

PJSC RUSHYDRO

# ANNUAL REPORT 2015

*(Translation from Russian original)*





RusHydro

# *PJSC RusHydro Annual Report 2015*

*(Translation from Russian original)*

## CONTENT

<b>THE CHAIRMAN'S STATEMENT</b> .....	4
<b>GENERAL DIRECTOR'S STATEMENT</b> .....	5
<b>PERFORMANCE INDICATORS</b> .....	6
<b>KEY EVENTS OF 2015</b> .....	8
<b>CHAPTER 1. ABOUT THE COMPANY</b>	
<b>1.1. COMPANY'S PROFILE</b> .....	10
<b>1.2. ORGANISATIONAL STRUCTURE OF PJSC RUSHYDRO</b> .....	10
<b>1.3. THE GROUP STRUCTURE</b> .....	11
<b>1.4. GEOGRAPHY OF ACTIVITIES</b> .....	12
<b>1.5. AWARDS IN 2015</b> .....	14
<b>CHAPTER 2. STRATEGIC REVIEW</b>	
<b>2.1. THE COMPANY'S STRATEGY</b> .....	17
2.1.1. Strategy of PJSC RusHydro .....	17
2.1.2. RusHydro Group's Long-term Development Programme .....	19
2.1.3. The strategy of the PJSC RAO Energy Systems of the East .....	20
2.1.4. Key performance indicators .....	23
<b>2.2. RISK MANAGEMENT</b> .....	26
2.2.1. Corporate risk management system .....	26
2.2.2. Risk register of RusHydro Group .....	29
2.2.3. Other risks .....	33
2.2.4. Insurance Protection .....	37
<b>2.3. THE FINANCIAL PERFORMANCE</b> .....	38
2.3.1. Profitability indicators .....	40
2.3.2. Revenue and expenses .....	41
2.3.3. Assets, equity and liabilities .....	43
2.3.4. Cash flow .....	45
<b>2.4. INVESTMENTS</b> .....	45
2.4.1. Investment policy principles .....	45
2.4.2. 2015 Investment programme .....	46
2.4.3. Fulfilment of PJSC RusHydro's and RAO Energy Systems of the East Group's investment programmes in 2015 .....	47
2.4.4. Investment plans .....	48
2.4.5. Comprehensive Modernisation Programme of HPPs .....	49
<b>2.5. INNOVATIVE DEVELOPMENT</b> .....	50
2.5.1. Innovative development programme .....	50
2.5.2. RusHydro Group's projects .....	52
2.5.3. 2016 plans .....	52
<b>2.6. THE COMPANY ON THE SECURITIES MARKET</b> .....	53
2.6.1. Interaction with investors .....	53
2.6.2. Authorized share capital .....	53
2.6.3. Stock trading on the Russian market .....	54
2.6.4. Company securities on the international securities markets .....	56
2.6.5. Dividend policy .....	58
2.6.6. Bonds .....	59
<b>CHAPTER 3. BUSINESS REVIEW</b>	
<b>3.1. BUSINESS MODEL</b> .....	62
<b>3.2. ELECTRICITY AND CAPACITY MARKET OVERVIEW</b> .....	62
3.2.1. General installed capacity and electricity production in Russian and in the world .....	62
3.2.2. Competitive advantages .....	63
3.2.3. Prospects of the Group development .....	65
<b>3.3. TARIFF REGULATION</b> .....	66
3.3.1. Structure of electricity and capacity market .....	66
3.3.2. The structure of the wholesale electricity and capacity market .....	66
3.3.3. Electricity and capacity sales tariffs in 2015 .....	68



<b>3.4. OPERATIONAL RESULTS</b>	<b>69</b>
3.4.1. Installed capacity	70
3.4.2. Electricity output	70
3.4.3. Electricity and capacity sales	70
<b>3.5. INTERNATIONAL COOPERATION</b>	<b>72</b>
3.5.1. Targets and goals of international activities	73
3.5.2. International Partnership	73
3.5.3. Cooperation with international organisations	74
<b>CHAPTER 4. CORPORATE GOVERNANCE</b>	
<b>4.1. CORPORATE GOVERNANCE SYSTEM</b>	<b>77</b>
4.1.1. Observance of the Corporate Governance Principles	77
4.1.2. Corporate Governance Structure	78
4.1.3. Governance over the Company's Subsidiaries	79
<b>4.2. GOVERNING BODIES</b>	<b>80</b>
4.2.1. General Meeting of Shareholders	80
4.2.2. The Board of Directors	80
4.2.3. The Committees of the Board of Directors	84
4.2.4. The Management Board and the Chairman of the Management Board, the Chief Executive Officer	90
<b>4.3. EXTERNAL AND INTERNAL CONTROL</b>	<b>93</b>
4.3.1. The external independent auditor	93
4.3.2. Internal audit commission	94
4.3.3. Internal Audit Service	94
4.3.4. Risk Control and Management Department	95
<b>4.4. REPORT ON REMUNERATION TO THE MANAGEMENT AND CONTROL AUTHORITIES</b>	<b>96</b>
<b>4.5. BUSINESS ETHICS AND ANTI-CORRUPTION</b>	<b>97</b>
4.5.1. Control over Major and Interested Party Transactions	97
4.5.2. Preventing the use of Insider Information	97
4.5.3. Anti-corruption efforts	98
<b>CHAPTER 5. SUSTAINABLE DEVELOPMENT</b>	
<b>5.1. SUSTAINABLE DEVELOPMENT MANAGEMENT</b>	<b>102</b>
<b>5.2. INTERACTION WITH STAKEHOLDERS</b>	<b>102</b>
<b>5.3. PERSONNEL AND SOCIAL POLICY</b>	<b>104</b>
5.3.1. HR policy	104
5.3.2. Social policy	106
<b>5.4. SAFETY AND ENVIRONMENTAL PROTECTION</b>	<b>108</b>
5.4.1. Industrial safety	108
5.4.2. Ecological safety	108
<b>5.5. ENERGY EFFICIENCY</b>	<b>111</b>
5.5.1. Programme in the field of energy saving and enhancement of energy efficiency of the PJSC RusHydro	111
<b>5.6. CHARITY</b>	<b>113</b>
<b>CONTACTS</b>	<b>114</b>
<b>GLOSSARY OF KEY TERMS</b>	<b>116</b>
<b>ABBREVIATIONS LIST</b>	<b>117</b>
<b>FOOTNOTES</b>	<b>118</b>



## THE CHAIRMAN'S STATEMENT



Dear shareholders,

The year 2015 was intensive but productive for RusHydro Group. The company fulfilled its basic tasks, demonstrated that its key priorities were reliability of the energy infrastructure and energy supply to consumers, as well as efficient use of water resources and steady development of the business.

The company was able to maintain stable production and financial performance. In 2015 RusHydro Group has received a net profit in the amount of 27 1591 million rubles, which is 12.5% higher than the result of the previous year.

In 2015, the key vector for the RusHydro Group was represented by the projects related to development of the energy infrastructure of the Far East. In December 2015 the first phase of the Blagoveshchensk TPP expansion project was completed by the construction of the 2nd stage of the station. There is a significant progress with other construction projects run by RusHydro in compliance with the Presidential Decree in Yakutsk, Khabarovsk Territory and Sakhalin, as well as with the construction of a new thermal power plant in Vladivostok.

While developing the heat-and-power infrastructure of the Far East, RusHydro didn't overlook the problem of hydropower potential development in the region. For the whole 2015 year, the Company performed extensive works on construction sites of Nizhne-Bureyskaya HPP in Amur Region and of Ust-Srednekanskaya HPP in Magadan region.

During the last year, the problem of increasing efficiency and reducing costs while maintaining reliability of power facilities came into focus. In December 2015 the Company's Board of Directors has approved the Program for increasing of investment and operational efficiencies and cost reducing as a part of the business plan.

The changes started in 2015 will significantly improve the quality of the corporate governance, make the work of the company more transparent and efficient, reduce operating expenses and investment costs, and relieve the Company of non-core assets.

RusHydro together with governmental authorities participated intensively in establishing a mechanism of alignment of electricity tariffs in selected regions of the Far East with the average tariffs level in the country, and in developing the ways of covering the difference between the economically - justified and tariffs, making investment-attractive.

At the First East Economic Forum, held in Vladivostok in September 2015, RusHydro and "RAO ES of the East" signed several promising agreements with Russian and international partners.

All the issues of 2015 could not dissuade us from optimism. The company has proven its effectiveness and the ability to fulfill all its liabilities, investment and social commitments.

In conclusion, I would like to thank the Company's shareholders, employees and our partners for contributing to our common cause – assurance of the socio-economic development of Russia. With your help and support in 2016 we will do a lot to achieve all our objectives.

**Trutnev Yu.P.**

Chairman of the Board of PJSC RusHydro



## GENERAL DIRECTOR'S STATEMENT

Dear Shareholders!

The year of 2015 is significant for us in the content of the priority investment projects execution, focused on development of the power infrastructure of the Far East: new capacities of Blagoveschenskaya TPP were commissioned (the 1st stage of the 2nd phase). It is one of the four thermal power plants in the Far East constructed upon the Order of the President № 1564 dated of November 22, 2012. Construction in the three other sites is on-going, commissioning of Yakutskaya TPP-2 is planned for the current year, of Sakhalinskaya TPP-2 and TPP in Sovetskaya Gavan' – for the next year.

Active construction works continued at Vostochnaya TPP in Vladivostok and in Ust-Srednekanskaya HPP in Magadan region. Implementation of the most important construction stage of Nizhne-Bureyskaya HPP was started in Amur region – the constructors started filling of the earth-filled dam and preparing of the basic equipment for installation. In April 2016, the Bureya river was dammed, and two hydropower units are planned to be commissioned in December 2016.

In early autumn, in the other part of the country – in the North Caucasus – a new powerful plant started in Dagestan mountains – Gotsatinskaya HPP. Intense construction and installation works took place for another two construction projects in this region – Zaragzhskaya HPP in Kabardino-Balkaria and Zelenchukskaya HPP-PSHPP in Karachay-Cherkessia during the whole year of 2015. In Siberia the Boguchanskaya HPP project is nearing completion. In the reported year, the Boguchansky reservoir was filled up to the design level allowing the plant to operate in the design basis regime.

RusHydro not only constructs, but also continues upgrading power facilities.

This is the investment into the safety and reliability of the operation, into the efficiency growth and the increase in the installed capacity of our plants. Since 2012, RusHydro has implemented the Integrated Modernization Programme that covers dozens of power facilities. More than half of the main equipment will be replaced within the framework of this programme. In 2015 Kamskaya HPP was the 1st to finalize full modernization of the hydropower units, thus its capacity increased by 14%. Additionally, 3 modernized hydroelectric units are commissioned in Volzhskaya HPP, 5 hydropower installations in Cheboksarskaya HPP, 3 hydropower units in Saratovskaya HPP and 1 hydropower installation in Novosibirskaya HPP. Replacement of turbines and generator mechanical parts took place in three hydropower units of Zhigulevskaya HPP. In total 14 hydropower units with the installed capacity of 1171 megawatt were modernized.

At the end of the last year, the company made efficiency improvement its top priority. We managed to minimize the costs of modernization, inter alia, due to improving the efficiency of procurement procedures while preserving the high quality of the works and initial target parameters of reliability and safety of HPPs. In 2015, we continued optimization of the administrative personnel: its headcount was reduced by 14%. In 2016, we will continue the work on improving efficiency. For example, RusHydro is going to minimize the operating expenses across the Group nearly by RUB 9 bn, 9% lower than the level of 2015. The cost optimization is intended to ensure the financial stability of the Group and better investment appeal.

Additionally to the difficult economical situation in the last year we faced negative environmental trends as well – the low streamflow period continued in the first half of the year had negative impact on production figures. However, the increase of the rainfall in autumn balanced the situation, and taking into account the increase in production of the new Boguchanskaya HPP and a number of the thermal power plants of RAO Energy Systems of the East, led to the power production increase by 4% as compared to the previous year.

However, even despite unfavorable hydrological conditions and deterioration of the business environment, RusHydro Group has preserved overall financial stability. We managed to increase the revenue by 6% as compared to 2014, keep growth of operating expenses below inflation rate, and increase net profit by 12.5%. The Group's leverage remains within the acceptable limits.

During the years of its' existence RusHydro has faced a lot of challenging and large-scale tasks and has always solved them successfully. This is the merit of the company staff, the high-level specialists, the reliable and talented people, having restored the damaged Sayano-Shushenskaya HPP and having finalized construction of Boguchanskaya HPP. No matter what the economical situation is, we have to keep our human potential, observe the local hydropower traditions and handle them over to the new generations. This is a strategic resource that ensures reliability of the unified power system of the country.

