

# Role of Consumer Representatives in furthering Power sector reforms in Uttar Pradesh

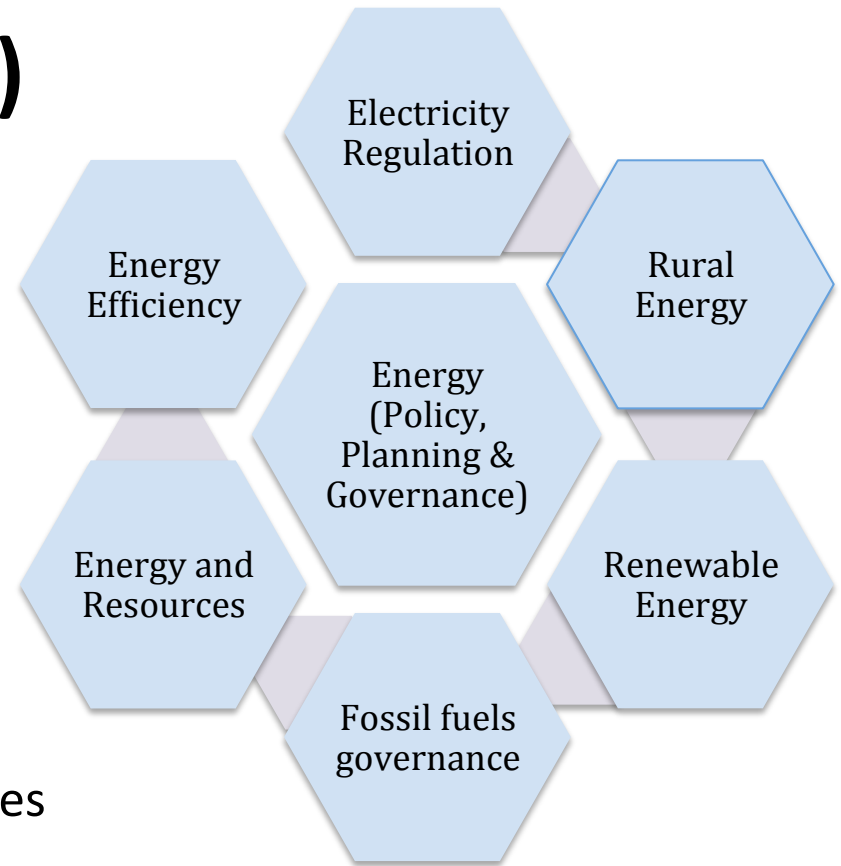
*Experience sharing based Maharashtra  
interventions*

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# Prayas (Energy Group)

- Not-for-profit orgn. founded in 1994
- **Analysis based policy advocacy for promoting public interest**
- **Focus on governance aspects & policy innovation**
- Extensive engagement with civil society groups, peoples' movements, consumers groups and media.
- Part of several high-level Govt. Committees & regulatory processes
  - **Regulatory commissions:** Consumer Representative before MERC and CERC, Advisory Committees of CERC and several SERCs
  - MoP and MNRE: RE Law, 12th Plan, Tariff Rationalisation Committee
  - NITI Aayog: 175 GW Expert Committee, Low Carbon Inclusive Growth, India Energy Security Scenarios, New Integrated Energy Policy; Indo-US energy dialogue



# Outline

- Motivation for initiating interventions in Mh power sector
- Experience sharing from few successful interventions
  - Distribution loss restatement
  - Load shedding protocol and Zero load-shedding model
- Major lessons
- Key recommendations

# Motivation

- Electricity - Key infrastructure sector
  - An important development input
  - Linkages with crucial sectors such as land, water, fuels, environment and finance
- Inefficiencies in planning and operation lead to
  - Significant losses, which ultimately impact consumers or tax payers.
  - Adverse social and environmental impacts and resource lock-ins
- Regulatory commissions provide a platform to scrutinize planning and financial and operational performance of electricity companies
- Motivation for PEG's engagement:
  - Reduce gross inefficiencies in sector planning and performance
  - Use and expand the available policy and regulatory spaces to demand greater transparency and accountability of the sector actors
  - Channelise civil society capacity to effectively use such spaces and to democratise the sector functioning

# Major issues taken up by Consumer Representatives and CSOs in Maharashtra since 1999

- Tariff
  - Financial and operational performance and planning related issues
  - Capital expenditure
  - Agriculture sales estimation and distribution losses
  - Metering, billing, collection efficiency, arrears, etc.
  - Tariff determination, fuel surcharges, regulatory asset recovery etc.
- Capacity addition planning and PPA related issues
- Load shedding and issues concerning supply and service quality
- Regulatory process and governance related issues
- Open access and markets
- Renewable energy related issues
- Parallel license arrangement, franchisees etc.

