

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,247 MW
Distillate	0 MW
Total TNB	2,247 MW
Total IPP	17,473 MW
Total Co-Gen	0 MW
Total System	22,543 MW

Generation Mix

Type	MWh	Percentage
Hydro	25,191	6.78 %
Gas	31,300	8.43 %
Total TNB	56,491	15.21 %
ST-Coal	249,526	67.18 %
LSS	2,774	0.75 %
Gas	63,091	16.99 %
Total IPP	315,391	84.91 %
Co-Gen	248	0.07 %
Total Co-Gen	248	0.07 %
Total Generation	372,130	100.19 %
PLTG	136	0.04 %
HVDC	552	0.15 %
Interconnection	688	0.19 %
Net Energy	371,442	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:	14:30:00 Hour
Total Set On Bus	18,916 MW
TNB Generation	2,840 MW
IPP Generation	14,379 MW
Spinning Reserve	1,690 MW
Maximum Demand	17,331 MW
Net Energy	371,442 MWH
Load Factor	89.30 %

Fuel Cost

Total Cost:	49,749,877.36 RM
Cost per Unit	13.38 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	656
Hydro	323
Syncon	437
Thermal	183
Total	1,599

Time	Weather	Temperature
Afternoon	Hot	32
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	35
TJGS	161
Total TNB	196
CBPS	47
KLPP	7
NPRI	135
PGLA	79
PLPS	74
SGB3	1
YPKA	19
Total IPP	360
Total Gas	556
Total Gas Required	556

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	15237	14431	14086	13553	13347	12982	13420	13342	13708	15490	16348	16944	16860	16558	17053	17291	17327	16856	15749	15673	16622	16548	16043	15589

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, October 5, 2020 2:02:14 PM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Wednesday

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	U001	695	692	693	692	648	600	547	550	500	502	501	523	610	692	692	692	692	692	692	692	692	692	692	693	692	694	692	691	694	694	694	692	691	693	692	694	692	693	693	689	692	690	693					
JMAH	U002	699	696	694	694	615	604	552	553	501	503	502	537	636	696	694	694	696	693	693	697	694	693	694	696	695	693	695	692	693	694	693	695	694	694	690	694	683	696	695	693	697	691	694	690	692	694	693	
JMHE	U002	981	978	946	898	901	899	848	850	806	801	798	801	801	801	804	803	801	800	859	978	980	983	980	978	977	978	983	981	980	980	978	982	980	981	979	980	981	976	978	981	981	977	978	979	982	978	975	979
JMJG	U001	671	672	677	647	645	645	645	649	645	644	665	678	676	674	676	676	678	677	678	676	685	677	674	677	677	675	677	673	678	673	676	677	675	678	678	677	677	676	672	678	676	678	676	679	677	676		
JMJG	U002	680	677	667	652	640	654	643	650	645	649	667	670	672	670	676	674	675	673	674	674	673	675	677	671	673	673	673	673	678	673	673	677	671	678	677	669	677	677	671	675	676	669	674	676	675	678	672	673
JMJG	U003	667	668	664	640	645	640	643	644	642	647	662	665	666	662	667	667	671	667	668	668	674	673	669	670	669	671	671	673	666	668	670	672	668	672	673	672	664	666	668	671	672	671	671	672	670	672	670	672
JMJG	U004	982	981	971	905	904	900	854	854	811	808	807	808	807	807	807	808	806	806	817	876	933	980	978	976	975	975	976	974	974	974	973	972	975	977	976	975	972	973	976	974	976	977	974	976	975	977	977	974
JMJG	U005	728	729	727	727	725	726	727	726	726	726	724	725	725	725	726	727	730	726	727	727	727	728	727	729	730	728	726	726	729	727	728	728	727	725	725	726	728	728	727	728	725	725	727	725	725	727	725	725
PKLG	U003	269	282	284	207	266	276	280	277	276	279	279	279	275	279	271	277	278	280	281	281	281	280	281	280	281	281	281	280	279	281	281	282	281	282	281	281	279	280	280	282	281	282	281	282	282	283	281	
PKLG	U004	283	281	277	280	282	279	279	280	278	283	281	280	281	280	280	281	281	281	280	281	281	280	281	280	281	281	280	279	275	280	279	282	279	281	282													

