

Daily System Generation Summary on Friday

Friday, April 16, 2021

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,206 MW
Distillate	0 MW
Total TNB	2,206 MW
Total IPP	16,379 MW
Total Co-Gen	0 MW
Total System	22,564 MW

Generation Mix

Type	MWh	Percentage
Hydro	17,454	4.77 %
Gas	71,297	19.50 %
Total TNB	88,751	24.27 %
ST-Coal	216,491	59.20 %
LSS	2,841	0.78 %
Gas	55,323	15.13 %
Total IPP	274,655	75.10 %
Co-Gen	165	0.05 %
Total Co-Gen	165	0.05 %
Total Generation	363,571	99.42 %
PLTG	-1,413	-0.39 %
EGAT	-31	-0.01 %
HVDC	-692	-0.19 %
Interconnection	-2,136	-0.58 %
Net Energy	365,707	100.00 %

Maximum Demand Record

Date: 3/10/2020	18,808 MW
Date: 3/10/2020	394,238 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:00:00 Hour
Total Set On Bus	17,823 MW
TNB Generation	4,278 MW
IPP Generation	12,350 MW
Spinning Reserve	1,188 MW
Maximum Demand	16,761 MW
Net Energy	365,707 MWH
Load Factor	90.91 %

Fuel Cost

Total Cost:	54,831,974.53 RM
Cost per Unit	15.08 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	156
Hydro	604
Syncon	444
Thermal	148
Total	1,352

Time	Weather	Temperature
Afternoon	Rainy	31
Morning	Sunny	26

Gas Usage

Station	(mmscfd)
GLGR	53
TJGS	219
Total TNB	272
CBPS	54
NPRI	162
PLPS	57
Total IPP	274
Total Gas	546
Total Gas Required	546

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	15229	14442	13987	13514	13275	13389	13372	13194	13550	15112	15783	16175	16174	15951	16225	16622	16760	16204	15695	15576	16378	16537	16209	15825

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Friday, May 7, 2021 1:51:10 PM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Friday

