RETROSPECTIVE USE OF FINANCIAL TOOLS OF THE SE “NATIONAL ATOMIC ENERGO GENERATING COMPANY “ENERGOATOM”

Urgency of the research. Unsatisfactory state of power generation capacity in Ukraine necessitates justification of the financing tools for the process of their renewal.

Target setting. Development of proposals to improve financing of the energy sector of Ukraine should be based on understanding of the existing features and problems of its implementation.

Actual scientific researches and issues analysis. Problems of the development of the power industry of Ukraine have been reflected in works of such scholars as O. Bilotserkivsky, N. Bolkvadze, A. Borysenko, A. Voinov, V. Konashchuk, A. Mazuenko, O. Parkhomenko, S. Saukh, I. Senikov, O. Stoyan, N. Shyryaeva and others.

Uninvestigated parts of the general matters defining. Scientists pay a lot of attention to separate issues of the electricity complex functioning, while the problems of financing of its modernization are largely ignored.

The research objective. The article is aimed at identifying peculiarities and problems of the financial tools use of the SE “NAEGC “Energoatom” - the bases of the electric power sector of Ukraine.

The statement of the basic material. Data of the financial statements of the SE “NAEGC “Energoatom” allow indicating presence of some features of its use of financial tools. These features consist of a significant and rather contradictory influence of the state as an owner on the process of forming financial resources of the enterprise.

Conclusions. The conducted analysis shows the need to optimize the current practice of financing the generating companies using specific financial tools and attracting financial resources from new sources.

Keywords: nuclear power engineering, power engineering; financial tools.

DOI: 10.25140/2410-9576-2018-2-1(13)-64-67

Urgency of the research. One of the most urgent problems of the Ukrainian power industry is unsatisfactory state of power generation capacities at present. At the state level, this problem was already recognized in 2005. However, over the past ten years, there has been no significant upgrade of Ukraine's generating capacity. Domestic power complex is on the verge of a collapse, as it applies to both thermal and nuclear generating units.

Target setting. Solving the problem of ensuring the stability of the electric power industry functioning is shifted to the level of financial relations, since it directly depends on the efficiency and efficiency of attracting financial resources necessary for modernization.

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UDC 336.7:620.9

UDC 336.7:620.9

Актуальність теми дослідження. Незадовільний стан потужностей генерації електричної енергії в Україні обумовлює потребу обґрунтування інструментів фінансування процесу їх модернізації.

Постановка проблеми. Розробка пропозицій щодо вдосконалення фінансування енергетичного сектору України повинна зумовлюватися на розумній існуючих особливостей та проблем його здійснення.

Аналіз останніх досліджень і публікацій. Проблеми розвитку електроенергетики України знайшли своє відображення в працях таких вчених, як О. Білоцерківський, Н. Болквадзе, А. Борисенко, А. Воїнов, В. Конащук, А. Мазуенко, Е. Олєсевич, О. Пархменко, С. Саух, Я. Серіков, О. Стоян, Н. Ширяєва та інших.

Виділення недосліджених частин загальної проблеми. Науковці продовжують багато уваги охоплюючи питання фінансування електроенергетичного комплексу, при цьому проблеми фінансування її модернізації переважно залишаються поза увагою.

Постановка завдання. Стаття орієнтована на ідентифікацію особливостей та проблем використання фінансових інструментів ДП “НАЕК "Енергоатом”- основи електроенергетичного сектору України.

Виклад основного матеріалу. Дані фінансової звітності ДП “НАЕК "Енергоатом” дозволяють вказати на наявність деяких особливостей використання фінансових інструментів ДП “НАЕК "Енергоатом”- основи електроенергетичного сектору України.

Висновки. Проведений аналіз засвідчує потребу оптимізації дійсьної практики фінансування генеруючих підприємств з використанням специфічних фінансових інструментів та залученням фінансових ресурсів із нових джерел.

Ключові слова: атомна енергетика, електроенергетика, фінансові інструменти.

Абакуменко О. В., Лукіашко П. О., Вікнянська А. О. Ретроспективне використання фінансових інструментів ДП “НАЕК "Енергоатом”
Actual scientific researches and issues analysis. Problem of domestic electricity development is reflected in the writings of many scientists. Scientific research in this area is diverse and raises a wide range of problems. A number of studies are devoted to general trends in the development of industry [1], "green" energy [2], stock exchange electricity market [3].

Uninvestigated parts of the general matter defining. Unfortunately, the problem of financial support for generating potential development of Ukraine has not practically found interest in broad scientific circles. Publications on financial tools for the modernization of the power sector remain isolated and insufficiently deep [4].

