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Place of forensic commodity expertise in the prevention of offenses in the retail electricity market

The article emphasizes that the threatening dynamics of the annual increase in the facts of damage and theft of energy equipment, theft of electrical energy, spontaneous connection to electrical grids can lead to imbalance and destruction of the electrical industry not only in a separate region, but also in the country as a whole. Attention is drawn to the fact that regulatory legal acts are aimed at curbing this dangerous dynamic, that carry out state regulation in the energy sector which, unfortunately, do not ensure stable security in this area. It is stated that specialists from different suppliers of electric energy prepare all the necessary materials to open criminal proceedings under Article 1881 of the Criminal Code of Ukraine, submit petitions to the investigating authorities about the need to carry out certain investigative actions, however, violators are not prosecuted. It was found that the main obstacle in bringing the perpetrators of these violations to criminal responsibility is the lack of methodological materials and skills in the police units in the investigation of criminal proceedings on the facts of theft of electrical energy and the practice of their consideration by courts.

It has been proved that the lack of methodological materials with a complete list of initial data that are necessary to determine the market price of products of the energy complex leads to discrepancies in conclusions of

experts. New methods for determining the market price of energy products during forensic commodity examinations will help to resolve the issue of assessing the products of the energy complex in expert practice. It is proposed to determine the subject, tasks, object of research of this forensic examination; outline possible approaches and methods for assessing their value; establish the assortment of goods that has formed in this market in the world and in Ukraine; clearly identify the boundaries of competence of commodity experts. It is emphasized that the determination of the market price for electricity and the cost of services for its provision goes beyond the competence of commodity experts, since the mechanism for setting prices (tariffs) for this type of product is controlled by the state and approved by the Regulator – National Energy and Utilities Regulatory Commission.

Keywords: electric energy, offenses, state regulation, responsibility, cost, forensic commodity examination.

Formulation of Research Problem. Absence of light or frequent interruptions in the supply of electricity to customers are often caused by attackers who encroach on power equipment. The robbers do not even think about the consequences of their criminal acts: from the loss of their own lives to encroachments on the public security of the region. Most energy facilities are energized and therefore a source of increased danger, leading to the death of the robbers themselves. In addition, the border status of some regions forces us to consider such actions as terrorist, as the stability of the functioning of the entire energy system of the region is under threat.

Over time, electricity becomes a more expensive and attractive commodity, and consequently, illegal actions aimed at using it for free also become profitable. In addition, the threatening dynamics of the annual growth of damage and theft of energy equipment, electricity theft, unauthorized connections to the electricity grids and other illegal actions can quickly lead to imbalance and destruction of the electricity industry not only in the particular region but also in the country as a whole. Only in the Kherson region in 2014, UAH 3 million in fines were charged for the discovery of uncounted and gratuitous electricity consumption. In 2020, twice as many such offenses were documented, and fines amounted to almost UAH 108 million ¹. That is why the issue of counteracting such offenses with the involvement of forensic commodity expertise is relevant.

Analysis of Essential Researches and Publications. The following domestic scientists such as A. F. Volobuiev, N. I. Klymenko, O. M. Moisieiev, I. A. Petrova, I. V. Pyrih, E. B. Simakova-Yefremian, R. I. Stepaniuk,

¹ Про звернення депутатів Херсонської обласної ради VIII скликання до Кабінету Міністрів України щодо запобігання викраденню електричної або теплової енергії шляхом її самовільного використання : рішення IV сесії обласної ради VIII скликання від 05.02.2021 р. № 103. URL: <http://khor.gov.ua/iv-sesiia-khersonskoi-oblasnoi-rady-viii-sklykannia> (date accessed: 28.03.2021).

V. Yu. Shepitko, M. H. Shcherbakovskyi and others ¹ have devoted their scientific works to the study of issues on of the functioning of the institute of forensic examinations in criminal proceedings and the prevention of offenses in various spheres of human activity. However, the coverage of the place of forensic commodity expertise in the prevention of offenses in the retail electricity market was left out of their attention.

The **Article Purpose** is to outline the place of forensic commodity expertise in the prevention of offenses in the retail electricity market.

Main Content Presentation. Recently, in almost all regions of Ukraine, the number of offenses related to the destruction of energy facilities, theft of equipment and electricity, as well as violations of the Rules of the retail electricity market are being significantly increased ².

