

SIMPLIFICATION OF CONNECTION TO THE POWER GRID AND OPPORTUNITIES TO IMPROVE AZERBAIJAN'S DOING BUSINESS RANKING

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SUMMARY

The policy paper looks into the simplification of power connection for businesses and improvement of Azerbaijan's Doing Business ranking. The Azerbaijani government has carried out some reforms to improve the country's situation in this Doing Business sub-ranking. In the first part, we take a look at the reforms carried out in the past three years. These reforms are remembered with new decisions in this field. In parallel, we showed the effect of these reforms on the country's ranking. In the second part, we take a look at the methodology of country rankings in the Doing Business sub-ranking for power connection. The study of the methodological approach makes it possible to plan the direction and size of the reforms that will be carried out. Since the annual Doing Business reports cover May-June of the previous and following year, the legislative reforms and changes carried out in this interval are naturally reflected in next year's report. The second part looks into the new legislative changes that are not included in the Doing Business 2019 report and brings them to the readers' attention. Also, it takes into account the current procedural and legislative base and makes a forecast about our country's ranking in the Doing Business 2020 report. At the end, as a result of the studies we conducted, proposals are made to government agencies regarding the improvement of the business environment in the country and the aforesaid Doing Business ranking in subsequent years.

1. INTRODUCTION

Improving the attractiveness of the business and investment environment in the country, attracting local and foreign investors and improving the country's position in international rankings depends directly on the level of competitiveness in the country, development of financial markets, establishment of a fair judicial system and rule of law, application of corporate governance standards and simplification, and transparency of customs and tax procedures.

In addition, procedures that seem insignificant at first glance such as property registration, construction permits, and access to power supply networks are often regarded as administrative obstacles that face most entrepreneurs and often entail most of the unofficial payments.

In the last 18 months, very important measures have been taken to optimize the procedure and timing of connection to power grids, implement services with better

quality, comfort and innovation and ensure transparency and consumer satisfaction in this area.

These measures also served to improve the legislative framework governing business activities referred to in the Doing Business report. The Doing Business report covers 11 of the legal fields that shape and regulate the business environment.

One of them is the study of the legislative framework and environment in countries with regard to the acquisition of electricity. The authors of the report compare the effectiveness of business environments in nearly 190 countries with quantitative indicators. The main purpose of Doing Business in this activity is to improve the state regulation of the private sector in countries and thus create a better environment for the business sector, enhancing the overall well-being and achieving economic growth. The elimination of administrative barriers is a key tool for legal reform and improvement of state policy.

To date, Doing Business has been a stimulating source for over 3,000 legal reforms across all countries. The improvement of the business environment in the private sector means eliminating or reducing unemployment, developing the country's economy, and enriching the country. The transparency, accessibility, and effective design of the laws and the low cost of their enforcement are key quality indicators of the legal environment.

Doing Business's database is one of the sources used by governments, researchers, international organizations and think tanks in the field of designing policies, reform, research, indexing, and other areas.

This policy document reviews the simplification of procedures for entrepreneurs to connect to power grids and thus improve our country's ranking in the Doing Business report and makes relevant policy proposals.

2. DESCRIPTION OF THE PROBLEM

1.1. Reforms, successes and shortcomings in entrepreneurs' connection to the power grid in the past three years

According to the World Bank survey¹, entrepreneurs regard the lack of reliable and durable electricity supply as the fourth biggest obstacle to business. Effective electrical connection procedures, safety and reliability of power supply, energy tariffs, protection of electricity consumers' rights, and electricity supply costs are all important factors in that governments should conduct reforms and implement programmes to improve the business environment and performance indicators.

The simplification of procedures for entrepreneurs' connection to power supply in Azerbaijan began in summer 2016. It should be noted that the country's leadership treats the process of simplifying the procedures from two aspects:

- *Simplifying the procedure of electricity supply to existing or planned construction business facilities;*

¹ "Doing Business 2018", 2017, "Doing Business – 2018", 2017

- *Improving Azerbaijan's position in the Doing Business index.*

Therefore, this policy document reviews issues of improving electricity supply to entrepreneurs in relation to our country's relevant subranking in the Doing Business report. Indicators in the Doing Business report allowed us to evaluate the activities carried out in this field in our country. Under Decree No 2199 issued by the President of the Republic of Azerbaijan on 21 July 2016 "On Additional Measures to Increase the Business Environment in the Republic of Azerbaijan and Further Improve the Position of our Country in International Rankings", the Business Environment and International Ranking Committee was established in order to increase the attractiveness of the country's business and investment environment to domestic and foreign investors, ensure the sustainability of rapid development attained in the field of entrepreneurship in recent years and further improve Azerbaijan's position in international rankings. The Commission's Statute was approved by a decree issued by the President of the Republic of Azerbaijan on 27 August 2018.

