



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

State Load Dispatch Center, Airoli

Daily system Report

for

13/Aug/2014

State Load Dispatch Center, Airoli (MSETCL)
Daily system Report for 13/Aug/2014 WEDNESDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSGENCO	Daily	Monthly	E) Central Sector	Daily	Monthly
1) Thermal	86.311	1110.177	1) Gujrat	12.485	45.361
2) Hydro	15.724	176.244	2) Madhya Pradesh	15.278	175.621
3) Gas	6.541	107.420	3) Chattisgarh	6.850	79.310
Total MSGENCO	108.576	1393.841	4) Maharashtra Net	88.351	919.557
B) 1) JSW JAIGAD	19.894	230.987	(Incl. 765kV Solapur-Raichur)	-9.479	-104.171
2) WPCL	5.025	61.636	5) Goa	-6.215	-74.057
3) ADANI	33.071	567.042	6) TAPS 1&2 Injection	7.366	96.287
4) Other CPP / IPP	20.297	178.049	7) RGPPL Injection	0.000	0.000
5) Wind Generation	30.560	410.204	8) Pench (Excess)	-0.476	-2.891
6) PENCH (MS)	0.476	2.891			
7) SOLAR	0.896	11.206	# Total Cent. Sector	123.639	1239.188
C) 1) TPCL Thermal	15.928	197.932	F) Other Exchanges		
2) TPCL Hydro	5.797	58.168	1) With TPCL (Excess)	-24.712	-302.620
TOTAL TPCL	21.725	256.100	G) Bilateral Power *		
3) REL Thermal	12.543	159.730	1) MSEDCL Bilateral	42.218	249.164
D) STATE			Include PX	17.837	-12.136
1) Thermal (A1+C1+C3)	114.782	1467.839	2) MUMBAI Bilateral	26.681	275.299
2) Hydro (A2+B6+C2)	21.997	237.303	Include PX	0.415	23.429
3) Gas (A3)	6.541	107.420	3) MUMBAI Schedule	26.806	275.924
4) Wind (B5)	30.560	410.204	H) ENERGY CATERED (MUs)		
5) CPP/IPP (B1+B2+B3+B4)	78.287	1037.714	1) MSEDCL	317.722	3792.424
6) SOLAR (B7)	0.896	11.206	2) TPCL	38.020	451.727
TOTAL STATE	253.063	3271.686	3) REL	20.963	266.728
			TOTAL STATE	376.705	4510.879

DETAILS OF MAHARASHTRA STATE PEAK DEMAND(MW)

PARTICULARS	A. Morning Peak at 11 Hrs	B. Evening Peak at 14 Hrs	C. Night Minimum at 4 Hrs
MSGENCO Thermal	3574	3665	3586
MSGENCO Hydro	852	1132	113
MSGENCO Gas	270	270	273
MSGENCO Total Generation	4696	5067	3972
Central Sector Receipt	6270	5331	4205
WIND	1102	1332	1193
CPP / IPP	3428	3397	3177
SOLAR	113	84	0
Exchange with Mumbai	-1363	-1361	-439
MSEDCL DEMAND MET	14273	13850	12108
Load Shedding	53	57	51
MSEDCL DEMAND	14326	13907	12159
TPCL GENERATION	1089	1017	739
R-INFRA GENERATION	523	523	524
TPCL+R-INFRA DEMAND	2975	2901	1702
STATE DEMAND MET	17248	16751	13810
STATE DEMAND	17301	16808	13861
Frequency (Hz)	49.94	49.97	49.77

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.2 Hz
50.19 Hz at 13.00 Hrs	49.57 Hz at 18:51 Hrs	49.89	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 13/Aug/2014

