



**Federal Grid Company of Unified Energy System**



ANNUAL REPORT 2011

ENERGY OF DEVELOPMENT



**Federal Grid Company (MICEX-RTS, LSE: FEES) – the operator of Russia's unified electricity transmission grid delivering electricity from generating facilities across Russia.**

The foundation of the country's electricity infrastructure:

- 854 sub-stations
- 124.6 thousand km of transmission lines
- 322.5 thousand MVA of transformer capacity
- 24,603 employees
- covers 74 Russian regions with a total area of 13 million km<sup>2</sup>

Largest publicly traded electricity transmission company in the world by length of transmission lines and transformer capacity

Russian stock market "blue chip", Russia's largest energy company based on market capitalization



## HISTORY



June 2002

State registration of the Company



January 2006

56 regional electricity transmission companies (MSKs) were transferred under the Company's control



July 2008

Completion of reform, the merger of RAO UES of Russia, MSKs and MMSKs into Federal Grid Company, the beginning of trading of Federal Grid Company shares on MICEX Stock Exchange and RTS Stock Exchange



January 2010

Moved to tariff regulation using the return on invested capital (RAB) regulation

[Tariff Regulation, page 64](#)



December 2010

Adoption of a new dividend policy, which pays dividends of at least 10% of RAS net income; approval of the 2010-2014 Long-term Investment Program in the amount of RUR952.4 billion

[Dividend Policy, page 90](#)



February 2011

Approval of the Company's new Engineering Policy

[Operations Overview, page 33](#)



March 2011

The Company completed a technical listing of its GDRs on the London Stock Exchange (LSE)

[Stock Market, page 88](#)



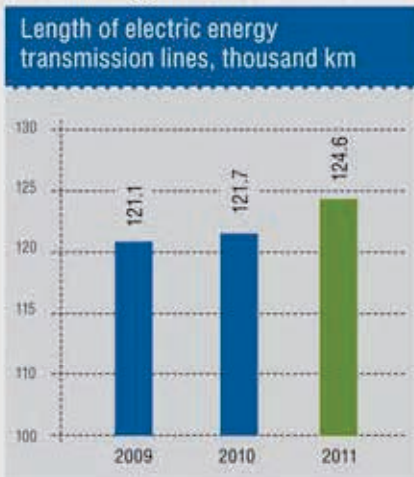
April 2011

Adoption of Federal Grid Company's Innovative Development Program

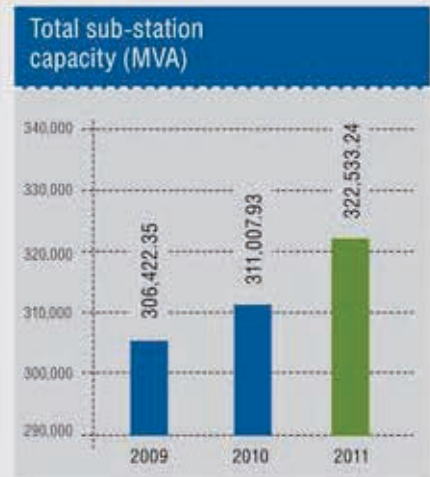
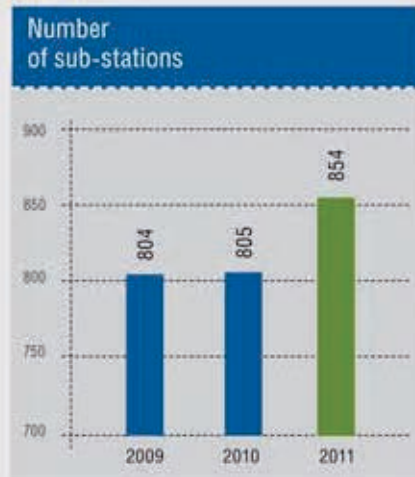
[Innovative Development, page 55](#)

## KEY ASSETS OF FEDERAL GRID COMPANY

Electric energy transmission lines



Sub-stations





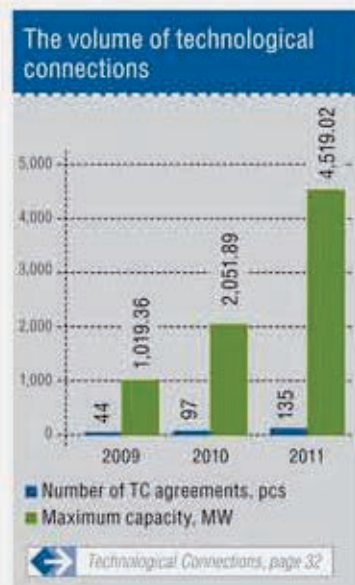
## MISSION

To reliably operate and develop the Unified National Electric Grid to boost Russia's economic growth and to ensure uninterrupted power supply to all regions country-wide

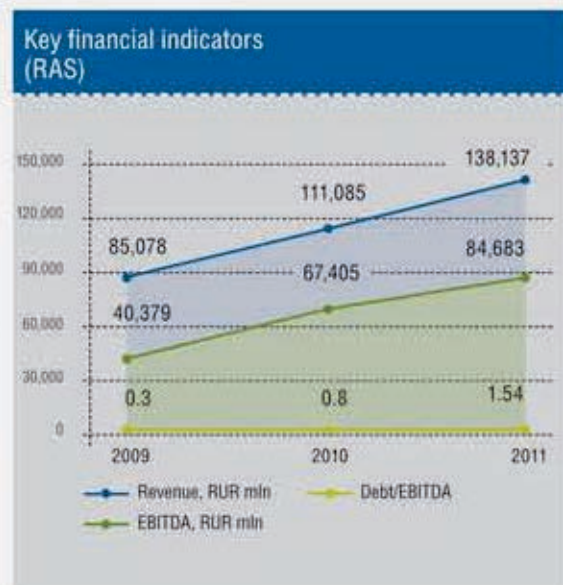
## THE COMPANY'S BUSINESS

Transmission of electric energy over the Unified National Electric Grid (UNEG)

Technological connections



## STABLE FINANCIAL POSITION



The largest part of the Company's revenue is generated by the tariff for electricity transmission, approved by the Russian Federal Tariff Service (FTS)

From 1 January 2010, the Company moved to RAB regulation, where by the tariff calculation is based on a guaranteed return on initial and invested capital

## AWARDS AND ACHIEVEMENTS



One of the world's fastest growing large energy companies in 2011, according to Platts international rating agency



Winner of the 2011 Investor Awards, winner in the category "Deal of the Year. Corporate Bonds"



Winner of the annual All-Russian contest "100 Best Russian Companies 2011," winner in the category "Best Energy Company"



Winner of the industry contest "2011 Organization of High Social Efficiency in the Electricity Industry"



Winner of the yearly contest for the best corporate web site for energy companies, conducted by the Energorynok magazine and Securities Market Publishing House

## RATINGS

S&P – BBB, Stable outlook

Moody's – Baa2, Stable outlook

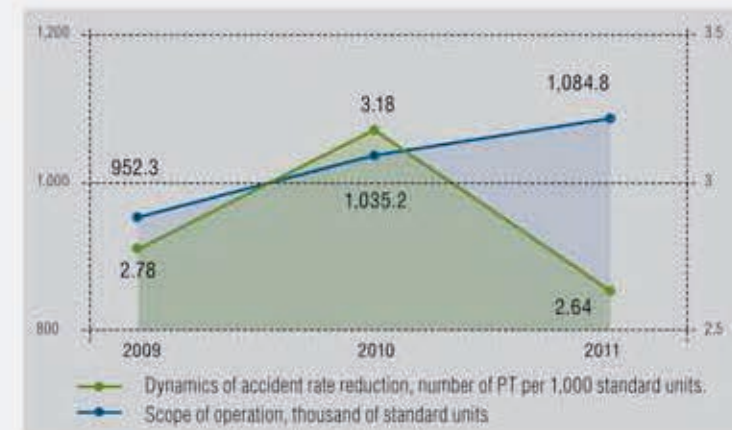


Please visit the web site of our interactive annual report <http://ar2011.fsk-ees.ru>

## FEDERAL GRID COMPANY STRATEGIC PRIORITIES

### 1 Reliability →

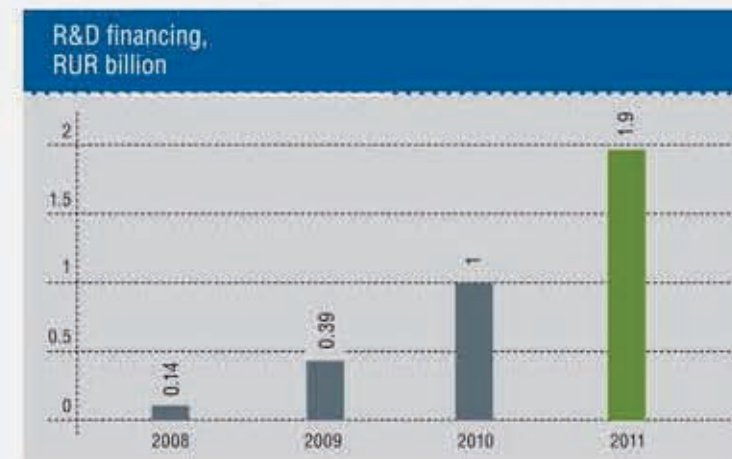
Reliable and stable electricity transmission across Russia is the basis of our strategy. While the volume of equipment in operation has increased, the Company has reduced the accident rate and the quantity of undelivered electricity.



### 2 Innovation →

To provide reliable, high quality and effective interaction between electricity consumers and producers, the Company actively introduces advanced technologies and equipment, works to create a smart network and increases the share of domestically-manufactured equipment it uses reducing import dependence.

Innovative Development, page 55



### 3 Efficiency →

The Company has been successful at improving financial and operational efficiency via equipment upgrades and better management and productivity.

137,69 million kWh

2011 energy saving effect of cost management

RUR 2 billion

2011 savings achieved via cost reduction

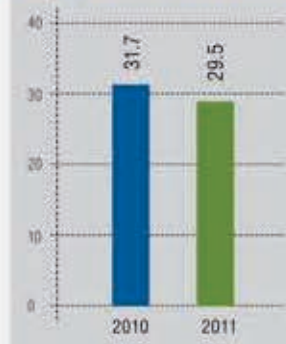
Cost Optimization, page 66

RUR 41,1 billion

2011 procurement savings

Procurement, page 47

### 2010-2011 Cost Management



Reduced cost per standard unit, thousand RUR/1 standard unit

## OBJECTIVES

Implement the large-scale investment program aimed at developing electric grid infrastructure

Modernize the electric energy industry and improve energy efficiency of the electric grid business

Upgrade operational and investment efficiency

Move to a smart power system - utilize innovative Smart Grid technologies in implementing investment projects

Upgrading the Company's investment attractiveness



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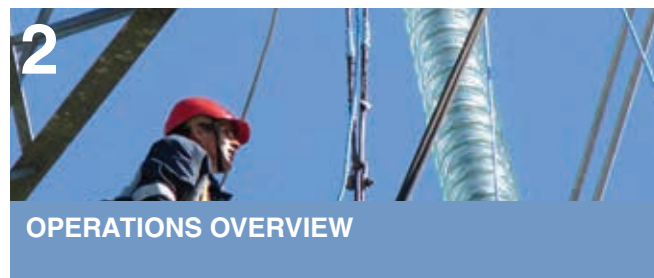
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See Book 2



# STATEMENT OF CHAIRMAN OF THE BOARD OF DIRECTORS

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## DEAR SHAREHOLDERS,

In July 2011, I was elected Chairman of the Federal Grid Company's Board of Directors, following an instruction by the Russian President to replace government officials with independent directors on corporate Boards of Directors. I am not new to the Company; I first joined as an independent director in 2008. During this time, I have seen the Company change for the better and I have tried my best to make it even more successful, fast-growing and open, both in Russia and internationally.

As our principal shareholder, the State has set strategic priorities to develop and ensure the reliable operation of Russia's national electric grid. These challenges seem daunting, unless we increase our transparency level. Transparency is an important priority for all of our shareholders, who want to be well-informed about the Company's performance; we also want to receive their feedback on our work. My key goal as Chairman of the Board of Directors is to transform Federal Grid Company into the most open and transparent company in the market.

In this respect, 2011 marked a new stage in corporate development. Federal Grid Company is the largest publicly traded electricity transmission company in the world by the length of high voltage lines and installed transformer capacity. Therefore, its liquidity and awareness on global markets are key management concerns. Completing our listing on the London Stock Exchange (LSE) in March of last year marked a major step forward for the Company. We view the global depository receipt (GDR) listing as the basis for raising additional funds to upgrade the UNEG. Investors' high degree of confidence in the Company is illustrated by oversubscription for 2011 bond issues.

To enhance operational transparency, we focus on shareholder interests and look to strengthen the Board of Directors' role in the decision-making process. In 2011, we held 29 meetings of the Board; of these, three meetings were held in person. In the longer term, the role of the Board of Directors will continue to be enhanced.

We did a good job boosting corporate investment appeal. In particular, we brought the Company's corporate governance in line with best international practice, approved a new Code of Corporate Ethics (developed in accordance with best standards), updated the organizational structure and enhanced business operating transparency by streamlining procurement. We successfully expedited preparing accounting reports (under both RAS and IFRS) to promptly disclose corporate information. During the reporting year, we have developed and successfully implemented the Company's anti-corruption policy covering all corporate units. In addition, we engaged Morgan Stanley (a global investment bank) as our corporate broker.

We engaged in serious efforts to foster international cooperation. Last year, the Company entered into agreements with top power equipment manufacturers, which have brought their products to Russia. It is an important step forward, both for the Company which will receive new equipment and for Russian regions. Constructing large industrial projects will positively affect the regional economy and will create new jobs.

Consolidating and integrating the electric grids of Russia and its neighboring countries is another important international cooperation issue. We have signed an agreement on the parallel operation of unified energy systems of Russia, Belorussia and Ukraine and have promoted cooperation with BRELL (Belarus, Russia, Estonia, Latvia and Lithuania) energy companies. The Company is negotiating the possibility of synchronizing Russia and Mongolia's energy systems and including Western Mongolia in parallel operation with Russia's Unified Energy System. We will soon be prepared to act as a liaison between Western and Eastern energy systems.

In 2012, we will continue to pursue contacts with the global business community and make our best effort to boost the Company's investment attractiveness, which contributes significantly to the Russian economy.





A handwritten signature in black ink, appearing to read 'E. Ferlenghi', written over a horizontal line.

**ERNESTO FERLENGHI**

Chairman of the Board  
of Directors of Federal Grid  
Company



# STATEMENT OF CHAIRMAN OF THE MANAGEMENT BOARD

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## DEAR SHAREHOLDERS,

2011 was a year of new opportunities and significant decisions for the Russian power industry, including for our Company. Thanks to our team's responsible professional work and support from the Russian government, we have maintained confident forward momentum and have managed to fulfill all shareholder objectives.

The Company's main priority is to provide reliable and stable electric supply to consumers. We have done everything possible to upgrade national electric grid reliability and create an additional safety margin for all its components. Investment and repair programs have been fulfilled in full; the emergency reserve has been fully staffed and new equipment has been purchased. One important result of this work was that Russia's backbone electric grid has operated under normal conditions without failures during the 2011-2012 autumn-winter season.

To ensure reliable operation of the Russian electric grid, active work has been done to renovate and develop the Unified National Electric Grid (UNEG) on the basis of a new generation backbone

potential and introducing the most advanced technologies. During the reporting year, under the Company's innovative development program, we collaborated with the Russian Academy of Sciences (RAS) and leading Russian research institutes. In 2011, the Company channeled a total of RUR1.9 billion to research and development.

Domestic and foreign manufacturers of electrical equipment, including Power Machines, Hyundai Heavy Industries, Toshiba and Alstom, are involved in research and innovative development. In 2011, our company entered into several long-term cooperation agreements to localize electrical equipment production from leading countries on Russian territory.

Developing backbone electric grids in Russian regions, delivering the capacity of new power units at generating facilities and upgrading the reliability of the electric supply to Moscow, St. Petersburg and the Tyumen Region are the Company's main activities. During the reporting year, we energized 84 power facilities with a total transformer capacity of 18,501 MVA.

*Our Company's key priority is to provide reliable electric energy supply to the consumers. The Company successfully accomplished its tasks in 2011 owing to professional work of its employees.*

electric grid – the smart grid. The project will allow us to reduce network losses across all voltage classes 25%, increase the capacity of transmission lines, smooth out generation schedules and provide a 30% reduction in the probability of electric grid accidents. The total economic effect of creating the new generation grid for UES of Russia will be RUR50 billion per year. We are carrying out projects to utilize high-temperature superconducting cable lines and high-capacity storage batteries, as well as to change overhead power lines for cable versions in large cities. In December 2011, the second phase of a pilot digital sub-station was commissioned in Moscow. Currently, we are actively working to create pilot regional smart grid clusters in various Russian regions.

Federal Grid Company is carrying out the technical re-equipment of the UNEG in close collaboration with the scientific community. Together with leading research institutes and design organizations, we are monitoring global innovative developments, implementing measures to develop Russia's scientific

The total length of energized power lines was 2,963 km. Technological connection services, with a total capacity of 1,086 MW, were fully rendered for consumers' power receivers.

In 2011, large-scale work was conducted as part of providing electric supply for major government projects, such as: the APEC Summit (scheduled for September 2012), the 2014 Sochi Winter Olympics and the Eastern Siberia – Pacific Ocean oil pipeline. That opens the way for Russian businesses to penetrate the Asian-Pacific markets. Implementing these projects will not only positively impact Russian economic development, but it will also strengthen Russia's position in the international arena.

In the past year, we have strengthened our company's financial position and achieved all planned targets. At the end of 2011, sales revenue from ordinary activities increased 24.43% year-on-year. The main growth drivers were extra revenue from electricity transmission services and consumers' technological connections to the UNEG, as well as implementation of the Cost





A stylized, handwritten signature in black ink, consisting of a large, flowing 'O' followed by 'B' and 'G'.

**OLEG BUDARGIN**

Chairman of  
the Management Board of  
Federal Grid Company



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Management Program that reduced the Company's 2011 operating costs RUR2 billion. Next year, we will continue to implement the Program aimed at increasing the proportion of open competitive procedures and optimizing purchase costs via standardizing design solutions and increasing the share of purchased standard equipment.

We have developed a package of measures to modernize electric grid infrastructure. The Company's management has decided to raise funds to implement this program, in particular, via the placement of bonds and loans with major Russian and Western banks. In this regard, during the past year, Federal Grid Company has been active on capital markets and has carried out activities aimed at increasing investment attractiveness. Among our key achievements in this area is a listing of depository receipts (DRs) on the London Stock Exchange (LSE), as well as four successful bond issues.

Complying with high corporate governance standards has traditionally been one of Federal Grid Company's main priorities. Effective interaction between corporate management and the Board of Directors enables the Company to successfully address the tasks facing the Company.

Federal Grid Company considers socially responsible business to be a systemic value. Sponsorship and charity and the promo-

insurance programs and a non-state pension fund scheme. We take care of our employees and their families' health, allocating funds for various employee rehabilitation programs, organizing their holidays and providing quality health care.

Our company pays particular attention to personnel reserve care. To date, Federal Grid Company has signed partnership agreements with more than 45 leading educational establishments across Russia. We announced that 2011 was the Year of the Young Professional. Young power engineers and students were trained in a joint educational program between Federal Grid Company and the SKOLKOVO Moscow Management School. Individuals participated in a panel discussion "Smart networks are future projects. The youth aspect." The final event of the Year of the Young Professional was the "Leaders of the new generation" forum held in Skolkovo. This was attended by more than a hundred of the Company's young employees who had an excellent opportunity to develop and upgrade their professional skills.

The power industry is rightfully considered to be a life-supporting industry. It provides a reliable electric supply to millions of consumers, production facilities, social infrastructure and transportation and communication facilities. Today, Federal Grid Company makes every effort to establish the safe and smooth operation of Russia's backbone energy complex. Next year,

*In 2011, against the background of the recessionary trends, the Company focused on cost optimization, reducing its operating costs by RUR2 billion, and getting the aggregate energy saving effect of 137.69 million kWh.*

tion of various projects in national culture, science, education and sports are integral corporate priorities. Federal Grid Company fully meets its social obligations to all employees – from industry veterans to young employees. The Company offers a decent wage, various social programs and non-material incentives. Significant attention is paid to maintaining professional power engineering dynasties, maintaining and enhancing the best labor traditions and transferring expertise and experience from generation to generation. The Company has a long-term housing improvement program, employee life and health

the Company will continue to work on implementing nationally important, large-scale innovative projects, maintaining the reliable and efficient operation of electric grid facilities and developing and increasing corporate capitalization, as well as broadening the range of investors.

I would like to express my appreciation to our shareholders, partners, customers and employees for their trust, and I also thank you for our mutually beneficial long-term cooperation and for the joint contribution to Federal Grid Company development.

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*During the past year, we have been active on capital markets, carrying out a listing of depository receipts on the London Stock Exchange (LSE), as well as four successful bond issues. The attracted funds will be used for financing of the program of modernization of the grid infrastructure allowing to increase the reliability and efficiency of electricity supply.*



## KEY EVENTS



### MAJOR INVESTMENT PROJECTS

#### SOCHI 2014

Federal Grid Company builds, modernizes and reconstructs electric grid facilities for the Sochi 2014 Olympics Winter Games to supply large spa resorts and sports facilities – the Sochi Olympic Stadium, the Ice Arena, the Olympic Oval, the Ice Curling Arena and the Krasnaya Polyana Mountain Cluster.

 [Key Investment Projects, page 52](#)

#### 5 September

Construction of the 110 kV Imeretinskaya – Ice Arena cable line was completed.

#### 8 November

The Company completed putting under working voltage the 110 kV Mzymta sub-station and the 110 kV Rose Farm – Mzymta cable power line in the Krasnaya Polyana Mountain Cluster.

#### 11 November

Federal Grid Company finished putting under working voltage the 110 kV Mzymta – Laura cable electric energy transmission line in the Krasnaya Polyana Mountain Cluster.

#### POWER SUPPLY ESPO OIL PIPELINE

We have taken part in the largest projects in recent decades – laying the strategic Eastern Siberian – Pacific Ocean oil pipeline (ESPO), which will transport Russian oil to the promising Asian-Pacific region markets. Constructing and reconstructing main power facilities for connection to the electric grids of ESPO facilities in areas of the Sakha Republic (Yakutia), the Jewish Autonomous and Amur Regions, and the Khabarovsk and Primorsk Regions, are within the scope of reference for the Company.

 [Key Investment Projects, page 52](#)

#### 22 July

Installation of electricity transmission line towers for the 220 kV high-voltage line for power supply of pump stations 40 and 41 of the pipeline system, Eastern Siberian – Pacific Ocean (ESPO)-2, was completed.

#### 12 December

The 220 kV Lesozavodsk- NPS-38 transmission line for external power supply at pumping station 38 of the ESPO pipeline was energized. During construction of the transmission line, 323 towers and 62 km of conductors and fiber optic lines were installed.

#### POWER OUTPUT OF BOGUCHANSKAYA HPP

The Boguchanskaya HPP is the largest new project in the Russian hydro-power engineering sphere with a capacity of 3 thousand MW, which is part of the Angara Cascade. To transmit power from the Boguchanskaya HPP, the Company is constructing 220 kV facilities in the Krasnoyarsk Region and acting as a technical agent for construction of 500 kV facilities.

 [Key Investment Projects, page 53](#)

#### 20 January


The construction of 220 kV network to transmit power of Boguchanskaya HPP (the Krasnoyarsk Region) was completed. New power facilities are fully prepared to work and will be energized after putting into operation of HPP.

#### 20 May

Construction of 500 kV power line Boguchanskaya HPP – Ozeraya was started. Putting into operation of the new line, scheduled for the end of 2012, will strengthen the connection between the electric energy systems of the Krasnoyarsk and the Irkutsk Regions.

## THE 2012 APEC SUMMIT

The Asian-Pacific Economic Cooperation (APEC) Summit will be held in Vladivostok in 2012. Federal Grid Company constructs and reconstructs the main power facilities in the Primorsk Region to ensure uninterrupted power supply to APEC Summit facilities.

 [Key Investment Projects, page 52](#)

**11 July**

Laying the high voltage cable, 8 km in length, along the bottom of the Eastern Bosphorus Strait was completed. This was the first time that the underwater cabling technology was used in Russia.

**25 August**

the 220 kV Vladivostok – Green Ugol transmission line, with a length of 64.9 km, was energized.

**5 September**

Equipment of the new 220 kV Green Ugol sub-station was energized.

**26 September**

Equipment of the new 220 kV Russkaya sub-station was energized.

**10 October**

New equipment of the 220 kV Volna sub-station was energized.

**12 December**

the 220 kV Vladivostok TPP (VTPP)-2 – Green Ugol power line, with a length of 15.4 km, was energized.

## THE 330 KV ELECTRIC GRID RING IN ST. PETERSBURG

Federal Grid Company is constructing the 330 kV electric grid ring in St. Petersburg to ensure reliable power supply to the City's northern areas, its large industrial enterprises and cultural Centers, as well as to create conditions to connect St. Petersburg users to the grid.

 [Key Investment Projects, page 53](#)

**30 June**

330 kV Vostochnaya – Volkhov-Severnaya, 330 kV Severnaya – Vostochnaya overhead power lines, as well as 330 kV Volkhov – Severnaya – Ilyich Plant, 330 kV Ilyich Plant-Vasileostrovskaya and 330 kV Vasileostrovskaya – Severnaya cable power lines were put into service.

**6 October**

Comprehensive reconstruction of the Volkhov-Severnaya sub-station, which was put into service in 1923 as part of the GOELRO plan, was completed. Next to the existing sub-station, Company built a new power facility with the use of innovative equipment – gas-insulated switchgear (GIS). The total investment in the reconstruction of the sub-station was RUR5.6 billion.

## RECONSTRUCTION OF OVERHEAD ELECTRIC ENERGY TRANSMISSION LINES IN THE CABLE DESIGN TO CLEAR A SPACE TO CONSTRUCT THE SKOLKOVO INNOVATION CENTRE FACILITIES AND TO ARRANGE POWER DELIVERY TO THE SKOLKOVO INNOVATION CENTRE FACILITIES

Federal Grid Company reconstructs 500, 220, 110 kV overhead electric energy transmission lines in the cable design to clear a space to construct the Skolkovo Innovation Centre facilities and building Skolkovo and Skolkovo-2S (Smirnov) 220 kV underground sub-stations.

 [Key Investment Projects, page 53](#)

**15 January**

The Company began works on transferring 110, 220 and 500 kV overhead power lines in the cable design for the power supply of Skolkovo Innovation Centre.

**20 March and 1 July**

Federal Grid Company began constructing the Skolkovo and Skolkovo 2 (Smirnov) 220 kV underground sub-stations with gas-insulated power transformers, ensuring greater reliability, compactness and fire safety facility operation.

## POWER OUTPUT OF POWER UNIT #4 OF KALININ NPP

The Company has been actively involved in addressing energy shortage in the north-west of the Moscow Region through the construction of over 600 km of 220-750 kV power lines and putting into operation of more than 8,400 MVA of transformer capacity for transferring power of the fourth power unit of the Kalinin NPP to the Moscow electric grid.

 [Key Investment Projects, page 53](#)

**23 November**

The Company completed the next stage of expansion of 750 kV sub-station Belozerskaya by putting into operation the new autotransformer AT 500/220 kV with the capacity of 501 MVA.

**13 December**

Federal Grid Company began commissioning procedures at the power distribution units of the Kalinin nuclear power plant. Use of innovative approaches allowed carrying out the design and construction of facilities twice ahead of statutory deadline.





## INNOVATIVE DEVELOPMENT AND MODERNIZATION

8 February

Federal Grid Company's Board of Directors at its meeting approved the Regulations on Engineering Policy, identifying the most advanced technical requirements and solutions in the field of capital construction and electric grid facility operation, as well as basic directions for UNEG innovation and the future development.

 [Improving the reliability of UNEG facilities, page 33](#)

7 April

Federal Grid Company's Board of Directors approved the Company's Innovative Development Program till 2016, with a view to 2020. The Program's main objective is improving the reliability, quality and efficiency of customers' power supply by upgrading the electric grid of UES of Russia based on innovative technologies.

17 June

Federal Grid Company and Rostelecom signed a general agreement on the provision of complex telecommunications services in the interests of Russian energy companies. The parties agreed to establish a digital transportation network for the electrical energy industry based on the network infrastructure of both companies and its further development under the operational control of Rostelecom.

 [Telecommunications and IT System Development, page 41](#)

9 September

According to the agreement between Federal Grid Company and Hyundai Heavy Industries to build a power equipment company with localized production in Russia, building of the Hyundai Plant started up in the Primorsk Region. The future plant is designed to produce up to 350 cells of gas-insulated switchgears (GIS) per annum that will meet up to 50% of Federal Grid Company's needs for this type of equipment.

28 September

Federal Grid Company and Megafon signed a cooperation agreement. The telecom operator will provide new fiber-optic cabling on the basis of Federal Grid Company's electric energy resources.

 [Telecommunications and IT System Development, page 41](#)



## CORPORATE GOVERNANCE AND SECURITIES

### 1 February

CJSC STATUS began maintaining Federal Grid Company's share register. The decision to transfer the share register was made by the Company's Board of Directors on 14 December 2010 based on tender results conducted among companies that provide share registrar services.

### 11 May

Shares of all generating companies were transferred from the balance of Federal Grid Company in exchange for shares of JSC INTER RAO UES (except AO ECO GruzRosenergo). The transmitted block of shares was valued at RUR100.8 billion. As a result of the deal Federal Grid Company Group owns 19.95% shares of JSC INTER RAO UES.

### 21 July

Federal Grid Company successfully completed placement of series 19 bonds worth RUR20 billion. Duration of securities is 12 years with 7-year put-option. Bookbuilding was carried out against the backdrop of volatility in global financial markets; however, the deal aroused great interest from the investment community.

### 27 October

Federal Grid Company placed series 15 bonds worth RUR10 billion.

### 28 March

There was a depository receipts listing for the Company on the main board of the London Stock Exchange and trading of Federal Grid Company depository receipts started up.

←→ [Stock Market, page 88](#)

### 29 June

The Company's Annual General Meeting of Shareholders decided on ordinary shares dividend payments based on 2010 results in the amount of RUR0.0020523650155 per ordinary Company share. The total dividend payout was RUR2,577,664 thousand. 30 August 2011 – Federal Grid Company paid dividends to shareholders for 2010 in full.

←→ [Dividend Policy, page 90](#)

### 1 August

First in the history of Federal Grid Company Independent Chairman of the Board of Directors was elected. New chairman Ernesto Ferlenghi, head of the Italian group ENI in Russia and the CIS, is a member of the Board of Directors of Federal Grid Company as an independent director since 2008.

←→ [Board of Directors, page 70](#)

### 12 December

Federal Grid Company placed series 18 bonds worth RUR15 billion.

### 28 April

The Board of Directors of Federal Grid Company decided to place the series of bonded loans for a total amount not to exceed RUR125 billion and approved the prospectus of the Company.

### 5 July

Federal Grid Company successfully placed 10-year local ruble bonds issue worth RUR10 billion. It was the first Russian market issue of the local bonds of the corporate sector, placed for a period of 10 years in the post-crisis period.

### 21 September

The new edition of the Corporate Ethics Code, approved by the Board of Directors, entered into force. The document was developed taking into account best international practices in corporate governance and aims at upgrading corporate culture across all Federal Grid Company departments.

### 28 December

Federal Grid Company summed up the results of pre-emptive right to acquire additional shares. Total placement was 4,438,498,226 shares at the offering price of RUR0.50 to the total amount of RUR2,219 million. Received money will be channeled to the implementation of the Company's investment program.





## INTERNATIONAL COOPERATION

**30 May**

A Federal Grid Company delegation visited Norway and took part in a meeting with Polycomtec representatives; Polycomtec manufactures composite tower bodies for electricity transmission lines. Meeting participants discussed the opportunity to use composite tower bodies to replace outdated ones in the Company's grids, as well as the idea to launch an appropriate manufacturing facility in Russia's North-West. These of the newest tower bodies will reduce capital costs, provide high speed and quality construction and installation work during the building of electricity transmission lines and improve electric energy supply quality.

**8 June**

Meeting of the U.S. Secretary of Energy Steven Chu with the Chairman of the Board of Federal Grid Company, Oleg Budargin. In the course of talks, the sides discussed issues of managing the grid line system, especially the transfer of electricity over long distances and the development of new technologies and strategy to ensure Russia's long-term electricity needs, and the technological and regulatory challenges of today's electricity industry.

**18 June**

Federal Grid Company and Morgan Stanley & Co. International Plc signed a cooperation agreement on the development and implementation of long-term relationship development with the investment community to achieve the target market value with maximum shareholder benefit.

**20 June**

Federal Grid Company and Cisco signed a memorandum of understanding on building the smart network in Russia

 [Innovative Development, page 55](#)

**21 June**

Federal Grid Company and TESMEC S.p.A. (Italy) have ratified the Cooperation Agreement in the field of UNEG modernization and innovation. In accordance with the Agreement, the parties plan to expand scientific and technological cooperation, aimed at improving the technology of installation jobs in the construction of transmission lines, as well as ensuring reliable operation of the main electric energy grid and its progressive development.

 [Innovative Development, page 55](#)

**22 September**

Federal Grid Company conducted negotiations with Alstom Grid, one of the three largest international manufacturers of electric energy supply and distribution equipment, on the first results of joint work within the framework of the two companies' strategic cooperation agreement. Alstom Grid representatives reported on the Company's newest developments in there lay protection and automation sphere, described features of Network Management Solutions and presented their vision on building the smart grid cluster in UES of Volga. Moreover, meeting participants discussed future projects related to DC links and reactive power compensation.



## SOCIAL RESPONSIBILITY AND ENVIRONMENT

30 April

Federal Grid Company specialists started to implement measures to reproduce the aquatic biological resources of the Primorsk Region, releasing into the pond of Izvestkovy Spring 250,000 salmon fry grown from eggs laid during last autumn's reproduction period. Therefore, the Company compensated for effects on the aquatic environment from cabling the 220 kV Green Ugol – Russkaya transmission line through the Bosphorus Strait.

↔ Environment, page 102

15 December

Young professionals from all branches of Federal Grid Company attended the Youth Innovation Forum "Leaders of the New Generation", organized jointly by Federal Grid Company and the SKOLKOVO Moscow Management School. The main objectives of the forum were the improvement of professional skills of young power engineers, the identification of talented professionals with leadership skills, development of team working methods.

↔ HR Policy, page 95

16 December

Federal Grid Company received a certificate for conforming to the environmental management system of the Executive Office and its branch – the Backbone Electric Networks (MES) of the South with international standard ISO 14001:2004. The certificate shows Federal Grid Company's commitment to principles of improving environmental performance and confirms the competence of the Company's environmental policy.

↔ Environment, page 102

22 June

Federal Grid Company and the SKOLKOVO Moscow Management School completed a joint training program for young power engineers, aimed at raising the audience's awareness about the project to create the smart electrical network in Russia.

↔ HR Policy, page 95

## KEY EVENTS AFTER THE REPORTING DATE (2012)

12 January

Six 220 kV transmission lines and four 220 kV sub-stations in the Primorsk and Khabarovsk Regions for providing external power supply facilities for the second stage of the ESPO – 2 oil pipeline (oil pumping stations 36, 38, 40 and 41) were energized.

7 February

At the 500 kV Beskudnikovo sub-station, the Company has completed individual tests of two production prototypes for the first static asynchronous reactive-power compensators (SARPC) in the world. The introduction of this innovative development by Russian scientists is designed to upgrade the capital's energy grid stability and reduce the risk of system blackouts.

12 March

SO UES and Federal Grid Company forwarded a jointly developed scheme and program for 2012-2018 Russia's Unified Energy System (UES) development to the Russian Ministry of Energy for approval.

22 March

The Russian Federal Financial Markets Service registered the report on the results of the additional share issue by Federal Grid Company (the State registration number of the issue 1-01-65018-D-103 D. Date of State Registration – 8 September 2011). The placement of securities was launched 29 September 2011 and was completed 3 February 2012. In total, during the additional issue, 43% of the shares of the additional issue (4,438,530,347 shares in the amount of RUR2,219,265,173.50) were placed. Funds raised from the float would be channeled to implementing the Company's investment program.





The share of electric energy transmitted through Federal Grid Company grids stands at

**50%** of all Russian energy consumption

Electric energy transmission is carried out across a territory spanning more than

**13** million square km

1

ABOUT THE COMPANY

# 1.1. GENERAL INFORMATION, OPERATIONAL AND FINANCIAL HIGHLIGHTS

Federal Grid Company is unique infrastructure, forming the physical backbone of the Russian economy. It is a key company in the country's energy sector.

The main focus of the Company is to manage the Unified National Electric Grid (UNEG) and to maintain its sustainable operation.

Federal Grid Company is:

- A natural monopoly on the Russian energy transmission market present in 73 Russian regions spanning 13.6 million square kilometers;
- Russia's largest energy company by market capitalization;
- The top publicly traded electric grid company by transmission line length and installed transformer capacity in the world;
- The top blue chip company on the Russian equity market.

 [Investment Community about Us, page 29](#)

Core business areas of Federal Grid Company include:

- UNEG management;
- Offering services to transmit energy and connect the electric grid to wholesale energy market players;

The Unified National (all-Russian) Electric Grid is a network of electric grids and other energy facilities ensuring stable energy supply to users, wholesale market operation and the parallel operation of the Russian energy system and the energy systems of foreign states. The nominal voltage type, transmission capacity, energy flow reversibility and other technical specifications of energy grid facilities included in the UNEG shall be subject to approval by the Russian Government.

- Maintaining electric grids in proper condition.
- Providing technical supervision and maintenance of Unified National Electric Grid facilities (UES of Russia)

The Company's revenues are mostly generated via energy transmission tariffs approved by the Russian Federal Tariff Service under RAB regulation methodology.

Key consumers include: regional distribution companies, sales companies and large industrial enterprises.

KEY OPERATIONAL HIGHLIGHTS	2009	2010	2011
Sub-stations, units*	804	805	854
Length of energy transmission lines, total thousand km**	121.1	121.7	124.6
Energy supply to distribution companies, to direct consumers and independent energy joint stock companies, net balance (million kWh)	452,662.172	470,648.072	484,663.552
Energy supply by the UNEG to neighboring states, net balance (million kWh)	13,628.309	15,716.33	19,284.808
Declared capacity (MW)***	95,545	91,179	90,937
Energy losses within the UNEG (million kWh)	22,120.61	22,525.621	22,553.172

\* Including leased facilities and open-type-bus-and-switch arrangements and units of other owners' sub-stations.

\*\* Including leased transmission lines.

\*\*\* Capacity that has been requested by consumers.

KEY FINANCIAL HIGHLIGHTS (RUR MILLION)	2009	2010	2011
Revenue	85,078	111,085	138,137
Adjusted EBITDA*	40,379	67,405	84,683
Adjusted EBIT**	16,962	34,723	43,905
Profit (loss) before tax	-54,049	67,312	11,444
Net profit (loss)	-59,866	57,082	-2,468
Adjusted net profit ***			
Net assets value	665,714	794,470	853,801
Market capitalization	367,971	452,717	351,163.1

\* Adjusted EBITDA = Earnings before taxes + Interest payable – Interest receivable + Depreciation charges for the reporting period + Change in valuation reserves for the reporting period – Change in the value of long term financial investments having current market value as a result of a value adjustment for the reporting period – Fixed assets revaluation charges – Revenues from technological connection services. To calculate this indicator, the amount of earnings before taxes is adjusted with regard to the change in valuation reserves and the revaluation of listed stock, including the amount of profit/loss from previous years that emerged as a result of writing off/charging reserves that are not taken into consideration.

\*\* Adjusted EBIT = Earnings before taxes + Interest payable – Interest receivable + Change in valuation reserves for the reporting period – Change in the value of long term financial investments having current market value as a result of a value adjustment for the reporting period – Fixed assets revaluation charges – Revenues from technological connection services. To calculate this indicator, the amount of earnings before taxes is adjusted with regard to the change in valuation reserves and the revaluation of listed stock, including the amount of profit/loss from previous years that emerged as a result of writing off/charging reserves that are not taken into consideration.

\*\*\* Adjusted net profit = Adjusted for gain on disposal of available-for-sale investments and investments in associates, loss on re-measurement of assets held for sale, non-specific impairment of PPE, impairment of available-for-sale investments, loss on dilution of share in associates.



## SWOT ANALYSIS

THE COMPANY'S STRENGTHS:	COMPANY'S WEAKNESSES:
<ul style="list-style-type: none"> <li>• Leading positions in the Russian energy market;</li> <li>• High capitalization level;</li> <li>• Favorable tariff regulation regime (RAB);</li> <li>• The Company's weight in the Russian economy and extensive government support (79.55% of Company's shares are owned by Federal Property Management Agency (Rosimuschestvo);</li> <li>• Country-wide reliable and continuous energy transmission;</li> <li>• Implementation of the cost management program; and</li> <li>• Financial sustainability: enhancing financial discipline, preventing conflicts of interests in financial and economic areas, development of the planning and budgeting system, accounting and tax policy and efficient capital leveraging.</li> </ul>	<ul style="list-style-type: none"> <li>• Demand for large-scale investment in renovating fixed assets due to the depreciation of grid assets; and</li> <li>• Challenged coordination of grid equipment maintenance and repairs due to the large territory covered by the Company.</li> </ul>
MARKET OPPORTUNITIES:	MARKET THREATS:
<ul style="list-style-type: none"> <li>• Guaranteed return on investments due to converting to RAB regulation;</li> <li>• Asset growth resulting from grid construction to supply energy to developing regions and new infrastructure facilities;</li> <li>• Introduction of the smart network and other innovative technologies; and</li> <li>• Implementation of sophisticated technologies and risk management in environmental protection.</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of increased load on sub-stations and energy transmission lines resulting from the expected growth in energy demand under Russian economy best case scenarios;</li> <li>• Deficit of free cash flow due to large-scale investment programs; and</li> <li>• Regulatory risks related to updated RAB regulation parameters.</li> </ul>

## THE COMPANY'S STRATEGIC PRIORITIES

Federal Grid Company is a backbone, reliable, efficient and fast-growing company focused on maintaining UNEG integrity, providing consistent, quality services to consumers and enhancing the welfare of its shareholders and investors.

### Our mission

To reliably operate and develop the Unified National Electric Grid to boost Russia's economic growth and to ensure uninterrupted power supply to all regions country-wide.

### Strategic priorities

#### Reliability

- Reliable energy supply is our key strategic priority. We take a responsible approach to maintaining reliable energy transmission as it determines Russia's well-being, from the normal operation of large industrial enterprises to the availability of lighting in each home;
- Our updated engineering policy is aimed at further enhancing the reliability of operated equipment by upgrading existing facilities and introducing sophisticated technologies;
- The life and wellness of our employees and the industrial and environmental safety of our companies are critically important to the Company. We continuously enhance industrial safety and consumer protection levels and apply new technologies for environmental protection.

#### Innovation

- We are committed to upgrading the quality of energy supply for consumers and to creatively introducing sophisticated technologies and equipment. Within the innovative growing Russian environment, the Company is focused on gradually converting the Unified National Electric Grid into a new smart electric grid which will ensure reliable, high quality and efficient cooperation between energy consumers and suppliers;
- The state of the UNEG affects Russia's economic growth rates. We, therefore, seek to bring the electric grid up to a new technological level by upgrading obsolete equipment and introducing change.

#### Efficiency

- New technologies and the professional excellence of our staff members are the key factors in our efficiency. We upgrade our equipment and improve management practices and work efficiency to boost our economic and production performance;
- Our wide-ranging business and monopoly position on the market offer sizeable advantages, such as financial sustainability, stable growth and an efficient risk management system. We use our strengths to enhance the Company's operating efficiency;
- We seek to follow best global corporate governance practices. Strict compliance with corporate governance standards and HR investment enables our shareholders and employees to make their own contributions to general corporate success;
- The strategy to maximize shareholder value is rooted in our wide-ranging business operations which are increasingly expanding due to our ambitious investment program and steady demand. The conversion to RAB regulation, streamlining capital structure and the new dividend policy also contribute to shareholder value growth.



## Our values

Corporate values are fundamental to Federal Grid Company; and they are our milestones in meeting objectives.

Federal Grid Company's VALUE RING demonstrates how we use our corporate values (the inner ring) to meet our strategic goals (the outer ring); of all corporate values, our employees are our most precious asset.

Energy supply to the regions, the largest industrial enterprises, cities and towns relies on their seamless, committed and sometimes even selfless work. We provide all staff members equal opportunities for successful work and professional and career growth. We encourage professional continuity across generations and empower our veterans to share their experience, skills and traditions with younger employees.



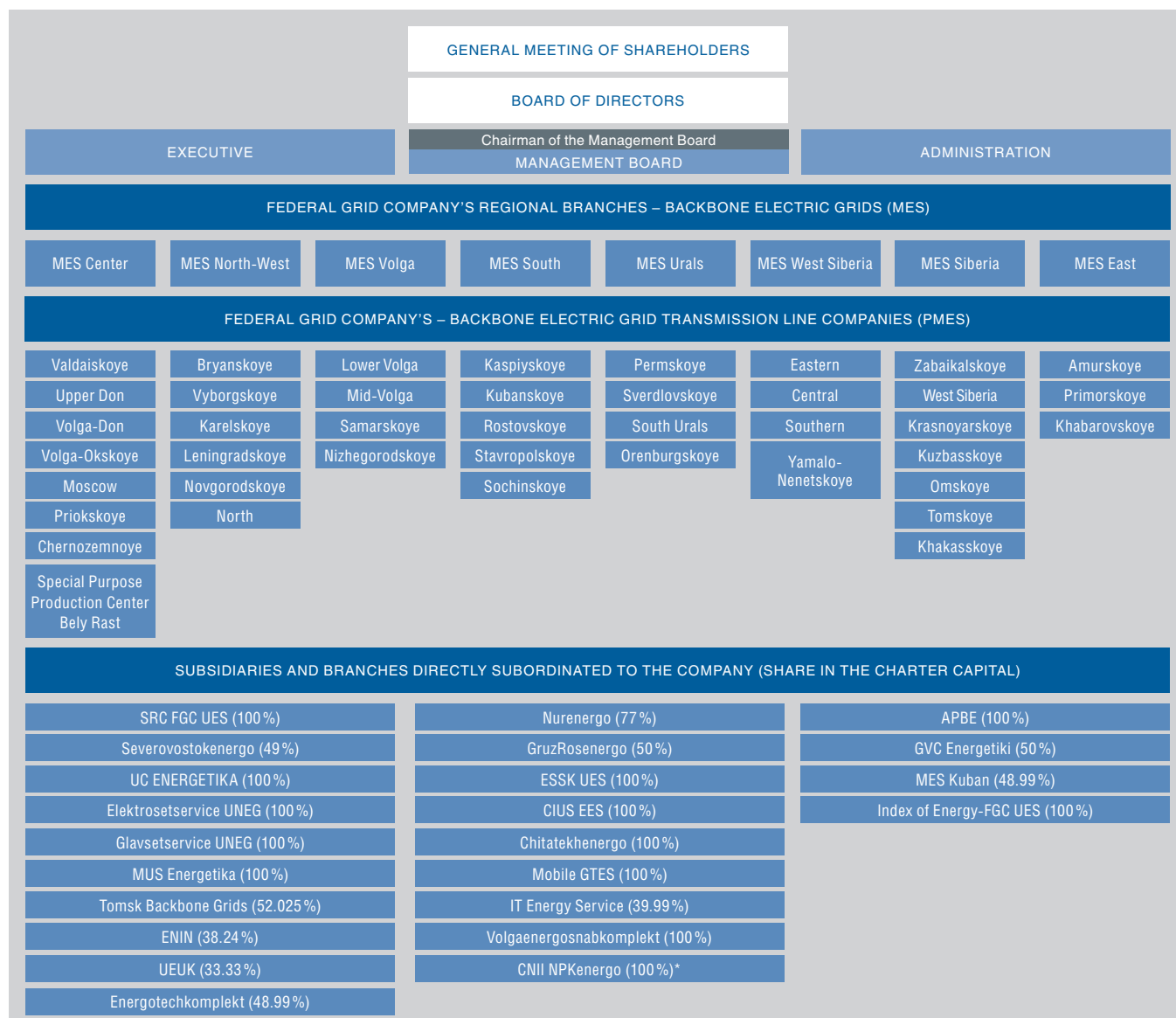
## ORGANIZATIONAL STRUCTURE

The Company's highest management body is the General Meeting of Shareholders. The Board of Directors is responsible for Company's growth strategy and supervision of the Management Board. The Management Board is responsible for the Company's day-to-day management.

 [Corporate Governance, page 69](#)

As of 31 December 2011, Federal Grid Company includes 50 regional branches:

- 8 branches of the Backbone Electric Grid (MES);
- 41 branches of the Backbone Electric Grid Transmission Line Companies (PMES);
- 1 Special Purpose Production Center Bely Rast.



\* In March 2012, an entry regarding the company's dissolution was made in the Unified State Register of Legal Entries.

As of 31 December 2011, Federal Grid Company has 23 SDCs operating in different sectors, including electric grid facility maintenance. Two subsidiaries – Tomsk Backbone Grids and MES Kuban – are backbone grid companies.

For detailed information on the Company's participation in SDCs and other organizations see Appendices.



