Developing the Central Asia/ South Asia Energy Corridor: The CASA-1000 Project

June 6, 2013
C. Thomas Breuer, Executive Director, CASA-1000 Secretariat
CASA-1000 Key Facts, Figures, Drivers

3-6 Billion kwh/year of surplus summer hydroelectric resources underutilized in Tajikistan and Kyrgyz Republic
- Some sold cheap, some never generated (water spilled)
- All from EXISTING hydroelectric plants

Pakistan’s current power supply deficit (esp for summer peak) could utilize all of this
- Reduce need for new power plant construction by 1300 MW
- Avoid burning oil

This release of idle economic value pays for the project.
Numerous enhancements are possible.
CASA-1000 and the Kyrgyz Republic

Kyrgyz Republic role

• Power supplier with large reservoir
  – Toktogul provides 14 months’ of average flow storage
• Power transit from Central Asia into Tajikistan and CASA
• Will reconnect Tajikistan to Central Asia

Benefits to Kyrgyz Republic

• Revenue from power sale at higher prices than available in Central Asia
• Trade connections to South Asia
• Long term: winter power purchaser?
CASA-1000 and Tajikistan

Tajikistan Role

• Largest Power Supplier
  – Existing hydros initially supply >3000 GWh per year
  – No new hydro plant construction included in economic justification

• Transmit Power from Kyrgyz Republic and beyond into CASA-1000 DC

Benefits to Tajikistan

• Market for all kWh that can be generated from existing plants
• Economic and diplomatic connections to South Asia
• Long term: winter power purchaser?
CASA-1000 and Afghanistan

Afghanistan Role
- Power transmitter
- Power purchaser?
- Power reseller?

Benefits to Afghanistan
- Income to central government
- Additional power supply
- Prove itself as reliable transit country

WHEN THEY DO THIS, THERE IS MUCH MORE BUSINESS TO COME
CASA-1000 and Pakistan

Pakistan Role

- Power purchaser. Existing shortfall can absorb power from multiple sources (domestic and imported)

Benefits to Pakistan

- Economical power supply for Pakistan, serving unserved demand and/or replacing oil used for generation
- Build ties to Central Asia and its resources
- Power purchaser via Open Access during October-April?
- SOMEDAY sell off-peak winter power northward
CASA-1000 Project Agreements

• 4 core PPAs assumed to be of 15 years (KR-AF, KR-PK, TJ-AF and TJ-PK bilateral Agreements)

• One PPA between AFG-PAK

• Master Agreement (binding all the parties):
  – Standard terms and conditions for PPAs
  – Framework for O&M, Open Access, Risk Mitigation
  – Costs and Risks Allocation Principles

• Coordination Agreement between KR and TJ

• Technical Code for operational requirements

• Account Bank Agreement securing payments “Waterfall”

• Host Government Agreements reflecting reciprocal obligations of Governments
CASAS-1000 Going Forward

Project Agreements
- Conditions for full negotiations to begin by September
  - Pakistani government in place
  - Advisor teams in place working for Kyrgyz Republic, Afghanistan
- Project Agreements initialing goal of December 2013, to be signed with final EPC contract signature.

Implementation
- IFC-funded consultant is preparing bid documents for EPC and Operations and Maintenance contractor

Financing
Thank You

Dr. C. Thomas Breuer
Executive Director

E-mail: t.breuer@casa-1000.org
Phone: +7 727 311 0376
website: www.casa-1000.org