Target setting. Of course, in the framework of this article, it is impossible and inappropriate to encompass all the determinants of the electricity sector in Ukraine. It is expedient to consider it according to the segments - the energy generation segment and the electricity transmission and distribution segment need special attention. In addition, in the conditions of impossibility to consider within the framework of one article all power-generating companies, it was decided to divide them according to the specifics of the production process. This study focuses on assessing the current practice of using financial tools to attract financial resources from the atomic energy company.

The statement of basic material. Bulk of the used generating capacity of Ukraine is concentrated at the disposal of seven companies: SE „NAEGC „Energoatom“, PJSC „Donbasenergo“, PJSC „Dniproenergo“, PJSC „DTEK Zahhidenergo“, PJSC „Ukrhidroenergo“, PJSC „Centerenergo“ and LLC „DTEK Skhidenergo“, with three of them belonging to DTEK's energy holding. According to the Anti-monopoly Committee of Ukraine (AMCU) in 2013-2015, these structures formed 93-95% of electricity generation. Assessing the practice of using financial tools by most of these enterprises is possible based on their financial statements, which is published by the Agency for the Development of the Ukrainian Stock Market Infrastructure (ARIFRU).

In recent years, about half of the total electricity generated in Ukraine is generated by power units of nuclear power plants, that is, SE “NAEGC "Energoatom". Unfortunately, due to the specifics of the organizational and legal form of the enterprise, its financial statements in the free access falls fragmentarily. In particular, in the database of issuers placed on the official site of the ARIFRU, it is presented only in 2003 and in 2012-2015 when the company attracted bond loans. However, despite this feature, it is still possible to identify trends and assess the main indicators of the financial tools use by the enterprise (Tab. 1).

Table 1

| Indicators of the financial tools use by the SE “NAEGC “Energoatom” to finance the activity in 2002-2003 and 2011-2016 | Years |
|---|---|---|---|---|---|---|---|---|
| Rate of growth of liabilities, % to 2002 | 100,0 | 102,9 | 218,5 | 905,5 | 875,5 | 865,0 | 871,1 | 888,4 |
| Equity in liabilities, % including: | 63,4 | 62,1 | 75,7 | 81,1 | 82,0 | 77,1 | 76,9 | 77,4 |
| - share capital, % | 36,5 | 35,0 | 16,2 | 3,9 | 81,1 | 82,1 | 81,5 | 79,9 |
| - undivided profit, % | 19,1 | 19,4 | 15,2 | 2,4 | 0,2 | -5,6 | -5,2 | -3,2 |
| - capital in pre-financing (other additional capital), % | 7,8 | 7,6 | 43,7 | 74,7 | 0,3 | 0,3 | 0,3 | 0,3 |
| Targeted financing in a liability, % | 11,6 | 13,6 | 4,6 | 1,3 | 0,2 | 0,9 | 0,8 | 0,2 |
| Credits of banks in liabilities, % | 1,8 | 1,7 | 8,5 | 1,8 | 2,2 | 2,5 | 3,6 | 5,5 |
| Current liabilities in liabilities (except loans and promissory notes), % | 20,6 | 18,6 | 10,7 | 3,0 | 2,7 | 6,1 | 5,9 | 5,2 |
| Average cost of borrowed capital, % per annum | - | 0,8 | - | 1,1 | 1,8 | 0,8 | 0,6 | 1,4 |
| Return on assets under operating profit, % | - | 4,8 | - | -1,5 | -1,9 | -0,8 | 3,9 | 2,0 |

Source: completed on by the authors on the basis of ARIFRU data [5]

Dynamics of the balance sheet of the SE “NAEGC “ENERGOATOM” confirms almost nine times the growth of the nominal volume of financial resources at the disposal of the company; however, this
growth should be evaluated through the prism of the specificity of the used financial tools. Main volume of funds was attracted through equity instruments, with the fact that in the years 2002-2003 they were dominated by the tools of a real inflow of financial resources (authorized capital and retained earnings), then in 2011-2012 significant volumes of promising tools were used (valuation of non-current assets), the nominal values of which in 2013 were added to the authorized capital. In this regard, it should be noted that the pre-assessment did not result in the real growth of financial resources at the disposal of the state-owned enterprise - they can only come in the long term, with the inclusion of depreciation of the valued value to costs and only in the absence of losses. Dynamics of retained earnings attests to the gradual loss of financial resources and calls into question the effectiveness of the valuation of non-current assets as a promising instrument for attracting financial resources.

Combination of active use of upsurge and inefficient business activity does not contribute to the receipt of financial resources, is ineffective in terms of financing the renovation of production potential and can be used as a means of redistributing customer funds to the benefit of related parties. In addition, the described practice creates conditions for unwarranted increase in the product value, and its further continuation will lead to further price escalation.

