



Energy connects us

CODE OF GOOD PRACTICES
OF OPERATORS OF ELECTRICAL ENERGY
DISTRIBUTION SYSTEMS

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Preamble

Electrical energy has become a commodity, and access to it is increasingly often considered a basic human right. This approach to electrical energy requires a broad understanding of how electrical energy distribution enterprises work. The Polish Power Transmission and Distribution Association, as a representative of major Distribution Systems Operators, wants to support this right based on mutual trust. The key to building trust is wide understanding and education, which is the rationale behind the development of this Code of Good Practices.

The Code of Good Practices was developed by the Polish Power Transmission and Distribution Association and is recommended for use by its Members on a voluntary declarative basis.

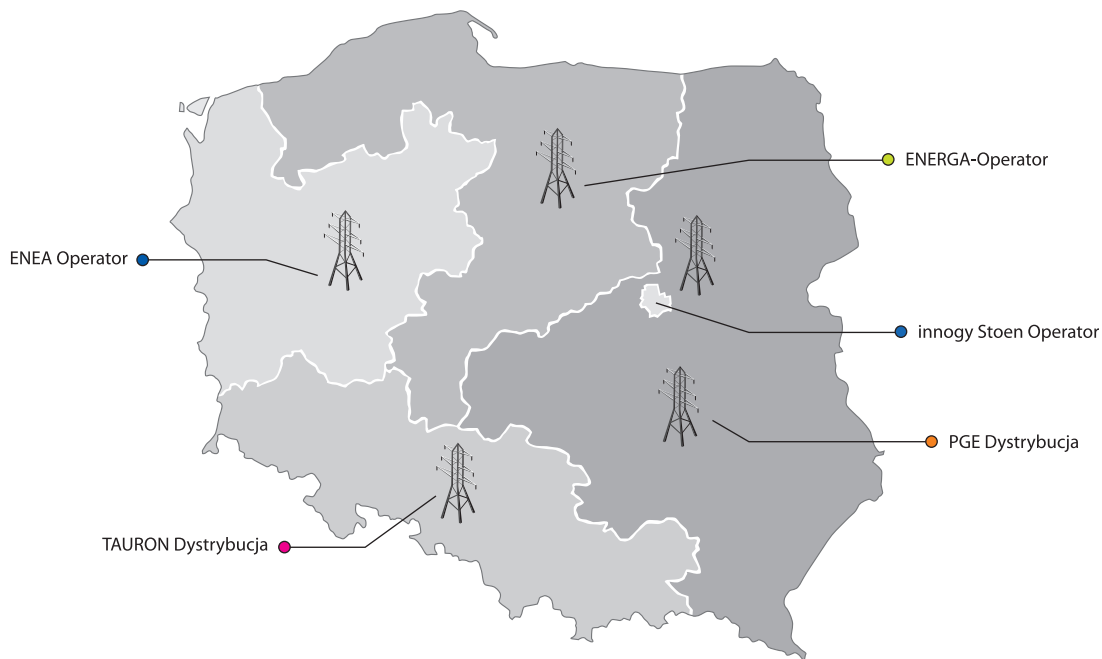
The purpose of this document is to present the tasks carried out by Distribution Systems Operators (hereinafter also referred to as "Operators") in the process of delivering electrical energy from the location of production to the location of reception by Customers, present what Operators do as part of their daily operations, and outline what should be required of them.

The implemented division into sectors of energy production, energy distribution and energy sales has not yet solidified in public awareness. For the Customer, Distribution System Operators and sellers of electrical energy still operate as one – as "electricity companies" or "power stations" despite entirely different legal frameworks and operations. The Code of Good Practices attempts to illustrate as fully as possible how Operators involved in the distribution of electrical energy work and what their goals are.

What is a Distribution System Operator?

