Dear Reader,

I am glad to have an opportunity to present the next report of the Georgian National Energy and Water Supply Regulatory Commission (hereinafter - the Commission), which combines comprehensive information on the activities carried out by the Commission in the energy and water supply sectors during 2021.

It has been 25 years since the establishment and functioning of an independent regulatory body of the energy sector on the basis of Georgian legislation. During this time, the Commission acquired a number of important functions, refined the regulatory framework and has become an organization that meets all the requirements set for an independent national regulatory body under the EU legislation and has been fully implementing the duties assigned to it.

At each stage of development, the Commission was guided by internationally recognized norms and tried to introduce the best international and European practices. For this purpose, the Commission constantly cooperated with the regulatory bodies of other countries and international organizations operating in the energy and water supply sectors. It constantly implemented international projects and shared the experience of leading regulators and experts, strengthening his abilities and adapting the acquired knowledge to the existing reality.

We faced quite big challenges in 2021. The fulfillment of the obligations assumed by Georgia under the Protocol of Accession to the Treaty establishing the Energy Union was on the agenda on the one hand, and, on the other hand, the implementation of measures to prevent the spread of the COVID-19 pandemic, in such a way that the above-mentioned did not have a negative impact on the effectiveness of the Commission’s activities. With our efforts, we were able to successfully cope with both tasks. The proof of this is the fact that in 2021 the annual implementation report published by the Energy Union on Georgia noted that the process of compliance with the EU legislation in the electricity sector is quite advanced and meets the requirements of the Accession Protocol.

The Commission continues to improve the regulatory legislation and is ready to successfully deal with any challenges. As always, the main task of the Commission is to impartially and fairly protect the interests of companies and consumers operating in the sector.

This report provides information not only on the activities of the Commission, but also on the changes and reforms implemented in the sector, aimed at establishing transparent and competitive markets through harmonization with European legislation and creating new consumer protection mechanisms.

We present the report of 2021. I hope you can get interesting and comprehensive information.

Sincerely,

Davit Narmania
The Chairman
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1. Main Directions and Results of the Commission’s Activity

In 2021, the following main events and trends took place in the energy and water supply sectors:

Electricity

- Electricity production (distribution to the grid) was increased by 13.6% compared to the previous year, and by 7% compared to 2019;
- From the second half of January to March 2021, Enguri HPP was stopped due to repair works, but, despite the above-mentioned, the final annual output, compared to the previous year, was increased by 30%;
- Domestic electricity consumption in Georgia, based on the data of 2011-2021, grew by 4.2% annually on average;
- Domestic electricity consumption was increased by 13.3% compared to the previous year, and by 8% compared to 2019;
- Unbundling of electricity distribution and supply activities was carried out in 2021;
- Electricity consumed by direct consumers was increased by 46% compared to the previous year, and by 24% compared to 2019;
- Electricity delivered to Abkhazia was increased by 15.8% compared to the previous year, and by 43.5% compared to 2019;
- Based on the data of 2011-2021, the production of electricity (distribution to Salte) in Georgia was increased by 2.3% on average each year;
- In the reporting year, electricity import increased by 24.6% compared to the previous year, and by 23.3% compared to 2019;
- Export of electricity was 2.5 times higher than the previous year's rate, and 61% higher than the rate of 2019;
- In the reporting year, 1.184 million kWh of electricity was transited, which was 11.6 times higher than the number of 2020;
- In the reporting year, the actual losses of electricity in the energy system (in the transmission and distribution network in total) amounted to 5.71%, including 1.88% in the transmission network and 3.83% in the distribution network. The loss in the transmission network amounted to 2.32%, which is 20.8% more than the figure of the previous year. The loss in "Energo-Pro Georgia" JSC network amounted to 9.72% (1.1% more compared to the previous year), and in the "Telasi" JSC network - 2.83% (50% less compared to the previous year);
- In 2020, the amounts of normative losses established for the operators of the electricity transmission and distribution system, which are determined for the next regulatory period (2021-2025), are unchanged for 2021, in particular, in the transmission network - 1.76% (including "Georgian State Electric System" JSC - 1.34%; "Sakrusenergo" JSC - 0.21%; "Energotrans" LLC - 0.21%); in "Telasi" JSC network - 4.81%, and in "Energo-Pro Georgia" JSC network - 9.8%;
- On July 1, 2021, the separation of distribution and supply activities was implemented. As a result, JSC "Energo-Pro Georgia" was unbundled into "Ep Georgia Supply" JSC and "Telasi" JSC – into "Tbilisi Electric Supply Company" JSC;
- In the reporting year, the Commission determined the values of normative losses for 2022 for the transmission network (1.92%) and "Telasi" JSC (5.57%);
The total installed capacity of power plants amounted to 4,544.1 MW (hydro - 3,380.2 MW, thermal - 1,143.2 MW, wind - 20.7 MW), which is 0.1% higher than the previous year's figure;

The market of retail electricity supply is highly concentrated (HHI2021=5,128), where the market share of "Ep Georgia Supply" JSC is 58%, and the share of "Tbilisi Electric Supply Company" LLC is 42%;

The market shares for the three largest electricity producers was distributed as follows: "Enguri HPP" LLC - 28.1%, "Energo-Pro Georgia Generation" LLC - 13.3% and "Gardabni Thermal Power Plant 2" LLC - 7.9%. Also, the Herfindahl-Hirschman index of the electricity production segment was HHI2021 =1,226.7;

Market opening rate (ratio of energy purchased on the market to total consumption) has significant growth dynamics: 2017 - 12.02%, 2018 - 14.1%, 2019 - 22.1%, 2020 - 19.7% and 2021 - 25.8%;

In the reporting year, 7 small power plants were put into operation, with a total installed capacity of 23.51 MW;

In the reporting year, 122 new micro power plants with a total capacity of 13,642 kW were subject to the net metering regulation. By the end of 2021, a total of 368 micropower plants with a total installed capacity of 17,710 kW are subject to the mentioned regulation;

The year 2021 was characterized by particularly heavy-precipitation climate conditions, which affected hydrogeneration. Compared to the previous year, the increase was 24%, namely, the amount of electricity generated by regulating stations increased by 30%, and the amount of electricity generated by seasonal and small hydro power plants was increased by 19%;

In 2021, "Energo-Pro Georgia" JSC improved the indicator of SAIDI (average duration of power outages per customer) by 16% and SAIFI (average frequency of power outages per customer) - by 12%, while "Telas" JSC SAIDI was improved by 11% and SAIFI was worsened by 4%;

In the mentioned year, the Commission, in accordance with the Law "On Energy and Water Supply", adopted the following acts:

- Resolution N14 of June 10, 2021 on the approval of the "rules for calculating normative losses of electricity"
- Resolution N58 of September 28, 2021 on the approval of the "Procedure for Issuing the Certificate of Origin of Electricity from Renewable Sources";
- Resolution N7 of March 30, 2021 "On approval of energy market monitoring and reporting rules".

The Commission approved the criteria and application forms for postponement of requirements for connection to the network of generation facilities, requirements for connection to the network of consumption facilities, high voltage direct current connections and power parks connected to direct current;

The Commission issued an electricity transmission license to the "Georgian State Electric System" JSC, and an electricity distribution license to the "Energo Pro Georgia" JSC and "Telasi" JSC. Licenses were issued based on the laws of Georgia "On Energy and Water Supply" and "On Licenses and Permits";

Tariffs for universal service, public service and supply of last resort were defined for "Tbilisi Electric Supply Company" JSC and "Ep Georgia Supply" JSC. In addition, electricity distribution tariffs for "Telasi" JSC and "Energo Pro Georgia" JSC were determined, and for "Georgian State Electro System" JSC - electricity transmission tariffs;
In order to promote electric cars, the Commission has introduced favorable conditions, in particular, according to the Commission's decision, the fee for connecting electric car charging devices to the electricity network has been reduced by 50%.

The Commission approved the standard conditions of the electricity distribution service contract at the public meeting. The uniform standard conditions include the standard conditions of the electricity distribution service agreement; Application form "Requesting to join the standard terms of the distribution service agreement"; Application form "Requesting the conclusion of a distribution service agreement under non-standard conditions"; the standard form of distribution service agreement.

Amendments were made to the decision No. 39/2 of the Georgian National Energy and Water Supply Regulatory Commission dated May 28, 2020 on the issuance of a license to operate the electricity market to the "Georgian Energy Exchange" JSC based on which, by February 1, 2022, "Georgian Energy Exchange" must submit to the Commission the daily market platform, develop a detailed plan of measures to be implemented for implementation, testing, launch and implementation in simulation mode with potential participants, and by April 1, 2022, must post instructions for using the daily market platform on its website.

The Commission determined the service fee of the day-ahead and daily electricity markets operator for "Georgian Energy Exchange" JSC, and the service tariff of the market operator of balancing and auxiliary services for "Georgian State Electro System" JSC.

**Natural Gas**

- Natural gas remains the main source of satisfying the final demand for energy;
- The share of natural gas in the total energy consumption is small, although it is characterized by an increasing trend;
- 99.4% of Georgia's demand for natural gas was met by imports. The Republic of Azerbaijan remains the main source of natural gas supply for Georgia;
- In 2021, the demand for natural gas in the country was increased by 0.9% and amounted to 2.5 billion cubic meters;
- Consumption of natural gas for household purposes in 2021 amounted to 1,220 million cubic meters, and consumption for non-domestic purposes – 1,284 million cubic meters, of which 496 million cubic meters is the consumption of thermal plants;
- In 2021, 30 suppliers were active in the wholesale and retail market of natural gas;
- To meet Georgia's demand, natural gas was imported into the country by two suppliers;
- The natural gas available on the Georgian market was traded at the wholesale level by eleven suppliers, among which the share of the three largest suppliers was 94%;
- In 2021, the so-called The average price of commercial natural gas at the wholesale trade level was 0.57 GEL/cubic meter;
- In 2021, compared to 2020, the number of heating degree days increased slightly, which means that in 2020, compared to the previous year, buildings needed to be heated by more degrees;
- In 2021, the process of gasification of new settlements continued, as a result of which the number of retail customers (household and non-household) amounted to 1,444,616 at the end of the reporting year;
• As of December 31, 2021, there were 22 distribution licensees operating in Georgia. Three of them are the largest licensees ("Tbilisi-Energy" LLC, "SOCAR Georgia Gas" LLC, "Sakorggaz" JSC). The mentioned three large distribution licensees distributed 90% of the total distributed gas;
• In 2021, the commission did not issue a new license for natural gas distribution. 2 natural gas distribution licenses were modified, in particular, changes were made in the licenses of LLC "SOCAR Georgia Gas" and JSC "Sakorggaz" and the license areas of the mentioned companies were expanded;
• Three natural gas distribution licenses were revoked in 2021: LLC "Chiragdani-XXI Century", LLC "Taba" and LLC "Arzu-Gas";
• According to the Commission's decisions No. 12/1, No. 12/2, No. 12/3 and No. 12/4 of March 25, 2021, the natural gas purchase agreements of guaranteed power sources (thermal power plants) valid for April-June 2021 were agreed upon;
• According to the decisions of the Commission No. 41/2, No. 41/3, No. 41/4 and No. 41/6 of September 23, 2021, the contracts for the purchase of natural gas of guaranteed capacity sources (thermal power plants) valid for October-December 2021 were agreed.

Water Supply

• An amendment was made to the "Rules for Calculating Normative Losses of Drinking Water" approved by the Commission's Resolution N45 of December 26, 2017. The main part was due to various editorial and technical changes. In addition, the principle and amount of loss calculation was changed, according to which the 15 percent limit was changed to 10 percent;
• "Georgian Water and Power" LLC and "Rustavi Water" LLC appealed to the Commission and stated that as a result of the works carried out in the water supply system and the renewal of the metering nodes, the water volumes were specified. As a result of information verification, it was established that the actual loss of the company is significantly higher than the amount of normative losses approved by the Commission. Based on this, the company requested to make a change in the amount of normative losses approved by the Commission for the years 2021, 2022 and 2023. The Commission considered and satisfied the request of the companies, as a result of which a corresponding change was made in the Commission's Resolution N47 of December 27, 2017 "On the Approval of Statutory Losses in Drinking Water Water Supply Systems";
• In accordance with the requirements of the Law of Georgia "On Energy and Water Supply", "Batumi Water" LLC and "Sachkheri Tskalkanali" LLC passed the authorization based on the license applications submitted by them and a new water supply license was issued to them;
• "Georgian Water and Power" LLC and "Mtskheta Water" LLC have merged, as a result of which the area of operation of "Georgian Water and Power" LLC was increased and the mentioned company provided water supply to the population of Mtskheta city. As for "Mtskheta Water" LLC, based on the request, the Commission has revoked the water supply license issued to it;
• Based on the fact that "Sagarejo" LLC fulfilled the conditions determined by the Commission's decision N66/1 of October 15, 2020, the Commission made a decision to activate the preliminary water supply license issued to it;
• The commission carried out an unscheduled audit of expenses of "Georgian Water and Power" LLC and "Rustavi Water" LLC;
• The Commission used fine against the "Georgian Water and Power" LLC in the amount of 75,000 GEL due to the violation of license conditions;
• Tariff regulation of "Sagarejo" LLC and "Batumi Water" LLC was carried out and water supply marginal tariffs were approved for the period of validity from January 1, 2022 to December 31, 2023;
• An amendment was made to the Commission's Resolution N47 of December 27, 2017 "On approval of normative losses in drinking water supply systems", based on which the amounts of normative losses of "Batumi Water" LLC and "Sagarejo" LLC were determined for the years 2022, 2023 and 2024;
• The Commission's Decision No. 14/1 of April 1, 2021 approved the lower limit of key indicators for water supply licensees, the current level, the target benchmark and the average amount of error of these indicators;
• The Commission agreed on the 2022-2023 investment plan of "Batumi Water" LLC for the rehabilitation of Batumi's water supply and drainage infrastructure over the next two years, according to which 16,251,941 GEL will be invested.

Miscellaneous

• The Commission was awarded with the ISO 9001:2015 international standard quality management system certificate. Based on the works and audits carried out in the Commission by international experts for one year, it was established that the quality of the Commission's activities is in full compliance with internationally recognized quality management requirements.
• The 4th project of twinning of public services financed by the European Union with 1,500,000 euros "Regulation of renewable energy in Georgia" was launched in the Commission.
• Within the framework of the twinning project of public services, an information campaign was carried out in order to raise the awareness of school-age children regarding energy efficiency issues.
• Within the framework of the "secret shopper" study conducted in utility companies, the service provided to customers by the electricity, natural gas and water supply companies and the process of fulfilling the Commission's regulations were checked. As a part of the research, both common and individual violations were identified; According to the results of the research, most of the violations observed in the companies have been corrected, although there are certain types of repeated violations, for which the companies have set a deadline.
• A memorandum of mutual cooperation was signed between the Commission and the Association of Mediators of Georgia. The purpose of the memorandum is to develop cooperation between the parties and introduce mediation as an alternative dispute resolution mechanism in Georgia.
• A memorandum of cooperation was signed between the Commission and Akaki Tsereteli State University. Within the framework of the memorandum, the parties express their readiness to support the university students in the internship and qualification raising in the Commission.
• The Commission approved the "2021 action plan for the protection of the rights of persons with disabilities". The purpose of the document is to outline the priorities, the implementation of which will help protect the rights of disabled people.
• A tripartite memorandum of mutual cooperation was signed between the Commission, the Energy Ombudsman Service and the Legal Assistance Service. The purpose of the memorandum is to ensure the protection of the rights of consumers in the electricity, natural gas and water supply sectors and to inform the public.
1. Development of the Regulatory Framework and its Harmonization with the Energy Community Legislation

1.1. Development of the Regulatory Framework and its Harmonization with the Energy Community Legislation

In 2014, Georgia signed the Association Agreement with the European Union, which, among other things, determined the obligation to harmonize the legislation of Georgia with that of the European Union in the field of energy. In addition, in 2016, the Protocol "On the Accession of Georgia to the Treaty Establishing the Energy Union" was signed, which established the specific conditions and deadlines for the introduction of the legislation of the Energy Union in Georgia. With the mentioned protocol, Georgia undertook the obligation to implement the transposition of the energy union legislation into the national legislation.

On December 20, 2019, the Parliament of Georgia adopted the Law of Georgia "On Energy and Water Supply", which laid the foundation for an unprecedented reform in the energy sector, within which the role and functions of the Commission significantly increased and which led to the need for the Commission to develop a number of new by-laws. For this purpose, after the adoption of the law, in 2020 and 2021, the Commission carried out active administrative norm-creating activities and approved and made appropriate changes to a number of by-laws regulating relations in the energy sector, during the development of which the knowledge and experience accumulated in the commission over decades were effectively used, and the best European practices were taken into account.

1.2. Electricity Sector

- **Changes implemented in the concept of the electricity market model design**

  In the reporting year, a number of changes were made to the "Electricity Market Model Concept" approved by the Resolution No. 246 of the Government of Georgia on April 16, 2020, on the basis of which, on the one hand, the deadline for launching the daily and balancing and auxiliary services markets was postponed until March 1, 2022, and on the other hand, the functions and duties of the balancing and auxiliary services market operator were specified. In addition, the criterion for calculating the limit of users entering the market by July 1, 2021 and a number of requirements in accordance with the current legislation were specified. In particular, the mentioned limit meant the exit of 35-110 voltage end-users to the market if each month consumed at least 0.4 million kWh of electricity, and in order to determine compliance with the consumption volume criterion, the total average monthly consumption volume during 2020 was determined. Such a consumer was obliged to register as a direct consumer of electricity in the existing wholesale market in accordance with the law.

- **Changes made to the rules of the electricity market**

  In the "Electricity Market Rules" approved by the Commission on August 11, 2020 by Resolution No. 46, several changes were made, aimed at correcting and refining the gaps identified based on the operation of the current simulation mode of the electricity day-ahead and balancing and auxiliary services markets, in particular, the day-ahead and daily electricity Explanations of the Market Rules, as well as the procedures of registration as a participant in the exchange. A representative who can view the participant's portfolio/portfolios has been added to the list of trading and clearing representatives of participants registered on the exchange. Exchange service fees have also been clarified, which means that the exchange participant must pay the exchange service
fee for each MWh of electricity traded on the exchange for each segment and the annual fee for admission to
the exchange, as well as the annual fee for additional portfolio services. The mentioned changes also clarified
the conditions for determining the equilibrium point for determining the market price of electricity in the
market the day before. As for financial guarantees on the exchange, the terms of its presentation have changed
from the principle of presenting a basic guarantee to the principle of presenting a trading limit. The principle
of presentation of the trading limit implies the possibility of the exchange participant to trade electricity in the
amount corresponding to the financial guarantee presented on the exchange, in contrast to the previous
principle, when the exchange participant was obliged to present the financial guarantee calculated based on
the historical prices of the exchange.

As for the part of the Market Rules concerning balancing and auxiliary services, in this case also the changes
made clarified definitions, procedures for registration of persons responsible for balancing, conditions for
submission of nominations, as well as submission of financial guarantees and characteristics of balancing
products.

- **Changes implemented in the "Retail Electricity Market Rules " approved by the Commission's
Resolution N47 of August 13, 2020**

In the "Retail Electricity Market Rules " approved by the Commission on August 13, 2020 by Resolution
N47 (hereinafter referred to as the "Retail Electricity Market Rules "), a number of changes were made during
the reporting year, which were aimed at protecting the rights and interests of both suppliers and consumers,
as well as the norms regulating the existing legal relations between them. For this purpose, it was determined
that the customer who wants to enter into a supply contract for the purpose of receiving electricity supply
services at the address at which he temporarily owns the real estate, is obliged to submit to the supplier only
the owner's consent, without submitting a document confirming the temporary ownership of the real estate.
The mentioned rule will simplify the procedure for the customer to join the standard terms of the supply
contract.

In order to protect and balance the rights of the supplier and the user, the term of service fee payment has
been changed and was defined as 15 calendar days, after which the supplier is obliged to warn the user and set
additional term for the payment of the service fee, which should not be less than two calendar days after the
payment deadline. In addition, in case of non-payment of the service fee, it was determined that it is not
allowed to stop the supply in self-governing cities on holidays, Saturdays and Sundays defined by the legislation
of Georgia, and in other municipalities - also on the eve of holidays and weekends.

In the reporting year, the Commission took into account the terms of pension and state tax enrollment for
retired persons and recipients of state allowances provided by the Law of Georgia "On Social Assistance", as a
result of which a change was made in the rules of the electricity retail market, in particular, it was determined
that for those consumers who, in accordance with the legislation of Georgia, represent To retired persons, it
will not be allowed to stop delivery on the basis of non-payment of service fees until the 16th of the calendar
month, and for the recipients of other above-mentioned state allowances - until the 22nd of the calendar
month.

In the reporting period, with the changes made to the rules of the electricity retail market, the independent
supplier and the large consumer were given the right to agree on a variable supply price, the change of which
will depend on the circumstances agreed by the parties. The mentioned change will contribute to the flexibility
of the legal relationship between the independent supplier and the large customer and agreeing on a favorable
price, which, in turn, is an important prerequisite for the development of a competitive retail market.
In order to protect the supplier’s interests and promote the stability of its activity, the rules of the Retail Electricity Market Rules were also amended, according to which the minimum term for entering into a supply contract was defined as 3 months. With the changes made in the reporting year, the supplier was given the right not to use the deposit submitted by the non-household consumer, as well as the deposit submitted by the household consumer who temporarily owns the real estate and submitted the deposit to the supplier on the basis of the mentioned basis, to cover the service fee. The change is an effective mechanism for compensation for unpaid service fees to the supplier, which will help to reduce the risks related to the non-payment of service fees and debt accumulation by non-household consumers, as well as in the case of temporary possession of real estate, and thus protect the supplier’s rights.

- **Changes implemented into the Commission’s Resolution N58 of November 12, 2020 "On Approval of Transitional Measures in the Electricity Sector"**

In the reporting year, several changes were made in the Commission’s Resolution N58 of November 12, 2020 "On the Approval of Transitional Measures to be Implemented in the Electricity Sector", the main purpose of which is to ensure the implementation of necessary measures for market opening and effective fulfillment of market rules during the transition period. In this regard, it is worth noting the change implemented on October 7, 2021, which regulated the issues related to the participation in the electricity market in the simulation mode during the transitional period, in particular, those electric energy enterprises and direct consumers of electricity who were obliged in accordance with the procedure stipulated in Chapter 3 of the rules of the electricity balancing and auxiliary services market, No later than October 15, 2021, apply to the operator of the electricity transmission system with a request for registration as a person responsible for balancing or a member of the balancing group, and undertake to apply until October 26, 2021 to the operator of the electricity day ahead and daily markets with a request for registration on the test platform in order to participate in the simulation mode. In addition, the same subjects were obliged to participate in simulated trading organized by the operator of daily markets the day before.

In addition, the Resolution determined the suspension of registration as a person responsible for balancing or a member of a balancing group or a provider of balancing services, as well as the process of changing the accounting perimeter one month before the market opening. In addition, according to the changes, the process of receiving applications for registration as a participant of the electricity day-ahead and daily markets has been suspended two weeks before the date of operation of the electricity day-ahead market. The named registration processes will resume after the opening of the market, in accordance with the "the Electricity Market Rules" approved by the Commission’s Resolution N46 of August 11, 2020.

It should be noted that the measures provided by the Commission's Resolution N58 of November 12, 2020 "On the Approval of Transitional Measures to be Implemented in the Electricity Sector" are being completed by the relevant entities step by step, according to the deadlines set by the same resolution, which is monitored by the Commission.

- **On determination of indicators of small enterprises in the electric energy sector (Decree N246 of May 31, 2021 of the Government of Georgia)**

On May 31 of the reporting year, the Resolution N246 of the Government of Georgia "On determining the indicators of small enterprises in the electric energy sector" came into force. This defines the criteria of a small enterprise and its purpose is to facilitate the smooth operation of universal service providers in the electricity retail market.
1.3. Natural Gas Sector

- **Market Concept Design of Natural Gas**

  The Government of Georgia approved the concept of the natural gas market model by Resolution No. 447 of September 2, 2021, in accordance with Article 129 of the first paragraph of the Law of Georgia "On Energy and Water Supply". The mentioned concept design, in accordance with the Law of Georgia on "Energy and Water Supply", establishes the guiding principles of the organization and operation of the wholesale natural gas market in Georgia for the establishment of such a model of the natural gas market, which ensures the creation of an attractive investment environment and through the development of transparent and competitive markets, the opportunity of free choice for the consumer as a wholesaler, both at the retail level, and also determines the measures to be implemented to move to the target model.

  The concept defined the segments and entities of the natural gas wholesale market. Any participant of the wholesale market is free to trade in the segment he wants.

  Conceptually, in accordance with the law, it was determined that in order to ensure common economic interest (supply security, quality and competitive supply price, as well as environmental protection, energy efficiency and consumer protection), the Government of Georgia may impose public service obligations on the energy enterprise. Public service obligations should have as little impact on market liberalization as possible and should be imposed in accordance with the law, after consultation with the Commission and other competent national authorities, as well as with the Secretariat of the Energy Community.

  According to the concept, the date of establishment and operation of the natural gas exchange was defined as the moment of entry into force of the daily balancing obligation for market participants according to the rules of the natural gas transmission network (the issue of balancing is regulated by the normative act of the Commission and the deadline for the obligation to come into effect is December 2022).

- **Natural Gas Retail Market Rules**

  In order to regulate relations in the natural gas retail market, on December 28, 2021, the Commission approved the "Rules of the Natural Gas Retail Market" (hereinafter - Natural Gas Retail Market Rules) on December 28, 2021. According to the best European practice, Natural gas retail market rules include natural gas supply rules, natural gas public service supply rules, last alternative supply rules and supplier change rules. The rules of the natural gas retail market ensure the end user's right to independently select an acceptable supplier, taking into account the offered supply price and service conditions, which is a prerequisite for the development of a competitive natural gas retail market.

  The Natural Gas Retail Market Rules establish the rights and obligations of the natural gas supplier and end user, the terms and conditions of the supplier entering into a supply contract with the end user (both domestic and non-domestic), changing its conditions, providing information to the end user, as well as providing services to him. The Natural Gas Retail Market Rules also fully reflect the requirements of the legislation of the Energy Community in terms of providing protection guarantees for household consumers and small enterprises, and regulate the activities of the supplier of natural gas as a public service; The rules also determine the conditions for the last alternative supply of natural gas in the event that the end user loses the
opportunity to receive natural gas due to the cessation of activity by the natural gas supplier or gross violation of obligations.

The Natural Gas Retail Market Rules provide for a quick, end-user-oriented, simple and free procedure for changing the supplier, the implementation of which will contribute to the opening of the natural gas retail market, its dynamism and active operation.

• **Natural Gas Distribution Network Rules**

The "Natural Gas Network Rules" approved by Commission Resolution No. 22 on August 31, 2018 combined the rules of the natural gas transportation and distribution network into one document, and according to the Law of Georgia "On Energy and Water Supply", the rules of the natural gas transmission and distribution network are two independent acts and their law provides for different admission procedures.

In order to fulfill the obligation imposed by the Law of Georgia "On Energy and Water Supply", the Commission approved the "Natural Gas Distribution Network Rules " by Resolution No. 80 of December 31, 2021, in a way, as well as promoting the most effective implementation of the innovations provided for by the law in practice.

The “Natural Gas Distribution Network Rules" regulate relations related to natural gas distribution between the operator of the natural gas distribution system, the supplier and the end user, as well as regulate the relations between the operator of the natural gas distribution system and the operator of the natural gas transmission system.

With the approval of the "the Distribution Network Rules ", legal proceedings related to the natural gas distribution network were regulated, namely, the connection of a new customer to the distribution network, increasing the volume to be connected to the distribution network, temporary connection, meter inspection, illegal consumption of natural gas and other issues.

It should be noted that in the above-mentioned resolution, the regulations related to the distribution network contained in the "Natural Gas Supply and Consumption Rules " approved by the Commission's Resolution No. 12 of July 9, 2009, as well as in the "Natural Gas Network Rules" approved by the Commission’s Resolution No. 10 of August 31, 2018, were combined.

• **Investment Appraisal Rule**

In order to ensure compliance with the requirements of the Law of Georgia on "Energy and Water Supply", the Commission’s Resolution No. 36 of July 29, 2021 approved the "Investment Appraisal Rule", the purpose of which is to develop, submit, evaluate, approve, monitor and evaluate investment plans of enterprises subject to tariff regulation and their constituent investment projects. Determining the main principles and criteria for making changes in them. Immediately after the entry into force of the aforementioned resolution, Resolution No. 27 of the National Regulatory Commission of Energy and Water Supply of Georgia of November 22, 2019 "On Approval of the Investment Evaluation Rule" was declared invalid.

"Investment Appraisal Rule" categorizes investment projects and defines evaluation criteria for each category of investment project. Accordingly, the existence of the "investment evaluation rule" contributes to the process of long-term planning and development of the system.
• **Rules for calculating normative losses in the natural gas distribution network and approval of normative losses**

Based on the Law of Georgia "On Energy and Water Supply", the Commission was obliged to ensure that appropriate changes were made to the acts of the Commission, taking into account the requirements of the law. Within the framework of the aforementioned, the Commission's Resolution No. 4 of March 18, 2021 approved the "Rules for Calculating Normative Losses in the Natural Gas Distribution Network", which will apply to distribution system operators. In addition, in the transitional provisions of the rule approved by the resolution, it was determined that the rule of calculation of losses will also be extended to the issues of calculation of losses of those enterprises that carry out natural gas distribution activities on the basis of a license issued before the implementation of the Law of Georgia "On Energy and Water Supply".

