

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,522 MW
Distillate	0 MW
Total TNB	2,522 MW
Total IPP	14,988 MW
Total Co-Gen	0 MW
Total System	20,333 MW

Maximum Demand Record

Date: 3/10/2020	18,808 MW
Date: 3/10/2020	394,238 MWH

Gas Usage

Station	(mmscfd)	Station	(mmscfd)
GLGR	50	Total	0
TJGS	191		
Total TNB	241		
CBPS	55		
KLPP	1		
NPRI	160		
PGLA	54		
PLPS	44		
YPKA	35		
Total IPP	348		
Total Gas	589		
Total Gas Required	589		

Alternate Fuel Usage

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	20:00:00 Hour
Total Set On Bus	15,405 MW
TNB Generation	2,864 MW
IPP Generation	11,096 MW
Spinning Reserve	1,439 MW
Maximum Demand	14,018 MW
Net Energy	300,217 MWH
Load Factor	89.24 %

Generation Mix

Type	MWh	Percentage
Hydro	15,098	5.03 %
Gas	34,948	11.64 %
Total TNB	50,046	16.67 %
ST-Coal	183,009	60.96 %
LSS	1,834	0.61 %
Gas	65,093	21.68 %
Total IPP	249,936	83.25 %
Co-Gen	154	0.05 %
Total Co-Gen	154	0.05 %
Total Generation	300,136	99.97 %
PLTG	-799	-0.27 %
HVDC	718	0.24 %
Interconnection	-81	-0.03 %
Net Energy	300,217	100.00 %

Fuel Cost

Total Cost:	38,020,530.85 RM
Cost per Unit	12.65 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	456
Hydro	339
Syncon	1,025
Thermal	331
Total	2,151

Time Weather Temperature

Afternoon	Hot	33
Morning	Sunny	27

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	13684	13217	12785	12383	12024	11807	11789	11540	11116	11482	11971	12237	12259	12153	12297	12360	12517	12559	12477	13108	14018	13866	13485	13164

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
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	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
HTRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	125	125	125
HTRG	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	64	65	65	65
KNRG	HY01	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
KNRG	HY02	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
KNRG	HY03	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
KNYR	HY01	56	59	60	61	62	58	61	60	64	60	61	99	71	85	65	71	62	62	59	62	75	64	61	100
KNYR	HY02	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KNYR	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
KNYR	HY04	-1	-1	-1	-1	61	-1	-1	59	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	59	100	100	100
LPIA	HY01	19	19	19	19	19	19	19	19	19	19	19	19	19	21	21	21	21	21	21	21	21	21	21	21
LPIA	HY02	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20
MNOR	HY01	6	6	6	6	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
PGAU	HY02	-1	-1	-1	-1	21	-1	-1	-1	-1	-1	-1	-1	-1	-1	18	-1	-1	-1	-1	-1	-1	-1	23	23
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
PGAU	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
SIHY	HY01	51	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SIHY	HY02	0	50	50	50	50	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	25	25	25	25	25	25	25	25	25	25	25
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25	25
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
TMGR	HY01	81	82	82	82	81	82	80	82	52	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
TMGR	HY02	45	87	77	64	50	47	91	90	51	66	47	90	55	73	44	49	44	42	43	45	57	46	46	91
TMGR	HY03	80	80	80	80	80	80	78	80	50	0	0	0	0	0	0	0	0	80	80	30	30	30	30	30
TMGR	HY04	81	81	81	81	81	81	77	81	51	33	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
UJLI	HY01	-1	-1	-1	-1	96	96	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
UJLI	HY02	-1	-1	-1	-1	94	91	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-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	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Total Hydro		704	744	684	769	934	691	638	724	519	442	391	472	396	406	343	312	297	414	412	539	738	635	469	537
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	3	4	7	8	19	10	16	17	17	11
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	8	9	15	9	6	12	9	7
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	3	3	4	9	12	12	14
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9	13	18	9	13	18	16	10	19	11
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	12	8	8	8	18	18	16
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	13	8	13	16	13	18	20	21	23
JLSL	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	4	5	7	12	12	16	24
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	7	10	14	16	20	11	13	7	5
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	9	12	21	22	19	11	14	16	27
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	7	11	10	17	9	16	16	13	7
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	6	9	11	14	18	26	37	42
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	9	18	21	29	31	28	17	11	10
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	4	6	6	10	8	14	10