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	603	557	502	446	453	450	347	313	302	245	253	249	251	316	405	400	486	694	694	691	692	692	691	693	694	689	692	689	692	692	692	691	693	694	692	691	691	693	691	693	693	692	694	692	691	692	689		
JMAH	U002	607	576	504	454	455	454	351	325	302	250	255	253	254	339	407	404	546	694	694	694	694	696	696	693	696	695	696	694	690	697	695	689	698	695	696	695	697	697	697	700	694	695	697	699	698	696	697	698	
JMHE	U001	978	984	899	896	860	842	833	832	829	830	828	831	831	833	828	831	830	951	980	980	981	981	981	983	981	979	979	977	981	979	977	979	979	980	980	981	981	981	981	987	979	976	979	982	984	979	983	980	
JMHE	U002	978	980	904	900	857	828	831	829	828	833	828	830	828	833	829	832	831	963	978	980	981	981	981	981	980	979	977	978	980	980	978	981	976	981	982	984	981	979	981	986	980	978	976	981	982	980	982	977	
JMIG	U001	672	672	671	675	673	668	671	674	670	670	672	667	676	671	675	672	666	669	672	677	671	666	672	675	672	673	672	676	668	671	669	672	673	671	667	671	675	668	672	671	671	670	673	671	671	672	673	670	
JMIG	U003	670	666	672	665	670	669	674	668	671	671	671	667	669	668	664	669	666	662	672	667	662	662	668	662	668	666	665	665	667	673	666	673	670	671	671	662	662	660	665	666	672	664	670	677	566	546	545	548	
JMIG	U004	855	855	854	854	854	834	836	836	834	836	836	836	837	834	835	836	836	857	854	855	856	853	854	854	857	854	854	855	852	854	854	854	854	853	854	854	854	854	853	854	852	856	853	854	855	855	853	854	853
JMIG	U005	891	885	887	887	859	828	829	831	825	831	827	830	832	830	829	828	831	891	891	892	891	892	892	889	887	891	889	890	891	889	889	890	889	890	889	890	890	895	890	890	887	887	887	887	890	887	888	890	888
PKLG	U003	153	154	154	155	154	154	154	149	153	151	152	154	154	153	155	155	188	264	278	278	280	279	278	279	277	275	275	274	277	277	276	277	276	277	276	276	276	277	277	278	277	261	210	154	153	154			
PKLG	U004	156	154	155	154	154	157	156	156	157	155	157	154	157	156	155	155	194	272	279	279	287	276	279	279	275	279	277	278	278	278	278	284	282	278	276	275	276	265	276	277	276	273	280	260	201	152	156	155	
PKLG	U006	279	269	269	268	267	269	267	269	269	269	269	271	270	267	270	268	267	267	271	268	269	272	269	269	266	267	271	269	267	269	266	269	271	272	265	269	269	272	268	233	270	267	271	272	271	263	273	265	
TBIN	U001	600	595	547	549	438	451	449	450	451	449	449	449	449	564	690	690	685	690	691	690	690	690	689	690	691	689	689	691	687	689	690	689	690	688	689	689	690	688	689	690	689	690	689	690	689	689	690		
TBIN	U002	602	600	550	559	451	452	451	452	452	451	451	451	451	536	690	707	689	692	692	693	693	691	685	691	683	694	691	691	690	691	690	687	689	691	690	687	689	689	692	693	690	691	690	689	683	683	690	694	
TBIN	U004	983	982	962	904	880	833	833	834	834	832	830	832	831	832	833	833	887	977	983	984	983	983	983	983	982	982	983	984	984	984	984	984	982	983	982	983	983	983	981	983	983	984	983	983	982	983	983		
Total ST-Coal		9027	8929	8530	8366	8025	7889	7682	7617	7577	7476	7480	7472	7491	7831	8264	8280	8548	9453	9623	9627	9631	9614	9618	9621	9610	9612	9609	9610	9604	9623	9605	9619	9620	9623	9614	9614	9614	9592	9613	9593	9619	9597	9619	9603	9372	9229	9260	9244	
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		
CBPS	BLK2	358	349	359	362	362	355	361	358	353	360	354	355	358	363	351	355	356	349	307	363	360	368	361	361	354	361	354	366	363	363	356	359	359	360	357	359	365	353	364	352	363	357	359	360	358	363	360	360	
EMPP	BLK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	97	97	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GLGR	GT01	107	108	75	67	69	67	66	68	68	69	67	68	68	68	69	67	93	100	101	100	100	102	101	101	100	68	67	74	105	104	103	103	103	104	103	91	67	67	67	95	101	101	100	100	101	99	101	101	
GLGR	GT02	107	107	73	68	67	67	67	68	67	67	67	68	67	68	68	94	100	100	101	99	100	100	100	100	100	67	67	74	104	103	103	103	103	104	90	67	67	67	95	100	100	100	100	100	100	100	100		
GLGR	ST1C	97	97	82	72	73	72	72	72	72	72	72	72	72	73	72	82	91	91	91	91	91	91	91	91	91	76	72	73	93	94	93	94	94	94	90	73	67	72	73	85	91	91	91	90	90	90	91		
NPRI	BLK1	525	514	528	527	533	528	528	529	524	530	521	529	530	534	512	527	523	523	514	528	530	533	536	533	518	524	518	528	530	532	523	524	529	525	522	523	529	518	530	523	531	528	530	529	532	530	527	529	
NPRI	BLK2	519	490	528	527	532	526	527	527	512	528	504	521	526	530	485	525	509	507	484	525	529	529	533	530	506	520	497	525	526	528	518	521	526	522	502	518	527	499	528	507	529	527	529	527	529	527	526	528	
PCGP	PGRG	596	582	600	603	607	600	601	601	594	604	590	599	602	608	580	599	596	591	578	601	603	609	612	605	589	596	585	605	603	606	593	598	601	597	596	594	601	589	603	596	607	600	602	601	602	603	599	603	
PLPS	GT11	126	124	129	128	128	130	129	129	125	129	126	128	128	123	129	142	141	138	144	146	143	140	140	137	144	111	137	137	137	133	137	138	135	134	138	116	111	115	139	142	143	142	143	144	143	143	103		
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	106	139	109	135	134	134	132	134	135	132	131	134	112	109	112	136	140	139	139	138	138	138	138	138			
PLPS	ST18	58	56	57	58	58	56	57	57	57	58	57	57	57	56	57	58	58	58	58	58	58	59	60	121	145	134	142	143	143	143	143	142	142	140	140	133	130	131	141	146	145	143	143	144	144	144	137		
SPGP	BLK1	718	720	718	720	720	720	719	718	720	719	721	719	720	361	360	360	361	360	718	718	717	718	719	717	717	718	717	718	720	717	718	716	717	719	719	718	717	717	716	717	718	718	719	717	717	717	717		
SPGP	BLK2	719	720	721	721	720	719	720	719	721	719	722	719	721	359	361	361	361	360	719	717	714	716	717	717	717	716	715	717	717	715	716	716	717	719	718	718	719	718	718	716	717	717	718	719	717	717	717		
TJGS	GT1A	226	218	226	227	230	228	225	226	224	226	229	228	227	231	217	226	226	227	184	228	225	227	227	228	223	229	220	233	225	225	226	22																	