In the last three years, at energy facilities in the Kherson region, 105 thefts and 370 cases of equipment damage totaling over UAH 3 million were committed, (7 transformers, 1,795 kg of oil, 4 tons of metal corners from main crash barriers, more than 8 km of wires were stolen etc.)³.

In addition, in the last six months in the Sumy region more than 30 thefts of power equipment (dismantled 3 transformers, stolen 14 electricity meters, almost 3 km of wires) and other thefts of electrical property, which led to power outages in customers. By their actions, plunderers caused losses of almost UAH 200,000. Within 6 months, 30 power towers were damaged. Almost UAH 170,000 was spent on the restoration of power grid pylons ⁴.

¹ Е.г., Волобуєв А. Ф. Проблеми методики розслідування розкрадань майна в сфері підприємництва : монограф. Харків, 2000. 336 р. ; Клименко Н. І. Судова експертологія. Курс лекцій : навч. посіб. Київ, 2007. 521 р. ; Моїсєєв О. М. Експертні технології: теорія формування та практика застосування : монограф. Харків, 2011. 424 р. ; Петрова І. А. Правові та процесуальні засади судово-товарознавчих експертиз споживчих товарів : монограф. Харків, 2011. 275 р. ; Пиріг І. В. Теоретико-прикладні проблеми експертного забезпечення досудового розслідування : монограф. Дніпропетровськ, 2015. 432 р. ; Сімакова-Єфремян Е. Б. Комплексні судово-експертні дослідження: теорія та практика : монограф. Харків, 2016. 456 р. ; Степанюк Р. Л. Криміналістичне забезпечення розслідування злочинів, вчинених у бюджетній сфері України ; за заг. ред. д-ра юрид. наук, проф. А. Ф. Волобуєва. Харків, 2012. 382 р. ; Шепітько В. Ю. Криміналістична тактика (системно-структурний аналіз) : монограф. Харків, 2007. 432 р. ; Щербаковський М. Г. Проведення та використання судових експертиз у кримінальному провадженні : монограф. Харків, 2015. 560 р.

² Правила роздрібногo ринку електричної енергії : затв. постановою НКРЕКП України від 14.03.2018 р. № 312 (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/v0312874-18> (date accessed: 28.03.2021).

³ Про звернення депутатів Херсонської обласної ради URL: <http://khor.gov.ua/iv-sesiia-khersonskoi-oblasnoi-rady-viii-sklykannia> (date accessed: 28.03.2021).

⁴ Тимошук О. Енергокрадії загрожують здоров'ю та життю громадян. 09.08.2019. URL: <https://khoda.gov.ua/energokrad%D1%96%D1%97-zagrozhujut-zdorov%E2%80%99ju-ta-zhittju-gromadjan> (date accessed: 29.03.2021).

It should be noted that in every region of Ukraine every year there is a destruction of hundreds of electric poles not only due to natural disasters, but also due to traffic accidents. Restoration of destroyed electrical poles requires significant human and material resources, disconnection from electricity supply to consumers at the time of elimination of accidents.

The norms of the Criminal Code of Ukraine ¹, as well as regulations, approved primarily by resolutions of the National Energy and Utilities Regulatory Commission of Ukraine (*hereinafter referred as NEURC*), are aimed at curbing this dangerous dynamics, including:

- Rules of the retail electricity market (No. 312, dated on 14.03.2018) ²;
- Code of Commercial Electricity Accounting (No. 311, dated on 14.03.2018) ³;
- Code of Distribution Systems (No. 310, dated on 14.03.2018) ⁴.

However, in our opinion, aforementioned regulations do not ensure proper regulation and level of security of the energy sector. Modern criminals steal electricity in a skilled, almost talented way: for example, by illegally installing electronic, pulse and similar devices in electricity meters (generators, transformers, etc.). The amount of losses due to such offenses in just one year and in one region can reach tens of millions of hryvnias. The large number of special devices used to steal electricity, the complexity of their manufacture, the features of concealed installation and the huge number of offers for their sale via the Internet, identified by experts, indicate a high level of qualification of thieves and the development of this illegal activity in the state at the level of trading.

