

Daily System Generation Summary on Tuesday

Tuesday, June 8, 2021

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,154 MW
Distillate	0 MW
Total TNB	2,154 MW
Total IPP	15,799 MW
Total Co-Gen	0 MW
Total System	22,224 MW

Generation Mix

Type	MWh	Percentage
Hydro	13,699	4.21 %
Gas	72,567	22.28 %
Total TNB	86,266	26.48 %
ST-Coal	184,793	56.73 %
LSS	3,226	0.99 %
Gas	50,372	15.46 %
Total IPP	238,391	73.18 %
Co-Gen	159	0.05 %
Total Co-Gen	159	0.05 %
Total Generation	324,816	99.72 %
PLTG	-231	-0.07 %
HVDC	-694	-0.21 %
Interconnection	-925	-0.28 %
Net Energy	325,741	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:	21:00:00 Hour
Total Set On Bus	16,505 MW
TNB Generation	4,622 MW
IPP Generation	10,624 MW
Spinning Reserve	1,254 MW
Maximum Demand	15,313 MW
Net Energy	325,741 MWH
Load Factor	88.63 %

Fuel Cost

Total Cost:	49,187,131.35 RM
Cost per Unit	15.15 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	253
Hydro	318
Syncon	581
Thermal	435
Total	1,587

Time Weather Temperature

Afternoon	Hot	33
Morning	Sunny	27

Gas Usage

Station	(mmscfd)
GLGR	49
SRDG	2
TJGS	216
Total TNB	268
CBPS	55
NPRI	136
PLPS	42
Total IPP	233
Total Gas	501
Total Gas Required	501

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	13588	12959	12432	11996	11644	11385	11373	11361	11688	12971	13491	13811	14013	14154	14586	14921	14962	14825	14085	14066	15294	15313	15197	15090

