

Федеральная Сетевая Компания  Единой Энергетической Системы

Публичное акционерное общество «Федеральная сетевая компания Единой энергетической системы»



Realization of the environmental strategy of the Russian Federation by energy companies (Example of Federal Grid Company of Unified Energy System)



Major strategic environmental documents of Russia for energy companies



Environmental doctrine of Russia (approved by the Government Edict of Russia No.1225-p, 31 August 2002)

Energy strategy of Russia for the period up to 2030 (approved by Government Edict of Russia No. 1715-p, 13 November 2009)

Basic principles of state environmental policy of the Russian Federation for the period up to 2030 (approved by the President of Russia, 30 April 2012)

Establishing the presidential commission for energy development strategy and environmental security (Edict of the President of Russia No. 859, 15 June 2012)

2017 year

- Edict of the President of Russia of 1 August 2015 No. 392 on observance of the SPNA year in Russia in 2017
National parks development
- Edict of the President of Russia of 5 January 2016 on observance of the environment year in Russia in 2017
Environment



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Goals and objectives of public environmental policy



Goal:

- Performing social and economic tasks, ensuring environment-oriented economic development, preservation of the environment, biodiversity and natural resources for present and future generations' needs, realization of the humans' right to favorable environment, strengthening the rule of environmental law and ensuring the environmental security

Key objectives:

- Establishing a system of good environmental governance
- Improving the environmental regulatory framework
- Ensuring environment-oriented economic development and introducing eco friendly innovations
- Mitigating measures to protect the environment
- Providing environmentally sound management of waste
- Nature conservation, including conservation of natural ecological system, flora and fauna forms
- Environmentally conscious culture and education development
- Development of international environmental co-operation

Presidential commission for energy development strategy and environmental security



Aim of creating:

- Coordination of authorities' and companies' activities in ensuring industrial, energy and environmental security, effective usage of mineral resources

Key objectives:

- Environment and energy security regulatory framework development, its coordination and control
- Review of electricity development programs, long-term development programs for energy companies and their subsidiaries and investing programs, analysis of their execution. Development of measures aimed at state policy realization in this field
- Considering the projects of environmental and security regulatory acts, taking measures aimed at their realization
- Guarantee of energy companies' effectiveness and transparency

Federal Grid Company: Facts and Figures



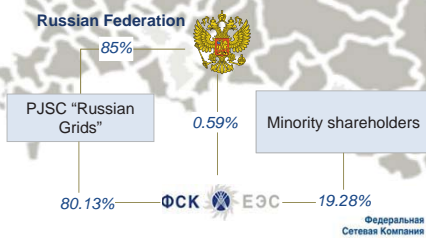
PJSC "Federal Grid Company of Unified Energy System" was created as a result of electricity reformation program in Russia in order to manage, preserve and develop Unified national electric system.

Company's mission:

Ensuring energy security for electricity consumers in Russia by the maintenance and development of the electricity transmission infrastructure.

- Territory of service **77** subjects of the Russian Federation
- Area **15.1** Million sq.km
- Employees More than **23** Thousand
- 2015 Investing program **1.17** Billion euro*
- Market capitalization **0.95** Billion euro*

Shareholders profile



Indicator	2014	9 months 2015
Revenue, billion euro*	1.9	1.4
Net profit, million euro*	59.0	56.6
Number of substations	924	924
Power line length, thousand km	138.8	139.1
Power transmitted via UES, billion kWh (% of generation)	515.2 (50.3%)	387.5 (50.8%)
Losses volume in UES, billion kWh	21.2	14.9**

* At the exchange rate of the Bank of Russia on 21 January 2016
** Estimate

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Federal Grid Company priorities



- Providing the company's economic effectiveness.
- Ensuring safety and smooth energy supply for consumers. Since 2010 the accident rate was decreased by 40%.
- Implementation of the state infrastructure development projects: energy supply for Baikal-Amur and Trans-Siberian mainlines; ESPO and Power of Siberia pipelines, major Siberia and Russia's Far East industrial and public facilities electrification.
- Support of international electricity trading contracts of Russian Federation



Andrey Murov
The Chairman of Federal Grid Company of Unified Energy System

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Impact on environment



Soil disturbance, vegetation clearance, SPNA and environmental pathways disturbance during the electricity lines construction and repair works



