

Environmental Policy of the Electric Grid Complex

The main goal of the state energy policy in the sphere of ensuring the environmental safety of the energy sector is to consistently limit the load of the fuel and energy complex to the environment by reducing emissions (discharges) of pollutants into the environment and reducing generation of production and consumption wastes.

PJSC Rosseti is the largest system-forming company that is part of the fuel and energy complex, which manages the work of grid organizations that transmit and distribute electricity in the territory of the Russian Federation and provides consumers with highly efficient environmentally friendly energy. At the same time, the Company's production activities include such types of environmental impact as the disposal of production waste, as well as physical impact.

The Company in its activities ensures the application of the most promising requirements aimed at reducing the environmental impact, demonstrates and owns all the necessary mechanisms aimed at preventing environmental risks. The company demonstrates its environmental focus through the implementation of the following key documents:

1. The Unified Technical Policy. It implements the principles and obligations of the company to apply the most advanced technical solutions that exclude the impact of harmful substances, methods and mechanisms on the surrounding ecosystem. It contains a list of prohibited technologies and materials (trichlorodiphenyl, fluoroplast, synthetic polyester polymers);

2. The Energy Saving and Energy Efficiency Program. It defines the goals and objectives of reducing the main indicator in the transmission of electricity - technological losses. The implementation of this program can reduce the cost of electricity transmission in terms of reducing the amount of conventional fuel required to maintain the technological process of transmission. In turn, this reduces the generation of electricity at the stations and CO₂ emissions;

3. The Innovative Development Program. The use of modern SmartGrid technical solutions, along with "flexible" distribution systems from distributed clean (sun, wind, water) generation allows to ensure maximum efficiency and performance of power transmission, optimize its operation modes, increase reliability and eliminate risks associated with technological violations and failures in the work of electrical equipment. In addition, the Innovation Development Program is aimed at developing new technologies, materials and systems that replace the use of harmful substances at facilities:

- static compensators with the use of power electronics;

- application of new types of wires on overhead lines and power cables on cable line;
- use of new types of high tower poles;
- application of high-voltage equipment with solid insulation;
- system-wise transition to the transmission of electricity by direct current;
- application of "green" distributed generation;
- use of storage batteries with solid electrolyte, etc.

Aggregate implementation of all programs and policies in the Company can ensure the fulfillment of ecological tasks facing the power grid complex.

The goal of implementing the environmental policy of the power grid complex is to maintain a favourable environment for present and future generations.

The environmental policy is based on the Constitution of the Russian Federation, federal laws and other regulatory legal acts of the Russian Federation, international obligations of the Russian Federation in the field of environmental protection.

The main "challenges" facing the power grid complex in the field of environmental protection:

- a decrease in the share of obsolete equipment, used at electric grid facilities and containing hazardous substances;
- a reduction in the volume of deforestation of forest plantations during laying and maintenance of ROWs during the passage of overhead lines in forest tracts;
- a decrease of negative impact on the environment during the construction of electric grid facilities.

The main targets for the implementation of environmental policy for power grid companies are:

- decommissioning of 100% of equipment containing polychlorinated biphenyls, followed by its transfer to destruction (2025);
- biodiversity conservation, including taking measures to prevent the decline in the number of birds listed in the Red Book of Russia;
- continuous improvement of the environmental management system to enhance the environmental performance of Rosseti's group of companies;
- reduction in the consumption of fuel and energy resources for production and utility needs by 3% per year until 2022;
- bringing the share of motor vehicles operating with environmentally "clean" fuel to 10% of the total vehicle fleet (2025), provided that the total cost of owning such a vehicle with a correction factor of 0.75 is comparable to the total cost of owning a similar vehicle with an internal combustion engine (gasoline, gas, diesel fuel) for 7 years.

The main directions of the implementation of the environmental policy are:

- compliance with the requirements and standards established by the environmental legislation of the Russian Federation and international legal acts in the field of environmental protection;
- establishment of unified environmental requirements for activities of power grid companies;
- expansion of international cooperation in the use of environmentally "clean" and energy-efficient technologies and equipment;
- the priority of taking measures to prevent harmful effects on the environment over the implementation of measures to eliminate the environmental negative consequences of such an impact;
- conducting energy saving and energy efficiency measures;
- use of the best available technologies and innovations in the power grid complex ensuring compliance with environmental requirements and minimizing the negative impact on the environment, including the use of cable lines and self-supporting insulated wires in the distribution grid complex, as well as ultra-high poles for overhead lines with a voltage of 110 kV and higher;
- replacement of gasoline and diesel fuel with environmentally "clean" types of motor fuel and use of electric vehicles in power grid companies;
- development of the charging infrastructure and increase of the overall share of electric vehicles in the Russian Federation;
- limiting the conduct of production and construction activities in areas of special nature conservation value;
- ensuring conservation of biological diversity and restoration of disturbed lands;
- stage-by-stage decommissioning of equipment containing polychlorinated biphenyls, as well as oil-filled equipment with replacement for an environmentally safe one;
- ensuring environmentally safe management of production waste;
- development and improvement of the Company's environmental management system;
- ensuring compliance by contractors in the design, construction, reconstruction and technical re-equipment of electric grid facilities with requirements of the legislation of the Russian Federation and PJSC Rosseti in the field of environmental protection and environmental safety;
- ensuring disclosure and accessibility of environmental information, informing all interested parties about failures that have occurred, their environmental consequences and measures for remediation;
- improvement of the system of industrial environmental control;
- active participation in the improvement of the regulatory and legal framework in the field of environmental protection and environmental safety;
- involvement of personnel in activities aimed at ensuring environmental safety, protecting the environment and rational use of natural resources;
- improvement of the qualification of personnel, maintaining electric grid facilities, in the field of environmental protection and environmental safety;

- continuous improvement of the image of PJSC Rosseti as an environmentally centric company.

PJSC Rosseti, accepting the environmental policy, undertakes to follow its provisions when carrying out production activities.

This environmental policy applies to PJSC Rosseti, SDCs of PJSC Rosseti, and is also recommended for use by territorial grid companies.