# WE ARE CONNECTED BY ENERGY

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CODE OF GOOD PRACTICE FOR DISTRIBUTION SYSTEM OPERATORS

## **TABLE OF CONTENTS**

What is a Distribution System Operator?	4
How does the Distribution System Operator work?	9
How does the Distribution System Operator connect the Customer to its grid?	12
How does the Distribution System Operator provide distribution services?	13
Customer agreements and billing	
• Prosumers	
Smart meters	
When and why might interruptions in power supply occur?	17
• How does the Operator take care of the distribution grid?	
• How does the Operator work in the event of extensive failures?	
Contact channels and complaint handling	20
Declaration	21

Access to electricity is a universal human right and it is an indispensable element of our lives. At the same time, development of renewable energy sources and environmental awareness have become increasingly important in recent years. Therefore we need to understand the nature and mode of operation of electricity distribution companies. The Polish Power Transmission and Distribution Association, associating Distribution System Operators, wants to establish this right on mutual trust. The Code of Good Practice is meant to be the key to building this trust through broad understanding and education.

#### What is the purpose of the Code of Good Practice?

The Code outlines the scope of tasks of Distribution System Operators (Operators) and defines the Customers' issues that can be addressed by the Operators. It also shows the goals pursued by the Operators and values they follow in their daily activities.

The electricity market is divided into segments comprising of generation, distribution and sale of energy, however, the Customers have not become fully aware of this division yet. They often perceive the Operators and Suppliers of electricity as a whole – "electricity boards" or "power plants", despite separate regulatory framework and conducted activities.

The Operators are aware of the close connection and influence of the energy industry on the environment, therefore they aim to minimize this impact on the surroundings and climate. They implement pro-environmental investments, manage their resources effectively and cultivate environmental awareness.

The Code of Good Practice was developed by the Polish Power Transmission and Distribution Association and its implementation is recommended by its Members - on a voluntary basis.

#### WHAT IS A DISTRIBUTION SYSTEM OPERATOR?

- The Operator provides electricity distribution services, i.e. it delivers electricity to the Customers connected to the distribution grid.
- The Operator does not generate or sell electricity.
- There are currently five major Distribution System Operators operating on the Polish market: Enea Operator, Energa-Operator, PGE Dystrybucja, Stoen Operator and TAURON Dystrybucja.
- Each of these companies operates in a specific area of the country and is responsible for the condition of its distribution grid infrastructure.



AREAS OF OPERATION OF THE FIVE MAIN DISTRIBUTION SYSTEM OPERATORS IN POLAND

Electricity is sold by energy Suppliers, i.e. companies holding a license for such activities issued by the President of the Energy Regulatory Office. The Suppliers compete on the free market throughout Poland, irrespective of the area of activity of particular Operators.

Energy is generated by large conventional power plants and renewable energy sources (RES). Many consumers act as prosumers, meaning they also generate energy using RES for their own needs.

#### SEPARATION OF ELECTRICITY DISTRIBUTION FROM OTHER SEGMENTS

# HOW IS THE ELECTRIC POWER SYSTEM ORGANIZED?

The Operator's activity can be compared to road network management and administration. The roads must be kept passable and reach out towards new houses and settlements. Those roads can be used by various carriers - it is the same with electricity. The Operator does not sell energy - it makes its grid available to the conventional and renewable energy Generators and energy Suppliers. It also selects the best grid maintenance and development strategies.

#### STRUCTURE OF POWER GRID DIVIDED INTO VOLTAGE LEVELS



## THE OPERATOR DISTRIBUTES ELECTRICITY AT THREE VOLTAGE LEVELS:

low voltage line (230/400 V) is used by the Operator to deliver electricity directly to households – it is a local road. Several such local roads meet at the interchange (MV/LV substation),

electricity is delivered to the MV/LV substation via medium voltage line of 15 kV (occasionally 6 kV or 30 kV). This is a provincial road. Several such provincial roads meet at the interchange (HV/MV substation),

2

there is a 110 kV high voltage line running to the HV/MV substation - this, in turn, is a national road.

In addition, there are also extra high voltage lines (EHV), which can be compared to motorways (road No. 4). They deliver energy to high voltage lines through EHV/HV substations, which are controlled by the Transmission System Operator in Poland. Its duties are performed by a separate special purpose company – Polskie Sieci Elektroenergetyczne.

The Operator has to ensure the highest quality of the delivered electricity regardless of the Energy Consumption Point and monitor the quality of low (LV), medium (MV) and high (HV) voltage current.



## HOW DOES THE DISTRIBUTION SYSTEM OPERATOR WORK?

The Operator carries out strictly regulated market activities on the basis of a license granted by the President of the Energy Regulatory Office. The scope of its tasks is set forth in the relevant rules of the law, particularly the Energy Law, along with its executive regulations.

The Operator performs its activities in accordance with such documents as:

- The Tariff for electricity distribution services (Tariff), which is a set of rules for the settlement of Customers and rates of fees,
- The Distribution Network Code, which is a set of rules for the use of the Operator's grid.