This is confirmed by the notification of the NEURC on the beginning of the investigation of violations of the legislation on the functioning of the electricity market. “*The decision was made on the basis of monitoring the behavior of market participants, for the day ahead, and the intraday market and the notification of SE Market Operator,*” said in an official announcement. According to the NEURC, signs of violations are contained in the actions of large electricity producers (*Centerenergo, D.TEK Dniproenergo, DTEK Zakhidenergo, DTEK Skhidenergo, Ukrhydroenergo*), as well as traders (*United Energy, Utility Trading, NEW*

¹ Кримінальний кодекс України : Закон України від 05.04.2001 р. № 2341-III (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/2341-14> (date accessed: 29.03.2021).

² Правила роздрібного ринку електричної енергії URL: <https://zakon.rada.gov.ua/laws/show/v0312874-18> (date accessed: 28.03.2021).

³ Кодекс комерційного обліку електричної енергії: затв. постановою НКРЕКП від 14.03.2018 р. № 311 (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/v0311874-18> (date accessed: 29.03.2021).

⁴ Кодекс систем розподілу : затв. постановою НКРЕКП від 14.03.2018 р. № 310 (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/v0310874-18> (date accessed: 29.03.2021).

ENERGY COMPANY, SE GUARANTEED BUYER). The NEURC acknowledged that the excess electricity in the market could lead to *manipulation of the sale of amount of electricity by some market participants, in particular, TPS / CHP*. In order to limit such manipulations, on June 3, 2020, the NEURC adopted a resolution according to which electricity can be sold only if it is confirmed that it is physically possible to produce it¹.

In addition, since 2018, specialists of JSC “Khersonoblenergo”, using special technical means, surveyed 2,070 consumer facilities and on 254 of them recorded radiation sources of high-frequency generators. However, only 48 cases (18%) were able to remove these devices (due to the procedure stipulated by law)². The cynicism and thirst for profit of electricity thieves, who neglect the health and lives not only of themselves but also of others, are striking. The lion’s share of those who like free electricity are dealers who use high-frequency generators. These devices are well known for their harmful effects on the human body: their work can cause a number of diseases – from diseases of the blood and cardiovascular system to oncology³.

Theft of hot or potable water, electricity or heat by unauthorized use without meters, the results of which are used for commercial calculations (if the use of meters is mandatory), or due to intentional damage to meters or in any other way (Article 188¹ of the Criminal Code of Ukraine)⁴. Theft of electricity, if such actions cause significant damage, entails criminal liability: a fine of 100 to 200 tax-free minimum incomes of citizens or community service for up to 2 years, or restriction of liberty for up to 3 years. The same acts, committed repeatedly or by prior conspiracy by a group of persons, or if they caused damage on a large scale, are punishable by imprisonment for up to 3 years⁵.

The basis for detecting theft of electricity is also pofinder analysis, when, for certain areas of the networks, experts analyze in detail the dynamics of consumption in terms of each consumer using consumption data from previous years, identifying suspicious facts of instability (significant declines or increases), not related to seasonal consumption fluctuations or other objective factors. Directly the facts of theft of the electricity during planned and unscheduled checks are found out by employees of oblenergo, inspecting means of the account of

¹ НКРЕКП почала офіційне розслідування порушень на ринку електроенергії, про які йшлося у розслідуванні «Схем» // Офіційний сайт «Радіо Свобода». 11.03.2021. URL: <https://www.radiosvoboda.org/a/news-skhemy-nkrekp-rozsliduvannya-elektroenerhiya/31145061.html> (date accessed: 29.03.2021).

² Про звернення депутатів Херсонської обласної ради ... URL: <http://khor.gov.ua/iv-sesiia-khersonskoi-oblasnoi-rady-viii-sklykannia> (date accessed: 28.03.2021).

³ Тимошук О. Зазнач. твір. URL: <https://khoda.gov.ua/energograd%D1%96%D1%97-zagrozhujut-zdorov%E2%80%99ju-ta-zhittju-gromadjan> (date accessed: 29.03.2021).

⁴ Кримінальний кодекс України ... URL: <https://zakon.rada.gov.ua/laws/show/2341-14> (date accessed: 29.03.2021).

⁵ Idem.

consumers according to the current legislation of Ukraine. During the raid work, a set of equipment is used, which consists of sample meters, current measuring devices, residual magnetization measuring devices, analyzers of electromagnetic radiation spectrum, etc. In order to create a sufficient evidence base, which is necessary during the consideration of the executed acts, all violations are recorded with photo and video equipment. Citizens often turn to oblenergos to report suspicions of possible illegal actions by their undisciplined neighbors.

