PROBLEMS AND TASKS OF LEGAL SUPPORT OF CRYPTOCURRENCY MINING IN ENERGY LAW

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The problems of the energy sector related to cryptocurrency mining have been repeatedly noted by representatives of the public authorities and the expert community. Unauthorized grid connections and theft of electric energy are mentioned among the problems. This is typical of "black" miners. There are also "home" miners, who pay for electricity at preferential rates for the population. Another risk to energy security is the increase in the carbon footprint of cryptocurrency mining. Current laws on the electric power industry do not provide for the peculiarities of the legal status of persons engaged in cryptocurrency mining in the electricity market. This gap should be filled. The article suggests possible options for harmonization of provisions of the electric power laws in terms of cryptocurrency mining.

Keywords: cryptocurrency mining, energy security, energy law, energy law and order.

Doctrine of the Russian Federation, the objectives of energy security primarily include reliable and sustainable provision of Russian consumers with energy resources. Emergencies, overload of grids leading to a failure in the energy supply to the consumers are typical of operations related to cryptocurrency mining. Therefore, the appropriateness or inappropriateness of the legal regulation of cryptocurrency mining, including for the purpose of energy security, is currently discussed a lot.

In November 2021, the Ministry of Finance and the Ministry of Energy proposed to equate cryptocurrency mining

with entrepreneurship and to regulate the procedure for paying taxes. However, the Bank of Russia is totally against the appearance of "money surrogates" in the country. [1]

On February 18, 2022, information appeared in public sources that the Ministry of Finance of Russia sent a draft law on the regulation of cryptocurrencies to the Government of the Russian Federation. The draft federal law was developed under the instruction of the Government of the Russian Federation on the basis of the approved concept of regulating the mechanism for organizing the digital currency circulation.

The Bank of Russia sees things differently and indicates multiple risks.

Let us dwell in more detail on the "energy" risks of cryptocurrency mining.

The 2022 Report of the Bank of Russia Cryptocurrencies: Trends, Risks, and Measures highlights, among other things, the risks to energy security, one of which arises due to the fact that an increase in mining volumes entails significant consumption of electricity, an increase in the load on the grids, and increases risks of emergencies, which may have a negative impact on the stability of the energy supply to residential buildings, social infrastructure facilities, and enterprises. [2]

The second energy security risk is the increase in the carbon footprint of cryptocurrency mining. A study by Chinese scientists found that the carbon footprint of bitcoin mining in China was comparable to the carbon footprint of one of China's major cities and jeopardized the implementation by the country of its carbon reduction targets, which was one of the reasons to ban mining. [3]

The problems of the energy sector related to cryptocurrency mining have been repeatedly noted by representatives of the public authorities and the expert community. Unauthorized grid connections and theft of electric energy are noted among the problems. This is typical of "black" miners.

Thus, Rosseti Northern Caucasus stopped 35 cases of unrecorded electricity consumption by mining farms in the area of the company's operations in 2019–2020. The volume of the stolen resource amounts to 45.3 million kWh. The cost of kilowatthours "stolen" by the miners exceeds 230 million rubles. The unrecorded resource consumption (theft) leads to voltage drops and can provoke technological disturbances in the operation of power facilities. Consequently, theft directly affects the quality and reliability

of energy supply to both the residents of the republics and the social structures. [4]

There are also "home" miners, who pay for electricity at preferential rates for the population.

The Irkutsk region is considered the capital of cryptocurrency mining in Russia due to the lowest electricity prices: mining farms use a lot of energy to operate computing equipment and cooling systems. Irkutskenergosbyt (the guaranteeing supplier of electricity in the region being a member of Irkutskenergo) began to bring actions in large numbers against the owners of mining farms in private homes in the region. The company believes that the farms perform entrepreneurial activity while buying electricity at low tariffs for the population. As the company informed Kommersant, since the beginning of the year, Irkutskenergosbyt has filed 85 lawsuits against the farm owners for 73.3 million rubles. So far, only nine cases have been won: by a court decision, private farms were transferred to commercial tariffs. Moreover, Irkutskenergosbyt will be able to return 18.7 million rubles after the tariff is recalculated. [5]

