

Daily System Generation Summary on Friday

Friday, December 20, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,317 MW
Distillate	0 MW
Total TNB	2,317 MW
Total IPP	16,287 MW
Total Co-Gen	0 MW
Total System	21,117 MW

Generation Mix

Type	MWh	Percentage
Hydro	16,404	4.64 %
Gas	31,024	8.77 %
Total TNB	47,428	13.41 %
ST-Coal	208,967	59.09 %
LSS	2,251	0.64 %
Gas	93,691	26.49 %
Total IPP	304,909	86.22 %
Co-Gen	1,603	0.45 %
Total Co-Gen	1,603	0.45 %
Total Generation	353,940	100.08 %
PLTG	-439	-0.12 %
HVDC	731	0.21 %
Interconnection	292	0.08 %
Net Energy	353,648	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	18,224 MW
TNB Generation	2,753 MW
IPP Generation	13,960 MW
Spinning Reserve	1,446 MW
Maximum Demand	16,759 MW
Net Energy	353,648 MWH
Load Factor	87.92 %

Fuel Cost

Average Spinning Reserve During Peak Hour

Type	MW
GT	547
Hydro	342
Syncon	911
Thermal	146
Total	1,946

Time	Weather	Temperature
Afternoon	Hot	35
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
GLGR	29
PAKA	1
TJGS	189
Total TNB	218
CBPS	49
KLPP	87
NPRI	133
PGLA	108
PLPS	84
SGB3	38
SGRI	14
SKSP	48
YPKA	36
Total IPP	596
Total Gas	815
Total Gas Required	815

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	14181	13489	13075	12724	12488	12295	12453	12752	13143	14746	15495	16052	16044	15601	15751	16540	16759	16410	15520	15518	16162	15847	15285	15016

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Sunday, January 05, 2020 8:56:29 AM

