

Daily System Generation Summary on Friday

Friday, March 3, 2023

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,043 MW
Distillate	0 MW
Total TNB	2,043 MW
Total IPP	17,441 MW
Total Co-Gen	0 MW
Total System	22,472 MW

Generation Mix

Type	MWh	Percentage
Hydro	18,887	5.46 %
Gas	50,936	14.72 %
Total TNB	69,823	20.18 %
ST-Coal	182,045	52.61 %
LSS	3,976	1.15 %
Gas	88,689	25.63 %
Total IPP	274,710	79.39 %
Co-Gen	845	0.24 %
Total Co-Gen	845	0.24 %
Total Generation	345,378	99.81 %
PLTG	1,022	0.30 %
HVDC	-1,683	-0.49 %
Interconnection	-661	-0.19 %
Net Energy	346,039	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:	15:00:00 Hour
Total Set On Bus	17,221 MW
TNB Generation	3,330 MW
IPP Generation	12,486 MW
Spinning Reserve	1,370 MW
Maximum Demand	15,890 MW
Net Energy	346,039 MWH
Load Factor	90.74 %

Fuel Cost

Total Cost:	94,776,798.23 RM
Cost per Unit	27.44 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	287
Hydro	634
Syncon	253
Thermal	265
Total	1,439

Time	Weather	Temperature
Afternoon	Rainy	30
Morning	Cloudy	26

Gas Usage

Station	(mmcsfd)
GLGR	47
TJGS	192
Total TNB	240
EMPP	299
NPRI	147
PCGP	89
SKSP	28
SPGP	105
Total IPP	668
Total Gas	908
Total Gas Required	908

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	14086	13426	13067	12735	12480	12363	12523	12775	13293	14701	15457	15770	15527	15161	15283	15890	15794	15605	15059	14946	15625	15251	14614	14168