## 1.2

# ROLE IN RUSSIA'S ENERGY STRATEGY

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Subject to the 2030 Russian Energy Strategy (approved by Russian Government Order No.1715-r from 13 November 2009), energy industry development shall be focused on the following:

- Auditing the electric grid sector and developing a monitoring system for electric grid distribution in terms of ensuring their reliable quality and efficient transmission capacity;
- Streamlining the configuration and enhancing the transmission capacity of backbone and distribution electric grids;
- Reducing the deterioration of electric grids to the average level seen in developed countries;
- Cutting losses in the electric grids and enhancing energy transmission efficiency;
- Raising private equity to fund the distribution energy sector for further growth, upgrading and renovating electric grids and fostering the reliability of energy supply to end-users for the long term;
- Ensuring the mass transition from administrative to economic incentives to boost the performance of electric grid companies;
- Developing consolidation management mechanisms for distribution grids across Russian regions, including licensing business operations to transmit and distribute energy; and

- Imposing more economic responsibility on power generation and grid companies for complying with guaranteed standards of reliability and service quality.

The Company views its Energy Strategy as a benchmark for adjusting its operations. We use the Energy Strategy to define UNEG growth priorities with a view towards government policy goals and objectives.

The Company's baseline document, which regulates the UNEG development, is the Layout and Program of Unified Energy System (UES) development in Russia for a seven year period (hereinafter, the Layout and Program). The document is focused on developing grid infrastructure and generating facilities and meeting long- and medium-term demand for energy and capacity. The 2011-2017 Layout and Program was approved by Russian Ministry of Energy Order No. 380 on 29 September 2011.

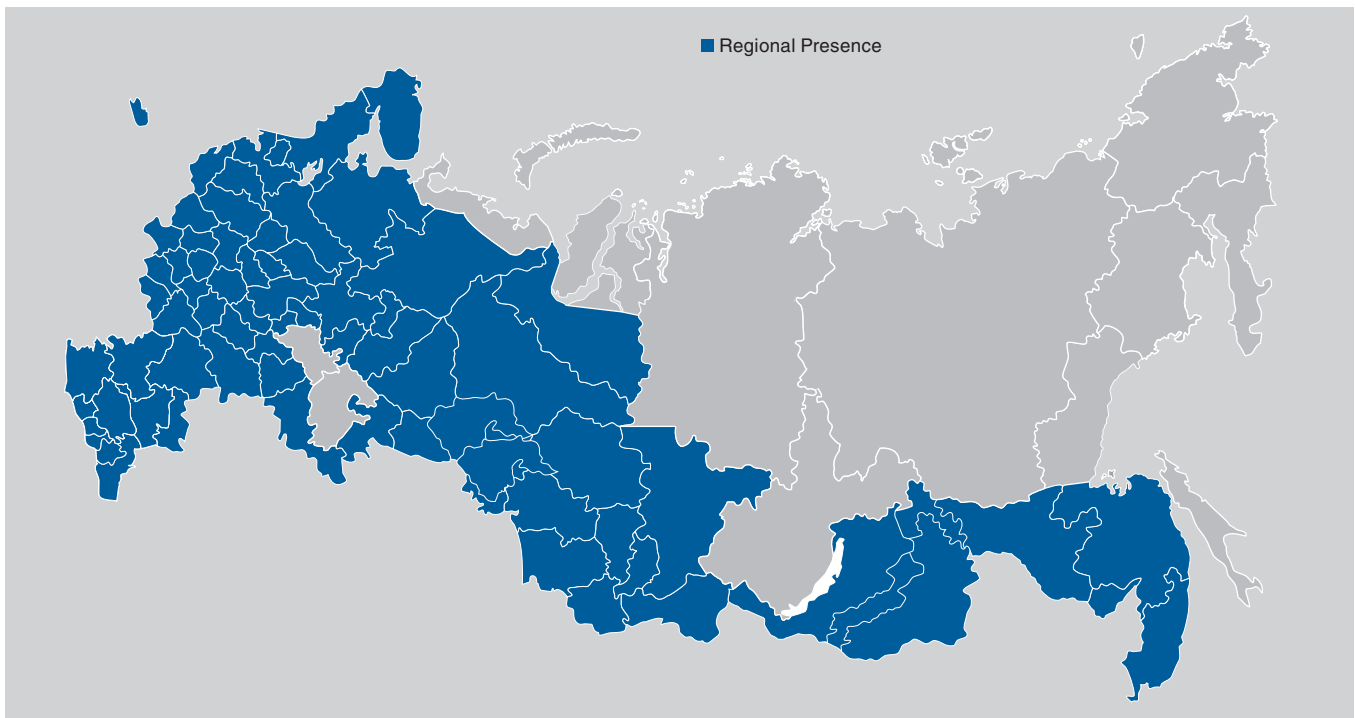


# 1.3

## THE COMPANY’S GEOGRAPHIC REACH AND MARKET SURVEY

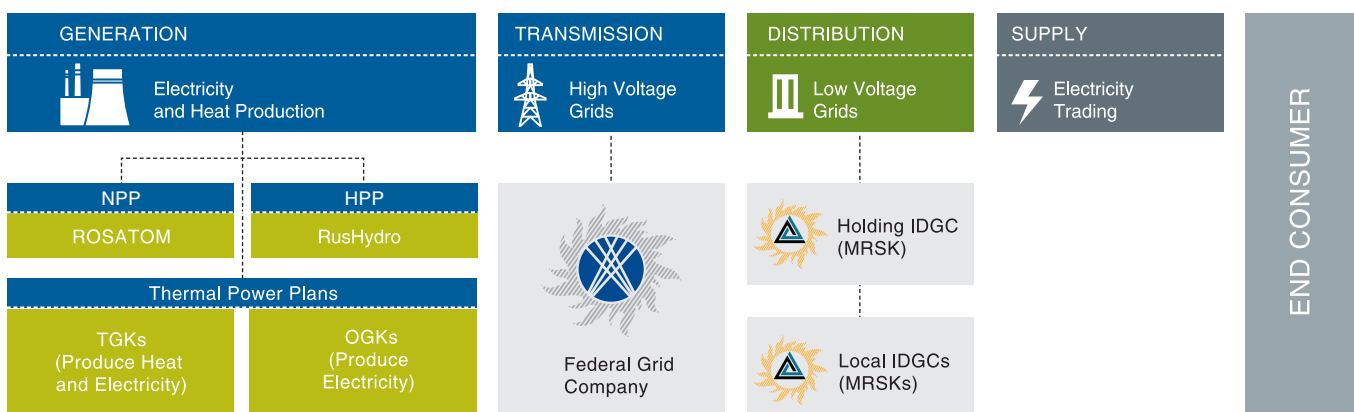
Federal Grid Company electric grid facilities are located in 73 Russian regions, covering the territory of more than 13.6 million square kilometers. The total length of transmission lines is more than 124 thousand kilometers. The area of our reach is divided into zones, each under the control of one of the Company’s branches – Backbone Electric Grids (MES; PMES).

The Chukotka, Kamchatka, Taimyr, Yakutia, Magadan and Sakhalin Regions are not yet covered by the UNEG, as there are no economic conditions to set up backbone transmission lines and large sub-stations due to low population density and the lack of large end-users.



### MARKET SURVEY

#### Russian Energy Industry Structure



#### Russian Energy and Capacity Market

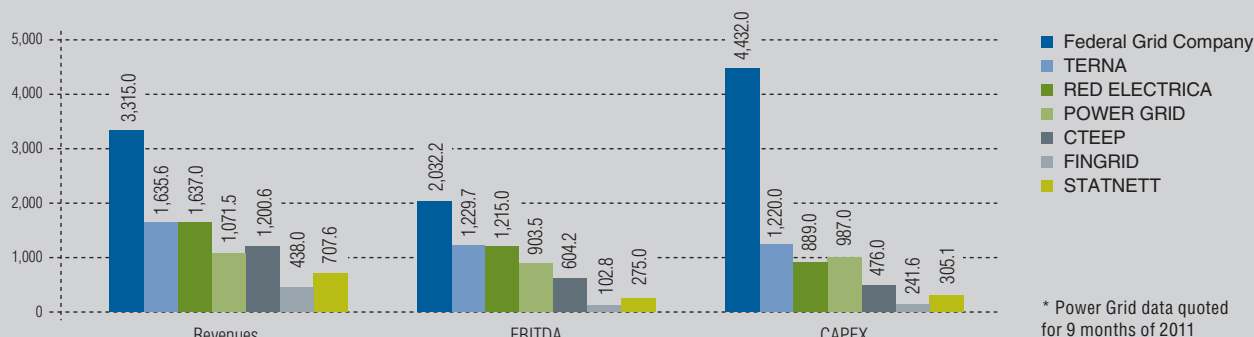
Energy and capacity market infrastructure:

- Non-Commercial Partnership “Market Council for the Organization of Efficient Wholesale and Retail Energy and Capacity Sales System” (NP Market Council);

- Administrator of the Wholesale Market Trade System (ATS);
- Federal Grid Company;
- System Operator of Unified Energy System (SO UES); and
- Financial Settlement Center (FSC).

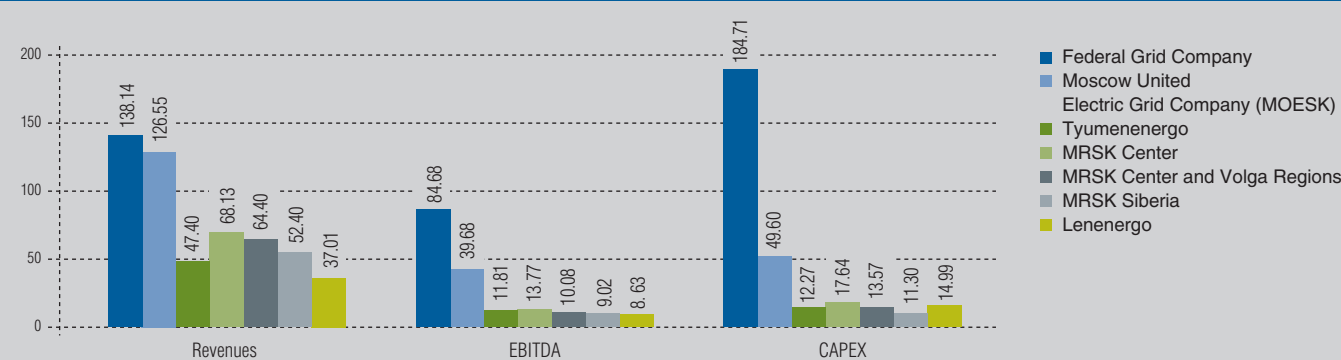


### Federal Grid Company compared with foreign peers based on 2011 indicators, € million



COMPANY	KEY INDICATORS
Terna SpA (Italy)	Public company with government participation through Cassa Deposit e Pesti Spa (29.99% participation in Terna) Tariff regulation – RAB Free float – 61.8% Credit ratings: S&P (AA-); Moody's (A2); Fitch (A)
Red Eléctrica Corporación S.A. (Spain)	Public company with government participation (20%) Tariff regulation – RAB Free float – 80% Credit ratings: S&P (AA-); Moody's (A2)
PowerGrid Corporation (India)	Public company with private participation (13.6%) Tariff regulation – RAB Free float – 13.6%
CTEEP (Brazil)	Public company with 100% private capital Tariff regulation – RAB Free float – 27.25%
Fingrid (Finland)	Public company with government participation (12%) Tariff regulation – RAB Credit ratings: S&P (A+); Moody's (A1); Fitch(AA-)
Statnett SF (Norway)	State-owned company reporting to the Energy and Fuel Ministry Tariff regulation – RAB Credit ratings: S&P (A+); Moody's (A2)

### Comparison with Russian peers based on 2011 indicators, RUR billion



COMPANY	KEY INDICATORS
MRSK Center	Public company with government participation through OJSC Holding MRSK. Major shareholders: OJSC Holding MRSK – 50.23%, Jamica Ltd -15.9%, The Bank Of New York Mellon – 7.01% Others – 26.86%
Moscow United Electric Grid Company (MOESK)	Public company with government participation through OJSC Holding MRSK. Major shareholders: OJSC Holding MRSK Major shareholders: OJSC Holding MRSK – 51%, OJSC GAZPROM – 31%, Moscow Government – 8%, Others – 10%

COMPANY	KEY INDICATORS
TYUMENENERGO	Public company with government participation through OJSC Holding MRSK Sole shareholder – OJSC Holding MRSK – 100%
MRSK Center and the Volga Region	Public company with government participation through OJSC Holding MRSK Major shareholders: OJSC Holding MRSK – 50.4% Jamica Ltd – 16.82%, Others – 31.78%
MRSK Siberia	Public company with government participation through OJSC Holding MRSK Major shareholders: OJSC Holding MRSK – 52.88% CJSC MRSK – 28.05%, Others – 19.07%
Lenenergo	Public company with government participation through OJSC Holding MRSK Major shareholders: OJSC Holding MRSK – 45.7%, KUGI SpB – 22.9%, VTB Group – 10.1%, Others – 37.89%

## GOVERNMENT REGULATION IN THE ENERGY INDUSTRY

As a natural monopoly, the Company is a strategically important entity for national defense and security.

The Company's business is governed by statutory documents issued by authorized federal executive bodies focused on the government regulation of the energy industry, which includes:

- The Russian Energy Ministry (Minenergo) is responsible for developing the State policy and legal regulation in the energy sector;
- The Russian Federal Tariff Service (FTS) is responsible for establishing pricing (tariff rates) for energy transmission and technical connection services within the UNEG and supervising prices (tariffs) and their application; and
- The Federal Service for Ecological, Technological and Atomic Supervision (Rostekhnadzor) is responsible for carrying out State environmental due diligence via technical supervision and the control of the energy industry, licensing specific activities and checking legal compliance.

The Company participates in the wholesale energy and capacity market (WECM), which has been organized by the Non-Profit Partnership Council for Organizing Efficient System of Trading at Wholesale and Retail Electricity and Capacity Market (NP Market Council). The key business areas of the NP Market Council include: ensuring the operation of the market's commercial infrastructure, efficient relationships between the wholesale and retail markets, creating favorable conditions to raise investment in the energy sec-

tor and ensuring the common commitment of wholesale and retail market operators to prepare documents regulating the energy industry; organization of the self-regulated wholesale and retail energy trade, the capacity and other products eligible for trading on the wholesale and retail markets for the purposes of Russian energy security, the unity of the economic environment, free economic activity and competition on the wholesale and retail markets, balance interests of producers and buyers of energy and capacity and meet public demand for reliable and sustainable energy supply.

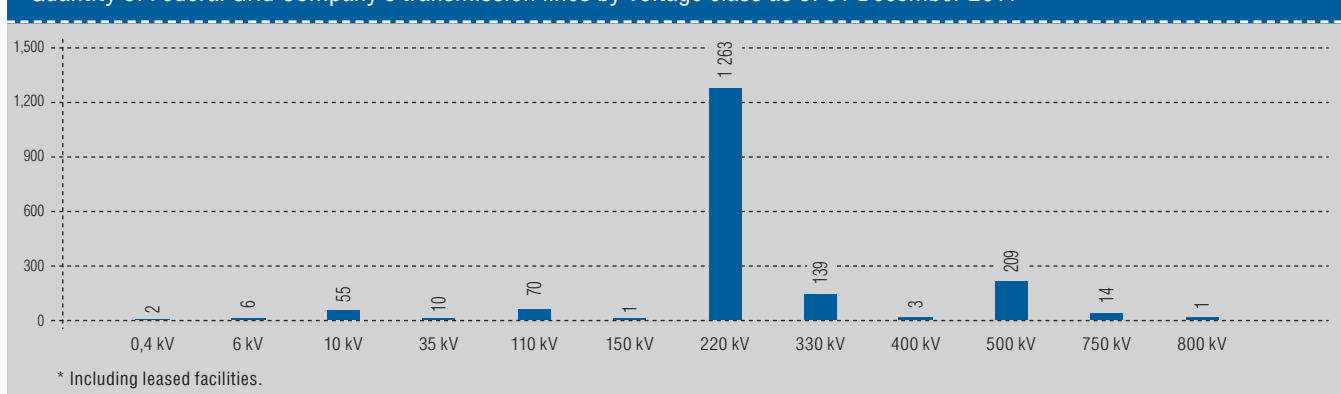
## THE COMPANY'S ELECTRIC ENERGY GRID ASSETS

Federal Grid Company maintains more than 124.6 thousand kilometers of transmission lines and 854 sub-stations with a total installed capacity exceeding 322,500 MVA.

## INTERNATIONAL BUSINESS

The Company operates as an energy carrier across the Russian customs border and the technical contractor under all commercial contracts for export/import WECM players. We offer services to transmit energy to the Russian State border subject to agreements with JSC INTER RAO UES and JSC TGC-1 via electric grid facilities included in the UNEG and owned or otherwise legally held by Federal Grid Company.

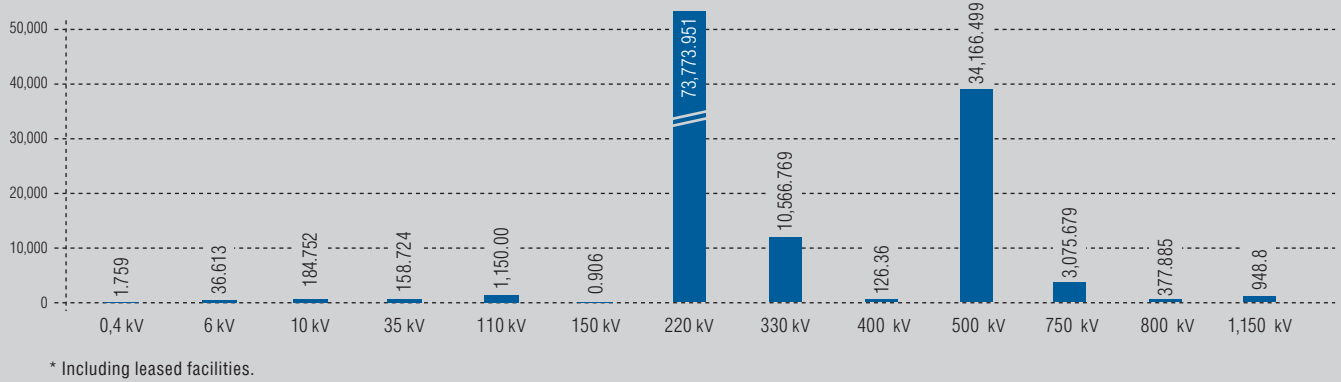
Quantity of Federal Grid Company's transmission lines by voltage class as of 31 December 2011\*



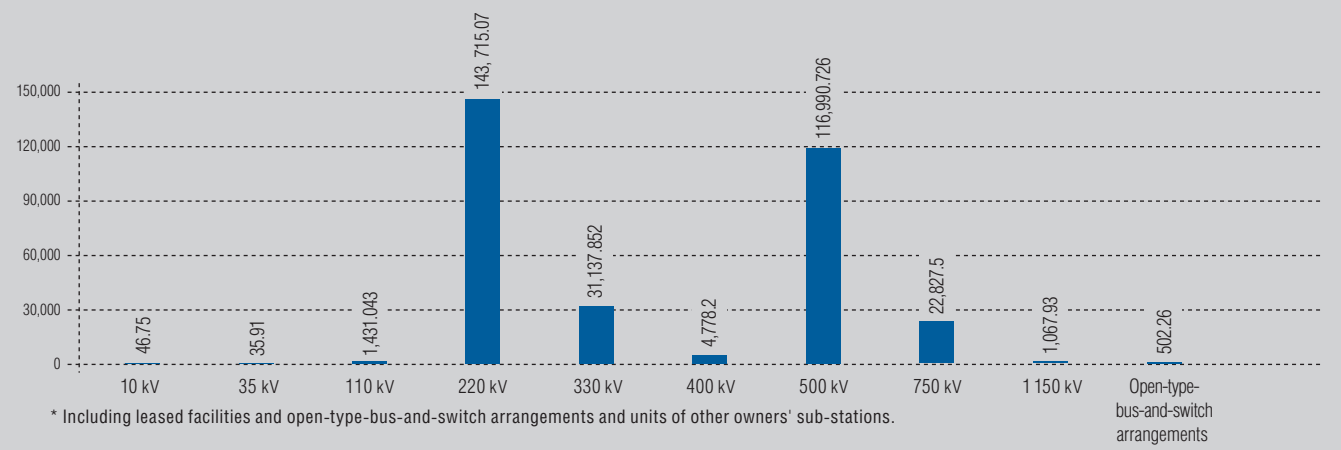




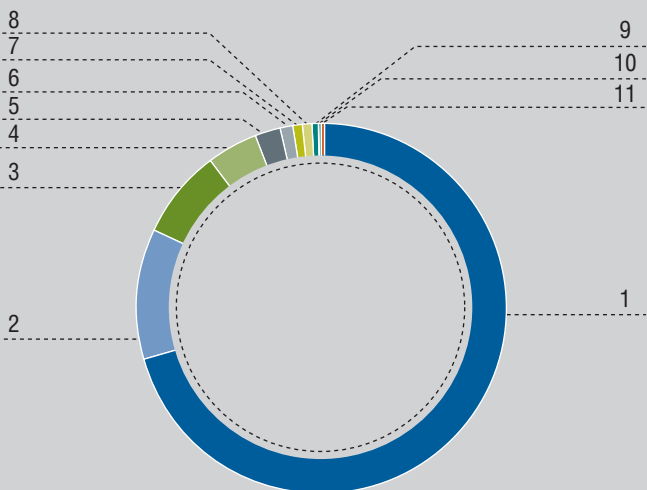
Length of Federal Grid Company's electricity transmission lines as of 31 December 2011, km\*



Federal Grid Company's sub-station capacity as of 31 December 2011, MVA\*



Number of Federal Grid Company's sub-stations as of 31 December 2011\*



1	220 kV	604
2	500 kV	99
3	330 kV	66
4	110 kV	37
5	10 kV	20
6	750 kV	8
7	Open-type-bus-and-switch arrangements	8
8	35 kV	7
9	1,150 kV	3
10	400 kV	1
11	6 kV	1

\* Including leased facilities and open-type-bus-and-switch arrangements and units of other owners' sub-stations.

We collect and process information of energy transmission along 137 international energy transmission lines (IETL) based on data provided by commercial energy metering equipment. To supply energy to the Bryansk, Pskov and Kaliningrad Regions, we have entered into agreements on paid energy transit services via the electric grids of Latvia, Lithuania, Estonia and Belarus with the relevant companies of the above-mentioned states.

Currently, there are 5 agreements on the parallel operation of UES of Russia with the energy systems of foreign states executed between Federal Grid Company and economic entities of Georgia, Mongolia, Kazakhstan, the Baltic States and Belarus, as well as an inter-system agreement with Finland. The Company signed agreements with Ukraine, Belarus and Azerbaijan on maintaining said parallel operation. Federal Grid Company also cooperates with the State Electric Grid Corporation of China.

Subject to the Maintenance Agreement on the Parallel Operation of the unified energy systems of Russia and the Republic of Kazakhstan, we signed the energy transit agreement under which the Company pays for energy transit across Kazakhstan from May 2010 to supply energy to Russian consumers.

Under the Agreement between the Governments of the Russian Federation and the Republic of Kazakhstan on the parallel operation of UES of Russia and UES of Kazakhstan, Federal Grid Company and KEGOC entered into an agreement to execute commercial contracts to settle deviations from the approved schedules of net power flows (based on hourly commercial metering data).

In 2011, the Company concluded agreements on energy and capacity transfer via the following IETLs:

- 330 kV Derbent – Khachmaz high voltage line (Azerbaijan);
- 110 kV Beliji – Yalama high voltage line (Azerbaijan);
- 110 kV C-457/C-458 Khandagayty – Ulangom high voltage line (Mongolia);
- 330 kV Yuzhnaya – Rostovskaya high voltage line (Ukraine);
- 500 kV Amurskaya – Heihe high voltage line (China);

We have managed to bring integration of the electric grids of Russia and bordering countries to a new level. Electric grid consolidation presents an opportunity to fully unlock the potential of Europe, Russia and the Pacific Rim. The integration of the electric grids of Russia and its bordering countries is a top priority for Federal Grid Company.



*Ernesto Ferlenghi,*  
*Chairman of the Board of Directors*

Currently, the parties have settled all issues that define energy volume to be transmitted across the state borders of the Russian Federation.

The Treaty on Access to Natural Monopoly Services in the Energy Industry signed by the Governments of the Russian Federation, the Republic of Kazakhstan and the Republic of Belarus, including pricing and tariff policy in 2012 shall become the basis for inter-state energy transmission among Common Free Market Zone countries, including grids of UES of Russia.

We cooperate with foreign energy systems on harmonizing energy laws and energy market establishment and synchronization under inter-state campaigns (CIS ES and its committees, including COTC), the Energy System Committee for BRELL (Agreement on the parallel operation of energy systems of Belarus, Russia, Estonia, Latvia and Lithuania); the Integration Committee of EURASEC; working groups on the Executive Committee of CIS ES and Fingrid, Finland, KEGOC, Kazakhstan, Belenergo, Belarus and under the Russia-EU energy dialogue program and relations with Asian countries (China and South Korea).



# 1.4

## RISK MANAGEMENT SYSTEM

The Company applies the risk management system. The risk management system is focused on ensuring sustainable and consistent corporate operations and growth by appropriate identification, assessment and efficient risk management which threaten the Company's business operations and goodwill, employee health and the environment and property interests of shareholders and investors.

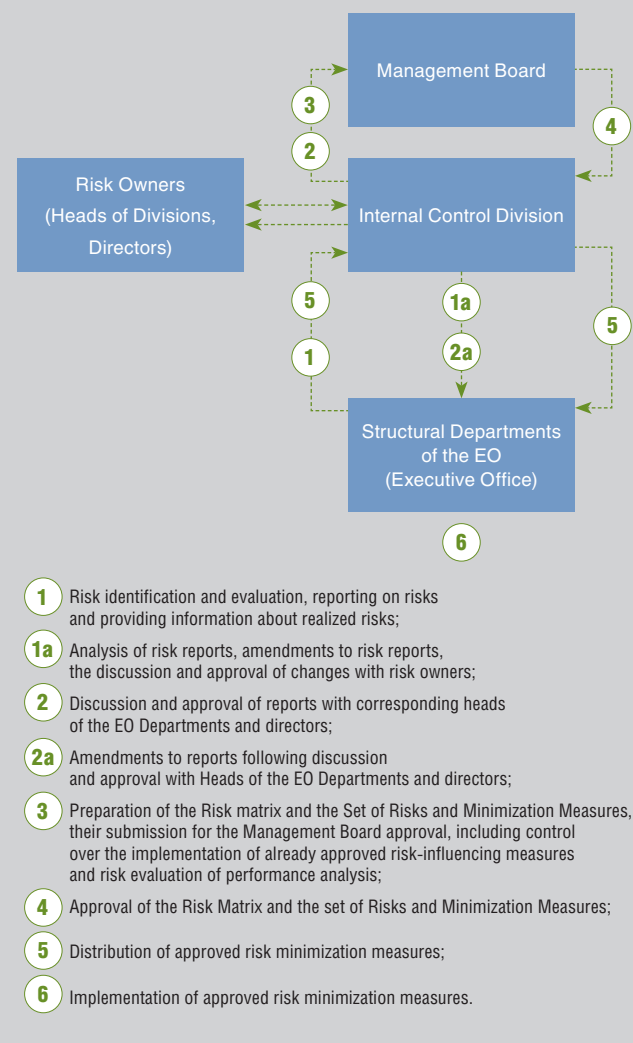
Parties to the Risk Management System:

- The Management Board;
- Deputy Chairman of the Management Board;
- Managers of the Company's units;
- Managers of the Branches.

The Risk Management System defines:

- 1. Risk identification methods**  
The risks shall be identified by applying methods based on ISO/IES 31010 and COSO (analysis, threat assessment, expert evaluation and event tree analysis).
- 2. Risk assessment criteria**  
Risk assessment criteria include: probability, financial impact and risk manageability. Probability and financial impact define risk relevance. Risk relevance may be higher if the Company is intolerant to said risk or if several executive units of the Company, its branches or affiliates are exposed to said risk.
- 3. Risk response**  
Risk response methods are viewed by us as follows: risk acceptance; minimizing the effects; risk transfer to the third party; risk avoidance; and combined methods. The Strategy is agreed upon with the Internal Control Department and approved by the Management Board.
- 4. Procedures and dates for risk reporting**  
Risk owners shall submit quarterly risk reports to the Internal Control Department, which makes necessary updates and agrees on them with risk owners. We use the submitted and updated reports to prepare the Risk Matrix and Action Plan for risk mitigation (which are then submitted to the Management Board for approval).







### Scheme of interaction between risk management system's participants





## Main Risks and Risks Minimizing Actions

RISK TYPE	RISK DESCRIPTION	EFFORTS TO MINIMIZE RISK
<b>1. GLOBAL (STRATEGIC) RISKS</b>		
Considering the need to ensure reliable UNEG operation and growth, global (strategic) risks shall include: risks of accidents and failures within the UNEG which involves the risk of safety and emergency control system failure, loss of energy quality and electrical blackouts.		
<b>2. PRODUCTION RISKS</b>		
2.1. Inadequate operation of the RPE & ECA	The risk arises in case of the inadequate operation of the RPE & ECA	Monitoring RPE & ECA operation; RPE & ECA operation analysis; Issuing operational instructions for the RPE & ECA.  <a href="#">Improving the reliability of UNEG facilities, page 33</a>
2.2. Energy quality impairment	The risk arises when energy quality performance is impaired and gives rise to consumer claims against energy transmission	Updating legal framework; Amendments made to the agreements on energy transmission services; Making technical efforts.  <a href="#">Production Safety, page 103</a>
2.3. Impaired reliability of the energy supply to consumers	The risk arises in energy blackouts, emergency consumer curtailment and claims filed by consumers against energy transmission	Updating the legal framework to ensure the reliability of energy supply to consumers; and Making technical efforts (in terms of the replacement of obsolete equipment, monitoring and equipment troubleshooting).
2.4. Risks related to innovative development and enhancing energy efficiency	This type of risk may be related to changes in regulatory body requirements and the inefficient actions of any third parties engaged for program implementation. Risk events may result in penalties imposed on the Company and any negative reputation consequences which may increase the cost of fundraising.	Development and approval of rules for relationships among structural units to implement the investment program;  <a href="#">Innovative Development, page 55</a> Introduction of data collection and review systems to monitor program implementation; and Plans to carry out technical audit of the program.
<b>3. SOVEREIGN RISKS</b>		
Federal Grid Company does not consider sovereign and regional risks as relevant to its operations.		
<b>4. INDUSTRY RISKS</b>		
4.1. Risk related to government tariff regulation	This risk is related to tariff adjustments to meet established parameters of tariff regulation.	Consistent implementation of RAB regulation parameters and preparing well-balanced and economically feasible proposals  <a href="#">Tariff Regulation, page 64</a>
4.2. Default risk of investment program financing schedule	This risk is related to the possible establishment (or adjustment for the following periods) of tariffs for Federal Grid Company services at a rate inadequate to cover the Company's actual costs. Such risks may occur in the case of default on the investment program caused by the violation of project financing schedules; adding new projects not contemplated by the investment program; actual costs of investment program projects exceeding the planned cost and the lack of fundraising required for the Company's investment program implementation. Failure to implement the investment program may result in a relevant tariff decrease for the following periods.	A comprehensive cost cutting program  <a href="#">Cost Optimization, page 66</a> A binding procedure for approving and controlling amendments and addenda to agreements with contractors and vendors; Regular reports on capital investment financing and meeting timeframes for work performance;  <a href="#">Investment Activity, page 49</a> Diversification of financing sources, including agreements to open loan facilities and bond issue;  <a href="#">Debt Portfolio, page 67</a>
4.3. Risk of default on the asset growth plan	This risk may be caused by improperly adding projects to the investment program due to wrongly identifying projects limiting the grid performance on the background of increasing energy demand. The effects of such risk occurrences include possible tariff reductions for the following periods in proportion to unspent amounts resulting from improperly adding projects. Besides, there may be lost profit due to the failure to provide energy transmission services and the loss of goodwill due to the failure to implement important projects.	Properly amending the Investment Program to include new facilities; Adjusting the program, if needed  <a href="#">Investment Activity, page 49</a>

RISK TYPE	RISK DESCRIPTION	EFFORTS TO MINIMIZE RISK
<b>5. LEGAL RISKS</b>		
	The Company views as fundamental the risks of third party claims and actions related to any disputes and the risks of claims and actions filed by Federal Grid Company against third parties.	<p>Prejudicial settlement procedures;</p> <p>Settlement agreements during judicial proceedings;</p> <p>Supporting a legal position aimed at dismissing a claim.</p>
<b>6. ENVIRONMENTAL RISKS</b>		
	Environmental safety and the rational use of natural resources are the main focus of Federal Grid Company. In case of any violations of environmental protection laws, the Company may incur penalties in accordance with federal laws. This risk exposure is considered insignificant.	<p>Implementation of the Company's 2011-2013 Environmental Program.</p> <p> <a href="#">Environment, page 102</a></p>
<b>7. FINANCIAL RISKS</b>		
7.1. Currency risk	99.9% of the Company's cash flow is generated in rubles, and its current loan liabilities are denominated in Russian rubles. The Company's financial status, liquidity, financial sources and performance results are not exposed to major currency risks.	<p>Changing plans to purchase imported equipment under the investment program in case of any material foreign currencies exchange growth.</p> <p> <a href="#">Procurement, page 45</a></p>
7.2. Liquidity risk	The current liquidity level makes the Company confident that it is not exposed to any material risk of default on its obligations in full and in due time. Servicing loans and borrowings is carried out in strict compliance with established schedules.	<p>Controlling the debt burden and credit worthiness of the Company in accordance with Federal Grid Company's Regulations on Credit Policy.</p> <p> <a href="#">Financial Performance, page 61</a></p>
7.3. Interest rate risk	This risk is related to loan facilities and caused by the volatility of interest rates on bank loans. In case of any interest rate increase, the costs of the credit portfolio service will rise.	<p>Generate a diversified credit portfolio for the Company in terms of instruments and maturity dates.</p> <p> <a href="#">Financial Performance, page 61</a></p>
7.4. Inflation risk	The current inflation rate has no material effect on the Company's financial status. Subject to inflationary outlooks, it will not affect the Company's ability to re-pay its liabilities. The critical inflation rate for the Company exceeds 30%.	<p> <a href="#">Financial Performance, page 61</a></p>
7.5. Counter-party risk	Among credit risks, the Company highlights financial risks related to counter-parties' activities. The aggravated financial status of counter-parties and the failure to meet their contractual obligations cause exposure to risks related to violating timeframes for investment program implementation.	<p>Reviewing the financial status of counter-agents at the procurement stage and further monitoring at the stage of performing contractual obligations;</p> <p>Setting up the Company's executive bodies to minimize financial risks related to counter-parties; and</p> <p>Hedging risks related to default on contractual obligations and the failure to repay the extended advance payments by claiming relevant financial security from counter-parties.</p> <p> <a href="#">Financial Performance, page 61</a></p>

## 1.5

# ANTI-CORRUPTION ACTIVITIES

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Fighting corruption is a top priority of government policy. The Company supports the State policy aimed at reducing corruption and voluntarily commits itself to developing and implementing the anti-corruption policy to minimize the Company's corruption risks and to foster anti-corruption awareness. In 2011, the Company developed and approved the Program for Fighting Corruption and Settling Conflicts of Interest.

We formed the Compliance Commission for Corporate Ethics and Conflict of Interest Settlement, as a collegial body responsible for generating the Company's anti-corruption policy and controlling Program implementation.

In addition, the Company established the Division for Anti-Corruption Efforts (DACE), an independent structural unit of executive bodies responsible for anti-corruption efforts, including the development of anti-corruption documents, anti-corruption monitoring and relationships with all structural units within the executive bodies

and branches. DACE also carries out an anti-corruption expert survey of the organization and management documents and their projects, as well as documents executed for transactions and prepares proposals on improving anti-corruption activities under the Program and controls the performance of the Commission's assignments.

DACE assessed possible effects of the 2010 Bribery Act enacted in Great Britain (1 July 2011) on companies listed on the London Stock Exchange. In accordance with the above-mentioned review, the Company updated applicable organizational and management documents and adjusted its efforts to fight corruption.

To perform tasks set by the Russian Prime Minister, the Company has collected and analyzed the certificates of property status for senior managers of executive bodies, branches, DSCs, as well as for their spouses, parents, children and close relatives.

# 1.6

## INVESTMENT COMMUNITY ABOUT US

Federal Grid Company in 2011 is a truly public company running one of the most advanced energy businesses based on RAB regulation. It is transparent and open. Our investors' response is the best evidence of our efforts.



Andrey Kazachenkov,  
First Deputy Chairman of the Management Board

Last year, the Company successfully strengthened its positions on the financial markets: our depository receipts are listed on the London Stock Exchange (LSE) and we started cooperating with Morgan Stanley, a globally renowned investment bank, which acts as corporate broker for Federal Grid Company.

The Company's share price was uneven in 2011 due to general global capital market trends. However, share performance of Federal Grid Company looked significantly better than MICEX Energy index performance. This was possible due to the "protective" properties of shares and sustainable strong performance of Federal Grid Company's financial indicators.

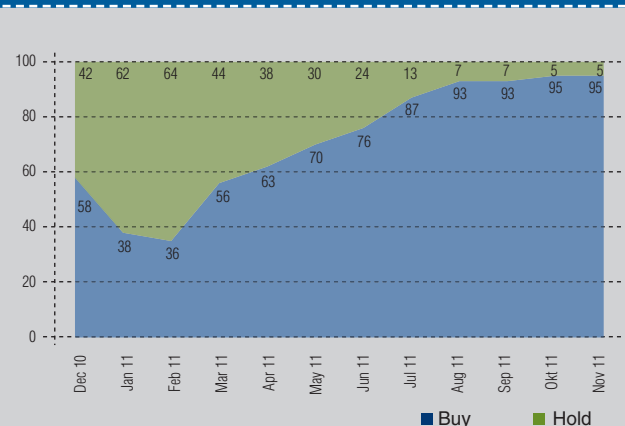
In 2011, brokerage houses had a generally optimistic outlook on the Company's shares: out of 22 top brokers only one recommended to hold, whereas others recommended buying the Company's shares. This is the maximum number of buy recommendations during the last two years.

### International and major local brokers' recommendations\*

BROKER	DATE	RECOM-MENDATION	TARGET PRICE, RUR	FORWARD PREMIUM
UBS	17.11.11	Neutral	0.36	18%
Goldman Sachs	10.08.11	Buy	0.6	96%
Morgan Stanley	11.11.11	Overweight	0.38	24%
MACQUARIE	20.10.11	Outperform	0.48	57%
Deutsche Bank	03.10.11	Buy	0.40	31%
VTB Capital	09.12.11	Buy	0.63	106%
Renaissance Capital	15.11.11	Buy	0.61	99%
JP Morgan	13.10.11	Overweight	0.31	1%
Merrill Lynch	11.11.11	Buy	0.41	34%
<b>AVERAGE PRICE</b>			<b>0.46</b>	<b>52%</b>
<b>Current price*</b>			<b>0.31</b>	

\* Source: Brokers' reports, Bloomberg as of 9 December 2011.

### Brokers' recommendations for 12 months



Source: Brokers' reports, Bloomberg as of 9 December 2011

### Individual comments of top energy investment bank analysts and the appeal of the Company's shares:

- In November 2011, HSBC analysts carried out a financial review of Russian energy companies giving preference to Federal Grid Company shares, noting a 50% growth potential;
- According to a Merrill Lynch report published November 2011, "protective" qualities transformed Federal Grid Company shares into high quality securities compared with EEMEA peer energy companies;
- In November 2011, Morgan Stanley favored Federal Grid Company shares due to a low share of the Company in consumers' end-tariff rates, a high profit margin and strong financial performance.





The aggregate energy saving effect for 2011

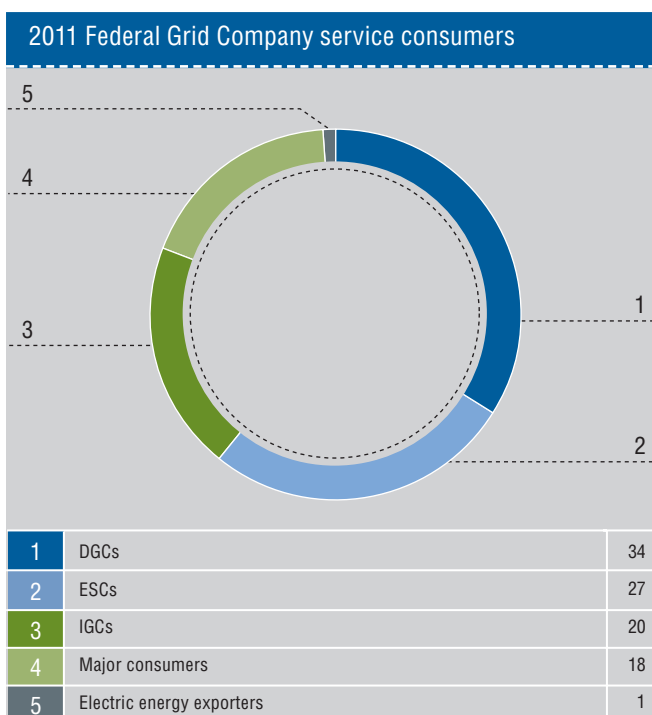
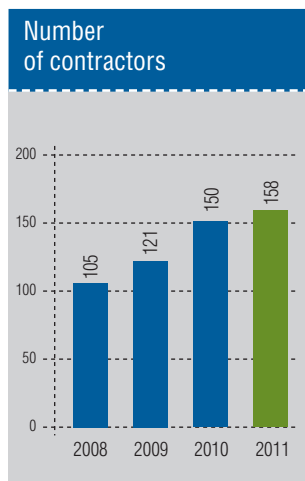
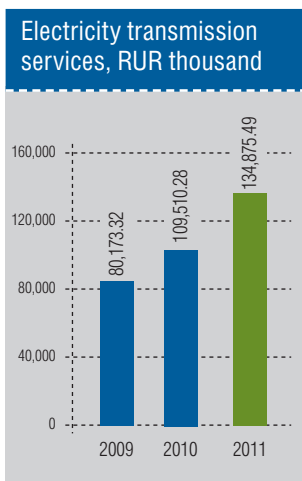
**137.7** million kWh

2011 electric energy output

**485** billion kWh

## 2.1 ELECTRICITY TRANSMISSION

Compared with 2009, the volume of the Company's electricity transmission services grew 68% in 2011:

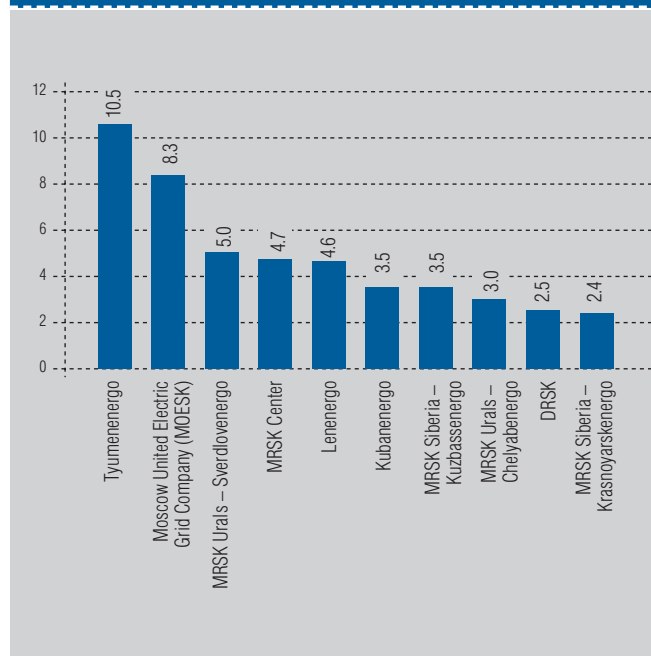


Company service consumers are categorized as follows:

- Distribution Grid Companies (DGCs);
- Independent Grid Companies (IGCs);
- Energy sales companies (ESCs)
- Major enterprises, electric energy consumers;
- Electric energy exporters.

In 2011, the number of UNEG-connected Company consumers stood at 158 organizations. The number of Company contractors grows in part due to implementing new technological con-

The share of the Company's major consumers in revenues generated by UNEG electricity transmission services in 2011



nections to the UNEG, satisfying judgments pertaining to concluding direct contracts with contractors and gradually terminating the last mile mechanism.

Pursuant to Russian law, UNEG electricity transmission services are classified as a monopolistic activity regulated by the State. The price of electricity transmission services is determined by corresponding rates set for different subjects of the Russian Federation by the Russian Federal Tariff Service taking into account process losses of energy during electricity transmission over the UNEG. The rates approved by the Russian Ministry of Energy are set as follows:

- The price of electricity transmission services to maintain UNEG electric facilities;
- The price of normative process electricity losses in the UNEG.

Our Company purchases electric energy and capacity on the wholesale market in Russian territories, united in price areas and non-price areas to compensate for UNEG losses.

Since 1 January 2011, our Company has purchased electric energy and capacity at free (unregulated) prices in accordance with Wholesale Market Rules for Electric Energy and Capacity, approved by the Russian Government Regulation № 1172 dated 27 December 2010.

Detailed information about tariffs is presented in the sub-section Tariff regulation.

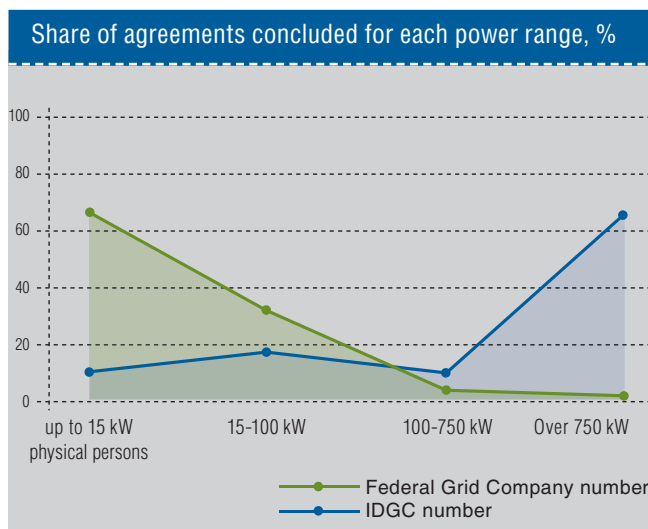
[Tariff Regulation, page 64](#)

Technological connections are an integrated service rendered by the Company to consumers to make the consumption (output) of electric energy possible, implying the actual connection of consumer energy receivers (power installations) to power facilities of grid organizations. The technological connection service is rendered to new, as well as to existing, consumers in need of increases in electricity demanded.

The major technological connection consumers are the following:

- Large-scale business (oil, steelmaking and construction material production, etc.);
- Construction and reconstruction of complex real estate property;
- Distribution grid companies.

The largest share of the Company's technological connection services consists of technological connections to power installations of more than 750 kW.



The number of technological connection agreements concluded and the growth in volume for maximum power per agreements concluded by the Company in 2009-2011:

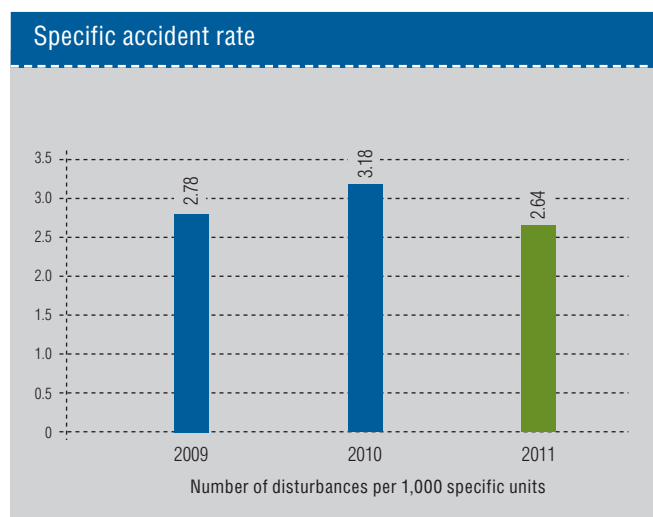
FEDERAL GRID COMPANY BRANCH	2009		2010		2011	
	NUMBER OF TC AGREEMENTS*	MAXIMUM POWER, MW	NUMBER OF TC AGREEMENTS*	MAXIMUM POWER, MW	NUMBER OF TC AGREEMENTS*	MAXIMUM POWER, MW
MES Center	2	7.64	6	41.38	16	253.03
MES Siberia	5	16.02	8	48.65	14	81.41
MES East	5	18.02	37	25.03	20	197.32
MES Urals	2	33.02	3	44.70	5	107.16
MES South	4	15.99	7	60.45	8	46.17
MES Volga	8	38.12	6	143.62	12	195.32
MES North-West	8	111.37	14	136.25	12	167.97
MES West Siberia	5	204.29	8	172.87	34	285.54
The executive office	5	574.90	8	1,378.95	14	3,115.93
<b>Total</b>	<b>44</b>	<b>1,019.36</b>	<b>97</b>	<b>2,051.89</b>	<b>135</b>	<b>4,519.02</b>

\*TC – technological connection.

## 2.2

## IMPROVING THE RELIABILITY OF UNEG FACILITIES

The Company pays significant attention to upgrading the functional reliability of the UNEG. The list and scale of measures to prepare the Company's facilities for the winter season has been considerably expanded. The planned improvement of production assets from the point-of-view of technology and staffing is under way, together with implementing innovations and preventing disturbances.



All of the above-mentioned resulted in a decrease in the accident rate and the volume of under-supplied energy, while increasing the fleet of operated equipment.

Maintaining the normative condition of electric grid facilities, constructing new facilities and reconstructing existing one and upgrading employee competence provided for reliability improvement in the Company's grids.