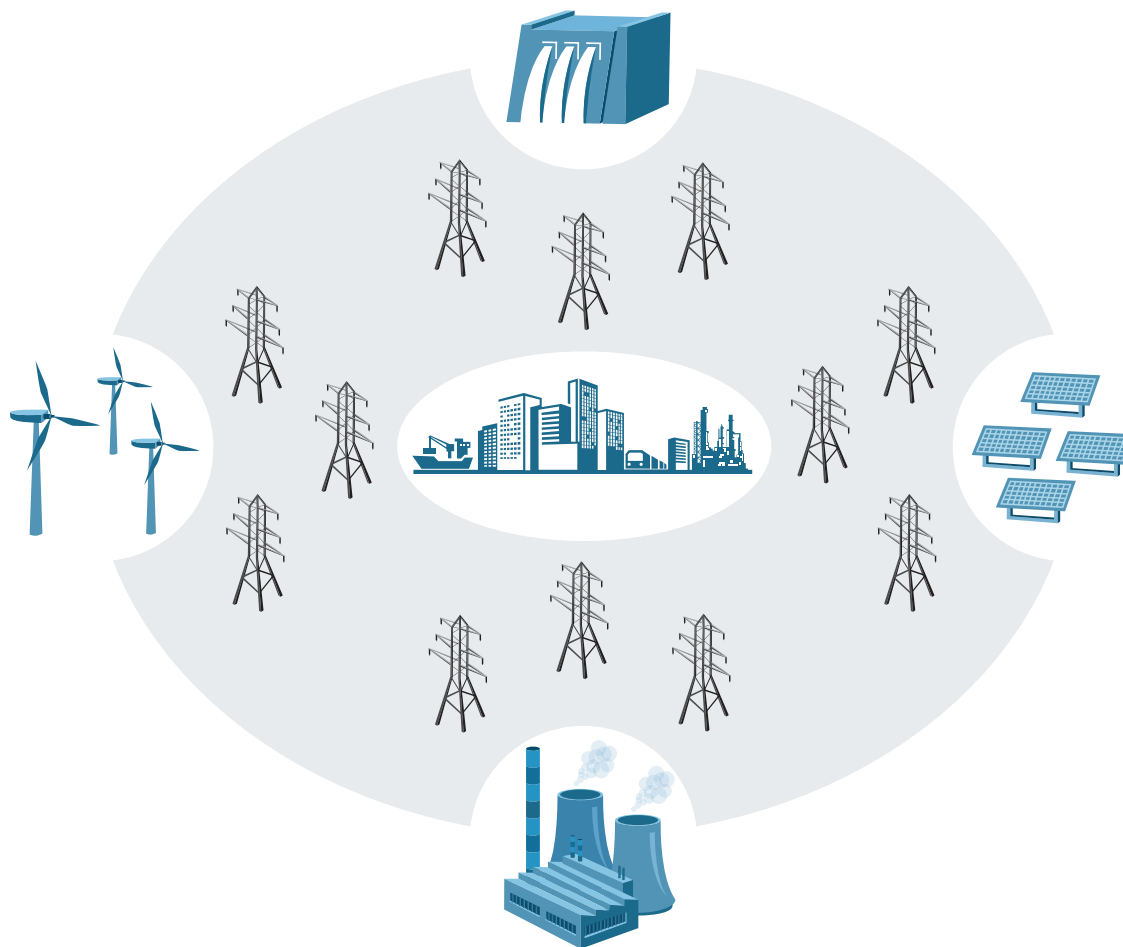
- It is an entity that distributes electrical energy, i.e. delivers it to Customers through its own grid.
- Operators have been appointed to render the distribution services by decision of the President of the Energy Regulatory Office
- There are currently five primary Distribution System Operators on the Polish market: ENEA Operator, ENERGA-Operator, PGE Dystrybucja, innogy Stoen Operator, TAURON Dystrybucja. Each of these companies operates on a defined territory of the country, and is responsible for the condition of its grid infrastructure in that area.

