

**IMPACT OF RUSSIAN GAS PRICES PROVIDING EQUAL
PROFITABILITY OF DOMESTIC AND EXPORT SUPPLIES ON THE
GAS INDUSTRY DEVELOPMENT**

Vasiliy Smirnov, Gazprom JSC

Petr. S Tarasov, Gazprom JSC

Natural gas use and natural gas markets development prospects:

Natural gas will remain at the root of the world energy industry development in the nearest decades since it is featured by the following:

- high energy potential;
- low carbon dioxide emissions during combustion;
- availability of significant resources;
- possibility of usage as motor fuel.

Besides, social and political crises which recently occurred in the North-African countries as well as natural cataclysms in Japan created a unique possibility for even more intensive development of the world gas market as compared to indicators of its growth which were previously forecasted by expert energy organizations.

The Russian Federation possesses significant reserves of natural gas (total resources are estimated at 248.6 trillion m³, explored reserves — at 47.8 trillion m³, including those explored by Gazprom Group amounting to 33.1 trillion m³) and is one of the leaders in gas production and export.

The main volume of gas produced by Gazprom (60%) assigned for domestic market supplying. The remaining volume of gas exports in the near abroad (12%) and the far abroad (26%) countries.

However, normal functioning of the gas industry in any gas producing country requires two conditions — significant investments and long-term sales market with economically sound anticipated prices.

To sustain and extend Russian gas domestic and export supplies, including the rapidly developing Asia-Pacific market, it is required to establish necessary investment environment for the creation of appropriate production and transmission infrastructure. OAO Gazprom is the owner of the Unified Gas Supply System exclusively entitled to exporting gas while protecting economic interests of the Russian Federation, fulfilling international obligations on gas export, ensuring federal budget revenue, and maintaining the Russian Federation fuel and energy balance. Besides, the Company is liable for the major part of investments earmarked for the development of the gas industry.

The Actual prerequisites for establishing the equal profitability principle of domestic and export gas supplies

At present, the Russian gas market is characterized by a high degree of state regulation of the major gas producers and suppliers. Prescriptively regulated, especially in pricing, the domestic market sector dominates. This has a relevant impact on the unregulated market segment.

The gas industry is the last undergone by market transformation among the other Russian fuel-energy industries. The pricing is one of the main aspect for gas industry reform. Due to low prices holding, the government regulation up to 2010 did not provide breakeven gas selling in domestic market.

Regulated prices formed essentially based on inflation and tariff levels of electric and heat power on Russian market.

Russia is the country with difficult climatic conditions – long term period of low temperatures and climatic severity (the difference between summer and winter temperatures).

The gas plays the key role in household supplying by heat generation and hot water. Providing the good conditions for Russian economy development, the policy of gas pricing bounding was carried out last 17 years.

A cheapness of energy resources is the reason of big problems in Russian economy, such as gas domination in the energy balance, waste of gas and lack of gas economy stimulus. Therefore Russian economics is characterized by the increased level of gas

content and reduced level of competitiveness.

This situation is the part of broader so-called problem of «macroeconomic transformation» from the system of low prices and low expenditures, formed in soviet period, to the high prices and high costs. Also form the cheapness of natural resources, relevant to emerging markets countries, to the high prices.

Till 1992 (the start of extensive price liberalization) wholesale prices on all kind of fuel-energy products (also the gas) were fixed. This prices were calculated based on the calorific efficiency of resource, technological effectiveness of its using and its influence on the environment. So, the price formation factors were consumer properties and quality characteristics of different fuel-energy resources.

At present among the all fuel-energy resources only gas which was produced by the companies-owners of main pipelines and their affiliates has the regulated prices. Whereas Gazprom is the owner of the biggest gas pipeline transportation system, produced gas is delivered for Russian consumers by regulated prices. Also, in accordance with legislation, the pipeline transportation gas service tariffs for independence companies are regulated.

Till October 1996 the gas prices were monthly updated in accordance with the price indexes, which The Government Statistics Service calculated. It provided the price parity keeping.

After October 1996 the gas price policy was changed: the price indexation was cancelled, and prices were “frozen” till November 1999, the prices for alternative types of resources continued to increase driven by the market influence.

Just in this period, the drastic changes in relation of prices of fuel-energy resources were happened. The intensive gas replacement of coal and fuel oil has started.

Since 1998 the companies, independent of gas transportation system owners (hereinafter referred to as «independent companies»), got the privilege to sell gas in domestic market by market prices. But because of limits and low volumes of independent companies gas the level of its prices actually connected with the level of Gazprom prices. Thus, in spite of freedom of independent companies gas prices, they still need to be oriented on regulated prices.

The comparison shows, that since 1990 till 2011 growth rates of regulated wholesale gas prices lagged from growth rates of other industry production market prices in 1,44 times integrally, of power industry – in 1,43 times, of oil industry – in 3,36 times, of coal industry – in 1,76, of iron industry – in 1,99 times.

Currently the interior gas prices for commercial consumers are in average on 5-6 times lower, than ones in European countries.

The absence of market signals about the real cost of gas and the gas economy stimulus loss led to transformation of Russian fuel-energy balance to incorrect “monogas” structure.

Gazprom as the owner of the biggest pipeline transportation gas system in the world able to transport gas to long distances to Russian and foreign consumers without interruption.

One of the Gazprom’s key task is the development of its pipeline system, which must provide safe gas delivery of Russian and foreign consumers, new remote mines attachment, gasification of new territories, new pipelines construction.