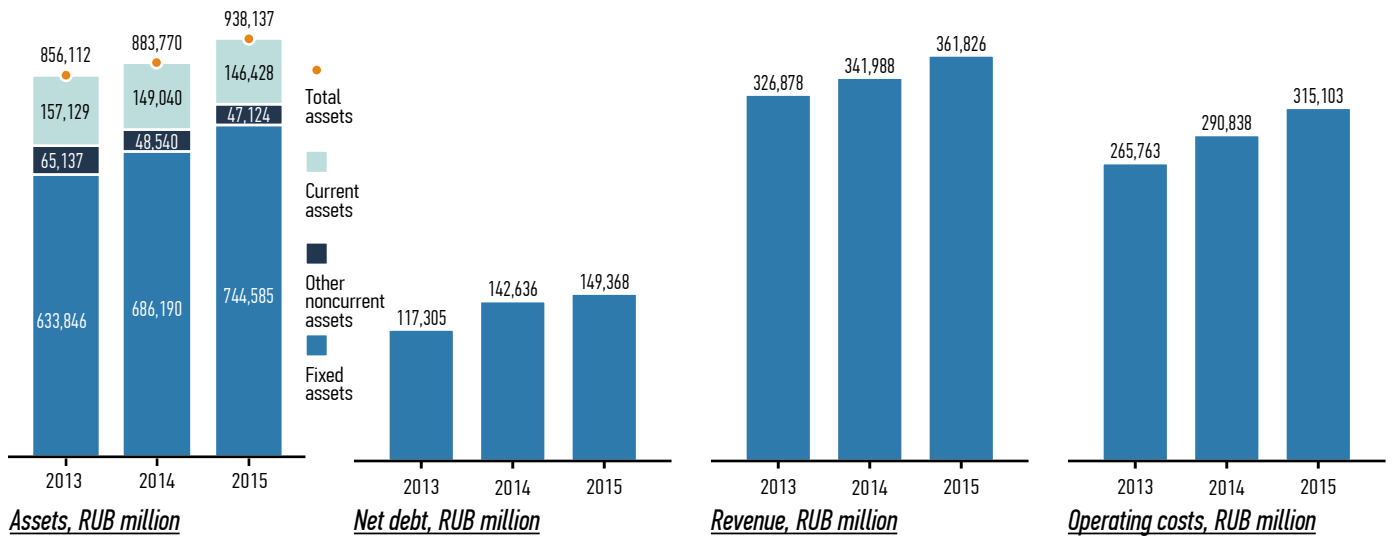
We have successfully lived through a complicated year. With all my heart I would like to thank my colleagues, the staff of RusHydro, its branches and subsidiaries for their fruitful work in 2015, and to wish them success in accomplishing our tasks in 2016.

**Shulginov N.G.**

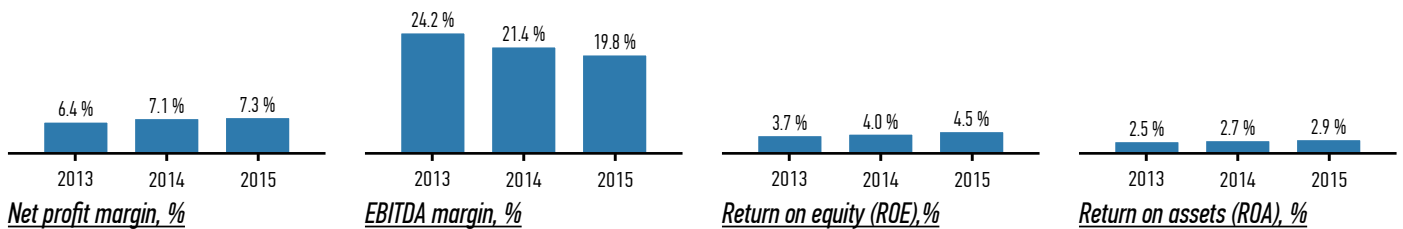
Chairman of Management Board – Director General of PJSC RusHydro



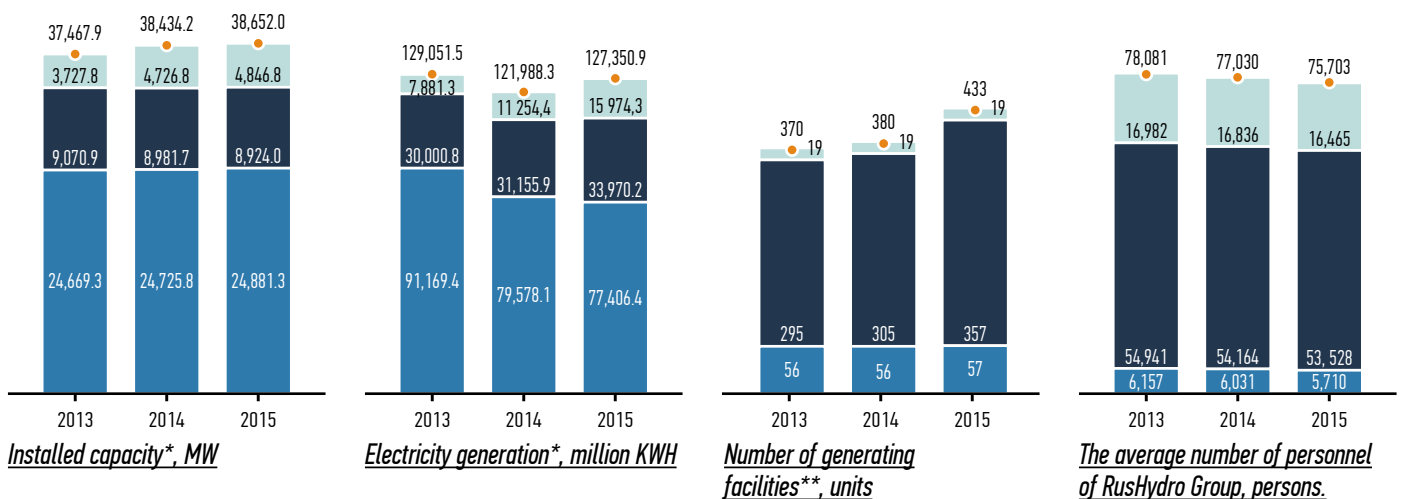
## FINANCIAL INDICATORS IN ACCORDANCE WITH IFRS



## FINANCIAL RATIO



## OPERATING HIGHLIGHTS

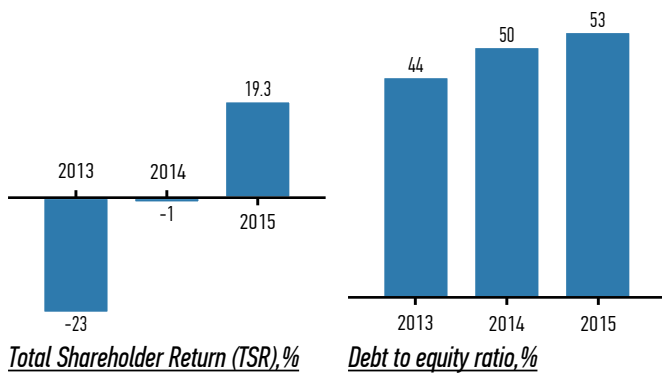
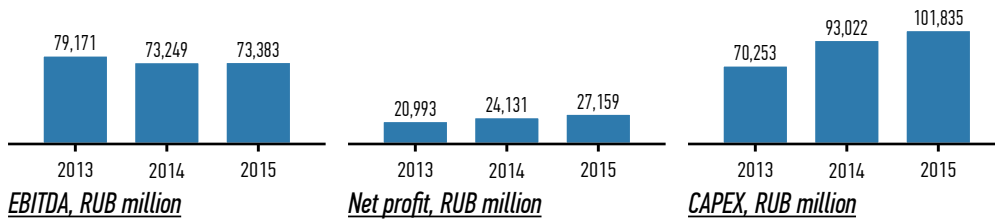


\* The data are based on JSC Boguchanskaya HPP (owned by PJSC RusHydro and United Company Rusal PLC), with the HPP-2 JSC KamGEK excluding HPP-1 and HPP-3 PJSC KamGEK, held in trust PJSC RusHydro.

\*\* Main number of generating facilities concentrated in the perimeter of the RAO Energy Systems of East Group

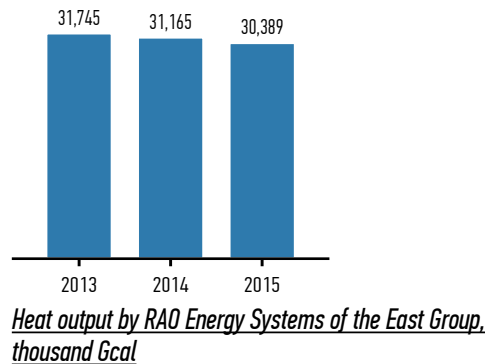


## PERFORMANCE INDICATORS



- RusHydro Group
- Other
- RAO Energy System of East Group
- PJSC RusHydro

The average number of personnel of RusHydro Group, decreased by 1.7 % compared to 2014 and by 3 % compared to 2013, due to the implementation of measures to optimize the number personnel and administrative staff measures to reduce non-core activities in the branches.





## KEY EVENTS OF 2015

<b>January</b>	<ul style="list-style-type: none"> <li>- RusHydro and Power Machines sign agreements on replacement of hydropower units at the Votkinskaya and Rybinskaya HPP</li> </ul>
<b>February</b>	<ul style="list-style-type: none"> <li>- Russian Institute of Directors upgrades the corporate governance rating of PJSC RusHydro to the Best Practice of Corporate Governance<sup>1</sup></li> </ul>
<b>June</b>	<ul style="list-style-type: none"> <li>- Yuri Trutnev, Deputy Chairman of the Russian Government, Plenipotentiary Envoy of President to the Central Federal District, is elected Chairman of the Board of Directors of PJSC RusHydro</li> <li>- The capacity output of the Sayano–Shushenskaya HPP to the electric grid increased to 5,100 MW as a result of modernisation of automatic reliability system installed at the station</li> <li>- RusHydro confirms the record high amount of dividends in its history – RUB 6.03 billion</li> </ul>
<b>July</b>	<ul style="list-style-type: none"> <li>- Boguchanskaya HPP reaches its design capacity of 2,997 MW allowing the plant to produce 17.6 TW-h of electricity per year</li> <li>- Kamskaya HPP is the first power plant of RusHydro to finish modernisation of its hydropower equipment and came to design working hours of hydroelectric power station</li> </ul>
<b>September</b>	<ul style="list-style-type: none"> <li>- Nikolay Shulginov appointed Chairman of the Management Board – General Director of PJSC RusHydro</li> <li>- 100 MW Gotsatlinskaya HPP is commissioned</li> </ul>
<b>December</b>	<ul style="list-style-type: none"> <li>- The construction of the first stage of the second phase of the Blagoveschenskaya CHP is completed, the new equipment increased the installed electric capacity of the plant by 120 MW and heat capacity by 188 Gcal/h</li> </ul>

In 2015, the Company enhanced construction and installation works at the Yakutskaya TPP-2 (1st stage), CHP in Sovetskaya Gavan, and the Sakhalinskaya TPP-2 (1st stage).

As a result of implementation of Comprehensive Modernisation programme in 2015, the Company's installed capacity increased by 55.5 MW including the growth of capacity of Volzhskaya HPP (10.5 MW), Zhigulevskaya

HPP (21.0 MW), Saratovskaya HPP (13.0 MW), Novosibirskaya HPP (5.0 MW), and Kamskaya HPP (6.0 MW).

### EVENTS AFTER REPORTING DATE (JANUARY – APRIL 2016)

<b>January</b>	<ul style="list-style-type: none"> <li>- RusHydro and Voith Hydro signed an agreement providing the possibility of cost optimisation of the Saratovskaya HPP modernisation</li> <li>- The interim results of tender offer for shares of PJSC RAO Energy Systems of the East were announced</li> </ul>
<b>February</b>	<ul style="list-style-type: none"> <li>- The most complicated stage of construction – the excavation of the unique derivation tunnel – is finished at the Zaramagkaya HPP-1</li> </ul>
<b>April</b>	<ul style="list-style-type: none"> <li>- RusHydro Group starts optimisation of its capital expenses.</li> <li>- The coupon rate was set at 10.35% per annum – the lowest coupon rate among corporate marketable securities since June 2014.</li> <li>- The Bureya river in the Amur region was dammed up and the river now flows through the Nizhne-Bureyskaya hydropower plant. This was the most important stage of construction of the plant.</li> </ul>



**01**

*PJSC RUSHYDRO*

*ANNUAL REPORT 2015*

***ABOUT THE COMPANY***

**127.4** BILLION TW·H – POWER GENERATION IN 2015



## 1.1. COMPANY'S PROFILE

**THE COMPANY'S MISSION** is to effectively utilize hydro resources, to create the conditions required for the reliable performance of Russia's Unified Energy System (UES) and to enhance the usage of renewable energy sources (RES) for the benefit of shareholders and society.

RUSHYDRO IS ONE OF THE LARGEST RUSSIAN UTILITY HOLDING COMPANIES. THE COMPANY IS A LEADER IN ENERGY PRODUCTION BASED ON RENEWABLE SOURCES AND COMBINES HEAT AND POWER PLANTS IN THE FAR EAST.

