





# Power market development in South Asian region: India- Nepal power trade

Presented by-

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# **Type of Markets**

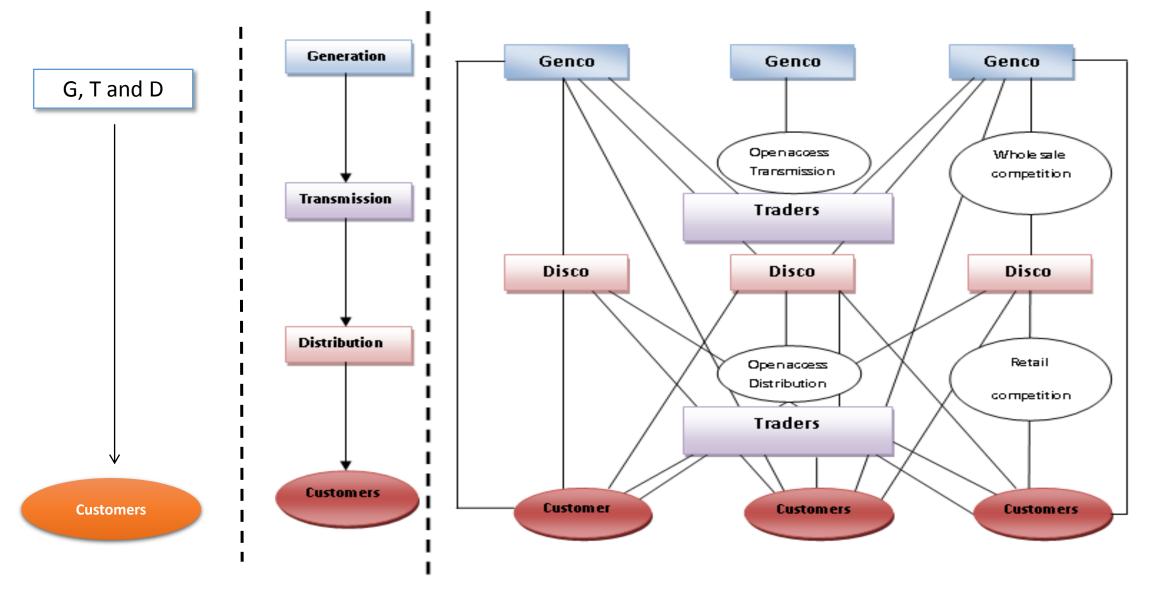
Type of Market	Numbers of Firms	Freedom of Entry	Nature of products	Examples	
Perfect Competition	Many	Unrestricted	Homogeneous (Undifferentiated)	Vegetable market	
Oligopoly	Few	Restricted	Undifferentiated or differentiated	Cement, Car	
Pure Monopoly	One	Restricted or completely blocked	Unique	Local water supply Electronic mark	•

How does it different from other market?



#### SARI/EI



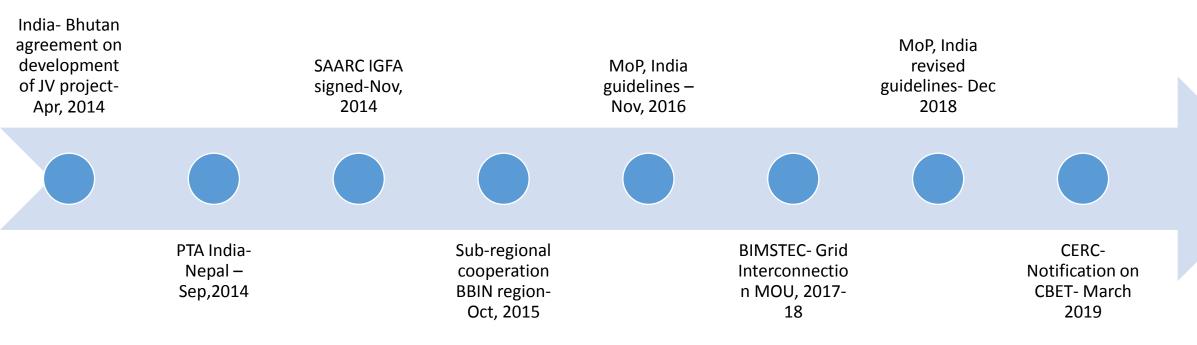








# Progress of CBET in the SA Region



Cross-Border Power Trade has increased by 67% from 2013-14 (7,843 MU) to 2018-19 (13,152 MU).







