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Features of the Protection of Digital Rights in the Electronic Conclusion of an Energy Supply Contract

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ABSTRACT

Today, various spheres of human life are especially encompassed by the trend towards digitalization. Rather strong changes are undergoing by political, economic and social institutions. Earlier in history, there was no similar analogue of the stage of human relations, the formation of a "new" digital reality. Accordingly, such transformations relate to the field of law, changing its objective function. It begins to be not only a way to apply the state power, not only an instrument for regulating the public and civil life of people, but also as a result of which it becomes an object of impact and influence of digitalization. Contractual relations are one of the earliest forms of social interaction, which developed together with society and its structure, adjusting to the level of progress. Currently, they are most widespread and cover almost all spheres of human activity, and this is due to the presence of a platform - the Internet - simplifying and speeding up communication.

Keywords: energy supply, electronic transaction, electronic signature, purchase and sale, contract, electric power industry, digital rights

1. INTRODUCTION

With the development and implementation of the "Digital Economy of the Russian Federation" program into the economy, the digitalization of the electric power industry was also envisaged, which allowed consumers to conclude an energy supply contract in electronic form, to control the quality level and volumes of this energy production. Along with this, discussions about "the search for optimal solutions and the development of models of legal regulation of public relations associated with the use of digital technologies in the field of finance, public administration, and the creation of artificial intelligence" occupy a special place [1]. A correct understanding of this issue is not only formal, but also practical, because the convenience and security of electronic transactions depends on the degree of reliability of the databases in which information about transactions will be stored, therefore, now it is necessary to pay attention to protecting data from various abuses and at the state level system failures.

2. METHODS

In the process of work on the topic, private-scientific and juridical methods were used, such as specific juridical, expressing the nature of their own regulatory organization of knowledge of the state and the law. The method of

comparative law, which allowed to correlate the economy and law of the Russian Federation with the economy and law of other countries in terms of general characteristics and features of their organization, structures, functions, etc. In addition, research methods and techniques were used to ensure a uniform and reliable empirical material and its initial processing, such as generalization of law enforcement practice, procedures for juridical description of current legislation, etc.

3. RESULTS

A strong leap in the development of information and communication technologies entailed an even greater interest in scientific progress and improving public relations, thereby forming a new world and a new reality. It becomes logical that such a trend inevitably relates to the field of law, at least because of the appearance of new mechanisms for Internet trading, training platforms, blogging and much more. Therefore, all this must be regulated and somehow taxes should be collected. That is why law is also becoming an object of digitalization. In the Russian Federation, laws and regulations regarding this area have been adopted. With the advent of new acts, a new conceptual and categorical apparatus is formed, for example, "digital economy", "information society", "information security of the Russian Federation" and so on. The emergence of modern communications has significantly changed the forms and methods of concluding civil law transactions. Speed and convenience are the key



benefits of electronic document management. Efficiency plays a big role in the market economy, and affects the outcome of transactions, which is why their conclusion in electronic form has become widespread in various areas of civilian traffic. First of all, we are talking about sales transactions. One type of contract of sale is an energy supply agreement. It is the legal form that defines the process of energy consumption. By virtue of paragraph 1 of Art. 539 of the Civil Code of the Russian Federation, an energy supply agreement regulates relations related to supply through an attached network only in cases where energy is supplied to the subscriber or consumer, and not any resources or goods [2]. The object of this contract is thermal energy. It has a number of properties, the main of which is its continuity, that is, a constant supply of energy in accordance with the developed schedule and the mode of energy supply. In accordance with Part 1 of Art. 539 of the Civil Code of the Russian Federation, under an energy supply agreement, the energy supplying organization is obliged to supply energy to the subscriber (consumer) through the connected network, the subscriber is obligated to pay for the energy received, also to observe the consumption regime stipulated by the agreement, to ensure the safety of the use of the energy networks under its jurisdiction and the serviceability of the devices and equipment used by it related to energy consumption [3]. In Civil law there is no uniform understanding of the subject matter of the energy supply agreement. The subject of the energy supply agreement contains two kinds of objects: actions of the sides to supply energy through the connected network to the subscriber's power receiving device receive and pay for energy, and energy itself as a specific product, the essence of which is the feature of energy to perform certain work [4].

The specificity of the subject matter of the energy supply contract, its difference from the subject of other types of purchase and sales contract, is as follows:

- 1) the transfer of goods to the consumer is carried out by the method of supplying energy through an attached network to the power plant of this user (subscriber) [5].
- 2) the consumer has an additional obligation to ensure the implementation of the regime of its use, the safety of use of the energy networks under his jurisdiction and the serviceability of the corresponding instruments and equipment used by him.
- 3) the power supply organization is vested with additional rights in the field of monitoring the technical condition of the subscriber's power installation, its devices and equipment.
- 4) the legislative support of the energy supply agreement is not limited to the norms contained in the Civil Code of the Russian Federation. Detailed regulation of these legal relations is ensured by laws and other legal acts on energy supply, as well as mandatory rules adopted in accordance with them [6].