Areas of operation of Distribution System Operators in Poland



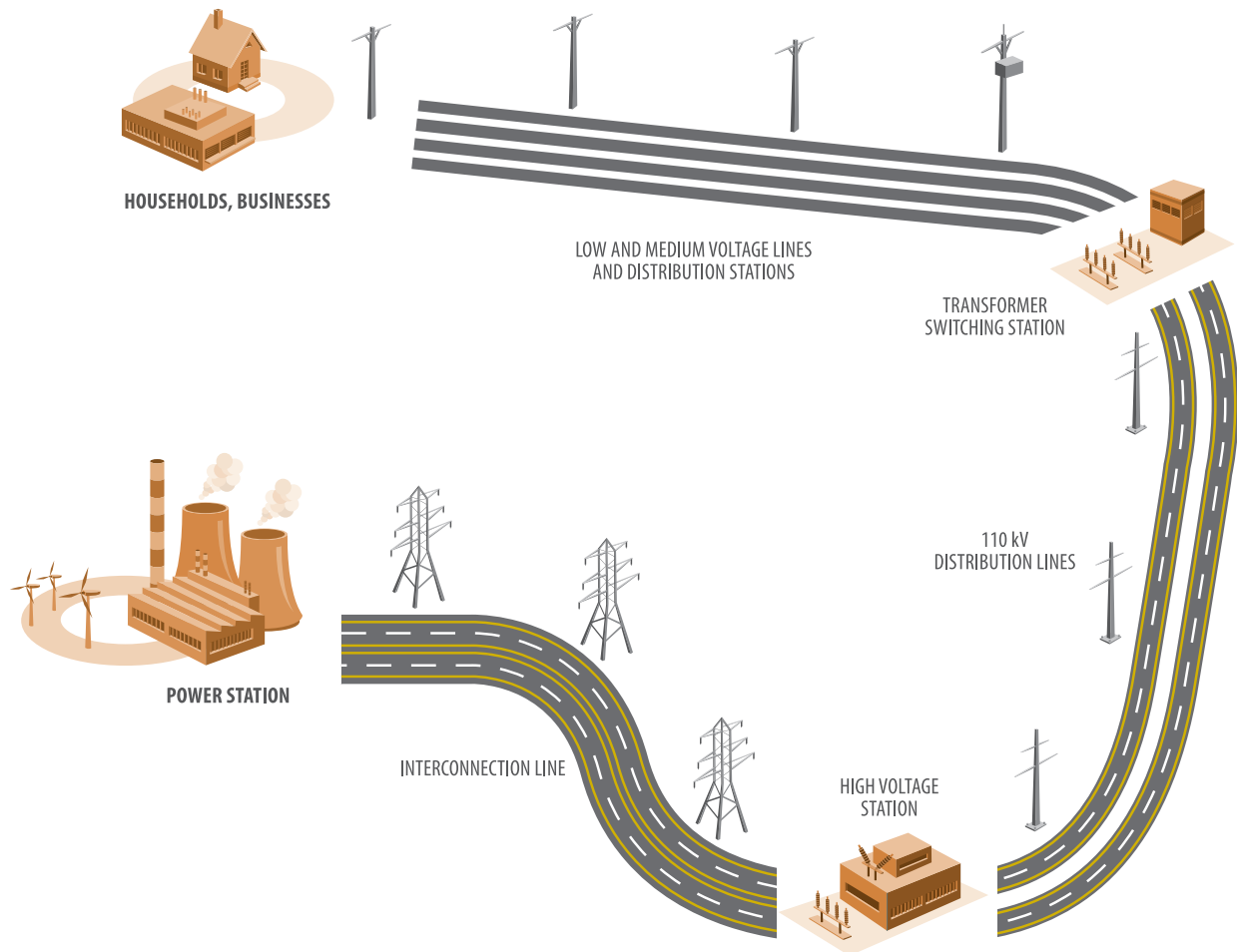
- An Operator neither produces nor sells electrical energy. Energy can be produced both by large power stations and small households with power generation installations. The Operator only makes it possible for electrical energy produced in these plants to be delivered to Customers connected to the distribution grid. Sale of electrical energy is handled by companies that compete on the free market in Poland, regardless of the borders of the operating areas of individual Operators.

Separation of electrical energy distribution from other sectors



- The activities of an Operator can be compared to managing a road network. It is necessary to keep roads unobstructed and to extend them to connect new houses or apartment complexes. These roads can be used by different carriers. It works the same for electrical energy. Distribution System Operators make their grids available to sellers and producers, making sure the grid is maintained in top condition so that electrical energy can reach new locations.

