



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

State Load Dispatch Center, Airoli

Daily system Report

for

09/Dec/2013

State Load Dispatch Center, Airoli (MSETCL)
Daily system Report for 09/Dec/2013 MONDAY

I GENERATION (MUs)			II EXCHANGES (MUs)		
A) MSGENCO	Daily	Monthly	E) Central Sector	Daily	Monthly
1) Thermal	102.366	911.292	1) Gujrat	13.870	129.168
2) Hydro	12.816	151.677	2) Madhya Pradesh	19.514	180.833
3) Gas	7.523	65.105	3) Chattisgarh	10.760	95.090
Total MSGENCO	122.705	1128.074	4) Maharashtra	81.561	733.052
B) 1) JSW JAIGAD	19.011	174.544	5) Goa	-5.615	-49.007
2) WPCL	7.639	67.735	6) TAPS 1&2 Injection	3.847	34.550
3) ADANI	27.410	256.390	7) RGPPL Injection	6.670	18.748
4) Other CPP / IPP	8.388	68.037	8) Pench (Excess)	-0.357	-3.621
5) Wind Generation	3.196	38.867	# Total Cent. Sector	130.250	1138.813
6) PENCH (MS)	0.357	3.621	F) Other Exchanges		
7) SOLAR	1.030	6.614	1) With TPCL (Excess)	-16.722	-156.454
C) 1) TPCL Thermal	18.258	172.819	G) Bilateral Power *		
2) TPCL Hydro	4.703	42.884	1) MSEDCL Bilateral	29.593	265.014
TOTAL TPCL	22.961	215.703	Include PX	0.000	9.203
3) REL Thermal	11.041	108.181	2) MUMBAI Bilateral	18.518	157.643
D) STATE			Include PX	4.242	34.301
1) Thermal (A1+C1+C3)	131.665	1192.292	3) MUMBAI Schedule	18.518	157.643
2) Hydro (A2+B6+C2)	17.876	198.182	H) ENERGY CATERED (MUs)		
3) Gas (A3)	7.523	65.105	1) MSEDCL	303.264	2726.241
4) Wind (B5)	3.196	38.867	2) TPCL	33.021	309.288
5) CPP/IPP (B1+B2+B3+B4)	62.448	337.726	3) REL	17.704	171.048
6) SOLAR (B7)	1.030	6.614	TOTAL STATE	353.989	3206.577
TOTAL STATE	223.738	1838.786			

DETAILS OF MAHARASHTRA STATE PEAK DEMAND(MW)

PARTICULARS	A. Morning Peak at 12 Hrs	B. Evening Peak at 17 Hrs	C. Night Minimum at 2 Hrs
MSGENCO Thermal	4419	4534	3638
MSGENCO Hydro	1353	1274	132
MSGENCO Gas	306	298	328
MSGENCO Total Generation	6078	6106	4098
Central Sector Receipt	5850	5328	4788
WIND	102	97	249
CPP / IPP	2746	2767	2407
SOLAR	148	42	0
Exchange with Mumbai	-848	-784	-536
MSEDCL DEMAND MET	14076	13603	11006
Load Shedding	779	556	17
MSEDCL DEMAND	14855	14159	11023
TPCL GENERATION	1226	1214	611
R-INFRA GENERATION	524	524	382
TPCL+R-INFRA DEMAND	2598	2522	1529
STATE DEMAND MET	16674	16125	12535
STATE DEMAND	17453	16681	12552
Frequency (Hz)	49.97	49.85	50.10

FREQUENCY PARTICULARS

MAXIMUM FREQ.	MINIMUM FREQ.	AVERAGE FREQ.	FREQ. BELOW 49.2 Hz
50.43 Hz at 03.58 Hrs	49.52 Hz at 17.46 Hrs	50.01	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 09/Dec/2013

