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# SCIENCE AND INNOVATION OF MODERN WORLD

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#### PHILOLOGICAL SCIENCES

90	Moshkovska L. M., Zakonnova O. O. STRUCTURAL AND SEMANTIC PROPERTIES OF ENGLISH	487
	PARENTHETICAL ELEMENTS IN SCIENTIFIC AND TECHNICAL TEXTS ON ROAD CONSTRUCTION TECHNOLOGIES:	
	TRANSLATION ASPECTS	
91.	Pampura S., Kutepova T. TO THE ISSUE OF THE TEEN SLANG	492
92.	Волкова М. Ю., Наливайко А. М.	496
	XX СТ. – ЗМІНА РОЛІ ЖІНКИ В ЛІТЕРАТУРІ XX СТОЛІТТЯ	
93.	Вірцан А. Є.	501
	СТИЛІСТИЧНІ АСПЕКТИ ПЕРЕКЛАДУ СУЧАСНОГО СЛЕНГУ (НА МАТЕРІАЛІ АМЕРИКАНСЬКИХ МОЛОДІЖНИХ	
94.	CEPIAЛIB)	505
94.	Карпенко О. Ю., Крилова Е. В. НОМІНАЦІЯ ПЕРСОНАЖІВ У ДІАЛОГІЧНОМУ МОВЛЕННІ ГОЛОВНОЇ ГЕРОЇНІ РОМАНУ ДЖЕЙН ОСТІН «PRIDE AND PREJUDICE»	303
95.	Крайчинська Г. В., Романюк І. М.	513
,,,	ОСОБЛИВОСТІ ПЕРЕКЛАДУ СУСПІЛЬНО-ПОЛІТИЧНИХ	313
	TEKCTIB	
96.	Пеліван О. К., Матієнко-Сільницька А. В.	519
	ПРОСОДІЯ І АКТУАЛІЗАЦІЯ КОМУНІКАТИВНОЇ ІНТЕНЦІЇ:	
	ЧАСТОТНИЙ ПАРАМЕТР	
97.	Перелигіна О. І., Ушакова С. В.	528
	РОЗВИТОК НАВИЧОК ВИВЧЕННЯ ІНОЗЕМНОЇ МОВИ У ВНЗ ДЛЯ ІНТЕГРАЦІЇ В МАЙБУТНЄ СУСПІЛЬСТВО	
98.	Федоряка Л. Д., Баля В. I.	533
	ОСОБЛИВОСТІ ПЕРЕКЛАДУ ФРАЗЕОЛОГІЗМІВ У ТВОРАХ	
	ДИТЯЧОЇ ЛІТЕРАТУРИ (НА ПРИКЛАДІ ПОВІСТІ Л. КЕРРОЛЛА	
	«АЛІСА В ЗАДЗЕРКАЛЛІ»)	
	PHILOSOPHICAL SCIENCES	
99.	Безродний А. Г.	536
	ЕВОЛЮЦІЯ ЯК НАСЛІДОК БОРОТЬБИ ЗА РЕСУРСИ	
	ECONOMIC SCIENCES	
100.		540
	IMPROVEMENT OF THE INNOVATIVE ACTIVITY OF BUSINESS	
	PROCESSES OF THE ENERGY COMPANY	
101.		548
	КРЕДИТНИЙ ПОРТФЕЛЬ БАНКУ ТА АСПЕКТИ ЙОГО	
	УПРАВЛІННЯ	

#### **ECONOMIC SCIENCES**

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## IMPROVEMENT OF THE INNOVATIVE ACTIVITY OF BUSINESS PROCESSES OF THE ENERGY COMPANY

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**Abstract.** Factors that have a decisive influence on the choice of an enterprise's innovative strategy have been identified and analyzed. The main stages of forming an innovative strategy at the enterprise were studied. The choice of an innovative strategy of an energy company by building a business model containing certain blocks and components is substantiated.

**Keywords.** innovation, innovative activity, innovative strategies, energy corporation, leadership strategy, business processes

Choosing the right strategy is critically important for the innovative activity of any enterprise and successful innovative management. Some factors that influence the choice of strategy include:

- the type of activity of the company: different industries have their own characteristics, so the strategy must take into account the specific requirements and needs of the enterprise in this industry. For example, high-tech companies may focus

on developing new products and technologies, while low-tech companies may focus more on optimizing production processes;

- organizational structure: the internal structure and culture of the enterprise are of great importance for choosing a strategy. For example, flexible and innovative organizations may focus on the rapid implementation of new ideas and risky projects, while more conservative organizations may be more cautious and focus more on stability;
- innovative activity: the strategy should take into account the level of innovation that the enterprise wants to achieve. This may include developing new products, implementing new technologies, improving processes or entering new markets. The choice of strategy will determine the way in which the enterprise will realize its innovative potential.

