

Daily System Generation Summary on Monday

Monday, July 15, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	1,892 MW
Distillate	0 MW
Total TNB	1,892 MW
Total IPP	16,082 MW
Total Co-Gen	0 MW
Total System	20,649 MW

Generation Mix

Type	MWh	Percentage
Hydro	9,339	2.59 %
Gas	32,428	8.98 %
Total TNB	41,767	11.57 %
ST-Coal	230,675	63.91 %
LSS	1,925	0.53 %
Gas	86,057	23.84 %
Total IPP	318,657	88.28 %
Co-Gen	732	0.20 %
Total Co-Gen	732	0.20 %
Total Generation	361,156	100.05 %
PLTG	-534	-0.15 %
HVDC	727	0.20 %
Interconnection	193	0.05 %
Net Energy	360,963	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:	16:30:00 Hour
Total Set On Bus	18,875 MW
TNB Generation	1,874 MW
IPP Generation	15,330 MW
Spinning Reserve	1,640 MW
Maximum Demand	17,266 MW
Net Energy	360,963 MWH
Load Factor	87.11 %

Fuel Cost

Total Cost:	66,089,640.62 RM
Cost per Unit	18.21 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	611
Hydro	378
Syncon	525
Thermal	213
Total	1,727

Time Weather Temperature

Afternoon	Hot	32
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	27
TJGS	199
Total TNB	227
MPSS	35
NPRI	132
PGLA	104
PLPS	71
SGRI	73
SKSP	46
YPKA	68
Total IPP	530
Total Gas	756
Total Gas Required	756

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	14143	13468	12972	12545	12325	12052	12402	12540	13173	14834	15923	16425	16380	16118	16760	17045	17209	16996	15877	15539	16747	16785	16227	15936

