

UDC 338.23

The development of competition in the electricity market

Bogdanov Dmitrii Dmitrievich

PhD (Economics), associate professor,
head of the department of economic theory,
Moscow Industry and Finance Academy,
P.O. Box 125190, Leningradskii ave., No. 80, Moscow, Russia;
e-mail: dbogdanov@mfpa.ru

Abstract

The paper addresses the problem of development of competitive electricity markets in relationships that were formed by the enactment of the law "On electric power industry", according to which it is prohibited to combine the activities of the transfer and sale and purchase of electricity. The author considers types of violations of antitrust laws in the retail and wholesale electricity market, and draws conclusions on the further development of competition in the electricity market.

Keywords

Electricity, sectoral legislation, the development of competitive market structure.

Introduction

Since the state energy company (hereinafter RAO UES) has been established in 1992, there were active discussions about how to develop the Russian electric power industry. Various schemes of corporatization, privatization, consolidation with high-yielding types of

industries (e.g., aluminum production), expansion of the production chain by including the production of equipment for the power industry were proposed as the main reform ideas. Most of these projects were rejected due to infringement of the interests of RAO UES private shareholders, or contradictions to the public interest.

Nowadays, the development of the industry is mostly associated with the improvement of competition in the markets. So, the Federal Law "On Electric Power Industry"¹ stipulates the measures of state regulation shall be applied if there is:

- shortage of electricity within the boundaries of any territory;
- technologically isolated regional electric power systems.

In case the energy systems fail to meet these conditions, measures for the development of competitive relations are applied.

Electricity markets are constantly monitored by the antitrust authorities as the demand for electricity is inelastic, that may be the cause of establishing and maintaining economically unjustified high tariffs for electricity or arranging conditions to limit an admission to networks.

Electricity market in a competitive environment

Electricity market features a constant production and consumption pro-

cess that can cause vertical restraints limiting access to the grid for customers beyond the agreements with suppliers. This problem is particularly relevant in the case where the power of the wholesale electricity supplier is not enough to cover current needs. In this case there is a situation when the electricity seller has a possibility of price discrimination on the residual demand.

The structure of modern Russian energy market is in the process of transformation for the time being. Thus, according to the Law on features of electric energy functioning from April 1, 2006 legal entities and individual entrepreneurs are prohibited to overlap activities of electric power transmission and dispatching management in electric industry with the activities of production as well as sale and purchase of electricity.

This Law having entered into force the following markets were established on the basis of the electricity generation industry:

- 1) market of electricity transmission services;
- 2) wholesale electricity market;
- 3) retail electricity market.

From the perspective of competitive relations development the activities of wholesale and retail electricity market are the most promising.

1 "Federal law on 26.03.2003 № 35-FZ "On electrical energy industry" ["Federal'nyi zakon ot 26.03.2003 No. 35-FZ "Ob elektroenergetike"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=83142>

Companies engaged in the sale of electricity, can be divided into several groups:

1. **Joint-stock companies – power supply companies**, that stood out due to the separation of transfer activities and trade of electricity (for example, JSC "Yantarenergosbyt" operates in the Kaliningrad region). In accordance with federal law "On Electricity" power supply companies are organizations whose principal activity is selling produced or acquired electricity to other entities. A guaranteed supplier of electric energy is a commercial organization obliged to conclude an agreement on electricity sale with any referring customer of electricity. As of 2007-2008, all members of the group occupied a dominant position in regional markets within the network length and location of the consumers on the market covering one or several regions.

2. **Independent power supply companies**, supply electricity to large industrial enterprises. For example, "Rusenergosbit" LLC supplies electricity to 33 objects of the JSC "Russian Railways" on the territory of the Russian Federation; LLC "Transneftservice C" provides electricity to infrastructure units managing the main oil pipelines.

3. **Companies that can buy electricity at guaranteed supplier acting in**

the territory or at other power supply companies.

According to the research of Russian FAS (Federal Antimonopoly Service)² most regional power supply companies are actually monopolists in their markets within the boundaries of the grid's balanced length and are the sole electricity supplier in the wholesale electricity market.

