

Daily System Generation Summary on Friday

Friday, March 31, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	1,875 MW
Distillate	0 MW
Total TNB	1,875 MW
Total IPP	19,010 MW
Total Co-Gen	0 MW
Total System	24,593 MW

Generation Mix

Type	MWh	Percentage
Hydro	14,083	3.71 %
Gas	62,402	16.46 %
Total TNB	76,485	20.17 %
ST-Coal	191,480	50.51 %
LSS	7,141	1.88 %
Gas	102,151	26.94 %
Total IPP	300,772	79.34 %
Co-Gen	763	0.20 %
Total Co-Gen	763	0.20 %
Total Generation	378,020	99.71 %
PLTG	432	0.11 %
HVDC	-1,528	-0.40 %
Interconnection	-1,096	-0.29 %
Net Energy	379,116	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:	15:30:00 Hour
Total Set On Bus	19,204 MW
TNB Generation	3,888 MW
IPP Generation	13,924 MW
Spinning Reserve	1,354 MW
Maximum Demand	17,903 MW
Net Energy	379,116 MWH
Load Factor	88.23 %

Fuel Cost

Total Cost:	107,872,881.92 RM
Cost per Unit	28.53 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	801
Hydro	596
Syncon	225
Thermal	388
Total	2,010

Time	Weather	Temperature
Afternoon	Hot	30
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	29
TJGS	174
Total TNB	203
CBPS	44
EMPP	291
KLPP	59
NPRI	142
PCGP	89
SKSP	48
SPGP	209
Total IPP	882
Total Gas	1,085
Total Gas Required	1,085

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	15993	15073	14534	14098	13690	13705	13709	13510	13644	15129	15904	16364	16359	16264	16758	17799	17852	17319	16629	16419	17053	17259	16940	16703