Under Decree No 2947 of the President of the Republic of Azerbaijan dated 2 June 2017, an Action Plan was endorsed to implement Decree No 2199 of the President of the Republic of Azerbaijan dated 13 July 2016 "On Additional Measures to Increase the Business Environment in the Republic of Azerbaijan and Further Improve Our Country's Position in International Rankings"².

Section 14 of the Action Plan is called "Connection to Power Supply Networks". In this section, the sub-section of the "Doing Business" report "Connecting to Electric Networks" identifies agencies responsible for improving the reliability of procedures, days, expenses and electricity supply and tariff transparency components in Azerbaijan's ranking.

It should be noted that on the date when the Action Plan was adopted, Azerbaijan took 105th place and had 64.8 points in "Connection to Power Supply Networks". The document sets out progress on the components listed above as a target in the subranking³.

The decree of the President of the Republic of Azerbaijan "On the Simplification of the Procedure for Electricity Supply to Existing or Planned Construction Facilities"⁴ laid the foundation of revolutionary changes in the procedure and timing of connection to power supply networks.

In order to monitor the implementation of work related to the acquisition of electricity (capacity) by existing or planned construction facilities with the required capacity of up to 150 kW (from the existing 0.4 kV network, including 150 kW), it is planned to set up Technical Councils (TC), which will be chaired by a representative of the Ministry of Energy and include representatives of the State Committee for Urban Planning and Architecture, the Baku Transport Agency, the Azerishig Open Joint-Stock Company, the State Agency for Automobile Roads, the Sumgayit Automobile Transport and Passenger Transportation Department under the Sumgayit City Executive Authorities, the Ganja Automobile Transport and Passenger Transportation Department under the Ganja City Executive Authorities and local executive authorities.

² <http://www.e-qanun.az/framework/35658>

³ <http://e-qanun.az/framework/35658>

⁴ Decree No 1313 of the President of the Republic of Azerbaijan dated 4 April 2017

After this decree, it is planned to consider entrepreneurs' applications for technical specifications to connect to the power grid, the drafting and issuance of project documentation, as well as connection to the power supply network in Small and Medium-sized Enterprises (SME) houses and ASAN Kommunal centres (in regions where there are no ASAN Kommunal centres, ASAN Service Centres until these centres are set up).

That same decree endorsed the "Development and issuance of technical specifications and drafting documents for the acquisition of electric power (capacity) by existing or planned construction facilities of entrepreneurs with the required capacity of up to 150 kW (from the existing 0.4 kV network, including 150 kW), as well as the procedure of connecting to the power supply network".

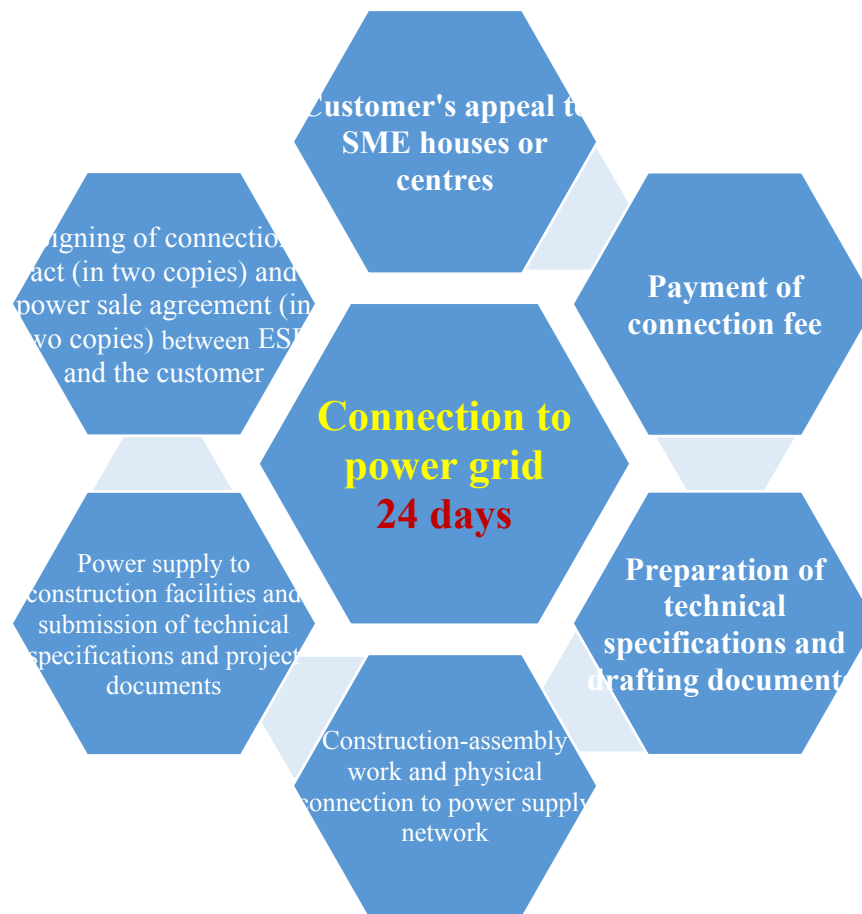
At its meeting on 28 July 2017, the Commission on the Business Environment and International Ranking also adopted an Action Plan for 2017-2018 to improve Azerbaijan's position in the Doing Business report. The action plan envisages the implementation of the following measures for the subranking to join power supply networks⁵:

- 1. Starting a system to acquire technical specifications and form a sufficient number of users through the Technical Council (TC);*
- 2. Formation of an electronic reference system for obtaining technical specifications;*
- 3. Improvement of the mechanism for power outages (defining limitations for power outages, consumer compensation for power outages, definition of penalties for suppliers);*
- 4. Application of the Geographical Information System (GIS) to create a map of electricity distribution systems;*
- 5. Analyses on the optimization of expenses connected with connection to the power supply network and preparation of relevant proposals;*
- 6. Enforcement of minimum quality standards for electricity supplier services by the regulator.*

Following a series of discussions at the Centre for Economic Reform Analysis and Communication on the implementation of the measures under Point 6 above, at the beginning (28 February 2018) and end (25 December 2018) of the last year, 43 amendments were made to the document "Development and issuance of technical specifications and drafting documents for the acquisition of electric power (capacity) by existing or planned construction facilities of entrepreneurs with the required capacity of up to 150 kW (from the existing 0.4 kV network, including 150 kW), as well as the procedure of connecting to the power supply network", which provides for the significant simplification of procedures for connecting to power supplies, and the document was improved.

After all these improvements, entrepreneurs are now connected to the power grid in 24 days in two stages in the following sequence:

⁵ Azerbaijan Economic Reform Review, September 2017



One of the biggest innovations is that no fee is charged for the preparation and issuance of technical specifications. The cost of connection is defined by the Cabinet of Ministers of the Republic of Azerbaijan in a differentiated manner, separately for agricultural and industrial facilities, as well as for construction facilities that provide trade, public catering, household and other types of services, and in proportion to the power required by entrepreneurs⁶. The connection fee is different depending on whether an entrepreneur's construction facility is connected to the power grid within 24 days or in a shorter period⁷.

Although the normative-legal act on connection to the power grid⁸ says that "the connection of a customer's construction facility to the power grid must have two stages and be provided no later than 20 (twenty) days", when the days required for connection procedures in the document are put together, it amounts to more than 20 days, and at the same time, the Cabinet of Ministers decision on the approval of the connection fee⁹ is classified in two tables with the amount of the connection fee being for 24 days and 12

⁶ Cabinet of Ministers Decision No 180 dated 27 April 2018 to approve the amount of the fee for connecting construction facilities to the power supply network.

⁷ Ibid.

⁸ The decree of the President of the Republic of Azerbaijan "On the simplification of the procedure for supplying electricity to entrepreneurs' existing or planned construction facilities"

⁹ Cabinet of Ministers Decision No 180 dated 27 April 2018 to approve the amount of the fee for connecting construction facilities to the power supply network.

days. Taking these facts into account, it is more expedient to make the timing of connection to the power grid not 20 days, but 24 days.

