УДК 351.75:351.778:620.9(477) **JEL Classification:** Q48

AKHROMKIN E. M.1, AKHROMKIN A. O.2

NATIONAL SECURITY, PUBLIC ADMINISTRATION AND ADMINISTRATION THROUGH THE PRISM OF ENERGY

DOI: https://doi.org/10.32620/cher.2025.3.13

Problem statement. The relevance of the topic is due to the critical role of the energy sector in ensuring the resilience of the state in the conditions of war, global crises and transformations of energy markets. Energy is not only an object of strategic management, but also an indicator of the effectiveness of public authorities in the context of security, independence and sustainable development, regulation and strengthening of interagency coordination. This justifies the need for a comprehensive analysis of the relationship between energy policy, public administration system and national security strategies. The article is aimed at studying the modernity of national security, public administration and administration through the prism of energy and determining development prospects. Methods used in the study: economic analysis, graphic, systematization and generalization, etc. The hypothesis of the study was the assumption of advantages and disadvantages of critical factors in the development of energy for 2025 - 2027. Summary of the main material: it has been established that energy as a sector of the national economy has acquired a new significance - not only as a source of economic and social sphere, but as a strategic sphere of public administration and a critical factor of national security, policy, and not just a tool for the implementation of political decisions. Conceptual directions for improving the state policy in the field of energy and national security are proposed. The originality and practical significance of the study lies in the modern approach to the development of national security, public administration and administration in the context of energy development. Conclusions. National security, public administration and administration through the prism of energy means the relationship between the energy security of the state, the system of public administration and administration, and ensuring overall national sustainability. And the system of public administration should be transformed from a reactive model to a strategic-preventive one, focused on strengthening the internal potential of the country, preserving its sovereignty and ensuring a decent standard of living for citizens. Further research consists in continuous monitoring of issues related to national security, public administration and administration in the energy sector.

Keywords:

energy, national security, public administration and administration.

¹ **Ахромкін Євген Михайлович,** доктор економічних наук, професор, професор кафедри національної безпеки, державного управління та адміністрування, Житомирський політехнічний державний університет, Житомир, Україна.

Akhromkin Eugene, Doctor of Economic Sciences, Professor, Professor of the National Security, Public Administration and Administration Department, Zhytomyr Polytechnic State University, Zhytomyr, Ukraine.

ORCID ID: https://orcid.org/0000-0003-4420-6265

e-mail: kaf.teor@ukr.net

² **Ахромкін Андрій Олександрович,** кандидат економічних наук, старший викладач кафедри національної безпеки, державного управління та адміністрування, Житомирський політехнічний державний університет, Житомир, Україна.

Akhromkin Andrey, Candidate of Economic Sciences, Senior Lecturer of the Department of National Security, Public Administration and Administration of Zhytomyr Polytechnic State University, Zhytomyr, Ukraine.

ORCID ID: https://orcid.org/0000-0003-4797-8172

e-mail: kaf.teor@ukr.net





НАЦІОНАЛЬНА БЕЗПЕКА, ПУБЛІЧНЕ УПРАВЛІННЯ ТА АДМІНІСТРУВАННЯ КРІЗЬ ПРИЗМУ ЕНЕРГЕТИКИ

Постановка проблеми. Актуальність теми зумовлена критичною роллю енергетичного сектору в забезпеченні стійкості держави в умовах війни, глобальних криз і трансформацій енергетичних ринків. Енергетика виступає не лише об'єктом стратегічного управління, а й індикатором ефективності публічної влади в контексті безпеки, незалежності та сталого розвитку. Загрози енергетичній інфраструктурі, кібератаки, дефіцит енергоносіїв та виклики «зеленої» трансформації вимагають перегляду моделей управління, нормативного регулювання та зміцнення міжвідомчої координації. Це обгрунтовує потребу в комплексному аналізі взаємозв'язку між енергетичною політикою та системою публічного адміністрування. Метою статті є дослідження сучасності національної безпеки, публічного управління та адміністрування крізь призму енергетики й визначення перспектив розвитку. Методи. використані в дослідженні: методи економічного аналізу, графічний, систематизація та узагальнення тощо. Гіпотезою дослідження стало припущення переваг, недоліків критичних факторів розвитку енергетики на 2025 – 2027 роки. Виклад основного матеріалу: встановлено, що енергетика як сектор національного господарства набула нового значення - не лише як джерело забезпечення економіки та соціальної сфери, а як стратегічна сфера публічного управління та критичний чинник національної безпеки. Визначено наголоси (переваги, недоліки, критичні фактори) у розвитку енергетики на 2025 – 2027 роки. Публічне управління у сфері енергетики повинно стати активним суб'єктом формування національної безпекової політики, а не лише інструментом реалізації політичних рішень. Запропоновано концептуальні напрями вдосконалення державної політики у сфері енергетики та національної безпеки. Оригінальність та практична значущість дослідження полягає у сучасному підході до розбудови національної безпеки, публічного управління та адміністрування в контексті розвитку енергетики. Висновки. Національна безпека, публічне управління та адміністрування крізь призму енергетики означає взаємозв'язок між енергетичною безпекою держави, системою публічного управління й адміністрування та забезпеченням загальної національної стійкості. А система державного управління має трансформуватись від реактивної моделі до стратегічно-превентивної, орієнтованої на зміцнення внутрішнього потенціалу країни, збереження її суверенітету та забезпечення гідного рівня життя громадян. Подальші дослідження полягають в постійному моніторингу проблематики пов'язаної з національною безпекою, публічним управлінням та адміністрування в енергетиці.

