

Daily System Generation Summary on Saturday

Saturday, November 16, 2019

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,202 MW
Distillate	0 MW
Total TNB	2,202 MW
Total IPP	15,514 MW
Total Co-Gen	65 MW
Total System	19,738 MW

Generation Mix

Type	MWh	Percentage
Hydro	11,766	3.49 %
Gas	22,308	6.61 %
Total TNB	34,074	10.10 %
ST-Coal	192,877	57.18 %
LSS	2,279	0.68 %
Gas	108,176	32.07 %
Total IPP	303,332	89.92 %
Co-Gen	636	0.19 %
Total Co-Gen	636	0.19 %
Total Generation	338,042	100.21 %
PLTG	5	0.00 %
HVDC	720	0.21 %
Interconnection	725	0.21 %
Net Energy	337,317	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:	19:30:00 Hour
Total Set On Bus	16,999 MW
TNB Generation	1,991 MW
IPP Generation	13,633 MW
Spinning Reserve	1,349 MW
Maximum Demand	15,637 MW
Net Energy	337,317 MWH
Load Factor	89.88 %

Fuel Cost

Total Cost:	59,727,162.21 RM
Cost per Unit	17.56 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	407
Hydro	375
Syncon	871
Thermal	217
Total	1,870

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	51
TJGS	110
Total TNB	161
CBPS	55
KLPP	75
NPRI	78
PGLA	114
PLPS	85
PTEK	2
SGB3	89
SGRI	61
SKSP	52
YPKA	84
Total IPP	694
Total Gas	856

Alternate Fuel Usage

Station	(mmscfd)
Total	0

Total Gas Required 856

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	14007	13481	13053	12662	12355	12314	12292	12112	12166	13434	14405	15003	14930	14701	15071	15179	15259	14785	14492	15092	15368	15111	14744	14402

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Thursday, December 05, 2019 8:38:19 AM

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

Daily MW Generation on Saturday

[illegible]

Daily MW Generation on Saturday

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	ST10	48	56	56	55	55	55	55	34	32	31	31	31	31	31	98	122	125	126	127	126	127	127	126	127	126	126	118	76	76	121	123	123	123	122	122	122	121	122										
YPKA	GT21	132	132	135	134	135	133	133	132	133	133	65	65	65	65	65	134	132	135	133	132	130	130	132	128	128	128	128	127	129	128	129	126	65	65	126	125	124	125	124	123	124							
YPKA	ST20	63	62	63	63	63	62	62	62	42	37	37	37	37	37	62	63	63	62	62	63	63	64	62	60	61	61	60	60	62	61	61	61	38	38	38	38	59	59	58	58	58	57	57	57				
Total CCGT-Gas		5112	5069	5116	5025	4945	4731	4624	4594	4542	4590	4495	4506	4520	4567	4334	4161	4316	5093	5415	5833	5780	5988	5973	6055	5856	5760	5699	5938	6083	6109	5950	6165	6077	6094	5868	5644	5592	5617	6104	6155	6030	6149	5917	6046	5755	5699	5486	5504
PTEK	GT1B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	71	70	68	0	0	0	0	0			
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	100	71	70	68	0	0	0	0	0		
BSIA	HY02	12	12	13	13	12	12	12	12	12	12	12	12	12	12	12	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	22	22	22	22	22	22	11	12	11	11			
CEND	HY01	9	9	9	10	9	9	9	9	9	9	9	9	9	9	9	10	10	10	9	9	9	10	10	10	10	10	9	10	10	9	9	9	9	10	9	9	9	9	9	9	9	9	9	9	9			
CEND	HY02	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
CEND	HY03	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
CEND	HY04	7	0	0	0	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			
HTRG	HY02	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
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	0	0	0	0	0	0	0	0	0	0			
KNRG	HY02	37	37	37	37	25	25	25	26	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25		
KNYR	HY02	98	98	98	98	98	98	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	59	58	59	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	0	
KNYR	HY03	99	99	99	99	99	99	99	0	-1	-1	-1	-1	-1	-1	-1	-2	-1	54	53	54	96	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	-1	
KNYR	HY04	99	99	99	99	99	99	99	61	59	60	60	60	60	61	61	59	59	59	57	59	59	60	100	99	100	58	58	100	100	99	99	99	99	99	99	99	100	100	99	99	100	99	99	99	98	99	59	
LPJA	HY01	19	19	19	19	19	19	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17			
LPJA	HY02	19	19	19	19	19	19	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17			
MNOR	HY01	7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
PGAU	HY01	-1	-1	-1	-1	-1	21	-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			
PGAU	HY03	-1	-1	25	-1	-1	-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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
PGAU	HY04	4	4	4	4	4	4	5	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			
SIHY	HY01	31	51	51	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	31	31	50	50	50	50	50	50	30	30	30	30	50	50	50	50	50	50	29	30	0	0		
SIHY	HY02	30	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	25	25	25	16	17	25	25	25	25	25	17	16	16	17	17	17	17	17	17	17	17	17	17	0			
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	24	16	16	25	25	25	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17	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			
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	0	0	0	0	0	0	0	0	0	0	0			
TMGR	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			
TMGR	HY02	0	0	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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
TMGR	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			
TMGR	HY04	30	31	31	58	81	32	32	32	32	32	32	32	32	32	33	33	31	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	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	-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	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			
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	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	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	5	5	5	5	5	5	5	5	5	5	5	5	5			
Total Hydro		522	557	584	585	496	469	444	209	20																																							