## 1.2. ORGANISATIONAL STRUCTURE OF PJSC RUSHYDRO

Organisational structure of PJSC RusHydro consists of the executive office of the Company and 19 subsidiaries:

1) PJSC RusHydro's branch

**Bureyskaya HPP**

2) PJSC RusHydro's branch

**Volzhskaya HPP**

3) PJSC RusHydro's branch

**Votkinskaya HPP**

4) PJSC RusHydro's branch

**Dagestan branch**

5) PJSC RusHydro's branch

**Zhigulevskaya HPP**

6) PJSC RusHydro's branch

**Zagorskaya PSPP**

7) PJSC RusHydro's branch

**Zeyskaya HPP**

8) PJSC RusHydro's branch

**Kabardino-Balkarian branch**

9) PJSC RusHydro's branch

**Kamskaya HPP**

10) PJSC RusHydro's branch

**Karachay-Cherkessia branch**

11) PJSC RusHydro's branch

**Cascade of Verkhnevolzhskiy HPPs**

12) PJSC RusHydro's branch

**Cascade of Kubanskiye HPP**

13) PJSC RusHydro's branch

**Corporate University of Hydropower**

14) PJSC RusHydro's branch

**Nizhegorodskaya HPP**

15) PJSC RusHydro's branch

**Novosibirskaya HPP**

16) PJSC RusHydro's branch

**Saratovskaya HPP**

17) PJSC RusHydro's branch

**Sayano-Shushenskaya HPP named after P.S. Neporozhniy**

18) PJSC RusHydro's branch

**North Ossetian branch**

19) PJSC RusHydro's branch

**Cheboksarskaya HPP**



## 1.3. THE GROUP STRUCTURE\*

### GENERATION

JSK Kolymaenergo (98,74%)
JSK Geoterm (99,65%)
JSK KamHEK (96,58%)
JSK Verkhne-Mutnovskaya GeoPP (100%)
JSK Pauzhetskaya GeoPP (100%)
JSK MEK (90%)
CJSC Boguchanskaya HPP (96,67%)
CJSC Blagoveshchenskaya CHPP (100%)**

### SUPPLY

JSC Sibenergosbyt (100%)
JSC Krasnoyarskenergosbyt (65,8%)
JSC RESK (90,52%)
JSC Chuvashskaya Power Suooly Company (100%)
LLC Power Suooly Company of Bashkortostan (100%)

### CONSTRUCTION

CJCS Sakhalinskaya SDPP-2 (100%)**
CJCS CHPP in Sovetskaya Gavan (100%)**
CJCS Yakutskaya SDPP-2 (100%)**
LLC SHPP of Stavropol Region and KCR (100%)
JSC Leningradskaya PSHPP (100%)
LCC Verkhnebalkarskaya SHPP (100%)
JSC Small HPPs of Altay (100%)
JSC Zagorskaya PSHPP-2 (100%)
JSC Renewable Energy Engineering Center (100%)
JSC Nizhne-Zeyskaya HPP (100%)
JSC Nizhne-Bureyskaya HPP (100%)
JSC Sulaksky HydroCascade (100%)
LLC Fiagdonskaya SHPP (100%)
JSC Zaramagskye HPPs (99,75%)
JSC Ust-Srednekanskaya HPP (100%)

CJSC Upper Naryn HPPs (50%)

JSC SHPP of KBR (95,28%)

### REPAIR AND CONSTRUCTION

CJSC Construction Contractor of the Boguchanskaya HPP (49%)
CJSC Developer of the Boguchansk Aluminum Smelter (49%)
CJSC Construction Contractor of the Boguchansk Aluminum Smelter (51%)
CJSC Developer of the Boguchanskaya HPP (51%)
JSC Hydroremont VCC (100%)
JSC ChirkeyGESstroy (100%)
LLC Montazhenergo(100%)
JSC Ust-Srednekanskaya GESstroy (100%)
JSC ESCO UES (100%)

### INSTITUTE

JSC NIIES (100%)
JSC Lengidroproject (100%)
JSC Hydroproject Institute (100%)
JSC Vedenevye VNIIG (100%)
LLP VNIIG (100%)
JSC MOSOBLHYDROPROJECT (62,54%)

### NON-CORE

JSC Yuzhno-Yakutsky HEC (100%)
JSC SHPP of Dagestan (100%)
JSC Karachaevo-Cherkesskaya HGCC (100%)
CJSCHydroEngineering Siberia (100%)
Ltd. SCC BoHPP (50%)
Ltd. Hydroproject-Service (51%)
CJSC Malaya Dmitrovka (100%)
RUSHYDRO INTERNATIONAL B.V. (100%)
JSC Hydroinvest (100%)
JSC TC RusHydro (100%)
JSC SC SSHPP (100%)

LLC RusHydro IT Service (100%)

JSC RBEF (51%)

JSC Pavlodolskaya HPP (100%)

JSC Dalnevostochnaya WPP (100%)

CJSC Holding Company BoHPP (100%)

JSC IESK (42,75%)

JSC GVC Energetiki (42,53%)

LLC VolgaHydro (40%)

LLC SNPG (100%)

LLC ITSPVE RusHydro (100%)

LLC Energy Index – Hydro OGC (100%)

CJSC Holding Company BoAS (100%)

LLC EZOP (100%)

Alstom RusHydro Holding B.V. (50%+1 share)

LLC AlstomRusHydroEnergy (100%)

LLC ENEKS (100%)

CJSC Technopark Rumyantsevo (100% +1 share)

HydroAir Limned (100%)

RUSHYDRO INTERNATIONAL A.G. (100%)

RUSHYDRO INTERNATIONAL INDIA PRIVATE LIMITED (51%)

BALP LIMITED (50%)

HYDROOGK ALUMINIUM COMPANY LIMITED (100%)

BOGES LIMITED (50%)

CJSC BoAS (100%)

HYDROOGK POWER COMPANY LIMITED (100%)

### MC

JSC ESK RusHydro (100%)

JSC MC HydroOGK (100%)

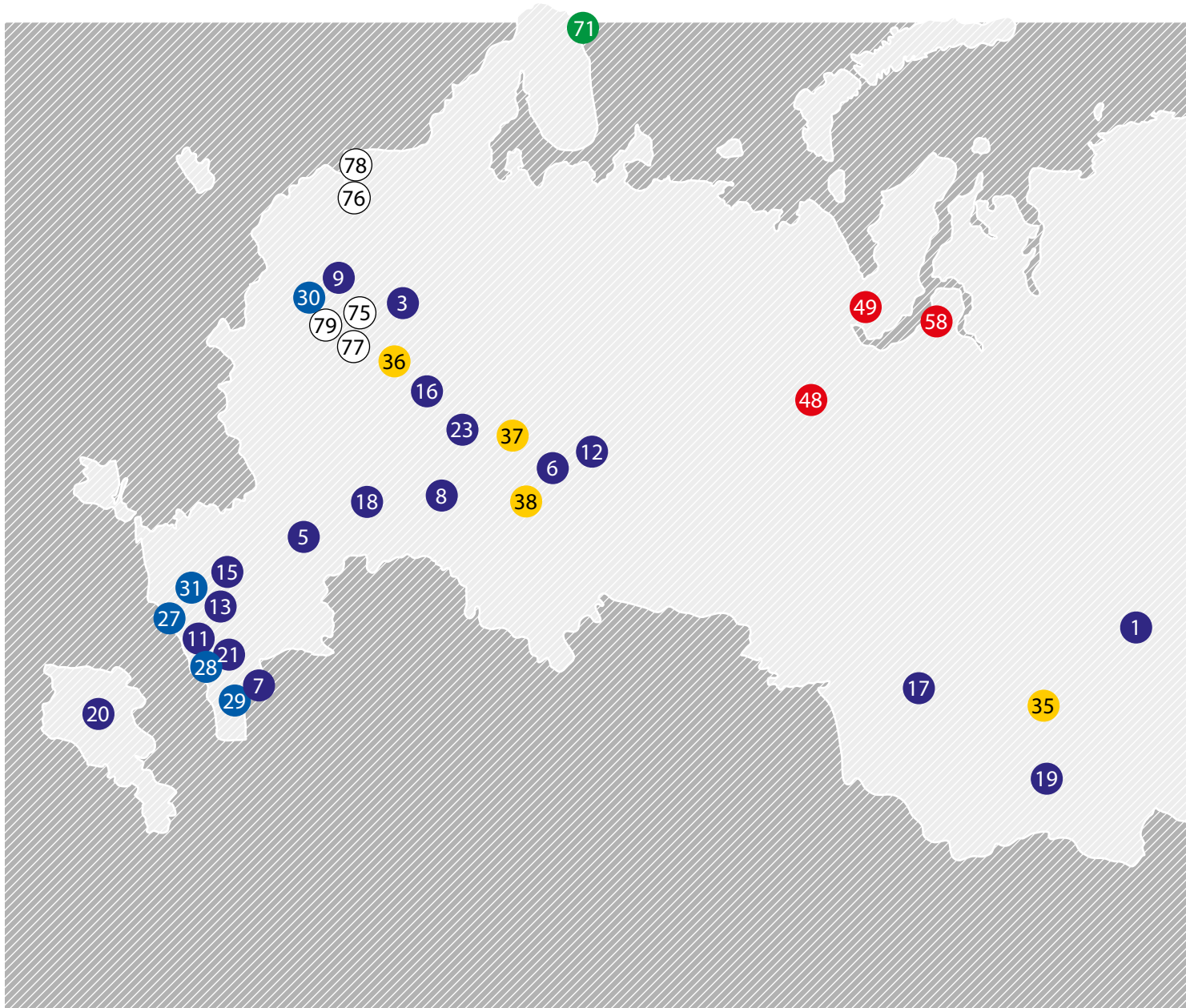
JSC RAOEnergy Systems of the East (84,39%) and SDCs of the company

\* As of 31.12 2015

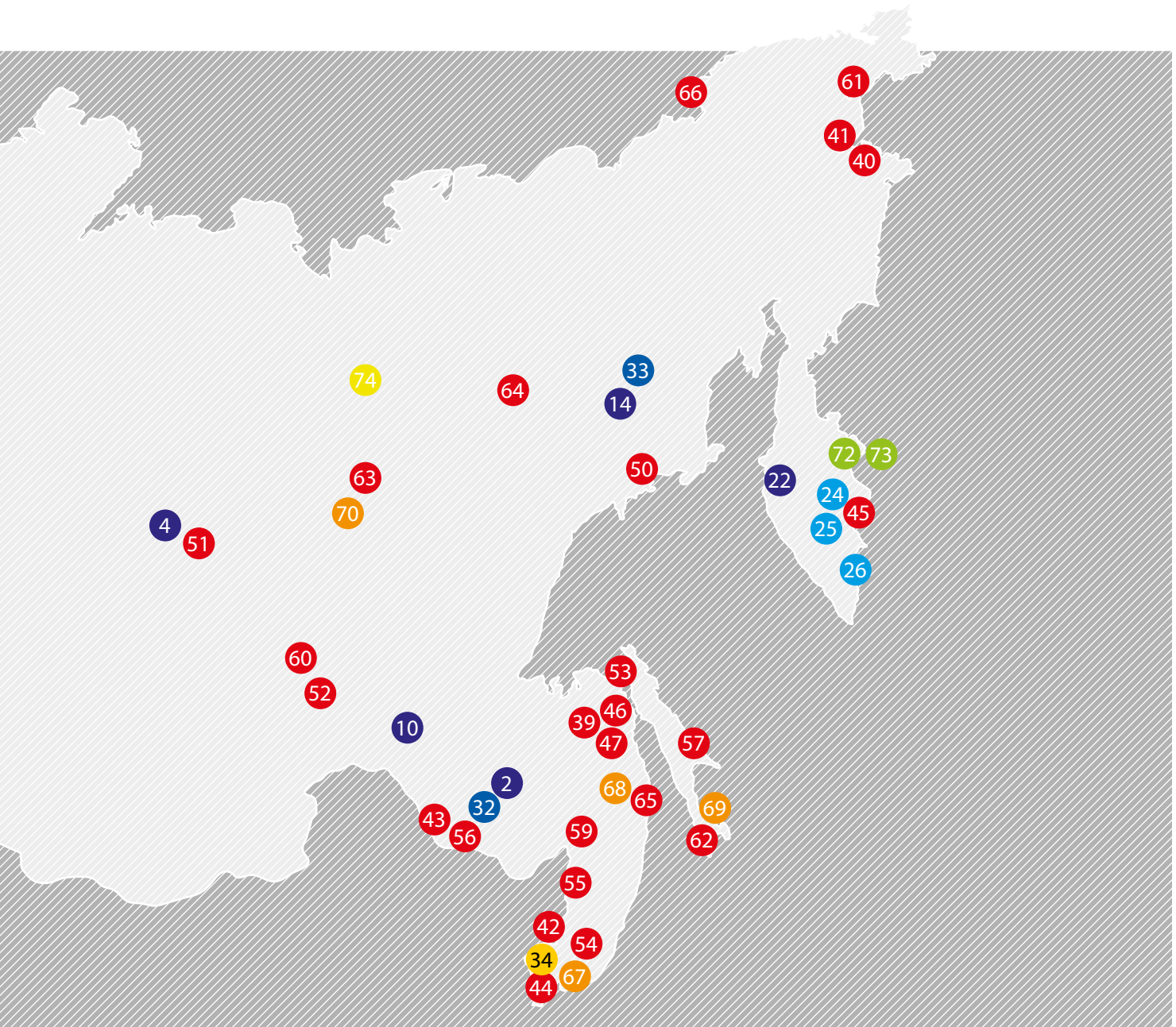
\*\* The companies have been transferred to the trust management of JSC RAO Energy Systems of the East



## 1.4. GEOGRAPHY OF ACTIVITIES



<b>● Operating PPs</b>	MW		
1. Boguchanskaya HPP	2 997	17. Novosibirskaya HPP	465
2. Byreyskaya HPP	2 010	18. Saratovskaya HPP	1 391
3. Cascade of Verkhnevolzhskiy HPPs	476,6	19. Sayano-Shushensky Branch	6 721
4. Cascade of Viluyksy HPPs	680	20. Sevan-Razdan Cascade	561,41
5. Volzhskaya HPP	2 650	21. HPPs of the Northern Ossetian Branch	79,5
6. Votkinskaya HPP	1 020	22. Tolmachyovskiy HPPs	45,2
7. Dagestan Branch	1 785,5	23. Cheboksarskaya HPP	1 370
8. Zhigulevskaya HPP	2 404	<b>● Geo PPs</b>	MW
9. Zagorskaya PSHP	1 200	24. Verkhne-Mutnovskaya GeoPP	12
10. Zeyskaya HPP	1 330	25. Mutnovskaya GeoPP	50
11. Kabardino-Balkarian Branch	157,5	26. Pauzhetskaya GeoPP	12+2,5
12. Kamskaya HPP	549	<b>● HPPs under construction</b>	MW
13. Karachaevo-Cherkessian Branch HPP	160,6	27. Zaragizhskaya HPP	30,6
14. Kolymskaya HPP	900	28. Zaramagsky HPPs	15+342
15. Cascade of Kubanskiye HPPs	476,5	29. Cotsatinskaya HPP	100
16. Nizhegorodskaya HPP	520	30. Zagorskaya PSHP	840
		31. Zelenchukskaya PSHP	140
		32. Nizhne-Bureyskaya HPP	320
		33. Ust-Srednekanskaya HPP	570
		<b>● Retail companies</b>	
		34. Far-Eastern Energy Company	
		35. Krasnoyarskenergosbyt	
		36. Ryazan retail energy company	
		37. Chuvash retail energy company	
		38. Bashkortostan retail energy company	
		<b>● Thermal PPs</b>	MW
		39. Amurskaya CHPP	285
		40. Anadyrskaya Gas Engine CHPP	30
		41. Anadyrskaya CHPP	56
		42. Artyomovskaya CHPP	400