Ключові слова:

енергетика, національна безпека, публічне управління та адміністрування.

Formulation of the problem. Modern global transformations caused by hybrid threats, armed conflicts, climate change and technological revolution actualize the issue of rethinking the national security system, its structure, tools and mechanisms of support. One of the key components, which in the conditions of the XXI century is of decisive importance for the stability of states and the stability of societies, is energy security — as a basic element not only of economic self-sufficiency, but also of national security.

In Ukraine, this problem has become especially acute due to the full-scale aggression of the Russian Federation in 2022, which transformed the energy sector from the basic sector of the economy to the frontier of hybrid warfare. The purposeful destruction of energy infrastructure, sabotage, cyberattacks on energy facilities, political and economic pressure through resources necessitated a rethinking of the role of public administration in the energy sector and

the inclusion of this direction in the national security system.

Energy has become not only an object, but also an instrument of influence — both in domestic governance and in international politics. In this context, the coherence between state policy in the field of security, energy and public administration is of particular importance. There is a growing need for new management approaches that will ensure the resilience of the energy system, flexibility in responding to crisis events, as well as effective interaction between central and local authorities, the private sector and civil society.

Currently, the national security system of Ukraine is undergoing deep reform. The National Security Strategy of Ukraine (2020) and related documents (in particular, the Energy Strategy until 2035, the Cybersecurity Strategy, the Strategy for Environmental Security and Adaptation to Climate Change) only partially took into account the scale of threats that have materialized



since February 24, 2022. Therefore, the urgent agenda is the task of integrating the energy component into all levels of the public administration and national security system — from strategic planning to the implementation of specific mechanisms for sustainable energy supply in the face of risks.

Crisis management in the energy sector requires special attention. After massive shelling of critical infrastructure facilities, Ukraine faced challenges in ensuring energy supply, heat, water, and communications in conditions of long-term damage. This requires building a system of energy resilience — that is, the ability not only to recover quickly from strikes, but also to function during emergencies. In this context, public administration institutions come to the fore, which must be able to act in conditions of uncertainty, make operational decisions, and coordinate the actions of various branches of government and sectors of the economy.

In addition, modern challenges require a revision of the regulatory and legal support for the functioning of the energy sector. We need new mechanisms of state regulation that would allow us to effectively coordinate the actions of the state, business, and international partners in the field of energy security. The problem of balance between market principles in the energy sector and instruments of direct state intervention in emergency situations is especially relevant.

No less important is the international dimension of energy security. Ukraine not only receives external support for the restoration of the energy system, but also plays the role of an "outpost" of Eastern Europe's energy independence. The issues of synchronization of energy systems, integration into the EU market (ENTSO-E), decentralization of energy sources, introduction of renewable energy sources—all this forms a new paradigm of national and energy policy, which requires a new scientific understanding.

Given the interconnectedness of the national security, energy, risk management and public administration sectors, it is necessary to develop integrated approaches that will allow:

- 1) to form energy policy as an element of the national security strategy;
- 2) introduce mechanisms of sustainable administration in the energy sector at all levels of government;

- 3) to develop a system of multi-level management of energy crises (from the local level to intergovernmental coordination);
- 4) to ensure energy decentralization as a form of increasing the survivability of the system:
- 5) to lay the foundations for the technological transition to digital, green, adaptive energy.