In case of theft of electricity by unaccounted use, unauthorized connection to networks, damage to meters, failure (damage) of seals and other consumer actions that lead to a decrease in the performance of the meter or networks, employees of the distribution company draw up an act of violation of Retail Electricity Market Rules and, depending on the offense, cut off electricity. Based on the act, the company's employees calculate the amount of damages in accordance with the methodology approved by the relevant resolution of the NEURC. However, it should be emphasized that the facts, where the amount of damages for theft of electricity is 113,500 UAH or more (Article 188¹ of the Criminal Code of Ukraine provides for criminal liability), it is difficult to find a person to serve a sentence for such an offense.

In addition, specialists of various electricity suppliers for the opening of criminal proceedings, under this article prepare all the necessary materials, submit requests to the investigating authorities on the need to conduct certain investigative actions to document such offenses and other measures to ensure criminal proceedings, however, do not prosecute robbers. Last year, in all regions of our State, in accordance with the Article 188¹ of the Criminal Code of Ukraine, the court did not pass a single conviction.

Victims of criminal proceedings on theft of electricity, its suppliers, distribution system operators and consumers are not guaranteed the right to a prompt, complete, and impartial investigation and trial for compensation for damage caused by a criminal offense. Additionally, the single provision of the Criminal Code of Ukraine (Article 188¹), which defines a limited list of illegal actions to steal electricity, does not address the aggravating circumstances of such an offense by an official using his official position, for the manufacture, sale or use of devices in order to steal electricity, they block the operation of meters, etc. Thus, even if the theft of electricity causes damage on a large or particularly large scale or in other aggravating circumstances, it will not affect the qualification of the offense, and the most severe punishment for such actions is borne as a minor offense in the form of restraint of liberty for up to three years. However, under similar conditions, theft of any other property (Article 184 paragraph 4 of the Criminal Code of Ukraine) is defined in the legislation as a serious offense punishable by 5 to 8 years in the prison¹.

¹ Кримінальний кодекс України URL: <https://zakon.rada.gov.ua/laws/show/2341-14> (date accessed: 29.03.2021).

It should be emphasized that according to the provisions of the Commercial Electricity Accounting Code, the party responsible for the commercial metering point and/or the party controlling the facility where the electricity metering units are installed are obliged to provide unimpeded access to it by authorized representatives controlling bodies and interested parties during working hours for technical inspection of the equipment of the metering unit or reading indicators from electricity meters¹.

However, the lack of the mechanism to ensure such a right to the supplier or operator of the distribution system in practice leads to the fact that (in order to hide the theft of electricity and avoid liability) the consumer who uses the device to reduce electricity meters, does not allow representatives to the facility to check meters, and after drawing up the relevant act on non-admission and leaving the inspection body of the object of inspection, the consumer dismantles and hides such a device (high-frequency generator, magnet, etc.), and then allows you to inspect the meter. The law does not provide for any liability of the consumer-theft for such illegal actions or the possibility of their prevention.

In our opinion, the main obstacle to bringing those guilty in these offenses to criminal liability should be the lack of methodological materials and skills in the police departments to investigate criminal proceedings on theft of electricity and the practice of their consideration by courts; imperfection and inconsistency of legal norms, the lack of their official interpretation. Thus, to prosecute those guilty of stealing electricity, in accordance with Article 242 of the Criminal Procedure Code of Ukraine², an investigator or prosecutor are to ensure the examination to evaluate the amount of loss of property caused by such an offense.

In addition, oblenergo experts emphasize that experts of state specialized forensic institutions of the Ministry of Internal Affairs of Ukraine and the Ministry of Justice of Ukraine do not conduct examinations to determine the amount of damage caused by theft of electricity. Experts motivate this by the fact that the cost of such goods as electricity is not the subject of expert research, as the state sets fixed prices for it, and departmental instructions (for experts) on this issue are absent.