The current situation restricts the development of competition, since most electricity consumers can not choose a power supply company being an alternative to one with an agreement on the electricity transmission signed by the grid organization, which is connected to the user's network.

This leads to establishment of "local" markets for electricity trade. Their geographic boundaries are determined by the length of grid belonging to a grid organization that has signed an agreement on the transmission of electricity with the appropriate power supply company.

Development of competition in the wholesale and retail markets through new entrants is complicated by admin-

2 "Results of the analysis of retail electricity markets" ["Rezultaty analiza roznichnykh rynkov elektricheskoi energii"], available at: http://fas.gov.ru/analisis/tek/a_21969.shtml

istrative barriers to entry. Thus, according to the request of Russian Federation Government Resolution of 29.12.2007 No. 996³, according to which the first regular competition for the right to operate as a guaranteed supplier in each area of guaranteed supplier activities specified in the prescribed manner, will be held no earlier than 2010.

Development of the retail electricity market has more competitive opportunities for relationships development than the wholesale market, as barriers to this market entry are smaller. So, nowadays independent power companies appear in some regions. They sell electricity bought on the wholesale market in the retail market, along with guaranteed suppliers.

Economic restrains of competition development are caused by the following costs the consumer incurs through

transition from one guaranteed supplier to another:

- recovery of losses suffered by the guaranteed supplier . In this relation it is economically inexpedient to renegotiate the supply of electricity in the retail markets during the calendar year with another supplier;

- establishment of a new automated system for commercial accounting of electricity needed to enter the wholesale electricity market.

Retail electricity market defects having an indirect impact on the competitive environment of the market include:

- late payment by some electricity consumers in general, and an increase of utilities debt in some regions in particular:

- high level of losses due to non-contractual or non-metered electricity consumption, large technological (according to the company "McKinsey" – 9-11% compared with 7% in Europe) and commercial losses (according to the company "McKinsey" – 4% compared to 0.4% in Europe)⁴;

- the need for major investments to modernize the industry's assets in or-

3 "Russian Federation Government Resolution on December 29, 2007 No. 996 "On amendments to certain regulations of the Government of the Russian Federation concerning the organization of guaranteeing suppliers of electric energy" ["Postanovlenie Pravitel'stva RF ot 29 dekabrya 2007 g. No. 996 "O vnesenii izmenenii v otdel'nye postanovleniya Pravitel'stva Rossiiskoi Federatsii po voprosam organizatsii deyatel'nosti garantiruyushchikh postavshchikov elektricheskoi energii"], available at: <http://www.garant.ru/hotlaw/federal/169344/>

4 "Results of the analysis of retail electricity markets" ["Rezultaty analiza roznichnykh rynkov elektricheskoi energii"], available at: http://fas.gov.ru/analisis/tek/a_21969.shtml

der to increase competitiveness, in particular – on the development of an automated system for control and accounting of electricity that is required to enter the wholesale electricity market;

- Lack of markets' information "transparency" that can arrange unequal conditions for buyers of electricity.

These limitations can be partially remedied only in the long term, for the time being markets must be constantly monitored in terms of the compliance with the antitrust laws. In particular, the Russian FAS:

- investigates cases of the anti-monopoly legislation violation;

- monitors electricity prices;

- checks the information transparency of the wholesale and retail market entrants in terms of the conditions for admission to electricity;

- controls economic concentration in the markets of production, transmission and sales of electricity to meet the requirements of the law "On Electricity".

The author analyzed the cases of the antimonopoly legislation violation examined in the Russian FAS⁵. The results indicate that the main type of anti-com-

5 The analysis is based on press releases on the facts of positive judgments concerning violations of antitrust laws in the electricity market in the section "News" of the of-

petitive behavior is to limit access to the retail and wholesale electricity market.

While the most frequent violations in the retail market can include:

- refusal to sign the contract for the supply of electricity;

- unfavorable conditions included in the agreement, for example, in frames of violated pricing procedures being established by normative acts, in particular, advance payments, the use of penalties for excess or shortfall of the declared amount of energy, payment of costs to maintain electrical networks and installations of the subscriber as a percentage of the consumed electricity cost.