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, July 16, 2019 8:46:52 AM

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

Daily MW Generation on Monday

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	689	692	694	691	691	693	693	694	695	604	603	641	640	691	689	695	693	693	670	653	650	652	652	649	652	654	650	683	682	678	680	689	681	683	684	670	670	672	693	694	693	688	682	693	691	692	687	694
JMAH	U002	695	691	693	693	698	694	695	691	698	604	601	644	646	690	694	694	688	698	694	696	694	693	698	690	694	699	685	686	683	682	685	682	683	684	674	674	675	695	693	693	692	682	694	693	697	693	695	
JMHE	U001	774	774	771	768	771	769	768	767	777	773	772	768	770	768	767	771	773	871	1001	1003	1003	1011	1004	1008	1002	1006	1002	1008	1005	1007	1006	992	1006	1005	1007	1002	1006	90	144	259	321	522	518	0	0	0	0	0
JMHE	U002	512	508	509	504	509	506	505	505	513	510	507	505	506	506	499	506	510	507	510	507	508	512	507	512	507	507	506	508	507	758	753	759	759	756	761	755	672	760	759	762	757	758	756	758	753	758	753	758
JMJG	U001	678	678	674	676	679	677	674	677	682	649	629	673	677	675	675	676	678	675	677	675	678	673	677	661	662	666	667	667	663	666	663	668	667	666	667	653	603	669	662	670	671	668	665	674	677	675	674	678
JMJG	U003	668	666	668	665	668	668	668	666	653	602	645	669	666	666	667	667	668	668	666	669	675	666	668	657	664	664	662	661	657	663	662	664	662	661	662	650	652	654	667	671	670	667	662	667	668	668	666	668
JMJG	U004	922	834	796	795	795	794	794	787	785	785	785	782	782	782	785	785	785	963	979	976	979	979	978	977	977	977	978	978	977	978	977	980	978	981	978	978	978	979	979	977	977	978	977	978	980	976	977	
JMJG	U005	891	789	791	792	791	783	789	789	792	786	791	789	789	790	789	796	790	791	843	914	970	980	980	981	980	977	978	983	985	976	976	976	980	979	978	981	980	979	977	977	974	983	978	974	978	974		
PKLG	U003	283	283	282	289	286	282	282	283	221	159	150	153	154	156	172	294	282	286	284	283	283	285	287	282	279	281	281	285	282	281	285	282	284	281	275	261	263	279	285	285	282	281	285	289	284	284	282	
PKLG	U005	471	466	468	466	464	467	468	471	427	345	270	270	266	270	269	283	371	455	468	467	464	466	469	468	468	466	461	464	463	467	468	470	466	467	468	464	441	442	470	469	469	472	471	471	470	471	467	467
PKLG	U006	468	470	470	470	470	469	471	472	465	385	305	272	272	283	371	450	472	468	468	472	468	470	471	470	471	472	470	471	466	470	471	470	472	470	455	452	465	466	470	472	472	469	467	471	469	470		
TBIN	U001	688	689	692	689	689	690	673	492	662	638	601	601	601	694	689	692	691	689	688	693	692	692	691	680	682	681	681	681	683	681	680	682	682	680	671	670	672	691	692	690	688	680	692	692	690	690	691	
TBIN	U002	690	692	692	693	693	690	692	691	673	604	605	604	605	694	692	692	692	693	692	694	692	690	691	685	683	683	683	685	684	683	683	684	684	684	681	673	614	675	692	690	691	693	683	693	699	695	691	693
TBIN	U003	0	0	0	0	0	0	0	2	108	71	90	153	161	168	151	165	169	171	140	42	0	0	115	223	357	494	651	683	688	681	682	693	683	660	671	614	674	692	695	689	689	684	695	688	692	692	689	
TBIN	U004	957	871	791	790	792	792	793	793	793	794	790	793	792	791	792	792	792	863	953	982	981	979	982	984	985	982	982	982	984	982	983	984	980	981	982	983	983	982	982	982	983	980	983	981	981	983		
Total ST-Coal		9386	9103	8991	8981	8996	8974	8965	8780	8850	8395	8086	8227	8323	8618	8698	8822	9068	9226	9664	9797	9779	9749	9746	9831	9927	10066	10194	10389	10411	10666	10642	10664	10679	10661	10647	10569	10271	9638	9848	9988	10038	10229	10174	9725	9722	9737	9701	9719
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	
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	
GLGR	GT02	95	95	95	94	95	95	95	94	95	95	95	95	95	95	95	95	95	95	108	108	108	107	108	95	95	95	95	94	94	95	95	95	94	95	95	95	95	95	95	107	107	108	95	95	95	94	95	95
GLGR	ST1C	40	38	40	39	39	40	40	39	38	39	39	39	39	38	39	39	39	44	44	44	44	46	41	39	39	39	39	39	39	39	39	39	39	39	39	39	39	38	39	43	45	46	39	39	40	40	39	39
MPSS	GT01	0	0	0	0	0	0	0	0	6	0	0	49	83	85	80	110	89	86	110	110	110	110	102	62	64	69	106	106	96	98	76	69	68	69	68	71	70	68	75	106	103	85	86	93	104	105	105	
MPSS	GT02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	80	109	101	64	63	71	107	107	96	98	77	72	72	71	71	70	69	76	106	104	87	87	92	104	104	94		
MPSS	ST01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	36	33	47	48	48	43	109	103	0	48	108	111	105	101	84	66	66	66	65	65	65	66	67	101	109	91	85	85	109	110	109	
NPRI	BLK1	0	0	0	122	121	123	122	217	307	396	398	392	398	401	380	397	400	513	499	509	509	514	504	514	506	515	504	509	514	515	509	506	506	506	504	487	374	487	505	511	505	506	464	499	498	505	505	506
NPRI	BLK2	516	516	518	512	442	321	326	320	317	328	466	437	521	410	311	333	530	530	501	512	510	516	506	516	507	517	505	512	517	516	511	507	508	506	505	487	369	490	506	512	504	506	464	500	498	505	506	508
PCGP	PGRG	605	599	603	599	603	592	350	273	239	254	246	245	250	352	327	252	260	599	582	593	593	605	590	598	592	600	586	596	603	601	594	604	605	603	599	596	477	593	602	607	599	604	546	595	593	603	601	602
PGLA	GT11	182	199	192	169	167	167	170	168	170	168	168	169	167	168	168	171	170	169	180	212	208	201	199	176	175	167	175	180	173	182	208	208	208	190	187	207	214	213	215	212	212	215	189	209	210	216	208	
PGLA	GT12	187	204	197	172	172	170	173	168	170	172	171	173	171	165	173	177	173	167	181	212	214	202	203	179	178	166	180	186	178	182	214	214	208	213	194	188	196	216	217	221	218	218	204	192	210	218	218	215
PGLA	ST10	207	227	220	208	206	206	206	204	206	208	205	208	208	205	208	212	206	204	214	235	231	223	230	218	222	208	207	216	209	223	235	236	237	230	215	217	238	235	240	235	235	234	224	233	233	233	233	
PLPS	GT11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	119	122	112	115	112	115	115	115	117	112	115	115	115	115	113	105	111	115	115	115	115	104	111	115	115	15	0	
PLPS	GT12	64	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	149	152	123	127	116	120	114	120	118	122	115	119	120	119	119	117	69	64	67	119	134	134	124	131	114	120	119	36	
PL																																																	

