Bulgaria: Natural Gas and Oil Sector 2014

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Overview of the Oil and Gas Sector in Bulgaria

The Bulgarian energy sector is comparably small in global terms, but is rather sizable in the country's industrial portfolio. It is considered strategic for the country's economy and national security. Although the private sector's share in Bulgarian energy has been increasing steadily, the larger share is still controlled by the state. Transparency remains a major governance issue for the energy sector in Bulgaria. The import and transit of hydrocarbons is a specific concern as the country is almost entirely dependent on a single source - Bulgaria imports nearly all of its gas and oil from Russia. Gazprom (through its intermediaries) is the single supplier of gas for import and transit for Bulgaria. Bulgaria received natural gas through a single pipeline from Russia. The import and transit pipeline systems are physically separated. The transit system has so far been reserved for Gazprom gas only and is not connected to national gas transmission pipelines. Under existing contracts, Bulgaria is obliged to transit up to 17 bcm annually to Turkey, Greece and Macedonia.

Of the European Union's countries, only two export oil: Great Britain and Denmark, while 21 others are almost fully dependent and Bulgaria is 93 % dependent.

Natural Gas Summary

Bulgaria's natural gas domestic market is only 2.5-3.5 billion cubic meters (bcm) per year but the country has an extensive system of main gas pipelines that serves its own needs and those of neighboring Turkey, Greece, and Macedonia. With 92 percent of Bulgaria's gas supplies coming from Russia through Ukraine's pipelines and only 8 percent from a local source in the Black Sea, Bulgaria needs to diversify its gas supplies very soon. According to the baseline estimations by 2022 Bulgaria will need 4.5 billion cubic meters of gas per year from which only 1.5 billion will be accounted to local production

As of January 2013 Bulgaria is receiving gas supplies directly from Gazprom Export. The new contract provides for a 20% smaller price compared to the tariff set out in the expiring gas supply contract.

Attempts to develop domestic gas resources have so far failed to produce significant results, although some small fields have been put under production and depleted. The best prospects for new discoveries are located offshore, most of which has yet to see a well drilled. No deep water wells have ever been drilled. Some depleted fields are being considered for construction of underground gas storage (UGS) and there are plans to expand the only existing UGS located at Chiren. USD330 million (EUR250 million) would be needed to expand the storage facility in Chiren.

There is shale gas in few Bulgarian locations which hold potential, but based on the current laws local and foreign companies are not able to target these resources. The Bulgarian government took a decision in January 2012 to, in effect; enact a ban on hydraulic fracturing used to extract unconventional gas. Commenting on shale gas in light of Romania's and Poland explorations, the Bulgarian Government is not reconsidering lifting the ban because the country has a lot more perspectives for conventional gas exploration and production.

Natural gas is imported to Bulgaria by a single public supplier, Bulgargaz EAD, a fully-owned subsidiary of the 100% government-owned Bulgarian Energy Holding (BEH). Bulgargaz is the only holder of a license for public provision of natural gas.

At the end of 2012 Bulgaria signed with Gasprom a new 10-year gas supply contract stipulating a 20% discount and excluding intermediaries. The document stipulates the supply of 2.9 bcm of gas per annum until 2022 along the traditional transportation corridor and along the South Stream pipeline once it is commissioned.

Natural gas distribution is carried out by Bulgargaz which supplies larger clients directly from the "national" ring of high pressure lines via branch lines, and by private distribution companies which have exclusive rights over their districts assigned on the basis of a license. The largest private gas distribution company Overgas is 50% controlled by Gazprom. Natural gas demand is mostly in the industrial and power generation sectors. Natural gas production, import, export, transport, transit, distribution and trading are governed by the Energy Law (2003) which established the State Energy and Water Regulatory Commission. Bulgaria has adopted but not yet fully implemented EU's acquis (gas directives) including the Third Liberalization package which requires gradual market opening and defines eligible customers.

Gas is pumped from the country's only gas storage facility in the northern village of Chiren at a daily rate of 4.2 million cubic meters. Bulgaria's minimal oil and gas reserves, poor production outlook, and limited competitive landscape are making the country vulnerable.

