

Linking Central Asia and South Asia

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

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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

CASA-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

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