The following characteristics of energy as a commodity can be distinguished:

- electricity cannot be stored;

- the process of electricity production, as a rule, is continuous and inextricably linked both with its transportation and consumption;
- electricity during transmission is consumed and cannot be returned;
- electricity can only be transmitted through the connected network, therefore, to receive energy, the buyer must have the technical devices needed to connect to the networks through which energy is transmitted [7].

Based on the foregoing, the subject of the energy supply agreement consists of several components. First of all, these are the actions of the energy supplying organization to supply energy through the connected network to the subscriber's energy installation, as well as the actions of the client to receive and pay for the energy itself as an independent financial benefit. Based on the foregoing, we can conclude that its subject determines the legal nature of the energy supply agreement, which is a special product and the actions of the sides to transfer this product. The place of energy in the system of objects of rights is determined by its role in the economic life of society and the state. As the development of digital technology does not stand still, the energy supply contract is also at the digitalization stage. To solve these problems, in practice, the Digitalization Concept of PJSC Rosseti has already been developed and technical specifications for the digitalization of Lenenergo have been developed. Using these concepts in real time you can monitor the parameters and modes of operation in all areas and all participants in the process of generation, transmission and consumption of energy. Developed networks will be able to support the functions of selfdiagnosis and self-healing.

In accordance with Regulation No. 442 dated May 4, 2012, as stipulated in paragraph 72 of the "Basic Provisions for the Functioning of Retail Electricity Markets" for individuals, an contract for the supply of electricity may be concluded not only on paper, with the development of digital technologies, it has become possible to conclude contracts on-line ".

The easiest way to conclude a reliable contract on the Web is to print a document, sign its tangible medium, scan it and send it to the other side for similar actions [8]. In this case, it is impossible to completely exclude physical interaction, since a signature made using a graphic tablet, although it will look like a signature made with a pen, is nevertheless possible to fake using a conventional graphics editor, which means it is unreliable.

In order to simplify the conclusion of the contract and to avoid unnecessary actions with printing, signing and scanning papers, you can use a certain type of electronic signature.

The term "electronic signature" officially appeared in 2011, when federal law No. 63-FL "On electronic signature" came into force, replacing the concept of "digital electronic signature" that existed in No. 1-FL of January 10, 2002 "On electronic digital signatures."

An electronic signature has its own varieties, difficulty levels, and, accordingly, strength. An example of a simple electronic signature is an account in which a login and password are enough to confirm an identity. Such a



signature, of course, is weaker than the default, and priority is given to the latter. Nevertheless, by agreement of the parties, a simple signature can become flush with the classic one, for example, in the case of concluding a contract with the bank when registering in the online office or when registering on the public services website. Usually, to obtain and use such electronic signatures, a larger amount of data is required than during registration, for example, on a social network: providing the series and passport number, TIN and other documents.

A reinforced signature is two sets of characters - the signature itself and the verification key to it. To create both a qualified and an unqualified signature, a cryptographic information protection tool (CIP) is used, but in the case of a qualified signature, a cryptographic protection tool is required, which is certified by the Federal Security Service of the Russian Federation.

A reinforced unqualified signature implies the signing of a document by a certain person and the absence of changes in it since then, most often it is valid together with confirmation that it is recognized as equal to the usual handwritten one. Nevertheless, it is still not a universal and full-fledged replacement, since it only acts when communicating with organizations with which an agreement has been signed to use an enhanced unqualified signature.

The enhanced qualified signature, as its name implies, surpasses the previous types of electronic signatures in force, being a complete analogue of a conventional signature. To receive it, it is required to provide to the certification center accredited by the Ministry of Digital Development, Telecommunications and Mass Media of the Russian Federation a certain set of documents that includes passport data, information of the compulsory pension insurance certificate, an individual tax payer number, and also a registration number as an individual entrepreneur in case of individual and documents confirming the authority of the action from the legal entity as its representative.

An electronic signature - enhanced by a qualified one - has both a number of advantages over a conventional signature and disadvantages.

A "classic" signature should not be specifically received and updated every year, unlike a strengthened qualified one, the only one of all types that is initially equal in strength to the usual one. Nevertheless, in the future, if the person's activity is associated with a voluminous document flow over a large territory, an enhanced qualified signature is preferable. It simplifies and speeds up activities, excluding from the process the waiting for documents by mail or, in the case of remote conclusion of the contract, the process of printing, signing, scanning and sending it back.

