THE ROLE OF THE ENERGY CHARTER IN PROMOTING ELECTRICITY COOPERATION IN THE SOUTH CAUCASUS

Anna Aslanidze

ENERGY CHARTER SECRETARIAT KNOWLEDGE CENTRE
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THE ROLE OF THE ENERGY CHARTER IN PROMOTING ELECTRICITY COOPERATION IN THE SOUTH CAUCASUS

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**Introduction**

After the Cold War, the South Caucasus (Armenia, Azerbaijan, Georgia, Iran and Turkey) re-emerged as a critical area in the geopolitical contest between major regional and global powers. Power systems in the South Caucasus are substantially different from those of two decades ago. During the years of political conflict between, respectively, Armenia and Azerbaijan, and Georgians and Abkhazians/Ossetians, and at a time of economic collapse, civil opposition and blockades, power systems were degraded and lost personnel with qualified management and technical skills. All reforms have yet not been able to compensate for these losses, even with Western support. The result of this is that power systems are functioning without productive links with other neighbouring countries, even if the interconnection still exists. These countries have a long-standing history of coexistence which should serve as a starting point when trying to bring benefit to all countries and in order to make power systems more efficient.

With the same logic, the processes of policy-making in all the countries in question should be harmonised in order to balance all interests. Regional economic cooperation is an extremely important condition for real economic development. The local power markets of each country in the region are too small to provide national producers with adequate market capacity, which is why regional electricity cooperation is unavoidable.

In this context, the Energy Charter, as a body having accumulated experience in fostering neighbourhood cooperation in difficult regions, could provide for a neutral platform allowing for dialogue and confidence building. The benefits of cooperation in the electricity field will serve not only to increase energy security, but will also contribute to building regional peace and fostering economic development.

The aim of this paper is to analyse the existing potential conditions and economic opportunities for regional electricity cooperation in the South Caucasus, and to work out policy recommendations on a potential technical Task Force to help achieve such cooperation.

The paper is structured in 3 main chapters. The first will help us understand the role of the Energy Charter, the Energy Charter Treaty (ECT) and the model agreements developed by the Secretariat, and how this organisation can promote energy cooperation in the region. The second chapter will try to explain the key trends in energy markets with reference to electricity production, export and the
existing/ongoing interconnection between all countries in question (information is provided country by country). The final chapter will assess the importance of cooperation for the region and will present the instruments and recommendations on a technical Task Force, which could foster this regional cooperation on electricity.
I. THE ROLE OF THE ENERGY CHARTER

Short history and membership

The roots of the Energy Charter date back to a political initiative launched in Europe in the early 1990s, when the end of the Cold War offered an unprecedented opportunity to overcome previous economic divisions. There was a recognised need to ensure that a commonly accepted foundation was established to develop energy cooperation among Eurasian states. This consideration gave birth to the Energy Charter process.¹

The European Energy Charter signed in December 1991 in the Hague was the first real institutional step for the establishment of a framework of rules for east-west energy trade. The Energy Charter Treaty (ECT) followed in 1994, a document incorporating the principles contained in the 1991 Charter into a legally binding mutual commitment.

In April 1998, the ECT and the Protocol on Energy Efficiency and Environmental Aspects (PEEREA) entered into force, following the completion of ratification by the first thirty members. The Treaty contains commitments on governmental cooperation, with regard to energy trade (including trade rules, transfer of technology, transit regime, access to capital, and the development of competition rules), investment promotion and protection, dispute resolution mechanisms and other provisions on sovereignty over energy resources, transparency, taxation, and much more.

It is important to note that more than 50 countries are members of the Energy Charter, including all countries in the South Caucasus, except for Iran, which however, became an Observer by invitation in 2002.

Shared commitment for cooperation

The world we live in is complex and the relationship among states can sometimes be problematic. Political instability and uncertainty can be insurmountable challenges to security and cooperation. In such context, the ECT establishes a legal framework to promote long-term cooperation in the energy field, based on complementarities and mutual benefits, in accordance with the objectives and principles of the Charter.

The Treaty provides a multilateral framework for energy cooperation that is unique under international law, and the strategic value of these rules is likely to increase in the context of efforts to build a legal foundation for global and regional energy security. So, creating successful regional cooperation that takes into account all relevant interests is among the Energy Charter’s objectives. This is especially important in relation to energy transit, which by nature, is a multilateral activity.

