

Daily System Generation Summary on Saturday

Saturday, September 17, 2022

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,139 MW
Distillate	0 MW
Total TNB	2,139 MW
Total IPP	17,701 MW
Total Co-Gen	0 MW
Total System	23,467 MW

Generation Mix

Type	MWh	Percentage
Hydro	18,273	5.55 %
Gas	49,118	14.93 %
Total TNB	67,391	20.48 %
ST-Coal	176,342	53.60 %
LSS	6,036	1.83 %
Gas	78,404	23.83 %
Total IPP	260,782	79.27 %
Co-Gen	797	0.24 %
Total Co-Gen	797	0.24 %
Total Generation	328,970	100.00 %
PLTG	1,799	0.55 %
HVDC	-1,809	-0.55 %
Interconnection	-10	0.00 %
Net Energy	328,980	100.00 %

Maximum Demand Record

Date: 5/24/2022	19,183 MW
Date: 5/24/2022	398,523 MWH

Set On Bus, TNB, IPP And MD

Daily Maximum Demand Hour at:	20:00:00 Hour
Total Set On Bus	16,867 MW
TNB Generation	3,240 MW
IPP Generation	12,395 MW
Spinning Reserve	1,193 MW
Maximum Demand	15,616 MW
Net Energy	328,980 MWH
Load Factor	87.78 %

Fuel Cost

Total Cost:	100,711,225.99 RM
Cost per Unit	30.57 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	1,320
Hydro	305
Syncon	463
Thermal	302
Total	2,390

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Cloudy	28

Gas Usage

Station	(mmcsfd)
GLGR	29
TJGS	83
Total TNB	113
CBPS	38
EMPP	264
NPRI	75
PCGP	85
PGLA	45
SKSP	3
SPGP	208
Total IPP	718
Total Gas	831
Total Gas Required	831

Alternate Fuel Usage

Station	(mmcsfd)
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	14050	13481	12961	12529	12085	11930	11985	11869	11933	12900	13801	14256	14244	13951	14318	14412	14378	14263	14190	14630	15616	15354	14950	14746

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, October 5, 2022 9:03:13 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Saturday