Daily MW Generation on Wednesday

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 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			
BSIA	HY01	21	21	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
BSIA	HY02	23	23	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
BSIA	HY03	24	24	24	24	24	25	25	25	24	12	12	12	12	12	12	12	12	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24		
CEND	HY01	9	9	10	10	9	10	9	10	9	10	10	9	10	9	9	9	9	9	10	10	9	10	10	9	10	9	10	9	10	10	10	10	10	10	9	10	9	10	9	10	9	10	9	10	9	10	9	10		
CEND	HY02	9	9	10	10	9	9	10	10	9	10	9	10	9	10	9	9	9	10	9	9	9	9	9	10	9	10	9	10	10	10	9	10	9	9	9	9	9	9	9	9	9	10	10	10	10	9	9	10		
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	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	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	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	65	63	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	124	124	124	125	125	63	63	63	125	125	125	125	125	125	124	124			
KNRG	HY01	25	36	36	36	0	0	0	0	0	0	0	0	0	0	0	0	36	36	36	36	36	36	36	36	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	HY02	24	37	37	37	0	0	0	0	0	25	24	24	25	0	0	0	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37		
KNRG	HY03	23	36	36	36	38	38	38	38	38	37	37	37	37	38	38	38	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36		
KNYR	HY01	95	99	95	99	94	97	99	97	94	95	97	58	99	99	81	0	94	96	96	96	97	96	96	96	96	95	52	57	97	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	
KNYR	HY02	96	99	96	99	95	98	99	98	95	95	98	100	99	99	99	-2	95	96	96	96	96	96	96	96	95	54	60	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	
KNYR	HY03	95	98	95	98	93	97	98	97	94	94	97	58	99	99	81	64	94	101	101	100	96	97	101	100	100	95	52	57	97	98	98	98	99	99	98	98	96	96	98	100	98	98	98	97	97	98	96	96		
KNYR	HY04	96	99	95	99	94	97	99	98	94	95	98	99	100	99	99	55	93	100	100	98	95	96	100	99	99	94	53	58	98	99	99	99	100	99	99	99	96	96	99	100	99	99	99	97	97	98	96	96		
LPIA	HY01	20	20	20	20	20	20	20	20	20	20	20	20	20	20	22	20	20	20	22	20	22	22	22	22	22	22	20	20	20	19	19	19	19	20	20	20	20	18	19	19	19	19	19	19	19	19	19			
LPIA	HY02	18	21	21	21	21	21	21	21	21	21	21	21	21	21	21	24	24	24	24	24	24	24	24	24	24	24	20	20	20	18	18	18	18	19	19	19	19	19	19	19	18	20	20	20	20	20				
MNOR	HY01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	5	5	5	5	6	6	6	6	6	6	5	5	5	5	5	5	5	7	7	7	7	3	3	6	6	6	6	6	6	4	4	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	65	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	-1	-1	-1	-1	109	108	108	108	108	108	108	108	110	
PGAU	HY03	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	27	-1	-1	19	81	75	81	81	81	81	73	77	81	81	81	81	81	81	81	81	82	-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	21	20	21	21	21	21	21	20	20	21	20	20	20	21	21	21	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0		
SIHY	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	30	50	30	30	30	30	30	30	30	30	0	0	0	0	30	30	30	30	30	0	0	0	0	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	50	50	50	50	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	30	30	30	30	30	0	0	0	0		
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	50	50	50	50	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	14	30	30	30	30	30	30	30	30		
SYPS	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	15	17	17	17	17	17	17	17	17	17	0	0	0	0	17	17	17	17	17	0	0	0	0		
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	17	17	17	17	17	17	17	17	17	0	0	0	0	17	17	17	17	17	0	0	0	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	17	17	17	17	17	17	17	17	17	0	0	0	0	17	17	17	17	17	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	17	17	17	17	17	17	17	17	17	17	0	0	0	0	17	17	17	17	17	17	17	17	17		
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	
TMGR	HY02	33	85	31	32	32	32	34	32	34	34	31	34	34	34	33	33	33	87	87	88	88	88	88	88	88	86	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	
TMGR	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	80	80	78	76	80	80	80	79	75	76	80	80	80	80	80	80	80	80	80	80	77	80	80	80	79	79	80	78	78	60	57	58	
TMGR	HY04	31	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	85	85	85	82	85	85	84	85	81	82	85	84	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
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	-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	-1				
UPIA	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
UPIA	HY02	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6																																