In addition, according to the Rule of Calculation of Normative Losses, recalculation of the amounts of natural gas losses for companies should be carried out within 3 months after the implementation of the Resolution. In order to fulfill the above-mentioned request, the Commission approved the normative losses in the natural gas distribution network by Resolution No. 11 of June 3, 2021.

2. **Electricity Sector**

2.1. Transformation of the electricity market

- General market design and stages of liberalization

This reporting year was important in terms of structural reorganization of the electricity market, since, based on the requirements of the Law of Georgia on Energy and Water Supply, in 2021 the process of perfecting and forming the new legislative basis was underway. Also, retail market of electricity was opened. It should be noted, that this process is fully harmonized with the Directives and Regulations of the EU 3\textsuperscript{rd} Energy Package, as well as the protocol of accession to the Energy Community Treaty.

Due to the large volume and difficulties of opening and liberalization of the electricity market and introduction of modern market tools, the legislative Acts developed based on the previous Law (including the Electricity (Capacity) Market Rules), which define the structure of the existing market functioning during the transition period (until July 1, 2021) on the wholesale and retail levels, shall remain valid until July 1, 2021 (Figure 2.1).
Trade in electricity at the wholesale market mostly occurs based on direct contracts. Electricity is sold by electricity producer, importer, wholesale supplier, electricity system commercial operator (ESCO) and
purchased by electricity distribution licensees (in the part of purchase of network losses), suppliers, direct consumers (to which the large consumer status shall be assigned based on the new legislation from 2021), exporters, electricity producers (for plant losses), ESCO and dispatch licensee (in the part of purchasing electricity for compensating for network losses). In order to trade in electricity on the wholesale market, subjects need to be registered at the ESCO as qualified utilities.

Electricity producers, due to regulation purposes, are divided into various categories, in particular:

a) **Regulatory power plants**, for which the Commission sets fixed tariffs.

b) **Partly deregulated power plants:** power plants built before August 1, 2008, the installed capacity of which is more than 50 MW. For such power plants the Commission establishes price cap tariffs.

c) **Deregulated power plants**, built after August 1, 2008, as well as small power plants (up to 15 MW of designed capacity) which operate on the market without a tariff defined by the Commission.

d) **Guaranteed capacity sources (thermal power plants)**, for which the Commission sets the charge for guaranteed capacity and the price cap (upper limit) tariff for electricity generation.

For those power plants, designed capacity of which exceeds 15 MW, the Commission issues electricity generation licenses, while those power plants whose designed capacity is up to 15 MW (small power plants), are exempted from the electricity generation license.

As to guaranteed capacity sources, they are used for ensuring sustainability and safe and reliable functioning of the whole electricity system of the country and are individually defined by the government of Georgia, based on guaranteed capacity and the period for delivery of guaranteed capacity to the system.

The function of the **wholesale supplier** of electricity is purchase of electricity from the generation licensee, small power plant, importer and supply of electricity to direct consumer and exporter.

As to electricity import and export activities, they are deregulated and can be carried out without a license. It is also possible to carry out electricity exporter activities based on free (without a tariff) price, in case of import – based on the tariff set by the Commission.

In the reporting year customers who were registered as a direct customers in a mandatory way and were obtaining electricity (capacity) for the own consumption purposes from the generation, transmission or distribution network operators, micro generation power plants or networks of other customers and at the connection points at least one of them was located at 35-110 kv voltage network, have been consuming at least 0.4 million kWh electricity per month.

In the electricity sales part, **market operator** shall be authorized to buy and/or sell electricity based on direct contracts or standard conditions of direct contracts on balancing energy, for the purpose of satisfying requests by qualified utilities. ESCO also organizes trade in guaranteed capacity, registers utilities as participants of wholesale trade in electricity, amends registration data and cancels registration. Market operator possesses and operates the commercial metering automated system which creates a unified database of electricity sales and automatically receives metering data from Automatic Electricity Control and Metering System. Its purpose is to receive, check, collect, group and aggregate the data for settlement of wholesale trade in electricity.
Network and system services on the wholesale market are performed by transmission system operator (TSO), transmission and distribution licensee. TSO (dispatch licensee) has signed contracts with possessors of the transmission network assets (transmission licensees) on transferring to it the authority of transmission network operation and development planning. TSO mainly manages the system using the SCADA (Supervisory Control and Data Acquisition) system and, at the same time, uses the Automatic System of Capacity Control and Metering.

**Distribution licensees** perform network services using the networks existing in their ownership and also in ownership of third persons. Costs of the wheeling service through the distribution network are compensated to distribution licensees based on the distribution and wheeling tariff, set by the Commission, while if third persons use their network, distribution licensee shall compensate an amount calculated in accordance with the Rules on Calculating Wheeling Fees of the electricity, natural gas and drinking water through network under the ownership of the third parties.

Electricity supply on the electricity retail market is carried out by the universal service supplier, supplier of electricity as a public service and the supplier of last resort, based on the tariffs set by the Commission. Also, in compliance with the new structure of the retail market, any interested person can carry out electricity supply activities based on a free, deregulated price.

As to **retail consumers**, household and **non-household** consumers are represented on the market. Also, from 2016 these categories include retail consumers, which possess micro-generation power plants functioning on renewable energy sources.

Target structure of the electricity market is given on Figure 2.3. Based on the electricity market model concept (hereinafter – the concept), market liberalization began in 2020 and will be carried out through 2026. It implies opening both the supply and consumption sides and entry to both wholesale and retail competitive markets.
Segments of the new wholesale electricity market are: day-ahead and intraday markets; market of bilateral contracts, balancing market and market of ancillary services, while the main subjects are (Figure 2.3): electricity market operators; transmission system operator; distribution system operator; electricity producer; trader; supplier; large consumer; organization delivering the wholesale public service.

Electricity **day-ahead and intraday market operator** ensures the following: operation of the day-ahead and intraday markets; maintaining the registry of the day-ahead and intraday market participants; establishing a transparent, accessible and reliable system of financial settlement for the relevant segment of the organized market.

**Balancing and ancillary services’ market operator** ensures the following: operation of the balancing market and market of ancillary services; purchase of products of the balancing market and market of ancillary services; calculating the imbalance cost; defining the amount of the financial guarantee for securing payment of the costs of the products of the balancing market and market of ancillary services and the imbalance price, as well as financial responsibility for the products purchased on this market and establishing a transparent, accessible and reliable system of settlement for the relevant segment of the organized market.

Day-ahead and intraday markets, as well as balancing market and market of ancillary services are a monopolistic licensed activity, while bilateral contracts market does not require license and may be carried out by different persons. Also, on the market of bilateral contracts, market participants are authorized to sign contracts through direct negotiations.

**Wholesale public service organization** is an important subject within the structure of the wholesale market. Goals of wholesale public service are: support to producers participating in contracts on purchase of renewable energy and guaranteed purchase contracts and facilitation of integration into the organized market of the electricity produced by them; support to the universal service supplier through ensuring a stable price on electricity and facilitation of integration into the organized market; security of supply to the consumers existing on occupied territory of Georgia (Autonomous Republic of Abkhazia) through purchase of electricity on the organized market.

**Transmission system operator** ensures defining of the forecasted volume of products on the balancing market and market of ancillary services; management of the electricity system based on the self-dispatch principle, as well as implementation of other measures needed for balancing, including activation of relevant capacity based on the balancing market results; organizing the mechanism of cross-border balancing, which, inter alia, includes management of emergency assistance supply between electricity systems; registration of balance responsible parties, including balancing service suppliers and assigning of relevant codes; management and development of the metering system needed for operation of wholesale markets, accessibility of hourly metering data.

Transmission system operator purchases electricity for compensating for network losses at the organized wholesale market.

**Distribution system operator** is a subject of the organized electricity market in the part of purchase of electricity for compensating for network losses and, at the same time, ensures management and
development of the metering system needed for operation of the retail market, accessibility of hourly metering data and/or relevant load profiles to relevant retail supplier.

Important participants of the wholesale market are electricity producers, who are structured as plants which have the public service obligation under the renewable energy support scheme (including the plants using guaranteed purchase contracts and the schemes supporting generation and use of energy from renewable sources), deregulated plants (including small power plant with the capacity of up to 15 MW and seasonal plants with the capacity of up to 40 MW). Electricity market concept design defines the schedule for exempting the plants producing electricity from the public obligation (Figure 2.4). Plants which have a public service obligation are required to trade on the organized market and return the positive difference existing between the market price and the tariff set by the Commission to the public service fund, which subsidizes consumption of Abkhazia and plants benefiting from the support schemes, hereby fills out the baskets of the universal service supplier and public service supplier through contracts for differences in relation to the organized market price.

![Figure 2.4 Schedule for exempting generation plants from the public service obligation](image)

Supply side of the wholesale electricity market is also represented by the so-called trader, who buys and sells energy to end consumers without supply.

Trader is authorized to trade in electricity both inside and outside the country, including import and export.

Consumption side, in the final consumption part, in compliance with the legislation, is fully liberalized, while mandatory liberalization began from May 1, 2018. Also, within this process, 23 consumers additionally entered the market under the mandatory rule. Based on the final data of the reporting year 2021, wholesale market has 46 “direct” (under the new legislation – “large”) consumers. In accordance with the concept, from July 1, 2023, all consumers on the connected to the 6-10 kv voltage level and those consumers who are connected to the 6-10 kv voltage level and consume in the average more than 1 million kWh per month, shall mandatorily enter the free (both wholesale and retail market) market.

Based on the current version of the concept, those consumers connected to the 6-10 kv voltage level whose consumption is less than 1 million kWh shall be authorized to receive electricity based on the consumer tariff regulated by the Commission, as a public service obligation, until 2026. In compliance with
the legislation, the status and criteria for a large consumer have been defined. The large consumer status grants the consumers the right to trade on the wholesale – bilateral contracts’, day-ahead and intraday markets. In order to do this, they must be registered, under the relevant rule, as balancing group members, on the balancing market and also as participants of the day-ahead and/or intraday and/or bilateral contracts’ markets.

They also have the right to trade on the retail market and choose several suppliers. On the demand side, wholesale market also includes free suppliers, who are authorized to purchase electricity both on the organized market and on the bilateral contracts’ market. Organized market also includes universal service suppliers, public service suppliers and suppliers of last resort, who supply electricity to relevant segments of the retail electricity market.

As to the retail market, here, along with large consumers, electricity is purchased from free retail suppliers by qualified consumers. On the retail market, universal service supplier supplies energy to small enterprises and retail consumers, based on the tariff regulated by the Commission, as a public service obligation. The same supplier is obliged to purchase the energy delivered to the grid by micro-generation plants.

Along with practical implementation of the transformation process, described above, a whole range of preparatory works are also underway, including development of legislation, process of division of activities, authorization of regulated utilities, improvement of metering systems, launch and improvement of software, registration of market participants, increase and development of the visibility and relevant skills of market participants, separate and joint testing of various market segments.

2.2 Main characteristics of the electricity market

The main characteristics (supply and consumption indicators) of the Georgian electricity market in 2021 are given in Figure 2.5. Several important aspects should be underlined within the electricity balance of the reporting year:
In 2021, electricity generation (delivery to the bus bar) increased by 13.6% compared to the previous year and by 7% compared to 2019. Increase of generation was caused by increased flow of water / positive hydrological year. 5 small power plants with the total installed capacity of 6.51 MW should be singled out: Dvirula HPP (installed capacity – 1.99 MW), Khrami HPP (installed capacity – 1.13 MW), Tbilisi Sea HPP (installed capacity – 0.4 MW), Roshka 2 HPP (installed capacity – 1.99 MW), Roshka 3 HPP (installed capacity – 1 MW). Based on the data of 2011-2021, electricity generation in Georgia annually increases in the average by 2.3%, which is predetermined by the electricity produced by the power plants put into operation during the current years.

As to electricity consumption in Georgia, in 2021 it increased in Georgia by 13.3% compared to the previous year and by 8% compared to 2019. Electricity consumption in Georgia in 2011-2021 was annually increasing by the average of 4.3% (see Figure 2.6).
Within the structure of electricity generation, the share of electricity produced (delivered to the bus bar) by thermal plants has diminished by 25.8% compared to 2020 and by 21.4% compared to 2019 and this share has constituted 18.4% of the total generated electricity. Consequently, the share of electricity produced by hydro-electric plants has reached 81% within the abovementioned structure, which is 8.8% higher than the corresponding data of 2020 and 6.7% higher than the data of 2019. Meanwhile, the share of electricity generated by the wind power plant, which was put into operation at the end of 2016, constituted 0.8% (see Figure 2.7).
In 2021, the share of electricity produced by regulatory HPPs providing public services within the total electricity generated by hydro-electric plants constituted 42.6%, while the share of electricity generated by the remaining electricity producer providing public services was 27.3% and the share of the hydro-electric plants free from the public service obligation was 30.2%, within which the share of electricity produced (delivered to the bus bar) by the hydro-electric plants with the capacity of over 15 MW was 72.7% and the share of small power plants was 27.3% (see Figure 2.8).

In 2021, regulated companies supplying electricity are represented with a significant share (48.8%) within the structure of electricity supplied to consumers. The share of direct consumers constituted 25.3%, while the share of electricity supplied to Abkhazia was 21%. In 2021, electricity consumed by public suppliers has diminished by 4.1% compared to the previous year and by 12.6% - compared to 2019, which was caused by the steps
accompanying the market liberalization process – by consumers of defined type entering the free market for trading (registration as direct consumers).

Consequently, electricity consumed by direct consumers has increased by 45.7% compared to the previous year. The amount of electricity supplied to Abkhazia has increased by 15.8% compared to the previous year and by 43.5% - compared to 2019 (see Figure 2.9).

Figure 2.9. Structure of internal consumption of electricity

In 2021, import of electricity exceeded the export 5 times. In the reporting year, import of electricity constituted 2,006 GWh. This is 24.6% higher than the indicator of the previous year and 23.3% higher than 2019. As to export, 391 GWh of electricity was exported from Georgia in 2021, which is 2.5 times more than the indicator of the previous year and 1.6 more than the relevant data of 2018 (see Figure 2.10).
As to the import and export of electricity in the reporting year according to countries, this is shown on Figures 2.11 and 2.12. 8% of the import of electricity was from Turkey, 62% - from Russia and 30% - from Azerbaijan.

The main characteristic of energy security in the electricity sector is continuity of electricity supply. It can be ensured by satisfaction of the demand for electricity in the country, through maximal utilization of own resources. This, in its turn, will contribute to replacement of import in the short-term and thermal generation in the long-term period.

Dynamics of generation and consumption of electricity according to the months of 2020 is shown on Figure 2.13. As we can see from this figure, during the autumn-winter period satisfaction of the demand for electricity through the capacities of hydro and thermal generation cannot be managed. Consequently, it is necessary to carry out import of electricity in order to satisfy the demand. As to the second half of spring and the summer period, surplus water resources provide the opportunity to satisfy the demand for electricity and to export the remaining electricity.
Supply and consumption of electricity in Georgia is characterized by seasonality. Electricity consumption in Georgia is higher during the winter period, than
during the summer period, while electricity supply is characterized by the opposite seasonal trend. Consequently, in terms of electricity consumption, Georgia is a country with its peak in winter, although, as shown on Figure 2.14, this situation is likely to change from 2031 and Georgian will become a country with the peak in summer. Taking this into account, in a near future it will be possible to reduce the share of electricity import, due to the fact that the peak demand for electricity is going to move to the summer period, when it will be possible to satisfy it using the existing local resources. On the other hand, launching new generation units within the country’s energy system will make it possible to reduce the share of the electricity imported for meeting the demand for electricity during the winter period.

Based on the results of analysis of the balance of consumption and supply of electricity for 2021, it can be stated that significant attention should be paid to construction of new generation capacities with use of local energy resources. Consequently, along with hydro resources, other local hydrocarbon and renewable resources should be used, including, first of all the wind and sun energy resources.

1 In order to forecast consumption of electricity in Georgia during the summer and winter periods, the Compound Annual Growth Rate (CAGR) is used, which is 3.4% for the winter period and 4.4% for the summer period. Based on the data of 2011-2021, the summer period is defined as April-September, while the winter period is defined as October-March.
It should be noted, that in 2021 the total capacity of generation in Georgia increased by 1% compared to 2020 and constituted 4,544.1 MW. Generation capacities according to power plant types are shown on Figure 2.15.

2.2.1 Retail Market

The Electricity Retail Market Rules (hereinafter – the Electricity Retail Market Rules), approved by the Commission’s Resolution #47, of August 13, 2020, entered into force on July 1 of the reporting year, as a result of which the activities of electricity distribution and supply have been separated and the universal service supplier (in case of household consumer) and public service supplier (for other customer categories) commenced supply activities, specifically Tbilisi Electricity Supply Company LLC started supply activities in the coverage area of Telasi JSC and EP Georgia Supply started activities in the coverage area of Energo Pro Georgia JSC.

During the reporting period, the Commission approved standard conditions of the Agreement on electricity supply of the LLC Tbilisi Electricity Supply Company and the JSC EP Georgia Supply. Service under standard conditions of the Agreement on supply ensures delivery of the service under equal conditions, in compliance with the legislation of Georgia.

Also, the Commission has approved the form of the bill, which will facilitate accessibility of the information regarding the electricity supplied to the consumers, price to be paid and its components, as well as the means for saving energy.

Retail market of electricity in Georgia is highly concentrated (HHI = 5,128), where the largest market share (58%) belongs to JSC Energo-Pro Georgia.

In order to evaluate the level of competition on a specific market, the Herfindahl–Hirschman Index (HHI) is used. It is calculated as the total of the squares of the market shares (%) of the participants existing on the market. The value of the HHI can be between 0 and 10 000, where 0 means low concentration of the market (full competition), whole 10 000 – means full monopoly. Based on the clarification by the European Commission, if the HHI exceeds 1 000, then the market is concentrated, while if the value of the index is more than 2 000, then the market is highly concentrated.
Figure 2.16. Consumption of regulated suppliers

Figure 2.16 shows the amount of electricity consumed by regulated suppliers of electricity according to the months of 2021. It can be seen from this Figure, that maximal consumption of both the JSC Telasi/LLC Tbilisi Electricity Supply Company and JSC Energo-Pro Georgia/JSC EP Georgia Supply is recorded in January-December and July-August. This tendency is predetermined by seasonality of electricity consumption in Georgia, where a significant role is played by increase of consumption by household consumers during the winter and summer period.

Figure 2.17. Consumption in the area of JSC Energo-Pro Georgia according to consumer categories

Consumption of household consumers in the area of JSC Energo-Pro Georgia in the reporting year constituted 40% of the total consumption, while consumption of non-household consumers constituted 60%. In the reporting year, compared to 2020, the amount of electricity consumed by household consumers in the distribution area of JSC Energo-Pro Georgia has diminished by 0.3%, while the amount of electricity consumed by non-household consumers has diminished by 5.4% (see Figure 2.17).
As to the amount of electricity distributed by JSC Energo-Pro Georgia to retail consumers according to voltage levels, 68% of total distributed electricity was consumed by the consumers connected to the 0.4 kV voltage network, 5% – by the consumers connected to the 110-35 kV network and 27% – by the consumers connected to the 6-10 kV network (see Figure 2.18).

It should be noted, that the quantity of the consumers connected to the 110-35 kV voltage has diminished by 43%, the reason for which is mandatory entry of consumer to the fee market.

In 2021, in the area of JSC Telasi, 61% of consumption is covered by non-household and 39% - by household consumers. The amount of electricity consumed by non-household consumers is increased by 11.8% compared to the previous year and diminished by 5.2% compared to 2019. The reason for this is stage-by-stage lifting of COVID-related regulations and restoration of economic activity. In the reporting year, the amount of electricity consumed by household consumers of the area of JSC Telasi increased by 8.1% compared to the previous year (see Figure 2.19).

![Figure 2.18. Consumption of JSC Energo-Pro Georgia according to voltage levels](image1)

![Figure 2.19. Consumption of JSC Telasi according to consumer categories](image2)
Also in the network of JSC Telasi, electricity distributed to the consumer connected to the 0.4 kV network covers a significant share (72%) within the total distributed electricity. The share of the consumer connected to the 6-10 kV network constituted 28%, while the share of the consumer connected to the 110-35 kV network was 1% (see Figure 2.20).

2.2.2 Wholesale market

In the reporting year, 104 producers of electricity were registered on the wholesale market, among them: 5 thermal power plants\(^2\), 2 regulatory\(^3\), 8 partly deregulated\(^4\), 15 deregulated\(^5\) and 78 small\(^6\) (deregulated) power plants.

In 2021, market shares for the three largest producers of electricity were distributed as follows: for JSC Enguri HPP - 28.1%, for JSC Gardabani Thermal Power Plant 2 - 7.9% and for JSC Energo-Pro Georgia Generation 13.3%, while the Herfindahl–Hirschman Index of the generation segment constituted HHI\(^{2019}\).

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\(^2\) Thermal power plants: Gardabani 9\(^{th}\) energy block (LLC Mtkvari Energy), air turbine (LLC „G power”), Tbilrsesi 3\(^{rd}\) and 4\(^{th}\) blocks, Gardabani thermal power plant (LLC Gardabani Thermal Power Plant), Gardabani thermal power plant 2 (LLC Gardabani Thermal Power Plant 2).

\(^3\) Regulatory power plants: Enguri HPP and Vardnili HPP.

\(^4\) Partly deregulated power plants: Khrami 1, Khrami 2, Dzevru, Zhinvali, Vartsikhe, Gumati, Rioni and Lajanuri HPPs.

\(^5\) Deregulated (design capacity of over 15 MW) power plants with a license to produce electricity: Shaori HPP, Oratkhala HPP, Zahesi, Chitakhevi HPP, Khadori HPP, Atshesi, Larsi HPP, Paravani HPP, Darioli HPP, Khelvachauri 1 HPP, Shuakhevi HPP, Kirnati HPP, Old Energy HPP, Meastiachala HPP 1 and Meastiachala HPP 2, Kartli wind power plant.

\(^6\) Small power plants (power plants with the design capacity of less than 15 MW) without a license to produce electricity: the total of 78 power plants.
=1,26.7. Consequently, we can evaluate the generation segment as a concentrated market. These indicators are given in the Table 2.1, according to years.

<table>
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<th>Name/Year</th>
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<td>9.76%</td>
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<td>1,133.6</td>
<td>1,222.8</td>
<td>1,512.2</td>
<td>1,596</td>
<td>1,516</td>
<td>1,226.7</td>
</tr>
</tbody>
</table>

Table 2.1. Market shares and HHI of the largest producers

Trade in electricity on the wholesale market is carried out based on direct contracts, while on the balancing market, which is operated by the electricity market operator (ESCO), trade is carried out based on the standard conditions of the direct Agreement on sales of balancing electricity, approved by the Commission.

In 2021, the amount of electricity sold based on direct contracts constituted 12,148 GWh, while the amount of electricity sold on the balancing market was 3,473. Therefore, the share of trade in electricity based on direct contracts constituted 78% of the total electricity supplied in the network, while the share of balancing electricity was – 22%. As to these indicators according to months, they are shown on Figure 2.21.

---

7 During counting of the HHI for 2021, possession of various power plants by companies has been taken into account.
Figure 2.21. Trade in electricity on the balancing market and through direct contracts

As to the structure of the suppliers of electricity on the wholesale market through direct contracts according to months, it is shown on Figure 2.22.

Figure 2.22. Structure of the suppliers of electricity based on direct contracts
Structure of the buyers of electricity based on direct contracts according to months is shown on Figure 2.23.

![Figure 2.23. Structure of the buyers of electricity based on direct contracts](image)

Structure of the balancing electricity purchased by the market operator according to months is shown on Figure 2.24.
Figure 2.24. Structure of the balancing electricity purchased by the market operator

A significant share within the balancing electricity purchased by the market operator in 2021 belongs to imported electricity. As to the electricity produced by hydro-electric plants, it is purchased for the balancing market by the market operator during the year, while the electricity generated by the hydro-electric plants in June-July fully satisfies the balancing market (see Figure 2.25).

Figure 2.25. Structure of the balancing electricity sold by the market operator

Balancing electricity is purchased from the market operator mainly by electricity distribution companies and direct consumers.
The price of the balancing electricity to be sold by the market operator is formed monthly, based on the weighted average principle of the prices of the electricity purchased by it from generation units and importers of various categories. In the reporting year, compared to the previous year, the selling price increased in the average by 19.5% (see figure 2.26). As to the price of the balancing electricity sold by deregulated power plants to the market operator in the reporting year, it has diminished in the average by 10.6%, compared to 2019 (see figure 2.27).

**Figure 2.26. Weighted average price of the balancing electricity to be sold by the market operator**

![Price of the balancing electricity to be sold by the market operator](image1)

**Figure 2.27. Price of the electricity sold by deregulated power plants on the balancing market**

![Price of the electricity sold by deregulated power plants on the balancing market](image2)
2.3. Unbundling of Activities

**Unbundling of TSO activities**

Certification of activities of the transmission system operator is a procedure, which determines compliance of the TSO with the requirements of independence and unbundling.

JSC Georgian State Electrosystem submitted to the Commission the application on certification as a TSO (hereinafter – the application on certification), with attached documents, on January 21, 2021. The submitted application on certification requested certification of the JSC Georgian State Electrosystem as a TSO, according to the model of property unbundling envisaged under the Law of Georgia On Energy and Water Supply (hereinafter – the Law) and the plan of unbundling of the electricity transmission system operator (hereinafter - the plan of unbundling of the electricity transmission system operator), approved by the Georgian government’s Resolution #682, of November 13, 2020.

As a result of consideration of the submitted application on certification and attached documents, the Commission deemed that the JSC Georgian State Electrosystem largely satisfied the main requirements envisaged under the plan of unbundling of the electricity transmission system operator, as a result of which, on March 4, 2021, decision (hereinafter – preliminary decision) was taken to certify the JSC Georgian State Electrosystem as a TSO, on condition that before December 31, 2021, the Ministry of Economy and Sustainable Development of Georgia would ensure such distribution of the management rights of the energy companies existing in the sphere of management of state agencies, that the companies carrying out transmission/distribution of energy on one hand and the companies carrying out generation/supply/trade on the other hand would not be under management of the same state agency, which would also ensure independence of the state agencies managing the TSOs from the other state agencies managing the companies which carry out electricity generation/supply/trade. Also, the JSC Georgian State Electrosystem was required to submit to the Commission the documents confirming full performance of the abovementioned activities.

The abovementioned decision, in compliance with the Law and the Rules of Certification, approved by the Commission’s Resolution #9, of March 7, 2020, was submitted for comments to the Energy Community Secretariat. Taking into account the remarks of the Secretariat of the Energy Community, on April 1, 2021, the Commission made the decision on certification of the JSC Georgian State Electrosystem as a TSO (hereinafter – the final decision) and the JSC Georgian State Electrosystem was required to fully perform, before December 31, 2021, all the activities defined under the decision of March 4.

Also, the final decision defined a detailed list of those documents, submitting of which the JSC Georgian State Electrosystem had to ensure before January 3, 2022, for the purpose of confirming full performance of the abovementioned activities.

**Approval of the TSO compliance program**

In the reporting year, the TSOs JSC Telasi and JSC Energo-Pro Georgia submitted, within established deadlines, for approval of the Commission the TSO compliance programs. The Commission approved the
documents, modified according to the Commission’s comments, by Decisions #75/8, of October 7, 2021 and #52/2, of December 9, 2021.

Within the frames of the compliance programs approved by the Commission, obligations were imposed upon the JSC Telasi and JSC Energo-Pro Georgia, which, for the purpose of implementation of unbundling requirements and compliance with them, in compliance with the Law and the Rules for Unbundling of Transmission System Operators, approved by the Commission’s Resolution #39, of July 16, 2020, along with other issues, include performance of specific measures by the TSO, elimination of discriminatory treatment during performance of activities, as well as the obligation of introducing the procedure for disclosing information and the rule for elimination of the conflict of interests.

**Approval of candidates for the position of the TSO compliance officer**

Position of the compliance officer is a significant innovation envisaged under the Law, which ensures compliance of the TSO with unbundling requirements. For this purpose, compliance officer ensures fulfillment of the requirements and conditions established under the compliance program and also ensures resolution of the issues related to existence of the potential conflict of interests between TSO management and employees, while in the reporting part – development of the periodical report and its submitting to the Commission.

During the reporting year, JSC Telasi nominated for approval of the Commission, along with the TSO compliance program, the candidate for the position of the TSO compliance officer.

After studying and evaluating the qualification, professional skills and independence requirements of the candidate, the Commission agreed, by Decision #52/1, of December 9, 2021, the candidate for the position of the compliance officer, nominated by JSC Telasi.

Based on decision of the Commission, in order to ensure independence of the compliance officer, duration of the labor Agreement to be signed between the TSO and the compliance officer was defined as no less than two years, since this period was deemed optimal for both sides of the labor relations – on one hand no long-term obligation arises for the TSO in terms of duration of the labor relations, while on the other hand this duration ensures for compliance officers both their independence and stability of labor relations.

2.4. Licensing and technical regulation

Bases on the status quo of December 31, 2021, there are 26 licensees functioning in the electricity sector of Georgia (see Annex 1), among them:

- Generation – 21;
- Distribution – 2;
- Transmission – 1;
- Market operation – 2.

