

Daily System Generation Summary on Saturday

Saturday, December 24, 2022

Availability at Daily Maximum Demand Hour

ST-Coal	0 MW
ST-Gas	0 MW
ST-Oil	0 MW
Hydro	2,510 MW
Distillate	0 MW
Total TNB	2,510 MW
Total IPP	17,297 MW
Total Co-Gen	0 MW
Total System	23,065 MW

Generation Mix

Type	MWh	Percentage
Hydro	21,620	6.67 %
Gas	59,130	18.24 %
Total TNB	80,750	24.91 %
ST-Coal	180,884	55.80 %
ST-Gas	8,404	2.59 %
LSS	6,328	1.95 %
Gas	45,944	14.17 %
Total IPP	241,560	74.52 %
Co-Gen	608	0.19 %
Total Co-Gen	608	0.19 %
Total Generation	322,918	99.61 %
PLTG	-587	-0.18 %
HVDC	-665	-0.21 %
Interconnection	-1,252	-0.39 %
Net Energy	324,170	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:	19:30:00 Hour
Total Set On Bus	16,502 MW
TNB Generation	4,178 MW
IPP Generation	11,085 MW
Spinning Reserve	1,215 MW
Maximum Demand	15,353 MW
Net Energy	324,170 MWH
Load Factor	87.98 %

Fuel Cost

Total Cost:	109,194,371.97 RM
Cost per Unit	33.81 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	507
Hydro	665
Syncon	590
Thermal	722
Total	2,484

Time	Weather	Temperature
Afternoon	Sunny	30
Morning	Rainy	25

Gas Usage

Station	(mmscfd)
GLGR	30
TJGS	153
Total TNB	183
CBPS	49
NPRI	149
PCGP	61
PGLA	50
PLPS	1
SPGP	207
PKLG	79
Total IPP	596
Total Gas	778
Total Gas Required	778

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	13902	13326	12883	12447	12199	11973	12024	12035	11893	12889	13562	13893	13706	13419	13838	14051	14333	14231	14134	14596	15291	14891	14346	14047

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Wednesday, January 4, 2023 11:09:57 AM