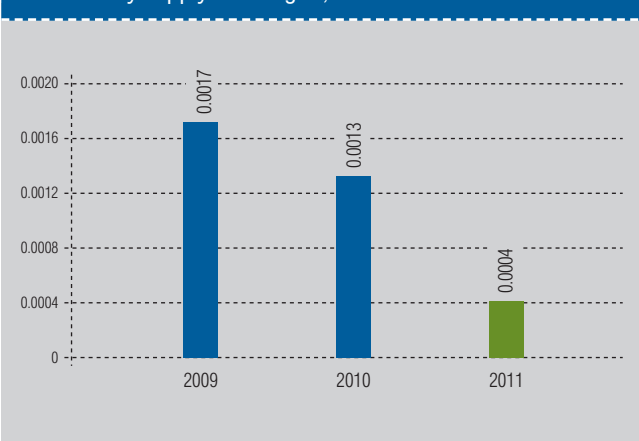
From 2009 to 2011, under abnormal environmental conditions, Federal Grid Company ensured the required reliability of electric grid facilities and stable UNEG operation, having fulfilled its obligations pertaining to reliable power supply to consumers, preventing the following:

- Emergencies related to the disruption of power supplied to major cities and regions;
- Imposition of mass limitations on power consumption in Russian subjects;
- Division of UES of Russia into parts (separation of UES).

## NEW ENGINEERING POLICY

The Company's New Engineering Policy was adopted in February 2011. The Policy is intended to determine the most advanced engineering requirements and solutions in the capital construction and operation of UNEG facilities, and to set basic priorities for the UNEG's innovative and prospective development. Adhering to the Policy will enable the Company to optimize the use of the existing investment resources, to improve the efficiency of the operation of the electric grid complex, to lower the operating costs, to improve

## Actual value of the limitation of consumers with regard to electricity supply via the grid, %



The new Engineering Policy is essentially a revolutionary document that allows the Company to launch a new development stage for the unified grid complex using the most advanced equipment and technologies. The new Policy determines the most advanced engineering solutions and equipment parameters to be used by the Company during UNEG renovation and re-equipment. The new Policy gives a clear signal to domestic machine tool and electrical products manufacturers to start manufacturing equipment which meets today's high standards, in regard to both quality and energy efficiency.



Oleg Budargin,  
Chairman of the Management Board

systemic reliability of the UNEG operation and to satisfy growing energy demand.

Adoption of the New Engineering Policy encouraged higher renovation levels. The New Engineering Policy determines the innovative course taken by the Company, with the establishment of an all-Russian Smart Grid being the highest priority.



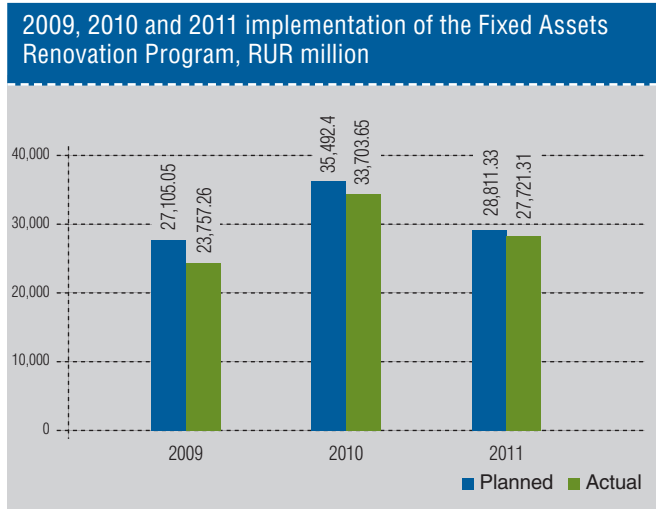
## FIXED ASSETS RENOVATION PROGRAM

The Company's Management Board approved the Fixed Assets Renovation Program for the period till 2017 on 24 December 2010. The Program is intended to provide for the reliable and efficient operation of the electric grid complex.

The Program includes the following:

- Commissioning facilities with total capacity of 69,147 MVA;
- Reconstructing 3,862 km of the electric energy transmission lines.

In 2011, the Program's financing plan amounted to RUR27,721 million, or 96.2% of planned volume.



## Technical re-equipment and equipment replacement per the 2011 Fixed Assets Renovation Program

EQUIPMENT ITEM	VOLTAGE CLASS	QUANTITY/ COMPLETE UNITS
Power (automatic) transformers	-	105
Reactive power compensators (reactors, capacitor banks and static compensators)	110-500 kV	14
High voltage circuit breakers	110-750 kV	827
Current transformers	110-500 kV	722
Voltage transformers	110-500 kV	401
Over-voltage suppressors (including line over-voltage suppressors)	35-500 kV	995
Relay protection devices (boards)	-	1,234
Emergency control automatics (boards)	-	669
UNEG sub-station equipment	-	182

The volume subject to technical re-equipment and replacement of UNEG facilities equipment has been determined based on titles of reconstruction for Federal Grid Company's 2011 Fixed Assets Renovation Program (taking into account Targeted Investment Programs).

In 2012, the Program's planned financing will amount to RUR41,650 million with the power of the reconstructed facilities exceeding 3,331 MVA.

## PROGRAMS FOR UPGRADING THE RELIABILITY OF UNEG FACILITIES

The experts predict an increasing energy deficit in Russia in the near future, as the economy's demand for power rises. Therefore, the issue of transmitting power within the UNEG will become urgent, resulting in increased loads for sub-stations and electric energy transmission lines. To resolve the problem, the Company has decided to form and implement the following programs for reliability upgrades:

### 1. 110-750 kV air and the oil circuit breakers replacement program

According to the Company's data, approximately 19% of the total number of disturbances registered at sub-stations in 2011 was caused by circuit breaker failures. A considerable number of circuit breakers are past their normative service life as determined by manufacturers. In addition, subjecting air and oil circuit breakers to overhaul will force the sub-stations to operate in a weakened "under repair" mode. The maintenance period for SF 6 circuit breakers to be installed by the Company is 12 years. Therefore, the reliability of sub-stations and the grid will improve, simplifying repairs, reducing costs and decreasing the probability of accidents. The program calls for replacing 3,802 complete circuit breaker units.

### 2. Overhead lines lightning-surge protection improvement program

According to 2011 statistics, 42% of the total number of overhead line-related disturbances was caused by thunderstorm electromagnetic activity damaging insulators, supports and wires and

Federal Grid Company's management takes serious measures aimed at gaining momentum to increase reliability of the UNEG. We expanded unprecedentedly the range and scale of work on preparation of the Company's facilities for the winter. We strengthen our operating units, implement innovative solutions, use all our efforts and resources to prevent failures.



Valery Chistyakov,  
First Deputy Chairman of the Management Board

resulting in faults in the ground, arc overvoltage and automatic cutoffs. The overhead lines lightning-surge protection improvement program calls for upgrading some 2,500 kilometers of overhead lines, installing 18,500 over-voltage suppressors and establishing an automated information and measurement system to control ice load on the overhead lines of MES South.

### 3. 10-750 kV current and the voltage measurement transformer replacement program

The failures of current measurement transformers (CMT) and of voltage transformers (VT) caused more than 5% of the total number of sub-station disturbances. CMTs and VTs that have operated for more than 30 years fail to supply automated information and commercial metering systems data required for accuracy and may damage SS equipment and cause accidents. To prevent this from happening, the Company plans to replace 2,534 CMTs and 1,867 VTs.

### 4. Upgrading the power transmission lines and the re-equipment program

The share of electric energy transmission lines (EETL) that have operated for more than 40 years comprises 29.2% of the total length of EETLs owned by the Company, whereas 8.9% of the total length of the EETL is made up of lines that have operated in excess of 50 years. The program calls for implementing up-to-date technologies and innovative solutions, contributing to the improvement of the EETL operation and increasing throughput.

### 5. AT replacement program

The program is intended to renovate the transformer fleet, which has operated for 40 or more years and to decrease the number of disturbances related to power transformer operation. The program also envisages upgrading the reliability of UNEG equipment, decreasing the ageing rate and increasing transformer power.

## 6. Instrumentation modernization program

Measurement instruments used to operationally monitor network and equipment parameters and process in sub-stations, which have reached their wear limit, are being modernized as part of this program. Modernized instrumentation provides for the control of parameters being measured to ensure measurement uniformity within and beyond the scope of State regulation. The Program calls for replacing measurement instruments at 520 sub-stations. The program will reduce the operating costs of measurement instruments with the wear limit, improve the accuracy and reliability of measurement results, increase equipment reliability and reduce the risk of operating personnel malfunctions.

## 7. Monitoring and electric energy control program (MEECP)

The monitoring and electric energy control program is created to ensure that the quality of electric energy transmitted through the UNEG to customers, including grid companies with different voltage classes, complies with regulations and standards. The MEECP will ensure that electric energy quality is complied with and maintained in the generation, transformation and distribution processes, that technological losses in the Federal Grid Company network are reduced and that the overall reliability of consumers' electric supply is increased.

## 8. Fire safety improvement program

The Company has developed this program to upgrade fire safety equipment at the Company's facilities. Implementing this program will decrease the number and scale of accidents. The probability of fires at equipment operated by the Company will also decrease.

## 9. Formation of an emergency reserve, and the purchase of equipment, materials, specialized machinery and accessories

This program is aimed at forming reserves of materials and equipment, upgrades and uploads of vehicles and the special vehicle fleet to provide timely repair work, speeding up accident recovery work.

## TECHNICAL SUPERVISION OVER ELECTRIC GRID FACILITY CONDITIONS

The Company has a system of internal multi-level technical supervision (hereinafter, referred to as ITSS) consisting of a set of organizational, technical, information, supervisory and preventive measures implemented in corporate branches to upgrade the operating reliability of equipment and advance the qualification of personnel to decrease the accident rate and the number of fires and injuries. The top level of the ITSS hierarchy is the Company's Technical Supervision and Audit Department.

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Measures implemented in 2011 to improve ITSS efficiency included the following:

- Continuous training of corporate employees in supervisory activities;
- Revising the existing normative documents on methodological, informational and organizational support for the ITSS and the development of new ones;
- Revising the system for assessing ITSS efficiency.

In 2011, the Technical Supervision and Audit Department performed technical supervision and audited the Company's branches. The results of these measures were used to plan and implement the elimination of deficiencies identified in accordance with the deficiency lists.

## POWER GRID EQUIPMENT DIAGNOSTICS

Electric grid equipment diagnostics form the basis for the Company's decisions concerning the operation, reconstruction and maintenance of technical conditions of power installations according to the norms. Electric grid equipment diagnostics is implemented in the form of regulatory diagnostics, special (targeted) diagnostics and online diagnostics.

### 1. Regulatory diagnostics

Regulatory diagnostics includes tests and measurements conducted in accordance with existing regulatory documents.

During 2011, the Company performed regulatory tests and measurements on the following high voltage equipment:

- 17,277 power and automatic transformers;
- 2,040 shunt reactors;
- 15,572 high voltage circuit breakers;
- 10,277 current transformers;
- 4,469 voltage transformers.

### 2. Special diagnostics

To control the technical condition of electric grid equipment not covered by regulatory diagnostics, and to assess the level and nature of the development of defects revealed by regulatory diagnostics, special (targeted) diagnostics are carried out. The special diagnostics involve the following programs:

- A targeted program for the complex inspection of overhead lines using express diagnostics to assess the condition of key elements of overhead line supports that have operated in excess of their normative service life. In 2011, this program was used to inspect 12,482 overhead line supports;
- A targeted program for the complex inspection of sub-station grounding equipment. In 2011, this program was used to inspect 39 sub-stations;

- A targeted program for the diagnostics of equipment and facilities in a degraded condition. In 2011, this program was used to perform diagnostics for 127 units of essential equipment.

### 3. Automated diagnostics

The Company uses automatic diagnostic systems to improve the timeliness and immediacy of diagnostics for costly power equipment, such as automatic power transformers and shunt reactors.

On 31 December 2011, the total number of power equipment units controlled by automatic diagnostic systems stood at 374, with total installed power of 50,379 MVA (277 units) and 7,414 MVA<sub>r</sub> (97 units).

### 4. Additional diagnostic control

The complex inspection of power equipment conducted with the participation of equipment manufacturers is intended to assess technical condition, load capacity and the remaining lifespan of equipment. In 2011, the Company inspected 666 power equipment units, including equipment manufactured by Elektro-zavod, Tolyattinsky Transformator and Energetichesky Standart.

The renewal and completion of the Company's diagnostic systems is accomplished to improve diagnostic quality and timeliness. In 2011, the Company laboratories were equipped with new diagnostic equipment (65 diagnostic devices for chemical laboratories, 42 diagnostic devices for electric engineering laboratories and 146 units to perform diagnostics on the overhead line components). In addition, the Company put into operation six mobile electric engineering laboratories.

## CONTINUOUS PROCESS-ENABLED CONTROL

The main function of continuous process-enabled control implemented by the Company is to provide power supply to market entities, meeting quality and reliability requirements and minimizing losses during the transfer of power over the UNEG.

The Company's achievements during the reporting year from successfully implementing the continuous process-enabled control include the following:

- In 2011, no violations of the standard for the excess of permitted voltage levels in the UNEG were registered;
- In 2011, the number of disturbances caused by errors made by operating personnel was 12 (compared with 32 in 2009 and 19 in 2010);
- The Company identified 134 "bottlenecks" which limit "normal" and "under repair" grid operation modes;

- The Company finished forming Electric Grid Control Centers (EGCC) in the corporate branches. Operative functions were granted to the EGCCs of the Priokskoye and Vologodskoye branches;
- The Company approved the procedure for planning and controlling the schedules of EETL and the 1150-110 kV sub-station dumping for the purpose of repairs, reconstructions and implementation of target programs;
- The Company developed and approved a Standard Instruction for operating personnel to maintain required voltage levels in the UNEG;
- The Company signed agreements for the information exchange process with major generating contractors (RusHydro, Rosatom and KES Holding);
- The Company finished unifying dispatch names of the 330-750 kV EETL.

The Company actively commissions new generation sub-stations equipped with advanced automated control systems, making the unattended operation of sub-stations possible. This will reduce maintenance costs and shorten the time for eliminating disturbances, allowing for the simultaneous analysis of the situation at the facility and on the adjacent grid. In 2011, the Company adopted unified Key Principles for the Organization of Transfers on new generation sub-stations. The principles were adopted jointly with SO UES and IDGC Holding.

## SITUATION AND ANALYTICAL MANAGEMENT

The main objective of the Company's Situation and Analytical Management is to develop measures and corrective actions to prevent and eliminate accidents, emergencies and their consequences.

This year, we have achieved the following results:

- Monitoring and analyzing special work periods, as well as emergency situations at the Company's facilities, have been performed;

- In the event of accidents and emergencies, Federal Grid Company staff work as the coordinating authorities;
- To organize the exchange of operational information on emergencies, information exchange agreements have been made with SAC Minenergo, the State Hydro-meteorological Center of Russia and Megafon;
- As part of the process of providing the Situation and Analytical Centers with up-to-date software and hardware, MES North-West and MES South have been equipped with mobile situation and analytical Centers (MSAC) during the reporting year.

## REPAIR OPERATIONS

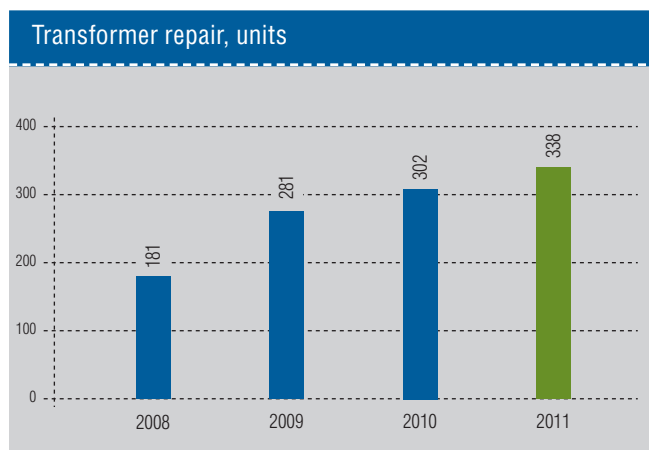
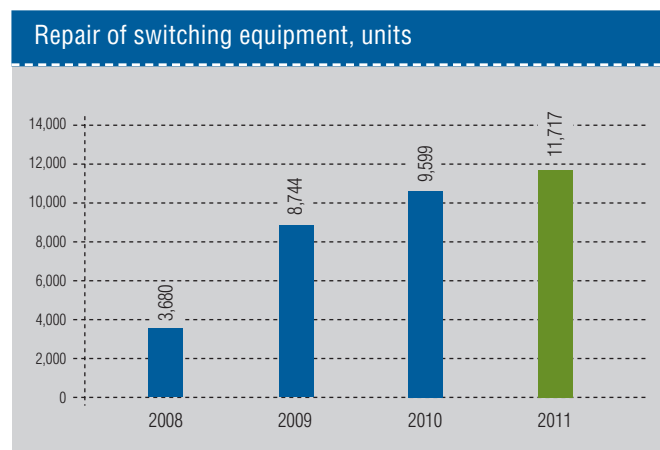
The Company performs repairs to maintain the required reliability of UNEG electric grids, to improve the efficiency of equipment operation and to effectively use resources to maintain UNEG electric grids.

The Company's program is based on a year-by-year rolling plan for the five year period.

The Company's 2011 repair campaign included the following accomplishments:

- Stubbing out 23,424 hectares of overhead line paths;
- The hacking down of 147,468 trees in danger of falling;
- The replacement of 45,558 insulators, 60 km of ground wire, 6,934 vent fingers; 121 inputs and 3,964 post insulators of disconnect links and bus-type supports;
- The repair of 8,750 foundations, 338 automatic transformer/transformer phases, 44 shunt reactor phases, 1,980 circuit breakers, 9,737 disconnect link phases and 154 compressors.

The yearly repair program, as well as timely and thorough preparation for special operation periods, allows the Company to maintain the normative state of equipment. Optimal maintenance and repair planning and cost reduction allows the Company to retain physical maintenance volumes and repair work at the necessary level to maintain reliability.





To ensure improved and efficient after-sales servicing of sub-station equipment, the Company concludes service agreements with equipment manufacturers for the entire service life of equipment.

The Company's basic Targeted programs implemented in 2011 included the following:

- The program to replace high-voltage inputs filled with T-750 oil at the sub-stations;
- The program for reliability improvement of post insulators;
- The program to replace worn-out insulators on overhead lines;
- The program to replace ground wire at 220-500 kV overhead lines;
- The program to stub out overhead line paths;
- The complex inspection of grounding equipment;
- The complex inspection of overhead lines using express diagnostic methods;
- The special diagnostics program for degraded equipment or facilities;
- The in-depth assessment of technical conditions of degraded equipment;
- The servicing of electric equipment.

While accomplishing the targeted programs, during the reporting year, the Company stubbed out 29,857 hectares of overhead line paths, replaced 164,304 insulators, 1,851 km of grounding wire, 644 inputs and 27,631 post insulators. The Program's accomplishment for servicing electric equipment involved the repair of 74 compressors.

## COMPANY PERFORMANCE DURING SPECIAL PERIODS

Weather and climatic conditions considerably influence the Company's performance. Therefore, we have to be prepared for peak loads on the grid during the autumn and winter seasons well in advance. The same applies to flood, fire and thunderstorm seasons.

During the 2011 flood season, the intensity of water level rises ranged from medium to low. In general, the level of water in the rivers corresponded to average long-term values, with excess levels registered in certain districts in the European part of Russia and in Siberia and the Far East. The Company performed all mandatory and additional measures to ensure the reliable operation of grid facilities during the flood season. Therefore, after the flood season ended, sub-station equipment, overhead electric energy transmission lines and buildings and erections were in working condition.

In 2011, intense thunderstorm activity was observed in the Lipetsk, Bryansk, Rostov, Volgograd, Sverdlovsk and Irkutsk

The infrastructure of Federal Grid Company survived natural catastrophes during recent years successfully. Nevertheless, we had to make our systemic conclusions on the necessity of improving operational reliability of the domestic energy system and to improve the safety of all system components.



Valery Chistyakov,  
First Deputy Chairman of the Management Board

Regions, as well as in the Republics of Buryatia and the Mari El. Mandatory measures ensuring the reliable operation of sub-station equipment and electric energy transmission lines were performed fully, so the intense thunderstorm activity did not lead to any increase in the number of emergency outages for sub-station equipment. Meanwhile, in certain regions, a slight increase in the number of emergency outages of electric energy transmission lines was registered.

Based on the 2010 dry summer, the Company developed and implemented basic, as well as additional measures, to upgrade fire safety at electric grid facilities.

The fires that did occur on the overhead lines did no damage to supports, wires, insulators and line accessories. No equipment damage caused by the fire was registered. Mandatory and additional fire prevention measures let the Company minimize the impact that fires have on sub-station equipment and electric energy transmission lines.

For the first time in corporate history, we have performed a two-stage preliminary check of the readiness of electric grid facilities to be prepared for the 2011-2012 heating season and to ensure reliable UNEG operation. The first stage of the check involved a preliminary commission check and the development of measures to eliminate major risks, whereas the second stage involved eliminating all cases of non-compliance and assessed the readiness of the Company's branches for the heating season. In September and October, all Company branches and affiliated and dependent companies were checked for their heating season readiness; corresponding certificates were then issued. The Company's preparation for the 2011-2012 heating season was checked 8-11 November 2011 by the Commission of the Russian Ministry of Energy with the participation of representatives of JSC SO UES, Rostekhnadzor and JSC UES Technical Inspection. This resulted in the issue of the No. 1 preparation certificate for the Company (11 November 2011).

## 2.3

# IMPROVING ENERGY EFFICIENCY AND MINIMIZING LOSSES

The 2011 Program to minimize UNEG power losses developed within the framework of the Company's Program for Energy Saving and Improving Energy Efficiency for the 2010-2014 period includes three main priorities:

### 1. Optimizing schematic and operating mode parameters under conditions of operation and continuous control of electric grids

The Company maintained optimal operation modes concerning reactive power and voltage, shut down the electric grid equipment (transformers and overhead lines) operated under light loads and reduced the duration of maintenance and repair for primary grid equipment. All these measures resulted in saving 56,840.7 thousand kWh.

### 2. Decreasing energy consumption spent on the sub-stations' in-house needs

Measures to implement this priority task included the following: optimizing the duration and number of operated transformer and automatic transformer cooling fans; optimizing the operation of heating and lighting systems in the sub-stations control rooms; providing for the automatic operation of heating systems used to heat the tanks and electric drives of oil-filled circuit breakers; installing energy-saving lamps and lights in outdoor switchgears and improving the energy efficiency of buildings. All these measures contributed to a decrease in energy consumption for the sub-stations' in-house needs by 58,653.2 kWh.

### 3. Construction, reconstruction and development of electric grids. Commissioning energy-saving equipment

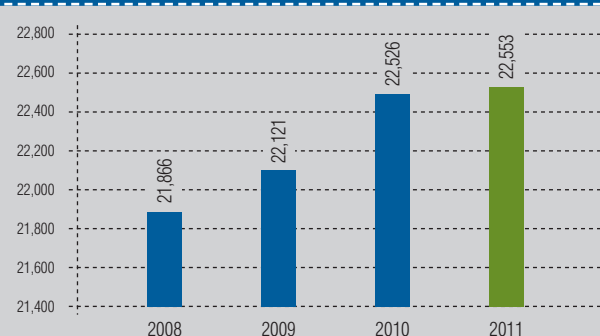
The Company equipped existing sub-stations with reactive power compensators, replaced the overloaded transformers and commissioned additional power transformers. We also optimized electric grid loads by constructing new overhead lines and sub-stations. All these measures resulted in saving 22,196.6 kWh.

In 2011, the technological effect from implementing measures aimed at decreasing UNEG power losses amounted to 137,690.5 kWh.

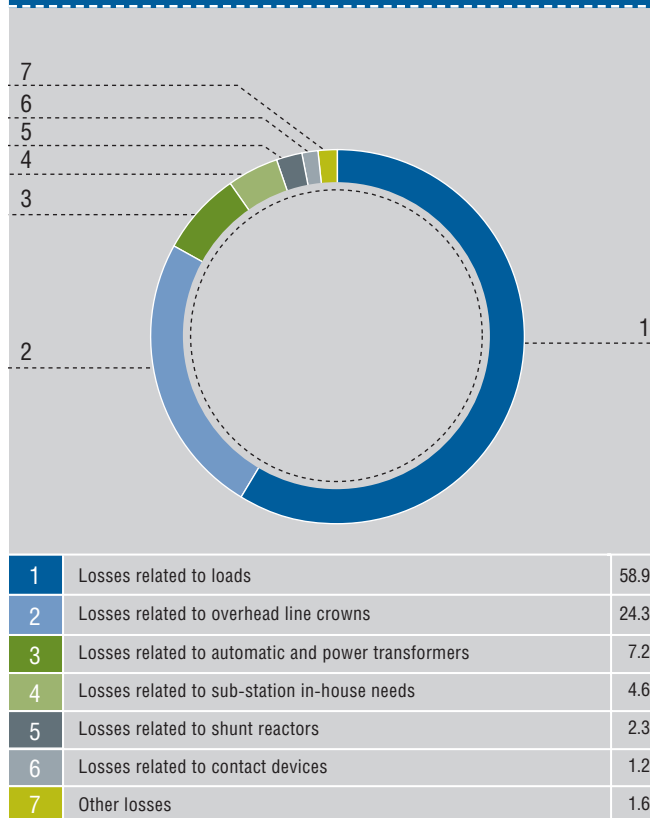
### Energy-saving measures implemented by the Company in 2011

IMPLEMENTED POWER-SAVING MEASURES	QUANTITATIVE EFFECT ON 31 DECEMBER 2011, THOUSAND KWH
Optimization of electric grid operating modes (concerning reactive power and voltage)	42,067.0
Shutting down of electric grid equipment under low loads	14,698.7
Reduction in the duration of maintenance for primary equipment (power lines, transformers), including the duration of work performed under voltage	75.0
Decreasing energy consumption for the sub-stations' in-house needs	58,653.2
Installing and commissioning reactive power compensators	410.8
Replacing overloaded transformers and installing and commissioning additional power transformers at existing sub-stations	12,063.3
Replacing measuring current transformers	1,400.5
Optimizing grid loads via the construction of new sub-stations and lines	8,322.0
<b>Total for all measures</b>	<b>137,690.5</b>

Annual power loss volumes, million kWh



The structure of 2011 UNEG power losses



The Company plans to perform an energy audit in compliance with its Program of Energy Saving and Increases in Energy Efficiency. We will identify facilities with the highest energy losses, develop additional measures to further decrease UNEG power losses and correct existing planned indicators based on the energy audit.

## INFORMATION ABOUT THE AMOUNT OF FUEL AND ENERGY RESOURCES USED BY THE COMPANY

In 2011, the Company used the following fuel and energy resources (FER): electricity, heat, fuels and lubricants (petrol and diesel).

Measures taken to reduce heat, electric energy and fuel consumption allowed the Company to save RUR147,965.67, excluding VAT, in 2011.

### Volumes of fuel and energy resource consumption (in terms of indicators recorded in the program)

INDICATOR	UNIT OF MEASUREMENT	VOLUME
Technological electric energy consumption in the UNEG	thousand KWh	22,553,171.97
Electric energy consumption in buildings	thousand KWh	29,195.59
Heat consumption in buildings	thousand Gcal	41.44
Petrol consumption	thousand liters	9,325.91
Diesel consumption	thousand liters	7,332.59

### Achieved technological effect (type of FER)

INDICATOR	UNIT OF MEASUREMENT	TECHNOLOGICAL EFFECT
Reducing the technological consumption of electric energy when it is transmitted over the UNEG through loss reduction measures	thousand KWh	137,690.55
Reducing electric energy consumption in buildings	thousand KWh	1,703.34
Reducing heat consumption in buildings	thousand Gcal	3.96
Reducing petrol consumption by automotive transport	thousand liters	65.40
Reducing diesel consumption by automotive transport	thousand liters	21.08

### Achieved economic effect

INDICATOR	UNIT OF MEASUREMENT	ECONOMIC EFFECT
Implementation of measures aimed at reducing losses in the UNEG		137 139.79
Electric energy consumption		5,616.49
Heat consumption	RUR thousand excluding VAT	3,298.78
Petrol consumption		1,454.82
Diesel consumption		455.80

## 2.4

## TELECOMMUNICATIONS AND IT SYSTEM DEVELOPMENT

*The Company's IT priority is to upgrade production efficiency, as well as finances, and to optimize costs associated with using different information systems. As a nation-wide operator implementing a range of projects and performing different activities involving a variety of business processes, the implementation of advanced information technologies is extremely vital.*

### AUTOMATED PROCESS CONTROL SYSTEM

An Automated Process Control System (APCS) is a unified distributed hierarchical system which integrates the means and sub-systems of existing independently developing automatic and automated control systems. APCS implementation will enable Electric Grid Control Centers to perform operational and non-operational functions.

In 2011, the following activities were performed in relation to the APCS:

- H&SP (ADTMS) projects were put into operation at the Grid Control Centers (GCC) of the Kuzbass, Vologda and Prioksky PMES, representing continuing work on creating Grid Control Centers to transfer operational functions regarding management facilities from SO UES;
- H&SP (ADTMS) project of the Head Grid Control Center (HGCC) of the North-West, including: implementing SCADA functions, analyzing calculations and analytical problems (EMS) and extending the H&SP functionality for operative technological management. The operator's simulator was also put into operation.
- H&SP of SCADA for the first stages of the MES Center, MES Siberia and MES East was commissioned; design documentation for the second stage of SCADA of the MES South, MES Volga, MES Western Siberia, and MES Urals was developed.
- Measures to improve the observability of the UNEG facilities were taken in MES Siberia and communication channels have been commissioned at 79 sub-stations.

### AUTOMATED PROCESS OPERATIONS CONTROL SYSTEM (APOCS)

The Automated Process Operations Control System (APOCS) is a hardware and software system intended to collect, analyze, visualize, store and transfer process information and to automatically control the operation of sub-station equipment. The system is equipped with an interface allowing personnel to control SS process operations implemented in line with interactions with the hardware and software complex.

In 2011, APOC systems were implemented at 88 UNEG sub-stations. Presently, the Company is actively implementing the APOC systems based on MEK 61850 protocol. Innovative projects involving the establishment of digital sub-stations are under way.

The focus on innovations and technological breakthroughs is a national priority, and as a systemic company, Federal Grid Company should become a leader in the movement. This also applies to information technologies, which are in fact the driving force behind innovations. I am convinced that this weighted and forward-looking approach will form the prerequisites for effective corporate development in the near future.



*Dmitry Gurevich,*

*Deputy Chairman of the Management Board*

### AUTOMATED INFORMATION AND MEASUREMENT SYSTEM FOR THE COMMERCIAL METERING OF ENERGY (AIMS CME)

The AIMS CME is intended to collect and register current and accurate data on the exchange of energy (power) among the Company's grid facilities, to confirm the accuracy of the data and to use data supplied by adjacent AIMS CMEs for settlements with wholesale energy market participants and with JSC ATS. The AIMS CME is a territorially distributed multi-level information and measurement system with centralized control and centralized collection, processing, storage and transfer of metering data, with a distributed energy metering function.

UNEG AIMS CME developments achieved in 2011 included the following:

- The 1PK software complex (upper level) was commissioned, with 2PK software complex (upper level) put to a production test of the AIMS CME of the UNEG;
- The 3PK software complex (SS level) of the UNEG SS AIMS CME was put to a production test;
- The Company proceeded with replacing current and voltage metering transformers and upgrading of secondary circuits for 330-750 kV sub-stations.

### DEVELOPMENT OF CORPORATE INFORMATION TECHNOLOGIES (ERPS)

In 2011, Federal Grid Company commissioned the following business management systems as part of ERPS project development:



- Automated reference information control system (ARICS);
- Automated system “Design and estimate documentation archive of Federal Grid Company and Construction Management and Engineering Center (AS DEDA);”
- Automated system for property complex management in SDCs (AS Property in SDCs);
- Automated system for managing development projects and changes in the productive systems of Federal Grid Company’s ERPS based on SAP Solution Manager products;
- Automated emergency reserve control system for the Federal Grid Company (AERCS);
- Automated system “Register of the UNEG facilities on SAP/ R3 platform;”
- Automated system “Formation of the Federal Grid Company’s investment program”.

and mobile digital radio communication systems, using WDM equipment, the synchronous digital hierarchy (SDH), and also by using TDM and IP protocol technologies.

The general plan for the establishment and development of the ESUPCN for the period till 2015 has been approved by Federal Grid Company’s Management Board and by the Governmental Commission for Federal Communications.

### Fiber-optics Communication Network

The fiber-optics communication network (FOCN) is the basic energy system’s communication network built using a fiber-optic cable suspended on overhead electric energy transmission lines. In addition, the Company extensively utilizes services provided by major communication operators rendered on the basis of long-term ongoing lease agreements.

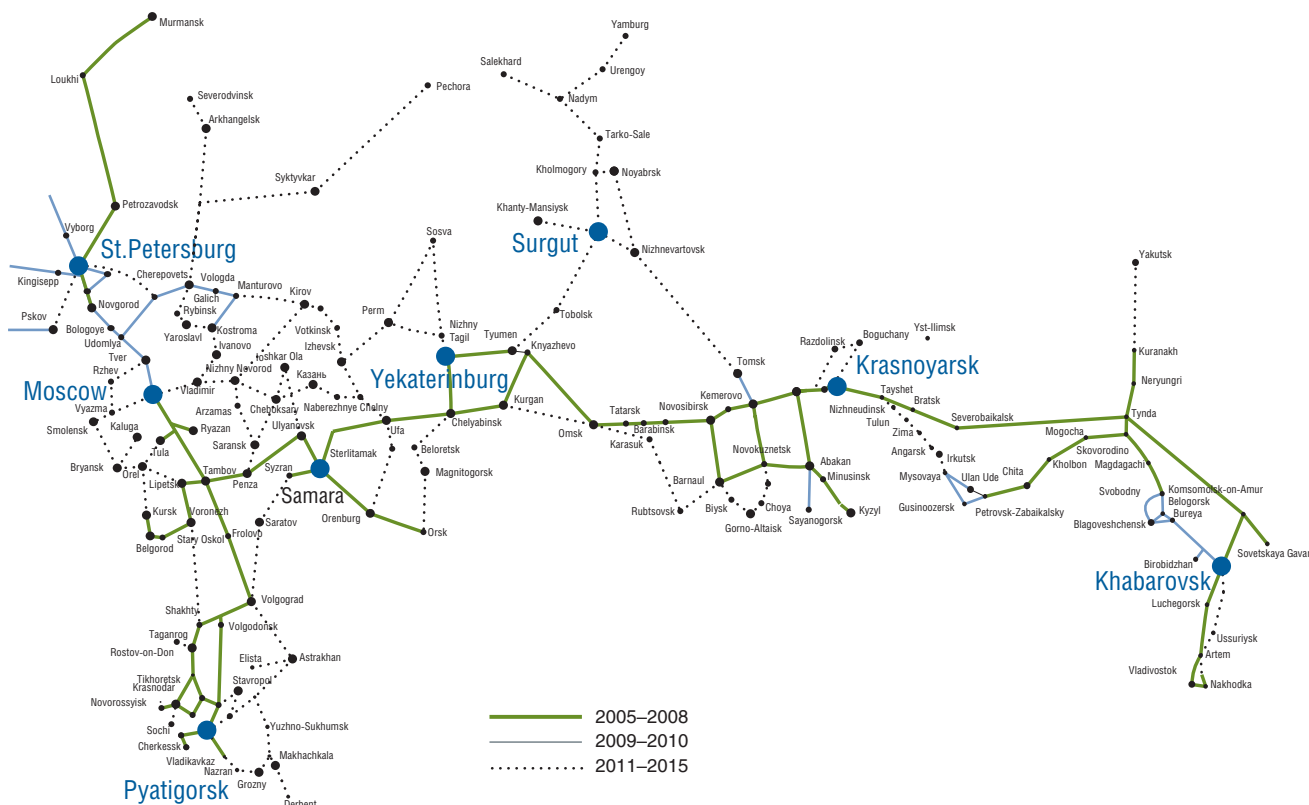
In 2011, measures carried out by the Company to develop the FOCN included:

- The Company commissioned the second and third Moscow–Rostov-on-Don FOCN startup complexes (2,200 km in length), connecting 38 facilities;
- The Company organized the transfer of voice messages and data over the FOCN connecting Krasnoyarsk (MES Siberia), Yekaterinburg (MES Urals), Samara (MES Volga) and Moscow (Executive Office of Federal Grid Company).

## THE ENERGY SYSTEM’S UNIFIED PROCESS COMMUNICATIONS NETWORK

The Energy System’s Unified Process Communications Network (ESUPCN) is a communications network used to support the operation of electric grid facilities and to control production processes across all levels, providing for a guaranteed exchange of all types of data (audio, video, etc.). The Company builds the ESUPCN by deploying fiber-optic (FOCN) and radio relay (RRCN) communication networks, upgrading high-frequency communications, deploying satellite communication systems

### ESUPCN fiber-optic communication lines development for the period till 2015



Therefore, by the end of 2011, the total length of long-distance and distribution FOCN operated by the Company comprised more than 33,500 km, composed of the following:

- 18,500 km – built by the Company;
- 8,500 km – resources obtained in exchange for “the right of way” along electric energy transmission lines;
- 6,500 km – resources obtained in exchange for and leased from third party organizations.

## Radio and Relay Communication Networks

Radio and radio-relay communication is used in the long-distance and distributed fixed-line USUPCN networks, in case laying the FOCN is not economically feasible or when a communication network needs to be deployed in a short time.

In 2011, the Company received 15 permissions from the Federal Service for Supervision in the Sphere of Telecom, Information Technologies and Mass Communications (Roskomnadzor) to use radio frequencies or radio frequency channels for 4 radio relay communication lines. The Company also received 68 expert conclusions on the possibility of utilizing radio frequencies or radio frequency channels for radio electronic devices mounted on overland mobile units, radio-relay lines, fixed telephony and user overland stations of satellite communications.

## Satellite Communication Network

To improve the reliability and visibility of electric grid facilities, the Company has established a satellite communications network. In 2011, the Company organized and commissioned satellite communication channels from electric grid facilities located on the territories of MES Siberia and MES South, equipped mobile analytical Centers of MES North-West and MES South with satellite communication systems, provided video surveillance over progress in constructing new electric grid facilities, established the Skolkovo Innovation Centre and the output of power from the Boguchanskaya HPP.

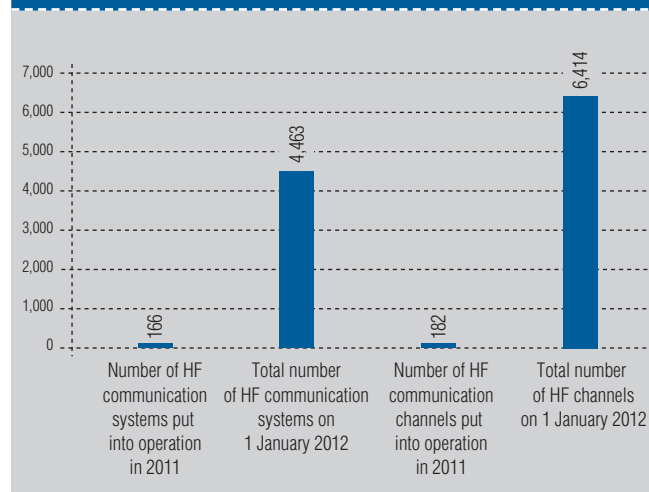
## Mobile Radio Communication Network

The TETRA mobile communication network is used to organize line operation communication in the interests of personnel servicing the overhead lines and to provide for back-up dispatch communication.

Currently, the Company's TETRA network includes three communications Centers and 129 base stations.

In 2011, the Company purchased protected communication equipment for personnel servicing the overhead lines in all corporate branches. The equipment in question includes 1,285 GSM/GPRS cell phones, 203 satellite phones and 1,683 VHF radio stations.

## High frequency communication systems put into operation in 2011



## High Frequency Communication Lines

Presently, high frequency communication lines form the Company's key communication network – providing for dispatch telephone communication and the transfer of remote control and AIMS CME data, as well as relay protection and emergency control commands. The high frequency communication network is made up of phase wires and wire ropes of the overhead lines, or wires and shields of cable electric energy transmission lines.

In 2011, the Company upgraded outdated and unreliable high frequency communication systems and put some of them out of service by commissioning new FOCNs.

## Telephone Communication Network

The Energy System Telephone Communication Network (ESTCN) is a hub network communicating with the process network of the Systems Operator and for other energy market participants.

In 2011, the Company's branches (MES) were equipped with more than 70 digital private automatic branch exchange (PABX) units and systems to register operative personnel communications, as well as the DECT wireless systems and the speaker phone and radio paging systems. Moreover, to upgrade the efficiency of data transfer on disturbances in the operation of electric grid components, the Company's MES North-West was used to test the hardware and software complex for recording dispatch communications.

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## **SYSTEMS BASED ON THE GLOBAL NAVIGATION SATELLITE SYSTEM (GLONASS) TECHNOLOGY**

The transportation monitoring system based on GLONASS/GPS technology is used to obtain real time information on the location of transportation vehicles and to control the fulfillment of assignments, as well as mileage and fuel consumption.

In 2011, the Company established two pilot GLONASS/GPS transportation monitoring systems from different manufacturers. The systems were deployed on the territory of two corporate branches – MES South and MES Volga. In Q4 2011, the Company conducted a tender for the right to equip transportation vehicles of MES North-West and MES Volga with GLONASS/GPS equipment.

## 2.5 PROCUREMENT

The Company is in the process of reducing its expenses in line with the Presidential directive to reduce the cost of purchasing goods, work and services. The Company's procurement activity principles are the main tool to accomplish this reduction. Expenses are optimized at the cost of reducing price factors (via tender procedures and negotiations with contractors), subject to the strict observance of physical indicators for the production program, keeping them at the level required to ensure reliability.

In 2011, the Company's procurement activities were performed in accordance with the Policy on the procedure for the regulated purchase of goods, work and services for in-house needs of Federal Grid Company. The Policy in question provides for organizing the purchases of goods, work and services based on a unified method involving the use of up-to-date purchasing formats, primarily tender-based. The procedural regulation of purchases is intended to ensure the targeted and efficient spending of funds, as well as economically feasible costs.

The Company's procurement activities are based on the following principles:

- **Transparency**  
The rules for purchase organization can be publicly accessed on the Company's web site. Information on the violations of

these rules can be sent to the Company's Central Tender Commission (CTC). CTC members include representatives of Russia's Ministry of Energy and the Federal Anti-monopoly Service. The Company's annual procurement program is published on the Company web site and on TZS-Elektra e-commerce site. A considerable share of purchasing is made via open tenders and other open competitive procedures, with related information published on the Company web site, the e-commerce site and in the mass media.

- **Competitiveness**  
The Company prefers open tenders as they provide for maximal competitiveness. Any competition limits require serious substantiation and collective decisions by the Company's authorizing bodies. In case a purchase is made from a sole supplier, these decisions can only be made by the Company's Central Tender Commission.
- **Substantiation**  
The rules set by the Company require that each decision should be substantiated and confirmed in writing. This not only improves purchasing efficiency, but prevents corruption as well.

### Types and conditions of regulated purchases of goods, work and services for the in-house needs of Federal Grid Company

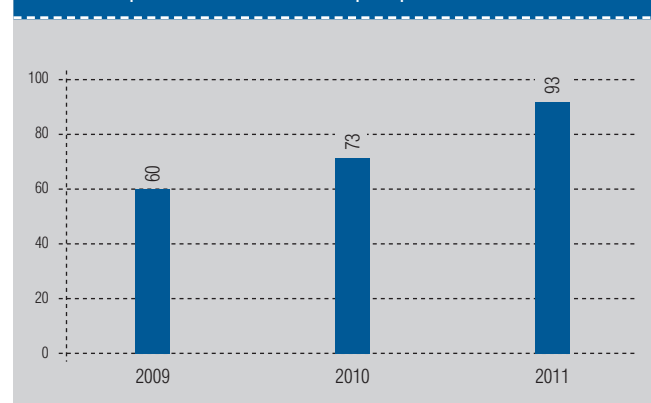
Open tender	The most preferred type, which is used without any conditions
Open request for offers	This type is selected if the purchase does not exceed RUR10 million (including VAT). Mostly used to purchase simple products.
Open request for quote	This type is selected if the purchase does not exceed RUR5 million (including VAT). Used for purchasing simple products
Open competitive negotiations	In most cases, this type is used for purchasing especially sophisticated products
Sole supplier	A decision on supplier selection is made by the Company's Central Purchasing Body, based on customer information from a market analysis
Closed procedures	Closed procedures may be used only if the direct targeted attraction of participants is used to preserve confidentiality, required in customer interests

The Company's Central Tender Commission approved TZS Elektra as an e-commerce site recommended for use by Federal Grid Company and its SDCs. The site is intended to organize and conduct competitive and regulated non-competitive purchases carried out by the Company using Internet technologies.

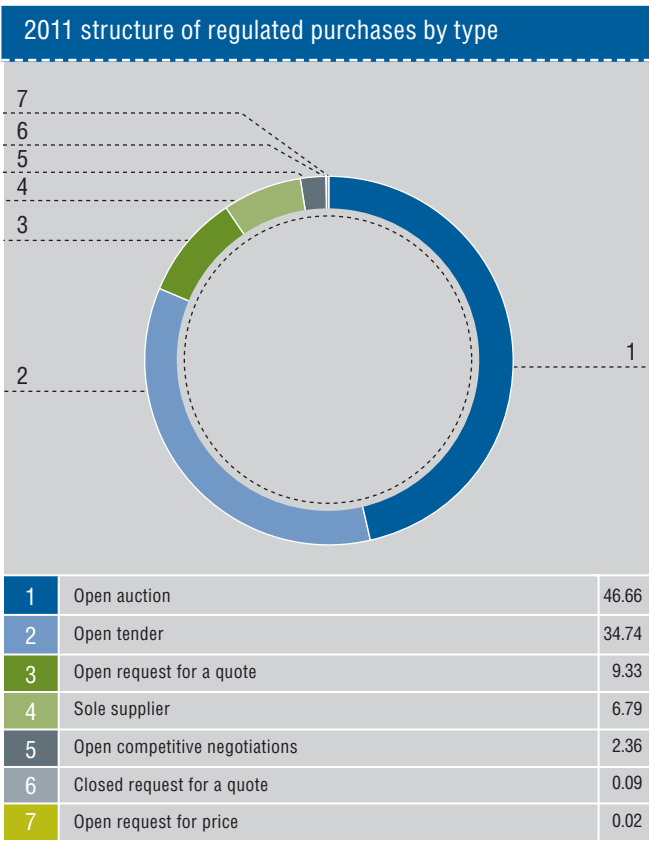
The agreements for financial services listed in Article 18 of the Russian Federal Law No 135-FZ On the Protection of Competition, dated 26 June 2006, are concluded via open electronic auctions using the e-commerce site operated by Sberbank-AST.

In 2011, competitive purchasing accounted for 93.21% of the total number of purchases made by the Company. Competitive purchases totaled RUR350,216,417.1 thousand.

Share of purchases based on open procedures







- Introducing brand new types of purchasing, together with related procedures and conditions – an auction, a simple purchase (up to RUR2.5 million) and a minor purchase (up to RUR500 thousand);
- Obliging the customer to publish on the Company’s site and on [www.zakupki.gov.ru](http://www.zakupki.gov.ru), an all-Russian official site (beginning 1 July 2012), information on all competitive purchasing procedures amounting to at least RUR500 thousand, financed using any expense item from the Company’s budget;
- Identifying cases for lodging appeals with Russia’s Federal Anti-monopoly Service concerning purchasing procedures and tender results;
- Possibility to apply for preferential amendments in case Russian goods (work, services) will be made a priority by the Russian Government, etc.

### IMPORT SUBSTITUTION POLICY

The Company’s import substitution policy is based on the following principles

- Decreasing the dependence on imported equipment;
- Implementing innovative energy efficient technologies;
- Developing and upgrading domestic industrial production;
- Developing production and scientific potential;
- Ensuring Russia’s required level of energy and industrial safety;
- Improving the technological level of production;
- Providing new employment opportunities.

### IMPROVING PROCUREMENT ACTIVITY IN 2012

To improve procurement activity and to fulfill directives from the Russian Government to reduce the cost of purchasing goods (work and services) by at least 10%, on 15 February 2012, the Company published Order No 75 “On improving procurement activity and the procedure for the proposal of issues for consideration by the Central Tender Commission.” The Order in question restricts purchases made from a sole supplier and establishes responsibility for the decisions of the coordinating persons proposing issues for consideration by the Central Tender Commission.

Pursuant to the Russian Federal Law “On purchasing goods, work and services by certain categories of legal entities, natural monopolies,” State-owned companies (corporations) and companies with State participation of at least 50% of authorized capital should exercise their purchasing activities in strict compliance with the law in question beginning 1 January 2012. To observe the legal requirements in question, on 27 January 2012, the Company’s Board of Directors approved the Policy for the purchase of goods, work and services for in-house needs of Federal Grid Company.

