



***Maharashtra State Electricity Transmission
Company Ltd.***

State Load Dispatch Center, Airoli

Daily system Report

for

24/May/2013

State Load Dispatch Center, Airoli (MSETCL)
Daily system Report for 24/May/2013 FRIDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSGENCO	Daily	Monthly	E) Central Sector	Daily	Monthly
1) Thermal	105.332	2768.448	1) Gujrat	11.907	300.752
2) Hydro	11.453	336.927	2) Madhya Pradesh	18.470	445.299
3) Gas	7.665	206.304	3) Chattisgarh	10.090	218.370
Total MSGENCO	124.450	3311.679	4) Maharashtra	60.156	1553.247
B) 1) JSW JAIGAD	27.661	639.242	5) Goa	-6.330	-150.620
2) WPCL	7.787	186.363	6) TAPS 1&2 Injection	3.854	91.804
3) ADANI	14.940	256.430	7) RGPPL Injection	12.256	312.481
4) Other CPP / IPP	12.992	268.046	8) Pench (Excess)	-0.271	-4.068
5) Wind Generation	26.660	372.857	# Total Cent. Sector	110.132	2767.265
6) PENCH (MS)	0.271	4.068	F) Other Exchanges		
C) TPCL & REL			1) With TPCL (Excess)	-18.709	-378.168
1) TPCL Thermal	26.146	647.911	G) Bilateral Power *		
2) TPCL Hydro	4.711	94.560	1) MSEDCL Bilateral	38.272	849.980
TOTAL TPCL	30.857	742.471	Include PX	0.000	50.068
3) REL Thermal	12.567	285.206	2) MUMBAI Bilateral	16.302	391.537
D) STATE			Include PX	2.877	92.744
1) Thermal (A1+C1+C3)	144.045	3701.565	3) MUMBAI Schedule	16.302	393.179
2) Hydro (A2+B5+C2)	16.435	435.555	H) ENERGY CATERED (MUs)		
3) Gas (A3)	7.665	206.304	1) MSEDCL	306.184	7427.782
4) Wind (B4)	26.660	372.857	2) TPCL	40.153	910.165
5) CPP (B1+B2+B3)	63.380	1108.591	3) REL	21.977	495.645
TOTAL STATE	258.185	5824.872	TOTAL STATE	368.314	8833.592

DETAILS OF MAHARASHTRA STATE PEAK DEMAND(MW)

PARTICULARS	A. Morning Peak at 12 Hrs	B. Evening Peak at 17 Hrs	C. Night Minimum at 5 Hrs
MSGENCO Thermal	4193	4180	4621
MSGENCO Hydro	829	606	152
MSGENCO Gas	318	312	324
MSGENCO Total Generation	5340	5098	5097
Central Sector Receipt	4747	4622	4628
WIND	1220	1399	942
CPP / IPP	2760	2727	2525
Exchange with Mumbai	-923	-1105	-329
MSEDCL DEMAND MET	13144	12765	12863
Load Shedding	59	62	56
MSEDCL DEMAND	13203	12827	12919
TPCL GENERATION	1588	1443	1101
R-INFRA GENERATION	524	523	524
TPCL+R-INFRA DEMAND	3035	3071	1954
STATE DEMAND MET	16179	15836	14817
STATE DEMAND	16238	15898	14873
Frequency (Hz)	50.06	50.24	50.20

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.2 Hz
50.55 Hz at 06.02 Hrs	49.75 Hz at 00.04 Hrs	50.12	0 % of Time(min)

* Displayed for information, not added in total. # Total Cent. Sector includes MSEDCL and TPCL bilateral power.

