

PROGRAMME OF INNOVATIVE DEVELOPMENT

The Company's innovation activities are carried out in accordance with the revised Innovative Development Programme of IDGC of Centre for 2015-2019, approved by the Board of Directors (Minutes No. 08/15 of April 16, 2015).

In 2014, IDGC of Centre's Board of Directors also approved the Policy of Innovative Development, Energy Conservation and Energy Efficiency (Minutes No. 15/14 of June 23, 2014). This document defines the strategic perspective as transition to the new technological mode of electric grids with qualitatively new characteristics of reliability, efficiency, availability, manageability and a focus on customers.

RESEARCH AND DEVELOPMENT

In 2015, the Company carried out the following research and development works:

- Simulator for operating staff based on virtual reality models of the transformer substation;
- Development of anti-ice covering and methods of their application on non-insulated HV wires using the ferromagnetic materials and Curie point close to 0 deg. C;
- Development, production and testing of single-circuit and double-circuit poles made of composite materials for overhead power lines of 6-20 kV.

The main tasks of the Company's innovative development are as follows:

- An upgrade of the Company's processing base.
- The commercialisation of new technologies requested in domestic and international technology markets.
- Development and introduction of new services.
- Improvement of the Company's energy efficiency by improving the energy efficiency of its facilities and equipment.
- Improving the Company's business processes and the introduction of new management methods and professional training of the personnel.
- Development of an innovative activities system.

IDGC of Centre's innovative development is carried out in the following areas:

- Research and development.
- Development of methodological support.
- Implementation of innovations.

In the reporting year, for the first time IDGC of Centre concluded the licence agreements for IDGC of Centre's intellectual property use:

- A patent for the utility model "Pole-mounted transformer substation" (3 agreements);
- A patent for the utility model "Power line pole" (2 agreements).

The first payments for using the utility models will be received in 2016.

Efficiency indicators of the Innovative Development Programme

Indicator	Unit	2015
Funding research and development carried out by other organisations, by contractors (universities and colleges, scientific institutions, small and medium-sized innovative companies)	RUB mln	24.03
Including by projects implemented as part of: Universities and colleges	RUB mln	11.03
The cost of further training and retraining courses at universities and colleges per employee	RUB/person	12.61

RESEARCH AND DEVELOPMENT COUNCIL

IDGC of Centre performs its research and development activities by participating in operations carried out by Rosseti's Research and Development Council, established in 2013. Representatives of the Company are members of both the Council's presidium and of an expert committee of sections.



Additional information on the implementation of research and development works is shown in Appendix 3.4 to the Annual Report.



Materials from the meetings of the Research and Development Council are published on the Website of Rosseti.