

Daily System Generation Summary on Thursday

Thursday, January 30, 2020

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,462 MW
Distillate	0 MW
Total TNB	2,462 MW
Total IPP	17,561 MW
Total Co-Gen	0 MW
Total System	22,846 MW

Generation Mix

Type	MWh	Percentage
Hydro	9,622	2.75 %
Gas	33,142	9.48 %
Total TNB	42,764	12.24 %
ST-Coal	230,987	66.10 %
LSS	2,476	0.71 %
Gas	73,334	20.98 %
Total IPP	306,797	87.79 %
Co-Gen	229	0.07 %
Total Co-Gen	229	0.07 %
Total Generation	349,790	100.09 %
PLTG	-410	-0.12 %
HVDC	726	0.21 %
Interconnection	316	0.09 %
Net Energy	349,474	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:	15:30:00 Hour
Total Set On Bus	18,286 MW
TNB Generation	2,664 MW
IPP Generation	13,963 MW
Spinning Reserve	1,651 MW
Maximum Demand	16,620 MW
Net Energy	349,474 MWH
Load Factor	87.61 %

Fuel Cost

Total Cost:	54,794,854.58 RM
Cost per Unit	15.68 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	415
Hydro	395
Syncon	966
Thermal	160
Total	1,936

Time	Weather	Temperature
Afternoon	Hot	36
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	49
TJGS	190
Total TNB	239
CBPS	48
KLPP	79
NPRI	145
PGLA	104
PLPS	60
Total IPP	435
Total Gas	674
Total Gas Required	674

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	13700	13160	12638	12238	11998	11909	12271	12429	12808	14405	15152	15739	15743	15578	16170	16543	16500	16256	15288	15110	16201	16067	15539	15292