(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	215	214	213	213	213	213	214	214	213	213	214	213	212	213	212	214	215	215	214	214	213	213	214	215	212	213	213	214	212	214	213	214	215	212	215	212	213	213	213	215	215	213	213	213	213	214		
JMAH	U002	213	214	214	214	214	214	214	213	213	213	215	213	213	213	213	214	214	215	213	214	214	214	215	212	212	214	214	214	213	213	212	214	213	277	521	715	706	708	703	705	705	648	363	212	213			
JMHE	U001	900	898	902	900	846	852	846	850	849	850	856	850	851	855	848	797	803	802	804	800	811	898	898	902	901	899	898	893	901	900	896	902	895	899	898	901	899	900	900	968	967	969	970	907	909	912	905	910
JMHE	U002	900	898	903	899	848	852	850	849	849	848	858	850	852	850	850	800	801	802	803	800	803	900	898	902	900	899	899	895	901	900	895	900	897	900	899	903	901	899	899	972	967	972	972	910	908	910	906	909
JMJG	U001	673	673	675	671	671	671	673	673	675	673	671	669	672	672	672	671	675	671	672	668	672	671	673	670	673	672	672	673	671	672	673	672	673	670	673	672	667	670	673	672	669	672	672	672	673			
JMJG	U002	671	684	673	675	676	673	676	673	674	677	674	673	674	673	671	678	672	673	675	672	677	679	674	674	668	675	674	673	673	673	674	674	673	674	673	675	674	672	671	677	677	680	671	674	672	677	673	673
JMJG	U003	676	679	675	673	682	672	678	677	675	678	678	679	677	677	677	677	679	676	668	680	678	679	678	678	678	677	682	670	682	672	681	676	677	677	678	677	674	672	683	673	679	677	673	680	677	677	679	
JMJG	U005	900	901	900	902	848	799	799	800	797	804	801	801	801	800	801	799	803	801	801	799	804	903	902	900	900	902	902	897	903	899	900	903	900	898	901	900	900	892	915	973	972	973	967	917	911	912	911	913
PKLG	U004	155	156	156	156	156	153	157	155	157	158	157	156	156	155	156	155	155	155	155	158	153	155	117	91	49	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PKLG	U005	268	267	268	268	268	268	268	269	267	273	267	269	271	268	269	267	267	271	267	271	268	271	267	268	300	337	329	363	362	359	357	359	358	359	358	359	358	359	358	359	358	358	358	354	357	360	360	
TBIN	U001	696	699	701	699	701	699	696	700	699	700	703	698	703	700	699	694	702	701	700	699	695	703	700	703	601	409	226	209	209	211	210	231	332	508	707	707	697	700	697	698	697	695	696	700	698	696		
TBIN	U002	698	699	694	700	701	699	699	697	700	704	699	700	698	699	700	697	702	698	699	699	694	698	699	697	700	700	692	698	700	696	698	695	696	700	699	699	698	699	697	698	697	702	702	695	697	698	700	698
TBIN	U003	668	667	668	666	668	667	666	667	667	667	667	665	666	667	666	666	667	667	667	667	667	667	667	666	666	665	665	669	665	666	666	666	666	666	666	665	668	666	666	666	666	667	667	667	667	667	666	
Total ST-Coal		7633	7649	7642	7636	7492	7434	7433	7438	7438	7455	7459	7437	7445	7444	7434	7330	7350	7350	7340	7341	7351	7650	7635	7609	7504	7317	7083	7071	7090	7085	7066	7089	7092	7202	7379	7588	7644	7870	8079	8295	8269	8290	8273	8083	8027	7758	7594	7604
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	
PKLG	U006	390	299	270	269	271	270	269	267	268	268	268	270	270	270	269	268	268	267	267	268	271	269	269	268	267	314	396	446	449	447	446	448	450	449	446	449	446	449	449	448	449	446	449	446	445	450	451	448
Total ST-Gas		390	299	270	269	271	270	269	267	268	268	268	270	270	270	269	268	268	267	267	268	271	269	269	268	267	314	396	446	449	447	446	448	450	449	446	449	446	449	449	448	449	446	445	450	451	448		
CBPS	BLK2	351	361	354	359	353	244	193	196	200	193	195	201	201	201	200	200	200	222	357	360	355	358	361	353	356	346	352	361	360	355	361	360	360	353	361	361	361	360	355	360	355	361	354	361	354	355		
GLGR	GT01	93	92	92	92	91	94	92	92	91	91	92	92	92	91	91	93	91	93	91	92	92	94	93	91	92	91	93	92	91	92	107	106	108	108	108	108	109	109	109	110	108	109	107	109	108	108		
GLGR	ST1C	41	41	40	40	41	40	40	41	40	40	41	41	41	41	40	40	40	40	40	40	41	41	40	41	41	41	41	41	40	44	47	47	47	47	48	48	48	47	48	48	47	47	47	47	46			
NPRI	BLK1	514	527	516	524	519	525	520	440	398	363	322	330	329	329	329	314	328	442	536	494	516	422	512	517	506	508	497	503	515	515	507	516	514	515	506	515	516	514	515	517	508	513	508	515	508	518	506	506
NPRI	BLK2	505	518	508	517	510	448	401	368	333	317	322	344	351	353	409	316	332	500	538	392	478	322	428	518	506	510	499	505	518	518	509	517	515	517	509	517	518	516	517	517	509	515	508	517	509	518	508	508
PCGP	PGRG	286	301	287	297	289	301	291	291	300	285	292	302	301	302	298	282	300	300	330	293	300	310	342	352	340	337	336	349	354	337	351	345	351	346	353	350	599	601	604	585	599	586	602	587	604	583	585	
PGLA	GT12	168	144	145	144	143	145	144	144	143	145	144	145	145	144	145	144	145	144	144	145	144	144	144	144	144	189	220	218	219	222	223	222	224	226	227	228	226	228	228	230	228	231	230	229				
PGLA	ST10	104	86	86	86	86	86	86	85	85	85	85	85	85	85	85	85	85	85	85	85	86	86	86	86	86	86	90	113	113	114	113	115	115	115	115	115	115	116	115	115	113	115	115	115	113			
PLPS	GT13	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
PLPS	ST18	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
SPGP	BLK1	707	719	708	713	709	718	711	713	712	705	644	650	648	651	649	683	649	718	727	714	718	708	713	716	706	705	691	703	716	715	704	714	717	715	704	717	717	717	720	719	707	711	704	718	705	719	712	706
SPGP	BLK2	707	721	709	715	710	718	711	713	716	706	643	648	647	649	648	704	647	718	735	714	718	709	716	719	707	705	696	707	718	718	704	718	721	720	708	720	720	718	719	719	708	716	709	721	709	720	712	711
TJGS	GT1A	222	182	166	162	152	148	148	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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																																																	

