

### Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,487 MW
Distillate	0 MW
<b>Total TNB</b>	<b>2,487 MW</b>
<b>Total IPP</b>	<b>17,126 MW</b>
Total Co-Gen	0 MW
<b>Total System</b>	<b>23,194 MW</b>

### Generation Mix

Type	MWh	Percentage
Hydro	11,742	3.07 %
Gas	62,823	16.44 %
<b>Total TNB</b>	<b>74,565</b>	<b>19.52 %</b>
ST-Coal	205,334	53.74 %
LSS	2,110	0.55 %
Gas	101,035	26.44 %
<b>Total IPP</b>	<b>308,479</b>	<b>80.74 %</b>
Co-Gen	-1,486	-0.39 %
<b>Total Co-Gen</b>	<b>-1,486</b>	<b>-0.39 %</b>
<b>Total Generation</b>	<b>381,558</b>	<b>99.86 %</b>
PLTG	168	0.04 %
HVDC	-694	-0.18 %
<b>Interconnection</b>	<b>-526</b>	<b>-0.14 %</b>
<b>Net Energy</b>	<b>382,084</b>	<b>100.00 %</b>

### Maximum Demand Record

Date: 5/11/2023	19,716 MW
Date: 5/11/2023	416,902 MWH

### Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	16:00:00 Hour
Total Set On Bus	18,925 MW
TNB Generation	3,763 MW
IPP Generation	13,943 MW
Spinning Reserve	1,299 MW
Maximum Demand	17,648 MW
Net Energy	382,084 MWH
Load Factor	90.21 %

### Fuel Cost

Total Cost:	93,085,440.09 RM
Cost per Unit	24.24 cents/kWH

### Average Spinning Reserve During Peak Hour

Type	MW
GT	397
Hydro	987
Syncon	88
Thermal	133
<b>Total</b>	<b>1,605</b>

Time	Weather	Temperature
Afternoon	Rainy	30
Morning	Cloudy	26

### 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	15564	14794	14321	13736	13444	13321	13703	13914	14288	15936	16748	17144	17005	16742	17194	17518	17620	17253	16465	16803	17126	16970	16331	15861

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, December 6, 2023 5:58:03 PM  
 (Ir. Shanmugam Thoppalan)  
 Head  
 Grid System Operator