It should be agreed that in today's conditions, expert practice does not fully meet the needs of judicial investigative bodies, legal entities and ordinary citizens in solving the urgent issue of assessing the quality and value of energy products. At the present stage of development of the national economy, the value of certain types of energy products (natural gas, products of its processing, etc.) is assessed according to the general scheme of valuation of movable property (according to the Law of Ukraine: *On Property Valuation, Property Rights and*

¹ Кодекс комерційного обліку URL: <https://zakon.rada.gov.ua/laws/show/v0311874-18> (date accessed: 29.03.2021).

² Кримінальний процесуальний кодекс України : Закон України від 13.04.2012 р. № 4651-VI (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/4651-17> (date accessed: 29.03.2021).

Professional Valuation in Ukraine)¹. General requirements, procedure, principles, methodological approaches and methods of valuation, valuation base and types of value must comply with the regulations of the National Standard No. 1 General principles of property valuation and property rights, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 10.09.2003 No. 1440².

It should be noted that the lack of methodological materials with a complete list of source data needed to determine the market value of energy products, causes differences in the conclusions of experts. In addition, since the subject and tasks of forensic commodity expertise of energy products are still not clearly defined, the questions posed to experts-commodity expertise in case of appointment of such expertise may be beyond their competence, and the conclusions should be as follows: *It is not possible*³. The solution of this problem requires a scientific substantiation of certain definitions and their definition; improvement of modern legislation on the regulation of this market (electricity, natural gas, etc.); introduction of the principles of independent market evaluation of this product and services for its provision.

The current stage of development of society is characterized by a strategic course to create a legal, democratic state. Ukraine is implementing radical socio-economic reforms, the process of democratization of all aspects of public life, which is impossible without strengthening law and order, ensuring reliable protection of constitutional rights and freedoms of citizens. However, since 01.07.2019 a new electricity market has been launched in Ukraine, based on the European model, which works effectively in Hungary, Slovakia, the Czech Republic, Germany, France, the Baltic States and Scandinavia. The introduction of innovations is a rather complex process, so some issues and controversies regarding this market of services remain unresolved to this day. However, the fact is indisputable: the new model of the electricity market is designed to create a healthy competitive environment in Ukraine for all participants in the energy process.

It should be noted that until 01.07.2019, in Ukraine there was a model of the electricity market *Energy Pool*: all generating companies sold electricity to

¹ Про оцінку майна, майнових прав та професійну оціночну діяльність в Україні : Закон України від 12.07.2001р. № 2568-III (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/4651-17> (date accessed: 29.03.2021).

² Національний стандарт № 1 «Загальні засади оцінки майна і майнових прав» : затв. Постановою КМУ від 10.09.2003 р. № 1440 (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/1440-2003-%D0%BF> (date accessed: 29.03.2021).

³ Інструкція про призначення та проведення судових експертиз та експертних досліджень та Науково-методичні рекомендації з питань підготовки та призначення судових експертиз та експертних досліджень : затв. наказом Мін'юсту України від 08.10.1998 р. № 53/5 (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/z0705-98> (date accessed: 05.03.2021).

the only State Enterprise *Energorynok* at the tariffs set by the state according to the well-known “cost +” algorithm. Under such conditions, suppliers (usually *oblenergos*) could buy electricity only from the same SE *Energorynok* at the same prices for all consumers, calculated according to certain methods.

This system had many shortcomings due to the fact that the price was determined not by the market (i.e. the balance between supply and demand), but by the state (artificially, through a single regulator — the NEURC). In this aspect, these goods could not be the objects of forensic commodity science. However, the new market model of the energy sector has created a basis for a different attitude of citizens to this type of goods and services for their provision. Recently, the National Scientific Centre “Hon. Prof. M. S. Bokarius Forensic Science Institute” of the Ministry of Justice of Ukraine and other expert institutions of the Ministry of Justice of Ukraine are actively receiving requests from legal entities and ordinary citizens to conduct research to determine the market value of electricity, specified in the annexes to the appeal.

As of today (with the functioning of the new model) consumers — individuals of the market are protected by the State. The NEURC together with the government have defined a mechanism due to which suppliers, separated from *oblenergos*, should supply electricity to the population at tariffs that previously operated in Ukraine (despite the fact that such tariffs are lower than their cost). At the same time, individuals can independently choose a supplier, however, at much higher market tariff.

