

07 August

DTEK Grids will develop a Concept of Smart Grid in the Kyiv region in cooperation with the biggest European power companies



At the 50th meeting of the Assembly and Board of Directors of the European Union Distribution Systems Operators Association (E.DSO), DTEK Grids presented a Concept of cooperation with E.DSO within a 10-year project on the modernization of distribution grids in the Kyiv region. Board of Directors supported DTEK Grids plans and will help the company on the way to the project implementation.

The 50th meeting of the Assembly and Board of Directors of the European Distribution Systems Operators Association ([E.DSO](#)) was held in Brussels. The event was attended by 37 representatives of 25 different European DSO. During the event, DTEK Grids CEO Oleksandr Fomenko presented a concept of cooperation with E.DSO to the members of Association and talked about DTEK Grids plans

regarding development of energy infrastructure in the Kyiv region by building a Smart Grid, able to facilitate energy transformation of Ukraine. Key advantages of the Smart Grid infrastructure include:

- a resilient grid infrastructure that still works even if one segment is damaged or destroyed;
- readiness for development of renewables, distributed generation, storage systems and green energy transition;
- a qualitatively different level of power supply services for customers: an average time of power outages per year shall be reduced from 1,500 to 100 minutes per year (SAIDI), while 100% of customers will be provided with smart meters.

At the first stage of the project, DTEK Grids shall develop a digital model that will be the first Digital Twin of a real Distribution Grid in Ukraine. It will allow testing efficiency of applied technical solutions and innovations as early as at the stage of planning. Such approach will allow to clearly forecast effects of all technical solutions and investments, like replacement of all overhead lines with the cable ones that are more resilient to weather conditions and other cataclysms. A digital model of the pilot project –an Irpin-Bucha-Borodianka energy junction – will be ready this autumn.

E.DSO Board of Directors supported the recovery plans and will help Ukraine to build a new infrastructure.

“We understand importance and need to create a new approach to grid development within the process of reconstruction of Ukraine by implementing best practices of E.DSO members. Adaptation and implementation of EU standards into the operation of Ukrainian electrical infrastructure is among the main tasks of the project. Therefore, we are ready to support the project and contribute to sharing of experience between E.DSO members and Ukrainian companies,”

says Roberto Zangrandi, E.DSO Secretary General.

Board of Directors decided to establish an expert group for sharing of knowledge and expertise with regard to reconstruction of destroyed grids in Ukraine, engaging experienced experts from European DSO-members of the association. The first workshop of the expert group may be held as soon as this autumn in Poland.

Commenting results of the meeting, DTEK Grids CEO Oleksandr Fomenko said:

“DTEK Grids creates a power supply system in Ukraine of a qualitatively different level. It is required for reliable and safe power supply to citizens and development of business. A modern Smart Grid will be built using best European practices and this is precisely why we actively cooperate with the Association of European Distribution Systems Operators (E.DSO). An upgraded grids infrastructure will create conditions for the development of large capacities of green generation and distributed generation, household SPS in particular. It will help minimize residents’ electricity expenses due to 100% coverage of the region with smart meters and reduction of losses in the grids. Smart Grids is a foundation for building a new Ukrainian energy system, energy independence of Ukraine and Europe. I am grateful to E.DSO members for support and I am sure that together we will succeed in building a better future in Ukraine.”

DTEK Grids ten-year plan envisages complete renewal of the electrical infrastructure of the Kyiv region with investment of 2.4 billion Euro and a three-year pilot project in the Irpin-Bucha-Borodianka energy junction worth 145 mln Euro. Residents of the Kyiv region will get a new energy infrastructure – efficient and up to date, with uninterrupted power supply, a significantly lower breakdown rate and higher resistance to threats. As a result, average time of power outages per year will be reduced from 1,500 to 100 minutes (SAIDI), while technological losses will decrease by 3 times – from 14% to 5%, all customers will get smart meters that will contribute to lean consumption and minimization of expenses.