The Operator posts these documents on its website following their approval by the President of the Energy Regulatory Office.

- The Operator's priorities include provision of services of the highest quality and Customer satisfaction with the level of assistance offered. To this end, the Operator implements innovative and customer-friendly solutions, provides various channels and forms of contact and optimizes the current customer service.
- The Operator strives to build Customer awareness in the scope of its business. It informs Customers about current activities, also through its website.
- The Operator ensures Customer data protection.
- The Operator carries out its activities on the energy market in an independent and impartial manner based on the so-called Compliance Program, while treating all market participants equally.

#### MAIN TASKS OF THE OPERATOR

The Operator's tasks include:



Acquisition of metering 0156354 and billing data, which is exchanged between 0002157 authorized entities. 0054032 Facilitation of Supplier switching, while ensuring equal treatment of all participants in the energy market.

## HOW DOES THE DISTRIBUTION SYSTEM OPERATOR CONNECT THE CUSTOMER TO ITS GRID?

- The Operator connects the Customers' facilities to its grid, including, among others, demand facilities, generation sources, energy storage units and electric vehicle charging stations.
- The connection process is carried out considering the division into connection groups based on relevant documents required by law.
- The connection process is carried out with the use of best practices to meet the Customers' needs and comply with legal and regulatory requirements.
- It operates efficiently and takes reasonable steps to shorten the grid connection process, if possible.
- It exercises due diligence in order to carry out grid connection process using the simplest procedures and minimum formality requirements.
- Where possible, the electronic document circulation is implemented.
- It provides information on the rules of grid connection process on its website in the most accessible way possible.
- Through its representatives, it provides full and comprehensive information about the grid connection process.



## HOW DOES THE DISTRIBUTION SYSTEM OPERATOR PROVIDE DISTRIBUTION SERVICES?

#### Customer agreements and billing

- Household Customer enters into a comprehensive agreement, both for the sale and distribution of electricity, with an authorized Supplier of their choice. In this case, the Customer receives one invoice. The list of Suppliers is available on the Operator's website.
- In the case of other Customers, it is the Customer who decides what type of agreement they would like to conclude. There are two possibilities:
  - The Customer concludes two separate agreements one for the distribution of energy with the Operator and the other for the sale of energy with the Supplier of their choice. In such a situation, the Customer receives two invoices issued independently by each entity.
  - The Customer concludes one agreement a comprehensive agreement for both the sale and distribution of electricity, with an authorized Supplier of their choice.

The Operator strives to simplify the concluded agreements, considering all the necessary provisions resulting from the obligations imposed by law. Draft agreements are made available to the Customers for information purposes.

- Should the current Supplier cease to perform the sales agreement, the so-called back-up sales agreement is concluded. It guarantees the continuity of power supply to the Customer until a new electricity Supplier is chosen.
- In the event of termination of the agreement, the Operator arranges for a final meter reading to make the final settlement, or dismantles the meter on the date agreed with the Customer.
- The Operator settles accounts for the provided distribution services according to the Tariff, which is approved by the President of the Energy Regulatory Office and posted on the Operator's website.

- The electricity distribution rates, approved by the President of the Energy Regulatory Office, are set forth in the relevant provisions of the law and include the following components on the invoice:
  - fixed grid charge reflects the costs incurred for the maintenance of power equipment poles, lines, substations,
  - **variable grid charge** reflects the costs of energy transmission and is directly dependent on its consumption,
  - subscription charge reflects the costs of meter reading,
  - **quality charge** it is a fee for the benefit of the Transmission System Operator Polskie Sieci Elektroenergetyczne for maintaining the extra high voltage transmission lines,
  - **transition charge** it is to cover the costs of liabilities incurred in connection with the expansion of the power plants several years earlier,
  - **RES charge** it is to cover the costs related to ensuring the availability of energy from renewable sources in the National Power System
  - capacity levy rate it is intended to cover the costs of power contracts of Power Generators obliged to keep their power units ready,
  - cogeneration charge it is intended to cover the costs related to ensuring the availability
    of energy from units operating in the system of high-efficiency cogeneration, i.e. simultaneous
    generation of electricity and heat.

In the future, depending on the adopted legal solutions, the items on the invoice may change.

#### **PROSUMERS**

Prosumers are both electricity consumers and producers. They generate electricity for their own needs in a micro-installation and feed any surplus into the grid. The full definition of a Prosumer can be found in the Renewable Energy Sources Act.

The following entities may become Prosumers:

- a household consumer,
- 📕 an enterprise,
- a housing cooperative,
- a foundation, association, sports association, etc.

The Prosumer must set up a micro-installation of up to 50 kW and be connected to a low or medium voltage grid.

The Operator also provides services for the benefit of energy communities, such as collective prosumers, citizen energy communities, energy clusters, cooperatives, among others. The services provided include, among other things, installation of smart meters, billing for the distribution services and making metering data available to authorised entities.

16

#### **SMART METERS**

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The replacement of traditional meters with Smart Meters (SM) is based on the Energy Law.