For legal entities there are market mechanisms, and the price of electricity depends on several factors: consumption; payment schedules and payment discipline; schedule of consumption during the day, etc. In addition, the supplier may offer each consumer individual conditions for cooperation, taking into account the specifics of such a customer. Today, in the conditions of the newly reformed electricity market, suppliers usually do not offer fixed prices for electricity, but enter into contracts, given the wholesale prices for electricity on electricity exchanges.

Separately, we emphasize that the modern retail market can be divided into two parts: *generic* and *free* market. The peculiarities of these markets are that: the *generic* market is limited by the administrative boundaries of regional regions (regardless of the ownership of electricity networks); The *free* market is limited to the territory of Ukraine. Generic service is *energy with delivery*, so the price of generic service is formed taking into account the cost of energy delivery to the consumer. In addition, in the free market the energy is sold without delivery, so the price usually does not take into account the cost of transmission and distribution (although options are allowed to take into account the cost of delivery by the consumer’s choice).

Legal, economic and organizational principles of the electricity market are determined by the Law of Ukraine No. 2019-VIII dated on 13.04.2017 *On*

Electricity Market (hereinafter referred as *the Law No. 2019-VIII*)¹. This Law regulates relations related to the production, transmission, distribution, buying and selling, supply of electricity to ensure reliable and safe supply of electricity to consumers, taking into account the interests of consumers, development of market relations, minimization of electricity supply costs and minimization of negative impact on the environment. Ancillary services market is a system of relations arising in connection with the buying of ancillary services from suppliers by the transmission system operator. The Law № 2019-VIII clearly stipulates that in order to ensure the supply of electricity to consumers, the generic service provider buys and sells electricity on the electricity market at free prices.

The methodology (procedure) for calculating the price of electricity offered by the generic service provider during the formation of prices for generic services is approved by the regulator — the NEURC².

The legal basis for the functioning of the electricity market consists of: the Constitution of Ukraine, Law No. 2019-VIII and other Laws of Ukraine: *On Combined Heat and Power Production (Cogeneration) and Waste Energy Potential*³, *The National Commission for State Regulation of Energy and Public Utilities*⁴, *On Natural Monopolies*⁵, *On Protection of Economic Competition*⁶, *On Environmental Protection*⁷, as well as international treaties of Ukraine, consent to be binding, provided by the Verkhovna Rada of Ukraine, and other regulations of Ukraine.

¹ Про ринок електричної енергії : Закон України від 13.04.2017 р. № 2019-VIII (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/2019-19> (date accessed: 29.03.2021).

² Про Національну комісію, що здійснює державне регулювання у сферах енергетики та комунальних послуг : Закон України від 22.09.2016 р. № 1540-VIII (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/1540-19> (date accessed: 29.03.2021).

³ Про комбіноване виробництво теплової та електричної енергії (когенерацію) та використання скидного енергопотенціалу : Закон України від 05.04.2005 р. № 2509-IV (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/2509-15> (date accessed: 29.03.2021).

⁴ Про Національну комісію, що здійснює державне регулювання URL: <https://zakon.rada.gov.ua/laws/show/1540-19> (date accessed: 29.03.2021).

⁵ Про природні монополії : Закон України від 20.04.2000 р. № 1682-III (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/1682-14> (date accessed: 29.03.2021).

⁶ Про захист економічної конкуренції : Закон України від 11.01.2001 р. № 2210-III (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/2210-14> (date accessed: 29.03.2021).

⁷ Про охорону навколишнього природного середовища : Закон України від 25.06.1991 р. № 1264-XII (as amended and supplemented). URL: <https://zakon.rada.gov.ua/laws/show/1264-12> (date accessed: 29.03.2021).

The aforementioned indicates that the determination of the market cost of electricity and its services is beyond the competence of commodity experts, as the mechanism of pricing (tariffs) for this type of product is controlled by the state and approved by the NEURC. Methodological recommendations and methods for determining the market cost of energy products during forensic commodity expertises will help to eliminate gaps in the evaluation of energy products in expert forensic commodity practice, in which it is necessary to: determine the subject, tasks, objects of research of this forensic expertise; develop approaches and methods for estimating their value; to determine the range of goods formed on the world market and on the market of Ukraine; clearly define the limits of competence of commodity experts.

Conclusions. It should be noted that even when the theft of electricity caused damage in large or particularly large amounts or in other aggravating circumstances, the qualification of the offense will not be affected, and the most severe punishment for such actions will be punished as a minor offense in the form of restraint of liberty up to 3 years.

