Suggestions on Draft ‘NATIONAL ELECTRICITY POLICY 2021’

Presentation to Ministry of Power Expert Committee Group
15 May 2021
Policy Design

• The National Electricity Policy may spell out vision and objectives stemming from current and emerging priorities including climate change, sustainability, environmental pollution, reliability, affordability and quality power supply.

• A review of the key initiatives and schemes bringing out achievement vis-à-vis objectives should inform the new policy.

• Estimation of future demand and projection of demand profiles should form the basis of sectoral planning.

• Envision transition towards a fossil-free electricity system along with with a strategy for Just Transition.

• Reassessment of hydro and renewable energy potential with cross-border energy transactions assumes critical importance.

• Retail tariff design with proper allocation of costs to consumer categories at various voltage-levels may be put in place; direct benefit transfer (DBT) to categories/sections of retail consumers may be provided as deemed appropriate by State Government.

• Enhancing domestic production in new and emerging technologies.
### Strategic Requirements

| **Energy Transition** | Fostering adoption of low-carbon pathways in power sector.  
Just Transition |
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<tr>
<td><strong>Power Sector Planning</strong></td>
<td>Short-, medium- and long-term load forecasting and demand profile projection on a regular periodicity</td>
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<td><strong>Renewable Energy integration</strong></td>
<td>Holistic planning of different types of storage – hydro, pumped storage, solar thermal, battery, hydrogen, etc., from techno-economic considerations on lifecycle basis</td>
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<td><strong>Tariff Setting</strong></td>
<td>Adoption of Time-of-Use tariffs in generation and for consumers with large enough price differentials to send price signals for attracting investments and voluntary participation of consumers in demand side management.</td>
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<td><strong>Grid Management</strong></td>
<td>Provision of adequate reserves, ensuring requisite spatial distribution so as to maintain grid stability.</td>
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Financial Health of DISCOMs: Improving operational performance through new and emerging technologies.
• Locking of investment in new coal capacity should be last resort; use of existing coal plants for meeting seasonal peaks.

Thermal Power

• Hydropower having value beyond electricity generation (grid support and flexibility, peaking power), right kind of market and regulatory framework should be developed to encourage investment.

Hydropower

• RE promotion should include floating solar projects on dams & canals, concentrating solar thermal technologies

Promotion of New Renewable Energy Technologies

• Given falling solar PV costs, and need to minimize overall power procurement costs, RPOs need not distinguish between solar and non-solar targets

RPOs and Power Procurement Costs

• Incentivize distributed solar using gross metering (with feed-in tariffs) and other emerging RE technologies - off-shore wind, etc.

Incentivizing RE

• Planning for transmission with focus on cost optimization and reliability.

Transmission Planning

• Factoring in prospects of cross-border trade in power system planning.

Cross Border Trading
**Distribution**

- **Private Participation in Distribution**
  - Encouraging increased private participation in areas which continue to show sub-par performance.

- **Carriage and Content**
  - Separation of carriage and content would create multiple challenges.

- **Metering**
  - A differentiated approach for metering should be adopted.

- **Regulatory Assets and Retail tariff**
  - Prescribe fixed timeline to reduce and eliminate regulatory assets;

- **Tariff Rationalization**
  - Actual cost of supply should be calculated for each consumer category/voltage level; DBT
  - SERCs to rationalize tariff categories

- **Distribution Asset Management**
  - Regulators to fix timelines for GIS mapping of all distribution assets
  - implementation of Enterprise Resource Planning system.
Need of the Hour

Power Markets
- Need based evolution of spot market is important instead of prescribing a percentage in definite time frames.
- Study of international experience recommended before introducing forward contracts and derivatives.

Environmental Issues
- Timeline for notifying SOPs for e-waste disposal (solar panels & storage batteries); early identification will allow identified disposal costs & mechanism to be factored into tariffs & contracts.

Creation of EV Charging infrastructure
- Encouraging DISCOMs to expedite setting up of charging infrastructure through utility-centric business models with regulatory support.

“Make in India”
- Promotion of domestic equipment manufacturing in AMI, Renewables, etc.
- Solar panels & grid storage require additional support.
Thank You