State Load Dispatch Center,Airoli (MSETCL)

Daily and Progressive Generation,Maximum,Minimum,OLC Details for 24/May/2013

Generating unit	Generation				OLC (MW)
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)	
Koradi					
Unit 5	3.75	64.52	170	140	145
Unit 6	1.65	70.51	144	0	130
Unit 7	3.45	85.78	165	105	125
Total	8.85	220.82			400
Bhusawal					
Unit 2	3.78	64.32	170	145	160
Unit 3	3.60	87.68	165	125	160
Unit 4	2.88	194.21	410	0	430
Unit 5	0.00	34.89	0	0	
Total	10.25	381.10			750
Parli					
Unit 3	0.00	0.00	0	0	0
Unit 4	0.00	0.00	0	0	0
Unit 5	0.00	0.00	0	0	0
Unit 6	0.00	0.00	0	0	0
Unit 7	0.00	0.00	0	0	0
Total	0.00	0.00			0
Chandrapur					
Unit 1	3.79	89.89	163	150	165
Unit 2	3.95	85.74	170	160	165
Unit 3	4.62	111.01	201	188	200
Unit 4	4.14	100.28	180	145	180
Unit 5	9.77	243.69	430	385	450
Unit 6	9.45	233.91	430	345	400
Unit 7	8.50	177.70	372	317	380
Total	44.21	1042.22			1940
Paras					
Unit 3	5.66	133.80	246	226	250
Unit 4	5.63	131.88	247	217	250
Total	11.29	265.68			500
Khaparkheda					
Unit 1	3.68	77.94	170	130	160
Unit 2	2.60	82.52	140	75	120
Unit 3	3.85	88.29	182	141	180
Unit 4	3.76	92.18	178	140	160
Unit 5	3.93	210.52	231	110	225
Total	17.80	551.44			845
Nasik					
Unit 3	4.36	102.63	195	165	195
Unit 4	4.18	98.61	182	162	180
Unit 5	4.39	105.95	196	166	195
Total	12.92	307.19			570
Uran					
All Units	7.66	206.30	326	311	300
Total	7.66	206.30			300
PENCH (MS)					
Pench (MS)	0.27	4.07	26	0	
Total	0.27	4.07			
Koyna					
Stage 1-2	2.36	95.17	265	40	520
Stage 4	5.15	117.17	522	0	250
Stage 3	2.05	47.14	160	0	240
Kovna 12&4 Total	7.50	212.34			770

Generating unit	Generation				OLC (MW)
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)	
Total	9.55	259.48			1010
Hydro					
KDPH	0.75	17.21	32	30	30
VTRNA	0.00	12.89	0	0	0
TILLARI	0.35	8.32	60	0	60
BHTGR/VEER	0.00	0.36	0	0	0
BHIRA T.R.	0.24	4.94	80	0	80
RNGR+BHTSA	0.25	6.50	11	10	12
BHANDARDRA	0.00	3.36	0	0	0
ELDARY	0.00	0.00	0	0	0
SMLHY PTN	0.30	11.42	13	12	0
GHATGHAR	0.00	12.45	0	0	0
Total	1.90	77.45			182
Wind					
MalharPeth	0.88	12.10			
Vankuswadi	1.64	18.46			
ATIT	0.18	7.49			
Kale	0.58	8.31			
Satara	6.40	36.23			
Shirala	0.54	8.22			
K Mahankal	0.08	14.16			
Supa	0.28	3.28			
Vita	2.58	29.13			
Dondaicha	9.14	162.36			
Sakri	1.22	20.87			
Nandurbar	1.02	17.66			
Khandke	1.21	16.29			
Khaparale	0.93	18.31			
Total	26.66	372.86			
CPP					
JSW JAIGAD	27.66	639.24	1216	1029	1098
WARDHA	7.79	186.36	329	321	325
Adani	14.94	256.43	720	590	617
Other CPPs	12.99	268.05			223
Total	63.38	1350.08			2263
Tata					
Trombay 4	0.00	0.00	0	0	0
Trombay 5	11.76	276.44	501	453	500
Trombay 6	4.27	122.72	280	154	500
Trombay 7A	2.58	67.83	123	83	120
Trombay 7B	1.51	37.83	68	56	60
Trombay 8	6.02	143.09	252	250	250
TATA Hydro	4.71	94.56	439	0	447
Total	30.86	742.47			1877
REL					
1&2	12.57	285.21	525	522	500
Total	12.57	285.21			500
Cent Sect					
Share					4723
Total					4723

MS PG CL	Thermal	105.33	2768.45			5005
	Thml+Gas	113.00	2974.75			5305
	Hydro	11.45	336.93			1192
	Total	124.45	3311.68			6497
State Total		258.18	5824.87			15860

State Load Dispatch Center,Airoli (MSETCL)