The relevance of the study is also due to the need for scientific support of the transformational policy carried out in Ukraine: reforming the electricity market, modernizing management systems in the field of critical infrastructure, developing institutions of public control over energy policies, introducing smart solutions into urban management and developing local energy security.

It is worth emphasizing that public administration and administration institutions should become not only executors of political decisions, but proactive policy-making actors capable of implementing strategies based on data, forecasts and social dialogue. This is especially true in the energy sector, where the cost of mistakes can be critical both for national security and for the daily lives of citizens.

Thus, the combination of energy, national security and public administration creates an interdisciplinary field within which modern scientific solutions should be formed that can ensure the sustainable development of Ukraine in the XXI century. The study of such relationships is not only of applied but also strategic importance for the future of the state, its subjectivity, geopolitical autonomy and well-being of the population.

Analysis of recent research and publications. The peculiarities of public administration and its impact on the security of the individual, society and the state in the system of national security are deeply and systematically disclosed in the monograph "Public Administration and National Security", which was prepared by a team of researchers A.M. Mykhnenko, N.M. Hrushchynska, Y.V. Nesteryak, Y.F. Zhovnirchyk, I.I. Deynega, V.P. Prykhodko, M.L. Nizhnikov, E.M. Makarenko, O.V. Polishchuk, I. V. Chibisova [1]. Scientists investigated the principles of interaction between society and government, analyzed the problems of national security of Ukraine, considered the principles of administration in the field of public relations through the prism of "education-economy-state".



Pavlyutin Y. M. studied public security as the newest object of administration in the field of guaranteeing the national security of Ukraine. He emphasized that the concept of "public security" is still a novelty for national security legislation. He supported the provision for the further penetration of tasks and functions to guarantee public security into the sphere of responsibility of all components of the security forces, in particular the National Guard of Ukraine [2].

Gurkovskyi M. P., Sydor M. Ya. investigated theoretical approaches to the definition of the concept of "national security" in the context of national legislation and international obligations of Ukraine. It was noted that in the context of the aggression of the Russian Federation against Ukraine, scientific research of fundamental concepts in the context of national security is of practical importance, on the basis of the analysis of legislation, the dynamics of changes in the definition of the concept of "national security" is shown. The definition of the concept of "national security" in the EU member states was analyzed, the components of national security were defined: state, public, informational, environmental, economic, transport, energy security, personal security. The relationship between the national security of the state, society and the individual was considered. The lack of a definition of the concept of "national security" in the current legislation is explained by the fact that, taking into account the complexity, multifaceted and dynamism of this concept, it is necessary to constantly update and improve the legislative framework [3].

Semenets-Orlova I., Klochko O. studied the modernization of Ukraine's foreign policy and diplomatic service, which is designed to strengthen its position in the international environment and ensure the development of a collective security system within the Euro-Atlantic community - the European Union and NATO. Scholars have stated that Ukraine's foreign policy strategy, adapted to national interests, should be one of the dominant factors in the formation of a full-fledged civil society, which is capable of creating an adequate system of state security and defense and to ensure its quality level. It has been proved that one of the priority tasks of the state authorities is the comprehensive implementation of the National Security Strategy of Ukraine in the context of growing asymmetric threats and conflictogenic factors [4].

A significant contribution to the development of scientific support of national security, public administration and administration through the prism of energy was made by representatives of modern Ukrainian science, who publish their developments in the electronic scientific publication "Public Administration and National Security" [5]. As for energy, for example, Matviyshyn E. G. and Luhovyi L. Y. studied the management of the development of energy supply systems for territories in Ukraine [6].

However, due to changes in priorities and emphasis in ensuring national security, public administration and administration through the prism of energy in wartime, scientific achievements need to be updated and updated.

The article is aimed at studying the modernity of national security, public administration and administration through the prism of energy and determining development prospects.

Presentation of the main research material. Energy plays a critical role in the national security of each state. It is the basis for the functioning of the economy, ensuring the livelihood of the population and maintaining defense capabilities. Public administration and administration in this area require a scientific approach that takes into account both economic and political, social and environmental aspects.

Energy security provides for a stable and reliable supply of energy resources to the country at affordable prices. This includes diversifying energy sources, developing domestic production, modernizing infrastructure, and improving energy efficiency. For example, Ukraine, which is dependent on energy imports, especially gas, has the strategic task of reducing this dependence by developing its own gas production industry, introducing energy-saving technologies and alternative energy sources.

