

## Status of Madhya Pradesh Power Sector:

**MP Generation Installed Capacity as on March, 2025: (MW) including allocated share in Joint & Central Sector Utilities:**

Sr. No.	Sector	Thermal	Nuclear	Hydro	Renewable	Total
1	State	*4570	-	1703.76	107.96	<b>6381.72</b>
2	Private	5744	-	-	8184.74	<b>13928.74</b>
3	Central	4818.59	491.98	1520	300	<b>7387.57</b>
	<b>Total</b>	<b>15132.59</b>	<b>491.98</b>	<b>3223.66</b>	<b>8592.70</b>	<b>27698.03</b>

Source - CEA Website

\*Units of STPS PH-2&3 de-commissioned

**Madhya Pradesh Renewable Generation Installed Capacity as on March, 2025:**

Sr. No.	Source of Energy	Capacity In (MW)
<b>1</b>	<b>Small Hydro</b>	<b>123.71</b>
<b>2</b>	<b>Wind Power</b>	<b>3195.15</b>
<b>3</b>	<b>Solar Power</b>	
i	Ground Mounted	4503.24
ii	PM Surya Ghar Yojana (Solar Rooftop)	513.10
iii	Off-grid Solar/KUSUM	102.04
	<b>Solar Power (Total)</b>	<b>5118.38</b>
<b>4</b>	<b>Bio-mass including Bagasse co-generation</b>	
i	Biomass power/Bagasse Cogeneration	92.50
ii	Biomass Cogeneration (Non-Bagasse)	14.85
iii	Waste to Energy	15.40
iv	Waste to Energy (Off-grid)	32.71
	<b>Bio Power (Total)</b>	<b>155.46</b>
	<b>Total RE (1+2+3+4)</b>	<b>8592.70</b>
<b>5</b>	<b>Large Hydro</b>	<b>2235.00</b>
	<b>Total RE</b>	<b>10827.70</b>

Source – MNRE Website

<b>MPPGCL Installed Capacity as on 31.03.2025</b>				
SL. No.	Power Station	Installed Capacity (MW)		M P Share (MW)
1	ATPS Chachai	(1 x 210 MW)	210	210
2	STPS, Sarni PH- IV	(2x250 MW)	500	500
3	SGTPS, Birsingpur PH-I	(2x210 MW)	420	420
4	SGTPS, Birsingpur PH-II	(2x210 MW)	420	420
5	SGTPS, Birsingpur PH-III	(1X500 MW)	500	500
6	Shri Singaji TPS PH-I	(2x600 MW)	1200	1200
7	Shri Singaji TPS PH II	(2x660 MW)	1320	1320

	<b>Total Thermal Generation</b>		<b>4570</b>	<b>4570</b>
1	Gandhi Sagar	(5x23 MW)	115	57.5
2	Pench, Totladoh	(2x80 MW)	160	107
3	Rani Awanti Bai Bargi	(2x45 MW)	90	90
4	Ban Sagar I Tons	(3x105 MW)	315	315
5	Birsinghpur	(1x20 MW)	20	20
6	Rajghat	(3x15 MW)	45	27
7	Ban Sagar II Silpara	(2x15 MW)	30	30
8	Bansagar -III Deolond	(3x20 MW)	60	60
9	Bansagar -IV Jhinna	(2x10 MW)	20	20
10	Madhikheda	(3x20 MW)	60	60
<b>Jawaharsagar &amp; RP sagar Stn. of Raj. (99MW &amp; 172 MW), 50% of 271MW</b>			----	<b>135.5</b>
<b>Total Hydro Power Station Generation</b>			<b>915</b>	<b>922</b>
1	Rataguradiya Solar Project		7	7
<b>Total</b>			<b>5492</b>	<b>5500</b>

Source - MPPGCL Website

#### IPPs Capacity:

Sr. No.	Power Station	Installed Capacity in MW	Power under Concessional PPA	Power under Long term PPA
1	MB Power	2x600 MW = 1200 MW	5%	30%
2	Jaypee Bina	2X250 MW = 500 MW	5%	65%
3	BLA Power	2X45 MW = 90 MW	5%	30%
4	Jaypee Nigrie	2X660 MW = 1320 MW	7.5%	30%
5	Lanco Amarkantak	1X300 MW = 300 MW	-	100%

