Why CASA-1000?

- supply electricity from Central Asia to South Asia
- first step towards a regional energy market
- develop inter-regional cooperation
- environmentally friendly
- boost regional development
CASA-1000 New Configuration

Package 1.

• 1300 MW AC/DC Convertor Station at Sangtuda (Tajikistan).
• 1300 MW DC/AC Convertor Station at Nowshera (PK).

Package 2.

• 500 kV B2B station in Pul-e-Khumri (AF) to be supplied through existing 220kV AC line from Sangtuda (TJ)

Other Packages

• Different segments of new HVAC and HVDC transmission lines and strengthening of existing HVAC lines
Security increase, technical complexity decrease

1. Security mechanisms
   – Direct and indirect measures developed

2. Simplified technical solution
   – Switching from a three to a two terminal station configuration

3. O&M
   – O&M services to be procured independently
Kyrgyz Republic’s role

- Kyrgyz will contribute average 1.55 billion kWh
- Superior supply flexibility/manageability due to Toktogul Reservoir

Kyrgyz Republic’s benefits

- Cash from power sales at much higher prices.
- Future fees as power transiter between the Kazakhstan, Uzbekistan, etc., and CASA-1000.
- Economic and diplomatic ties to South Asia.
- Economic benefits to Afghanistan, Pakistan, enhance security
Tajikistan’s role

• Largest power supplier at 2.75 billion kWh per year
• Wheeler of power from Kyrgyz Republic through its system to AC/DC converter station at Sangtuda

Tajikistan’s benefits

• Cash from high priced sale of power that now is not generated at all because of lack of market. Of the four countries, Tajikistan will see the largest income increase.
• Economic and diplomatic ties to South Asia.
• Economic benefits to Afghanistan, Pakistan, enhance security
Afghanistan’s role

- Power transiter
- Some power purchase

Afghanistan’s benefits

- Establish itself as reliable transit country
- Transit revenue.
- Improved ties with Pakistan and Central Asia
Pakistan’s role

- Principal buyer
- Real source of operating cash flow

Pakistan’s benefits

- MWh bought at $80-100* each displace fuel-only costs of oil fired generation of $160-180 each
- Project operations will fund increased stability in Afghanistan
- Economic, diplomatic ties to new resource-supplier countries in Central Asia
Contracting Status

• Owners Engineers
  – For DC—GFA/Manitoba Hydro (Canada): Rebidding
  – For AC—Monenco (Iran) – Contract Signed

• Converter Stations
  – New tender documents released October 6, Bids due early 2017
  – Back to Back tender documents being prepared

• DC lines
  – Afghanistan lines under negotiation
  – Other lines: tender documents under final preparation

• AC lines
  – tender documents under final preparation
Thank you

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