The new Policy contains the following modifications:

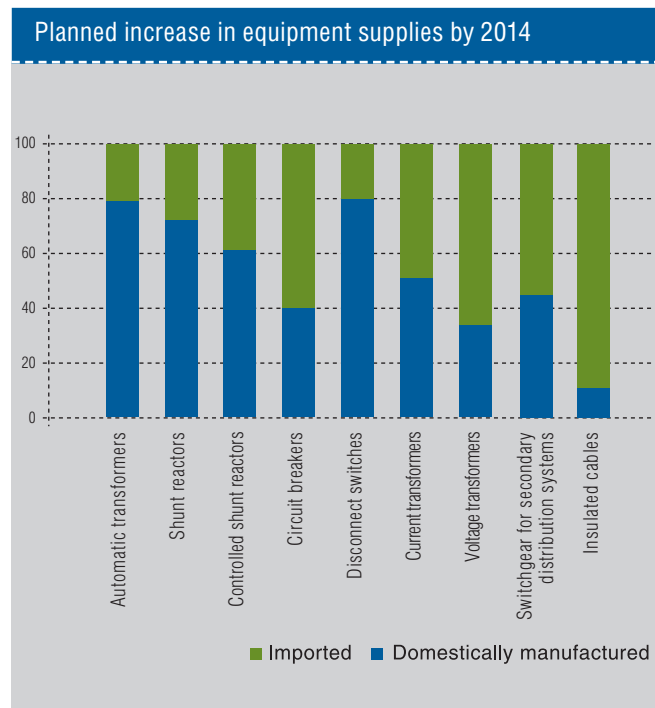
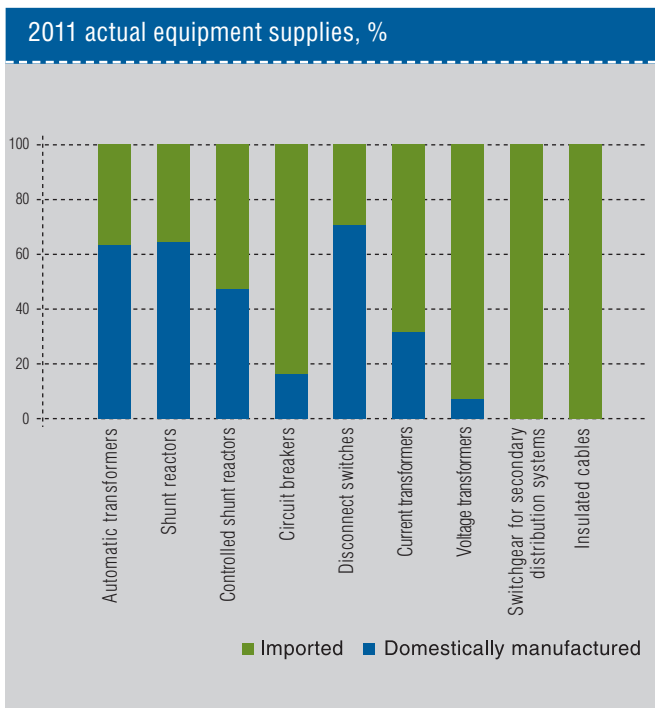
- Reducing the purchasing price cap;

To implement import substitution measures, the Company concluded agreements on cooperation in developing and using advanced technologies and equipment at electric grid facilities. The agreements were concluded with 77 domestic equipment manufacturers, including 72 Russian companies.

Furthermore, the Company confirmed its plan to implement measures on developing energy machine tools in the Russian Federation. The Company also developed essential conditions for a standard long-term supply agreement (LTSA), concerning the supply of electric equipment localized in Russia.

The first LTSA signed by the Company during the reporting year include the following:

- On 15 August 2011, the Company signed a long-term agreement with HK Elektroavod for the supply of transformer equipment manufactured by HK Elektroavod. The planned purchase volume will comprise at least 3,628 MVA in 2012, 2,511 MVA in 2013 and 4,035 MVA in 2014;
- On 9 September 2011, the Company signed a long-term agreement for the supply of electric products with Hyundai Electrosystems. The supply of switchgear for secondary distribution systems will commence in 2013, with supply scope standing at 180-240 cells per annum;



- On 28 September 2011, the Company concluded a long-term agreement for the supply of electric products localized in Russia with Power Machines. Toshiba became a partner of Power Machines for constructing the transformer manufacturing plant. The planned scope of supply will comprise 5,014 MVA in 2014, 5,544 MVA in 2015, 5,544 MVA in 2016, 5,544 MVA in 2017 and 5,544 MVA in 2018.

The share of imported equipment purchased by the Company comprised 65% by the end of 2011. By 2014, we plan to decrease the share of purchased imported equipment to 46%.



The 2011 investment program  
financing volume

RUR **184.7** billion

The 2011 cost optimization effect

RUR **2,000** million

3

INFORMATION FOR SHAREHOLDERS  
AND INVESTORS

## 3.1 INVESTMENTS AND INNOVATIONS

### 3.1.1 INVESTMENT ACTIVITY

*One of the Company's priorities is implementing a global investment program intended to upgrade the electric power grid, to implement advanced technologies across all UNEG control levels and to provide for the Russian economy's growing power demand.*

In 2010, the Russian government, represented by the Russian Ministry of Energy, approved a large-scale investment program for Federal Grid Company for the period from 2010 to 2014. The program, which has an unprecedented scale in the post-Soviet period, involves financing in an amount exceeding RUR952 billion.

The tasks of Federal Grid Company's investment program:

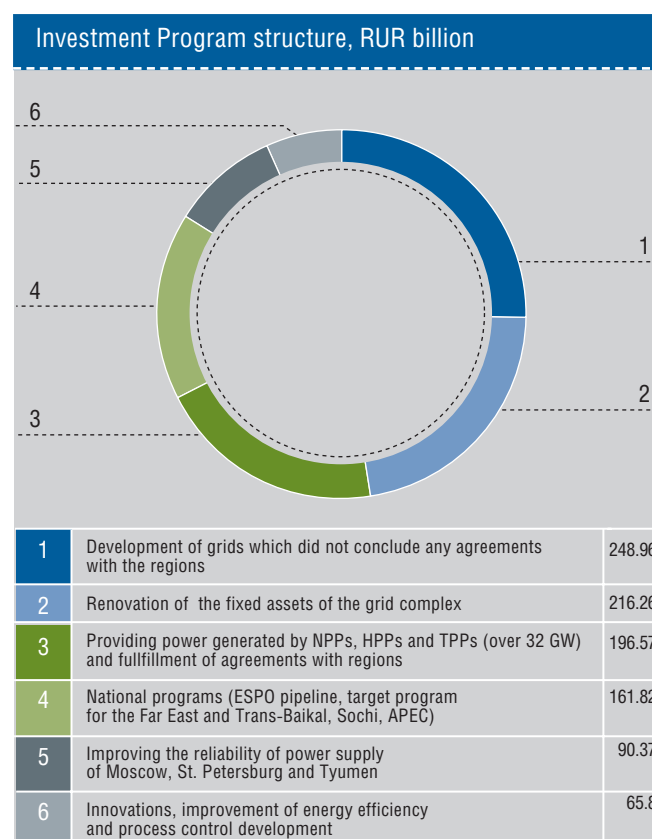
- To provide for renovating the Company's grid assets;
- To implement electric grid facility construction projects that are of the highest national priority (the APEC Summit, the ESPO pipeline, the 2014 Sochi Olympic Games, the Skolkovo Innovation Centre and improving the reliability of power supply to Moscow and St. Petersburg, etc.);
- To fulfill agreements concluded with regional administrations to provide for consumers' power supply;
- To provide power from the generating units of the NPPs, HPPs and TPPs put in to operation;
- To implement innovation and energy efficiency programs;
- To establish the process infrastructure to provide for the functioning of the competitive electric energy and capacity market.

The investment program is financed by the Company's own funds and funds obtained via the additional issue of the Company shares, federal budgetary funds and funds generated from the sale of RAO UES of Russia assets. To finance the program in 2010-2011, the Company attracted RUR105 billion by placing the Company's bonds on Russian financial markets. The payments for technological connections, loans and credits are also used by the Company to implement the investment program.

To renovate fixed assets of the electric grid complex, we plan to spend RUR216.26 billion. To develop the grids which did not conclude any agreements with the regions, the Company will spend RUR248.96 billion. To improve the reliability of power supply to Moscow, St. Petersburg and Tyumen, the Company will spend RUR90.37 billion. The Company will invest

RUR65.8 billion in innovations, upgrading energy efficiency and developing process control. Investments to implement the governmental programs will comprise RUR161.82 billion. To provide power from the NPPs, HPPs and TPPs and to fulfill agreements with regional administrations (except for Moscow, St. Petersburg and Tyumen), the Company plans to spend RUR196.57 billion.

Implementation of the Company's 2011-2014 Investment Program will result in putting in to operation 74,310 MVA transformer capacity and 16,377.6 km of electric energy transmission lines.



#### Federal Grid Company's 2010-2014 investment volumes and priorities, RUR billion

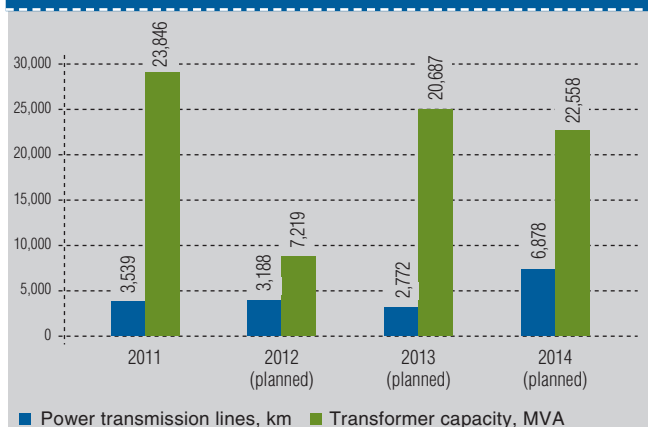
THE MAIN PRIORITIES OF FEDERAL GRID COMPANY'S 2010-2014 INVESTMENT PROGRAM	2010	2011	2012	2013	2014	TOTAL FOR 2010-2014	%
Federal Grid Company's 2010-2014 Investment Program	170.5	189.6	194.6	197.8	199.9	952.4	100
Asset development	109.9	122.1	120.7	130.5	140.8	624.1	65.5
Asset maintenance	57.1	62.2	69.7	65.5	59.1	313.6	32.9
Technological connection	3.5	5.2	4.2	1.8	0.0	14.7	1.6



## 2011 main investment priorities

ITEM	2011 FINANCING	FACILITIES TO BE PUT IN TO OPERATION	
	RUR MILLION	KM	MVA
<b>Total</b>	<b>189,566.16</b>	<b>3,200.32</b>	<b>17,284.78</b>
Retrofitting and reconstruction	59,736.21	589.70	11,300.00
Provision of power generated by NPPs, HPPs and TPPs	820.77	0.00	1,376.00
Improvement of power supply reliability for Moscow, St. Petersburg and Tyumen	16,253.90	241.20	3,132.00
Grid facilities included in agreements with regional administrations (except for Moscow, St. Petersburg and Tyumen)	701.53	172.00	0.00
Development of grids which did not conclude any agreements with the regions	3,401.34	0.00	200.00
Technological connections	6,455.81	51.50	1,410.00
Renovation of Federal Grid Company's fixed assets	32,102.86	125.00	5,182.00
New construction	129,829.95	2,610.62	5,984.78
Power provision facilities: NPPs, HPPs and TPPs	20,291.58	543.20	1,502.00
Facilities to improve power supply reliability for Moscow, St. Petersburg, Tyumen and the Sochi Region	6,075.07	90.00	125.00
Facilities included in the agreements with regional administrations (except for Moscow, St. Petersburg and Tyumen)	11,630.30	749.60	2,195.00
Development of grids which did not conclude any agreements with regional administrations	44,125.71	873.00	1,375.00
Development of process control, IT technologies and additional target programs	6,430.35	0.00	0.00
Facilities included in the Federal Target Program "Economic and Social Development of Far East and Trans-Baikal for the Period till 2013"	11,227.96	246.52	378.00
The program for the development of power networks in the Sochi Region for the 2008-2014 period, providing power to the Olympic sporting facilities	7,231.01	108.30	409.78
Purchase of facilities for production purposes	12,185.40	0.00	0.00
Innovations and energy efficiency	4,128.29	0.00	0.00
Other	5,910.02	0.00	0.00
Design and survey work (future years)	594.26	0.00	0.00

### Electric grid facilities to be put into operation in 2011-2014\*

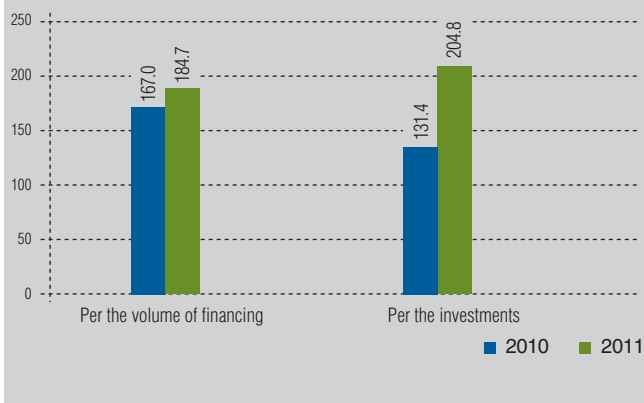


\* The planned performance indicators for 2012-2014 may be changed after the Company's 2012-2014 investment program is approved by the Russian Ministry of Energy.

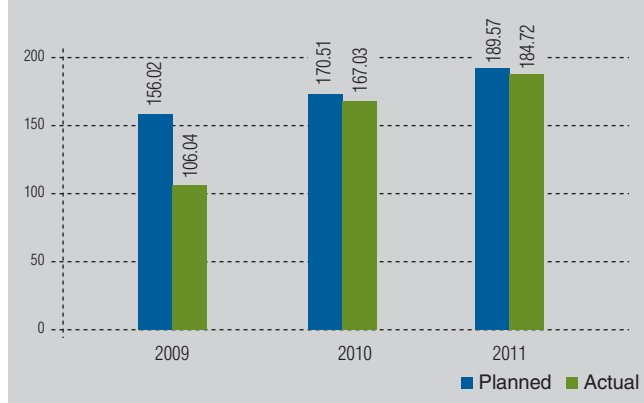
### Implementation of the 2011 Investment Program

The Company's 2011 investment plans were implemented meeting all key criteria. The number of sub-stations and electric energy transmission lines connected to voltage in 2011 were 84 power facilities with a total transformer capacity of 18,501 MVA, which is twice the figure for the similar indicator in 2010. The total length of electric energy transmission lines connected to voltage was 2,963 kilometers.

2010-2011 Federal Grid Company investment program implementation dynamics, RUR billion



The volume of planned and actual investment financing, RUR billion

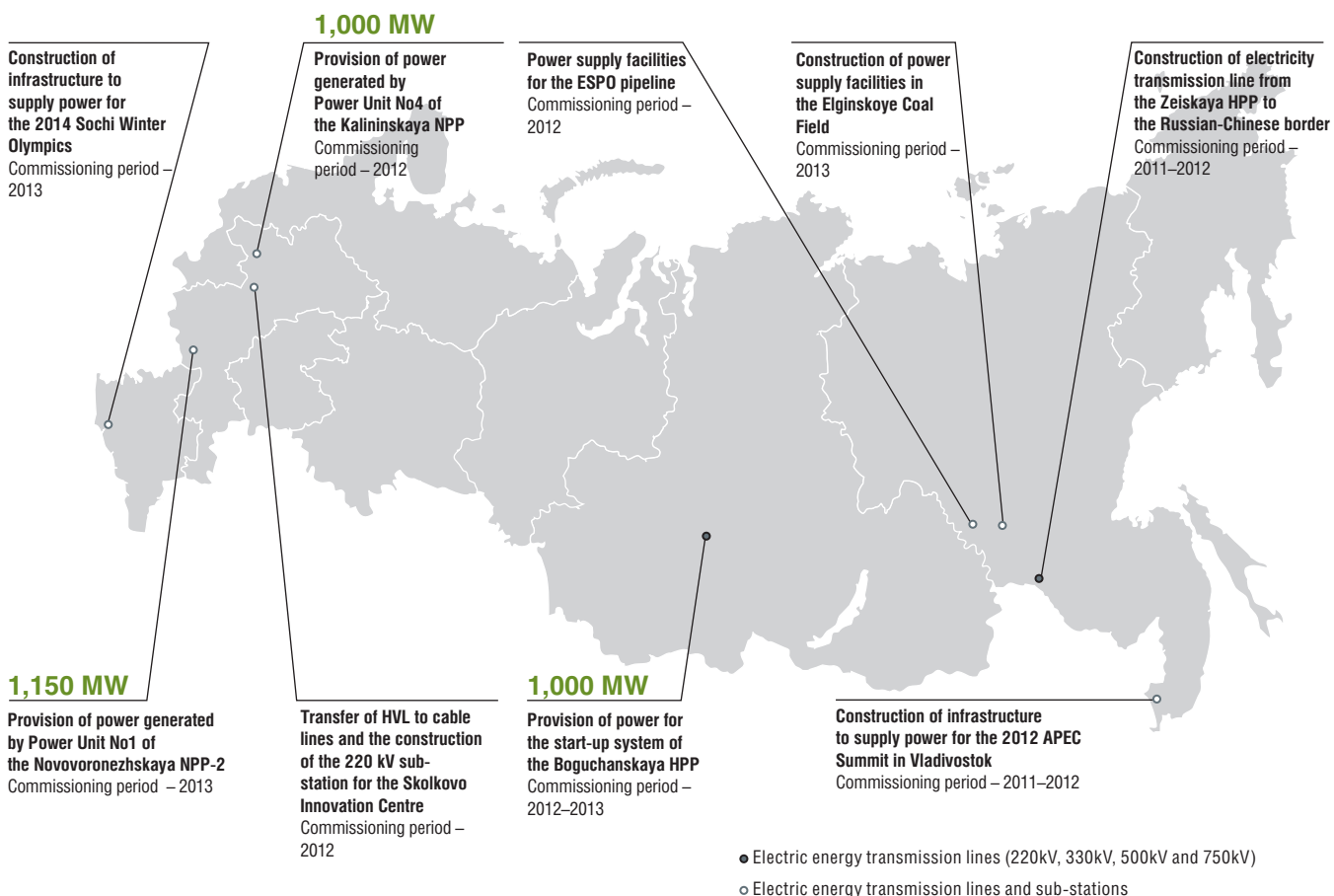


### Key Investment Projects

The country has recently implemented numerous large-scale projects. Russia won the right to host the 2014 Winter Olympics. The nation will also host the 2012 APEC Summit. The second stage of the ESPO pipeline construction has been launched, making the dynamically

developing markets of Asia and the Pacific Region accessible for Russian businesses. The Skolkovo Innovation Centre is also under construction. An up-to-date, reliable electric grid infrastructure constructed and maintained by the Company is one of the key factors contributing to the success of these projects.

### Federal Grid Company Key Investment Projects Map



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## Sochi-2014

To prepare for the 2014 Winter Olympics in Sochi, the Company is working on constructing, modernizing and reconstructing 24 electric grid facilities with a total capacity of 1,774.3 MVA. The total length of electric energy transmission lines in the Sochi Region comprises 283.63km. Work is being done in compliance with Russian Government Decree No. 991 "On the Program of Constructing Olympic Games Facilities and Developing Sochi as a Mountain Resort" (dated 29 December 2007).

In 2011, facilities commissioned by the Company included the following:

- The 110 kV Imeretinskaya sub-station, the 110 kV Ledovy Dvorets sub-station and 110 kV Mzymta sub-station;
- The 220 kV overhead transmission lines to provide power from the Adler CHP plant;
- The 110 kV cable and overhead transmission lines in the Imeretinskaya Plain (17.2 km);
- The 10 kV distribution power supply networks of the Roza Khutor Alpine skiing resort (with a total length of 50.5 km);
- The 110 kV cable and overhead transmission lines in the Imeretinskaya Plain (17.2 km);
- The 110 kV cable and overhead transmission lines in the Roza Khutor Plateau area (3.3 km).

In addition, a decision was made to include construction in Krasnaya Polyana of the new 110 kV 80 MVA Sportivnaya sub-station in the Company's investment program to provide for standby power supply for Olympic facilities of the Roza Khutor Alpine skiing resort and Olympic Village infrastructure in the mountains. The new sub-station will be located in the piste finishing zone in the vicinity of the sporting events. The total amount invested to construct the new sub-station will be RUR881 million.

The total amount to be invested in constructing Olympic facilities in Sochi till 2014 will exceed RUR28 billion.

## The ESPO Pipeline

The East Siberian – Pacific Ocean (ESPO) pipeline is constructed to transport Russian oil to the promising markets of the Asian-Pacific Region. The Company is tasked with providing a reliable power supply. To do so, the Company will proceed with constructing and reconstructing electric grid facilities all across the Far East.

ESPO power supply facilities commissioned by the Company in 2011 included the following:

- The 220 kV sub-stations for OPS-38, OPS-40 and OPS-41;
- The 220 kV transmission lines from the Primorskaya SDPP – OPS 38; OPS – 38 – Lesozavodsk; Dalnevostochnaya – OPS-

40; Dalnevostochnaya – OPS-41; OPS-40 – OPS-41; OPS-36 – Primorskaya SDPP.

According to adjustments approved by the Russian Ministry of Energy during the reporting year, the Company's investment program was complemented by six new ESPO electric grid facilities in the total amount of RUR2,079.59 million.

The total amount allocated by the investment program to finance the ESPO power supply facilities in 2010-2014 will comprise RUR42,175.6 million.

## The APEC Summit

The eight major facilities to be constructed by the Company for the APEC Summit (which will be held in Vladivostok in 2012) include: four 220 kV sub-stations with a total capacity of 430 MVA and four 220 kV electric energy transmission lines with a total length of 150 km.

To implement the above-mentioned project during the reporting year, the Company has put into operation three sub-stations (the 220 kV Aeroport sub-station, the 220 kV Zeleny Ugol sub-station with 220 kV HVL overhangs and the 220 kV Russkaya sub-station), Zeleny Ugol – Russkaya HVL going Eastern Bosphorus Strait, the 220 kV HVL Artyomovskaya CHP plant – Vladivostok and the 220 kV HVL Vladivostokskaya CHP plant – Zeleny Ugol – Volna. Other facilities put in to operation in 2011 include: the 220 kV Patrokl sub-station and the 220 kV HVL Vladivostok – Zeleny Ugol (a section of the 220 kV HVL Artyomovskaya CHP plant – Zeleny Ugol).

To prepare for the APEC Summit, the Company is building a 220 kV double-circuit HVL Zeleny Ugol – Russkaya, 16.8 km long. This sophisticated engineering project involves the installation of two cable lines on the mainland and on Russky Island and laying a 2.2 km cross-linked polyethylene three-phase cable along the Eastern Bosphorus Strait seabed. The Company was the first in Russia to use the underwater cable laying technology in July 2011.

The 220 kV three-wire cable insulated by cross-linked polyethylene is a unique innovation for the power sector. Different from the usual oil-filled cables, the new cable is light weight and environmentally friendly. To provide for process communications and line operation parameters monitoring, 12 optical fibers are integrated in the cable shield. The cable design features a reinforced metal armor to decrease the risk of cable damage during seismic activity typical for the region. The cable is manufactured in factory length with no connecting collars, therefore it is very reliable.

## The Skolkovo Innovation Centre

The Skolkovo Innovations Centre is a large-scale national project for establishing an advanced scientific and engineering complex for the development and commercial use of new technologies. The Centre will concentrate on five priorities, including: energy, information technologies, telecommunications, bio-medical and nuclear technologies. Skolkovo will house the departments and laboratories of leading universities and companies from Russia and other countries. The scientists will conduct academic research, teach post-graduate students and implement innovative campaigns. The Centre will also make room for hi-tech production facilities.

For the 2011 till 2014 period, the Company will construct and reconstruct nine electric grid facilities of the Skolkovo Innovation Centre. During the reporting year, the Company was busy with re-arranging the 500 kV electric energy transmission line and transforming the overhead line into a cable one. The Company also constructed two 220 kV underground sub-stations in Skolkovo and Smirnovo. The total capacity of the sub-stations stands at 252 MVA.

The total amount allocated under the Company's investment program to finance electric grid facilities of the Skolkovo Innovation Centre from 2010-2014 is RUR13.53 billion.

## The 330 kV Electric Energy Ring in St. Petersburg

The Company is an active participant in constructing the 330kV electric energy ring in St. Petersburg. Historically, the energy system of the Northern Capital was developed radially. Today's technology makes it possible to construct a new cable-overhead direct current line which will connect the southern and northern parts of the city across the Gulf, thus creating an electric energy ring. The solution will improve the reliability of the city's power supply, minimizing the probability of major emergencies and phased blackouts.

Construction of the electric energy ring was launched in 2007 and will be finished in 2012. The ring will incorporate five sub-stations, two overhead and three cable electric energy transmission lines.

During the reporting year, the Company has put in to operation the 330kV Vostochnaya – Volkhov-Severnaya overhead transmission line and the 330 kV Volkhov-Severnaya – Zavod Ilyicha cable transmission line. In addition, in 2011, the Company finished reconstructing and retro-fitting the 220 kV Volkhov-Severnaya sub-station, the 330kV Vostochnaya sub-station and the 220kV Zavod Ilyicha sub-station.

The total amount of financing for the project is RUR32.3 billion.

## The Boguchanskaya HPP

The Boguchanskaya HPP is Russia's largest hydro-power plant currently under construction. The Boguchanskaya HPP is integrated into the Angarsk chain of hydro-power stations. The first hydro-power units of the HPP are to be put in to operation in April 2012, with the rest to be commissioned after April 2013.

The Company builds new and reconstructs existing electric grid facilities in the Krasnoyarsk Region to provide for the output of power from the Boguchanskaya HPP to the unified electric grid of Siberia. Furthermore, the Company also acts as the agent for constructing the 500 kV grid facilities.

In 2011, the Company finished constructing the 220 kV networks to provide power from the Boguchanskaya HPP. Other activities included renovating the 125 MVA AT-3, 220/110/10 kV Primary Distribution Feeder (PDF) (220kV PDF Kodinskaya) and constructing the 500 kV Boguchanskaya HPP – Ozernaya transmission line (first stage).

Facilities constructed through Federal Grid Company's investment program

FACILITY	FULL COST OF THE FACILITY ACCORDING TO THE 2010-2014 INVESTMENT PROGRAM, RUR MILLION
The 220 kV HVL Boguchanskaya HPP – the Priangarskaya sub-station	
The 220 kV Priangarskaya sub-station	8,818.60
The 220 kV HVL Priangarskaya sub-station – the Razdolinskaya sub-station	
The 220 kV Razdolinskaya sub-station	985.0
The 220 kV switchgear for secondary distribution systems of the Boguchanskaya HPP	1,708.6
Reconstruction of the 220/110/10 kV Primary Distribution Feeder (220 kV PDF Kodinskaya)	10,000.0
Construction of the 500 kV HVL Boguchanskaya HPP – Ozernaya	

## The Kalininskaya NPP

The Kalininskaya NPP located in the Tver Region is a major energy producer in the central part of Russia. The first and the second power units of the NPP were put in to operation in 1985-1987. The construction of the remaining two power was suspended in 1991. The developing Russian economy needed new generating facilities and the third power unit of the NPP was put in to operation in 2005, while construction of the fourth 1 GW power unit was launched two years later.

The Company's responsibility here is to provide for the transmission of electric energy from new power units. The construction of a transmission line equipped with the new generation 750 kV



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Gribovo sub-station and the 500 kV Dorokhovo sub-station will eliminate existing limitations on connecting new consumers and improving the reliability and stability of the regional power supply system on the whole. The length of electric energy transmission lines will exceed 700 km. The total amount invested in the project will exceed RUR34.5 billion.

In 2011, the Company finished the next stage of extending the 750 kV Belozerskaya sub-station and initiated start-up work at power generation facilities of the Kalininskaya NPP. The amount invested in the project in the reporting year totaled RUR15,411 million.

### The Novovoronezhskaya NPP-2

Further development of the Novovoronezhskaya NPP (NVNPP) will be in the form of newly constructed power units – advanced energy generating facilities complying with international safety standards. The first power unit of the NVNPP-2 will be put in to operation in 2013. The Company is engaged in constructing facilities intended to provide power from the first power unit of the NVNPP-2, including the rearrangement of the 220-500 kV electric energy transmission lines.

In 2011, work performed by the Company included the design and organization of the construction of 220 kV CL No1 Novovoronezhskaya NPP-2 – Novaya and 220 kV CL No 2 Novovoronezhskaya NPP-2 – Novaya. Corporate specialists also reconstructed the 220 kV HVL Novovoronezhskaya NPP – Liski 3.4 and the 220 kV HVL Novovoronezhskaya NPP – Latnaya.

### Construction of the Zeyskaya HPP – Russian-Chinese Border Line

Pursuant to the Federal Target Program for economic and social development of the Far East and Trans-Baikal for the period till 2013, the Company is engaged in constructing the 500 kV Amurskaya – Heihe inter-state electricity transmission line which will become the key facility exporting energy from Russia to China. Putting in to operation the inter-state electricity transmission line

will provide for the output of power from the Zeyskaya HPP and will increase the volume of energy exported to China.

During the reporting year, we finished constructing the first stage of the 152.8 km long 240 MVA 500 kV HVL Zeyskaya HPP – Amurskaya – State Border. The second stage will be constructed in 2012.

### The Elginskoye Coal Field Power Supply Facilities

The Elginskoye Coal Field is the biggest coking coal deposit in the Far East. The field is located in the south of the Republic of Sakha (Yakutia). This is the Company's first project involving the establishment of a smart grid territorial cluster in the Far East. To supply power to the Elginskoye coal field, the Company constructs three 220 kV sub-stations (Elgaugol, "A" and "B") and two 220 kV electric energy transmission lines. Each of the lines will be 268 km long. In addition, the Company is engaged in reconstructing the existing 220 kV Prizeyskaya sub-station.

The Company's newly constructed facilities will initiate numerous pilot projects, including the equipment of standard automatic process control systems used at sub-stations with systems based on optical fiber cables to transfer digital data, and the application of Smart Sphere technology to control the main parameters of power transmission in real time.

In 2011, the Company launched preparatory work to construct electric grid facilities for external power supply. The construction will be accomplished in two stages. The first stage, to be accomplished by 2013, will involve the Company reconstructing the 220 kV Prizeyskaya sub-station in the Amur Region. The Company will also build three new 220 kV sub-stations and the 268 km long 220 kV Prizeyskaya – Elgaugol transmission line. Work connected with the extension of the 220 kV distribution gear at the Prizeyskaya sub-station will be accomplished by 2015, together with construction of the second 220 kV Prizeyskaya – Elgaugol transmission line and installation of the 125 MVA automatic transformer at the 220 kV Elgaugol sub-station.

### 3.1.2 INNOVATIVE DEVELOPMENT

During the reporting year, the Company has adopted and approved the Innovative Development Program (the Program) for the period till 2020.

The main goal of the Program is improved reliability, efficiency and safety of the electric grid facilities and the energy sector by applying innovative technologies and solutions for turning them into a smart (active-adaptive) Center of technological infrastructure for the energy industry.

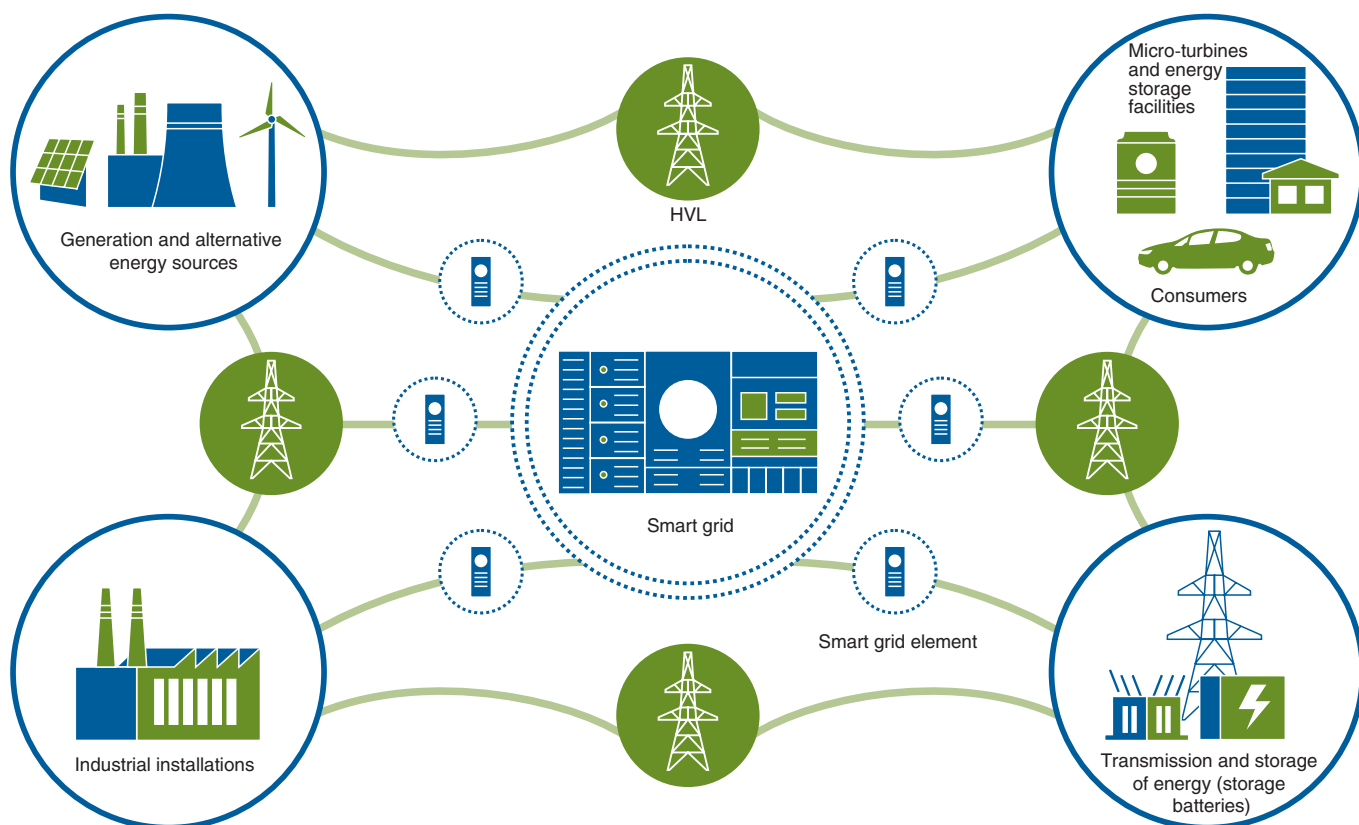
The Program's implementation, in coordination with industry and corporate documents, is aimed at achieving Federal Grid Company's strategic objectives:

- Ensuring Russia's energy security and sustainable development;
- Meeting the required reliability of electric energy transmission services;
- Participating in the free functioning of the electricity market;
- Upgrading UNEG functioning and development;
- Providing for production personnel safety;
- Upgrading environmental standards.

The Program's objectives:

- Creating a target vision of the smart energy system based on an active-adaptive grid;
- Developing and testing new technologies, including breakthroughs in all innovative areas;
- Preparing and implementing integrated pilot projects to create the active-adaptive grid;
- Commercializing new technologies;
- Developing new services on the energy markets based on new technologies;
- Developing, modernizing and enhancing UNEG energy efficiency;
- Creating a production base for UNEG modernization;
- Upgrading business processes and implementing new management methods;
- Establishing an effective innovation management system that enables the integration of all key participants in the innovation process, as well as providing projects with necessary resources within the program.

#### Smart Grid Operation Scheme



The smart grid is understood to be a qualitatively new grid state, constructed on the basis of new principles and technologies in electricity transmission and transformation, which allows for:

- Integrating all forms of generation and all consumer types for the situational management of demand for their services and for actively participating in grid operation;
- Changing grid parameters and topology in real-time for current operations, preventing the emergence and development of failures;
- Expanding market opportunities through the mutual rendering of a wide range of services by market entities and infrastructure;
- Minimizing losses, enhancing self-diagnosis and self-correcting systems under conditions of reliability and power quality;
- Integrating the electric grid and information infrastructure to create an all-mode control system with full information support.

As part of the Program, the Company implements work related to modernizing and developing the UNEG, forming conceptual, technological and industrial bases and conditions for constructing a smart grid based on an active-adaptive grid and improving the Company's business processes and organizational mechanisms to provide for innovative development tasks. From the standpoint of achieving these objectives, the following main areas of Federal Grid Company's innovative activities under the Program during the reporting year have been singled out:

1. Developing a Smart Grid Concept based on an active-adaptive grid;
2. Developing and testing new technologies;
3. Commercializing new technologies;
4. Developing and implementing new Federal Grid Company services in energy markets;
5. Implementing integrated pilot projects to create the active-adaptive grid;

Now, we may follow two paths toward modernization. The first path is to use equipment which is being used now, and current technologies which we used in recent years. But, there is a second way – to implement new technological solutions which have not been used in our electric grids before, and which may lead to a better effect. Our Company selected the second path – the way of innovative development.



Roman Berdnikov,  
Deputy Chairman of the Management Board

6. Developing, modernizing and enhancing UNEG energy efficiency;
7. Creating a production base for UNEG modernization;
8. Upgrading business processes and implementing new management methods;
9. Developing a system for Federal Grid Company innovative activities;
10. Developing the Program's management mechanism.

During the reporting year, these areas of Federal Grid Company's innovative activities yielded specific significant results, which had been planned in the 2011 Program, and involved significant practical effects, both in the short- and long-term.

The Program implies the fulfillment of target efficiency indicators for the Company's innovative development in the period till 2020.

#### The Program's key performance indicators that characterize innovative activity achievements during the reporting year:

INDICATOR GROUP	KEY PERFORMANCE INDICATOR	INDICATOR UNIT	INDICATOR VALUE	
			TARGET INDICATOR VALUE FOR 2011	2011 INDICATOR VALUE
Energy saving and energy efficiency	The share of under-supplied energy in the total volume of energy output from the UNEG	%	4.8	4.65
Improving the usability of services rendered	Number of patents on the balance sheet by year end, resulting from R&D activities	%	0.0028	0.0004
Efficiency of innovations	Number of patents on the balance sheet by year end, resulting from R&D activities	units	27	35

## Research and Development (R&D) Activities

An important trend in the Company's Innovative Development Program was developing, testing and implementing breakthrough innovative technologies at UNEG facilities, including: energy accumulation, digital sub-station, high temperature super conductivity and the transmission of energy using direct current.

The R&D program has been designed to fulfill orders of the Russian President (Minutes № Pr-22 from 4 January 2010) to ensure sustainable long-term funding for the development of new technologies, equipment and instruments within Federal Grid Company's Investment Program and is aimed at creating a smart grid and ensuring the sustainable innovative development of the Unified National Electric Grid (UNEG).

The purpose of the R&D program is to conduct a package of research, development and technological work aimed at upgrading the reliability, quality and efficiency of power supply through the modernization of UES of Russia's electric grids transforming them into the smart (active-adaptive) core of electric power industry technological infrastructure.

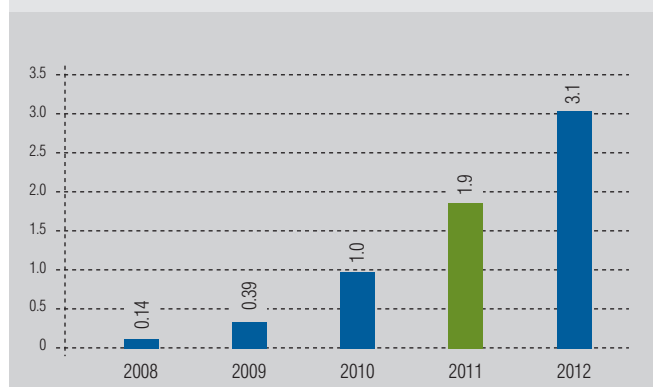
Creating a smart grid with an active-adaptive grid (SG AAG), a new technological level of domestic energy development, with a dynamic positive multiplier effect for Russian industrial development and activities is the target result of R&D activities.

Creating a SG AAG within the framework of the R&D program involves developing and introducing new technical resource control principles, network unit control systems and electric grid control systems in stationary and post-emergency modes and reliable and durable electrical equipment and automation systems, based on new scientific developments, technologies and UES operation principles.

The main R&D priorities within the frameworks of the Company's Innovative Development Program include the following:

- Developing the concept and theoretical foundations for the smart grid system;

### R&D financing, RUR billion



The Federal Grid Company favors the Smart Energy development model, as this model will empower us to meet today's challenges – exclusive standards for reliability and energy quality, the development of distributed energy and consumer demand management practices.



Roman Berdnikov,  
Deputy Chairman of the Management Board

- Developing new types of power equipment for sub-stations and electric energy transmission lines for the smart grid system;
- Developing new types of control equipment, automation, protection and measurement systems for the smart grid system;
- Developing a control system for the smart grid system;
- Developing a system for monitoring and protecting the grid from external impacts;
- Providing for the reliable and safe operation of the UNEG and maintaining high quality power transmission services;
- Improving the energy efficiency of the electric grids.

To implement the R&D program, the Company concluded 57 agreements and considered 215 finished R&D stages in 2011 implemented by 29 organizations. Among these companies were:

- eight academic and industrial research institutes (Research and Development Center Federal Grid Company UES, United Institute for High Temperatures at the Russian Academy of Sciences, All-Russian Electronic Technical Institute, ENIN etc.);
- two higher education establishments (the Moscow Power Engineering Institute (MPEI), and the Kazan State Power Engineering University (KSPEU);
- seven design organizations (Institute Energosetproyekt, the Non-profit Partnership Engineering and Innovation Center, Company ORGRES, STRI AB, etc.);
- 12 production and research organizations (Electrozavod, The Korolev Rocket and Space Corporation Energia, Streamer Scientific and Production Union, etc.).

To improve the efficiency of the system controlling the Company's innovative activities and to implement R&D results, the Company established a Scientific and Technical Council (STC). The STC established in conjunction with the Russian Academy of Sciences (RAS) is chaired by Vladimir Fortov, Academician-Secretary of the Department of Energy, Machine Tools, Mechanics and Control Processes of the RAS, the Director of the Joint High Temperatures Institute of the RAS. Responsibilities of the STC include the coordination of innovative, technical and operational policy pertaining to UNEG modernization, the preparation of suggestions on actualizing the main priorities of the R&D program and recommendations on implementing inno-



vative technologies, materials and equipment at UNEG facilities. The STC also contributes to formulating concepts of the Company's policy on innovations and technologies and assesses the efficiency of fundamental scientific research on issues related to corporate operations. Other STC responsibilities include preparing suggestions on the use of international advanced technologies and best practices in resolving production problems and on variants for improving resources used for the Company's innovative activities.

In general, the Innovative Development Program will upgrade Russian energy potential efficiency, ensuring the full integration of UES of Russia into the global energy market, promoting the development of new innovative technologies, ensuring the development of the country's industry, reducing the share of imported equipment and creating conditions for obtaining the greatest benefit to the Russian economy, as well as positive technological and socio-economic results.

## Technological Effects

PROGRAM AREAS	EFFECTS
1. Technologies to improve UES of Russia system reliability	Increased lightning-proof for overhead power lines (reduced accidents 25-30%); Increased explosion safety for electrical equipment (prevention of fires and accidents like in the Chagino sub-station in 2005, the AT explosion followed by a breakdown of a 220/110 kV gas-insulated complete switchgear in 2008); Short circuit current limitation in metropolitan areas (cost savings in the installation of additional equipment at sub-stations 1.5-2 times); Increased grid throughput while reducing weight and size properties (HTS technology, new types of overhead wires).
2. Technologies to create a smart grid (increased grid flexibility and manageability):	Development of electrical equipment with controlled electrical characteristics (FACTS, STATCOM, CSR, etc.); Technology development for self-restoring electrical equipment and grid infrastructure; Development of power electronics-based electrical equipment (including for converting and controlling electricity transmission); Using energy storage systems (generation and consumption optimization, saving up to RUR15 billion per annum).
3. Reduced electrical grid operating costs	Increased grid automation (preventive management, changes in grid performance and topology in the automatic mode); Reduced installation and repair time for electrical grid components (digital sub-stations, a 30% reduction).
4. Reduced value of modern, reliable and highly efficient equipment	Reduced equipment cost (including a 2-3% per annum decline in equipment prices for equipment based on semiconductor power electronics).

## Comprehensive Social and Economic Effects

PROGRAM AREAS	EFFECTS
1. Ecology	More than 3.5 GW capacity delivered by power plants generating renewable energy-based electricity (including HPPs); A 2.5 million ton decline in CO <sub>2</sub> emissions by reducing energy losses; Over 2,000 hectares of land released in metropolitan areas from the grid infrastructure
2. Efficiency	Relative energy losses reduced in backbone grids from 4.8% to 3.6%;
3. Reliability	New services introduced for consumers (three-four comprehensive services to consumers within the next five years); Reduced electric energy under-supply to consumers.
4. Systemic effect for UES of Russia	Reduced indoor feeding Centers from 251 to 43 units; Smoothing the load through the use of high-capacity electric power storage systems; Decline in the growth of grid and generating equipment (saving an increase in the installed capacity of power plants 3-5% by reducing the required power reserve since 2014).
5. Socio-economic	Development of new areas, electrification of the country's remote areas (deposits and transportation systems of Siberia and the Far East); Increased tax revenues to the country's budget by launching new production; About 11,000 new jobs created; Development of the country's industry and related industries ensuring the development and introduction of new technical devices with qualitatively new characteristics, the establishment of a domestic industrial base; Development and opening of new actual areas of research and development (including breakthrough ones), basic research and research projects.

Work performed by the Company during the reporting year in line with innovative activities' priorities includes the following:

1. A SES AAG concept (a strategic document, the long-term targeted vision of Russia's power system) has been developed in cooperation with leading universities and research centers in Russia. The document has been approved by the joint Scientific and Technical Council of Federal Grid Company and the Russian Academy of Sciences;
2. Advanced technologies that are crucial for UNEG modernization and the transition to the SES AAG have been created and are now being tested. These include:
  - the second stage of the Digital Sub-Station testing ground and the synchronized vector measurement device as the basis for multi-agent control system technology which have been manufactured and implemented at JSC Research and Development Center of Federal Grid Company;
  - model samples for the experimental sample of the short circuit current and transient recovery voltage limiting system in 110-220 kV networks based on vacuum-controlled lightning arrestors, etc., which have been developed and tested;
3. Commercialization processes of innovative development results have been initiated and are active now. 35 patents and certificates of registration (including 5 foreign ones) on various inventions and utility models in the electricity sector have been obtained, 4 licensing agreements have been made, top-priority technologies for implementing commercialization events have been defined. In particular, Federal Grid Company has received a profit of more than RUR10 million from licensing agreements made in 2011.

As of the end of the reporting year, Federal Grid Company's intellectual property portfolio includes property rights for intellectual activities certified by 159 patents and certificates of registration.

Patenting technological and technical innovations, as well as preparing for the commercialization of Federal Grid Company's intellectual property based on licensing, has been done since 2003. The strong importance of the achieved developments is confirmed by the number of patents received from foreign intellectual property services, including the German Patent Office.

1. New services are developed and implemented, both for existing and promising markets.
2. Developing and testing the business model for the installation and operation of Grid Energy Storage System (GESS) are being developed and tested. Two GESS pilot projects are being implemented (start-up operations have been carried out and the equipment is ready for pilot production with grid testing).
3. Work on creating the energy clusters of the smart energy system in IES of the East – integrated SES AAG pilot projects is underway. The eastern Russian pilot projects will provide a reliable power supply to deposit facilities, oil and

gas infrastructure, the reservation of schemes for power provision and an increase in the throughput of electricity transit. We will be able to identify merits, demerits and the synergetic effect of using various technologies while constructing a smart energy system for subsequent replication in UES of Russia. Pilot projects of MES North-West will increase the reliability of power supply to big cities, create an effective grid infrastructure and provide a reservation of electricity transit. The implementation of these pilot projects will provide a high level of reliability of electric supply to St. Petersburg, Komi Republic and Arkhangelsk electric grids, as well as the provision of generating capacity to the electric grids of the Murmansk Region and the Republic of Karelia.

4. A joint scientific and technical council between Federal Grid Company and the Russian Academy of Sciences has been established to coordinate and serve as an expert support to the Company's innovation and technical and operational policies.
5. A new unique mechanism of Federal Grid Company's interaction with universities and research organizations has been developed to conduct breakthrough research, create advanced technologies and train personnel – innovation competence Centers. These activities are necessary to develop the Company's innovative activities, in particular, the expansion of the Russian scientific and engineering base, including: involving foreign partners and cooperating with Russian higher education institutions.
6. An approach to managing the implementation of the Program based on road maps, which meets best international practices, has been developed.
7. To increase the Company's transparency, an innovative activities' section has been created on Federal Grid Company's web site (in Russian), and proposals on increasing the degree of corporate transparency in its innovative activities have been prepared. Federal Grid Company's Innovative Development Program until 2016 with a prospect till 2020 is shown in this section in full. Also, this section covers promising R&D innovative activities.
8. In 2011, the Company actively participated in the activities of the Smart Energy System technological platform (TP SES)<sup>1</sup>, the work of which was aimed at drawing attention to problems of creating Russia's smart energy system and to organizational registration of the community of public and private companies that are interested in the intellectualization of the energy sector, as well as innovative development issues. TP SES participants initiated several scientific and industrial projects as part of scientific and technical cooperation on the Platform's operating activities. New TP SES participants have been attracted. In general, working out the TP SES organizational structure has been finalized. In 2012, it is planned to complete the organization of the TP SES working bodies' activities (committees, working

<sup>1</sup> The technological platform is a form of a public-private partnership in the innovative field. The Company and the Federal Unitary Enterprise Russian Energy Agency are initiators of creation of the Smart Energy System technological platform (TP SES).

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groups), the development of road maps to achieve the TP's objectives, as well as the development and launching of a strategic research program of the technological platform.

### Regulatory and Technical Provisions

In 2011, regulatory and technical documentation was actively supplemented and updated. Fifty-two regulatory and technical documents were approved and registered as organizational standards. Another 11 documents were prepared for approval. Fourteen documents were under development. The Regulatory and Technical Documents section and an electronic library of documents are regularly updated on the Company's corporate information web site.