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Thanks to Smart Meters reading is carried out electronically, which allows for precise determination of the amount of energy consumed from the distribution grid, and in the case of prosumers and energy communities, also the amount of energy fed into the distribution grid.

Smart Meters are capable of bidirectional communication with the Operator's metering system.

Thanks to Smart Meters, we can remotely

- obtain billing readings,
- suspend or restore power supply,
- change the tariff group,
- read load profiles,

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obtain information about the quality of electricity delivered to Customers.

Thanks to Smart Meters, the Customers can obtain metering data in near real-time through its dedicated secure communication interface.

Detailed information on the Smart Meter functions, methods of communication and the benefits of using this type of device can be found on the websites of the Operators.

## WHEN AND WHY MIGHT INTERRUPTIONS IN POWER SUPPLY OCCUR?

Lack of access to electricity from the distribution grid most often occurs in the following cases:

- planned power interruption due to the modernization and investment activities related to the grid and the Operator's assets,
- grid failure caused by, among others, external factors,
- statutory curtailment concerning electricity supply imposed on the Operator by Polskie Sieci Elektroenergetyczne.

In addition, the electricity delivery can be interrupted:

- as a result of ongoing debt recovery proceedings,
- if, upon inspection, it is established that the installation at the Customer's premises poses an imminent danger to life, health or the environment,
- if, upon inspection, an illegal consumption of electricity is detected.

Should an electricity shortage occur, the Customer may contact the Operator's 24-hour emergency hotline or use other available contact channels in order to verify its cause.

## HOW DOES THE OPERATOR TAKE CARE OF THE DISTRIBUTION GRID?

- The Operator performs the following tasks as part of its grid management process:
  - operation (ongoing maintenance) of the grid,
  - modernization, e.g. replacement of poles or lines, repair and retrofit of the substation,
  - development of the power grid, e.g. the construction of new elements of the grid related to the process of connecting new Customers,

striving to use modern technologies in order to reduce the duration of power interruptions during such activities.

- However, in certain situations resulting from technological processes used and to ensure the safety of its employees and Customers, the Operator completes its maintenance and development tasks during planned power interruptions.
- The Operator shall exercise due diligence to implement the planned interruptions in the manner that is least burdensome for Customers.
- The Operator notifies the Customers in advance of planned interruptions, including the date and time of their commencement and completion. Such information is made available by the Operator on its website and in a customary manner in each area.

## HOW DOES THE OPERATOR WORK IN THE EVENT OF EXTENSIVE FAILURES?

- In the event of a failure, the Operator is available 24 hours a day, handles notifications from the Customers regarding power interruptions and works to restore power without undue delay.
- During the failure, the Operator provides additional resources to handle requests and inquiries from the Customers on an ongoing basis and address them promptly.
- In the event of extensive failures, the Operator uses its all resources to restore power as soon as possible. At the same time, it ensures the safety of its workers removing the failure and affected residents.
  - The repair work activities are carefully scheduled to remove threats and restore power to as many Customers as possible without undue delay.
  - First, the Operator restores power to facilities performing vital social functions, including hospitals, water and gas distribution facilities, public transport, etc. where a prolonged lack of energy can cause far-reaching consequences.
  - Extensive failures require cooperation with Fire Departments and relevant state and local government units responsible for crisis management.
    - During the failure, it actively cooperates with media representatives, provides reliable information about its range and the expected time of power restoration.
    - In the event of exceeding the permissible time of power interruption, the Customers are entitled to compensation on the terms set out in the Tariff.

### CONTACT CHANNELS AND COMPLAINT HANDLING

- The Operator informs on its website about the method of submitting a complaint.
- Complaints are handled in the shortest possible time.
- The Customer can obtain information directly from the representatives of the Operator through the provided contact channels.
- The Operator provides new contact channels or modifies the existing ones in accordance with the Customers' expectations. It introduces amenities in order to ensure professional, including remote, Customer support.
- Each notification from the Customer, regardless of the method of its transmission, is treated by the Operator with due attention. It tries to answer the Customer's questions at the first contact.
- If the Customer's inquiry cannot be handled by the Operator, they will receive feedback on where it should be submitted and the reasons why the Operator cannot answer their question.
- In each case, the Operator tries to solve the problem amicably.
- Should any dispute arise, the Customer may seek assistance of the Coordinator for negotiations to the President of the Energy Regulatory Office, whose role is to help in reaching an agreement between the parties involved in the dispute.
- The Customer also can use the help of the Polish Consumers' Association, the Office of Competition and Consumer Protection and the Energy Regulatory Office.



#### DECLARATION

As the Distribution System Operators, represented by the Polish Power Transmission and Distribution Association, we strive to ensure an uninterrupted supply of electricity to all entities connected to the distribution grid. We fulfill this obligation through the investments in the distribution grid development and constant care for its maintenance at a high technical level with respect for the natural environment. Acting in an atmosphere of understanding and trust on the part of our Customers, we develop modern customer service systems, facilitate contact and guarantee the highest level of professionalism in carrying out current tasks.





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