

Daily System Generation Summary on Friday

Friday, July 22, 2022

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	19,762 MW
Total Co-Gen	0 MW
Total System	25,431 MW

Generation Mix

Type	MWh	Percentage
Hydro	25,775	6.76 %
Gas	44,704	11.73 %
Total TNB	70,479	18.50 %
ST-Coal	225,651	59.22 %
LSS	6,137	1.61 %
Gas	77,761	20.41 %
Total IPP	309,549	81.24 %
Co-Gen	847	0.22 %
Total Co-Gen	847	0.22 %
Total Generation	380,875	99.96 %
PLTG	2,178	0.57 %
HVDC	-2,346	-0.62 %
Interconnection	-168	-0.04 %
Net Energy	381,043	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:	16:30:00 Hour
Total Set On Bus	19,200 MW
TNB Generation	3,750 MW
IPP Generation	14,126 MW
Spinning Reserve	1,270 MW
Maximum Demand	18,008 MW
Net Energy	381,043 MWH
Load Factor	88.17 %

Fuel Cost

Total Cost:	131,543,302.45 RM
Cost per Unit	34.54 cents/kWH

Average Spinning Reserve During Peak Hour

Type	MW
GT	764
Hydro	494
Syncon	396
Thermal	302
Total	1,956

Time	Weather	Temperature
Afternoon	Hot	33
Morning	Sunny	28

Gas Usage

Station	(mmscfd)
GLGR	29
TJGS	89
Total TNB	118
CBPS	44
EMPP	253
NPRI	130
PCGP	78
SPGP	179
Total IPP	684
Total Gas	802
Total Gas Required	802

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	15921	15095	14569	14146	13619	13449	13573	13629	13731	15545	16473	16973	17049	16810	17198	17845	17894	17744	16663	16400	17246	16974	16403	15904