Generating unit	Generation				OLC (MW)	Generating unit	Generation				OLC (MW)	
	Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)			Daily (Mus)	Monthly (Mus)	Max (MW)	Min (MW)		
Koradi						Total	8.30	116.59			1170	
Unit 5	2.96	19.88	140	105	120	Hydro						
Unit 6	3.19	30.12	145	122	120	KDPH	0.46	4.86	19	19	19	
Unit 7	3.35	34.18	154	125	135	VTRNA	0.00	0.00	0	0	0	
Total	9.50	84.19			375	TILLARI	0.00	0.00	0	0	0	
Bhusawal						BHTGR/VEER	0.07	0.73	4	2	4	
Unit 2	3.42	32.80	160	130	150	BHIRA T.R.	0.18	2.71	41	0	40	
Unit 3	3.42	31.90	150	130	150	RNGR+BHTSA	0.38	3.44	16	15	15	
Unit 4	0.03	0.03	30	0	0	BHANDARDRA	0.00	0.00	0	0	0	
Unit 5	3.96	10.46	174	164		ELDARY	0.00	0.00	0	0	0	
Total	10.83	75.20			300	SMLHY_PTN	1.20	8.90	51	50	10	
Parli						GHATGHAR	2.22	14.45	240	0	0	
Unit 3	0.00	0.00	0	0	0	Total	4.52	35.09			88	
Unit 4	3.76	35.07	169	140	170	Wind						
Unit 5	3.61	21.01	175	132	170	MalharPeth	0.25	2.34				
Unit 6	4.78	39.30	225	162	220	Vankuswadi	0.58	4.64				
Unit 7	4.54	37.76	226	160	220	ATIT	0.05	0.99				
Total	16.70	133.14			780	Kale	0.17	1.81				
Chandrapur						Satara	1.47	14.46				
Unit 1	3.24	28.05	143	122	135	Shirala	0.16	1.73				
Unit 2	3.20	28.10	139	125	135	K Mahankal	0.01	0.80				
Unit 3	4.06	36.41	183	142	160	Supa	0.08	0.52				
Unit 4	4.18	39.25	187	163	170	Vita	0.32	5.18				
Unit 5	0.00	0.00	0	0	0	Dondaicha	0.00	3.63				
Unit 6	1.76	59.78	295	0	0	Sakri	0.00	0.44				
Unit 7	8.86	82.49	404	322	360	Nandurbar	0.04	0.26				
Total	25.31	274.09			960	Khandke	0.05	1.08				
Paras						Khaparale	0.03	0.99				
Unit 3	4.66	42.71	216	180	225	Total	3.20	38.87				
Unit 4	4.94	46.67	226	186	225	CPP						
Total	9.60	89.39			450	JSW_JAIGAD	19.01	174.54	896	704	821	
Khaparkheda						WARDHA	7.64	67.74	337	301	330	
Unit 1	3.01	7.43	160	100	180	Adani	27.41	256.39	1230	860	1234	
Unit 2	3.02	26.85	150	110	160	Other_CPPs	8.39	68.04				
Unit 3	0.00	21.20	0	0	0	Total	62.45	566.71			2385	
Unit 4	3.69	36.11	204	0	170	SOLAR						
Unit 5	9.31	70.36	450	282	450	Total	1.03	6.61				
Total	19.03	161.95			960	Total	1.03	6.61				
Nasik						Tata						
Unit 3	2.88	26.93	185	0	0	Trombay 4	0.00	0.00	0	0	0	
Unit 4	4.25	38.31	187	165	190	Trombay 5	10.16	97.64	501	317	500	
Unit 5	4.27	28.10	186	165	190	Trombay 6	0.00	0.00	0	0	0	
Total	11.40	93.34			380	Trombay 7A	1.45	12.91	62	59	120	
Uran						Trombay 7B	1.15	10.38	49	47	60	
All Units	7.52	65.10	328	297	300	Trombay 8	5.50	51.89	253	184	250	
Total	7.52	65.10			300	TATA Hydro	4.70	42.88	413	0	447	
PENCH (MS)						Total	22.96	215.70			1377	
Pench (MS)	0.36	3.62	53	0		REL						
Total	0.36	3.62				1&2	11.04	108.18	526	381	500	
Koyna						Total	11.04	108.18			500	
Stage 1-2	3.56	39.02	515	40	600	Cent Sect						
Stage 4	3.38	57.17	693	0	250	Share					5459	
Stage 3	1.36	20.41	238	0	320	Total					5459	
Koyna 12&4 Total	6.94	96.18			850	MS PG CL						
							Thermal	102.37	911.29			4205
							Thml+Gas	109.89	976.40			4505
							Hydro	12.82	151.68			1258
							Total	122.70	1128.07			5763
							State Total	223.74	1838.79			15484