Daily MW Generation on Saturday

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				
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10	18	27	36	40	47	50	54	22	43	25	33	36	52	36	50	39	33	29	23	12	3	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	2	6	5	16	20	21	34	35	31	28	38	29	29	28	37	33	34	28	5	4	1	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	12	57	112	184	209	252	255	282	333	341	314	302	275	234	311	291	239	187	123	98	85	51	11	1	1	1	1	0	0	0	0	0	0	0	0	
PCUF	CUFG	13	3	1	2	4	3	3	2	2	2	1	2	2	2	3	2	1	2	3	2	1	3	3	2	2	1	3	2	1	2	3	2	3	3	2	2	2	3	2	2	2	4	1	1	2	2	2	2			
PCUF	CUFK	25	23	24	24	24	24	24	25	23	25	23	23	25	23	25	23	25	23	25	23	25	25	24	24	25	24	25	24	24	25	24	25	24	25	23	23	24	24	24	24	25	25	24	23	24	23	24	26			
Total Co-Gen		38	26	25	26	28	27	27	27	25	27	24	25	27	25	27	26	24	23	27	28	25	26	28	27	24	26	27	25	28	27	27	27	27	27	28	25	25	26	27	26	26	27	25	24	26	25	26	28			
Total Gen		14048	13721	13447	13231	13067	12830	12684	12432	12373	12418	12324	12333	12360	12423	12156	12002	12200	13037	13429	13960	14443	14808	15003	15187	14994	14773	14736	15026	15148	15345	15226	15405	15284	15270	14861	14597	14552	14570	15142	15650	15381	15419	15190	15167	14794	14709	14434	14229			
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	0	0			
TIE-HVDC		30	30	30	30	30	30	30	30	30	30	31	31	30	30	30	30	30	30	30	30	31	31	30	30	30	30	30	30	30	30	30	30	30	30	31	31	29	29	30	30	29	29	31	31	30	30	29				
TIE-PLTG		11	-74	-64	-9	-16	-43	-8	-82	-12	3	-20	-8	37	1	14	1	4	23	-35	42	8	-22	-31	-31	34	12	5	44	48	33	17	17	-5	1	46	-16	30	-51	21	-17	-17	-12	49	51	20	0	2	8			
Interconnection		41	-44	-34	21	14	-14	22	-51	18	33	10	22	68	31	44	31	34	53	-5	71	38	8	0	-1	64	43	35	74	77	63	47	46	25	31	76	14	60	-22	50	13	13	18	79	81	50	30	32	38			
System Total		14007	13765	13481	13210	13053	12844	12662	12483	12355	12385	12314	12311	12292	12392	12112	11971	12166	12984	14344	13889	14405	14800	15003	15188	14930	14730	14701	14952	15071	15282	15179	15359	15259	15239	14785	14583	14492	14592	15092	15637	15368	15401	15111	15086	14744	14679	14402	14191			
SRev ST-Coal		107	340	446	458	447	445	453	455	447	452	445	453	441	445	456	445	449	438	455	451	336	199	198	204	207	224	216	226	209	213	209	211	210	213	215	214	213	210	158	127	122	108	122	116	105	114	112	108			
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	9	38	38	41	0	0	0	0			
SRev CCGT-Gas		891	781	665	756	836	1050	941	971	1023	975	1070	1059	1045	998	1231	1404	1249	745	751	506	559	351	366	284	483	579	640	401	256	230	389	174	262	245	471	695	747	722	235	184	309	190	422	293	584	497	636	618			
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	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	0		
SRev Co-Gen		27	39	40	39	37	38	38	38	40	38	41	40	38	40	38	39	41	38	37	40	39	37	38	39	38	40	37	39	40	38	38	38	38	37	40	40	39	38	39	39	38	36	40	41	39	40	39	37			
Syncon		1014	888	737	976	976	825	976	976	1077	1077	1077	1077	1077	926	1077	1077	1077	1078	926	976	976	976	976	976	976	976	976	976	976	825	976	976	888	762	611	701	701	888	888	976	825	802	489	615	802	651	888	976	976	976	1077
Hydro		280	238	362	209	198	384	258	293	296	295	295	295	295	422	294	296	294	292	426	340	340	339	256	298	298	377	503	262	260	352	422	555	447	412	378	319	279	401	429	501	496	404	532	299	306	325	290	318			
S.Reserve Total		2406	2373	2337	2438	2494	2742	2666	2733	2883	2837	2928	2924	2896	2831	3096	3261	3110	2591	2595	2313	2250	1902	1834	1801	2002	2196	2221	1904	1741	1721	1820	1589	1658	1608	1992	2243	2254	2196	1663	1349	1618	1579	1808	1637	2010	1952	2053	2158			