The formalization of the innovation strategy within the framework of the innovation program is an important stage of the implementation of innovation management in the organization. The main steps for developing an innovation program include:

- definition of goals and objectives: this is determined on the basis of the strategic goals of the enterprise. For example, it can be to achieve a competitive advantage, expand markets or improve productivity;
- establishment of procedures: definition of procedures that will be used for identification, evaluation and implementation of innovative projects. These can be the processes of gathering ideas, internal evaluations, development of business plans, attracting financing and implementing projects;
- determination of resources and constraints: establishing the resources needed to complete each project, including financial, human and material resources.

It is also important to identify time constraints, such as project deadlines or budget constraints;

- organizational structure of innovation management: creation of an appropriate organizational structure that will be responsible for managing the innovation program. These can be separate units, committees or innovation teams that coordinate

activities for the development and implementation of innovations.

- external communications: creation of a communication system with partners, consumers and other interested parties.

Designing an innovative strategy is a constant and dynamic process, as it requires analysis and response to changes in the internal and external environment of the enterprise. Some requirements for a successful innovation strategy include:

- clear directives and temporary guidelines: the innovation strategy should have clear goals and guidelines that determine how the company plans to achieve its innovation goals. This allows all interested parties to understand the direction of the enterprise and promotes joint efforts;
- flexibility: the innovation strategy must be flexible to ensure adaptation to changing market conditions and requirements. It should allow the enterprise to quickly respond to new opportunities and challenges, changing the course of action or revising project priorities;
- organizational design: the innovation strategy must be supported by an appropriate organizational design that facilitates the implementation and implementation of innovations. This may include the creation of teams, departments or structures that specialize in innovative projects and facilitate collaboration and exchange of ideas;
- correlation with the corporate strategy: the innovation strategy must be consistent with the general corporate strategy of the enterprise [1].

The business model of innovative activity of an energy company contains certain blocks.

The block "Key stakeholders" describes the network of partners and consumers, thanks to which the business model functions.

The "Key resources" block contains the main resources thanks to which the company is able to carry out business processes, namely: power equipment and auxiliary means, qualified personnel (managers and specialists of the company's departments have higher education and many years of experience), as well as the client base. The availability of the specified resources allows the company to form,

prove and communicate value propositions to consumers, maintain relations with consumer segments and earn a profit

The "Value propositions" block forms the value of products and services offered by the energy company within the framework of business processes. The value is achieved due to the following characteristics: novelty, productivity, quality, convenience.

The block "Relationships with clients" includes measures for the organization of personal support for large industrial consumers, maintenance of the consumer base by all existing categories and individual customer segments, as well as the organization of personal accounts of payers for consumed electricity, structured by categories and segments. The energy supply company uses a variety of actions within the framework of customer service in order to develop partnership relations with the latter.

The block "Cost structure" includes various costs associated with the functioning of the business model. The block describes the most significant costs that arise as a result of the energy company's production activities within the framework of specific business models. The most significant costs of the company: material, staff wages, taxes, costs of outsourcing business models.

The "Revenue Flow Processes" block contains two main sources of the energy company's income from the main business processes: from the supply of electricity to consumers in percentages approved by the National Energy Regulatory Commission for a given Distribution System Operator, and income from the implementation of projects of technical connections of consumers to power grids.

The "Sales Channels" block contains certain business processes related to the support of customer service for certain categories and market segments, i.e.: development of the consumer's personal account, support and development of the informativeness of the company's website for consumers, increasing the efficiency of the company's Call Center .

The block "Key activities" includes the main business activities of the company, which ensure the success of its activities: provision of services for

distribution and supply of electricity and services for technical connections of consumers to electric networks; organization of billing activities.

The results of the comprehensive analysis indicate the need to choose an innovation management strategy and enterprise goals, that is, it is important to take into account specific conclusions and recommendations obtained from the analysis. Depending on the context, purpose and characteristics of the studied energy company, different innovation management strategies can be chosen:

- innovation leadership strategy: focused on "being a pioneer" in the introduction of new technologies and products on the market. Requires active research and development, financial investment and rapid response to changes in the industry;
- imitation strategy: focuses on using innovations that have already been successfully implemented by competitors. This may include improving and adapting existing products or technologies;
- cooperation strategy: focused on establishing partnership relations and cooperation with other organizations, research centers or universities for joint development and implementation of innovations;
- focusing strategy: focused on the development and implementation of innovations for a narrow market segment or a specific client segment.

