

APPLICATION OF REGULATORY ASSET BASE IN RUSSIA BASED ON INTERNATIONAL EXPERIENCE

E.A. Milovanova, O.I. Bolshakova, A.V. Milovanov

*State University of Management, Moscow;
Tambov State Technical University, Tambov*

Represented by Doctor of Economics, Professor V.V. Bykovsky

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Abstract: The paper considers the international experience of RAB application; it presents the Russian Government policy based on RAB method as well as the RAB formulas for gas transmission sector.

Regulatory Asset Base (**RAB**) is the system of long-term tariff regulating; its main function is the attraction of investment for business development and infrastructure modernization.

Regulatory Asset Base was first used in Great Britain at the end of 1980's during the electricity network privatization and electricity market liberalization. The government allocated 14 size comparable network companies to use new system. Regulatory Asset Base proved to be very effective: energy companies reduced costs and at the same time increased investments to the sector. In the world practice RAB is a standard of tariff regulating for electricity distributing networks, water supply, communication systems.

In the middle of 1990's Canada, USA, Australia and some countries of Western Europe started to use RAB, each of them had their features. In 2002 the Europe Union was obliged to use RAB in tariff regulating for monopolies in Czech Republic, Slovakia, Hungary, Poland, Rumania, Bulgaria and some other countries.

The work on a new model of tariff regulation started in core agencies (first of all Economic Development Ministry) in the electricity network reform in 2003–2005. Similarly to Great Britain, as part of the reforming process Russia allocated 11 size comparable inter-regional network companies. The necessary

Милованова Елена Александровна – студентка, e-mail: Milovanova_alena@bk.ru; Большакова Ольга Ильинична – кандидат физико-математических наук, доцент кафедры экономики и управления в нефтегазовом комплексе, ГОУ ВПО «Государственный университет управления», г. Москва; Милованов Александр Васильевич – кандидат технических наук, доцент кафедры «Автомобильная и аграрная техника», ТамбГТУ, г. Тамбов.

research was made; the mythologies and legislative base were developed. In June 2008 the Prime Minister of Russia Vladimir Putin signed Government Resolution on pricing in electricity and heat energy (RF Government Resolution No. 476 of 28.06.2008). The work on the resolution lasted for more than 2 years. It's become the example of implementation of progressive international experience in Russian regulating system. It was decided to test RAB on a number of regions and in 2011 the transfer to RAB in all Russian electricity network companies was completed.

International experience shows that RAB tariff regulating has a number of advantages for electricity network companies and consumers over “cost-plus” system.

RAB guaranties the return of investments and yield of capital to companies sufficient to loan servicing and profit realization. It also stimulates cost reduction, because the saved assets stay in company unlike to “cost-plus” system.

RAB advantages for customers are the increasing level of energy supply security and the quality of service at the cost of investments.

The assessment of the company's own investment is made by an independent expert. The essential criterion of assessment should be real market cost value required for the electricity construction projects. Companies obtain new sources of income by the government guaranty rate of return. The income is the investment in the network development.

Tariffs are fixed for 3–5 years, so electricity network companies can predict their income and cost for several years. There is an opportunity to reduce critical percentage of accumulated depreciation.

The attraction of investments is also important to gas transaction system because of the high level of accumulated depreciation and low level of gas supply. Under the cost-plus method of gas transmission regulations in Russia the companies have no economic motivation to reduce costs, increase reliability and the quality of service. Currently, there are some works on RAB-methodology development and the possibility of using RAB in Russian gas transmission regulation research.

FSR Summer School on Regulation of Energy Utilities presents the following method

$$AR = RAB \cdot ROR + DEPR + OPEX,$$

where RAB = capital asset base, computed from re-evaluated balance sheets (current cost method) = Gross RAB (GRAB) – cumulated depreciation; DEPR = = technical depreciation (= GRAB / Useful Life (UL) of each item); OPEX = = operating cost from company accounts, peer checked (1.5–2.5 % of gross capital asset base for transmission); ROR (rate of return, average) = WACC = = weighted average cost of capital; $WACC = K_E / (1 - t_e) \cdot E / (D + E) + K_D D / (D + E) \cdot (1 - t) / (1 - t_e)$; K_E – is the cost of equity; K_D – is the cost of debt; t – is the debt tax shield; t_e – is the corporate tax rate; E – share of equity capital; D – share of loan capital.

Despite the existence of some problems with the adaptation of RAB in Russia, especially in gas transmission (problems related to fixed assets

reevaluation, reliability of presenting, etc.) international experience shows the availability of RAB regulating system. Further research will make it possible to eliminate the drawbacks of the present methodology and take into account the interests of all subjects of market.

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Применение метода расчета тарифов на основе регулируемой базы инвестиционного капитала в России с использованием зарубежного опыта

Е.А. Милованова, О.И. Большакова, А.В. Милованов

*ГОУ ВПО «Государственный университет управления», г. Москва;
ГОУ ВПО «Тамбовский государственный технический университет», г. Тамбов*

Ключевые слова и фразы: возвратность капитала; регулируемая база капитала; тарифообразование.

Аннотация: Рассмотрены примеры международной практики использования RAB-регулирования, показана политика правительства России в отношении данного метода регулирования, приведена методология расчета для газотранспортной отрасли.

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