### Equipment, Technology and Material Certification

Our Company regularly assesses the possibility and feasibility of using various equipment, technologies and materials from both domestic and foreign manufacturers at the Company's facilities. The certification procedure is carried out based on the verification of their manufacturing conditions, compliance with standards and sector-specific and corporate regulatory and technical documentation, taking into account operating experience from similar equipment.

In 2011, we reviewed 650 applications for certification and the extension of the certification committee's opinions which had expired. As a result, the Company issued and recommended for use 228 positive opinions. A negative expert opinion was issued for 75 types of equipment.

## 3.2

# FINANCIAL PERFORMANCE OVERVIEW

The budget structure consisting of the hierarchical budget system is the Federal Grid Company's main financial management tool.

In order to establish its financial management system in compliance with today's corporate governance practice, Federal Grid Company made the following efforts:

- To introduce the process management model, the Company reviewed and regulated its business processes and identified Business Planning and Budgeting;
- Established the financial structure based on identified financial responsibility Centers;
- Created the cash flow control system;
- Developed and introduced the management accounting system;
- Introduced the system of budget management which involves responsibilities of the Company's management bodies and branches to prepare and review draft budgets, approve and execute budgets, control their execution, carry out budget accounting and prepare, audit, review and approve budget accounting.

The business performance analysis system is based on comparing planned figures and actual performance.

Cash flow management is based on centralized cash flow generation from the operational business, financial and investment activities and the further allocation of funds to finance operational and investment activities. Operational business activities are financed by distributing funds across the Company's branches.

In 2011, the Company's financial management bodies focused on maintaining reasonable financial stability within the limits of its debt position.

The Company's financial policy was focused on cost optimization programs to reduce operational costs per conventional unit of equipment without the impairment of performance and reliable grid maintenance.

### 3.2.1 FINANCIAL PERFORMANCE

Federal Grid Company demonstrated the following 2011 year-end financial results:

INDICATOR, RUR MILLION	2009	2010	2011
Revenue	85,078	111,085	138,137
Production cost	64,080	75,680	84,174
Sales profit (loss)	15,870	28,584	45,236
Other income	113,770	144,907	171,434
Other expenses	183,688	111,763	209,463
Profit (loss) before taxes	-54,049	67,312	11,444
Deferred tax assets	-180	-33	46
Deferred tax liabilities	-722	-1,181	-5,545
Current profit tax	-4,876	-9,264	-8,390
Mandatory charges	-39	249	-25
Net profit (loss)	-59,866	57,082	-2,468
Adjusted net profit (loss)	9,427	25,812	33,687

Indicators for the reviewed period (2009-2011) show sustainable growth in revenues of Federal Grid Company. In 2011, sales revenues from Company's main business increased RUR27,052 million or 24.4% y-o-y. Main growth drivers include:

- revenue growth from energy transmission services by RUR25,365 million or 23.2% due to rise of production facilities in connection with UNEG expansion and increased tariffs for 2011 against 2010.
- revenue growth from the technical connection of consumers to the UNEG by RUR1,483 million or 2.3 times from 2010 due to the expanded scope of services provided to newly connected consumers.

In 2011, the cost of Company services (without administrative expenses) increased RUR8,494 million (11.2%) year-on-year

due to the increased scope of serviced equipment on the back of commissioned new facilities and depreciation charges resulting from the revaluation of fixed assets.

The cost of production growth rate (11.2%) is well below the revenue growth rate (24.4%).

The 2011 financial and business results of the Company recorded losses of RUR2,468 million (a RUR57,082 million net profit recorded in 2010). 2011 losses resulted from:

- A negative difference from the revaluation of financial investments in market-quoted shares;
- A negative difference from the revaluation of fixed assets; and
- Recording accrual and the reversal of a bad debt provision.

Adjusted net profit (profit excluding losses from asset revaluation and accrual and the reversal of bad debt provision and securities impairment provision) is RUR33,687 million, a RUR7,875 million increase (30.5%) from 2010. In 2011, important drivers of adjusted net profit growth were:

- A 23% increase in additional revenue received by the Company from energy transmission services and an increase in technical consumer connections and, thus, an additional profit of RUR1.5 billion compared with 2010 (a 2.5 times growth);
- Implementing the cost management program which led to operational cost cutting by RUR2 billion (at 2010 prices), a two time excess over planned figures;
- In 2011, purchased energy cost decreased RUR2 billion compared with 2010 and the share of purchased energy costs fell to 13% from 17%. The financial result of loss reduction was RUR1.6 billion, a RUR1.3 billion increase compared with the 2010 level.

In the context of the April 2011 tariff change and the unstable international financial markets, the Federal Grid Company performance in 2011 may be viewed as positive.

The dynamics of the above balance sheet indicators show a clear growth trend. During 2009-2011, the Company's total assets and liabilities saw a material growth on the back of non-current assets and long-term liabilities increases and a simultaneous reduction in the short-term share.

In 2011, the main factors affecting non-current assets:

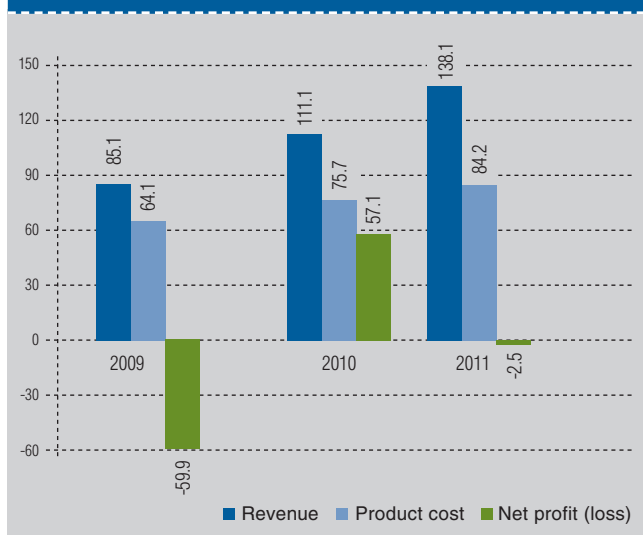
- Increased in fixed assets and construction in progress due to Federal Grid Company's investment program and the revaluation of the fixed assets value; and
- Decline in long-term financial investments resulting from INTER RAO UES shares being revalued at market value as of year-end.

We view 2011 Federal Grid Company performance as positive. The Company has maintained stable financial positions and ensured 100% financing of its 2011 investment program. A transparent investment planning system under RAB regulation resulted in positive growth performance of the Unified National Energy Grid.



Andrey Kazachenkov,  
First Deputy Chairman of the Management Board

Dynamics of revenue, expenses and net profit in 2009-2011, RUR million



### Key assets, equity and liabilities indicators according to the financial statement for Federal Grid Company's 2011 performance

INDICATOR, RUR MILLION	AS OF 31 DECEMBER 2009	AS OF 31 DECEMBER 2010	AS OF 31 DECEMBER 2011
Total assets	746,667	902,110	1,037,493
Non-current assets value	588,425	767,152	919,501
Current assets value	158,242	134,958	117,992
Total liabilities	746,667	902,110	1,037,493
Shareholder equity	665,436	794,192	853,526
Long-term liabilities	7,440	52,668	138,166
Short-term liabilities	73,791	55,250	45,801



The following circumstances affected the change in current assets:

- Reduction in short-term financial investments due to the redemption of promissory notes and the allocation of funds to finance the Company's investment program;
- Reduction in short-term accounts receivable due to the accrual of provisions for doubtful debt resulting from the revaluation of INTER RAO UES shares recorded on the balance of Energy Industry Index – FGC UES, increased advance payments for repairs and consumer debt on the UNEG energy transmission agreements;
- Inventory increase from more raw materials required to maintain and repair fixed assets and an increased emergency reserve; and
- Increased cash on the Company's current accounts.

The Company's capital growth in 2011 is associated with an increase in share capital due to the RUR11,193 million additional share issue offered in 2010, which was registered in March 2011; increases in the additional capital on the back of fixed assets revaluation and a RUR2,468 million loss on 2011 performance.

The increase in long-term liabilities in 2011 is driven by receiving borrowed funds in the amount of RUR80 billion (a RUR25 billion loan and a RUR55 billion bond placement).

Changes in short-term liabilities during the reporting year were driven by such factors as:

- Reduced accounts payable;

## 2009-2011 Company's Financial Indicators

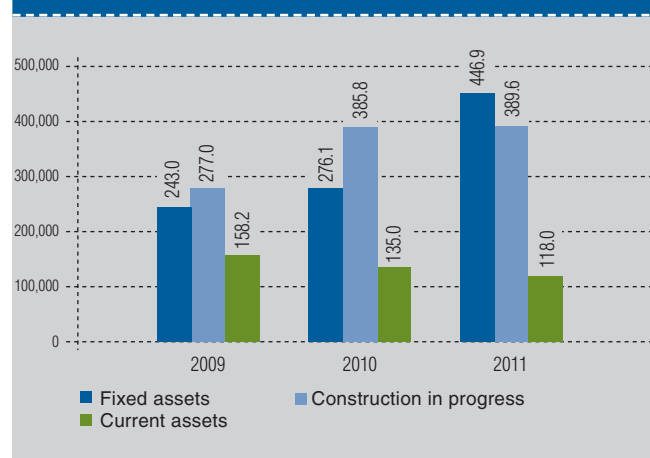
INDICATOR	DECEMBER 31, 2009	DECEMBER 31, 2010	DECEMBER 31, 2011
<b>LIQUIDITY RATIOS*</b>			
Absolute liquidity ratio	2.41	1.3	1.0
Short-term liquidity ratio	5.91	4.9	4.0
Current liquidity ratio	6.66	5.3	4.4
<b>CAPITAL STRUCTURE RATIOS**</b>			
Equity to total assets ratio	0.94	0.89	0.82
Debt to equity ratio	0.07	0.12	0.22
<b>PROFIT MARGIN RATIOS</b>			
EBITDA margin***, %	47.5	61.5	61.3
Profit margin***, %	11.1	23.2	24.4
Return on assets***, %	1.3	2.7	3.2
Assets turnover	0.11	0.12	0.13

\* For the purpose of calculating the above indicators, accounts payable exclude debt to shareholders on assets contributed to pay for the issued shares; and short-term accounts receivable record advance payments for non-current assets.

\*\*To calculate the above-mentioned indicators, the equity includes debt to shareholders on assets contributed to pay for the issued shares.

\*\*\* For the purpose of calculating the above-mentioned indicator, the EBITDA (net profit) amount includes no factors external to the Company's management competency.

## Dynamics of change in assets in 2009-2011, RUR billion



- Writing-off the debt of shareholders on the additional share issue;
- Increased accrued debt on taxes and levies; and
- Increased liabilities to suppliers and contractors under the investment program.

In 2011, the Company carried out a procedure to increase its share capital. Consequently, other short-term liabilities recorded in the financial statements include current debt to the shareholders on contributions to share capital, which is officially re-registered into share capital upon registration of the report on the additional share issue with the Federal Financial Market Service. The amount recorded on the 2011 financial statements was RUR2,219 million (RUR11,193 million in 2010) compared with RUR40,178 million in the 2009 financial statement.

In 2011, liquidity indicators for Federal Grid Company's 2011 performance showed the Company's ability to repay its short-term liabilities. The above-mentioned indicators show a relatively high liquidity and solvency level.

The decrease in current, quick and absolute liquidity ratios is associated with decreased short-term financial investments (the repayment of VTB Bank and Alfa-Bank promissory notes).

The equity to total assets ratio shows equity share in assets and the level of financial independence from debtors. The addressed period saw an insignificant reduction in the equity to total assets ratio driven by growth in the Company's loan portfolio (raising loans and bonded loans to finance the investment program.) Nevertheless, the ratio is good and shows the strong financial sustainability of Federal Grid Company.

On the whole, Federal Grid Company maintains a high liquidity level and good equity to total assets ratio; its equity constitutes 82% of assets.

## Key Principles on Using Available Cash

Available cash management is based on ensuring the maximum efficiency of investment and the optimal risk/returns ratio.

Returns on financial investments were generated from investing available corporate cash into Russia's top banks with the highest reliability level. The banks were selected based on assessing their financial operations and establishing the risk limit. The main investment instruments relied on the investment term and included bank deposits, current accounts balance and bank notes.

In 2011, the Company's good performance was driven by reasonable liquidity management and streamlining the investment structure in terms of returns on investment and minimizing risks.

## Net Profit Distribution

The profit of Federal Grid Company after tax (net profit) defined by financial statements is the source for reserve fund accrual and dividend payments. According to Federal Grid Company's, FY 2011 performance, the Company recorded losses of RUR2,468 million driven by the revaluation of financial investments in market-quoted shares and recording the accrual and reversal on provisions for doubtful debt.

### 2009-2011 net profit distribution, RUR million

DISTRIBUTION AREAS	PERIOD		
	2009	2010*	2011
Retained earnings (losses) for the reporting period:	-59,866	58,088	-2,468
Allocate to:			
Reserve fund	0	2,904	0
Development	0	18,578	0
Coverage for losses brought forward and remuneration to the Board of Directors	0	34,028	0
Dividends	0	2,577.7	0

\* Approved by Federal Grid Company's general meeting of shareholders.

## 3.2.2 TARIFF REGULATION

Energy transmission tariffs are subject to State regulation and are approved by the Russian Federal Tariff Service (Russian FTS).

Key regulations governing tariff rates applicable to UNEG energy transmission include:

- Federal Law No. 35-FZ on the Energy Industry (dated 26 March 2003);
- Government Decree No. 109 (dated 26 February 2004) on pricing policy applicable to electric and thermal energy within the Russian Federation applicable till 1 January 2012;
- Government Decree No. 1178 (dated 29 December 2011) on pricing policy applicable to regulated prices (tariffs) in the energy industry;

- Government Decree No. 1220 (dated 31 December 2009) on defining applicable tariff rates on long-term tariffs for the reliability and quality of goods and services provided;
- Russian FTS Decree No. 56-e/1 on the approval of methodological guidelines to calculate energy transmission tariffs via the Unified National (all-Russian) Electric Grid;
- Russian FTS Decree No. 231-e (dated 26 June 2008) on the approval of methodological guidelines for the return on invested capital method;
- Russian FTS Decree No. 347-e/4 (dated 4 December 2009) on the approval of the rate of return on invested capital to calculate tariffs on energy transmission tariffs via the Unified National (all-Russian) Electric Grid; and
- Government Decree No. 1172 (dated 27 December 2010) on the approval of wholesale energy market rules and amendments to some Government orders related to the wholesale energy market;

Before 2010, the UNEG energy transmission tariff rates for Federal Grid Company were established by the economically reasonable cost method.

Since 2010, as part of measures to upgrade the investment attractiveness of the electricity industry, Federal Grid Company has had rates for electricity transmission services over the UNEG established based on the return on invested capital (RAB regulation) method. The payment for standard process losses of electrical energy (capacity) in the UNEG is made at rates set by the Russian FTS in a differentiated manner based on the specific Russian region.

To determine the tariff for each year of the regulated accounting period, required gross proceeds are calculated by summing the values of return, return on invested capital and the value of expenditures required to carry out regulated activities. In order to avoid a sharp rise in rates as a result of RAB regulation, a smoothing mechanism is provided. This mechanism involves re-distributing required gross proceeds during the long-term regulatory period.

Russian FTS Order No. 347-e/4 dated 4 December 2009 (as amended and re-stated by Russian FTS Order No. 217-e/4 dated 1 September, 2010) establishes the basic tariff regulation parameters for 2010-2014 for Federal Grid Company:

INDICATOR*	2010	2011	2012	2013	2014**
Rate of return on capital invested as of 1 January 2010	3.9%	5.2%	6.5%	7.8%	9.1%
Rate of return on capital invested after 1 January 2010	11.0%	11.0%	11.0%	10.0%	10.0%
Invested capital return term, years	35	35	35	35	35
Initial RAB base, RUR billion	647.6				

\* 2012-2014 indicators may be changed after the regulator approves new tariffs and tariff parameters.

\*\* In compliance with the Russian Government's Decree N 1178 dated 29 December 2011 (version dated 23 March 2012) "On Price Setting in the Sphere of Regulated Prices (Tariffs) in Electric Energy Industry" (jointly with the Basics of Price Setting in the Sphere of Regulated Prices (Tariffs) in Electric Energy Industry and the Rules of State Regulating (Review, Application) of Prices (Tariffs) in Electric Energy Industry), the rate of return during the first long term period of regulating, excluding the last year, may be set on a case by case basis with regard to the capital invested until switch to RAB regulation and with regard to the capital created after switch to RAB regulation.

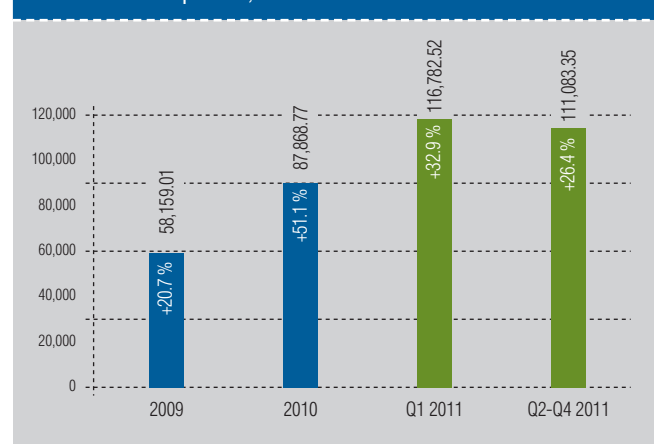
By Russian FTS Order № 552-e/2 (dated 29 December 2009) (as amended by Russian FTS Order № 325-e/1 dated 6 December 2011) for Federal Grid Company's tariffs for electric power transmission to the UNEG from 1 January 2012 to 1 July 2012 are set at 2011 tariff levels.

By Russian Government Regulation № 1178 (dated 29 December 2011), "On pricing with regard to regulated prices (tariffs) in the electric power industry," the Federal Tariff Service (FTS) is instructed:

- Until 1 April 2012, to decide on the tariff level for electric power transmission over the Unified National (all-Russian) Electric Grid (UNEG) by the management organization of the Unified National (all-Russian) Electric Grid for 2012 – 2014 from 1 July 2012;
- In conjunction with the Russian Ministry of Economic Development and the Ministry of Energy, before 1 April 2012 to prepare and submit to the Russian Government proposals on making changes to Russian Government regulations, providing a time displacement for changing (indexing) regulated prices (tariffs) in the electric power industry from 1 January to 1 July starting from 2013.

For 2010, tariffs for the North Caucasus Republics and the Stavropol Territory were set in the amount of RUR37,845.23 / MW per month; for 2011 – RUR43,783.55 / MW per month.

Federal Grid Company tariffs on energy transmission services and electric facilities maintenance for 2009-2011 period, RUR/MW/month



Tariff regulation based on long-term tariff rates with a view to the return on invested capital involves the Company's compliance with service reliability and quality performance set forth by the Russian Energy Ministry.

Order No. 296 of Russia's Ministry of Energy dated 29 June 2010 establishes methods to calculate the reliability and quality of provided goods and services for the organization operating

the Unified National (all-Russian) Electric Grid (UNEG) and territorial grid organizations.

The performance list includes indicators of energy transmission reliability characteristics for technical failures and their effects on consumers and service quality provided to consumers which, in particular, describes the technical connection capacity.

Russia's FTS Order No. 254-e/1 (26 October 2010) established the methodological guidelines for the calculation and application of multiplying (decreasing) factors for compliance with tariff rates set for organizations that are involved in regulated activity with the reliability and quality levels of provided goods and services. Subject to the above-mentioned Guidelines, the Company's revenues will be subject to multiplying or decreasing factors within the 3% limit.

The FTS decision to establish the 2011-2014 tariffs involves planned service reliability and quality indicators for the UNEG-operating organization for 2011-2014.

The FTS decision to establish 2011-2014 tariffs involves planned service reliability and quality indicators for the UNEG-operating organization for the 2011-2014 period.

In 2011, the actual reliability and quality levels of services provided by Federal Grid Company were:

- Service reliability level – 0.0346;
- Service quality level – 1.1983.

The switch of Federal Grid Company to RAB regulation ensured adequate financial potential to meet large-scale challenges in investment activities. The approved investment program will enable the Company to enhance stable energy supply to customers, as well as the generation capacity of power plants, upgrade its grid and implement a range of important government projects. Moreover, RAB regulation defines a brand new approach to cost management in terms of established operational expenses performance (2% per year for Federal Grid Company).

INDICATOR*	REGULATION PERIOD			
	2011	2012	2013	2014
Service reliability level	0.0490	0.0483	0.0475	0.0468
Service quality level	1.2599	1.2410	1.2224	1.2040

\* 2012-2014 indicators may be changed after the regulator approves new tariffs and tariff parameters.

### 3.2.3 COST OPTIMIZATION

In order to increase business efficiency, streamline volumes and structure production and administrative costs, while also undertaking anti-crisis efforts, the Federal Grid Company Management Board has approved the integrated program aimed at cost cutting in 2009-2011.

In 2011, the Company proposed the Cost Management Program.

In 2011, the nominal cumulative effect of cutting costs for the production and sales of goods (work/services) under the Cost Management Program was RUR1,996 million (which was twice as much as the planned level).

Key objectives of the Cost Management Program in 2011 were:

- Reducing energy losses in the UNEG;
- Cutting material costs;
- Optimizing the cost of repairs and third party services to maintain grids and distribution facilities;
- Reducing employee costs by implementing an efficient human resource policy; and
- Decreasing general business and other expenses.

In terms of cost cutting, the Company's focus involves:

- Cutting the per-unit purchase costs of goods, work and services by at least 10 percent per annum in real terms;
- Increasing performance by cutting operational expenses, nominal operating costs and losses within the UNEG;

No doubt, we will continue our work to manage costs with a view to the Company's scope, regional specifics and the potential of the investment program to enhance performance. We believe that the Company may pursue a lot of options to optimize its costs and unlock reserves.



Andrey Kazachenkov,  
First Deputy Chairman of the Management Board

- Introducing innovative methods for UNEG operation, repairs and maintenance; and
- Employing the relevant number of highly qualified specialists to support Federal Grid Company business operations with optimal personnel costs.

Cost cutting is the Company's main priority in coming years. The Company has developed an action plan to cut costs in 2011-2014, which will enhance business performance and reduce service costs.

The action plan's economic effect will depend on increased procurement efficiency, reduced energy consumption by sub-stations and reduced prices for maintenance and repairs carried out by external contractors, as long as the physical scope of work is sustained.

### 3.2.4 DEBT PORTFOLIO

By the end of 2011, Federal Grid Company's debt portfolio grew to RUR130 billion on the back of the public placement of bonds and raising credit from Gazprombank. At the same time, the Company has met its obligations on servicing its debt portfolio and debt repayment in full and on time.

#### The Company's debt portfolio as of 31 December 2011:

TYPE OF LOAN	AMOUNT, RUR BILLION	MATURITY
Bond issues	105	2.5-10 years
Gazprombank credit	25	3 years
<b>Total</b>	<b>130</b>	—

In addition, the Company has revolving credit facilities opened by Alfa-Bank with a RUR20 billion limit, Sberbank of Russia with a RUR75 billion limit, Gazprombank with a RUR25 billion limit, Bank Saint Petersburg with a RUR6 billion limit, ACB Russia with a RUR6.5 billion limit and a non-revolving credit facility at Raiffeisenbank for RUR10 billion. The credit facilities are valid for 5 to 15 years.

We plan to increase our debt portfolio in order to finance the 2012-2014 investment program and to refinance current debt.

The Company intends to cover cash shortages from existing and scheduled credit facilities and by offering bond issues on Russian and foreign markets. The use of specific loan instruments will depend on market conditions.

#### The Company's outstanding bond issues:

SERIES	6	7	8	9
Type of securities	Documentary interest-bearing non-convertible bonds kept on centralized deposit with a call and put options			
Registration number	4-06-65018-D	4-07-65018-D	4-08-65018-D	4-09-65018-D
	outstanding	outstanding	outstanding	outstanding
Issue, RUR million	10,000	5,000	10,000	5,000
Number, million bonds	10	10	10	10
Denominated currency	1,000 RUR	1,000 RUR	1,000 RUR	1,000 RUR
Maturity period	10 years	10 years	10 years	10 years
Interest rate	7.15%	7.50%	7.15%	7.99%
Issue State registration date	05.11.2009	05.11.2009	05.11.2009	05.11.2009
Issue report registration date	05.11.2009	05.11.2009	05.11.2009	05.11.2009
Placement date	05.10.2010	17.11.2010	05.10.2010	17.11.2010
Maturity/option date	28.09.2010	29.10.2010	28.09.2010	29.10.2010
Coupon yield per 1 bond	26.09.2013	27.10.2015	26.09.2013	24.10.2017
Stock exchange	35.65	37.4	35.65	39.84
Quotation lists	MICEX	MICEX	MICEX	MICEX
Outstanding issue of 1 January 2011, RUR million	B	B	B	B
Outstanding issue as of 31 December 2011, RUR million	10,000	5,000	10,000	5,000
Outstanding issue as of 31 December 2011, RUR million	10,000	5,000	10,000	5,000

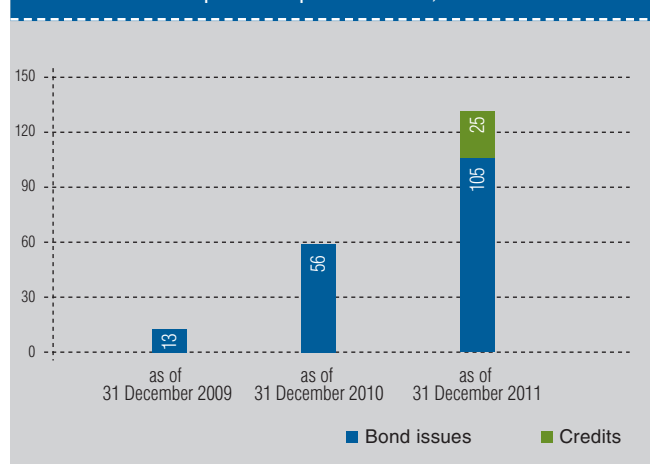
### 2011 Bond Issues

On 7 June 2011, the Federal Financial Markets Service (FFMS) registered the securities prospectus of Federal Grid Company for RUR125 billion. The decision to place bonds was made by the Board of Directors 29 April 2011. Under the above-mentioned prospectus, the Company placed Series 13, 19, 15, and 18 bonds for a total of RUR55 billion.

The bonds were placed via public subscription on the MICEX Stock Exchange to a broad-based group of investors. The funds raised were allocated to finance the investment program.

On 6 October 2011, the Company redeemed Series 4 bonds in the amount of RUR6 billion.

2009-2011 debt portfolio performance, RUR million





## Company's outstanding bond issues (continued)

SERIES	10	11	13	15	18	19
Type of securities	Documentary interest-bearing non-convertible bonds kept on centralized deposit with a call and put options					
Registration number	4-10-65018-D	4-11-65018-D	4-13-65018-D	4-15-65018-D	4-18-65018-D	4-19-65018-D
	outstanding	outstanding	outstanding	outstanding	outstanding	outstanding
Issue, RUR million	10,000	10,000	10,000	10,000	15,000	20,000
Number, million bonds	10	10				
Denominated currency	1,000 RUR	1,000 RUR	1,000 RUR	1,000 RUR	1,000 RUR	1,000 RUR
Maturity period	10 years	10 years	10 years	12 years	12 years	12 years
Interest rate	7.75%	7.99%	8.5%	8.75%	8.5%	7.95%
Issue State registration date	05.11.2009	05.11.2009	07.06.2011	07.06.2011	07.06.2011	07.06.2011
Issue report registration date	05.10.2010	17.11.2010	26.07.2011	03.11.2011	23.12.2011	26.07.2011
Placement date	28.09.2010	29.10.2010	05.07.2011	27.10.2011	12.12.2011	21.07.2011
Maturity/option date	24.09.2015	24.10.2017	22.06.2021	23.10.2014	09.06.2014	18.07.2018
Coupon yield per 1 bond	38.64	39.84	42.38	43.63	42.38	39.64
Stock exchange	MICEX	MICEX	MICEX	MICEX	MICEX	MICEX
Quotation lists	B	B	B	B	B	B
Outstanding issue of 1 January 2011, RUR million	10,000	10,000	0	0	0	0
Outstanding issue as of 31 December 2011, RUR million	10,000	10,000	10,000	10,000	15,000	20,000

## Credit Ratings

The high level of the Company's creditworthiness and its financial sustainability are confirmed by ratings assigned by top international rating agencies. The current credit ratings are in the investment category and show that the Company's key performance indicators are in compliance with the level required for the full and timely performance of financial obligations.

Credit ratings as of 31 December 2011:

RATING AGENCY	RATING	
	INTERNATIONAL SCALE	NATIONAL SCALE
Standard&Poor's	BBB/Stable	ruAAA
Moody's	Baa2/Stable	Aaa.ru

### Federal Grid Company credit ratings during the last three years:

23 September 2011 – Standard&Poor's confirmed Federal Grid Company's credit ratings: long-term international scale credit rating at BBB, outlook Stable and a national scale rating of ruAAA.

12 May 2011 – At its annual rating review, Moody's confirmed Federal Grid Company's credit ratings at Baa2 with a stable outlook, as well as its national scale rating at Aaa.ru.

18 January 2011 – Standard&Poor's confirmed Federal Grid Company's credit ratings: long-term international scale credit rating at BBB, outlook Stable and a national scale rating at ruAAA.

18 June 2010 – Standard & Poor's confirmed Federal Grid Company's credit ratings: long-term international scale credit rating at BBB, outlook Stable and national scale rating at ruAAA.

22 December 2009 – Standard & Poor's changed its rating outlook on Federal Grid Company from Negative to Stable. At the same time, it confirmed the Company's long-term international scale credit rating at BBB, outlook Stable and national scale rating at ruAAA.

14 April 2009 – Standard & Poor's confirmed Federal Grid Company's credit ratings: long-term international scale credit rating at BBB, outlook Stable and national scale rating at ruAAA with a Negative outlook.

# 3.3 CORPORATE GOVERNANCE

## 3.3.1 CORPORATE GOVERNANCE PRINCIPLES

*The corporate governance system established by the Company complies with best international practice and is based on principles set forth in the Russian Corporate Conduct Code, the Company's internal Corporate Conduct Code and Principles of Corporate Governance from the Organization for Economic Cooperation and Development (OECD).*

The Company follows corporate governance principles by making efforts aimed at profit generation, focusing its business activity on the long-term, complying with applicable legal requirements and respecting shareholders' rights, maintaining operational transparency, protecting the environment, meeting safety rules and maintaining the social security system for its employees.

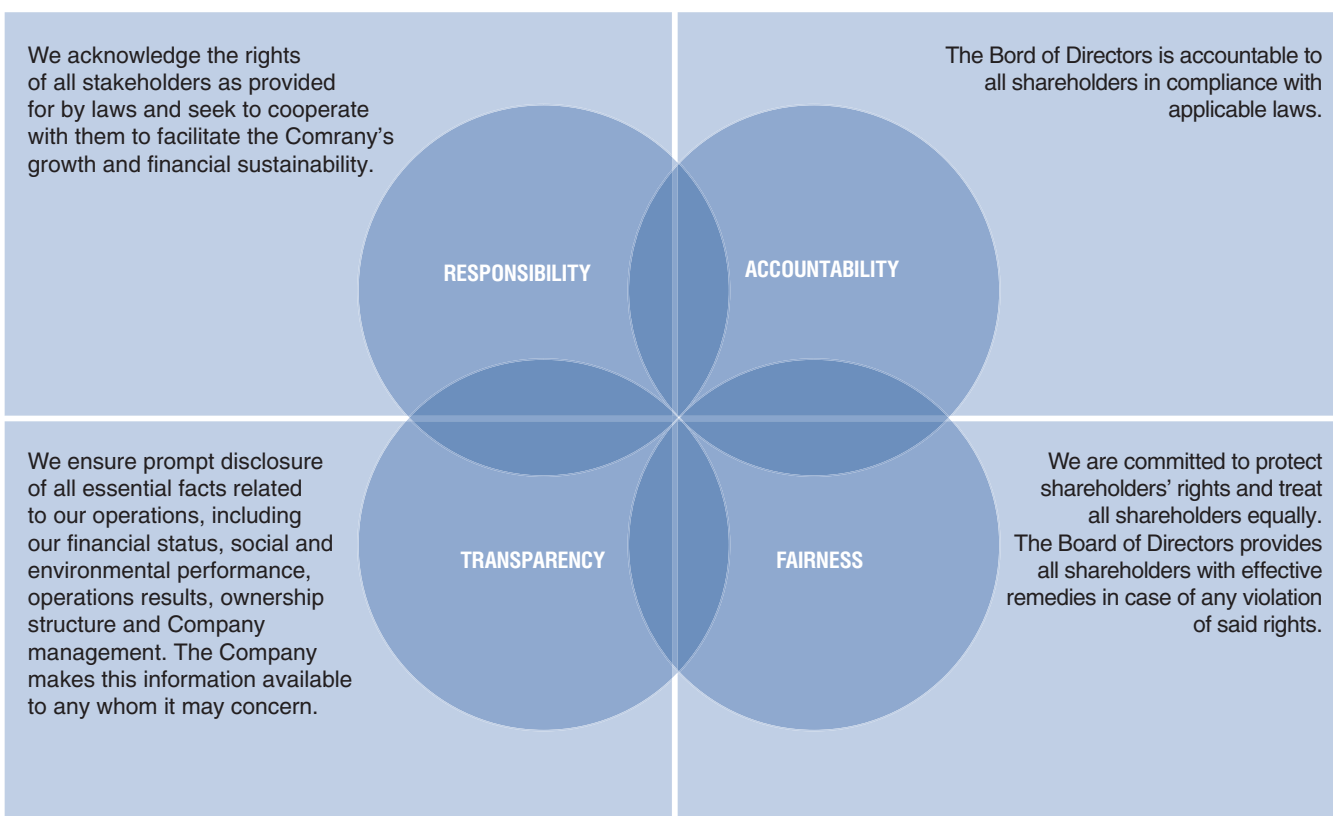
The Company has approved and applied internal documents which regulate the structure, procedures and practices of corporate governance.

The full list of internal documents is available on our corporate web site (Investors/Corporate Governance/Corporate Documents).

In 2011, we approved the Articles of Association as amended and re-stated to record changes in the Company's charter capital and made several technical amendments related to the Company's branches.

The Company's SDCs are managed in accordance with the Regulations on SDCs Management. These Regulations govern the execution by the Company of its shareholder's (member's) rights at General Meetings of Shareholders (members), the Board of Directors and Audit Commissions of the SDCs and set forth general conditions of the corporate relations between the Company and its SDCs.

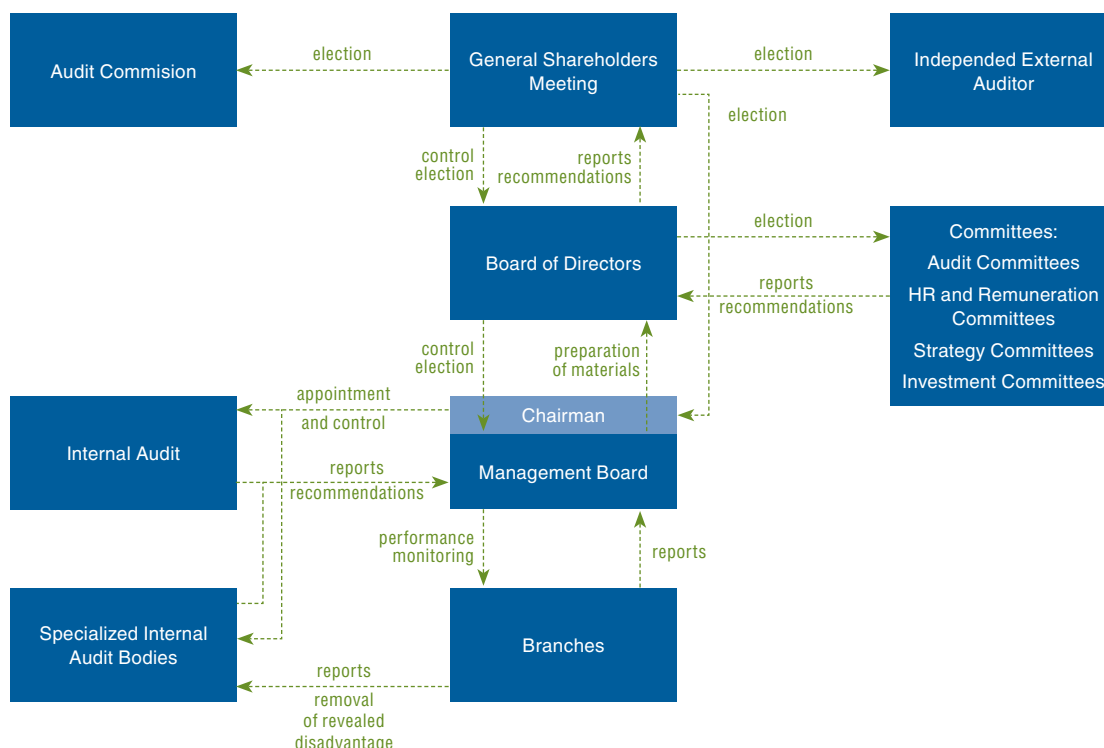
### Corporate Governance Principles



### 3.3.2 MANAGEMENT AND CONTROL BODIES

The Company's corporate management system has a well-developed structure with a seamless mechanism of relationships between management and control bodies.

#### Organizational Structure of the Company's Management Bodies



The General Meeting of Shareholders shall be the Company's highest management body. The Board of Directors outlines the general focus on corporate development and supervises operations of the Company's Management Board, which is responsible for managing the Company on a day-to-day basis. The Chairman of the Management Body is the chief executive officer (CEO) of the Company. The Board of Directors established committees which are aimed at improving the performance of the Board of Directors. The Company employs an efficient control system, both externally by shareholders (the independent auditor and the Audit Commission) and internally (special-purpose units for internal audit and control).

#### General Meeting of Shareholders

In 2011, the Company held two General Meetings of Shareholders. At the Extraordinary General Meeting on 23 March, the shareholders approved the transaction to acquire additional shares of INTER RAO UES. The Annual General Meeting of Shareholders on 29 June made a resolution on dividend payment on ordinary shares for 2010 and approved the 2010 annual report and financial statement, the Articles of Association as amended and re-

stated, as well as elected the Board of Directors and the Audit Commission and approved the Company's Auditor.

#### Board of Directors

The Board of Directors is elected by the General Meeting of Shareholders via cumulative voting for one year terms and is made up of 11 members (six of these members must represent the State in accordance with the Company's Articles of Association). The Company's Articles of Association stipulate membership of Market Council representatives, a non-profit organization incorporated as a non-profit partnership uniting power sector companies and large energy consumers on a membership basis.

Four independent directors are elected to the Board of Directors, including the Chairman of the Board of Directors, to ensure an unbiased decision-making process and balanced interests for different shareholder groups.

Operations of the Board of Directors shall be governed by the Federal Law "On Joint Stock Companies", Russian laws and internal corporate documents.

## Composition of the Board of Directors acting from 29 June 2010 to 29 June 2011

NAME	BORN	EDUCATION	POSITION
<b>Sergey Shmatko</b> , Chairman of the Board of Directors	1966	Higher	Russian Minister of Energy
<b>Boris Ayuev</b>	1957	Higher	Chairman of the Management Board, member of the Board of Directors of SO UES
<b>Oleg Budargin</b>	1960	Higher	Chairman of the Management Board and member of the Company's Board of Directors
<b>Alexey Makarov</b>	1937	Higher	Director of the Energy Research Institute of the Russian Academy of Sciences; Member of the Russian Academy of Sciences
<b>Andrey Malyshev</b> , Deputy Chairman of the Board of Directors	1958	Higher	Member of the Management Board, Deputy Chairman of the Management Board of ROSNANO
<b>Dmitry Ponomarev</b>	1967	Higher	Chairman of the Management Board of NCP Market Council; Chairman of the Management Board of ATS
<b>Rashid Sharipov</b> , independent director	1968	Higher	Deputy General Director of KFK-Consult
<b>Ernesto Ferlenghi</b> , independent director	1968	Higher	Head of the Representative Office of Eni in the Russian Federation and the CIS
<b>Georgy Kutovoy</b>	1937	Higher	Advisor on the Power Sector to the President of United Metallurgical Company
<b>Igor Khvalin</b> , independent director	1974	Higher	General Director of Volga Engineering Group
<b>Yuri Solovyev</b> , independent director	1970	Higher	First Deputy President – Chairman of the Management Board of VTB Bank

## Composition of the Board of Directors in office from 29 June 2011 (positions indicated as of the election date)

### Ernesto Ferlenghi

*Position in the Company:* Chairman of the Board of Directors Independent Director

*Born:* 1968

*Education:* Tor Vergata University of Rome, Department of Mathematics, Physics and Natural Sciences, holds a degree in physics

Member of the Company's Board of Directors since 2008.

Holds no shares in the Company.

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Eni S.p.A. (Italy)	Piazzale Enrico Mattei 1, 00144, Rome, Italy	Vice President
Eni (Russian Federation and CIS)	10 Bolshoy Levshinsky Lane, Building 1, Moscow, Russia, 1119034	Head of the Representative Office

### Igor Khvalin

*Position in the Company:* Independent Director, Chairman of the Strategy Committee and member of the Committees for Investments, Audit, HR and Remuneration.

*Born:* 1974

*Education:* Moscow Aviation Institute (State Technical University), Moscow State Pedagogical University, PhD. in history

Member of the Company's Board of Directors since 2010.

Holds no shares in the Company.

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Closed Joint Stock Company Engineering Group "Volga"	12 Gonchamaya Street, Building 6, Moscow, Russia, 109240	Chief Executive Officer, Chairman of the Board of Directors
Commission attached to the President of the Russian Federation on modernization and the technological development of the Russian economy	12, Elizavetinsky Lane, Building 1, Moscow, Russia, 105005	Member of the Working Group on Energy Efficiency
Open Joint Stock Company "Holding of the Inter-regional Distribution Grid Companies"	5A Akademika Chelomeya Street, Moscow, Russia, 117630	Member of the Board of Directors

## Boris Ayuev

*Position in the Company:* Member of the Board of Directors

*Born:* 1957

*Education:* Ural Polytechnic Institute with a degree in electric power plants, holds a PhD. in technical sciences.

Member of the Company's Board of Directors since 2004.

*Participation share in the Company's share capital:* 0.007196%

*Share of the Company's ordinary stock:* 0.007196%

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "System Operator of Unified Energy System"	7 Kitaigorodsky Passage, Building 3, Moscow, Russia, 109074	Chairman of the Management Board, Member of the Board of Directors
Open Joint Stock Company "Administrator of the Trading System of the Wholesale Electricity Market"	12 Krasnopresnenskaya Embankment, Floor 8, Moscow, Russia, 123610	Member of the Board of Directors
Joint Stock Company "Financial Settlement Centre "	12 Krasnopresnenskaya Embankment, Entrance 7, Floors 7-8, Moscow, Russia, 123610	Member of the Board of Directors
Closed Joint Stock Company "Agency for Balance Forecasting in the Electric Power Industry"	22 Andropov Avenue, Moscow, Russia, 115533	Member of the Board of Directors
Non-profit partnership "Russian National Committee of CIGRE (International Council on Large High Voltage Electric Systems)	7 Kitaigorodsky Passage, Building 3, Moscow, Russia, 109074	Chairman

## Oleg Budargin

*Position in the Company:* Chairman of the Management Board, Member of the Board of Directors

*Born:* 1960

*Education:* Norilsk Industrial Institute, cum laude degree in industrial and civil engineering

Member of the Company's Board of Directors since 2010.

*Participation share in the Company's share capital:* 0.000234%

*Share in the Company's ordinary stock:* 0.000234%

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "All-Russian Regional Development Bank"	65 Sushevsky Val, Block 1, Moscow, Russia, 1129594	Member of the Supervisory Board
Open Joint Stock Company "INTER RAO UES"	27 Bolshaya Pirogovskaya Street, Building 3, Moscow, Russia, 119435	Member of the Board of Directors

## Kirill Lyovin

*Position in the Company:* Member of the Board of Directors, Member of the Strategy and Audit Committees

*Born:* 1968

*Education:* Moscow Aviation Institute (MAI), majoring in economics and research and design management

Member of the Company's Board of Directors since 2011.

Holds no shares in the Company

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "Aeroflot – Russian Airlines"	10 Arbat Street, Moscow, Russia, 119002	Member of the Board of Directors
Open Joint Stock Company "Russian Agricultural Bank"	3 Gagarin Lane, Moscow, Russia, 119034	Member of the Management Board, Deputy Chairman of the Management Board

## Alexey Makarov

*Position in the Company:* Member of the Board of Directors, Member of the Strategy and Investment Committees

*Born:* 1937

*Education:* Leningrad Polytechnic Institute, PhD degree in economics (1970), professor (1974); an expert on power industry system research, the development of power sector policy and forecasts in the fuel and power energy sector. Member of the Russian Academy of Sciences (RAS).

Member of the Company's Board of Directors since 2008.

Holds no shares in the Company

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Russian Academy of Sciences	14 Leninsky prosp., Moscow, Russia	Fellow of the Russian Academy of Sciences for Power Engineering, Mechanical Engineering, Mechanical Sciences and Control Processes
Federal State Budget-Financed Scientific Organization "Energy Research Institute of the Russian Academy of Sciences"	31 Nagornaya Street, Building 2, Moscow, Russia, 117186	Director



## Andrey Malyshev

*Position in the Company:* Member of the Board of Directors, Chairman of the Investment Committee

*Born:* 1959

*Education:* Moscow Power Engineering University, with a degree in heat power automation as a heat power engineer. Ph.D. in sociology and technical sciences.

Member of the Company's Board of Directors since 2008.

Holds no shares in the Company.

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Closed Joint Stock Company "Prepreg-SKM"	14 Krzyzanovskiy Street, Building 3, Moscow, Russia, 14117218	Chairman of the Board of Directors
Closed Joint Stock Company "TREKPOR TEKHNOLODGI"	3G Priborostroiteley Street, Dubna, the Moscow Region, Russia, 141980	Deputy Chairman of the Board of Directors
Closed Joint Stock Company "Galileo Nanotech"	1, Zavodskaya Street, Khotkovo, the Sergiev-Posad District, the Moscow Region, Russia, 141371	Chairman of the Board of Directors
Limited Liability Company "SITRONICS-Nano"	12 Zapadny Lane, Building 1, Zelenograd, Moscow, Russia, 1124460	Chairman of the Board of Directors
Open Joint Stock Company "RusHydro"	51 Respubliki Street, Krasnoyarsk, the Krasnoyarsk Region, Russia, 660075	Member of the Board of Directors, Chairman of the Strategy Committee
Limited Liability Company "Lithium-ion Technologies"	94 Khmel'nitsky Street, Novosibirsk, the Novosibirsk Region, Russia, 94630110	Chairman of the Board of Directors
Joint Stock Company "Plakart"	50 Kommunisticheskaya Street, Novosibirsk, Russia, 6300070	Chairman of the Board of Directors
Limited Liability Company "Hematological Corporation"	34/63, Obrucheva Street, Building 2, Moscow, Russia, 117342	Chairman of the Board of Directors
Limited Liability Company "NT-Pharma"	50 Zhivopisnaya Street, Russia, 123098	Chairman of the Board of Directors
Joint Stock Company "Fiber-optic systems"	5 Svetotekhnikov Highway, Saransk, the Republic of Mordovia, Russia, 430034	Member of the Board of Directors
Fund for Infrastructure Education Programs	10 60-Letiya Oktyabrya Prospect, Moscow, Russia, 117036	Member of the Management Board
Limited Liability Company "SinBio"	55/1 Leninsky prosp, Building 2, Moscow, Russia, 119333	Chairman of the Board of Directors
Open Joint Stock Company "ROSNANO"	12A Nametkina Street, Moscow, Russia, 117420	Member of the Management Board, Deputy Chairman of the Management Board

## Dmitry Ponomarev

*Position in the Company:* Member of the Board of Directors, Member of the Strategy Committee

*Born:* 1967

*Education:* the International Law Department of the Moscow State Institute of Foreign Affairs (under the Ministry of Internal Affairs) and the Economics Department of the C.E.P. Paris Institute of Political Sciences

Member of the Company's Board of Directors since 2008.

Holds no shares in the Company.

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "Administrator of the Trading System of the Wholesale Electricity Market"	12 Krasnopresnenskaya Embankment, Entrance 7, Floor 8, Moscow, Russia, 123610	Member of the Board of Directors
Open Joint Stock Company "System Operator of Unified Energy System"	7 Kitaigorodsky Passage, Building 3, Moscow, Russia, 109074	Member of the Board of Directors
Joint Stock company "Financial Settlement Centre"	12 Krasnopresnenskaya Embankment, Entrance 7, Floors 7-8, Moscow, Russia, 123610	Member of the Board of Directors

## Yuri Solovyev

*Position in the Company:* Member of the Board of Directors (Independent Director), Member of the Investment and Strategy Committees

*Born:* 1970

*Education:* Plekhanov Russian Academy of Economics; London Business School, MBA

Member of the Company's Board of Directors since 2010.

Holds no shares in the Company.

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
VTB Bank (Open Joint Stock Company)	29 Bolshaya Morskaya Street, St. Petersburg, Russia	First Deputy President – Chairman of the Management Board

## Denis Fedorov

*Position in the Company:* Member of the Board of Directors, Chairman of the Committee for HR and Remuneration and member of the Audit Committee

*Born:* 1978

*Education:* Bauman Moscow State University, majoring in Economic Management; completed post-graduate course at the Moscow Power Engineering Institute majoring in Economics and the Industrial Energy Sector. Ph.D. in Economics.