During the reporting year, the Commission staff prepared 23 decisions related to licensing in the electricity sector, specifically:

- Based on the decision N5/1 of February 17, 2021 of the Commission amendments have been introduced to the electricity generation License (N008, Serie 11) issued to the Vardnili Hpp Cascade and Annex 1 (Technical data) and Annex 2 (Licensing conditions) of the mentioned license have been approved. New License certificate has been issued in the name of Vardnili HP Cascade LLC.
- Preliminary transmission license (N007, Serie 12) of Energo Pro Georgia JSC has been revoked under the decision N5/2 of February 17, 2021 of the Commission and respectively the decisions N71/2 of December 9, 2015 and N65/35 October 6, 2016 have been anulled.

- Based on the decision N6/1 of February 18, 2021 of the Commission Electricity Transmission License (N006, Serie 12) issued to the Energo Trans LLC has been revoked and decisions N 26/2 of November 11, 2010 and N20/2 of August 27, 2013 have been revoked.

- Based on the Decision N6/2 of February 18, 2021 of the Commission amendments have been introduced to the electricity transmission license (N004, Serie 12) of the Georgian State Electrosystem and Annexes of the mentioned license (technical data and licensing conditions) have been approved. License certificate has been issued to Georgian State Electrosystem JSC.

- Based on the decision N19/1 of April 28, 2021 of the Commission new distribution license has been issued to Telasi JSC (N058, Serie 14) that was enacted as of July 1, 2021 and after enactment decision N82 of December 28, 1998 and subsequent license N3/01 have been revoked.

- Based on the decision of the Commission N20/2 of May 13, 2021 new electricity distribution license (N059, Serie 14 has been issued to Energo Pro Georgia JSC that was enacted as of July 1, 2021 and respectively the license N057, Serie 14 approved under the decision N9/3 of May 18, 2007 as well as the decision itself was revoked.

- Based on the decision N20/1 of May 13, 2021 of the Commission new electricity transmission license N007(serie 12) was issued to Georgian State Electrosystem JSC that was enacted as of July 1, 2021 and previous license issued to Georgian State Electrosystem JSC (N004, Serie 12) and decision N6/2 of February 18, 2021 of the Commission has been revoked.

- Based on the decision N22/2 of May 20, 2021 of the Commission amendments were introduced to the electricity generation license (N088, Serie 11) issued to Energo Pro Georgia Generation JSC due to fact that Energo Pro Generation JSC was renamed as EP Georgia Generation JSC on April 14, 2021.

- Based on the decision N35/2 of July 29, 2021 of the Commission amendments have been introduced to the decision N39/3 of May 28, 2020 on issuing ELectricty Market Operation License to Georgian State Electrosystem JSC due to the changes made to the electricity Market Concept Design.

- Based on the decision N38/4 of September 2, 2021 amendments were introduced to the decision N39/2 of May 28, 2020 on issuing electricity market operation license to Georgian Energy Exchange JSC due to changes made in the Electricity Market Concept Design.

2.5. Main Results of Regulating Network Activities

The Commission always strives to improve the normative acts in order to ensure transparency and fairness. The Commission has approved “Criteria for deferring requests of High Voltage DC Connections and connecting capacity parks connected to DC electricity lines”, “Criteria for deferring connection requests of the consumption units to the electricity networks” and “Criteria for deferring connection requests of the generation units to the electricity networks”. The basis of approving those acts is the membership of Georgia to the Energy Community, as long as Georgia by acceding to the Energy Community Treaty undertook obligation to transpose EU Third Energy package. The abovementioned amendments ensured compliance with the EU legislation (2016/631/EC, 2016/1447/EC, 2016/1388/EC).
Under the decisions N2/6 of January 28 and N4/3 of February 11, 2021 the Commission approved registration application of balance service provider and respective standard contract. A number of amendments have been introduced also to the Network Rules approved under the Resolution N10 of April 17, 2014 throughout the reporting period. The actual investments of the companies made in 2020 have been studied and analyzed and as a result the projects have been selected for which the companies have been obliged to submit expert opinion issued by the accredited body regarding estimation of price of the construction, maintenance or reconstruction works by taking into account compliance indicators with the project or other initial documents and current standards.

2.5.1 Transmission Activity

Electricity transmission network is one of the main infrastructural pillars of the country. Its proper functioning is a basis for ensuring security of the population and supply of the generation units, as well as for realization and development of the country’s economic and electricity potential to a maximum extent. Approval of the mandatory 10-Year Transmission Network Development Plan of Georgian State Electrosystem represents a new level of development of energy infrastructure and its regulatory norms. Development of high and extra high voltage electricity infrastructure is a strategic goal of the country and first of all, implies establishment of the sustainable, reliable and technically-and economically efficient electricity transmission network that will ensure security of electricity supply at any stage of the development, enough capacity of the transmission network, compliance with the electricity quality standards, integration of the renewable energy into the network, regional cooperation and increase of the electricity exchange amounts with the neighboring countries. Throughout the reporting year the 10_year Transmission Network Development Plan for 2022-2032 has been submitted to the commission. While preparing comments and recommendations to the document the Commission involved the stakeholders in the discussion process, including distribution licensees and the academicians. In the process of discussing the plan the Commission considered local problematic issues, such as deficit of free connection capacities in the resort and industrial zones and key substations of the transmission networks, delay of the construction of the generation units and transmission infrastructures due to various reasons, current global pandemics and other impeding factors, as well as the issues of strategic importance such as structural reorganization of the market and harmonization with the EU legislation. One of the important positive results of the 2022-2032 Transmission Network Development plan are major developments with regards to the increased integration of the wind and solar energies, that was reflected in the studies made and increase of share of the renewable energy generation units ensured by constant improving of the reliability of the transmission network and flexibility of the energy system.

2.5.2 Main Results of the Distribution Activities

Similarly to the Transmission Network the proper functioning and development of the Distribution Network is also an important infrastructure for the country. In accordance with the Law the distribution licensees submitted 5-year distribution network development plans to the commission that were studied and analyzed in accordance with the best practices in the sector. The comments were made by the commission and after they were envisaged by the licensees the commission approved the distribution plans of Telasi JSC with
the amount of 96 million GEL investments and of Energo Pro Georgia with the amount of 454 million GEL investments (the latter's plan was approved with comments).

The commission developed rules of connecting micro generation power plans to the network throughout the reporting year. Hereby Investment Appraisal Rules have been approved under the decision N36 of June 29, 2021 by the Commission. Amendments have been introduced to the Electricity Distribution Network Rules where one of the main issue is that all meters in the distribution network will be read within last 4 days of the respective month.

2.5.3 Regulation of Electricity Losses in the Transmission and Distribution Networks

Setting normative losses in the transmission and distribution networks is one of the main functions of the Commission and serves the purpose of optimizing the costs necessary for purchasing the losses, as well as it represents one of the important energy efficiency measures with regards to reducing negative environmental impact and emissions.

In the process of radical restructuring of Georgian electricity market the network activities have been unbundled from generation and supply activities, the requirements in relation to the metering systems have been changed both at the retail and wholesale level. Specifically, the Commission requested that the meter reading cycle is approximated to the wholesale cycle in order to ensure much more precision in defining loss component in the electricity delivered on bus bar and accruing that component to the companies. Based on the fact that important monthly fluctuations were expected in 2021 and upcoming years the Commission has made amendments to the Rules of Calculating Electricity Normative Losses (Resolution N14, June 10, 2021) in order to ensure more flexibility of the rules. Specifically, based on the Article 7(4) if the important changes take place in the transmission or distribution networks throughout the regulatory period that caused such important changes of the network structure and/or load causing increase of the actual losses by 5% throughout the year and/or by 10% within past 3-month period (this shall be evidenced by the metering data at the points of electricity receipt and delivery) in relation to the normative losses approved by the Commission, the Commission is entitled to recalculate normative losses and/or its structure (allocation between voltage levels) on the basis of justified application of the licensee. These amendments were used in case of Georgian State Elecrosystem JSC and Telasi JSC, specifically:

- The normative losses for the Georgian State Elecrosystem JSC were defined in an amount of 1.92% instead of 1.76%;
- The normative losses for Telasi JSC were set in an amount of 5.57% instead of 4.81%, including:
  - 110 (35) KV voltage level -1.17%;
  - 10 (6) KV Voltage Level - 2.79%;
  - 0.4 KV Voltage Level -1.61%.

Comparison of the actual costs of the reporting year with the data of the previous year gives a clear vision on the efficiency of the companies’ activities and trends of network planning and development. Actual total loss in the electricity transmission and distribution networks constituted 5.7% (see figure 2.28) of the total electricity in the network (1.88% for the transmission network and 3.83% in the distribution network). This indicator has improved by 12.4% compared with the same indicator of 2019.
Actual losses in the network of ENergo Pro Georgia JSC has constituted 511 GWH that is a 9.83% of the electricity in the network and exceeds approved normative loss (9.80%). In 2020 the actual loss of the company was 9.72%. Therefore, slight increase by 1.13% is obvious (see figure 2.29).

The actual losses of Telasi JSC have constituted (based on the settlement data between receipt and delivery) have constituted 2.83% that is twice less compared with the data of 2020. The reason for that is a change of the meter reading approach (see figure 2.30). Using the same reading results at the end of the year that was used at the beginning of the year gives more precise picture of the network losses. Network losses of Telasi JSC was 6.1% (figure 2.30).
2.6. Pricing and Tariff Regulation (Electricity)

2.6.1. Legal and Methodological Framework


The tariff setting methodology envisages incentive-based (price cap regulation) and cost-plus regulation principles widely accepted in the international practices. These principles ensure sustainable functioning of the company and promotion of the efficiency, reimbursement of incurred reasonable costs and ensuring reasonable profit.

According to the Law of Georgia on Energy and Water Supply electricity supply (selling electricity to the final customer) has been defined as a separate activity since July 1, 2021 and it is no more combined with the distribution activity. Therefore, the tariffs for the distribution system operator and public service supplier have been calculated separately. The new market model concept envisages electricity supply by public and universal service suppliers to household customers, small companies and certain large companies that do not have supplier, lost supplier due to planned or unplanned restrictions or due to non-compliance of the obligations by their supplier. Within the public service obligations conferred upon the company by the Government of Georgia the Commission is entitled to set electricity tariffs for those final consumers to whom the services are provided by the public service supplier according to the Commission’s tariff setting methodology. Respectively, the Commission under its Resolutions N8 of May 13, 2021 and N15 of June 24, 2021 has approved: “Universal Service Supply Tariff Calculation Methodology”, “Tariff Calculation Methodology for Supplying Electricity within the Public Service Obligations”, “Tariff Calculation Methodology for the Supplier of Last Resort”, “Tariff Calculation Methodology for the Day-ahead and Intraday Electricity Market Operator” and “Depreciation/Amortization Norms of the Regulated Assets of the Tariff
Regulated Companies”. Based on the abovementioned Resolution the Tariff Calculation Methodologies and Depreciation/Amortization Norms approved under the Resolution N14 of July 30, 2014 have been revoked.

The abovementioned supply tariff setting methodologies ensure uninterrupted and reliable functioning of the supplier, protection of customer at the transitory stage of the market and definition of the stable price for them. According to the legislation supply companies providing the public services are also responsible for the imbalances. Respectively, service component envisaged under the tariff setting methodologies includes also imbalance costs apart from the typical regulated expenses, whereas reasonable profit is calculated in an amount of 1.5% of the electricity settlement price (weighted average electricity price). Hereby, it shall be noted that in case of tariff calculation methodologies of the universal service and public service supply the tariff structure envisages return risk costs that reduces risk of return accrued to the customer for the company and it equals 0.05%.

The Commission, under its decisions N21/1, 21/2, 21/3, 21/4 and 21/5 has approved: tariff application forms to be submitted by the electricity supplier, electricity generation licensee, electricity distribution licensee and electricity market operators for the purpose of calculating respective tariffs.

According to the Law due to transition to new market model, unbundling of the distribution system operators (Telasi JSC, Energo Pro Georgia JSC) took place within the first half of the reporting year and according to respective licenses (Decision N19/1 of April 28, 2021 on Issuing Electricity Distribution License to Telasi JSC and Decision N20/2 of May 13, 2021 on Issuing Electricity Distribution License to Energo Pro Georgia JSC) they have been defined as the electricity distribution system operators. Whereas based on the Resolution N236 of May 25, 2021 of the Government of Georgia obligation of providing public supply services from July 1, 2021 has been imposed upon the Tbilisi Electricity Supply Company JSC in the area of the Telasi JSC and EP Georgia Supply in the area of Energo Pro Georgia LLC and they have been defined as the universal service supplier, electricity public service provider and supplier of last resort.

It is notable that the basis for calculating tariffs of Telasi JSC and Energo Pro Georgia JSC from the period of July 1, 2021 are the cost audit reports of those companies made on December 18, 2020 as the new tariff calculation has been made on the basis of data of 2019 year according to the methodologies that were already reflected in the tariffs approved under the Resolutions N83 and 84 of December 29, 2020 of the Commission.

On the basis of the Article 30(1)(c) of the Law of Georgia on Energy and Water Supply the Commission is entitled to calculate temporary tariffs and define respective compensation measures in case if the final tariff differs from the temporary tariff for the purpose of exercising the functions envisaged under the Article 29 of the same Law in case if there is a delay in calculating transmission, distribution and public service tariffs. Based on the abovementioned provision the Commission deemed appropriate to set temporary tariffs for the abovementioned companies considering the fact that those companies do not have respective actual costs and technical indicators necessary for carrying out public supply.

Based on the fact that the Resolution N246 of April 16, 2020 of the Government of Georgia on Approving Electricity Market Concept Design defined January 1, 2022 (instead of July 1, 2021) as the date of commencing respective activities by the electricity market operators, the temporary tariffs for the supply companies were set for the period from July 1, 2021 to January 1, 2022 considering the Resolution N236 of May 25, 2021 of the Government of Georgia.

In accordance with the requirements of the 14(4) Article of the Methodology for Approving Guaranteed Capacity Fees, Tariffs of Generating Electricity from Guaranteed Capacity Sources and Electricity Market Operator Tariffs (Annex 3) the contracts on the purchase of natural gas by guaranteed capacity sources (Thermal Power Plants) were agreed with the Commission for each subsequent 3-month periods throughout
2021. As a result, a price of each cubic meter of natural gas to be provided for the generation purposes for the whole reporting period were defined in an amount of 143 USD without VAT and settlement was made in national currency (GEL) with the exchange rate approved by the National Bank of Georgia on the last day of the reporting month.

In January 2021 (20.01.2021) merger of Georgian State Electrosystem JSC and its subsidiary – Energo Trans LLC took place. Respectively, the Commission revoked fixed tariffs for Energo Trans LLC on the basis of the Resolution N3 of February 26, 2021 on Introducing Amendments to the Resolution N33 of December 4, 2008 of the Commission on Electricity Tariffs, whereas fixed transmission tariffs for 2021-2025 regulatory period constituted a sum of the tariffs of Georgian State Electrosystem JSC and Energotrans LLC as it was envisaged under the current tariff setting methodology.

In accordance with the Law and the Resolution N9 of March 27, 2020 of the Commission Georgian State Electrosystem was certified as a Transmission System Operator under the Decision N14/3 of the April 1 of 2021 of the Commission and new transmission license was issued to it on the basis of the decision N20/1 of May 13, 2021 to be enacted from July 1, 2021. Based on the fact that according to the Law of Georgia on Energy and Water Supply the electricity dispatch is no longer a licensed activity and also on the basis of the contract of January 4, 2021 of Georgian State Electrosystem JSC and Sakrusenergo JSC on Transmitting Operation Rights of electricity transmission lines and related infrastructure owned by Sakrusenergo JSC to Georgian State Electrosystem and carrying out subsequent maintenance services, the dispatch license of Georgian State Electrosystem JSC and the transmission license of Sakrusenergo JSC have been revoked under the decisions N28/1 and 28/2 of June 24, 2021 of the Commission. Georgian State Electrosystem was given electricity market operator license for the balance and ancillary services markets. Georgian State Electrosystem JSC has been established as a sole operator of Georgian transmission system having transmission license, as well as the electricity market operator license (N008, Serie 12) of the balancing and ancillary services issued by the Commission.

The Resolution N5 of March 18, 2021 has introduced amendments to the Resolution N43 of December 27, 2016 on Approving Uniform System of Accounts for the Electricity Sector and specific adjustments were made to the chart of accounts and instructions to the chart of accounts, accounting of the fixed assets and reporting forms. Hereby, reporting forms were deleted from the Resolution and respective reporting forms were approved under the Decision N14/2 of April 1, 2021 on Approving Reporting Forms for the Purpose of Implementing Uniform System of Accounts in the Electricity Sector.

2.6.2. Tariff Regulation and Current Tariffs of the Sector

Based on the tariff methodologies and regulations approved by the Commission tariffs are set for the regulatory period and individually for each specific company. Regulatory period in case of the distribution and supply activities constitutes 5 years, for public service HPPs – 3 years, whereas for Thermal power plants – guaranteed capacity fee – 1 year and electricity generation tariffs by guaranteed capacity sources – 1 month, based on the actual data. The Commission set tariffs throughout 2021 for a number of regulated companies. The mentioned process comprised setting of tariffs and fees for 4 licensees (TPPs) having public service supply obligations, 2 companies having public service obligation, as well as for the electricity balancing and ancillary services market operator (Georgian State Electrosystem JSC) and day-ahead and intraday market operator (Georgian Energy Exchange).
As a result, guaranteed capacity tariffs have been approved for G Power LLC (Gas turbine), Gardabani TPP LLC (combined-cycle gas turbine), International Energy Corporation of Georgia LLC (3rd and 4th Blocks of Tbilisi), and Mtkvari Energy LLC (9th Block of Tbilisi) guaranteed capacity fees (table 2.2), whereas marginal tariffs of the generation of the electricity by guaranteed capacity sources are published on the official website of the Commission in a due course on a monthly basis.

<table>
<thead>
<tr>
<th>Fees of Balancing Market Operator and Guaranteed Capacity (Gel/Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company</strong></td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Georgian State Electrosystem JSC</td>
</tr>
<tr>
<td>Mtkvari Energy LLC</td>
</tr>
<tr>
<td>Georgian International Energy Corporation LLC</td>
</tr>
<tr>
<td>Georgian International Energy Corporation LLC</td>
</tr>
<tr>
<td>G Power LLC</td>
</tr>
<tr>
<td>Gardabani TPP LLC</td>
</tr>
</tbody>
</table>

*Table 2.2.*

Based on the Resolution N246 of April 16, 2020 of the Government of Georgia on Approving Electricity Market Concept Design for transition to the target market model from 2022 the Commission has approved Service fees of the electricity day-ahead and intraday market operator – Georgian Energy Exchange (table 2.3) and tariffs of the electricity balancing and ancillary services market operator (table 2.2) by its decisions N68 and N69 of December 29, 2021.

<table>
<thead>
<tr>
<th>Approval of the Day-ahead and intraday market operators fee (Tetri/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company</strong></td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Georgian Energy Exchange JSC</td>
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</table>

*Table 2.3.*

Under the Resolutions N 26–28 of June 29, 2021 transmission tariffs of the Georgian State Electrosystem JSC (table 2.4) and distribution tariffs of Telasi JSC and Energo Pro Georgia JSC (table 2.5) have been approved for the period of July 1, 2021 until January 1, 2026.

<table>
<thead>
<tr>
<th>Electricity Transmission Tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company</strong></td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Georgian State Electrosystem JSC</td>
</tr>
</tbody>
</table>

*Table 2.4.*
### Electricity Distribution Tariffs (Tetri/kWh)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Telasi JSC</td>
<td>110-35 KV</td>
<td>2.411</td>
<td>0.544</td>
</tr>
<tr>
<td>Telasi JSC</td>
<td>10-6-3.3 KV</td>
<td>4.324</td>
<td>2.961</td>
</tr>
<tr>
<td>Telasi JSC</td>
<td>380-220 V</td>
<td>8.172</td>
<td>6.184</td>
</tr>
<tr>
<td>Energo Pro Georgia JSC</td>
<td>110-35 KV</td>
<td>3.257</td>
<td>1.851</td>
</tr>
<tr>
<td>Energo Pro Georgia JSC</td>
<td>10-6-3.3 KV</td>
<td>5.453</td>
<td>4.950</td>
</tr>
<tr>
<td>Energo Pro Georgia JSC</td>
<td>380-220 V</td>
<td>11.979</td>
<td>9.427</td>
</tr>
</tbody>
</table>

Table 2.5.

Based on the Resolutions N29-34 of June 29, 2021 the supply tariffs (universal service supply, public service supply, last resort supply) of EP Georgia Supply JSC and Tbilisi Electricity Supply Company LLC (Table 2.6-2.8) have been approved for the periods of July 1, 2021 – January 1, 2022 and January 1, 2022- March 1, 2022. Final consumption tariffs for those suppliers is a sum of supply and distribution and transmission tariffs.

### Final Consumers Tariffs of the Universal Service (Tetri/kWh)

<table>
<thead>
<tr>
<th>Company</th>
<th>Customer Category</th>
<th>01.07.2021 -</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tbilisi Electricity Supply Company LLC</strong></td>
<td>10-6-3.3 kv, household</td>
<td>18.136</td>
</tr>
<tr>
<td></td>
<td>220-380 V, non-household, small company</td>
<td>17.072</td>
</tr>
<tr>
<td></td>
<td>220-380 V, household, 0-101 kWh/month</td>
<td>4.453</td>
</tr>
<tr>
<td></td>
<td>220-380 V, household, 101-301 kWh/month</td>
<td>7.853</td>
</tr>
<tr>
<td></td>
<td>220-380 V, household, &gt;301 kWh/month</td>
<td>11.653</td>
</tr>
<tr>
<td><strong>EP Georgia Supply JSC</strong></td>
<td>10-6-3.3 kv, household</td>
<td>18.052</td>
</tr>
<tr>
<td></td>
<td>220-380 V, household, 0-101 kWh/month</td>
<td>3.753</td>
</tr>
<tr>
<td></td>
<td>220-380 V, household, 101-301 kWh/month</td>
<td>3.753</td>
</tr>
<tr>
<td></td>
<td>220-380 V, household, &gt;301 kWh/month</td>
<td>4.491</td>
</tr>
</tbody>
</table>

Table 2.6.

### Final Consumption Tariff of Public Service (Tetri/kWh)

<table>
<thead>
<tr>
<th>Company</th>
<th>Customer Category</th>
<th>01.07.2021 -</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electricity Supply Company LLC</strong></td>
<td>110-35 kv, non-household</td>
<td>18.120</td>
</tr>
<tr>
<td></td>
<td>10-6-3.3 kv, non-household</td>
<td>18.136</td>
</tr>
<tr>
<td></td>
<td>220-380 v, non-household except small company</td>
<td>17.072</td>
</tr>
<tr>
<td><strong>EP Georgia Supply JSC</strong></td>
<td>110-35 kv, non-household</td>
<td>18.034</td>
</tr>
<tr>
<td></td>
<td>10-6-3.3 kv, non-household</td>
<td>18.052</td>
</tr>
<tr>
<td></td>
<td>220-380 v, non-household except small company</td>
<td>12.442</td>
</tr>
</tbody>
</table>
Hereby, in accordance with the legislation within the framework of defining final consumption tariffs and for ensuring electricity purchase costs in the temporary supply tariffs the Commission defined amount of the electricity to be purchased and purchase conditions by Tbilisi Electricity Supply Company LLC and EP Georgia Supply JSC from electricity generation units and Electricity System Commercial Operator JSC when exercising their functions of universal service and public service supply under its decision N31/1 of June 30, 2021.

Information on current supply and final consumption tariffs as well as their components is reflected in the Annexes N5-8.

### 2.6.3. Tariff Benchmarking Analysis (tables, graphs)

In order to estimate final consumption tariffs in Georgia in relation to other countries the table N2.9 and figure 2.31 provides information on household electricity tariffs of the other countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Household tariff (Tetri/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>17.049</td>
</tr>
<tr>
<td>Ukraine</td>
<td>18.314</td>
</tr>
<tr>
<td>Georgia</td>
<td>22.344</td>
</tr>
<tr>
<td>Kosovo</td>
<td>22.904</td>
</tr>
<tr>
<td>Armenia</td>
<td>24.486</td>
</tr>
<tr>
<td>Moldova</td>
<td>30.424</td>
</tr>
<tr>
<td>Turkey</td>
<td>31.865</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>31.910</td>
</tr>
<tr>
<td>Serbia</td>
<td>32.122</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>33.500</td>
</tr>
<tr>
<td>Albania</td>
<td>35.585</td>
</tr>
<tr>
<td>Netherlands</td>
<td>35.960</td>
</tr>
<tr>
<td>Hungary</td>
<td>38.332</td>
</tr>
<tr>
<td>Country</td>
<td>Tariff (Tetri/kWh)</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>38.441</td>
</tr>
<tr>
<td>Montenegro</td>
<td>38.772</td>
</tr>
<tr>
<td>Iceland</td>
<td>42.376</td>
</tr>
<tr>
<td>Croatia</td>
<td>49.911</td>
</tr>
<tr>
<td>Norway</td>
<td>50.111</td>
</tr>
<tr>
<td>Estonia</td>
<td>50.956</td>
</tr>
<tr>
<td>Lithuania</td>
<td>51.278</td>
</tr>
<tr>
<td>Malta</td>
<td>58.357</td>
</tr>
<tr>
<td>Sweden</td>
<td>58.514</td>
</tr>
<tr>
<td>Romania</td>
<td>58.898</td>
</tr>
<tr>
<td>Finland</td>
<td>59.180</td>
</tr>
<tr>
<td>Latvia</td>
<td>60.156</td>
</tr>
<tr>
<td>Slovenia</td>
<td>61.792</td>
</tr>
<tr>
<td>Poland</td>
<td>61.811</td>
</tr>
<tr>
<td>Slovakia</td>
<td>64.147</td>
</tr>
<tr>
<td>Czech</td>
<td>66.347</td>
</tr>
<tr>
<td>Greece</td>
<td>66.895</td>
</tr>
<tr>
<td>France</td>
<td>72.141</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>73.156</td>
</tr>
<tr>
<td>Cyprus</td>
<td>74.879</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>77.120</td>
</tr>
<tr>
<td>Austria</td>
<td>83.348</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>84.022</td>
</tr>
<tr>
<td>Portugal</td>
<td>84.548</td>
</tr>
<tr>
<td>Denmark</td>
<td>88.752</td>
</tr>
<tr>
<td>Spain</td>
<td>92.099</td>
</tr>
<tr>
<td>Ireland</td>
<td>93.558</td>
</tr>
<tr>
<td>Italy</td>
<td>99.392</td>
</tr>
<tr>
<td>Belgium</td>
<td>103.703</td>
</tr>
<tr>
<td>Germany</td>
<td>125.059</td>
</tr>
</tbody>
</table>

*Table 2.9. Household Tariffs in Different European Countries (Tetri/kWh) (Including VAT)*
2.6.4. Investment Project Implementation Analysis

In accordance with the principles defined under the tariff setting methodology approved by Resolution N68 of December 15, 2020 the company tariff shall envisage implemented investments as well as planned investments by the transmission and distribution system operators in accordance with the investment plans approved by the Commission. In this context the Commission pays much attention to analysis and monitoring of implemented and ongoing investment projects.

While calculating tariffs the Commission reflects planned investments of the tariff calculation year and tariff year submitted by the transmission and distribution licensees in the regulatory asset base. The company is obliged to justify necessity of the planned investments and the effect and benefits of its implementation. If the company does not reach planned target indicator (including the ones related to quality of service standards) the Commission is entitled to apply sanctions envisaged under the legislation, whereas if the target indicators are met the Commission might apply incentives towards the well-performing company.

Electricity distribution licensees are obliged to carry out detailed reporting of the work done separately for each project with regards to the investment projects that are agreed with the Commission. The Commission is entitled to request submission of additional expert opinions with regards to work done. After the analysis of those documents’ compliance of the technical and economic indicators of the work carried out with the agreed investment plans will be estimated and the distribution, wheeling and consumption tariffs (if such) will be adjusted accordingly.

Targeted investments carried out by the respective electricity licensee shall result in improvement of the reliability of the public service providing generation units and electricity network, as well as of the security and electricity quality indicators.
In 2021 the sum of actual investments made in the electricity sector by the regulated generation, transmission and distribution licensees constituted 256,394 thousand GEL, the respective indicators per type of activity and source of funding are provided on figures 2.32-2.34.

Figure 2.32. Actually carried out Investments by 2021 (thousand GEL)

Figure 2.33. Investments carried out in 2021 according to types of activity (thousand GEL)
The aim of the electricity distribution system operators is to increase efficiency and reliability in their coverage area, as well as increase capacity for the further development of electricity network. This serves as a ground for making investments annually. The number of investments made by Telasi JSC in 2021 constitutes 43,893 thousand GEL, out of which 12,705 thousand GEL was used for technical re-equipping, reconstruction (35-110 kv and 6-10 kv substations, 110-35 kv overhead transmission lines, 0.4-10 kv cable infrastructure etc.) and capital refurbishments (power transformers, electrical and construction parts of the substation, repair of the subscriber’s metering nodes and substitution). Whereas 27,588 thousand GEL was spent for connecting new subscribers and expanding the network that included satisfaction of 4,476 new connection applications, whereas income for the connection to the network constituted 18,648 thousand GEL without VAT. Apart from that different tools and equipment, technical equipment and software has been purchased in an amount of 3,600 thousand GEL.

