

Low electricity losses are indicative of the cost-effective operation and quality of the Distribution System Operator's activities (electricity distribution). Reducing electricity losses is one of the most important business objectives of the DSO. For this reason, numerous operational measures have been implemented to date.

- Our obligation, as prescribed by the IMF, is to reduce electricity losses at the level of EPS - in 2017 to 12.8 percent, 2018 to 11.9 and by late 2019 to 10.8 percent - said Dr Dusan Comic, Director of the Market Support and Loss Reduction Department of the DSO, at a recently held meeting of the representatives of the said department with the directors of the Market Support and Loss Reduction Sectors of all six branches in Southeast Serbia.

It was estimated that the cities of Belgrade and Nis are the areas with the greatest potential for reducing commercial losses. When the technical losses are excluded from the total losses, commercial or non-technical losses are generated as a result of the electricity consumed by customers which has not been read and billed. This involves unauthorized consumption, i.e. electricity thefts, technical limitations and reading and billing issues. Most of the non-technical losses involve meter tampering: setting a magnet, unauthorized connection of new and re-connection of existing customers.

Non-technical losses are reduced by controlling unauthorized consumption, replacing outdated induction meters with modern ones, characterised by lower losses and lesser possibility of manipulating measurement accuracy, as well as by relocating measuring points. As regards the acceptance of new measuring points, an operation manual should be prepared to ensure uniform procedures throughout the DSO. Facilities which have not been connected although they have received proper connection approvals by the Planning Sector should be inspected.

It was concluded that measuring points' inspections should be intensified, inspection procedures in all branches harmonized, operation manuals for inspections issued and integral records and uniform redress procedures set up in the case of anonymous complaints. At least twice a year, electricians in charge of inspections should undergo training, while external audits of the staff performing the inspections should be organized at least once a year. It is also important to purchase new software or upgrade existing one, including possible set up of a database containing data about risky customers. In addition, new, specialized equipment facilitating more efficient detection of abuse should be procured. Market Support and Loss Reduction Department also organises and exchanges teams of electricians inspecting the measuring points between branches and units to increase the reliability of inspection results. It is essential to strengthen cooperation with the Measures and Precious Metals Department, as well as to promote ways of filing anonymous complaints for unauthorized consumption.

The participants agreed that relocating measuring points is necessary in all cases suspected of manipulation, when it comes to customers whose measuring points were suggested for

relocation during the inspection on the account of the reasonable suspicion of abuse, including the ones on whose measuring points where magnetic field presence was established by the ORD application during the reading, and in cases when inspections were impossible due to inaccessibility. One of the solutions is to move the measuring points of customers who leave meter readings on a piece of paper and in cases of new connections, without exception.

Internal and External Transparency is Essential

In promoting the fight against unauthorized consumption and reducing non-technical losses, both internal and external communication models and tools are vital. Internal communication is achieved by training the staff on the necessity of combating electricity thefts, better coordination and understanding between the sectors, staff proactivity and engagement. External communication educates and informs the interested public about the necessity of combating unauthorized electricity use, greater presence and understanding of this topic in the media, and greater number of citizens' reports against those who steal electricity while reinforcing public support in this fight.