Hourly Load Data As on 24/May/2013

TIME SR. NO.	MSPGCL GEN.			TOTAL	WIND	CPP / IPP	CS SHARE	CS RECPT	Mum.S CH.	Mum. NET EXCH.	MSEDCL DEMAND MET	LOAD SHEDDI NG	MSEDCL DEMAND WITH LS	TPCL + R -INFRA DEMAND	STATE DEMAND	FREQ. (Hz)
	THM	HY	GAS													
1	4725	836	316	5877	896	2539	4578	4821	-799	-797	13362	87	13449	2442	15891	50.01
2	4693	623	316	5632	977	2483	4466	4678	-667	-638	13158	56	13214	2249	15463	49.95
3	4654	356	319	5329	1052	2491	4391	4442	-562	-464	12870	56	12926	2112	15038	50.03
4	4701	242	322	5265	1023	2498	4362	4511	-491	-379	12918	56	12974	2004	14978	50.07
5	4621	152	324	5097	942	2525	4360	4628	-486	-329	12863	56	12919	1954	14873	50.20
6	4657	94	326	5077	1003	2416	4437	4946	-486	-345	13097	56	13153	1970	15123	50.36
7	4655	139	325	5119	1090	2416	4401	4660	-501	-314	12971	59	13030	1939	14969	50.03
8	4686	337	319	5342	1037	2431	4399	4328	-501	-442	12696	60	12756	2067	14823	50.27
9	4309	412	318	5039	1239	2599	4405	4640	-517	-622	12895	60	12955	2346	15301	50.13
10	4269	642	320	5231	1144	2637	4593	4815	-667	-788	13039	60	13099	2683	15782	50.14
11	4273	852	323	5448	1115	2645	4783	4878	-788	-943	13143	60	13203	2937	16140	50.07
12	4193	829	318	5340	1220	2760	4769	4747	-851	-923	13144	59	13203	3035	16238	50.06
13	4285	766	319	5370	1188	2796	4783	4487	-871	-1015	12826	118	12944	3078	16022	50.30
14	4262	639	318	5219	1288	2763	4724	4502	-850	-1091	12681	62	12743	3007	15750	50.06
15	4251	452	324	5027	1239	2772	4654	4732	-845	-1018	12752	62	12814	3089	15903	49.94
16	4190	549	311	5050	1219	2742	4546	4756	-859	-984	12793	62	12855	3092	15947	50.06
17	4180	606	312	5098	1399	2727	4513	4622	-852	-1105	12765	62	12827	3071	15898	50.24
18	4188	188	320	4696	1168	2652	4201	4437	-607	-1149	11829	62	11891	2962	14853	50.37
19	4220	109	320	4649	1034	2662	4153	4318	-554	-1233	11453	62	11515	2796	14311	50.26
20	4225	495	320	5040	996	2792	4394	4687	-652	-900	12638	62	12700	2799	15499	50.30
21	4240	748	320	5308	1032	2752	4463	4760	-661	-808	13068	62	13130	2723	15853	50.00
22	4275	439	320	5034	1016	2776	4526	4814	-667	-785	12878	62	12940	2628	15568	50.00
23	4293	354	316	4963	1119	2752	4556	5062	-754	-807	13112	59	13171	2574	15745	49.99
24	4287	594	319	5200	1224	2754	4504	4861	-814	-830	13233	59	13292	2576	15868	49.96
MUs	105.33	11.45	7.66	124.45	26.66	63.38	107.96	112.13	-16.30	-18.71	308.18	1.52	309.70	62.13	371.84	50.12

NOTE : ALL VALUES IN MW

Mumbai Sch./Net Exch is shown with reference to MSETCL System. (+) indicates Mum. to MSETCL and (-) indicates MSETCL to Mum. Mumbai Schedule is calculated for MSETCL periphery (taking 4% loss for import & 4.85% MSETCL loss # Without Applying Load Diversity Factor

State Load Dispatch Center,Airoli (MSETCL)
Details of Generating Unit Outages/Trippings for 24/May/2013