1.2. Doing Business's methodological approach to connection to electricity

While preparing Doing Business reports, the database is based on 4 sources:

- *Legal and regulatory acts;*
- *Government representatives (government agencies);*
- *Doing Business respondents (experts, representatives of the private sector, etc.);*
- *World Bank regional officers.*

Doing Business is based on assessment results for 4 main indicators when compiling the electrical energy connection index¹⁰:

1. *The number of completion procedures in the period from the application for electricity supply and prior to the signing of the contract;*
2. *The time required for connection to the power line (day)*
3. *Connection costs (ratio of percentage to per capita national income)*
4. *Times of power cuts and their monitoring, legal mechanisms for minimizing such situations, and transparency of tariffs.*

Let's take a closer look at the terms and meanings of the indices:

According to the methodology, a **procedure** implies any contact between an employee (representative) of a business entity and the power supply enterprise during the period of connection to the power grid. Contacts between the business entity's own employees are not considered as a separate procedure.

The **time** is calculated based on a calendar day. The time required for each procedure step is at least 1 day (if the operation is done online, it is 0.5 days). It is assumed that a business entity is aware of all the necessary procedures to connect to the power grid and takes each procedural step consistently without delay. Also, although the procedures can be performed in parallel, they cannot start on the same day for calculation purposes, but only on the day the preceding procedure ends.

The time spent on the consistent and timely execution of the procedures is taken as the time required in practice. To put it more plainly, the most important time is the time spent on the completion of all procedures to connect to the power grid, not the time specified in the law.

Connection costs are calculated as the ratio of percentage to per capita national income (Value Added Tax (VAT) not included). All costs for the procedures required to connect to the power grid are included here.

The security of supply and transparency of tariffs are measured by the Doing Business electrical security index SAIDI (System Average Interruption Duration Index)

¹⁰ "Doing Business – 2018", 2017

and SAIFI (System Average Interruption Frequency Index). The SAIDI index characterizes the average cut-off period for each consumer throughout the year in the country's largest economic city. Annual statistical data is obtained from the supplier company and government agencies. To collect points on this index, one must meet the following conditions:

- *The supplier company should keep statistics of outages;*
- *The value of SAIDI should not exceed 100 hours;*
- *The value of SAIFI should not exceed 100 units.*

If the limits for these indicators (terms) are exceeded, power supply is not considered reliable and no points are given for this index. Also, if statistical data collection for power outages is evasive or is not generally conducted at all, then it is not possible to earn a point on the index. The reliability of supply and transparency of tariffs for countries that meet the above criteria are estimated based on 6 components:

1. If SAIDI and SAIFI are equal to or below 12, 1 point is given (equal to an hour-long power cut per month). If it is 4 or lower, an additional 1 point is given (which means an hour-long power cut per quarter). Finally, if it is equal to 1, an additional 1 point is added. One can earn a maximum of 3 points on this index;
2. Power failure control by a power supplier is carried out by automated systems (e.g. KIS, Supervisory Control and Data Acquisition (SCADA), etc.), 1 point is given. If the system is not automated and is based on consumer feedback, no point is given;
3. If electric power recovery is automated (KIS, SCADA), 1 point is given, and if it is carried out by repair brigades and site workers, 0 points are given;
4. If the service of the electricity supplier is monitored by government agencies, 1 point is given, otherwise no points are given;
5. If electricity tariffs are available online, and at the same time, consumers are informed about tariff changes 1 month ahead, 1 point is given, otherwise, 0 points are given;
6. Availability of penalties to reduce power cuts. If the duration of a power cut exceeds a predetermined limit, and if there is a fiscal fine for the distributing company or compensation for consumers, 1 point is given. If there is no such mechanism, no points are given.

2. AZERBAIJAN'S POSITION ON THE SUBRANKING OF ELECTRICITY CONNECTION IN THE DOING BUSINESS 2019 REPORT: REFORMS CONSIDERED AND IGNORED IN THE RECENT REPORT

Azerbaijan ranks 74th in the electrical grid connection ranking in the Doing Business 2019 report. Its proximity to the nearest index is 77.27 out of 100 points. Azerbaijan's position is based on the following indicators:

- *Number of procedures: 7;*
- *Duration: 41 days;*
- *Cost: 140.4%;*
- *Supply quality and tariffs transparency (0-8): 7.*

For comparison, it must be noted that according to the Doing Business 2019 report, the indicators of the leading country in electrical grid connection, the United Arab Emirates (UAE), are as follows:

- *Number of procedures: 2;*
- *Duration: 10 days;*
- *Cost: 0;*
- *Supply quality and tariffs transparency (0-8): 8.*

Apparently, the smallest number of procedures among the countries involved in evaluating the report in this area is 2. It takes 10 and 18 days to complete all the required procedures and connection work in the countries with the best results. As far as the costs are concerned, the construction and connection of power lines with a capacity of up to 150 KW is free of charge in UAE, Japan and China. Entrepreneurs are not charged. The 27 countries that met all of the rating requirements for supply quality and tariff transparency showed maximum results with 8 points. The conclusion is that not every country with a good result on this indicator has the best indicator for all the points of the indicator.