Energy is an important tool of foreign policy. Control over energy resources can be used as a means of pressure on other countries. Public administration should ensure the independence of energy policy from external influence. For example, Nord Stream 2 is a political project that aims to increase Europe's dependence on Russian gas, which poses threats to the energy security of individual countries and the region as a whole.

The availability of energy for the population is an important factor in social stability. A sharp rise in energy prices could lead to social protests and political instability. In many countries, there are programs to support vulnerable groups of the population to pay for utilities, which can reduce social tension.



The extraction, transportation and use of energy resources have a significant impact on the environment. Public administration should contribute to the transition to cleaner energy sources and reduce greenhouse gas emissions. The development of renewable energy (solar, wind, hydropower) allows you to reduce dependence on fossil fuels and reduce the negative impact on the climate.

National security in the energy sector also includes the protection of energy infrastructure from terrorist attacks, cyber threats and other types of sabotage. Public administration must ensure reliable protection of energy facilities and cybersecurity of energy networks.

Cyber threats are becoming more and more relevant for the energy sector. Attackers can attack the management systems of energy facilities, which can lead to energy supply disruptions and other negative consequences. In particular, in 2015, a cyberattack on energy companies took place in Ukraine, which led to power outages in several regions.

Terrorist groups can carry out attacks on energy infrastructure facilities in order to destabilize the situation in the country. Attacks on oil facilities in Saudi Arabia in 2019 led to a significant reduction in oil production and an increase in prices on the world market.

Effective management of the energy sector requires a clear and transparent regulatory framework. Laws and regulations should be clear to all market participants and ensure a level playing field.

The state plays an important role in regulating the energy sector. It sets the rules of the game in the market, controls the activities of energy companies and ensures the protection of consumer rights. For example, the National Energy and Utilities Regulatory Commission (NEURC) is a regulator in the energy market of Ukraine.

Transparency in the energy sector helps to reduce corruption and increase trust in public authorities. Disclosure of information about the owners of energy companies and the terms of energy supply contracts helps to increase transparency.

Public administration in the energy sector should be organized in such a way as to ensure the effective implementation of the assigned tasks. Clear coordination between various public authorities and the involvement of experts and members of the public in the decision-making process is necessary.

In Ukraine, the Ministry of Energy, the National Energy and Utilities Regulatory Commission, the Antimonopoly Committee and other state authorities are responsible for energy policy. Coordination between the different public authorities is essential to ensure coherence of actions and avoid duplication of functions.

Energy is a strategically important industry for any country. Effective public administration and administration in this area is the key to national security, economic development and social stability. And energy security is becoming more and more relevant in the context of globalization and growing geopolitical tensions. In particular, the energy crisis in Europe in 2022 showed how vulnerable the energy system can be to external shocks.

Ukraine has significant potential for the development of its own energy sector. The use of this potential will reduce dependence on energy imports and increase the country's energy security. There are different views on the ways of energy development. Some experts believe that it is necessary to continue using fossil fuels, while others believe that it is necessary to switch to renewable energy sources as soon as possible. The analysis of the energy sector has certain limitations. It is impossible to accurately predict future energy prices or technological breakthroughs.

Therefore, energy is an important component of national security, public administration and administration. Effective governance in this area requires an integrated approach that takes into account economic, political, social and environmental aspects. The development of its own energy, improving energy efficiency and the transition to cleaner energy sources are important tasks for Ukraine.

Figure. 1 presents fragments (advantages, disadvantages, critical factors) of the development of modern energy for 2025-2027.