Member of the Company's Board of Directors since 2011.

Holds no shares in the Company.

## Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "Centrenergyholding"	16 Nametkina Street, Moscow, Russia, 117997	Head of the Department for the Development of the Power Sector and Marketing in Power Engineering
Open Joint Stock Company "Tsentrenergokholding"	101 Prosp. Vernadskogo prospect, Building 3, Moscow, Russia, 119526	General Director, Member of the Board of Directors
Limited Liability Company "Gazprom energoholding"	16 Nametkina Street, Moscow, Russia, 117997	General Director
UAB "Fortis Energy" (CJSC "Fortis Energy")	Justiniškių g. 64, Vilnius, Lithuania	Member of the Management Board
Fund for the Development of Education, Science and Engineering "Nadezhda"	17 Krasnokazarmenaya Street, Moscow, United Institute for High Temperatures of the RAS, National Heat and Mass Transfer Committee of the RAS	Member of the Management Board
Open Joint Stock Company for Power Engineering and Electrification "Mosenergo"	101 Prosp. Vernadskogo, Building 3, Moscow, Russia, 119526	Member of the Board of Directors
Open Joint Stock Company "Second Generation Company of the Wholesale Electricity Market"	The Solnechnodolsk Settlement, the Izobilnensky District, the Stavropol Region, Russia, 356128	Chairman of the Board of Directors
Open Joint Stock Company "Sixth Generation Company of the Wholesale Electricity Market"	101 Prosp. Vernadskogo, Building 3, Moscow, Russia, 119526	Chairman of the Board of Directors
Open Joint Stock Company "Territorial Generation Company № 1"	1 Marsovo Pole, St. Petersburg, Russia, 1191186	Member of the Board of Directors
Joint Stock Company Kaunas Heat and Power Plant	Taykos av. 147, LT-51142, Kaunas, Lithuania	Member of the Management Board

Closed Joint Stock Company "Mezhregionenergo-stroy"	2/1 Semenovskaya Embankment, Moscow, Russia, 105094	Chairman of the Board of Directors
Joint Stock Company "Mezhregionenergo-stroy"	2 Energetikov Lane, Kaliningrad, Russia, 236034	Chairman of the Board of Directors
Open Joint Stock Company "Heat Energy Company Mosenergo"	5 Golianovskaya Street, Building 9, Moscow, Russia, 105094	Member of the Board of Directors
Open Joint Stock Company "Tyumen Retail Supplier"	3 Nizhnevartovskoye Highway, Building 7, Surgut, the Khanty-Mansiysk Autonomous Okrug-Yugra the Tyumen Region, Russia, 628406	Chairman of the Board of Directors
Non-Profit Partnership "The Council of Electric Power Producers and Strategic Investors in the Power Industry" (NPP "Energy Producer Council")	28 B Balaklavsky Boulevard, Building B, Moscow, Russia, 117452	Member of the Supervisory Board
CJSC "Kaunas Heat-Electric Generating Plant" (CJSC "Kauno termofikatsine elektrine")	147, Taykos Street, LT-3031, Kaunas, Lithuania	Member of the Management Board
Open Joint Stock Company "Holding of Inter-regional Distribution Grid Companies"	5A Akademika Chelomeya Street, Moscow, Russia, 117630	Member of the Board of Directors
Open Joint Stock Company "INTER RAO UES"	12 Krasnopresnenskaya Embankment, Entrance 7, Moscow, Russia, 123610	Member of the Board of Directors

### Rashid Sharipov

*Position in the Company:* Member of the Board of Directors (Independent Director), Chairman of the Audit Committee, member of the HR and Remuneration Committee

*Born:* 1968

*Education:* Moscow State University of Foreign Affairs, graduated in 1991, degree in international affairs and international law. California Western Scholl of Law, 1993, LL.M degree

Member of the Company's Board of Directors since 2008.

Holds no shares in the Company.

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Limited Liability Company "KFK-Consult"	3 Smolensk Square, Office 650, Moscow, Russia, 121099	Deputy General Director
Open Joint Stock Company "System Operator of Unified Energy System"	7 Kitaigorodsky Passage, Building 3, Moscow, Russia, 109074	Member of the Board of Directors
Open Joint Stock Company "All-Russian Regional Development Bank"	65 Sushevsky Val, Block 1, Moscow, Russia, 1129594	Member of the Supervisory Board
Irkutsk Joint Stock Company for Power and Electrification	3 Sukhe-Bator Street, Irkutsk, the Irkutsk Region, Russia, 3664025	Member of the Board of Directors
Open Joint Stock Company "Federal Hydro Generating Company – RusHydro"	51 Respubliki Street, Krasnoyarsk, the Krasnoyarsk Region, Russia, 660099	Member of the Board of Directors, Chairman of the Audit Committee

On 29 June 2011, Vladimir Furgalsky, Corporate Governance and Strategic Communications Director, was elected Secretary of Federal Grid Company's Board of Directors.

### Vladimir Furgalsky

*Position in the Company:* Secretary of the Board of Directors

*Year of Birth:* 1977

*Education:* St. Petersburg University of Economics and Finance, University of Arkansas, USA (degree: Master of Business Administration (MBA))

Holds the position of Corporate Governance and Strategic Communications Director, Federal Grid Company.

*Election year:* 2011

Holds no shares in the Company.

## Board of Directors Activities

In 2011, the Company's Board of Directors held 29 meetings (three of them were held in the form of joint attendance) and made resolutions on 130 issues. The Board of Directors approved long-term Company development programs, including: the Innovative Development Program, the Options Program, the Insurance Program, the 2011 and long-term Cost Management Program and Resolutions on Liability Insurance for the Company's Management Bodies and Executive Officers and Engineering Policy. The Board made decisions defining the main areas of corporate operations: localizing production within the Russian Federation with Power Machines, Hyundai Electric Systems and ELEKTRO-ZAVOD and the 2011-2013 program to reduce investment costs.

## Committees of the Board of Directors

The committees aim to upgrade the performance of the Board of Directors by addressing the most important issues falling under the competence of the Board of Directors and developing recommendations on said issues.

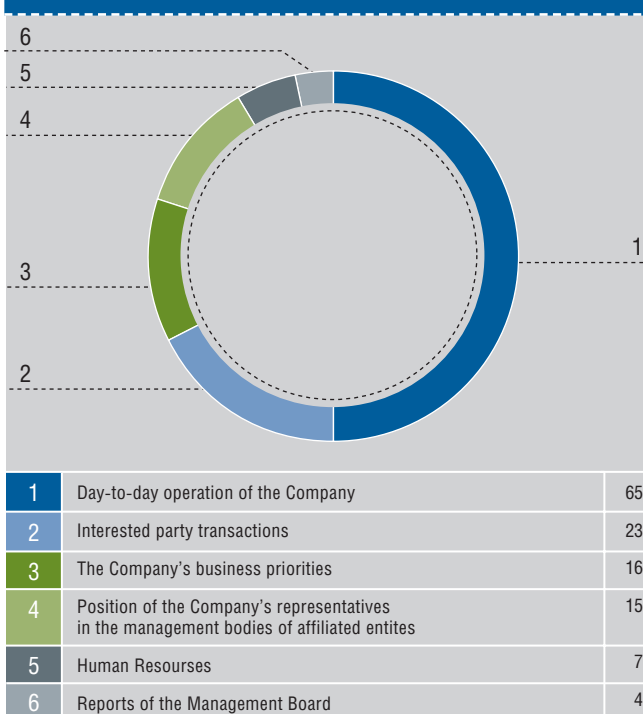
### Strategy Committee

The Committee's functions include: addressing and developing recommendations for the Board of Directors on issues related to the development of the Russian Unified Energy System.

#### Composition

- **Igor Khvalin**, Chairman of the Committee; General Director of Volga Engineering Group;
- **Roman Berdnikov**, Deputy Chairman of the Management Board of Federal Grid Company;
- **Anatoly Dyakov**, President of the Unified Energy Complex of Russia and the Non-Profit Partnership Scientific and Technical Council of UES;
- **Viktor Kudryavy**, Advisor to the President of Eurocement Group;
- **Igor Kozhukhovskiy**, Director General of APBE;
- **Natalia Zaikina**, Deputy Chairman of the Board of Directors at NCP Market Council;
- **Kirill Lyovin**, Deputy Chairman of the Management Board of Russian Agricultural Bank;
- **Yuri Lipatov**, Chairman of the Power Energy Committee of the Russian State Duma;
- **Alexey Makarov**, Director of the Energy Research Institute of the Russian Academy of Sciences;
- **Valentin Mezhevich**, First Deputy Chairman of the Commission for Natural Monopolies of the Federation Council of the Russian Federal Assembly;
- **Dmitry Ponomarev**, Chairman of the Management Board of NCP Market Council;
- **Alexander Rogov**, Head of the Energy Sector Development and Marketing Office at the Energy Sector Development and Marketing Department of JSC Gazprom;
- **Yuri Solovyev**, First Deputy President – Chairman of the Management Board of VTB Bank;

## The structure of issues addressed at 2011 Board of Directors meetings



- **Maria Tikhonova**, Director of the Economic Regulation and Property Relations Department at the Fuel and Energy Sector of the Russian Ministry of Energy;
- **Vladimir Fortov**, Member of the Presidium of the Russian Academy of Sciences;
- **Nikolay Shulginov**, First Deputy Chairman of the Management Board of SO UES.

### Committee's 2011 Activities

The Strategy Committee held four meetings, two of them in the form of the joint attendance. The meetings reviewed the Innovative Development Program until 2020 and Specifications to Develop the Company's Growth Strategy until 2025.

### Investment Committee

The Committee is responsible for reviewing and submitting to the Board of Directors recommendations on the Company's investment policy and advising the Board of Directors on any investment risks.

#### Composition

- **Andrey Malyshev**, Chairman of the Committee; Deputy Chairman of the Management Board of ROSNANO;
- **Alexander Ilyenko**, Director for UES Asset Management of SO UES;
- **Roman Berdnikov**, Deputy Chairman of the Management Board of Federal Grid Company;
- **Vladimir Mayorov**, Director General of ECMC UES;
- **Yelena Povolotskaya**, Financial Director at the NCP Market Council;
- **Alexey Makarov**, Director of the Energy Research Institute of RAS;

- **Vasily Nikonov**, Director of the Electric Power Industry Development Department at the Russian Ministry of Energy;
- **Yuri Solovyev**, First Deputy President – Chairman of the Management Board of VTB Bank;
- **Sergey Serebryannikov**, Rector of the State Educational Institution of Higher Professional Education MPEI (TU);
- **Alexander Rogov**, Head of Energy Sector Development and the Marketing Office at the Department for Energy Sector Development and Marketing at Gazprom;
- **Vladimir Fortov**, Member of the Presidium of the Russian Academy of Sciences (RAS);
- **Igor Khvalin**, Director General of Volga Engineering Group.

#### 2011 Activities

The Investment Committee held 13 meetings, two of them in the form of joint attendance. The meetings approved recommendations for the Board of Directors on the following issues:

- Implementing the 2011 Investment Program;
- Adjusting the 2011 Investment Program and the 2010-2014 Investment Program;
- Approving the methods of calculation and the assessment of the key performance indicator “cost cutting for the purchase of goods (work/services) per product in real terms by at least 10 percent annually within three years;” and
- Approving the Regulations on the Acquisition of Goods, Work and Services for Company Needs.

#### Audit Committee

The Committee is responsible for preparing recommendations to the Board of Directors on selecting an independent audit organization and improving the Company’s reporting system and internal control.

#### Composition

- **Rashid Sharipov**, Chairman of the Committee; Deputy General Director of KFK-Consult;

- **Igor Khvalin**, General Director of Volga Engineering Group;
- **Denis Fedorov**, Head of the Energy Sector Development and Marketing Office in the Department for Marketing and Gas and Liquid Hydro-carbon Processing at Gazprom;
- **Kirill Lyovin**, Deputy Chairman of the Management Board of Russian Agricultural Bank.

#### 2011 Activities

The Audit Committee held four meetings, two of them in the form of joint attendance. The meetings approved and issued a recommendation to the Board of Directors on approving the Company’s 2012 Insurance Program.

#### HR and Remuneration Committee

The HR and Remuneration Committee is responsible for preparing recommendations to the Board of Directors related to remuneration and incentive schemes for the Company’s top managers and the Audit Commission and defining candidate selection criteria for the Company’s management bodies.

#### Composition

- **Denis Fedorov**, Chairman of the Committee; Head of the Energy Sector Development and Marketing Office in the Department for Marketing and Gas and Liquid Hydro-carbon Processing at Gazprom;
- **Rashid Sharipov**, Deputy General Director of KFK-Consult;
- **Igor Khvalin**, General Director of Volga Engineering Group.

#### 2011 Activities

The HR and Remuneration Committee held four meetings, two of them in the form of joint attendance and approved recommendations to the Board of Directors on the following issues:

- Approving amendments to the Regulations on the Non-State Pension Scheme for the Company’s Top Managers; and
- Approving the report on meeting the Company’s key performance indicators (KPIs) in H1 2011.

### Board of Directors' members attendance at 2011 meetings of the Board of Directors and its Committees

BOARD OF DIRECTORS	AUDIT COMMITTEE	STRATEGY COMMITTEE	HR AND REMUNERATION COMMITTEE	INVESTMENT COMMITTEE
NAME OF BOD MEMBER	ATTENDANCE AT MEETINGS (TOTAL MEETINGS / ATTENDED)			
Boris Ayuev	29/28			
Oleg Budargin	29/29			
Georgy Kutovoy	15/15			
Kirill Lyovin	14/14	2/2		
Alexey Makarov	29/25		4/4	13/8
Andrey Malyshev	29/29			13/13
Dmitry Ponomarev	29/21		2/0	2/2
Yuri Solovyev	29/28		2/2	13/13
Denis Fedorov	14/13	2/2	2/2	
Ernesto Ferlenghi	29/29	2/2		
Igor Khvalin	29/28	4/4	2/2	13/12
Rashid Sharipov	29/25	4/4	4/2	
Sergey Shmatko	15/15			



## Management Board

Day-to-day operations of Federal Grid Company are managed by the Chairman of the Management Board and the Management Board, which are accountable to the General Shareholders Meeting and the Board of Directors.

The Management Board operations are governed by the Federal Law on Joint Stock Companies, laws of the Russian Federation and internal corporate documents.

The Chairman of the Management Board is the chief executive officer (CEO).

Information on the Management Board's 2011 operations

### Management Board members in office from 7 September 2010 to 11 August 2011

1. Oleg Budargin, Chairman
2. Dmitry Troshenkov
3. Valery Chistyakov
4. Dmitry Gurevich
5. Roman Berdnikov
6. Andrey Kazachenkov
7. Yuri Mangarov
8. Alexander Bobrov
9. Evgeny Zhuykov
10. Pavel Romanov
11. Dmitry Gvozdev

Changes in the Management Board:

- The Resolution of the Board of Directors from 11 August 2011 (Minutes No. 139 of the Board of Directors) terminated the powers

of the following Management Board members: Dmitry Troshenkov and Pavel Romanov;

- The Resolution of the Board of Directors from 11 August 2011 (Minutes No. 139 of the Board of Directors) appointed the following members of the Management Board: Andrey Cherezov (Deputy Chairman of the Management Board, Chief Engineer at the Company) and Samuil Zilberman (General Director at the Siberian Main Electric energy transmission lines, a branch of Federal Grid Company).

### Management Board members in office from 11 August to 26 December 2011

1. Oleg Budargin, Chairman;
2. Valery Chistyakov
3. Dmitry Gurevich
4. Roman Berdnikov
5. Andrey Kazachenkov
6. Yuri Mangarov
7. Alexander Bobrov
8. Evgeny Zhuykov
9. Dmitry Gvozdev
10. Andrey Cherezov
11. Samuil Zilberman

Changes in the Management Board:

- The Resolution of the Board of Directors from 26 December 2011 (Minutes No. 150 of the Board of Directors) terminated the powers of Alexander Bobrov (First Deputy Chairman of the Management Board) and Dmitry Gvozdev (Deputy Chairman of the Management Board).

## Management Board members in office from 26 December, 2011



### Oleg Budargin

Chairman of the Management Board, member of the Board of Directors.

Born 16 November 1960, Mr. Budargin graduated from the Norilsk Industrial Institute in 1982 with a cum laude degree in industrial and civil engineering. From 1984-1995, he worked at Norilskstroi PSMO (Production Construction and Assembly Association), Promstroi Trust of Norilsk Mining and Metallurgical Work (NGMK), the Capital Construction Department of NGMK and also served as the Deputy CEO of NGMK. Mr. Budargin was the Mayor of Norilsk from 2000–2002, and the Governor of the Taimyr (Dolgano-Nenets) Autonomous District from 2003–2006. In 2007, he was appointed assistant to the Plenipotentiary Representative of the Russian President in the Siberian Federal District. On 11 July 2009, the Federal Grid Company Board of Directors appointed Mr. Budargin Acting Chairman of the Management Board,

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "INTER RAO UES"	12 Krasnopresnenskaya Embankment, Floors 7-8, Moscow, Russia, 123610	Member of the Board of Directors
Open Joint Stock Company "All-Russian Regional Development Bank"	65 Sushevsky Val, Block 1, Moscow, Russia, 1129594	Member of the Supervisory Board
Non-profit Partnership "Association of Solar Energy Enterprises"	22, Krasnaya Presnya Street, Moscow, 123376	Chairman of the Supervisory Board

and on 27 October 2009, he was elected Chairman of the Federal Grid Company's Management Board by an Extraordinary General Meeting of Shareholders.

Share in the Company's ordinary stock: 0.000234 %

Participation interest in the Company's share capital: 0.000234 %



### Valery Chistyakov

First Deputy Chairman of the Management Board

Born 18 May 1955, Mr. Chistyakov graduated from the Vladimir Polytechnic Institute in 1977 with a degree in mechanical engineering, and from the Financial Academy under Russian Government in 1996 with a degree in economics. In 2003, he completed MBA in business management at the State Management University. He holds a PhD. in Economics. From 1999–2009, he held various positions in the energy

### Positions in other organizations

no positions held in other companies

sector, including Deputy CEO for Sales at Vladimirenergo, CEO at Udmurtenergo, Director of the Upper Volga Branch of IDGC Center and North Caucasus, CEO at Lenenergo and First Deputy CEO at UES Engineering Center. In September 2009, he was appointed Deputy Chairman of the Management Board of Federal Grid Company and was elected as a member of the Management Board of Federal

Grid Company in October 2009. Mr. Chistyakov has served as First Deputy Chairman of the Management Board of Federal Grid Company since November 2009.

Participation interest in the Company's share capital: 0.000232%

Share in the Company's ordinary stock: 0.000232%



### Andrey Kazachenkov

First Deputy Chairman of the Management Board

Born 24 April 1980, Mr. Kazachenkov graduated cum laude from Saint Petersburg State Engineering and Economic University with a degree in engineering plant economics and management. He also holds an MBA from the University of Wisconsin (Madison, USA) and was trained at IMD (Switzerland) and INSEAD (France) Business Schools under special economics and finance programs. He started his career in 2004 with Lenenergo as an Advisor to the Finance Director, and later was appointed Deputy Director for Finance. In 2005, Mr. Kazachenkov joined OGC-1 as Head of the Corporate Finance Department. Since October 2009, he has been the Advisor to the Chairman of Federal Grid Company's Management Board. Since November 2009, Mr. Kazachenkov

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "Construction Management and Engineering Center of Unified Energy System"	5A Akademika Chelomeya Street, Moscow, Russia, 117630	Member of the Board of Directors
Non-government Pension Fund for Power Engineering (non-profit organization)	16, Bersenevskaya Embankment, Building 16, Moscow, 119072	Member of the Fund Board

has been Deputy Chairman of Federal Grid Company's Management Board. Mr. Kazachenkov was elected a Member of the Company's Management Board in September 2010. In May 2012, he was appointed First Deputy Chairman of the Company's Management Board.

Participation interest in the Company's share capital: 0.00023%

Share in the Company's ordinary stock: 0.00023%



### Roman Berdnikov

Deputy Chairman of the Management Board, member of the Investment and Strategy Committees.

Born 14 August 1973, Mr. Berdnikov graduated from the Moscow Power Engineering Institute in 1998 with a degree in electric power plants. From 1997 to 1998, he worked as chief electrician at Mosenergo. From 1998 to 1999, he worked in the Tariffs and Technical and Economic Indicators Department of SO CDU UES of Russia. From 1999 to 2002, Mr. Berdnikov worked with RAO UES of Russia, where he was employed as specialist in the Department of SDC of the Federal National Wholesale Electric Power Market and made a career as a leading specialist in the Electric Power Market Development Department. In October 2002, he joined Federal Grid Company as the main specialist in the Strategic Planning Department. In 2003, he was appointed Deputy Head of the Strategic Planning Department; and in 2005, he took over as Head of the Service and Grid Reliability Improvement

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Joint Stock Company Interconnected Energy System "GruzRosenergo"	2 Marshal Gelovani Street, Tbilisi, Georgia, 20159	Member of the Board of Directors
Open Joint Stock Company "The G.M. Krzhizhanovskiy Energy Institute"	19 Leninsky Boulevard, Moscow, Russia, 117927	Member of the Board of Directors
Non-profit partnership "Market Council for Effective Wholesale and Retail Trade"	12 Krasnopresnenskaya Embankment, Floors 7-8, Moscow, Russia, 123610	Member of the Supervisory Board

Department, which afterwards was restructured as the Customer and Market Relations Department. In 2009, he took over the position of Development and Customer Relations Director of Federal Grid Company. Mr. Berdnikov was elected a Member of the Management Board of Federal Grid Company in October 2009. Since

February 2010, he has been Deputy Chairman of Federal Grid Company's Management Board.

Participation interest in the Company's share capital: 0.0000001968%

Share in the Company's ordinary stock: 0.0000001968%



### Dmitry Gurevich

Deputy Chairman of the Management Board

Born 22 July 1971, Mr. Gurevich graduated from the Bonch-Bruyevich Leningrad Electro-Technical Institute in 1993 with a degree in radio engineering. In 1997, he obtained an MBA from St. Petersburg International Institute of Management (IMISP) and a Master Certificate from D. Washington University in Project Management. After graduation, he joined AT&T (Lucent Technologies). In 1997, Mr. Gurevich was appointed Project Director of CJSC

### Positions in other organizations

no positions held in other companies

Lucent Technologies. In 2003, he joined Rostelecom, where he became Head of the Project Management Director and was Deputy General Director and a Member of the Management Board. In February 2008, he was appointed Telecommunications Director of Federal Grid Company; in October 2009, Mr. Gurevich was appointed Telecommunications and IT Director of

Federal Grid Company. In October 2009, Mr. Gurevich was elected a Member of the Company's Management Board.

Mr. Gurevich holds no shares in the Company.



### Evgeny Zhuykov

Deputy Chairman of the Management Board, General Director at the Company's MEG of Urals branch

Born 13 May 1961, in 1990, Mr. Zhuykov graduated from the Sverdlovsk Institute of the National Economy with a degree in economics and logistics planning, majoring in economics. He is a graduate of the Presidential Program of Executive Staff Training for National Economy Enterprises specializing in finance and lending (2000). Mr. Zhuykov holds a PhD. in Economic. For 13 years, he worked for Western Electric Grids POEIE Sverdlovenergo: from 1987 to

### Positions in other organizations

no positions held in other companies

1990, he was Head of the Procurements Department and from 1990-2000, he was the Deputy Director. From 2001-2002, he was Head of Logistics at Uralplastic (Yekaterinburg). In 2002, he was appointed Deputy General Director for Economics and Finance and acting General Director of MES of Urals. In June 2010, Mr. Zhuykov was appointed General Director of MES of Volga. Since September 2010, he has been a Member of Federal Grid Company's Management

Board. Since July 2011, he has been appointed Deputy Chairman of Federal Grid Company's Management Board. In December 2011, Mr. Zhuykov was appointed General Director of MES of Urals.

Participation interest in the Company's share capital: 0.0000001603%

Share in the Company's ordinary stock: 0.0000001603%



### Samuil Zilberman

Member of the Management Board, General Director at MES of Siberia

Born 3 May 1946, he graduated from the Krasnoyarsk Polytechnic Institute with a degree in electrical systems and grids. He holds a PhD. in Technical Sciences and is a member of the Russian Engineering Academy. From 1997 to 2002, he was employed as the General Director at a Territorial Special Unit of RAO UES of Russia – the Siberian Intra-system Electric Grids. In 2002, he was appointed General

### Positions in other organizations

no positions held in other companies

Director at MES of Siberia, a Federal Grid Company branch. In August 2011, Mr. Zilberman was elected a Member of the Management Board of Federal Grid Company.

Participation interest in the Company's share capital: 0.000294%

Share in the Company's ordinary stock: 0.000294%



### Yuri Mangarov

Deputy Chairman of the Management Board

Born 6 November 1956, Mr. Mangarov graduated from the Plekhanov Moscow Institute of National Economy with a degree in economic cybernetics. During 26 years, he worked in the mining and metals industry. He started his career as an engineer with Norilsk Mining and Metallurgical Works and became Director of Norilsk Integrated Plant. In 2003, Mr. Mangarov was appointed Deputy HR and Social Policy Director with Mining and Metallurgical Company Norilsk Nickel; and later held the offices of Deputy Director for Employment Relations and Salary and the Head of the Director Secretariat. In August 2009, he joined Federal Grid Company as Deputy Head of the Financial Control and Internal Audit

### Positions in other organizations

NAME OF ORGANIZATION	ORGANIZATION'S REGISTERED ADDRESS	POSITION
Open Joint Stock Company "Energostroysnabkomplekt UES"	49 a Michurinskiy Pr., Moscow, Russia, 119607	Member of the Board of Directors
Open Joint Stock Company "Construction Management and Engineering Center of Unified Energy System"	5A Akademika Chelomeya Street, Moscow, Russia, 117630	Member of the Board of Directors

Division. In October 2009, Mr. Mangarov was appointed Director for Control and Audit Operations. Since March 2010, he has been Deputy Chairman of Federal Grid Company's Management Board.

In September 2010, Mr. Mangarov was elected a Member of the Management Board of Federal Grid Company.

He holds no shares in the Company.



### Andrey Cherezov

Deputy Chairman of the Management Board, Chief Engineer

Mr. Cherezov, born 12 October 1967 in the Kemerovo Region, graduated from Altay State Technical University in 1993 with a degree in power supply. Here, he also completed the government training course for executive officers employed at national business entities, majoring in economics and corporate management. His 18-year career developed from a relay protection and automation service engineer to top executive positions. In 2006, he was

### Positions in other organizations

no positions held in other companies

appointed Director at the Western Siberian company for maintenance and repairs of Federal Grid Company's branch, M&R MEN of Siberia (Barnaul). From May 2007, he was employed as First Deputy General Director and Chief Engineer of MES Siberia, a Federal Grid Company branch. In 2009, he was appointed Deputy Chief Engineer at Federal Grid Company and Deputy Chairman of the Management Board.

In July 2011, he was appointed Chief Engineer of Federal Grid Company. In August 2011, he was elected a Member of the Federal Grid Company's Management Board.

He holds no shares in the Company.

## Transactions with the Company' shares concluded by members of the management bodies in 2011

- On 2 August 2011, Oleg Budargin, a member of the Board of Directors and Chairman of the Management Board, acquired 2,668,400 registered non-documentary ordinary shares in Federal Grid Company; and

- On 29 August 2011, Valery Chistyakov, First Deputy Chairman of the Management Board, acquired 2,930,000 registered non-documentary ordinary shares in Federal Grid Company.

### 3.3.3 REMUNERATION TO MANAGEMENT BODIES

#### The Board of Directors

Remuneration to members of the Board of Directors is paid in accordance with Regulations on Compensation and Remuneration to Members of Federal Grid Company's Board of Directors approved by the Annual General Meeting of Shareholders on 29 June 2010 (Minutes No. 9 dated 2 July 2010).

The amount of remuneration payable to each member of the Board of Directors for his/her involvement in the work of the Board of Directors is calculated with a view to the total number of Board of

Directors meetings held during the corporate year, the number of Board of Directors meetings attended by said member and revenue for the relevant financial year.

Remuneration is payable to members of the Board of Directors' Committees in accordance with Regulations on Compensation and Remuneration to Members of the Board of Directors' Committees approved by a resolution of the Federal Grid Company's Board of Directors dated 16 December 2010 (Minutes No. 120).

#### Remuneration paid in 2011 for the period 29 June 2010 – 29 July 2011

NAME	REMUNERATION FOR ATTENDED BOARD OF DIRECTORS MEETINGS, RUR THOUSAND	OTHER PERSONAL PAYMENTS, INSURANCE PREMIUM UNDER THE VPLI *, RUR THOUSAND	TOTAL, RUR THOUSAND
Sergey Shmatko	0	0	0
Boris Ayuev	667.58	280.42	948.00
Dmitry Ponomarev	712.09	280.42	992.51
Ernesto Ferlenghi	761.54	280.42	1,041.96
Alexey Makarov	707.14	280.42	987.56
Alexey Makarov	675.00	280.42	955.42
Andrey Malyshev	801.10	280.42	1,081.52
Yuri Solovyev	771.43	280.42	1,051.85
Igor Khvalin	801.10	280.42	1,081.52
Oleg Budargin	0	0	0
Denis Fedorov	0	0	0
Kirill Lyovin	0	0	0
Georgy Kutovoy	568.69	280.42	849.11
<b>TOTAL:</b>	<b>6,465.67</b>	<b>2,523.78</b>	<b>8,989.45</b>

\* VPLI – voluntary personal liability insurance

#### Remuneration to the Management Board

According to the Regulations on Employment Agreements and Compensation and Remuneration to Top Managers of Federal Grid Company, approved by the Board of Directors on 24 December 2009 (Minutes No. 52), monthly remuneration payable to top managers is established by their employment agreements. This remuneration is based on a fixed rate (salary) and a variable rate (bonus). The bonus amount depends on the top managers meeting key performance indicators (KPIs). The target KPIs and the methods of calculation and assessment of their performance are subject to annual approval by the Board of Directors. The remuneration structure for top managers (fixed to variable ratio) complies with established global practices.

#### Details on remuneration, benefits and cost compensation payable to members of Federal Grid Company's Management Board, including the chief executive officer (CEO), in 2011 (RUR thousand):

Salary	179,836
Bonuses	232,884
Commissions	0
Benefits	0
Other personal payments (voluntary personal liability insurance)	3,376
<b>Total</b>	<b>416,096</b>



### Details of remuneration, benefits and cost compensation payable to the chief executive officer (CEO) of Federal Grid Company in 2011 (RUR thousand):

Salary	13,134
Bonuses	29,522
Commissions	0
Benefits	0
Other personal compensations (voluntary personal liability insurance)	569
<b>Total</b>	<b>43,225</b>

Details of remuneration paid to members of the Company's Board of Directors and the Management Board are recorded in the Issuer's quarterly report for the Q1 as of the end of the reporting financial year. The Company's quarterly reports are also posted on the Federal Grid Company's official web site.

#### The connection between remuneration to members of the highest governing body, top executive representatives and senior managers and the results of the Company's operations

Payments to the Company's top managers are made based on locally approved regulations and imply that key performance indicators (KPIs) for the Company's operational results have been met. The structure, calculation method and target values for KPIs for top managers of Federal Grid Company are approved by the Board of Directors. In 2011, the following KPI structure was

used (an excerpt from the Minutes No 140 of the Meetings of the Board of Directors (№ 140 dated 19 August 2011):

#### Mid-year payments:

- Relative number of restrictions on electricity transmission services, %;
- No fatal accidents or group accident, if there is an injured person in grave condition;
- Compliance with the target limit for current liquidity;
- Meeting schedules for funding and developing the investment program with progressive totals from the beginning of the year, %.

#### Annual payments:

- EBITDA, RUR million;
- Efficient implementation of the Cost Management Program (CMP), %;
- No major accidents;
- Electric energy losses in the grid used by Federal Grid Company to provide electricity transmission services, %;
- Fulfillment of schedules for commissioning power facilities and plans for financing and development, %.

The approved target KPIs for half-year and full year for the Company's top managers, in general, have been fully achieved.

## 3.3.4 INTERNAL CONTROL SYSTEM

The Company's internal control system is focused on revealing and mitigating the risk of events which may negatively affect the Company's ability to meet its objectives and cause damages; the safekeeping of assets; the efficient use of resources and compliance with Russian laws, resolutions of management bodies and internal corporate documents.

### Audit Commission

The Audit Commission is elected annually by the General Meeting of Shareholders to control the Company's financial and business activity.

The competence of the Audit Commission includes:

- Confirming the validity of information recorded in the annual report, balance sheet and the Company's profit and loss account;
- Analyzing the Company's financial status, revealing reserves to improve its financial status and developing recommendations for management bodies; and
- Carrying out inspections (audits) of the Company's financial and business activities

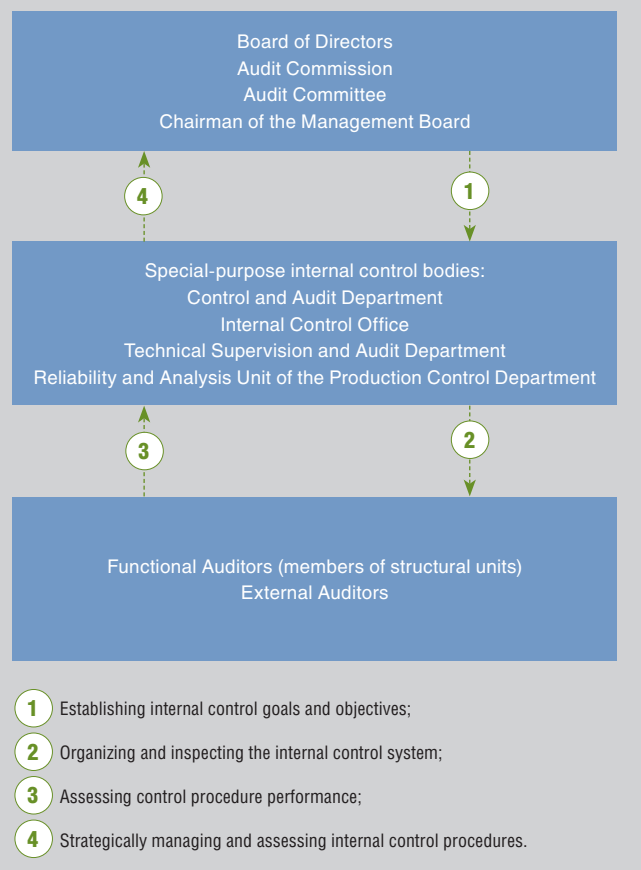
Members of the operative Audit Commission elected at Federal Grid Company's General Meeting of Shareholders held 29 June 2011:

NAME	POSITION AND FULL-TIME EMPLOYMENT*
Vladimir Raspopov	Chairman of the Audit Commission Head of the Information Resources Division at the Russian Federal Property Management Agency (Rosimuschestvo)
Alexander Ganin	Deputy Director of the Power Sector Development Department at the Russian Ministry of Energy
Andrey Kolyada	Deputy Head of the Division for Fuel and Energy and Coal Industries of the Administration for Infrastructural Sectors and Organizations of the Military-Industrial Complex of the Russian Federal Property Management Agency
Victor Lebedev	Deputy Director of the Department for State Tariff Regulation, Infrastructural Reforms and Power Efficiency at the Russian Ministry of Economic Development and Trade
Maria Tikhonova	Director of the Department for Economic Regulation and Property Relations at the Russian Ministry of Energy

\* Positions are indicated as of the moment of election.

Audit Commission members hold no shares in the Company.

## Relationships among participants of the internal control system at different levels



## Auditor

The Annual General Meeting of Shareholders held 29 June 2011, approved PricewaterhouseCoopers Audit (PwC Audit CJSC), closed joint stock company, as the Company's auditor for the purpose of carrying out a mandatory audit of the Company's financial statements. The Auditor is a member of the Russian Non-Commercial Partnership Audit Chamber and is involved in many other professional organizations, business unions and associations.

PwC is registered with the Public Company Accounting Oversight Board (PCAOB) and the relevant professional supervision bodies in the UK, Luxembourg and Ireland.

## The Company's Internal Control Units

The Company has adopted the Regulations on Internal Control System which establishes the following units:

- The Control and Audit Department responsible for controlling the financial and business operations of the Company and its affiliated entities;
- The Internal Control Department responsible for organizing and implementing internal control procedures;
- The Technical Supervision and Audit Department responsible for the technical supervision of the operative energy facilities and their maintenance and repair quality;
- The Investment Program Support Department responsible for controlling the appropriate use of funds allocated for the Company's Investment Program; and
- Reliability and Analysis Unit of the Department for the Control of Maintenance and Repairs of Equipment and Grid Facilities.

In accordance with established internal control procedures, in 2011, the internal control units of Federal Grid Company carried out inspections subject to approved annual plans to the extent of their competence.

## Remuneration to Control Units

### Remuneration to the Audit Commission

No remuneration is payable to Audit Commission members.

### Remuneration to Auditor

Remuneration (including VAT) payable to the Auditor of Federal Grid Company, both for carrying out mandatory audits of the Company's financial statements, prepared in accordance with RAS, and for auditing Group Federal Grid Company's combined and consolidated statements, prepared under IFRS is:

- For 2010 – RUR49.56 million;
- For 2011 – RUR47.79 million.

## 3.4 SHARE CAPITAL

### 3.4.1 SHARE CAPITAL STRUCTURE

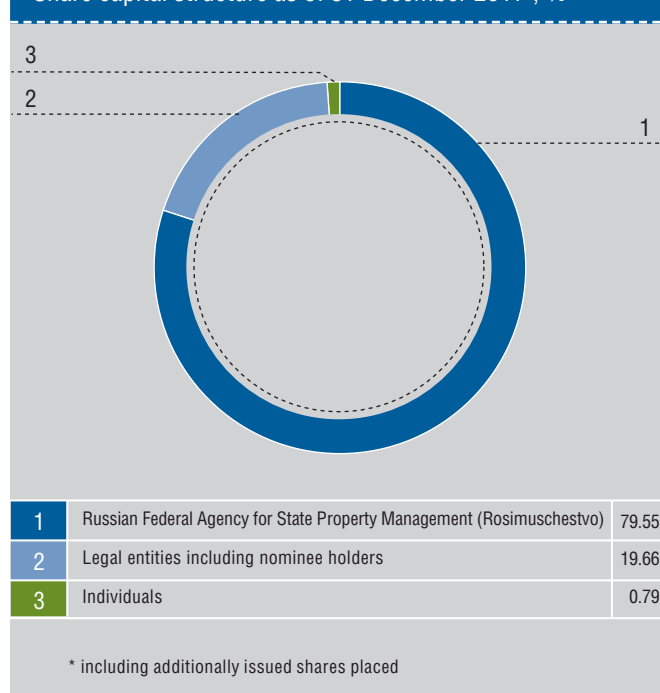
In accordance with the Articles of Association, as of 31 December, 2011, the share capital of Federal Grid Company stood at RUR627,974,064,196.5, divided into 1,255,948,128,393 ordinary registered non-documentary shares with a nominal value of RUR0.50 per share.

The number of authorized shares is 90,857,695,438 ordinary registered shares with a nominal value of RUR0.50 per share, worth a total of RUR45,428,847,719 at their nominal value. Authorized ordinary shares have the same rights as issued ordinary shares.

No preferred shares were placed.

On 3 February 2012, placement of an additional issue of ordinary shares at a price of RUR0.50 per share was completed. In total, during the additional issue 4,438,530,347 shares were placed, which represents 43% of the total number of securities of the additional issue to be placed. As a result of the placement, the Company received funds amounting to RUR2.219 billion.

Share capital structure as of 31 December 2011\*, %



#### Share Capital History

STATE REGISTRATION NUMBER FOR THE ISSUE	STATE REGISTRATION DATE FOR THE ISSUE	PLACEMENT PRICE	PLACEMENT METHOD	NUMBER OF ISSUED SHARES	TOTAL NUMBER OF SHARES (FOLLOWING THE ADDITIONAL SHARE ISSUE)	REGISTRATION DATE FOR REPORTING ON ISSUE RESULTS
1-01-65018-D	10.09.2002	RUR0.5	distribution among founders	243,214,483,559	243,214,483,559	10.09.2002
1-01-65018-D-001D	21.03.2006	RUR	closed subscription placement to RAO UES of Russia	118,167,724,361	361,382,207,920	15.05.2007
1-01-65018-D-002D	23.08.2007	RUR0.59	closed subscription placement to RAO UES of Russia and the Federal Agency for State Property Management	114,965,254,235	476,347,462,155	18.04.2008
1-01-65097-D-097D	03.06.2008	–	conversion upon merger	737,588,491,911	1,153,514,196,362	12.08.2008
1-01-65098-D-098D	03.06.2008	–	conversion upon merger	34,154,626,385	1,153,514,196,362*	12.08.2008
1-01-65018-D-101D	25.12.2008	RUR0.51 for open subscription RUR0.5 for entities with pre-emptive rights	open subscription	80,047,137,190	1,233,561,333,552	26.01.2010
1-01-65018-D-102D	12.08.2010	RUR0.5 for open subscription RUR0.5 for entities with pre-emptive rights	open subscription	22,386,794,841	1,255,948,128,393	01.03.2011
1-01-65018-D-103D	08.09.2011	RUR0.5 for open subscription RUR0.5 for entities with pre-emptive rights	open subscription	4,438,530,347	1,260,386,658,740	22.03.2012

\* 94,576,384,089 shares were redeemed (annulled).

The Russian Federation, which bought shares amounting to RUR2.218 billion, was the main participant in the additional issue. The remainder of outstanding shares in the amount of RUR1.37 million was acquired by minority shareholders.

Funds received from placed shares will be used to ensure reliable operation and upgrade the efficiency of the Unified National (all-Russian) Electric Grid, as part of the Company's investment program.

On 11 April 2012, changes were recorded in the Company's Articles of Association, under which share capital is RUR630,193,329,370 (six hundred and thirty billion one hundred ninety-three million three hundred and twenty-nine thousand three hundred and seventy rubles).

## Shareholder Database Analysis

In June 2011, the Company analyzed the list of its shareholders, identifying key shareholder groups, holders of ordinary shares and depository receipts. The Company's free float stood at 20.52%.

Core free float holders are institutional investors and holding structures.

The Company's major shareholders, owning more than 1% of Federal Grid Company shares (according to the shareholder register as of 29 July 2011 – the date of compiling the list of persons having the pre-emptive right to acquire additional shares via a public offering) are:

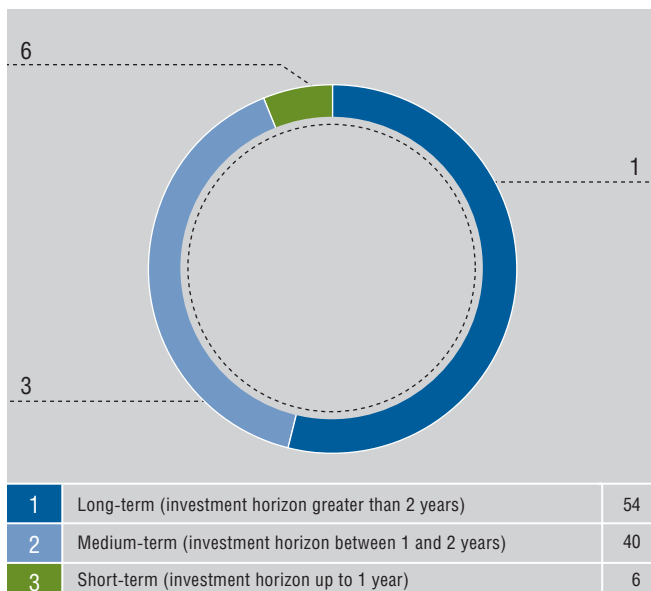
- Sberbank of Russia (1.1503%) – a professional securities market participant that conducts transactions with securities of the most reliable and investment-attractive issuers;
- Centrenergykholding (2.6628%);
- Index of Energy FGC UES (1.0929%)

Most investors view the Company's securities as growth shares, with revenue growth rates typically outperforming industry peers. Growth investors are followed by sovereign wealth funds, which in 2011 saw a distinct increase in their share compared with the previous year. Value investors, focused on undervalued corporations, account for more than 5% of the Company's free float, with index investors coming in next.

### List of registered entities that hold more than 2% of shares in individual accounts as of 31 December 2011

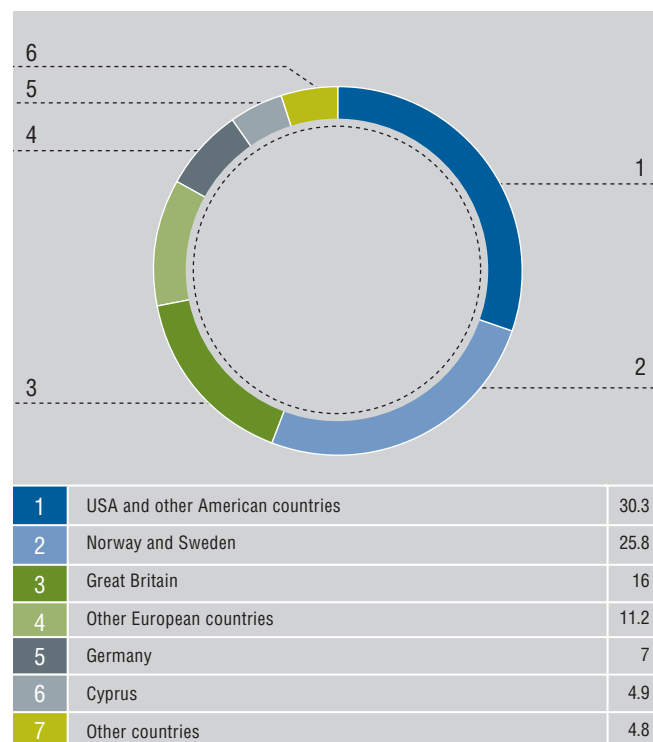
NO.	REGISTERED ENTITY TYPE	NAME	NUMBER OF SHARES	PERCENTAGE OF THE TOTAL NUMBER OF SHARES PLACED
1	Owner	The Russian Federation, represented by the Russian Federal Agency for State Property Management (Rosimuschestvo)	1,002,651,902,686	79.55
2	Nominee holder	Depository and Corporate Technologies	73,798,484,242	5.86
3	Nominee holder	Depository Clearing Company	64,061,991,484	5.08
4	Nominee holder	National Settlement Depository	53,086,348,107	4.21
5	Nominee holder	ING BANK (EURASIA) CJSC	36,276,995,535	2.89

### Institutional investor breakdown by investment style, % of free float

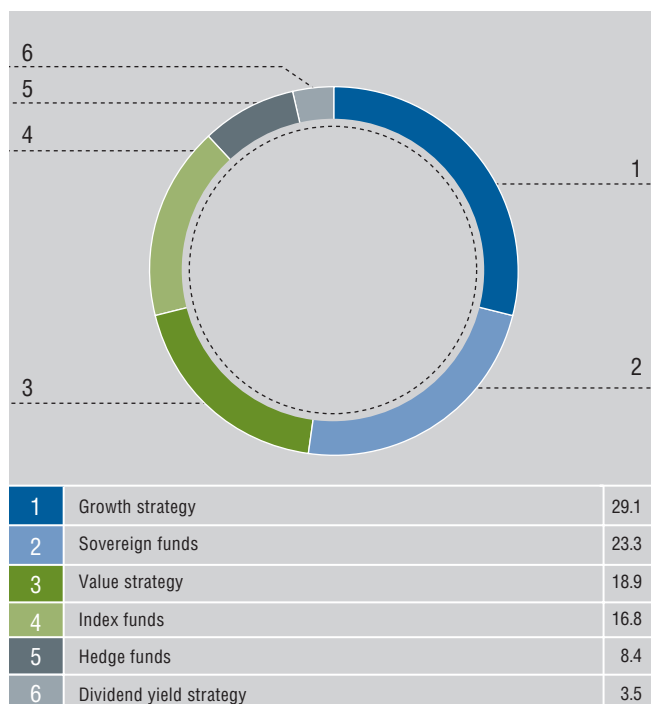


The Company's shareholders are predominantly long-term investors, with low portfolio turnover exceeding two years.

### Institutional investor breakdown by geography, % of free float



### Institutional investor breakdown by investment style, % of free float



This growth and value investment mix is typical for most electricity sector shares, largely due to their strong upside, combined with low valuations based on assets and cash flow performance.



### 3.4.2 STOCK MARKET

Federal Grid Company shares trade on the “B” quotation list of the MICEX Russian stock exchange. The fundamental appeal of the Company’s stock is underpinned by its inclusion in Russian and foreign indices.

#### Federal Grid Company’s share weighting in key stock indices, % (data as of the end of year)

INDEX	2011	2010
MSCI Russia	1.41	1.48
MSCI Emerging Markets	0.09	0.045
MICEX	1.60	1.51
MicexPWR	14.68	14.33
MicexLC	2.10	1.97
RTSI	1.56	1.66
RTSeu	20.78	18.99
Russian Traded Index (Vienna Stock Exchange)	2.35	-
The RTX Energy (Vienna Stock Exchange)	24.30	-

#### Company’s share highlights

SHARE CATEGORY	ORDINARY REGISTERED NON-DOCUMENTARY SHARES
Nominal value	RUR0.50 per share
MICEX ticker symbol	FEES
LSE ticker symbol	FEES
ISIN	RU000A0JPNN9
Bloomberg code	FEES RM

#### 2011 Share Performance

Global equity markets closed lower in 2011, with MSCI World, a developed markets index, down 7.6% and MSCI EM, which

looks at emerging economies, losing 20.4%. The key downside factors for markets were the end of the second round of quantitative easing (QE2) in the United States, the unfolding European debt crisis, the downgrade in the United States’ sovereign rating and mounting concerns over a double dip recession in the global economy.