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, April 4, 2023 11:58:27 AM

(Ir. Shanmugam Thoppalan)
Head
Grid System Operator

Daily MW Generation on Friday

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																									
JMHE	U001	972	911	898	900	849	852	851	852	851	848	852	850	850	851	849	852	952	975	978	979	973	975	973	973	976	978	979	975	974	978	974	978	976	973	981	975	974	977	971	973	969	970	975	974	976				
JMHE	U002	974	921	897	900	849	850	849	850	850	849	849	850	850	850	849	958	976	978	979	976	976	975	973	976	979	981	977	979	979	974	979	978	973	982	978	975	981	973	976	972	971	977	974	978					
JMJG	U001	674	671	676	673	671	673	674	674	671	671	673	670	677	671	673	672	674	673	671	672	646	596	597	637	677	674	677	677	674	673	674	675	679	677	682	673	677	676	676	673	673	672	672	673	671	672			
JMJG	U002	676	677	675	673	673	673	673	622	614	668	676	677	675	675	674	673	678	672	673	674	673	674	671	675	674	675	668	674	677	676	672	615	611	682	678	682	683	678	679	679	678	679	680	678	673	676	674	673	
JMJG	U003	668	662	673	668	669	670	666	668	670	671	667	672	678	666	670	668	672	666	667	664	670	679	672	665	672	667	670	666	671	669	668	668	672	672	666	668	668	671	668	670	672	666	671	668	672	668	663		
JMJG	U004	976	957	901	900	861	852	853	849	851	854	851	854	852	851	853	853	851	852	850	902	963	975	977	973	975	977	978	977	977	975	977	975	981	974	972	972	968	970	968	967	969	974	972	969	938	959	975	976	
JMJG	U005	975	942	900	900	847	853	849	850	851	848	849	851	852	848	851	850	852	851	849	952	979	973	977	974	974	976	971	977	969	977	977	973	976	976	975	977	972	976	973	972	977	975	978	971	973	975	975	974	
PKLG	U003	274	278	242	173	155	158	160	159	160	161	160	160	159	160	160	160	160	160	160	200	159	155	219	209	274	278	223	148	157	246	278	282	281	276	276	275	278	277	277	277	277	278	276	278	276	275	276	276	
PKLG	U004	262	276	249	163	152	150	153	149	158	153	155	156	154	154	155	155	156	153	154	204	154	156	227	216	256	269	228	151	153	236	273	276	275	276	276	272	274	272	279	275	269	270	276	264	271	276	273	277	
PKLG	U006	449	448	449	447	447	445	449	448	450	448	449	451	449	447	447	448	447	445	448	449	449	450	449	448	451	449	451	449	447	447	448	447	448	448	449	448	447	445	447	457	452	450	449	454	452	448			
TBIN	U001	210	212	211	210	212	212	211	210	210	211	210	211	212	212	211	212	209	210	212	209	211	210	212	213	209	210	211	208	210	211	208	210	211	211	212	211	211	211	211	211	211	211	210	211	211	211	211		
TBIN	U002	209	212	211	212	210	210	211	210	211	211	210	209	211	212	210	209	211	210	212	209	211	210	212	209	210	211	210	211	210	211	210	211	212	211	211	209	210	212	211	211	211	211	211	211	212	211	210	211	210
TBIN	U004	985	961	903	903	852	853	854	853	853	852	852	852	852	853	853	850	854	851	937	983	976	983	983	981	985	981	984	984	983	983	982	983	983	983	983	983	981	982	982	983	982	982	980	983	983	983	983		
Total ST-Coal		8304	8128	7885	7722	7447	7451	7453	7394	7400	7448	7448	7464	7463	7445	7460	7455	7459	7443	7450	7984	8074	8086	8203	8109	8227	8278	8210	8075	8090	8270	8325	8262	8278	8333	8331	8331	8331	8323	8330	8326	8314	8328	8320	8330	8294	8270	8312	8317	8317
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	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	0
CBPS	BLK2	357	319	197	201	202	202	201	201	202	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201		
EMPP	BLK1	708	674	705	709	712	697	632	584	491	463	498	466	502	499	436	398	411	639	709	676	711	717	689	712	678	680	691	706	711	716	710	706	721	710	709	705	703	718	686	685	717	696	693	697	685	694	708	713	
EMPP	BLK2	705	686	700	709	711	697	628	586	496	459	498	468	495	500	436	398	410	650	709	676	711	717	689	711	678	680	691	711	713	715	710	709	720	711	708	705	703	718	687	685	717	698	692	697	683	692	705	711	
EMPP	BLK3	705	681	701	709	711	698	698	684	499	457	499	468	491	495	435	398	410	655	709	677	710	715	689	712	675	677	691	710	712	715	710	709	720	710	708	705	703	718	686	684	717	698	694	692	684	693	704	712	
GLGR	GT02	94	94	94	94	94	94	94	94	94	95	95	94	95	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	
GLGR	ST1C	42	42	42	42	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41		
KLPP	GT13	64	64	64	64	64	64	65	63	67	64	63	64	64	64	63	59	64	64	64	59	64	67	62	67	63	63	64	63	67	68	106	135	136	138	138	134	138	113	109	110	113	139	129	129	130	130	129	59	
KLPP	GT15	67	67	66	67	67	66	66	66	71	66	68	68	67	70	67	62	66	67	67	61	67	70	66	70	67	66	66	67	71	72	110	144	145	147	148	144	147	116	111	112	116	147	149	148	149	149	148	150	
KLPP	ST17	91	88	90	91	92	91	90	90	91	91	92	93	91	91	85	90	91	92	89	92	94	89	94	92	93	92	92	94	94	127	144	143	143	143	142	142	130	128	130	130	143	142	141	141	142	142	128		
NPRI	BLK1	507	502	505	453	328	325	323	317	328	327	326	329	326	329	326	313	328	327	350	492	497	514	503	512	500	491	319	511	511	510	512	511	512	514	509	509	510	511	505	502	514	503	506	502	502	506	509	509	
NPRI	BLK2	518	513	515	492	509	431	329	322	334	333	332	334	332	334	332	316	333	333	507	314	332	445	425	523	380	326	326	439	528	408	531	529	527	524	524	526	522	526	516	512	526	514	517	514	512	515	519	520	
PCGP	PGRG	595	583	591	602	605	596	594	583	610	603	603	606	602	605	602	479	505	633	630	632	627	613	583	587	589	602	612	617	602	604	620	595	589	589	588	588	595	590	585	595	590	584	588	595	598				
SKSP	BLK1	221	221	223	221	221	223	223	223	223	221	222	223	222	224	224	222	224	222	222	222	222	223	224	222	222	222	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223	223		
SPGP	BLK1	716	708	714	721	721	717	711	701	719	720	717	718	720	718	721	694	720	720	721	702	721	720	710	713	701	700	700	707	706	704	711	707	710	702	703	703	705	719	707	713	718	718	713	706	705	707	719	717	
SPGP	BLK2	727	727	722	718	727	718	717	718	715	718	715	717	717	716	720	723	717	720	726	719	718	713	714	702	698	694	695	691																					

Daily MW Generation on Friday

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	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	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	HY03	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
KNYR	HY01	100	99	100	100	60	60	60	59	60	60	60	60	60	98	100	100	60	59	60	60	59	60	59	100
KNYR	HY02	96	61	60	75	62	61	61	61	62	61	60	61	62	60	99	100	100	60	59	60	60	61	100	100
KNYR	HY03	54	53	54	54	54	54	53	53	54	54	54	54	54	0	0	0	0	0	0	0	0	54	54	54
LPJA	HY01	13	14	16	15	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	13	12	12
LPJA	HY02	14	14	14	14	14	14	14	14	14	14	14	14	14	15	15	15	15	15	15	15	15	14	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
PGAU	HY01	-1	-1	-1	-1	-1	-1	-1	-1	22	-1	-1	-1	-1	-1	18	23	23	22	18	22	22	20	22	22
PGAU	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	19	-1	-1	19	23	23	22	18	22	22	19	22	22	21
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
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
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
SIHY	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
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	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
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
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
TMGR	HY02	31	30	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
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
TMGR	HY04	41	40	41	41	77	41	41	40	83	71	85	86	82	84	81	37	51	44	69	37	42	51	39	41
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
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	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		422	384	346	360	341	304	304	301	370	334	348	350	367	348	344	499	526	520	464	422	435	447	542	631
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	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
BSLS	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
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	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
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	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
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	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
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	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
KNLS	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
KRLS	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
MALS	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
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	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
PKLS	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
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

