

Daily System Generation Summary on Thursday

Thursday, January 23, 2020

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,462 MW
Distillate	0 MW
Total TNB	2,462 MW
Total IPP	17,925 MW
Total Co-Gen	0 MW
Total System	23,210 MW

Generation Mix

Type	MWh	Percentage
Hydro	12,412	3.39 %
Gas	32,735	8.93 %
Total TNB	45,147	12.32 %
ST-Coal	243,189	66.35 %
LSS	2,681	0.73 %
Gas	74,217	20.25 %
Total IPP	320,087	87.33 %
Co-Gen	225	0.06 %
Total Co-Gen	225	0.06 %
Total Generation	365,459	99.71 %
PLTG	-357	-0.10 %
HVDC	-702	-0.19 %
Interconnection	-1,059	-0.29 %
Net Energy	366,518	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	18,545 MW
TNB Generation	2,516 MW
IPP Generation	14,343 MW
Spinning Reserve	1,675 MW
Maximum Demand	16,908 MW
Net Energy	366,518 MWH
Load Factor	90.32 %

Fuel Cost

Total Cost:	57,535,554.10 RM
Cost per Unit	15.74 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	508
Hydro	220
Syncon	984
Thermal	170
Total	1,882

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
GLGR	41
TJGS	191
Total TNB	232
CBPS	49
KLPP	87
NPRI	143
PGLA	102
PLPS	47
SGRI	1
Total IPP	429
Total Gas	661
Total Gas Required	661

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	15568	14677	14125	13816	13403	13082	13027	13185	13474	15024	15878	16474	16386	16250	16613	16761	16761	16550	15585	15272	16298	16177	15964	15712

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, March 09, 2020 2:24:29 PM

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

Daily MW Generation on Thursday

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	U002	693	695	694	694	695	696	692	693	693	693	692	692	695	696	693	694	692	692	691	693	695	697	692	694	696	697	693	692	689	694	694	698	
JMHE	U001	981	979	983	980	916	798	810	802	798	797	802	803	801	799	802	803	796	797	913	976	981	978	981	983	972	979	983	981	983	979	983	983	981
JMHE	U002	980	981	980	979	848	798	797	801	799	798	801	803	800	798	801	803	796	801	984	974	979	979	978	981	972	978	982	984	981	978	982	982	980
JMJG	U001	676	663	660	673	679	679	669	671	669	669	588	596	601	651	641	664	678	683	667	672	671	670	667	682	667	671	669	667	678	663	671	671	671
JMJG	U003	669	665	671	665	668	665	667	671	665	610	593	593	593	593	640	643	655	668	670	668	672	663	670	668	667	661	669	667	668	668	669	668	672
JMJG	U004	900	900	879	804	804	806	804	805	805	807	804	806	805	804	804	805	806	822	904	904	903	906	903	902	903	900	903	902	905	902	904	904	904
JMJG	U005	983	911	798	805	806	807	804	807	808	807	804	806	806	804	808	805	806	805	891	981	977	977	976	981	974	977	980	977	977	975	975	975	975
PKLG	U003	282	279	282	279	280	282	282	279	283	279	278	285	278	284	285	217	210	213	274	278	276	281	283	284	275	276	273	279	271	276	279	279	279
PKLG	U004	279	281	284	278	280	279	280	280	281	280	281	281	281	283	282	281	281	280	281	279	280	280	281	280	281	280	280	280	280	280	280	279	280
PKLG	U005	466	467	467	467	467	465	468	465	467	440	468	464	467	466	440	464	469	466	468	468	468	468	468	468	468	468	468	468	468	468	468	467	467
PKLG	U006	447	449	449	448	447	449	450	449	449	447	446	446	446	446	449	448	448	449	445	448	450	447	448	448	448	448	448	448	448	448	445	450	452
TBIN	U001	686	686	686	687	687	688	687	688	687	687	687	687	687	688	686	687	686	688	685	688	690	687	687	688	688	687	689	688	689	689	689	689	689
TBIN	U002	689	690	691	692	692	689	690	693	691	689	691	692	692	689	690	690	693	690	691	688	691	691	690	692	690	692	691	690	691	692	693	693	693
TBIN	U003	691	692	689	690	691	693	691	691	691	690	688	693	694	691	692	693	691	691	693	687	690	691	692	691	690	692	691	690	691	692	693	693	693
TBIN	U004	981	982	976	889	801	802	803	803	803	802	802	803	801	802	803	802	803	820	908	981	985	982	983	981	982	982	981	984	984	982	982	982	982
Total ST-Coal		10403103201018910030 9761 9596 9594 9595 9595 9582 9442 9453 9452 9568 101691039110394104031039910427103651039310393104001040310376103951039510395103921040210391103891041210405104011040810406103861039310391104021039810405																																
Total ST-Oil		0 0																																