#### PLF (%) Last 5 Years (as per MIS Report):

YEARS	ATPS	STPS IV	SGTPS PH-I&II	SGTPS PH-III	SSTPP PH-I	SSTPP PH II	MPPGCL as whole
2019-20	91.70%	64.36%	44.04%	76.37%	40.61%	37.66%	<b>46.80%</b>
2020-21	88.30%	85.04%	64.73%	87.97%	48.28	7.38%	<b>43.70%</b>
2021-22	82.00%	78.76%	54.25%	60.27%	44.86	40.67%	<b>44.40%</b>
2022-23	77.95%	90.59%	65.66%	89.67%	64.27	55.45%	<b>57.80%</b>
2023-24	97.81%	88.81%	69.08%	65.91%	67.11%	67.76%	<b>60.40%</b>

Source – MPPGCL's MIS Reports

**Rate in Rs. Per Unit for FY 2024-25:**

<b>Sr. No.</b>	<b>Power Station</b>	<b>Per Unit Fixed Cost</b>	<b>Per Unit Energy Charge</b>	<b>Total per Unit</b>
	<b>IPPs</b>			
1	MB Power	1.60	2.81	<b>4.42</b>
2	Jaypee Bina	1.75	3.23	<b>4.98</b>
3	Jaypee Nigrie	1.66	0.63	<b>2.29</b>
4	BLA Power	1.73	4.09	<b>5.82</b>
5	*Lanco	0.91	2.38	<b>3.28</b>
	<b>Weighted Average IPPs</b>	<b>1.59</b>	<b>2.02</b>	<b>3.62</b>
	<b>MPPGCL's Thermal</b>			
7	ATPS PH-III	1.11	2.09	<b>3.20</b>
8	STPS PH-IV	1.65	3.08	<b>4.73</b>
9	SGTPS PH-1&II	1.01	2.89	<b>3.90</b>
10	SGTPS Ext. Unit 5	0.85	2.61	<b>3.47</b>
11	SSTPP PH-I	1.42	3.32	<b>4.74</b>
12	SSTPP PH-II	1.41	3.07	<b>4.48</b>
	<b>Weighted Average MPPGCL's Thermal</b>	<b>1.30</b>	<b>3.01</b>	<b>4.31</b>
	<b>Weighted Average Thermal (IPP + MPPGCL)</b>	<b>1.42</b>	<b>2.58</b>	<b>4.00</b>
	<b>MPPGCL's Hydel</b>			
13	Gandhi Sagar, HPS	0.42	-	<b>0.42</b>
14	Pench, HPS	0.99	-	<b>0.99</b>
15	Rajghat, HPS	1.43	-	<b>1.43</b>
16	Bargi, HPS	0.36	-	<b>0.36</b>
17	Bansagar PH-1,2&3, HPS	1.17	-	<b>1.17</b>
18	Bansagar PH-4 (Jhinna), HPS	1.27	-	<b>1.27</b>
19	Birsinghpur, HPS	1.14	-	<b>1.14</b>
20	Madhikheda, HPS	2.79	-	<b>2.79</b>
	<b>Weighted Average Hydel</b>	<b>0.95</b>		<b>0.95</b>

Source – MYT Orders issued by the Commission

\*Cost for FY 2023-24

**MPPTCL's Transmission System (as per MYT P. No. 54/2024)**

S. No.	Voltage Level	As on 31.3.2024		
		EHV Lines	EHV Sub-Stations	
			Ckt. KMs	Number
1	400 KV	4089.24	14	11195
2	220 KV	15106.30	88	33110
3	132 KV	22868.75	314	35510
<b>TOTAL -</b>		<b>42064.29</b>	<b>416</b>	<b>79815</b>

**Transmission Losses in FY 2023-24:**

Details	FY 2022-23	FY 2023-24
Energy Received into System (MUs)	88850.33	95137.09
Energy sent Out of System (MUs)	86511.36	92655.63
Energy Lost (MUs)	2338.97	2481.46
<b>Transmission Loss (%)</b>	<b>2.63%</b>	<b>2.61%</b>
Target fixed by Hon'ble MPERC	<b>2.77%</b>	<b>2.76%</b>

**Other Details:**

- Intra-state Transmission Losses during FY 2023-24 is **2.61%**.
- Maximum Demand during FY 2024-25 was **18913 MW** on 20.12.2024.
- Present peak demand App. **14000 MW**