Daily MW Generation on Monday

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			
YPKA	GT21	0	0	0	0	0	0	0	0	0	0	0	0	0	68	100	102	133	135	119	119	120	118	120	118	67	67	67	66	100	103	120	120	120	119	67	67	67	67	127	125	126	115	123	123	125	125	125		
YPKA	ST20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	61	62	54	54	56	54	55	55	40	40	40	40	49	48	55	56	56	56	56	40	40	40	40	57	58	58	54	57	57	58	57	58	
Total CCGT-Gas		4579	4476	4054	3747	3471	3332	3106	3103	3149	3281	3465	3421	3558	3563	3422	3545	3817	4661	4888	5295	5641	5936	5994	6002	5636	5516	5375	5421	5741	5807	5811	5902	5980	5951	5813	5421	4719	5412	5509	6049	6098	6101	5820	5841	5911	6045	5901	5702	
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	12	0	0	0	0	21	23	0	0	0	0				
BSIA	HY02	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	23	23	23	23	23	23	23	12	12	12	12	12	12	11	12	12	12	12	20	23	23	23	23	23				
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	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	8	8	8	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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	62	-1	-1	-1	-1	-1	62	63	62	-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	-1	-1	-1	-1	-1	-1	-1	-1	-1	64	63	-1	-1	-1	-1	65	63	63	63	-1	-1				
KNRG	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	0	0	0	0	0	0	0	0	0	0	24	22	0	0	0	22	22	36	0	0	0	0		
KNRG	HY02	25	25	25	25	25	25	25	25	24	25	25	25	25	25	24	25	26	25	24	25	25	25	24	25	25	25	25	25	26	25	25	25	25	25	25	25	27	25	23	24	25	25	22	37	25	25	25	25	
KNRG	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	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	36	0	0	0	0	0			
KNYR	HY01	0	0	58	96	96	96	96	96	53	96	96	96	96	96	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	59	57	47	57	58	0	0	0	
KNYR	HY02	0	0	61	95	95	95	95	95	54	95	95	95	95	95	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	60	47	58	59	58	58	0		
KNYR	HY03	-1	-1	98	97	97	96	96	96	59	97	96	96	96	96	96	60	-1	-1	-1	-1	60	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	60	-1	-1	97	60	60	60	60	60	60	-1			
KNYR	HY04	58	59	60	97	97	97	97	97	54	97	97	97	97	97	96	60	61	59	58	58	58	58	58	58	58	58	58	56	69	58	58	59	59	59	57	41	55	58	63	98	59	48	58	59	59	59	58		
LPJA	HY02	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	27	20	20	19	18	18	18	18	18	18	18	18	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	6	6	4	4	2	2	2	2	5	5	5	5	5	5	5	6	6	3	3	3	3	5	5	2	2	2	2	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	30	30	21	0	0	0	0	31	31	31	31	31	31	31	31	31	0	0	0	31	31	31	31	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	30	30	31	0	0	0	0	30	30	30	30	30	30	30	31	0	0	0	31	31	31	31	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	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31	31	31	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	13	16	16	0	0	0	0	0	16	16	16	16	16	16	16	16	16	0	0	0	17	17	17	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	16	16	0	0	0	0	0	0	16	16	16	16	16	16	16	16	16	16	0	0	0	17	17	17	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	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	17	17	17	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	0	0	0	0	0	0	0	0	0	0	10	17	0	0	0	0	17	17	0	0	0	0			
TMGR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	33	33	34	32	33	33	33	0	0	0	0	0	0	0	31	34	0	0	0	0	33	-1	-1	-1	-1			
TMGR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	35	34	35	33	35	34	-1	-1	-1	-1	33	32	33	33	33	33	31	31	-1	-1	-1	-1	-1	36	34	0	0	0	0		
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	31	32	32	32	32	32	0	0	0	0	0	0	0	34	32	0	0	0	34	32	0	0	0	0	0			
TMGR	HY04	33	32	33	33	33	32	33	32	31	33	33	33	33	33	28	33	33	33	30	33	32	33	31	33	32	33	31	33	33	33	33	32	33	33	33	33	31	34	33	34	34	34	34	33	32	33	33	33	
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	90	85	90	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	91	89	-1	67	-1	-1	93	89	-6	66	87	87	-1	-1	-1	
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	87	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	67	-1	-1	-1	91	93	67	90	-1	-1	-1	-1			
UPIA	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	6	6	6	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		161	161	381	489	489	487	488	487	321	451	488	488	488	479	224	165	162	157	209	262	337	410	464	476	244	235	238	252	302	292	292	292	384	382	296	846	349	161	261	607	566	855	1026	565	356	292	172		
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		
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	7	12	17	15	19	22	22	19	22	23	17	15	15	20	13	19	12	4	2	1	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	1	2	3	4	6	9	14	17	16	29	21	33	25	21	30	29	29	32	8	9	4	6	2	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	12	19	30	30	37	37	41	41	34	34	34																						

Daily MW Generation on Monday

[illegible]