



ГОСУДАРСТВЕННАЯ КОРПОРАЦИЯ ПО АТОМНОЙ ЭНЕРГИИ «РОСАТОМ»

# JSC “Concern Rosenergoatom” activity in new market environment

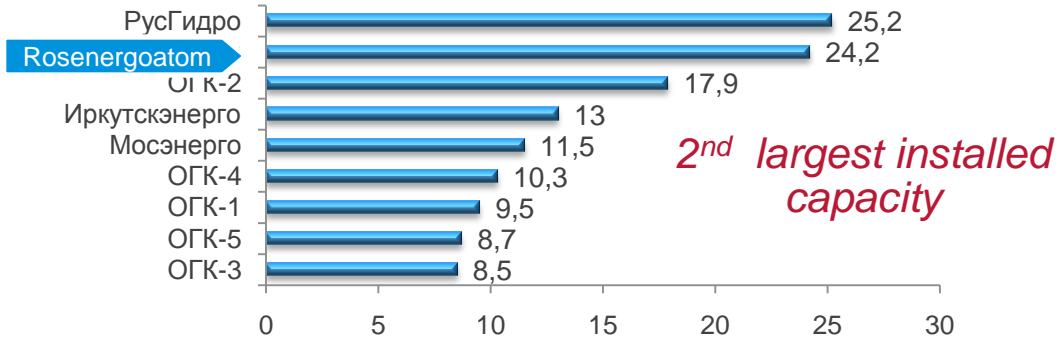
Deputy Director General –  
Sales director  
A.A. Khvalko

# Content of the report

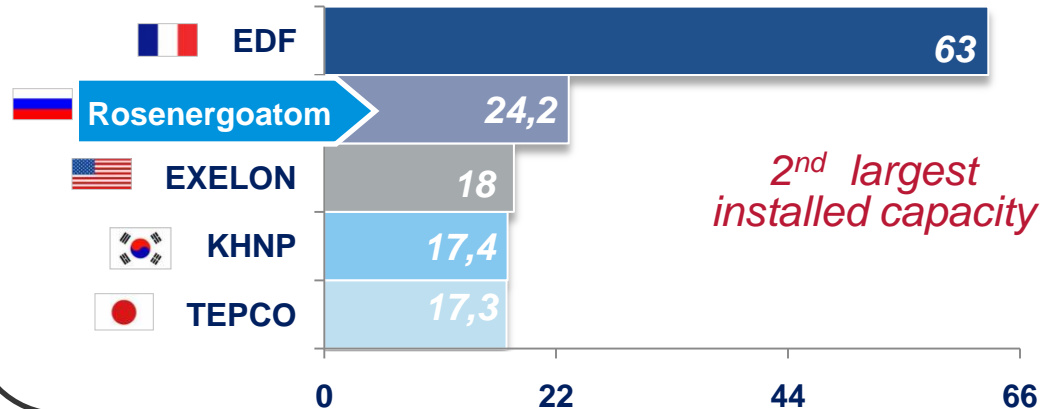
1. Position of the Company at electric power market
2. Conditions of JSC “Concern Rosenergoatom” participation in wholesale electricity (capacity) market
3. Main performance indicators
4. Development prospects

# Rosenergoatom position among generating companies

## Installed capacity rating (GW)



## TOP-5 in the world on installed capacity (GW) among NPPs managing companies



# Conditions of JSC “Concern Rosenergoatom” participation in wholesale electricity (capacity) market

NPPs are least cost and economically sound plants if operated under base load conditions

Rosenergoatom being organization operating NPPs should have costs necessary for ensuring safe operation of NPPs

According to decisions of Russian government, Rosenergoatom takes part in realization of large-scale and ambitious program of new NPP units construction

Rosenergoatom has been performing activities on erection of new power units, financial resources are needed to continue with it

The state postpones covering of gap between inland sale prices and export prices, that does not allow NPPs to use competitive edge to the full extent in comparison with thermal generation in order to receive funds for construction of NPPs directly from the market

Construction of new nuclear power units is more time-consuming in comparison with construction of thermal power plants

# Input of new capacities

- In November 2010 Rosenergoatom concluded Power supply agreements for new NPPs for sale of capacities of 9 new units (1915 contracts). The contracts will guarantee receiving of 4,4 trillion rubles from sale of power of new units till 2038.
- Since 01.01.2011 sale of power of unit 2 Rostov NPP within the framework of power supply agreements started
- Since 01.01.2013 sale of power of unit 4 Kalinin NPP should start within the framework of power supply agreement

## **Preparatory measures for unit 4 Kalinin NPP:**

1. New GTP is registered
2. Since 01.01.2012 right for electric energy sale at open market of electric capacity was granted
3. Activities were planned for certification of capacity in JSC «System Operator of the United Power System» needed to start power sale.

