

Daily System Generation Summary on Friday

Friday, November 01, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,367 MW
Distillate	0 MW
Total TNB	2,367 MW
Total IPP	15,631 MW
Total Co-Gen	65 MW
Total System	20,003 MW

Generation Mix

Type	MWh	Percentage
Hydro	12,050	3.44 %
Gas	33,306	9.52 %
Total TNB	45,356	12.97 %
ST-Coal	203,134	58.07 %
ST-Gas	3,841	1.10 %
LSS	2,496	0.71 %
Gas	92,775	26.52 %
Total IPP	302,246	86.41 %
Co-Gen	1,216	0.35 %
Total Co-Gen	1,216	0.35 %
Total Generation	348,818	99.72 %
PLTG	-273	-0.08 %
HVDC	-701	-0.20 %
Interconnection	-974	-0.28 %
Net Energy	349,792	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	17,990 MW
TNB Generation	2,399 MW
IPP Generation	13,962 MW
Spinning Reserve	1,577 MW
Maximum Demand	16,522 MW
Net Energy	349,792 MWH
Load Factor	88.21 %

Fuel Cost

Total Cost:	64,085,655.82 RM
Cost per Unit	18.37 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	408
Hydro	384
Syncon	924
Thermal	130
Total	1,846

Time	Weather	Temperature
Afternoon	Hot	34
Morning	Sunny	25

Gas Usage

Station	(mmscfd)
PAKA	45
PGPS	31
TJGS	165
Total TNB	241
CBPS	55
KLPP	112
MPSS	50
NPRI	10
PGLA	111
PLPS	94
SGB3	85
SKSP	51
YPKA	65
PKLG	39
Total IPP	671
Total Gas	913

Total Gas Required 913

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	13968	13366	12918	12558	12320	12180	12314	12287	12611	14146	15022	15702	15684	15404	15649	16357	16507	16203	15403	15813	16191	16015	15520	15139

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, December 05, 2019 8:17:40 AM

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

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		
TJGS	GT1B	218	220	218	218	218	215	214	215	219	207	185	183	220	215	220	188	219	215	218	219	218	219	218	218	219	217	206	216	220	217	214	217	218	218	217	217	217	217	217	217	220	220	216	216	218	219	216	220	218
TJGS	ST1C	246	246	246	246	246	246	245	241	241	218	216	208	244	244	245	195	242	231	240	243	246	246	246	246	246	246	247	247	247	247	247	247	247	247	247	247	246	246	250	250	250	250	250	250	250	250	246		
TJGS	GT2B	220	220	220	220	220	220	220	157	157	156	156	156	156	207	222	222	222	222	222	222	222	219	219	219	219	219	219	219	219	219	219	217	217	217	219	219	219	219	219	219	219	219	219	219	219	219	219	219	
TJGS	ST2C	121	121	121	121	121	121	121	96	96	96	96	96	96	111	121	121	121	121	121	121	121	121	124	124	124	124	124	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	121	
YPKA	GT11	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	66	89	111	110	111	114	114	114	114	67	67	67	113	115	115	114	114	115	115	66	65	66	115	115	114	115	90	0	0	0	0	
YPKA	GT12	67	67	67	67	67	66	67	66	66	66	66	67	66	67	66	67	68	69	67	81	135	136	138	133	133	133	136	67	68	68	132	134	133	134	133	133	136	71	66	127	134	137	138	138	138	117	0	0	0
YPKA	ST10	33	31	31	32	32	32	31	32	31	32	31	32	31	32	32	32	32	75	78	84	117	118	134	120	121	121	82	82	82	117	120	121	120	120	87	79	93	119	119	120	130	128	121	59	0	0	0	0	
YPKA	GT21	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	66	65	66	66	87	126	125	125	125	65	66	66	66	125	125	125	126	125	125	66	66	66	122	130	133	134	134	134	133	134	134	132	
YPKA	ST20	37	37	36	37	37	37	37	37	36	37	36	36	36	36	37	37	37	38	38	37	42	59	59	59	59	38	38	38	38	57	60	60	60	60	59	39	38	39	53	62	63	63	63	62	62	62	62	63	
Total CCGT-Gas		4831	4980	4840	4624	4448	4435	4456	4216	4183	4066	4010	4012	4169	4377	4204	4065	4384	4833	5070	5416	5600	5905	5891	6105	5893	5764	5480	5426	5691	5930	6002	6026	6053	6046	5977	5795	5369	5225	5890	6201	6082	6067	6199	5994	5805	5458	5391	5299	
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	12	12	12	12	12	12	12	12	12	12	12	12	11	12	12	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
CEND	HY01	9	10	10	9	10	9	9	10	10	9	9	9	9	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
CEND	HY02	9	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10	9	10	9	9	9	10	9	9	9	10	9	10	10	9	10	10	9	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	
CEND	HY03	9	9	9	9	9	9	9	9	9	9	9	9	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
CEND	HY04	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
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	-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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
KNRG	HY01	36	36	36	36	35	35	36	35	35	35	36	35	35	35	35	35	35	21	22	35	35	35	35	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	0	0	0	0	0	0	0	0	0	0	
KNRG	HY02	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	24	23	36	36	36	36	24	23	23	23	23	24	24	23	24	24	24	24	24	23	23	24	25	24	24	24	24	25	24	25	24	
KNRG	HY03	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	22	23	35	35	35	35	23	23	23	22	22	23	23	22	23	23	23	23	22	22	0	0	0	0	0	0	0	0	0	0		
KNYR	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	95	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	0	0	0	0	
KNYR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	55	
KNYR	HY04	58	58	58	58	58	58	58	59	59	59	59	59	59	59	59	59	60	53	53	58	97	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	
LPIA	HY01	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20		
LPIA	HY02	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
MNOR	HY01	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	3	3	5	5	5	5	5	5	1	1	3	3	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	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1		
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	22	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1			
PGAU	HY04	4	4	4	4	4	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4			
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31	31	51	51	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	50	50	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	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	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	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																														

