Energy Community Gas Market Report

1st Energy Community Gas Regulatory Forum

Maribor, November 9th, 2007

ECRB Gas Working Group

- Following the approval of its internal rules the ECRB has set up three working groups on Electricity, Customers and Gas
- The members of the GWG are:
  - 15 in total: EU MS (Austria, Bulgaria, Greece, Hungary, Italy, Romania, Slovenia); Contracting Parties (Albania, Bosnia and Herzegovina, Croatia, FYR of Macedonia, Montenegro, Serbia, UNMIK); and Turkey (as Observer)
  - The scope of the GWG is to develop the work of the ECRB on the Energy Community gas market and collaborate with regional stakeholders on gas issues.
  - GWG work is supported by the ECRB Section of ECS.
  - For the purposes of this study, support has being provided by USAID (Pierce Atwood) and experts from the WG members (Serbia)

Overview

- **According to the ECRB Work program, the ECRB GWG is conducting a Gas Survey to cover all its members:**
  - **Builds upon the experience of the former CEER WG SEEER (2004-2005)**
  - **Provides current data on state of play for natural gas in the region, identifies needs, offers recommendations**
  - **Focuses on gas market and structure, regulatory relationship to gas infrastructure conditions and issues, regulatory role with respect to investment needs and projects**
  - **The work has not been completed yet; preliminary results presented here**

Scope of the Report

- It is the starting point of the GWG efforts
- Will serve as the platform for the provision of regulatory input on the issues related to the development of the SEE gas market
- Practical approach applied; limited time; and anticipation of other studies currently underway or finalised, including extensive work by the Energy Community Secretariat
- Will not duplicate the work that others (ECS and the WB, for the time being) are already undertaking on the regional level, but will try to supplement it

Areas covered

- **Three main areas:**
  - **Existing gas demand/supply, infrastructure and market operation (supply, transmission, distribution, storage, LNG) and anticipated future evolutions**
  - **The legal and regulatory framework in the countries of the region**
  - **Infrastructure development:**
    - **Legal and regulatory framework: responsibilities and roles**
    - **Existing arrangements for regional approach**

Methodology

- Regulators were asked to update prior information (gathered in 2003) and also to answer the new questions
- New questionnaire developed based on the old questionnaire, with a more concrete focus on:
  - the legal and regulatory side
  - Investment needs and plans – and the regulatory relationship to these

Schedule for Completion

- ECRB Gas Survey begun in May 2007
- Currently, 14 of 15 responses received (missing Bulgaria)
- Draft Survey in process; the second draft is currently under review by the members of the GWG
- Final report will be available by the end of 2007
- Results will be presented in the next JGW and Forum

The Market

- **Huge differences between the countries:**
  - **Mature gas markets for the EU-MS (Greek market emerging, Turkish market also growing)**
  - **Developed gas markets in some of the Contracting Parties' markets (Croatia, Serbia)**
  - **Minimal development in FYR of Macedonia, Bosnia and Herzegovina**
  - **Negligible or non existent consumption, infrastructure and supply in UNMIK, Montenegro, Albania**

Gas Supply

- Strong dependence on imports
- For the vast majority, long term contracts govern gas supply
- Limited supply side options (main suppliers Russia and Algeria)
  - Imports of Russian gas via existing routes
  - Imports of LNG (Greece, Turkey and Italy)
- Poor interconnection in the region
- Backhaul opportunities, cross border storage and LNG facilities not exploited
- Contractual rather than physical congestion in transit, spare capacity

Market size and self sufficiency

Country	Market size (2003, BCM)	Market size (2006, BCM)	Share of imports (2003)	Share of imports (2006)
Albania	0,01	0,01	0%	0%
Bosnia and Herzegovina	0,18	0,36	100%	100%
Croatia	2,64	2,67	41%	36%
F.Y.R. of Macedonia	0,11	0,08	100%	100%
Montenegro	0	0	NA	NA
Serbia	2,22	2,30	85%	91%
Austria	8,90	8,91	77%	88%
Bulgaria	NA	NA	NA	NA
Greece	2,40	3,29	100%	100%
Hungary	14,56	14,24	80%	80%
Italy	76,40	84,50	82%	92%
Romania	18,30	17,26	30%	30%
Slovenia	1,03	1,10	100%	100%
Turkey	21,20	30,89	97%	97%
Adhering Parties	**5,16**	**5,42**	**63%**	**64%**
Art. 27 Countries	**121,59**	**129,30**	**70%**	**78%**