The lack of alternative natural gas supplies affected negatively the country during the Russia-Ukraine gas dispute in January 2009. Left without gas supplies, Bulgaria could only avail of the gas from its storage facility Chiren. However, as its current capacity could cover less than half of the daily consumption in winters, gas supplies for industrial consumers as well as for district heating companies was diminished or stopped during the crisis.

Oil Summary

The domestic oil resources in Bulgaria are very limited (about 15 million barrels) and production is marginal. Import, export, and trade in crude oil and refined products are completely liberalized. All of the crude oil and considerable quantities of refined products are imported from Russia. Russia's imports from Bulgaria, on the other hand, are marginal, leading to imbalance in bilateral trade and in Bulgaria's external accounts. Crude oil imports currently stand at around 9.5 million tons per year (190.000 bbl/day) processed at Lukoil's Neftochim refinery and petrochemicals works located on the seaside near Burgas. The refining facility, still the largest one on the Balkans, was recently upgraded with a residue upgrading project.

Bulgaria strives to become an oil producer and in 2012 awarded licenses for offshore oil explorations to French TOTAL, in the location 1-21 Khan Asparouh. Two other companies, the

Spanish Repsol and the Austrian OMV, are included as partners and are together researching a region of 14,000 sq. km, around 50 miles off the coast of Varna. The duration of the license is five years.

According to estimates made by Bulgarian scientists, 85 billion cubic meters of recoverable reserves could lie beneath these waters, along with significant amounts of oil. The total investments needed for deep-sea drilling may well exceed 1 billion euros over the next five years. A large part of that would be subcontracted to local industrial and maritime companies.

Meanwhile, in August 2012 Sofia awarded a license for oil exploration in the Block 1-19 St. Athanasius. This is located south of the block where quantities sufficient for 10-15% of domestic gas consumption are currently being extracted. The company involved, Scotland's Melrose Resources, merged with the Irish Petroceltic International PLC on October 10, 2012.

Lastly Block 1-22 Teres, close to the maritime border with Turkey is estimated to have some amounts of hydrocarbons. At the end of 2012, the Bulgarian government announced a public tender for interested companies wishing to explore that part as well.

Should all these explorations prove to be fruitful, Bulgaria may well be secured in energy terms in less than a decade, while it will also participate in all major energy networks between the West and the East.

Interconnectors

Bulgarian government is working on a few projects with the neighboring countries as a major effort to diversify its supplies of gas, which for the time being comes almost entirely from the two parallel lines that come from Russia via Ukraine, Moldova, and Romania.

the construction of these has been slow and full financing is lacking. Having enough gas is a big issue, with most hopes set on Caspian gas from Shah Deniz to fill up the interconnectors. While the interconnectors with Romania and Greece have both been most advanced in terms of logistics, the interconnector with Turkey is seen as the most important strategically.

Interconnection Greece - Bulgaria (IGB)

The project includes construction of trans-border reverse gas pipeline with length of about 168.5 km (140 km in Bulgaria, 28.5 km in Greece), connecting the Greek gas network in the area of Komotini with the Bulgarian gas network in the area of Stara Zagora. The capacity of the gas pipeline is foreseen to be 3 up to 5 billion m3/year, the pipe diameter is 700 mm (28").
The total indicative value is EUR 150-160 million. Funding is secured for the project of European Energy Program for Recovery in the amount of EUR 45 million (Decision C (2010) 5813 of the European Commission on 30.08.2010).

On July 14 2009 a Memorandum of understanding was signed between the companies "Bulgarian Energy Holding" EAD, EDISON and DEPA, which defines the principles for development and realization of the project. A Memorandum for understanding was also signed between BEH EAD and the Greek gas distribution operator DESFA, which foresees natural gas supplies for the Bulgarian market through utilization of the capacity of the Greek LNG terminal

Revitusa, gas interconnection Greece-Turkey, as well as capacity in the Greek national gas network if required by the Bulgarian country in compliance with the national legislation.

