

Way Forward

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Improve Reliability Indices

Improve the reliability indices (SAIDI, SAIFI, CAIDI) of power supply at the various “Delivery Points” which often exists at the medium voltage levels. For this, distributed generation (renewable and/or otherwise) would help as opposed to the “wires capacity uplift” and central generation

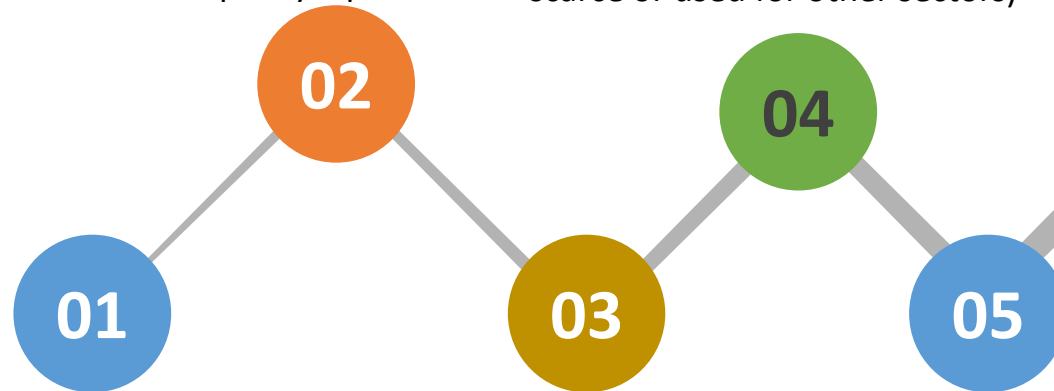
Fuel Import Substitution

Fuel Import substitution efforts (i.e. displace imported diesel, gas or coal) for generation is highly based on availability of domestic surplus of other fuels (which itself could be scarce or used for other sectors)



EE and CDM

Lowering energy consumption and demand growth through non-wire alternatives (NWA) of demand side management (conservation and demand response) and power-factor improvement (VAR). This is the lowest cost strategy.



Increased Energy Access to Rural Sector

Energy Access for the rural sector is best delivered through solar/wind/biomass/biogas in isolated microgrids (for now) capable of expansion and eventual tie to the grid later

Policy and Regulatory Reforms

Regulatory and Organizational reforms are needed to ensure that effectiveness and “market-like” price signals (albeit sector subsidized) are sent to all consumers. Any subsidies must not occur at the bottom-line profitability to the utilities. Price signals have yielded the best results in demand supply management

Way Forward

Afghanistan

- Fuel security and Generation Expansion
- 3-year focused emphasis to promote Off-Grid networks using renewables
- Interconnection of regional grids and centralized scheduling and dispatch in next 2-3 years
- Define area load dispatch centres, and SCADA hierarchy for the country.

Bangladesh

- Alleviate poor power quality and Volt-VAR support in the distribution segment
- Upgrade old (select/stressed) Transmission and Distribution networks to integrate Distributed Generation
- Set up regional centers to offer Conservation and Demand Management Programs

Bhutan

- Automate fault detection systems in key distribution feeders (through line-sensors) to identify fault location for speedier dispatch of maintenance crew and fast restoration
- Improve System Index and Asset Management

India

- Alleviate poor power quality and availability at Delivery Points in MV and LV network
- Upgrade critical distribution networks to manage large distributed generation (Solar PV) with distributed energy storage systems
- Evaluate near-autonomous load-following of variable-generation (Solar/Wind) on a select distribution station (MV+LV) where renewables share is higher than 50%
- Set up conservation and demand management programs in each district of every state

Way Forward

Maldives

- Fuel Import Security and Efficient Renewable Generation Mix
- Promote Off-Grid Hybrid networks using renewables
- Set up centers to offer Conservation and Demand Management Programs in each Island

Nepal

- Fuel Import Security and Efficient Renewable Generation Mix
- Promote Off-Grid Hybrid Networks using Renewables
- Promote Localized Load Control for Load Shedding/Sharing
- Set up centers to offer Conservation and Demand Management Programs in each area

Pakistan

- Explore and Resolve the root cause for its Transmission system's instability and unplanned outages
- Explore and Resolve the root cause for its Distribution system's poor reliability and unplanned outages
- Explore Load-Balancing Systems particularly on an Area Basis, if larger share renewables are to be integrated

Sri Lanka

- Fuel Security and Generation Expansion
- Set up regional centers to offer Conservation and Demand Management Programs
- 3-year focused emphasis to promote Off-Grid networks using renewables

Thank You

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