CHANGING GAS PRICE MECHANISMS IN EUROPE AND RUSSIA`S GAS PRICING POLICY

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Overview

Since 2009 European gas market is undergoing deep transformation process accompanied by dramatic change of the gas pricing mechanism with the expanding share of spot-indexed gas supplies. Russia is traditionally one of the key players on this market. This paper investigates European gas market transition and how Russian gas export strategy is adapting to these changes. Analyses of contract renegotiations and reported prices show that although Gazprom still formally follows the traditional oil-indexation rhetoric it has in fact already significantly reviewed its pricing policy [1].

Different scenarios the further development of Russia's gas pricing policy in the European gas market are considered, taking into account the recent geopolitical developments and security of supply issues, as well as oil price reduction.

Methods

Apparent and implicit adjustments of the Russian gas pricing policy in Europe are examined using analytical and statistical methods. Data on all the contracts revisions with the European clients from Gazprom`s official financial quarterly reports for 2009-2014 is analysed and the historically reported Russian gas export prices are compared with the tentative prices from traditional oil-linked contracts (based on the prices of oil products), demonstrating the size of gas price discounts provided already by Gazprom.

European gas supply-demand balance is assessed using the Nexant World Gas Model (WGM) [2] integrated in ERIRAS modeling information complex SCANER [3]. The WGM searches for the minimum cost of meeting world gas demand. Unlike many energy markets models, which use prices as assumptions, the WGM calculates gas prices as marginal costs of supply in each country. To account for the features of gas markets pricing mechanisms the data on volumes, prices and take-or-pays of long-term contracts is also included in the model.

One of the basic assumptions of the WGM – gas demand forecast by country – is obtained from SCANER and calculated based on countries' energy balances forecast, that involves projections for economic development, demography indicators, and energy policy analyses. The SCANER complex contains data on almost 200 nodes all over the world, including detailed data on Russian fuel and energy complex. Primary gas demand from SCANER can be adjusted by the WGM if resulting gas prices indicate low competitiveness of gas compared with coal, nuclear or renewable energy.

Results

Statistical analyses demonstrate that Despite Gazprom`s strident rhetoric in favor of traditional oil indexation, in actual fact numerous adjustments and contract reviews have already been made in the course of the last 5 years. During the period 2009 –2014 nearly 60 gas supply contracts were reviewed with 40 clients, providing price discounts, easing of take-or-pay obligations and a certain introduction of a spot component.

Calculations using Russian Customs Service statistics, Gazprom reports and the Nexant World Gas Model, clearly show the increasing differential between calculated traditional oil-linked price and real Russian gas export prices to Europe. By 2013 Gazprom had already provided nearly a 16 per cent average discount (around 70 $/mcm) to its European customers compared to its pre-crisis traditional oil-linked price formulas and this process is ongoing further.

Analyses of the mid- and long-term European gas market supply-demand balance show that new changes significant in the Russian gas pricing policy could be expected by the end of this decade, when new suppliers reach the European market and the next wave of gas glut might occur [4, 5]. Until then Russia will most likely follow its current strategy of delaying providing the minimum discount acceptable to the buyer for as long as possible, but there will be a permanent price review process. At the same time modelling shows that there are no chances to completely replace Russian gas in Europe by spot-based supplies from the other gas producers without very significant price growth.

Conclusions

Russia is trying to adapt to the fundamental changes occurring in the European gas market, though in a "concealed" manner; formally following the principle of oil indexation, while de-facto providing strong price discounts and linking pricing to spot prices via the retroactive payments model. The price concessions provided by Gazprom contributed to recovering of its gas exports volumes to Europe in 2013, though political events in 2014 and the desire to reduce dependency on Russian gas destroyed all these achievements. Nevertheless at least in the next decade the role of Russia in the European market shouldn't be underestimated. The possibility of reducing gas imports from Russia without serios financial damage to the European consumers will be limited and it will depend mainly on world LNG market growth, dynamics of gas demand in Asia and the success of building the "Southern Corridor" from Middle East and Caspian to Europe. With the growth of alternative supply, primarily with the coming wave of LNG glut, Russia will have to enter into stronger price competition with the new suppliers, provide additional discounts and introduce an explicit spot price component.

References

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