### 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																								
JMAH	U001	696	696	695	697	696	697	696	697	699	696	695	695	695	695	695	696	696	697	698	697	700	698	695	694	696	694	698	697	694	695	694	693	694	693														
JMAH	U002	694	693	696	694	695	695	697	697	698	696	696	695	694	695	693	696	696	695	694	694	691	697	692	696	695	699	696	694	695	695	694	697	694	693	702	694	693											
JMHE	U001	954	954	949	949	881	881	878	878	882	880	884	879	881	881	878	881	880	949	949	950	951	950	957	951	947	948	951	951	949	951	948	951	950	950	949	947	951	949	898									
JMHE	U002	980	979	977	978	882	881	883	884	881	879	881	881	881	880	877	879	880	956	979	975	975	973	979	978	976	977	977	976	974	974	982	978	977	978	976	976	975	975	976	976	978							
JMIG	U001	674	662	658	666	659	666	675	670	662	671	667	666	671	676	667	662	671	663	668	669	660	666	670	672	671	664	669	672	672	675	664	667	666	666	671	666	666	668	667	673	668	671	667	667	668	667	669	668
JMIG	U003	678	666	676	671	672	671	668	671	670	670	672	671	677	670	673	673	677	671	683	667	668	676	671	676	673	675	677	672	668	676	671	671	674	673	671	672	668	671	672	671	672	673	669	668	672	672	672	671
JMIG	U005	975	979	974	973	876	880	880	880	881	878	881	881	882	881	879	881	883	973	981	975	977	974	978	978	977	979	977	977	977	981	980	977	977	977	978	977	976	977	972	977	980	982	981	975	981	976	976	
PKLG	U003	275	277	275	275	277	277	276	276	274	275	276	275	275	274	274	275	274	276	271	232	189	152	158	156	154	155	155	155	155	155	155	155	155	155	155	155	156	156	156	156	156	154	155	156	156	155	156	
PKLG	U004	159	189	192	181	236	273	280	276	276	273	277	278	277	273	274	276	278	275	271	273	277	276	274	276	272	269	267	274	272	268	269	271	275	271	272	269	272	270	271	276	268	272	274	273	273	274		
PKLG	U005	470	470	470	470	470	390	390	390	390	390	390	390	390	390	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	
TBIN	U001	688	692	690	690	686	689	689	689	692	689	689	692	691	690	688	689	688	689	690	690	691	729	693	686	690	688	689	689	686	689	688	689	689	688	689	688	689	688	688	688	687	687	688	686	689	685	687	
TBIN	U002	688	691	689	689	689	688	689	688	690	691	691	687	692	688	689	688	687	689	690	696	692	689	687	690	688	690	692	689	689	689	688	687	689	688	688	688	689	688	688	688	688	688	691	688	690	687	689	
TBIN	U003	688	688	688	688	687	688	688	686	687	693	687	688	688	687	685	685	685	689	687	688	688	687	689	691	686	686	687	687	688	686	687	689	686	686	688	684	690	687	685	687	687	688	691	688	686	686	688	
Total ST-Coal		8619	8636	8629	8621	8406	8376	8389	8382	8382	8381	8386	8378	8397	8381	8446	8449	8467	8682	8737	8714	8671	8670	8607	8615	8601	8591	8601	8603	8593	8604	8587	8600	8593	8596	8596	8595	8583	8609	8594	8589	8601	8597	8598	8600	8585	8608	8586	8541