		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		216	213	214	214	213	214	213	214	213	214	214	214	213	332	453	694	707	703	706	706	704	705	704	706	706	701	696	706	705	704	704	704	703	707	705	706	704	707	704	705									
JMHE	U001		933	924	803	798	801	801	801	797	803	799	798	799	801	801	801	801	800	801	879	881	920	922	917	914	921	917	918	923	919	919	917	917	920	921	921	923	918	918	980	975	981	976	980	973	976	982			
JMHE	U002		935	926	799	747	562	501	502	501	502	497	501	500	500	763	752	802	801	798	801	801	881	879	921	921	918	918	920	919	920	920	921	918	920	921	918	921	918	919	963	976	981	980	979	981	977	982			
JMJG	U001		671	673	671	629	542	495	469	414	418	420	419	418	419	417	419	418	418	475	564	671	674	664	662	662	662	666	666	666	666	666	663	656	564	569	618	664	662	657	655	658	656	657	658	656	658	660			
JMJG	U002		675	670	673	629	552	512	473	411	422	423	420	421	422	420	420	419	420	422	423	480	531	618	674	674	672	674	675	678	678	678	678	672	672	672	673	676	671	672	669	679	671	672	675	677	671	677			
JMJG	U004		880	823	801	804	803	804	804	804	804	806	805	806	806	805	804	805	805	805	804	837	887	904	906	906	912	924	920	923	923	923	923	922	922	920	921	920	921	920	921	924	922	921	924	922	919	920			
JMJG	U005		860	797	799	799	801	801	801	801	801	799	800	799	800	797	801	798	798	798	797	804	850	883	895	895	891	895	889	895	897	897	897	870	870	870	870	870	870	870	870	870	904	900	901	900	895	900	895	903	
PKLG	U006		269	270	269	270	268	268	269	269	269	269	269	270	269	269	268	268	267	269	267	268	271	269	269	269	269	268	313	382	439	448	448	448	450	448	448	445	450	446	448	449	449	448	446	449	450	449	449	446	
TBIN	U001		482	274	210	214	285	307	300	302	209	212	212	212	211	212	211	211	213	211	212	211	211	149	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TBIN	U002		212	214	214	213	214	213	214	211	214	214	213	214	213	212	212	214	215	213	214	214	276	414	573	681	703	705	706	703	702	701	708	701	703	701	698	697	701	701	702	700	703	701	704	700	702	704	703		
TBIN	U003		213	212	213	213	213	213	213	210	213	213	211	212	212	211	213	213	213	213	213	213	262	356	523	703	703	700	698	699	703	701	700	702	700	701	700	697	700	698	703	705	701	701	700	701	700	701	701	701	701
TBIN	U004		835	802	799	803	804	803	801	803	803	805	802	803	802	803	803	802	801	804	801	806	851	852	854	854	854	882	872	872	876	873	872	872	871	874	872	871	872	873	872	875	872	874	874	870	872	874	872	875	
Total ST-Coal			7181	6798	6465	6333	6058	5931	5860	5737	5671	5670	5663	5668	5668	5926	5916	5964	5965	5965	5964	6153	6764	7350	7877	8197	8204	8231	8285	8350	8426	8435	8434	8407	8394	8382	8278	8297	8343	8403	8391	8387	8516	8542	8542	8536	8537	8542	8526	8554	
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		272	272	276	272	273	269	274	269	254	201	200	195	201	201	201	202	250	253	200	201	201	200	193	194	197	197	201	201	200	199	202	202	202	201	201	203	204	266	268	260	203	201	201	203	200	201			
EMPP	BLK1		700	704	713	709	710	695	710	697	675	704	643	611	663	597	500	557	705	710	693	710	409	411	410	399	406	407	406	409	410	409	412	414	410	413	411	420	420	565	643	703	688	582	591	409	410	410	411		
EMPP	BLK2		709	705	713	710	708	708	709	708	675	703	654	626	675	661	628	524	553	708	709	709	710	668	410	411	399	406	406	406	408	410	409	412	410	411	413	408	412	414	555	710	709	703	711	709	693	710	665	426	
EMPP	BLK3		704	704	712	710	708	696	708	698	712	709	706	690	700	711	661	567	594	708	708	694	710	669	553	410	400	406	406	407	408	410	409	412	421	631	602	458	423	492	612	711	703	688	711	708	708	710	710	657	
GLGR	GT02		107	106	106	106	91	92	92	91	91	92	92	92	92	92	92	92	91	92	91	92	91	91	91	91	92	91	92	92	92	92	91	91	91	91	91	92	92	92	107	107	108	107	107	107	91	92			
GLGR	ST1C		46	45	45	45	40	41	40	41	40	40	41	41	40	41	40	40	41	41	41	41	40	41	41	41	41	41	41	41	41	41	41	40	40	40	41	41	41	41	47	47	47	47	48	47	40	40			
NPRI	BLK2		518	517	523	517	518	513	518	513	520	517	517	509	518	385	310	309	310	311	516	514	398	310	307	307	298	299	511	512	517	518	515	514	519	518	518	518	518	518	523	518	519	512	519	518	518	518	516		
PCGP	PGRG		599	597	610	601	599	591	605	594	599	603	600	588	601	603	603	601	607	599	599	594	603	601	600	549	579	382	386	388	398	400	398	544	605	605	599	602	605	603	608	606	599	586	603	604	601	602	600	603	
PGLA	GT12		219	221	221	222	220	221	144	147	146	147	146	146	146	146	145	145	145	145	145	145	145	145	143	146	146	146	146	146	146	146	146	146	147	147	148	147	147	147	147	146	145	146	145	146	146				
PGLA	ST10		107	107	107	106	106	106	84	82	82	82	82	82	82	81	81	81	81	81	81	82	82	82	82	82	82	82	82	82	82	82	81	82	82	82	82	81	81	81	81	81	81	81	81	81	81	81			
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	45	89	129	129	147	199	76	0	0	0	0	0		
SPGP	BLK1		725	726	727	726	723	720	724	722	725	727	724	719	725	724	726	726	724	725	723	714	724	718	718	718	709	590	443	592	598	721	723	717	724	722	719	723	722	720	722	721	722	714	724	724	723	725	722	722	
SPGP	BLK2		724	726	727	723	722	716	722	720	722	724	722	716	723	723	724	725	723	721	711	715	712	713	717	703	714	445	596	599	649	717	718	725	721	721	723	720	718	720	722	722	714	724	723	724	724	721	720		
TJGS	GT2A		217	217	217	217	217	187	187	129	132	132	132	132	132	131	131	129	130	192	130	131	131	131	131	131	130	130	130	132	132	131	131	132	131	131	130	220	129	130	132	132	131	131	130	130					
TJGS	GT2B		212	212	212	214	214	215	182	183	126	128	126	126	126	128	129	127	127	126	127	190	125	128	128	126	127	127	127	127	128	126	128	128	128	128	128	128	127	127	124	124	126	127	127	127	126	125			
TJGS	ST2C		251	251	251	251	251	251	230	230	193	193	193	193	193	193	193	193	193	193	242	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	194	194	194	194	194	194	194			
Total CCGT-Gas			6110	6110	6160	6129	6100	6051	5929	5882	5689	5702	5578	5467	5626	5482	5261	4963	5080	5488	5747	5866	5575	5099	4724	4530	4487	4207	4010	4310																					