Investments were also made by Energo Pro Georgia JSC in an amount of 92,229 thousand GEL for same purposes. With the help of these investments 17 MMO-type switches have been constructed and put into operation, at the 35/110 substations different voltage power transformers of 10-6/0.4 KV have been repaired, substation buildings were renovated and watchman’s cabins were installed, different types of maintenance works were carried out at the transmission lines, repair works also comprised 10/6 KV network, specifically new power transformers were installed, mounts and cables were installed, cables substituted, transformer points were fenced, roofed and repaired. More than 1000 voltage cells were installed, in the central distribution points vacuum type switches have been organized and more than 100 linear switches. Within the framework of rehabilitating Kakheti 0, 4 KV network 6500 pillars, 243.2KM run-flat isolated cables and 1553 meters have been installed.

The figure 2.35 provides information on the investments made by electricity distribution system operators – Energo Pro Georgia JSC and Telasi JSC in 2021.
2.7. Promoting renewable energy and energy efficiency

Utilization of renewable energy resources remains one of the priorities for the future development of the electricity sector in order to use the existing energy resources in Georgia efficiently, increase electricity security and sustainability, and fully meet the demand for electricity in the country.

Georgia is rich in various sources of renewable energy. While water resources have historically played a leading role in Georgia, alternative renewable sources are becoming increasingly popular (such as wind, solar, etc.). Adoption of the above-mentioned legislation and the development of relevant by-laws will facilitate the utilization of these resources.

The Commission has an important role in practical implementation of the legislation regarding RES and energy efficiency. For these purposes, the Commission intends to make relevant amendments to the Network Rules and approve new Electricity Market Rules, which will provide for priority access of RES to grids, if necessary, accruing full or partial network access costs to network operators and defining PSOs in the electricity market. It should be noted that the Commission, following the law, also approved the Rules for Issuing Certificates of Origin of Electricity in 2021.

The Commission plays a leading role in the regulation and promotion of micro power plants, for which the so-called net metering regulation is applied information about which is provided in the next paragraph.
2.7.1 Outcomes of the introduction of net metering regulation

Active involvement of consumers in the functioning of the retail electricity market is a modern trend in the development of the electricity market. A well-proven method of this process is to satisfy the consumer's own consumption through micropower renewable energy sources, which is supported by various incentive policies at the international level.

*Figure 2.36. Representative scheme of Net Metering*

One of the traditional and widespread policies for the development of consumer-owned power plants is the so-called Net Metering, which is also popular in Georgia. This above-mentioned incentive mechanism became active in Georgia in 2016, with the relevant resolution adopted by the GNERC. Initially, individual connections were allowed, which spurred interest in micro-power plants at the consumer level. In the second phase, in 2019, the Commission made amendments to the above regulation, which provided for the possibility of joint involvement of a group of customers in the net metering program. In 2020, the Commission decided to increase the maximum allowable installed capacity of the micro power plant from 100 kW to 500 kW. According to the information available to the Commission, at the end of 2021, 131 subscribers used a net metering scheme in the area of JSC "Telasi" with a total capacity of 5,857 kW, and 237 subscribers - in the area of JSC "Energo Pro Georgia" with a total capacity of 11,854 kW. In 2021, a total of 368 subscribers were registered in the net metering system, with a total capacity of 17,711 kW. In total, in 2021, net metering is characterized by the following indicators compared to the previous year: the number of subscribers increased by 1.5 times, and the connected capacity - by 4.35 times.

Figure 2.37 indicates the dynamics of the development of micro power plants in Georgia in the period of 2016-2021. It is obvious that the increase of the connection limit for the power plants included in the net metering system had a positive impact on the growth rate of the power plants, but mainly at the expense of individual connections, as by the 2021 data only 15 group connection requirements took place.

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8 Electricity (Capacity) Supply and Consumption Rules approved under the Resolution N20 of September 18, 2008 of the Commission
3. Natural gas sector

Natural gas remains the main source of meeting final energy demand in Georgia. The share of natural gas in total energy consumption is increasing slowly. In 2021, 99.4% of Georgia’s demand for natural gas was met by imports and the remaining 0.6% by domestic production. The Republic of Azerbaijan remains the main source of gas supply.
3.1. Natural Gas Market

According to the energy balance of Georgia, the share of natural gas in total energy consumption was 38.5%. The reduction in the share of biofuels and waste has been observed, one of the reasons for which may be active gasification and replacement of solid fuels with natural gas (see Figure 3.1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural Gas</th>
<th>Oil products</th>
<th>Electricity</th>
<th>Biofuel</th>
<th>Coal</th>
<th>Geothermal, solar and other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>28.4%</td>
<td>31.8%</td>
<td>32.7%</td>
<td>31.0%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2014</td>
<td>28.2%</td>
<td>31.8%</td>
<td>32.7%</td>
<td>31.0%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2015</td>
<td>30.5%</td>
<td>28.2%</td>
<td>31.0%</td>
<td>30.5%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2016</td>
<td>33.1%</td>
<td>28.2%</td>
<td>31.0%</td>
<td>30.5%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2017</td>
<td>29.7%</td>
<td>28.2%</td>
<td>31.0%</td>
<td>30.5%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2018</td>
<td>28.9%</td>
<td>30.5%</td>
<td>31.0%</td>
<td>30.5%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2019</td>
<td>30%</td>
<td>29.7%</td>
<td>31.0%</td>
<td>30.5%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2020</td>
<td>29.3%</td>
<td>28.9%</td>
<td>31.0%</td>
<td>30.5%</td>
<td>33.1%</td>
<td>34.5%</td>
</tr>
</tbody>
</table>

*Figure 3.1. Energy Balance of Georgia*

In 2021, natural gas was supplied to Georgia from 4 main sources. The Republic of Azerbaijan remains the primary source. Figure 3.2 demonstrates the size of the Georgian natural gas market and the main gas flows in 2021.

---

*Source: National Statistics Office of Georgia.*
3.1.1 Market Structure and its Participants

The natural gas market includes natural gas retail and wholesale markets. There is no organized market for natural gas in Georgia, and therefore, natural gas is traded in the wholesale market only through bilateral agreements. Suppliers carry out natural gas import (or purchase small volumes of extracted natural gas) and resell it to other suppliers, while suppliers at the retail level deliver it directly to end customers. The foregoing does not exclude the activity of one supplier at both levels of the market.

SOCAR-related companies still have a dominant position in both the wholesale and retail markets. Consequently, the market is concentrated at both levels, and therefore, making access to natural gas at a competitive price for deregulated customers is a major challenge.

In 2021, 30 suppliers were operating in the natural gas market, 19 of which were active only in the retail market, and 11 - at both levels of the market (see Annex N9).

Physical delivery of natural gas to the end customers is ensured by natural gas transportation (whose main function is to transport natural gas from its source of extraction or import to the delivery points) and distribution licensees. The structure of the Georgian natural gas market is illustrated in Figure 3.3.

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The data used in this chapter are preliminary and may change as a result of the audited data submitted by regulated companies.
3.1.2. Unbundling of activities

**TSO Unbundling**

In order to meet the transmission system operator unbundling requirements, in close cooperation with the Secretariat of the Energy Community, in the reporting year, the Commission agreed on and submitted to the Government of Georgia for approval a natural gas TSO unbundling plan developed by the Georgian Gas
Transportation Company LLC. The above-mentioned plan was approved by the Resolution of the Government of Georgia №129 of March 25, 2021 (hereinafter - the unbundling plan), which laid the foundation for the start of the unbundling process of the natural gas TSO.

According to the unbundling plan, the ISO model was defined as a model of unbundling natural gas transmission system operator in Georgia. The current natural gas transportation licensee, Georgian Gas Transportation Company LLC, as well as Georgian Oil and Gas Corporation JSC, were tasked to take appropriate measures, including, the establishment of a new company, the transmission network owner, transfer of ownership of the assets to be used for natural gas transmission activities to it, and conclusion of a lease agreement between the transmission network owner and the natural gas transportation licensee. The owner of the transmission network, in turn, should establish a compliance program that sets out measures to prevent discriminatory actions and excludes violations of the requirements of independence and unbundling provided by the law.

Georgian Gas Transportation Company LLC submitted an application for certification to the Commission on June 10, 2021. After reviewing the application, the Commission found that the requirements set by the law and the unbundling plan were not met, namely, as of September 2, 2021, a lease agreement was not concluded between the Georgian Gas Transportation Company LLC and the transmission network owner, as a result of which the Georgian Gas Transportation Company LLC did not have the necessary technical and physical resources to fulfill its obligations as the transmission system operator, and the transmission network owner did not submit the compliance program required by law and the unbundling plan. In addition, the certification applicant failed to certify compliance with the independence and unbundling requirements established by the law.

Based on the above conditions, the certification application submitted by the Georgian Gas Transportation Company LLC was rejected and by the Commission's Decision №38/2 of September 2, 2021, it was refused to certify as a natural gas TSO. The Commission informed the Secretariat of the Energy Community about the preliminary decision and sent the Commission Decision №38/2 of September 2, 2021, for the submission of their considerations.

In its opinion, the Secretariat supported the decision of the Commission and pointed out that the certification of the GGTC LLC was not possible under these conditions. Based on this opinion, the Commission made a final Decision №48/4 on November 11, by which the Georgian Gas Transportation Company LLC was denied the request to be certified as a natural gas TSO.

**Unbundling of Distribution System Operators**

In accordance with the amendments to the Law of Georgia on Energy and Water Supply in the reporting year, the deadline for unbundling the natural gas distribution system operator was set to July 1, 2022, instead of December 31, 2021. Consequently, natural gas distribution licensees did not submit any unbundling plans to the Commission during the reporting year.
3.1.3. Key Features of the Market

As mentioned, the natural gas market, according to its essence and characteristics, can be divided into retail and wholesale markets. In the wholesale market, natural gas is traded between traders, trader and licensee (for loss reimbursement purposes), between the trader and the supplier, while in the retail market, natural gas is supplied to the end customers.

3.1.3.1. Natural Gas Wholesale Market

The Republic of Azerbaijan remains the main source of natural gas supply to Georgia. Over the past four years, through various contracts, Georgia has received an average of 91% of the natural gas needed to meet its demand from Azerbaijan. At the same time, Georgia is transiting natural gas from the Russian Federation to the Republic of Armenia, which in 2021 was higher by 11% than last year.

In 2021, Georgia's demand for natural gas amounted to 2,504 million m3, which is higher by 0.9% than the previous year. Natural gas was imported to the country by two suppliers to meet the demand. In total, 99.4% of Georgia's demand for natural gas was met by imports, and the rest by the local production. Procurement of local extraction and injection into the natural gas transportation system of Georgia was carried out by three suppliers, one of which is also an importer. Accordingly, natural gas was placed on the Georgian natural gas market (import and local production) by a total of four suppliers (Georgian Oil and Gas Corporation JSC, Georgian Branch of Frontera Resources Georgia Corporation, Bago LLC, SOCAR Georgia Gas LLC). The Herfindahl-Hirschman Index (HHI) among suppliers at this level of trade (placement of natural gas on the wholesale market) was 5015, indicating a highly concentrated market. The index is slightly worse than in previous years, mostly reflecting the changes in the share of natural gas sources than any changes in the market in terms of competition. A similar situation is especially typical for countries that are insufficiently connected with neighboring countries and/or there is a lack of importers interested in exploiting different sources in the market.

Information on natural gas received in Georgia in 2021 is given in Table 3.1.

<table>
<thead>
<tr>
<th>Natural Gas Entry Point</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>1,105</td>
<td>1,229</td>
<td>1,183</td>
<td>1,132</td>
</tr>
<tr>
<td>Russia</td>
<td>39</td>
<td>162</td>
<td>204</td>
<td>397</td>
</tr>
<tr>
<td>Armenia</td>
<td>15</td>
<td>0</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>South Caucasus Gas Pipeline</td>
<td>Additional and optional</td>
<td>822</td>
<td>853</td>
<td>900</td>
</tr>
<tr>
<td>Import</td>
<td>296</td>
<td>339</td>
<td>259</td>
<td>24.5</td>
</tr>
<tr>
<td>Local extraction</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td><strong>In total</strong></td>
<td>2,286</td>
<td>2,592</td>
<td>2,573</td>
<td>2,595</td>
</tr>
</tbody>
</table>

*Table 3.1. Gas intake in Georgia according to entry points (mln. m3)*
11 suppliers traded at the wholesale level with the natural gas available to trade in the Georgian market, among them the share of the three largest suppliers was 94%. The Herfindahl-Hirschmann Index (HHI) was 3109, which also indicates a highly concentrated market. In conditions when the market is characterized by high concentration at the level of natural gas imports, the development of competition in wholesale trade is impossible without the imposition of special measures. In the long run, it is essential to find alternative sources of natural gas (including access to LNG and the Turkish market, transporting gas to the Georgian natural gas market through so-called swaps), which will be implemented in case of appropriate legislative changes and the interest of suppliers. It is also important to encourage local production, including biogas production, and to promote network integration.

The level of competition in the market, including at the wholesale level, significantly determines the price of natural gas. When determining the average price at the wholesale level, the weighted average price of natural gas sold by all suppliers in this market segment is taken into account. The separation of social and commercial segments is also crucial in price setting.

As was mentioned, from the South Caucasus Pipeline, Georgia acquires the so-called social gas used to supply the population and thermal power plants with natural gas. Consequently, both wholesale and retail prices of natural gas in this segment are significantly lower compared to the commercial segment. At the wholesale level, the price of social gas can be estimated through the price of natural gas provided by the Commission in setting the customer tariff, which averages 0.30 GEL/m3, taking into account various levels of government subsidies. As for the commercial segment, in 2021 the average price of natural gas at this level of trade was 0.57 GEL/m3.

It is interesting to compare the prices of natural gas in the European wholesale markets. In contrast to Georgia, in the organized markets of European natural gas (so-called hubs), prices vary significantly by season, depending on the demand-to-supply ratio. In the organized markets of European natural gas, due to the growing demand, on the one hand, interruptions on the supply side, on the other hand, 2021 was also marked by additional fluctuations in natural gas prices compared to previous years. Recently, in parallel with the increase of connection capacities of European countries and the construction of new interconnectors, the prices of different markets tend towards each other. Figure 3.4 shows the price dynamics at the Central European Gas Hub for 2021.

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11 Source: Central European Gas Hub AG (CEGH), www.cegh.at
3.1.3.2. Natural Gas Retail Market

The change in the structure of natural gas consumption since 2014 is conditioned by the increase in natural gas consumption by the population, on the one hand, and by the decrease in the consumption of gas filling stations, on the other. In 2021, the rate of natural gas consumption by household customers increased significantly.

The structure of natural gas consumption and information on the natural gas consumed by each sector are given in Figures 3.5.a and 3.5.b.
The 9\% increase in demand in the household sector is explained by the gasification of new settlements, increased capacity of appliances of customers (mainly switching to gas central heating boilers), and state subsidies for up to 200 m\(^3\) in winter months. As for the rate of gas demand at gas filling stations, after 2015, when the use of natural gas in vehicles reached a peak, until 2020 there is a steady decline in consumption in this sector. The reasons for this were the increase in prices for natural gas, the increase in taxes on this type of fuel, prices on other types of fuel (increased competition from LPG is noteworthy), and the increase in imports.
of hybrid and electric vehicles, which mostly replace natural gas vehicles. It should be noted that the downward trend in gas demand by gas filling stations was stopped in 2021 and there was an increase in demand by 1%, which in turn is a result of rising prices for liquefied natural gas.

Demand for natural gas in other sectors of the economy has been more or less equal over the last five years. As shown in Figure 3.6, trade, repair of vehicles, houseware and personal consumption objects, manufacturing industry, electricity, gas and water generation and distribution sectors are the biggest users. They consume a total of 82% of the natural gas consumed by the commercial sector. Of these three sectors, the electricity, gas and water generation and distribution sector is the most seasonal due to the need for electricity generation by TPPs, while the other two sectors are more or less stable in natural gas consumption. The demand for natural gas broken down by sectors into months is given in Figure 3.7.

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12 This category includes the purchase of natural gas by gas filling stations.
13 Including TPPs.
In addition to the evident seasonality of TPPs, the consumption of natural gas by various commercial facilities is also characterized by seasonality. It should be noted that the sectors of health care and social assistance, public administration, education, hotels and restaurants, and other utility, social and personal service organizations use natural gas to heat the building. The full share of these sectors in total consumption is 16%.

Table 3.2 shows the share of different sectors of the economy in total consumption and the seasonality factor of these sectors.\(^{14}\). As can be seen from the table, most of the sectors are characterized by pronounced seasonality.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Seasonality Factor (%)</th>
<th>Share in total consumption (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, hunting and forestry; fishing/fishery</td>
<td>76%</td>
<td>1%</td>
</tr>
<tr>
<td>Manufacturing industry</td>
<td>55%</td>
<td>27%</td>
</tr>
<tr>
<td>Electricity, gas and water generation and distribution</td>
<td>84%</td>
<td>39%</td>
</tr>
<tr>
<td>Trade; Repair of vehicles, houseware and personal consumption objects</td>
<td>51%</td>
<td>13%</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>65%</td>
<td>3%</td>
</tr>
</tbody>
</table>

\(^{14}\) The seasonality factor is a correlation of sector demand in the winter period (months in the beginning and last three months of the year) with the annual demand of the sector. The more the factor is distanced from 50% the more seasonal the consumption is. If the factor strives to 100% the consumption is high in the winter period and if it tends to 0% the consumption is higher in the summer period, in the case of 50% consumption is equal throughout the winter and summer periods.
Transport and Communications | 51% | 1%
---|---|---
State governance | 82% | 3%
Education | 89% | 2%
Health care and social assistance | 83% | 2%
Other utility, social and personal services | 69% | 6%
Other | 58% | 3%

**Table 3.2. Characteristics of Natural Gas Consumption by other Sectors of Economy**

Consumption of natural gas by household customers is also characterized by prominent seasonality. Figure 3.8 shows the consumption of natural gas by household customers (population) per month.

![Graph showing consumption of natural gas by household customers](image)

**Figure 3.8. Consumption of natural gas by household customers (mln m3)**

As mentioned, the consumption of natural gas in the household and non-household segments (where natural gas is mainly used only for heating) is characterized by a pronounced seasonality. The difference in natural gas consumption in winter and summer is closely related to climatic conditions. In Georgia, during the winter period (which lasts almost 6 months, from October to March), the maximum values of energy consumption are related to the drop in temperature, and during the transition period, the level of energy consumption becomes quite stable until the air temperature starts to rise. Any increase in air temperature during spring-summer is reflected in a reduction in energy consumption. 15To examine the correlation between natural gas consumption and atmospheric air temperature climate, statistical data have been used – Heating Degree Day measuring the difference between the average outside temperature and base temperature.

---

15A heating Degree Day is a measurement of the severity and length of cold weather. It shows the difference between the outside temperature and the base temperature. The base temperature is a balance point i.e. minimum environmental temperature when there is no necessity to heat the building. If the average day temperature is less than the base temperature, heating is necessary and the difference between those temperatures is the degree day for the specific day.
Figure 3.9 provides information on Heating Degree Days in Tbilisi in 2012-2021. As can be seen from the figure, the Heating Degree Days were characterized by an increasing trend in 2019-2021. In 2021, the number of heating degree days increased slightly compared to 2020, which means that in 2021, buildings needed to be heated by more degrees compared to the previous year. It should also be noted that the Heating Degree Day of 2021 is almost equal to the average of the last 10 years.

![Figure 3.9. Heating Degree Days in Tbilisi](image)

<table>
<thead>
<tr>
<th></th>
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<td>2012</td>
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<tr>
<td>2013</td>
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<tr>
<td>2018</td>
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<td>2019</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>2020</td>
<td>1,297</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2021</td>
<td>1,328</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

![Figure 3.10. Actual amounts of the natural gas consumed by household customers and adjusted amounts per Heating Degree Days](image)

Figure 3.10. Actual amounts of the natural gas consumed by household customers and adjusted amounts per Heating Degree Days

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16 The source of information about the weather is National Environment Agency LEPL.
Although Figure 3.9 provides information only for the capital, it is likely that the trend is more or less similar in Georgia as a whole. Given this assumption, Figure 3.10 shows the natural gas consumed by household consumers in 2012-2021 according to the actual volumes and those adjusted by heating Degree Days. As can be seen from the figure, in 2021 the consumption of natural gas by household consumers is increased. This increase is due to the state program of subsidizing up to 200 m³ in the winter months and gasification of new settlements.

In 2021, the process of gasification of new settlements continued, bringing the number of retail consumers (household and non-household) to 1,444,616 at the end of the reporting year (see Figure 3.11). In 2021, 84,779 new users were added to the sector.

![Graph of Natural Gas Consumers](image)

Figure 3.11. Number of Natural Gas Consumers

A significant proportion of the total number of consumers is still occupied by inactive consumers (who did not consume natural gas), who are actually passive throughout the whole year. Figure 3.12 shows the number of active and inactive users by month. As can be seen from the figure, a significant portion of the consumers, even though they are connected to the distribution network, do not consume natural gas. These facilities are closed and/or are seasonal residences. Although distribution licensees provide a service to ensure the delivery of natural gas to these inactive customers and therefore incur costs, they are not reimbursed by those consumers who do not consume natural gas under the existing tariff methodology. The tariff is set per unit of consumed natural gas and does not include capacity/fixed components. This circumstance is one of but not the only reason why we should start discussing the integration of a capacity/fixed component in the tariff.

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17 According to the deviation from the average Heating Degree Days of 2012-2018.
Consumption of natural gas by household consumers varies by city and rural areas, as well as by region. In small towns, boroughs, and especially villages, the average consumption of natural gas per household is significantly lower than in cities, as firewood is still actively used as the source of fuel. The exceptions are Mtskheta-Mtianeti and Adjara regions. High consumption in Mtskheta-Mtianeti can be explained by direct subsidies for natural gas tariffs in this region, especially in cold climates and the access to firewood, while the main reason for high consumption in rural settlements of Adjara region is the developed tourism sector. Figure 3.13 shows the natural gas consumption per household in urban and rural areas by region.
For most people and businesses, natural gas is used for cooking, and heating water and premises. The increase in gasification of new settlements, the number of new consumers connected to the network, and consumption are most evident in the group of consumers using natural gas exclusively for cooking.

Due to the arrangement of the wholesale market, the prices of natural gas in the retail market also differ significantly according to the social (residents and TPPs) and commercial consumers.

Consumer tariffs for household consumers are set by the Commission and tariff regulation is discussed in Chapter 3.3. As for non-household consumers, the price of natural gas in this sector is not regulated and it is determined by the contract between the customer and the supplier. The price of natural gas for non-household customers connected to the distribution network shall be determined under the conditions established by the Commission, through a public offer, which implies that the supplier is obliged to sell natural gas only at a pre-offered price. The suppliers have no such obligation to the commercial consumers connected to the transportation system. Given the above, the average price of natural gas for commercial consumers connected to the distribution network was 0.63 GEL/m³, while the same figure for commercial customers connected to the transportation system was more than 0.59 GEL/m³. It is necessary to put retail and direct customers on an equal footing, on which the regulatory commission will continue to work with the relevant institutions.

The consumer price structure of end users considering all its components is given in Figure 3.14.

Figure 3.14. Customer price/tariff structure of natural gas

In 2021, the Commission agreed on five-year development plans for the distribution network of Tbilisi Energy LLC, Socar Georgia Gas LLC, SakOrgGas JSC, Telavgazi LLC, Sachkheregazi LLC, and Didi Dighomi LLC. The total cost of network investments planned for 2022-2026 amounted to 123 mln GEL.

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The price of natural gas supplied to TPPs and non-energy consumption is not included in this calculation, because given their size, this would not affect prices intended for other consumers.
3.2. Licensing

After the entry into force of the Law of Georgia on Energy and Water Supply, the natural gas distribution and transportation licensees were obliged to re-authorize. Natural gas transportation and distribution licenses issued before the enactment of the law are temporarily in force and their holders continue to provide relevant services until the unbundling is completed in accordance with the law. These licenses will be automatically terminated upon the entry into force of a new license under the law.

According to the latest data of the reporting period, 23 licensees were operating in the natural gas sector, including one in the field of transportation and 22 in the field of distribution.

3.2.1. Natural Gas Transportation

The natural gas transportation system consists of gas pipelines and their component equipment operating or designed at a pressure of more than 1.2 MPa and through which natural gas transportation is carried out by a natural gas transportation licensee. The Commission has issued the only natural gas transportation license to the Georgian Gas Transportation Company LLC, which transports natural gas throughout the whole territory of Georgia.

Today the transportation system has 5 entry points from which 1 represents the entry point from the local extraction. Information about each point is given in Figure 3.15.
1. The capacity of the gas pipeline coming from Russia ("Mozdok-Saguramo") is 20 mln m³/day. Through this pipeline the natural gas is supplied to Armenia;
2. The capacity of the gas pipeline coming from Azerbaijan ("Kazakh-Saguramo") is 10 mln m³/day;
3. The designed capacity of the transit gas pipeline ("South Caucasus Pipeline") from Azerbaijan is 64⁹ mln m³/day. However, Georgia has one connection point to the transportation system with a capacity of 5.5 mln m³/day;
4. The injection of natural gas from local extraction entry point depends on the average daily production of natural gas;
5. The total capacity of the reverse gas pipeline to Armenia is 3.14 million m³/day.

Figure 3.15. Natural gas entry points in Georgia

In parallel with the increase in consumption, it is important to optimize the entry capacities by increasing or diversifying them in order to ensure the security of supply. One of the ways to increase the security of supply is the existence of a natural gas storage facility.

In 2017, a normative loss was set for the transportation licensee, for the first time, under the Rule for Calculation of Normative Natural Gas Losses in the Transportation System approved by the Commission Resolution № 4, of March 28, 2017. This methodology motivates the transportation licensee to reduce the actual losses and consequently receive the benefits of the reduction. At the same time, the reduction in actual losses in future tariff periods will also affect consumers - reducing the volume of losses to be reimbursed by the tariff. As a result of the measures taken by the transportation licensee, losses in the natural gas transportation system were reduced in 2018-2021. The amount of losses in the natural gas transportation system is given in Figure 3.16.

19 Total capacity of SCP and SCPX.
3.2.2. Distribution of natural gas

As of December 31, 2021, there were 22 distribution licensees operating in Georgia. Among them are three large licensees (Tbilisi Energy LLC, Socar Georgia Gas LLC, SakOrgGas JSC). These three major distribution licensees accounted for 90% of the total distributed gas (see Figure 3.17).

3.2.3. License Applications and Changes in the License Register
In 2021, the Commission did not issue a new license for the distribution of natural gas. As for the changes in the existing natural gas distribution licenses, 2 natural gas distribution licenses were modified during the reporting period, namely, changes were made in the licenses of Socar Georgia Gas LLC and SakOrgGas JSC. The license areas of the mentioned companies were expanded.

In addition, in 2021, three natural gas distribution licenses were revoked - Chiraghdani XXI Saukune LLC, Taba LLC, and Arzu-Gas LLC:

- According to the letters of Taba LLC and Arzu-Gas LLC, the companies sold the assets and demanded the revocation of natural gas distribution licenses. As the assets of the above companies were transferred to the ownership of Tbilisi Energy LLC, based on a license issued by the Commission’s Decision №14 / 4 of June 1, 2006, the natural gas distribution activities to the settlements located in the operation area of Taba LLC and Chiraghdani XXI Saukune LLC (Taba LLC - village Tabakhmela, and Chiraghdani XXI Saukune LLC - village Dighomi) will be carried out by Tbilisi Energy LLC. The licenses issued for Taba LLC and Chiraghdani XXI Saukune LLC were revoked.

- As for Arzu-Gas LLC, according to the letter submitted to the commission, due to financial difficulties, the company could not continue its activities and requested the revocation of the natural gas distribution license. The real estate assets located in the license area of Arzu-Gas LLC (village of Vakhtangisi, Gardabani Municipality) - natural gas distribution network, were transferred to Socar Georgia Gas LLC on the basis of a purchase agreement and the company requested a change in its license area. Due to the request of Arzu-Gas LLC for revocation of the license and the circumstances that Socar Georgia Gas LLC applied for modification of license to the Commission in the mentioned area, the natural gas distribution license of Socar Georgia Gas LLC was modified and the settlement in the operation area of Arzu-Gas LLC was added to the area, on the one hand, and at the same time, the Commission made a decision to revoke the natural gas distribution license of Arzu-Gas LLC.

During the reporting period, the Commission also initiated public administrative proceedings for the issuance of individual administrative-legal acts of the Commission on the revocation of the natural gas distribution licenses of Gaztrans Service LLC and Akriani 2006 LLC.

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**Figure 3.18. Dynamics of the number of natural gas distribution licensees**
3.2.4. Results of Technical Regulation

Natural gas is supplied to Georgia from various sources, such as local production and imports from neighboring countries. Therefore, the technical parameters of natural gas are different.

Pursuant to the current legislation, the quality of natural gas is defined by the interstate standard GOST 5542-87, according to which the minimum allowed calorific value of natural gas is 7,600 kcal/m³ under standard conditions (20°C and 1 bar pressure). The average calorific value of imported gas in Georgia by months is given in Figure 3.19, which shows that the difference between the calorific values of natural gas received during the year in the natural gas transportation system of Georgia is minimal.