Prepared By: -Select Name-

Checked By: -Select Name-

Printed on: Monday, August 8, 2022 4:28:10 PM

(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																									
JMAH	U001	705	705	706	704	706	705	705	706	705	708	664	605	625	701	707	707	704	704	706	705	704	705	704	708	708	706	711	705	705	704	706	704	704	708	706	707	706	711	713	538	355								
JMAH	U002	707	705	703	706	707	705	701	706	707	703	705	703	706	707	704	705	709	708	707	707	699	704	702	706	705	707	703	702	708	707	706	703	705	703	705	703	705	379	216	218	214	214							
JMHE	U001	973	982	977	981	978	899	901	899	897	850	852	850	849	848	850	843	850	980	976	977	977	974	979	976	977	978	978	977	976	978	979	978	979	974	978	976	974	977	979	978									
JMHE	U002	974	984	979	980	981	898	901	901	895	851	850	848	848	848	845	851	846	850	972	980	984	978	976	982	979	977	981	982	979	978	982	980	977	979	980	977	978	979	976	976	977	979	979						
JMJG	U001	666	667	666	666	666	666	665	673	667	667	667	667	670	669	666	666	668	666	666	665	665	667	667	667	666	667	667	666	671	666	666	666	667	668	667	587	646	646	665	673	677	663	661	672	667	665	666		
JMJG	U002	674	673	675	672	674	671	674	672	673	673	672	677	674	673	671	672	677	675	677	676	671	676	673	675	673	673	677	668	677	675	673	679	673	673	676	685	671	673	672	672	669	682	673	671	675	673	671	673	
JMJG	U003	669	667	667	668	671	672	668	671	667	667	667	674	668	668	662	671	668	671	665	669	667	667	664	666	668	671	668	671	669	668	669	668	667	670	668	665	668	665	677	662	671	666	668	668	664	672	668	669	
JMJG	U004	972	972	972	972	957	903	900	900	898	900	902	902	905	903	900	903	903	944	977	975	973	972	972	977	972	974	974	972	972	972	972	975	972	973	972	974	973	973	972	974	972	974	972	971	975	977	972		
PKLG	U003	274	279	277	276	275	276	278	201	146	147	149	149	149	149	150	146	148	147	147	147	147	146	148	147	144	148	147	151	147	149	150	149	147	149	146	148	150	147	148	149	147	149	148	149	150	146	151		
PKLG	U004	271	277	275	273	274	274	276	241	165	150	153	158	156	158	157	158	158	155	156	156	158	156	157	156	153	155	153	159	156	159	157	158	161	162	158	154	156	157	159	155	156	158	153	160	159	157	159	158	
PKLG	U005	466	470	468	471	408	329	262	269	265	268	269	271	269	269	269	267	269	268	268	268	268	267	269	269	269	268	269	269	269	268	269	268	269	269	268	269	269	268	269	269	268	269	269	269	269	269	268		
PKLG	U006	446	448	447	449	446	444	448	421	350	276	267	267	269	266	269	270	269	269	269	268	268	268	268	268	269	268	268	269	268	268	267	269	268	269	268	269	268	268	269	268	269	268	269	269	269	268	269		
TBIN	U002	700	699	702	699	700	700	701	701	706	702	698	703	701	701	700	698	700	698	699	698	700	701	701	700	699	702	698	698	700	700	706	702	700	700	697	700	697	700	701	697	700	701	698	705	578	368	213	209	211
TBIN	U003	700	699	701	701	699	700	701	699	702	700	700	701	699	699	699	699	700	699	702	700	699	701	699	705	700	699	699	701	700	697	700	700	700	701	697	700	701	697	700	701	698	705	578	368	213	209	211		
TBIN	U004	938	939	938	937	938	907	902	904	898	852	854	853	852	851	854	854	853	852	922	937	938	938	937	939	938	936	936	938	936	938	936	937	937	937	937	940	938	938	940	937	938	936	939	939	935				
Total ST-Coal		10135	10166	10153	10155	10080	9749	9683	9564	9341	9114	9069	9028	9040	9110	9102	9121	9116	9114	9481	9531	9521	9523	9508	9536	9527	9525	9529	9528	9534	9536	9532	9546	9528	9540	9543	9520	9443	9503	9518	9516	9535	9537	9202	8906	8712	8565	8380	8165	
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		
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	216	222	214	218	218	222	220	212	213	220	218	223	228	223	219	217	215	223	222	222	224	223	216	225	216	220	222	224	223	279	357	353	356	355	356	349	356	353	355	361	359	350	357	355	350	357	351	350	
EMPP	BLK1	369	377	366	374	372	373	375	361	361	376	370	374	383	375	370	371	401	472	476	485	506	691	687	710	687	596	560	601	617	710	689	686	691	691	694	677	692	684	698	710	709	681	692	690	679	691	682	679	
EMPP	BLK2	369	376	366	374	373	374	374	360	361	376	370	375	383	375	370	371	401	471	479	486	507	588	694	710	702	602	563	603	623	710	694	701	703	704	707	692	705	701	706	709	695	706	703	694	706	697	697		
EMPP	BLK3	404	377	366	374	372	374	374	360	362	376	370	374	383	374	371	371	401	477	484	508	594	687	710	686	578	549	591	618	710	691	686	690	694	693	666	691	684	695	706	710	681	693	688	679	691	682	677		
GLGR	GT02	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	94	94	94	94	94	94	94	94	94	94	94			
GLGR	ST1C	41	41	41	41	41	41	40	41	40	41	41	42	42	42	42	41	41	41	41	41	40	41	40	41	40	40	41	40	40	41	41	41	41	41	41	41	41	41	41	40	41	40	40	40	40	40	39		
NPRI	BLK1	311	319	308	313	314	317	317	303	307	316	313	320	328	320	314	310	308	320	319	317	320	319	376	398	388	391	398	398	398	516	510	505	509	508	508	500	509	506	508	515	512	502	511	509	501	511	502	502	
NPRI	BLK2	329	333	325	329	329	333	332	319	322	332	328	335	342	335	329	326	325	335	335	331	335	334	329	398	326	451	341	340	340	341	403	508	512	486	430	421	439	440	466	528	526	514	524	511	504	515	505	506	
PCGP	PGRG	535	398	390	390	388	395	394	389	389	394	388	399	416	400	394	399	396	400	397	398	605	601	586	606	582	592	602	601	600	601	590	580	588	587	587	570	590	584	587	602	598	575	593	586	574	589	575	574	
SPGP	BLK1	719	549	399	362	361	360	362	360	360	360	362	360	361	360	362	360	361	499	599	726	726	720	719	716	725	710	716	712	718	722	725	723	723	724	723	725	723	721	723	724	726	726	724	725	725	726			
SPGP	BLK2	717	599	399	362	360	362	363	361	360	360	364	359	362	362	360	360	361	499	600	718	718	717	717	716	719	717	716	711	710	713	711	711	711	711	711	711	711	711	712	713	711	712	713	712	714	713	713		
TJGS	GT2A	131	131	131	131	131	131	131	131	131	131	131	131	131	131	132	132	132	131	132	129	131	131	131	131	131	131	131	131	131	131	131	131	131	206	217	216	219	219	219	219	189	189	217	217	219	219	218	218	218
TJGS	GT2B	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	125	127	127	125	125	127	125	127	199	212	213	213	213	213	213	181	182	213									