The second most important short-term financial liability for financing of the needs of the SE “NAEGC “Energoatom” was the group of financial tools, the basis of which were payables and current settlement obligations, - more than 10 billion hryvnas by the end of 2016, which is 2.2 times more than at the end of 2002. Use of the most short-term financial tools of the enterprise, although different in scale from the surplus, has, however, resulted in a real increase in financial resources, since most of these instruments provide for the receipt of assets or deferrals of payments.

For the assessed period, for the SE “NAEGC “Energoatom”, the role of bank loans in terms of attracting financial resources has increased significantly. In 2016, their share in the balance sheet exceeded even the total amount of immediate liabilities, and the absolute amount exceeded 11 billion UAH. In addition, the growth in the volume of resources attracted through credit instruments was permanent and in 2016, it reached 24 times in relation to the level of 2002.

On the contrary, the role of such an instrument as targeted financing has been steadily declining over the period under consideration. If in 2002-2003, its volumes approached UAH 3 bln or 1/8 in the balance sheet, then already in 2016 amounted to only 380 million hryvnas or 1/50.

The indicated transformations of the priorities of the SE “NAEGC “Energoatom” by use of the financial tools should be evaluated taking into account the ownership of the enterprise by the state. Obvious is the self-annulment of the state from the financing of its activities, while the company enjoys a rather preferential treatment for the revaluation of its non-current assets. However, it is easy to notice the neglect of nuclear energy, the level of depreciation of fixed assets, which in the year 2016 approached 2/3, and real action to restore production capacity or to optimize operational activity is not followed. It seems that domestic nuclear power is thrown to the extreme and is coming to a standstill in recent years in favor of pan-European ideas about its insecurity. However, in domestic conditions of energy shortages and insufficient growth of production capacities of more environmentally sustainable generation technologies, indifference seems insufficiently balanced.

Situation with the SE “NAEGC “Energoatom” is rather indicative given the scale of the financial resources attraction using various instruments. In 2016, the company used borrowed funds borrowed from nine major lenders and one bonded loan. The fact of diversifying the instruments of attracting financial loans (issuance of bonds) should generally be evaluated positively the more that experience of using this tool has been in operation since 2003. However, it is impossible to ignore the fact that the conditions for attracting a bond loan in 2012 were quite difficult. Despite the long-term nature of the loan, its value was at the time of attraction and remained in 2016 one of the highest among all borrowed financial loans. In addition, share of bonds in the total volume of borrowed financial loans remained low - in 2016 it did not reach 10%. Unfavorable in terms of financing development of the enterprise remained and the structure of borrowed financial loans by terms. From the submitted volume of obligations for a term no more than a year was involved 57.6%, and for a period of more than five years - only 36.2%. There is no information on currency structure of the obligations of the enterprise in the open access, but indirectly, it can be judged about based on cost. Based on the latter, there is a
reason to assume that foreign currency loans amount to 73% in the presented portfolio of liabilities. The structure of financial loans of the SE "NAEGC "Energoatom" under the criterion of creditors' jurisdiction is also worth paying attention to. In 2016, not less than 61% of these resources were provided by public financial institutions, another 12% was formed at the expense of foreign institutions (primarily the EBRD - 8%). Rather low share of private banks in the structure of the engagements undertaken by the company suggests that its attractiveness as a borrower is insufficient.

An important aspect of attracting and using borrowed resources by any enterprise is a correlation between their value and the profitability of operating activities. Assessing average cost of the financial resources attracted by the SE "NAEGC "Energoatom" through lending instruments, as the ratio of total financial expenditures to the average annual level of debt capital, its instability should be noted. Average cost of the borrowed financial tools for the company fluctuated within the range of 0.8-1.8% per annum and was achieved due to the high share of the short-term liabilities in loan capital, which are often free of charge in Ukraine. If we talk about the ratio of financial expenses to term liabilities, then the value of capital attracted through a set of relevant financial tools fluctuated within the range of 10-16% (only in 2012 - 5%). Moreover, in the period 2012-2016 there was a permanent growth of the latter indicator, indicating a deterioration of the situation in the capital market for the enterprise.

Comparing the cost of the borrowed capital with the return on assets calculated on operating profit, we could argue that attracting financial resources using financial loan tools for an enterprise is inappropriate. A multiple excess of the cost of capital over the return on assets contributes to gradual wastage of the financial resources from turnover of the enterprise.

**Conclusions and perspectives for further researches.** Summarizing the features and trends of the financial tools use of the nuclear power company, it is necessary to note the following. Firstly, the SE "NAEGC "Energoatom" is a state-owned company and has a significant influence on the government's political decisions. Second, due to the cautious attitude of the Western partners of Ukraine towards nuclear energy and the desire to protect themselves from possible emergencies on the morally and technically obsolete equipment of Ukrainian NPPs, the SE "NAEGC "Energoatom" is funded taking into account the hopelessness of its development.