**Introduction of model agreements developed by the Energy Charter**

In 2008, the Energy Charter Secretariat, with the help of a professional consultant and with the valuable assistance of the voluntary Legal Advisory Task Force (which currently consists of over 60 senior legal expert from 33 leading companies and international law firms), adapted the Pipeline Model Agreements in order to prepare a set of Electricity Model Agreements (MAs), including an Intergovernmental Agreement (an international treaty among the States involved in the electricity project) and a Host Government Agreement (one or more separate agreements between each of the respective States involved and the project investors). This work was presented and discussed at the meetings of the Task Force on Promoting Regional Electricity Cooperation between Central and South Asia which took place in Kabul on 18 November 2007 and in Dushanbe on 23 April 2008. The preparation of this Model Agreement has been included in the Secretariat’s draft Programme of Work for 2009.2

In general, MAs are developed for the purpose of assisting parties in negotiating a final agreement within a particular field of activity. They offer a set of texts which represent some of the possible approaches that can be used on a voluntary basis and to the extent desired, by a state or investor involved in the negotiation of a cross-border electricity project.

In identifying the crucial issues concerning a particular field of activity, a successful model agreement should contain relevant clauses aiming to maximize the optimal benefit of all parties concerned. Addressing these issues is essential to ensure that the resulting binding agreement will endure and continue to operate smoothly during its lifetime.

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A number of issues, specifically relevant to electricity transmission projects, would normally be dealt with in the MAs. These issues include:

- the interoperability of the electricity systems in the different control areas;
- the determination of available cross-border capacity;
- system quality and security (e.g. frequency and voltage control);
- the allocation of cross-border capacity;
- the scheduling of cross-border exchanges;
- the settlement of deviations;
- cost and benefit allocation;
- the valuation of electricity in the different systems; and
- conditions for access to the systems.

**International Energy Charter and engagement with Iran**

In the course of 2014, the Energy Charter countries in partnership with Observers and interested states from all over the world concluded multilateral negotiations on the International Energy Charter (IEC), a new political declaration which was formally signed and adopted by more than 70 countries and international organisations on May 20-21, 2015 in The Hague. This new declaration reflects the ambition of the Energy Charter to play an important role in the evolving global energy architecture. Signing and adopting the new political declaration will grant observership to the country in question, which will play an active role in cooperating with the Energy Charter and other countries.

Signing the IEC is a great opportunity for observers and non-members to learn more about the ECT, its benefits and obligations, and cooperate closely with the Member States. This new declaration opens new investment and trade opportunities and thus strengthens cooperation and energy security for all participating countries.

The possibility of Iran becoming a Member of the Energy Charter would obviously be very beneficial in terms of political cooperation, especially in the South Caucasus, considering all countries in this region have already acceded to the Treaty.
Chairmanship of Georgia in 2015

In 2015, Georgia assumed the Chairmanship of the Energy Charter Conference. The country has always been committed to facilitating electricity trade with its neighbours through greater technical compatibility with their power grids, harmonisation of legislation, and development and renovation of the transmission infrastructure. Georgia\(^3\) is also a connecting bridge between the East-West and North-South routes and a seasonal exporter of environmentally clean hydropower which endeavours to develop a regional power market that could potentially include Turkey, Azerbaijan, Armenia, Iran and Russia. As the country’s power grid is connected to the grids of all neighbouring countries, it may work in a synchronised regime with the energy systems of Russia, Azerbaijan and Armenia.

During the Chairmanship in 2015, one of Georgia’s main goals was to improve regional cooperation, which in itself was divided into two levels on the basis of the peculiarities of the Caucasus region:

- **East - West task force**, comprising Turkmenistan, Azerbaijan, Georgia and Turkey
- **North - South task force**, comprising Georgia, Armenia, Iran and Russia

These two task forces could meet at the Ministerial level\(^4\) on a back-to-back basis in Georgia, and technical level meetings can be held in member countries of each task force on a rotation basis.

Georgia, as a significant transit country in the region, is particularly interested in strengthening the Energy Charter process with regard to energy transit. The country put great emphasis on electricity transit and has made this issue a priority throughout its 2015 Chairmanship by enhancing discussions between interested parties in the regional context for the promotion of electricity transit rules based on the ECT.