Daily MW Generation on Friday

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	
KNRG	HY01	22	22	22	22	22	22	22	0	0	0	0	0	0	0	0	0	36	36	36	36	36	36	36	36	36
KNRG	HY02	21	20	21	21	22	21	21	0	0	0	0	0	0	0	0	0	37	37	37	37	37	37	37	37	37
KNRG	HY03	24	23	24	24	25	24	24	25	25	37	37	37	37	38	24	23	38	37	38	36	36	36	35	35	
KNYR	HY01	95	87	95	95	97	98	97	96	95	97	93	65	64	101	60	65	62	63	61	84	76	100	101	89	62
KNYR	HY02	59	-1	-1	-1	-1	-1	-1	-1	-1	58	58	58	99	55	-1	-1	-1	-1	-1	-1	-1	61	61	100	58
KNYR	HY03	99	95	97	97	99	100	99	98	99	99	98	58	57	101	-1	-1	-1	-1	-1	-1	-1	60	60	100	56
KNYR	HY04	100	97	98	98	100	101	100	99	100	99	100	59	102	55	59	58	58	55	62	62	62	61	102	58	57
LPIA	HY01	18	18	18	18	18	18	18	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
LPIA	HY02	16	16	16	16	16	16	16	15	15	15	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	3	3	3	3
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	21	-1	-1
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PGAU	HY03	21	20	21	20	20	21	21	21	21	20	20	20	21	21	21	21	21	21	21	21	21	21	21	21	21
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	21	21	
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31	31	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	
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	17	17	17	25	25	25	25	25	
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	25	25	25	25	25	
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	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	HY02	49	44	54	46	82	78	54	47	46	77	46	46	86	43	47	47	44	42	64	58	86	91	69	47	
TMGR	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	85	29	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
TMGR	HY04	-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
UJLI	HY01	140	-1	-1	-1	-1	-1	-1	-1	-1	148	140	144	146	148	88	-1	-1	-1	-1	-1	-1	91	93	93	93
UPIA	HY01	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
UPIA	HY02	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Hydro		815	525	549	540	584	582	555	489	466	703	694	621	581	1003	481	295	289	288	295	347	427	738	837	923	636
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
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	4	8	11	22	20	21	22	23
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	9	18	19	18	11	19	30	11	22
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	9	12	15	22	19	12	24	19	29	30
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	7	11	11	16	21	0	0	0	0
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	12	15	21	27	34	31	41	27	27	37
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	9	11	14	15	10	11	16	5	11	9
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	9	16	19	16	23	32	22	32	50	50
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	10	14	17	25	22	28	40	46	24	50
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	12	15	19	15	36	45	34	44	51	43
KRLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	8	11	13	20	19	19	22	30	30
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15	18	26	30	23	20	20	41	35	43
SPLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	13	22	11	37	41	26	33	45	46	37
SSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10	13	26	31	23	23	14	41	9	31	13
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	10	13	18	18	17	12	10	28	11	29
TBLS	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	0
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	11	49	116	164	218	272	295	294	301	389	360	414
PCUF	CUFG	4	3	4	4	3	5	2	4	3	5	3	6	3	3	3	3	4	5	2	5	4	3	4	2	5