43. Blagoveshenskaya CHPP.....	400	60. Chulmanskaya CHPP.....	48	● <b>Wind PPs</b>	MW
44. Vladivostok CHPP.....	497	61. Evgenkinotskaya TPP.....	34	72. Kalmykskaya Wind PP	1,1
45. Kamchatskiye CHPPs.....	406,8	62. Yuzhno-Sakhalinskaya CHPP.....	316	73. WPP in Ust-Kamchatsk.....	0,55
46. Komsomolskiye CHPPs.....	600	63. Yakutskaya TPP.....	320	● <b>Solar PP</b>	MW
47. Komsomolskaya CHPP.....	360	64. Arkagalinskaya TPP.....	224	74. Batagai solar PP.....	1
48. Kyzym (Mobile PP).....	72	65. Maya TPP.....	81	○ <b>Research and design organizations</b>	
49. Labytnangi (Mobile PP).....	73	66. Chaunskaya CHPP.....	34,5	75. Mosoblhydroproject	
50. Magadanskaya CHPP.....	96	● <b>Thermal PPs under construction</b>	MW	76. Vedeneyev VNIIG	
51. Mirninskaya TPP.....	72	67. Vostochnaya TPP	139,5	77. Hydroproject institute	
52. Nerunginskaya TPP.....	570	68. Sovgavanskaya CHPP.....	120	78. Lenhydroproject	
53. Nikolaevskaya CHPP.....	131	69. Sakhalinskaya TPP.....	110	79. NIIES	
54. Partizanskaya TPP.....	203	70. Yakutskaya TPP.....	170		
55. Primorskaya TPP.....	1 467	● <b>Tidal PP</b>	MW		
56. Raychikhiskaya TPP.....	102	71. Kislogubskaya Tidal PP	1,7		
57. Sakhalinskaya TPP.....	252				
58. Urengoy (Mobile PP).....	72				
59. Khabarovskiye CHPPs.....	1 155				



## 1.5. AWARDS IN 2015

### The 2015 Platts Top 250 Global Energy Company Rankings

The agency announces PJSC RusHydro Russia's best energy company (#137 in the rating – the best result among Russian energy companies).

### An award from System Operator For Significant Contribution into the Assurance of the Reliability of the Unified Power System of Russia

The award is given to Sayano-Shushenskaya HPP named after P.S. Neporozhnyi, a subsidiary of PJSC RusHydro.

### The Project Olympus all-Russian public sector professional project management competition

The project on the replacement of hydro power equipment at Zhigulevskaya HPP scores 3rd in the Complex Project Management System category.

### The study of the corporate transparency of the largest Russian companies in 2015 conducted by the Russian Regional Integrated Reporting Network

PJSC RusHydro is awarded the 1st level of transparency (#12 out of 729 companies).

### The Corporate governance Rating of Russian Institute of Directors

PJSC RusHydro is awarded level 8 – the Best Practice of Corporate governance.

### The MediaTEK, the first all-Russian competition

The charity environment protection projects of PJSC RusHydro are awarded in the Environment Protection category.

### The EMEA Finance international magazine

The magazine announces the lending agreement for the modernisation of Saratovskaya HPP the best sustainable development transaction executed in Central and Eastern Europe in 2014.

### The Environmental Initiatives of Russian Companies in Media. The Fuel and Energy Complex and Metal Industry rating compiled by Modern Media Research Institute in cooperation with Zhivaya Planeta TV channel

PJSC RusHydro scores 3rd.

### The rating of social reports as of 2014 compiled by RAEX international rating agency

The report of RusHydro Group on sustainable development is rated 3 stars (8.76 points).

### The Top 25 of Social Responsibility Managers rating compiled by the Russian Manager Association

Deputy PR Director, Media Secretary of PJSC RusHydro scores 9th.

### The Top 15 Leaders of Corporate Entities of RBC

PJSC RusHydro reaches the Top 10 of the ring.

### The Crystal Pyramid 2015 human asset management award

The branch of PJSC RusHydro – "Corporate University of Hydroenergetics" wins the Grand Prix in two categories – the Corporate University of the Year and the HR Project of the Year.

### The All-Russian Competition of Youth Projects and Educational Initiatives in the Energy Industry held under the auspices of the Ministry of Energy of the Russian Federation

The Development of the Staff Resources of PJSC RusHydro and Summer Energy School educational projects win the competition.

### The Silver Strings national corporate media competition

The electronic version of the Vestnik RusHydro newspaper receives a certificate in the Best Digital Edition: Innovative Solutions in Corporate Media Communication category.

### The Best Corporate Media 2015 competition organized by the Russian Communication and Corporate Media Director Association

The Vestnik RusHydro corporate newspaper is awarded in the Souvenir and Graphic Product category.

### The Digital Communications AWARDS

The following projects of PJSC RusHydro are awarded:

- the People of Light art project,
- five video clips on under-construction power plants in the Far East,
- the virtual energy museum of the Far East.



**Boris Bogush**

Member of the Management Board,  
First Deputy General Director-Chief Engineer

**- One of the key words in RusHydro's Strategy is "reliability". What does it imply?**

- We have lived through the tragedy at Sayano-Shushenskaya HPP. Such events cannot be forgotten, both we and the public are very concerned with the reliability of our facilities, whether people can live safely at the downstream side of our facilities, to work at our plants. This is why reliability is fundamental and vital for our company.

Reliability is a complex concept: it includes equipment readiness to bear the load, and keeping permitted wear levels of the equipment, and continuous monitoring of violations of technology. Of course, age of the facilities is important. We have some quite "mature" facilities that were designed according to the GOELRO Plan 1 – Baksanskaya HPP, Gizeldonskaya HPP. Uglichskaya HPP was built before the Great Patriotic War, the first hydraulic unit of Rybinskaya HPP was put into operation in autumn 1941 (its startup facilitated Moscow survival in the conditions of limited power supply of the wartime).

The company also has new facilities, the construction of which has been completed just recently: Boguchanskaya HPP, Bureyskaya HPP, Gotsalinskaya HPP. They also require heightened attention as there were applied new technology and engineering solutions that have not yet proved their reliability by the test of decades.

We must keep sufficient reliability level at the facilities of any age, of any prehistory. In the conditions of limited financing it is vitally important to correlate reasonably the investment in facilities and required target condition, when the risks become understandable and manageable.

Moreover, the reliability factor includes facilities environmental safety. We must minimize negative influence inherent on any huge structures and, if possible, to reduce environmental risks, including the risks at the big rivers –Volga, Yenisei, Angara.

**- How can reliability be ensured in practice?**

- In 2012 we launched large-scale and ambitious Integrated Modernization Program (IMP) for the term until 2025. Now we are talking about shifting of completion term beyond 2025 due to the company financing reduction because of critical situation in the economy. We had to review very carefully the investment priorities in guaranteeing of facilities reliability, and their ranking to avoid deterioration of the assets condition. I consider vitally important that even in the conditions of modernization slowdown we manage to keep positive dynamics of our assets reliability improving.

In addition to the Integrated Modernization Program fulfillment, guaranteeing of reliability and safety includes a number of technical measures. The first is continuous improvement of the corporate standardization system in the field of technical regulation. The second is functioning of the safety and reliability management system for hydropower facilities and power-generating equipment of the company. The Analytical Center on the basis of affiliated Scientific Research Institutes as a supporting system for decision-making for the operation of facilities plays key role in it. The Center is a network structure collecting all data from our facilities in online mode analyzing it, checking for compliance with regulations and standards, and issuing recommendations for keeping our assets at the required safety level. The third is implementation of the program of repairs, maintenance, technical rehabilitation and modernization (within the IMP scope) with participation of our subsidiary repair and service company having all the required competencies.

**- Will all kinds of financial optimization influence the quality of the IMP fulfillment and, in the end, at its reliability?**

- We considered such risk. We had to set priorities very carefully of what we are going to do with our funds to avoid it. That's why even in conditions of certain reduction of financing, equipment condition and our assets condition generally shouldn't deteriorate in the foreseeable future. The analytics and technical condition index calculation confirm it.

**- It is often spoken at the country level about import substitution recently.**

- We must presume that significant part of our company equipment needs must be satisfied by the national manufacturers, the share of which will be increasing. Even now imported deliveries of equipment and spare parts are gradually substituted. At the number of big plants there were concluded contracts for equipment delivery where the suppliers are only native manufacturers, our old and reliable business partners. But this process doesn't mean refusing from cooperation with foreign countries of application of modern technologies developed also abroad.

We are making actual steps towards the localization of equipment manufacture meeting our requirements. For example, large-scale production project on hydroturbines replacement at Saratovskaya HPP is fulfilled by us together with Voith Hydro. This joint venture will manufacture high-quality products of the Russian origin created applying the knowledge of our Austrian partners.



02

*PJSC RUSHYDRO*

*ANNUAL REPORT 2015*

**STRATEGIC REVIEW**

**361,826** RUB MILLION REVENUE IN 2015

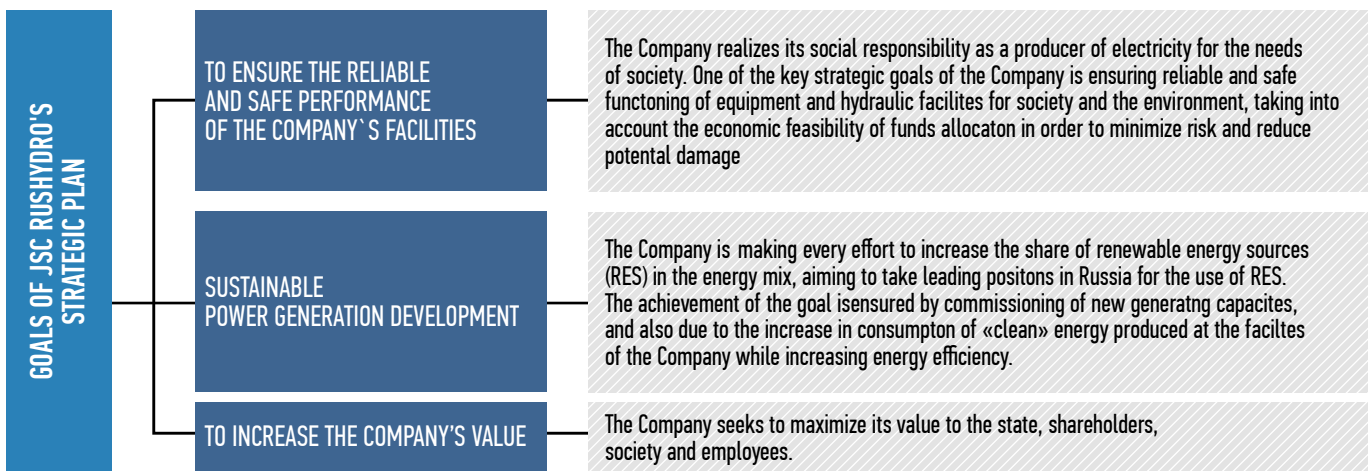




## 2.1. THE COMPANY'S STRATEGY

### 2.1.1. STRATEGY OF PJSC RUSHYDRO

The Company's strategy is presented as the Strategic Plan till 2015 with a view to 2020 (Strategic plan)<sup>3</sup>. Currently, the Company designs The Development Strategy of RusHydro Group for the period up to 2020 with the outlook for 2025. The Strategy will be approved in 2016.



#### 2.1.1.1. MECHANISMS OF STRATEGY IMPLEMENTATION

The main instruments to implement the Strategy are the Company's Growth Priorities for the current year and the Strategy Implementation Plan, which includes the Company's development priorities.

The long-term Development Programme (LTDP) is formed for a five-year period and it defines the basic principles and directions providing for development of RusHydro Group aimed at effective usage of power resources, creation of conditions providing for reliability of the UES and advanced usage of energy sources to benefit shareholders and society. For the LTDP details refer to item 2.1.2.

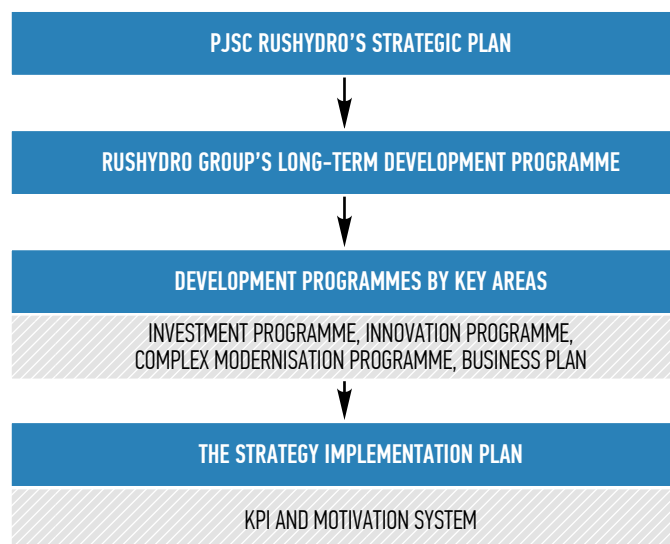
RusHydro's system of strategic management connects the strategic management processes with the motivation system.