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, July 5, 2021 5:23:29 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	496	502	402	401	357	359	359	352	350	351	350	347	350	349	351	349	385	527	554	554	633	632	632	632	600	553	552	602	695	693	691	692	691	692	691	698	690	693	692	694	692	691	695	693	693	693	692	694	
JMAH	U002	522	504	403	404	354	353	353	354	354	354	353	351	353	354	354	354	398	559	554	555	634	633	634	634	602	558	554	607	698	696	696	695	695	695	694	694	696	694	695	692	695	695	698	694	694	697	693	694	
JMHE	U001	899	849	847	783	782	781	780	781	779	784	782	771	777	781	776	783	778	777	782	850	853	848	901	899	896	901	901	902	902	950	948	951	949	950	948	947	946	949	948	948	948	950	948	949	950	949	951		
JMHE	U002	901	849	853	778	780	781	781	781	779	782	782	770	780	781	779	778	776	775	780	852	850	850	903	897	898	900	900	901	900	900	951	948	952	950	951	949	948	948	951	948	950	949	949	951	950	949	950	950	
JMJG	U001	596	642	666	672	678	671	621	585	543	500	498	497	549	546	546	549	550	625	648	647	646	652	644	651	667	672	675	670	671	671	671	674	674	674	673	672	674	672	590	475	451	448	447	453	448	447	449	447	
JMJG	U002	678	667	662	664	669	667	634	573	549	510	503	506	548	548	545	551	563	625	640	651	645	647	646	642	662	660	670	663	665	671	671	672	669	671	662	674	668	665	662	672	673	661	668	674	667	667	674	666	
JMJG	U003	666	664	660	662	662	659	630	573	542	500	506	506	543	545	543	547	563	634	643	640	647	643	642	651	663	671	667	668	672	666	662	669	670	666	666	670	669	670	668	666	664	669	670	667	666	669	664	670	
JMJG	U005	891	887	869	800	798	799	797	800	801	798	801	796	797	801	796	804	797	800	849	852	849	892	890	888	888	890	891	888	847	343	345	345	348	334	330	326	318	326	330	330	328	331	333	343	371	403			
PKLG	U003	154	155	155	156	156	155	157	155	155	152	156	154	157	157	157	157	156	156	157	156	156	158	157	156	156	155	156	195	250	264	276	276	278	275	274	277	278	277	276	275	270	272	275	274	274	275	275		
TBIN	U001	670	601	600	600	542	441	400	401	402	399	401	398	401	400	399	402	444	604	690	689	689	690	687	666	600	602	641	690	689	689	687	686	686	687	689	688	686	688	690	687	686	687	687	687	688	687	687	687	
TBIN	U002	675	603	603	602	560	444	403	403	399	403	400	399	405	402	402	403	437	612	690	698	688	692	692	673	601	602	620	689	689	691	691	692	693	692	690	692	694	692	691	691	692	690	691	694	693	691	690	692	
TBIN	U004	901	854	852	854	852	856	856	853	854	852	854	853	852	853	853	853	853	853	853	853	853	902	903	901	905	902	903	905	903	954	954	954	954	953	953	954	952	955	954	951	954	956	953	953	952	951	950		
Total ST-Coal		8049	7777	7572	7376	7190	6966	6771	6611	6507	6385	6386	6348	6512	6517	6501	6530	6700	7547	7791	7994	8145	8145	8333	8295	8134	8068	8127	8340	8572	8620	8735	8249	8256	8253	8242	8246	8233	8224	8138	8029	8007	7992	8007	8022	8008	8019	8045	8079	
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	362	360	359	359	358	358	356	353	357	360	356	363	357	357	355	363	371	356	357	356	356	356	354	359	353	359	362	362	361	361	351	359	362	362	362	359	352	352	362	366	368	359	363	363	362	362	357	357	
GLGR	GT01	101	67	68	66	67	67	67	68	67	68	68	67	68	69	68	67	86	99	101	101	87	68	68	67	66	68	68	76	99	99	99	101	101	100	100	100	68	69	82	101	101	98	100	100	100	100	101	101	
GLGR	GT02	101	67	67	68	68	68	68	68	67	68	68	67	68	68	68	68	88	100	101	100	86	67	68	67	67	67	78	100	100	100	100	100	100	100	100	67	67	83	101	100	100	100	100	100	100	101	101		
GLGR	ST1C	91	76	72	72	72	72	72	72	72	72	72	72	72	72	72	80	90	91	91	88	73	71	72	72	72	72	74	91	91	91	91	91	91	91	91	91	76	73	78	91	91	91	91	91	91	91	91	91	
NPRI	BLK1	505	498	499	505	502	503	499	498	497	505	504	0	0	0	0	0	0	0	124	232	527	529	531	531	506	501	505	502	505	489	505	504	505	506	505	506	496	505	506	505	500	501	502	500	503	500	500	500	
NPRI	BLK2	503	500	502	509	490	507	485	482	485	502	509	511	482	505	499	515	521	509	512	509	512	515	514	514	502	518	520	508	505	508	492	509	509	508	502	505	496	500	509	509	514	508	508	508	509	510	509	508	
PCGP	PGRG	603	592	595	602	596	600	593	594	592	600	601	593	591	596	593	601	605	588	595	591	596	596	597	579	603	602	604	595	602	581	603	602	508	594	596	584	590	604	602	609	601	601	603	601	603	602	603		
PLPS	GT11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	44	43	43	63	128	129	129	132	127	125	128	126	129	130	130	126	130	124	108	115	142	141	141	142	142	142	142	141	143		
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	74	141	141	143	146	146	146	147	147	149		
PLPS	GT13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	128	137	137	137	136	137	133	108	111	143	142	141	142	143	143	142	142	143		
PLPS	ST18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	32	55	56	57	58	58	58	59	132	142	143	143	142	142	141	131	132	213	214	214	214	213	213	213	213	213	214			
SPGP	BLK1	721	717	719	719	719	717	718	718	718	718	716	719	718	718	720	717	720	718	717	718	719	717	718	717	717	717	718	717	716	715	716	712	713	713	716	716	717	719	717	715	716	717	718	718	716	718	719	717	
SPGP	BLK2	717	717	719	720	719	717	718	718	719	718	719	720	718	720	716	719	717	717	717	717	718	718	717	718	717	718	716	718	719	716	715	717	717	717	717	716	717	718	719	718	719	718	716	719	719	719	717		
TJGS	GT1A	223	224	226	226	226	228	225	229	225	226	224	226	225	225	227	225	223	224	226	229	228	227	229	225	215	218	228	225	222	224	228	216	226	225	223	223	224	222	223	226	224	226	225	225	224	223	224	227	225
TJGS	GT1B	217	217	219	215	219	213	217	219	215	218	215	216	218	216	215	217	218	214	220	218	215	217	217	217	205	214	216	216	214	216	208	216	214	213	218	217	211	215	216	216	213	216	217	213	214	214	216	216	
TJGS	ST1C	246	242	242	242	242	242	242	239	243	240	243	243	243	243	243	243	243	241	237	236	240	237	241	240	244	244	244	244	241	245	245	245	245	244	244	244	244	244	244	247	247								