For example, in 2009, the FAS found LLC "Energocomfort Karelia" guilty of unjustifiably calling on suppliers of Karelia retail electricity market to pay for electricity consumed in December 2006, 2007, 2008 on the basis of tariffs imposed for the next year (2007, 2008, 2009 respectively)⁶.

According to investigation of the FAS regional office the OJSC "Novgorodskaya energosbitovaya kompaniya" occupying a dominant position on the re-

official website of the FAS Russia. Available at: <http://fas.gov.ru>

6 "Press release of the FAS Russia on October 13, 2009" ["Press-reliz FAS Rossii ot 13 oktyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26994.shtml

tail sale of electricity made actions that infringe upon the interests of consumers by choosing payment options to pay for the consumption of electrical energy. In particular, the OJSC "Novgorodskaya energosbitovaya kompaniya" using the tariff option not selected by consumers for 2009 and called "one-part tariff depending on the annual number of hours for electricity use" to pay for delivered electricity with local government municipal units of Novgorod region was considered a violation⁷.

The wholesale electricity market has recorded cases of:

- refusals to sign the contract for the transmission of electricity;
- refusal to enter into agreements on exchange of information necessary for admission to trading on the wholesale electricity market.

For example, the FAS Russia determined that in the period from July 2007 to December 2007 the OJSC "Saratovtnergo" evaded signing the list of electrical energy measuring instruments aimed at commercial accounting with JSC "Mezhregionenergosbyt", which made the latter face barriers to access the wholesale electricity market. Mean-

while, in accordance with paragraph 8 of the rules on non-discriminatory access to the administrator's services of trading system, approved by the Government Decree No. 861 of the Russian Federation, objects of the wholesale market being adjacent to the applicant are required to adjust with it documents proving commercial accounting is guaranteed in terms of electricity produced in the wholesale market, within 30 days of receipt of the abovementioned documents⁸.

The OJSC "Moscow United Electric Grid" unjustifiably refused to sign a contract for technological connection of power consumer devices to the power distribution networks in order to supply the construction facility, located in Naro-Fominsk district of Moscow region, with electricity⁹.

There are infringements of competition on the market of power transmission as well. So, MUP "Podolskaja elektroset" was found to have violated the antitrust laws, as by connecting to the electric grid within its network the company occupying a dominant position

7 "Press release of the FAS Russia on October 2, 2009" ["Press-reliz FAS Rossii ot 13 oktyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26804.shtml

8 "Press release of the FAS Russia on November 24, 2008" ["Press-reliz FAS Rossii ot 24 noyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_21226.shtml

9 "Press release of the FAS Russia on September 3, 2009" ["Press-reliz FAS Rossii ot 3 sentyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26333.shtml

in the market for electric power transmission collected extra payments over standard fixed tariff as agency fees, established requirements in specification, that are not required by law.

To control the price of electricity for detecting cases of electricity prices manipulation the Russian FAS found the following cases of prices deviation in 10% of nodes within the boundaries of the wholesale market zones, related to the unified grid system:

- 50% with respect to the previous day, similar day of previous week, similar adjustable price;

- 30% for the similar day of the previous month or quarter.

The monitoring revealed violations in setting electricity prices. Thus, the participant in the wholesale electricity market of the Ivanovo region, LLC "Energosetevaya Companya" exceeded the level of unregulated prices for OJSC "Ivenergosbit" in November and December 2008, January and February 2009 for delivered electricity from the wholesale to the retail electricity market¹⁰.

Analysis of the activities carried out by the power supply companies in the field of information disclosure made

10 "Press release of the FAS Russia on August 26, 2009" ["Press-reliz FAS Rossii ot 26 avgusta 2009 goda"], available at: http://www.fas.gov.ru/news/n_26130.shtml

by the Russian FAS¹¹ found that there are violations in terms of the information disclosure standards specific for objects of the wholesale and retail electricity markets. In particular, it was found that not all networking companies place model contracts for technological connection on the "Internet". Signs of technological connection violations were revealed on Web sites of network companies on the "Internet", which placed the model contracts for technological connection.