The Strategy Implementation Plan (SIP) includes annual tasks and indicators aimed at achieving the strategic targets of the Company. The Plan is formed to communicate and operationalize the Strategy for a one-year period. It contains tasks and indicators for the current year indicating the Company's

officer and organisational units responsible for their implementation.

The Company's development priorities are named in a formalized list of key strategic goals, projects and programmes, the implementation of which ensures

achievement of the Company's strategic goals and maximum synergy during the current year. The purpose of the Priorities is to concentrate the Company's resources on the most important targets and indicators





### 2.1.1.2. IMPLEMENTATION OF THE STRATEGY OF PJSC RUSHYDRO

#### Ensuring reliability and modernisation of operating assets

The Company continued to implement the comprehensive modernisation programme for PJSC RusHydro's generating facilities. As a result of programme implementation, the installed capacity of the existing generating facilities increased by 55.5 MW.

*2015 priority achieved*

#### Providing for stable functioning of hydropower facilities during flood periods

The Company continues to implement the Construction Programme for new hydropower facilities on tributaries of the Amur river to regulate the stream flow in flood periods. On the first stage of development of the operational planning model for flood protection HPPs in the Far East, the system of hydropower regimes modeling at the Bureyskaya HPP has been created.

*Priority moved to 2016*

#### The increase in installed capacity through implementation of the investment projects

In 2015, in terms of the Investment Programme implementation the Zelenchukskaya HPP-PSPP with the installed capacity of 140 MW, but based on the results of analysis of RusHydro's investment programme implementation construction schedules of of the Zelenchukskaya HPP-PSPP were revised, providing for completion of the project implementation in 2016.

*Priority moved to 2016*

#### Providing quality service to customers of power retail companies

The Company continued to implement a comprehensive programme aimed at improving customer loyalty for the trade companies managed by JSC ESC RusHydro.

*2015 priority achieved*

#### Improving competitiveness of project complex

The approaches for organisation of PJSC RusHydro Science & Engineering and Technological Complex Management System were developed. In 2016, the Company plans to approve the Concept for reorganisation of PJSC RusHydro Science & Engineering and Technological Complex Management System.

*Priority moved to 2016*

#### Creating an effective innovation management system and forming a continuous innovation process in the Company

Regulation on development and execution procedure for the PJSC RusHydro Innovative Development Programme was approved for the purpose of methodological support for the Innovative Development Programme updating.

*2015 priority achieved*

#### Expanding the Company's presence on the foreign markets

In terms of implementation of the Upper Naryn Cascade of HPPs (Kirghizia) construction project the project documentation on the Akbulunskaya HPP and Narynskaya HPP-1 has been developed in accordance with the contract for design and survey works between CJSC Upper Naryn HPPs and JSC Lenhydroproject.

Currently, the project implementation has been suspended due to denunciation of the Agreement between the Government of the Kyrgyz Republic and the Government of the RF for construction and operation of the Upper Naryn Cascade of HPPs.

*2015 priority achieved*

#### Approval of the Company's strategic documents

The Board of Directors approved the following changes in the long-term programme of RusHydro Group:

- Included measures aimed at a planned and gradual replacement of procurement of foreign goods (works, services) by purchase of Russian goods (works, services) with equivalent technical characteristics and consumer properties;
- Included measures aimed at reducing operating expenses (costs);
- Defined target values of indicators of realisation of these measures.

*2015 priority achieved*

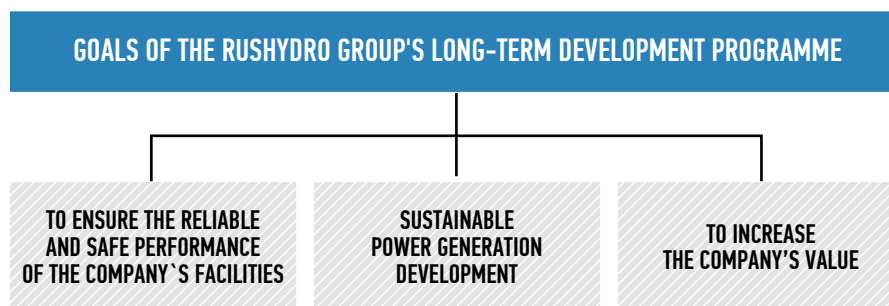
#### Improving the corporate governance system

PJSC RusHydro Corporate Governance Code has been approved.

*2015 priority achieved*



## 2.1.2. RUSHYDRO GROUP'S LONG-TERM DEVELOPMENT PROGRAMME



In accordance with the Instructions of the President of the Russian Federation<sup>4</sup> and the Government of the Russian Federation<sup>5</sup>, RusHydro Group's Long-term Development Programme for 2015-2019 was developed (hereinafter – the Long-term Development Programme, the Programme). The Programme was reviewed at a meeting of the Government Commission on the development of the electric power industry<sup>6</sup> and approved by the Company's Board of Directors<sup>7</sup> on November 20, 2014.

RusHydro Group's Long-term Development Programme is based on the Strategic Plan, the medium-term consolidated business plan of RusHydro Group and approved programme documents of RusHydro Group (PJSC RusHydro and PJSC RAO Energy Systems of the East): production programmes, investment programmes, and the innovative development programmes.

The key activities aimed at the implementation of the Long-term Development Programme in the reporting year are represented as the activities performed in the framework of these programmes. Information about their implementation is given in items 2.3, 2.4., 2.5., and 3.4.

As part of the Long-term Development Programme

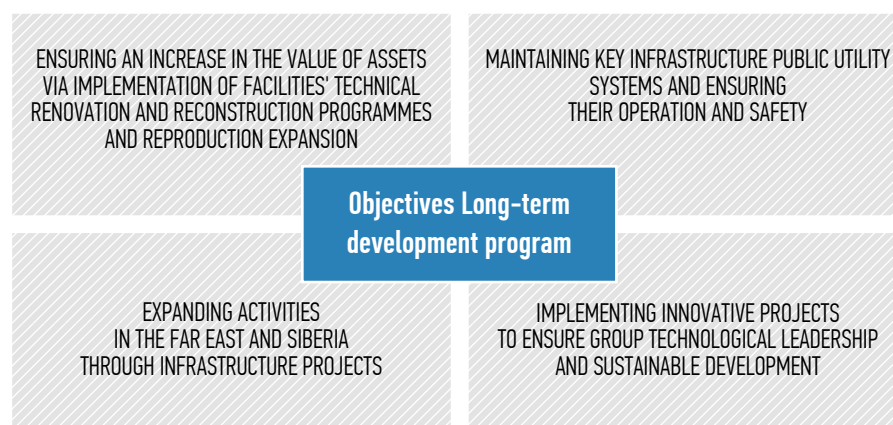
implementation in 2015:

- the installed capacity increased by 55.5 MW as a result of implementation of the Technical Upgrade and Reconstruction Programmes;
- Corporate Governance Code has been approved<sup>8</sup>;
- a number of measures aimed at financial recovery of the companies of the RAO Energy Systems of the East Group has been taken;
- the optimisation of the administrative personnel has been made in accordance with change of the Company's organisational structure of ; the non-core activities of the Company's branches were reduced;
- gradual substitution of import products (work, services) for the equivalent by technical characteristics and consumer properties of Russian goods (work, services) has been provided, including the approval of the Road map for import substitution for the period till 2020<sup>9</sup>;
- the Integrated Security System (ISS) of the Pavlodolskaya HPP has been put into operation, the

ISS modernisation stage of the Zagorskaya PSPP, the Dagestan Branch, the Novosibirskaya HPP, Sayano-Shushenskaya HPP and Bureyskaya HPP has been completed, integration of the HPP security systems of the Kabardino-Balkarian Branch has been completed as a part of modernisation of the branch's fixed local network;

- Regulations on improvement of the investment and operating activities and reduction of expenses have been approved<sup>10</sup>;
- Internal Control and Risk<sup>11</sup> Management Policy has been approved, Subsidiary Company Policies have been approved in the key subsidiary companies..

The Long-term Development Programme defines basic principles and directions which ensure RusHydro Group's effective development and contains proposals to improve PJSC RusHydro's operating and investment activities, and proposals to enhance the efficiency and competitiveness of the RAO Energy Systems of the East Holding, including the implementation of a public-private partnership mechanism in the hydropower industry, as well as measures to upgrade the corporate governance system.





To audit Programme implementation in accordance with the Directive of the Government of the RF<sup>12</sup> and Guidelines of the Ministry for Economic Development of the RF, the Audit Committee of the Board of Directors<sup>13</sup> and the Board of Directors<sup>14</sup> approved the Standard on auditing the implementation of the Long-term Development Programme. The Standard was developed with consideration of the typical standard approved by Instruction of the Government of the Russian Federation<sup>15</sup> on auditing the implementation of the long-term development programmes of joint-stock companies, included in a special list, approved by an Order of the Government of the Russian Federation<sup>16</sup>. Furthermore, the Board of Directors<sup>16</sup> approved the Technical specifications for auditing the implementation of the RusHydro Group's Long-term Development Programme.

Under the terms of Contract No. OG-206-94-2015/3351 dated 03.12.2015 for auditing the implementation of the RusHydro Group's Long-term Development Programme

In compliance with the Directive of the Government of the RF as of 05.03.2015 No. 1346p-P13 "On substitution of import products for Russian products", the changes have been introduced into the RusHydro Group's Long-term Development Programme, approved by the Board of Directors of PJSC RusHydro as of 03.04.2015, No. 212. The LTDR includes the measures aimed at the planned and phased substitution of import goods (work, services) for the equivalent by technical characteristics and consumer properties of Russian goods (work, services), and values of the specified measures implementation indicator.

In compliance with the Directive of the Government of the RF as of 16.04.2015 No. 2303p-P13 "On reduction of operating expenses (costs)" the changes have been introduced into the LTDP, approved by the Board of Directors of PJSC RusHydro as of 22.06.2015, No. 218. The LTDR includes the List of activities aimed at the reduction of the operating expenses (costs), and defines the target values of the implementation indicators for the specified activities.

in 2015 for the period 2015–2019 concluded with the CJSC HLB Vneshaudit, an audit of the LTDP implementation was conducted. Based on the audit results, the Audit opinion has been prepared which registered that no facts were detected which could give grounds to consider that the actual results of the Group activities for the year 2015

and degree of achieving their target values are not calculated accurately; any other reasons exist of the performance indicators actual values deviation from the ones planned by the LTDP; intended use of the funds of the relevant budgets by the Group for the year 2015 was performed inefficiently.

### 2.1.3. THE STRATEGY OF THE PJSC RAO ENERGY SYSTEMS OF THE EAST

#### MISSION

CREATION OF CONDITIONS FOR SOCIAL AND ECONOMIC DEVELOPMENT OF REGIONS OF THE FAR EASTERN FEDERAL DISTRICT THROUGH PROVIDING EXISTING AND PROSPECTIVE CONSUMERS WITH AFFORDABLE ENERGY INFRASTRUCTURE

The basis for developing the strategy of the PJSC RAO Energy Systems of the East is the Strategic Plan of PJSC RusHydro for the period till 2015 with an outlook till 2020, approved by the Board of Directors of PJSC RusHydro on June 16, 2010, and the RusHydro Group's Long-term Development Programme, approved by PJSC RusHydro's Board of Directors on November 21, 2014.

#### The implementation of reliable and uninterrupted supply of consumers with electric and thermal energy

Holding, as the main producer of electric and thermal energy on the territory of the Far Eastern Federal district, understands the fullness of its social responsibility and makes every effort to ensure the sustainable and efficient development of electric power industry on the territory of the Far Eastern Federal district, creation and maintenance of the unified control circuit, realization of state policy in relation to energy development in the region, embodied in the programme documents of Federal and regional levels, and, first and foremost, ensure the reliability and operational safety of the operated equipment and facilities.

#### The development of heating business

The holding focuses on the development of already existing activities and entering new markets. One of the promising directions is the development of the heating business in the regions where the company operates.

#### The sustainable growth fundamental value in the long term

The holding plans to increase its fundamental value and increase their value for shareholders, employees and society. The instruments for achieving this goal include both gradual vertical integration and the optimization of operating activities of the holding, as well as improving the efficiency of business processes and management system development.



**George Rizhinashvili**

Member of the Management Board,  
First Deputy General Director

**- The Strategic Plan until 2015 with an outlook up to 2020 was adopted in 2010. Did you achieve the targets set five years ago?**

- We launched 3500 MW of new capacities and restored Sayano-Shushenskaya HPP to the target values - 6400 MW of installed capacity.

There was a capacity figure for renewable energy sources that we had to provide. We made corrections in Strategy 2010. Particularly, we decided to concentrate on major projects, neglecting small plants and small HPPs.

There were also certain changes in international activities for the last five years. For example, we abandoned the idea of international investment activities, i.e. we did not acquire assets abroad. Both the Board of Directors and the government decided that we needed to focus on management of assets in Russia. However, we have certain services abroad, which are RusHydro's supporting businesses.

The strategy was broadly implemented. We are preparing a new Strategy for 2015-2020 with an outlook up to 2025.

