Regional seminar: INOGATE PC convergence with EU Electricity and Gas Tariffs

INO_GATE Information Event
Support to the Electricity Sector

John Swinscoe
Electricity Markets Convergence Expert

Tbilisi, February 19, 2014
Tariff Review

Regional Review of Tariffs
- Focus on methodologies for Electricity and gas
- Comment on alignment with EU practices

Tariff Seminar
- Tariff methodologies
- Tariff Design
Tariff Review

- All respondents said that their tariffs are cost based
- Most use historical costs for valuing assets and use straight line depreciation
- All say that tariffs are fully cost reflective
- Most say that there are no subsidies in the tariffs
- Some (Georgia, Kazakhstan, Moldova, Ukraine) are contemplating incentive regulation for transmission/distribution
Commercial & Residential Tariffs in PCs

Kyrgyzstan  Tajikistan  Belarus  Ukraine  Armenia  Kazakhstan  Azerbaijan  Georgia  Moldova

Residential  Commercial
Tariffs in EU15 and PCs

EU 15 and Partner Countries (Excl. Tax)
Tariff Seminar

• Held in Budapest 29 - 31 October
• Representatives from 7 of PCs
• Covered all aspects of tariff setting:
   OPEX, CAPX and RoA
   Tariff design
   Investments
   Public Service Obligations
   Network Access
Tariff Seminar

Positive feedback on

- Relevance
- Quality
- Organisation
Inogate involvement in the Georgian Electricity Sector

3 key areas:

- Review proposed legislation, codes etc. with a ‘3rd Package’ focus
- Provide some learning from the experiences of recent accessions to the Energy Community
- Assist with the development of a detailed design for the wholesale electricity market
Energy Strategy Review

• Energy Security
• Environment
• Energy Efficiency & Renewables
• Optimisation of resources
• Affordability
Energy Community Treaty

Protection of Investment
• Stable, favourable and transparent conditions
• Most favoured nation principle

Competition
• Eliminate barriers to trade
• Avoid market distortions
• Legislate against anti-competitive behaviour
ECT (Continued):

**International Trade & Transit**
- Non discriminatory access to networks
- Non discriminatory pricing of transit
- Dispute resolution

**Environment**
- 20% reduction in GG emissions
- 20% increase in renewables share in energy resources
- 20% improvement in Energy Efficiency
**GEMM 2015**

<table>
<thead>
<tr>
<th>Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arose from the Hydro Investment Promotion Project, supported by USAID and</td>
<td>implemented by Deloitte</td>
</tr>
<tr>
<td>Initially motivated by wish to encourage foreign investment into the small</td>
<td>HPP sector</td>
</tr>
<tr>
<td>Investment deterred by a lack of clarity in the Georgian market and by</td>
<td>uncertainty in the ability to reach export markets</td>
</tr>
<tr>
<td>The ‘Georgian Electricity Market Model’ document was a vision for reform of</td>
<td>arrangements</td>
</tr>
<tr>
<td>the electricity trading arrangements</td>
<td></td>
</tr>
</tbody>
</table>
GEMM 2015

- GEMM proposes a bilateral trading model
- Incorporates the principles of the 2nd energy package of the EU
- Covers the main principles of market operations and roles/responsibilities of actors
- Proposes a roadmap for implementation
GEMM 2015

• HIPP morphed into HPEP (Hydro Power and Energy Planning project in the autumn of 2013)

• Much work is in progress with HPEP, including proposals for
  – Changes to primary legislation
  – Drafting of arrangements for trade with Turkey
  – Proposals for capacity allocation on HVDC connection
  – Drafting of Grid code
Current Market overview

- Regulatory Generation
- Thermal HPP
- Other Large HPP
- Small HPP <13MW

Tariff
Capacity & Energy Tariff

ESCO

Import

Derived Tariff
Capped Tariff
Negotiated

Distribution
Eligible Customers
Export
Issues with existing model

• Direct Contracts are imprecise
  – Total volume over month with provisions for wide variances in contract delivery
  – No incentive for accurate forecasting
  – Of little value in the unit commitment and dispatch process

• No price discovery
  – ESCO prices derived from the mix of supply injected into grid
  – Large proportion of wholesale supply on direct contracts between jointly owned supply and distribution
  – Little opportunity for traders or aggregators to introduce liquidity
Issues with existing model

• Lack of certainty discourages investment
  – Uncertainty concerning legislative environment
  – Frequent changes to market rules
  – Pre-existing MOUs providing preference to some investments
  – Lack of access to export markets

• Uncertainty concerning tariff strategy
  – Pre-existing MOUs distort market
  – Relationship between cost to serve and cost allocation
Objectives of Market Design

• Reflection of overall Energy Market strategy
• Define in detail the relationship and interaction between market actors
• Propose a pathway from the current environment to the liberalised, transparent and liquid market envisioned the EU Acquis and the GEMM 2015 concept
Competitive Market

- Competitive Generators/Import
- Traders
- Eligible Customers/Export

Regulated Market

- Regulated Generators/Import
- Wholesale Public Trader
- Regulated Suppliers
- Regulated Consumers

Bi-lateral

- Spot
- Balancing
Demand can be difficult to predict...

England Vs Germany 1990, World Cup Semi-Final, Kick Off 19:00
Design Issues

• TSO, MO and WPT: Separate entities? Functions within a single entity?
• Liquidity: How to move dominant regulated generation into the market?
• Competition: How to gradually open the market to wider competition?
• Pricing: How to prevent market distortion by leakage of low price competitive generation into the competitive segment?
• Affordability: How to protect vulnerable customers in a competitive market?
• Staging: What is the first incarnation and how does the market progress?
Questions?