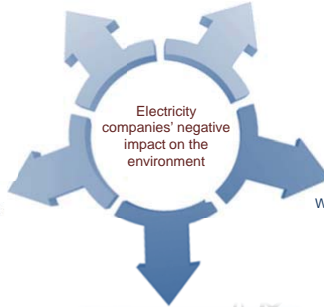
SF₆ – insulated equipment operation and absence of methods to measure its leakage



Using condensers and transformers with polychlorinated biphenyl, an organic pollutant of the first class of danger, subject to Stockholm Convention



Water, soil, air pollution caused by the accidents with oil-filled equipment



Bird deaths at power lines, as a result of electric shock



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Environmental activities of Federal Grid Company



Указание 30
Федеральной сетевой компании
11.03.2015 № 30/15
Положение об экологической политике
Федеральной сетевой компании
11.03.2015 № 30/15

В соответствии с требованиями Федерального закона от 02.07.2013 № 171-ФЗ «О внесении изменений в Федеральный закон «Об экологической ответственности субъектов хозяйствования» и признании утратившими силу отдельных законодательных актов Российской Федерации» Федеральная сетевая компания приняла решение о разработке и реализации Программы экологической политики.

30 June 2014
PJSC "Russian Grids" policy of innovative development, energy-saving and energy efficiency

30 April 2012
Chairman of the Government of Russia Directive No.1710p-П13 on voluntary system of ecological responsibility implementation

30 September 2014
"FGC UES" Board of Directors' decision on developing the Program for environmental policy realization

30 September 2014
Environmental policy of "FGC UES"

31 March 2015
Program for environmental policy realization of "FGC UES"

Considering the negative impact on the environment, Federal Grid Company's activities aimed at establishing a system of effective environmental governance

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Environmental policy of Federal Grid Company and its Realization Program



Environmental Policy of FGC UES

- Key activities of environmental policy realization program:
1. Ensuring environmental security according the environmental law of Russia
 2. Improving environmental regulatory framework
 3. Improving environmental governance of the Federal Grid Company
 4. Creation of company's goodwill as socially and environmentally conscious
 5. Innovative environmental development aimed at rational use of natural resources

Planned expenditures for environmental policy realization in 2015-2019 amount 20 million euro, including:

- Environmental security activities according the environmental law of Russia
- Environmental management system implementation and certification
- Improving statutory and technical regulation of environmental activities
- Federal Grid Company's goodwill as environmentally-oriented
- Innovative decisions development

Achieving goals of environmental policy



Meeting the environmental law of Russia requirements:

- Developing of environmental regulatory documentation and obtaining licenses for operation
- Granting the underground water abstraction license and meeting the license agreement conditions
- Environmental accounting and reporting
- Environmental educational courses for employees

Meeting the environmental security requirements:

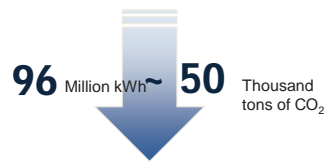
- Internal environmental accounting
- Ecological auditing of Company facilities
- Water use and disposal, artesian well use, waste management, rational use of land and forest resources control
- Estimating environmental risks, developing measures of managing them

Reduction of the negative impact on the environment

Reduced volume of water use	11.1%
Reduced volume of water disposal	12.6%
Reduced volume of total pollution discharge	29.8%
Reduced volume of waste	10.4%

For 9 months 2015 against 2014

Reducing losses, improving energy saving and energy efficiency



Federal Grid Company as environmentally-oriented



Introducing voluntary system of ecological responsibility:

Meeting international environmental standards ISO 14001:2004, ISO 5001:2011

- Raising funds in international banks is impossible without meeting international environmental requirements
- Co-operation with external stakeholders on international markets
- Environmental Management System and Energy Management System contribute to energy consumption optimization, more rational nature resources usage, waste reduction
- Environmental Management System ensures reduction of negative impact on the environment and allows to solve both economic and environmental tasks at the same time



Recommendations



1. A compromise between rising company's economic efficiency and meeting environmental requirements is governance rationalization and usage of innovative equipment and technology.
2. Extension of international environmental co-operation at all levels, including co-operation between companies on addressing waste-related challenges, exchange of best practices in using green technologies.
3. Strengthening cooperation under OSCE auspices on protecting energy infrastructure from natural and man-made disasters and terrorist attacks.