

The logo for the World Forum on Energy Regulation is located in the top right corner. It features a stylized globe with a blue square overlaid on it. The square contains the text "WORLD FORUM" in white, "ON" in a smaller font, and "ENERGY REGULATION" in white. A thin white line extends from the globe towards the center of the slide.

Presentation on Key Issues faced by Regulators in developing countries - India

Mr. S. B. Kulkarni, Member,
Maharashtra Electricity Regulatory Commission

- World Forum on Energy
Regulation IV
Athens, Greece
- October 18 - 21, 2009

Organisation of Electricity Sector in India



CERC

CGS, CTU & inter-State
tariff

SERCs

Affordability issues
concern SERCs

G, T, D &
Retail Supply

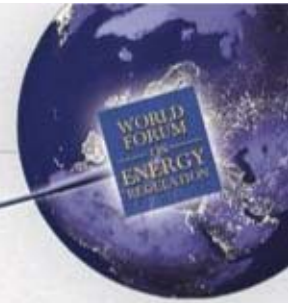
- **Installed generation capacity - India – 150,300 MW;**
capacity available to Maharashtra – 20800 MW
- **Peak shortage** - Estimated peak shortage of 18.1% and
estimated energy shortage of 8.8% % during FY 2009-10 in
India; Maharashtra has peak shortage of ~ 23%
- **Per capita consumption: India ~ 600 units; Maharashtra
~ 900 units**

Issues faced by residential & small consumers



1. Lack of basic distribution infrastructure
2. Quality of supply
3. Affordability of Tariff
4. Billing & Payment
5. Monopoly in electricity supply

Basic Distribution Infrastructure



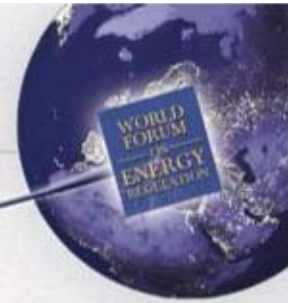
- Distribution network in rural areas is poor
 - Capital expenditure requirement to strengthen distribution network
 - Recovery of capital expenditure costs has tariff implications
- Difficulties in obtaining electricity supply
 - Because of poor distribution network
 - Simplification of application procedure

Quality of Supply



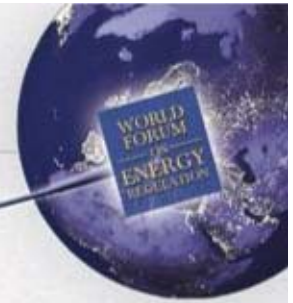
- Rural – urban divide in terms of quality of network as well as quality of supply
 - Assured hours of supply – load shedding is an issue, because of prevalent demand-supply gap in the State
 - Voltage – due to long LT lines, the voltage at consumer end is often not within standards
 - reliability of supply – weaker distribution network due to long LT lines leads to more interruptions

Affordability of tariff...1/2



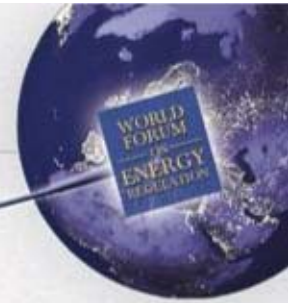
- Historically, there is a wide disparity between the tariffs charged to different consumer categories
- National Tariff Policy stipulates that tariffs should be within +/- 20% of average cost of supply by 2011
 - Steep increase will be required for agricultural and residential consumers to meet above objective
 - Agricultural consumers do not have the capacity to pay even the existing tariffs
 - Most of them are paying flat rate tariffs
 - State Government is subsidizing even these rates

Affordability of tariff...2/2



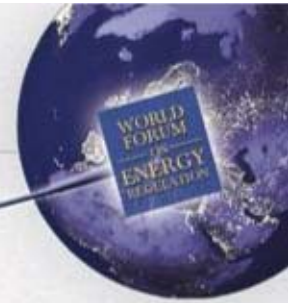
- Relationship between tariff and quality of supply needs to be examined
 - Agricultural consumers receive supply for only 8 to 10 hours daily
 - Due to long LT lines, supply voltage is also poor
 - Utility has no incentive to supply more to agricultural sector, since it is un-remunerative
 - Regulators have to play a key role here

Billing & Payment – 1/2



- MERC has attempted to simplify the electricity bill by making bills more informative
- MERC has directed Utilities to provide multiple channels for ease of bill payment, viz.,
 - Drop boxes
 - Through internet
 - Electronic clearing mechanism through banks
 - Collection centres
 - Pre-paid meters

Billing & Payment – 2/2



- For settling billing disputes, a three-level Grievance redressal mechanism has been established
 - Internal Grievance Redressal Forum
 - Consumer Grievance Redressal Forum – one in each Circle – 15 in the State
 - Ombudsman

Natural monopoly in electricity supply



- Distribution licensees (unified distribution and supply licence) have a natural monopoly
- In Maharashtra, due to historical reasons, there are parallel licensees only in Mumbai area
 - Tata Power & Reliance – in suburban Mumbai
 - Tata Power & BEST – in Greater Mumbai
- Introduction of competition is necessary to reduce tariffs and improve service quality
 - MERC has determined wheeling charges for use of wires of other licensees
 - Practical issues – meter ownership, past arrears, etc.

Way Forward



- Strengthen Grievance Redressal to improve supply quality and service
- Introduce competition in electricity supply
 - to reduce tariffs
 - to improve quality of supply
- Steps to attract more investment in the power sector
 - Generation, Transmission & Distribution



Thank You!

Mr. S B Kulkarni - World Forum on Energy Regulation IV - Athens, Greece - October 18-21, 2009