![Figure 3.19](image)

*Figure 3.19 Average calorific values of natural gas imported in Georgia by months (kcal/m³)*

3.3. Pricing and Tariff Regulation

3.3.1. Tariff Regulation and Current Tariffs of the Sector

Natural monopoly activities of the transportation and distribution of natural gas are fully subject to the tariff regulation of the Commission. As for the natural gas supply, the natural gas supply activity for specific customer categories was deregulated under Decree №69 of the Minister of Energy of Georgia, September 25, 2007, on Deregulation and Partial Deregulation of Natural Gas Supply Activity, for non-household customers and household customers gasified after September 1, 2007 (after August 1, 2008, in Tbilisi) supply tariffs are
deregulated and they are supplied with natural gas without setting the tariff with the conditions and prices publicly offered by the supplier.

The order was amended by Order №52 of the Minister of Energy of Georgia, of August 14, 2017, according to which, “this order does not apply to natural gas supply to individuals (residents-household consumers) by the natural gas suppliers, for which the consumer tariff for natural gas supply to individuals (residents-household consumers) was set by the Georgian National Energy and Water Supply Commission in the period after July 1, 2017.

Out of 23 licensed companies subject to tariff regulation in the natural gas sector operating in 2021, Georgian Gas Transportation Company LLC is the natural gas transportation licensee, for which natural gas transportation tariffs were set for 2020-2022, and 22 companies are the natural gas distribution licensees. For the majority of distribution licensees (except for 3 enterprises) tariffs for distribution, supply and consumption of natural gas for 2020-2022 have been set and, consequently, for the supply of natural gas in their area, after the tariffs are set by the Commission, natural persons (population and household consumers) are no longer subject to Decree №69 of the Minister of Energy of Georgia, September 25, 2007, on Deregulation and Partial Deregulation of Natural Gas Supply Activity.

3.3.1.1. Natural Gas Transportation Tariff

During the reporting period, the transportation tariff was set in accordance with Commission Resolution №38, of December 24, 2019, on amendment of Commission Resolution №30, of December 30, 2005, on Natural Gas Tariffs, valid from January 1, 2020, to January 1, 2023.

3.3.1.2. Natural Gas Distribution Tariffs

For the majority of natural gas distribution companies (18 enterprises), the Commission has set long-term tariffs for the supply, distribution and consumption of natural gas for 2020-2022. However, despite the significant growth in natural gas prices worldwide, the purchase prices of natural gas supplied to the residents in the reporting year were stable in US dollars and did not change. Although, during the tariff regulation period 2020-2022, the exchange rate of the national currency to the US dollar increased significantly, which, in turn, increased natural gas supply tariffs for households.

Pursuant to Article 27 of the Natural Gas Tariff Calculation Methodology (hereinafter - Tariff Methodology) approved by the Commission Resolution №33 of December 25, 2014 (adjustment for natural gas supply tariff), if in the regulatory period, the natural gas purchase price in national currency differs from the projected price, the Commission will adjust the supply tariff for the next tariff regulatory period by the difference between the actual and planned prices of natural gas in the national currency using the adjustment principles set out in the Methodology. The adjustment of the natural gas supply tariff by the purchase price of natural gas is based on the following factors:

A) Contract price for the purchase of natural gas purchase;

B) National currency exchange rate to the currency of contract price for the purchase of natural gas purchase.
In addition, according to Article 28, Paragraph 4 of the Tariff Methodology, the Commission is authorized to adjust the natural gas supply tariff of the relevant tariff year(s) by natural gas purchase price in a national currency based on the same tariff methodology before the end of the relevant tariff regulatory period, as well as on the basis of a justified request submitted by the company during the relevant tariff year, only once.

Taking into account the above-mentioned legal grounds, in order to adjust the natural gas supply tariff in 2021, Tbilisi-Energy LLC, Varketilairi LLC, Energokavshiri JSC, Gasko + LLC, Kamari M LLC, and Didi Dighomi LLC applied to the Commission with a tariff application.

Taking into account the current situation concerning the currency exchange rate, it was considered reasonable to include the exchange rate determined by the state budget for the year 2021 - 1 US dollar = 3.3137 GEL in the supply tariff for the purchase of natural gas to be supplied to household customers in the license area of the company, in addition to compensation for the losses received for the past period.

Taking into account the above-mentioned circumstances, natural gas supply tariffs, and accordingly, the consumption tariffs were determined for household consumers in the areas of Tbilisi Energy LLC, Varketilairi LLC, Energokavshiri JSC, Didi Dighomi LLC, Gasko + LLC, and Kamari M LLC, approved by the Commission Resolutions №10 of May 27, 2021, №21, №22, №23 of June 28, 2021, №49 and №50 of November 25, 2021, and validity period was determined for the period until January 1, 2023.

The natural gas distribution tariffs of some natural gas distribution licensees were also adjusted in the reporting year. In particular, according to the first and third paragraphs of Article 28 of the Tariff Methodology, natural gas distribution/wheeling tariffs are subject to adjustment if the analysis of the annual report of the company reveals that the volume of adjustment for the reporting year is equal to or exceeds 10% of the income receivable by the distribution/wheeling tariff with a positive or negative sign in the corresponding year. The Commission is required to carry out a regulatory audit of the costs of the components to be adjusted in order to determine the exact extent of the adjustment.

Within this framework, the Commission carried out the study of the 2020 audited financial statements submitted to the Commission by the distribution licensees in relation to the indicators reflected in the tariff calculation for each of them, and in this context, as a result of the initial analysis, it was revealed that the difference between the planned and actual indicators of the components subject to correction exceeded 10% in relation to the following licensees: Telavgazi LLC, Gogochuri and Company LLC, DVS LLC, Gama LLC and Sachkheregazi JSC.

The mentioned companies, based on the relevant letters of the Commission, ensured the submission of tariff applications to the Commission in the manner and form established by the Commission. In addition, Telavgazi LLC, DVS LLC and Sachkheregazi JSC demanded the adjustment of the natural gas supply tariff along with the adjustment of the natural gas distribution tariff.

The audit teams were established by the relevant orders of the Chairman of the Commission, following the principles and requirements outlined in the Regulatory Cost Audit Rules in the Natural Gas Sector approved by Annex 11 of the Commission Resolution №33 of December 25, 2014, and Article 22 of the Tariff Methodology. The actual technical and economic indicators of companies in the tariff regulatory period of 2020-2022 were analyzed in detail. The adjustment components were determined in the part of the supply tariff for Gogochuri and Company LLC and Gama LLC, and in terms of both supply and distribution tariffs - for Telavgazi LLC, DVS LLC, and Sachkheregazi JSC.
In view of the above circumstances, tariffs for natural gas supply, distribution, wheeling and consumption were determined for Telavgazi LLC, DVS LLC and JSC Sachkheregazi LLC, which were approved by the Commission Resolutions №44, №46, and №48 of 2021, and natural gas distribution tariffs were set for Gogochuri and Company LLC and Gama LLC, which were approved by the Commission Resolutions №45 and №47 of 2021.

The above adjustments to the natural gas supply and distribution tariffs made in 2021 are given in Tables №3.3 and №3.4.

<table>
<thead>
<tr>
<th>Company</th>
<th>Long-term tariff, 2020-2022</th>
<th>As a result of adjustment</th>
<th>Tariff change</th>
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</thead>
<tbody>
<tr>
<td>Tbilisi Energy LLC</td>
<td>26.810</td>
<td>33.449</td>
<td>6.639</td>
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<tr>
<td>Energokavshiri LLC</td>
<td>28.761</td>
<td>35.838</td>
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<tr>
<td>Varketilairi LLC</td>
<td>28.355</td>
<td>35.461</td>
<td>7.106</td>
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<td>Didi Dighomi LLC</td>
<td>30.221</td>
<td>35.420</td>
<td>5.199</td>
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<td>Kamari M LLC</td>
<td>26.040</td>
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<td>Gasko + LLC</td>
<td>25.766</td>
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<td>Sachkheregazi JSC</td>
<td>27.994</td>
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<tr>
<td>DVS LLC</td>
<td>32.419</td>
<td>39.266</td>
<td>6.847</td>
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Table 3.3. Adjustment of natural gas supply tariffs (Tetri / kWh)

<table>
<thead>
<tr>
<th>Company</th>
<th>Long-term tariff, 2020-2022</th>
<th>As a result of adjustment</th>
<th>Tariff change</th>
</tr>
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<tbody>
<tr>
<td>Telavgazi LLC</td>
<td>22.592</td>
<td>18.911</td>
<td>-3.681</td>
</tr>
<tr>
<td>Sachkheregazi JSC</td>
<td>13.683</td>
<td>4.554</td>
<td>-9.129</td>
</tr>
<tr>
<td>Gama LLC</td>
<td>1.671</td>
<td>1.864</td>
<td>0.193</td>
</tr>
<tr>
<td>Gogochuri and Company LLC</td>
<td>1.510</td>
<td>1.740</td>
<td>0.230</td>
</tr>
<tr>
<td>DVS LLC</td>
<td>2.550</td>
<td>2.728</td>
<td>0.178</td>
</tr>
</tbody>
</table>

Table 3.4. Adjustment of natural gas distribution tariffs (Tetri / cubic meter)

In the reporting year, structural changes were made in the natural gas distribution sector, in particular, by the relevant decisions of the Commission, the licenses for natural gas distribution were revoked for Taba
LLC, Chiraghdni XXI Saukune LLC and Arzu Gas LLC. Accordingly, by the Commission Resolution №24 of 28 June 2021, the mentioned companies were removed from the Commission Resolution №30 of December 30, 2005 on Natural Gas Tariffs.

The final consumer tariffs set in the area of natural gas distribution licensees with constituent components are presented in Annex №8.

3.3.2. Analysis of the implementation of investment projects

![Figure 3.20. Investment in the natural gas sector (thousand GEL)](image)

According to unaudited information, the five largest companies operating in the natural gas sector (Georgian Gas Transportation Company LLC and Georgian Oil and Gas Corporation JSC - in the transportation sector; Tbilisi Energy LLC, Socar Georgia Gas LLC, SakOrgGas JSC - in the distribution sector) planned to invest 56,112,000 GEL by 2020. Actual investment constituted 97,115,000 GEL (Fig. 3.20), among them, 82,437,000 GEL was invested by the companies itself and 14,678,000 GEL was financed by the third parties (Figure 3.21). The essential difference between the planned and actual investments is largely related to the purchase of gas pipelines in the amount of 21,394,000 GEL from the state by Socar Georgia Gas LLC. It should also be noted that for the construction and rehabilitation of natural gas pipelines, investments in the amount of 5,036,000 GEL were made by Georgian Oil and Gas.
3.3.2.1. Natural Gas Transportation

The cost of investment projects planned for 2021 on the high-pressure main gas pipelines was 6,215,000 GEL, and actual investment amounted to 5,036,000 GEL, among them, 33.25% (1,674,000 GEL) was financed by Georgian Oil and Gas Corporation LLC and 66.75% (3,362,000 GEL) - with the funds of Georgian Gas Transportation Company LLC.

These investments were mainly carried out in the local works on the main gas pipelines, construction of gas distribution stations, arrangement of solar cells, ball valves, regulators and turbine meters. Also in the reporting year, fixed office equipment, special purpose equipment, etc. were purchased.

3.3.2.2. Natural Gas Distribution Activities

The planned investment in the natural gas distribution sector by 2021 was 49,898,000 GEL, including the planned investment by Socar Georgia Gas LLC - 13,800,000 GEL, JSC SakOrgGas - 18,627,000 GEL, and Tbilisi Energy LLC - 17,471,000 GEL. In the same year, a total of GEL 92,079,000 was invested, including 77,401,000 GEL - with own funds, and 14,678,000 GEL - with the financing of third parties (consumers).

A significant share of actual investments in natural gas distribution in 2021 in the amount of 57.48% was made by Socar Georgia Gas LLC, amounting to 52,932,000 GEL. Among them, the 80 km gas distribution network was created and put into operation with its funds during the reporting year, which will provide gasification to 998 new potential customers. Also, the capital construction of the network branches (dead ends)
with a length of 164.6 km was carried out. In the same year, the company purchased gas pipelines worth 21,394,000 GEL from the state. In addition, 33,600 new subscribers were connected to the natural gas distribution network.

JSC SakOrgGas invested a total of 10,725,000 GEL in 2021 with its funds. In particular, during the reporting year, the company built new gas pipelines up to 56 km in length in different regions and rehabilitated the existing networks, as a result of which 8,000 new subscribers were connected to the distribution network.

As for the volume of investments planned by Tbilisi Energy LLC in 2021, it amounted to 17,471,000 GEL. Actual investment projects in the amount of 28,423,000 GEL were implemented, including 13,745,000 GEL - with their funds, and 14,678,000 GEL - with funding from the third parties. The cost of construction of the gas distribution network and rehabilitation/reconstruction works constitutes a significant share of the investments. Gas metering equipment, office inventory, and intangible assets were also purchased. New customers were gasified, meters were taken out of the customer's areas, etc., which significantly contributes to the city's safe gas supply, regulation of natural gas pressure, accident reduction, better arrangement of metering, and reduction of both technical and commercial losses of natural gas.

In addition, in the previous years Tbilisi Energy LLC started and intensively continues the process of building a geographic information system of natural gas distribution network, within the framework of which the existing network was georeferenced. The purpose of this process is to compile an accurate description of the gas pipelines owned by the company and their subsequent registration, which is important for the proper development and planning of gas supply infrastructure in the context of the growing development of the city.

Investments in the natural gas distribution network by licensees are given in Figure 3.23.
3.3.3. Comparative analysis of tariffs

In order to assess the severity of consumer tariffs in force in Georgia, Table 3.5 and Figure 3.24 illustrate the natural gas household tariffs operating in different countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Household Tariff (Tetri/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>28.489</td>
</tr>
<tr>
<td>Georgia</td>
<td>55.454</td>
</tr>
<tr>
<td>Turkey</td>
<td>80.136</td>
</tr>
<tr>
<td>Moldova</td>
<td>102.560</td>
</tr>
<tr>
<td>Armenia</td>
<td>105.807</td>
</tr>
<tr>
<td>Ukraine</td>
<td>112.645</td>
</tr>
<tr>
<td>Hungary</td>
<td>129.525</td>
</tr>
<tr>
<td>Romania</td>
<td>133.358</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>135.480</td>
</tr>
<tr>
<td>Serbia</td>
<td>145.191</td>
</tr>
<tr>
<td>Lithuania</td>
<td>152.543</td>
</tr>
<tr>
<td>Latvia</td>
<td>154.110</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>156.545</td>
</tr>
<tr>
<td>Country</td>
<td>Tariff (Tetri / m³)</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Croatia</td>
<td>160.236</td>
</tr>
<tr>
<td>Poland</td>
<td>168.688</td>
</tr>
<tr>
<td>Slovakia</td>
<td>181.108</td>
</tr>
<tr>
<td>Estonia</td>
<td>183.084</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>184.293</td>
</tr>
<tr>
<td>Greece</td>
<td>195.726</td>
</tr>
<tr>
<td>Belgium</td>
<td>200.586</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>208.014</td>
</tr>
<tr>
<td>Slovenia</td>
<td>228.281</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>251.748</td>
</tr>
<tr>
<td>Ireland</td>
<td>263.157</td>
</tr>
<tr>
<td>Austria</td>
<td>271.574</td>
</tr>
<tr>
<td>Germany</td>
<td>272.230</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>289.759</td>
</tr>
<tr>
<td>France</td>
<td>300.756</td>
</tr>
<tr>
<td>Italy</td>
<td>305.821</td>
</tr>
<tr>
<td>Spain</td>
<td>306.093</td>
</tr>
<tr>
<td>Portugal</td>
<td>371.383</td>
</tr>
<tr>
<td>Denmark</td>
<td>378.040</td>
</tr>
<tr>
<td>Netherlands</td>
<td>390.216</td>
</tr>
<tr>
<td>Sweden</td>
<td>563.153</td>
</tr>
</tbody>
</table>

*Table 5. Household tariffs in different European countries (Tetri / m³) (including taxes)*

*Figure 3.24. Household tariffs in different European countries (Tetri / m³) (including taxes)*
4. Water Supply Sector

4.1. Overview of the sector

4.1.1 Regulatory Framework

The water supply sector has been regulated by the Commission since 2008. The water supply sector is regulated based on the following laws and by-laws:

- Law of Georgia on Energy and Water Supply;
- Rules for Supply and Consumption of Drinking Water approved by the Commission Resolution №32 of November 26, 2008;
- Service Quality Rules approved by the Commission Resolution №20 of June 28, 2021;
- Investment Appraisal Rule approved by the Commission Resolution №36 of July 29, 2021;
- The Rule for Calculation of Normative Losses of Drinking Water approved by the Commission Resolution №45 of December 26, 2017;
- Methodology for Calculation of Water Supply Tariffs approved by the Commission Resolution №21 of August 10, 2017;

4.1.2 Licensees and Supply Coverage Area

As of December 31, 2021, 9 water supply licensees are operating in the water supply sector in Georgia. According to the National Statistics Office, as of January 1, 2021, the population of Georgia is 3,728,600 people. 67.0% of the population (2,498,115 people) are provided with drinking water by water supply licensees, while 33.0% (1,230,485 people) are provided with water by local self-government units. In total, the number of consumers increased by 5.8% compared to last year, amounting to 63,329 subscribers (see Table 4.1).

<table>
<thead>
<tr>
<th>N</th>
<th>Company name</th>
<th>Ownership</th>
<th>Number of customers</th>
<th>Consumers per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Georgian Water and Power LLC</td>
<td>Private</td>
<td>586,025</td>
<td>1,165,740 46.7</td>
</tr>
<tr>
<td></td>
<td>(GWP)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Out of the licensees operating in the water supply sector, 1 is a state-owned company, 5 is a municipal company and 3 is a privately owned company. See Table 4.1 for details.

<table>
<thead>
<tr>
<th>System description</th>
<th>Water supply systems</th>
<th>Supplied population</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Category</td>
<td>The size of the system</td>
<td>Number of customers</td>
<td>Amount</td>
</tr>
<tr>
<td>I</td>
<td>Very Big</td>
<td>&gt; 100,000</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Big</td>
<td>25,000 - 100,000</td>
<td>8</td>
</tr>
<tr>
<td>II</td>
<td>Medium</td>
<td>5,000 - 25,000</td>
<td>32</td>
</tr>
<tr>
<td>III</td>
<td>Small</td>
<td>500 - 5,000</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Very Small</td>
<td>&lt; 500</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>67</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2 General characteristics of water supply systems of licensed companies.
4.2. Licensing and monitoring of license conditions

4.2.1 Licensing

Pursuant to Article 161 of the Law of Georgia on Energy and Water Supply, water supply licensees were required to apply to the Commission for authorization (re-licensing) within 2 months after the enactment of this law. Since the license applications were not submitted in a complete form by the licensees, the Commission identified a deficiency, for remedy of which the licensees were given additional time. Taking into account the remarks of the Commission, the companies - Batumis Tskali LLC and Sachkheris Tskalkanali LLC - again applied to the Commission with license applications and submitted the documents required by law. The commission reviewed the submitted applications and re-issued water supply licenses to both companies. As for the other licensees, the authorization is planned for 2022.

Due to the merger of Georgian Water and Power LLC and Mtskhetis Tskali LLC, the area of operation of Georgian Water and Power LLC has increased, and the company has taken over the drinking water supply network in Mtskheta Municipality and now provides drinking water to existing consumers. As for Mtskhetis Tskali LLC, the company requested the revocation of the water supply license issued to it. Since there were no circumstances that could pose a threat to the safe, uninterrupted, and reliable supply of adequate quality drinking water to the consumers of Mtskheta Municipality, the Commission complied with the request of Mtskhetis Tskali LLC and revoked the water supply license issued to it.

Sagarejo LLC applied to the Commission and informed that the conditions set by the Commission Decision №66/1 of October 15, 2020, were fulfilled, according to which a preliminary water supply license was issued and the license was activated. The company submitted to the Commission the conclusion of the Levan Samkharauli National Forensics Bureau LEPL, which confirms that the water supply system complies with the technical regulations in force in Georgia. In addition, the company presented the results of the laboratory test of drinking water samples taken from the water supply systems of the village Kakabeti by the LEPL National Food Agency, which fully complies with the technical regulations of drinking water. Other documents required by law (schematic diagram, list of assets, etc.) were also submitted. After reviewing the submitted documents, the Commission considered that the conditions set out in the decision were met and made a decision to validate a water supply license (№018, series 3) for Sagarejo LLC.

Table 4.3. provides detailed information on licenses of acting licensees and their issuance dates.

<table>
<thead>
<tr>
<th>N</th>
<th>Company name</th>
<th>License number</th>
<th>Date of license issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United Water Supply Company of Georgia (UWSCG) LLC</td>
<td>№001, Series 3</td>
<td>10/11/2011</td>
</tr>
<tr>
<td>2</td>
<td>Soguri LLC</td>
<td>№003, Series 3</td>
<td>24/11/2011</td>
</tr>
<tr>
<td>3</td>
<td>Georgian Water and Power LLC (GWP)</td>
<td>№005, Series 3</td>
<td>21/12/2011</td>
</tr>
<tr>
<td>4</td>
<td>Rustavis Tskali LLC (RWC)</td>
<td>№007, Series 3</td>
<td>21/12/2011</td>
</tr>
<tr>
<td>5</td>
<td>Kobuletis Tskali LLC (KWC)</td>
<td>№010, Series 3</td>
<td>05/01/2012</td>
</tr>
<tr>
<td>6</td>
<td>Marneulis Sopetskali LLC (MVWC)</td>
<td>№015, Series 3</td>
<td>31/05/2012</td>
</tr>
<tr>
<td>7</td>
<td>Sagarejo LLC (SVWC)</td>
<td>№018, Series 3</td>
<td>15/10/2020</td>
</tr>
</tbody>
</table>
4.2.2 Monitoring of license conditions

The Commission constantly monitors the fulfillment of the license conditions of the water supply licensees through various means, including the reporting forms submitted by the licensees to the Commission.

In 2021, the complaints of consumers submitted to the Commission regarding the taking of meter readings by Georgian Water and Power LLC and the accrual of the relevant fee became especially frequent. To investigate the matter, the Commission requested from the company the documentation related to the taking of the meter reading and the accrual of the fee. From the information provided, it was found that with a large proportion of consumers, the company did not take meter readings for the entire year or took them at certain intervals and not according to the established rule. In addition, the fee was not charged at the current year rate. Given the above circumstances, at its public meeting on August 12, 2021, the Commission considered the issue of violation of the license terms of Georgian Water and Power LLC. The commission found that the company had disregarded the requirements of the rules, for which Georgian Water and Power LLC was fined 75,000 GEL.

The Commission conducted an unscheduled audit of the costs of Georgian Water and Power LLC and Rustavis Tskali LLC. It covered the investigation of various issues such as: the connection of new consumers, number of employees and gross payroll, equipment used in operations, etc. The results of the audit were informed to the Company in writing and instructed to take into account the remarks, opinions, and recommendations reflected in it during the 2021-2023 regulatory period.

The Commission has studied in detail the situation in all licensed water supply companies during 2021. The study revealed a deterioration in the level of service on certain indicators (for example, losses, accidents, schedule). There are also problems with reimbursement of costs, namely, five companies cannot cover operating costs with the current tariff. Given the current situation, the Commission plans to implement certain types of changes in the existing regulations in 2022-2023, which will ensure the improvement of both the technical and financial conditions of the companies.

4.3. Criteria for Evaluation and Comparative Analysis of the Main Activities of Licensed Companies

4.3.1 Evaluation Criteria

By Resolution № 36 of July 29, 2021, the Commission approved the "Investment Appraisal Rule in the Water Supply Sector", one of the main purposes of which is to determine the criteria for evaluating the performance of water supply licensees and approve their existing level and targets.

In selecting the criteria, the Commission relied on the best international practices (International Water Organization - IWA) and the current situation and challenges in the sector. As a result, 11 key performance indicators were selected, namely:

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20 Batumis Tskali LLC has been licensed and has been carrying out water supply activities since 2011. The company was re-authorized in 2021 following the law.

21 Sachkheris Tskalkanali LLC has been licensed and has been providing water supply activities since 2012. The company was re-authorized in 2021 following the law.

22 For more information, see Chapter 4.3.2 Comparative Analysis, Figure 4.5.
1. Supplied drinking water quality index, according to which the quality of drinking water supplied to customers by licensees is assessed;
2. Index for determining the area of coverage of drinking water supply, according to which the area of coverage of the drinking water supply network of an individual licensee in its territorial unit of operation is assessed;
3. Drinking water supply schedule, according to which the continuity of drinking water supply to customers by the water supply company is estimated;
4. Sewage service coverage area index, according to which the sewage service coverage area of a particular licensee is assessed in the territorial unit of its operation;
5. Quality index of a liquid discharged into the water reservoirs through the sewerage system, according to which the compliance of quality of the liquid discharged into the water reservoirs by a separate company with the norms in force in Georgia is evaluated;
6. Index of coverage with fire hydrants. This indicator assesses the coverage area of the number of fire hydrants in the network of water supply licensees;
7. Drinking water pipeline accident index. The indicator assesses the number of damages to the drinking water supply pipelines of the licensed water supply company (per 100 km, per year);
8. Wastewater pipeline accident index. The indicator estimates the number of damages to the wastewater pipelines of water supply licensees (per 100 km, per year);
9. Drinking water system leakage index. This indicator estimates the volume of drinking water loss in the water supply systems of water supply licensees;
10. Service Personnel Performance Index. The indicator estimates the number of people employed by water supply licensees based on the size of a particular water supply system;
11. Drinking water distribution pipeline flexibility index. This indicator estimates the average number of customers disconnected in the event of a single failure, taking into account the current state of the network of a particular water supply licensee.

For the above criteria, annually, no later than April 1, the Commission shall set:
A) lower limit - means the worst indicator among water supply licensees;
B) existing level - means an indicator of current status for a specific licensee;
C) target - which is determined based on the best practices of the developed countries of the world.

These criteria are defined before the licensees submit their investment plans to the Commission. Accordingly, pursuant to the Investment Appraisal Rule in the Water Supply Sector, licensees are obliged to take into account the criteria set by the Commission when drafting their investment plans and they shall ensure the development of directions that will improve the existing level of service at the expense of their investments.

By Decision №14/1 of April 1, 2021, the Commission approved the lower limit, the current level, and the target of key performance indicators (see Table 4.4).
<table>
<thead>
<tr>
<th>Key Performance Indicators</th>
<th>Quality of drinking water</th>
<th>Wastewater quality</th>
<th>Index of coverage with fire hydrants</th>
<th>Accidents on drinking water pipelines</th>
<th>Accidents on wastewater pipelines</th>
<th>Water system leakage index</th>
<th>Service Personnel Performance</th>
<th>Distribution Pipeline Flexibility Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower limit</td>
<td>88.6</td>
<td>9.44</td>
<td>95.6</td>
<td>2.07</td>
<td>420.7</td>
<td>1,648.2</td>
<td>90.9</td>
<td>24.3</td>
</tr>
<tr>
<td>GWP Tbilisi</td>
<td>99.9</td>
<td>24.0</td>
<td>95.6</td>
<td>9.5</td>
<td>420.7</td>
<td>879.1</td>
<td>53.6</td>
<td>10.8</td>
</tr>
<tr>
<td>GWP Mtskheta</td>
<td>97.6</td>
<td>24.0</td>
<td>-</td>
<td>2.37</td>
<td>301.7</td>
<td>800.5</td>
<td>22.5</td>
<td>12.12</td>
</tr>
<tr>
<td>RWC</td>
<td>99.9</td>
<td>24.0</td>
<td>95.6</td>
<td>2.07</td>
<td>252.9</td>
<td>1,648.2</td>
<td>90.9</td>
<td>11.3</td>
</tr>
<tr>
<td>UWSC G</td>
<td>99.9</td>
<td>19.3</td>
<td>-</td>
<td>N/A</td>
<td>235.9</td>
<td>875.5</td>
<td>51.7</td>
<td>6.82</td>
</tr>
<tr>
<td>BWC</td>
<td>99.5</td>
<td>24.0</td>
<td>100</td>
<td>36.1</td>
<td>148.6</td>
<td>23.9</td>
<td>57.4</td>
<td>24.3</td>
</tr>
<tr>
<td>KWC</td>
<td>100</td>
<td>24.0</td>
<td>100</td>
<td>62.4</td>
<td>128.5</td>
<td>341.8</td>
<td>28.9</td>
<td>19.8</td>
</tr>
<tr>
<td>SWC</td>
<td>100</td>
<td>24.0</td>
<td>N/A</td>
<td>N/A</td>
<td>11.8</td>
<td>59.2</td>
<td>0.96</td>
<td>10.6</td>
</tr>
<tr>
<td>MVWC</td>
<td>88.6</td>
<td>9.4</td>
<td>-</td>
<td>3.58</td>
<td>124</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Soguri</td>
<td>100</td>
<td>18.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21.0</td>
<td>1.0</td>
<td>90.0</td>
</tr>
<tr>
<td>Target</td>
<td>100</td>
<td>24.0</td>
<td>100</td>
<td>25.0</td>
<td>25.0</td>
<td>1.0</td>
<td>5.0</td>
<td>500.0</td>
</tr>
</tbody>
</table>

Table 4.4 Key Performance Indicators of Licensees

4.3.2 Comparative analysis.

-The information on the metering of each licensee is provided in Figure
4.1. As can be seen from the figure, Soguri LLC and Kobuletis Tskali LLC do not have metered household customers. Among other licensees, Georgian Water and Power LLC has the lowest metering rate (=40%) and Sachkheris Tkalkanali LLC has the highest (=98%). In 2021, the largest number of subscribers with meters in comparison with the previous year increased at the United Water Supply Company of Georgia LLC (by 14.6%). It should be noted that in some cases, consumers who are supplied with drinking water at relatively lower intervals consume more water (see. Figure 4.2). For example, in the Kvemo Kartli region, the average water supply schedule is 11 hours, and the water consumption per day is 153 liters per person; In Samtskhe-Javakheti region, where there is a 21-hour water supply, the consumption of drinking water per capita per day is 113 liters. It is possible to conclude that frequent drinking water interruptions and water supply schedules force consumers to take various measures, including the creation of drinking water supplies, which increases the rate of drinking water consumption. Information on consumption of drinking water per capita and per subscriber by metered customers is given in Figure 4.3. As mentioned above, the licensees, Kobuletis Tskali LLC and Soguri LLC,

![Figure 4.1. Metering level by licensees (%)](image)

![Figure 4.2. Dependence of water supply schedule and drinking water consumption per capita, by territorial units (United Water Supply Company of Georgia LLC)](image)

do not have household metered customers. Consequently, information about them is not reflected. Marneulis Soptsali LLC has the lowest consumption among other licensees, while Georgian Water and Power LLC has the highest consumption. Nationwide drinking water consumption (metered sector) averages 171 liters per capita per day, and 410 liters per subscriber per day. Figure 4.4 provides information on non-revenue water (NRW) volume and the number of network damages. There is a certain relationship between these two indicators, which has also been confirmed by a detailed study of companies. In particular, in the case of licensees who have high losses and the number of accidents at the same time, it is likely that a large share of losses comes from technical reasons (hidden leaks, improper infrastructure, etc.). And in the case of companies where the loss is high and the number of accidents is low, the commercial loss likely has a larger share of the total volume of losses (illegal consumption, wasteful costs caused by excessive consumption, etc.). Figure 4.5 provides information on the financial condition of companies, which is calculated in terms of the ratio of operating expenses to income. As can be seen from the figure,

Figure 4.3. Consumption of drinking water per capita and per subscriber, according to the licensees (liter/day).