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Tuesday, April 4, 2023 9:14:30 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	907	901	900	860	800	800	799	800	801	804	800	801	801	801	799	799	803	804	898	978	980	981	981	980	982	974	979	982	984	978	979	980	980	978	979	977	979	979	980	981	982	978	983	983	978	974	976	980	979			
JMHE	U002	901	901	899	868	800	803	803	802	800	801	801	801	801	801	799	799	798	801	903	974	978	978	980	980	976	974	978	977	983	982	978	981	980	980	977	979	980	983	979	980	982	981	983	980	975	979	980	980				
JMJG	U001	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	677	679	682	677	678	682	676	677	677	678	678	677	677	675	680	678	678	677	679	677	677	677	680	675	678	678	678	678	678	678	678				
JMJG	U002	680	680	680	678	678	678	678	678	678	678	678	678	678	678	678	678	678	679	681	680	677	679	680	677	678	671	673	673	673	673	678	679	676	676	674	674	673	675	675	677	670	674	674	674	674	674	674	675	675			
JMJG	U003	672	672	672	675	675	675	675	675	675	675	675	675	675	675	675	675	675	677	678	676	674	672	673	676	679	678	673	677	675	669	675	677	676	672	677	672	677	668	677	677	675	674	674	674	683	673	673	673				
JMJG	U004	906	906	906	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904	904					
JMJG	U005	797	797	797	794	794	794	794	794	794	794	794	794	794	794	794	794	794	801	817	926	982	983	978	979	976	975	977	980	977	980	978	977	977	977	977	976	977	978	977	977	977	977	977	977	977	976	980	980				
PKLG	U003	138	148	150	151	151	151	150	150	150	152	151	150	151	151	185	265	290	289	280	277	276	275	275	279	278	278	280	279	277	278	278	279	278	279	278	279	279	278	278	275	278	278	277	277	278	278	249	249				
PKLG	U004	150	142	147	147	148	145	149	153	150	151	149	147	146	146	148	208	249	254	252	249	253	253	250	250	251	248	246	246	255	254	252	251	252	252	249	253	252	249	248	252	253	254	252	253	253	252	241	241				
PKLG	U005	323	273	269	269	268	269	271	269	268	269	269	269	268	269	269	269	269	332	404	462	462	470	470	470	470	467	469	470	467	471	470	468	473	470	459	467	471	469	468	470	471	473	471	469	469	470	470	471	461	461		
PKLG	U006	269	268	268	268	269	268	268	269	270	268	268	269	268	269	268	269	267	269	269	268	269	269	268	268	270	271	267	267	270	269	268	269	269	269	269	268	269	268	269	269	268	268	268	269	269	269	269	269	269			
TBIN	U001	211	210	210	210	210	211	209	210	211	210	209	211	210	209	212	210	211	211	210	210	212	210	211	210	242	360	359	398	397	400	399	391	350	351	420	451	450	449	443	269	207	210	211	212	210	210	211	211	208	209	210	210
TBIN	U003	212	210	210	211	209	211	210	210	210	210	209	211	210	210	210	212	210	211	210	210	212	210	211	210	210	209	210	209	210	209	211	211	209	210	211	210	210	210	211	212	210	210	210	212	210	210	211	211	208	209	210	210
TBIN	U004	903	904	901	897	811	804	802	802	802	802	804	803	803	804	803	886	981	982	982	982	982	982	982	982	983	982	981	984	983	984	985	989	985	987	984	984	982	980	983	984	981	982	981	983	979	987	983	982	982			
Total ST-Coal		7745	7688	7685	7608	7393	7389	7388	7388	7392	7388	7394	7388	7389	7387	7383	7279	6493	6671	7257	7643	7653	7672	7786	7788	7822	7801	7823	7818	7824	7770	7773	7850	7894	7877	7863	7862	7690	7634	7627	7638	7640	7631	7640	7640	7633	7617	7641	7640	7588			
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	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	0		
EMPP	BLK1	720	710	690	694	701	646	522	446	416	409	410	410	455	624	629	714	716	709	706	711	710	708	710	710	685	702	681	691	711	710	712	710	708	710	690	712	711	711	702	724	709	703	694	687	681	678	683	687	687			
EMPP	BLK2	719	709	690	694	708	650	515	454	415	409	411	409	456	631	627	714	716	709	711	711	711	710	711	710	685	698	681	689	711	711	706	711	708	709	692	712	710	711	700	724	708	703	695	686	681	677	684	687	687			
EMPP	BLK3	720	709	690	694	708	701	704	701	699	640	667	655	709	701	708	713	716	709	709	712	710	709	711	710	685	701	682	694	711	710	710	710	706	708	691	712	711	711	700	724	709	700	695	686	681	678	684	686	686			
GLGR	GT01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	35	35	90	107	103	104	103	102	102	103	104	105	103	103	104	102	103	104	102	103	104	104	103	105	104	104	104	104	102	65	66	66	66			
GLGR	GT02	103	103	103	103	103	103	103	103	103	103	103	103	102	103	104	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	104	104	103	104	104	104	104	104	104	104	104	104	103	104	105	67	67	67				
GLGR	ST1C	44	43	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	45	37	92	93	94	94	93	94	94	94	94	94	94	93	94	93	93	93	93	93	93	93	93	93	93	94	93	93	94	75	70	70		
NPRI	BLK1	528	512	449	338	332	331	331	332	331	326	331	331	332	331	331	341	483	518	517	516	518	515	517	518	494	509	503	514	517	518	517	518	514	515	509	517	517	515	516	527	517	515	512	508	503	501	506	508	508			
NPRI	BLK2	524	508	444	332	330	331	331	330	330	324	329	331	331	331	329	340	476	521	516	519	519	519	519	520	496	483	506	515	518	518	518	518	515	517	510	519	517	520	518	530	518	517	514	509	505	502	507	509	509			
PCGP	PGRG	616	601	593	593	603	605	605	603	603	593	601	602	604	601	602	606	610	605	602	606	602	603	603	603	583	591	576	597	604	604	603	605	597	601	589	604	602	600	603	629	605	599	593	587	576	571	580	583	583			
SKSP	BLK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	64	72	110	217	297	220	300	341	336	338	337	336	335	335	335	336	336	335	331	333	334	331	219	220	221	221			
SPGP	BLK2	731	724	711	714	724	724	723	722	712	721	722	722	721	722	722	723	710	714	710	712	722	719	710	710	712	719	721	717	722	717	722	717	720	714	724	719	718	715	740	721	713	719	715	706	707	712	714	714				
TJGS	GT1A	123	126	126	128	127	127	125	127	125	127	126	125	128	125	128	129	126	228	227	228	225	226	224	226	225	226	218	226	226	228	226	229	228	226	226	227	227	227	226	230	727	227	226	220	216	119	123	123				
TJGS	GT1B	113	112	115	118	113	116	112	114	112	114	113	112	118	115	116	117	116	215	216	216	215	216	215	214	216	213	207	214																								

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
KNRG	HY03	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
KNYR	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
KNYR	HY02	101	100	60	60	100	95	99	97	94	66	76	68	100	93	98	93	100	97	67	97	100	100	77	90
KNYR	HY03	55	55	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
KNYR	HY04	61	61	60	59	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
LPIA	HY01	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
LPIA	HY02	19	19	19	19	17	17	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
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	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
PGAU	HY02	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	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
PGAU	HY04	21	21	21	21	22	21	22	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
SIHY	HY01	50	50	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	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	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	85	84	42	41	85	81	84	80	78	45	55	46	86	76	84	79	85	80	41	76	85	81	55	64
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
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	6	6	6	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		552	550	415	411	495	487	495	487	482	419	439	422	495	478	490	1447	1098	733	786	1120	1286	1408	1344	1150
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