Generating unit	Generation				OLC (MW)
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)	
Koradi					
Unit 5	0.00	0.00	0	0	0
Unit 6	3.33	38.10	150	120	140
Unit 7	2.84	37.89	155	60	130
Total	6.17	75.99			270
Bhusawal					
Unit 2	3.01	7.14	140	115	137
Unit 3	3.02	31.60	150	115	135
Unit 4	0.00	39.45	0	0	0
Unit 5	8.66	95.33	410	290	295
Total	14.68	173.53			567
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	3.88	0	0	0
Unit 7	0.00	2.03	0	0	0
Total	0.00	5.91			0
Chandrapur					
Unit 1	3.02	38.27	131	123	135
Unit 2	3.60	41.05	156	140	150
Unit 3	0.00	34.87	0	0	0
Unit 4	4.37	48.94	194	176	200
Unit 5	10.34	79.15	450	410	450
Unit 6	8.64	102.88	385	315	380
Unit 7	9.08	76.54	408	323	350
Total	39.06	421.69			1665
Paras					
Unit 3	0.00	36.95	0	0	0
Unit 4	4.57	61.76	211	156	250
Total	4.57	98.71			250
Khaparkheda					
Unit 1	3.10	35.60	150	100	200
Unit 2	3.44	24.13	165	120	190
Unit 3	3.53	50.17	155	136	210
Unit 4	3.37	49.18	154	115	210
Unit 5	0.00	63.81	0	0	0
Total	13.44	222.89			810
Nasik					
Unit 3	0.00	3.25	0	0	0
Unit 4	4.11	53.32	190	125	190
Unit 5	4.28	54.89	187	155	190
Total	8.39	111.47			380
Uran					
All Units	6.54	107.42	278	270	280
Total	6.54	107.42			280
PENCH (MS)					
Pench (MS)	0.48	2.89	47	0	
Total	0.48	2.89			
Koyna					
Stage 1-2	4.10	44.74	465	40	600
Stage 4	6.59	48.57	760	0	250
Stage 3	2.12	29.58	240	0	320
Kovna 12&4 Total	10.70	93.31			850

Generating unit	Generation				OLC (MW)
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)	
Total	12.82	122.89			1170
Hydro					
KDPH	0.00	0.00	0	0	
VTRNA	0.58	3.52	61	0	61
TILLARI	0.46	9.76	61	0	60
BHTGR/VEER	0.22	1.38	10	9	5
BHIRA T.R.	0.45	5.12	43	0	40
RNGR+BHTSA	0.06	0.69	3	2	0
BHANDARDRA	0.04	6.91	14	0	5
ELDARY	0.00	0.00	0	0	
SMLHY PTN	0.97	12.52	49	37	10
GHATGHAR	0.13	13.45	115	0	
Total	2.90	53.35			181
Wind					
MalharPeth	0.99	13.26			
Vankuswadi	1.76	22.59			
ATIT	0.18	3.32			
Kale	0.53	9.74			
Satara	14.26	198.75			
Shirala	0.84	13.50			
K Mahankal	0.07	1.28			
Supa	0.25	3.56			
Vita	3.08	42.27			
Dondaicha	4.56	52.22			
Sakri	1.00	11.60			
Nandurbar	0.80	10.50			
Khandke	1.04	14.34			
Khaparale	1.19	13.28			
Total	30.56	410.20			
CPP					
JSW JAIGAD	19.89	230.99	912	672	824
WARDHA	5.02	61.64	215	200	210
Adani	33.07	567.04	1502	987	1490
Other CPPs	20.30	178.05			745
Total	78.29	1037.71			3269
SOLAR					
Total	0.90	11.21			
Total	0.90	11.21			
Tata					
Trombay 4	0.00	0.00	0	0	0
Trombay 5	11.90	144.16	505	461	500
Trombay 6	0.00	0.00	0	0	0
Trombay 7A	2.52	34.29	115	99	120
Trombay 7B	1.51	19.49	66	61	60
Trombay 8	0.00	0.00	0	0	0
TATA Hydro	5.80	58.17	468	72	447
Total	21.72	256.10			1127
REL					
1&2	12.54	159.73	525	521	500
Total	12.54	159.73			500
Cent Sect					
Share					5814
Total					5814
MS PG CL	Thermal	86.31	1110.18		3942
	Thml+Gas	92.85	1217.60		4222
	Hydro	15.72	176.24		1351
	Total	108.58	1393.84		5573
State Total		253.06	3271.69		16283