But the Company so far could not completely form the sufficient financial resources, which are necessary for investments in pipeline transportation gas system reconstruction and renovation due to selling gas in domestic market.

These resources are formed substantially due to gas export trading through transfer backing.

Underrated gas prices do not encourage gas consumers to carry out necessary technological modernization and implement energy efficiency measures for existing capacities (GDP energy intensity in Europe, Japan, and North America is 2—4 times lower than in Russia. At the same time, in comparable values, the natural gas prices in the European markets are 1.4 times lower than the oil prices).

The single opinion formed due to united analysis of Gazprom and state authorities

showed that the most effective way to solve the gas underestimating problem is the graded transition to market approaches of gas pricing.

The methodology of domestic gas pricing was defined in the Order of the FTS (Federal Tariff Service) of Russia subordinating the gas prices to the cost of gas oil and black oil fuel in foreign markets, which allows objective assessment of gas sold in the domestic market.

But Contrastive analysis of current gas prices levels and formula computed levels shows, that there is a risk of momentary gas prices rising (more than twice) for commercial consumers. It could badly influence on economics.

Therefore the transaction period is needed - the risks of dramatic price growth will be cancelled

Government of the Russian Federation issued a regulation stipulating that during the period till 2014 the supply of gas by Gazprom to the domestic market should be based on the gas price formula, which provides a step-by-step achievement of equal profitability of domestic and export gas sales and takes into account the cost of alternative fuels.

Adjustment of wholesale prices of gas produced by Gazprom and its affiliates and supplied domestically through the Unified Gas Supply System to all consumers (apart from households) should be based on the gas price formula providing for, during the transition period¹, the stage-by-stage achievement of equal profitability of domestic and export gas supplies and considering the cost of alternative fuels. In this case, the price formula should include factors for regional differentiation of natural gas prices in the Russian Federation.

For denial of dramatic price growth of prices computed by formula the special discount indexes provided. These indexes are the component part of formula. Introduction of transaction period is highly required for gas industry reformation. During this time arrangement of necessary conditions for introducing of new gas market pricing approaches is planned. This will provide the conditions for market prices of gas establishment in 2015.

From 2015, it is planned to abandon the state regulation of gas prices and switch to state regulation of tariffs for gas transportation services for all consumers of such services.

Its very important, that during transformation period regulation of gas prices for population will be continued.

Analysis of questions, connected with transformation to new pricing approaches shows availability of possible risks:

Significant stagger of domestic gas prices during the year because of European hydrocarbon prices volatility.

Domestic prices alteration because of currency rate changing. The price formula contain the gas price in far abroad countries that initially is calculated in US dollars.

Appearance of social problems which are connected with heat supply of population.

The additional exploration shows that prices volatility risk following with price bounces in oil markets could be hedged both by nine month period in price formula and by bounds of price changing.

The currency rate changing risk is quite low because the world hydrocarbon prices and Russian rouble rate of US dollar are changed in the opposite direction and synchronized in time.

The social risks, which is connected with the influence on housing tariffs could be also hedged by nine month period in price formula.

There will not be any direct influence on population expenditure because pricing formula affects only for commercial consumers.

Gas price rise is unlikely to affect any significantly operational costs of gas consuming industries.

The analysis of price elasticity of gas demand carried out by independent experts

¹ Transition period for the adaptation of gas consuming industries to the market-based gas prices.

demonstrated that its level is extremely low and inelastic demand characterizes the major part of industrial products. According to experts, the increase in gas prices by 20% per year does not cause any demand constraints for gas consuming enterprises.

Bringing gas prices to the level of equal profitability of its domestic and export supplies will establish the system of rational consumption of different fuels, and encourage development of alternative fuel industries, primarily the coal industry.

Additional approaches of domestic gas market improvement

Under these conditions the whole set of issues regarding extension of gas sales based on market principles through electronic trading platforms, as well as establishment of gas exchange trade on the commodity exchanges is being worked out at the initiative of Gazprom.

It is important to note, that using stock-exchange technologies in gas-trading is standard practice in world markets. This type of trading decides an issue of operative access in pipeline transportation system, forms competition, reduces costs on marketing, increase the reliability of supplying and gives signals about real market price of gas.

The practice of deregulated price gas trading using stock-exchange technologies, that took the place in Russia since 2006 till 2008 showed its positive role in forming real price signal.

Gas trading using price formula and gas exchange organization should be considered as formation of gas infrastructure, which connect gas trading on long-, medium term contracts with spot trading.

The anticipated effect of reaching the domestic and export gas supplies equal profitability level

For the State:

- development of the gas market in the Russian Federation;
- reduction of the level of dependence of the natural gas industry economy in foreign natural gas markets;
- formation of rational structure of Russian fuel-energy balance and providing energy security;
- energy intensity reduction of Russian economics, obsolete equipment replacement;
- state budget revenues increase.

For OAO Gazprom:

- rising of domestic market gas trading efficiency
- gradually domestic gas market transformation to sterling financial resource for investments in maintenance and development of gas supplying;
- expansion of own sources of financing for the Company investment programs;
- elimination of disparities in the supplies volume and revenues from domestic and foreign market activities ratio. (The domestic market supplies account for 60% of total sales, while the revenue from this activity in 2010 accounted approximately to 28% of the proceeds from the gas sales);
- stabilization of development sources of Gazprom