

Daily System Generation Summary on Tuesday

Tuesday, January 28, 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	17,118 MW
Total Co-Gen	0 MW
Total System	22,403 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,928	4.02 %
Gas	34,718	10.03 %
Total TNB	48,646	14.06 %
ST-Coal	233,066	67.34 %
LSS	2,309	0.67 %
Gas	61,720	17.83 %
Total IPP	297,095	85.84 %
Co-Gen	228	0.07 %
Total Co-Gen	228	0.07 %
Total Generation	345,969	99.96 %
PLTG	-853	-0.25 %
HVDC	725	0.21 %
Interconnection	-128	-0.04 %
Net Energy	346,097	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:	16:00:00 Hour
Total Set On Bus	17,855 MW
TNB Generation	2,765 MW
IPP Generation	13,408 MW
Spinning Reserve	1,673 MW
Maximum Demand	16,201 MW
Net Energy	346,097 MWH
Load Factor	89.01 %

Fuel Cost

Total Cost:	53,724,846.60 RM
Cost per Unit	15.52 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	274
Hydro	436
Syncon	800
Thermal	149
Total	1,659

Time Weather Temperature

Afternoon	Hot	36
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	43
TJGS	203
Total TNB	246
CBPS	51
KLPP	17
NPRI	148
PGLA	30
PLPS	82
Total IPP	328
Total Gas	574
Total Gas Required	574

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	13910	13404	12958	12437	12135	11980	12151	12297	12724	14200	14896	15380	15440	15320	15631	16111	16201	15955	14965	14820	15846	15921	15615	15382

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, March 09, 2020 2:42:30 PM

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

Daily MW Generation on Tuesday

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	694	697	693	694	689	694	693	695	694	695	686	695	691	694	694	693	696	699	696	695	691	692	694	693	696	695	663	682	
JMHE	U001	780	779	778	781	778	779	780	780	780	781	780	780	779	781	776	777	780	779	780	781	778	781	779	777	780	781	782	780	781
JMHE	U002	919	917	919	779	781	780	775	779	780	781	781	779	780	780	779	781	777	984	980	980	981	981	980	981	979	980	981	977	980
JMJG	U001	673	672	671	669	672	667	675	673	673	609	598	600	596	596	629	673	680	677	672	679	677	679	663	668	675	677	668	672	672
JMJG	U003	671	668	668	668	668	670	668	670	669	600	596	593	595	594	629	668	668	668	666	670	667	667	667	679	673	668	669	671	672
JMJG	U004	902	901	828	786	786	787	786	786	787	786	785	787	786	787	786	848	892	892	892	892	892	892	891	892	892	895	894	892	894
JMJG	U005	921	920	890	771	756	776	770	771	772	771	770	771	774	770	769	761	785	843	921	948	975	972	974	973	972	969	977	972	977
PKLG	U003	208	206	207	207	208	207	207	207	212	206	209	209	208	206	207	205	205	208	206	205	208	205	204	205	206	205	204	209	203
PKLG	U004	142	141	141	142	140	140	142	138	140	142	140	140	141	141	142	143	142	141	141	143	142	142	142	141	141	143	142	139	141
PKLG	U005	423	426	424	424	445	469	466	466	464	466	467	467	470	472	466	468	467	466	468	467	466	467	467	467	467	466	466	469	469
PKLG	U006	447	448	446	451	449	446	449	450	450	446	448	450	449	449	446	448	448	449	449	446	448	449	449	449	449	446	450	446	446
TBIN	U001	690	690	691	690	690	691	691	691	687	690	688	691	691	689	690	690	685	690	691	689	689	689	689	689	689	689	689	686	692
TBIN	U002	693	693	696	693	694	693	690	694	693	693	693	692	693	695	692	691	692	694	693	693	693	692	692	693	693	693	693	693	693
TBIN	U003	690	689	692	691	690	692	691	690	691	692	691	689	687	690	691	689	689	689	691	692	689	689	692	690	687	691	686	690	689