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
HTRG	HY04	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
KNRG	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	0	0
KNRG	HY02	37	37	37	37	37	37	37	37	37	37	37	37	25	24	25	24	24	24	25	37	37	37	37	25
KNRG	HY03	38	38	38	38	38	38	38	38	38	38	38	38	20	20	20	20	20	20	20	38	38	38	38	20
KNYR	HY01	100	101	100	100	100	100	100	100	100	100	100	100	99	101	101	100	100	100	100	101	100	100	100	100
KNYR	HY02	104	105	104	104	105	104	105	104	104	104	105	104	104	105	103	103	105	104	105	105	105	105	105	104
KNYR	HY03	98	98	97	96	96	95	95	95	95	95	96	96	97	98	98	98	97	97	98	97	97	96	95	96
KNYR	HY04	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
LPIA	HY01	22	22	22	22	22	22	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
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	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	82	22	112	22	82	82
PGAU	HY02	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	83	83	22
PGAU	HY03	21	21	22	21	21	21	22	22	22	22	22	22	82	82	82	21	22	22	22	82	82	113	112	112
PGAU	HY04	22	22	22	22	22	22	22	22	22	22	22	22	81	81	81	22	22	22	22	82	81	81	111	111
SIHY	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	30	30	
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	30	
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	30	
SYPS	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	
SYPS	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	17	
SYPS	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	25	25	25	25	
SYPS	HY04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	
TMGR	HY01	-1	-1	-1	-1	0	0	-1	-1	0	0	-1	-1	-1	-1	0	-1	0	-1	-1	0	-1	0	-1	84
TMGR	HY02	0	0	0	0	0	0	33	34	32	33	34	34	30	0	0	0	0	0	0	0	0	0	0	84
TMGR	HY03	39	41	39	84	41	44	40	42	40	38	40	41	43	41	37	40	49	85	40	82	39	40	69	38
TMGR	HY04	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	84	86	
UJLI	HY01	89	98	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	147	146	84	-1	-1	
UJLI	HY02	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	95	86	93	93	85	
UPIA	HY01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
UPIA	HY02	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Total Hydro		785	799	695	738	697	698	694	724	725	720	722	726	729	729	731	719	664	680	718	876	925	871	665	687
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	1	3	7	9	16	19	21	23	24	24	
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	12	16	20	24	28	17	32	37	
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	13	17	21	17	27	29	31	31	32	
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	14	17	16	31	39	40	39	28	
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	18	17	21	16	23	21	41	40	
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	9	9	7	24	24	24	29	
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11	13	26	32	19	41	44	46	48	
JELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	14	16	14	25	28	28	30	30	
JSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	16	22	19	35	38	42	34	
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	16	21	45	54	62	71	78	80	85	
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	18	25	30	21	38	41	42	45	
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	15	21	27	28	30	30	30	
KNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	12	18	53	73	82	89	97	99	
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	5	9	20	23	26	27	26	26	
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	14	13	20	17	18	38	9	17	
MNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	34	28	62	42	76	29	29	36	

