

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	16,444 MW
Total Co-Gen	0 MW
Total System	21,383 MW

Generation Mix

Type	MWh	Percentage
Hydro	20,904	5.75 %
Gas	47,150	12.98 %
Total TNB	68,054	18.73 %
ST-Coal	221,612	61.01 %
LSS	3,633	1.00 %
Gas	69,274	19.07 %
Total IPP	294,519	81.07 %
Co-Gen	1,297	0.36 %
Total Co-Gen	1,297	0.36 %
Total Generation	363,870	100.17 %
PLTG	375	0.10 %
HVDC	227	0.06 %
Interconnection	602	0.17 %
Net Energy	363,268	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:	16:30:00 Hour
Total Set On Bus	18,948 MW
TNB Generation	3,306 MW
IPP Generation	14,037 MW
Spinning Reserve	1,552 MW
Maximum Demand	17,466 MW
Net Energy	363,268 MWH
Load Factor	86.66 %

Fuel Cost

Total Cost:	76,371,645.08 RM
Cost per Unit	20.98 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	346
Hydro	679
Syncon	192
Thermal	326
Total	1,543

Time Weather Temperature

Afternoon	Hot	34
Morning	Sunny	25

Gas Usage

Station	(mmscfd)
GLGR	29
TJGS	181
Total TNB	210
CBPS	52
KLPP	48
NPRI	159
PGLA	53
PLPS	73
Total IPP	384
Total Gas	594
Total Gas Required	594

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	14119	13429	13070	12660	12386	12237	12341	12537	13221	14927	15916	16470	16516	16501	17031	17297	17444	17038	16165	16232	16913	16636	16164	15739

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, November 3, 2021 1:14:14 Head PM

(Ir. Shanmugam Thoppalan)
Grid System Operator

Daily MW Generation on Monday

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	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
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	63	0	0	0	0	0	0	0	0	0	0	0	0	62	63	63	63	63	63	63	63	63	63	63
HTRG	HY02	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0
KNRG	HY01	35	35	35	35	35	16	0	0	0	0	0	0	0	0	24	24	24	24	24	24	35	35	35	35
KNRG	HY02	36	36	35	36	36	36	0	0	0	0	0	0	0	0	23	22	22	23	23	23	35	36	35	35
KNRG	HY03	35	35	35	34	35	35	36	36	36	36	36	36	36	35	35	35	35	21	21	21	34	34	34	34
KNYR	HY01	59	58	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	57	57	56	98	
KNYR	HY02	60	59	99	98	98	99	98	98	97	97	97	98	98	96	101	99	99	100	100	100	100	102	102	
KNYR	HY03	60	59	94	94	94	94	94	94	94	89	89	94	94	93	94	94	94	94	94	58	57	57	58	
KNYR	HY04	60	59	99	99	98	99	99	99	98	98	98	99	99	99	97	100	99	100	100	100	98	98	99	
LPIA	HY01	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
LPIA	HY02	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
MNOR	HY01	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
PGAU	HY01	-1	-1	19	19	19	19	19	19	19	19	19	19	19	19	19	19	21	21	21	20	20	20	21	
PGAU	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	20	20	21	20	21	0	
PGAU	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	21	21	21	21	0	
SIHY	HY01	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
SIHY	HY02	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31	
SIHY	HY03	30	30	0	0	0	0	0	0	0	0	0	0	0	0	30	30	30	30	30	30	30	31	0	
SYPS	HY01	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	
SYPS	HY02	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	
SYPS	HY04	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	0	0	
TMGR	HY01	43	42	42	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	34	34	33	34	34	32	33	
TMGR	HY02	44	44	44	42	44	44	44	44	44	44	45	44	45	46	44	45	45	45	45	45	44	44	45	
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	32	39	41	41	41	41	40	41	40	41	41	41	
TMGR	HY04	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	33	33	32	33	33	32	-1	
UJLI	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	90	92	88	84	81	-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	100	96	
UPIA	HY01	5	5	5	6	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	
Total Hydro		805	694	698	654	653	655	644	624	574	570	571	571	573	568	567	573	669	763	775	768	831	844	900	
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	
BDSL	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	13	15	18	22	23	21	26	
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	14	11	11	30	21	29	30	29	
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	9	23	24	28	24	28	32	32	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	8	16	25	29	36	10	39	38	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	18	31	30	35	37	39	34	
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	5	9	17	22	22	22	26	24	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	24	26	22	35	37	35	48	50	
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	10	15	23	22	29	29	40	42	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	18	13	35	30	36	37	35	46	
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	8	15	27	16	30	30	29	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	11	22	30	36	39	45	46	45	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	19	27	35	31	43	50	52	51	
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	12	10	24	22	20	39	40	43	

