

Project Title: Central Asia – South Asia Regional Energy Trade

Project ID (if available): IO2051904

Region/Country: SAR, ECA

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ESMAP Thematic Area (M – Main; S – Secondary (if applicable)):

Energy Security	S
Energy Markets	M
Energy Poverty	S
Renewable Energy	S
Energy Efficiency	

Brief Description:

Pakistan and Afghanistan, as most of the countries in the South Asia region, need to increase electricity supply to meet the growing demand. In contrast, the neighboring states of the Central Asia region (Tajikistan, Kyrgyz Republic, Uzbekistan, Kazakhstan and Turkmenistan) are well endowed with energy resources, including hydropower and natural gas, and have electricity surpluses which they would like to export. Although some electricity lines interconnect the border areas of Afghanistan with the three neighboring Central Asian states (Tajikistan, Uzbekistan, and Turkmenistan) since Afghanistan does not have integrated national electricity network the two regions are not electrically connected and electricity trade is not possible. This carries high opportunity costs to both regions.

The countries in the regions have recognized the electricity trade potential and are looking into ways to exploit it. This is particularly the case with Pakistan and Tajikistan, which have been discussing opportunities for electricity trade since early 1990s. These discussions have received a renewed impetus during the last couple of years, as the international financial institutions – especially the World Bank and ADB – as well as the private sector, have shown strong interest in supporting regional integration. In 2005, ECA region of the World Bank completed a study on electricity export potential in Central Asia, and the SAR region, with financial assistance from ESMAP, in June 2005 organized a workshop on electricity trade with the Economic Cooperation Organization (ECO), which encompasses both Central and South Asian countries. At a regional conference on electricity trade, organized by the Government of Pakistan in Islamabad in May 2006, the four countries – Afghanistan, Kyrgyz Republic, Pakistan, and Tajikistan – created a joint Multi-Country Working Group (MCWG) to pursue a project for constructing a transmission line to export about 1000 MW of electricity from Tajikistan and Kyrgyz Republic to Pakistan via Afghanistan (with a possibility to off-load some electricity in Afghanistan). Subsequently, at the second regional conference in Dushanbe in October 2006, the countries signed a Memorandum of Understanding (MoU) for the Central Asia-South Asia (CASA) project development (CASA-1000) and created a Ministerial Committee to oversee the effort. They also formally requested the World Bank and ADB to assist in conducting the necessary analytical work for project preparation. The World Bank is currently funding advisory services for the MCWG, and a report on energy trade models for the ECO region. These activities are in part financed by ESMAP funds. The combined outcome of the ESMAP-funded activities, whose products include the workshop in 2005, the report on energy trade model (which is now being finalized), and a set of documents for the MCWG, have made important contributions to advancing the regional energy trade initiative and translating it into a specific investment project. The proposed study builds on these activities taking them further toward realization of the initiative.

CASA-1000 involves: (i) construction of a high-voltage power transmission line from Tajikistan to Pakistan via Afghanistan and strengthening of transmission infrastructure in the affected countries (including possibly in Kyrgyz Republic as well); and (ii) development of the associated electricity trading arrangements.

The analytical work in support of the CASA-1000 project consists of two main tasks: (a) a Technical and Economic Assessment (TEA); and (b) Commercial Assessment (CA) of the project. The TEA study, to be funded by ADB, will examine the technical and economic merits of the project and its environmental, social and other safeguard implications, while the CA will examine options for implementing the project through public-private partnerships arrangement and propose institutional, financial, risk, and legal structures of the project. The two studies, which are interlinked, will be conducted in parallel. Each study will have two phases: *Phase 1*, to be conducted at a pre-feasibility level, will examine the technical, economic and commercial merits of the CASA-1000 project at the level of analysis sufficient to make “proceed/do not proceed” decision; *Phase 2* – assuming the outcome of Phase 1 is “to proceed” – will go into details needed to help bring the project to financial closure, expected in late 2007/early 2008.

The requested ESMAP funding, in conjunction with PPIAF, will help finance Phase 1 of the Commercial Study. Some financing will also be provided by the beneficiaries (i.e., the four countries involved in CASA-1000).

More specifically, Phase 1 of the Commercial Assessment is expected to achieve the following: (i) identify core private investors who would be interested in and willing or likely to commit to investing in the Project or participating otherwise; (ii) make a preliminary determination of the structure of the project and the associated institutional arrangements; (iii) develop a preliminary assessment of various financing options; (iv) develop a preliminary assessment of the major risks to the Project, particularly the war/civil disturbance risk (including through Afghanistan) and a determination as to whether – and, if so, how – these risks may be mitigated; and (v) develop an outline of the overall legal and governance framework, a description of the content of the various legal documents, and draft the Heads of Agreement for the Inter-Governmental Agreement. The principal outcome of these activities should be a decision as to whether and how to proceed with implementation of the CASA-1000 project. The counterpart for the study will be the MCWG, representing the four countries. Details of the task are described in the Terms of Reference for the Commercial Study¹.

CASA-1000 would be a pioneering project in regional cooperation between Central and South Asia, not only in electricity trade but in general. Although its direct benefits should be significant, its demonstration effect could be even larger. At present, there are no electrical (nor other energy) links between the two regions. By demonstrating how a regional electricity project could be structured, financed, implemented, and operated, the project would establish a precedent that could be used to expand electricity (and gas) trade further, paving the way for building up an integrated Central Asia – South Asia Regional Electricity Market CASAREM), whose potential benefits would extend beyond electricity/energy sector.

Promoting regional cooperation and *regional markets* is the primary thematic area of the CASA-1000 project. At the same time, such cooperation -- in the specific context of Central Asia – South Asia electricity trade -- would contribute to increased *energy security* of the region, as well as to the increased use of *renewable energy* resources (hydropower). The trade would open up export markets

¹ Financing for Phase 2 of the study, should the outcome of Phase 1 be to proceed (as expected), will be requested subsequently, possibly in part from the same sources (PPIAF and ESMAP).

for hydropower of Tajikistan and Kyrgyz Republic, providing a boost to economic growth in the two countries, with positive knock-on effects on the ability of these countries to reduce poverty through economic growth, stronger social safety net, and improved social services to the poor. Similarly, the income from the transit fees to Afghanistan and the prospects of closer integration of the country with its neighbors should have direct and indirect benefits to its economy and its ability to broaden electricity access, including to the poor. In Pakistan, ensuring adequate electricity supply, to which the import would contribute, would avoid potentially major constraint to economic growth, maintaining which is a key to financing poverty-reducing programs (including electrification).

Delivery Schedule:

PCN Review ²	
Completion draft final/formal review meeting	June 2007
Final delivery to client	September 2007

Outputs expected:

	Yes?	Delivery date (Quarter, FY)
Formal AAA Report	Yes	Q4, FY07
Informal AAA product (e.g., policy note) – indicate:	No	
Workshop/Conference	Yes	Q4, FY07; Q1, FY08
Training course/materials/knowledge products	No	
Others (indicate)		

² This activity is an integral part of the effort to support regional integration, which both ECA and SAR regions have undertaken during the last several years. Such an effort in the energy sector was formally initiated in the SAR in September 2004. Currently, the activities are financed through an IO code, as a business development activity.