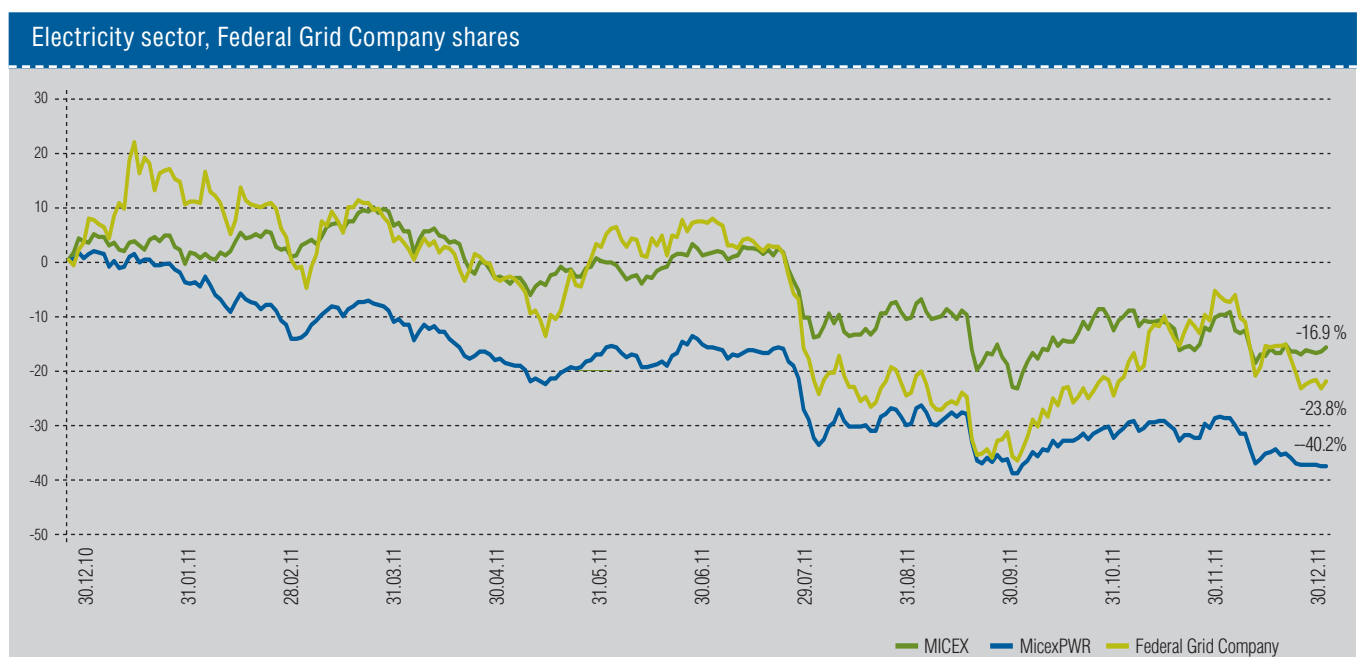
The Russian market lost 16.9% off the MICEX index, despite oil prices picking up 13.3%. Throughout the year, investors were cautious about their exposure to emerging markets in general and Russian assets in particular. The result was capital outflow from Russia, which at year end stood at nearly USD85 billion. At the end of the year, the Russian market faced pressure from growing political instability linked to State Duma elections.

Electricity sector equities were major under-performers, as all of 2011 was marked by pressure from tariff decisions by the industry regulator.

Federal Grid Company’s share price decline as of the end of the year was only 23.8%, strongly outperforming the electricity sector company index. Industry analysts, many of whom prefer Federal Grid Company over its sector peers, note that the Company’s equities will be less prone to negative fallout from regulatory decisions, as Federal Grid Company is only a minor contributor to eventual tariff growth rates.

As of 30 December 2011, Federal Grid Company’s share price on MICEX stood at RUR0.2811, which is 68% below analysts’ consensus, pointing to further upside potential for the Company’s shares.

MICEX is the main trading platform for the Company’s shares and accounts for more than 90% of market deal volume.



## Federal Grid Company Share Performance on MICEX

		2011	2010
Volume	units	476,111,513,800	307,017,566,700
	RUR	159,370,754,044	105,717,431,921
Number of deals	units	2,043,606	1,137,379

Source: MICEX web site

## Key Parameters of MICEX Share Trading

		2011	2010
Low	RUR	0.21111	0.282
High	RUR	0.481	0.389
Period end	RUR	0.2811	0.369
Number of shares	mln shares	1,255,948	1,233,561
Capitalization at year end	RUR, mln	351,163.1	452,717.01

Detailed information on trading in the Company's shares and depository receipts is available on its web site (Investors / Share Information / Interactive Stock Chart).

## Global Depository Receipt (GDR) Program

On 30 June 2008, the Company launched a Global Depository Receipt (GDR) Program, which was not listed under Regulation S and Rule 144A. The Program's depository bank is Deutsche Bank.

In 2011, the Company successfully completed a technical listing procedure on the Main Market of the London Stock Exchange (LSE), which began trading Federal Grid Company GDRs on 28 March.

As of 31 December 2011, the GDR Program had 3.7 million receipts, representing 0.1485% of the Company's share capital. The maximum number of GDRs the Company is allowed to issue is 2,511,896,256.

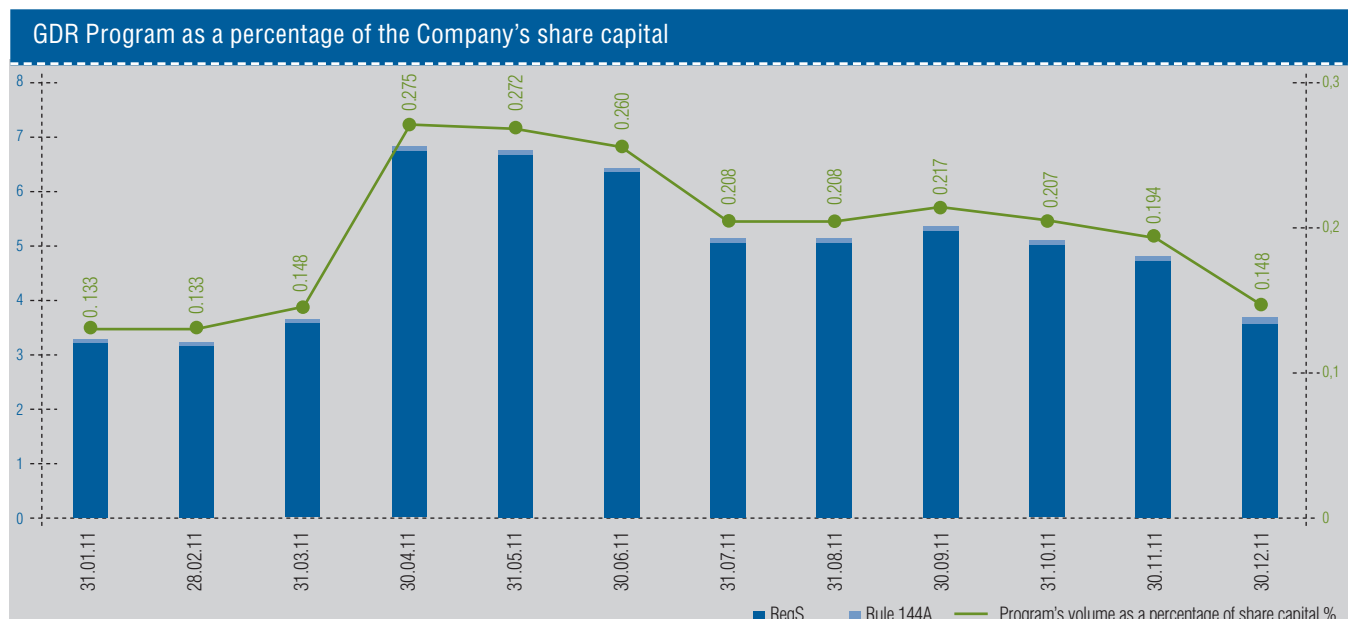
## GDR Program as a percentage of the Company's share capital

Information about trading in the Company's depository receipts is available on its web site (Investors / Share Information / GDR Program).

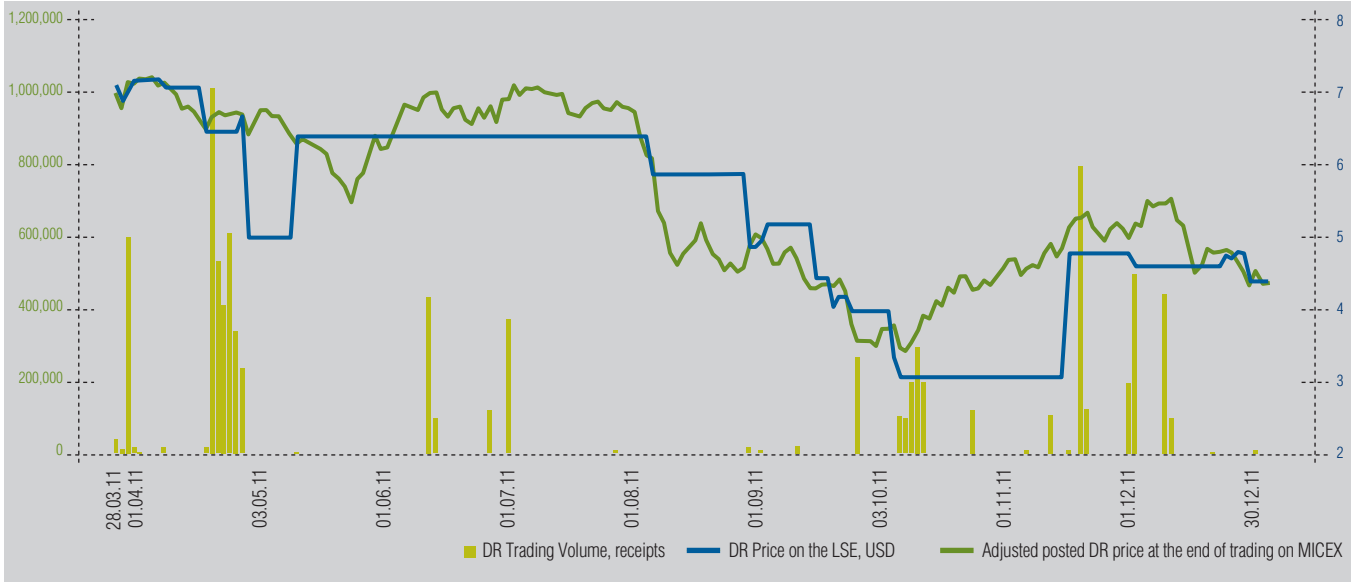
Updates about the GDR program are also available on the LSE web site at [www.londonstockexchange.com](http://www.londonstockexchange.com) under Federal Grid Company's ticker symbol FEES.

## GDR Program highlights

	REGULATION S	RULE 144A
Ratio	1 GDR: 500 shares	1 GDR: 500 shares
International code	ISIN: US3133542015 Common Code: 036273577	ISIN: US3133541025 Common Code: 036273372
Price per GDR at year end	USD 4.401	-
Number of GDRs as of 31 December 2011	3,632,686	97,296



### GDR price and trading volume, LSE



### 3.4.3 DIVIDEND POLICY

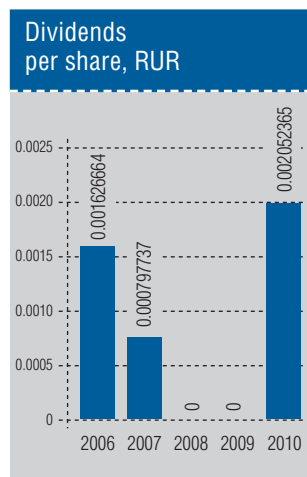
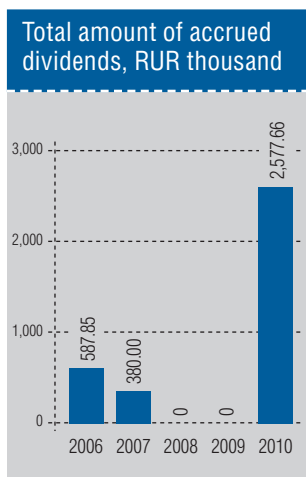
The Company’s dividend policy is determined by the Regulations on the Dividend Policy, approved by the Board of Directors on 16 December 2010. In accordance with the Regulations, the minimum payout rate is set at 10% of net profit under RAS (after compulsory deductions to the reserve fund), adjusted for the amount of profit from the revaluation of financial investments, the recovery of the bad debt provisions and non-recurring income from the sale of securities and other assets to finance the investment program.

The General Meeting of Shareholders makes decisions on paying dividends based on recommendations of the Board of Directors. The amount of dividends is determined based on financial results, balancing the interests of the Company and its shareholders.

#### 2011 Dividends

In accordance with Clause 2 of Article 42 of the Federal Law № 208-FZ “On Joint Stock Companies” (dated 26 December 1995) and Clause 7.5 of Article 7 of Federal Grid Company’s Articles of Association, the source of the dividend payment is the Company’s net profit determined based on the Company’s accounting statements.

#### The Company’s Dividend History



According to Federal Grid Company’s 2011 accounting statements, there was a loss of RUR2,468,359 thousand. The main reasons for the loss were a negative margin on the revaluation of financial investments in shares listed on the stock market and a reflection of activities on the accrual and recovery of bad debt provisions.

In 2012, the Company’s Annual General Meeting of Shareholders will make a resolution to pay 2011 dividends. Shareholders are invited to make a decision not to pay 2011 dividends on the Company’s ordinary shares.

### 3.4.4 INVESTOR RELATIONS

In 2011, the Company continued developing investor relations and enhancing information transparency to position Federal Grid Company as one of the leaders in the power sector.

The Company's key achievements in IR building:

- In 2011, the Company successfully listed its depository receipts on the Main Market of the London Stock Exchange, marking a corporate milestone for investor relations;
- In 2011, Federal Grid Company first published its 2010 financial statements under IFRS within four months after the financial year ended, meeting best disclosure practices for public companies, as well as requirements of the UK's Financial Services Authority (FSA);
- on 18 June 2011, as part of the Saint Petersburg International Economic Forum, Federal Grid Company and Morgan Stanley signed a cooperation agreement, making Morgan Stanley the Company's corporate broker;
- Together with Morgan Stanley, in 2011, the Company rolled out a set of measures aimed at upgrading its IR practices. One of the innovations was offsite investor meetings involving Federal Grid Company managers to discuss IFRS financial statements for H1 2011;
- On 24 October 2011, an event run by Bloomberg (London) hosted a round table called "Investing in Modernization and Protecting Shareholder Value," which was organized by Federal Grid Company. It involved the Chairman of the Company's Board of Directors Ernesto Ferlenghi, representatives of the leading investment banks, funds and European power sector companies, including National Grid;
- Federal Grid Company continued its efforts to broaden analyst coverage. In particular, in 2011, Federal Grid Company secured analyst coverage from Macquarie Capital, HSBC and ING;
- In 2011, Federal Grid Company started working towards improving its investment appeal to individual investors, meeting individual minority shareholders in Samara and Rostov-on-Don;
- The Company's 2010 annual report won Best Annual Report in the Electricity Sector category at the 14th annual federal contest for annual reports organized by RTS and MICEX trading exchanges. The report was also recognized by an annual federal contest for annual reports and corporate web sites run by Securities Market, an industry magazine and the Russian Ministry of Finance.

Next year, we will continue to work to improve our relationships with the Company's investment community. Priorities in this area will include: upgrading the liquidity of the Company's shares and depository receipts on MICEX and LSE and expanding analyst coverage. We will also expand the shareholder and investor base, including via specialized funds that invest in power companies and developing cooperation with individual minority shareholders. Upgrading corporate governance practices and interacting with the investment community will allow our Company to strengthen its status as a leading Russian energy sector "blue chip."





In 2011, the overall average number of employees that received corporate training stood at

42%

The number of injured employees declined

2.75 times in 2011



## 4.1

## SOCIAL RESPONSIBILITY PRINCIPLES

*Our company endorses sustainable development principles, striking the right balance between meeting its business targets and fulfilling social and environmental objectives.*

At the core of Federal Grid Company's corporate social responsibility is ensuring reliable uninterrupted electricity supply to the Unified National Electric Grid (UNEG). We are responsible for bringing electricity to consumers across the country, continuously working to upgrade the UNEG facilities, developing and introducing innovative solutions for the UNEG's improved energy efficiency and ensuring that State funds invested in the Company are used transparently and effectively.

Other crucial aspects of the Company's corporate social responsibility include:

- Responsibility toward communities – to reduce the environmental footprint;
- Responsibility toward suppliers and contractors – creating a transparent competitive environment and market-based pricing;
- Responsibility toward employees – providing favorable labor conditions and opportunities to foster professional and personal growth.

Corporate social responsibility (CSR) of Federal Grid Company is a set of commitments the Company has to its stakeholders concerning its impact on the environment, communities and the economy at large. The Company undertakes to honor these commitments voluntarily, interacting with all stakeholders and working to ensure corporate sustainable development and strategy implementation. The Company's public plans and commitments and the progress it makes are available in Federal Grid Company's Annual Social Responsibility and Corporate Sustainability reports.

### Social Responsibility and the Corporate Sustainability Reports

To improve corporate governance, boost investment appeal, enhance credibility for shareholders and adhere to best global corporate governance practices, Federal Grid Company has been publishing Social Responsibility and Corporate Sustainability reports annually since 2008.

In our social reporting, we are guided by international non-financial disclosure standards, including the GRI (G3) guidelines, the GRI Energy Protocol and the AA 1000 SES standard. We also engage in dialogues with stakeholders to discuss the key theme(s) of each report we prepare. Prior to being released, the final version of the report goes through public discussion at a set of hearings held in person or in absentia.

Federal Grid Company reports are included in the National Registry of Corporate Non-Financial Reports, created by the Russian Union of Industrialists and Entrepreneurs (RUIE). Our 2010 Social Responsibility and Corporate Sustainability Report successfully completed the public endorsement procedure at the RUIE Board. Full versions of Federal Grid Company's Social Responsibility and Corporate Sustainability Reports are available on our website at [http://www.fsk-ees.ru/about/corporate\\_social\\_responsibility/](http://www.fsk-ees.ru/about/corporate_social_responsibility/) (in Russian).

### Interaction with Stakeholders

Maintaining dialogue with key interested parties is a crucial part of our CSR efforts, helping our reporting encompass information about the Company's performance that is relevant to our stakeholders, along with the Company's views on important developments and problems.

The Company's stakeholders include:

- Government authorities, including tariff regulatory bodies;
- Government authorities in Russian regions and local governments;
- Large industrial consumers;
- The investment community, including minority shareholders and Russian and global strategic investors;
- Generation companies;
- The Company's management;
- The Company's personnel;
- Contractors and equipment producers;
- Community groups.

In 2011, we organized activities to interact with:

- Shareholders and investors (General Meetings of Shareholders; meetings between the Company's managers and investment analysts; consultative meetings with individual minority shareholders);
- Local authorities in Russian regions and energy companies (signing Cooperation Agreements to develop the UNEG and coordinate development plans);
- Personnel (events held as part of the Year of the Young Specialist, the Dynasty Program, Open Doors Day, the Summer and Winter Olympics and summer student groups);
- Suppliers and contractors (signing agreements with Hyundai Heavy Industries Ltd, Morgan Stanley, VTB Capital, Rostelecom, Profotech, Hevel and RTSof).

In 2011, the Company was among the participants in the Saint Petersburg International Economic Forum and the International

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Investment Forum Sochi 2011, signing more than ten cooperation agreements with leading global companies.

In 2011, key developments in sustainable development and corporate social sustainability included:

- Adoption of the new Corporate Ethics Code;
- Approval of Federal Grid Company's Quantitative Environmental Targets for 2013 to 2015;
- Efforts as part of strategically important projects to ensure electricity supplies to the 2014 Winter Olympics in Sochi, the 2012 APEC Summit in Vladivostok and the second stage of the East Siberian – Pacific Ocean (ESPO) pipeline construction;
- Approval of Federal Grid Company's Innovative Development Program for the period till 2016 and potentially till 2020;
- Public endorsement of Federal Grid Company's 2010 Social Responsibility and Corporate Sustainability Report by the Board of the RUIE;
- Approval of a long-term program for corporate assistance to upgrade housing conditions for Federal Grid Company employees.

## Charity

In 2011, we donated approximately RUR143 million to help numerous sports, cultural, scientific and charitable organizations, and we also allocated more than RUR5.2 million to providing assistance to individuals.

## 4.2

## HR POLICY

*Our HR policy is aimed at ensuring that the Company has highly skilled personnel at its disposal whenever needed and at creating a favorable environment for effectively developing and utilizing human resources.*

Our people are our core value. Thanks to their coordinated, conscientious and selfless – when needed – efforts, it is possible to bring uninterrupted electricity supplies to our country's regions and largest companies.



An excerpt from the Corporate Ethics Code of Federal Grid Company

One cannot implement any strategy, even the kindest one, without a close-knit professional team on hand. We have such a team consisting of thousands of our employees. It boasts skilled and experienced professionals who successfully meet targets within their scope of responsibility, working towards our shared objective of ensuring reliable electricity supplies to consumers across Russia's vast territory.



Ernesto Ferlenghi,  
Chairman of the Board of Directors

Power sector modernization targets bring about new personnel training requirements in the industry. Our HR policy is an integrated system of personnel interaction to ensure the optimal utilization of personnel potential, the improvement of the shared corporate culture and the promotion of effective employee motivation and professional development. We aim to recruit only the best trained personnel, work hard to provide professional growth opportunities to our employees, improve our system for creating a succession pool of candidates, foster corporate culture and maintain positive morale and psychological environment within the Company.

Primary principles of Federal Grid Company's HR policy:

- Effective organizational design and head count planning based on the existing staff and the Company's current and strategic plans;
- Creating and maintaining motivational schemes to improve labor interest and satisfaction;

- Improving personnel utilization efficiency, matching personnel expenses to results achieved, including employee skills improvement;
- HR management enhancement to maximize the efficiency of the Company's personnel utilization;
- Compliance with HR policy basics and HR management procedures as laid out by corporate regulatory documents for all employees regardless of their position;
- Ongoing improvement in personnel management techniques to reflect the latest HR management concepts, while observing the Company's specific features and corporate standards;
- Complying with applicable Russian laws

Key elements of the Company's HR policy:

- Upgrading the organizational and managerial structure and head count planning;
- Employee remuneration and motivation system;
- Personnel training and development;
- Development of a succession pool of candidates;
- Social assistance;
- Performance management;
- Labor relations;
- Administrative support;
- Corporate communications and corporate culture promotion.

### Head Count and Qualitative Composition of the Personnel

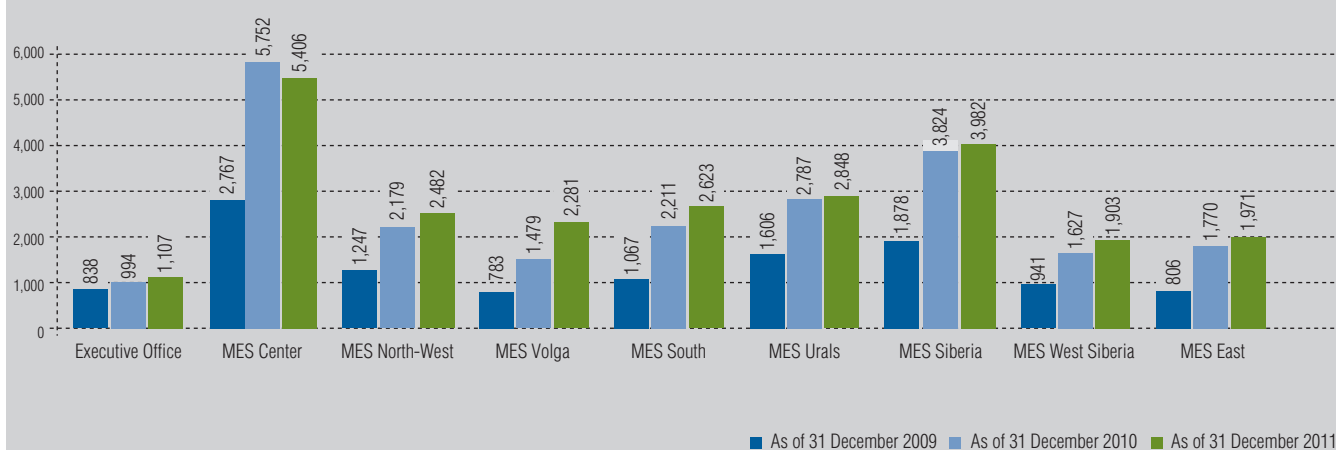
As of 31 December 2011, Federal Grid Company had a head count of 24,603.

In 2011, the reason for the 8.6% increase year-on-year in corporate personnel was the improved quality of equipment maintenance and repair, along with efforts to create new jobs in electric grid facilities commissioned under the Company's investment program. Additional jobs were also created as part of an integrated electric grid development program in the Sochi Region and to ensure the reliable performance of the Company's Olympic facilities.



Key Investment Projects, page 51

## Head count dynamics, persons



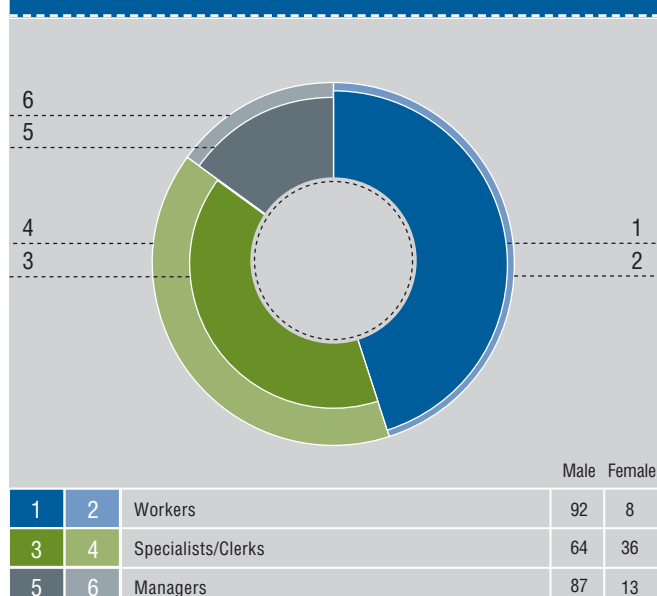
## Qualitative composition of the Company's personnel, persons

PERSONNEL CATEGORY	REPORTING PERIOD		
	2009	2010	2011
Total	11,933	22,188	24,603
Including:			
administrative and managerial personnel	4,640	5,359	6,605

## Personnel breakdown by activity type, persons

PERSONNEL CATEGORY	REPORTING PERIOD		
	2009	2010	2011
Operating personnel	11,418	15,602	15,992
Including: production and industrial personnel	6,900	9,312	9,370
Maintenance personnel	2	7,021	8,611
Mechanization and transportation employees	513	0	0

## Personnel breakdown by category and gender, %



## Employee breakdown by age and education

Throughout 2011, the Company's personnel composition saw no major changes compared with 2010.

Part of the reason driving effective growth and technical maintenance of the Company's electric grids, improved reliability and successful implementation of the corporate investment program is our employees' strict skill and qualification standards. In 2011, the share of Federal Grid Company employees with a vocational higher education stood at 33%; 56% of personnel had a university degree (up 3%).

Over the past several years, we have seen a trend toward a decline in our employees' age. Between 2010 and 2011, the average age of our employees fell to 38.7 years old (as of 31 December 2011). A majority of them (56%) are employees of the most productive age, both economically and socially, i.e. below 40 years old. This combination of young ambitious employees and experienced professionals with extensive expertise ensures sharing knowledge and skills and is the optimal age structure for personnel.

## Personnel Retention and Churn

At Federal Grid Company, we pay special attention to attracting and retaining highly qualified professionals that are supremely valuable to the Company. In 2011, we rolled out an employee motivation system aimed at retaining key personnel, ensuring the effective succession in key jobs and attracting young professionals. In 2011, the annual personnel churn totaled 6.2%.

In 2011, the Regulation on Adaptation for Newly Hired Staff was adopted.

## Material Incentives for Personnel

Our balanced corporate system of employee remuneration and motivation relies on a set of indicators, i.e. personnel category and performance results for specific branches and structural units, as well as regional labor market specifics. Salaries and wages of our employees are shaped by the complexity and responsibility of their work, their own skills and the impact that they have on the Company's key performance results.

For employee remuneration and motivation, Federal Grid Company adheres to the following principles:

- Utilizing a unified approach toward remuneration for all employees;
- Ensuring that our regional and industry-specific salary package is competitive on the labor market;
- Creating an employee remuneration system that encompasses both material and non-material needs and employee interests.

To refine Federal Grid Company's standing on the labor market, we completed a study in 2011 looking into the salary and wage levels of key employees at rival companies in regional markets. The results proved that the employee pay offered by the Company is within the market average.

## Awards Policy

To celebrate their contribution to the State, the power industry, the electricity sector and our Company, we recognize employees who have strongly succeeded in their efforts to maintain, construct and upgrade power industry facilities, mastered and introduced new devices and technologies, and fostered and followed our corporate values:

- Five employees of Federal Grid Company received the title of Honorary Power Engineers of the Russian Federation following Decrees by the Russian President in 2011;
- 101 Federal Grid Company employees received official appreciation from the Russian Government, recognizing their effective contribution to providing uninterrupted electricity supplies to consumers across Russia in 2011;
- 140 employees received awards from the Russian Ministry of Energy for their services to the power industry, including three employees that obtained the Honorary Employee of the Power

Industry title and 14 employees who were named Honorary Power Engineers; 68 employees received Honorary Certificates and 55 employees were named Honorable Mentions;

- 56 individuals received awards from the All-Russian Industrial Union of Power Industry Employers, including seven employees who won the Veteran of the Electricity Industry title for their many years of productive work in the electricity sector;
- 980 employees received corporate awards for their contribution to Federal Grid Company; of this number, two employees received the supreme corporate award for their outstanding achievements for the benefit of the Company – the Honorary Employee of Federal Grid Company award. 120 employees received various titles and recognitions, with their names appearing on the Company's Honors Board. 418 employees received Honorary Certificates and 440 individuals were named Honorable Mentions;
- 12 employees of our subsidiaries and affiliates received awards from the Russian Ministry of Energy and 18 employees were recognized by awards from the All-Russian Industrial Union of Power Industry Employers. 257 employees of the Company's subsidiaries, affiliates and contractors received corporate awards from Federal Grid Company.

## Personnel Training and Development

The Company's personnel training initiatives are aimed at striking the right balance between maintaining the professional level of employees to meet day-to-day targets and improving and growing their skills to pursue longer-term objectives.

In 2011, various corporate training involved a total of 9,811 people, or 42.05% of the Company's overall average head count.

Throughout 2011, the Company continued the programs it initiated in 2010, while also developing and rolling out new training projects:

- Operating personnel at new generation sub-stations;
- Grid control Center (GCC) operators at new generation sub-stations;
- Training the personnel of relay protection and automation, emergency controls and automatic process control system services of equipment providers;
- Training on the subject "Energy Inspections as a Way to Improve Energy Efficiency and Energy Saving;"
- Production personnel training under programs developed by the Russian Federal Environmental Industrial and Nuclear Supervision Service.

We are convinced that the high level of professional training demonstrated by our employees is one of the cornerstones underpinning the UNEG. In line with this, in September 2011, we rolled out a chain of Personnel Training Centers (PTCs) across the Company's branches – Backbone Electric Grids (MES). By employing unified training standards and programs based on



advanced equipment and specialized electric grid test fields across all regions of our presence, we hope to further improve the Company's professional HR potential.

Following the PTCs launch, 1,328 people used its educational and practical training capacities in Q4 2011, including 1,227 production personnel.

In 2011, we developed 28 sample programs for production personnel training. Each program is designed for a specific employee category: operating, dispatch and maintenance personnel, directors and chief engineers of backbone electric grid enterprises (PMES), sub-station directors and chemical laboratory staff, etc. The number of programs is set to grow in the future to include a larger number of personnel categories, while simultaneously upgrading teaching quality and level.

Our Company launched a project to develop a training simulator facility offering energy system mode control and operating switching functions for the PTC of every branch. In 2011, a training simulator facility was developed for executives and Federal Grid Company branches: MES Volga and MES Urals. Until 2012, there are plans in place to develop and introduce training simulator facilities with an energy system mode control and operating switching functions across all of the Company's MES branches.

Investing in production personnel training is just as important as investing in production equipment upgrades. These two processes are closely intertwined and cannot exist without each other. If we are rolling out modernizations and opening new generation sub-stations, we should have highly skilled trained professionals to operate them.

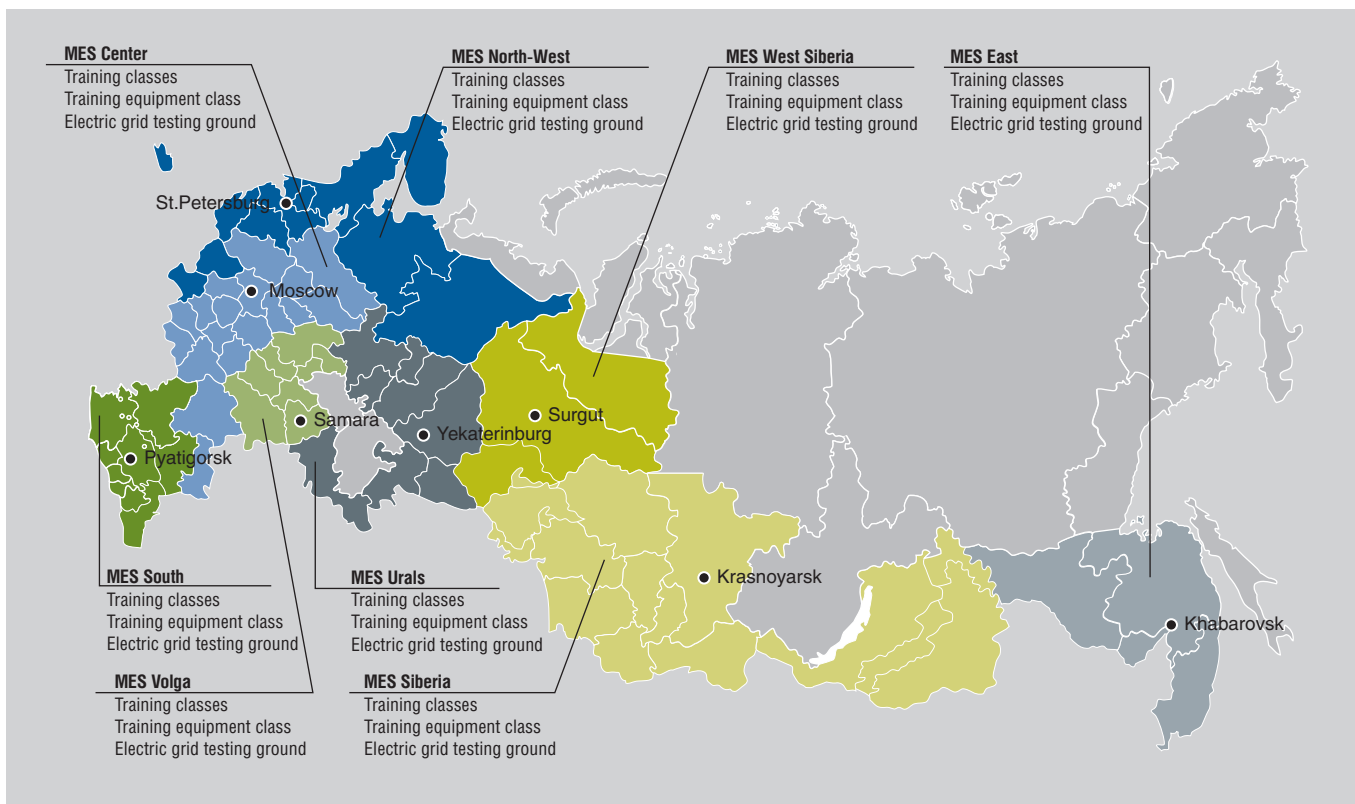


Andrey Cherezov,  
Deputy Chairman of the Management Board – Chief Engineer

In April 2011, we launched a personnel training project called Knowledge Days, which were designed as a comprehensive ongoing skills improvement tool for corporate employees, an initiative to teach our employees professional mobility, help new employees settle into the Company and create a knowledge management system. Each Thursday, our experts share their knowledge and experience with colleagues via video conferences, allowing all Federal Grid Company branches to be engaged in the project.

In the reporting year, we also started working towards creating a distance learning framework at Federal Grid Company. A pilot project launched to date has focused on two areas: introducing

### The Company's Personnel Training Centers



In our Company aimed at growth the volume of requirements to knowledge was increasing consistently, and the educational market did not make the comparable progress. Eventually we realized that we needed to create a system which we could manage ourselves establishing and controlling educational standards and quality. We are moving forward quickly, implement innovative projects, and for this we need highly professional specialists at all levels.



Yelizaveta Nikolova,  
Chief of Personnel Training Center

an electronic document management system and eliminating technical violations at our production facilities. In the future, we plan to expand the number of distance learning programs. Our 2010 plans include: launching new programs for production and technical personnel, holding intensive courses for managers and offering a course on information technology.

## YEAR OF THE YOUNG SPECIALIST

*2011 was officially declared the Year of the Young Specialist at our Company, reflecting our understanding that it is only by attracting highly trained professionals with expertise in cutting-edge equipment and technologies that we can successfully meet global targets that we are faced with.*

Our special focus during the reporting year was the corporate succession pool of candidates. We approved Federal Grid Company's Youth Policy and the Young Specialist Charter. One of the key areas in our Youth Policy is upgrading relationships with universities and inspiring university and vocational college students to choose Federal Grid Company as their future employer. 2011 was announced to be the Year of the Young Specialist.

In 2011, we organized numerous corporate activities to create opportunities for our younger employees to fulfill their potential and develop professionally, as well as to attract new young professionals and to support educational facilities.

- As part of Federal Grid Company's involvement in the Saint Petersburg International Economic Forum in 2011, we organized "Smart Grids – Projects of the Future: Youth Perspective," a round table that attracted 70 participants, including students in their last years at university, post graduates and young professors from the Moscow Power Engineering Institute and the Saint Petersburg Polytechnic University, young scientists and young promising Federal Grid Company employees;

- In July 2011, together with the SKOLKOVO Moscow Management School, we launched a new training program called Changes Leaders, aimed at training the Company's mid-level managers using an integrated joint program. We completed two training modules in the reporting year and are extending the program into 2012;
- In December 2011, we organized Leaders of the New Generation, a youth innovation forum, in conjunction with the SKOLKOVO Moscow Management School. The event attracted more than 100 young professionals representing all branches of Federal Grid Company. During the forum's first session, participants worked on scientific projects led by the Company's executives and improved their public speaking and presentation skills. The second module of the forum focused on helping young participants discover their creative potential, offering them the opportunity to prepare individual stage performances;
- In 2011, the Company continued to interact with more than 50 prestigious higher and vocational-technical education institutions; these institutions carried out specialized training for the Company's profile professions;
- The practice of organizing student construction brigades, which resumed in 2010, continues. During the 2011 work season, more than 350 students (this is a sevenfold increase against 2010) from seven universities worked at Federal Grid Company facilities in 10 Russian regions;
- In spring 2011, profiled universities organized the Federal Grid Company Day, engaging approximately 10,000 students and professors. At a meeting with students, our executives and branch managers outlined the Company's key development lines, innovative projects with strong upside potential and demand for new employees;
- In accordance with the Regulation on Undergraduate Training and Employment Procedures approved during the reporting year, more than 550 university students completed their undergraduate production training at our facilities;
- Under the Cooperation Agreement signed between our Company and the Moscow Power Engineering Institute (MPEI) in 2010, we carried out the following joint events during the reporting year:
  - The Company's employees contributed to improving the structure and content of the educational program for bachelor's and master's degrees and for power engineering curricula. They also assisted in developing and delivering further training courses for corporate personnel;

We want young graduates to believe in the power sector and develop a strong bond with our profession.



Oleg Budargin,  
Chairman of the Management Board

Our joint training project with the SKOLKOVO Moscow Management School is of great importance to the Company, involving our most talented, proactive and promising employees. The task they now have in front of them is an ambitious one: to develop unique breakthrough projects in the Company's five key operational areas based on best global practices and their intellectual and creative abilities.



Natalya Ozhegina,  
Deputy Chairman of the Management Board

Practice shows that most students make their decisions about potential jobs during their second and third year. Therefore, the Company focuses attention on first year university students.



Natalya Ozhegina,  
Deputy Chairman of the Management Board

- In 2011, Federal Grid Company helped organize a contest for the best scientific and academic manuscript for power engineering students and a contest for the best scientific paper among MPEI students focused on the important area of backbone electric grids. As a result of the contest, six training aids, two textbooks, one reference book, and two production and practical editions have been published;
- A contest for the best scientific paper among MPEI students focused on the important area of backbone electric grids. As part of the Company's participation in the 2011 St. Petersburg International Economic Forum, contest winners for the best student scientific papers were awarded at the Federal Grid Company's corporate stand;
- In 2011, MPEI employees and students took part in a strategic session aimed at creating Federal Grid Company's Innovative Development Program; the priority R&D subjects that they proposed were included in the Company's 2011 R&D plan;
- In summer 2011, Federal Grid Company's subsidiary MES Center and MPEI professors organized the Young Engineers School – theoretical and practical courses for students in their last years at the Moscow Power Engineering Institute and the Ivanovo State Power Engineering University;
- In 2011, our technical experts, in conjunction with professors from the Relay Protection and Automation Department at the Ivanovo State Energy University, developed a special educational program for fifth year students focused on adapting graduates' skills and knowledge to Company requirements.
- We upgraded the building of the Power Engineering College in Kaspysk, equipping it with electric technology laboratories, including modern machinery and simulators and providing necessary teaching literature and arranged computer classes; Together with the Government of the Primorsk Region and Hyundai Heavy Industries, our Company opened the Power Engineering College in Vladivostok. Its graduates will be able to work at Federal Grid Company facilities in the Far East and at a gas-insulated switchgear (GIS) plant currently being built by Hyundai Heavy Industries. Our Company took part in

- reconstructing the college's building, while also providing modern equipment and simulators to its laboratories;
- We supplied a new electric technology laboratory to the Nevinnomyssk Power Engineering College with modern simulators that imitate as closely as possible equipment used by Federal Grid Company across its facilities.

## PERSONNEL EVALUATION

In the reporting year, we developed a new concept for creating a succession pool (SP) of candidates for the Company, helping us to pursue the following targets:

- Improvement of the Company's key indicator – reliable grid operation – by doubling the functions of the core production division heads;
- Creating a comprehensive SP management system based on candidates' nomination to the SP, in accordance with evaluation results, defining individual development plans (IDP) for everyone in the succession pool and controlling their IDP progress using additional evaluation tools;
- Develop a SP to fill the post of Heads and Deputy Heads of structural units in the following areas of the Company's operations:
  - Relay protection and automated equipment;
  - Sub-station equipment operations;
  - Information technology systems;
  - Operating and technological management;
  - Power lines;
  - Electric mode service.
- Forming a model of a candidate's professional and technical competencies to qualify for the SP;
- Developing a mentorship system to include the evaluation of potential SP candidates, training sessions for mentors helping them share their professional experience and key performance indicators for mentors.
- To upgrade the efficiency of interactions between mentors and candidates, the Company developed a "workbook" for



candidates, which provides all information related to educational programs for this worker category.

In 2011, evaluation activities for potential SP candidates and mentor training programs were tested in the pilot branches: MES Center and MES North-West. A total of 227 people took part in the evaluations for the SP and 34 employees signed up for the mentor training program. Relying on results of the pilot projects, we decided to extend the concept to all of the Company's branches in 2012. A detailed description of the stages of work and basic elements of the method are included in Regulations on Mentorship and Regulations on Personnel Reserve, which were approved in 2011.

## NON-GOVERNMENTAL PENSION PROVISION

The non-governmental pension provision program in place is based on a differentiated approach to the non-governmental pension amount and aims to help the Company retain its highly skilled personnel.

Since the program launch, non-governmental pension from Federal Grid Company funds has been provided to 3,220 employees. In 2011, 527 employees qualified for non-governmental pensions from the Company. In accordance with norms of the Regulation on Non-Governmental Pension Provision to Federal Grid Company employees, a total of RUR383,432,587 was transferred to the non-governmental pension fund of the power industry.

## HOUSING IMPROVEMENT PROGRAM

In June 2011, our Company adopted and launched the Long-Term Corporate Assistance Program for Housing Improvement for Federal Grid Company Employees, striving to attract and retain personnel categories that play a key role in ensuring uninterrupted electricity supplies to consumers and upgrading UNEG reliability.

## CORPORATE CULTURE ENHANCEMENT

The Corporate Culture at our Company involves values, work and behavior standards that shape employees' impression about the Company, inspire feelings of reliability, enhance the understanding of succession and help to properly respond to corporate developments while creating a sense of security.

Together, we have defined a circle of values which matter to us all as members of one team sharing one challenging cause: supplying electricity across all Russian regions.

We created an evaluation system that has 80% of all evaluated parameters focused on determining the level of employees' professional and technical competencies described with support from the Company's leading experts. The system only marginally looks at the managerial and administrative skills of employees. When creating test assignments and evaluation procedure as such, we relied on the broadest range of proposals from leading experts in the Company's central office, executives of the MES and the PMES, and experts at different levels representing three of our branches – MES Center, MES North-West and MES Volga.



Alexander Solod, Deputy Chief Engineer, Head of the task group creating an evaluation system for employees wanting to become part of the succession pool of candidates

As part of corporate culture development, we carried out the following activities in 2011:

- We adopted the new Corporate Ethics Code for Federal Grid Company, as our ideological platform for building all corporate policies and defining all production and social relationships within the Company, while also shaping criteria for our relationships with business partners and communities;
- We carried out Federal Grid Company's Winter Olympiad, with the finals attracting more than 150 employees;
- We carried out Federal Grid Company's Summer Olympiad; the number of Company employees in the finals reached 189;
- Under the Veteran Project, the Company provided financial assistance to power industry veterans in the form of payments marking special dates and healthcare allowances. Festivities for the veterans were organized twice per year: on Victory Day and on Power Engineers Day. Cultural activities were a regular feature, including theater and museum visits. Throughout the year, the Company actively helped the Veteran Council of the Electricity Sector;
- We supported the children of MES employees who participated in the Song of the Year contest held by Angelina Vovk's Foundation. Fifty children took part in the contest's final gala performance and then spent their holidays at the Orlyonok All-Russian Children's Center.
- For the children of our employees, we organized trips to Federal Grid Company facilities and ran a contest among them, dedicating it to the subject "I Am the Future of the Power Industry," under Federal Grid Company's Dynasty program.

## 4.3 ENVIRONMENT

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*A responsible approach to environmental protection and caring about nature and natural resources is at the core of our environmental policies.*

Environmental protection is among our most important objectives and is a strong contributor to our reputation as a socially responsible company. Electricity transmission has a significantly smaller environmental impact compared with other power industry branches. Emissions, discharges and waste products are not the result of the technological process of electricity transmission but appear as a result of production operations and are characterized by very low levels of maximum permissible values. Environmental footprint is also insignificant. In 2011, contamination levels across all of Federal Grid Company's sub-stations were extremely low, with total emissions into the atmosphere was 90.4 tons, waste discharge into superficial waters reached 62,700 cubic meters, and the volume of waste products for I-V classes stood at 12,900 tons. Still, our Company continues efforts to minimize its environmental footprint.

In 2010, we approved the Implementation Program for Federal Grid Company's Environmental Policies for 2011-2013, and on 30 December 2011, we approved Target Environmental Parameters for Federal Grid Company for 2013-2015.

As part of the program to implement its environmental policies, our Company has activities in place helping to mitigate the impact of its production operations on the environment, including:

- Technical activities:
  - Replacement of equipment that contains dangerous and toxic substances, including trichlorodiphenyl (713 static condenser jars with a total weight of 42.8 tons were utilized in 2011);
  - Repairs of systems and oil container devices (the systems and devices at a total of 44 energy facilities were repaired in 2011);
  - Organization of temporary landfill sites (arranged at 55 facilities in 2011);
  - Construction and modernization of sewage and waste treatment systems (work completed at 98 facilities in the reporting year).
- Administrative activities:
  - Introducing an environmental management system that is compliant with ISO 14001 international standard;
  - Upgrading the environmental production control system and conducting environmental audits;
  - Providing personnel with environmental training;
  - Developing regulatory documents as needed;
  - Upgrading documentary support for environmental protection activities.

The Company's grid construction and upgrade projects are subject to statutory review and undergo public hearings assessing their environmental impact. During construction and upgrading of electric grids, new environmentally friendly equipment is installed and new design and construction technologies are introduced for power lines.

In 2011, all Federal Grid Company branches underwent environmental audits to control compliance with environmental legislation, the availability and condition of environmental documents and the technical condition of environmental facilities. The Company analyzed problems arising in the process of the branches' environmental protection activities. Based on audit results, the Company developed programs of measures to upgrade the efficiency of environmental protection activities (for both the Company and its branches).

In 2011, the Company conducted environmental training of personnel under the following programs:

- Appropriate handling of I-IV class hazardous waste – 170 employees;
- Environmental protection and safety training for executives and specialists – 59 employees;
- Introduction of environmental management systems under ISO 14001:2004 requirements – 75 employees;
- Internal audit of environmental management systems under ISO 14001:2004 requirements – 22 employees.

In 2011, the Executive Office of Federal Grid Company and MES South successfully introduced an environmental management system, which later received ISO 14001:2004 certification.