Daily MW Generation on Friday

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	
PCUF	CUFK	5	3	4	3	4	3	3	3	3	4	4	5	3	4	3	4	3	2	2	1	3	4	4	5	3	4	2	5	3	4	3	1	4	5	4	4	3	3	3	6	3	4	2	4	1	2	4	3
Total Co-Gen		9	6	8	7	7	8	5	7	6	9	7	11	6	7	6	7	6	6	7	3	8	8	7	9	5	9	4	9	5	8	6	3	7	8	8	7	7	6	6	9	7	8	6	8	5	4	9	7
Total Gen		15148	14674	14324	14135	13859	13689	13456	13325	13227	13409	13350	13311	13296	13360	13130	13078	13434	14412	15012	15454	15650	15990	16089	16188	16064	15986	15922	16104	16117	16437	16507	16605	16635	16538	16126	15787	15590	15363	15534	15855	16279	16439	16455	16295	16098	15999	15724	15475
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		
TIE-HVDC		-28	-29	-29	-29	-29	-29	-29	-29	-29	-29	-28	-30	-28	-30	-29	-28	-28	-30	-29	-29	-28	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-28	-28	-28	-28	-28	-28	-29	
TIE-PLTG		-51	-91	-86	-82	-96	-7	-26	-55	-16	-91	-7	-28	-42	-67	-30	-67	-85	-61	-67	-103	-101	-60	-55	-93	-78	-41	2	-90	-75	-94	-84	-37	-93	-56	-46	-54	-72	-45	-9	-46	-67	-43	-51	-48	-80	-29	-70	-53
Interconnection		-78	-120	-115	-111	-125	-36	-55	-84	-45	-120	-36	-55	-73	-95	-61	-96	-113	-89	-97	-132	-130	-89	-83	-121	-107	-70	-26	-120	-105	-123	-112	-66	-122	-84	-75	-83	-101	-74	-38	-76	-96	-71	-79	-76	-108	-57	-98	-82
System Total		15229	14797	14442	14249	13987	13728	13514	13412	13275	13532	13389	13369	13372	13458	13194	13177	13550	14504	15112	15589	15783	16082	16175	16312	16174	16059	15951	16227	16225	16563	16622	16674	16760	16625	16204	15874	15695	15441	15576	15934	16378	16513	16537	16374	16209	16059	15825	15560
SRev ST-Coal		474	477	651	721	745	802	790	792	802	792	797	804	787	768	642	631	653	300	143	139	135	152	148	145	156	154	157	156	162	143	161	147	146	135	144	144	144	166	145	165	139	161	139	155	178	305	227	208
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		150	233	210	225	204	237	233	235	269	226	278	240	229	768	908	802	185	178	524	188	135	112	114	256	213	214	359	208	120	118	147	128	110	122	157	162	400	487	373	175	97	114	101	103	105	106	109	153
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	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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syncon		476	890	890	890	890	890	890	739	890	552	602	602	602	389	616	991	991	991	991	991	804	476	476	476	451	890	739	890	703	476	302	302	302	302	529	970	904	904	904	630	378	151	167	167	0	353	313	434
Hydro		411	287	263	272	228	230	257	370	242	355	314	375	415	206	501	312	318	319	312	260	367	464	551	465	777	494	629	414	532	516	775	651	631	669	683	434	416	488	407	608	538	817	768	787	840	276	434	409
S.Reserve Total		1511	1887	2014	2108	2067	2159	2170	2136	2203	1925	1991	2021	2033	2131	2667	2736	2147	1788	1970	1578	1441	1204	1289	1342	1597	1752	1884	1668	1517	1253	1385	1228	1189	1228	1599	1796	1950	2131	1915	1578	1152	1243	1175	1212	1123	1040	1083	1290