Based on the analysis, it is proposed to choose a leadership strategy in innovation with an emphasis on managing the company's goals using diversification.

The innovative activity of the energy supply company, which is the object of analysis in this study, in the conditions of martial law and taking into account the geographical location of fixed assets (networks and equipment) is quite complicated. The easiest way to improve the economic condition of this company is to increase tariffs for the provision of services in the generation and distribution of electric energy using incentive tariff formation.

Stimulating regulation or RAB-regulation (RAB - regulatory asset base, when translated - regulatory asset base) is a system of tariff formation based on long-term tariff regulation (3.5 or 8 years), aimed at attracting investments for the construction

and modernization of the infrastructure of electric networks and stimulating the cost efficiency of electricity distribution companies. One of the components of the RAB-regulation system is the determination of the amount of the required income, which will depend on the achievement of the established indicators of the reliability of electricity supply and the quality of service to consumers, as well as the motivation of regulated companies to reduce costs [2]. The main elements of RAB regulation are shown in Figure 1.

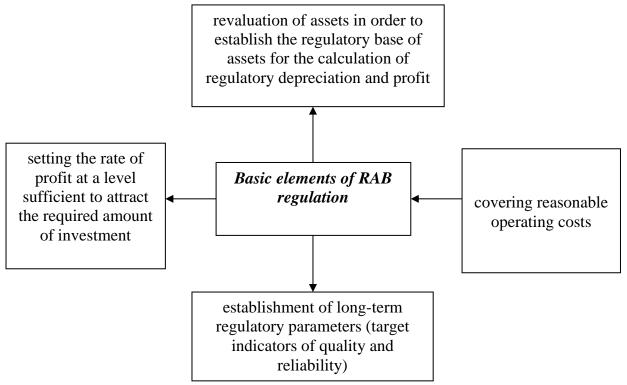


Figure 1 – Main elements of RAB regulation [2]

The well-known traditional model used in tariff formation in energy "costs +" is represented by the formula:

Cost + Profit (percentage of cost) = Service price,

The RAB regulation method represents another model:

Price - Profit (requirements to the level of return on capital) = Cost,

That is, this model suggests choosing the cost price as a target indicator.

The "expenses +" method currently in effect in tariff formation for electricity supply services makes it possible to include in the tariff operating costs, depreciation deductions, as well as the established level of profitability.

The RAB methodology converts the level of profitability into the level of

income per capital (R). The latter depends on two components:

- the regulatory base of the company's assets;
- the regulatory rate of return (r).

The so-called fair value of the company's assets is taken as the regulatory base of assets, which can be calculated in certain ways, namely:

- as the market value of the company;
- as the renewable value of the company's assets;
- as a discounted cash flow;
- as the book value of the company or the replacement value of assets.

Therefore, in order to determine the regulatory base of the company, it is necessary to carry out an assessment of the company's fixed assets.

The use of the regulatory rate of turnover requires more complex and well-founded calculations. According to the European RAB methods, the weighted average cost of capital (WACC) should be used for its calculations. This indicator is calculated using a formula that takes into account the value of the company's equity capital and the value of debt capital. Moreover, both the company's own and borrowed funds are characterized by their price, which depends on the set interest rate. At the same time, the specified calculations also require the values of the company's taxes, which must be taken into account [2].

The regulator also sets the level of operating costs that are included in the tariffs, namely:

- controlled expenses (on energy carriers);
- uncontrolled indexation to the level of inflation, deductions to the wage fund, taxes, fees.

By reducing controlled costs, the distribution system operator company can save financial resources, which will be transferred to the company's profit.

When the transition to the second regulatory period will take place, it will be appropriate to determine the requirements for the efficiency and quality of services with the help of the proposed regulator.

The implementation of incentive regulation allows the operator of the

distribution system - the energy supply company to reduce the intervention of the Regulator in the operational activity, as well as to preserve the savings achieved due to the increase in the efficiency of the activity at the disposal of the company. In addition, there is an opportunity to provide the required amount of funding for investment and innovation programs thanks to the involvement of equity and loan capital.

In general, the introduction of stimulating regulation in the activities of the SSR in the energy sector contributes to the formation of an attractive investment climate and the increase of innovative activity in order to attract private investments, increase the quality and reliability of electricity supply, and increase the efficiency of the operational activities of energy companies. The latter occurs as a result of reducing inefficient operating costs and returning part of the achieved profit to consumers in the form of a corresponding reduction in tariffs.

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