Most interactions currently begin online and are subsequently fixed on paper. It is very likely that in the future the whole process will go into digital space, therefore, the development of the process of electronic conclusion of contracts, as well as the protection of digital rights is one of the most important aspects of the transformation in favor of optimizing civil relations.

Standards aimed at protecting digital rights have appeared in the civil legislation of the Russian Federation relatively

recently. One of the protection elements of such protection is the formulation and resolution of the issue related to the legalization of the collection and processing of significant arrays of anonymous information. To this end, a new article 783.1 of the Civil Code of the Russian Federation introduces the design of an agreement on the provision of services for the provision of information. At the same time, it is stipulated that the contract may provide for the obligation not to take actions, as a result of which the transmitted information can be disclosed to third parties. Undoubtedly, it is worth paying attention to such a way of protection as a separate model of a smart contract, which provides for the existence of a contract in traditional writing and is designed to ensure openness and security of the contract. In addition to such an agreement, part of its terms may be included in a smart contract. In order for the smart contract to be not an empty phrase, but an effective tool, a rule has been added to the legislation, according to which a transaction may provide for the parties to fulfill its obligations upon the occurrence of certain circumstances through the use of information technologies. In other words, the information system itself will execute.

The main problem of the regulation of digital rights in the Russian Federation is the insufficient updating of the norms to modern realities, the belatedness of a number of short stories and too much compromise. Electronic technology alone cannot guarantee equal and effective legal protection for all participants in digital transactions. The obvious risks here are related to the inability of the system to verify the real will of the parties to the agreement, to verify the awareness and voluntariness of their actions.

To keep up with the times, the state needs to adapt to ever new trends and revise the procedure for exercising power.

4. DISCUSSION

The state adapts and reacts differently to new trends in society and digital reality, trying to manage especially mutating social relations. Despite the fact that today many companies conclude transactions online, digital space and digital regulation have pitfalls. So, at present, no mechanism has been developed for legislative regulation of digital law. The result of which was the spread of cybercrime - one of the main problems of the 21st century [9]. Along with this, a rather sensitive issue is the prospects of the legal profession in the conditions of mass robotization of various professions. Since jurisprudence is not a pure set of mechanical skills and honed actions, limited only by knowledge of laws and codes, it will be practically impossible to create such an artificial intelligence that will perform the work of a lawyer no worse than a person. For laws in the field of the information field to work qualitatively, an understanding of the mechanism of digital things at a basic level is needed. Be that as it may, information law is currently part of the modern branches of law.

The inevitability of the introduction of digitalization in the field of Russian law and legislation is a trend that can be seen throughout the developing and civilized world. That is



why it is important to be able to adapt and draw up your own vector of development and find a way to protect yourself and be able to prove your case in court in the event of a dispute if necessary [10].

When signing a contract in electronic form, the following rules must be observed: an agreement on the use of a specific electronic signature must be signed either by a qualified electronic signature or in the usual form by hand; the use of the most secure enhanced qualified signature ensures that you will not have difficulties in case of a dispute - it is accepted by the court without additional evidence of identification of the author, and no additional agreement on the type of electronic signature is required; it is desirable to use the PDF format - in addition to a smaller size compared to other formats (which is important when sharing), it ensures the integrity of the document and is convenient for archival storage; using the service of an exchange operator - if necessary, he can act as a third independent party in the arbitration court, in addition, the service generates an archive of documents sent by contractors, which eliminates their loss and relieves the organizations participating in the contract from independent worries about storing information.

5. CONCLUSIONS

Internet technologies and Internet rights are developing by leaps and bounds - there are new services, the possibility of concluding contracts online, the number of online purchases and financial services is growing. The advent of new digital opportunities greatly simplifies our lives, but since these relations are not directly regulated by Russian law, great risks are created. Possible solutions to the practical aspects of the application of digitalization in the field of law and jurisprudence can be found using foreign experience. For example, the use of electronic sources, training lawyers in new skills, storing a large amount of information, providing a powerful database security system, promoting the services of professional lawyers and much more.

In the era of rapid development of information technology, the conclusion of transactions through the Internet is an integral part of the functioning of electronic trade. Adequate development of the institute under study makes it possible for most business entities to extract larger profits in the implementation of their economic activities.

Therefore, the timely development and adoption of federal laws aimed at the development of the digital economy: determining the procedure for making civil transactions in electronic form, regulating digital financial assets, attracting financial resources using digital technologies - all this is a landmark event in the development of the country's economy and modern regulation of public relations. Obviously, the formation of a legal basis for the existence of a digital economy will affect the development of civil science in this area.

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