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																									
KNYR	HY04	101	101	101	101	100	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101																								
LPIA	HY01	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	14	14	14	14																								
LPIA	HY02	15	15	15	15	15	15	16	15	15	15	15	15	15	15	15	15	15	15	15	15	12	13	15	15	15																								
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																								
PGAU	HY01	22	21	21	22	22	22	22	22	22	22	21	22	22	22	22	22	21	21	21	22	22	21	21	21	20																								
PGAU	HY02	-1	20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	20	-1	-1	-1	-1	-1																								
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	51	30	31	31																								
SIHY	HY02	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																								
SIHY	HY03	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																								
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	17	17	17																								
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	17	17	17																								
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	25	17	17	17																								
TMGR	HY01	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	34	34	34	34	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1																								
TMGR	HY02	45	88	87	61	46	44	64	45	45	52	46	46	46	62	58	47	50	46	83	53	45	45	43	46	45																								
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																								
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	-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																								
Total Hydro		705	797	774	651	731	679	700	680	680	688	681	680	683	681	697	693	683	717	725	761	732	724	688	685	688	688	688	689	689	689	715	668	667	726	722	751	725	726	972	1193	1011	1027	1051	987	910	789	786		
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				
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	8	12	16	16	18	27	16	18	22	29	22	17	17	14	25	22	15	8	4	2	1	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	1	10	12	18	23	26	30	29	35	31	34	34	33	32	26	11	8	5	8	9	4	3	2	0	0	0	0	0	0	0	0	0	0	0		
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	11	12	20	28	29	32	32	32	32	32	32	19	25	25	13	20	13	6	4	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	1	6	13	16	17	23	27	39	14	12	16	8	19	5	6	4	13	12	5	2	2	2	2	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	2	6	13	20	25	30	34	32	36	17	29	47	38	11	24	24	34	17	17	11	1	1	1	0	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	1	5	9	12	16	19	22	25	26	16	22	14	26	21	23	22	18	19	22	6	8	5	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	1	5	10	14	20	26	41	39	38	47	43	50	45	44	46	21	40	28	21	12	7	4	4	0	0	0	0	0	0	0	0	0	0	0		
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	10	16	13	29	28	23	25	29	29	23	30	21	29	28	15	12	14	8	5	2	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	3	8	14	20	26	28	39	38	42	37	35	35	23	20	26	24	9	6	8	8	4	2	0	0	0	0	0	0	0	0	0	0	0	0		
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	15	29	38	54	77	79	86	91	74	90	62	91	73	29	46	68	41	48	32	18	11	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	4	7	18	18	28	33	35	32	43	43	45	31	40	38	17	13	18	18	22	13	11	6	1	0	0	0	0	0	0	0	0	0	0	0	0	
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	8	12	20	24	27	26	17	11	26	28	13	10	27	26	25	18	18	13	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	
KNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12	37	55	69	78	90	99	71	79	100	100	96	62	60	75	49	35	31	21	19	14	7	2	0	0	0	0	0	0	0	0	0	0	0	0
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	10	15	19	25	22	28	30	27	25	30	17	19	16	24	21	13	11	7	6	4	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	12	8	17	26	24	42	44	46	51	51	47	51	39	45	19	12	4	2	1	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
MNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	41	20	41	65	67	93	93	96	97	98	97	99	96	73	68	15	9	2	5	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	38	54	69	85	95	105	111	99	100	112	113	113	92	108	55	61	45	19	14	14	7	3	3	3	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	4	1	3	6	9	6	5	8	8	6	3	2	0	2	4	9	8	8	10	8	6	3	1	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	3	9	16	23	30	32	34	38	36	46	47	41	43	28	27	25	17	13	4	7	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	12	16	20	22	24	17	24	6	27	17	29	29	22	11	2	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	8	15	22	30	30	30	29	29	17	17	10	25	23	18	30	30	3	4	5	10	3	2	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	27	158	265	420	560	665	829	892	846	826	833	894	842	783	713	638	514	415	318	245	190	123	68	8	3	3	0	0	0	0	0	0	0	0	0	0
KHTC	BLK1	2	2	4	2	2	3	5	3	3	2	2	3	2	0	4	4	2	3	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	3	
PCUF	CUFG	14	13	14	12	13	13	15	13	13	15	14	14	15	14	13	13	14	14	14	13	13	14	13	14	13	14	13	15	13	12	15	15	16	15	16	15	15	15	14	16	16	15	16	15	15	16	16		
PCUF	CUFK	27	24	26	25	27	4	6	5	5	6	4	4	5	5	6	5	4	4	3	6	4	19	26	26	26	26	26	28	27	24	24	27	28	25	26	26	26	26	24	27	28	26	26	27	25	26	26		
Total Co-Gen		43	39	44	39	42	20	26</																																										

