

Labor Protection

The top priority of the Company's labor safety policy lies in sustaining the lives and health of the employees.

The Company has reviewed and introduced a revised version of the Labor Safety Management Policy (developed taking into account the requirements of GOST12.0.230-2007 and OHSAS 18001:2007 International Standard). The Policy was effected in March 2012.

The Company also spends considerable amounts to implement organizational, technical and preventive initiatives to improve the safety of the employees. The key initiatives implemented in 2012 include the following:

1. The operation of mobile event data recorders used to record the most dangerous actions of personnel operating electric installations.
2. The efficient operation of 50 stationary and 17 mobile labor safety units to organize and promote safe labor conditions, and to train the

personnel on safe methods of work, taking into account today's requirements.

3. The continued efficient operation of psychological relief rooms to prevent and eliminate the adverse functional conditions of substations' personnel.

To prevent occupational accidents the Company performs annual employee injury risk assessments.

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The Company implemented a system to assess the efficiency of labor safety management.

The Company has approved a list of initiatives to prevent occupational accidents at the Company facilities.

The Company conducts periodical certification of workplaces.

A positive effect of a set of measures comprising a labor safety management system can be felt through a decrease in injury rates and the number of emergencies occurring in the course of the Company's economic activities. In 2013 the number of accidents occurring in the Company and its SDCs fell by 14.5%, compared with the previous year. The employee injury rate fell by 12.5%.

Nonetheless the Company is aware of current labor safety issues and we are going to proceed with improving labor safety to preserve the health of our employees.