Daily MW Generation on Friday

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		
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	9	13	8	16	8	22	20	22	17	21	25	25	23	15	9	18	9	5	4	2	0	0	0	0	0	0	0	0	0		
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4	4	6	30	30	30	9	29	30	30	23	30	27	30	28	22	27	23	11	5	2	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	0	0	15	129	269	437	571	665	751	820	852	920	966	967	989	974	936	860	815	618	596	440	341	220	122	17	1	0	0	0	0	0	0	0	0	0
ESTL	ESTL	0	0	13	13	13	14	16	14	10	8	3	3	12	13	8	18	18	16	16	10	11	7	10	9	13	14	14	15	12	13	17	15	11	13	9	12	11	7	10	16	12	15	18	17	17	10	9	12	
KHTC	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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	0	0		
PCUF	CUFG	4	4	3	3	4	4	4	3	3	5	4	4	3	2	4	5	5	4	3	4	4	4	4	3	4	3	4	5	3	5	3	4	4	5	3	4	5	4	4	4	3	4	3	4	4	4			
PCUF	CUFK	11	11	11	10	11	11	11	10	13	11	10	11	11	9	12	12	11	10	10	11	11	11	12	12	10	10	11	11	11	10	11	10	10	12	11	11	10	10	12	11	11	9	11	10	10	11	10		
PFTZ	PFTZ	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	5	4	4	4	1	1	1		
Total Co-Gen		20	20	32	31	33	34	36	33	28	31	23	22	31	32	26	41	40	37	35	28	31	28	32	31	32	34	35	36	35	34	37	38	31	35	31	35	31	28	32	39	34	35	34	36	34	25	25	27	
Total Gen		15946	15468	15048	14857	14487	14307	14062	13845	13636	13528	13641	13584	13682	13658	13472	13320	13618	14582	15087	15490	15861	16132	16333	16460	16338	16359	16201	16467	16711	17339	17755	17850	17823	17873	17276	16756	16562	16185	16335	16523	16947	17272	17219	17165	16934	16755	16665	16483	
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		
TIE-HVDC		-29	-29	-29	-29	-29	-29	-29	-30	-30	-28	-28	-29	-29	-29	-29	-29	-29	-29	-51	-99	-99	-99	-99	-99	-99	-99	-99	-99	-98	-99	-99	-98	-96	-97	-99	-100	-97	-100	-98	-100	-99	-49	-49	-30	-31	-28	-29		
TIE-PLTG		-18	-18	4	3	-18	-11	-7	-4	-25	-30	-36	-14	2	-7	-9	15	3	1	9	51	56	31	68	64	80	53	36	53	52	35	56	46	68	88	55	20	33	1	15	13	-6	61	8	3	24	-27	-10	-4	
Interconnection		-47	-47	-25	-27	-47	-40	-36	-33	-54	-60	-64	-41	-27	-36	-38	-14	-26	-27	-42	-48	-43	-67	-31	-34	-21	-43	-63	-45	-47	-63	-44	-53	-29	-8	-43	-79	-67	-96	-84	-84	-106	-38	-40	-46	-6	-58	-38	-33	
System Total		15993	15515	15073	14884	14534	14347	14098	13878	13690	13588	13705	13625	13709	13694	13510	13334	13644	14609	15129	15538	15904	16199	16364	16494	16359	16402	16264	16512	16758	17402	17799	17903	17852	17881	17319	16835	16629	16281	16419	16607	17053	17310	17259	17211	16940	16813	16703	16516	
SRev ST-Coal		345	525	736	747	759	754	751	804	801	749	748	736	738	756	740	752	746	758	753	554	383	368	389	368	339	327	382	366	360	353	332	392	378	325	326	327	332	326	331	343	329	350	326	365	387	343	338	339	
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		884	1148	1299	1340	1418	1566	1815	1967	2246	2369	2262	2336	2263	2251	2442	2774	2620	1801	1413	1629	1458	1294	1378	1277	1553	1610	1745	1370	1146	699	369	335	257	302	337	573	709	936	690	572	307	328	345	357	437	353	284	341	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		829	829	917	917	917	917	917	917	917	917	917	917	766	917	917	363	363	363	363	363	363	363	363	363	363	363	363	399	399	399	212	0	0	0	340	428	428	428	428	428	302	0	0	0	88	302	302	766	
Hydro		213	251	201	187	206	243	243	246	328	213	199	197	331	199	203	502	475	481	537	579	566	554	634	650	653	654	611	572	563	528	594	627	738	637	707	546	471	544	543	502	442	528	573	591	628	710	649	312	
S.Reserve Total		2271	2753	3153	3191	3300	3480	3726	3934	4141	4248	4126	4186	4098	4123	4302	4391	4204	3403	3066	3125	2770	2579	2764	2658	2908	2954	3101	2707	2468	1979	1507	1354	1373	1264	1710	1874	1940	2234	1992	1845	1380	1206	1244	1313	1540	1708	1573	1758	