State Load Dispatch Center, Airoli (MSETCL)

Hourly Load Data As on 09/Dec/2013

TIME SR. NO.	MSPGCL GEN.			TOTAL	WIND	CPP / IPP	SOLAR	CS SHARE	CS RECPT	Mum.S CH.	Mum. NET EXCH.	MSEDCL DEM. MET	LOAD SHEDDING	MSEDCL DEM. WITH LS	TPCL + R -INFRA DEMAND	STATE DEMAND	FREQ. (Hz)
	THM	HY	GAS														
1	3680	127	320	4127	216	2404	0	4625	4926	-751	-679	10994	8	11002	1671	12673	50.09
2	3638	132	328	4098	249	2407	0	4771	4788	-634	-536	11006	17	11023	1529	12552	50.10
3	3776	132	321	4229	251	2406	0	4703	4733	-566	-466	11153	30	11183	1460	12643	50.13
4	3769	132	321	4222	223	2402	0	4672	4732	-533	-414	11165	30	11195	1409	12604	50.25
5	3806	133	323	4262	181	2399	0	4756	4934	-521	-414	11362	37	11399	1410	12809	50.11
6	3843	134	325	4302	170	2406	0	5042	5454	-540	-445	11887	136	12023	1512	13535	49.95
7	4047	134	324	4505	160	2568	0	5007	5463	-553	-487	12209	418	12627	1683	14310	49.96
8	4252	204	325	4781	148	2646	22	5053	5577	-499	-420	12754	873	13627	1803	15430	49.86
9	4293	383	322	4998	123	2673	61	5164	5868	-497	-455	13268	890	14158	2059	16217	49.95
10	4394	1033	312	5739	102	2755	121	5273	6016	-693	-567	14166	675	14841	2368	17209	49.95
11	4449	1312	311	6072	108	2783	105	5487	5932	-928	-826	14174	644	14818	2568	17386	50.00
12	4419	1353	306	6078	102	2746	148	5557	5850	-969	-848	14076	779	14855	2598	17453	49.97
13	4429	1126	306	5861	83	2753	151	5567	6093	-991	-848	14093	918	15011	2590	17601	49.95
14	4474	976	303	5753	78	2762	187	5470	5839	-884	-766	13853	804	14657	2505	17162	50.07
15	4468	1357	302	6127	77	2743	116	5352	5689	-886	-744	14008	664	14672	2524	17196	49.90
16	4477	1774	297	6548	97	2741	73	5195	5470	-884	-758	14195	585	14780	2519	17299	49.93
17	4534	1274	298	6106	97	2767	42	5183	5328	-869	-784	13603	556	14159	2522	16681	49.85
18	4546	223	300	5069	100	2762	4	5074	5045	-866	-780	12253	682	12935	2508	15443	49.81
19	4565	141	307	5013	101	2762	0	5222	5655	-989	-878	12706	259	12965	2584	15549	49.88
20	4563	168	308	5039	103	2698	0	5370	5705	-964	-896	12702	275	12977	2528	15505	50.06
21	4608	174	310	5092	77	2668	0	5243	5544	-924	-895	12538	148	12686	2384	15070	50.06
22	4508	128	318	4954	91	2631	0	5175	5278	-902	-1016	11963	75	12038	2170	14208	50.16
23	4430	138	318	4886	121	2328	0	5047	5203	-890	-973	11590	29	11619	1996	13615	50.06
24	4397	128	318	4843	137	2238	0	4870	5130	-784	-827	11546	31	11577	1824	13401	50.20
MUs	102.36	12.82	7.52	122.70	3.20	62.45	1.03	122.88	130.25	-18.52	-16.72	303.26	9.56	312.83	50.72	363.55	50.01