In January 2011 a joint company "ICGB" AD was registered between "Bulgarian Energy Holding" EAD and IGI Poseidon (50% EDISON and 50% DEPA). BEH EAD and IGI Poseidon are the shareholders with equal shares. The joint company will construct, own and operate the infrastructure and is responsible for developing, designing, financing, construction, commissioning, operation and maintenance of the new gas interconnection IGB.
Under the developed roadmap the pipeline will be put into operation in December 2014.

Interconnection Bulgaria - Romania (IBR)

Gas interconnection with Romania (Ruse - Giurgiu) will connect Bulgarian and Romanian gas networks, length around 23.8 km - pipeline length on the Bulgarian territory approx. 15.4 km; pipeline length on the Romanian territory approx. 7.2 km; pipeline length of undercrossing the Danube River approx. 1.2 km. The project requires the construction of two gas metering stations (Ruse and Giurgiu). It is the first interconnection between the national transmission systems of Bulgaria and Romania. IBR initial capacity will be around 0.5 bcm/y (1.5 bcm/y maximal technical capacity).

In the beginning of June 2009 between Bulgartransgaz EAD and S.N.T.G.N. Transgaz S.A. a Memorandum of agreement was signed according to which the two countries are obliged to cooperate in the construction of the Gas Interconnection Bulgaria – Romania Project.
It is expected that the construction of the IBR interconnection will cost 27.6 million EUR. During the realization of the project our country will receive grant co-financing from EU from the European Energy Programme for Recovery - 8.9 M EUR (4.375 M EUR grant for Bulgartransgaz EAD). The rest of the financing will be provided by the two gas companies (15 million EUR - Bulgartransgaz EAD) and will be used mainly for co-financing the activities for the construction of the two gas metering stations (one on Bulgarian territory and one on Romanian territory) and for the supply of pipes and equipment.

The design and construction of the pipeline on Bulgarian and Romanian territory will be implemented separately by Bulgartransgaz EAD and respectively S.N.T.G.N. Transgaz S.A. The passage through the Danube river will be realized by joint the two companies for design and construction.

Interconnection Bulgaria - Serbia (IBS)

Interconnection Sofia - Dimitrovgrad (Serbia) - Nis (Serbia), will connect national transmission networks of Bulgaria and Serbia. The aim is to ensure diversification of routes, intersystem connectivity and gas transmission. It is expected that construction of the pipeline will provide an option for delivery of up to 1.8 bcm/y of natural gas, (in both directions), with opportunity to further increase the volumes up to 4.5 bcm/y. The total length of the route is 150 km of which around 50 km are on Bulgarian territory. Possible pipe diameter is 28" and 55 bar working pressure. Under the developed roadmap the pipeline will be put into operation in late 2015.

Interconnection Turkey - Bulgaria (ITB)

The interconnector project with Turkey is described as being "key" to Bulgaria's energy diversification efforts, because the Turkish system has six entry points for natural gas. The

77km-long gas pipeline (75 km on Bulgarian territory and 2 km on Turkish territory) will carry up to 3 billion cubic meters of Caspian natural gas a year initially, the pipe diameter is 28 inches (700 mm), working pressure 75 bar.

The ITB project will provide a supply of not only Azerbaijan, but also by traders in gas terminals to liquefy gas in Turkey.
On March 20, 2012 Bulgaria and Turkey signed a declaration to accelerate the construction of the gas interconnection between the two countries.
According to the roadmap for the development of the project, the necessary infrastructure in Bulgaria will be completed by the end of 2013 and the commissioning of the gas pipeline interconnection - in March 2014.
The implementation of this project will provide conditions necessary for the diversification of sources and routes for our country sufficiently.

South Stream

The South Stream gas pipeline, with a capacity of some 63 bcm per year, will carry gas from Russia to Central and Southern Europe. The onshore pipeline will connect Varna, on the Black Sea, to northern Italy, via Bulgaria, Serbia, Hungary and Slovenia. It is planned to go on stream by the end of 2015. The project was initiated by Russia's Gazprom and Italy's ENI. Latest estimates put the costs for the construction of the Bulgarian section of the pipeline at 4.1 B EUR.