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																											
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	12	37	68	107	124	172	183	179	192	215	226	257	276	293	297	294	225	172	144	113	56	27	4	1	1	1	0	0	0	0	0	0						
PCUF	CUFG	3	4	3	2	4	4	2	3	3	2	3	4	5	2	4	4	4	5	3	3	4	3	4	3	4	3	2	3	2	1	4	3	3	4	3	4	3	3	3	3	5	3	3	3	4	3	2				
PCUF	CUFK	3	4	3	2	4	3	2	3	4	3	2	3	3	2	4	3	3	5	3	4	5	3	3	3	3	4	2	3	2	2	4	3	3	4	4	3	3	3	4	3	4	4	4	2	4	2					
Total Co-Gen		6	8	6	4	8	7	4	6	7	5	5	7	8	6	5	9	4	8	7	7	10	6	7	9	6	7	6	7	7	4	6	4	3	8	6	6	8	7	6	6	6	9	6	7	7	6	7	4			
Total Gen		13705	13509	13267	13018	12774	12562	12347	12247	12028	11932	11819	11817	11783	11785	11602	11276	11154	11365	11492	11714	11969	12195	12234	12282	12236	12217	12187	12221	12268	12282	12318	12341	12458	12481	12540	12376	12463	12564	13068	13823	13966	13913	13817	13581	13457	13344	13091	13061			
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		
TIE-HVDC		31	31	30	30	29	29	30	30	31	29	30	30	31	31	31	30	30	31	31	29	29	31	31	30	29	29	29	29	31	29	30	30	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30		
TIE-PLTG		2	-7	31	29	-27	-17	-54	-23	-14	-15	-5	-37	-25	-22	44	-35	20	38	-9	-25	-19	-33	-21	-67	-42	-38	17	-20	-46	-35	-60	-76	-77	-102	-39	-56	-33	-41	-58	-61	-70	-67	-67	-113	-46	-46	-91	-40			
Interconnection		33	24	62	60	1	12	-24	7	16	14	24	-7	6	8	74	-5	50	68	22	6	10	-4	9	-37	-11	-9	46	9	-17	-6	-30	-47	-47	-72	-8	-26	-3	-11	-28	-31	-40	-37	-37	-83	-16	-16	-61	-11			
System Total		13684	13497	13217	12970	12785	12562	12383	12252	12024	11930	11807	11836	11789	11789	11540	11293	11116	11309	11482	11720	11971	12211	12237	12331	12259	12238	12153	12224	12297	12300	12360	12400	12517	12565	12559	12413	12477	12586	13108	13866	14018	13962	13866	13676	13485	13372	13164	13084			
SRev ST-Coal		130	307	537	483	477	448	458	445	449	451	450	450	456	456	442	444	449	451	444	445	449	404	398	382	403	390	398	401	403	387	402	395	408	406	399	403	396	404	366	122	123	104	107	126	120	110	369	453			
SRev CCGT-Gas		914	767	394	277	302	126	273	96	108	120	187	273	225	230	365	660	772	704	610	552	739	557	537	573	603	589	584	576	553	582	592	591	422	326	239	247	339	374	251	198	140	175	276	325	288	371	383	149			
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	
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
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
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	
Syncon		1155	1155	1155	968	529	968	1155	1054	1155	1155	1242	1242	1178	1329	1178	1329	1329	1329	1329	1329	1329	1155	1155	1091	1242	1242	1242	1242	1242	1091	1091	990	1141	1228	1228	1329	1242	1242	968	489	489	489	489	640	827	827	676	489			
Hydro		192	102	112	214	488	242	108	173	227	217	181	100	240	79	293	125	140	123	125	133	108	211	441	222	228	296	335	337	330	465	263	493	314	229	236	255	242	279	382	627	691	581	569	462	342	381	372	389			
S.Reserve Total		2391	2331	2198	1942	1796	1784	1994	1768	1939	1943	2060	2065	2099	2094	2278	2558	2690	2607	2508	2459	2451	2327	2467	2419	2476	2517	2559	2556	2528	2525	2348	2469	2285	2189	2102	2234	2219	2299	1967	1436	1443	1349	1441	1553	1577	1689	1800	1480			