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	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	33	35	33	33	34	34	34	33	33	33	34	32	34	34	33	31	31	31	33	34	35	33	33	34
PCUF	CUFK	12	19	18	17	18	18	18	19	18	17	18	19	19	19	18	17	18	18	16	19	17	18	18	18
Total Co-Gen		45	54	51	50	52	52	52	52	51	50	52	51	53	53	50	51	54	53	51	49	51	50	50	48
Total Gen		13948	13631	13353	13100	12839	12703	12541	12315	12287	12160	12117	12139	12263	12508	12295	12179	12524	13505	14084	14602	14961	15485	15639	15770
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		-30	-30	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29
TIE-PLTG		14	-8	21	-30	-47	-14	16	-30	0	0	-30	-2	-18	5	41	27	-29	-11	-28	8	-30	-30	-5	-14
Interconnection		-16	-38	-9	-59	-75	-43	-13	-59	-29	-28	-59	-31	-47	-24	12	-2	-83	-2	-58	-39	-57	-21	-59	-60
System Total		13968	13673	13366	13163	12918	12750	12558	12378	12320	12192	12180	12174	12314	12536	12287	12185	12611	13511	14146	14645	15022	15510	15702	15834
SRev ST-Coal		345	373	399	361	389	372	373	364	358	365	360	357	368	354	365	367	364	146	-53	87	104	105	102	109
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
SRev CCGT-Gas		945	601	741	740	916	929	908	1148	1181	1298	1354	1352	1195	987	1160	1299	980	910	881	664	480	339	353	183
SRev ST-Gas		33	33	33	33	33	33	33	38	38	38	38	38	38	38	38	38	38	38	38	38	39	39	43	30
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
SRev Co-Gen		20	11	14	15	13	13	13	13	14	15	13	14	12	12	15	14	11	12	14	16	14	15	17	15
Syncon		1153	1153	1153	1153	1153	1153	1153	1153	1153	1153	1153	1002	1153	1002	1153	1153	1153	1153	1153	1052	865	865	865	678
Hydro		289	286	287	287	288	288	287	287	285	287	283	415	287	412	284	285	283	370	369	325	333	350	355	429
S.Reserve Total		2785	2457	2627	2589	2792	2788	2767	3003	3029	3156	3201	3178	3053	2805	3015	3156	2829	2629	2402	2283	2021	1713	1729	1646