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, March 09, 2020 2:49:21 PM

(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	690	693	693	694	700	603	603	603	605	603	550	554	606	692	694	655	693	697	695	694	693	693	693	694	694	694	693	694	693	697	688	695	695	694	695	692	699	694											
JMHE	U001	777	779	779	782	778	780	778	778	779	781	782	780	780	781	777	781	778	785	781	780	780	776	781	779	775	779	778	778	779	781	781	781	778	780	779	781	779	779	778	780									
JMHE	U002	978	775	776	783	779	779	779	778	780	780	781	780	779	781	777	780	777	785	986	978	978	977	981	979	974	978	975	977	979	980	978	980	977	978	976	981	977	980	981	979	980	978	979	978	980	976	981		
JMJG	U001	667	669	668	615	545	548	547	547	547	548	548	550	549	545	546	549	550	662	676	676	674	673	678	677	677	677	676	672	678	683	665	668	671	670	671	667	672	666	672	670	670	672	672	667	675	673	673	667	
JMJG	U003	667	668	669	585	546	546	540	541	546	545	545	544	544	545	542	557	557	671	669	668	671	667	667	667	673	671	667	668	667	668	666	668	669	664	671	662	673	662	655	676	663	679	669	650	687	656	664	664	
JMJG	U004	855	858	788	787	787	788	788	786	788	788	786	789	787	789	788	787	789	836	902	904	904	902	903	902	901	901	901	901	901	900	902	901	900	901	901	902	902	903	904	902	903	902	902	903	903	903	902	904	
JMJG	U005	850	851	780	782	782	779	782	780	782	785	782	782	781	785	760	781	782	769	785	838	935	978	981	985	981	979	978	966	978	977	980	979	983	981	977	978	977	979	977	978	977	979	978	981	977	980			
PKLG	U003	229	281	284	284	251	153	150	152	150	153	152	151	194	286	285	281	286	283	281	279	281	282	282	281	283	279	281	279	282	278	280	280	282	282	276	284	289	283	284	282	275	287	280	285	285	280	283	284	
PKLG	U004	141	140	140	142	142	138	140	136	143	142	144	143	140	139	143	140	141	141	140	142	142	140	141	140	142	139	136	142	143	142	136	141	142	144	142	140	142	141	140	142	141	136	143	142	140	143	141		
PKLG	U005	467	466	468	468	438	351	267	267	268	270	269	269	300	394	460	466	466	468	467	467	467	467	466	466	466	469	466	467	468	468	469	470	466	466	465	466	466	468	467	468	469	469	472	466	466	467	451	468	466
PKLG	U006	446	446	449	449	449	450	449	448	447	446	449	450	449	448	446	446	449	449	450	451	448	448	449	448	446	446	449	448	448	449	447	446	449	450	450	450	448	451	452	448	449	449	449	449	449	449	449		
TBIN	U001	690	690	690	690	688	689	691	652	651	600	552	553	601	693	690	691	692	691	692	693	690	684	691	691	692	690	690	692	687	691	691	689	689	691	691	691	690	691	690	692	690	689	692	690	689	690	689	690	
TBIN	U002	696	690	692	695	692	694	687	653	653	602	550	553	603	689	690	691	694	692	691	690	691	688	692	686	690	691	688	692	686	690	691	687	690	688	691	691	692	689	690	691	690	693	690	692	692	692	686		
TBIN	U003	694	693	690	694	690	690	700	656	623	603	556	553	603	693	689	675	671	691	691	690	691	688	691	690	980	692	695	689	690	692	687	692	676	693	691	692	692	689	690	692	690	691	692	690	692	691	692	692	
TBIN	U004	983	916	829	783	782	783	782	783	783	782	782	783	784	782	783	783	782	783	829	917	982	981	983	980	982	982	983	981	983	984	982	983	982	983	982	982	981	984	983	982	982	982	983	983	983	983			
Total ST-Coal		9830	9615	9395	9233	9049	8771	8683	8560	8545	8428	8228	8234	8500	9042	9070	9063	9105	9356	9673	9865	10027	10053	10077	10072	10071	10068	10039	10068	10078	10055	10051	10049	10061	10052	10059	10067	10059	10058	10085	10044	10092	10060	10053	10091	10045	10067	10061		
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			
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			
CBPS	BLK2	209	202	206	213	220	223	221	222	215	219	223	223	224	224	210	203	225	343	357	354	354	359	357	358	358	361	361	359	359	358	358	359	359	361	361	357	351	220	349	356	363	356	363	361	361	356	357	356	
GLGR	GT01	66	67	68	69	67	67	68	68	68	68	70	68	68	68	67	67	67	69	68	68	67	66	68	67	67	67	67	68	100	99	99	100	99	101	68	67	66	68	67	86	99	100	101	100	68	67	68	67	
GLGR	GT02	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	67	67	68	67	70	100	100	100	100	100	100	68	68	67	86	101	101	101	99	67	68	67	68			
GLGR	ST1C	72	70	71	71	71	71	71	71	71	71	71	71	71	72	71	71	71	71	71	71	71	71	71	72	72	71	72	90	90	90	90	90	90	75	72	71	72	80	89	90	89	90	72	71	72	72			
KLPP	GT13	113	111	111	115	116	118	119	119	117	119	120	120	119	119	115	111	119	122	123	112	112	135	133	126	119	128	115	128	112	116	138	139	126	128	131	122	113	119	111	122	123	117	124	126	120	121	121	121	
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	105	152	144	135	127	137	124	137	124	126	157	156	140	142	142	137	128	129	124	132	132	130	135	135	80	81	81	0			
KLPP	GT15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	120	124	123	153	145	133	129	138	126	138	142	142	152	155	137	140	139	134	127	128	124	128	135	131	135	135	134	135	135	134		
KLPP	ST17	50	47	48	51	51	51	50	50	50	51	51	51	51	55	55	55	55	117	118	175	201	202	197	193	193	193	197	189	193	205	201	193	197	197	197	193	187	189	189	193	193	193	201	181	177	177	129		
NPRI	BLK1	313	381	425	327	332	380	401	370	327	327	404	527	527	328	321	313	456	509	505	508	506	499	509	508	502	507	509	508	509	506	510	509	509	508	499	497	511	500	478	482	482	482	479	525	525	505			
NPRI	BLK2	491	368	371	337	305	312	313	316	307	315	318	319	319	315	299	290	317	508	507	509	507	499	509	510	503	511	506	509	509	509	507	510	511	510	509	501	499	511	502	511	510	512	510	509	506	502	508	505	
PCGP	PGRG	563	545	547	411	380	389	391	402	381	396	403	401	402	397	367	347	403	598	591	597	598	580	603	601	592	602	591	601	600	600	596	602	603	602	599	584	580	602	583	602	599	603	600	592	583	595	589		
PGLA	GT11	165	167	166	165	164	164	164	164	164	164	164	164	164	164	164	164	162	163	164	171	180	209	192	208	159	213	207	170	176	209	208	214	207	194	173	164	160	182	206	195	208	209	164	177	187	161			
PGLA	GT12	180	178	179	186	185	186	187	189	185	188	189	188	190	188	182	177	188	187	186	186	187	197	205	236	217	232	183	238	230	230	200	233	234	237	229	218	196	187	184	208	229	221	234	235	187	200	211	186	
PGLA	ST10	201	202	2																																														

