CONCEPTUAL POWER DEVELOPMENT MAP OF NEPAL

EXISTING / UNDER CONSTRUCTION/ PROPOSED POWER STATIONS & TRANSMISSION LINES / SUBSTATIONS

(NOT TO SCALE)

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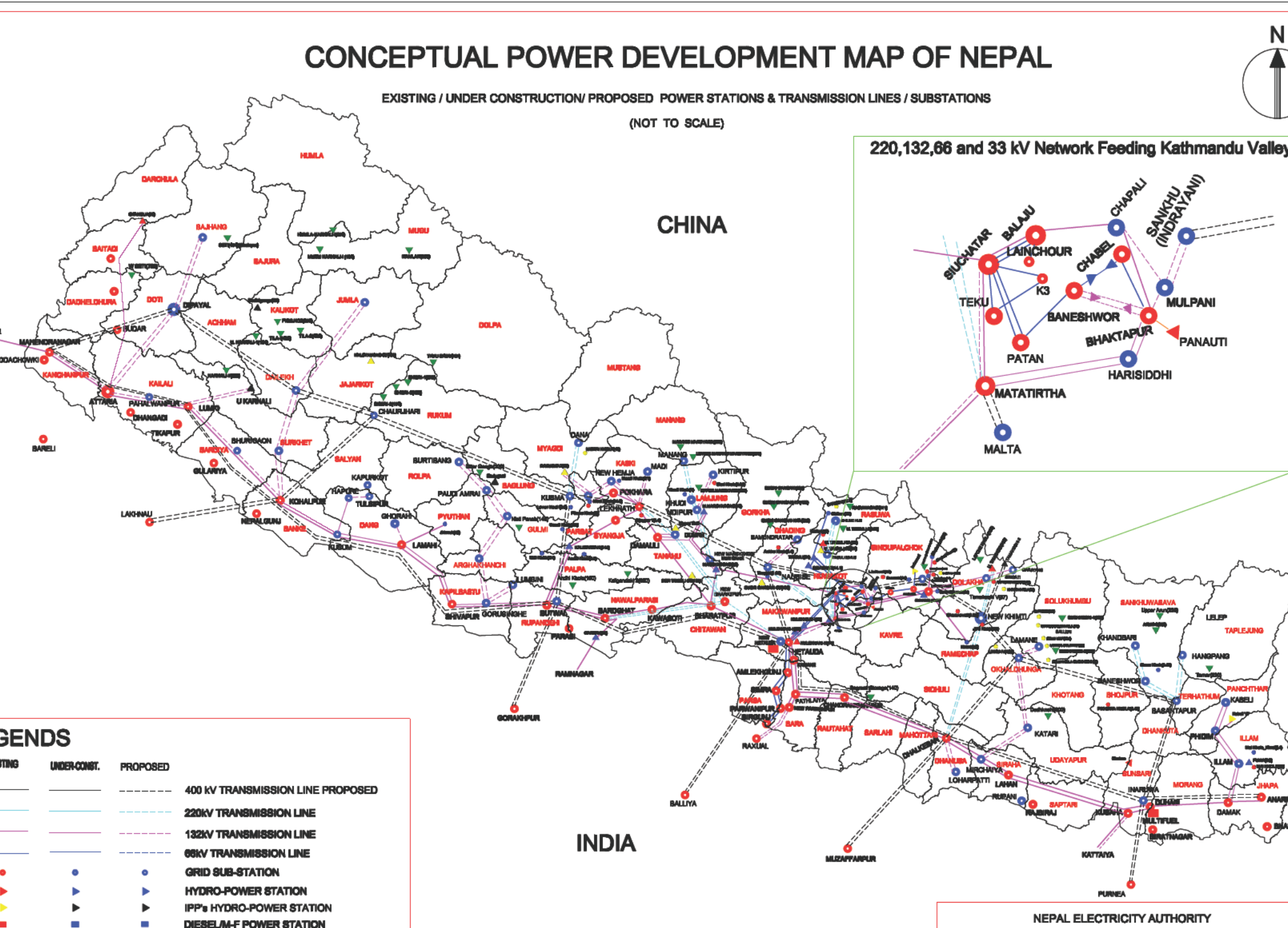

NEPAL ELECTRICITY AUTHORITY

SOUTH ASIA INVESTOR'S WORKSHOP

ON

CROSS BORDER ELECTRICITY TRADE

COUNTRY PERSPECTIVE PRESENTATION (NEPAL)

Overview of Nepal Power System

- Total installed capacity 787 MW
- Hydro dominated– hydro accounts for 93% of the total installed capacity
- Demand increasing annually at 10%
- Population having access to grid electricity about 63%
- Peak Load in FY 2013/14= 1200 MW
- Capacity shortage in FY 2013/14= 600 MW

CROSS BORDER TRANSMISSION LINE

- Dhalkebar–Muzaffarpur 400kV Cross-border Transmission Line
  - Out of 140km, 40km of Nepal Portion Dhalkebar-Bittamod is under construction through PTCN.
  - Construction Contract signed with M/S TATA Projects, India on December 2013.
  - Route Alignment Survey Completed, Tower Spotting Work Completed, Tower Foundation is in Progress.

- Bardghat-Gorakhpur 400kV 2nd Cross-border Transmission Line
  - ADB is financing for the feasibility study of the project.

Existing Power Exchange Arrangement

- Nepal and India has been exchanging power for many years. Power is being exchanged and traded mainly through 8 points along the Indo-Nepal border.
- Power exchange on commercial mode between two countries is increasing each year.
- Present level of exchange is 50 MW, trading is 80 MW.
- Power exchanges are being done through mainly 33kV and 132kV links.
- Nepal is facing critical power shortage and is becoming net importer.
- PTC, India is the nodal body for trade.

Institutional Arrangement

- **Power Exchange Committee(PEC)**
  - Constituted in 1992- oversees the exchange and other issues, supposed to meet once a year
- **Joint Committee on Water Resources (JCWR):** constituted as per agreement of August 3, 2000 and headed by secretaries of concerned ministries of both the countries

Potential for Power Trade from Nepal

- Total theoretical potential: 83,000 MW
- Economically feasible: 43,000 MW
- Storage capacity plants: 21,400 MW
- Existing capacity: 787 MW
- Projects under construction: 1,044 MW
  (NEA/subsidiary companies)
- Planned and Proposed (NEA): 1,852 MW

Existing Interconnections with India

Transmission Link	*Evacuation Cap. (MW)*	*Traded, MW*	*Voltage Level, kV*
Kusaha--Kataiya	130	80	132
Gandak-Rampur	50	25	132
Mahendranagar-Tanakpur	50	30	132
Kataiya-Rajbiraqj	10	8	33
Raxual-Birgunj	10	10	33
Sitamadhi-Jaleswor	10	8	33
Nepalgunj-Nanpara	10	8	33
Jayanagar-Siraha	8	8	33