Central Asia South Asia Electricity Transmission and Trade Project

Update on Progress and Recent Developments

November 6, 2014
The CASA-1000 project is the most advanced initiative on regional cooperation between the Central Asia and South Asia regions. The project is supported by a broad coalition of partners and financiers including the United States and United Kingdom Governments, the World Bank, European Investment Bank (EIB); Islamic Development Bank (IsDB) and partners in the Arab Coordination Group (ACG) and the European Union.

**Project Components**

A. Transmission Infrastructure
   - A1 – High Voltage Direct Current (HVDC) Line in Tajikistan, Afghanistan and Pakistan (750km/500kV/1,300MW)
   - A2 – HVDC Converter Stations at Sangtuda (1,300MW); Kabul (300MW) and Peshawar (1,300MW).
   - A3 – High Voltage Alternating Current (HVAC) Line between Kyrgyz Republic and Tajikistan (475km/500kV).
   - A4 – Tajikistan grid reinforcement (115 km/500 kV) AC line from Regar to Sangtuda and other substation works.

B. Technical Assistance and Project Implementation Support
   - B1 – HVDC and HVAC Owner’s Engineers
   - B2 – Environment and Social Management Support
   - B3 – Audits, Financial and Revenue Management
   - B4 – Project Management Support
   - B5 – Coordination
   - B6 – Project Communications
   - B7 – Capacity Building

C. Community Support Programs (CSP)
Progress and Recent Developments

- Commercial agreements
- Financing
- Implementation
Commercial Agreements – Framework agreed

- Bilateral Power Purchase Agreements (PPAs) between buyers and sellers + one b/w Afghanistan and Pakistan for on-sale of electricity purchased but not consumed by Afghanistan. PPAs are the contracts that govern quantities of supply, tiered pricing, liquidated damages, etc.

- A Master Agreement (MA) that defines the standard terms and conditions applying to all PPAs including the cost and risk allocation principles such as:
  - A Common Fund to cover unplanned outages, variation in hydrology, and contributions to CSPs during operations from the tariffs.
  - Safeguards to mitigate against adverse impact of change of law or tax.

- A Coordination Agreement between Kyrgyz Republic and Tajikistan providing for all technical and commercial aspects of power flow and operational coordination.

- A Technical Code (under development) to cover all operational requirements such as dispatch, metering, curtailments, and others.
Commercial Agreements – Current Status

- The MA and PPAs have been finalized in the last Joint Working Group (JWG) meeting in July 2014, except for two open issues – prices and remedies for payment default.
- The price agreement discussion has accelerated, after formation of new Afghanistan Government.
- Transit price between Pakistan and Afghanistan for the power transited over Afghanistan has been agreed in Oct 2014.
- The PPA/MA are targeted to be approved by the four countries in the next Inter Governmental Council (IGC) meeting, planned in the last quarter of 2014.
Commercial Agreements – Pricing

- **The total PPA Price includes:** a) energy price; b) transmission charge; and c) Afghanistan transit fee.

- **Energy price:** Negotiations ongoing and nearing convergence between sellers and buyers; however, Pakistan wants to conclude this jointly with an agreement on the transit fee.

- **Transmission Charge and Future adjustments to PPA Price:** These elements have been agreed between the four countries.

- **Afghanistan Transit fee:** Agreed between Pakistan and Afghanistan.
## Financing – Updated Plan

<table>
<thead>
<tr>
<th>Costs and Sources of Financing</th>
<th>Afghanistan</th>
<th>Pakistan</th>
<th>Tajikistan</th>
<th>Kyrgyz Republic</th>
<th>Total Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project costs (including contingencies, Taxes and IDC)</td>
<td>404</td>
<td>232</td>
<td>301</td>
<td>233</td>
<td>1,170</td>
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</table>

### Financing Approved

<table>
<thead>
<tr>
<th>Source</th>
<th>Afghanistan</th>
<th>Pakistan</th>
<th>Tajikistan</th>
<th>Kyrgyz Republic</th>
<th>Total</th>
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<td>World Bank</td>
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<td>527</td>
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<td>European Investment Bank*</td>
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<td>90</td>
<td>180</td>
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<tr>
<td>Donors/ Trust Funds/ others</td>
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<td>7.5</td>
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<tr>
<td>Borrower/Implementing Agency</td>
<td>47</td>
<td>32</td>
<td>22</td>
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### Financing under approval

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<th>Kyrgyz Republic</th>
<th>Total</th>
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</thead>
<tbody>
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<td>Islamic Development Bank/ Arab coordination Group</td>
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<td>118</td>
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<tr>
<td>Donors and Trust Funds</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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</table>
Financing – Current Status

- The total estimated cost of the CASA-1000 project is $1,170m.
- With the approved financing from the World Bank ($526.5m); the Afghanistan Reconstruction Trust Fund (ARTF) ($40m); USG ($15m) and EIB (€140m), the current financing gap is about 23%.
- The remaining financing is expected to be secured through IsDB, ACG, Bilaterals and additional IDA financing.
- The Multi-Donor Trust Fund (MDTF) administered by the Bank has been setup and expected to be capitalized with initial funding from USG with other donors to follow (e.g. UK).
Implementation

- The four countries are targeting to complete the infrastructure works in early 2018 and start operations in the summer of 2018.
- Procurement commenced for key packages, namely, HVDC converter stations; Afghanistan HVDC line packages (longest of the line segment); and Owner’s Engineers for HVAC and HVDC systems.
- Procurement for the remaining components would start after remaining finances have been tied up.