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

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	692	693	674	603	603	603	605	603	601	602	601	620	693	691	693	694	694	694	692	690	694	693	691	693	692
JMAH	U002	693	696	664	603	603	603	604	604	603	604	602	604	621	692	693	693	695	691	693	694	696	693	693	694	695
JMHE	U001	800	801	798	801	800	805	803	801	798	805	802	800	801	802	806	981	981	982	980	981	979	979	977	982	980
JMJG	U003	673	656	657	662	678	652	662	664	667	661	662	657	673	671	658	665	662	666	662	661	657	677	662	657	659
JMJG	U004	942	853	810	811	810	810	810	809	807	809	805	809	808	807	810	807	872	990	1029	1028	1026	1027	1025	1021	1023
JMJG	U005	876	794	797	801	800	801	797	798	800	804	799	801	801	797	797	983	982	981	981	977	976	977	977	977	978
PKLG	U003	284	282	284	283	285	283	279	282	281	266	205	205	209	270	282	282	282	280	281	279	280	281	283	282	284
PKLG	U004	281	282	281	280	279	290	281	279	278	255	208	204	205	253	281	279	277	281	279	280	282	282	281	283	281
PKLG	U005	466	466	466	468	468	466	466	466	466	452	405	407	405	455	467	406	378	357	359	357	361	361	359	394	454
TBIN	U001	687	690	691	691	691	678	603	600	600	601	600	601	688	686	686	689	687	687	688	690	687	687	686	685	684
TBIN	U002	689	691	692	690	693	670	604	604	602	604	605	602	687	690	693	694	694	690	693	689	689	689	689	690	690
TBIN	U003	690	690	689	691	688	678	604	604	602	604	605	603	693	692	693	692	692	690	693	691	694	692	692	690	692
TBIN	U004	800	802	801	803	803	804	802	803	803	802	803	804	802	803	805	803	803	889	980	981	982	983	984	982	984
Total ST-Coal		8573	8396	8304	8187	8201	8143	7920	7917	7908	7869	7703	7698	8014	8312	8352	8302	8271	8317	8672	9013	9018	9020	9008	9047	9090
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
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
CBPS	BLK2	348	218	290	212	218	220	215	222	215	224	224	221	220	216	223	333	362	361	361	362	362	362	354	354	347
GLGR	GT01	95	97	96	96	95	96	96	96	96	96	94	96	96	97	96	96	96	95	95	95	95	94	94	95	94
GLGR	ST1C	41	40	40	41	41	41	41	41	41	41	41	39	41	40	41	41	40	40	41	41	41	41	41	42	42
KLPP	GT13	65	68	63	69	68	69	69	68	68	69	68	69	68	68	72	101	106	102	118	137	134	125	116	117	115
KLPP	GT14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	154	126	148	145	134	126	125	128
KLPP	GT15	76	80	76	80	80	81	80	80	75	79	82	82	82	82	81	83	83	115	112	129	146	144	135	127	130
KLPP	ST17	84	85	85	84	89	91	91	85	85	84	84	89	89	89	93	93	101	121	185	197	205	204	201	197	193
NPRI	BLK1	454	391	377	341	393	390	392	349	336	350	393	398	397	350	344	343	349	506	511	515	511	510	499	496	489
NPRI	BLK2	379	392	376	338	394	390	392	344	334	346	343	399	347	349	342	340	347	507	513	506	513	512	512	500	497
PAKA	GT4B	77	77	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	39	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	461	487	357	384	393	387	387	398	374	396	386	400	396	399	393	389	500	593	603	594	602	603	600	602	576
PGLA	GT11	160	166	160	163	166	164	165	166	162	167	164	173	179	167	166	165	176	175	186	170	168	212	226	226	226
PGLA	GT12	178	183	177	181	183	183	183	185	181	187	183	191	196	185	184	182	194	193	204	187	186	233	247	247	179
PGLA	ST10	202	204	202	204	205	205	202	205	204	202	203	210	218	209	204	202	216	221	212	204	207	233	252	252	248
PLPS	GT11	109	112	109	111	114	112	112	70	66	70	67	71	71	66	65	68	114	115	113	125	125	125	126	122	112
PLPS	GT12	63	65	62	65	0	0	0	0	0	0	0	0	0	0	0	0	0	70	129	129	130	130	124	116	113
PLPS	GT13	107	109	106	109	114	109	111	112	109	69	66	68	68	69	63	62	67	66	112	110	123	123	122	121	117
PLPS	ST18	175	176	174	176	133	130	132	117	114	96	92	96	95	89	88	92	106	132	145	205	205	204	202	194	194
SGB3	GT31	108	111	108	110	109	106	106	112	108	111	107	111	111	107	107	110	109	112	111	110	112	112	111	107	107
SGB3	GT32	110	113	110	112	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGB3	GT33	71	70	70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGB3	ST34	178	178	178	178	95	61	58	58	58	57	57	58	58	58	57	57	58	59	59	59	59	59	59	57	57
SGRI	GT22	67	71	64	67	70	70	69	69	66	69	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	GT23	102	100	102	102	106	105	101	104	100	104	104	107	21	0	0	0	0	0	0	0	0	0	0	0	0
SGRI	ST24	103	112	105	110	111	111	109	113	111	112	101	59	9	9	0	0	0	0	0	0	0	0	0	0	0
SKSP	BLK1	260	221	219	222	286	281	284	304	281	296	290	328	240	221	219	218	243	271	244	218	220	224	221	236	216
TJGS	GT1A	0	0	0	0	0	0	0	0	0	0	0	0	0	151	232	216	187	224	185	202	224	222	222	215	214
TJGS	GT1B	134	147	132	142	143	143	148	145	137	146	145	145	147	140	146	218	213	182	220	176	196	215	217	216	205
TJGS	ST1C	82	82	82	82	82	82	82	82	82	82	82	82	83	87	233	253	234	244	230	223	245	249	249	249	242
TJGS	GT2A	146	146	146	146	146	147	147	147	147	148	148	145	148	148	147	146	200	213	213	213	212	214	214	214	184

Daily MW Generation on Friday

[illegible]