Each country has strengths and weaknesses associated with connection to electricity. For example, although Japan does not require any costs from entrepreneurs for this service, the time required to connect to the power grid is 105 days, which is 64 days more than in Azerbaijan. But due to its high performance on other parameters, Japan is ranked 22nd among 190 countries in this index while Azerbaijan is ranked 74th.

In the section "Substantiation of the problem" of the policy document, we talked at length about the four parameters (procedures, timeframe, cost, supply quality and tariff transparency) related to connection to electricity. The Reform Action Plan was compiled with the study of the current methodology and international experience of connection to electricity in the Doing Business report¹¹. As a result of the implementation of these measures, the procedures have been significantly simplified. As a result, after the completion of all required procedures, the time of the customer's connection to the power grid has been reduced to 24 days. However, since the reforms do not fully cover the period when the latest Doing Business report¹² was compiled, the report says 41 days.

In the Doing Business 2019 report, Azerbaijan was one of the 10 most successful countries in improving the business environment (8 reforms) and was ranked 25th among 190 countries in overall rankings, moving 22 steps higher. Along with the reduction of the number of procedures related to electricity connection and shortening of their timeframe, Azerbaijan invested in improving the network infrastructure in 2017-2018

¹¹ Azerbaijan Economic Reform Review, September 2017

¹² "Doing Business – 2019", 2018

and created a regulatory body – the Agency to Regulate Energy Issues (AREI) Public Legal Entity, which is responsible for monitoring power outages¹³.

In the Doing Business 2019 rankings, the number of procedures did not change compared to previous years (2017, 2018). This is due to the fact that the amendments to the legislation were finalized at the end of 2018, and this period was not included in the reporting period.

The following table presents Azerbaijan's position and changes in 2019 in the Doing Business report in a comparative way.

Table 1. Procedures for connecting to the power grid in Azerbaijan (2019)¹⁴

Responsible agencies and procedures	Duration (days)	Expenses (AZN)
<p>1. Responsible agency: ASAN Kommunal</p> <p>A customer applies to ASAN Kommunal and submits the necessary documents to connect to the power line.</p>	12	
<p>2. Responsible agency: Azerishig OJSC</p> <p>Azerishig OJSC's network engineer looks at the site to prepare technical conditions and set the optimal route. During the inspection of the site, the presence of a representative of the customer is important.</p>	1	
<p>3. Responsible agency: Azerishig OJSC</p> <p>Azerishig OJSC prepares the project of the electric power line based on technical specifications.</p>	11	
<p>4. Responsible agency: Local executive authorities and the Ministry of Internal Affairs (MIA)</p> <p>ASAN Kommunal receives the necessary permits from the relevant authorities for the excavation work (MTCHR, Baku City Executive Authorities (BCEA), etc.). Nevertheless, the customer is also required to inform the local executive authorities and the Ministry of Internal Affairs about the commencement of excavation work.</p>	2	
<p>5. Responsible agency: Electricity company</p> <p>The contractor signs a contract with a licensed electricity company for the construction of a power line.</p>	7	9,562.5
<p>6. Relevant Authority: State Energy Control Department (SECD)</p> <p>Upon completion of the work to build the power line,</p>		

¹³ www.iqtisadiislahat.org, 2017

¹⁴ (Doing Business Economy Profile: Azerbaijan, 2019)

SECD conducts a final inspection to verify compliance with the technical specifications and a permit is issued.	2	
7. Relevant entity: Azerishig OJSC		
The customer submits the permit document to the electricity distribution company (Azerishig OJSC) and sign a contract for power supply. Upon completion of the work, the customer will be connected to the power grid and power supply will be provided.	7	

The requirements of Presidential Decree No 1313 (without amendments and supplements) dated 4 April 2017 are reflected in the Doing Business 2019 report, though not in full, but the well-known decision of the Cabinet of Ministers on connection tariffs and the amendments from the decrees on changes to the aforesaid decree¹⁵ are not taken into account. It is expected that reforms conducted in connection to electricity in Azerbaijan will be considered in the Doing Business 2020 report.

