On-the-job injury rate (comparative analysis of injury rates for 2017 and 2018)

In 2018, two accidents occurred at IDGC of the South:

on-the-job fatal accident with an employee of the Volgogradenergo branch:

serious personal injury of an employee at the Rostovenergo branch.

No accidents happened in 2017.

Frequency (Fr) of the total injury rate (the number of injured persons per 1 thous. employees) across IDGC of the South in 2018 was 0.143 vs 0 in 2017

The accidents occurred in the following circumstances:

On July 12, 2018, died Eduard Dekhant (born in 1991), an electric fitter for PTL repair at PD Left-Bank Power Grids of the Volgogradenergo branch. He approached a crane truck that transported reinforced-concrete add-ons under 110 kV overhead line with its wires being under voltage when the crane truck driver let the crane arm come close to the line wire and the crane truck body got under potential. Based on the accident investigation results, Internal Administrative Order No.513 was issued on July 27, 2018.

On July 5, 2018, a dog attacked Armen Mkrtchan (born in 1960), the distribution grid supervisor at Dybovsky RPG of Rostovenergo branch, and inflicted multiple degloving facial wounds (serious injury). Following the accident results, Order No.410 dated August 2, 2018, was issued for PD Eastern Power Grids of the Rostovenergo branch.

Considering the causes of the accidents, the Company prepared and implemented measures to improve personnel safety.

Key measures to improve working conditions

Focus areas of occupational safety enhancement at IDGC of the South:

a lower number of accidents and personnel injuries at workplaces; a lower number of occupational diseases;

fewer workplaces with harmful and hazardous working conditions, as well as with high and medium levels of occupational risks; greater number of employees who passed a medical examination that proved employees are medically fit;

fewer violations of occupational safety requirements by employees, contractors and other persons being at the Company's facilities;

fewer violations of occupational safety requirements detected by officers of the state control and supervision agencies during inspections of the Labour Protection Management System (LPMS); implementation of measures developed based on results of the inspections of the Labour Protection Management System by the state control and supervision agencies;

reduced number of accidents and injuries of contractors' employees and other persons being at the Company's facilities; holding meetings and consultations with the employees and their representatives regarding occupational safety issues, including the Labour Safety Committee (Commission) meetings;

implementation of decisions adopted during previous performance reviews of the Labour Protection Management System; increase of benefits and compensations to the employees occupied at works in harmful and hazardous conditions;

money payments for compensation of damages incurred by accidents and injuries, breached occupational safety requirements;

increased funding for occupational safety measures.

To reduce the on-the-job injury risk in 2018, IDGC of the South fully executed the activities of the Programme for implementing video recording of crew permission to works under orders and instructions for 2017–2018.

Operational conversations in all the Company's branch units are mandatorily recorded using sound recorders in the Operative Dispatch Service, RPG Operative Dispatch Team. Availability of stable radio communication between the crews and the dispatcher is checked regularly, all the conversations are recorded with the sound recorder.

The employees' health and life are of top priority for the Company. Pursuant to the requirements of the Labour Code of the Russian Federation, in 2018, IDGC of the South took efforts to create safe working conditions at workplaces and prevent on-thejob injuries and third party injuries-at the Company's facilities, among them:

sticking to the Injury Risk Mitigation Programme by IDGC of the South and third parties' personnel at the power grid complex facilities from 2018 through to 2021 (approved by IDGC of the South Board of Directors, Minutes No.258/2018 dated February 2, 2018);

development and approval for ultimate execution of additional onthe-job risk mitigation measures and requirements of ROSSETI organisational and regulatory documents;

monitoring of working conditions, protective equipment condition, personnel provision with special clothing, safety shoes and amenities at all the Company's branches. Labour safety days were held, and commissions involving the employees of the Company Executive Office technical units (as per the schedule) worked on a monthly basis;

execution of preliminary, regular, pre-trip and post-trip medical examinations;

organisation of extended videoconferences chaired by Deputy General Director for Technical Issues — Chief Engineer of IDGC of the South and participated by the management of the PD, RPG, industrial safety units and heads of primary trade union organisations;

operation of Labour Safety Committees in the Company Executive Office, branches and production units;

investigation of causes and circumstances of accidents that occurred with the employees of ROSSETI's S&As. Issues related to accident causes and circumstances, as well as making the personnel aware of operational and informative messages on the accidents that occurred in 2018 are included in the agenda of a monthly Labour Safety Day.

In accordance with the Regulations on Labour Safety Day, practical training and instructive admissions are organised on specially equipped training sites in all PD and RPG of the Company's branches to allow the personnel to work out the safe procedures and practices for electric facilities until they become automatic.

In accordance with this Programme, the Company has planned 106 events, from which 64 were taken in 2018, while 40 are conducted on an ongoing basis. All the activities scheduled for the reporting period were fulfilled within the established time limits.

In 2018, the Company executed the Programme for implementing video recording of crew permission to works on electric facilities under orders and instructions for 2017–2018.

The said Programme provides for a set of activities for:

pilot operation of several video recorders available on the market to select the optimal model for further wide use; drafting of required documentation; creation of a repository for video data from video recorders; procurement and distribution of video recording devices, setting of a test period of their usage and execution of awareness-building activities.

As of December 31, 2018, the Programme activities were fully accomplished.

IDGC of the South expenditures for occupational safety measures within the reporting period totalled RUB 226.431 mn, +18.5% or RUB 41,824 mn year-on-year. The major increase by RUB 23.506 mn was in employees' provision with personal protective equipment, including special clothing and safety shoes.

In 2018, specific occupational safety costs per an employee rose 19% year-on-year to RUB 13,400.

Specific costs for personal protective equipment per an employee in 2018 went up by 25% year-on-year to RUB 11,700.

In accordance with art. 226 of the Labour Code of the Russian Federation, activities for working conditions and occupational safety improvement at IDGC of the South's branches and across the entire Company are financed at a minimum rate of 0.2% of total costs of production (work execution, service rendering).

Production monitoring and activited for elimination (mitigation) of the employees' exposure to harmful factors at workplaces

In 2018, 1,391 crews worked in the Company's operations area, including 970 crews of IDGC of the South (589 — at overhead lines, 381 — at substations) and third-party crews (312 —

at overhead lines, 154 — at substations). The inspections are organised so that one month is enough to cover 100% of crews working on all power grid sections, all substation groups, PTL services and other units working at electric facilities.

IDGC of the South personnel is fully furnished with protective equipment, tools, and necessary appliances. The expenditures for those purposes in 2018 totalled RUB 40,635.32 thous. vs target of RUB 40,245.686 thous. The employees are also completely furnished with special clothing and safety shoes. The total costs in 2018 amounted RUB 159,587 .414 thous. vs target of RUB 158,874.145 thous.

By the year-end, a special working condition assessment was conducted at 13,602 workplaces, i.e. 100% of the total number.

The employees doing the job at workplaces that do not comply with state occupational safety regulations receive compensation for the operation in harmful working conditions, obtain additional leaves, milk and other equivalent products (or monetary compensation).

The Company does not have workplaces that did not undergo the special working condition assessment (art. 27 of Federal Law No. 426, Letter No.AB-5599/13 of the Russian Ministry of Energy dated June 9, 2018). The production monitoring of harmful and hazardous factors affecting the employees is conducted on a regular basis.