TBIN	U004	923	923	848	782	782	783	783	783	783	783	781	784	784	783	781	783	836	925	985	984	983	982	984	981	983	983	983	983	981
Total ST-Coal		9776	9770	9592	9228	9233	9269	9267	9271	9273	9139	9125	9115	9130	9124	9186	9262	9273	9663	9879	9958	9994	9976	9977	9965	9960	9971	10003	9851	9857
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
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
CBPS	BLK2	357	357	359	363	359	362	220	221	221	223	220	223	223	223	230	362	359	359	359	362	362	362	361	361	358	358	359	359	366
GLGR	GT01	98	95	95	95	95	94	94	94	94	95	96	95	96	95	94	96	94	95	95	86	95	108	101	99	67	68	84	99	99
GLGR	GT02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	35	86	86	109	101	101	67	68	85	100	100	100	100
GLGR	ST1C	42	39	39	40	39	39	39	39	39	40	39	39	39	39	39	38	38	41	38	88	90	89	72	71	76	91	91	91	91
KLPP	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	29	35	22	21	21	21	29	44	56	136	134	135	
KLPP	ST17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	28	60	60	64	
NPRI	BLK1	500	471	491	508	485	489	473	449	364	361	391	405	520	530	527	467	532	494	506	509	512	510	511	511	506	511	510	509	509
NPRI	BLK2	509	506	513	515	514	515	443	347	346	317	316	317	317	320	318	316	401	511	514	510	515	511	511	511	507	511	511	511	511
PCGP	PGRG	595	590	598	600	602	600	597	603	501	503	501	500	501	507	503	601	609	600	602	601	606	604	602	604	597	600	601	600	600
PGLA	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	82	139	139	139	139	138	159	149	192	237	235	
PGLA	ST10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	104	104	
PLPS	GT11	129	128	128	129	128	129	129	129	129	129	128	129	128	129	127	126	127	130	130	146	144	143	119	143	116	127	118	143	141
PLPS	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	147	146	145	124	144	119	131	123	147	
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	77	126	126	143	142	142	116	142	112	125	115	144	
PLPS	ST18	57	58	58	58	58	59	58	58	59	59	58	58	58	58	59	59	113	141	174	217	215	216	205	215	202	207	197	212	
TJGS	GT1A	212	221	190	196	188	122	122	124	124	124	123	126	125	157	134	121	166	230	228	229	229	226	218	227	219	210	223	224	
TJGS	GT1B	208	216	180	188	184	116	117	121	119	121	118	122	121	150	131	120	162	225	216	226	222	223	223	221	217	221	212	200	
TJGS	ST1C	204	238	210	221	214	166	166	162	162	162	162	162	162	186	177	162	184	243	246	246	250	250	250	246	247	247	250	238	
TJGS	GT2A	222	222	222	222	195	146	146	146	146	146	146	146	148	145	146	146	215	213	215	213	212	214	214	215	212	214	214	214	
TJGS	GT2B	219	219	219	220	192	143	143	143	143	145	145	142	143	145	144	144	212	210	212	211	211	211	211	210	212	212	212	211	
TJGS	ST2C	263	263	263	263	245	211	211	211	211	211	211	211	211	211	211	211	258	258	258	258	258	258	258	258	258	258	258	258	
Total CCGT-Gas		3615	3623	3565	3618	3498	3191	2958	2847	2658	2636	2654	2675	2788	2896	2834	2831	3106	3693	3867	4042	4272	4403	4483	4466	4349	4396	4314	4510	
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	0	0	0	0	0
BSIA	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	21	21	21	21	21	21	21	22	21	21	12	
BSIA	HY02	22	22	22	22	22	22	22	22	22	22	22	22	22	10	11	10	10	10	10	11	21	21	21	21	21	21	11	20	
BSIA	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	00										