Figure 4.4. Non-revenue water and network damages.

23 Based on the principle of full cost recovery (tariff includes both operating and capital expenses).
operating expenses are covered only by Georgian Water and Power LLC and Rustavis Tskali LLC, whose tariffs are regularly set by the Commission. As for other companies, their operating expenses exceed revenue. These companies are state-owned and/or municipal-owned companies that offset the existing revenue shortfall with subsidies. It is noteworthy that the above-mentioned companies have not yet applied to the Commission regarding the tariff recalculation. The volume of drinking water consumed by licensees in 2021 amounted to 215 million cubic meters. Figure 4.6 shows the percentage sharing of water volume by consumer categories.


Figure 4.4. Dependence of non-revenue water volume and number of accidents;


Figure 4.5. Dependence of revenue and expense.
4.4. Investments and tariffs

4.4.1 Investment plans

In accordance with the Investment Appraisal Rules in Water Supply Sector, the licensees submitted long and short-term investment plans to the commission, after their examination the commission agreed on the investment plans of Batumi Water LLC. The plans of Georgian Water and Power LLC and Rustavi Water LLC were agreed by the Commission in 2020. As for the rest of the companies, due to the fact that the investment plans were not fully presented, they were given additional time to adjust and submit.

Figure 4.7 shows the investment plans agreed by the commission of Georgian Water and Power LLC and Rustavi Water LLC and analysis of their actual implementation.

Figure 4.7 Planned and implemented investments

4.4.2 Actual implemented investment projects:

For the purpose of providing each consumer with relevant water supply service by water supply licensee enterprises, for rehabilitating of existing or constructing new network, or individual metering of
consumers, actual implemented investments in 2021 by two huge water supply licensee companies - Georgian Water and Power LLC (which covers Tbilisi and Mtskheta cities) and United Water Supply Company of Georgia LLC (which covers almost the entire territory of Georgia, except Autonomous Republic of Adjara, Tbilisi, Mtskheta and Rustavi) constituted 215.9 million GEL (see Figure 4.8).

![Figure 4.8 Investments in water supply sector](image)

**Figure 4.8 Investments in water supply sector**

4.4.3 Tariffs
4.4.3.1 Legal and methodological basis.

Similar to the electricity and natural gas sectors, tariff calculation issues for water supply licensee enterprises are regulated by the Law of Georgia on Energy and the tariff methodology developed by the Commission in accordance with it and approved by a normative administrative-legal act, which is based on the approaches and principles of regulation of “incentive” (marginal revenues) recognized by international practice.

The methodology aims to protect consumers from monopoly prices and also to protect the interests of investors, to enable them to function stably, reimburse reasonable expenses and make a fair profit.

Based on the Methodology of Water Supply Tariff Calculation approved by the Commission’s Resolution N21 of August 10, 2017, the tariffs are set for 3 years and, accordingly, the possibility of including the forecast data in the tariff is determined, among them, capital expenditures (annual depreciation and returns on regulated assets) for each tariff year for investments that are agreed in accordance with the established rule (investment plans) by the decision of the Commission and should be implemented in the respective tariff year. The tariff methodology envisages adjustment of tariffs according to the investments actually implemented for
the next tariff regulation period.

The tariff methodology provides for the determination of the rate of return for the enterprise on the basis of regulated assets by the weighted average cost of capital (WACC) method, which in turn ensures the possibility of making a fair profit on invested capital and reimbursement of the value of attracted capital.

Based on the analysis of renewed data of major components of weighted average cost of capital (WACC) new rate for the following regulation period was calculated. The Commission sets the weighted average cost of capital before taxes (profit tax) and, consequently, the rate of return on the basis of regulated assets was set at 14.98% (before taxes), where the cost of debit (rd) constituted 13.19%.

For the tariff regulation period 2021-2023, the overall efficiency factor (X) was determined by 1.5% (for the year of calculation of the tariff corresponding to the first regulation period of a particular enterprise - 0%), and the individual efficiency factor (X ind.) - 0%.

4.4.3.2 Current tariffs of the sector

According to the principles determined by the Methodology of Water Supply Tariff Calculation, in 2021 the tariff regulation of the licensed enterprises, Batumi Water LLC and Sagarejo LLC was carried out. The preliminary license for water supply issued by Sagarejo LLC came into force in 2021, therefore, the tariffs were set for the first time. It should be noted that the Commission did not use cross-subsidy in tariff calculation24. As for Batumi Water LLC, in the case of the mentioned licensee, the tariffs were by the local self-government and in 2021 the tariff regulation was carried out for the first time by the Commission. The increase affected the household non-metered sector and non-household consumers25.

Within the framework of the tariff calculations carried out in relation to the above-mentioned licensees, changes were made in the Resolution №17 of the Commission on Water Supply Tariffs of August 17, 2010 and water supply tariff rates for the period from January 1, 2022 to December 31, 2023 were approved for Batumi Water LLC and Sagarejo LLC (see Figure 4.9).

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24 The amount of the tariff for household and non-household cunsumers is the same.
25 The current tariffs were: household non-metered - 1.85 L / person / month; Non-household - 4.0 L / m3.
Figure 4.9 Current tariffs (GEL, including VAT).

* - Water supply tariffs are set by local municipalities for presented licensees.
5. Methodological Activities

With the adoption of the new Law on Energy and Water Supply, the Commission has made great efforts in 2021 to draft and adopt important sub-legislative normative acts in the fields of energy and water supply, so that, first of all, existing systems in service to be maintained and new services to be launched in a timely manner. It can already be said with certainty that almost all the systems were maintained within the new model and in many cases they were even refined. Particularly noteworthy in this regard is the fact that the reform has fully maintained the standard of one-contact network services, which is under the supervision of international organizations.

The following measures were taken in the reporting year:

5.1. Rules for electricity distribution network:

The Law on Energy and Water Supply set out the basic principles related to the operation and management of the distribution network, which contained many innovations.

Accordingly, when the Commission's Resolution # 19 of June 28, 2021 approved the "Rules for Electricity Distribution Network", the adoption of this resolution introduced significant changes in the electricity sector, particularly:

- **Service Centers** - The system operator is obliged to have at least one service center in all the self-governing cities / administrative centers of the municipality where it carries out distribution activities.

- **Restoration of supply to the disconnected customer at the request of the customer** - the system operator must restore the supply to the customer within the time frame set for the recovery of the disconnected supply due to debt (not later than the next day after receiving the request), also in case the customer requests to restore terminated supply based on his own request. In such a case he will be charged by cut-off/restoration fee. This issue was not regulated by the previous Rules of Electricity (capacity) Supply and Consumption. Accordingly, from the date of entry into force of the new rules, customers can request not only timely restoration of electricity supply in case of payment of debt, but also operative action in case the customer on his own initiative was cut off from electricity supply and requests restoration of its supply.

- **Removal of the restriction** - a person can simultaneously enjoy the status of both a micro generation power plant and a small generation power plant.

- **The connection of the unit must be made with a capacity of at least 10 kW.** The minimum connecting capacity of each consumer shall be not less than 10 kW, including when connecting a residential, industrial, multi-apartment building or other unit. However, when connecting two or more new units, regardless of the method by which the capacity of the unit will be calculated, the construction-design documentation of the unit must envisage the connection of each unit with a capacity of at least 10 kW.

- **Submission of a signed supply contract at the connecting time** – the system operator is obliged to send to relevant supplier agreement of supply signed by the customer, which is attached to the application
to the distribution network, and to notify with new customer’s subscriber number and the estimated supply launching date.

If the applicant wishes to trade at the organized market, the electricity market operator must be notified about it.

➢ **Informing about launching of supply** - The system operator is obliged to inform the new customer about the exact time of starting the power supply by short text message (not more than 5 and not less than 2 calendar days in advance).

➢ **Connection to the distribution network of the charger point / station in a special way** - Preferential terms of connection apply only to the connection to the distribution network of charger devices, the use of which is not limited to the circle of persons and is not intended only for personal use. The connecting capacity of the charging station does not participate in the calculation of the connecting capacity of the facility or defined area at its location and the use of a charging station (electricity consumption) for other purposes is not allowed. Connection fee of charging station to the distribution network constitutes 50% of connection free of new customer to the distribution network, according to the offered package.

If the charging station is not connected within one year after the completion of the connection works provided for in this Article or the charging station is not used within 10 years, the system operator is entitled to cancel this connection after 3 months notice to the customer.

➢ **Temporary connection with standard and non-standard conditions** - Temporary connection to the distribution network can be made under standard or non-standard conditions. The system operator is obliged to define and make publicly available the standard conditions for temporary connection to the distribution network and the cost of services, 220 W including 10 kW, and 380 W including 30 kW, with power for temporary connections within a radius of 100 m from the existing distribution network; In addition, the system operator is also authorized to specify other conditions other than this paragraph for temporary connection under the standard condition.

The term for temporary connection with standard conditions shouldn’t exceed 12 months, except in the case of temporary connection for construction or repair purposes. In such occasions term for temporary connection with standard conditions shall be prolonged. The system operator is authorized to determine the different cost of the service for the temporary connection with standard conditions depending on the voltage, capacity, as well as the place of work to be performed and / or other criteria. However, the offer of the same service by the system operator to different persons (customers) using the system must be carried out under equal contract terms. Within 2 working days, the system operator reviews the application of the person wishing to connect under the standard condition and makes a decision on satisfying the request with a complete technological cycle. Consumer wishing to make a temporary connection with a non-standard condition shall apply to the system operator to request issuance of technical conditions for temporary connection. In case of non-standard temporary connection works, a contract is concluded between the system operator and the customer, which precisely defines the obligations of the parties, the work to be performed and the issue of ownership / ownership of the assets created as a result of this work.

In case of temporary connection with non-standard temporary connection, if the required period of temporary connection exceeds 3 calendar months, after the completion of the works provided in the
technical condition of temporary connection, the consumer is entitled to arrange the metering node himself or to request to the system operator the service of arranging the metering node. After the completion of the works provided by the technical condition, the application is submitted to the system operator and in case of request for arrangement of the metering node by the system operator, it will also pay the fee specified in Annex 3 of the Rules for the relevant package. The standard conditional temporary connection fee for the system operator represents the additional revenue associated with the distribution activity that will be taken into account when calculating the distribution tariff.

- **Reconstruction of customer supply scheme (relocation of individual metering node / change of supply scheme).** At the request of the customer, it is possible to move and reconstruct the distribution network, including the metering node. This requires a relevant contract with the distribution network operator. However, the customer request can be fulfilled under standard or non-standard conditions. The system operator is obliged to define and make publicly available the standard and non-standard conditions of service, term and cost of service of the distribution network, including the complete technological cycle of relocation-reconstruction of the metering node. The system operator is authorized to set different prices for standard conditional services according to the term of work, voltage, capacity, type of consumption, as well as the place of work to be performed and/or other criteria.

Moreover, the offer of the same service by the system operator to different customers of the system (customers) must be carried out under equal contractual terms. The system operator is obliged to fulfill the request in accordance with the publicly announced standard or non-standard conditions, or to make a decision on the rejection of the request (the refusal must be substantiated and made within 2 days upon request under standard conditions, and within 10 days on non-standard conditions).

- **Sealing the meter in the package.** If due to various circumstances it is necessary to remove the electricity meter of the customer, it should be placed in a separate package and sealed in such a way that it is impossible to damage the meter without damaging the package. The inviolability of the sealed package in addition to the seal must also be confirmed by the signature of the concerned person so that opening the sealed package will cause damage to that signature (text).

- **Virtual customers can no longer use micro-power plants with a installed capacity of more than 500 kW** - The rules specify that the installed capacity of a micro generation power plant should not exceed 500 kilowatts, furthermore, in the case of both one subscriber and a group of customers;

- **A group of customers has been authorized to use a micro generation power plant connected to the internal network** - In the case of a micro-generation power plant connected to the internal grid, the members of the group will benefit from the electricity running in the distribution network, registered by this customer’s individual reverse meter.

- **The procedure for determining the final non-domestic customers as a small enterprise** - The rules regulate in detail the procedures for determining, changing, canceling, and enforcing the status of a small enterprise for a non-residential customer. Also, taking into consideration that in the event of a connection of a customer, increasing capacity and/or changing the voltage level, temporary ownership of the real estate or change of rightful owner, the customer will be able to receive electricity before the status is renewed. The determined the criteria, according to which the non-domestic customer will
know in advance, will receive services from universal or public service providers before the new status comes into force.

➢ **Arranging of the smart meter** - The electricity distribution system operator is obliged to arrange a multifunctional electronic metering system (smart meter):
  a) In case of connection of one or more units;
  b) In case of connection of the micro-generation power plant and / or request of the customer to use the micro-generation power plant;
  c) In case of connection of the charging point / station of autonomous vehicles operating on electricity to the distribution network;
  d) In case of relevant request by the customer.

➢ **Relevant deadlines have been set for the metering of electricity consumption and meter reading** - In order to replace the "block" meter reading system, the rules specify that all meter readings in the distribution network for payment of the electricity consumption must be read within the last four calendar days of the respective month. The mentioned approach has launched in Tbilisi from this year, and will be launched in all other municipalities from September 1, 2022;

➢ **The upper limit of the total permissible installed capacity of the micro-generation power plants to be connected to the network of the system operator has been increased** – particularly, the total installed capacity of the micro-generation power plants connected to the system operator’s network may not exceed 4 percent of the peak load in the distribution system of the relevant system operator (instead of the 2 percent before the change);

➢ In case of division of the unit metered with smart meters, it was determined that a smart meter should be installed on the separated real estate as well, Subject to payment of the package fee for the arrangement of the smart meter defined by the relevant rules.

5.2. **New service quality rules:**

Resolution # 20 of June 28, 2021 approved the new "Service Quality Rules". Accordingly, the resolution was in full compliance with the Law on Energy and Water Supply. In addition, the resolution:

➢ A part of the recovery of the disconnected customer at the request of the customer was added to the standard of restoration of supply for customers disconnected for non-payment; Accordingly, the system operator will be obliged to pay the customer the amount specified in the rules, not only if he is unable restore supply on time for the customer disconnected due to the non-payment, but also in the case when the customer was disconnected not because of the debt, but at his own request and this customer requests a restoration of the electricity supply.

➢ Submission of photographs by utilities to confirm the existence of an "external cause" was given a more important role;
Possibility of transferring compensation to the account of the customer has been added to "The rule of compensation for services not guaranteed by the standard of commercial quality of service" has been added to the, which allows customers to choose whether to keep the money on the subscriber card or to reflect it in his bank account.

In the electricity sector, the reliability of supply standard by the enterprise will be estimated by both SAIDI and SAIFI indicators - The performance of the standard was assessed by the average duration of the interruption (SAIDI). Under the new rules, the average frequency of supply interruptions was also added (SAIFI).

5.3. Changes in the rules of supply and consumption of natural gas

Resolution of the Commission # 40 of 30 September 2021 amended the Rules for the Supply and Consumption of Natural Gas.

- **Obligation to install a natural gas volume corrector** - According to the rules, natural gas distribution licensees have an obligation to install a natural gas volume corrector, if necessary, in order to meter the consumption of natural gas by the retail customer.

- **Arranging a smart meter** - The natural gas distribution licensee is obliged to arrange a smart meter in case of the relevant request of the customer.

- **Conditions for arranging an internal network** - The rules specify that the process of connecting a new customer to the distribution network does not depend on the condition of the customer’s internal network or the change of this condition. The distribution licensee is obliged to connect the new customer to the network without interruption, regardless of whether the customer additionally requests the arrangement of the internal network or refuses to arrange it (including the arrangement of one or more points of consumption), or interferes with the performance of the internal network in any way.

- **Exemption from the obligation to pay the connection fee in advance** – an individual wishing to connect is exempted from the obligation to pay the connection fee in advance, if the obligation to pay this fee is imposed in writing form by an administrative body. In such a case, the distribution licensee has no right to identify an error in the application on the basis of non-payment of the connection fee in advance.

5.4. Natural gas distribution network rules:

Resolution # 80 of the Commission of December 31, 2021 also approved the Rules of the Natural Gas Distribution Network, which will come into force on July 1, 2022. Natural Gas Distribution Network Rules regulate natural gas distribution relationships between the natural gas distribution system operator, supplier and customer, as well as the relationship between the system operator and the natural gas transmission system operator. By adopting this sub-legislative normative act, the Commission has taken an important step in introducing reforms in the natural gas sector.

The following news was reflected in this resolution:
➢ Service centres - The system operator is obliged to have at least one service center in all the self-governing cities / administrative centers of the municipality where it carries out distribution activities. The deadline for fulfilling this obligation is January 1, 2024.

➢ Text message for submission of internal network readiness document. In case of network services (in the case of services defined by Chapters IV, V and VI of the Rules), the system operator is obliged to register the application and respond (complete) to the application with text messages, also, by intermediate text message provided by the mentioned service, along with other information, to inform the customer about the necessity of providing a document of readiness for the beginning of gas supply of the internal network (in case of non-delivery of the document to the system operator).

➢ Interruption of supply (when a customer causes a disruption in the network, the network fails and / or its gas appliances do not have a production declaration of conformity). The system operator is obliged to refuse the natural gas supply to the customer when the customer-owned gas supply system, including the network is faulty and / or its gas appliances (heating unit, water heater, gas-cooker and other appliances consuming natural gas) do not have a production declaration on compliance or certificate of compliance and relevant technical documentation (technical characteristics of the appliances, technical conditions of its installation and operation and other information), also, if it is obvious that the use of the customer's gas appliances will have negative affect to gas supply system and / or the ability of the system operator, to provide services to these and / or other customers at a standard level. In case of failure to correct the defect, the system operator is obliged to stop the supply of natural gas to this customer in compliance with the conditions provided by the rules.

➢ Submission of a signed supply contract at the connecting time – the system operator is obliged to send to relevant supplier agreement of supply signed by the customer, which is attached to the application to the distribution network, and to notify with new customer's subscriber number and the estimated supply launching date.

If the applicant wishes to trade in the organized market, the natural gas market operator must be notified about it.

➢ Temporary accession under standard and non-standard conditions. The system operator is obliged to define and make publicly available the standard conditions for temporary connection to the distribution network and the cost of services. The period of temporary connection should not exceed 12 months, except for the case of using the temporary connection for construction or repair purposes. In such cases, the term of temporary connection can be extended. The system operator is authorized to determine a different cost of the service for temporary connection under standard conditions, depending on the pressure, capacity, as well as the place of the work to be performed and/or other criteria. In addition, the same service offer by the system operator to different persons (customers) using the system must be carried out under equal contractual conditions. The deadline for the introduction of the standard conditions of temporary connection and conditions of the cost of service was determined until January 1, 2023.

➢ Reconstruction of the customer supply scheme (transfer of individual metering node/change of supply scheme). The system operator is obliged to define and make publicly available the service, standard and non-standard conditions of the distribution network, including the transfer of the metering node through the full technological cycle of reconstruction, cost and term of the service. It is authorized to determine different prices services under standard conditional depending on the term of performance of work, pressure, power, type of consumption, as well as the place of work to be performed and/or...
other criteria. In addition, the same service offer by the system operator to different persons (customers) using the system must be carried out under equal contractual conditions.

- **Locking out the main supply when using backup power.** At the customer's request, it is possible to provide him with backup power (this requires the signing of an relevant contract) and the works shall be carried out in accordance with the requirements of the rules. If backup power is used, the main power supply must be locked.

- **Supplying storerooms and/or other units, and/or equipment located in the common property with natural gas backup power.** For supplying storerooms and/or other units, and/or equipment located in the common property with natural gas, what should be done separately according to the request of the customer (or customers) can be connected according to the requirements of this article.

- **Confirmation of gas supply readiness by a qualified person.** In the case of connecting a new unit to the distribution network, as well as performing such network services when there is a reconstruction of the customer's internal network, for natural gas supply, it is mandatory a qualified person to confirm the readiness for the customer's gas supply system (internal network, including gas appliances or devices owned by him).

- **Internal network readiness document form.** The document confirming the readiness of the internal network prepared by a qualified person can be prepared both in the form given in Annex 3 of the Rules, and by another authorized person, in accordance with the form approved by the legal act.

- **Preparation of internal network readiness document when works are performed by system operator.** If the installation (arrangement) or reconstruction of the internal network is carried out by the system operator, he is responsible for timely (within the agreed period) and proper execution of the works - accordingly, for preparing and presenting to the customer a internal network readiness document.

- **Lower limit of supply pressure to low pressure consumers.** The lower limit of pressure to be supplied to low-pressure consumers, the supply of which must be guaranteed by the system operator, is 180 mmHg.

- **Atmospheric pressure correction method for low pressure metering node.** For low pressure metering nodes – the atmospheric pressure correction method, which envisages multiplying the volume taken from the meter by the pressure correction coefficient (PK) (mentioned coefficient is approved by the Commission's decision for each settlement).

### 5.5. Extension of the existing service at the Public Service Hall

In the 2020 annual report of the Georgian National Energy and Water Supply Regulatory Commission, the general public was informed about certain services available at the Public Service Hall. It should be noted that within the framework of the joint project of the Commission and the Public Service Hall, several new services were added to the utility services transferred to the Public Service Hall in 2021. In addition to registering as a subscriber in the electricity, natural gas and water supply sectors and checking utility debts, citizens can:

- to sign an electricity supply agreement with relevant supply companies in the electricity sector;

- to register a request for on-site inspection of the metering devices (meter), on the basis of which they will receive information about the proper operation of the meter;
• to register a request for on-site inspection of the technical quality of the supply and find out whether there are any problems related to the supply at the facility, based on which the company will immediately carry out an on-site inspection, report the problem in writing form and inform about its correction;

• to request information about supply and the technical parameters of electricity, natural gas and water supply charges;

• request the termination or restoration of supply in their own area.

• When requesting an on-site inspection of metering devices and technical quality at Public Service Hall, consumers were given the opportunity to describe in detail the causal relationship related to the problem;

• Consumers have also been given the option to register an issue with the Public Service Hall about a problem related to frequent outages, on the basis of which the company will investigate on the spot, identify the problem and inform about its correction.

In addition, the following services were introduced to improve and simplify processes:

• The applicant’s signature is done electronically through the Sign Pad, which has accelerated the process of submission of the application, since the operator of the Public Service Hall no longer has to print out the document and then upload it.

• When booking a visit to the Public Service Hall on my.gov.ge, the consumer is informed in advance about the utility services available at the Public Service Hall.

New services are available in all 27 branches of the Public Service Hall, and submitting an application for receiving services is not related to the territorial location of the unit. In addition, 26 utility companies are involved in the services of the Public Service Hall.

26 utility companies are involved in the project, whose goal is to offer quick and simplified services to citizens. In the branches of the Public Service Hall, the following can receive services: JSC "Telasi", LLC "Tbilisi Electric Supply Company" (Telmiko), JSC "Energo-Pro Georgia", JSC "Ep Georgia Supply", LLC "Tbilisi Energy", LLC "Telavgaz", LLC "Sokar Georgia Gas, Sakorrgaz JSC, Georgian Water and Power LLC, Rustavi Water LLC, United Water Supply Company LLC, Inter-Gas LLC, Akriani 2006 LLC, Gasco+ LLC ", LLC "Energia +", LLC "Sachkheregaz", LLC "Gama", LLC "Kamari M.", LLC "EnergoUnion", LLC "Varketilairi", LLC "Didi Digomi", LLC "Soguri", to those wishing to receive utility services from "SachkhereTskalkanali" LLC, "Kobuleti Water" LLC, "Batumi Water" LLC and "Marneuli Sofckali" LLC.

As for the statistics of referrals to the utility services of the Public Service Hall, 6,969 users benefited from the services in 2020, and 13,606 users in 2021, which means that the request to the utility services of the Public Service Hall increased by 95% in 2021 compared to 2020.

5.6. "303# service extension

• "303#/USSD • "Batumi Water" LLC joined the service.
• “*303#/USSD adapted to the new energy market, which means that it will be possible in the electricity and natural gas sectors distributors to request the necessary information from suppliers and provide it to the mobile operator.
• A new service has been added to “*303#/USSD, through which it is possible to fix a problem related to the technical quality of the supply, as well as an operational response standard has been introduced, in particular, in case of a technical quality problem being detected, the employee of the company is obliged to promptly contact the consumer in order to determine/specify the cause of the problem and other details, to assess whether the situation is an emergency or not and to inform the relevant officials about it. The company is obliged to respond appropriately to the received message, to check the cause of the problem observed on the spot.

The purpose of the problem fixing function of “*303# is to improve the quality of service and simplify communication with the utility company for the consumer. The use of these services is important, as it gives the Commission the opportunity to better see the problems in the distribution network and, accordingly, to better assess its challenges.

It is also worth noting that consumers were given the opportunity to request billing verification by using “*303# and to request a grounded response from the utility company regarding billing, in particular, instead of going to the company and filling out the relevant application, consumers can simply dial “*303# on their mobile phones and request verification of following types of billing on the subscriber’s card:

• Current billing, which allows the consumer to request verification of over/underbilled quantity, as well as verification of incorrect tariff billing and network service fee billing;
• deposit accrual;
• By dialling “*303#, the consumer also has the opportunity to report a non-billing problem to the system operator.

Upon receiving the notification on billing verification, the company is obliged to record the mentioned notification in accordance with the conditions and procedures defined by the Service Quality Rules (including informing the customer about the registration number of the application at the enterprise) and to take appropriate actions as determined by the Commission in case of receiving the application.

“*303#, within one hour od making the request the consumer will receive registration number of the application by SMS, after the registration of the application, the progress of the application is controlled by the Commission.

Regarding the statistics of the “*303# service, a total of 929,048 transactions were made by consumers in 2020, and a total of 1,722,168 transactions were made by consumers in 2021, in total of 2,651,216 transactions. As for the dynamics of referrals to the service, compared to 2021-2020, the total increased by 85%, and the average monthly increase constituted 7%.

5.7. Development of electronic agreement of construction projects at the www.my.gov.ge portal

With the mutual cooperation of the Commission, Municipal Services Development Agency and the legal entity of public law in the sphere of governance of the Ministry of Justice of Georgia - Digital Governance Agency (hereinafter - the Agency), the software integration unified portals of electronic services www.my.gov.ge and newly implemented program at municipalities www.ms.gov.ge took place. The interactive maps of these two portals are currently being integrated with each other.
In addition, the problems related to the service are constantly being identified, the service is improved, developed, and the enterprises created with the partial participation of the state are registered at my.gov.ge.

5.8. Standard forms

In accordance with the changes made in the current legislation during 2021, the typical application forms intended for consumers related to the activities of utility enterprises in all three sectors were updated and placed at the website of the Commission.

Changes were made both in the application forms approved by the Commission and in the recommendation forms. In total, 102 application forms valid in all three sectors were updated. Updated application forms are designed in such a way that the consumer does not make a mistake both in formulating his request and in specifying/providing the circumstances necessary to fulfil this request. It should be noted that the above-mentioned applications can be filled both electronically and manually.