For example, model contracts of OJSC "Lenenergo", OJSC "Jantarenergo" stated that the applicant, regardless of the power specific for the connected object, shall arrange for technical inspection (survey) of connected energy receiving device by the territorial authority of RTSS (Russian technical supervision service), get and send a copy of the certificate on admission of electrical installation to a network organization.

According to these model contracts, if the applicant fails to submit to a network organization a certificate on admission of electric installation, the net-

11 "Analysis of the activities of network organizations upon placement of model contracts at the official websites" ["Analiz deyatel'nosti setevykh organizatsii po razmeshcheniyu na ofitsial'nykh saitakh informatsii o tipovykh dogovorakh"], available at: http://www.fas.gov.ru/analysis/tek/a_26865.shtml

work organization has the right to unilaterally terminate the contract. Moreover, the applicant must fully reimburse for the reliance damages of the network organization, costs that network organization will have to incur to restore the previous situation. In addition, the network organization is entitled to award a penalty from the applicant according to the contract.

The rights of consumers are violated by provisions of standard contracts, stipulating the contract shall be deemed not concluded, and the applicant's application for technological connection be refundable without execution unless the applicant submits the signed contract to the network organization within the 30-day deadline. However, paragraph 15 of the Rules on technological connection¹² provides that the applicant must sign and submit a draft contract in 30 days.

12 "Rules for operation of retail electric power markets in the transitional period of reforming the power industry, approved by the Government of the Russian Federation on 31.08.2006 No. 530" ["Pravila funktsionirovaniya roznykh rynkov elektricheskoi energii v perekhodnyi period reformirovaniya elektroenergetiki, utverzhennyye postanovleniem Pravitel'stva Rossiiskoi Federatsii ot 31.08.2006 No. 530"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=98111>

Common violation in the model contracts for technological connection is a violation of the Rules on technological connection settling the order of payment for technological connection of legal entities and individual entrepreneurs whose capacity is more than 15 kW to 100 kW inclusive.

For example, the Russian FAS found that guaranteed supplier of electricity in the territory of St. Petersburg, LLC "Energya Holding", violated the rules of using electricity tariffs in relation to HOA (homeowners association) "Penates".

"Penates" performs communal electricity services in the suburban settlement. Project documentation of the residential complex provides for the installation of stationary electric stoves in homes. According to the order of the St. Petersburg Tariff Committee, HOA "Penates" refers to a group of communal services consumers-performers that purchase electricity for domestic consumption by the citizens living in houses equipped with electric stoves stationary. The tariff for this category is set at 130 kop./KWh. However, the LLC "Energya Holding" calculated payments of the HOA "Penates" using the tariff set for another group of communal services consumers – performers that purchase electricity for household use by citizens in homes

with gas stoves, and in this case the tariff would be estimated at 185 kop./kWh¹³.

In general we may say that the position of antitrust regulation features a well-balanced policy, focused on arranging conditions to reduce losses of consumers, with industry-specific being taken into account. For example, the electric energy industry is the only sphere of the real economy, where, taking into account the ability of producers to discriminate on the residual demand, the boundaries of dominance are established – 20% instead of 50% (in some cases 35%) are established in the Law "On Protection of Competition".

Conclusion

In conclusion we can say that the current level of competition allows market participants to commit violations of anti-trust laws, with the means of market monitoring and administrative proceedings on the facts of violation being insufficient to work out this issue. So, investigation, prosecution and upholding decisions made by the courts require a significant amount of resources. Therefore it is necessary to solve the issue by establishing an institutional framework that allows arranging the

13 "Press release of the FAS Russia on October 1, 2009" ["Press-reliz FAS Rossii ot 1 oktyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26754.shtml

conditions of market entry for new entrants and limiting cases with abuse of dominant position in the markets. This requires the development of new and improvement of existing regulations in the electricity sector. Some progress in this area has already been achieved, so the Russian FAS developed performance standards of network organizations in the technological connection sphere¹⁴ aimed at complying with consumer rights and legislation on electrical energy that will allow avoiding violations committed by natural monopolies by the implementation of technological connection to electric grids.