Strengthening the role of the Energy Charter as an international organisation with a global dimension will allow its members, including Georgia, to derive particular benefits and to deepen trade relations beyond the traditional constituency.

In July 2015, the Ministry of Energy of Georgia and the Energy Charter Secretariat jointly organised a meeting on regional electricity cooperation in the South Caucasus. During this meeting, representatives of governments and energy

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4 Ibid.
companies from Armenia, Azerbaijan, Georgia, Iran, Russia and Turkey, as well as from international organisations, discussed the potential establishment of a legal and technical framework for secure and sustainable regional cross-border electricity trade and for attracting investments needed to develop it.\(^5\)

### II. ELECTRICITY COOPERATION IN SOUTH CAUCASUS

**Energy sector overview**

The current situation regarding power supply in the South Caucasus differs substantially from country to country (see table 1).

**Armenia** has close to 100 power companies - 95 hydroelectric, 3 thermal and a nuclear power plant (the only NPP in the whole South Caucasus) generating 8,036 GWh of electricity per year.

The lack of economic efficiency in the country, however, is still an issue to be solved as the electricity consumption is fairly low compared to the generation capacity: only 30%\(^6\) is used, which has an impact on the average price per kWh (7.5 AMD,\(^7\) excluding network costs) of electricity produced in Armenia. However, the country still continues to modernise and expand its power generation capacities. Armenia planned to expand and build new nuclear plans at lower costs and to develop renewable energy, due to its geothermal, solar, wind and biogas potential. As a consequence, the generation capacity will increased significantly.

Although energy consumption is not showing signs of growth, the country is planning on boosting its exporting potential. In 2014, the Government of Armenia approved the energy security strategy of the country and one of the key factors is the fundamental principle of regional integration and cooperation.\(^8\)

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\(^5\) [http://www.energycharter.org/media/news/article/georgia-hosts-a-meeting-on-regional-electricity-cooperation-in-south-caucasus/?tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=76573b4d5e484c32d4bb36017ff6c5a1](http://www.energycharter.org/media/news/article/georgia-hosts-a-meeting-on-regional-electricity-cooperation-in-south-caucasus/?tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=76573b4d5e484c32d4bb36017ff6c5a1)


\(^7\) Ibid.

\(^8\) Energy Strategy of Armenia Accomplishments, Challenges, Next Steps – Areg Galastyan, Yerevan 2014
Table 1: Electricity production in Caucasus countries in 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Electricity Production (w/o heat) in GWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>8,036</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>18,710</td>
</tr>
<tr>
<td>Georgia</td>
<td>9,695</td>
</tr>
<tr>
<td>Iran</td>
<td>254,276</td>
</tr>
<tr>
<td>Russia</td>
<td>1,070,734</td>
</tr>
<tr>
<td>Turkey</td>
<td>239,496</td>
</tr>
</tbody>
</table>

Source: IEA Statistics

**Georgia** is a net electricity exporter and has developed much of its clean energy through the hydropower sector. Nowadays, the country generates over 9,695 GWh per year and 80-85% of total energy is produced by hydropower plants (HPP). Furthermore, official estimates show that 80% of the country’s economically viable hydro potential has yet to be explored.10

In contrast to Georgia’s case, **Turkey** has difficulties in meeting its energy demand. The economy is developing fast and the country is experiencing population growth which resulted in a dramatic increase in energy consumption: Deloitte Consulting anticipated that demand will grow from 6.5 to 7.5% annually reaching 467,260 GWh by 2021.11 Turkey has increased its energy production with the annual output totalling about 200 billion kWh.12 In 2012, electricity production was 239,496 GWh with more than 72% produced from thermal and about 24% from hydro.13

The other group of countries - **Iran, Russia and Azerbaijan** - are rich in natural resources. **Iran** generates around 254,276 GWh per year, which is almost 1/5 of the energy produced in the Middle East and Africa regions, ranking the country as number 19th in energy generation.14

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10 Ibid.


12 See fn. 2


14 See fn. 5
However, with the objective of keeping seasonal balance, Iran imports 1.2% of its electricity consumption. In terms of electric mix, more that 95% is coming from thermal sources and less than 5% from renewables (hydro and wind).\textsuperscript{15}

It is important to mention that Iran plans to generate an additional 23,000 MWh\textsuperscript{16} of electricity through nuclear technology by 2025 to meet its increasing demand for energy.