State Load Dispatch Center,Airoli (MSETCL)

Hourly Load Data As on 13/Aug/2014

TIME SR. NO.	MSPGCL GEN.			TOTAL	WIND	CPP / IPP	SOLAR	CS SHARE	CS RECPT	Mum.S CH.	Mum. NET EXCH.	MSEDCL DEM. MET	LOAD SHEDDI NG	MSEDCL DEM. WITH LS	TPCL + R -INFRA DEMAND	STATE DEMAND	FREQ. (Hz)
	THM	HY	GAS														
1	3626	128	273	4027	1345	3333	0	4824	4625	-838	-718	12659	78	12737	1979	14716	49.88
2	3526	113	274	3913	1198	3220	0	4630	4664	-666	-563	12459	51	12510	1823	14333	49.78
3	3515	143	273	3931	1243	3154	0	4349	4708	-625	-484	12562	51	12613	1745	14358	49.84
4	3586	113	273	3972	1193	3177	0	4235	4205	-680	-439	12108	51	12159	1702	13861	49.77
5	3629	93	273	3995	1157	3157	0	4388	4423	-839	-449	12283	53	12336	1708	14044	49.79
6	3567	305	274	4146	1187	3201	0	4758	5014	-873	-548	13000	57	13057	1808	14865	49.94
7	3621	657	274	4552	981	3199	4	5135	5684	-961	-691	13736	59	13795	1967	15762	49.96
8	3577	903	275	4755	912	3189	39	5243	5890	-1063	-791	14005	59	14064	2127	16191	49.91
9	3614	1124	275	5013	1081	3270	69	5456	6017	-1172	-1091	14386	56	14442	2443	16885	49.93
10	3611	976	274	4861	969	3311	110	5930	6480	-1290	-1328	14430	53	14483	2768	17251	49.86
11	3574	852	270	4696	1102	3428	113	5782	6270	-1402	-1363	14273	53	14326	2975	17301	49.94
12	3574	1087	270	4931	1047	3462	109	5491	5830	-1463	-1347	14059	56	14115	3023	17138	49.91
13	3714	969	271	4954	1113	3415	101	5241	5591	-1451	-1386	13791	108	13899	3010	16909	50.01
14	3665	1132	270	5067	1332	3397	84	4793	5331	-1363	-1361	13850	57	13907	2901	16808	49.97
15	3612	1177	270	5059	1333	3399	100	5023	5122	-1329	-1361	13665	53	13718	2930	16648	49.85
16	3594	764	271	4629	1432	3472	82	5435	5409	-1313	-1395	13640	53	13693	2935	16628	49.91
17	3545	674	272	4491	1678	3352	56	5171	5253	-1338	-1331	13526	55	13581	2901	16482	49.92
18	3537	493	278	4308	1621	3426	24	4709	4625	-1472	-1401	12630	57	12687	2847	15534	49.97
19	3633	278	271	4182	1514	3375	5	4734	4817	-1309	-1292	12622	58	12680	2767	15447	49.83
20	3661	657	270	4588	1499	3423	0	5032	5255	-1153	-1195	13617	59	13676	2790	16466	49.85
21	3648	1091	270	5009	1462	2995	0	4699	4763	-1141	-1108	13147	55	13202	2692	15894	49.91
22	3556	791	272	4619	1359	2965	0	4398	4745	-1107	-1038	12677	53	12730	2529	15259	49.92
23	3600	740	273	4613	1413	2957	0	4375	4286	-1063	-1054	12242	52	12294	2375	14669	49.84
24	3526	464	275	4265	1389	3010	0	4568	4532	-895	-978	12255	52	12307	2235	14542	49.95
MUs	86.31	15.72	6.54	108.58	30.56	78.29	0.90	118.40	123.54	-26.81	-24.71	317.62	1.39	319.01	58.98	377.99	49.89