# Examples of successful interventions

Two case studies from Maharashtra

# Distribution loss restatement...1

- Agricultural consumption has large component of un-metered supply
- Utilities estimate T & D loss
  - $T\&D \text{ loss} = (\text{Generation} - \text{Metered Sales} - \text{Estimated agricultural consumption})$
  - Feeder level load data not reliable / accurate due to lack of AMR metering
- In FY 16 Utility filed application for tariff revision – claimed T&D loss ~ 16%
- Prayas and other consumer representatives filed detail submissions countering the utility's claims based on data and analysis in the technical validation session of the tariff petition
  - Demonstrated that tariff impact of over Rs. 10,000 Cr can be averted with appropriate loss estimation

# Distribution loss restatement...2

- MERC directed the utility to respond to the submissions made by consumer representatives
  - Utility did not have adequate data to defend its claims
  - MERC accepted consumers' demand that losses estimated by the utility are prima facie incorrect and partially revised it
  - Also directed the utility to undertake independent evaluation of the loss estimation methodology and submit a detail report based on which the commission would finalise loss levels
  - Further revision based on the report findings is expected to take place during the mid-term review
- Utility forced to accept high level of T&D loss**



# Load shedding protocol

- In 2005-06 MERC formulated load shedding protocol which defined number of load shedding hours for a region based on its distribution losses and collection efficiency
- Protocol was decided through public process undertaken at multiple locations
- Utility in 2008 unilaterally changed the protocol without prior approval or notice and later filed petition seeking revision of the protocol
- Simultaneously, it filed a separate petition claiming that it is not possible to estimate load relief and hence protocol is not implementable

# CRs' interventions and commission's ruling

- CRs made detail submissions based on data and analysis challenging the notion of inability to estimate load relief
- Strongly attacked utility's unwillingness towards being accountable in its load shedding practices
- Lot of data was demanded for analysing utility's claims. This made the process robust and rational, and ensured that any further change in protocol would be based on similarly rigorous analysis & data
- Commission supported views expressed by CRs and did not entertain utility's claims of inability to estimate load relief
- Commission through public process issued a modified protocol which covered wider options and gave higher flexibility to utility

# Appellate Tribunal and load shedding committee

- Utility challenged commission's order before the Appellate tribunal for electricity (ATE) inter-alia questioning commission's jurisdiction to define such a protocol
- Prayas requested to be a party to the proceedings before ATE and made similar analysis based representation supporting the commission's order
- ATE upheld MERC order as well as jurisdiction in defining such protocol
- It also suggested more consultative process for arriving at the protocol by way of forming a load shedding committee that would comprise of representatives from utility, commission, load dispatch centre and consumer representatives

# Pune Zero Load Shedding Model...1

- MERC protocol imposed 2-4 hours of load shedding in Pune (~0.54 MU per day)
- CII and several industries in Pune proposed to generate power necessary to bridge the gap using their stand-by capacities - ~90 MW of capacity was made available
- Cost of additional generation would be recovered from Pune consumers through an additional “reliability surcharge”
- Reliability surcharge was to be paid only by consumers consuming more than 300 units per month
- After initial reservations, CRs and consumer organisations supported the proposal while continuing their demands for improvements in the larger planning issues
- MSEDCL accepted the proposal and MERC approved it in May 2006. Additional charge was worked out to be 0.42 paise per unit

# Pune Zero Load Shedding Model...2

- By 2008, MSEDCL experienced several problems and it was found that industries were not generating their committed share
- Generators were finding it hard to match the frequently varying schedule and Pune's demand had also grown and hence the gap
- Captive generation was replaced with interim franchisee and consumers consuming more than 100 units per month were required to pay the additional charge
- Model continued for another 2-3 years, and was extended to Thane, Navi Mumbai and Vashi. Over 8 Million people in these cities benefited and got relief from load shedding.
- Model established that differential pricing can have significant impact on overcoming peak shortages
- Continuous monitoring by consumer groups, CRs, CII, and MERC made this possible

# Major lessons

- Transparency and access to data is paramount, this should be the starting point
- Due compliance with procedural aspects equally crucial
- Innovative analysis and sound understanding of utility operations systems is essential
- Multi- level interventions
  - SERC, CERC, ATE
  - MoP, CEA, NITI Aayog etc.
  - Media and awareness building amongst CSOs and public representatives
- Consistent collaborative engagement among CSOs
- Focus should be on broader sectoral issues and larger public interest

# Key recommendations based on Mh experience

- Appointing Consumer Representatives (CR) and making them party to all proceedings before the ERC goes a long way in building capacity of CRs and strengthening consumer participation
- Technical validation sessions conducted in presence of CRs can significantly improve the quality of tariff process
- Periodic interactions of CSOs and CRs with Commission and utilities in a non adversarial settings such as advisory committee meetings, or workshops aimed at improving consumer participation, can help significantly
- Consistent, long-term engagement across multiple fora for ensuring sustained impacts
  - Collaborative effort by CSOs and consumer groups
  - Engagement with State Govt., regulatory commission, and academic institutions necessary

# THANK YOU

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