

Daily System Generation Summary on Saturday

Saturday, September 30, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,002 MW
Distillate	0 MW
Total TNB	2,002 MW
Total IPP	17,907 MW
Total Co-Gen	0 MW
Total System	23,208 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,658	3.80 %
Gas	39,933	11.11 %
Total TNB	53,591	14.91 %
ST-Coal	217,253	60.43 %
LSS	6,594	1.83 %
Gas	80,632	22.43 %
Total IPP	304,479	84.69 %
Co-Gen	638	0.18 %
Total Co-Gen	638	0.18 %
Total Generation	358,708	99.78 %
PLTG	-80	-0.02 %
HVDC	-728	-0.20 %
Interconnection	-808	-0.22 %
Net Energy	359,516	100.00 %

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:	20:00:00 Hour
Total Set On Bus	17,746 MW
TNB Generation	2,928 MW
IPP Generation	13,652 MW
Spinning Reserve	1,136 MW
Maximum Demand	16,650 MW
Net Energy	359,516 MWH
Load Factor	89.97 %

Fuel Cost

Total Cost:	75,243,219.04 RM
Cost per Unit	20.94 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	1,394
Hydro	194
Syncon	625
Thermal	363
Total	2,576

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	29

Gas Usage

Station	(mmscfd)
GLGR	29
SRDG	1
TJGS	48
Total TNB	77
CBPS	39
EMPP	256
NPRI	125
PCGP	77
PLPS	36
SKSP	0
SPGP	186
Total IPP	720
Total Gas	797
Total Gas Required	797

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	16103	15514	14878	14375	13982	13708	13575	13301	12983	13862	14483	14850	14828	14554	15026	15541	15846	15627	15318	15712	16650	16550	16126	15930

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, October 2, 2023 2:29:50 PM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Saturday

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	701	697	697	696	697	694	694	698	694	695	696	698	698	695	697	695	698	697	694	695	697	694	698	694	693	696	696
JMAH	U002	696	697	696	696	697	692	695	694	695	696	694	693	698	695	696	697	695	694	694	695	696	692	694	695	696	693	693
JMHE	U001	900	901	902	901	901	900	901	902	900	900	851	851	848	851	844	853	849	853	850	847	888	873	901	897	899	894	899
JMHE	U002	972	972	974	972	898	902	902	898	902	898	850	850	849	849	847	852	846	850	851	850	848	902	899	899	899	899	899
JMJG	U001	675	673	678	670	672	672	673	676	672	670	673	672	670	674	676	672	672	667	667	673	676	672	671	671	671	671	671
JMJG	U002	677	673	668	673	676	678	677	673	679	676	674	675	677	677	674	672	675	675	672	663	673	674	673	673	676	683	673
JMJG	U003	671	672	667	672	673	673	671	675	672	668	673	671	674	673	626	628	677	671	672	673	671	672	674	673	673	677	673
PKLG	U003	275	271	272	274	273	275	274	276	277	277	276	275	277	278	276	276	277	277	275	271	276	274	276	270	272	270	271
PKLG	U004	277	276	274	273	277	277	278	274	272	275	280	278	275	274	275	275	276	276	274	275	276	270	277	275	271	274	276
PKLG	U005	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460
TBIN	U001	690	690	688	689	690	687	688	690	689	692	691	690	689	690	641	600	691	685	689	691	690	689	691	501	499	500	499
TBIN	U002	689	689	690	690	689	690	690	691	686	688	688	688	688	689	672	602	692	693	689	689	688	688	686	687	557	499	501
TBIN	U003	686	685	687	689	687	686	690	686	688	687	689	687	688	684	689	631	599	690	689	689	688	688	686	688	687	497	501
TBIN	U004	986	984	982	984	950	906	903	902	904	904	871	852	852	853	853	854	852	852	853	853	888	903	903	903	903	904	903
Total ST-Coal		9355	9340	9335	9339	9240	9192	9196	9195	9190	9186	9066	9040	9037	9036	8985	8876	8779	9047	9043	9030	9034	9170	9164	9183	9180	8674	8606
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
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
CBPS	BLK2	211	210	211	212	212	211	211	212	211	211	210	211	209	211	205	208	206	213	210	212	208	212	212	207	198	212	201
EMPP	BLK1	710	711	706	613	547	474	458	467	422	445	411	437	409	414	406	408	405	411	414	412	451	411	425	409	392	434	395
EMPP	BLK2	710	711	710	614	548	472	460	468	419	441	411	434	408	412	406	408	405	413	412	408	446	412	430	409	392	435	395
EMPP	BLK3	709	710	711	611	544	473	461	467	420	441	410	435	409	410	405	408	405	412	414	411	455	412	431	409	392	436	395
GLGR	GT02	95	95	95	95	95	95	95	95	94	94	95	94	94	95	95	95	95	95	94	97	95	94	95	95	95	94	95
GLGR	ST1C	41	41	41	41	42	42	41	42	42	43	42	41	42	42	41	42	42	41	41	41	41	41	41	42	41	41	41
NPRI	BLK1	522	434	309	308	309	308	309	310	308	309	308	309	304	308	302	304	301	311	307	309	304	308	308	302	290	307	291
NPRI	BLK2	411	330	354	331	331	329	331	332	331	331	329	330	327	329	323	324	322	332	328	331	326	329	329	324	310	330	313
PCGP	PGRG	603	600	601	603	602	603	402	401	402	402	398	401	394	401	385	392	385	407	396	401	392	401	399	391	378	402	377
PLPS	GT13	124	125	124	124	124	124	125	125	125	124	125	125	124	125	125	124	125	124	125	124	125	125	125	125	125	125	125
PLPS	ST18	58	58	58	58	57	58	58	58	58	57	57	57	57	58	58	58	58	57	57	58	58	58	58	58	58	59	58
SKSP	BLK1	90	0	0	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	719	718	720	719	719	720	718	598	598	500	501	401	450	359	362	362	362	360	450	451	538	597	598	599	599	600	719
SPGP	BLK2	715	716	715	716	716	713	718	598	599	498	499	401	450	401	362	361	362	360	451	451	577	598	600	599	600	599	718
TJGS	GT2A	131	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TJGS	GT2B	128	118	185	160	161	161	160	160	161	160	161	160	160	161	161	161	161	160	161	161	161	161	161	161	161	161	159
TJGS	ST2C	191	191	115	95	93	93	94	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
Total CCGT-Gas		6168	5889	5655	5300	5100	4876	4641	4426	4283	4150	4050	3929	3930	3818	3728	3748	3727	3792	3951	3962	4268	4251	4304	4222	4124	4329	4377
SRDG	GT04	0	0	0	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 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
BSIA	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	0
BSIA	HY03	23	23	23	23	23	23	22	23	9	9	9	9	9	9	10	10	10	10	10	11	10	-1	-1	-1	-1	12	11
CEND	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
CEND	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	6	6	6
CEND	HY03	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
HTRG	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
HTRG	HY03	3	3	3	3	3	3	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
HTRG	HY04	3	3	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
KNRG	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	0
KNRG	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	0	0