**- Could you name the main targets of this new strategy?**

- The main difference from the previous document is that we have developed so-called "target points" for the Company by the end of the relevant planning period.

What does it mean? If we talk about the Company's mission, it is important to ask a simple question: what will become of the Company in ten years? What may be the options in answering this question? For example, RusHydro currently manages energy assets in the Far East. Question: Will it continue managing these assets in ten years, or it will cease managing them after a certain restructuring? It is an interesting cross-road that requires a systematic approach, analysing the financial model and making the decision on the basis of the analysis. If the target state is "we stay together", what key short-term strategic actions must be implemented in the RAO ES of the East management? This means changing RusHydro's target capital structure for restructuring the debt of RAO ES of the East, the tariff policy, creating good conditions for investments in the Far East energy sector. Clearly, all this must comply with the government policy in the field of Far East asset management. However, this option assumes the significant difference in the achievable value of the Company.

By the way, RAO ES of the East's net income and revenues, as well as engineering stability index have fundamentally changed for the better after we obtained the controlling interest from the state. Now we need a breakthrough, which would remove the debt burden, improve the tariff policy and create opportunities for investment in new power generating facilities in the Far East over the next five years.

The Rehabilitation and Modernization Programme may give different scope under the annual average value of not more than 30 billion RUB. Annual average efficiency is around 14-15%. It turns out that we annually generate about five billion RUB of extra value from the Integrated Modernisation Programme worth of 30 billion RUB. Roughly speaking, around 50 billion RUB of added value are generated only by this program, we are talking about non-discounted figures.

**- Does the current thermal and hydro generating ratio remain unchanged?**

- The current generation ratio is 75 to 25 %, while the capacity ratio is 70 to 30 %. I think that this ratio will remain unchanged. If the thermal capacity rating becomes more active, plus there are four facilities under construction in compliance with Decree of the President of the Russian Federation, the proportion may be changed in favour of thermal generation.

**- What is the Company's business model?**

- Our business model is very simple: effective management of hydropower plants maintaining overall reliability and energy security of the operating hydropower facilities, as well as value maximisation for the shareholders.

Secondly, improving RAO ES of the East short-term performance and implementing systemic stabilisation measures for the Far East energy assets in terms of debt restructuring and improving the tariff policy.

In fact, these two segments form the stability of our business, which has led to the fact that, we will pay record dividends for 2015- 15 billion RUB.

### 2.1.3.1. IMPLEMENTATION OF THE STRATEGY OF PJSC RAO ENERGY SYSTEMS OF THE EAST

#### DEVELOPMENT PRIORITIES AND THE RESULTS OF THEIR 2015 IMPLEMENTATION

##### Development of a system approach to energy development in the Far Eastern Federal district

In order to coordinate the Long-term Programme of the retired capacities substitution and development of the energy industry complex on the territory of the Far East Federal District (DFO) in the area of responsibility of the RAO Energy Systems of the East Group till the year 2025 (hereinafter referred to as the Programme) with the plans for development of the DFO territories, and to synchronise with federal and regional programmes for the DFO power industry development, the draft programme was forwarded for approval to the regional government authorities.

The proposals for a number of regions have been received in terms of the separate programme subsections, which were analysed and taken into account in the Programme. As of 31.12.2015, considering all corrections made, the approval has been received from all the DFO subjects to which the Programme was sent – Primorsky Krai, Khabarovskiy krai, the Magadan Region, the Republic of Sakha (Yakutia), the Kamchatka Region, the Sakhalin Region, the Amur Region, the Chukotka Autonomous District. The Programme is also agreed upon with PJSC FGC UES and PJSC Rosseti.

*Priority moved to 2016*

##### Implementing the investment projects

The work on the capital facilities construction was carried out in accordance with the approved project implementation schedules.

The supply and installation of the main equipment have been provided on the Blagoveschenskaya CHP (2nd stage). Electric and thermal capacities have been put into operation at the Blagoveschenskaya CHP (2nd stage).

The supply of the main equipment has been provided on the Yakutskaya SDPP-2 (1st stage). Positive opinions of the Main Directorate of State Expert Review have been received for the Sakhalinskaya TPP-2 (1st stage) and Yakutskaya TPP-2.

*2015 priority achieved*

##### Ensuring the reliability and modernisation of existing assets

The activities of the Production Programme of RAO Energy Systems of the East Group planned for the year 2015, including the activities on technical upgrading and reconstruction of the equipment, as well as the programmes of the Holding companies' assets repair, have been completed to the full extent.

*2015 priority achieved*

##### Optimizing the corporate structure and improving corporate governance effectiveness

The works have been carried out on optimisation of the corporate structure of the RAO Energy Systems of the East Group, including in order to prepare possible sale of a non-core asset – Luchegorsky open-pit coal mine ("LUR"), the reorganisation of JSC DGK has been carried out in the form of transforming of the branch "LUR" into a separate legal entity (JSC LUR), which was completed 01.09.2015.

In accordance with the decision of the Board of Directors of PJSC RusHydro (Minutes as of 07.10.2015 No. 223) the activities are performed on consolidation of up to 100 % of shares of the PJSC RAO Energy Systems of the East into ownership of the RusHydro Group.

*2015 priority achieved*

##### The increase in revenues/ cost reduction

As a part of work aimed to improve the effectiveness of sales activities of subsidiaries PJSC RAO Energy Systems of the East in 2015 concluded bilateral purchase and sale of electric energy contracts. The economic effect from signing of the bilateral electric energy purchase and sale contracts has exceeded 1.7 billion rubles.

In order to enhance the efficiency of the procurement procedures carried out by functionality of the electronic trading platform, the mechanism of the Dutch re-auction has been introduced. In 2015, a number of procurements were conducted with its application.

RAO Energy Systems of the East Group continues to optimise fuel supply, in particular, basic coal reserve at the warehouses of the TPPs of subsidiaries the PJSC RAO Energy Systems in comparison with the previous year is reduced by more than 236 thousand tonnes (10 %) taking into account observance of the conditions for provision of the reliable TPP fuel supply.

*2015 priority achieved*

##### Upgrading the regulatory framework in the energy industry

As part of implementation of the long-term regulation, the work has been carried out related to preparation of the proposals on evaluation of the implementation consequences of the long-term model of the tariff regulation, among other things the amount of shortfall in income in the year 2015 has been defined, without which compensation transit to the long-term regulation is impossible. At the same time the implementation of the long-term regulation leads to the tariff growth that is impossible under the conditions of restrictions imposed by the government. In this regard, it is necessary to create the mechanism of compensation of the short-received proceeds. The proposals on creation of such mechanism are forwarded to the federal state government bodies.

*2015 priority achieved*



### International activities

In 2015, RAO Energy Systems of the East Group continued its intense activities on expansion of the international cooperation, also as part of the implementation of the common projects with the partners from the countries of Asia-Pacific Region, working out of possibility to localise manufacturing of the power-generating equipment in the territory of the DFO, organisation of the electric power export to the border areas.

A number of agreements for cooperation with foreign companies and representatives of the public authorities of the countries of Asia-Pacific Region were signed at the Eastern Economic Forum which took place in September, 2015.

#### 2015 priority achieved

## 2.1.4. KEY PERFORMANCE INDICATORS

A system of key performance indicators (KPI) of PJSC RusHydro is aimed at enhancement of efficiency of the Company's performance and achievement of the goals set by the shareholders. The KPI system includes the indicators approved in the RusHydro Group's Long-term Development Programme for 2015-2019 (five-year period) and as part of Business Plan for the year 2015.

- KPI List approved as part of the RusHydro Group's Long-term Development Programme for 2015-2019, is approved by decision of the Board of Directors (Minutes as of 21.11.2014 No. 206 with supplements as of 31.03.2015 No. 212 and as of 19.06.2015 No. 218).
- KPI List of PJSC RusHydro for the year 2015 is approved by decision of the Board of Directors (Minutes as of 26.12.2014 No. 208). Target values for yearly and quarterly KPI are approved by the Board of Directors (Minutes as of 30.04.2015 No. 214) (Appendix 2 to Business Plan for 2015-2019).

### 2.1.4.1. PJSC RUSHYDRO'S KPI

PJSC RusHydro KPIs include six yearly KPIs: four financial and economic indicators and two industrial indicators that conforms to requirements of the Federal Agency for State Property Management (Rosimushchestvo). The financial and economic indicators include two indicators obligatory for use, as per Rosimushchestvo Instructions – total shareholder return on investment (TSR) and return on equity (ROE). Basis for the financial and economic

indicators calculation in the Company is the consolidated statements of the Group as per IFRS.

In 2015, methods of calculation and evaluation of the key indicators of PJSC RusHydro were amended (Minutes of the Board of Directors as of 22.06.2015 No. 218) in compliance with the Instruction of Rosimushchestvo (letter dated 25.12.2014 Ref. No. 05/55332) and decision

of the Board of Directors of PJSC RusHydro dated 23.12.2014 (Minutes as of 26.12.2014 No. 208) on the need to improve the procedure for calculation of the indicator "Return on equity ROE, %". The improved calculation of the indicator was brought into compliance with item 5.1.1 of the Guidelines for application of the key performance indicators of Rosimushchestvo.

#### KPIs Target and Actual Values

	KPI	2014		2015			
		Actual KPI values	Degree of target value achievement	Actual KPI values	Target value	Degree of target value achievement	KPI's Weight
<b>YEARLY</b>							
1	Reducing goods (work, services) acquisition costs per unit produced (%)	11.6	Implemented	Not established	-	-	-
2	Total shareholder return (TSR**), %	Not established	-	< 100 %	100 %	Not implemented	10 %
3	Return on equity (ROE***), %	Not established	-	4.5	3.1 %	Implemented	20 %
4	Share of buying from small- and medium-sized business entities, %	Not established	-	29	18 %	Implemented	10 %
5	Reliability criterion – both: – Not exceeding the limit for accidents (pcs.)	0	Implemented	0	0	Implemented	25 % -
6	– Readiness factor (coefficient)	> 1	Implemented	> 1	> 1	Implemented	-
7	EBITDA ratio**, RUB million	53,048	Implemented	Not established	-	-	-

8	Fulfilling capacity commissioning timetable and the finance and disbursement plan, %	101	Implemented	99 ****	100	Implemented	25 %
9	Leverage ratio (coefficient)	0.2	IMPLEMENTED	0.2	≤ 1.5	IMPLEMENTED	10 %
<b>QUARTERLY</b>							
1	Reliability criterion – both: - accident rate (compared with the previous year) (coefficient). - not to exceed normative values of accident rate - lack of fatal industrial accidents or group Company accidents, if there are casualties with severe outcome (pcs.) - receipt (availability) of a readiness passport on the Company's facilities within a prescribed period (%) (Q1 and Q4)	< 1  Not established  0  100	Implemented  -  Implemented  Implemented	Not established  < 1  0  100	< 1    100 (on the 1st and 4th quarter)	Implemented  Implemented  Implemented	33.3 %  -  -  -
2	Current liquidity ratio (coefficient)	6.4	Implemented	5.6	≥ 1	Implemented	33.3 %
3	Fulfilling quarterly timetables to finance and implement investment programme in cumulative total from the beginning of the year, %	102	Implemented	98***	100	Implemented	33.3 %

\* The Indicator "Lower costs due to the implementation of the cost management programme, %" established in 2011 by an Order of the Ministry of Energy of the Russian Federation (Minutes as of 23.12.2010 No. ASH-446pr) was introduced according to the said Minutes for a three-year period. Within the scope of the established indicator, the Company implemented a programme for improving operational efficiency in 2011-2013. The programme provided cost reduction to a maximum allowable level that is not critical for ensuring the normal functioning of facilities and maintaining technological reliability, by 10 % from 2010 base within three years. The programme has been fully implemented. In accordance with the abovementioned, the indicator is excluded from the list of the KPI target values for the year 2014.

\*\* Indicator evaluation is made based on comparison of its absolute value for the Company with the TSR indicators of the companies (only according to common shares), included in the electric power industry index of the Moscow exchange (MICEX PWR), except for electricity supply network and power supply companies, and PJSC RAO Energy Systems of the East. KPI target value is considered to be achieved, if TSR value of the Company is in 50-th percentile (and higher) of the TSR matrix of the companies included in the electric power industry index of the Moscow exchange, which is equivalent to 100 %.

\*\*\*The indicator is calculated in accordance with the Methods of calculation and evaluation of the key indicators of PJSC RusHydro, (approved by the Board of Directors, Minutes as of 26.12.2014 No. 218), taking into account the amendments and supplements introduced by the decision of the Board of Directors (Minutes as of 03.04.2015 No. 212, Minutes as of 22.06.2015 No. 218).

\*\*\*\* As per Methods of calculation and evaluation of the key performance indicators of PJSC RusHydro (approved by the Board of Directors, Minutes as of 26.12.2014 No. 208), the indicator target value is considered to be achieved, if actual indicator ≥ 0.85 of the target (100 %).

