

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,372 MW
Distillate	0 MW
Total TNB	2,372 MW
Total IPP	17,485 MW
Total Co-Gen	0 MW
Total System	22,299 MW

Generation Mix

Type	MWh	Percentage
Hydro	28,022	7.44 %
Gas	34,540	9.17 %
Total TNB	62,562	16.62 %
ST-Coal	227,745	60.48 %
LSS	3,655	0.97 %
Gas	82,313	21.86 %
Total IPP	313,713	83.32 %
Co-Gen	1,192	0.32 %
Total Co-Gen	1,192	0.32 %
Total Generation	377,467	100.25 %
PLTG	210	0.06 %
HVDC	723	0.19 %
Interconnection	933	0.25 %
Net Energy	376,534	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:	15:30:00 Hour
Total Set On Bus	18,927 MW
TNB Generation	3,500 MW
IPP Generation	14,463 MW
Spinning Reserve	916 MW
Maximum Demand	18,026 MW
Net Energy	376,534 MWH
Load Factor	87.03 %

Fuel Cost

Total Cost:	78,705,290.57 RM
Cost per Unit	20.85 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	452
Hydro	444
Syncon	177
Thermal	189
Total	1,262

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	25

Gas Usage

Station	(mmscfd)
GLGR	48
SRDG	4
TJGS	91
Total TNB	142
CBPS	47
KLPP	77
NPRI	152
PGLA	102
PLPS	75
SKSP	48
Total IPP	501
Total Gas	643
Total Gas Required	643

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	14820	14316	13817	13414	13091	12987	13054	13136	13756	15418	16295	16982	16950	16928	17465	17930	18008	17594	16486	16872	17355	16942	16518	16094

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, November 3, 2021 1:20:03 PM
 (Ir. Shanmugam Thoppalan)
 Head
 Grid System Operator

Daily MW Generation on Tuesday

[illegible]

Daily MW Generation on Tuesday

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
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	HY03	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	HY02	125	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	125	124	124	124	124
KNRG	HY01	36	36	36	36	36	36	36	36	36	36	36	36	36	36	24	36	36	36	36	36	36	36	36	36
KNRG	HY02	37	37	37	37	37	37	37	37	37	37	37	37	37	37	25	37	37	37	37	36	37	37	37	37
KNRG	HY03	36	36	36	36	36	36	36	36	36	36	36	36	36	36	24	36	36	36	36	36	36	36	36	36
KNYR	HY01	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97
KNYR	HY02	98	99	99	100	99	99	99	99	98	99	99	99	99	99	99	99	99	99	98	99	98	99	99	98
KNYR	HY03	94	93	93	94	94	93	94	88	87	87	89	90	91	91	89	89	93	91	89	87	89	87	91	88
KNYR	HY04	98	99	99	99	98	99	98	98	98	98	98	99	99	98	98	98	99	99	99	98	98	99	99	99
LPIA	HY01	19	19	19	19	19	19	20	20	20	20	21	21	21	21	19	20	20	20	20	20	20	20	20	21
LPIA	HY02	21	21	21	21	21	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	21
MNOR	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	2
PGAU	HY01	0	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
PGAU	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	20	20	20	20	0
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	20	20	20	20	0
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	48	48	47	47	0
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	36	50	30	30	30	30
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30	50	50	50	50	30
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	17	17	25	25	25	25	25
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	25	25	25	25	25
TMGR	HY01	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	34	33	33	80	80	80	79	80	80	80
TMGR	HY02	40	86	64	54	45	63	47	63	45	46	44	43	50	56	61	86	80	61	78	76	44	85	85	44
TMGR	HY03	40	0	0	0	0	0	0	0	0	0	0	0	0	31	31	31	31	80	80	80	81	81	81	81
TMGR	HY04	32	73	41	42	41	42	42	44	41	42	41	40	42	42	61	82	75	57	73	72	42	81	81	41
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	112	101	151	112
UJLI	HY02	-1	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	99	100	99	150	151	185	186
UPIA	HY01	6	5	6	5	5	6	6	6	5	5	6	6	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
Total Hydro		914	949	896	888	875	895	873	894	870	867	864	862	874	881	882	930	953	925	956	1069	1008	1145	1149	1079
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	0	0	0	0	0	0	0	0	0	0
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	10	16	17	15	17	24	32
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	10	15	20	23	27	27	32	32
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	12	19	27	36	39	43	40	33
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	18	26	31	36	32	36	32	45
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	10	14	19	21	22	15	25	25
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	12	18	29	35	38	41	46	45
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	13	16	24	33	33	37	45	39
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	14	22	25	31	32	38	44	34
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4	15	20	24	27	30	28	23
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	18	29	33	35	46	37	50	46
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	18	25	36	42	43	43	52	29
SSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	11	13	20	27	32	23	37	33
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	10	13	14	20	25	18	28	19