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																								
PKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	19	33	60	76	112	104	90	110	93	103	75	60	112	107	101	74	36	36	25	10	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	1	3	9	16	23	29	27	30	51	52	35	49	16	12	23	41	17	19	23	15	5	1	1	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	2	5	11	8	21	33	38	42	44	45	45	44	43	42	35	28	21	25	9	11	6	1	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	2	3	2	3	3	10	10	11	17	5	16	9	11	16	9	8	4	4	3	1	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	0	2	2	4	14	13	29	28	30	30	30	25	30	30	30	29	17	22	17	16	7	2	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	3	47	150	280	418	573	635	826	845	842	882	888	872	853	787	880	786	635	571	364	279	175	67	7	0	0	0	0	0	0	0	0	0	0	
ESTL	ESTL	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
KHTC	BLK1	4	3	4	2	4	2	4	4	2	2	3	2	2	3	1	2	1	2	2	3	0	0	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	20	17	21	5	4	4	4	4	3	4	5	4	4	5	4	5	4	5	4	5	3	3	4	2	3	2	4	4	3	3	4	3	3	4	3	4	4	4	4	4	4	4	4	4	4			
PCUF	CUFK	3	3	4	5	4	4	3	3	5	3	5	4	5	4	3	3	4	4	3	4	5	4	4	3	3	3	3	3	4	4	5	4	5	4	3	5	5	4	4	4	3	3	4	3	3			
PFTZ	PFTZ	1	1	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total Co-Gen		43	39	44	28	27	25	26	26	25	24	28	25	26	25	25	27	23	26	25	26	24	24	22	20	21	20	23	23	22	23	22	24	22	22	24	24	22	23	24	24	24	26	26	25	25			
Total Gen		13857	13535	13266	13114	12867	12577	12425	12291	12147	12047	11914	11950	11964	11972	12011	11847	11832	12368	12751	13107	13480	13658	13872	13796	13658	13397	13404	13539	13764	13965	14071	14098	14194	14251	14218	14107	14109	14087	14516	15287	15280	15103	14848	14645	14335	14197	14041	13889
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		-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28	-28			
TIE-PLTG		-18	-40	-32	-11	11	-67	6	-5	-24	-2	-32	-24	-33	-7	3	27	-33	-53	-111	-32	-54	-47	7	-66	-20	-41	13	1	-46	-17	47	-49	-111	-100	14	-12	2	-9	-52	-38	17	-22	-15	-74	17	-76	21	10
Interconnection		-45	-68	-60	-39	-16	-94	-22	-32	-52	-30	-59	-51	-60	-34	-24	0	-61	-81	-138	-59	-82	-74	-21	-94	-48	-68	-15	-27	-74	-45	20	-77	-139	-128	-13	-40	-25	-36	-80	-66	-11	-50	-43	-101	-11	-104	-6	-18
System Total		13902	13603	13326	13153	12883	12671	12447	12323	12199	12077	11973	12001	12024	12006	12035	11847	11893	12449	12889	13166	13562	13732	13893	13890	13706	13465	13419	13566	13838	14010	14051	14175	14333	14379	14231	14147	14134	14123	14596	15353	15291	15153	14891	14746	14346	14301	14047	13907
SRev ST-Coal		562	541	553	558	543	560	559	553	551	549	554	558	556	554	561	558	548	552	564	553	563	543	552	549	659	927	1132	1077	1077	1081	1091	1078	1063	963	694	487	496	501	423	207	224	204	222	410	467	469	481	473
SRev CCGT-Gas		623	663	797	969	1032	1134	1281	1448	1367	1478	1621	1566	1564	1554	1506	1555	1582	1163	947	880	718	853	606	698	692	818	613	554	397	395	459	396	380	370	421	359	360	115	106	102	170	125	174	103	167	93	160	169
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		44	44	45	45	44	45	45	44	44	44	44	45	45	44	44	44	44	44	45	45	44	44	45	45	44	45	45	45	-3	-6	-4	-3	-5	-7	-6	-3	-6	-3	-6	-6	-5	-6	-6	-3	-2	-7	-8	-5
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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		615	615	802	802	714	714	802	802	714	714	802	802	714	802	802	802	802	714	615	527	615	802	802	802	714	714	802	714	615	615	615	340	428	252	527	527	714	428	252	252	252	527	527	714	626	500		
Hydro		690	676	593	550	592	591	594	604	604	609	606	602	600	599	598	609	624	608	571	599	551	604	623	601	634	622	637	612	596	539	569	533	494	495	534	642	542	650	857	660	610	855	918	724	726	576	590	590
S.Reserve Total		2534	2539	2790	2924	3012	3131	3281	3451	3367	3481	3627	3573	3566	3554	3510	3568	3600	3169	2928	2692	2490	2659	2628	2695	2831	3213	3228	3090	2868	2624	2730	2619	2359	2249	1982	2012	1919	2064	1808	1215	1251	1430	1647	1761	1972	1845	1849	1727