In \textbf{Azerbaijan}, the total installed generating capacity is approximately 18,710 GW. The country’s 13 operating natural gas power plants account for 91%\textsuperscript{17} of total power generation in 2012, up from 86%\textsuperscript{18} in 2011, as hydropower generated less electricity while natural gas generated more. Azerbaijan has eight hydropower plants and a very small amount of wind capacity account for the remainder of the country’s installed generating capacity. Furthermore, the country is planning to add 12,308 MW of generation capacity before the end of 2025.\textsuperscript{19}

In 2011, Russia reached 1,021 TWh\textsuperscript{20} in energy consumption. The biggest part of electricity generation is from natural gas. However, Moscow is planning to reduce reliance on electricity produced from natural gas.\textsuperscript{21} Currently Russia is a net electricity exporter but it may well become an electricity importer in the medium to long term.\textsuperscript{22}

\textbf{Current volume of electricity exports}

Table 2: Volume of imported and exported electricity

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
Country & Import in GWh & Export in GWh & Import in GWh & Export in GWh \\
\hline
 & 2010 & 2012 & 2010 & 2012 \\
Armenia & 283 & 98 & -1 077 & -1 696 \\
Azerbaijan & 100 & 141 & -462 & -680 \\
Georgia & 232 & 615 & -1 492 & -520 \\
Iran & 3 015 & 3 897 & -6 707 & -11 629 \\
\hline
\end{tabular}
\end{table}

16 http://en.wikipedia.org/wiki/Energy_in_Iran#Electricity
17 U.S. Energy Information Administration (EIA) and International Energy Agency (IEA)
18 Ibid.
20 Ibid.
21 See fn. 15
22 See fn. 15
The situation also varies from country to country when it comes to exports. For example, in 2012 Georgia was a net electricity exporter (see table 3). The country’s main problem is its old infrastructure, as there is not enough investment in the distribution and transmission systems. In addition, distribution losses are quite high, so Georgia’s exports do not exceed 10% of total generation, which in 2012 was only around 528GWh. It has to be kept in mind that the country exports only in summer months, while it imports power during winter.

The Armenian case is different, as the country’s energy law allows producers to only export expensive generated capacity with production costs exceeding 15 AMD. Once transmission costs are added, the total export price becomes higher than the cost of generated electricity in other Caucasus countries. Therefore, electricity from Armenia is exported exclusively in seasonal exchanges.

The picture is different for a country rich in natural resource – Azerbaijan –, which is a net exporter of electricity. The total export in 2012 did not exceed 680 GWh, which is less than 10% of the total production. This is why Azerbaijan decided to add 1,200 to 2,000 MW of gas-fired generation capacity by 2015 and invest in infrastructure renovation with the objective of reducing transmission losses in the electricity grid from the current 15% to more a conventional 5% level.

Concerning Iran, much attention has been given to its hydrocarbon reserves but little has been written about the strategic nature of its electricity sector.

Figure 1: Iranian Electricity Exports and Imports (in GWh), 1997-2011

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<table>
<thead>
<tr>
<th></th>
<th>1 644</th>
<th>2 661</th>
<th>-11 091</th>
<th>-19 143</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>1 144</td>
<td>5 827</td>
<td>-1 918</td>
<td>-2 954</td>
</tr>
</tbody>
</table>

Source: IEA Statistics

23 See fn. 5
24 See fn. 5
25 See fn. 15
Since 2007, Iran’s net electricity trade surplus has increased more than sixfold. The restructuring of the electricity sector (structural, technological and economical) and the overall increase in electricity capacity, led to a significant rise in the overall electricity generation in the country and has underpinned Iran’s goal of using the electricity sector to substantiate its regional power.

By September 2012, Iran had increased its net electricity exports to a total of 11,629 GWh. Furthermore, in an effort to allow for greater export capacities, the Government has invested into generation and transmission and attempted to curb domestic demand and encourage energy efficiency.

Iran views the South Caucasus as a potential area for energy trade and transportation, and in fact, it has close relations with Azerbaijan and Armenia. Since 2006, Armenia and Iran have cooperated on the construction of hydroelectricity plants (more details on this project will be discussed in the section on interconnections).

Turkey’s need of energy sources has also led to a strong initiative for economic cooperation between the country and Iran. The completion of a new electricity transmission line in northern Iran boosted exports to Turkey to 400 MWh by the end of May 2012 from the original 190 MWh. Based on Turkey’s total electricity imports (5.8 billion kWh), Iran could have very well provided approximately 13% of these imports in 2012.