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									
KNYR	HY01	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	59	59	59	100	100	100	100	100	100	100	100			
KNYR	HY02	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	59	-1	-1	102	101	101	101	101	101	101	101			
KNYR	HY03	105	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	105	104	105	103	104	59	59	105	105	105	105	105	105	105			
KNYR	HY04	102	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	100	100	60	60	102	101	101	102	101	101	101			
LPIA	HY01	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17			
LPIA	HY02	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	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	3	3	3	3	3	3			
PGAU	HY01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	19	20	20	19	18	79	78	110	110	150			
PGAU	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			
PGAU	HY03	21	21	22	20	20	20	20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	21	20	19	19	20	21	21	20	20		
PGAU	HY04	22	22	22	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	20	20	21	22	22	21	21			
SIHY	HY02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	50	50	0	0	0	50	50			
SIHY	HY03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	50	50	50	50	0	0	0	50	50			
SYPS	HY01	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	25	25	25		
SYPS	HY03	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	25	25	25		
SYPS	HY04	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	25	25	25		
TMGR	HY01	84	84	84	-1	-1	-1	-1	-1	-1	-1	-1	84	84	33	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84		
TMGR	HY02	86	86	85	87	36	36	-1	-1	-1	-1	-1	-1	-1	-1	88	89	88	89	89	88	88	87	88	89	89	89	88	87	89	88	89		
TMGR	HY03	82	83	81	82	32	32	0	0	0	0	0	0	0	0	62	62	62	62	62	61	62	61	62	62	62	61	60	62	61	61	58		
TMGR	HY04	41	56	39	45	41	81	41	37	38	52	41	65	86	81	41	45	55	84	81	72	82	84	40	83	40	74	81	81	81	63	40		
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		
UJLI	HY02	0	0	0	0	0	0	0	0	-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	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	5	5	5	5	5	5	5		
Total Hydro		1211	1225	1206	882	777	819	741	660	659	675	663	689	713	887	817	602	752	1181	1175	1197	1249	1222	1144	1189	1143	1179	1188	1307	1308	1290	1376	1332	
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	
BDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	6	9	14	15	19	21	22	15	23	26	26	26	24	26	21	11	4
BKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	3	10	18	22	21	12	14	32	32	35	31	31	29	26	21	12
BSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	10	16	18	17	24	24	14	16	18	33	36	27	18	24	26	9
CHLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	11	13	12	12	16	14	25	24	29	40	44	35	27	30	19	28
GBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	9	11	13	14	17	17	20	17	22	17	20	23	11	16	8	3
GELS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	11	10	19	20	21	25	27	28	29	27	24	28	25	23	21	19
GNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	10	10	18	28	31	22	34	22	18	30	34	42	33	32	20	26	11
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	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	1	4	12	10	12	29	29	21	26	34	30	34	23	26	25	27	38	33	30
KDLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	14	25	28	50	62	54	68	71	51	75	67	83	95	73	48	82	67	48
KKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	13	18	26	26	32	16	20	22	28	26	33	19	28	31	29	13
KMLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	8	12	17	17	21	23	19	18	21	30	31	24	21	26	25	7
KNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	13	23	38	52	52	50	81	61	98	43	74	51	56	74	80	75	80	70
KRLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	11	17	21	25	27	10	15	16	25	19	20	27	30	26	28	26
MCLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	11	17	24	29	37	41	42	45	46	47	46	46	45	42	38	33	28
MNLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	18	32	40	53	61	68	71	72	74	77	77	75	74	69	60	58	50
PKLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32	42	47	78	72	100	78	110	105	113	113	113	112	106	101	91	65	49
SPLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	6	18	21	30	32	39	29	43	37	38	19	47	42	44	24	34	28
SSLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	14	20	23	28	32	33	38	39	37	38	38	38	33	32	31	31
STLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	7	10	13	17	18	22	27	10	29	10	15	16	25	12	18	20	
TBLS	LSS1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	15	21	24	30	17	15	23	23	24	30	30	30	30	30	30	30	25