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 13/Aug/2014

Position as on 6.30 Hrs of 14/Aug/2014

Name of Generating Unit	Capacity	Tripped Date	Tripped Time	Sync.Date	Sync. Time	Reason of Outage	Expected Date
PLANNED OUTAGE							
Parli Unit 3	210	13/02/2013	23.50		Continued.	Water Shortage	
Koyna ST - IV 3	250	07/07/2014	09.00		Continued.	Annual Overhaul	23/08/2014
FORCED OUTAGE							
Dabhol 1B	230	28/05/2013	22.02		Continued.	Gas shortage.	
Dabhol 3A	230	06/06/2013	08.28		Continued.	Gas Shortage	
Dabhol 2A	230	06/06/2013	09.10		Continued.	Gas Shortage	
Dabhol 1X	290	27/06/2013	21.46		Continued.	Gas Shortage	
Dabhol 1A	230	27/06/2013	21.47		Continued.	Gas Shortage	
Dabhol 2X	290	15/07/2013	15.09		Continued.	Gas Shortage	
Dabhol 2B	230	08/08/2013	15.03		Continued.	Gas Shortage	
Dabhol 3X	290	29/12/2013	05.47		Continued.	Gas Shortage	
Dabhol 3B	230	29/12/2013	06.14		Continued.	Gas Shortage	
Tata Trombay 8	250	09/01/2014	22.54		Continued.	Emergency H/T, Fire at turbine track.	
CPP WPCL U-1	135	30/01/2014	12.45		Continued.	turbine vibration	
CPP WPCL U-2	135	18/02/2014	00.02		Continued.	Ash Conveying problem	
CPP Dhariwal	300	28/05/2014	02.27		Continued.	PA Fan Vibration Problem. (U-1).	
Koradi Unit 5	200	17/06/2014	11.53		Continued.	I D Fan Bearing Temperature High.	
CPP IPL U-1	270	26/06/2014	05.46		Continued.	Coal Shortage.	
Parli Unit 4	210	29/06/2014	10.19		Continued.	Water Shortage	
CPP JSW (J) U2	300	20/07/2014	00.00		Continued.	No Buyer	
Parli Unit 5	210	30/07/2014	00.02		Continued.	Water Shortage.	
Tata Trombay 6	500	31/07/2014	21.34		Continued.	Economic Shut down.	
Parli Unit 7	250	01/08/2014	10.10		Continued.	Water Shortage.	
Parli Unit 6	250	01/08/2014	19.08		Continued.	Water Shortage.	
Bhusawal Unit 4	500	06/08/2014	13.56		Continued.	Boiler Tube Leakage.	
Uran Unit A0	120	07/08/2014	05.45		Continued.	Main X'mer Bucholz.	
Uran Unit 6	108	07/08/2014	05.45		Continued.	Non Availability of AO.	
Uran Unit 5	108	07/08/2014	11.19		Continued.	Gas Shortage.	
CPP Adani U-4	660	09/08/2014	01.08		Continued.	Coal Shortage.	
Chandrapur Unit 3	210	11/08/2014	13.39	14/08/2014	00.45	Boiler Tube Leakage.	
Paras Unit 3	250	11/08/2014	14.08		Continued.	Air Heater Problem	
Khaparkheda Unit 5	500	12/08/2014	14.34	14/08/2014	04.12	PA Fan Tripped	
Nasik Unit 3	210	12/08/2014	15.25		Continued.	Water wall T/L	

State Load Dispatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 13/Aug/2014