The back-to-back station of the already completed transmission line with Turkey and the planned back-to-back station with Armenia will allow to operate the systems of the North-South and East-West electricity corridors.

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Existing and ongoing interconnections

First of all, electricity cooperation among these countries implies the development and the creation of technical possibilities to allow for energy transfer between states. However, currently the electricity systems of three Caucasus countries\(^{30}\) are operating in full isolation and with no connections to other countries (beyond the Caucasus region).

Table 3: Electricity border lines/Cross-border infrastructure

<table>
<thead>
<tr>
<th></th>
<th>Iran-Armenia</th>
<th>Armenia-Georgia</th>
<th>Georgia-Russia</th>
<th>Georgia-Turkey</th>
<th>Azerbaijan-Georgia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Voltage(kV)</td>
<td>220</td>
<td>220</td>
<td>500</td>
<td>400</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>220</td>
<td>220</td>
<td>220</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Nominal Power Capacity</td>
<td>300</td>
<td>150</td>
<td>700</td>
<td>700</td>
<td>850</td>
</tr>
<tr>
<td>(MW)</td>
<td></td>
<td>160</td>
<td>154</td>
<td>160</td>
<td>350</td>
</tr>
<tr>
<td>Planned</td>
<td>500</td>
<td>500</td>
<td>400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal Power Capacity</td>
<td></td>
<td>700</td>
<td>350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(MW)</td>
<td></td>
<td>1000</td>
<td></td>
<td>350</td>
<td></td>
</tr>
</tbody>
</table>

Source: Georgian State Electrosystem (GSE) and Ministry of Energy of Armenia

Armenia

Armenia’s power grid is interconnected with all neighbouring countries in the Caucasus region, including connections of 220 kV with Georgia, 220 kV with Iran, 220 with Turkey and 330kV with Azerbaijan. Armenia and Iran decided to build a third power transmission line connecting the two countries’ power grids. Moreover, they are planning to build a large hydroelectric plant on the Arax River flowing along the Armenian-Iranian border. On April 13th, 2016, Armenia, Russia, Georgia and Iran signed a Memorandum of Understanding agreed to a roadmap to prepare joint energy projects and to increase cooperation in the energy sector.\(^{31}\)

After the operation of the Georgia and Armenia interconnection grid, the power systems of the North-South route can potentially be linked to the Iranian power grid on the border with Armenia.

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\(^{30}\) Armenia, Georgia, Azerbaijan

\(^{31}\) ISW – Franklin Holcomb and The New ISW Russia – Ukraine Team: Russia in Central Asia and The Caucasus, June 09, 2016
Georgia

Georgia’s power grid is also connected to the grids of all neighbouring countries and may work in synchronised regime with the energy systems of Russia, Azerbaijan, Armenia and Turkey (see the map below). Furthermore, after the implementation of the planned Georgia-Russia 500 kV interconnection line Kazbegi,\footnote{The project is under construction (2018-2022)} it will be possible to create a Russia-Georgia-Azerbaijan-Russia interconnection ring. Concerning Georgia’s interconnection with Turkey, the capacity interconnection could be linked to Russia and other countries in the region.

Azerbaijan

Azerbaijan’s power system is interconnected with the energy systems of neighbouring countries\footnote{The connection with Armenia was interrupted} – Russia (500 kV), Iran (330 kV) and Georgia (230 kV), a favourable condition for energy transit to neighbouring countries.

The connection with Iran is realised through the transmission lines Astara (Azerbaijan) – Astara (Iran) with a 220 kV capacity that was put into operation in 2003. This transmission connection is the second line connecting the power systems of two countries.

With reference to Russia, energy exchange takes place through the transmission lines Derbent-Jashma of 330 kV voltage and also through transmission lines (110kV) to Chechnya, although rarely used. With Turkey, the connection is through the transmission lines of 154 kV “Babek-Igdir,” which is 94 km long (in the Nakhichevan Autonomic Republic).
III. CONCLUSIONS AND RECOMMENDATIONS

The South Caucasus is a region with a continuously increasing demand of electricity. While Georgia, Armenia and Turkey are poor in gas and oil, Russia, Iran and Azerbaijan are rich in natural resources. It is crucial to integrate Georgia’s and Armenia’s vast hydro and Azerbaijan’s natural gas resources, which could be a promising source of supply for neighbouring countries.

