

# **Energy Charter Activities** in CAREC region

18<sup>th</sup> Meeting of the Energy Sector Coordination Committee
Beijing, 4-5 September 2014

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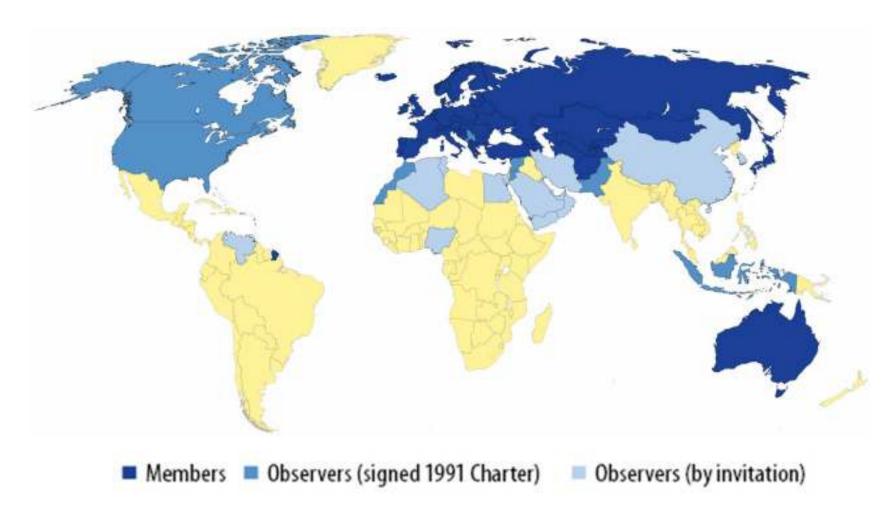
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- Electricity Transit Pricing Study;
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#### **Energy Charter Constituency**



This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area





# Intergovernmental treaty and organisation promoting the Principles of the Energy Charter:

- Improving energy security
- Implementing energy efficiency
- Enhancing safety and minimising environmental problems
- Developing more efficient energy markets
- Creating a climate favourable for both enterprises and for the flow of investments and technologies





# **Energy Charter Treaty and Protocol on Energy Efficiency:**

- More than 50 members; open to any exporting, transit or importing country
- National sovereignty over energy resources
- Investment protection based on nondiscrimination
- WTO based trade provisions, including freedom of transit
- Investor-to-state and state-to-state dispute settlement procedures
- Protocol on Energy Efficiency and Related Environmental Aspects
- Model Agreements facilitating construction of cross-border infrastructure





# Regional Energy Cooperation

- Regional Task Force on Electricity Cooperation in Central and South Asia established in 2007,
- Afghanistan, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan
- Developing a framework for sustainable and secure regional power trade based on the principles of the ECT





### **Objectives:**

- Promoting political dialogue for the development of sustainable energy resources and the development of transport corridors and the trade in electricity and gas;
- Enhancing cooperation through systematic channel for knowledge and information sharing and know-how.





### **Meetings held:**

9 regional meetings have been organized:

- Bishkek, Kyrgyzstan (26 April 2007),
- Kabul, Afghanistan (18 November 2007),
- Dushanbe, Tajikistan (23 April 2008),
- Almaty, Kazakhstan (21 April 2009),
- Ashgabat, Turkmenistan (18 November 2009),
- Ulaanbaatar, Mongolia (9 July 2010),
- Issyk-Kul, Kyrgyzstan (23 June 2011),
- Dushanbe, Tajikistan (20 July 2012),
- Ashgabat, Turkmenistan (8-9 December 2014).





# **Electricity Transit Pricing Study**

- Joint work with CDC "Energiya" under the Fellowship Programme of the Secretariat;
- Comparative analysis of various transit methodologies;
- Adpatation of ENTSO-E's ITC model for Central Asian UPS.