It is also worth noting that application forms for addressing the problem of poor quality supply and frequent interruption of supply have been developed and placed at the Commission's website. The mentioned application forms give the applicant the opportunity to correctly state the request, as well as fully describe the essence of the problem and provide information about interruptions, which, in turn, helps the Commission to correctly identify problem areas.
6. Commercial Service Quality

6.1. Service quality and standard description

The Commission has been using electronic monitoring system of commercial service quality already for 5 years. The above mentioned software was introduced in 2017 to ensure monitoring of implementation of goals defined by the “Service Quality Rules” approved by the Resolution No 20 of June 28, 2021 via modern systems and technologies.

“Service Quality Rules” approved by the Commission on June 28, 2021 apply to electricity, natural gas and water supply sectors and establish unified requirements and standards. Commercial service quality standards are the indicators of commercial service quality set by the Commission defining the minimum level of customer service quality which shall be provided by the entity. The electronic monitoring system of commercial service quality monitors the following general and guaranteed standards envisaged by the Resolution:

- **Overall Standards**

  1. Informing customers about the date and duration of the planned termination – to meet the standards the customers shall be informed about 90% of the total amount of terminations in a timely manner;

  2. Restoration of supply for disconnected customers in the case of unplanned termination - to meet the standards, 80% of the total amount of terminations shall be restored in a timely manner;

  3. The time for responding to the phone call by the call center operator – to meet the standards, 80% of calls shall be responded in 80 seconds;

  4. Decreasing average duration of termination of electricity supply;

  5. Decreasing average duration of termination of natural gas/water supply.

- **Guaranteed Standards:**

  1. Restoration of the supply to the customers disconnected due to nonpayment: in case of paying off the debt until 16:00, the deadline shall be (in the high mountainous regions or at the weekend until 14:00) 5 hours after payment, in case of paying off the debt after 16:00 (in the high mountainous regions or at the weekend after 14:00) – until 12:00 of the next day;

  2. A justified written response and/or responding to the written applications of the customers – deadline shall be
5-10 working days;

3. Checking metering devices on spot in response to application of the customers – deadline shall be 10 working days;

4. Registering as a subscriber (except electricity) and provision of supply with requested conditions – deadline 5 working days;

5. Connecting of a new charging point of customer/increase capacity for autonomous means of transportation working on electricity – deadline is determined according to the package chosen by the customer;

6. Checking technical quality on spot in response to application of the customer – deadline 5 working days;

7. Issuing technical condition for connection of a new customer – deadline 10 working days;

8. Arrangement of metering node and network in-cut - deadline is determined according to the package chosen by the customer;

9. Connection of a micro generation power plant - deadline is determined according to the package chosen by the customer.

6.2. Statistical Information

Customers’ applications submitted to the regulated utilities, the information on planned and unplanned terminations, the information on connection of new customers and recovery of supply for the customers disconnected due to nonpayment, are automatically recorded in the Commission’s database in real time, for the purpose of effective control over compliance with the abovementioned standards. Based on the database, data analysis and visualization module of commercial service quality monitoring system ensure processing of information and submitting in a desired manner.

The indicators of meeting the standards of commercial service quality in the years of 2017-2021 are given below according to the sectors.
Informing customers about date and duration of planned termination

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity</th>
<th>Natural Gas</th>
<th>Water Supply</th>
</tr>
</thead>
<tbody>
<tr>
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<td>65%</td>
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<td>26%</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>34%</td>
<td>34%</td>
<td></td>
</tr>
</tbody>
</table>

Restoration of supply for disconnected customers in case of unplanned termination

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity</th>
<th>Natural Gas</th>
<th>Water Supply</th>
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<td>76%</td>
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</tr>
<tr>
<td>2018</td>
<td>95%</td>
<td>75%</td>
<td>89%</td>
</tr>
<tr>
<td>2019</td>
<td>96%</td>
<td>66%</td>
<td>92%</td>
</tr>
<tr>
<td>2020</td>
<td>96%</td>
<td>35%</td>
<td>52%</td>
</tr>
<tr>
<td>2021</td>
<td>98%</td>
<td>45%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Figure 6.1. Informing customers about date and duration of planned termination

Figure 6.2. Restoration of supply for disconnected customers in case of unplanned termination
Figure 6.3. Restoration of supply for customers disconnected due to the non-payment

Figure 6.4. Justified written response and/or responding to the application of customers
Figure 6.5. Checking metering devices on the spot in response to request of customers

Figure 6.6. Registering as subscriber
Figure 6.7. Connection of a new customer

Figure 6.8. Checking technical quality on spot in response to application of customer
Figure 6.9. Answering time by hotline operators

Figure 6.10. Arranging metering node and network in-cut
Figure 6.11. Increasing capacity

Figure 6.12. Connection of micro generation power plant
Compliance of the overall standards of the service quality doesn't depend on the service provided to only one customer. Target indicators for the overall standard of service quality are set by the enterprise for an indefinite number of customers during a calendar year. In assessing the target indicator of the overall standards, the cases of non-compliance caused by the external factors are not taken into account.

The annual service provision indicators envisaged by overall standards are evaluated annually for each service separately and as a result of the evaluation of these indicators, the Commission uses financial mechanisms towards certain utility company, for encouraging or sanctioning it, which is reflected in the tariff set by the Commission for the relevant services for this utility according to the following principle: In case of improvement / deterioration of the annual target rate of the overall standards, the regulated cost base of the enterprise will increase / decrease accordingly by 0.01% of the regulated cost base for each improved / deteriorated 1 percent, except to the standard for reducing the average duration of a power outage, for which in each region, according to the territorial district, in case of improvement or worsening of the average duration of power outage by the utility, the Commission is authorized to increase or decrease the base of regulated costs in calculating the tariff of the utility company in accordance with the Q factor.

In the event of the failure to perform services envisaged by guaranteed standards due to the internal reasons, the utility is obliged to provide specified compensation to the customers for nonperformance of services:

- In case of non-compliance with the standards related to the connection of a new customer to the network/increasing capacity, arrangement of metering node in electricity, natural gas and water supply sectors and connection of micro generation power plant in the electricity sector in the specified timeframe, the compensation is defined as follows:

  In case of missing the deadline for connection to the network (system) defined by the package set by
the Commission for the first time – the fee for connection of the new customer is decreased by 50%; in case of missing the deadline for the second time, if the works for the connection to the network (system) are not finished - the connection fee is reduced to zero. As of 2019, in case of missing the deadline for connection to the network (system) in the electricity, natural gas and water supply sectors for the third and every next time, the licensee is obliged to compensate 50% of the connection fee to the person willing to connect - every time the deadline is missed;

- For the violation of other guaranteed standards, the compensation is a one-time action and amounts: 5 GEL – for household customers and 10 GEL – for non-household customers.

The compensation envisaged by the guaranteed standards shall be accrued on the customer’s subscriber card as a credit for further settlement, whereas in case of advanced payment, the compensation shall be accrued on the customer’s credit card, indicated in the application. In addition, the compensation shall be reflected in the customer’s subscriber card within 15 working days from the violation of guaranteed standard of service. In case individual is not yet registered as the customer, the compensation shall be accrued on his subscriber card, within the term of 15 days since beginning of the supply.

![Figure 6.14. Total accrued compensations on guaranteed standards by sectors in 2021](image)

In 2021, due to the violation of guaranteed standards, the distribution companies paid 476 765 GEL to the
customers as compensation. Out of this amount, 324,677 GEL was paid due to violation of the standard for connection a new customer to the network and 152,088 GEL for the violation of the rest of the guaranteed standards that is allocated as follows:

![Pie chart showing accrued compensations]

- 86%: Connecting to a new customer
- 16%: Increasing capacity
- 5%: Restoration of supply to the customers disconnected due to the non-payment
- 9%: Justified written response and/or responding to the application of customers
- 13%: Arranging metering node and network in-cut
- 2%: Registering as a subscriber
- 69%: Checking metering devices on the spot in response to request of customers
- 13%: Checking technical quality on spot in response to application of customers
- 2%: Connection of a micro generation power plant

**Figure 6.15. Total accrued compensations on guaranteed standards by sectors in 2021**

The amount of the compensation accrued to the customers for non-performance of the guaranteed standards in the defined timeframe in the years of 2017-2021 according to the distribution licensees is highlighted in the Table.

<table>
<thead>
<tr>
<th>Utility</th>
<th>Accrued compensation (GEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Amount of accrued compensation presented on Table 5.11 might differ from the amount recorded in the Commission’s annual report of the previous year. In the 2021 report, the data of 2020 is clarified, since the amount accrued in the calendar year may be adjusted during the following year.
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Amount 1</th>
<th>Amount 2</th>
<th>Amount 3</th>
<th>Amount 4</th>
<th>Amount 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLC “Georgian Water and Power”</td>
<td>1,821,010</td>
<td>1,481,530</td>
<td>545,975</td>
<td>212,750</td>
<td>224,300</td>
</tr>
<tr>
<td>JSC “Telasi”</td>
<td>117,830</td>
<td>210,155</td>
<td>45,240</td>
<td>4,530</td>
<td>88,615</td>
</tr>
<tr>
<td>LLC “Socar Georgia Gas”</td>
<td>647,375</td>
<td>353,410</td>
<td>143,635</td>
<td>46,050</td>
<td>33,675</td>
</tr>
<tr>
<td>JSC “Energo-Pro Georgia”</td>
<td>317,655</td>
<td>236,085</td>
<td>285,935</td>
<td>231,370</td>
<td>242,815</td>
</tr>
<tr>
<td>LLC “Tbilisi Energy”</td>
<td>56,630</td>
<td>52,835</td>
<td>436,775</td>
<td>145,980</td>
<td>6,105</td>
</tr>
<tr>
<td>JSC “SakOrgGas”</td>
<td>130,250</td>
<td>41,850</td>
<td>59,315</td>
<td>10,670</td>
<td>8,525</td>
</tr>
<tr>
<td>LLC “Rustavi Water”</td>
<td>36,430</td>
<td>44,390</td>
<td>3,155</td>
<td>1,150</td>
<td>160</td>
</tr>
<tr>
<td>LLC “United Water Supply Company of Georgia”</td>
<td>630</td>
<td>3,045</td>
<td>69,610</td>
<td>92,630</td>
<td>5,760</td>
</tr>
<tr>
<td>LLC “Batumi Water”</td>
<td>0</td>
<td>188,735</td>
<td>170</td>
<td>1,750</td>
<td>0</td>
</tr>
<tr>
<td>LLC “Telavgazi”</td>
<td>0</td>
<td>0</td>
<td>10,585</td>
<td>5,720</td>
<td>0</td>
</tr>
<tr>
<td>Other small utilities</td>
<td>650</td>
<td>1,315</td>
<td>1,615</td>
<td>8,530</td>
<td>2,930</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,128,460</td>
<td>2,613,350</td>
<td>1,602,010</td>
<td>761,130</td>
<td>612,885</td>
</tr>
</tbody>
</table>

Figure 6.1. amount of compensation accrued to consumers

Reduction of the total amount of the compensation accrued to the customers is mainly the result of improved performance of the companies, regarding implementation of the guaranteed standards.

6.3. State subsidy related to the Covid-19-

For the purpose of supporting citizens, during worsened socio-economic situation caused by the pandemic, according to the decision of the Government of Georgia, the government subsidized bills of electricity, natural gas and water supply in January and February of 2021 from the state budget.

The state covered utility bills of following subscribers:

- Consumed maximum 200kWh electricity in a month. Drinking water and cleaning fees were also subsidized for them.
- Consumed maximum 200 cubic meter natural gas in a month.

Besides above mentioned subsidy, the government subsidized bills of electricity, natural gas and drinking water supply in February, March, April, November and December of 2020 from the state budget. Moreover,
the difference between the electricity consumption tariff for electricity in 2020 and the current electricity consumer tariff in the reporting month (during the accounting period indicated in the relevant month receipt) was subsidized from the budget.

Utility bills were covered by the state to those target groups who consumed 301 KWh or less during the reporting month.

For customers that utility bill subsidy program applied to, but for the purpose of solidarity decided to refuse the benefit, the Commission activated utility bill subsidy refusal platform at its official webpage (www.gnerc.org/ge/covid-19), where they could state their decision.

<table>
<thead>
<tr>
<th>Utility service subsidies according to sectors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Customers</td>
</tr>
<tr>
<td>Electricity Sector</td>
<td>Subsidized</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refusal to subsidy</td>
</tr>
<tr>
<td>Natural Gas sector</td>
<td>Subsidized</td>
</tr>
<tr>
<td></td>
<td>Refusal to subsidy</td>
</tr>
<tr>
<td>Water Supply Sector</td>
<td>Subsidized</td>
</tr>
<tr>
<td></td>
<td>Refusal to subsidy</td>
</tr>
<tr>
<td>Total</td>
<td>Subsidized</td>
</tr>
<tr>
<td></td>
<td>Refusal to subsidy</td>
</tr>
</tbody>
</table>

*Figure 6.2 Subsidy of 2021 according to sectors*

7. Settlement of the Issues Related to the Consumer Complaints and Deferring Deadlines for Connecting New Consumers or Increasing Capacity
7.1. Overview of the Regulatory Framework Related to the Consumers' Complaints and Deferring Deadlines for Connecting (Increasing Capacity) New Customers to the Network

Based on the Article 29(1)(k.c) and the Article 155 of the Law of Georgia on Energy and Water Supply, resolving the disputes between companies, as well as between customers and companies, within its competence, is one of the main functions of the Commission.

Those functions are defined under the Administrative Violations Code of Georgia, Natural Gas Supply and Consumption Rules approved under the Resolution N12 of July 9, 2009 of the Commission, Electricity (Capacity) Supply and Consumption Rules approved under the Resolution N20 of September 18, 2008 of the Commission, Drinking Water Supply and Consumption Rules approved under the Resolution N32 of November 26, 2008 and other legislative acts. Based on those rules, one of the main functions of the Commission is to review and resolve the requests of the companies on deferral of the deadlines for connecting new customers to the networks.

The Commission is independent in resolving disputes and obeys only the legislation of Georgia. It resolves the disputed issue impartially, in full compliance with the requirements of the law. Although the Office of the Energy Ombudsman operates independently of the Commission, the protection of consumers' interests remains an important function of the Commission. Therefore, when discussing and resolving disputes, the Commission strives to implement its functions in full compliance with the legislation.

The Commission, as a result of reviewing the dispute, issues an individual administrative-legal act - a Decision.

When reviewing a dispute the function of the Commission defined by the legislation on consumer protection does not exclude its right to also protect the interests of the Company, if the company presents its justified, evidence-based and legally compliant position.

7.2. Consumers' Complaints in the Electricity Sector

The relationship between the consumer and the energy enterprise in the electricity sector is subject to regulation by the Electricity Retail Market Rules approved by the Commission Resolution №47 of August 13, 2020 and the Electricity Distribution Network Rules approved by the Commission Resolution №19 of June 28, 2021.

During the reporting period the cause of dispute was the non-fulfillment/improper fulfillment of requirements by the company, particularly, incorrect billings of consumed product caused by damaged meters, incorrect charging of the deposits, incorrect determination of supervision and charging period. In the reporting period, a significant part of the disputes is related to the old debt, as well as to the issues on connecting new consumers to the distribution network.

During the reporting period, 1677 applications/complaints were submitted directly to the Department for Consumers' Disputes regarding disputes in the electricity sector, including:
The Commission made 346 decisions as a result of reviewing disputes submitted directly to the Department for Consumers' Disputes. 302 applications/complaints were satisfied fully, 30 - partially, and 14 - were not satisfied. The administrative proceedings on those applications/complaints of the customers, on which the decision of the Commission was not made, were completed by the letters of the staff of the Commission.

The amount cut off from customers' accounts in electricity sector constituted 2,481,587.56 GEL.

The Commission has reviewed 194 applications concerning the connection of new customers to the distribution network out of which 38 applications were satisfied, 8 applications were partially satisfied, and 120 - were not satisfied. The proceedings were terminated in relation to 12 applications.

7.3. Consumers' Complaints in the Natural Gas Sector

In the natural gas sector the relations between customers and companies are regulated by the Commission Resolution №12 of July 9, 2009 “On Approving Natural Gas Supply and Consumption Rules”. The main reasons of complaints in natural gas sector are incorrect fulfillment or non-fulfillment of the requirements of the rules by the companies, specifically, improper review of the disputes at the company, improper application of rules of billing, non-compliance with the rules of removing and installing meters, as well as non-compliance with the rules of meter sealing (improper drafting of protocol), the absence of the customer at the above procedures. Customer complaints were also conditioned by issues of new customer connection to the distribution network.

The total number of applications/complaints in the natural gas sector submitted directly to the Consumers' Complaints Department at the Commission during the reporting period was 1087, including:

a) Tbilisi Energy LLC - 638;
b) SOCAR Georgia Gas LLC- 368;
c) SakOrgGas JSC - 47;
d) Telavgazi LLC - 7;
e) Energokavshiri JSC - 5;
g) Didi Dighomi LLC - 5;
g) Varketilairi LLC - 7;
h) Chiraghdani XXI Saukune LLC - 4;
i) Kamari M LLC - 2;
j) Georgian Gas Transportation Company LLC - 2;
k) Inter Gazi LLC - 1;
The Commission made 268 decisions as a result of reviewing disputes submitted directly to the Consumers’ Complaints Department. 152 applications / complaints were fully satisfied, 49 partially and 67 were not satisfied. The administrative proceedings on those applications/complaints of the customers, on which the decision of the Commission was not made, were completed by the letters of the staff of the Commission.

The amount cut off from consumers’ accounts in natural gas sector constituted 388,223.22 GEL.

The Commission has reviewed 121 applications concerning connecting new customers to the distribution network out of which 19 applications were satisfied, 75 - were not satisfied and 1 was partially satisfied. The proceedings were terminated in relation to 11 applications.

7.4. Consumers’ Complaints in the Water Supply Sector

In the water supply sector the relations between customers and companies are regulated by the Commission’s Resolution №32 of November 26, 2008 “On Approving Drinking Water Supply and Consumption Rules”. The main reason for the disputes is the incorrect fulfillment or non-fulfillment of the requirements of the rules by the water supply licensee, namely: complaints for claiming by the company the reimbursement of old debts, improper charging of consumers by non-metered water supply acts (disregarding the mode of operation of the customer), conditional charge on the customer, untimely reading of meters, as well as problems with the connections as a new customer, etc.

The total number of applications/complaints in the water supply and sewerage sector submitted directly to the Consumers’ Complaints Department at the Commission during the reporting period was 968, including:

a) Georgian Water and Power LLC - 841;

b) Georgian United Water Supply Company LLC - 65;

c) Batumis Tskali LLC - 49.

d) Rustavis Tskali LLC - 7;

e) Mtskhetis Tskali LLC - 2;

f) Marneulis Soptskali LLC - 1;

g) Kobuletis Tskali LLC - 3.

The Commission made 141 decisions directly as a result of reviewing disputes submitted to the Consumers’ Complaints Department. 104 applications / complaints were fully satisfied, 21 were partially satisfied, and 16 were not satisfied. The administrative proceedings on those applications/complaints of the customers, on which the decision of the Commission was not made, were completed by the letters of the staff of the Commission.

The amount cut off from consumers’ accounts in the water supply sector has constituted 583,023.78 GEL.
The Commission reviewed 122 applications for connection of new customers to the distribution network, of which 33 were satisfied, 50 were not satisfied, 11 were partially satisfied, and proceedings was terminated on 16 of them.

7.5. Old debts
During the reporting period, the Commission reviewed 244 applications regarding the old debts, of which 153 were fully satisfied, 18 were partially satisfied, and 73 were not satisfied. The amount cut off has constituted 196,448.98 GEL.

During the reporting period, the Commission made 755 decisions after reviewing 3732 disputes submitted to the Consumers’ Complaints Department. The total amount cut off constituted 3,452,834.56 GEL. The amount of cut off on the basis of decisions has constituted 1,021,214.74 GEL, and the amount of cut off old debts - 196,448.98 GEL.

<table>
<thead>
<tr>
<th>Application / Complaint</th>
<th>Performance status</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total: 3732</td>
<td>1. Satisfied - 1589</td>
<td>3,452,834.56 GEL</td>
</tr>
<tr>
<td></td>
<td>2. Partially satisfied - 161</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Not satisfied - 1561</td>
<td></td>
</tr>
</tbody>
</table>

Table 7.1. Applications and complaints submitted to the Commission

In accordance with the dispute resolution practice and the new legislation, the Commission is systematically adjusting the rules governing all three sectors, which will also affect the number of customer applications/disputes and their content.

7.6. Issues Related to the Deferral of the Deadlines for Connecting New Customers (Increasing Capacity)
The applications submitted to the Commission where deferral of the deadlines for connecting new customers (increasing capacity) to the distribution network was requested has been a real challenge for the Commission as that non-compliance was triggered by the pandemic situation. During the reporting period, 646 letters concerning the above-mentioned issue have been submitted to the Commission in relation to 1588 applications. After the careful consideration of those letters, the Commission satisfied 264 letters that concerned 698 applications and partially satisfied 33 letters in relation to 650 applications, whereas the company’s request was refused in relation to 17 cases. It is noteworthy that regulated companies were carrying out connection works even in pandemic conditions. As a result of completing their obligations within the deadline the administrative proceedings have been terminated in relation to 186 letters. The statistics of letters received by the Commission by sectors are as follows:

- In electricity sector: 377 letters concerning deferring deadlines of connecting new customers (increasing capacity) have been submitted to the Commission;
- In the natural gas sector: 169 letters concerning deferring deadlines of connecting new customers (increasing customers) have been submitted to the Commission;
- In the water supply sector: 117 letters concerning deferring deadlines of connecting new customers (increasing capacity) have been submitted to the Commission.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Performance status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total: 663</td>
<td>Satisfied - 264</td>
</tr>
</tbody>
</table>
8. **International Relations**

8.1. **Partner International Organizations**

Cooperation with international organizations provides support to the Commission in sharing knowledge and experience in the energy and water supply sectors. Cooperation with foreign experts, obtaining information on international best practices and experience strengthens the Commission's capacity and improves the regulatory process.

In 2021, despite the constraints caused by the COVID-19 pandemic, the Commission actively continued to work in a remote mode with international organizations such as the United States Agency for International Development (USAID), the National Association of Utility Regulatory Commissions (NARUC), the Energy Regulators’ Regional Association (ERRA), the Council of European Energy Regulators (CEER), the Energy Community (Energy Community), etc.

The Commission's cooperation with the Energy Regulators’ Regional Association (ERRA) is noteworthy. The Commission has a long-standing relationship with ERRA. It is one of the founding members of this organization. The Commission staff in 2021 actively participated in the ERRA General Assemblies, chairmen meetings, working groups, committee meetings and trainings.

In 2021, the Commission representatives actively cooperated with the Energy Community and participated in the events and working groups organized by the Energy Community Secretariat.

The Commission collaborates with the Council of European Energy Regulators (CEER), where it enjoys an observer's status since 2017. In 2021, the Commission staff remotely attended the CEER General Assemblies and actively participated in various working group meetings.

The Chairman of the Commission, Mr. Davit Narmania, shared information with the representatives of the Slovak Regulatory Commission concerning the ongoing reforms in the Georgian energy market. At the meeting, the Chairman spoke on the projects implemented for the liberalization of the electricity market and future plans emphasizing the importance of cooperation and experience sharing with foreign colleagues.

In 2021, a virtual meeting of the Georgian-Armenian joint working group was held. Representatives of Georgian and Armenian regulatory commissions, transmission system operators, market operators and the Ministries of Economy took part in the event. The ongoing reforms in the energy sector of Georgia and Armenia, the technical and legal issues of relations between the new entities of the sector were discussed at the meeting.

8.2. **Implemented and Current International Projects**
In 2021, a number of successful international projects were implemented. The Commission has launched the 4th EU Twinning Project. The title of the project is: Development of Network Tariff Setting Methodologies, Energy Efficiency and Renewable Energy Regulatory Strategy and Creating Regulatory Framework for Enabling Demand Side Involvement. From the Georgian side the project will be led by Mr. Giorgi Pangani, a member of the Commission. The project implementing partners are the Austrian Energy Regulatory Authority (E-Control) and the German Federal Grid Agency (BNetzA). The project will involve experts from the French Energy Regulatory Commission (CRE) and the Lithuanian National Energy Regulatory Council (Vert). The project is funded with 1 500 000 EUR and its duration is 27 months.

A number of meeting were held during the year, within the NARUC / USAID project - Gender Equality in the Energy Sector, WGDP Women's Global Development and Welfare Initiative - Women's Advancement in the Energy Sector. The Commission member, Ms. Maia Melikidze participated in the project as a program trainer. Ms. Eka Shekriladze, an employee of International Relations' Department of the Commission, a NARUC representative and an employee of the Tariff Department of the Armenian Energy Regulatory Commission took an active part in the same project. The existing situation and challenges in the organizations in terms of gender issues, the current year work plan, the main directions of the project and logistical issues have been discussed at the meetings. The project lasted for 7 months and working group meetings were held every month.

The Commission's spokesperson, Ms. Ketevan Berikashvili, as a NARUC Expert, participated in a three-day webinar sponsored by the United States Agency for International Development (USAID) and the National Association of Utility Regulatory Commissions (NARUC). She made a presentation on the GNREC Communication Strategy and the Media Club project. The Central Asian Energy Regulatory Partnership Program aims at experience and best practices sharing with the Tajik Ministry of Energy and Water Resources (MoEWR), the Energy Regulatory Authority (ESA) and the Antimonopoly Agency (AA). The program comprised both technical assistance and capacity building in the field of regulation. NARUC experts and participants discussed the activity transparency and communication strategy of the Tajik regulatory authority.

Mr. Nugzar Beridze, Director of the Commission’s Electricity Department, and Mr. Zviad Gachechiladze, First Deputy Director, participated in the Central Asian Energy Regulatory Partnership Program (NARUC) as a part of the NARUC Expert Partnership Program. As a part of the project, they shared with the representatives of the Kazakhstan Regulatory Commission with their experience in regulating normative losses in transmission and distribution networks and market reforms. The program aimed at experience and best practices sharing with Central Asian countries, providing technical assistance and regulatory assistance in terms of capacity building.

Within the technical assistance organized by the National Association of Utility Regulatory Commissions (NARUC), the Market Dry Run was conducted to enhance the competencies of the Commission and energy market participants in market control testing. In 2021, several meetings were held on this topic. Mr. Nikoloz Sumbadze, Market Monitoring Department Director attended the meetings. The strategy of bidding in the wholesale and balancing markets, the methods of determining marginal and alternative costs in the hydropower sector were discussed at the meetings.

Several meetings on cybersecurity were organized by the National Association of Utility Regulatory Commissions (NARUC). Representatives of the Commission’s staff attended the meetings together with NARUC experts. The technical task prepared by the Commission was discussed at the meeting. The conditions for the inclusion of elements promoting cyber security in the investment plan of critical facilities have been discussed. It is planned to implement a bilateral project.
The Commission's experience regarding asset depreciation was used in a study by the National Association of Utility Regulatory Commissions (NARUC) under the title - "Depreciation Costs - A Guide for Utility Regulators." Mr. Giorgi Kelbakiani, Head of the Capital Expenditure Audit Division of the Tariffs and Economic Analysis Department, has discussed the Commission's approaches to calculating the depreciation of regulated assets.

In 2021, the Commission actively cooperated with the representatives of the United States Agency for International Development (USAID) "Securing Georgia's Energy Future Program". The program included a number of important trainings on cyber security, as well as several meetings, which were attended by the representatives of the Commission.

The United States Agency for International Development (USAID) organized the South Caucasus Green Energy Forum, where investment opportunities for green energy production in Georgia have been discussed. The forum was held online and was attended by the Chairman of the Commission, Mr. Davit Narmania, representatives of the US Embassies of the South Caucasus, US Green Energy Organizations, developers and representatives of various organizations.

Under the auspices of the United Nations Conference on Climate Change in Glasgow, the UK Office for Electricity and Natural Gas Markets (Ofgem) has launched the Global Accelerator of Regulators for Energy Transformation. Ms. Maia Melikidze, a member of the Commission and Chair of the Energy Regulators Regional Association (ERRA), took part in the virtual opening ceremony of the program. She spoke on the role of regulators in achieving decarbonisation and promoting renewable energy. The Commission, together with other regulators, has joined the "Statement of Intent", which aims at strengthening cooperation between regulators to achieve decarbonisation.

The Energy Regulators Regional Association (ERRA) has published a report on the status quo of the Consumer Protection Working Group, co-authored by Ms. Tatia Pirashvili, a representative of the Commission's Consumer Complaints' Department. The study is based on an analysis of the legal framework documents of the regulatory bodies of 22 member states of ERRA and the mechanisms of protection of the rights of consumers in the electricity and natural gas markets.

In 2021, the Commission implemented a technical assistance project aimed at improving and developing the tariff methodology within the Urban Services Development Investment Program, funded by the Asian Development Bank (ADB).
9. Public Relations

Informing the public about the decisions made by the Commission, through simple means of communication as soon as possible, is a priority for the Commission and it is carried out with high responsibility. Despite the difficult epidemiological situation due to the new coronavirus (COVID-19), the Commission has used all alternative and possible means to fully achieve this goal.

Representatives of the Commission continued to take an active part in television and radio broadcasts. Relations with representatives of the media, as well as the non-governmental sector and experts have not been stopped. Cooperation with Radio Commersant continued throughout the year, where the program "Professionals" covered important developments in the energy and water supply sectors.