Levels of electric power grids



- Electricity is delivered at three levels of voltage. Low-voltage lines supplying 230/400V deliver electrical energy directly to homes. This type of grid is like a local road. Several such local roads meet at a node (medium/low voltage transformer substation). Energy is delivered to the substation by a 15 000 V medium voltage line (rarely 6000 V or 30 000 V). This is like a regional road. Several regional roads again meet at a node (high/medium voltage transformer substation). Between the high/medium substations we have 110 000 V high-voltage power lines. These are our national roads. This is how the electrical energy distribution system is organized. There are also extra high voltage power lines that can be compared to motorways, which through extra high/high voltage transformer substations deliver energy to high voltage power lines. In Poland this particular grid is managed by the transmission system operator, whose obligations are performed by a separate and specially appointed company – Polskie Sieci Elektroenergetyczne S.A.

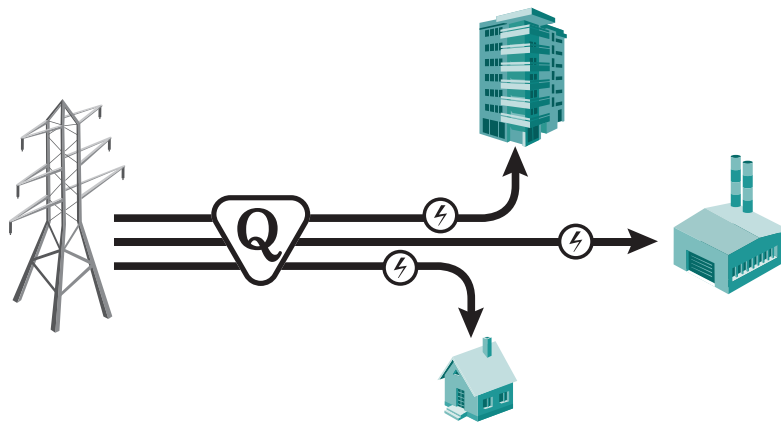
- Operators do their best to make sure that electricity is of superior quality regardless of where it is drawn. That is why Operators monitor energy quality at every voltage level: low, medium and high.

How does a Distribution System Operator work?

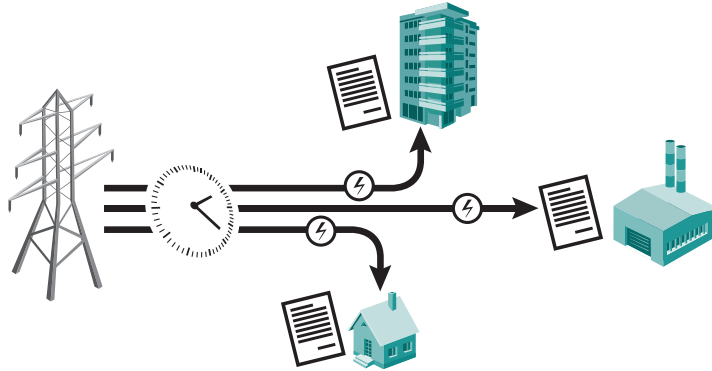
- An Operator's activities on the market are tightly regulated. The scope of assigned tasks results directly from provisions of the law, in particular of the act on energy law.
- An Operator's activities on the energy market is constantly monitored by the President of the Energy Regulatory Office.
- An Operator's work is also performed on the basis of, among other documents, the Distribution System Operation and Maintenance. Each Operator presents such a document for approval to the President of the Energy Regulator Office and then publishes it on its website.

Main tasks of an Operator

- Distribution activities cover the following areas:
 - supplying electricity in a continuous way while maintaining high quality parameters.



- connecting to the grid everyone who requests to be connected, provided they meet certain conditions, while maintaining optimal timeframe of the connection process.



- collecting and providing metering and billing data to authorized entities, e.g. energy sellers.



- completing processes of switching electrical energy sellers while ensuring equal treatment to all participants in the energy market.



Additionally, a Distribution System Operator:

- Is available 24 hours a day in case of emergency situations.
- Informs Customers about his operations on an ongoing basis via his website, among other communications channels.
- Systematically adapts new contact channels to Customer expectations.
- Introduces improvements to ensure professional Customer services, including remote services.
- Treats every report with due attention, regardless of how it is communicated. Diligently provides systematic updates on the progress of every issue.
- Strives to simplify contracts, yet including all necessary provisions mandated by law. Drafts of contracts are presented in advance to give Customers ample time to review.
- Provides the highest level of security for Customer personal data.