14 "Federal law on 26.03.2003 № 35-FZ "On electrical energy industry" ["Federal'nyi zakon ot 26.03.2003 No. 35-FZ "Ob elektroenergetike"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=83142>; "Federal law on 26.03.2003 No. 36-FZ "On peculiarities of electric power during the transition period and on amendments to some legislative acts of the Russian Federation and repeal of certain legislative acts of the Russian Federation in connection with the adoption of the federal law "On electrical energy industry" ["Federal'nyi zakon ot 26.03.2003 No. 36-FZ "Ob osobennostyakh funktsionirovaniya elektroenergetiki v perekhodnyi period i o vnesenii izmenenii v nekotorye zakonodatel'nye akty Rossiiskoi Federatsii i priznanii utrativshimi silu nekotorykh zakonodatel'nykh aktov Rossiiskoi Federatsii v svyazi s prinyatiem federal'nogo zakona "Ob elektroenergetike"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=102978>

References

1. "Analysis of the activities of network organizations upon placement of model contracts at the official websites" ["Analiz deyatel'nosti setevykh organizatsii po razmeshcheniyu na ofitsial'nykh saitakh informatsii o tipovykh dogovorakh"], available at: http://www.fas.gov.ru/analysis/tek/a_26865.shtml
2. *Economy in transition. Essays on economic policy in post-communist Russia. Economic growth in 2000-2007* [*Ekonomika perekhodnogo perioda. Ocherki ekonomicheskoi politiki postkommunisticheskoi Rossii. Ekonomicheskii rost 2000-2007*], Delo ANKh, Moscow, 2008, 1328 p.
3. "Federal law on 26.03.2003 No. 36-FZ "On peculiarities of electric power during the transition period and on amendments to some legislative acts of the Russian Federation and repeal of certain legislative acts of the Russian Federation in connection with the adoption of the federal law "On electrical energy industry" ["Federal'nyi zakon ot 26.03.2003 No. 36-FZ "Ob osobennostyakh funktsionirovaniya elektroenergetiki v perekhodnyi period i o vnesenii izmenenii v nekotorye zakonodatel'nye akty Rossiiskoi Federatsii i priznanii utrativshimi silu nekotorykh zakonodatel'nykh aktov Rossiiskoi Federatsii v svyazi s prinyatiem federal'nogo zakona "Ob elektroenergetike"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=102978>
4. "Federal law on 26.03.2003 № 35-FZ "On electrical energy industry" ["Federal'nyi zakon ot 26.03.2003 No. 35-FZ "Ob elektroenergetike"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=83142>
5. "Press release of the FAS Russia on August 26, 2009" ["Press-reliz FAS Rossii ot 26 avgusta 2009 goda"], available at: http://www.fas.gov.ru/news/n_26130.shtml
6. "Press release of the FAS Russia on November 24, 2008" ["Press-reliz FAS Rossii ot 24 noyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_21226.shtml
7. "Press release of the FAS Russia on October 1, 2009" ["Press-reliz FAS Rossii ot 1 oktyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26754.shtml
8. "Press release of the FAS Russia on October 13, 2009" ["Press-reliz FAS Rossii ot 13 oktyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26994.shtml

9. "Press release of the FAS Russia on October 2, 2009" ["Press-reliz FAS Rossii ot 2 oktyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26804.shtml
10. "Press release of the FAS Russia on September 3, 2009" ["Press-reliz FAS Rossii ot 3 sentyabrya 2009 goda"], available at: http://www.fas.gov.ru/news/n_26333.shtml
11. "Proceedings of the official website of Federal Antimonopoly Service" ["Materialy ofitsial'nogo saitа Federal'noi Antimonopol'noi Sluzhby"], available at: <http://fas.gov.ru>
12. "Results of the analysis of retail electricity markets" ["Rezul'taty analiza roznichnykh rynkov elektricheskoi energii"], available at: http://fas.gov.ru/analysis/tek/a_21969.shtml
13. "Rules for operation of retail electric power markets in the transitional period of reforming the power industry, approved by the Government of the Russian Federation on 31.08.2006 No. 530" ["Pravila funktsionirovaniya roznichnykh rynkov elektricheskoi energii v perekhodnyi period reformirovaniya elektroenergetiki, utverzhennyye postanovleniem Pravitel'stva Rossiiskoi Federatsii ot 31.08.2006 No. 530"], available at: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=98111>
14. "Russian Federation Government Resolution on December 29, 2007 No. 996 "On amendments to certain regulations of the Government of the Russian Federation concerning the organization of guaranteeing suppliers of electric energy" ["Postanovlenie Pravitel'stva RF ot 29 dekabrya 2007 g. No. 996 "O vnesenii izmenenii v otdel'nye postanovleniya Pravitel'stva Rossiiskoi Federatsii po voprosam organizatsii deyatelnosti garantiruyushchikh postavshchikov elektricheskoi energii"], available at: <http://www.garant.ru/hotlaw/federal/169344/>