As already stated, the South Caucasus’ power markets are too small to provide national producers with adequate market capacity; however, concerted efforts in the region could help meet consumption levels. This could help develop not only the countries’ potential but also increase the economic benefit by improving the energy efficiency in the country.

Any large scale regional cooperation project among South Caucasian countries is a technological and economic necessity, as it would help accelerate economic development, regional integration and energy security. In addition, it would promote peace in the region. However, the success of the process depends on political will and the clear understanding of common advantages for all involved countries.
Armenia and Iran have chosen a long-term cooperation strategy according to which both partners would gradually increase their technological skills together and would complement each other. In 2010, this cooperation was formally approved through a 20 year agreement for each cubic meter of Iranian gas, Armenia is delivering 3 kWh of energy to Iran. The project is of strategic importance for Armenia because it could offer the opportunity to become an important exporter of electricity and it would foster economic growth.

Georgia has plans with both Armenia and Russia to improve electricity interconnections. It seems that the construction of a south to north interconnection between Iran-Armenia-Georgia-Russia could be on the table in the near future. More consultations would be required to fully integrate Azerbaijan and Turkey in the emerging regional power market.

Moreover, cooperation will stimulate the development of the region and should take in account the interests for all states. It should encourage free trade, remove quantity limits in mutual trade, but also establish a common investment space.

Whichever trade agreement signed by Armenia, Azerbaijan and Georgia with the CIS in 1994 has largely been ineffective. Consequently, trade agreements have been supplemented by different bilateral arrangements. Unfortunately, none of these agreements succeeded in establishing strong legal provisions supporting a harmonised approach toward freedom of transit and terms of access conditions to the cross-border transit infrastructure in the region.

With the exception of the lack of clear transit methodologies, poor capacity allocation and congestion management framework, one of the major challenges in the region are transmission and distribution losses because of infrastructure deficiencies. Electricity lost from supply source transmission to distribution stations is in the range of 2 to 3%, which is relatively low compared to other developed markets. However, the electricity loss mostly caused by pilferage, is 20% in Azerbaijan, 14% in Turkey, and 11% in Georgia. Azerbaijan has still significant problems with bill collection in rural areas and has not yet completed a metering process.

34 Zarifian, Julien. ‘Iran and Its Two Neighbours Armenia and Azerbaijan: Resuming Relationships under America’s Suspicious Eyes.’ Iran and the Caucasus 13, 2009 (388)
Recommendations on the technical Task Force

Cooperation is a difficult task. The most crucial moment in the process is the political will of the countries involved and the choice of direction. The governments could be assisted by a technical Task Force of experts established by an independent and neutral organisation like the Energy Charter Secretariat. The Task Force shall investigate the potential for cooperation and electricity trade in the region in-depth and report on actions required in the following areas:

- In-depth assessment on barriers (political, economic, technical) to regional cooperation.
- What kind of legal inter-governmental agreements are required between countries to specify the principles of power trade projects, the fundamental rules for regional power markets and for the creation of a regional coordinating centre.
- A transparent and clear regulatory framework should be established in each of the countries.
- What kind of national level legislation is required to promote cross-border interconnections and power trade.
- A study on transit methodology, poor capacity allocation and congestion management frameworks.
- The harmonisation of national electricity regulations regarding the policies of ownership, technical and economical feasibility and open access to the network for third parties.
- Transparent prices and technical clarification of the interconnection, which will include
  - detailed design of the interconnection;
  - reliability standards;
  - implementation and use of line protection;
  - determination of needs of data exchange and economic analysis;
  - continuously monitoring and disseminating the generation and transmission maintenance scheduling.
- Transparent network tariff determination with clearly represented fixed and variable costs, which should be non-discriminatory with the objective to provide a firm basis for investors interested in the development of networks (as for generating tariffs).
- Facilitation and promotion of private investment, overcoming market entry barriers and establishing a clear regulatory framework.
o Continuous improvement of the power system in each country in order to be able to cover the local power demand and long-term supply countries.

Regional economic cooperation is extremely important for real economic development. With the same logic, policy making in the countries in question could be harmonised in the way that the social interests of the population from each side of the broader region could be balanced and fully reflected in the political decision making process.

The Author

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