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 09/Dec/2013

Position as on 6.30 Hrs of 10/Dec/2013

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	
Chandrapur Unit 5	500	14/07/2013	00.01		Continued.	Condenser replacement work.	
Cent_Sect Tarapur 2	160	24/11/2013	20.42		Continued.	Maint.work.	13/12/2013
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	
Tata Trombay 6	500	19/07/2013	23.54		Continued.	Economic shut down.	
Dabhol 2B	230	08/08/2013	15.03		Continued.	Gas Shortage	
CPP VIPL	300	02/10/2013	00.45		Continued.	Turbine bearing vibration high.	
CPP JSW (J) U2	300	21/10/2013	00.00		Continued.	Lack of Shedule.	
CPP WPCL U-3	135	10/11/2013	6.10		Continued.	I D Fan Problem	
Bhusawal Unit 4	500	12/11/2013	21.13	09/12/2013	23:20	Tripped,As GT4 Burst.	
CPP INDIABULLS	270	25/11/2013	00:00		Continued.	Non-availability of coal	
Uran Unit 5	108	25/11/2013	21.33		Continued.	Gas Shortage.	
CPP Adani U-3	660	01/12/2013	23.49		Continued.	TO ATTEND OIL LEAKAGE BEARING NO 7	
Uran Unit A0	120	04/12/2013	13.26		Continued.	GAS RESTRICTION	
Uran Unit 6	108	04/12/2013	13.26		Continued.	Gas Restriction	
Nasik Unit 3	210	06/12/2013	17.35	09/12/2013	05.35	BLR T/L.	
Khaparkheda Unit 3	210	07/12/2013	02.14		Continued.	Furnace Pressure high.	
Chandrapur Unit 6	500	07/12/2013	04.34	09/12/2013	14.53	BLR T/L.	
Khaparkheda Unit 4	210	08/12/2013	23.34	09/12/2013	1.58	M.S.TEMPRETURE LOW	
Chandrapur Unit 6	500	09/12/2013	14.54	09/12/2013	15.51	High Drum Level.	

State Load Dispatch Center,Airoli (MSETCL)
Details of Line outages/Trippings for 09/Dec/2013