On the occasion of the International Consumer Rights Day, an open door day was held. During the event, the Chairman of the Commission, members of the Commission and the Energy Ombudsman met with citizens and listened to their assessments of the services provided by utility companies. On the occasion of the International Water Day, a meeting was conducted with the representatives of non-governmental organizations. The Chairman of the Commission awarded the outstanding students of the Bachelor, Master and Doctoral programs in Energy and Electrical Engineering of the Technical University (GTU). Also "GNERC Auditorium" was opened at the Faculty of Energy of Akaki Tsereteli State University in Kutaisi, organized and financed by the Commission. A conference dedicated to Energy Day was held. The Chairman of the Commission awarded not only the dedicated persons working in the Commission, but also in the energy sector in general.

Due to the difficult epidemiological situation, concluding event of 2021 was held by the Chairman of the Commission in the form of the press conference, only for the media representatives. Major attention was payed at the ongoing reforms of the energy sector. Plans for 2020 were also presented.

During the reporting year the Commission launched and completed the process of adopting the website for the visually impaired and low vision individuals.

The project Media Club implemented in an updated format has been completed. Within the framework of the project, 170 people participated in trainings conducted in an online format. Among the participants were journalists and representatives of the non-governmental sector, as well people employed in the energy, water supply, banking sectors and students. The topics of the trainings included the legal framework of the electricity, natural gas and water supply sectors, the new law of Georgia on Energy and Water supply and the relevant changes in the regulations; Harmonization of Georgian legislation with the directives envisaged by the Third Energy Package of Europe, functions and role of the energy exchange in the energy sector, monitoring of the energy market, tariff regulation. After completion of the project, participants who completed the full course were awarded with certificates.
Information on the adopted regulations of the Commission and ongoing newses in the sectors of energy and water supply are constantly updated at the official website of the Commission [www.gnerc.org](http://www.gnerc.org), moreover at official pages of Facebook, Twitter, Feedc, Youtube  Georgia, and LinkedIn.

In the reporting year, due to the epidemiological situation, the commission intensified customer relations through social media networks. Monitoring of consultations for citizens in 2021 revealed that the main questions were related to various problems arising in the relationship with utility companies. In particular, the issues arising from the changes in the meter reading system, the quality and continuity of water supply, the terms of connection to the distribution network, according to the decision of the Government of Georgia, subsidizing the increase of electricity tariffs for target groups and other issues.

Due to the mentioned topics, the activity of the citizens in the call centre of the commission has significantly increased. According to the monitoring of incoming calls, a total of 16651 calls were received at the call centre during 2020.

### 10. Management Functions

#### 10.1 International Standard ISO 9001:2015

One of the main strategic goals of the Commission in 2020 has been to ensure its activities in accordance with the international standards. For those purposes, for the first time in the Commission’s history International Standard ISO 9001:2015 has been developed and implemented at the Commission. This means that the quality of the activities carried out by the Commission is in full compliance with the international requirements what was confirmed both under the audit reports issued by the national auditors as well as by the international certification body (TUV Austria).

#### 10.1.1 Results of the Development of  ISO  9001:2015

Within the reporting year amendments have been introduced to a set of documents, specifically strategic program, positive and negative factors of the organization, organizational risks, Process Development manuals, Key Performance Indicator Templates, Risk Assessment Templates and etc. have been newly formulated. This has assisted the Commission on its way to full adaptation with the international procedures in accordance with the ISO 9001:2015 implemented in 2020.
10.1.2 Audit of the compliance with ISO 9001: 2015

Both internal and external, international supervisory audits (by TUV Austria) have been conducted within the reporting period for the first time. As a result of those audits the Commission was highly rated. Specifically, below are quotes provided from the audit reports:

**Internal Audit** - “Organisation has potential to reduce negative impacts within its Quality Management Systems to be able to provide its customers the products and services that are compliant with the current normative and regulatory requirements”

**External International Audit** - „Quality Management System is ifully compliant with the international Standards. The staff of the Commission is very qualified and motivated, the employees of the Commission have proved to have good knowledge of the Quality Management Systems, the Documents are correct and complete and process evaluation is conducted on a high level. Activity of the top management, dedication to the work and management is excellent.”

10.2 Budget and Main Parameters of its Execution

According to Article 26 of the Law of Georgia on Energy and Water Supply, the Georgian National Energy and Water Supply Regulatory Commission approves the detailed budget for the next year by the end of each year, which also includes the costs of the public defender of consumers' interests, which is independent from the apparatus of the Commission.

The Commission is financed from the regulation fee established by the Commission for regulated activities, which is paid by the relevant licensees and other regulated enterprises in accordance with the Law of Georgia on Regulation Fee.

The regulation fee is the main source of the budget formation of the Georgian National Energy and Water Supply Regulatory Commission, which covers the expenses of the Commission and which ensures the financial independence of the Commission and the exercise of its powers defined by the legislation of Georgia.

The coefficient of the regulation fee to be paid by regulated enterprises in the electricity, natural gas and water supply sectors is determined by the Commission’s Resolution N63 of December 9, 2020, and it constitutes 0.002.

The information about the planned and actual income of the Commission envisaged in the 2021 budget is given below:
Figure 10.1. Planned and actual income of the commission in 2021 (thousands of GEL)

Forecasting of Commission’s expenses in the budget is carried out by taking into account the forecast volume charged to the regulation fee. It is completed with a reasoned justification of each spending, based on the need for smooth functioning of the Commission.
The planned budget of the Commission for 2021 is 43,384 (thousand) million GEL. The difference between the planned and actually incurred expenditure by the Commission in the article of Purchase of the Main Assets was caused by the non-payment of the expenses for the purchase/reconstruction of the office building of the Commission. The commission made a decision regarding the purchase of the building in 2022.

The Commission's 2021 financial statement audit report is attached to this annual report as an appendix. According to the audit report, the financial statements, taking into account all existing aspects, fairly reflect the financial position of GNERC as of December 31, 2021, in accordance with International Financial Reporting Standards.

10.3. Purchases of goods and services

The Commission purchases goods and services in accordance with the Law of Georgia on State Procurement. Procurement during 2021 was carried out in accordance with the existing procurement plan. The amount provided by the annual procurement plan was 2 million GEL. Figure 10.1 displays the information about the finances provided by the Commission's annual procurement plan for 2018-2021 years.
10.4. Human resources management and administration

10.4.1. Human resources management

The structural units of Georgian National Energy and Water Supply Regulatory Commission are:
1. Advisory Board;
2. Electricity Department;
3. Natural Gas Department;
4. Water Supply Department;
5. Tariff and Economic Analysis Department;
6. Legal Department;
7. Regulation Improvement and Methodological Support Department;
8. Department for Consumers’ Disputes;
9. Market Monitoring Department;
10. Commercial Service Quality Control Department;
11. Public Relations Department;
12. International Relations Department;
13. Chancellery and Human Resources Department;
14. Department of Procurement, Property Management and Logistics;
15. Finance-Budgetary Department;
16. IT Department;
17. Apparatus of the Commission Chairperson and Commissioners.

According to the decision of Georgian National Energy and Water Supply Regulatory Commission N54/14 of December 23, 2021, the new staff structure of the Commission was approved. Accordingly, the Commission's apparatus was defined with 139 staff units.

One vacant position in the Commission was filled in 2021 on the basis of the competition, which was held on the basis of the Approval of the Procedure for Holding the Competition provided for by the Law of Georgia on Public Service and the Resolution N412 of June 18, 2015 of the Government of Georgia and the Regulation of the Competition in the Apparatus of Georgian National Energy and Water Supply Regulatory Commission in accordance with the Resolution N23 of September 14, 2017. As a result of all of the above, as of December 31, 2021, the number of employees at the Commission's was 129, at positions envisaged by staff structure.

The Labor Regulations of Georgian National Energy and Water Supply Regulatory Commission was approved by the Order N1083 of the Chairman of the Commission in December 13, 2019 and is an essential part of the labor contract and regulates labor relations at the Commission.

In order to ensure the equal enjoyment of the rights established by the legislation of Georgia, the Commission implements the following measures:

Taking into account the requirements of the Convention on the Elimination of All Forms of Discrimination against Women and the Law of Georgia On the Elimination of All Forms of Discrimination, the Commission’s decision N34/1 of July 22, 2021 approved the Rule of Prevention and Response to Sexual Harassment at Georgian National Energy and Water Supply Regulatory Commission, which defined fundamentals of sexual discrimination prevention and responsibility at the Commission.

According to the decision of the Commission N102/11 of December 13, 2019, the Procedure for promotion, transfer, encouragement and bonuses of persons employed at Georgian National Energy and Water Supply Regulatory Commission was approved, according to which procedures for enhancement of the motivation of employees of the Commission, the development of human resources and administrative management system is carried out and their legal bases are defined.

The methodology of the employee evaluation system was determined by the Rule of evaluation of persons employed at Georgian National Energy and Water Supply Regulatory Commission, approved by the Commission’s decision No34/2 of July 22, 2021. Accordingly, an employee evaluation process was carried out and, taking into account the results, the needs of the Commission’s organizational and human resource efforts, career advancement and professional development were determined for mandatory program. Each employee was given an equal opportunity for formulating goals and objectives, in the process of their implementation and evaluation of the work performed.

The Commission has a database that includes personal data of employees, and relevant structural unit has access to it, within the competence.

During the reporting period, the personal data requested, processed and stored by the Commission were in the following form:
- personal data of employees;
- personal data of interns and trainees;
• documentation of participants in the competition announced for appointment to a vacant position;
• Electronic database for storing personal data specified in applications submitted by citizens to the Commission in the electronic document circulation system.

Storage of information about personal data in the Commission is carried out both electronically and in physical form. In both cases, the rules established by the law of information storage are observed.

According to the Law of Georgia On Personal Data Protection, principles of data processing and storage rules were developed. The rights and obligations of the data processor are defined. File system catalogues were placed in the file system, where the following information was recorded: name of the file system; name and address of data processor, place of data storage and/or processing; Legal basis for data processing; category of data subject; data category in the file system; purpose of data processing; data storage period; Data receivers and their categories located in the file system; General description of the procedure for data security protection.

Five catalogues have been forwarded to the file system: on video surveillance in the Commission building, on the employee’s entry and exit from the building, on proceedings in the Commission, on cooperation with the Public Service Bureau, and on the hotline. One catalogue dealing with personal data of employees is under development.

In accordance with the Rule of Internship and Training Practice at the Georgian National Energy and Water Supply Regulatory Commission, approved by the order N623 of the Chairman of the Commission in December 29, 2014, internship of the students from Tbilisi State University, Paris Institute of Political Sciences, Technical University of Georgia, Business and Technology University and University of Georgia was implemented at the Commission. A total of 12 students completed their internship in the Commission.

The human resources management software package was updated daily. Modules for recording and managing the orders of the Commission’s departments, staff of the apparatus and the Chairman of the Commission were placed in the Commission's portal, which serves to strengthen and development of the human resources management function through the development/implementation of an electronic strategy.

In 2021, measures to raise the level of professional education of the employees of the Commission were constantly implemented. Training and instructional 2021 annual program was prepared, as well personnel training registration journal and incoming training registration journal for newly recruited employees.

Due to the epidemiological situation, employees of GNTERC participated in the following online trainings: Promotion of Transparency and Ethical Standards in the Use of Artificial Intelligence; Fundamentals of Energy Systems for Non-engineers; Implementation of New Labor Regulations in Legal Entities of Public Law; Strengthening of the Infrastructure of GEOstat and Capacity Building; For Prevention of Sexual Harassment; Rights of Persons with Disabilities and Etiquette of Communication with them; On Protection of Personal Data; On Creation of Favourable Regulatory Environment for Development of Network Tariff Methodology, Energy Efficiency and Renewable Energy Regulatory Strategy and Ensuring Demand Side Involvement; Effective telephone Service and Service+; Graphic Design; as well as in the Summer School trainings organized by the Florence School of Regulation and the Energy Community.

During the reporting period, three employees of the Commission's (with scholarship) completed master’s programs at leading European universities: International Energy Law and Policy (Great Britain, University of Dundee), European and International Energy Law (Germany, Technical University of Berlin) and Water and Wastewater for All for Managers of Urban Water Supply and Wastewater Services ‘ (France, AgroParisTech).
10.4.2. Proceedings

Proceedings in the Commission are carried out in accordance with the rules of the Commission on proceedings, approved by the order of the chairman of the Commission N45 of January 24, 2020 and decree N414 of the President of Georgia dated July 1, 1999 on the approval and implementation of Unified Rules of Proceedings.

The departmental registers of the Commission are maintained in the Commission (including the register of received and sent correspondence). In 2021, the Commission received a total of 13,910 applications/letters.

The Commission's portal contains modules for accounting and managing disputes discussed at the Commission, public hearings of the Commission, resolutions and decisions of the Commission, which significantly contributes to the successful functioning of the unified system of proceedings at the Commission.

Legal, economic, licensing and scientific-technical documents received by the Commission and created as a result of the Commission's activities are included in the archive fund of the Commission. A person specially appointed by the order of the Chairman is responsible for archival proceedings. The commission is guided in the process of organizing the departmental archive by the Combined Nomenclature of the Affairs of the Apparatus of the Georgian National Energy and Water Supply Regulatory Commission and the Defender of the Public Interests of Consumers Existing with the Commission, approved by order N118 of March 6, 2017 of the Chairman of the Commission. The commission cooperates with the State National Archives. The departmental archive management module of the Commission, electronic archive of the Commission is monthly updated.

According to the agreement signed between the Commission and the State National Archives on October 18, 2021, in 2021 the scientific and technical processing of the archive documents was carried out, for the years 2004-2017 of the Public Defender of Consumer Interests existing with the Commission, kept in the departmental archive of the Commission.

The person specially appointed by the order of the Chairman of the Commission is responsible for the proceedings of secret documents received and sent to the Commission.

According to the Law of Georgia On Licenses and Permits, the Commission maintains a departmental license register, in which 5 new records were added and 7 records were removed during the reporting period, and 12 existing records were modified, which was caused by the issuance, cancellation and amendment of licenses in the same period. An electronic license management program was created, which includes information from 1998 to the present day.

According to the submission of the Commission, the data stipulated by Article 13 of the Law of Georgia On Licenses and Permits will be entered in the state license register and information on the issuance of the license will be published on the website of the Legislative Herald of Georgia.

10.4.3. Publicity of the information

The Commission ensures proactive publication of public information on its website (the Commission’s website – www.gnerc.org) according to the Resolution №7 on Approving Rules of Electronically Requesting Public Information kept at the Georgian National Energy and Water Supply
Regulatory Commission and its Proactive Publication which is adopted by the Commission on March 28, 2014.

Pursuant to the Article 49 of Chapter III of the General Administrative Code of Georgia, a report on public information was prepared and approved by the Commission's Decision No 52/3 on December 9, 2021 which includes analysis of ensuring freedom of information, availability of public information and fulfilling the requirements of public information issuance according to the Article 40 of this Code and analysis of compliance with the timeframe prescribed by this Code.

The above-mentioned document was sent to the President of Georgia, the Prime-Minister of Georgia, the Parliament of Georgia and published in the Legislative Herald of Georgia pursuant to the Article 49 of Chapter III of the General Administrative Code of Georgia. In 2021, 67 written requests were submitted to the Commission from which 54 requests were fully satisfied, 10 requests were partially satisfied and 3 applications were refused. Partial satisfaction or refusal was caused by the absence of requested information at the Commission as well as by confidentiality reasons and existence of relevant legal basis.

With regard to issuance of public information, a person responsible for ensuring availability of public information has kept a register of letters submitted by e-mail (publicinfo@gnerc.org) or chancellery division on requesting issuance or interpretation of public information.

An annual report of the Commission on issuance of public information during 2016-2021 years is published on the Commission’s website (www.gnerc.org).

10.4.4. Public hearings and protocol proceeding of the Commission

The Commission fulfills the requirements of the Article 32 of General Administrative Code of Georgia, which concerns publicity of the Commission’s public hearings according to which the Commission’s hearings are public and any interested person is authorized to attend them, except the cases where the public hearing or its part is closed. During the reporting period, the Commission did not make decision on the closure of public hearing.

Decisions of the Commission, according to the rules defined by the law, are made by oral hearings at the public hearing or without oral hearing. Before making decision of the Commission, public consultations are held on issuance, modification, revocation, suspension of licenses, setting, adjustment or revocation of tariffs as well as disputes between the consumers and regulated companies or between the regulated companies themselves. Notifications on public hearings are published at the Commission’s official website. In 2021, 58 public hearings were held at the Commission and 81 resolutions and 832 decisions were adopted, whereas 493 decisions were made without oral hearings.

Resolutions and decisions adopted by the Commission are published on the Commission’s official website: www.gnerc.org.

In case of request of any interested person, the Commission makes decision on recognizing the submitted information as a commercially confidential information. In 2021, 3 decisions were made...
on the partial recognition of information as a commercially confidential. During the reporting year, the Commission did not make any decision on the refusal of recognition of information as a commercially confidential.

Public hearings of the Commission are conducted electronically via special hardware program

## 11. Annexes

Annex №1 - List of Licensees in the Electricity Sector

<table>
<thead>
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<th></th>
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<th></th>
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<td>20</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>21</td>
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<tr>
<td>Electricity Distribution</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Electricity Transmission</td>
<td>3</td>
<td>3**</td>
<td>3**</td>
<td>3**</td>
<td>3**</td>
<td>3**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electricity Dispatch</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Operation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>21</td>
<td>22</td>
<td>25</td>
<td>26</td>
<td>26</td>
<td>28</td>
<td>28</td>
<td>27</td>
</tr>
</tbody>
</table>

* From 1st of September, 2017 Energo-Pro Georgia JSC conducts electricity distribution and supply activities in the licensed area of Kakheti-Energodistribution JSC

** Preliminary transmission license issued to the Energo-Pro Georgia JSC

### Generation

- Khrami 1 HPP JSC
- Khrami 2 HPP JSC
- Georgian Water and Power LLC (Jinvali HPP)
- Vardnili HPP Cascade LLC
- Enguri HPP LLC
- Eastern Energy Corporation LLC (Khadori HPP)
- Mtkvari Energy LLC
- Vartsikhe-2005 LLC
- G-Power LLC
- Energia LLC (Larsi HPP)
- Gardabani Thermal Power Plant LLC
- Sakartvelo-Urban Energy LLC (Paravani HPP)
- Darial Energy LLC
- Old Energy JSC
- Svaneti Hydro JSC (Mestiachala HPP 1, Mestiachala HPP 2)

### Transmission

- Energo-Pro Georgia - Generation JSC
  - Rioni HPP
  - Lajanuri HPP
  - Dzevrula HPP
  - Atshesi HPP
  - Gumati HPP Cascade
  - Shaori HPP
  - Satkhene HPP
  - Chitakhevi HPP
  - Ortachala HPP
  - Zahesi HPP
- Georgian International Energy Corporation LLC (Tbilisresi)
- Kartli Wind Power Plant LLC
- Adjara Energy – 2007 LLC (Khelvachauri HPP)
- Adjaristskali Georgia LLC
  - (Shuakhevi HPP)
- Gardabani TPP 2 LLC

### Market operation

- The Georgian Energy Exchange JSC
- Georgian State Electrosystem JSC

### Distribution

- Telasi JSC
- Energo-Pro Georgia JSC
## Annex №2 - Number of Electricity Customers in 2014-2021

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Customer</td>
<td>1,664</td>
<td>1,653</td>
<td>1,689</td>
<td>1,753</td>
<td>1,767</td>
<td>1,806</td>
<td>1,847</td>
<td>1,649</td>
</tr>
<tr>
<td></td>
<td>.80</td>
<td>.54</td>
<td>.90</td>
<td>.61</td>
<td>.55</td>
<td>.47</td>
<td>.97</td>
<td>.38</td>
</tr>
<tr>
<td>Including:</td>
<td>1,566</td>
<td>1,556</td>
<td>1,562</td>
<td>1,641</td>
<td>1,661</td>
<td>1,697</td>
<td>1,736</td>
<td>1,551</td>
</tr>
<tr>
<td>Household</td>
<td>.27</td>
<td>.00</td>
<td>.48</td>
<td>.90</td>
<td>.91</td>
<td>.99</td>
<td>.84</td>
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<td>4</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>8</td>
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<tr>
<td>Non-household</td>
<td>98,52</td>
<td>97,54</td>
<td>126</td>
<td>111</td>
<td>105</td>
<td>108</td>
<td>111</td>
<td>98,07</td>
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<td></td>
<td>5</td>
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<td>4</td>
<td>2</td>
<td>6</td>
<td>18</td>
<td>17</td>
<td>47</td>
</tr>
<tr>
<td>Direct Customer</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,664</td>
<td>1,653</td>
<td>1,689</td>
<td>1,753</td>
<td>1,767</td>
<td>1,806</td>
<td>1,847</td>
<td>1,649</td>
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<tr>
<td></td>
<td>.80</td>
<td>.55</td>
<td>.90</td>
<td>.61</td>
<td>.55</td>
<td>.49</td>
<td>.98</td>
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<td>7</td>
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<td>7</td>
<td>7</td>
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<td>1</td>
<td>8</td>
<td>3</td>
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Annex №3 - System Peak Load in 2011-2021

Annex №4 - Electricity Losses in Distribution Network in 2021

<table>
<thead>
<tr>
<th>Losses</th>
<th>Distribution Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Telasi JSC</td>
</tr>
<tr>
<td>Normative (%)</td>
<td>4.81%</td>
</tr>
<tr>
<td>Actual (%)</td>
<td>2.83%</td>
</tr>
<tr>
<td>Actual (mln kWh)</td>
<td>87 kWh</td>
</tr>
</tbody>
</table>
Anex №5. Tariffs for last alternative supply of electricity

Annex №6. Electricity supply tariffs
Annex №7. Final consumption tariffs of electricity

<table>
<thead>
<tr>
<th>Public service supply</th>
<th>Universal service supply</th>
<th>Public service supply</th>
<th>Universal service supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tbilisi Electricity Supply Company JSC</td>
<td>EP Georgia Supply JSC</td>
<td>Tbilisi Electricity Supply Company JSC</td>
<td>EP Georgia Supply JSC</td>
</tr>
</tbody>
</table>

### Final consumption tariffs of electricity (tetri / kWh)

<table>
<thead>
<tr>
<th>110-35 kV non-residential</th>
<th>10-6-3.3 kV non-residential, except small enterprise</th>
<th>220-380 V non-residential, small enterprise</th>
<th>10-6-3.3 kV residential, 0-101 kWh/month</th>
<th>220-380 V non-residential, &gt;301 kWh/month</th>
<th>220-380 V non-residential, 0-101 kWh/month</th>
<th>220-380 V non-residential, &gt;301 kWh/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution tariff</td>
<td>Transmission tariff</td>
<td>Distribution tariff</td>
<td>Transmission tariff</td>
<td>Distribution tariff</td>
<td>Transmission tariff</td>
<td>Distribution tariff</td>
</tr>
</tbody>
</table>
Annex №8. Final customer tariffs of natural gas

**FINAL CUSTOMER TARIFFS OF NATURAL GAS, HOUSEHOLD (TETRI, CUBIC METER)**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Wholesale Market</th>
<th>Retail Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energokavshiri JSC</td>
<td>48.24</td>
<td>0.52%</td>
</tr>
<tr>
<td>Georgian Oil and Gas Corporation JSC</td>
<td>45.213</td>
<td>1.50%</td>
</tr>
<tr>
<td>SakOrgGazi JSC</td>
<td>48.334</td>
<td>4.16%</td>
</tr>
<tr>
<td>Sechkhergazi JSC</td>
<td>43.880</td>
<td>0.07%</td>
</tr>
<tr>
<td>Socar Georgia Gas Distribution JSC</td>
<td>40.846</td>
<td>0.45%</td>
</tr>
<tr>
<td>Frontera Resources Georgia Corporations – Georgian Branch</td>
<td>39.828</td>
<td>0.10%</td>
</tr>
<tr>
<td>Akriani-2006 LLC</td>
<td>43.216</td>
<td>0.09%</td>
</tr>
<tr>
<td>Arzu Gas LLC</td>
<td>41.524</td>
<td>0.01%</td>
</tr>
<tr>
<td>Bago LLC</td>
<td>40.678</td>
<td>0.19%</td>
</tr>
<tr>
<td>Gas Energy LLC</td>
<td>46.844</td>
<td>0.02%</td>
</tr>
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<td>Gas Trading LLC</td>
<td>49.86</td>
<td>0.19%</td>
</tr>
<tr>
<td>Gama LLC</td>
<td>48.928</td>
<td>0.19%</td>
</tr>
<tr>
<td>Gasco+LLC</td>
<td>35.161</td>
<td>0.07%</td>
</tr>
<tr>
<td>Gogochuri and Company LLC</td>
<td>36.358</td>
<td>0.14%</td>
</tr>
<tr>
<td>D-A-S LLC</td>
<td>45.73</td>
<td>0.30%</td>
</tr>
<tr>
<td>Didi Dighomi LLC</td>
<td>48.978</td>
<td>0.03%</td>
</tr>
<tr>
<td>Energia + LLC</td>
<td>49.338</td>
<td>0.06%</td>
</tr>
</tbody>
</table>

Annex №9. List of Suppliers at the Wholesale and Retail Natural Gas Markets (Market Share)

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Wholesale Market</th>
<th>Retail Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energokavshiri JSC</td>
<td>48.24</td>
<td>0.52%</td>
</tr>
<tr>
<td>Georgian Oil and Gas Corporation JSC</td>
<td>45.213</td>
<td>1.50%</td>
</tr>
<tr>
<td>SakOrgGazi JSC</td>
<td>48.334</td>
<td>4.16%</td>
</tr>
<tr>
<td>Sechkhergazi JSC</td>
<td>43.880</td>
<td>0.07%</td>
</tr>
<tr>
<td>Socar Georgia Gas Distribution JSC</td>
<td>40.846</td>
<td>0.45%</td>
</tr>
<tr>
<td>Frontera Resources Georgia Corporations – Georgian Branch</td>
<td>39.828</td>
<td>0.10%</td>
</tr>
<tr>
<td>Akriani-2006 LLC</td>
<td>43.216</td>
<td>0.09%</td>
</tr>
<tr>
<td>Arzu Gas LLC</td>
<td>41.524</td>
<td>0.01%</td>
</tr>
<tr>
<td>Bago LLC</td>
<td>40.678</td>
<td>0.19%</td>
</tr>
<tr>
<td>Gas Energy LLC</td>
<td>46.844</td>
<td>0.02%</td>
</tr>
<tr>
<td>Gas Trading LLC</td>
<td>49.86</td>
<td>0.19%</td>
</tr>
<tr>
<td>Gama LLC</td>
<td>48.928</td>
<td>0.19%</td>
</tr>
<tr>
<td>Gasco+LLC</td>
<td>35.161</td>
<td>0.07%</td>
</tr>
<tr>
<td>Gogochuri and Company LLC</td>
<td>36.358</td>
<td>0.14%</td>
</tr>
<tr>
<td>D-A-S LLC</td>
<td>45.73</td>
<td>0.30%</td>
</tr>
<tr>
<td>Didi Dighomi LLC</td>
<td>48.978</td>
<td>0.03%</td>
</tr>
<tr>
<td>Energia + LLC</td>
<td>49.338</td>
<td>0.06%</td>
</tr>
<tr>
<td>Didi Dighomi LLC</td>
<td>48.978</td>
<td>0.66%</td>
</tr>
<tr>
<td>Energia + LLC</td>
<td>49.338</td>
<td>0.07%</td>
</tr>
<tr>
<td></td>
<td>Name of the Company</td>
<td>Transportation License</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Gas Transportation Company of Georgia LLC</td>
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</tr>
<tr>
<td>2</td>
<td>Tbilisi Energy LLC</td>
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</tr>
<tr>
<td>3</td>
<td>Socar Georgia Gas LLC</td>
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<tr>
<td>4</td>
<td>Sakorggas LLC</td>
<td>√</td>
</tr>
<tr>
<td>5</td>
<td>SG Gas Company LLC</td>
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</tr>
<tr>
<td>6</td>
<td>Sachkheregazi JSC</td>
<td>√</td>
</tr>
<tr>
<td>7</td>
<td>Varketilair LLC</td>
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</tr>
<tr>
<td>8</td>
<td>Telavgas LLC</td>
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</tr>
<tr>
<td>9</td>
<td>Didi Dighomi LLC</td>
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</tr>
<tr>
<td>10</td>
<td>Energy Union JSC</td>
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<tr>
<td>11</td>
<td>Inter Gas LLC</td>
<td>√</td>
</tr>
<tr>
<td>12</td>
<td>Gasco+ LLC</td>
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</tr>
<tr>
<td>13</td>
<td>Khamari M LLC</td>
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</tr>
<tr>
<td>14</td>
<td>Akriani- 2006 LLC</td>
<td>√</td>
</tr>
<tr>
<td>15</td>
<td>Mamed LLC</td>
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</tr>
<tr>
<td>16</td>
<td>Gastransservice LLC</td>
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<tr>
<td>17</td>
<td>Gazmsheni LLC</td>
<td>√</td>
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<tr>
<td>18</td>
<td>Chiraghdani LLC</td>
<td>√</td>
</tr>
<tr>
<td>19</td>
<td>Gama LLC</td>
<td>√</td>
</tr>
<tr>
<td>20</td>
<td>DVS LLC</td>
<td>√</td>
</tr>
<tr>
<td>21</td>
<td>Energia+ LLC</td>
<td>√</td>
</tr>
<tr>
<td>22</td>
<td>Gogochuri and Company LLC</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>