We note that the lack of methodological materials with a complete list of source data needed to determine the market cost of energy products, causes differences in the conclusions of experts. The solution of this problem requires a scientific substantiation of certain definitions and their definition; improvement of modern legislation on the regulation of this market (electricity, natural gas, etc.); introduction of the principles of independent evaluation of the market of this product and services for its provision.

It is proved that methodical materials for determining the market cost of energy products for forensic commodity expertises will help to eliminate the problematic issue of evaluation of energy complex products in expert forensic commodity practice, develop approaches and methods for estimating their cost; to determine the range of goods formed on the world market and on the market of Ukraine; clearly define the limits of competence of commodity experts.

Given the above, we can conclude that determining the market cost of electricity and services is beyond the competence of commodity experts, as the mechanism of pricing (tariffs) for this type of product is controlled by the state and approved by the regulator — the NEURC.

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I. A. Петрова, В. М. Фесюнін, О. С. Донцова
Місце судової товарознавчої експертизи
у запобіганні правопорушенням
на роздрібному ринку електричної енергії

Зауважено, що притягненню до кримінальної відповідальності винних у пошкодженні й викраденні енергообладнання, розкраданні електроенергії заважає відсутність у підрозділів поліції методичних матеріалів і навичок розслідування таких правопорушень і практики їх розгляду судами.

Акцентовано, що визначення ринкової вартості електроенергії та послуг з її надання перебуває за межами компетенції експертів-товарознавців, оскільки механізм формування цін (тарифів) на цей вид продукції затверджує Національна комісія, що здійснює державне регулювання у сферах енергетики та комунальних послуг, а контролює держава. Мета статті — окреслити місце судової товарознавчої експертизи у запобіганні правопорушенням на роздрібному ринку електроенергії.

Ключові слова: електрична енергія, правопорушення, державне регулювання, відповідальність, вартість, судово-товарознавча експертиза.

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Место судебной товароведческой экспертизы в предупреждении правонарушений на розничном рынке электроэнергии

Подчёркнуто, что угрожающая динамика ежегодного увеличения количества фактов порчи и воровства энергооборудования, кражи электрической энергии, самопроизвольного подключения к электросетям может привести к разбалансированию и разрушению электрической отрасли не только отдельной области, но и страны в целом. Обращено внимание на то, что на сдерживание этой опасной динамики направлены нормативно-правовые акты, осуществляющие государственное регулирование в сфере энергетики, которые, к сожалению, не обеспечивают стабильной безопасности в этой сфере. Констатировано, что для открытия уголовного производства по статье 188¹ Уголовного кодекса Украины специалисты различных поставщиков электрической энергии подготавливают все необходимые материалы, подают ходатайства следственным органам о необходимости проведения тех или иных следственных действий, однако, в итоге нарушителей к уголовной ответственности так и не привлекают. Установлено, что главным препятствием в привлечении виновных в этих нарушениях к уголовной ответственности следует признать отсутствие в подразделениях полиции методических материалов и навыков в расследовании уголовных производств по фактам хищения электрической энергии и практики их рассмотрения судами.

Доказано, что отсутствие методических материалов с полным перечнем исходных данных, необходимых для определения рыночной цены продуктов энергетического комплекса, приводит к расхождениям в заключениях экспертов. Решить проблемный вопрос оценивания продуктов энергетического комплекса в экспертной практике помогут новые методики определения рыночной цены продуктов энергетики при проведении судебных товароведческих экспертиз. Предложено определить предмет, задачи, объекты исследования этой судебной экспертизы; выработать подходы и методы к оцениванию их стоимости; оговорить ассортимент товара, сформировавшийся на этом рынке в мире и в Украине; чётко обозначить границы компетенции экспертов-товароведов. Акцентируется,

что определение рыночной цены электрической энергии и стоимости услуг по её предоставлению выходит за пределы компетенции экспертов-товароведов, поскольку механизм формирования цен (тарифов) на этот вид продукции контролирует государство и утверждает регулятор — Национальная комиссия, осуществляющая государственное регулирование в сферах энергетики и коммунальных услуг.

Ключевые слова: электрическая энергия, правонарушения, государственное регулирование, ответственность, стоимость, судебно-товароведческая экспертиза.

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