Position as on 6.30 Hrs of 10/Dec/2013

Name of Line	Tripped Date	Tripped Time	Synchronise d Date	Synchronise d Time	Reason of Outage
InterState					
Voltage Level : 220KV			Outage Type PLANNED OUTAGE		
Borivali -Tarapur	07/12/2013	10.15		Continued.	MUMBAI STRENGTHENING WORK
Tillary-Amona	09/12/2013	09.54	09/12/2013	20.07	Bus Outage @ Tillary.
Voltage Level : 400KV			Outage Type HAND TRIPPED		
Seoni-Wardha-II 765KV.	02/12/2013	22.05		Continued.	OVER VOLTAGE
Kolhapur-Solapur(PGCIL)-I	03/12/2013	16:42		Continued.	Over Voltage.
A'bad-Talegaon PG-1	07/12/2013	10.12		Continued.	line readyfor charging
Dhule-Sar'Sarovar - II	08/12/2013	1.47	09/12/2013	10.04	over voltage
Kolhapur - Mapusa - I	08/12/2013	13.09	09/12/2013	09.36	OVER VOLTAGE
Solapur - Solapur (PG)	08/12/2013	17.06	09/12/2013	06.39	over voltage
Kolhapur - Mapusa - I	09/12/2013	16.28		Continued.	Over Voltage.
Dhule-Sar'Sarovar - I	10/12/2013	02.08		Continued.	Over Voltage.
Voltage Level : 220KV			Outage Type HAND TRIPPED		
Wardha - Deoli (PGCIL)	05/12/2013	19.30		Continued.	To control L/L due to 220KV Wardha-Warora Outage.
Voltage Level : 400KV			Outage Type TRIPPED		
Karad - Solapur (PGCIL)	08/12/2013	23.03		Continued.	TRIPPED ON OVER VOLTAGE
Voltage Level : 220KV			Outage Type TRIPPED		
Talange - Chikodi	09/12/2013	20.55		Continued.	Distance Protection.
IntraState					
Voltage Level : 400KV			Outage Type PLANNED OUTAGE		
400/132 KV 200 MVA ICT - II @ Khadka	11/11/2013	09.07		Continued.	Replacement of Old 200 MVA ICT Under LES Upto 04/01/2014.
400/220KV 315 MVA ICT-I @ Padgha	26/11/2013	10.25		Continued.	Taken on TBC LV Side.(15 Days)
400/220KV 315MVA ICT- I @ Chandrapur	04/12/2013	11.20		Continued.	Taken on TBC LV Side for Breaker Work Upto 9.12.13.
400/220/33 KV 315 MVA ICT - I @ Akola	09/12/2013	09.55	09/12/2013	19.14	Q.M.Work.
New Koyna - Karad - I	09/12/2013	11.12	09/12/2013	19.10	Taken on TBC For Attending Oil Pressure Problem in CB.
Voltage Level : 220KV			Outage Type PLANNED OUTAGE		
Chalishaon-Khadka II	07/10/2013	11.37		Continued.	Modification of existing Khadka-Chalishaon line.
Bus Sectioniser @ Apta	04/12/2013	09.57		Continued.	Replacement of Isolator & 6 No's of CT's Upto 8.12.13.
Pusad-Nanded	05/12/2013	06.03		Continued.	220KV Ghatodi S/S LILO Work.
Khaperkheda - Wardha.	06/12/2013	09.25		Continued.	Raising height of tower for VIPL line crossing.
Purti - Bhugaon	06/12/2013	09.28		Continued.	Raising height of tower for VIPL line crossing.
Ghodbandar - Bhoisor (MSETCL)	07/12/2013	10.38		Continued.	MUMBAI STRENGTENING WORK
Pedambe -Nerale	09/12/2013	08.15	09/12/2013	18.20	Insulator Replacement Work.
Tillary - Halkarni	09/12/2013	09.40	09/12/2013	18.08	Bus Outage.
KDPH-Wankuswadi	09/12/2013	09.45	09/12/2013	17.00	Replacement of Partially Damaged Conductor of R Ph Wave Trap.
Nivali-N'koyna	09/12/2013	09.52	09/12/2013	16.50	R.M.Work.

State Load Dispatch Center, Airoli (MSETCL)
Details of Line outages/Trippings for 09/Dec/2013

