

Power Sector in India

Opportunities & Challenges in the State

Presented By

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Maharashtra Discom | State Demography & Challenges



3.08 Lakh square
km Area



35 Million
Consumers



4.5 Million
Agri Consumers

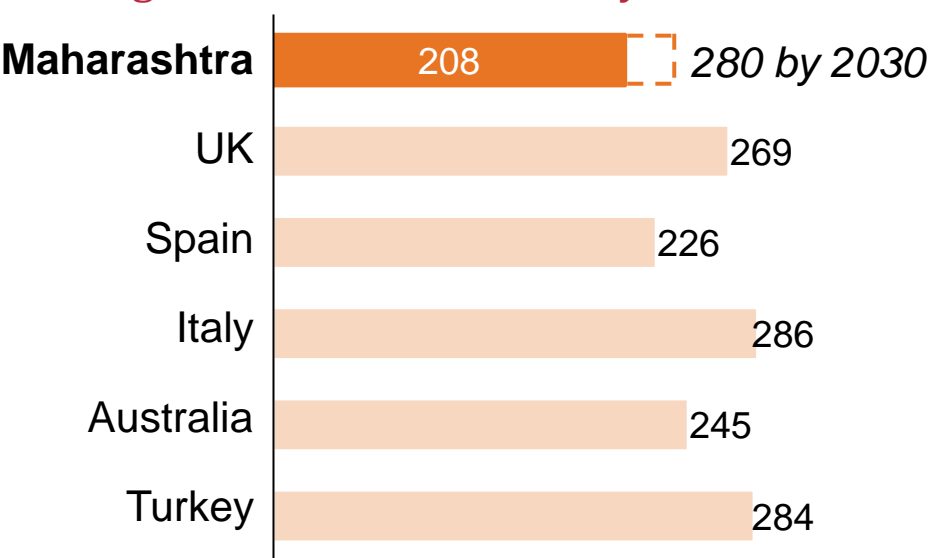


30.7 GW
Peak Demand



\$ 14.77 Billion
Annual Revenue

Aggregated Demand (GW) comparable to
global utilities at country scale



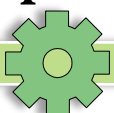
Key Challenges

- ❑ Escalating Power Purchase Cost
- ❑ 30% share of energy consumption by Agriculture sector
- ❑ Significant capital investment requirements for network expansion
- ❑ Rising debt levels & increasing subsidy liability
- ❑ Limitations within the transmission network

5 key aspects of Maharashtra's Energy Transition Vision



1 India's leader in
energy transition
planning and
implementation



2 Fastest
acceleration in
capacity between
2023-30



3 Innovation leader
in agri-solarization,
storage and green
hydrogen



4 Leader in facilitation
of INR **3 lakh Cr.+**
investment by
2030; 1/3rd by state
utilities



5 Turn-around/
transformation &
potential listing of
the distribution
company

Meticulous Planning | Driving Energy Transition

Driven by Maharashtra's **aspirations of economic progress**, long-term GDP considered to grow at **8%** for planning purposes. Consequently, **aggregate and peak** considered to grow at **6.3% & 6.5%** respectively.

Maharashtra's **aggregate demand** considered to grow up to **280K MUs** and **peak demand** up to **45GW** by 2030

- Flagship initiative, plans to solarize **16 GW** – 100% agricultural feeders.
- 1 GW Solar under LIS

- **8 Lakh off grid** solar pumps (highest in India) installed.
- **Guinness World Record** for the **highest installation** of off grid solar pumps, viz., **45,911** in a month.

- **10-12 GW** of RTS by 2030
- Empower consumers,
- Reduce grid dependency
- Support net metering and P2P

Resource Adequacy Plan

MSKVY 2.0

Energy Storage System

MTSKPY

Hybrid & RTC Projects

RTS & Behind the Meter Solar

- Strategically planned capacity addition by 2030
 - Solar **25.5 GW**
 - Thermal **2.2 GW**
 - Hybrid **4 GW**
 - FDRE **1.5 GW**;
 - Hydro **0.8 GW**

- To complement intermittent renewables, **33.5 GWh of storage capacity planned**
- Managing peak demand

- Promoting hybrid projects (**solar + wind + storage**) to deliver **RTC power**

Strategic Gain | Strong Performance & Value Creation



Curtailling Power Purchase Cost – Saving in Power Purchase cost is estimated to be ~\$9.3 billion over the next five years



Reduced ACoS – RE procurement (MUs) to increase from **13% to 52%**, resulting in reduced ACoS which in BAU would have increased by CAGR of **9.19%**.



Daytime electricity supply for farmers to boost their production & support state economy. Initiated process for a **separate AG Company**.

Socializing the reduction in Cost through rationalization of tariff

26% reduction in Residential (0-100) unit tariff, as against BAU increase at 6.81%

Rebate introduced for residential consumers @ 0.9 cents/unit (FY 2025-26) during solar hours

Industrial tariff reducing at 1.73% CAGR as against BAU increase at 8.04%.

Government subsidy burden reduced ~ \$ 7.42 billion over the next five years

Cross-subsidy burden removed from Industries

Solar hour tariff will be lower than open access tariff



Thank You