Развитие конкуренции на рынке электроэнергетики

Богданов Дмитрий Дмитриевич

Кандидат экономических наук, доцент,
заведующий кафедрой экономической теории,
Московская финансово-промышленная академия,

125190, Россия, Москва, Ленинградский просп., 80;
e-mail: dbogdanov@mfp.ru

Аннотация

В статье рассматривается проблема развития конкурентных отношений на рынках электроэнергетики, которые образовались в результате введения в действие закона «Об электроэнергетике», согласно которому запрещается совмещать деятельность по передаче и купле-продаже электроэнергии. Автор рассматривает виды нарушений антимонопольного законодательства на розничном и оптовом рынке электроэнергетики и делаются выводы о дальнейшем развитии конкурентной среды на рынках электроэнергетики.

Ключевые слова

Электроэнергетика, отраслевое законодательство, развитие конкуренции, структура рынка.

Библиография

1. Анализ деятельности сетевых организаций по размещению на официальных сайтах информации о типовых договорах. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/analysis/tek/a_26865.shtml
2. Материалы официального сайта Федеральной Антимонопольной Службы. [Электронный ресурс]. – Режим доступа: <http://fas.gov.ru>
3. Постановление Правительства РФ от 29 декабря 2007 г. № 996 «О внесении изменений в отдельные постановления Правительства Российской Федерации по вопросам организации деятельности гарантирующих поставщиков электрической энергии». [Электронный ресурс]. – Режим доступа: <http://www.garant.ru/hotlaw/federal/169344/>
4. Правила функционирования розничных рынков электрической энергии в переходный период реформирования электроэнергетики, утвержденные постановлением Правительства Российской Федерации от 31.08.2006 № 530. [Электронный ресурс]. – Режим доступа: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=98111>

5. Пресс-релиз ФАС России от 01 октября 2009 года. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/news/n_26754.shtml
6. Пресс-релиз ФАС России от 13 октября 2009 года. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/news/n_26994.shtml
7. Пресс-релиз ФАС России от 2 октября 2009 года. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/news/n_26804.shtml
8. Пресс-релиз ФАС России от 24 ноября 2008 года. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/news/n_21226.shtml
9. Пресс-релиз ФАС России от 26 августа 2009 года. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/news/n_26130.shtml
10. Пресс-релиз ФАС России от 3 сентября 2009 года. [Электронный ресурс]. – Режим доступа: http://www.fas.gov.ru/news/n_26333.shtml
11. Результаты анализа розничных рынков электрической энергии. [Электронный ресурс]. – Режим доступа: http://fas.gov.ru/analysis/tek/a_21969.shtml
12. Федеральный закон от 26.03.2003 № 36–ФЗ «Об особенностях функционирования электроэнергетики в переходный период и о внесении изменений в некоторые законодательные акты Российской Федерации и признании утратившими силу некоторых законодательных актов Российской Федерации в связи с принятием федерального закона «Об электроэнергетике». [Электронный ресурс]. – Режим доступа: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=102978>
13. Федеральный закон от 26.03.2003 № 35-ФЗ «Об электроэнергетике». [Электронный ресурс]. – Режим доступа: <http://www.consultant.ru/online/base/?req=doc;base=LAW;n=83142>
14. Экономика переходного периода. Очерки экономической политики посткоммунистической России. Экономический рост 2000-2007. – М.: Дело АНХ, 2008. – 1328 с.