Daily MW Generation on Tuesday

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	HY01	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22																									
KNRG	HY02	22	22	23	23	23	23	23	23	23	23	23	23	22	23	22	35	35	35	35	35	35	35	35	35	35																								
KNYR	HY01	100	57	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0																								
KNYR	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																									
KNYR	HY03	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	102	102	58	58	99	99	99																								
KNYR	HY04	100	59	58	61	60	58	59	59	58	59	62	58	98	90	60	100	61	60	61	61	61	60	60	82	73	81	101	100	98	95	98	102	102	101	101	101	101	101	101										
LPJA	HY01	17	17	17	17	17	17	17	17	17	17	17	17	18	19	20	20	20	22	24	24	24	21	20	21	20	21	21	21	21	21	17	17	17	17	17	19	19												
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	6	6	6	6	6	6	6	6	5	5	5	3	3	5	5	6	6	6	6	4	4									
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	18	-1										
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	20	20	20	20	21	21	21	20	21	-1	-1	-1	-1	18	18	18	18	18	18	18						
PGAU	HY03	-1	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	21	21	20	21	20	-1	-1	-1	-1	-1	-1	-1	-1	19	18	19	18	18	18	18	19	18					
PGAU	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	0	21	21	21	21	21	0	0	0	0	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	0	0	31	51	51	51	51	8	0	0	0	31	31	51	51	51	51	9	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	0	31	50	50	50	50	31	0	0	0	0	14	50	50	50	50	30	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	0	17	25	25	25	25	17	0	0	0	17	17	25	25	25	17	8	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	0	17	25	25	25	25	17	0	0	0	17	17	25	25	25	17	17	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	0	15	17	25	25	25	25	7	0	0	0	17	25	25	25	17	17	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	0	17	25	25	25	25	17	0	0	0	17	25	25	25	17	17	0	0	0						
TMGR	HY01	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	54	54	64	64	64	64	64	64	64	64	62	32	-1	-1	-1	-1	62	62	31	31	32		
TMGR	HY02	64	32	33	33	33	21	23	23	23	23	23	20	23	23	33	33	33	54	54	54	65	64	65	64	65	64	64	60	64	64	64	64	33	32	33	33	33	33	64	64	64	33	34	33	33				
TMGR	HY03	30	29	30	30	30	21	22	22	22	23	23	22	23	22	22	-1	-1	-1	-1	-1	-1	-1	-1	62	62	62	57	-1	-1	-1	-1	32	32	60	60	30	29	30	30	-1	-1	-1	0	0	0	0	0		
TMGR	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	0	63	63	63	63	63	63	63	63	63	63	61	61	0	0	0	0	0	0	0	0	0	0		
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	88	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	96	98	96	-1	-1	-1	-1	-1	92	93	96	94	93	-1	-1
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	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	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
Total Hydro		531	285	229	232	231	208	212	211	211	235	212	215	209	251	265	188	231	213	291	305	364	532	590	789	836	656	650	664	679	845	974	1030	1117	1150	1065	618	551	542	616	760	1036	1131	1137	1101	966	782	799	601	
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	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	2	5	8	11	13	18	22	25	20	17	23	26	26	17	14	22	24	22	21	3	1	0	1	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	2	4	6	22	28	34	35	13	17	24	16	27	27	29	15	24	15	21	2	3	6	8	3	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	3	13	13	13	14	35	35	14	15	35	25	25	24	46	36	36	14	14	2	2	2	2	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	1	7	15	21	27	33	38	41	46	49	50	50	48	46	44	41	40	35	27	21	15	8	2	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	2	4	9	11	16	29	37	20	43	25	25	23	28	11	12	49	31	8	8	17	16	4	2	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	1	5	13	18	25	30	35	38	39	42	30	45	44	42	22	23	34	31	25	20	13	7	2	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	6	17	10	16	15	20	28	30	33	42	32	38	36	37	25	28	20	23	33	13	2	2	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	1	6	11	24	32	37	30	42	38	46	32	57	58	56	54	39	32	23	32	24	15	11	5	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	1	3	12	18	24	24	34	33	29	42	42	43	41	41	39	14	37	22	21	13	14	5	1	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	16	54	97	154	193	239	294	277	279	302	285	334	333	303	271	276	269	199	183	116	84	47	18	0	0	0	0	0	0	0	0	0	0	0	0
PCUF	CUFG	4	4	4	6	5	6	4	5	5	5	6	5	4	5	6	4	5	5	4	5	5	5	5	5	5	5	5	5	6	4	4	4	4	5	5	4	5	4	4	5	-2	-2	4	5	5	6			
PCUF	CUFK	4	4	5	5	4	5	5	5	3	5	4	5	5	4	6	5	5	4	6	5	6	4	5	5																									

Daily MW Generation on Tuesday

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		27	-1	-2	8	20	16	16	8	22	3	27	-2	-7	-40	6	14	-80	-24	-48	-55	-56	-30	-19	-34	0	1	-50	-24	-27	-47	-44	-11	-12	31	20	17	45	50	14	2	13	-12	-10	27	18	-14	2	-15
System Total		13910	13694	13404	13088	12958	12670	12437	12338	12135	12024	11980	12025	12151	12326	12297	12285	12724	13662	14200	14531	14896	15195	15380	15548	15440	15341	15320	15401	15631	16019	16111	16141	16201	16156	15955	15434	14965	14678	14820	15578	15846	15943	15921	15856	15615	15531	15382	15100
SRev ST-Coal		314	320	437	470	452	437	427	460	463	561	565	570	556	560	546	464	472	338	244	165	129	147	146	158	163	152	120	119	113	141	137	155	138	146	123	140	141	150	131	159	145	146	143	163	147	222	297	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	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		215	207	265	212	332	639	872	983	1172	1194	1176	1155	1042	934	996	999	724	280	668	493	406	316	319	202	319	222	540	442	234	180	187	166	203	159	297	288	628	856	815	164	175	199	221	193	277	136	212	358
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		62	62	61	59	61	59	61	60	62	60	61	59	60	62	59	59	59	62	59	60	62	60	60	61	60	59	59	60	60	59	60	61	62	58	60	61	60	59	62	62	60	67	67	62	60	59	56	
Syncon		1079	1079	1180	1180	1180	1180	1180	1180	1029	1180	1029	1180	1180	1180	1029	1268	1268	1117	1268	894	1117	1117	1117	777	590	777	928	1016	1016	865	1016	928	741	741	741	1079	1166	1166	1166	916	578	491	403	403	403	590	439	777
Hydro		195	255	210	207	208	231	227	228	228	355	227	224	230	188	325	163	120	289	146	158	248	291	233	374	514	507	386	334	344	429	399	431	531	498	583	256	188	197	223	429	539	531	526	562	697	494	628	400
S.Reserve Total		1865	1923	2153	2128	2233	2546	2767	2911	3105	3199	3209	3188	3068	2924	2955	2953	2643	2086	2385	1770	1960	1933	1875	1571	1647	1718	2033	1970	1767	1675	1798	1740	1674	1606	1802	1823	2184	2429	2394	1730	1499	1427	1447	1475	1673	1589	1722	1805