Position as on 6.30 Hrs of 14/Aug/2014

Name of Line	Tripped Date	Tripped Time	Synchronised Date	Synchronised Time	Reason of Outage
InterState					
Voltage Level : 400KV			Outage Type HAND TRIPPED		
Dabhol-Nagothane-II	29/07/2014	00.05		Continued.	Over Voltage
Kolhapur - Mapusa - I	06/08/2014	17.08	13/08/2014	09.57	Over Voltage.
Kolhapur-Solapur(PGCIL)-I	11/08/2014	16.40	13/08/2014	09.44	Over Voltage
Kolhapur - Mapusa - I	13/08/2014	17.01		Continued.	Over Voltage.
IntraState					
Voltage Level : 500KV			Outage Type PLANNED OUTAGE		
HVDC POLE I -CHDPR	11/08/2014	13.09		Continued.	A.M.work(For 5 Days)
Voltage Level : 400KV			Outage Type PLANNED OUTAGE		
400/220KV 500MVA ICT-II at Warora	09/07/2014	14.35		Continued.	Attending CTR Fire System Nitrogen Leakage.
400/220 KV 105 MVA Spare ICT Unit @ Bhusawal - II	13/08/2014	12.10	13/08/2014	19.59	Commissioning Nitrogen Fire Fighting System.
Voltage Level : 220KV			Outage Type PLANNED OUTAGE		
Matardevi(Ghugus) - Lloyds Metals	13/08/2014	10.31	13/08/2014	18.47	Testing of Distance Protection Relay & IR Value Measurment & R M Work.
Chikhali - Jalna - II	13/08/2014	10.35	13/08/2014	18.30	Rectification Work Such as Jumper Tightening,Fixing of Nut Bolts to Jumper etc.
Chikhali - Jalna - I	13/08/2014	10.40	13/08/2014	18.31	Rectification Work Such as Jumper Tightening,Fixing of Nut Bolts to Jumper etc.
Kalmeshwar-Ambazari	13/08/2014	12.11	13/08/2014	13.57	Capacitance & Tan Delta Measurment of CC
Karad-Wathar	13/08/2014	12.17	13/08/2014	14.35	Line Maint.Work.
Chandrapur MIDC-Gadhchandur-Matardevi	13/08/2014	13.32	13/08/2014	17.27	Testing of Distance Protection Relay,Breaker Timing & IR Value Measurment.
Aurangabad - Babaleshwar	13/08/2014	16.55	13/08/2014	18.04	Repl of R Ph Wave Trap Jumper.
Lamboti-Solapur-I	13/08/2014	17.14	13/08/2014	19.14	Replacement of B Ph Line Side Jumper.
Voltage Level : 400KV			Outage Type FORCED OUTAGE		
400/220 KV 600 MVA ICT-II @ Kalwa	12/08/2014	22.03	13/08/2014	09.32	Hot Spot(Repl.of Conductor)
Voltage Level : 220KV			Outage Type FORCED OUTAGE		
Main Bus I @ Kalwa I	12/08/2014	22.20	13/08/2014	09.27	Hot Spot(Repl.of Conductor)
Nasik - Airoli - Knowledge Park	13/08/2014	12.20	13/08/2014	14.43	Hot Spot on R Phase WT.
Voltage Level : 400KV			Outage Type HAND TRIPPED		
Bhusawal- Aurangabad	12/08/2014	19.16	13/08/2014	10.35	Over Voltage
Karad-Kolhapur-II	13/08/2014	16.46	14/08/2014	06.32	Over Voltage.
Bhusawal- Aurangabad	13/08/2014	18.15		Continued.	Over Voltage.
Karad-Jaigad I	13/08/2014	19.05		Continued.	Over Voltage.
Lonikand- Koyna Stage IV	14/08/2014	03.09	14/08/2014	06.48	Over Voltage.
Voltage Level : 220KV			Outage Type HAND TRIPPED		
Theur - Magarpatta	13/08/2014	05.27		Continued.	To Control Loading on Theur-Lonikand.