### The List of RusHydro's 2016 KPIs\*

Nº	KPI	Target
<b>YEARLY KPIS:</b>		
1.	Total shareholder return (TSR), %	100
2.	Return on equity (ROE), %	3.6
3.	Share of buying from small- and medium-sized business entities, % including: - according to the results of a procurement only among subjects of small and medium enterprises, %	≥ 18 ≥ 10
4.	Reliability criterion – both: - Not exceeding the limit for accidents; - Readiness factor;	0 > 1
5.	Compliance with capacity commissioning schedules and with the finance and disbursement schedule, %	100
6.	Leverage ratio (LR)	≤ 1.5
<b>QUARTERLY KPIS:</b>		
1.	Current liquidity ratio (CLR);	≥ 1
2.	Reliability criterion – both: - accident rate; - lack of fatal industrial accidents or group accidents, if there are casualties with a severe outcome; - obtaining (availability) of a readiness certificate in due time, % (1 and 4 quarter of the year)	< 1 0 100
3.	Compliance with quarterly finance and disbursement schedules of the investment programme, in cumulative total from the beginning of the year, %	100

\* Target values of KPIs of PJSC RusHydro for 2016 approved by the Board of Directors of PJSC RusHydro (minutes as of 25.12.2015 No. 229)



### 2.1.4.2. KPI OF RUSHYDRO GROUPS'S LONG-TERM DEVELOPMENT PROGRAMME

#### The KPIs of the RusHydro Group's Long-term Development Programme for 2015 – 2019<sup>18</sup>

	Key Performance Indicators	2015			2016	2017	2018	2019
		Target	Actual	Implementa-tion	Target	Target	Target	Target
1	Total shareholder return (TSR) <sup>19</sup> , %	100	<100	Not imple-mented	100	100	100	100
2	Return on equity (ROE), %	4.0	7.8	Implemented	3.4	3.1	3.2	3.6
3	Leverage ratio	≤ 1.5	0.53	Implemented	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
4	Limitation on the debt leverage (Net Debt/EBITDA)	≤ 4	1.7	Implemented	≤ 3.8	≤ 3.5	≤ 3.5	≤ 3.5
5	Reliability criterion: Not exceeding the limit for accidents (pcs.)	0	0	Implemented	0	0	0	0
	Readiness factor	> 1	> 1	Implemented	> 1	> 1	> 1	> 1
6	Compliance with the capacity commissioning schedule for core new construction facilities, MW	120*	120	Implemented	970	762	142.5	-
7	Share of buying from small- and medium-sized business entities <sup>20</sup> , %	≥ 18	29	Implemented	≥ 18	≥ 18	≥ 25	≥ 25
8	Effectiveness of share capital. (EBITDA / yearly average share capital), %	11.9	14.3	Implemented	11.7	11.2	11.6	12.2
9	Labour efficiency. (number of employees per 100 MW of available capacity) <sup>21</sup>	27.7	25.2	Implemented	26.0	24.5	24.3	24.1
10	Introducing the corporate governance code and ensuring compliance with its requirements	The Code was approved by the Board of Directors		Implemented	100 %	100 %	100 %	100 %
11	Integral innovative KPI, %	85	100	Implemented	85	90	90	95
12	The reduction in operating expenses (costs) <sup>22</sup> , %	2	3.9	Implemented	2	2	2	2

\* Correction term input power for the project construction of Yakutskaya GRES-2 power station from 2015 to 2016, agreed by Order of the President of the Russian Federation from 18.09.2015 № PR-1911 and included in the Investment programme of PJSC RusHydro for 2015, approved by order of RF Ministry of energy 14.12.2015 No. 955, and the Investment programme of PJSC RusHydro for 2016-2018, approved by order of RF Ministry of energy 14.12.2015 No. 956. In accordance with the decision of the Board of Directors of PJSC RusHydro (Minutes as of 25.12.2015 No. 230<sup>23</sup>), record the schedule for commissioning of the main objects of the new construction is completed.

The Long-term Development Programme contains the KPI established for the 2015-2019 period. The calculation of the target values of the KPI is made in compliance with the parameters for the 2015-2019 Business Plan, and takes into account measures provided for by the RusHydro Group's programmes

In 2015, the indicator "Operating expenses (costs) reduction" was included in the Long-term Development Programme of the RusHydro Group (Minutes of the Board of Directors as of

22.06.2016 No. 218) in compliance with Directive of the Government of the Russian Federation as of 16.04.2015 No. 2303p-P13.

Failure to implement the indicator "Total shareholder return (TSR)" in 2015 is mainly explained by the relative growth of several utility stocks after a significant fall in the previous reporting period, caused by sharp fall of the oil price in the second half of 2014 and decrease of the investors' interest in the sector, caused by unfavorable

tariff policy. At the same time, during this crisis period RusHydro stock performed better than the sector. While the main electrical utility sector index –MICEX Power –came down by 23 % during 2014, RusHydro shares lost only 5 %. That is why during 2015 these stocks showed relatively high growth of the TSR indicator. At the same time, the absolute value of RusHydro's TSR indicator for 2015 is positive. Within a year the shares grew by 25 %, which is higher than the growth of the MICEX electrical utilities industry index (18 %).

### 2.1.4.3. KPIS OF PJSC RAO ENERGY SYSTEMS OF THE EAST

#### 2015 KPIs of PJSC RAO Energy Systems of the East

KPI	Target	Actual	Implementa-tion
Implementation of the investment programme, %	100	97*	Implemented
The execution by subsidiaries and controlled companies transferred under trust management in accordance with Agreement No. OG- 175 – 169 – 2013 from 23.12.2013, established quarterly KPIs and conditions of bonuses, %	100	81*	Implemented
EBITDA ratio, RUB million	12,191	12,797	Implemented

\* Assessment made in accordance with the Methodology.



## 2.2. RISK MANAGEMENT

### EVENTS OF 2015

- The Internal Risk Control and Management Policy of the Company is updated.
- The Register of the strategic risks of PJSC RusHydro for 2015 – 2016 based on data from the automated Internal Risk Control and Management System is updated.
- The Internal Risk Control and Management Policy of PJSC RAO Energy Systems of the East is updated.
- 17 key subsidiaries (design institutes, construction and equipment installation prime contractors, IT subsidiaries and affiliates, and distributing subsidiaries and affiliates) confirm Internal Risk Control and Management Policies based on the requirements of the parent Company, develop risk management plans for 2015 – 2016, and implement the procedures of annual individual risk management reporting.

#### 2.2.1. CORPORATE RISK MANAGEMENT SYSTEM

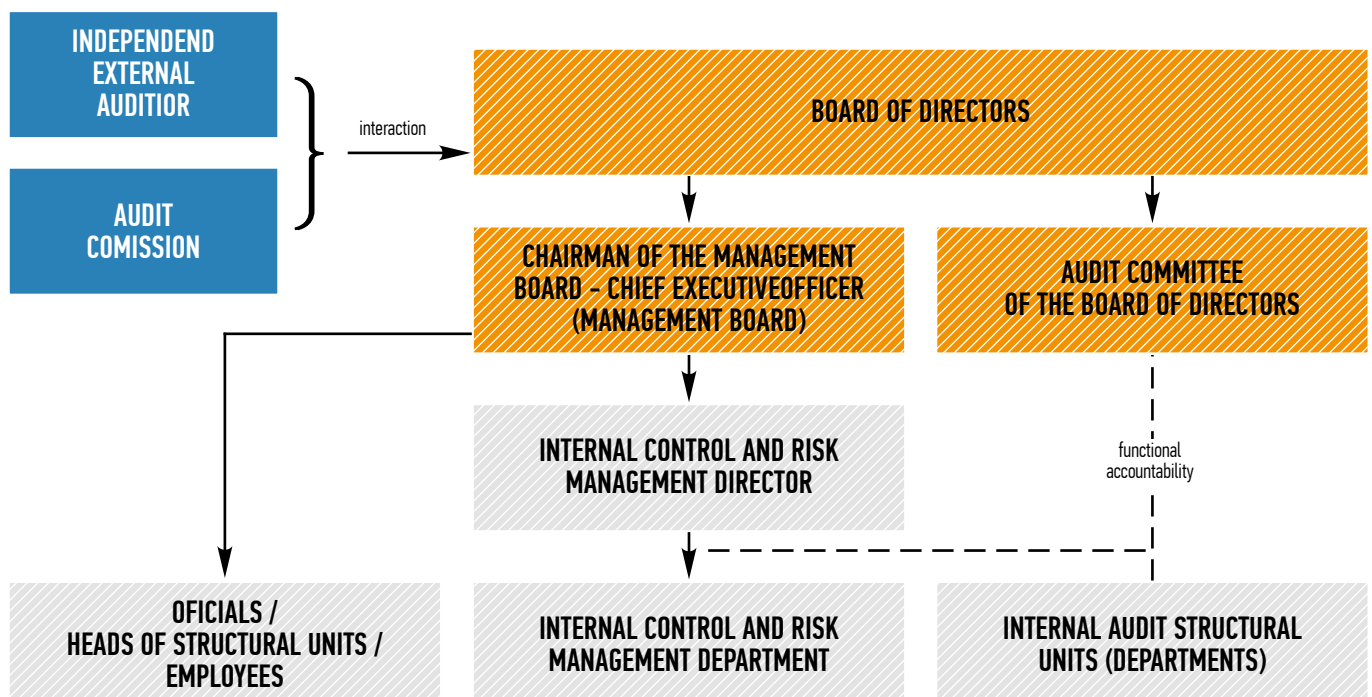
The activity of PJSC RusHydro is connected with some risks which, under certain circumstances, may have negative influence on the operational and financial results of the RusHydro, as well as the social and natural environment of the Company. The Company has developed a risk management system in order to minimize the negative influence of possible risks and optimize favorable

opportunities. The system is developed in order to ensure the execution of the Company's strategy.

The Risk Management and Control Department is established as a part of the Internal Risk Management and Control Unit for the purpose of risk management process organisation.

The risk management programme of RusHydro won the Best Risk Management 2015 competition in the Production Organisations category of the 13th Risk Management in Russia and the CIS International professional forum.

#### Structure of business and risk management activity of PJSC RusHydro





### 2.2.1.1. STAGES AND METHODS OF RISK MANAGEMENT

#### Stages of risk management



The approval data is the principle document stipulating the process of the formation of the register/plan/report on risk management and respective KPI.

The Company compiles the Register of strategic risks on an annual basis. This document is subject to approval by the Board of Directors. The Board approves the plan of strategic risk management for the management of critical and significant risks. The plan stipulates the terms of actions, persons responsible for them, and their expected

results. The efficiency of the execution of risk management actions and KPI is taken into consideration in the payment of bonuses to employees. The monitoring and control of the execution of the plan is carried out by the risk managers of the Company.

Risk managers interact with the members of the Audit Committee of the Board of Directors for the purpose of controlling the functioning of the risk management system of PJSC RusHydro, which corresponds to the guidelines on

the audit of the Boards of Directors of companies in which the Russian Federation holds stakes (stipulated by decree no. 86 of the Russian Federation Federal Property Management Agency dd. 20.03.2014).

The Automated Internal Control and Risk Management System was implemented in 2014 in order to support the process of risk management technologically due to the necessity of processing big volumes of data and ensuring the current monitoring of key risk parameters.

### 2.2.1.2. CORPORATE DOCUMENTS

The Internal Control and Risk Management Policy of the Company is the main document stipulating the

goals, purpose, and principles of the functioning of the corporate risk management control of PJSC RusHydro.

#### Documents stipulating strategic risk management

Operational risks	Investment risks	Market (sales) risks	M&A risks
<ul style="list-style-type: none"> <li>- Provision on the process of the formation of production programmes</li> <li>- The recommendations of the Analysis Centre (as a part of the annual report of the Analysis Centre)</li> <li>- Provision on system of rehabilitation and modernisation project management</li> <li>- Methodological guidelines on the assessment of the risks of production assets and the influence of different types of equipment modernisation based on real options and VaR calculation in which the reputation consequences of equipment failure is taken into consideration.</li> <li>- The set of standards concerning the production activity of the Company in terms of the management of the risks of certain stages of production asset lifecycle.</li> </ul>	<ul style="list-style-type: none"> <li>- Provision on the management of investments in the form of capital investments</li> <li>- Methodological guidelines on risk assessment on the RORAC basis</li> <li>- Quarterly reports on project risk management filed by investment subjects to the Board of Directors</li> <li>- The standard list of risks connected with the execution of investment projects as a part of the Directive on the management of investments in the form of capital investments</li> <li>- Risk registers, risk management action plans, and reports on the execution of the plan of risk management events (monthly).</li> </ul>	<ul style="list-style-type: none"> <li>- Provision on the policy of PJSC RusHydro in the field of the sales of active generation units within the price zones of the wholesale market of electricity and capacity.</li> <li>- Methodological guidelines of the identification of the minimal (maximum) electrical energy indices for the wholesale power joint market</li> <li>- Methodological guidelines for the assessment of the internal ratings of the contractors of the Company operating in the wholesale market of electricity and capacity based on Moody's criteria of with a limitation of the credit rating within the contract portfolio.</li> </ul>	<ul style="list-style-type: none"> <li>- Provision on the planning, pre-approval, support, and the execution of strategically important other significant transactions.</li> <li>- Registers and risk management plans concerning the considered strategically important transactions as parts of the certificates of strategically important transactions.</li> </ul>



### 2.2.1.3. DEVELOPMENT OF INTERNAL RISK MANAGEMENT AND CONTROL SYSTEM IN 2015 AND PLANS FOR 2016

Company's measures aimed to improve risk management system in 2015:

- the Register of the strategic risks of PJSC RusHydro have been updated, which allowed increasing the share of the quantitative assessments of transactions and reduce the need for expert opinion;
- the risk management system continues at PJSC RAO Energy Systems of the East on the basis of approaches similar to the ones of PJSC RusHydro. The Internal Risk Management and Control Policy of PJSC RAO Energy Systems of the East has been approved. Strategic risk management registers and plans of PJSC RAO Energy Systems of the East, Far-Eastern Energy Company PJSC, and Far-Eastern Generating Company PJSC have been approved and are being regularly updated;
- Internal Risk Management and Control Policies have been approved by 17 subsidiaries and affiliates (design institutes, building and installation prime contractors, IT subsidiaries and affiliates, and distributing subsidiaries and affiliates) executing investment projects; the owners of risks and persons responsible for the collection and update of information have been appointed;
- the Internal Risk Management and Control Policy has been updated (minutes of the meeting of the Board no. 227 dd. 16/11/2015);
- an external audit of the Long-term Development Programme of the development implementation was carried out based on the results of the year 2015.