If we compare the Doing Business 2018 and Doing Business 2019 reports, we can see that due to the reforms, the time required to connect to the power line in 2019 dropped from 69 days to 41 days and became about two times shorter, because the application for connection to the power line and the submission of the initial documents are carried out through ASAN Kommunal (ASAN service centers where these centers are not available) and SME houses¹⁶. These institutions are also entrusted with obtaining a permit for excavation work. This amendment reduced the duration of the procedure from 13 to 2 days.

If previously (2018) work to build a power line could be carried out by the Azerishig OJSC or a contractor depending on the customer's choice, in the last report (2019), this work was carried out only by the latter. The duration of the work has also decreased in practice from 20 to 7 days. In the last two procedures, however, the change in the process and time was not taken into consideration. In the 2019 report, SECD conducts a final inspection to verify compliance with the technical specifications of the work and, if the technical conditions are met, provides the relevant permit document to the customer. In the last procedure, the consumer submits this permit to Azerishig JSC, the parties sign a contract on electricity supply and power supply begins. The cost of connection to the power line (in current terms) was 140.4% of national per capita income from May 2017 to May 2018.

However, as we noted in the previous sections, some of the procedures listed above have been cancelled (for example, the entrepreneur obtaining appropriate permits, SECD carrying out the final inspection to verify compliance with the technical requirements), and the number of procedures has been reduced to 2. The connection fee is determined on the basis of 2 types of tariffs, depending on the time of the connection.

Let's count the sum of the connection fee with the help of tariffs endorsed by the Cabinet of Ministers and on the basis of the Doing Business calculation methodology:

¹⁵ Decree No 1857 dated 28 February and Decree No 437 dated 25 December 1857 by the President of the Republic of Azerbaijan.

¹⁶ They are expected to open in 2019.

Table 5. Calculation of expenses on connection to the electrical grid in Azerbaijan on the basis of Doing Business methodology

Power	Amount of connection fee (in manats)		
	For agricultural facilities	For industrial facilities	For trade, public catering and other types of facilities
140 kVt	<p>1. $(21240+(140-125)\times 72)/1.18 = 18,915.3$</p> <p>2. $18,302.4/6,928\times 100 = \underline{273.0\%}$</p>	<p>1. $(23600+(140-125)\times 80)/1.18 = 21,017.0$</p> <p>2. $20,336.0/6,928\times 100 = \underline{303.4\%}$</p>	<p>1. $(28320+(140-125)\times 96)/1.18 = 25,220.3$</p> <p>2. $24,403.2/6,928\times 100 = \underline{364.0\%}$</p>

Note: According to the Doing Business methodology, the required power is 140 kilowatts. According to the methodology, since the cost of connection does not include the value added tax (VAT), it is deducted from the tariff and the cost of connection is found based on per capita national income¹⁷.

According to the methodology, if there are several tariffs, the value taken as a basis in the index of expenses on connection to electricity is the median value, in which case the cost of connection will be 303.4%.

Taking into account all legislative reforms carried out prior to the date of preparation of the policy paper¹⁸ on connection to the power line, Azerbaijan's indicators in the Doing Business 2020 report (taking into account the terms of the relevant methodology) can be predicted as follows:

Table 6. Forecast of results on Azerbaijan Power Line Connection Indicator in the Doing Business 2020 Report

Years	Connection to power line (ranking)	Number of procedures (number)	Time (calendar days)	Expenses (ratio to per capita national income)	Supply quality and tariff transparency (index)
2019	74	7	41	140.4%	7
2020	15-25	2	24	303.4%	5

¹⁷ The national income indicator is the last official indicator disclosed by the State Statistics Committee, it belongs to 2017. For this reason, a slight mistake in calculations is possible.

¹⁸ 13 February 2019

3. POLICY PROPOSALS ON CREATING A FAVOURABLE ENVIRONMENT IN THE FIELD OF CONNECTING BUSINESS FACILITIES TO ELECTRICITY AND ON IMPROVING AZERBAIJAN'S POSITION IN THE RELEVANT SUBRANKING OF THE DOING BUSINESS RANKING

1. **First policy proposal:** Compensation by the state for entrepreneurs' expenses on connection to power supplies of up to 150 kW or reduction of connection expenses by optimizing them.

Advantages of the policy proposal: Although the reduction of costs to zero in the world is rare, it still happens. All expenses on the construction of power lines for businesses in Japan, China and the UAE - materials, licences, workers, etc. are covered by the state. Coverage of expenses by the state or setting of a lower amount than the current high amount are important aspects of support for business. In countries with the same economic status, similar expenses by entrepreneurs are considerably lower. According to the results of 2019, connection costs are 5.7% in Russia, 70.3% in Armenia and 157.4% in Georgia. Only in Turkey this indicator is higher - 389.5%. Another important point is that, in contrast to Azerbaijan, the past three years have seen a tendency to reduce the cost of connection in each of the abovementioned countries, including Turkey, where the costs are high. In most European countries, this indicator is significantly lower, ranging from 5% to 26%.