# Events of 2011 effecting open market of electricity

**04.04.2011 Government Decree №1172 dated 27.12.2010 was published which stated regulations of open market of electricity since 01.01.2011 and prescribed the following:**

- Correction of funding sources of investment program of NPPs
- Indexation of power price at 8,8% does not occur in 2011
- Reduction of tariffs for general public and “forced generators” since 01.04.2011
- Increase of price acceptance scope at day-ahead market since 01.07.2011



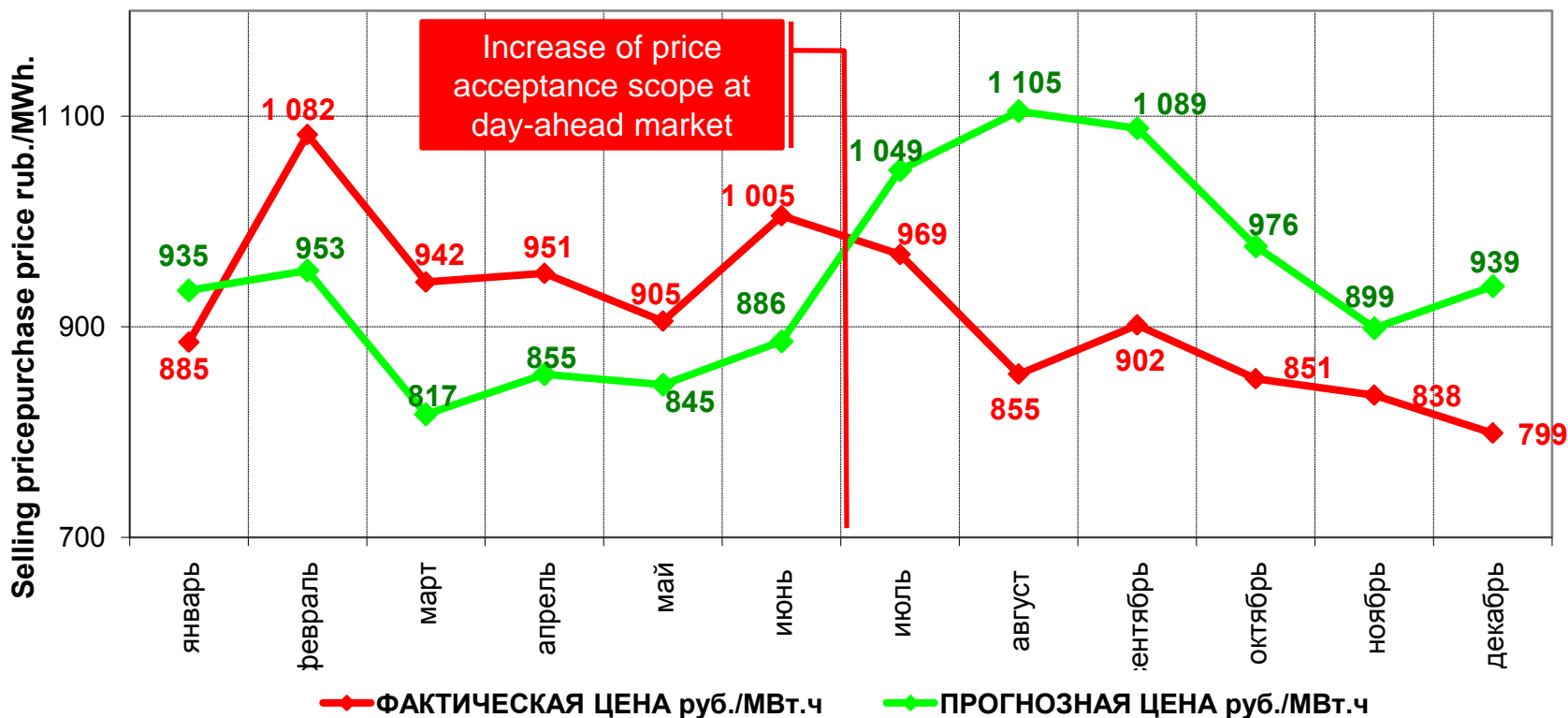
- 01.01-31.05.2011 – temporary regulations at open electricity market → practical payments for 5 months only at the end of June
- 31.05.2011 – Order of Federal Tariff Service about reduction of safe operation premium and investment to NPP capacity price at 12,3 billion rubles
- From 01.07.2011 till 31.10.2011 – 15% reduction of open prices of electric power in relation to forecasting prices

The collage contains several news snippets:

- Электроэнергетика потеряла 150 млрд рублей за четыре дня** (24.02.2011 Мария Церетели): Завлечение правительства об ограничении роста тарифов и снижении объемов инвестпрограммы...
- Сечин сократит число новых ГЭС и АЭС** (18.02.2011 Мария Церетели): Правительство нашло дополнительные 52 млрд руб. для бюджета за счет увеличения сроков реализации инвестпрограмм...
- Игорь Сечин перешел к ручному управлению** (18.02.2011 Мария Церетели): Энергокомпаниям предложено сэкономить на вырубке в предвыборном году...
- ЭНЕРГЕТИКА БЕЗ ПРАВИЛ** (14.03.2011 Татьяна Кособкова, Санкт-Петербург): Президент требует урегулировать тарифы на электроэнергию для потребителей...
- Рост тарифов на электричество может привести к отставкам губернаторов** (14.03.2011 Татьяна Кособкова, Санкт-Петербург): Президент требует урегулировать тарифы на электроэнергию для потребителей...
- Медведев и Путин замораживают рост цен на электроэнергию** (25.03.2011 Мария Церетели): На ближайшие годы о либерализации рынка электроэнергии можно забыть...
- Япония заставила задуматься о том, нужны ли России новые АЭС** (15.03.2011 Андрей Кондратьев, РБК-ТВ): Сегодня ситуацию на японских атомных станциях обсудят министры энергетики Евросоюза...
- «Бедные» энергетики заработали за год почти 5 млрд долларов** (05.04.2011 Мария Церетели, Елена Шестернина): РБК daily решила выяснить, так ли бедны энергетики, как они хотят себя представить...
- Государство ограничит рост цен на электричество** (18.05.2011 Андрей Жуков, Санкт-Петербург): Федеральная служба по тарифам планирует до конца мая внести изменения в ряд нормативных актов...

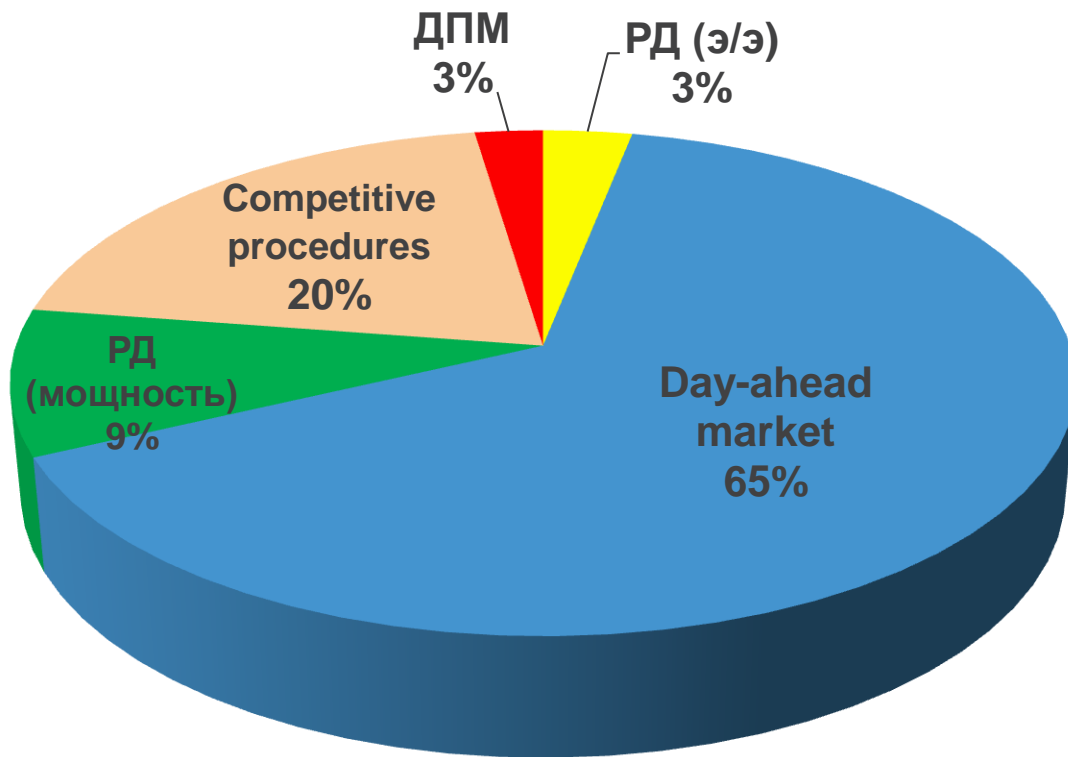
# Relation between forecasting prices and effective free-of-control prices of electric power

Average annual forecasting price was **946 rubles/MW\*h**,  
Effective realized price – **915 rubles/MW\*h**