Federal Grid Company's principal objectives in environmental protection include:

- Introducing and certifying an ISO 14001:2004 compliant environmental management system at Federal Grid Company's MES North-West branch, and ensuring optimal performance of the existing environmental management system at the Company's Executive Office and MES South;
- Utilizing de-installed equipment containing trichlorodiphenyl;
- Planning and implementing technical and administrative environmental protection activities aimed at mitigating the Company's negative environmental impact and at meeting the Company's current target environmental indicators;
- Conducting internal environmental audits at Federal Grid Company branches to identify non-compliance with and violations in environmental legislation and developing appropriate measures to address them;
- Setting up environmental training for the Company's executives and specialists to ensure compliance with Russian environmental legislation and improving the personnel's environmental awareness;
- Developing a register of specially protected natural areas in the vicinity of Federal Grid Company electric grid facilities to create a database of environmentally valuable areas and thus reduce the environmental footprint of electric grid facilities as early as the design and maintenance stage.



## 4.4

## PRODUCTION SAFETY

*In the electric power industry, production safety is a matter of paying close attention to issues that the lives and health of people depend on. Our Company employs a systemic approach to addressing all safety issues.*

## LABOR PROTECTION

Two years ago, corporate management developed a new OSH management system based on the detailed allocation of personnel responsibilities, incident registration and analysis and the possibility to quickly prevent future recurrences. The Company's management believes that work on upgrading labor safety should be carried out continuously, providing a responsible attitude for employees in this sphere.

To improve employee safety and performance, we have developed a set of organizational, technical and preventive measures that we are heavily investing in. In 2011, labor protection spending per employee grew 55.6% year-on-year, driven mainly by larger expenses on the purchases of certified professional clothing and footwear to protect personnel from industrial electromagnetic field frequency and thermal risks of an arc flash.

In 2011, labor accident reduction efforts at each PMES were based on the results of an injury risk evaluation at the Company's facilities and were in line with a set of objectives outlined by the Council for Protection and the Company's internal documents.

For the first time in a decade, Federal Grid Company's industrial accident frequency rate saw a marked decline. For FY 2011, the number of incidents fell two-fold compared with 2010, and the number of injured employees declined 2.75 times.

To improve labor safety, we carried out the following measures:

- A two-week labor protection program prior to the 2011 repair campaign, allowing brigades to work at power facilities;
- A unified Labor Protection Day with the subject "Risk Management and Injury Prevention in Working with High Voltage Lines;"
- A month-long initiative on road traffic safety;
- Improvement of personnel interaction measures, including preparation for error-free actions;
- Introduction of ongoing control and analysis of safe working practices at the Company's facilities;
- Efficiency evaluation of violation prevention systems for personnel working at power facilities, with proposals developed to improve its performance.

The Company continued working towards creating psychological rehabilitation rooms at sub-stations, complementing the ten existing ones with three new rooms during the reporting period. Federal Grid Company also completed a pilot project to acquire 17 mobile labor protection offices to teach employees safe working practices in line with modern requirements, taking into account the remoteness of our production personnel.

## INDUSTRIAL SAFETY

In 2011, Federal Grid Company operated 339 hazardous industrial facilities (HIFs) registered with the State Register.

To ensure safe operation of the HIFs and to prevent incidents and enhance the readiness to contain and eliminate such accidents, the Company carried out the following measures in 2011:

- Registration/exclusion/re-registration of HIFs with the State Register;
- Obtaining License No. VP-00-012816 (dated 24 June 2011), to operate explosive and flammable production facilities;
- Developing and introducing documents that regulate HIF operations identified by obtaining, using, storing and transporting hazardous substances: action plans for accident situations, prevention and elimination measures for oil and oil product spills, safety passports;
- Receiving a positive industrial safety report from Russia's Federal Environmental Industrial and Nuclear Supervision Service confirming that the Company's facilities comply with regulatory requirements;
- Liability insurance for damage to the life, health or property of third parties and the environment in case of an accident at HIFs;
- Industrial safety training and testing for personnel.

The Company also introduced production control to make sure industrial safety norms are observed in HIF operations. To do so, we developed the Regulation on Production Control of Industrial Safety Compliance at Federal Grid Company Hazardous Industrial Facilities.

## FIRE SAFETY

Federal Grid Company suffered one fire outbreak in 2011 – at Control Center No.1 of the 220 kV sub-station of the MES Center's Vologda branch. Damage from the fire is estimated at RUR13.563 million.

The reason for the marked decline in the number of fires associated with technological breaches of sub-station equipment at the Company's facilities is the implementation of a set of additional measures as part of preparing for the 2010 fire-hazard period (creating a 25 m fire break along the sub-station perimeter, purchasing fire pumps and buying fire hoses to extinguish fire on the approach to the sub-station up to 25 meters from the fence, etc.).

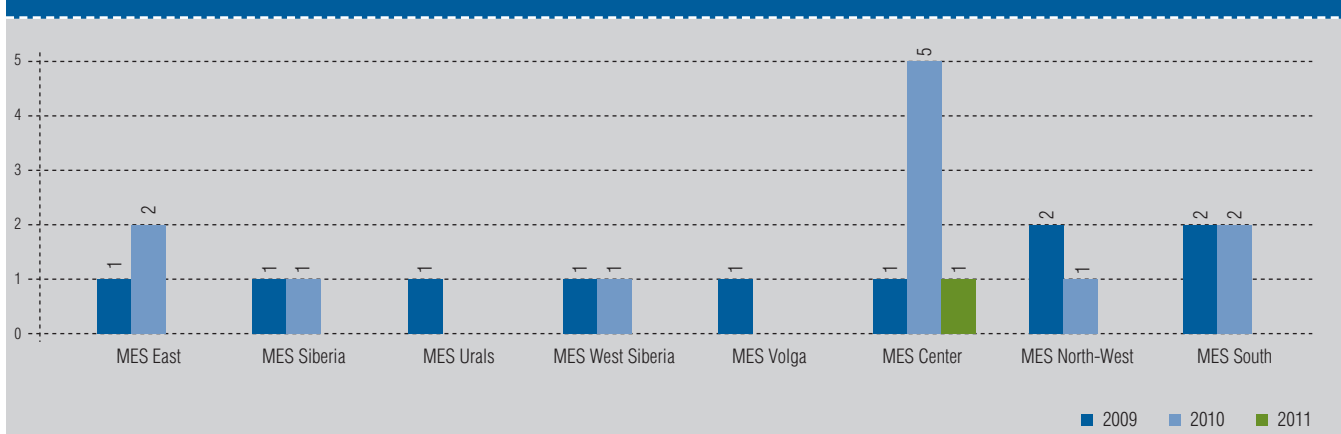
In 2011, the Program to enhance and upgrade fire safety at Federal Grid Company facilities was implemented. Its objectives are:

- Introducing modern fire protection systems;
- Bringing the facilities in line with current fire safety requirements;
- Complying with orders imposed by regulatory authorities of the Russian Emergencies Ministry.

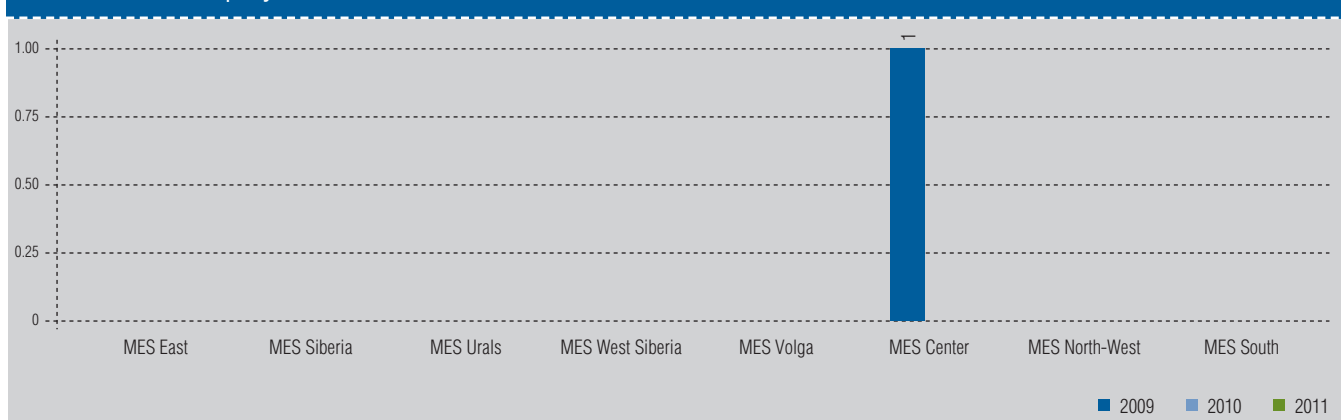
In 2011, fire safety standards were developed, taking into account current requirements for the design, construction, repair and maintenance of fire safety systems at corporate facilities.

As part of personnel fire safety training, every six months, fire drills and exercises are held, including in conjunction with fire departments.

Distribution of technological breaches leading to fire outbreaks at sub-station equipment included in Federal Grid Company Branches – MES 2009-2011 statistics



Distribution of technological breaches leading to fire outbreaks at transmission lines included in Federal Grid Company Branches – MES 2009-2011 statistics



## CONTACTS

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Addresses, telephone numbers, contact persons, bank details, the Company's web site address, brief information on the auditor, the registrar and the depositor responsible for maintaining the Company's securities:

### **Federal Grid Company:**

Actual and mailing address: 5A Akademika Chelomeya Street, Moscow, Russia, 117630

Telephone: +7 495 710 9000

Fax: +7 495 710 9655

E-mail: info@fsk-ees.ru

The Company's web site address: www.federal-grid.com

Telephone line for shareholders: +7 800 200 1881

Contact information for institutional investors and analysts:

Investor Relations & Equity Capital Markets Department

Telephone: +7 495 710 9064

E-mail: ir@fsk-ees.ru

### **Information on Federal Grid Company's auditor conducted 2011 independent audit of the accounting/financing reporting**

Full name of the company: Closed Joint Stock Company Price-waterhouseCoopers Audit

Abbreviated company name: PwC Audit

Location: 10 Butyrsky Val Street, Moscow, Russia, 125407

INN: 7705051192

OGRN: 1027700148431

Telephone: +7 495 967 6000

Fax: +7 495 967 6001

E-mail: hotline@ru.pwc.com

Information on the auditor's membership in self-regulated organizations

Organization's full name: Not-for-Profit Partnership Audit Chamber of Russia

Location: Building 9, Block 2 3rd Syromyatnichesky Lane, Moscow, Russia, 105120

### **Information on the organization(s) registering the rights for the Company's securities**

The registrar, maintaining the register of the Company's securities

### **Information on the registrar:**

Since February 2011, the Company's Registrar has been STATUS Registrar Company, which was selected via an open tender.

Full name of the company: Closed Joint Stock Company STATUS Registrar Company

Abbreviated company name: STATUS

Location: 32, Block 1 Novorogozhskaya Street, Moscow, Russia, 109544

Mailing address: 32, Block 1 Novorogozhskaya Street, Moscow, Russia, 109544

Telephone: +7 495 974 8350

Fax: +7 495 678 7110

E-mail: info@rostatus.ru

License number: 10-000-1-00304

Issue date: 12 March 2004

License term: indefinite

Issuing authority: Russia's Federal Financial Markets Service

### **Information on the depository responsible for the centralized keeping of the Company's bonds:**

Full name of the company: Non-Banking Credit Organization-Closed Joint Stock Company National Settlement Depository

Abbreviated company name: NSD

Location: 1/13 Sredny Kislovsky Lane, Building 4, Moscow, Russia

Information on the license to perform depository activities on the securities market:

License number: 177-12042-000100

Issue date: 19 February 2009

Expiration date: unlimited

Issuing authority: Russia's Federal Financial Markets Service

# GLOSSARY

## Different names for Federal Grid Company and its branches

Federal Grid Company, The Company	Open Joint Stock Company "Federal Grid Company of Unified Energy System" (Federal Grid Company)
Branches	The branches of Federal Grid Company – Backbone Electric Grid (MES), Enterprise of the Backbone Electric Grid (PMES)
Head Office (EO)	The headoffice of Federal Grid Company

## Abbreviations

**Abbreviation** – Full name

**ACPP** – Annual Complex Purchase Program

**AIMS CMEE** – Automated Information and Measurement System for the Commercial Metering of Electrical Energy

**AL** – Aerial Line

**AS** – Automated System

**AS CFFC** – Asynchronous Synchronous Cross-Field Frequency Converter

**AS MMR** – Automated System for Managing Maintenance and Repairs

**ASC** – Asynchronous Synchronous Compensator

**ASCMEE** – Automated System for Commercial Metering of Electric Energy

**ASDEC** – Automated System for Dispatch and Engineering Control

**ASDFC** – Automated System for Document Flow Control

**ASEC** – Automated System for Engineering Control

**ASPC** – Automated System for Process Control

**AT** – Automatic Transformer

**AWP** – Autumn-Winter Period

**BBS** – Back-to-Back Station

**BGC** – Bulk Grid Company

**BPS-2** – Baltic Pipeline System-2

**CB** – Capacitor Bank

**CGIS** – Corporate Governance Information System

**CSCD** – Controlled Series Compensation Device

**CSR** – Controlled Shunt Reactor

**CT** – Communication Tools

**CTC** – Central Tender Commission

**DATS** – Data Acquisition and Transmission System

**DCT** – Direct Current Transmission

**DDTS** – Digital Data Transmission System

**DECS** – Dispatch and Engineering Control System

**DC** – Distribution Company

**EBIT** – Earnings Before Interest and Taxes

**EBITDA** – Earnings Before Interest, Taxes, Depreciation and Amortization

**ECA** – Emergency Control Automatics

**EDATS** – Engineering Data Acquisition and Transmission System

**ESO** – Energy Supply Organization

**ESPO** – Eastern Siberia-Pacific Ocean Pipeline

**FACTS** – Flexible Alternating Current Transmission Systems

**FOCL** – Fiber-Optic Communication Line

**GCC** – Grid Control Center

**HFCS** – High Frequency Communication System

**HPP** – Hydro Power Plant

**HPS** – Heat Power Station

**HTSCL** – High Temperature Superconductor Cable Line

**HTSM** – High Temperature Superconductor Materials

**IECS** – Internal Engineering Control System

**KPI** – Key Performance Indicator

**LNPP** – Leningrad Nuclear Power Plant

**LTSM** – Low Temperature Superconductor Materials

**MCST** – Multi-Chamber Switching Tube

**MR** – Maintenance and Repairs

**NGO** – Non-governmental organization

**NPP** – Nuclear Power Plant

**ODM** – Operational Dispatch Management

**OS** – Outdoor Switchgear

**PS** – Phase Shifter

**PSD** – Power System Disturbance

**EETL** – Electric energy transmission line

**RAB** – Regulatory Asset Base

**RAD** – Research and Advanced Development

**ROIP** – Reliability and Observability Improvement Program

**RPA** – Relay Protection and Automatics

**RPEA** – Relay Protection and Emergency Automatics

**RRL** – Radio Relay Lines

**RS** – Requirement Specifications

**SC** – Synchronous Compensator

**SCRPBVC** – Static Compensator for Reactive Power Based on Voltage Converter

**SDCs** – Subsidiaries and Dependent Companies

**SDPP** – State District Power Plant

**SHT** – Software and Hardware Tools

**SSDS** – Switchgear for Secondary Distribution Systems

**STC** – Static Thyristor Compensator

**TC** – Technological Connection

**TR** – Technical Requirements

**UEEDCN** – Unified Electrical Energy Digital Communications Network

**UEEECN** – Unified Electrical Energy Engineering Communications Network

**UES** – Unified Energy System

**UES of Russia** – Unified Electrical System of Russia

**UNEG** – Unified National (all-Russian) Electric Grid

**URARP** – Universal Regulator of Active and Reactive Power

**USCD** – Uncontrolled Series Compensation Device

**VRG** – Vacuum-Reactor Groups

**WMEPC** – Wholesale Market for Electrical Power and Capacity

# APPENDICES. PART 1

## COMPLIANCE WITH THE CODE OF CORPORATE GOVERNANCE

№	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
<b>GENERAL SHAREHOLDERS MEETING</b>			
1	Notifying shareholders about the General Shareholders Meeting at least 30 days prior to the meeting date irrespective of items included on the agenda, unless a longer notice is stipulated by legislation.	Compliant	According to p. 11.4 of Article 11 of the Company Articles of Association the 30 days notice on the General Shareholders Meeting shall be sent (or handed over) to each person included into the list of persons authorized to participate in the General Shareholders Meeting. The notice shall also be published in the Rossiyskaya Gazeta newspaper.
2	Shareholders' opportunity to examine the list of persons authorized to participate in the General Shareholders Meeting, starting from the notification date for the General Shareholders Meeting through to closing the internal General Shareholders Meeting, and in case of a meeting held in absentia till the date for receiving voting ballots expires.	Compliant	Any person holding at least 1 percent of votes is entitled to this. Document data and postal addresses for individuals included on this list are provided only at the consent of these individuals.
3	Shareholders' opportunity to examine information (materials) which are to be submitted during preparation for the General Shareholders Meeting, via electronic communication, including the Internet.	Compliant	According to p. 11.5 of Article 11 of the Company's Articles of Association, the shareholders are entitled to within 20 days prior to the General Meeting, and within 30 days prior to the General Meeting in case the General Shareholders Meeting includes an agenda item on reorganizing the Company, to examine materials for the General Shareholders Meeting on the Internet. The information is published on the Company's web site at <a href="http://fsk-ees.ru/">http://fsk-ees.ru/</a> , in the Shareholders and Investors section.
4	Shareholders' opportunity to submit an issue for the agenda of the General Shareholders Meeting or to demand calling a General Shareholders Meeting without giving an extract from the register of shareholders if their rights to shares are registered in the register of shareholders, and the sufficiency of an extract from the depo account for executing the above-mentioned rights if their rights to shares are registered on the depo account.	Partially compliant	In accordance with p. 4.7 of the Regulations on the Procedure for Preparing and Holding the General Shareholders Meeting, when an issue is submitted to the agenda or when an Extraordinary General Shareholders Meeting is called, a shareholder's possession of shares, the rights to which are considered according to the deposit account in the depository, is confirmed by providing an extract from the depo account.
5	Provision in the Articles of Association or internal documents of the joint stock company to require the obligatory presence of the General Director, members of the Management Board, members of the Board of Directors, members of the Audit Commission and the auditor of the joint stock company at the General Shareholders Meeting.	Partially compliant	Paragraph 7.2 of the Regulations on the Procedure for Preparing and Holding the General Shareholders Meeting requires that the Chairman of the Board of Directors or members of the Board of Directors be present.
6	The obligatory presence of candidates during the consideration of issues related to electing members of the Company's Board of Directors, the General Director, members of the Management Board, members of the Audit Commission, as well as the issue on approving the auditor of the joint stock company at the General Shareholders Meeting.	Non-compliant	This requirement is not provided for by any corporate internal documents, but the candidates to the specified positions may be present at the Company's General Shareholders Meeting
7	A registration procedure for participants in the General Shareholders Meeting in the internal documents of the joint stock company.	Compliant	Paragraph 5.1 of Article 5 of the Regulations on the Procedure for Preparing and Holding the General Shareholders Meeting of Federal Grid Company
<b>BOARD OF DIRECTORS</b>			
8	Provision in the Articles of Association of the joint stock company for the Board of Directors' authority to approve on an annual basis the financial and economic plan of the joint stock company.	Compliant	In accordance with p.p.33 and 15.1 of Article 15 of the Company's Articles of Association, the areas of competency for the Board of Directors includes approving the business plan and targets for the Company's key performance indicators.
9	A risk management procedure for the joint stock company approved by the Board of Directors	Non-compliant	This procedure was not approved by the Company's Board of Directors as a separate document.
10	Provision in the Articles of Association of the joint stock company regarding the right of the Board of Directors to make a decision on suspending the authority of the General Director appointed by the General Shareholders Meeting	Not applicable	Functions of the Company's sole executive body are performed by the Chairman of the Company's Management Board. In accordance with Sub-paragraph 10 of paragraph 10.1 of Article 10 of the Company's Articles of Association, the Chairman's election and early termination is an area that falls under the competency of the Company's General Shareholders Meeting
11	Provision in the Articles of Association of the joint stock company of the right of the Board of Directors to establish requirements for professional skills and remuneration for the General Director, members of the Management Board and heads of the primary structural divisions of the joint stock company	Partially compliant	In accordance with Sub-paragraphs 10 and 37 of Paragraph 15.1 of Article 15 of the Company's Articles of Association, areas of competency that fall under the Company's Board of Directors include establishing remuneration and compensation for the Chairman and the members of the Company's Management Board



№	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
12	Provision in the Articles of Association of the joint stock company of the right of the Board of Directors to approve contract terms with the General Director and members of the Management Board	Compliant	Sub-paragraph 37 of Paragraph 15.1 of Article 15 of the Company's Articles of Association -the Board of Directors approves contract terms with the General Director and members of the Management Board
13	Provision in the Articles of Association or internal documents of the joint stock company for the requirement stating that votes of members of the Board of Directors who are either the General Director or members of the Management Board are not taken into account when voting to approve contract terms with General Director (a management organization or the managing director) and members of the Management Board	Compliant	According to p. 18.10 of the Company's Articles of Association when deciding on the issue stipulated by p.p. 37 and 15.1 of the Company's Articles of Association the votes of the members of the Board of Directors who are the members of the Company's sole executive body at the same time, are not taken into account
14	Presence on the Board of Directors of the joint stock company of at least three independent directors that meet requirements of the Corporate Conduct Code	Compliant	In accordance with a decision of Federal Grid Company's Annual General Shareholders Meeting on 29 June, 2011, the following directors meeting independence requirements were included on the Company's Board of Directors: Rashid Sharipov, Igor Khvalin, Ernesto Ferlenghi and Yuri Soloviev
15	Absence in the composition of the Board of Directors of the joint stock company of persons who were found guilty of committing crimes in the sphere of economic activities or crimes against the government, interests of public service and service to local government institutions or who had administrative punishments applied to them for violations of the law in the area of entrepreneurial activity or in the area of finance, tax and tax collection and securities market	Compliant	There are no such persons in the composition of the Company's Boards of Directors valid throughout 2011.
16	Absence in the composition of the Board of Directors of the joint stock company of persons who are participants, the General Director (managing director), member of a regulatory body or employee of a legal entity that competes with the joint stock company	Compliant	There are no such persons in the composition of the Company's Boards of Directors valid throughout 2011.
17	Requirement in the Articles of Association of the joint stock company to elect the Board of Directors via cumulative voting	Compliant	According to p. 10.9 of Article 10 of the Company's Articles of Association during cumulative voting the number of votes owned by each shareholder is multiplied by the number of persons to be elected to the Board of Directors.
18	Provision in the internal documents of the joint stock company of the obligation of members of the Board of Directors to withdraw from actions that lead or potentially lead to a conflict between their interests and the interests of the joint stock company; obligation to disclose information on this conflict to the Board of Directors in case it occurs	Compliant	According to p.p. 4.1.6 of p.4.1 of p.4 of the Company's Code of Corporate Governance the members of the Company's Board of Directors shall refrain from actions which may result in a conflict between their interests and the interests of the Company. In case such conflict arises, a member of the Company's Board of Directors shall inform the other members of the Board of Directors and also refrain from voting on related issues
19	Provision in the internal documents of the joint stock company of members of the Board of Directors duty to notify the Board of Directors in writing of their intention to make transactions with securities of the joint stock company, if they are members of the Board of Directors of this joint stock company or its subsidiaries or dependent companies, as well as to disclose information about the transactions with such securities made by them	Compliant	According to p. 16.9 of Article 16 of the Company's Articles of Association, and p. 3 of the Regulation of the Company's Board of Directors, and p.p. 7.2 and 7.3 of the Insider Information Policy, and pp. 4.1.6 and 4.1. of the Company's Code of Corporate Governance, the members of the Company's Board of Directors are obliged to disclose the information on the sale (disposal) and (or) the purchase of the Company securities
20	Provision in the internal documents of the joint stock company of the requirement to hold at least one meeting of the Board of Directors every six weeks	Non-compliant	According to p. 6.4 of Article 6 of the Regulation of the Board of Directors, the meetings of the Board of Directors are conducted as necessary, but at least once in every quarter
21	Meetings of the Board of Directors of the joint stock company during the year which is the subject of the annual report of the joint stock company are carried out regularly, at least one meeting every six weeks	Compliant	On average in 2011, meetings of the Company's Board of Directors were held at least once per month or more.
22	Provision in the internal documents of the joint stock company of a procedure for holding meetings of the Board of Directors	Compliant	The Company has an established Regulation of the Board of Directors, approved by the resolution of the Company's Annual General Shareholders Meeting dated 30 June 2009 (Minutes No7, dated 10 June 2009)
23	Provision in the internal documents of the joint stock company of regulations on the necessity of the Company's Board of Directors approving transactions in an amount of 10 percent and more of the cost of the Company's assets, except for transactions made as part of the Company's day-to-day economic activity	Partially compliant	Sub-item 27 (a) of Item 15.1 of Article 15 of the Company's Articles of Association stipulates that the Board of Director grants preliminary approval for corporate transactions that have the non-current assets worth more than 10 percent of the balance value as the object of the transactions.



№	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
24	Provision in the internal documents of the joint stock company of the right of members of the Board of Directors to receive information required to perform their functions from executive bodies and heads of the Company's main structural divisions, as well as responsibility for the failure to provide such information	Compliant	In accordance with Section 3 of the Regulations on the Board of Directors, members of the Company's Board of Directors are entitled to receive information about the Company's operations, including commercial secrets, and access all constituent, normative, reporting, accounting, contractual and other corporate documents.
25	The existence of a Strategic Planning Committee of the Board of Directors or another committee assigned with said functions (except for the Audit Committee and the Human Resources and Remuneration Committee)	Compliant	Establishing the Strategy Committee was approved by a decision of the Company's Board of Directors as of 15 May 2008 (Minutes No. 62). Operation procedures are laid out by the Regulations on the Strategy Committee of Federal Grid Company
26	The existence of a committee of the Board of Directors (the Audit Committee) which recommends the auditor for the joint stock company to the Board of Directors and cooperates with the auditor and the Audit Commission of the joint stock company.	Compliant	Establishing the Audit Committee was approved by a decision of the Company's Board of Directors as of 15 February, 2008 (Minutes No. 54). Operation procedures are laid out by the Regulations on the Audit Committee of the Board of Directors of Federal Grid Company.
27	Presence of only independent and non-executive directors on the Audit Committee	Compliant	The Audit Committee consists only of independent and non-executive directors.
28	The Audit Committee is managed by an independent director	Compliant	The Audit Committee of the Company's Board of Directors is managed by independent director Rashid Sharipov.
29	Provision in internal documents of the joint stock company of the right of all members of the Audit Committee to access any documents and information of the joint stock company provided that they do not disclose confidential information	Compliant	Section 3 and 4 of the Regulations on the Audit Committee of the Board of Directors of Federal Grid Company.
30	Establishing a committee of the Board of Directors (the Human Resources and Remuneration Committee) with the function of defining recruitment criteria for candidates applying for positions of members of the Board of Directors and developing the joint stock company's remuneration policy	Compliant	The HR and Remuneration Committee was established by a decision of the Company's Board of Directors as of 15 February, 2008 (Minutes No. 54). The procedure for the Committee's operations is laid out by the Regulations on the HR and Remuneration Committee of the Board of Directors of Federal Grid Company.
31	The Human Resources and Remuneration Committee is managed by an independent director	Compliant	Paragraph 5.2 of the Regulations on the HR and Remuneration Committee of the Board of Directors of Federal Grid Company.
32	The absence of officials of the joint stock company on the Human Resources and Remuneration Committee	Compliant	Paragraph 5.2 of the Regulations on the HR and Remuneration Committee of the Board of Directors of Federal Grid Company.
33	Establishing the Risk Committee under the Board of Directors or assigning these functions to another committee (except for the Audit Committee and the Human Resources and Remuneration Committee)	Non-compliant	The Committee was not established.
34	Establishing the Corporate Conflicts Settlement Committee of the Board of Directors or assigning these functions to another committee (except for the Audit Committee and the Human Resources and Remuneration Committee)	Non-compliant	The Committee was not established.
35	The absence of joint stock company officials on the Corporate Conflicts Settlement Committee	Not applicable	The Committee was not established.
36	The Corporate Conflicts Settlement Committee is managed by an independent director	Not applicable	The Committee was not established.
37	Provisions in internal documents of the joint stock company of procedures for establishing and operating Board of Directors' Committees, approved by the Board of Directors	Compliant	Regulations: On the Audit Committee, On the HR and Remuneration Committee, On the Reliability Committee of the Board of Directors, On the Strategy Committee, On the Investment Committee.
38	Provision in the Articles of Association of the joint stock company on the process for defining the quorum for the Board of Directors, allowed to provide for the obligatory participation of independent directors in Board of Directors' meetings	Non-compliant	According to p. 18.2 of the Company's Articles of Association the quorum to conduct the meeting of the Board of Directors is composed of at least half of the total number of the elected members of the Board of Directors
<b>EXECUTIVE BODIES</b>			
39	Provision of the collegial executive body (Management Board) of the joint stock company	Compliant	According to p.20.1 of Articles 20 and 21 of the Company's Articles of Association the running activities of the Company are managed also by the Company's Management Board, the collegial executive body
40	Provision in the Articles of Association or internal documents of the joint stock company on regulations on the necessity of the Management Board's approval of transactions with real estate and loans taken out by the joint stock company provided that said transactions are not deemed major transactions and are not part of day-to-day economic activities of the joint stock company	Compliant	In accordance with p.15.1 of Article 15 of the Company's Articles of Association, it is an area of competency under the Board of Directors. At the same time, however, in accordance with Item 6.1 of the Regulations on the Preparation of Materials for the Management Board's Meetings, all questions submitted for consideration to the Company's Board of Directors are subject to mandatory preliminary considerations by the Company's Management Board.

№	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
41	Provision in the internal documents of the joint stock company of the procedure for approving operations beyond the financial and economic plan of the joint stock company	Partially compliant	This requirement is not provided for by the Company's Articles of Association or any other documents. In part, these questions are outlined by the Regulations on the Procedure for Placing Temporarily Disposable Free Funds of Federal Grid Company (approved by the Management Board of Federal Grid Company, Minutes No. 528 as of 24 April, 2008) and by the Regulations on Debt Management Procedure (approved by the Company's Board of Directors, Minutes No. 44 as of 29 May, 2007).
42	Absence in the composition of executive bodies of persons who are either participants, the General Director (managing director), members of the management body or employees of a legal entity that competes with the joint stock company	Compliant	There are no such persons in the executive body.
43	Absence in the structure of the executive bodies of the joint stock company of persons who were found guilty of committing crimes in the area of economic activities or crimes against the government, interests of public service and service in local government institutions, or of persons who experienced administrative punishments for violations in the area of business activity or in the area of finance, taxes, fiscal charges and the securities market. If functions of the sole executive body are carried out by a management organization or a managing director, the General Director and members of the Management Board of the management organization or the managing director must meet the requirements of the General Director and members of the Management Board of the joint stock company	Compliant	There are no such persons in the executive body.
44	Provision in the Articles of Association or internal documents of the joint stock company to prohibit the management organization (managing director) from carrying out similar functions in a competing company, as well as to be in any other material relationship with the joint stock company, besides rendering services of the management organization (managing director)	Non-compliant	This prohibition is not provided for by the Company's the Articles of Association or by any other documents.
45	Provision in internal documents of the joint stock company of the duties of executive bodies to withdraw from actions leading or potentially leading to a conflict of interest and the interests of the joint stock company, and duties to inform the Board of Directors if such a conflict occurs	Compliant	According to p. 4.2.7 of the Company's Code of Corporate Governance the Chairman and the members of the Management Board shall refrain from actions which may result in a conflict between their interests and the interests of the Company. In case such conflict arises, the Chairman or a member of the Company's Management Board shall inform the Board of Directors and also refrain from discussing and voting on related issues
46	Provision in the Articles of Association or internal documents of the joint stock company of criteria for electing the management organization (managing director)	Non-compliant	The Company's Articles of Association or any other documents do not contain any selection criteria for management organizations, as the Company has no intentions to attract one to perform the functions of the Company's sole executive body
47	The joint stock company's executive bodies present monthly performance reports to the Board of Directors	Non-compliant	Reports by the Chairman of the Company's Management Board are provided on a quarterly basis (Sub-paragraph 14 of paragraph 22.1 of Article 22 of the Company's Articles of Association).
48	Liability for infringing on provisions for using confidential and proprietary information stated in contracts concluded by the joint stock company with the General Director (management organization, managing director) and members of the Management Board	Compliant	Contracts signed by the Company with the Chairman of the Management Board and members of the Management Board outline the liability for violations of provisions on the use of confidential and proprietary information.
<b>COMPANY SECRETARY</b>			
49	Presence in the joint stock company of a special official (the Company Secretary) whose task is to ensure the compliance of bodies and officials of the joint stock company with procedural requirements guaranteeing the execution of rights and legitimate interests of the Company's shareholders	Compliant	The function is performed by the Secretary of the Company's Board of Directors.
50	The process of appointing (electing) the Company Secretary and his/her duties are stipulated by the Articles of Association or internal documents of the joint stock company	Compliant	Article 4 of the Regulations on the Board of Directors



No.	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
51	Provision in the Articles of Association of the joint stock company for requirements for candidates for the Company Secretary position	Non-compliant	There are no such requirements.
<b>MATERIAL CORPORATE ACTIONS</b>			
52	Requirement in the Articles of Association or internal documents of the joint stock company to approve a major transaction prior to its fulfillment	Compliant	Sub-paragraph 16 of paragraph 10.2 of Article 10 and Sub-paragraph 20 of paragraph 15.1 of Article 15 of the Company's Articles of Association.
53	Obligatory involvement of an independent appraiser in evaluating the market value of property which is the subject of a major transaction	Compliant	Said deals involve the services of an independent appraiser.
54	Presence in the Articles of Association of the joint stock company a prohibition to undertake any action when acquiring (taking over) a large stake of shares of the joint stock company (takeover) aimed at protecting the interests of executive bodies (members of these bodies) and members of the Board of Directors of the joint stock company, as well as actions worsening the shareholders' position compared to their existing position (in particular, a prohibition against the Board of Directors on making decisions on the issue of additional shares, the issue of securities that are convertible into shares or securities enabling a person to purchase shares of the Company before the termination of the Prospectus even if the right to make these decisions is granted by the Articles of Association)	Non-compliant	This prohibition is not provided for by the Company's Articles of Association.
55	Requirement in the Articles of Association of the joint stock company of the obligatory involvement of an independent appraiser to estimate the current market share price and possible changes in the share price as the result of a takeover	Non-compliant	This requirement is not provided for by the Company's Articles of Association. But in case the Company is re-organized, the decision on reorganization will be based, among other things, on the results of the estimation of the current market price of the Company property and shares
56	Absence in the Articles of Association of the joint stock company of the release of a purchaser from their duty to make an offer to shareholders to sell their ordinary shares (securities issue that is convertible into ordinary shares) during a takeover	Compliant	This norm is not provided for by the Company's Articles of Association.
57	Presence in the Articles of Association or internal documents of the joint stock company of the requirement for the obligatory involvement of an independent appraiser in defining the share conversion ratio during reorganization	Compliant	According to p. 26.2 of Article 26 of the Company's Articles of Association in case the General Shareholders Meeting decides to reorganize the Company, an independent appraiser shall be involved to define the share conversion ratio
<b>INFORMATION DISCLOSURE</b>			
58	An internal document approved by the Board of Directors that outlines rules and approaches of the joint stock company to information disclosure (Regulations on the Information Policy)	Compliant	The Regulations on the Information Policy were approved by the Company's Board of Directors on February 28, 2008 (Minutes No. 55).
59	Existence of internal documents of the joint stock company that require the disclosure of information about the purpose of the share issue, about persons intending to purchase shares to be issued, including a large shareholding and about whether executives of the joint stock company participate in purchases of the Company's shares to be issued	Non-compliant	This requirement is not provided for by the Company's Articles of Association or any other documents.
60	Existence of a list of information, documents and data in internal documents of the joint stock company which should be given to shareholders for making decisions on items submitted to the General Shareholders Meeting	Compliant	A list of information (materials) is defined by the Company's Board of Directors based on Articles 11 and 12 of the Company's Articles of Associations, p. 7 of the Regulations on the Information Policy and p. 4 of the Procedure for the Preparation and Holding of the General Shareholders Meeting
61	A web site of the joint stock company on the Internet that regularly discloses information on the joint stock company (on the web site)	Compliant	<a href="http://www.fsk-ees.ru/">http://www.fsk-ees.ru/</a>
62	Presence in internal documents of the joint stock company of the requirement to disclose information about transactions of the joint stock company made with persons who according to the Articles of Association are among executives of the joint stock company, as well as about transactions of the joint stock company made with organizations in which executives of the joint stock company hold, directly or indirectly, 20 percent of the authorized capital of the joint stock company and above or which can be essentially influenced by said persons	Compliant	In accordance with p.5.2.8 of the Regulations on the Information Policy

№	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
63	Presence in internal documents of the joint stock company the requirement to disclose information about all transactions which can influence the market price of the Company's shares	Compliant	In accordance with Items 5.1 and 5.2.10 of the Company's Regulations on the Information Policy.
64	An internal document approved by the Board of Directors on using essential information on the operations of the joint stock company, shares and other corporate securities and transactions with them which are not public and the disclosure of which could materially influence the market price of shares and other securities of the joint stock company	Compliant	The Regulations on Insider Information were approved by the resolution of the Board of Directors as of 06 October 2011 (Minutes No 144)
<b>CONTROL OVER FINANCIAL AND ECONOMIC ACTIVITY</b>			
65	Internal control procedures over the financial and economic activity of the joint stock company are approved by the Company's Board of Directors	Compliant	The Provisions on the Audit Commission as approved by the resolution of the Company's Board of Directors on 21 October 2002 (Minutes No). The Regulations on the Company's Internal Control System as approved by the Company's Board of Directors on 28 February 2008 (Minutes No 55)
66	A special division of the joint stock company which enforces the execution of internal control procedures (supervision and auditing service)	Compliant	The Company's divisions responsible for the internal control procedures include the following: Control and Audit Department – controls the financial, production and economic activities of the Company divisions, branches and dependent companies; Internal Control Directorate – performs running control and analysis of the efficiency of accounting in the Company and dependent companies; Technical Surveillance and Auditing Department – performs auditing checks of production and engineering activities of the divisions and branches of the Company The Audit Commission
67	The presence in internal documents of a requirement by the Board of Directors of the joint stock company about defining the structure and composition of the supervisory and auditing services of the joint stock company	Compliant	The Company's Regulations on the Internal Control System outlines participants in the internal control system, structural divisions of the Company responsible for controlling and auditing the Company's financial, economic and investment activities.
68	Absence in the supervisory and auditing services of persons who were found guilty of committing crimes in the area of economic activities or crimes against the government, interests of public service and service of local government institutions, or persons who had administrative punishments applied to them for violations in the area of business activity or in the areas of finance, taxes, fiscal charges and the securities market	Compliant	There are no such persons in the Company's supervision and auditing services.
69	Absence in the composition of the supervisory and auditing services of persons who are members of any executive body of the joint stock company, and persons who are participants, the General Director (managing director), members of management bodies or employees of a legal entity that competes with the joint stock company.	Compliant	There are no such persons in the Company's supervisory and auditing services
70	Presence in internal documents of the joint stock company of a timeframe for presenting documents and data to the supervisory and auditing services for estimating the financial and economic operations carried out, and the responsibility of officials and employees of the joint stock company for their failure to present documents and data within the specified timeframe	Compliant	Paragraph 7 of the Regulations on the Audit Commission.
71	Presence in the internal documents of the joint stock company of the supervisory and auditing services' duty to inform the Audit Committee about revealed infringements, and in case of the latter's absence, presence of a duty to inform the Board of Directors of the joint stock company of said infringements	Compliant	According to p. 4 of the Regulations on the Audit Commission if any abuse by the officials of their powers is revealed, as well as any misappropriations, embezzlement, shortages and illegal expenditures in cash and material assets, an intermediate statement shall be drawn and inform the Board of Directors of such occurrences immediately.
72	Presence in the Articles of Association of the joint stock company of the requirement for a preliminary estimation by the supervisory and auditing services of the feasibility of operations not included in the financial and economic plan of the joint stock company (non-standard operations)	Non-compliant	This requirement is not provided for by the Company's Articles of Association
73	Presence in the internal documents of the joint stock company a coordinated procedure for non-standard operations with the Board of Directors	Non-compliant	This procedure is not laid out by internal documents.





No	CCG ARTICLE	COMPLIANT/ NON-COMPLIANT	NOTE
74	An internal document approved by the Board of Directors that defines the Audit Commission 's inspection procedure for the joint stock company's financial and economic activity	Compliant	The Regulations on the Audit Commission as approved by the resolution of JSC RAO UES of Russia's Board of Directors on 21 October 2002 (Minutes No 2), the Regulations on the Company's Internal Control System as approved by the Company's Board of Directors on 28 February 2008 (Minutes No 55)
75	The Audit Committee's evaluation of the Auditor's Report prior to its presentation to shareholders at the General Shareholders Meeting	Compliant	According to p.2.1.4. of p.2 of the Regulations on the Audit Committee approved by the Company's Board of Directors, the framework of reference of the Audit Committee includes preliminary assessment of book-keeping reports
<b>DIVIDENDS</b>			
76	An internal document approved by the Board of Directors and used by the Board of Directors as guidelines for approving recommendations on dividend amount (Dividend Policy Regulations)	Compliant	The Company's Regulations on the Dividend Policy approved by a decision of Federal Grid Company's Board of Directors as of December 16, 2010 (Minutes No. 120).
77	Presence in the Dividend Policy Regulations on rules defining the minimum share of the joint stock company's net profit allocated to dividend payments, and conditions for the non-payment or partial payment of dividends on preferred shares, which have dividend size outlined in the Articles of Association of the joint stock company.	Compliant	The procedure for the determination of a minimal share of the Company's net profit allocated to dividend payment is outlined in p. 4.3 of the Regulations on the Dividend Policy
78	Publication on information about the joint stock company's dividend policy and amendments to it in the periodic publication outlined by the Articles of Association of the joint stock company for publishing information about the General Shareholders Meeting, and publication of said data on the joint stock company's web site on the Internet.	Compliant	The Company's Regulations on the Dividend Policy are published on the Company's official website at <a href="http://www.fsk-ees.ru/investors_corporate_doc.html">http://www.fsk-ees.ru/investors_corporate_doc.html</a>

## IMPLEMENTATION OF THE ASSIGNMENTS OF THE PRESIDENT AND THE GOVERNMENT OF THE RUSSIAN FEDERATION

No	ASSIGNMENT ISSUED BY	REGISTRATION DETAILS	ASSIGNMENT SUMMARY	PERFORMANCE STATUS	PERFORMANCE RESULT
1	The Government of the Russian Federation	V3-P13-6294 As of 23 July 2009	Forming special committees under the Board of Directors (Supervisory Board) and the introduction of key performance indicators of the Company's activity	In 2009 the following Committees under the Board of Directors were formed in the Company: Investment Committee, Committee on Human Resources and Remuneration, Strategy Committee, Audit Committee). The composition of the KPI is approved every year by the Board of Directors.	Contained in Section 3, "Information for shareholders and investors," pp.3.3. "Corporate governance" (3.3.1. – "Management Bodies", 3.3.3. "Remuneration Payment to Management Bodies").
2	The Government of the Russian Federation	ISH-P13-2232 As of 8 April	Making payments (remunerations) to the managerial personal of the Company (sole executive body / chairman of the collegial executive body, the Deputy of the sole executive body / members of the collegial executive body, the heads of departments, members of the Board of Directors (Supervisory Board) which are entitled to receive remuneration	The Board of Directors (as of 14 May 2010) considered the draft Provision on payment remunerations and compensations to the members of the Board of Directors (Supervisory Board) in a new version and recommended the Annual General Shareholders Meeting to approve it. 29 June 2010 the Annual General Shareholders Meeting approved a new version of the Provision on payment remunerations and compensations to the members of the Board of Directors (Supervisory Board).	Contained in Section 3, "Information for shareholders and investors," pp.3.3. "Corporate governance" (3.3.2. – "Management Bodies", 3.3.3. "Remuneration Payment to Management Bodies").

3	The Government of the Russian Federation	ISH-P9-3772	As of 18 June	Implementing the Company's strategy in the field of energy conservation and energy efficiency	The Program to reduce electric energy losses in the Unified National Energy Grid in 2011, has been developed as a part of the Program for energy conservation and improvement of energy efficiency of Federal Grid Company for 2010-2014, approved by the Management Board of Federal Grid Company on 27 July 2011	Contained in Section 2, "Operational Overview," pp.2.3. "Improving the reliability of UNEG facilities".
4	Federal Property Management Agency	GN-13/7796	As of 3 April 2009	Conducting procurement of products made in Russia	Federal Grid Company carried out work to optimize the Company's investment program for 2009-2011. In applying cheaper engineering solutions in the construction (reconstruction) of electricity supply network facilities, including the increase in procurement of equipment made in Russia based on analyzing the possible replacement of equipment imported for the equipment of domestic producers.	Contained in Section 2, "Operational Overview," pp. 2.6. "Organization of procurement activities".
5	The Government of the Russian Federation	ISH-P13--8685	As of 17 December 2010	Realizing measures aimed at ensuring the transparency of procurement and transition to electronic procurement, including provisions regulating the procurement procedures of goods, works and services.	The Company has developed and submitted for consideration by the Board of Directors the following issues: 1. On approval of the Procedure for using preferences during the regulated procurement in Federal Grid Company. 2. On improving the procurement activities of Federal Grid Company. 3. On approving the Procedure for the implementation of measures in identifying facts of abnormally low price tendering during the competitive procurement procedures 4. Posting of information on the planned procurement, including the cost of goods (works, services) and concluded agreements on the official website of Federal Grid Company	The Board of Directors (as of 19 August 2011, Minutes No 140) made the following decisions: 1. Approved Procedure for using preferences during the regulated procurement.2. The Company set the minimum number of electronic auctions with the use of re-auction procedure using e-commerce at a level not less than 95 % of the total number of competitive procurement. 3. Central Tender Committee of the Company was charged to identify a list of mass media to publish all transparent procurement procedures therein.4. Approved form of a report on procurement activities. 5. Approved the Procedure for the implementation of measures in identifying facts of abnormally low price tendering during the competitive procurement procedures.6.Approved a report form for posting information on concluded agreements on the official website of the Company. 7. Set a term of posting information on concluded agreements on the official website of the Company: no later than the 10th day of each month. 8. Assigned the Management Board to post information on concluded agreements on the official website of the Company up to the introduction of ACS 'Agreements' See Section 2, "Operational Overview", pp. 2.5. "Organization of procurement activities".



6	The Government of the Russian Federation	KA-P13-8297	As of 4 December 2010	Details on decisions aimed at improving the wage system for the Company workers	Assignment was a recommendation in terms of developing a system of material incentives for both business executives (top managers) and other employees and if the current system of material incentives has been previously approved by the Board of Directors of the Company a new one was not necessary. In terms of the disclosure of more complete information on incentive payments received by top managers in the reporting year, the information was fully disclosed in the Annual Report of the Company.	Contained in Section 3, "Information for shareholders and investors," pp.3.3. "Corporate governance" (3.3.3. "Remuneration payment to the management bodies").
7	The President of the Russian Federation	Pr-846	As of 2 April 2011	Ensuring government-linked Companies make decisions to reduce the cost of purchases of goods (works, services) per unit by not less than 10% per year during three years in real terms.	In order to improve the procurement activities and performance of assignment of the Russian Government to reduce the cost of purchases of goods (works, services) by not less than 10% per year, on 15 February 2012, Federal Grid Company published an order No 75 "On Improving the procurement activities and the regulation procedures of submitting issues for consideration of the Central Tender Committee (CTC)" providing for restriction of cases of purchases from a single source and establishing the responsibility of individuals who agree these decisions for decision-making in submitting issues for consideration of CTC. On 27 January 2012, the Board of Directors approved the Provision on the procurement procedure of goods, works and services for the needs of Federal Grid Company which contains the following new features: reduction of procurement price cap; procurement procedures and conditions of use – auction, simple (up to RUR2.5 million) and small (up to RUR500 thousand); imposition upon customer the duty of posting information about all competitive procurement procedures, worth RUR500 thousand, funding by all budget items of the Company on the website of the Company, and from 1 July 2012 – on the official national website <a href="http://www.zakupki.gov.ru">www.zakupki.gov.ru</a> .	Contained in Section 2, "Operational Overview", pp. 2.5. "Organization of procurement activities". Provision on procurement of goods, works and services for the needs of Federal Grid Company, approved by the Board of Directors (Minutes No 151/1 as of 27 January 2012) posted on the Company's website <a href="http://www.fsk-ees.ru/suppliers/procurement_management/">http://www.fsk-ees.ru/suppliers/procurement_management/</a> (in Russian).



*The cover photo was taken by Nataliya Valuiskaya, a Leading Specialist of Sochinskoye PMES (a Federal Grid Company branch). The photo captures the installation of one of seven raised towers for the 220 kV transmission line in the Adler Thermal Power Plant, using the largest MI-26T helicopter. The use of the helicopter was necessitated by the non-standard parameters of the towers. The height of each tower is 57 meters and the weight exceeds 30 tons (compared with this, the average height and weight of a typical tower is 40 meters and 10 tons respectively). The raised towers are used due to rugged topography: the line was being laid in the mountains of the Sochi National Park, which has large elevation changes. Thanks to pilot accuracy, the installation operation took just a few minutes and did not impact the national park's environment.*



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