The implementation of this policy proposal is crucial in two aspects.

First, the current tariffs do not take into consideration two important factors such as the length of the distance between the source of electricity supply and a business facility, and the significance of the route (road) selected for power supply to the construction site, while both factors have an important share in the calculation of costs. This leads to a violation of the principle of justice in the calculation of costs, and the amount of connection fees does not differ in different conditions (expenses), which ultimately results in all entrepreneurs having to pay a fixed amount.

Second, the official costs of entrepreneurs have increased dramatically as a result of the establishment of single tariffs after recent reforms to simplify connection to electricity. If in the last Doing Business report this figure was 140.4%, according to our calculations based on the formulas we developed in accordance with the Doing Business methodology, expenses at least doubled and reached 303.4%. The growth in entrepreneurs' expenses can lead to a slight decline in Azerbaijan's relevant subranking in the next Doing Business report.

Shortcomings of the policy proposal: The implementation of this policy proposal is currently difficult for 4 reasons.

First, procedures for connecting business facilities to electricity in the past one year and a half were simplified for two reasons, one of which is the improvement of Azerbaijan's position in the Doing Business report and ensuring of a favourable business environment. In our view, the government attaches more importance to the first reason. Looking at the course of reforms, we can see this clearly. The Doing Business report

contains four important indicators for electricity connection, which differ greatly from each other for the degree of significance. The relatively less important of them is entrepreneurs' expenses. More precisely, high expenses do not affect the country's ranking as the indicator is estimated in comparison with that of other countries, and the range of indicators among 190 countries is very wide – from zero (Japan, China, UAE) to 16,713 per cent (Venezuela). Otherwise, the government of Azerbaijan would not have doubled the expenses in comparison with the last reporting period. It is precisely this factor that should be regarded as the biggest obstacle to the realization of the policy proposal.

Second, the implementation of this policy proposal will increase public spending. The adoption of this decision during the reform of public spending can face resistance within the government.

Third, it has not been a long time since the adoption of single tariffs for electricity connection, and the supporters of this decision justified their position by the need to reduce the informal costs of entrepreneurs. The reduction of entrepreneurs' informal costs can also be assessed as an obstacle to the implementation of the policy proposal.

Fourth, the government's counterargument to the argument that the growth in entrepreneurs' spending will encourage a decline in our position in the relevant Doing Business subranking could be that other reforms (reduction in the number and duration of procedures) carried out in this field in 2018 can compensate for the negative impact of the growth in expenses.

2. Second policy proposal: Acceleration of the SCADA system's coverage of the entire energy sector

Advantages of the policy proposal: During the drafting of the Doing Business 2019 report, the big energy accident¹⁹ at the Mingachevir Hydroelectric Power Station in June 2018 did not appear in the SAIDI and SAIFI indices, as data from May 2017 to May 2018 were used. It should be noted that according to this indicator, which is maximum 8 points, Azerbaijan had the highest score for all indicators - 7 points, but failed to gain points for only 1 indicator. Most likely, the negative impacts of the accident will be considered in the Doing Business 2020 report next year. It is possible to forecast that in the best-case scenario, our SAIDI and SAIFI indicator, which is 7 points, will decline by several points. This will be a decisive factor in the assessment of Azerbaijan's electricity connection. It should be remembered that in the previous report (2018) the SAIDI and SAIFI indicators were 0.9 and 1.0, respectively.

The main function of the SCADA system is to establish a direct visual contact between the network and the controller who manages the energy system. Through this system, it is possible to control and manage the electrical equipment of the network, perform emergency operations, analyze electrical incidents, make measurements and prepare

¹⁹ According to the State Commission's calculations on the accident at one of the substations of the Azerbaijan Thermal Power Station LLC, during the 2 days of the accident and the elimination of its consequences, customers lost 23 million kW/h of power supply. According to international practice, the amount of damage per kW/h of electricity not supplied to the customer is \$ 100. Considering that industry has a small share in the economy of Azerbaijan, this figure is set at \$ 12. Using this method, it was established that the population and the economy sustained damage worth \$ 276 million or 469.2 million manats. It should be noted that during the accident in Mingachevir there was a breakdown in electricity supply to 39 cities and regions of the country for 2 days.