Position as on 6.30 Hrs of 25/May/2013

Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
PLANNED OUTAGE							
Parli Unit 4	210	28/11/2012	02.37		Continued.	water shortage.	
Koyna Unit 12	80	29/11/2012	08.30		Continued.	A/OH.	
Cent_Sect Tarapur 2	160	31/12/2012	17.05		Continued.	Refuelling work	
Parli Unit 6	250	25/01/2013	19.49		Continued.	Water Shortage/AOH from 06.03.2013	
Parli Unit 3	210	13/02/2013	23.50		Continued.	Water Shortage	
Parli Unit 5	210	14/02/2013	22.45		Continued.	Water Shortage	
Parli Unit 7	250	17/02/2013	01.00		Continued.	Water Shortage.	
Cent_Sect TARAPUR-3	540	30/03/2013	22.30		Continued.	AOH.	
FORCED OUTAGE							
Dabhol 2B	230	03/01/2013	13.29		Continued.	Gas shortage.	
CPP Adani U-2	660	22/04/2013	13.47		Continued.	ID fan problem.	
Dabhol 1A	230	05/05/2013	09.42		Continued.	Gas Shortage.	
Dabhol 2X	290	11/05/2013	04.28		Continued.	Gas Shortage	
Dabhol 2A	230	11/05/2013	04.30		Continued.	Gas Shortage	
CPP WPCL U-3	135	11/05/2013	11.25		Continued.	Maintenance Problem.	
Bhusawal Unit 5	500	22/05/2013	22.49	24/05/2013	17.06	Bus bar protection operated due to R ph.CT bursting of GT-5 bay.	
Dabhol 1A	230	23/05/2013	12.58		Continued.	Gas Shortage	
Dabhol 1B	230	23/05/2013	12.58		Continued.	Gas Shortage	
Dabhol 1X	290	23/05/2013	12.58		Continued.	Gas Shortage	
Koyna Unit 8	80	23/05/2013	15.30		Continued.	Bearing temp.high.	
Bhusawal Unit 4	500	24/05/2013	08.16	25/05/2013	00.10	Due to tripping of Stn.T/F-4A.	
Koradi Unit 6	210	24/05/2013	12.57		Continued.	Boiler tube leakage.	
Bhusawal Unit 5	500	24/05/2013	17.09	24/05/2013	18.24	Cooling gas temp.high.	
Bhusawal Unit 5	500	24/05/2013	18.27	24/05/2013	23.10	Tripped due to AC supply failed.	
CPP Adani	1320	24/05/2013	18.35	24/05/2013	18.40	Synch.first time with grid.	
CPP Adani	1320	25/05/2013	01.18		Continued.	Turbine over speed testing.	

State Load Dispatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 24/May/2013