Capacity and its use at key cross-border points

Location	Type	From (TSO)	Country	To (TSO)	Country	Max flow MNm3/h (*)	Utilisation rate (**)
Griespass	Pipeline	ENI-CH/Swissgas	CH	SRG	I	2,49	84%
Panigaglia	LNG	GNL Italia	I	SRG	I	0,51	65%
Mazara del Vallo	Pipeline	TMPC	TUN	SRG	I	3,29	83%
Gela	Pipeline	GreenStream	LYB	SRG	I	1,04	82%
Gorizia	Pipeline	SRG	I	Geoplin-Plinovodi	SLO	0,19	44%
Tarvisio	Pipeline	OMV	A	SRG	I	3,90	69%
Murfeld	Pipeline	OMV	A	Geoplin-Plinovodi	SLO	0,42	85%
Baumgarten	Pipeline	SPP	SK	OMV/TAG/BOG	A	6,00	72%
Revithoussa	LNG	DESFA	GR	DESFA	GR	0,52	16%
Kula	Pipeline	Bulgartransgas	BUL	DESFA	GR	0,66	51%
Beregdaroc	Pipeline	UKRTransgas	UKR	MOL	H	1,72	76%
Isaccea/Mediesu A.	Pipeline	UKRTransgas	UKR	Transgas	RO	4,38	61%
Negru Voda	Pipeline	Transgas	RO	Bulgartransgas	BUL	3,00	59%
Total Art. 27 Countries						**28,12**	**70%**
Kiskundorozsma	Pipeline	MOL	H	Serbia Gas	SRB	0,54	44%
Rogatec	Pipeline	Geoplin-Plinovodi	SLO	Plinacro	HR	0,20	64%
Loznica	Pipeline	Serbia Gas	SRB	BiH-gas	BiH	0,08	53%
Total Adhering Parties						**0,82**	**50%**

(*) Source: GIE, November 2005 data; for Kula, Revithoussa: RAE, July 2007
(**) Source: ECRB Gas Survey 2007

Legal and Regulatory Framework (1)

In terms of the *legal and regulatory framework*, many forward steps have taken place in the last year or two:

- **Primary gas legislation passed or about to be passed, consistent with EU requirements/Energy Community Treaty**
- **Independent regulators for the gas sector have been set up in all GWG countries except BiH and Albania**
- **In Bosnia and Herzegovina, Albania draft legislation is pending to give the existing electricity regulators competence in the gas sector as well (both anticipated for passage by end of 2007)**

Legal and Regulatory Framework (2)

- Unbundling is underway, with accounting completed in every case where applies; legal and organizational unbundling in most cases – TSO and DSOs established in majority
- Transmission tariff methodologies are being developed
- The licensing regime varies greatly
- Hard to build necessary infrastructure in third countries
- Much work needed to make the framework operational

Preliminary Lessons from the Survey (1)

Large projects in the planning stages:

- Mainly for pipeline gas, few LNG terminals
- Different models exist for infrastructure development (e.g. Nabucco, IGI…) but harmonized access and trading rules needed anyway
- Limited legal and regulatory provisions for infrastructure development (pipelines, LNG and storage)
- Most investments will be in distribution, regulatory support needed but national decisions

Preliminary Lessons from the Survey (2)

- Significant idle import capacity already exists
- Need to overcome a vicious circle:
  - Inadequate regulation
  - Low investment
  - Low supply
  - High costs
  - Low gas competitiveness
  - Small gas market
  - Weak gas industry
  - Low pressure for better regulation

Some encouraging starting points

- Market rules have hardly been developed, thus regional harmonization easier, starting from mature countries
- Few strong interests hinder gas market development
- Gasification is economically feasible under certain conditions (WB/KfW study)
- Substantial benefits to accrue to the region:
  - Gas (and hence energy) cost reductions from economies of scale
  - Fast development of much needed power generation
  - Interconnection with EU minded projects and West European market
  - Urban, regional and global environmental benefits

Key Regulatory Challenges

- Foster and accelerate implementation of the EU acquis
- Develop the framework for infrastructure development under mainly emerging markets conditions
  - regulatory certainty to be provided for West Balkan Ring
- Foster cross-border trade:
  - full exploitation of existing infrastructure needed
  - develop a framework for transit and its “convergence” with domestic transmission
- Foster security and diversity of supply
- Enhance competition

Gas Regional Initiative in the Balkans (1)

- **Background**
  - last Mini Forum
  - ECRB decision
  - experience with EU
- **Sub-regions with different features:**
  - A. North Western Balkans (Croatia, Serbia): gas market developed, considerable experience
  - B. South Western Balkans (Bosnia and Herzegovina, Montenegro, Albania, FYR Macedonia, UNMIK): no or little gas used and no experience
  - C. Neighbouring countries (Austria, Bulgaria, Hungary, Greece, Italy, Romania, Slovenia): GRI focusing mainly on cross-border issues, especially regarding transit

Gas Regional Initiative in the Balkans (2)

- Neighbouring countries are part of the GRI “South-South East” region and EU members
- Issues to be addressed differently in SW Balkans
  - Infrastructure development
  - Developing a new market
  - Distribution and transmission unbundling
- Common issues
  - Licensing
  - Implementation of Directives
  - Harmonization of wholesale tariff and market rules, etc.

Gas Regional Initiative in the Balkans (3)

- Short term focus on:
  - Transit, enhanced use of existing infrastructure
  - Providing stable and harmonized regulatory framework for new infrastructure
  - Appropriate provisions tailored to developing markets
- Co-ordinated by ECRB (Gas Working Group)
  - Co-ordination with neighboring countries (ERGEG GRI for SSE, Turkey)
- Implementation Group to include TSOs, Donors, IFIs, Representatives of network users
- Stakeholders meetings to be held back to back with Gas Forums