Daily MW Generation on Wednesday

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																										
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	7	21	11	14	4	21	11	11	28	9	28	23	29	25	20	11	6	6	2	0	0	0	0	0	0	0	0	0	0	0	0			
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	14	22	28	33	38	42	25	47	48	48	48	50	48	44	40	34	22	24	11	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	15	24	31	35	21	19	37	44	9	11	4	12	57	58	13	24	11	26	9	6	6	2	0	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	2	3	6	25	20	26	34	22	35	40	29	10	28	33	16	30	9	5	12	10	5	4	1	0	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	11	57	110	172	260	296	301	333	307	406	354	315	337	350	434	358	350	249	199	186	102	42	24	5	0	0	0	0	0	0	0	0	0	0	0	0	
PCUF	CUFG	4	3	4	3	5	3	4	3	4	5	3	4	4	4	5	2	3	3	2	4	4	3	5	3	4	3	4	42	42	42	4	3	3	4	4	3	3	4	4	3	3	4	3	3	3	3	3	3		
PCUF	CUFK	3	2	3	2	4	4	1	3	5	5	3	3	4	3	5	2	2	2	3	4	3	3	3	3	3	3	3	3	3	4	14	29	30	3	2	4	4	5	3	3	3	3	2	2	3	3	3			
Total Co-Gen		7	5	7	5	9	7	5	6	9	10	6	7	8	6	6	4	7	10	4	5	5	5	8	7	6	8	6	7	6	8	56	71	72	7	5	7	8	9	6	6	7	6	6	6	6	6	6			
Total Gen		15261	14817	14455	14262	14111	14089	13576	13547	13371	13217	13007	13092	13444	13523	13367	13163	13732	14747	15514	16009	16372	16629	16968	17059	16884	16701	16583	16943	17076	17226	17186	17459	17340	17152	16764	16293	15809	15520	15713	16579	16689	16620	16591	16606	16098	15895	15647	15396		
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		31	31	30	30	31	31	29	29	30	30	31	31	30	30	30	30	30	30	30	30	30	30	30	30	31	31	29	-99	-99	201	29	-98	-98	30	31	31	31	31	30	30	30	30	30	30	30	30	30	30		
TIE-PLTG		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	-8	-9	-6	13	2	36	-2	17	18	45	1	19	60	31	-37	35	27	27	27			
Interconnection		32	32	31	31	32	32	30	30	31	31	32	32	31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	30	-98	-98	193	20	-104	-85	31	67	29	48	49	75	31	50	90	62	-7	65	57	57	57	
System Total		15237	14792	14431	14238	14086	14064	13553	13524	13347	13193	12982	13067	13420	13499	13342	13138	13708	14723	15490	15985	16348	16605	16944	17035	16860	16677	16558	16918	17053	17331	17291	17273	17327	17263	16856	16269	15749	15499	15673	16538	16622	16596	16548	16523	16043	15909	15589	15346	15346	
SRev ST-Coal		155	161	217	503	593	609	619	610	615	594	549	537	541	413	408	412	389	402	409	301	182	139	148	140	146	132	160	144	153	171	169	171	172	161	155	185	181	186	172	162	162	168	202	167	170	157	186	178	178	
SRev CCGT-Gas		1016	1191	1494	1437	1547	1520	1356	1525	1503	1683	1635	1548	1347	1268	1375	1366	1465	884	432	779	960	766	591	477	707	822	863	646	684	633	599	549	586	657	945	948	1220	1359	1167	548	450	509	579	592	986	1114	1323	1373	1373	
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
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
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		889	976	976	976	976	976	976	976	976	976	976	976	976	825	976	827	976	802	374	374	500	500	500	500	500	500	500	500	500	500	500	187	187	187	374	525	676	676	676	525	525	525	525	525	525	525	525	525	525	
Hydro		205	46	112	97	105	90	82	88	102	127	120	192	109	224	132	291	197	52	453	352	307	292	283	287	324	356	544	517	369	387	386	478	474	479	386	124	127	123	118	204	189	194	189	195	131	219	239	229	229	
S.Reserve Total		2265	2374	2799	3013	3221	3195	3033	3199	3196	3380	3280	3253	2973	2730	2891	2896	3027	2140	1668	1806	1949	1697	1522	1404	1677	1810	2067	1706	1691	1654	1385	1419	1484	1860	1782	2204	2344	2133	1439	1326	1396	1495	1479	1812	2015	2273	2305	2305		