1,061
Total Gas Required	1,061

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	15523	14841	14277	13774	13443	13207	13463	13434	13731	15471	16379	17108	17052	16665	17352	17768	17590	17398	16240	15923	17035	17104	16554	16364

Daily MW Generation on Thursday

		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		696	694	691	693	691	695	694	694	692	693	690	693	692	694	691	693	684	683	682	681	684	684	683	683	682	681	684	684	683	683	682	685	684	681	694	693	692	694										
JMAH	U002		589	599	696	695	698	693	695	696	693	697	694	694	693	696	693	693	694	694	695	682	683	683	682	688	693	694	694	695	693	694	692	685	684	685	684	682	682	686	683	685	684	683	685	685	696	693	695	694
JMHE	U001		759	763	761	763	762	761	761	761	762	760	762	765	761	762	762	761	765	762	998	1008	1010	1006	1010	780	779	778	785	1004	1006	1006	1012	1011	1013	1010	1012	1011	1014	1012	1015	1018	1012	1015	1014	757	762	757	758	760
JMJG	U001		650	645	645	650	630	651	647	645	649	649	648	645	645	649	648	646	650	646	643	648	672	675	678	670	673	667	671	671	673	683	671	668	668	672	671	658	669	673	672	673	671	667	662	669	673	671	669	671
JMJG	U003		667	677	666	665	668	667	668	668	668	668	671	672	666	678	665	669	667	663	670	668	669	670	666	670	666	670	665	669	669	667	666	673	667	668	671	667	667	666	667	666	667	666	667	666	667	669	668	
JMJG	U004		954	956	892	807	787	785	785	788	785	785	785	785	785	783	785	845	978	977	977	977	978	979	977	978	977	978	976	977	978	976	977	977	977	978	976	977	977	977	976	977	977	976	976	976	977			
PKLG	U003		286	281	282	284	283	281	281	282	283	283	283	282	282	284	282	282	281	280	281	282	282	281	282	279	282	280	279	279	283	276	205	278	283	279	281	282	284	287	223	216	246	274	281	280	280	280	283	280
PKLG	U005		468	471	470	470	468	470	469	470	469	472	471	472	468	468	471	470	470	470	470	469	470	470	470	470	471	470	470	471	470	469	471	472	467	468	475	470	470	470	471	471	471	473	468	471	468	470	470	
PKLG	U006		468	468	469	470	468	465	468	461	467	468	467	469	469	465	466	467	468	467	465	469	466	466	466	466	466	468	469	471	468	468	468	466	469	468	468	469	469	468	471	468	468	468	468	468	468	468	470	470
TBIN	U001		690	691	690	690	690	688	690	692	689	689	691	692	692	691	691	690	690	690	682	680	680	680	680	680	689	690	690	690	689	690	678	680	680	682	678	675	681	680	679	679	679	681	681	690	689	691	690	
TBIN	U002		705	691	693	693	690	691	692	692	691	691	694	692	692	690	692	690	691	695	694	665	678	695	674	679	681	688	694	690	690	692	690	682	686	678	684	681	683	683	683	681	681	684	684	685	691	691	692	691
TBIN	U003		690	691	691	691	690	692	687	690	693	691	689	690	692	689	689	691	693	689	686	684	681	680	683	684	693	691	691	689	691	690	693	682	681	679	683	678	680	681	683	675	679	681	683	678	690	693	689	693
TBIN	U004		952	952	887	799	782	783	784	783	782	781	783	782	783	782	783	781	813	900	984	982	983	983	982	982	982	981	981	981	983	983	981	981	982	981	982	983	983	981	984	982	983	982	984	983	982	981	980	981
Total ST-Coal			8574	8579	8533	8370	8307	8322	8321	8319	8323	8329	8323	8329	8325	8327	8317	8328	8422	8631	8904	8906	8950	8930	8942	8709	8758	8753	8757	8987	8987	8983	8908	8933	8945	8926	8947	8921	8935	8952	8888	8876	8901	8939	8955	8678	8740	8727	8732	8739
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
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
CBPS	BLK2		353	360	361	358	361	357	348	357	245	218	215	215	221	222	223	223	296	362	356	360	358	363	358	365	355	356	357	359	360	368	362	356	355	361	351	344	354	348	362	354	356	354	363	355	363	357	362	
GLGR	GT01		0	0	0	0	0	0	0	0	0	0	0	0	4	35	52	90	103	100	101	100	101	99	101	99	65	67	68	102	101	101	100	99	100	100	86	67	68	69	70	67	68	69	68	68	70	69	68	
GLGR	GT02		95	95	95	95	95	94	95	95	94	95	95	95	94	95	95	95	90	101	101	101	101	100	100	100	67	67	70	101	100	100	100	100	101	101	83	68	68	69	68	68	69	68	69	68	69	69	69	
GLGR	ST1C		39	40	39	39	39	40	40	40	40	40	40	40	39	40	37	34	87	88	88	88	89	89	89	89	70	69	70	88	89	89	89	89	90	90	84	71	70	71	70	70	70	70	70	69	69	69	69	
KLPP	GT13		117	122	121	120	120	115	95	69	74	70	69	70	73	74	74	73	99	110	109	117	131	120	137	133	133	138	125	113	134	137	137	137	142	142	143	123	110	106	112	139	142	144	145	143	145	144	145	127
KLPP	GT14		155	157	141	113	0	0	0	0	0	0	0	0	0	0	26	111	121	126	146	132	153	142	148	151	134	122	148	150	152	151	152	152	152	134	118	112	113	153	154	155	155	155	155	157	157	137		
KLPP	GT15		153	156	140	140	140	129	116	83	83	82	82	82	87	82	84	82	119	118	120	123	144	129	148	141	146	149	136	125	146	150	148	151	148	148	148	148	133	117	112	118	149	149	150	153	154	153	154	137
KLPP	ST17		202	201	197	198	148	123	119	91	91	92	92	91	95	91	87	94	115	179	188	188	204	196	204	204	200	202	196	187	200	200	200	201	200	200	203	193	184	180	183	204	203	203	204	204	204	204	196	
MPSS	GT01		99	106	89	87	86	85	84	86	87	86	85	85	88	86	88	86	86	88	84	100	101	101	99	99	101	70	79	99	100	100	101	98	99	99	100	87	71	71	73	103	103	103	103	102	103	103	102	78
MPSS	GT02		37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	85	98	101	101	99	100	101	74	79	98	99	101	100	99	98	99	99	88	73	75	73	105	105	105	105	105	105	105	105	80	
MPSS	ST01		76	50	40	37	36	36	35	36	37	36	35	35	37	36	36	36	36	36	35	108	106	107	107	107	107	83	72	108	108	108	108	108	107	107	107	99	71	71	71	107	112	112	112	112	112	113	90	
NPRI	BLK1		500	509	496	494	494	487	477	489	416	407	407	409	418	418	417	413	407	505	491	503	497	503	506	501	499	499	504	503	503	510	504	498	503	505	498	480	436	433	446	510	505	511	512	510	513	515	515	512
NPRI	BLK2		499	512	497	497	497	488	480	488	415	406	406	412	418	416	415	415	408	506	491	505	499	505	509	506	499	501	505	501	506	511	508	499	506	506	501	482	436	434	447	512	507	516	511	511	515	514	515	514
PAKA	GT4A		84	84	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PAKA	GT4B		75	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PAKA	ST4C		80	74	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PCGP	PGRG		587	595	600	605	600																																											