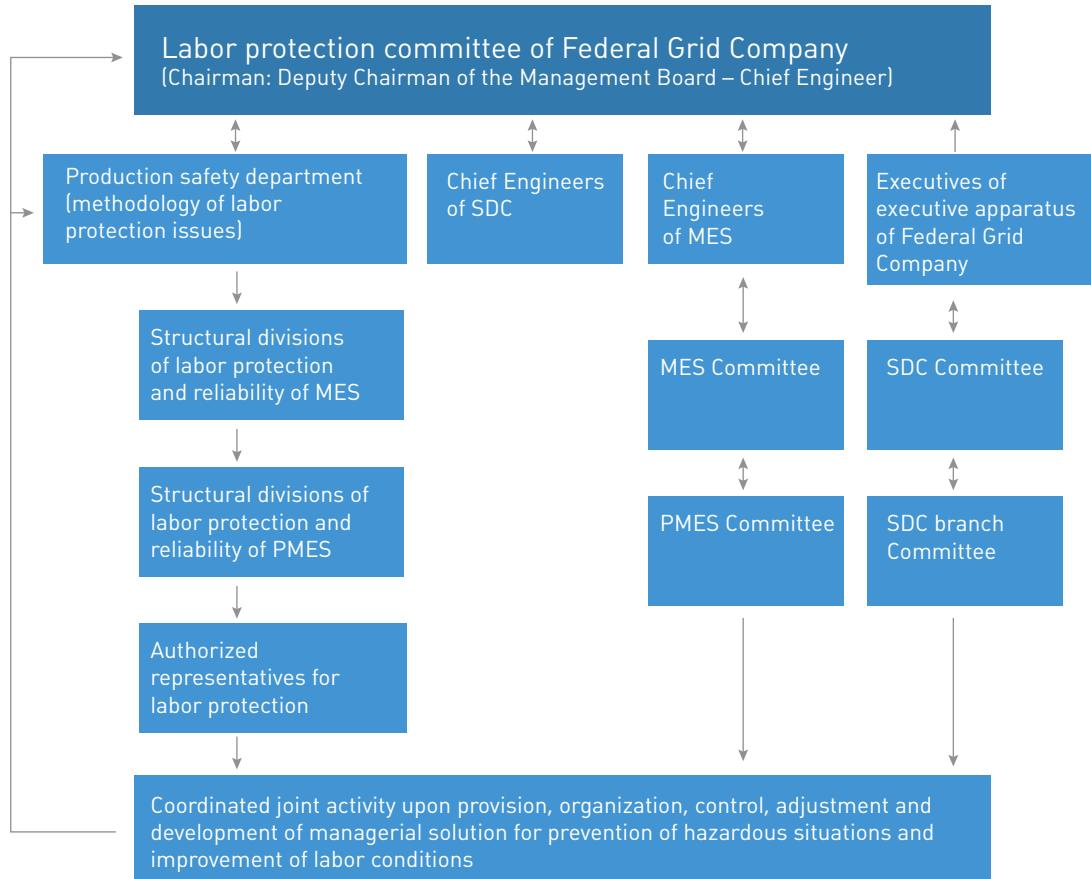


Sergei Savosko, Head of the Production Safety Department of Federal Grid Company

System for management of labor protection and priority directions of activity

Federal Grid Company attributes close attention to ensuring of safety at the workplace. In 2010 in the Company was created the risk management system in the sphere of labor protection. Its aim is avoidance and prevention of workplace injuries and creation of favorable working conditions.

Labor Protection Management Scheme in Federal Grid Company



Company policy upon issues of labor protection is elaborated by the Committee for labor protection, collegial consultative body composed from the representatives of executive apparatus, chief engineers of the branches of the Company (MES) and SDCs of the Company – 21 persons. In 2012 were held 4 meetings of the Committee at which were developed measures aimed at prevention of workplace injuries.

At the level of branches of the Company – MES, PMES are active Labor protection committees*, usually headed by chief engineers. The Committees monitor the observance of labor protection requirements by the personnel, fulfillment of measures aimed at prevention of workplace injuries and occupational diseases among employees.

In the branches of Federal Grid Company in 2012 were active 50 Labor protection committees comprised of 949 persons.

* The work of Committees is based upon "Sample regulation on labor protection committee in branches of Federal Grid Company – PMES", enacted since 2009.



During the reporting period were held 279 meetings, at which were considered 1234 issues. Upon all considered issues the resolutions of Labor protection committees were implemented.

The labor teams of the production structural divisions of PMES (substations, services of maintenance of substations, high voltage lines as well as relay protection and controls, laboratories, metrology services, transport services etc.) elect the authorized persons (nominees) in the sphere of labor protection* by open voting at the general meeting of the employees of the branch structural division for a term not exceeding 3 years. In 1,153 structural divisions of EMEG branches were elected 794 authorized persons (nominees) in the sphere of labor protection. In other labor collectives the elections were not held due to territorial remoteness and separateness (mechanization areas, relay protection and emergency controls etc.). During 2012 607 authorized persons underwent training at the special labor protection courses.

The authorized persons control the labor protection conditions in theirs structural divisions as well as the observance of labor protection norms by the employees of the structural

division. With their active involvement are held the Days of labor protection and fire safety. Owing to the work of the authorized persons was increased the number of inspections of the working brigades with the aim of decrease of errors during preparation of workplaces and clearance, including personnel detached for service.

The priority directions of the Company's activities in the field of labor protection are:

- exclusion of cases of production injuries and occupational diseases;
- forming of safe behavior among employees of the Company at production facilities as well as the skills for prevention of dangerous situations;
- continuous improvement of labor conditions.

In accordance with state normative requirements in Federal Grid Company was introduced the Procedures for identification of hazards and evaluation of injury risk at facilities of Federal Grid Company. On an annual basis the Company conducts work aimed at identification and elimination of risks of injury at the Company's facilities.

A target KPI indicator was introduced in the Company for executives of the Company as well as executives of MES, PMES in the sphere of labor protection: "Absence of lethal accidents at production or group accident in case of availability of grievously injured." As of year-end 2012, the KPI was fulfilled for Company executives and most of executives of MES and PMES, as during investigation of accidents by commissions, chaired by state labor inspectors from Federal Labor Inspectorate of Russia no guilt of Company executives as well as executives of MES and PMES was identified.

* By the Order of Federal Grid Company No. 781 dated 08.10.2010 was introduced the "Sample regulation upon authorized person (nominee) of the labor collective in branches of Federal Grid Company – PMES".