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																									
KNRG	HY02	37	37	39	39	39	39	39	39	39	39	39	23	23	23	23	22	23	23	23	23	23	23	23	23	23	23	23	24	37	37	37	37	37	37	37	37	37												
KNRG	HY03	36	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22	22	21	21	0	0	0	0	36	36	36	35	36	35	35	36	36											
KNYR	HY01	58	56	-1	-1	-1	-1	-1	-1	-1	-1	102	99	99	99	-1	-1	-1	-1	-1	-1	55	57	57	57	55	57	58	60	59	-1	-1	-1	-1	100	100	100	100	100	100	100	100	100							
KNYR	HY02	61	58	58	59	58	59	59	58	58	58	61	93	59	63	59	60	102	59	57	56	56	56	58	57	56	69	57	93	59	62	57	66	100	62	61	60	58	-1	61	75	80	62	94	78	78	100	62	65	
KNYR	HY03	17	58	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	59	99	97	96	99	101	101	101	100	100	101	100	100	100							
KNYR	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	0	0	0	0	0	0	0	0	0	-1	0	20	-1	62	61								
LPIA	HY01	20	20	20	20	20	20	20	20	20	20	21	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	18	18	18	18	18	18	18	18	18	18	18	18	18	18							
LPIA	HY02	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3						
PGAU	HY01	20	-1	-1	-1	-1	-1	-1	-1	-1	-1	79	-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							
PGAU	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	0	0	0	0	0	0	0	0	0	0	20	20	20	20	20	20	20	20					
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	0	0	0	0	0	0	0	0	0	20	20	20	20	20	20	20	20						
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	0	0	0	0	0	30	30	30	30	0	0	0	0	50	48	48	48	47	47	24	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	0	0	0	0	0	0	0	0	0	0	0	0	49	50	50	50	50	50	30	0					
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	30	30	50	50	50	50	30	30	30	0	0	0	0	0	30	50	50	50	50	50	30	0						
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	17	17	25	25	25	25	17	17	17	17	0	0	0	0	25	25	25	25	25	25	25	25	25						
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	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25							
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	84	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	84	84	84	84	-1	-1	-1	-1	84	84	84	84	84	83			
TMGR	HY02	44	44	44	44	44	44	44	43	43	44	45	71	42	46	44	44	82	42	43	43	44	43	43	44	41	49	43	51	44	45	41	44	54	77	44	43	41	43	44	47	56	43	82	71	66	88	47	52	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84					
TMGR	HY04	31	85	85	85	5	-1	-1	-1	-1	-1	85	31	33	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	85	84	83	83	31	-1	-1	-1	85	84	85	84	84	85	84	85	84	
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					
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	92	-1	-1	-1	-1	-1	90	93	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	89	81	-1	149	150	186	181	90	83	-1	95	185	187	183	185	185	95	95
UPIA	HY02	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7				
Total Hydro		436	502	375	319	237	233	233	231	231	231	236	807	363	374	332	235	315	323	324	229	213	212	214	216	284	280	316	391	370	445	424	799	874	872	891	501	389	247	410	1200	1496	1516	1399	1375	1389	1477	1308	1094	
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	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	1	2	8	12	12	17	19	18	23	26	23	29	27	27	24	24	21	11	15	11	11	6	3	1	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	0	2	5	8	4	18	21	14	20	19	20	24	28	22	25	28	26	27	16	18	11	10	2	1	1	0	0	0	0	0	0	0	0		
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	10	14	20	22	21	31	29	27	25	19	20	22	19	12	11	10	9	8	5	2	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	3	8	14	21	8	4	13	19	33	42	43	22	14	37	39	32	19	12	11	10	6	3	2	1	0	0	0	0	0	0	0	0		
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	7	13	21	25	30	33	27	37	35	38	39	33	16	6	30	25	16	5	0	1	1	0	0	0	0	0	0	0	0	0	0		
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	8	11	15	18	21	23	16	25	26	22	27	24	25	24	22	20	15	12	7	5	2	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	1	5	8	16	19	30	29	24	26	24	24	29	34	29	26	37	31	25	25	28	14	8	4	3	0	0	0	0	0	0	0	0			
JSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	6	10	17	22	35	35	5	9	15	16	15	12	14	14	16	9	19	24	19	10	5	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	1	2	2	16	16	26	27	30	29	22	33	43	29	23	27	24	23	15	14	12	11	12	7	3	0	0	0	0	0	0	0	0			
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	14	13	12	24	14	20	30	30	30	30	30	21	24	21	12	16	19	8	6	6	5	3	0	0	0	0	0	0	0	0			
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	11	20	23	32	27	40	20	30	43	46	24	21	44	41	37	33	33	15	11	8	3	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	1	4	5	7	20	42	46	48	50	51	52	52	49	36	29	50	40	25	30	22	15	9	3	0	0	0	0	0	0	0	0				
SSLs	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	8	22	26	24	32	34	38	35	26	16	19	14	34	20	18																	

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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0