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
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	HY02	22	22	22	23	23	23	23	24	23	24	23	24	23	23	23	23	24	23	23	24	23	23	23	23
KNYR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	101	100	100	100	97	97	99	99
KNYR	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	99	98	99	98	99	98	98
KNYR	HY03	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	59	101	100	100	100	100	100	100
KNYR	HY04	54	53	52	52	57	58	59	85	58	58	100	77	72	60	56	52	60	55	57	57	59	58	60	59
LPJA	HY01	19	19	19	19	19	19	19	19	19	19	20	20	20	22	22	24	25	25	25	25	23	23	23	22
MNOR	HY01	8	8	8	8	8	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	21	21
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	21	21
PGAU	HY03	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	-1	-1	-1	-1	-1
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21	21	0
SIHY	HY01	31	31	31	31	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	51	51	0
SIHY	HY02	30	30	30	30	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	0
SYPS	HY01	17	17	17	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0
SYPS	HY02	17	17	17	25	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	-1	-1	-1	52	62	52	52
TMGR	HY02	33	30	30	36	36	38	38	36	38	38	35	31	28	35	38	80	82	38	36	38	39	37	39	38
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	94	97	97	93
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
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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
Total Hydro		258	254	252	277	301	284	172	219	169	170	214	212	209	171	161	154	171	168	214	217	175	193	197	198
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
JSLs	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	4	5	4	5	4	4	4	5	4	4	5	4	5	4	5	5	4	5	4	5	4	3	5	4
PCUF	CUFK	5	4	4	5	4	5	4	5	5	3	4	6	4	6	6	5	6	4	7	5	3	6	4	5
Total Co-Gen		9	9	8	9	9	9	8	9	9	10	7	9	10	10	9	13	8	12	12	10	11	9	11	23
Total Gen		13714	13372	13200	12863	12645	12429	12256	12169	12009	11939	11881	11997	12269	12561	12473	12388	12779	13690	14396	14712	15145	15570	15787	15871
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		31	30	30	31	31	30	30	31	31	31	30	30	30	30	30	30	31	31	30	30	30	30	30	30
TIE-PLTG		-14	6	14	-24	-19	-8	-9	-46	-17	-47	-54	-34	-28	23	18	39	-54	-58	-35	-92	-34	-5	21	-42
Interconnection		17	36	44	7	11	22	21	-15	14	-16	-24	-4	2	53	48	69	-25	-28	-5	-61	-3	26	52	-12
System Total		13700	13339	13160	12860	12638	12411	12238	12187	11998	11958	11909	12005	12271	12512	12429	12323	12808	13722	14405	14777	15152	15548	15739	15886

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	
SRev ST-Coal		279	403	458	541	608	691	687	815	830	874	868	870	875	599	565	612	572	446	331	264	164	138	114	119	119	120	123	152	252	246	136	140	142	130	139	132	124	132	133	106	147	99	131	138	100	146	124	130
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		1313	1436	1385	1586	1644	1565	1537	1549	1644	1598	1501	1386	1379	1592	1698	1769	1454	909	762	1095	816	574	437	379	517	521	611	338	46	152	346	245	250	243	335	467	950	1149	1000	461	287	336	238	228	603	607	553	634
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	0	0	0	0	0	0	0	0	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		61	61	62	61	61	61	62	61	61	61	60	63	61	60	60	60	61	57	62	58	58	60	59	61	59	47	59	63	60	62	60	62	63	61	60	61	59	60	60	59	60	61	59	62	61	64	62	64
Syncon		1267	1267	1267	1267	1116	1267	1267	1267	1267	1267	1116	1116	1267	1355	1355	1355	1355	1355	1355	1355	1204	1204	1204	1117	1355	1355	1204	1053	777	590	590	678	678	829	1103	1254	1254	1254	1016	678	865	865	865	1103	1103	1355	1355	
Hydro		199	203	204	179	306	172	135	118	138	137	92	245	248	135	144	151	134	137	101	98	140	273	269	259	313	133	132	266	531	400	465	618	584	580	533	344	108	104	106	282	626	539	541	413	232	273	142	143
S.Reserve Total		3119	3370	3376	3634	3735	3756	3688	3810	3940	3937	3788	3680	3679	3653	3822	3947	3576	2904	2611	2870	2533	2249	2083	2022	2125	2176	2280	2023	1942	1637	1597	1655	1717	1692	1896	2107	2495	2699	2553	1924	1798	1900	1834	1706	2099	2193	2236	2326