How does a Distribution System Operator connect a Customer to his grid?

- The connection process is carried out based on relevant legally required documents.
- When connecting, the Operator follows the best practices to accommodate the needs of Customers as well as legal requirements.
- Operates efficiently to maximally reduce the time of connecting to the grid.
- Applies diligence to make sure the connection process is carried out following the simplest procedures with minimised formalities.
- Where possible, uses electronic document workflow.
- Provides information about terms of connecting to the grid on his website as comprehensively as possible. His representatives provide full and exhaustive information on the grid connection process.

Grid connection procedure



How does a Distribution System Operator render distribution services?

- Distribution services are rendered under concession granted by the President of the Energy Regulatory Office. Our performance is fundamentally based on the act on energy law and the executory orders accompanying it.
- Under binding law, it is the Customer who decides which type of contract they wish to conclude. There is a choice:
 - The Customer signs two separate contracts, one for the supply of energy with the Operator, and another for the sale of energy, with a selected seller. In this scenario, bills will be issued independently by both entities.
 - The Customer signs one contract (the so-called comprehensive contract) covering the sale and supply of energy, where the seller of the electrical energy needs to be relevantly authorised. In this scenario, the Customer receives one invoice. The current list of authorised sellers is available on the Operator's website.

Billing Customers

- The distribution services are billed based on a Tariff which is approved by the President of the Energy Regulatory Office. The current Tariff is published on the websites of individual operators.
- To some Customers, the bill for the distribution of electrical energy may appear complicated. However, this is due to the requirements of the law which the Operator complies with.
- The charges for the distribution of electrical energy result from the following items on the bill. The rates for these items are approved by the President of the Energy Regulatory Office:
 - **fixed grid fee** – reflects the costs incurred to maintain the energy infrastructure – the poles, lines and transformer stations.
 - **variable grid fee** – reflects the cost of transmitting energy and is directly dependent on energy usage.
 - **service charge** – reflects the cost of metering and billing.

- **quality charge** – a charge for the transmission system operator – Polskie Sieci Elektroenergetyczne for the maintenance of highest voltage lines.
- **transitional charge** – designed to cover the costs incurred in the expansion of power stations more than ten years ago.
- **RES charge** – designed to cover the costs involved in ensuring access to energy from renewable sources in the national electrical energy system.

The items on the invoice may change in the future, depending on implemented legal solutions.

Complaints process

- The way to lodge complaints is explained by the Operator on his website. In case of any doubts, Customers can obtain information directly from representatives of the Operator through available contact channels. Complaints are reviewed in the shortest possible time.
- The Operator strives to resolve every issue in an amicable way.
- If case of concerns, Customers can obtain support from the Consumer Federation, the Office of Competition and Consumer Protection or the Energy Regulatory Office.

Amicable resolution



When and why might there be interruptions in power supply?

- Interruptions in electrical power supply from the distribution network usually occur in the following cases:
- supply is interrupted due to an Operator performing grid and equipment modernisation work
 - there is a grid failure caused by external factors
 - the Customer has not paid their bill on time

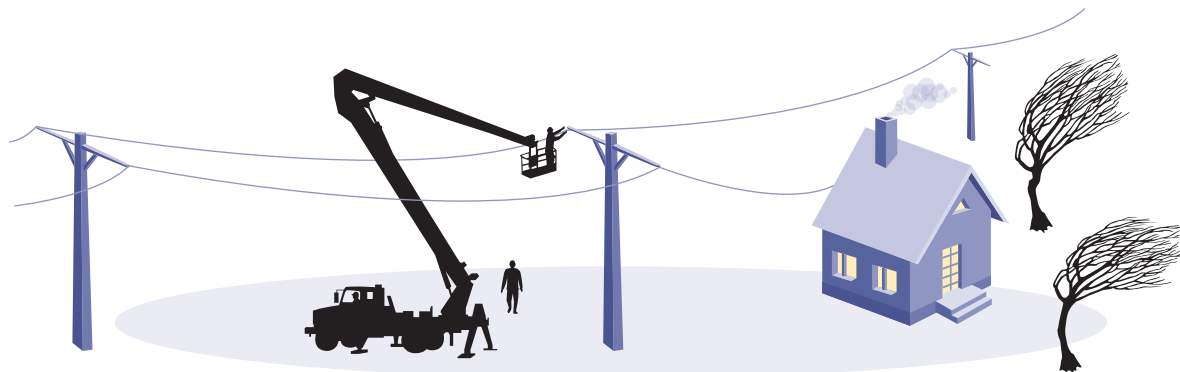
What does an Operator do when modernising his distribution grid?

