



CENTRAL ASIA REGIONAL ECONOMIC COOPERATION

Energy Sector Coordinating Committee Meeting

22-24 September 2010, Bishkek, Kyrgyz Republic

MEETING SUMMARY

I. Introduction

1. The ESCC Meeting was convened in Bishkek, Kyrgyz Republic on 22-24 September 2010. Delegations from seven of the eight CAREC countries¹, representatives from CAREC partner multilateral institutions and other development partners, and international energy and water experts participated in the meeting. In addition, representatives from the International Fund for Saving the Aral Sea (Executive Committee and SIC-ICWC) attended as observers. The meeting was opened by Honorable Osmonbek Artykbaev, Ministry of Energy Kyrgyz Republic and the opening session chaired by Mr. Avtandil Kalmambetov, Deputy Minister, Ministry of Energy of Kyrgyz Republic. Plenary sessions were moderated by the Asian Development Bank and the World Bank. The objectives of the ESCC meeting were to update on implementation of the CAREC Energy Action Plan, to seek agreement on the subcommittee work program, to share experiences on the subject of energy and water and to discuss deliverables for the 9th Ministerial Conference that will take place November 2nd 2010.

2. Presentations by the Kyrgyz Republic

The Kyrgyz Republic provided an overview of the energy sector and key directions of the state policy in energy. A second presentation by USAID-funded Kyrgyz Republic Energy Advisory Services program focused on efforts of Kyrgyz Government to promote transparency in the energy sector. The Presidential Decree of 10 July, 2010 focuses on the institutional reforms and introduction of incentives for accountability and performance based contracts. The work includes the set of planned

¹ Afghanistan, Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, Uzbekistan. The People's Republic of China was not represented.

actions to reduce losses through the installation of modern transmission and distribution metering and upgrading of the billing system to ensure revenues are retained within the energy sector.

Need for donor coordination and sharing information was encouraged for more optimal donor support in the sector. A third presentation, sponsored by EBRD, provided a brief overview of small hydropower (HPP) developments in the country. They have identified 20 out of 132 possible locations, of which 4 have feasibility studies currently under preparation. Implications of climate change has not been specifically examined, but hydrologic analysis shows that power generated in winter time by these 4 HPPs would be up to 50% less than summer generation. Small HPP development would be supported by a renewable energy law, amendments to which are ready to be submitted to the next Parliament for consideration.

II. Implementation of Action Plan

A. Pillar 1, Energy Supply/Demand and Infrastructure

3. The objective of the Energy Demand/Supply Balance Diagnostic Study is to contribute to the regional power sector master plan to identify optimal infrastructure investments. For the four countries (KAZ, KYG, TAJ, UZB) studied, the overall demand and supply characteristics, and national sector development priorities were given. The power sector development in these countries for last decade was motivated by concerns for national energy security and self-sufficiency. In terms of gaps and overlaps in energy infrastructure, the study pointed out the need for more concentration of transmission assets for improving inter-connection abilities, and more attention to national/regional dispatch centers. The study illustrated the differences in peak hours across the four countries, as one of the opportunities for cooperation for energy security and cost savings. The diagnostic illustrates that the lack of energy inter-trade and coordination in seasonal energy generation and transmission has significant economic losses which can have important impacts on growth issues and energy security. The study pointed out the trade-off between individual national objectives and economic optimization. Political will to address some of these issues remains important.
4. The ESCC participants were presented with the findings of the diagnostic study and estimated revenue losses due to the lack of regional power trade. The delegates highlighted that among the three barriers, technical, commercial and political willingness, the last remains the most difficult and requires substantial joint effort for the resolution. It was agreed that overcoming commercial barriers will be assisted through the capacity building program provided by the CAREC Institute. Simultaneously, the technical bottlenecks for the regional trade of electricity and the proposals for their elimination will be prepared by the consultants of the regional power sector master plan, recruitment of which is at the final stage. The master plan will also provide technical solutions for the synchronized operation of Afghanistan with the power grid of Central Asian countries. The participants also discussed the need to identify Energy efficiency initiatives, which would result in quick realization of benefits in reduction of winter deficits and savings of energy.

B. Pillar 2, Regional Dispatch and Regulatory Development

5. The finding of diagnostic study for the Pillar 2 'Regional Dispatch and Regulatory Framework' was presented to the ESCC members. The Central Asia Power System (CAPS) study provided an overview of the current situation, strengths and weaknesses, opportunities and threats to integrated operations. It also offered short, medium and long-term recommendations. Historically, the CAPS planning and operation was designed on criteria where national borders were not taken into account. The situation has since changed after independence of the countries. The study findings were well received followed by involved discussions, indicating interest of members on this topic.

6. The diagnostic study simulated the integrated and isolated operation scenarios for all the five of the countries of the Central Asia Power System, noted the different time for occurrence of peak loads in each country, variability in minimum and maximum demand supplied on most of the days and concluded significant overall savings in the operation and system costs. The analysis illustrated the economic benefits of enhanced interconnections and trade in terms of cost-savings, fuel savings and infrastructure development, compared to countries operating in isolation. Model simulations indicated a potential saving of USD\$1.5 billion over three years, based on simplified assumptions. It pointed out that the main issue is to elevate the confidence of countries to benefit from regional integration through cooperation. This will be assisted by increasing transparency, as the current (predominantly) vertically integrated structures make access to information more difficult for third parties.