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		
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	11	21	10	10	22	33	11	11	32	43	44	43	43	33	32	21	11	8	8	8	8	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	2	11	19	11	39	40	42	44	49	50	17	46	18	49	47	41	6	36	5	0	2	1	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	2	2	4	13	19	26	14	41	49	41	35	14	48	45	26	31	41	11	15	9	4	1	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	1	8	15	24	28	34	36	39	42	42	43	43	41	36	40	36	15	5	1	2	2	1	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	5	5	9	16	33	41	16	50	50	49	50	40	50	40	18	24	31	11	10	12	2	1	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	1	8	19	25	18	28	27	45	17	18	24	49	52	35	57	48	51	36	38	8	3	3	1	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	3	7	14	19	26	35	38	40	35	43	24	40	19	7	42	17	43	25	11	4	3	2	2	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	1	23	67	104	126	214	233	263	273	327	319	299	328	256	372	317	298	223	223	82	83	40	20	10	8	0	0	0	0	0	0	0	0	0
PCUF	CUFG	34	34	35	33	35	35	32	34	34	32	32	32	33	33	32	31	32	33	32	33	32	33	31	31	31	32	32	32	34	34	33	32	31	32	31	32	33	33	32	34	34	33	33	34	34	34	34		
PCUF	CUFK	33	33	35	34	35	34	35	36	36	35	34	34	34	35	32	36	35	35	36	34	35	33	35	34	34	34	33	32	35	34	33	32	33	34	34	33	33	33	35	35	35	33	35	34	35	34	34		
Total Co-Gen		67	67	70	67	70	69	67	70	70	67	66	66	65	67	64	68	68	68	68	65	67	66	67	67	65	65	64	64	67	66	67	66	65	65	65	66	64	65	66	68	67	69	67	68	67	69	68	68	
Total Gen		14204	13838	13508	13292	13081	12954	12724	12625	12490	12408	12294	12408	12439	12618	12754	12811	13116	14000	14728	15133	15511	15766	16048	16126	16055	15841	15609	15641	15736	16273	16521	16604	16778	16775	16438	16113	15570	15330	15546	16237	16174	15975	15831	15594	15278	15073	14978	14733	
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		31	30	30	31	31	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	30	30	29	29	31	31	30	30	31	31	30	30	29	29				
TIE-PLTG		5	-34	1	-44	-12	-37	-18	4	-17	-18	-21	-32	-32	-31	-17	60	-46	-18	-37	-36	-2	-49	-23	-54	-7	-25	-11	-23	-33	4	-38	-58	0	0	10	28	33	-1	9	-29	-5	6	-35	-11	-25	-97	-55	-7	
Interconnection		35	-4	31	-13	18	-7	12	35	14	13	11	-2	-2	-1	14	90	-15	12	-6	-5	28	-18	8	-23	23	6	20	7	-3	34	-7	-27	31	31	40	58	62	28	40	2	24	35	-4	20	5	-67	-26	22	
System Total		14181	13854	13489	13317	13075	12973	12724	12602	12488	12407	12295	12422	12453	12631	12752	12733	13143	14000	14746	15150	15495	15796	16052	16161	16044	15847	15601	15646	15751	16251	16540	16643	16759	16756	16410	16067	15520	15314	15518	16247	16162	15952	15847	15586	15285	15152	15016	14723	
SRev ST-Coal		438	476	523	599	578	647	786	778	784	840	884	888	694	523	482	533	471	488	342	104	99	97	109	70	27	135	133	119	124	168	171	165	170	171	168	184	169	171	155	156	176	157	160	152	160	158	167	160	
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		1969	2098	2255	2305	1880	1818	1820	1920	2043	1992	2037	1723	1814	1907	2018	1868	1656	957	757	981	778	525	556	500	653	855	1022	918	859	554	348	251	415	226	310	313	521	535	499	281	366	588	652	462	629	600	700	950	
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	0	
SRev Co-Gen		8	8	5	8	5	6	8	5	5	8	9	9	10	8	11	7	7	7	7	10	8	9	8	8	10	10	11	11	8	9	8	9	10	10	10	9	11	10	9	7	8	6	8	7	8	6	7	7	
Syncon		1102	1253	1253	1102	1253	1253	1253	1253	1253	1253	1102	1253	1253	1253	1253	1253	1102	1253	1253	1102	1253	1066	1253	1253	1253	1253	1253	1102	1127	940	940	302	0	0	338	525	852	791	579	579	791	978	1066	1066	1253	1253	1253		
Hydro		274	139	146	277	134	137	140	139	142	233	135	256	122	125	131	308	206	262	128	141	287	159	282	187	200	202	248	374	415	254	342	342	553	722	837	622	640	391	391	397	471	416	310	248	208	106	107	109	
S.Reserve Total		3791	3974	4182	4291	3850	3861	4007	4095	4227	4326	4318	3978	3893	3816	3895	3969	3593	2816	2487	2489	2274	2043	2021	2018	2143	2455	2667	2675	2508	2112	1809	1707	1450	1129	1325	1466	1866	1959	1845	1420	1600	1958	2108	1935	2071	2123	2234	2479	