The Council of Energy Producers Association proposes to ensure conditions, under which miners consume electricity on equal terms with the industry, while noting that in order to improve the situation with the cryptocurrency miners, it is necessary to introduce a differentiated fee for electricity depending on the consumed volume. [6]

The Association of Guaranteeing Suppliers and Energy Retail Companies proposes to allow energy companies to disconnect illegal cryptocurrency miners from the grids. [7]

The Ministry of Energy of Russia believes that cryptocurrency mining should be introduced into the legal field, and a proportionate fee for technical connection and electricity consumption as well as taxes should be received. [8]

The Chairman of the State Duma Energy Committee notes that it is necessary to make a decision to ban mining or to create conditions for mining that would not use cheap electricity intended for the population. [9]

Therefore, based on the results of comprehensive discussions, a decision can be made either to ban cryptocurrency mining, or to regulate such activities. In the second case, amendments to laws on the electric power industry will be required since current laws on the electric power industry do not provide for the peculiarities of the legal status of persons engaged in cryptocurrency mining in the electricity market.

Federal Law dd. July 31, 2020 No. 259-Φ3 On Digital Financial Assets, Digital Currency, and on Amendments to Certain Legislative Acts of the Russian Federation does not provide for relevant provisions.

It seems appropriate to set forth the peculiarities of the legal status of persons engaged in cryptocurrency mining as the consumers of electricity and capacity.

Presently, the Federal Law On the Electric Power Industry itself has paid insufficient attention to the legal status of certain categories of consumers as compared to other players in the electricity market.

Thus the Federal Law On the Electric Power Industry sets forth the peculiarities of the legal status of electric grid and energy sales companies, and guaranteeing suppliers.

With regard to the consumers, the Federal Law On the Electric Power Industry currently contains a fairly general definition, according to which consumers of electricity are persons purchasing electricity for their own domestic and/or industrial needs.

At the level of by-laws, categories of the consumers are distinguished primarily at the level of Resolution of the Government of the Russian Federation dd. December 29, 2011 No. 1178 On Pricing in the Field of Regulated Prices (Tariffs) in the Electric Power Industry.

Differentiation of requirements for different categories of buyers is contained in the Rules of the Wholesale Electricity and Capacity Market approved by Resolution of the Government of the Russian Federation dd. December 27, 2010 No. 1172, in the Basic Provisions for the Functioning of Retail Electricity Markets approved by Resolution of the Government of the Russian Federation dd. May 4, 2012 No. 442, etc.

Let us dwell on the provisions of the Basic Provisions for the Functioning of Retail Electricity Markets in a little more detail. Since 2019, these provisions have been supplemented by norms that establish certain requirements for the consumer acting as the owner of the microgeneration facility.

These norms appeared due to the addition of provisions to the Federal Law On the Electric Power Industry with regard to the legal regime of the microgeneration facility operating, inter alia, on the basis of renewable energy sources.

In a situation where black or gray mining may lead to an emergency in the field of energy supply, the establishment of requirements for this category of consumers also becomes a necessity unless it is decided to ban this type of activity.

Legal analysis of law enforcement practice shows that it is advisable to set forth the peculiarities of the legal regime of equipment used for cryptocurrency mining as the power receiving device. In order to avoid different interpretations, it is also expedient to include the relevant norms in the Federal Law On the Electric Power Industry.

It is required to determine the conditions and procedure for technological connection

of the power receiving device used for cryptocurrency mining to grids.

The norms specifying the requirements to the price for electricity to be paid by persons engaged in cryptocurrency mining as well as the provisions that establish requirements for ensuring the safe operation of the relevant power receiving equipment are of key importance. It is also necessary to make appropriate additions to the sections on the powers of public authorities in the electricity market in terms of regulating and controlling activities for cryptocurrency mining.

It seems appropriate to consolidate the provisions on liability for violation of the requirements of energy laws by persons engaged in cryptocurrency mining.

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