Daily MW Generation on Thursday

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
BSIA	HY03	24	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
CEND	HY02	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	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
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
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
KNRG	HY02	23	24	24	23	24	24	23	24	23	23	23	23	23	23	24	23	37	36	36	36	36	36	37	37
KNYR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	57	98	98	98	98	98	97	97
KNYR	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	99	98	98	98	98	98	98
KNYR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	100	100	99	99	99	99	99
KNYR	HY04	59	59	58	58	58	59	59	59	60	59	57	57	58	59	58	57	56	58	57	99	99	99	99	99
LPJA	HY01	18	18	18	18	18	18	18	18	18	20	20	20	20	20	21	21	22	22	20	20	20	20	19	19
MNOR	HY01	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	5	5	3	3	3	3	5	5	5
PGAU	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
PGAU	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
PGAU	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	0	0	0	30	30	30	30
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	0	0	0	30	50	50	50
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	25	25
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17	17	0	0	0	0	0	17	25
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	0	0	0	0	0	0	0
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	0	0	0	0	0	0	0
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	52	52	51	52	81	82	82	82	82	82	82	82
TMGR	HY02	0	0	0	0	0	0	0	0	0	0	27	-1	-1	-1	-1	54	54	52	52	83	84	85	85	86
TMGR	HY03	82	82	82	32	32	32	32	32	32	32	32	31	32	32	32	31	50	50	49	51	78	76	77	76
TMGR	HY04	0	0	0	12	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	30	51	51	50	51	79	79	80	81
UJLI	HY01	-1	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	88	85	84	-1	-1	-1	-1	-1	-1
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	89	89	89	89	89	89	-1	-1
UPIA	HY01	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
UPIA	HY02	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total Hydro		252	254	253	190	178	179	177	178	178	179	177	177	178	205	167	168	167	179	221	389	390	474	547	702
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
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	8	12	17	7	22	24	25	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10	17	24	30	35	39	40	45	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	19	30	20	48	48	37	48	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	16	22	28	33	37	43	43	44	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	17	24	30	37	42	46	50	45	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15	21	27	32	35	39	44	35	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	12	20	25	10	17	37	45	24	36	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	29	37	43	49	54	46	30	34	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	14	21	27	32	36	39	41	43	
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	17	73	129	192	251	249	318	342	359	339	
PCUF	CUFG	5	4	5	5	4	5	4	4	3	4	3	4	4	3	4	4	4	4	4	5	5	5	5	5
PCUF	CUFK	5	6	5	7	6	6	3	7	5	6	5	6	5	4	4	5	6	6	6	4	6	6	6	6
Total Co-Gen		10	10	10	12	10	11	7	11	8	10	8	10	8	7	8	9	10	10	10	7	10	8	9	9
Total Gen		15524	15198	14616	14368	14075	13959	13786	13548	13369	13225	13034	13010	13013	13111	13123	13142	13362	14346	14966	15472	15813	16086	16399	
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

Daily MW Generation on Thursday

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																								
TIE-HVDC		-30	-29	-29	-29	-29	-29	-30	-30	-29	-29	-29	-29	-29	-29	-29	-29	-29	-29	-28	-28	-29	-29	-29	-30	-30	-29	-29	-28	-28	-29	-29	-29	-29	-30	-30	-29	-29	-28	-28									
TIE-PLTG		-7	-6	-26	-23	-14	-41	6	-30	3	5	-12	-1	22	23	-26	-28	-75	-10	-21	-47	-29	-50	-39	0	-5	5	-66	-61	-45	-32	-2	-2	-2	-2	26	-30	25	-6	-1	-6	-38	-28	-31	19	18	-8	-11	-3
Interconnection		-37	-35	-54	-52	-43	-70	-23	-60	-27	-24	-41	-31	-7	-7	-55	-58	-105	-40	-51	-77	-58	-80	-68	-30	-34	-24	-95	-91	-75	-62	-31	-31	-31	-31	-3	-60	-3	-34	-30	-35	-66	-56	-62	-11	-11	-38	-39	-31
System Total		15568	15240	14677	14427	14125	14036	13816	13615	13403	13256	13082	13048	13027	13125	13185	13207	13474	14393	15024	15556	15878	16173	16474	16533	16386	16232	16250	16375	16613	16860	16761	16759	16761	16908	16550	16134	15585	15290	15272	15975	16298	16389	16177	16098	15964	15875	15712	15458
SRev ST-Coal		152	235	264	413	543	559	569	566	566	572	672	659	658	616	609	612	545	526	377	164	161	152	156	128	190	162	162	155	152	179	160	160	160	163	153	164	166	143	150	154	147	149	169	162	164	153	157	150
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		737	757	991	1019	1029	982	1147	1391	1567	1701	1748	1785	1780	1797	1759	1700	1512	639	871	887	612	428	254	364	466	450	503	565	429	471	452	452	452	375	519	763	1129	1388	1357	546	503	403	619	584	512	599	693	443
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	
SRev Co-Gen		60	60	60	58	60	59	63	59	62	60	62	63	62	61	60	60	60	63	60	63	60	62	61	61	62	60	60	61	61	59	59	59	59	60	60	63	59	62	61	62	60	61	61	59	59	60	62	
Syncon		1267	1080	1080	1080	1167	1167	1354	1354	1354	1354	1355	1355	1355	1355	1355	1355	1355	1355	1355	1180	1180	993	993	993	993	1180	1180	1079	1079	892	892	892	892	892	892	1079	1079	1079	1079	1180	806	806	806	993	1180	1180	1267	1267
Hydro		76	75	76	208	133	132	133	132	132	131	133	133	132	136	143	142	143	131	175	206	205	308	310	255	258	90	90	217	51	190	187	189	187	187	213	54	153	200	195	141	272	271	272	185	259	299	191	151
S.Reserve Total		2292	2207	2471	2778	2932	2899	3266	3502	3681	3818	3969	3991	3986	3966	3928	3870	3615	2711	2838	2500	2218	1943	1774	1801	1969	1942	1995	2077	1772	1793	1750	1752	1750	1676	1837	2120	2590	2869	2843	2082	1790	1689	1927	1985	2174	2290	2368	2073