7. The methodology and numbers of the study were discussed and debated. Though the diagnostic study did not carry out a rigorous economic and market analysis to accurately estimate the implications of current and future operations of the energy sector; however, the general message was recognized. ESCC members agreed that the follow on work required should be discussed and decided by the sub-committee for the Pillar 2. Afghanistan indicated its keen interest to participate in these subcommittee discussions as they perceive problems in trade with Central Asian countries due to lack of synchronization among their power grids. The sub-committee will identify any perceived or actual issues in integrated operation and identify actions needed to realize the benefits from the immediate actions not requiring major changes and investments in the existing system.

Pillar 3, Energy Water Linkages

8. The work program for Pillar 3 to enhance cooperation by integrating energy and water analysis was approved by the ESCC in March 2010. This session focused on the first activity in the work program, namely to establish a joint view on decision support and architecture (design) for energy-water modeling for Central Asian countries. Reconnaissance meetings with national and political counterparts held over the last month discussed the fundamentals of a decision-support system architecture (i.e., data information; available tools and models; and user-interface). The consultants presented on the issues that they heard on the scope of the effort, perceived needs, data sharing and transparency, effective resource management, understanding the range of tradeoffs and opportunities, understanding the economic and commercial aspects, and national aspirations and regional benefits².

Key issues emerging from the presentation were:

1. Given the current level of cooperation, the countries uniformly welcomed the proposed initiative; they agreed to a common goal to develop an independent, transparent and technically acceptable integrated energy-water model.
2. The countries stated that there have been a number of models and analysis done for Central Asia, but have not brought together the broad range of sectors nor clearly embedded national goals and priorities.
3. While integrating national aspirations, there needs to be a connecting regional model to understand current and future energy water issues.
4. A review of existing models which have been prepared in the basins over the years, will assess the extent to which existing individual country or basin models for Central Asia address the stated analytical needs of the countries and region.
5. The decision support system for energy and water will require an institutional platform based on collaboration and mutual respect for data sharing, transparency in the modeling platform and a robust interface to evaluate trade-offs and opportunities, and risks with economic and commercial underpinnings.

The issues raised during the Committee's discussion included:

- Agreement with the proposed next steps, with the modification requested by KYRZ to begin the model overview in November (rather than October), and offer by SIC-ICWC to provide additional information provided at national workshops for better understanding of the model architecture. Uzbekistan indicated they would provide written comments.
- Support for working at national levels as well as at the regional level. Indicators should reflect outputs for each individual country.
- A review of existing models is important to see how they fit together; in addition, it was recommended that the model be built from smaller sub-regional analysis.

² Kazakhstan did not attend the session on Energy-Water Linkages.

- Basins of all trans-boundary rivers and their tributaries are included in the model.
- The institutional platform for modeling and analysis will require further discussion amongst all countries.
- The energy-water analysis should be linked to an understanding of the role and functioning of all energy resources (it was noted that Pillar 1 will provide such an analysis, to be coordinated with Pillar 3).

III. Other issues

9. **CAREC Ministerial Conference:** The program for the upcoming CAREC Senior Officials Meeting and Ministerial Conference (October 30 – November 2, 2010) was explained, highlighting CAREC's 10th anniversary. ESCC will deliver the results of the diagnostics for each of the three pillars as well as the Progress Report.
10. **ESCC Progress Report:** The updated energy sector progress report and work plan (and schedule) were reviewed. It was proposed to convene the Committee twice annually, with sub-committee meetings as needed. The first sub-committee meetings (for Pillars 1 and 2) were proposed for December 2010; the sub-committee meeting for Pillar 3 was proposed for Spring 2011. The next ESCC was proposed for April 2011. Locations are to be confirmed by individual countries. Principally the dates, actions, activities and dates proposed were accepted, Uzbekistan indicated they will provide comments in written form.
11. **Capacity Building:** A presentation from the CAREC Institute explained its role as a virtual institute, focusing on capacity building and sector research activities in priority sectors at the regional level. The CAREC Institute Performance Assessment Review (CIPAR) undertaken in consultation with member countries highlighted the desire for greater interface with sector coordination committees. Appropriate participation and coordination for the sector committees was discussed as was improved interface with international and local institutions. Following the presentation, discussion focused on possible areas for capacity building events for the Energy Sector Coordinating Committee. Topics were suggested for Pillars 1, 2 and 3 for a variety of modalities (presentations, research and study tours). Participants were given a table of possible topics and asked to indicate their priority interests. These will be combined into a single list of priority events.
12. Invitation to CDC (Energy): the committee agreed to invite a representative from CDC to each ESCC meeting and relevant subcommittee meetings as an observer.

IV. Conclusions and Next Steps

13. The next meeting of the ESCC will be in April 2011.

14. The subcommittee meetings for Pillar 1 and Pillar 2 will take place in December 2010. The subcommittee meeting for Pillar 3 will take place in January 2011.

The summary of the meeting has been approved by the participating members of the ESCC meeting.