State Load Dispatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 13/Aug/2014

Position as on 6.30 Hrs of 14/Aug/2014

Name of Line	Tripped Date	Tripped Time	Synchronise d Date	Synchronise d Time	Reason of Outage
Lonikand-Theur - I	13/08/2014	05.30	13/08/2014	08.32	R Ph Jumper of W/T Opend.
Kalwa-Mulund-I	14/08/2014	01.15	14/08/2014	01.29	Shifting of Bus B to Bus A.
Kalwa - Borivali	14/08/2014	01.40	14/08/2014	01.57	Shifting of Bus B to Bus A.
Kalwa - Khargar	14/08/2014	02.06	14/08/2014	04.40	Shifting of Bus B to Bus A.
Voltage Level : 400KV			Outage Type TRIPPED		
Nagothane-Dabhol-I	10/08/2014	06.02		Continued.	over voltage
New Koyna - Dabhol - I	10/08/2014	13.01		Continued.	Over Voltage
Karad-Jaigad II	11/08/2014	23.17	13/08/2014	07.49	Distance Protection,(RFC 17.50Hrs/12-8-2014)
New Koyna - Dabhol - I	13/08/2014	13.01		Continued.	Over Voltage.
Voltage Level : 220KV			Outage Type TRIPPED		
Pusad - Ghatodi	12/06/2014	17.40		Continued.	At loc.no 27,28 D/C tower 220KV Nanded-Ghatodi & 220KV Pusad-Ghatodi Collapsed(Line taken in service Bypassing Ghatodi LILO at 18.58/13-6-2014)
Nanded - Ghatodi	12/06/2014	17.40		Continued.	Dist.Prot,optd.Z-I at loc.no 27,28 D/C tower 220KV Nanded-Ghatodi & 220KV Pusad-Ghatodi Collapsed(Line taken in service Bypassing Ghatodi LILO at 18.58/13-6-2014)
Aurangabad-Jalna-II	02/07/2014	14.33		Continued.	Heavy Rain @ Aurangabad S/S load Trimming Schem Operated,Ckt Charged from Chikhli End @ 15.15 Hrs DT 2.7.14.
220/100 KV,200MVA ICT - I at Padgha	18/07/2014	02.37		Continued.	Diff.Prot
Gangapur-Valve	23/07/2014	03.16	13/08/2014	17.44	Dist.Prot.Tower Collapse.

State Load Dispatch Center,Airoli (MSETCL)

Details of On Line Capacity for 14/Aug/2014

Generating unit	Derated Capacity (MW)	OLC (MW)
Koradi		
Unit 5	200	0
Unit 6	210	125
Unit 7	210	95
	620	220
Bhusawal		
Unit 2	210	107
Unit 3	210	107
Unit 4	500	0
Unit 5	500	376
	1420	590
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	135
Unit 2	210	150
Unit 3	210	140
Unit 4	210	190
Unit 5	500	450
Unit 6	500	380
Unit 7	500	350
	2340	1795
Paras		
Unit 3	250	0
Unit 4	250	206
	500	206
Khaparkheda		
Unit 1	210	170
Unit 2	210	170
Unit 3	210	170
Unit 4	210	170
Unit 5	500	300
	1340	980
Nasik		
Unit 3	210	0
Unit 4	210	198
Unit 5	210	190
	630	388
Uran		
All Units	852	280
	852	280
PENCH (MS)		
Pench (MS)	53	
	53	
Koyna		
Stage 1-2	600	600
Stage 4	1000	250
Stage 3	320	320
	1920	1170
Hydro		
KDPH	40	0
VTRNA	60	61

Generating unit	Derated Capacity (MW)	OLC (MW)
TILLARI	60	61
BHTGR/VEER	21	5
BHIRA T.R.	80	40
RNGR+BHTSA	20	0
BHANDARDRA	45	10
ELDARY	23	0
SMLHY PTN	12	20
GHATGHAR	250	0
	611	197
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	825
WARDHA	405	215
Adani	2640	1490
Other CPPs	300	745
	4545	3275
SOLAR		
Total	0	
	0	
Tata		
Trombay 4	150	0
Trombay 5	500	500
Trombay 6	500	0
Trombay 7A	120	120
Trombay 7B	60	60
Trombay 8	250	0
TATA Hydro	444	447
	2024	1127
REL		
1&2	500	500
	500	500
Cent Sect		
Share	3455	5311
	3455	5311

	21940	7 of 7	16039
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