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	
SGRI	GT11	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	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	
SGRI	GT13	106	110	110	110	110	106	107	110	110	110	107	106	109	110	110	107	107	115	110	113	134	133	108	109	109
SGRI	ST14	63	67	65	65	65	66	61	66	65	65	65	66	66	67	67	65	66	66	69	62	142	141	217	220	198
SGRI	GT21	106	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SGRI	GT23	105	108	109	109	109	106	106	109	109	109	106	109	109	109	105	109	105	105	129	129	128	128	110	111	111
SGRI	ST24	124	119	60	61	61	61	56	60	60	60	59	57	61	59	59	59	60	60	63	64	67	65	65	61	61
SKSP	BLK1	218	219	260	219	221	218	218	218	217	219	218	225	248	226	218	219	224	219	226	323	270	336	312	325	330
TJGS	GT1A	190	156	230	212	208	149	144	148	188	148	149	152	181	173	168	149	146	162	178	227	212	221	220	220	
TJGS	GT1B	184	145	217	206	205	145	134	141	180	142	141	140	171	167	164	140	143	155	169	214	213	216	217	216	
TJGS	ST1C	236	189	244	244	238	187	180	185	196	185	185	185	208	229	197	189	208	187	210	235	246	242	242	245	245
TJGS	GT2A	213	201	199	202	202	202	202	146	146	146	146	146	146	189	148	147	146	146	217	209	209	209	209	209	209
TJGS	GT2B	209	198	198	198	198	198	198	144	144	144	144	144	142	186	147	144	142	144	214	206	205	204	206	206	
TJGS	ST2C	260	251	251	251	251	251	251	211	211	211	211	211	229	231	211	211	211	256	257	257	257	257	257	257	
YPKA	GT21	113	101	102	103	103	65	66	66	66	66	66	66	66	66	66	66	66	131	133	138	135	137	136	138	
YPKA	ST20	54	48	48	47	48	39	39	39	39	39	39	39	39	39	39	39	62	64	66	65	66	66	66	66	
Total CCGT-Gas		6707	6369	6121	5906	5729	5415	5291	5061	4925	4752	4739	4754	4915	5044	4934	4746	5170	5895	6320	6738	7059	7300	7520	7613	
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	HY02	23	23	23	23	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	
CEND	HY01	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	
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	24	23	23	23	23	23	24	23	0	0	0	0	0	0	0	0	0	0	0	0	
KNRG	HY02	0	0	0	0	0	0	0	0	0	0	0	0	24	24	25	24	25	25	25	25	25	24	24	25	
KNYR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	57	59	0	0	0	62	
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
KNYR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	96	96	96	96	96	96	
KNYR	HY04	57	57	60	58	59	58	56	57	59	59	57	57	72	59	66	59	57	69	57	57	58	58	60	100	
LPIA	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	
LPIA	HY02	15	15	15	15	15	15	15	15	15	15	15	15	15	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	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	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	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	
PGAU	HY03	-1	19	-1	-1	-1	17	17	-1	-1	19	-1	-1	18	19	-1	-1	18	-1	21	21	20	21	20	21	
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	
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	
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	
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	
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	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	
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	
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	
TMGR	HY02	29	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
TMGR	HY03	29	32	32	32	32	31	30	34	34	33	33	34	35	34	34	33	34	31	34	34	33	34	34	34	
UPIA	HY01	5	5	5	5	5	5	5	5	5	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	
Total Hydro		193	186	169	189	158	173	170	157	159	177	157	174	200	188	203	157	170	173	158	180	202	346	511	435	

