

MAHAGENCO YEAR WISE CAPACITY ADDITION PROGRAMME

LAST CAPACITY ADDITION UNITS

Sr. No	Power Station	Unit No.	Capacity	Date of Commissioning
1	Khaperkheda	3	210	31-05-2000
2	Khaperkheda	4	210	07-01-2001

No Capacity addition after Jan. 2001 up to May 2007 in MSEB/Mahagenco (6 years gap)

A. PROJECT COMPLETED (1500 MW)

Name of the Project	Unit No.	Zero Date	Scheduled Synchr.	Actual Synchr.,	Scheduled Full Load Opr.	Actual Full Load Opr	Delay in Months	Capacity of the unit (MW)	Cap. Addition during Year	Year
Parli TPS	Unit 6	14-Jan-04	14.07.06(30)	16.02.07(37)	14.09.06 (31)	19.05.07 (40)	9	250	500 MW	2007-08
Paras TPS	Unit 3	25-May-04	25.11.06 (30)	31.05.07 (36)	25.01.07 (31)	10.03.08 (45)	14	250		
Parli TPS	Unit 7	31-Aug-06	28.02.09 (30)	12.11.09 (39)	30.04.09 (31)	10.02.10 (42)	11	250	500 MW	2010-11
Paras TPS	Unit 4	31-Aug-06	30.04.09 (32)	30.11.09 (39)	30.06.09 (33)	27.03.10 (43)	10	250		
Khaperkheda	Unit 5	23-Jan-07	22.03.10 (38)	31.03.11(50)	22.05.10 (40)	05.08.11(55)	15	500	500 MW	2011-12
Total Capacity added								1500	1500 MW	

B. PROJECTS RECENTLY COMMISSIONED (1000MW)

Name of the Project	Unit No.	Zero Date	Scheduled Synchr.	Actual Synchr.,	Scheduled Full Load Opr.	Actual Full Load Opr.	Delay in Months	Capacity of the unit (MW)	Cap. Addition during Year	Year
Bhusawal TPS	Unit 4	23-Jan-07	22.05.10 (40)	11.05.11 (52)	22.08.10 (43)	07.03.12(62)	19	500	1000 MW	2011-12
Bhusawal TPS	Unit 5	23-Jan-07	22.08.10 (43)	03.03.12 (61)	22.11.10 (46)	30.03.12 (62)	18	500		
Capacity addition under commissioning								1000	1000 MW	

Capacity Addition 11th Five year Plan (2007 to 2012) - 2500 MW

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C. COAL BASED THERMAL PROJECTS UNDER EXECUTION (3230MW)

Name of the Project	Unit No.	Zero Date	Scheduled Synchr.	Actual/ Anticipated Synchro.,	Scheduled Full Load	Actual Full Load Achieved	Delay in Months	Capacity of the unit (MW)	Net Cap. Addition during Year	Net Cap. Addition during Year	Year
Parli TPS (Replacement)	Unit 8	20.01.09	19.11.11	21.07.13	19.12.11	20.08.13	20	250	210	1450 MW	2013-14
Chandrapur TPS	Unit 8	06.02.09	09.04.12	30.07.13	09.06.12	30.09.13	16	500	500		
Chandrapur TPS	Unit 9	09.02.09	09.07.12	09.10.13	09.09.12	30.01.14	17	500	500		
Koradi TPS (Replacement)	Unit 8	23.09.09	23.09.13	23.09.13	21.12.13	21.12.13	0	660	240		
Koradi TPS	Unit 9	23.09.09	23.03.14	23.03.14	21.06.14	21.06.14	0	660	660	1320 MW	2014-15
Koradi TPS	Unit 10	23.09.09	23.09.14	23.09.14	21.12.14	21.12.14	0	660	660		
Capacity addition under Execution								3230	2770	2770 MW	

D. PROJECTS UNDER PLANNING & FUTURE PROJECTS (8760 MW)

- Latur Project JV with M/s BHEL : Capacity : 1500 MW Commissioning year : 2015-16
- Bhusawal Unit 8 Under replacement : Capacity : 1x660 MW Commissioning Year : 2016-17
- Dhopawe Project Through PPP : Capacity : 3x 660 MW Commissioning year : 2016-17
- Dondaicha Project through PPP : Capacity : 5x660 MW Commissioning year : 2016-19
- Paras Unit 5 : Capacity : 1x250 MW Commissioning year : 2017-18
- Nashik Unit 6 under Replacement : Capacity : 1x660 MW Commissioning year : 2017-18

1220 MW Gas project at Uran turnkey contract Tender process decided to cancel due non availability of sufficient gas. Land, water and all required clearances are available.

COAL WASHERY & CFBC BOILER POWER PLANT AT CSTPS

- Board has accorded in-principle approval on 19.12.2011 for installation of 12.0 MTPA coal washery with 25 % reject coal in the premises of CSTPS and installation of Reject Coal Based CFBC Boiler.
- Washery is to be implemented on BoT basis and the CFBC plant will be implemented by MAHAGENCO itself to avoid any operation issues in operation of the reject coal base power plant and existing PF Boiler Power Plants.
- Cost of Washery: 500 Crs.
- Capacity of CFBC boiler is 500 MW with additional coal blending with washery reject
- Cost of CFBC : 6 Cr/ MW (3000 Crs)
- Land required for washery as well as CFBC plant: @ 40 H and Water requirement = 20 MMC/Yr
- Implementation Schedule of Coal Washery & CFBC Boiler plant:
 - Fixing of Consultancy for Coal Washery & CFBC Boiler plant : 4th July 2012
 - Detailed Project Report & EPC Specifications : Sept 2012
 - NIT for CFBC Boiler plant implementation contract award : Dec.2012
 - EOI & RFQ for Coal washery : July 2013
 - Government & Statutory clearances (Parallel activities) : Sept 2013
 - CFBC Boiler plant implementation contract award : Sept 2013
 - Commissioning of Washery :Sept 2015
 - Commissioning of CFBC Boiler plant : Mar. 2016