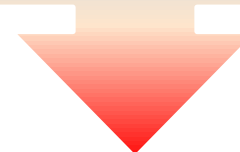
Key factor: modification of regulatory framework

# Sales revenue share of company in 2011



## In 2011 in comparison with 2010:

- 1,9 times drop of power price (from 391 to 206 thousand roubles/MW)
- 2 times decrease of РД share



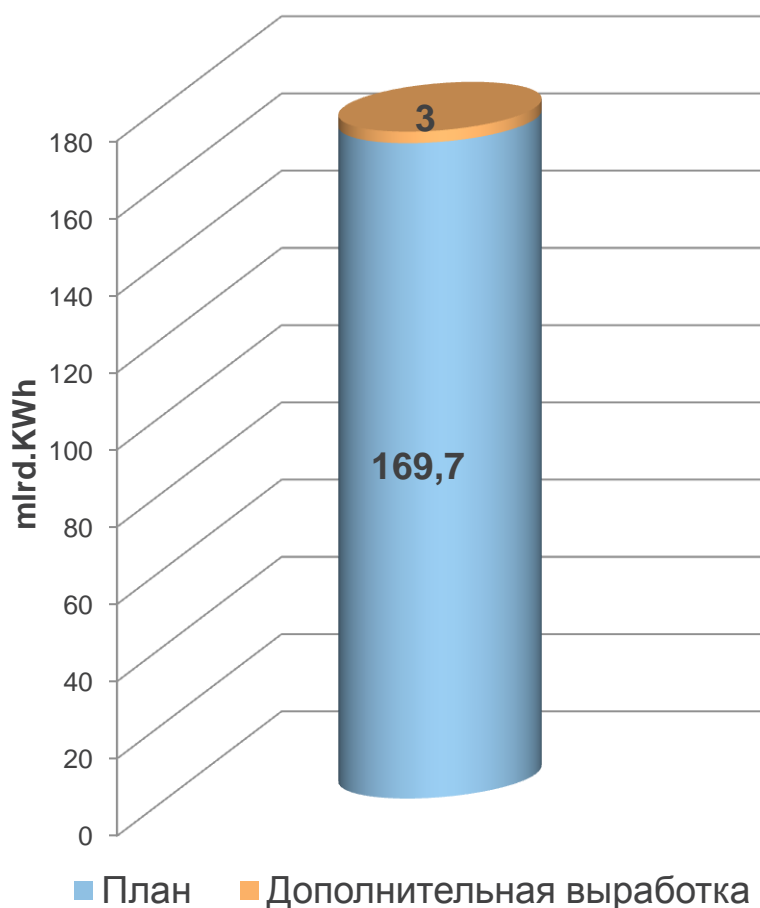
Since 01.01.2011 most part of income of Rosenergoatom is provided due to electric power sales at open prices

Till 01.01.2011 main income – sale of capacity



# Summary indicators of activities at open market of electricity in 2011

## Power production



In spite of the fact that planned indicators concerning power production were outstripped income of Rosenergoatom from electric power sale at day-ahead market was 3,5 billion rubles lower than target one due to external reasons (measures on price reduction for end-user).

Considering that Rosenergoatom income from other market sectors are related with electric power sale at a day-ahead market the Company is performing activities aimed at:

- Reservation of capacity price premium for investments and safety for the year 2012 and subsequent years.
- Development of procedure for compensation of shortfall in income of NPPs, as foreseen by effective market regulations

# Activities realized by Rosenergoatom

## Outage time reduction program

Considering that all relevant standards of nuclear power units operation were absolutely adhered power production grew by 1,2 billion KWh

## Programs of energy saving and enhancement of energy efficiency

- Enhancement of fuel-and-power resources utilization efficiency;
- Cost saving;
- Increase of power generation
- Increase of efficiency coefficient ;
- Ensuring of economic benefit growth of JSC "Concern Rosenergoatom"

Expected payback period for mentioned activities is about **7 years**

## Social project «AtomZhKH» (housing and utilities)

Decisions were taken concerning purchasing and management of assets in the area of housing and utilities in nuclear satellite-towns in order to prevent tariff growth in given areas and to increase quality of communal services rented for company employees.

These activities resulted in increase of operating efficiency of the company due to commodity output growth and cost optimization.

# Development outlook

Possible changes considered by Rosenergoatom for definition of further activities prospects and forecasting of risks are as follows:

- Change of calculation principles of sales premium for energy sales company – provider of last resort
- Introduction of a system of financial guarantee of payment for power and capacity supplies in open market of electricity
- come to competition between suppliers in terms of aggregate costs (“flat-rate” market)
- Motivation for realization of most part of electric power and capacity on open agreements
- Issue of target regulations of retail market – improvement of retail market consumer competition

**Thank you for attention!**