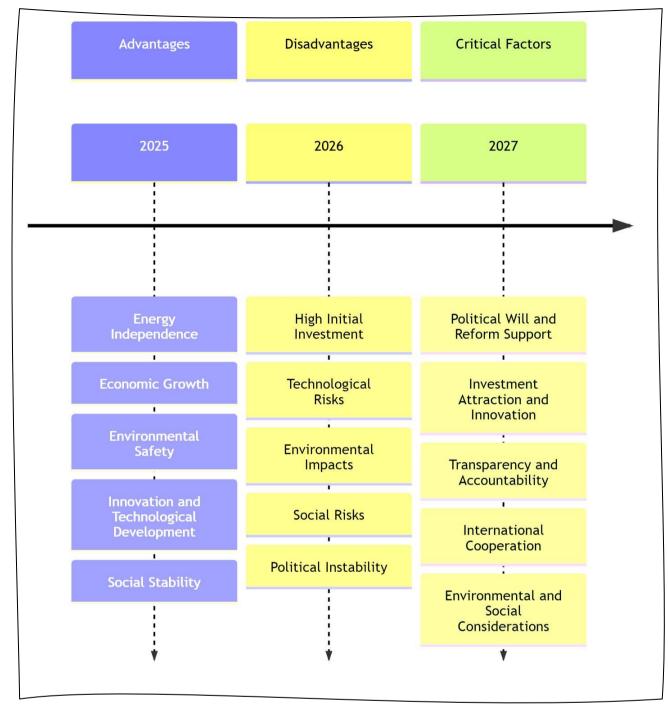


Figure 1 – Fragments (advantages, disadvantages, critical factors) of the development of modern energy for 2025-2027

Source: developed by the authors

Thus, national security, public administration and administration through the prism of energy means the relationship between the energy security of the state, the system of public administration and administration and ensuring overall national sustainability. National security in the energy dimension lies in the ability of the state to ensure sustainable, safe and uninterrupted access to energy resources for all citizens, businesses and critical infrastructure, even in crisis

situations such as war or man-made disasters. Energy security is officially defined as part of national security in accordance with Art. 66 of the National Security Strategy of Ukraine.

Public administration and administration in the energy sector is a system of organizational and legal mechanisms for the actions of authorities responsible for creating strategies, legal norms, control, monitoring, risk forecasting and responding to threats to the energy sector.



Through the prism of energy, this process includes: coordination of actions between various government agencies (the Cabinet of Ministers, the National Security and Defense Council, the Ministry of Energy, the National Regulator, etc.); developing, implementing, and evaluating strategies (e.g., Energy Security Strategies); protection and restoration of critical infrastructure from enemy attacks or cyberattacks; diversification of energy sources and supply routes; protection of consumer rights and fulfillment of international obligations of Ukraine. This interaction is the cornerstone of modern state policy, as stable energy supports the functioning of all other sectors, military resilience and economic sovereignty of the state, and effective public administration allows minimizing risks and quickly responding to any threats to national security, especially under martial law or energy crises.

Conclusions and prospects for further research. In the course of the study, it was established that energy as a sector of the national economy has acquired a new significance — not only as a source of economic and social spheres, but as a strategic sphere of public administration and a critical factor of national security. The full-scale war in Ukraine has exposed the vulnerability of energy infrastructure to external threats and proved that not only the economic, but also the social stability of the state depends on the effectiveness of its protection, security of citizens and defense capability of the country.

National security in the energy dimension has a multifactorial structure. It covers energy independence, diversification of sources and routes of energy supply, infrastructure modernization, protection of critical facilities, cyber resilience, effective legal regulation and transparent administration. Each of these factors requires integration into the public policy of the state, taking into account interagency cooperation, public involvement and adaptation to international security standards.

The key conclusion is that public administration in the energy sector should become an active subject in the formation of national security policy, and not only a tool for the implementation of political decisions. It should be proactive, anti-crisis, open to innovation, aimed at strengthening the institutional capacity of authorities and ensuring energy resilience even in the most critical conditions.

The scientific study also revealed regulatory and organizational gaps that make it impossible to systematically implement energy security

policy. We are talking about the lack of a comprehensive methodology for assessing energy markets at the local level, imperfect coordination between central and regional structures, weak institutional design of mechanisms for protecting energy infrastructure in the context of a hybrid war.

Taking into account the above, it is advisable to propose the following conceptual directions for improving the state policy in the field of energy and national security:

Institutionalization of energy security as a separate direction in the structure of the national security system of Ukraine, with the development of an appropriate state target program that would cover the issues of restoration, protection, investment and development of the energy sector.

Introduction of the principle of energy resilience (sustainability) into the regulatory framework as a mandatory component of strategic planning for government agencies, regions and communities.

Formation of an effective vertical of public administration in the field of energy security, which includes not only ministries and regulators, but also a clear delineation of powers between authorities of all levels, taking into account the risks, vulnerabilities and opportunities of decentralized energy supply.

Expansion of crisis response tools, in particular the creation of a multi-level response system to cyberattacks and other technological threats in the energy sector, with the involvement of the national cybersecurity sector.

Intensification of state support for innovative solutions in the field of energy, including the development of "green" technologies, smart grids, energy storage systems, micro- and minigeneration sources.