RPO OBLIGATIONS

FY	% RPO TARGET	MW CAPACITY REQUIRED TO MEET SOLAR MUS	FULFILLMENT OF RPO BY MAHAGENCO
2010-11	0.25	118	1MW Chandrapur
2011-12	0.25	129	4MW Chandrapur
2012-13	0.25	142	150 MW Sakri – Work is in Progress
2013-14	0.5	313	100 MW Kudgoan + 25 Gangakhed- Planned
2014-15	0.5	344	<i>Can be planned as per land availability</i>
2015-16	0.5	379	<i>Can be planned as per land availability</i>

MAHAGENCO SOLAR POWER ADDITION PROGRAMME

- **Mahagenco has already commissioned 5 MWp (1+2+2 MWp) Solar PV power plant in the premises of Chandrapur Super Thermal power station.**
- **Two Orders for 125 MWp (5x25 MWp) placed for development for Solar Photovoltaic Power Project at Shivajinagar, Dist- Dhule on 06.05.2011 & 21.05.2011.**
- **Order placed on 28.02.2012 on M/s Prithvi to development of 25 MW Crystalline solar plant at Sakri .**
- **Mahagenco further planned development of 500 MWp solar power projects at various locations in Maharashtra.**

MAHAGENCO SOLAR PROJECTS

A. Completed Projects				
Sr. No.	Particular	1 MWp Chandrapur Solar Projects	2 MWp Chandrapur Solar Projects	2 MWp Chandrapur Solar Projects
1	Location	CSTPS Chandrapur	CSTPS Chandrapur	CSTPS Chandrapur
2	Land in Hector	4.0	3.5	5.5
3	Capacity	1 MWp	2 MWp	2 MWp
4	Board approval	01.03.2008	29.01.2010	29.01.2010
5	GoM approval	18.07.2010	18.07.2010	18.07.2010
6	Technology used	Thin Film	Crystalline	Thin Film
7	Commissioning date	09.04.2010	18.10.2011	12.02.2012
8	Average Gen in KWh/day	4164.79	8079.45 (Design)	9315.07 (Design)
9	Payback period	10 years	10 years	10 years
10	Consultant & PMC	M/s Mitcon Pune	M/s Mitcon Pune	M/s Mitcon Pune
11	Project Execution agency	M/s Moser Baer India Ltd. New delhi	M/s Instant Energy Pvt. Ltd. Mumbai	M/s Megha Engineering & Infra. Ltd. Hyderabad
12	Contract value In Rs. Crs.	12.50	25.25	23.24
13	Total Project Cost in Rs. Crs.	13.00	50.00	
14	Finance from GoM in Rs. Crs (20 % of total cost)	2.60	5.00	5.00
15	Finance from Financial Institute in Rs. Crs (80 % of total cost)	10.40	20.00	20.00
16	Name of Financial Institute	PFC	ERADA	ERADA
17	Tariff in Rs/KWh	15	17.91	17.91
18	RPO Company	JBBS/MSEDCL	JNNSM/NVVN/MSEDCL	JNNSM/NVVN/MSEDCL

MAHAGENCO SOLAR PROJECTS

B. Projects Under Execution:				
Sr. No.	Particular	25 MWp Sakhari	50 MWp Sakhari	75 MWp Sakhari
1	Location	Shivajinagar, Tal-Sakhari (Dhule)	Shivajinagar, Tal-Sakhari (Dhule)	Shivajinagar, Tal-Sakhari (Dhule)
2	Land in Hector	39	140	120
3	Capacity	25 MWp	50 MWp	75 MWp
4	Board approval	27.07.2011	23.07.2010	23.07.2010
5	GoM approval	10.06.2011	10.06.2011	10.06.2011
6	Technology used	Crystalline	Thin Film	Crystalline
7	Commissioning date	31.12.2012	31.03.2012	31.03.2012
8	Average Gen in KWh/day (Mus/year)	113750 (41.525 MUS/Year)	227500 (83.05 MUS/Year)	341250 (124.575 MUS/Year)
9	Payback period	10 years	10 years	10 years
10	Consultant & PMC	TUV-SUD South Asia Pvt Ltd.	TUV-SUD South Asia Pvt Ltd.	TUV-SUD South Asia Pvt Ltd.
11	Project Execution agency	M/s Prithi Infirmination Solutions Ltd. Hyderabad	M/s Megha Engineering & Infra. Ltd Hyderabad	M/s Lanco Silar Energy Pvt. Ltd Gugaon, Haryana
12	Contract value In Rs. Crs.	210.00	548.00	884.00
13	Total Project Cost in Rs. Crs.	1924.00		
14	Finance from GoM in Rs. Crs (20 % of total cost)	384.80		
15	Finance from Financial Institute in Rs. Crs (80 % of total cost)	1539.20		
16	Name of Financial Institute	KFW Germany		
17	Tariff in Rs/KWh	15.61	15.61	15.61
18	RPO Company	MSEDCL/BEST	MSEDCL	MSEDCL