Total ST-Oil		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 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
CBPS	BLK2	357	207	211	210	210	211	210	210	209	205	212	212	211	211	211	299	358	361	361	365	363	358	354	357	360	361	360	358	361	361	360	354	365	356	366	368	369	361	362	359	360	354	362	361	362			
EMPP	BLK1	681	653	593	498	520	438	409	410	417	409	407	453	466	495	408	431	498	709	713	692	711	710	717	710	708	686	690	705	709	704	710	709	710	707	684	690	689	718	720	722	707	706	709	689	614	559	502	426
EMPP	BLK2	689	691	632	503	515	435	409	411	419	409	406	454	472	500	408	435	498	709	713	693	711	709	717	710	708	686	690	710	710	706	709	709	710	701	686	696	689	718	719	721	712	710	709	707	621	562	501	428
EMPP	BLK3	682	691	631	504	525	435	408	415	432	409	407	453	473	500	408	435	498	709	713	694	710	710	717	710	709	686	690	710	709	703	709	709	710	702	685	706	689	718	719	722	711	709	709	708	684	565	525	430
GLGR	GT01	94	95	95	96	96	96	96	94	96	96	93	94	95	96	95	94	95	97	96	94	96	109	109	110	109	102	95	94	95	109	109	109	109	109	97	94	96	97	97	95	95	95	107	108	110	108		
GLGR	ST1C	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	41	41	47	48	48	49	46	40	41	41	46	47	47	47	47	46	42	41	42	42	42	42	42	42	46	46	46	47	46			
NPRI	BLK1	511	316	319	322	319	319	319	319	321	317	313	319	322	319	315	317	320	398	518	511	514	515	520	518	511	507	510	515	517	515	512	516	517	514	506	519	508	521	525	526	516	517	515	514	506	515	515	515
NPRI	BLK2	518	473	329	328	328	328	328	326	328	325	321	329	329	329	322	328	328	406	519	511	515	517	521	519	512	508	511	515	518	516	514	517	517	514	508	521	509	524	527	527	517	518	515	514	507	518	517	516
PCGP	PGRG	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620		
PLPS	GT11	128	128	128	128	128	127	128	127	128	128	128	128	128	127	128	128	124	128	130	141	145	148	145	145	141	115	115	144	144	144	144	144	144	144	144	145	20	121	121	118	118	119	153	140	150	149	149	
PLPS	GT12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	142	140	140	142	141	141	136	110	113	138	138	138	138	138	138	138	138	110	110	110	110	110	110	110	110	140	145	144	144	
PLPS	ST18	59	58	59	58	58	59	58	58	58	59	59	58	59	59	58	58	59	58	142	146	143	214	214	214	213	198	199	212	212	212	212	212	212	212	205	203	131	134	129	128	128	154	137	147	145	146		
SKSP	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPGP	BLK1	713	713	719	719	718	719	717	652	501	500	492	501	602	720	714	721	720	720	720	712	717	720	718	719	715	708	710	715	714	713	713	718	718	714	706	718	710	719	728	729	717	719	718	717	703	718	718	716
SPGP	BLK2	709	709	717	717	718	716	712	650	502	499	492	498	602	714	710	718	714	715	714	707	713	712	712	712	709	702	705	709	708	705	704	713	714	708	698	713	706	714	722	723	713	713	713	716	703	717	715	712