State-owned Bulgarian Energy Holding (BEH) and Russian gas giant Gazprom plan to raise the capital of the joint venture company, which was set up to build and operate the South Stream gas pipeline on Bulgarian territory, by contributing 191 million levs ($133.5 million/97.7 million euro) each.
South Stream Bulgaria's capital will be raised to some 400 million levs in order to finance its investment program for 2013.

In October 2013, Bulgaria and Gazprom officially launched construction works on the Bulgarian section of the pipeline.

In the beginning of December 2013, the European Commission said the bilateral agreements on the construction of the South Stream pipeline - concluded between Russia, Bulgaria, Serbia, Hungary, Greece, Slovenia, Croatia and Austria - are all in breach of the EU law and need to be renegotiated.

On December 30, a public tender on “Performance of detailed design, delivery of equipment and materials, construction and mounting works, personnel training and commissioning of transmission gas pipeline South Stream on the territory of the Republic of Bulgaria” was announced .
http://www.south-stream.info/en/tenders/tender/performance-of-detailed-design-delivery-of-equipment-and-materials-construction-and-mounting-works-1/

Oil and Gas Trends Overview

- Natural gas production remains positive with a ramp up from the Deventsi deposit as well as the return of the suspended Kalikara tieback, which will both boost production levels;

- The offshore East Kavarna field is planned to be brought on stream in later 2014, further adding to gas production growth. Production is anticipated to reach 766Mcm by 2017;

- Further upside to Black Sea potential could be gained in the Khan-Asparuh block, to the South of Romania's successful Neptun block. In July 2013 OMV, Total and Repsol began the largest 3D seismic survey ever in the Black Sea;

- Despite growing interest in the Black Sea, it has not all been positive. The tender for the Teres block, located next to Khan-Asparuh, was cancelled after receiving no bids;

- One operational license at Lukoil's Neftochim Burgas refinery was revoked by the Bulgarian customs authority. This was reportedly due to the company failing to install metering equipment by the March 2013 deadline, a prerequisite set out by the authority to combat smuggling and tax evasion;

- Bulgaria's Risk/Reward Ratings remain unchanged as the upstream sector fails to lure major companies while its downstream remains in the hands of Lukoil.

- Progress on improving cross-border gas infrastructure trade flexibility continues as the development of interconnectors between Bulgaria and Romania, Serbia, Greece and Turkey reach different stages of completion;

Best Prospects and Opportunities for US companies

Bulgaria's expanding offshore exploration and production has created a steadily growing market for offshore oil and gas equipment and services, which is estimated at $2.7 billion in 2013.

American equipment and services could capture a significant share of the market. In the local market, American companies are well known as world leaders for advanced technologies, quality, and experience in the offshore oil and gas sector. In general, U.S. suppliers of oil and gas equipment and services are quite competitive in the upstream and midstream sub-sectors where advanced technologies and reliability are strict requirements. Sales opportunities are promising in the following areas: oil & gas equipment, accessories, chemical, services for the upstream, midstream and downstream segments; deep-water development; mature well development; oil & gas legacy environmental improvements.

Some other best products and services for this industry include:

- Seismic activity services (both two and three dimensional);
- Improved analytical seismic computer codes;
- Drilling equipment (including directional drilling), and drilling fluids
- Wellhead equipment (such as Christmas trees, valves, compressors, pumps, piping equipment, safety equipment, well completion, casing, and cementing equipment);
- Improved production stimulation;
- Enhanced oil recovery for selected fields in which production is dwindling;
- Crude oil and natural gas pipeline design and construction services
- Technology and services for expanding of gas storage capacities;
- Equipment for control of shipment and transit of gas via Ukraine;

and services related to construction of gas interconnections with Romania and Greece.
Rate of exchange: 1EUR = 1,35USD

Contacts

CS Sofia, US Embassy Global Markets

For additional information on the market potential for your product in this industry sector, please contact your nearest U.S. Commercial Service Export Assistance Center, with a copy to: Emily Taneva, e-mail: emily.taneva@trade.gov ; address: the Commercial Service, U.S. Embassy Sofia , 16, Kozyak Street, tel.: (359 02) 929 5770.

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