Daily MW Generation on Monday

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																																
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	2	4	8	10	14	18	22	25	28	28	29	19	18	13	26	22	21	15	15	7	3	2	0	0	0	0	0	0	0	0	0	0													
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	2	8	10	13	24	26	30	29	30	30	30	18	19	14	13	29	14	30	12	12	11	4	1	0	0	0	0	0	0	0	0	0	0	0											
Total LSS		0	0	0	0	0	0	0	0	0	0	0	16	68	135	226	326	373	437	457	520	535	528	473	463	424	426	471	405	341	260	174	126	64	22	2	1	0	0	0	0	0	0	0	0	0	0										
PCUF	CUFG	28	30	29	28	29	28	28	28	29	27	29	30	27	29	28	29	28	29	29	27	27	27	27	27	28	28	28	28	28	27	28	27	27	29	28	29	28	29	28	29	29	28	28	29	28	28	29	28								
PCUF	CUFK	27	28	26	26	27	26	26	26	26	24	26	27	26	26	26	26	27	26	26	26	27	25	26	24	27	26	26	25	25	25	26	25	26	25	26	26	26	26	27	26	28	25	25	26	25	26	25	26	26	26	26					
Total Co-Gen		55	58	55	54	56	54	54	54	55	51	55	57	53	55	54	56	54	55	56	52	53	51	54	53	53	53	53	53	54	53	53	53	53	52	55	54	56	54	57	54	54	54	53	55	54	54	53	55	54							
Total Gen		14140	13659	13479	13242	13089	12865	12737	12514	12473	12351	12305	12293	12375	12505	12585	12707	13227	14190	14947	15332	15912	16201	16497	16683	16569	16507	16533	16826	17010	17370	17343	17357	17422	17396	17017	16431	16188	15848	16252	17038	16942	16863	16622	16440	16198	15919	15757	15500								
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	0	0	0					
TIE-HVDC		-29	-28	30	30	30	30	31	30	30	30	30	29	30	31	30	30	31	30	0	0	0	0	0	0	0	0	0	0	0	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-PLTG		53	5	24	44	-7	13	49	5	60	-4	41	41	8	3	20	-6	-21	42	-7	-14	-1	-4	30	40	57	60	36	64	-18	4	49	-33	-19	-67	-18	-26	26	34	23	49	32	0	-11	6	37	-8	21	36								
Interconnection		25	-23	54	74	23	43	80	34	90	26	71	71	37	33	51	24	9	72	23	-14	-1	-4	30	40	57	60	36	64	-18	4	49	-33	-19	-67	-18	-26	26	34	23	49	32	0	-11	6	37	-8	21	36								
System Total		14119	13686	13429	13172	13070	12825	12660	12483	12386	12328	12237	12225	12341	12475	12537	12686	13221	14121	14927	15349	15916	16208	16470	16646	16516	16451	16501	16766	17031	17369	17297	17393	17444	17466	17038	16460	16165	15817	16232	16992	16913	16866	16636	16437	16164	15930	15739	15467								
SRev ST-Coal		733	805	794	847	901	897	898	901	951	949	1010	1011	1009	1010	1012	1009	1008	944	814	794	516	409	158	148	175	326	322	324	312	131	175	166	160	159	199	409	446	443	444	289	284	290	403	451	467	507	504	501								
SRev CCGT-Gas		496	529	555	658	610	572	604	702	788	819	822	844	767	628	771	673	431	271	172	301	256	172	356	344	449	352	555	408	285	409	466	426	383	375	527	495	401	409	279	290	354	276	347	306	385	287	302	352								
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	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	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	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	0	0	0	0	0	0	0	0
Syncon		612	612	461	548	548	548	548	548	674	674	674	674	674	674	674	674	548	361	361	361	361	361	361	361	361	374	374	374	374	187	187	187	0	0	187	187	274	461	274	187	0	0	0	0	0	0	0	187	187	187						
Hydro		423	361	283	240	241	240	251	271	241	244	243	243	241	246	247	241	357	450	438	445	482	469	541	556	561	549	565	566	819	908	963	953	1059	1023	937	708	559	467	508	461	622	597	603	412	521	308	421	432								
S.Reserve Total		2264	2307	2093	2293	2300	2257	2301	2422	2528	2686	2749	2772	2691	2558	2704	2597	2344	2026	1785	1901	1615	1411	1416	1409	1546	1601	1816	1672	1790	1635	1791	1732	1602	1557	1850	1799	1680	1780	1505	1227	1260	1163	1353	1169	1373	1289	1414	1472								