Daily MW Generation on Saturday

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							
KNRG	HY03	21	21	21	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	38	37	37	37	21	21	21	21	21			
KNYR	HY01	95	0	0	0	0	0	0	0	0	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95		
KNYR	HY02	99	100	100	100	100	100	100	100	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99		
KNYR	HY03	98	99	99	99	99	99	99	99	99	99	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98		
KNYR	HY04	101	98	98	98	98	98	98	98	98	100	100	100	96	89	99	90	99	99	99	101	101	101	96	99	98	97	98	101	99	99	100
LPIA	HY01	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17	17	17	17	17	
LPIA	HY02	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	13	
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	3	3	3	3	3	3	
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	-1	-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	-1	-1	-1	19	-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	0	0	19	21	21	21	
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	0	22	23	22	22	
SYPS	HY03	2	0	0	0	0	0	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	HY04	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	
TMGR	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	79	33	33	
TMGR	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	32	32	32	32	
TMGR	HY04	41	44	42	42	43	41	42	41	41	41	41	41	41	37	41	38	42	44	45	42	81	42	43	40	41	42	42	65	81	62	48
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	183	180	180	
UPIA	HY01	5	5	4	4	4	4	4	4	4	4	4	4	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	5	5	5	5	5	5	5	
Total Hydro		557	445	443	461	462	460	460	446	448	541	560	556	539	520	319	319	324	519	543	542	531	532	548	514	544	546	545	547	550	547	588
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	0	0	0	0	0	0	
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	10	19	11	20	23	23	26	26	25	24	23	27	24	17	11
BKLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	11	15	19	23	19	31	28	31	26	30	29	27	25	21	19	15
BSLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	13	17	21	22	24	31	23	32	19	32	32	30	22	22	10	18
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	14	19	12	31	22	37	39	40	35	37	40	38	40	36	32	30	24
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6	13	12	24	38	35	41	42	43	34	30	38	39	18	16	9
GELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	13	12	15	22	27	29	16	25	19	15	16	22	0	2	0
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	9	17	23	30	27	25	43	34	42	45	46	39	45	41	37	31
JELS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6	13	15	23	27	21	30	31	31	32	30	28	29	23	9	17
KDLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	13	23	29	43	56	61	60	82	86	92	87	62	90	68	26	21	13	17
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	12	15	22	28	33	35	37	42	43	43	31	45	34	29	30	31
KMLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	8	11	15	19	21	27	29	25	25	31	20	27	30	13	27	5
KNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	32	36	58	41	53	92	94	100	75	99	100	89	96	69	78	66
KRLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	9	6	17	12	24	28	30	30	30	30	30	30	28	28	18	20	15
MALS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	5	12	30	23	15	14	20	20	18	29	27	21	26	26	29	29
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7	12	24	19	26	44	45	44	46	50	46	35	24	36	19	17
MNLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	11	15	18	56	40	48	89	87	83	91	86	75	80	44	59	37	40
PKLS	LSS3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	20	56	89	94	99	88	104	109	93	81	91	76	50	59	59	17
SNLS	LSS4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	14	22	31	36	42	46	50	50	44	50	50	49	50	41	33	41
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	11	18	21	37	28	31	47	34	55	41	47	51	29	40	42	37
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	9	19	32	26	25	36	41	41	36	44	25	39	32	32	19
STLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4	6	13	19	13	14	18	26	26	29	13	20	17	19	9	12
TBLS	LSS2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	13	26	22	27	30	27	30	30	24	30	28	20	18	12	17
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	16	89	215	300	480	598	690	824	940	948	987	979	934	915	851	759	655	539
ESTL	ESTL	4	10	7	9	6	9	11	0	0	0	10	0	0	15	16	17	20	0	8	18	15	14	12	18	14	14	13	8	8	0	0
KHTC	BLK1	-21	-20	-18	-19	-17	-19	-17	-19	-19	-18	-17	-17	-15	-15	-14	-13	-19	-22	-21	-27	-28	-30	-34	-32	-34	-36	-38	-43	-44	-43	-44