Strengthening the transparency of governance in the energy sector as a condition for combating corruption, strengthening consumer confidence and effective partnership with international organizations.

Institutional cooperation between energy policy actors, the security sector and academia in order to form evidence-based policies based on analytics, risk assessment and sound forecasting.

Summing up, it can be argued that effective public administration in the energy sector is a critical condition for ensuring national security, especially in the context of hostilities and multi-vector threats. The system of public administration should be transformed from a reac-



tive model to a strategic-preventive one, focused on strengthening the internal potential of the country, preserving its sovereignty and ensuring a decent standard of living for citizens.

Перелік використаних джерел

- Публічне управління та національна безпека: монографія. А. М. Михненко, Н. М. Грущинська, Ю. В. Нестеряк, Я. Ф. Жовнірчик, І. І. Дейнега, В. П. Приходько, М. Л. Ніжніков, Е. М. Макаренко, О. В. Поліщук, І. В. Чібісова ; за ред. д-ра іст. наук, проф. А. М. Михненка і д-ра екон. наук, доц. н. М. Грущинської. Київ: НАУ, 2019. 340 с.
- Павлютін Ю. М. Публічна безпека як об'єкт адміністрування у сфері забезпечення національної безпеки. Південноукраїнський правничий часопис. 2021. № 2. С. 112-118. https://doi.org/10.32850/sulj.2021.2.19
- Гурковський М. П., Сидор М. Я. Поняття національної безпеки як адміністративно-правової категорії. Соціально-правові *студії*. 2021. Вип. 2 (12). C. https://doi.org/10.32518/2617-4162-2021-2-26-
- Семенець-Орлова І., Клочко О. 4. Національна безпека: український вимір. Наукові праці Міжрегіональної академії управління персоналом. Політичні науки та публічне управління. 2022. Вип. 2 (62). С. 66https://doi.org/10.32689/2523-4625-2022-75. 2(62)-10
- Фахове електронне наукове ви-5. дання "Публічне адміністрування та національна безпека". URL. https://www.internauka.com/magazine/public-administration/ (дата зветнення: 17 квітня 2025 р.)
- 6. Матвійшин €., Луховий Управління просторовим розвитком енергопостачальної системи територій України. Management of the Spatial Development of Energy Supply Systems of Territories in Ukraine.

2021. Вип. 6. https://doi.org/10.25313/2617-572X-2024-6-9976.

References

- 1. Public administration and national security: monograph (2019). A. M. Mykhnenko, N. M. Hrushchynska, Yu. V. Nesteryak, Ya. F. Zhovnirchik, I. I. Deynega, V. P. Prykhodko, M. L. Nizhnikov, E. M. Makarenko, O. V. Polishchuk, I. V. Chibisova; edited by Dr. of History, Prof. A. M. Mykhnenko and Dr. of Economics, Assoc. Prof. M. Hrushchynska. Kyiv: NAU, 340.
- 2. Pavlyutin, Yu. M. (2021). Public security as an object of administration in the sphere of ensuring national security. South Ukrainian Law 2. https://doi.org/10.32850/sulj.2021.2.19
- 3. Gurkovsky, M. P., Sydor, M. Ya. (2021). The concept of national security as an administrative and legal category. Socio-legal studies. 2 26–32. https://doi.org/10.32518/2617-4162-2021-2-26-32
- 4. Semenets-Orlova, I., Klochko, O. (2022). National security: Ukrainian dimension. Scientific works of the Interregional Academy of Personnel Management. Political science and 66-75. administration, 2, (62),public https://doi.org/10.32689/2523-4625-2022-2(62)-
- 5. Professional electronic scientific publication "Public Administration and National Se-Retrieved from: https://www.internauka.com/magazine/public-administration/ (Assecc date: April 17, 2025)
- 6. Matviyshyn, E., Lukhovyy, L. (2021). Management of the Spatial Development of Energy Supply Systems of Territories in Ukraine. Management of the Spatial Development of Energy Supply Systems of Territories in Ukraine, 6. https://doi.org/10.25313/2617-572X-2024-6-9976.

Стаття надійшла Стаття опублікована: 30.09.2025 p.

до редакції: 30.06.2025 р.

Стаття прийнята до друку: 27.09.2025 р.

Бібліографічний опис для цитування:

Akhromkin E. M., Akhromkin A. O. National security, public administration and administration through the prism of energy. *Часопис економічних реформ*. 2025. № 3(59). С. 119–126.