- Planned power outages are related to the modernisation and development of the power grid. However, Operators strive to perform more and more of their distribution work without interruptions, using advanced technologies to maintain power supply. Modernisations can mean e.g. replacing electrical poles and wiring, or works inside transformer substations. Development of distribution grids consists in, e.g. adding new grid components to accommodate new Customers.
- Operators do their best to proceed with planned outages in a way that causes least inconvenience to Customers.
- Operators always inform Customers about planned outages in advance, in a way that is customary in the affected area. Operators also make this information available ahead of time on their websites.
- Operators inform about the planned date and time of resuming power supply.

What does an operator do in case of widespread grid failure?

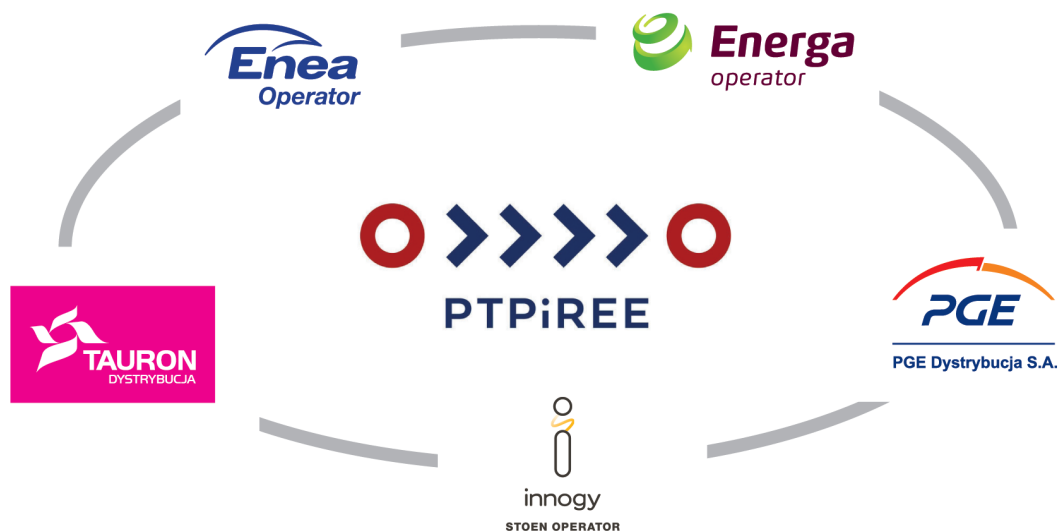
- During a failure, an Operator mobilizes additional resources to expedite Customer complaint processing.
- In case of widespread failures, an Operator works under full mobilisation procedures to remove the failure in the shortest time, while protecting the health and life of electrical fitters and residents of affected areas.
- Repair works are performed in such order as to restore power supply to the biggest number of Customers as soon as possible.
- In first order, an Operator restores power supply to important public buildings, where prolonged power supply interruption could result in far-reaching consequences: hospitals, water and gas distribution facilities, public transportation systems, etc.
- In the course of removing widespread failures, a Operator cooperates on an ongoing basis with the Fire Brigade and relevant bodies of central and local government responsible for crisis management.
- During failures, an Operator actively cooperates with representatives of the media, providing accurate information about the scope of the failure and the anticipated time to restore power supply.
- In every situation, an Operator does his best to minimise the duration of the outage. In case of long-term interruption of power supply, Customers may apply for discounts based on principles specified in our Tariffs.

Repair works



Commitment

We believe that by investing in the development of the distribution grid, ongoing focus on maintaining it in top technical condition, developing modern service systems, facilitating contact and professionalism in daily work, Distribution System Operators represented by the Polish Power Transmission and Distribution Association will provide uninterrupted supply of electrical power of superior quality to all entities connected to the distribution grid, operating in an environment of understanding and trust of our Customers.





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