### Scope of the Study:

- Analyze electricity interconnections in CIS and selected South Asian countries;
- Analyze issues related to electricity transit and transit pricing methodologies;
- Examine available transit tariff methodologies;
- Compare existing transit pricing methodologies for existing and new electricity interconnections;
- Recommend the most suitable approach





# **Methodologies Reviewed**

- BRELL Draft Methodology Guidelines for Electricity Transit
- Methodology for Calculating Transit Tariff of Russian Electricity Through Belarus Power Grids
- Transit Tariff Methodology of CIS Power Council
- 4. ENTSO-E's ITC Model





# **Outcomes of the Analysis**

ITC model was recommended for adaptation for the following reasons:

- Transparent for all participating parties;
- Flexible to reflect any network evolutions;
- Relatively simple for adaptation;
- Universal for various configurations;
- Practically tested on 2012 data;
- Adequate results.





# **Next Steps:**

- Working Group established under Power Coordination Council of CA:
  - □ meeting held on 16 July 2014;
- Ongoing work on adaptation of the model:
  - Different configurations of the UPC,
  - □ Excel model developed.
- Technical workshop with participation of ENTSO-e and European TSOs:
  - □ To take place in ECS on 15 October 2014.





#### **Power Sector Reform**

- Work is undertaken under the Fellowship Programme of the Secretariat;
- Main focus on investment protection for infrastructure modernization;
- Geographical scope: Kazakhstan,
   Kyrgyzstan, Tajikistan and Uzbekistan.





# Scope of the Study:

- Analysis of regulatory frameworks of Central Asian countries;
- Investment challenges of modernization;
- Regional dimension of investment attraction;
- Preliminary conclusions and next tasks.





# Challenges of modernization

- Generation infrastructure:
  - Aging of capacity and energy supply threats.
- Network infrastructure:
  - □ High technical and commercial losses.
- End-use consumption:
  - Seasonal consumption,
  - Heating and irrigation.





# **Age of Generation Capacity**

	Kazakhstan	Kyrgyzstan	Tajikistan	Uzbekistan
< 10 year	11 %	4 %	14 %	7 %
11-20 year	11 %	9 %	0 %	5 %
21-30 year	33 %	23 %	12 %	13 %
> 30 year	44 %	64 %	74 %	75 %

Power Sector Regional Master Plan, Fichtner, 2012





# **Regional Dimension**

- Obvious economic and environmental benefits;
- Regional vs. national approaches;
- Energy independence and self-sufficiency;
- Re-conceptualising the notion of energy security.





# **Regional Dimension**

- Integrating regional cooperation into national energy strategies;
- EU experience on regional cooperation and diversification of supply;
- Energy independence vs. Managing of energy dependence.





# **Viability of Investments**

- General investment climate,
- Independence of regulator,
- Politically sensitive tariffs,
- Non-compliance and lack of enforcement of inter-state agreements,
- Majority of investments are of geopolitical nature or under sovereign guarantee.

# Role of investments in facilitating cross-border trade

- Export revenues to minimize tariff risks,
- Access to neighboring markets clear export and import guarantees,
- BITs only play a limited role in regulating disputes on electricity exchanges.
- International investment law could contribute to de-politicize regional electricity cooperation and improve trust between CA states.





# Conclusion

The following lessons could be serve to develop a sufficiently solid regulatory framework enabling financial viability of electricity investments:

- EU experience in terms cooperation of sovereign states, cross-border trade, non-discriminatory access to networks and harmonization of the national rules;
- Russian experience in terms of designing specific regulatory structures to attract investments in relatively unstable and unpredictable investment climates.





# **Next Steps:**

- Case study on EU experience on cooperation in power sector applicable to Central Asia,
- Case study on Russian and Kazakh experience on attracting investments into generation (longterm regulated capacity agreements),
- Draft report will be discussed at the Trade and Transit Group meeting (18 September 2014), finalized and disseminated.







# Thank you for your attention!

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Common rules for global energy security