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																								
TIE-HVDC		-97	-29	-29	-29	-29	-30	-30	-29	-29	-28	-28	-29	-30	-30	-29	-99	-97	-99	-98	-100	-96	-97	-99	-97	-97	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99		
TIE-PLTG		108	86	-2	44	6	28	15	58	11	31	47	62	51	15	48	33	19	56	87	80	104	85	100	119	127	105	89	101	96	98	111	80	94	62	153	111	63	76	100	118	176	109	63	68	145	58	83	18
Interconnection		11	57	-30	16	-23	-2	-15	27	-17	2	19	34	21	-14	18	4	-10	-43	-10	-19	7	-14	4	23	28	8	-8	2	-3	-1	12	-19	-5	-37	54	12	-36	-23	1	19	77	10	-36	-31	46	-41	-16	-81
System Total		14050	13694	13481	13137	12961	12690	12529	12290	12085	12088	11930	11808	11985	12131	11869	11676	11933	12474	12900	13367	13801	14069	14256	14295	14244	14020	13951	14258	14318	14439	14412	14458	14378	14494	14263	14111	14190	14266	14630	15478	15616	15497	15354	15285	14950	14989	14746	14552
SRev ST-Coal		565	727	797	869	890	888	888	890	890	886	891	887	889	888	891	889	891	891	886	774	631	416	246	239	241	233	226	187	178	179	176	189	201	248	234	100	180	192	196	67	71	71	77	76	71	87	59	
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 CCGT-Gas		200	200	150	181	210	259	381	428	621	608	732	843	684	828	1049	1347	1230	822	563	444	735	1211	1586	1780	1823	2103	2300	2000	1962	1779	1719	1572	1479	1280	1312	1455	1450	1342	990	369	507	534	709	699	898	875	958	1245
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	
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
SRev Co-Gen		0	0	0	12	0	16	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		514	363	514	615	514	514	514	514	514	514	514	514	514	514	514	514	514	514	363	426	426	426	426	514	514	514	514	514	514	514	514	514	640	640	514	514	363	514	514	514	239	426	426	426	426	514	515	
Hydro		305	364	236	258	279	283	262	282	282	274	281	282	279	280	281	265	269	279	396	325	289	318	326	274	277	274	274	274	273	273	273	247	168	169	236	240	362	237	236	326	380	375	359	335	399	376	409	411
S.Reserve Total		1584	1654	1697	1935	1893	1944	2061	2134	2307	2282	2418	2526	2366	2511	2732	3017	2902	2506	2213	2081	2224	2586	2754	2814	2853	3132	3321	3014	2936	2744	2685	2509	2476	2290	2310	2443	2275	2273	1932	1405	1193	1406	1565	1537	1799	1748	1968	2230