Daily MW Generation on Saturday

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																								
PCUF	CUFG	19	19	19	18	18	20	20	20	19	20	20	19	20	20	21	22	20	20	18	18	19	16	16	15	15	17	15	15	14	15	14	20	20	18	19	18	18	18	17	20	21	20	20	21	21			
PCUF	CUFK	15	15	14	14	15	16	13	13	16	15	15	14	14	16	14	15	15	14	16	14	15	16	15	13	15	15	16	15	16	16	16	16	15	16	13	15	16	16	16	15	15	15	14					
PFTZ	PFTZ	4	4	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	9	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13					
Total Co-Gen		21	28	34	34	34	38	39	26	29	28	40	29	28	50	48	50	53	30	32	45	32	31	30	30	24	23	18	18	13	-2	-2	0	-1	3	14	12	12	20	22	23	30	29	29	28	27	32	28	38
Total Gen		16101	15702	15467	15134	14836	14566	14336	14107	13948	13812	13697	13558	13551	13443	13281	13009	12967	13408	13845	14060	14474	14673	14854	14923	14790	14557	14526	14932	15001	15385	15551	15681	15758	15753	15603	15408	15266	15193	15662	16512	16610	16590	16517	16426	16100	15992	15905	15754
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				
TIE-HVDC		-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30	-30			
TIE-PLTG		29	-13	-16	-1	-12	-3	-8	7	-4	0	19	2	6	-8	11	-6	14	-14	14	-7	22	7	34	23	-8	-38	2	18	5	11	40	0	-57	-26	7	-27	-21	-36	-19	-38	-9	-16	-3	-15	5	-28	5	-4
Interconnection		-2	-44	-47	-31	-42	-34	-39	-23	-34	-31	-11	-28	-24	-39	-20	-36	-16	-44	-17	-37	-9	-23	4	-7	-38	-68	-28	-12	-25	-19	10	-31	-88	-56	-24	-58	-52	-67	-50	-69	-40	-46	-33	-45	-26	-59	-25	-35
System Total		16103	15746	15514	15165	14878	14600	14375	14130	13982	13843	13708	13586	13575	13482	13301	13045	12983	13452	13862	14097	14483	14696	14850	14930	14828	14625	14554	14944	15026	15404	15541	15712	15846	15809	15627	15466	15318	15260	15712	16581	16650	16636	16550	16471	16126	16051	15930	15789
SRev ST-Coal		157	172	177	173	270	320	316	315	322	324	367	373	376	378	339	453	451	367	373	385	382	330	347	328	331	503	510	502	498	505	494	499	426	375	347	325	356	344	339	178	166	185	174	162	177	187	166	166
SRev CCGT-Gas		720	909	789	1144	1344	1568	1803	2018	2161	2294	2394	2515	2514	2626	2716	2696	2717	2652	2493	2482	2176	2193	2140	2222	2320	2115	2067	1716	1543	1077	824	634	469	633	735	649	687	670	410	213	249	204	260	242	423	441	503	692
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		
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	
SRev Co-Gen		-2	0	-2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	-2	0	0	0	0	1	0	1	0	-1	0	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-1	0
Syncon		703	703	703	703	703	703	703	703	703	703	552	552	703	703	804	804	804	703	703	703	728	728	577	728	703	552	703	703	703	703	703	703	703	703	703	703	552	703	703	516	428	277	428	516	516	703	703	703
Hydro		131	118	120	102	101	103	103	103	117	115	122	254	258	124	143	243	243	238	144	120	121	107	106	241	124	119	268	118	116	113	116	75	115	114	122	118	249	119	91	280	293	486	363	331	420	81	123	95
S.Reserve Total		1709	1902	1787	2122	2418	2694	2924	3139	3303	3436	3586	3694	3700	3831	3901	4196	4213	4061	3713	3690	3382	3358	3322	3368	3504	3440	3396	3076	2859	2398	2136	1912	1713	1825	1907	1795	1844	1836	1543	1187	1136	1152	1226	1251	1536	1412	1494	1656