reports. Although the SCADA remote control system in the electric network of Azerishig OJSC was set up in January 2010²⁰, no complete integration of the electricity network into the system was carried out. The same can be said about Azerenergy OJSC. If there is a loss of energy or an accident at any of the substations included in the system, that incident is immediately transmitted to the Central Control Service with a special alarm signal, which appears on the controller's computer. The duty controller can immediately detect the accident that occurred and investigate the cause of the accident, which will allow the accident to be eliminated as soon as possible and prevent interruptions in energy supply to consumers. The accident in Mingachevir showed that statements by Azerishig OJSC officials about the use of the SCADA system were far from the reality²¹.

Shortcomings of the policy proposal: Doing Business obtains the required indicators for the calculation of SAIDI and SAIFI indices from relevant government agencies. It appears that the information submitted for the preparation of the report did not reflect the reality. Therefore, Azerenergy and Azerishig OJSC may not be interested in the implementation of this policy proposal, because the implementation of the policy proposal is possible only after determining the actual scope of the SCADA system and the extent to which the indicators required for calculating the SAIDI and SAIFI indices reflect the reality.

3. Third policy proposal: The provision of compensation to consumers for power outages according to legislation or penalties for electricity distributors and enforcing the requirement that consumers must be notified of changes in tariffs at least one month in advance.

Advantages of the policy proposal: Azerbaijan did not receive points in the last valuation of compensation to consumers for power cuts or the penalty for electricity distributors. If relevant changes are made to the legislation, it will be possible to protect the rights of consumers (including entrepreneurs) and increase the quality of electricity supply, which will ensure a favourable business and investment environment.

The disclosure of tariff changes at least one month in advance can increase the effectiveness of entrepreneurs' expense planning and management of the turnover. Although the legislation currently requires this, it is not fully implemented²².

Shortcomings of the policy proposal: In the current situation, where the electricity generation and distribution network is not fully technically modernized and integrated into automatic control systems, the implementation of the proposal can lead to a massive increase in compensation for consumers or penalties for electricity distributors, encourage an increase in judicial disputes between entrepreneurs and electricity suppliers, and create a negative precedent.

²⁰ <http://azerishiq.az/page/scada-sistemi>

²¹ <https://report.az/energetika/azerisig-in-sedr-muavini-baki-seheri-uzre-enerji-itkisi-17-den-7-8-e-endirilib-musahi-be/>

²² **Law of the Republic of Azerbaijan "On natural monopolies". Article 10-1. Obligation of natural monopoly subjects to disclose information.** Legal entities that have a natural monopoly shall disclose information about the terms and conditions of the supply of goods and services and their prices, as well as changes in those conditions and prices in the manner prescribed by law at least 30 days prior to the offer of those conditions or changes in those conditions and prices.

4. CONCLUSIONS AND SUGGESTIONS

Thanks to consistent reforms in the field of electricity connection over the past one year and a half, all administrative barriers faced by entrepreneurs have been eliminated, the number of procedures has been reduced as much as possible, the time of connection has been shortened significantly, and informal payments have been cancelled. The implementation of these measures should be highly appreciated in terms of improving the business climate in the country, attracting direct foreign investments, and improving the country's Doing Business rating. The main issue that entrepreneurs are not happy about electricity connection is the high cost of connection. At the same time, the situation with regard to the accountability (especially, financial accountability) of organizations engaged in energy generation and supply is not satisfactory.

Based on the conclusions of the policy paper, we believe that the implementation of the following proposals will further improve the situation in the field of connection to electricity for business facilities:

1. State funding for costs or optimization of costs associated with the connection of business facilities to the electricity supply system;
2. Complete integration of the country's energy generation and distribution system into the SCADA system;
3. Adoption of special reporting standards for state agencies in order to increase transparency and accountability in the activities of Azerenergy OJSC and Azerishig OJSC;
4. Compliance with the requirement that consumers (entrepreneurs, population) must be informed at least one month in advance about an increase in electricity tariffs;
5. Formation of mechanisms of penalties for agencies responsible for power outages and the compensation to consumers;
6. Elimination of contradictions about time (20 days or 24 days) in legislative acts related to electricity connection;
7. Ensuring the safety and reliability of electricity supply in the country by eliminating monopolies in the field of electricity distribution;
8. Implementation of minimum quality standards for electrical service providers by the regulator envisaged in the Action Plan of the Commission on the Business Environment and International Rankings.

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