Position as on 6.30 Hrs of 25/May/2013

Name of Line	Tripped Date	Tripped Time	Synchronised Date	Synchronised Time	Reason of Outage
InterState					
Voltage Level : 400KV			Outage Type PLANNED OUTAGE		
Parli (PG) - Wardha (PG) - II	24/05/2013	07.10	24/05/2013	14.16	Hot spot attended.
Voltage Level : 220KV			Outage Type PLANNED OUTAGE		
Tarapur - Boiser	13/04/2013	10.33		Continued.	Mumbai Stengthening Work & Now Line Tarapur-Ghodbunder.(one month)
Nasik-Navsari-I	24/05/2013	08.24	24/05/2013	18.42	Insulator washing at Navasari end.
Voltage Level : 400KV			Outage Type HAND TRIPPED		
Kolhapur - Mapusa - I	23/05/2013	16.35		Continued.	Over Voltage
Dhule-Sar'Sarovar - II	23/05/2013	22.31	24/05/2013	06.53	Over voltage
Kolhapur-Solapur (PG) II	24/05/2013	06.52		Continued.	Over Voltage
Dhule-Sar'Sarovar - I	25/05/2013	02.54		Continued.	Over Voltage.
IntraState					
Voltage Level : 400KV			Outage Type PLANNED OUTAGE		
50MVAR Line Reactor on Bhusawal- Akola at BSL End	04/05/2013	12.05		Continued.	Overhauling of Line Reactor upto 21-5-2013
400/220KV,500MVA ICT-III At Kalwa.	24/05/2013	07.05	24/05/2013	18.25	Tan delta and bay maintenance.
400/220KV,315 MVA ICT-I At Lonikand.	24/05/2013	10.51		Continued.	To attend red hot spot.Taken on TBC.
New Koyna-Jaigad II	24/05/2013	11.10	24/05/2013	22.00	Due to outage on Main Bus-I at New Koyns.
Main Bus- I @ New Koyna	24/05/2013	11.20	24/05/2013	21.47	Replacement of B ph.isolator.
400/220KV 315 MVA ICT-I @ Padgha	24/05/2013	11.39	24/05/2013	14.36	P.M.maintenance work.
400/220 KV 315 MVA ICT-III @ Padgha	24/05/2013	14.44	24/05/2013	17.31	P.M.maintenance work.
Voltage Level : 220KV			Outage Type PLANNED OUTAGE		
Ghodbandar - Bhoisor (MSETCL)	13/04/2013	10.09		Continued.	Mumbai Strengthening Work.
220/100KV 200 MVA ICT-III @ Padgha	22/05/2013	10.46		Continued.	Repl.of A bus,B bus isolator under JICA scheme.ICT on TBC.Outage for 8 days.
Mudsinghi - Mumewadi - I	24/05/2013	08.12	24/05/2013	15.29	Cold line washing.
220/110 KV T/F - 3 @ Mudshingi	24/05/2013	09.03	24/05/2013	15.25	Annual maintenance work.
220/132 KV,100MVA ICT-II At Padegaon.	24/05/2013	10.02	24/05/2013	17.10	Q.M.Work
Pophali-K'gaon	24/05/2013	10.15	24/05/2013	17.25	P.M.Work
Uran - JNPT	24/05/2013	11.30	24/05/2013	18.17	Replacement of insulator string.
Voltage Level : 100KV			Outage Type PLANNED OUTAGE		
Borivali - Borivali- I	24/05/2013	10.24	24/05/2013	14.40	Line maintenance work.
Voltage Level : 400KV			Outage Type HAND TRIPPED		
400/220 KV 100 MVA Spare Unit @ Koradi	12/07/2012	07.11		Continued.	Main Buchholz prot.operated
400/220 KV 105 MVA Spare ICT Unit @ Bhusawal - II	02/02/2013	10.17		Continued.	Low Oil Pressure Alarm Received.
400/220KV 500MVA ICT-II at Warora	07/02/2013	17.57		Continued.	Hand Tripped.

State Load Dispatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 24/May/2013

Position as on 6.30 Hrs of 25/May/2013

Name of Line	Tripped Date	Tripped Time	Synchronise d Date	Synchronise d Time	Reason of Outage
Bhusawal- Aurangabad	23/05/2013	17.54		Continued.	Over Voltage
Deepnagar-Aurangabad-II	23/05/2013	19.25		Continued.	Over Voltage
Karad - Kolhapur - II	24/05/2013	03.11	24/05/2013	06.43	Over Voltage.
Voltage Level : 220KV			Outage Type HAND TRIPPED		
Chikhali - Jalna - II	12/04/2013	17.57		Continued.	To Control Over Loading of 220KV Paras-Chikhali.
Voltage Level : 400KV			Outage Type TRIPPED		
400/11.5KV 90 MVA STN T/F III @ 400KV C'PUR	25/09/2012	15.38		Continued.	Differential protection operated Declared Faulty by Genco.
Khadka - Deepnagar - II	22/05/2013	22.49		Continued.	Bus bar protection operated due to R ph.CT bursting of GT-5 bay.(B ph.Bkr pole of Khadka Ckt.II burst.)
400/220 KV 500 MVA ICT-I @ Deepnagar	24/05/2013	08.10	24/05/2013	21.11	Tripped due to B ph.LV side CT burst 220KV side bus bar operated Gen.of U-4 affected.
400/220 KV,500MVA ICT-II at Deepnagar.	24/05/2013	08.10	24/05/2013	21.22	220KV Bus Bar protection operated.
400/11 KV 80 MVA Station T/F 4A @ Deepnagar	24/05/2013	08.16	24/05/2013	09.11	B ph.LV sude CT burst 220KV side bus bar operated Gen.of U-4 affected.
Voltage Level : 220KV			Outage Type TRIPPED		
Usmanabad-Paranda	25/04/2013	16.36		Continued.	Distance protection(4 Nos of Tower Collapsed)
Paranda-Barshi	25/04/2013	17.39		Continued.	Distance protection(Ckt Under Breakdown)
220/66 KV 50 MVA ICT- II @ Pusad	21/05/2013	20.10		Continued.	Diff Protection.
Apta-Uran-III	24/05/2013	01.45	24/05/2013	11.24	Distance protection.
Deepnagar - Bambhori	24/05/2013	08.10	24/05/2013	09.36	220KV Bus Bar protection operated.
Deepnagar-Khadka I	24/05/2013	08.10	24/05/2013	09.26	220KV Bus Bar protection operated.
Deepnagar-Khadka-II	24/05/2013	08.10	24/05/2013	09.28	220KV Bus Bar protection operated.
Amalner-Deepnagar	24/05/2013	08.10	24/05/2013	09.34	220KV Bus Bar protection operated.
Pophali - Karad	24/05/2013	11.28	24/05/2013	15.05	Distance protection.
Vankuswadi-KDPH	25/05/2013	02.30		Continued.	Distance protection.
M.B. At KDPH.	25/05/2013	02.30		Continued.	Due to tripping of KDPH-Vankushwadi.
Pophali - KDPH	25/05/2013	02.30	25/05/2013	03.00	Due to bus fault.
Bombay Dyeing - Sahara	25/05/2013	05.14		Continued.	Distance protection Z 1.
Apta-Uran-III	25/05/2013	05.55		Continued.	Distance protection operated.
Voltage Level : 132KV			Outage Type TRIPPED		
Harangul-Chakur	24/05/2013	14.00	24/05/2013	14.13	Distaance protection operated.