### 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
HTRG	HY03	7	7	7	7	8	8	7	7	8	8	7	7	7	8	8	8	7	7	7	7	7	7	7	7
HTRG	HY04	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
KNRG	HY02	24	24	24	24	24	24	24	24	24	25	24	24	24	37	37	37	37	37	37	37	37	37	37	37
KNRG	HY03	22	22	22	22	22	22	22	22	22	22	22	22	22	38	38	38	38	38	38	37	38	37	37	37
KNYR	HY02	-1	58	60	60	60	60	58	61	61	59	59	-1	-1	-1	-1	60	61	94	94	94	-1	-1	-1	-1
KNYR	HY04	56	0	0	0	0	0	59	59	57	58	59	59	59	59	58	59	60	96	96	96	96	96	96	97
LPIA	HY01	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	25	25	20	20	20	20	20	20	20
LPIA	HY02	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	15	15	15	20	20	20	20	20	20
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	3
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	-1	-1	-1	-1	-1
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1
PGAU	HY03	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	81	81	81	81	21	-1	-1	-1	-1
SIHY	HY01	30	50	50	50	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0
SIHY	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
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
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
TMGR	HY01	44	44	46	49	44	44	44	45	44	44	44	47	59	49	44	58	48	83	83	46	65	83	83	83
TMGR	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
TMGR	HY04	-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	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	98	-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
UPIA	HY01	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
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		271	294	298	370	314	314	314	314	395	394	370	305	280	249	311	259	249	312	325	286	449	475	560	740
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	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BSLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHLS	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
GBLS	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
GELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GNLS	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
JELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JSLS	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
KDLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KKLS	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
KMLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KRLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0
MNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PKLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SNLS	LSS4	0	0	0	0	0	0	0	0	0	0	0	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	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	0	0	0	0	0	0	0	0	0	0	0
TBLS	LSS2	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 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																										
Total 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																										
ESTL	ESTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																											
KHTC	BLK1	-95	-95	-96	-95	-96	-93	-92	-91	-91	-93	-92	-91	-91	-92	-91	-96	-102	-104	-104	-104	-106	-104	-108	-102	-104	-108	-102	-104	-108	-109	-109	-106	-107	-99	-100	-103	-102	-101	-100	-102	-102	-102	-99	-95	-98					
PCUF	CUFG	23	24	24	24	24	24	22	23	23	23	24	24	24	24	24	23	23	23	22	22	22	21	21	23	23	21	20	20	21	20	19	21	20	22	21	21	20	22	23	22	22	22	22	22	22	22				
PCUF	CUFK	3	3	0	2	4	5	2	0	3	2	2	2	1	5	3	2	5	2	3	3	3	1	4	2	2	3	2	2	1	2	3	3	1	3	2	2	5	2	2	2	2	0	4	3						
PFTZ	PFTZ	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15					
Total Co-Gen		-54	-53	-57	-54	-53	-49	-53	-53	-50	-53	-51	-51	-52	-48	-51	-50	-52	-61	-63	-63	-65	-65	-73	-70	-65	-63	-62	-64	-64	-72	-71	-80	-80	-82	-80	-68	-63	-61	-71	-75	-74	-70	-62	-63	-63	-62	-54	-59		
Total Gen		15596	15130	14816	14538	14321	14034	13966	13834	13659	13594	13548	13648	13904	14167	14000	14063	14288	15391	15914	16435	16777	16969	17137	17306	17063	16932	16796	17110	17207	17531	17521	17499	17626	17604	17289	16872	16518	16350	16782	17153	17122	17101	16986	16723	16372	16255	15853	15551		
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		-30	-29	-27	-29	-28	-28	-28	-29	-28	-28	-28	-30	-28	-28	-31	-28	-29	-29	-30	-28	-30	-28	-30	-28	-28	-30	-28	-28	-31	-29	-28	-28	-29	-29	-30	-29	-30	-30	-30	-29	-28	-27	-28	-28	-30					
TIE-PLTG		12	15	9	13	-11	-8	15	12	11	15	5	4	-4	-15	10	1	-11	11	-25	19	22	14	7	17	47	34	28	38	8	12	-2	-13	7	12	18	15	29	-33	-12	-14	8	15	12	-6	24	-16	-13	-1		
Interconnection		-18	-13	-18	-16	-39	-36	-13	-16	-18	-13	-24	-25	-34	-43	-18	-30	-39	-19	-54	-11	-7	-16	-21	-13	17	6	0	9	-20	-16	-30	-44	-22	-16	-11	-14	0	-63	-41	-44	-22	-15	-18	-34	-3	-44	-42	-32		
System Total		15614	15143	14834	14554	14360	14070	13979	13850	13677	13607	13572	13673	13938	14210	14018	14093	14327	15410	15968	16446	16784	16985	17158	17319	17046	16926	16796	17101	17227	17547	17551	17543	17648	17620	17300	16886	16518	16413	16823	17197	17144	17116	17004	16757	16375	16299	15895	15583		
SRev ST-Coal		166	149	156	164	389	377	368	369	370	367	369	375	356	371	384	382	367	189	134	157	165	156	139	131	145	155	145	143	153	142	159	146	153	150	150	151	163	137	152	157	145	149	148	146	161	138	160	205		
SRev CCGT-Gas		766	1273	1580	1925	1872	2133	2210	2335	2594	2654	2683	2510	2247	1941	2232	2132	1942	1151	888	412	242	361	175	210	563	387	600	359	264	267	258	241	231	269	370	495	774	989	308	267	367	330	349	709	1038	1185	1347	1596		
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	
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	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		1142	1041	1041	1041	1041	1041	1041	1041	890	890	1041	1041	991	1142	1142	1142	1142	1142	890	890	739	577	739	1142	1142	1041	890	401	401	552	552	552	552	552	991	1142	1142	1142	667	365	365	552	365	365	516	955	955			
Hydro		154	152	148	144	150	150	150	150	320	321	194	191	266	146	152	136	146	83	70	109	198	172	288	307	373	112	111	153	264	516	591	423	276	278	454	200	113	72	72	207	453	511	429	520	527	370	157	160		
S.Reserve Total		2315	2702	3013	3361	3589	3838	3856	3982	4262	4320	4374	4272	4015	3755	3997	3879	3684	2652	2320	1908	1582	1665	1429	1225	1820	1883	2083	1785	1659	1413	1496	1449	1299	1336	1614	1924	2279	2426	1761	1385	1417	1441	1565	1827	2179	2296	2702	3004		