# **India- Nepal trade**

Existing Power Transfer- About 550 MW (India to Nepal)

- About 350 MW: 132 KV and below radial line
- About 200 MW: D-M line (Operated at 220 KV)

Under construction – Total about 950 MW

Rated 400 KV operation of D-M line

#### **Future interconnection**

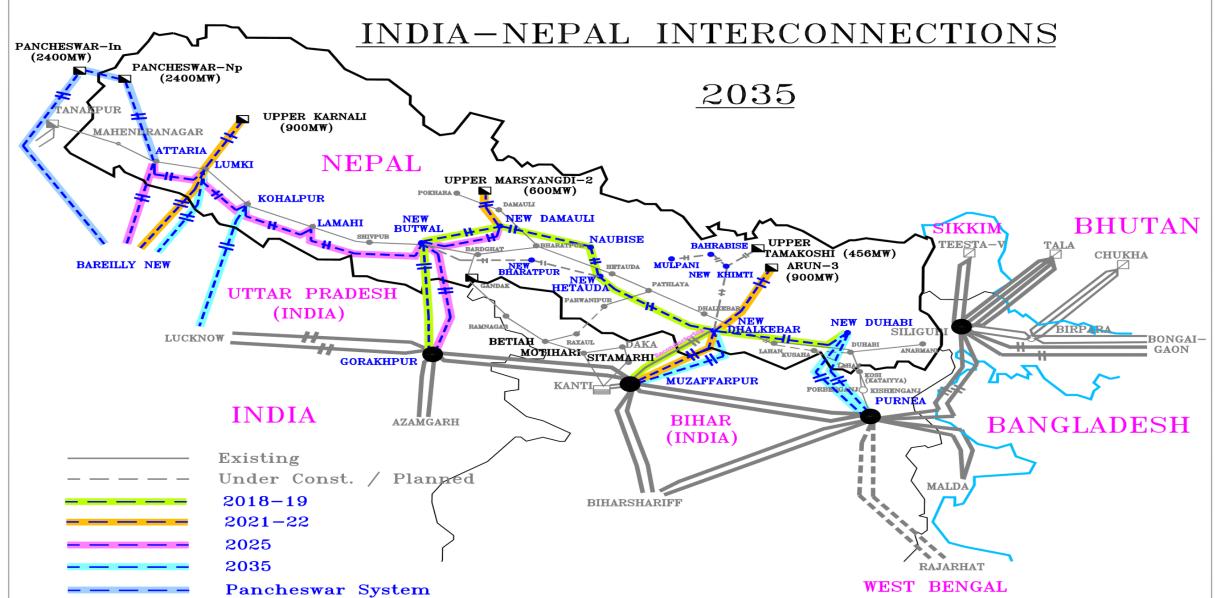
- New Gorakhpur- New Butwal
- •2<sup>nd</sup> circuit stringing of Kataiya-Kusaha and Raxaul-Parwanipur 132 KV
- •Three new 132 kV radial lines from UP to Nepal and Energy banking.
- •Interconnection associated with Arun-3 (900MW) HEP

Source: MoP, India presentation – ISUW 2019















# **Market Products India- Nepal**

#### **Existing Trade**

- Long term
- Medium term
- Short Term

#### **Future- under discussion**

- Trade through Exchange (DAM and TAM)
- Power Banking

#### **Future- other avenues**

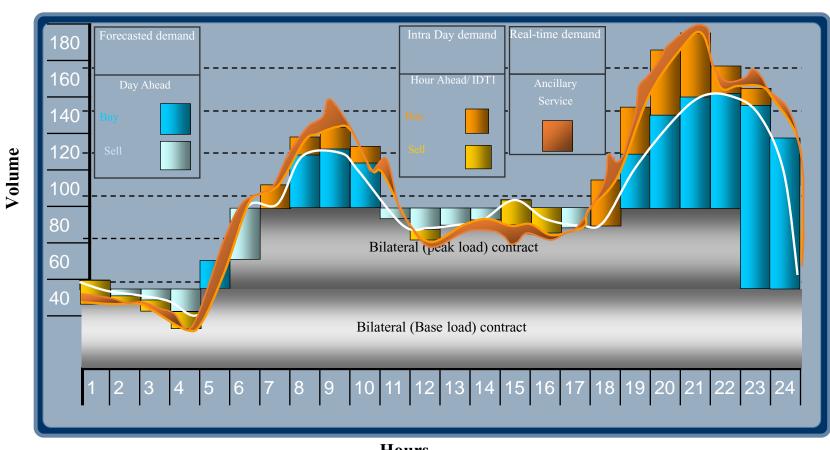
• Renewable energy, reserve sharing, ancillary services







#### **Market Products and utility**



Hours







# Experience sharing of Indian Market Development

7/21/2019







# Thank You!

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