State Load Dispatch Center,Airoli (MSETCL)

Details of On Line Capacity for 25/May/2013

Generating unit	Derated Capacity (MW)	OLC (MW)
Koradi		
Unit 5	200	135
Unit 6	210	0
Unit 7	210	160
	620	295
Bhusawal		
Unit 2	210	160
Unit 3	210	160
Unit 4	500	430
Unit 5	500	
	1420	750
Parli		
Unit 3	210	0
Unit 4	210	0
Unit 5	210	0
Unit 6	250	0
Unit 7	250	0
	1130	0
Chandrapur		
Unit 1	210	160
Unit 2	210	165
Unit 3	210	200
Unit 4	210	190
Unit 5	500	420
Unit 6	500	430
Unit 7	500	300
	2340	1865
Paras		
Unit 3	250	250
Unit 4	250	250
	500	500
Khaparkheda		
Unit 1	210	160
Unit 2	210	150
Unit 3	210	160
Unit 4	210	170
Unit 5	500	150
	1340	790
Nasik		
Unit 3	210	195
Unit 4	210	180
Unit 5	210	195
	630	570
Uran		
All Units	852	300
	852	300
PENCH (MS)		
Pench (MS)	53	
	53	
Koyna		
Stage 1-2	600	520
Stage 4	1000	250
Stage 3	320	240
	1920	1010
Hydro		
KDPH	40	30
VTRNA	60	0

Generating unit	Derated Capacity (MW)	OLC (MW)
TILLARI	60	60
BHTGR/VEER	21	0
BHIRA T.R.	80	80
RNGR+BHTSA	20	12
BHANDARDRA	45	0
ELDARY	23	0
SMLHY PTN	12	0
GHATGHAR	250	0
	611	182
Wind		
MalharPeth	0	
Vankuswadi	0	
ATIT	0	
Kale	0	
Satara	0	
Shirala	0	
K Mahankal	0	
Supa	0	
Vita	0	
Dondaicha	0	
Sakri	0	
Nandurbar	0	
Khandke	0	
Khaparale	0	
	0	
CPP		
JSW JAIGAD	1200	1095
WARDHA	405	320
Adani	1320	617
Other CPPs	300	219
	3225	2251
Tata		
Trombay 4	150	0
Trombay 5	500	500
Trombay 6	500	500
Trombay 7A	120	120
Trombay 7B	60	60
Trombay 8	250	250
TATA Hydro	444	447
	2024	1877
REL		
1&2	500	500
	500	500
Cent Sect		
Share	3455	4679
	3455	4679