Daily MW Generation on Tuesday

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		
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	17	16	30	30	30	30	28	12	30	30	30	30	30	30	30	29	22	14	6	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	31	92	184	262	363	418	459	454	540	477	524	536	496	449	427	357	330	291	264	199	102	49	15	0	0	0	0	0	0	0	0	0	0	
PCUF	CUFG	26	25	26	26	26	26	25	26	25	27	26	27	26	27	26	25	26	23	22	23	22	22	22	22	22	22	22	22	22	22	22	22	22	23	23	24	24	24	24	23	23	24	26	26	27	27	26		
PCUF	CUFK	26	25	25	25	25	26	26	26	25	25	27	26	27	26	25	28	26	25	26	25	26	24	23	24	24	23	27	26	25	26	26	26	25	25	26	25	25	25	25	24	26	27	27	25	24	26	24		
Total Co-Gen		52	50	51	51	51	51	52	50	52	51	53	53	52	52	51	53	52	48	48	47	45	46	46	46	49	47	47	49	48	48	47	47	49	48	49	48	50	50	50	50	49	51	51	51	53	53	50		
Total Gen		14879	14615	14371	13991	13867	13541	13469	13261	13139	13025	13028	12978	13058	13111	13117	13231	13734	14851	15430	16034	16303	16786	16962	17189	17031	16908	16980	17237	17515	17858	17944	18011	18045	18054	17654	17018	16615	16247	16962	17486	17381	17233	17007	16912	16584	16319	16105	15826	
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		
TIE-HVDC		30	30	30	31	30	30	30	29	31	30	30	30	31	31	30	30	31	31	31	31	30	30	31	30	31	31	29	30	30	30	31	30	29	30	30	30	30	29	30	30	30	30	29	30	31	31	30		
TIE-PLTG		32	-19	28	-22	23	-10	28	-38	20	0	15	19	-23	-39	-45	-58	-48	-27	-16	-15	-19	3	-47	37	54	43	26	6	25	-2	-14	-42	11	35	34	52	103	39	64	46	0	35	38	-15	39	25	-17	60	
Interconnection		62	10	58	9	53	19	58	-8	51	30	45	48	8	-8	-15	-27	-18	3	15	16	11	33	-17	67	84	74	56	36	54	28	17	-12	40	65	64	82	133	69	94	76	30	66	68	14	69	56	14	90	
System Total		14820	14608	14316	13985	13817	13525	13414	13272	13091	12998	12987	12934	13054	13123	13136	13262	13756	14852	15418	16021	16295	16756	16982	17125	16950	16837	16928	17205	17465	17834	17930	18026	18008	17992	17594	16940	16486	16182	16872	17414	17355	17171	16942	16901	16518	16266	16094	15739	
SRev ST-Coal		240	455	443	539	499	532	432	715	748	846	832	850	843	845	847	810	528	354	138	185	186	188	224	180	192	184	202	248	229	201	226	201	172	185	169	180	183	174	176	181	178	190	186	186	176	186	184	176	
SRev CCGT-Gas		1096	907	951	1249	1384	1590	1734	1826	1881	1900	1912	1941	1877	1822	1828	1782	1727	1235	1276	875	745	437	441	397	558	737	490	450	247	188	187	167	119	107	283	581	740	1040	489	154	256	405	457	605	659	630	740	863	
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 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 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	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		374	274	274	274	274	274	461	461	461	461	461	461	461	461	461	461	374	374	374	374	374	374	374	374	374	374	374	187	187	0	0	0	0	0	0	0	187	374	374	187	0	0	0	187	187	187	187	187	374
Hydro		259	202	255	263	276	256	277	256	280	283	285	287	275	268	305	257	321	349	324	259	320	233	229	299	321	320	301	458	555	634	594	547	551	482	658	461	313	356	361	656	662	649	490	289	357	366	474	448	
S.Reserve Total		1969	1838	1923	2325	2433	2652	2904	3258	3370	3490	3490	3539	3456	3396	3441	3310	2950	2312	2112	1693	1625	1232	1268	1250	1445	1615	1367	1343	1218	1111	1015	921	847	811	1147	1409	1610	1944	1213	991	1096	1244	1320	1267	1379	1369	1585	1861	