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		
Total LSS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	101	225	325	442	590	601	709	658	715	716	787	782	849	825	755	767	716	565	402	310	234	126	41	10	4	0	0	0	0	0	0	0	0
PCUF	CUFG	4	5	3	5	5	3	5	5	4	6	4	4	5	4	4	3	4	5	5	3	5	5	4	4	5	4	4	4	6	4	4	4	28	28	29	28	27	29	29	28	28	28	4	5	5	4	4	4	
PCUF	CUFK	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26		
Total Co-Gen		30	31	29	31	31	29	31	31	30	32	30	30	31	30	30	29	30	31	31	29	31	31	30	30	31	30	30	32	30	30	30	54	54	55	54	53	55	55	54	54	54	30	31	31	30	30	30	30	
Total Gen		15930	15557	15106	14749	14560	14292	14150	13865	13649	13516	13430	13452	13556	13737	13625	13452	13754	14832	15506	15949	16425	16748	16987	17189	17031	16903	16786	17020	17155	17566	17865	17944	17940	17930	17678	17196	16680	16434	16427	16987	17250	17109	16975	16664	16418	16146	15887	15642	
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	
TIE-HVDC		-99	-96	-99	-97	-97	-97	-97	-99	-97	-98	-98	-98	-98	-98	-98	-98	-99	-99	-97	-98	-98	-99	-99	-99	-99	-97	-96	-96	-96	-96	-100	-97	-96	-99	-99	-97	-97	-97	-98	-97	-99	-99	-97	-99	-98	-98	-97		
TIE-PLTG		108	78	110	92	89	102	101	125	127	82	79	110	81	121	94	63	121	54	60	97	50	92	113	72	81	90	75	57	53	106	116	112	143	19	33	85	114	104	124	58	101	151	100	48	114	62	81	109	
Interconnection		9	-19	11	-5	-9	5	4	26	30	-16	-19	12	-17	23	-4	-35	23	-45	-39	0	-48	-5	14	-25	-18	-9	-24	-40	-43	10	20	12	46	-78	-66	-14	17	7	27	-40	4	52	1	-49	15	-36	-17	13	
System Total		15921	15576	15095	14754	14569	14287	14146	13839	13619	13532	13449	13440	13573	13714	13629	13487	13731	14877	15545	15949	16473	16753	16973	17214	17049	16912	16810	17060	17198	17556	17845	17932	17894	18008	17744	17210	16663	16427	16400	17027	17246	17057	16974	16713	16403	16182	15904	15629	
SRev ST-Coal		168	137	150	148	209	451	453	507	535	588	632	652	656	589	597	586	575	588	329	277	289	286	298	274	279	282	277	283	282	276	278	267	288	275	271	286	276	312	295	293	274	275	353	442	428	417	502	540	
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 CCGT-Gas		2036	2455	2872	2909	2918	2895	2895	2980	2971	2895	2922	2885	2818	2880	2914	2918	2835	2309	2096	1840	1556	1219	994	814	975	1137	1338	1217	1158	705	418	321	291	314	362	460	355	468	404	208	215	340	258	291	356	274	341	350	
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	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	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	0
Syncon		187	187	187	401	401	401	489	489	676	676	676	676	676	588	588	588	588	500	500	500	500	374	495	495	495	495	395	395	395	395	395	374	374	187	187	500	588	689	689	588	374	374	374	374	374	374	374	374	
Hydro		397	383	402	387	492	450	440	354	354	338	350	324	300	234	434	649	369	430	436	414	402	555	562	517	563	527	518	399	398	416	405	470	459	494	539	494	561	607	608	441	610	624	481	524	531	642	469	470	
S.Reserve Total		2788	3162	3611	3845	4020	4197	4277	4330	4536	4497	4580	4537	4450	4291	4533	4741	4367	3827	3361	3031	2747	2434	2349	2100	2312	2441	2528	2294	2233	1792	1496	1432	1412	1270	1359	1740	1780	2076	1996	1530	1473	1613	1466	1631	1689	1707	1686	1754	