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																								
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	5	10	16	34	21	39	40	35	30	20	20	29	24	20	13	8	6	4	2	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	0	1	3	5	7	7	5	8	20	16	10	13	11	3	12	19	8	6	9	7	2	2	1	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	0	1	2	3	6	5	8	7	19	29	18	22	24	23	30	23	13	17	8	11	7	0	1	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	33	114	193	291	281	300	343	535	709	617	655	596	576	466	534	410	443	371	238	127	71	46	10	3	3	0	0	0	0	0	0	0		
ESTL	ESTL	13	18	20	21	22	21	22	18	15	12	15	19	18	15	18	20	19	17	19	17	21	21	21	15	15	17	17	17	18	16	18	16	19	19	18	16	19	11	14	18	21	21	18	20	18	18		
KHTC	BLK1	1	5	2	2	3	3	3	1	1	2	2	2	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	1	1	1	3	3	4	2	2					
PCUF	CUFG	4	4	4	3	2	3	4	2	3	4	4	4	3	4	3	4	5	3	2	3	3	4	3	4	3	5	4	4	4	4	4	2	5	5	3	4	5	3	4	3	3	4	3					
PCUF	CUFK	2	2	4	4	1	2	4	2	4	2	4	3	1	2	0	4	11	15	13	12	9	8	11	9	6	7	6	7	10	9	7	12	7	11	8	10	10	11	9	12	12	8	8	4	2	2	2	
PFTZ	PFTZ	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	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6					
Total Co-Gen		26	35	36	36	34	35	39	29	29	26	31	34	31	28	28	36	43	44	45	38	40	40	41	32	30	33	33	34	36	37	35	38	35	38	37	37	39	38	39	38	38	36	40	37	32	35	32	31
Total Gen		13970	13746	13408	13117	13027	12904	12653	12499	12415	12255	12328	12305	12529	12827	12745	13136	13306	14178	14702	15186	15446	15698	15740	15772	15557	15290	15178	15166	15248	15586	15851	15788	15750	15734	15605	15279	15036	14891	14949	15528	15584	15473	15245	14943	14628	14386	14146	13902
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			
TIE-HVDC		-29	-29	-28	-28	-29	-29	-28	-31	-28	-28	-30	-31	-30	-31	-27	-80	-97	-99	-98	-98	-98	-97	-98	-100	-98	-99	-98	-100	-97	-98	-98	-98	-99	-98	-98	-99	-97	-98	-98	-100	-98	-78	-30	-29	-29			
TIE-PLTG		-87	-17	11	-32	-12	-8	-54	-39	-37	-18	-4	-19	36	20	1	-4	93	66	100	108	87	89	68	90	128	70	115	122	63	70	58	1	54	68	99	79	75	80	102	67	57	70	94	81	92	-27	6	-20
Interconnection		-116	-46	-18	-60	-40	-36	-82	-70	-65	-46	-35	-50	6	-10	-30	-32	13	-31	1	11	-11	-9	-30	-6	30	-29	17	23	-35	-30	-39	-98	-44	-30	0	-19	-23	-18	3	-30	-41	-29	-6	-17	14	-58	-22	-49
System Total		14086	13792	13426	13177	13067	12940	12735	12569	12480	12301	12363	12355	12523	12837	12775	13168	13293	14209	14701	15175	15457	15707	15770	15778	15527	15319	15161	15143	15283	15616	15890	15886	15794	15764	15605	15298	15059	14909	14946	15558	15625	15502	15251	14960	14614	14444	14168	13951
SRev ST-Coal		675	683	680	681	775	774	777	775	772	777	776	773	772	775	775	674	669	609	258	248	299	235	233	269	290	268	273	267	271	268	261	247	264	278	279	211	267	274	263	261	270	261	268	284	260	261	305	
SRev CCGT-Gas		552	726	927	1137	1094	1206	1468	1608	1683	1783	1729	1739	1583	1261	1251	1039	844	275	319	270	187	290	230	471	589	424	421	394	243	204	216	200	236	219	312	204	212	212	247	94	214	256	285	328	387	622	861	1052
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	
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
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
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		689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	101	101	414	214	214	126	126	126	214	214	588	689	689	676	214	214	214	214	214	214	214	401	588	588	401	126	126	313	313	739	840	840	840
Hydro		509	511	596	600	516	524	516	524	529	592	572	589	516	533	521	239	588	640	787	453	439	468	532	471	719	575	622	696	606	813	679	681	696	646	647	798	736	661	619	374	464	537	703	952	761	694	691	691
S.Reserve Total		2425	2609	2892	3107	3074	3193	3450	3596	3673	3841	3766	3790	3560	3258	3236	2053	2202	1938	1578	1185	1051	1119	1121	1425	1812	1855	2005	2046	1796	1499	1370	1342	1410	1357	1452	1427	1616	1735	1717	1130	1074	1180	1562	1861	2171	2416	2653	2888