The Company invests significant funds at organizational technical as well as preventive measures aimed at increase in the level of safety of employees. The key measures undertaken in 2012 are:

1. Was implemented the project of introducing mobile video recorders in operation for recording of most dangerous actions of personnel working at power units.
2. Together with the respective structural divisions of the executive apparatus of Federal Grid Company and branches of the Company – MES, was developed the Complex program for improvement of labor conditions at facilities for the period of 2012-2017.
3. Was organized effective operation of 50 permanent and 17 mobile labor protection offices for organization and conduction of promotion of safe labor

conditions, training of personnel in the sphere of safe labor technics taking into account the modern requirements.

4. Was continued the practice of effective functioning of psychological release rooms for prevention and correcting unfavorable functional condition of the operating personnel of substations.

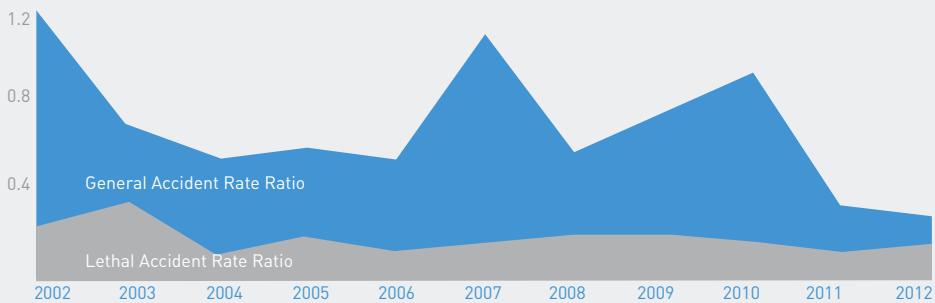
In 2012 was continued conduction of review contest for best organization of work in the sphere of labor protection among branches of Federal Grid Company – MES, PMES. Samara enterprise of MES Volga branch was recognized as the best in terms of organization of labor protection work.

Injury indicators

For the first time during 10 years the coefficient of general accident rate in Federal Grid Company reached a minimum level. For objective evaluation of accident level the following specific indicators are used: R_g – general

accident rate ratio (number of injuries for 1,000 employees); R_{LAR} - lethal accident rate ratio.

General and Lethal Accident Rates at the Company's Facilities



In 2012 in MES branches of Federal Grid Company occurred 6 accidents, during which were injured 7 persons:

- 6 persons during work at the UNEG objects (substations and high voltage lines);
- 1 person during a road traffic accident.

In SDCs (Elektrosetservic UNEG, CIUS UES and MGTS) no cases of production accidents were recorded, in comparison with the previous year the number of injured employees decrease (from 2 persons in 2011 to absence of injured in 2012).

On the whole in 2012 in branches and SDCs of the Company in comparison with the previous year the number of accidents decreased by 14.3% (from 7 to 6 cases). At the same time the number of injured employees decreased by 12.5% (from 8 to 7 persons). The level of lethal injuries increased by 33% (from 3 to 4 persons).

The most widespread types of accidents in 2012 were:

- injury by current including from induced voltage at high voltage lines;
- impact of voltaic arc (while approaching current-carrying lines under voltage at an impermissible range).

Protection from electromagnetical impact at workplace

Federal Grid Company conducts regular appraisal of workplaces in terms of working conditions. One of the evaluated indicators is the level of electromagnetic interference (EMI) at the workplace. According to sampling performed by specialized organizations:

- the level of electromagnetic intensity at permanent workplaces of substations did not exceed 5 kV/m;
- in places of temporary fulfillment of maintenance works the level of electromagnetic intensity was in the interval between 5 and 30 kV/m.

In accordance with SaNPIН (sanitary norms and regulations) 2.2.4.1191-03 "Electromagnetic field under production conditions" the maximum permissible level of intensity of electric field under impact of less than 1 hour per shift is 60 kV/m.

Protection of employees from unfavorable impact of EMI is performed by conduction of organizational measures (insulation of zones of EMI impact, location of workplaces and directions of the servicing personnel at sufficient range from EMI sources, ensuring the observance of maximum permissible levels) as well as engineering and technical measures (introduction of new technologies and usage of individual protective equipment for protection against electromagnetic fields (EP-1-summer, EP-3-winter).