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	
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	
CHLS	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	
GBLS	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	
MCLS	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	21	22	22	23	22	22	22	21	22	23	23	23	28	29	27	27	24	27	20	19	19	19	19	19	19
PCUF	CUFK	32	30	32	31	32	32	31	31	32	32	32	32	30	29	31	31	30	31	29	32	29	30	32	30	31
Total Co-Gen		53	52	54	54	54	53	53	53	54	55	55	55	54	55	60	61	57	56	55	58	54	52	51	49	49
Total Gen		15527	15186	14877	14519	14248	13964	13835	13590	13460	13312	13274	13295	13469	13626	13493	13333	13829	14796	15529	15976	16389	16709	17071	17145	17031
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		0	0	0	0	0	0	0	0	30	30	30	30	30	31	31	31	31	30	30	30	30	30	30	30	30
TIE-PLTG		4	1	36	-3	-29	14	61	1	-13	36	37	11	-24	25	28	39	69	-2	36	-45	-9	-68	-23	-28	-17
Interconnection		4	1	36	-3	-29	14	61	2	17	67	67	41	6	56	59	70	100	28	66	-15	22	-37	7	3	
System Total		15523	15185	14841	14522	14277	13950	13774	13588	13443	13245	13207	13254	13463	13570	13434	13263	13731	14774	15471	16017	16379	16769	17108	17183	17052
SRev ST-Coal		176	171	286	277	301	287	287	288	285	278	286	279	277	219	166	164	120	180	168	191	142	147	143	123	127
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		1073	1028	724	803	827	1069	1193	1423	1559	1732	1745	1730	1569	1450	1655	1843	1572	1239	886	640	626	511	510	417	481
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		7	8	6	6	6	6	7	7	7	6	5	5	5	5	6	5	0	-1	3	4	5	2	6	8	9
Syncon		766	703	854	703	854	703	854	854	704	854	854	854	552	703	703	854	854	703	854	703	552	602	602	602	854
Hydro		195	265	131	262	142	278	281	143	141	273	143	143	126	402	263	287	143	130	278	142	271	400	306	291	367
S.Reserve Total		2217	2175	2001	2051	2130	2343	2471	2715	2846	2993	3033	3011	2836	2690	2917	3117	2846	2441	2036	1804	1725	1645	1592	1509	1601