Position as on 6.30 Hrs of 10/Dec/2013

Name of Line	Tripped Date	Tripped Time	Synchronise d Date	Synchronise d Time	Reason of Outage
Main Bus @ Tillary.	09/12/2013	10.10	09/12/2013	18.08	Oil Tpo Up in CT & PT.
Karad-Wathar	09/12/2013	14.12	09/12/2013	16.35	Q.M.Work @ Wathar End.
Voltage Level : 400KV		Outage Type FORCED OUTAGE			
Dabhol - New Koyna - I	30/11/2013	21.54		Continued.	H/T TO CONTROL OVER VOLTAGE
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
Deepnagar-Waluj I	03/12/2013	12:08		Continued.	To attend Y ph ISO. at Waluj end.
Bhusawal- Aurangabad	06/12/2013	11.07	09/12/2013	09.09	Over Voltage.
Karad - Kolhapur - II	08/12/2013	16.36		Continued.	OVER VOLTAGE
Lonikand- Koyna Stage IV	08/12/2013	21.00	09/12/2013	09.23	OVER VOLTAGE
Bhusawal- Aurangabad	09/12/2013	17.10		Continued.	Over Voltage.
Karad-Jaigad I	09/12/2013	21.28		Continued.	Over Voltage.
Lonikand- Koyna Stage IV	09/12/2013	23.09		Continued.	Over Voltage.
Voltage Level : 220KV		Outage Type HAND TRIPPED			
Chikhali - Jalna - II	17/11/2013	18.00		Continued.	AFTER TAKEN IN/S,A'BAD ICT 3
Chikhali - Jalna - I	17/11/2013	18.00		Continued.	AFTER TAKEN IN/S,A'BAD ICT 3
Aurangabad - Babaleshwar	30/11/2013	9.24		Continued.	TO CONTROL A'BAD ICT LOADING
Voltage Level : 400KV		Outage Type TRIPPED			
400/ 21.75 KV 600 MVA GT IV @ Deepnagar	12/11/2013	21.00	09/12/2013	23:20	GT4 Caught Fire.
Dabhol - Nagothane - I	24/11/2013	16.10		Continued.	Over Voltage.
Karad-Jaigad I	08/12/2013	17.04	09/12/2013	09.15	OVER VOLTAGE
Karad - Kolhapur - I	08/12/2013	4.03		Continued.	over voltage
Voltage Level : 220KV		Outage Type TRIPPED			
220/100 KV,200MVA ICT - I at Padgha	07/06/2013	17.48		Continued.	Diff.Protection
Talandge - Sawantwadi - II.	29/10/2013	17.30		Continued.	Dist Prot.
Voltage Level : 132KV		Outage Type TRIPPED			
Paras-Akot	09/12/2013	09.06	09/12/2013	09.25	Distance Protection Operated Z-I R Ph.

State Load Dispatch Center, Airoli (MSETCL)

Details of On Line Capacity for 10/Dec/2013

Generating unit	Derated Capacity (MW)	OLC (MW)	Generating unit	Derated Capacity (MW)	OLC (MW)
Koradi			TILLARI	60	0
Unit 5	200	100	BHTGR/VEER	21	7
Unit 6	210	120	BHIRA T.R.	80	40
Unit 7	210	120	RNGR+BHTSA	20	7
	620	340	BHANDARDRA	45	7
Bhusawal			ELDARY	23	
Unit 2	210	150	SMLHY_PTN	12	8
Unit 3	210	150	GHATGHAR	250	
Unit 4	500	110		611	88
Unit 5	500	0	Wind		
	1420	410	MalharPeth	0	
Parli			Vankuswadi	0	
Unit 3	210	0	ATIT	0	
Unit 4	210	170	Kale	0	
Unit 5	210	170	Satara	0	
Unit 6	250	220	Shirala	0	
Unit 7	250	220	K Mahankal	0	
	1130	780	Supa	0	
Chandrapur			Vita	0	
Unit 1	210	125	Dondaicha	0	
Unit 2	210	120	Sakri	0	
Unit 3	210	170	Nandurbar	0	
Unit 4	210	200	Khandke	0	
Unit 5	500	0	Khaparale	0	
Unit 6	500	380		0	
Unit 7	500	380	CPP		
	2340	1375	JSW_JAIGAD	1200	810
Paras			WARDHA	405	330
Unit 3	250	200	Adani	1980	1234
Unit 4	250	200	Other_CPPs	300	
	500	400		3885	2374
Khaparkheda			SOLAR		
Unit 1	210	180	Total	0	
Unit 2	210	160		0	
Unit 3	210	0	Tata		
Unit 4	210	190	Trombay 4	150	0
Unit 5	500	450	Trombay 5	500	500
	1340	980	Trombay 6	500	0
Nasik			Trombay 7A	120	120
Unit 3	210	190	Trombay 7B	60	60
Unit 4	210	190	Trombay 8	250	250
Unit 5	210	190	TATA Hydro	444	447
	630	570		2024	1377
Uran			REL		
All Units	852	300	1&2	500	500
	852	300		500	500
PENCH (MS)			Cent Sect		
Pench (MS)	53		Share	3455	5342
	53			3455	5342
Koyna					
Stage 1-2	600	600			
Stage 4	1000	250			
Stage 3	320	320			
	1920	1170			
Hydro					
KDPH	40	19			
VTRNA	60	0			