At the current stage of its development the Internal Risk Management and Control System (IRMCS) of the Company may be characterised as developing. The concept of the implementation and development of IRMCS against the decrease of staff is based on the risk-oriented approach to internal control; the formation of the vertically-integrated structure of the internal control subjects of the Company which ensures the maximum engagement of business process owners and the structural units of the Company into such activity through the appointment of business process administrators responsible for the execution of IRMCS within the respective units of the Company and the optimisation of the interaction of the internal control subjects of the Company with the Control and Risk Management Department of the Company responsible for methodological support, monitoring, and coordination of the activity of internal control subjects as a part of IRMCS activity

For more details on improvement of risk management system see corporate site [www.rushydro.ru](http://www.rushydro.ru) (sustainable development/risk management).

#### Integration of IRMCS system by PJSC RusHydro and PJSC RAO Energy Systems of the East

PJSC RAO Energy Systems of the East started implementing the IRMCS based on the principles and standards of PJSC RusHydro in 2012

The following key steps have been taken:

- the Internal Control and Risk Management Policy has been approved
  - consolidated strategic risk management plans have been formed;
- etc.

The IRMCS system of PJSC RAO Energy Systems of the East is currently fully functional.

Registers and plans are updated, and position of the Group on the most pressing matters is formed under the control of the risk managers of PJSC RusHydro on a regular basis. Reports on the execution of strategic risk management plans are analysed for the introduction of important matters into the strategic risk management plans of PJSC RusHydro.

Special attention is paid to the management of the risks of investment projects carried out at four energy sites in the Far East: CHP in Sovetskaya Gavan (to be commissioned in 2017), Sakhalinskaya TPP-2 (1st stage) (to be commissioned in 2017), Yakutskaya TPP-2 (1st stage) (to be commissioned in 2016), Blagoveschenskaya CHP (2nd stage) (in 2015 the first phase of the second stage of Blagoveschenskaya CHP was finished. At this stage key equipment was tested and test-launched individually. Works on the site are to be finished in 2016).

Pursuant to decree no. 1564 of President of the Russian Federation as of 22.11.2014 On the Further development of PJSC RusHydro implementation of these projects is a high priority task for the Group.

#### Company conducts independent assessment of risks on a regular basis.

In 2015, Willis CIS Insurance Broker surveyed 10 facilities. The Company is currently monitoring the execution of plans concerning the implementation of previous surveyors' recommendations. The results of this monitoring are further submitted to the reinsurance broker for the assessment of risks by the insurers and reinsurers of the Company. Due diligence inspections concerning the risks connected with m&a transactions are carried out. The recommendations of the external auditor of the Company are taken into consideration.

#### Programme of development of Internal Risk Management and Control System of RusHydro Group until 2019

As parts of the execution of the Programme for 2016 – 2018, it is planned:

- to approve the Rules of the Compilation of Risk Management Reports and the interaction of branches, subsidiaries and affiliates and dependent companies with the risk managers of PJSC RusHydro concerning risk management and the implementation of respective adjustments to corporate procedures,
- to integrate risk management systems into the processes of planning and decision-making within the branches, subsidiaries and affiliates and dependent companies of the Group,
- to conduct the analysis of the risk management report collection system of the Group covering all of its companies and aggregate risk management information at the parent company level using automated internal risk management and control systems.
- to monitor the development of corporate risk management systems and their efficiency on a regular basis.

## 2.2.2. RISK REGISTER OF RUSHYDRO GROUP

### 2.2.2.1. RISKS CAUSED BY ACTIVITY OF THE COMPANY

The current register of risks caused by the activity of the Company has been formed on the basis of data as of the previous period and the analysis of external information.

The register of strategic risks taking into consideration the possibility of such risks and their influence on the business of the Company is represented in the Risk Radar. The Radar reflects the forecast on the change of the risk profile of the Company for 2015 – 2016 taking into consideration updated risk factors influencing the business of the Company against the growth of country risks. The range of risks presented in the Radar reflects the management priorities

of the Company touching upon its readiness for the negative scenarios of the development of the overall risk situation.

Among the most serious risks of the Company in 2015 we should note the development of the following risks (compared to 2014): the risk of unfavourable legislative changes (the red zone), the risk of the deficit of resources required for the execution of production programmes, the risk of engineering companies to fail to meet their goals, and the risk of terror attacks (the yellow zone). The urgency of risks connected with staff management has de-

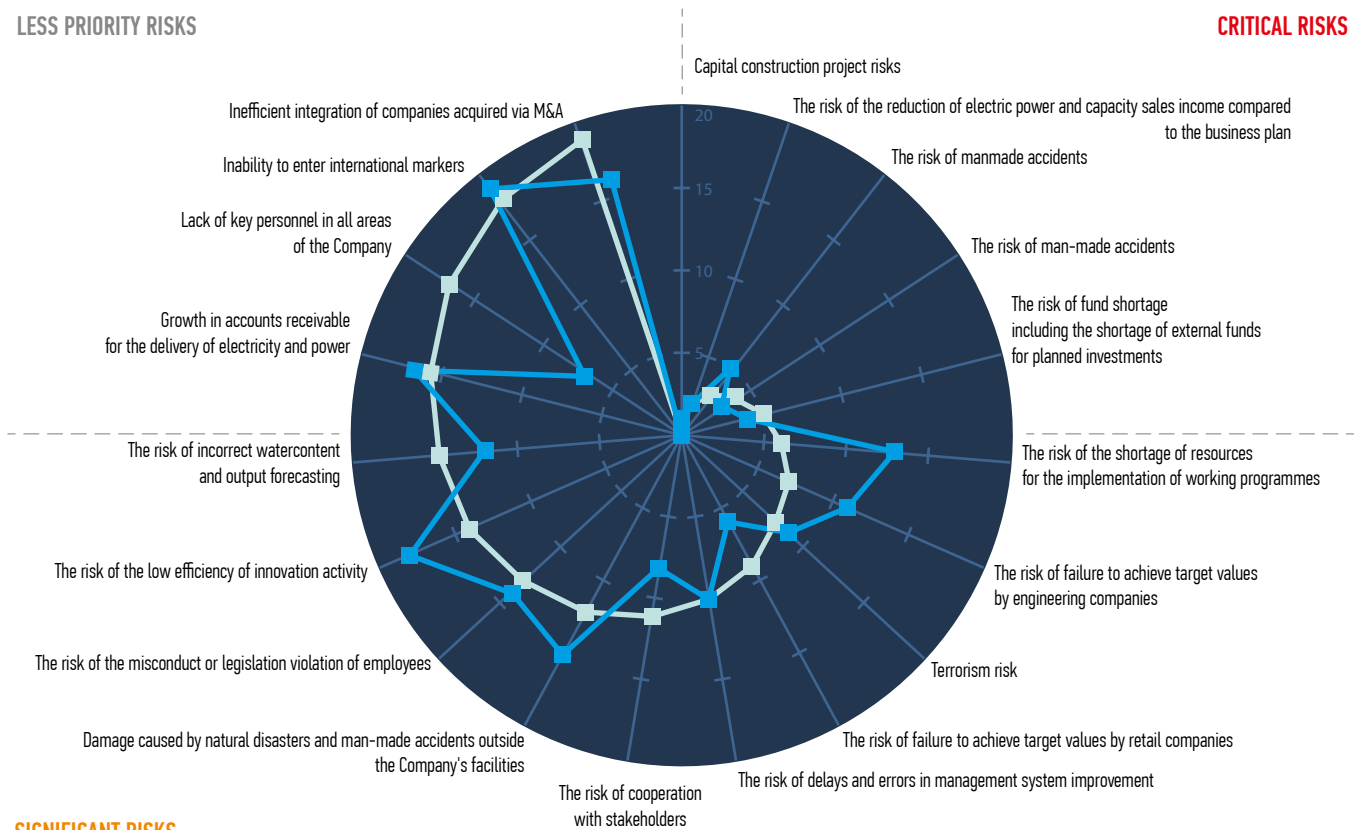
creased significantly.

Speaking about fuel-and-energy companies according to bench-marking report by leading international consultancies, the possibility of their expansion to foreign markets and the variety of their services rendered to end users have grown; their cooperation with investors and other stakeholders has developed, especially in terms of the disclosure of information touching upon the activity of the Company, innovative development, and the development of the alternative (wind) energy sector.

### PJSC RusHydro risks radar for 2015-2016

LESS PRIORITY RISKS

CRITICAL RISKS






SIGNIFICANT RISKS

■ Risk rating for 2014

■ Risk rating for 2015-2016 rr.



### The list of PJSC RusHydro risks in 2015

CRITICAL RISKS		
Risk name	Risk factors	Risk management activities
<b>Capital construction project risks</b> 	<p>The risk is related to a wide range of investment programmes for the next few years, and the complex management and financing structure of a range of products.</p> <p>Risk factors:</p> <p>At the initiation and design stage:</p> <ul style="list-style-type: none"> <li>- great uncertainty in the projects' feasibility studies,</li> <li>- non-compliance of the quality of design documents with the requirements set,</li> <li>- considerable dependence of the projects' economic parameters on the external factors (the availability of grid infrastructure and markets by the date of commissioning of the facility constructed).</li> </ul> <p>At the implementation stage:</p> <ul style="list-style-type: none"> <li>- problems with the preparation of flood zones,</li> <li>- increase of the cost of equipment and materials during the construction,</li> <li>- supply chain interruptions due to various reasons.</li> </ul> <p>Other</p> <ul style="list-style-type: none"> <li>- interaction with shareholders of PJSC RusHydro.</li> </ul>	<p>The systematisation of data on the designed projects:</p> <ul style="list-style-type: none"> <li>- the development of the corporate project management system for the systematisation of data on the existing and designed projects.</li> </ul> <p>The development of the internal expert review of design and detailed design documents:</p> <ul style="list-style-type: none"> <li>- improvement of the efficiency of functioning of design institutes, optimisation of purchasing activities intended to reinforce the role of the Company's own design institutes in performing the internal assessment of the design and tender documents,</li> <li>- regulating the internal expert assessment of design documents.</li> </ul> <p>Control over the quality of work, schedule and cost:</p> <ul style="list-style-type: none"> <li>- maintaining the list of mala fide designers, and participating in selection of subdesigners;</li> <li>- optimisation of insurance and purchasing systems in regard of construction and mounting activities,</li> <li>- development of regulatory documents in regard of performance of individual types of work, the implementation of an authorisation system permitting the employees to perform such types of work, and enabling the suspension of individual employees from the performance of work in case of any material violations,</li> <li>- development of the quality control of supplied equipment (including equipment manufacture and shipment/delivery),</li> <li>- the creation of the schedule and cost monitoring and control system for the new construction projects based on the SAP capital construction management information system.</li> </ul>
<b>The risk of the reduction of electric power and capacity sales income compared to the business plan</b> 	<p>The risk is critical due to overregulation of the electricity and capacity market, highly volatile electricity prices on WECM, variability of fuel prices for PJSC RAO Energy System of the East, decreasing payment capacity of contractors resulting from the effects of financial crisis, unfavourable conditions (dry years), difficulties in forecasting the payload of the equipment. The risk correlates closely to the risk of inaccurate forecast of water inflows.</p>	<ul style="list-style-type: none"> <li>- Preparation of proposals on changes to be introduced in legal documents regulating power industry;</li> <li>- periodic review of the marketing policy of RusHydro;</li> <li>- the termination of bilateral hedging contracts in the day-ahead market, including electricity purchase contracts as a security for obligations;</li> <li>- implementation of a system of commercial dispatching;</li> <li>- activities intended to decrease the amount of debt for electricity and capacity supplied.</li> </ul>
<b>The risk of negative legal changes/violations</b> 	<p>The critical risk of unfavourable changes/ violations of law is one of the most significant for the power industry not only in Russia, but worldwide. The safety, insurance, environmental and other regulatory requirements are getting stringent; the consumers' energy efficiency is encouraged, and this factor is increasingly affecting the Company with the course of time.</p>	<ul style="list-style-type: none"> <li>- Continuous monitoring of initiated and reviewed changes of the law which may affect the activities of the Company;</li> <li>- monitoring and review of existing standards and normative documents in the sphere of technical regulation;</li> <li>- to present the Company interests, representatives of the Company participate in major events and round table discussions concerning changes of the law, such events and discussions organized by the bodies of legislative, executive and judicial powers, by nongovernmental organisations, industry associations, by legal unions and associations;</li> <li>- Performance of periodic environmental audits and adhering to the resulting recommendations;</li> <li>- Participation in the work of task forces of the Russian Ministry of Energy on issues of technical regulation and in the work of Technical Committee No 016 of the Federal Agency on Technical Regulating and Metrology (concerning national standards).</li> </ul>



### The risk of man-made accidents



The risk is mitigated within the red zone due to the implementation of the comprehensive modernisation programme and the respective equipment reliability and safety growth. However, taking into consideration the potential consequences of risk occurrence, which may threaten human life and health and lead to the disruption of production and further reduction of the Company's revenue, the risk remains in the focus of attention of the managers of the Group. The negative effect on the risk probability of severance of managerial ties is possible in case of Company privatisation and/or restructuring of the management system by cash-generating units and projects under construction. Here the risk factors result from design faults manifesting at the operation stage, equipment deterioration, the violation of operating conditions, untimely repairs, re-equipment and reconstruction, low-quality repair, the low-quality of construction and installation works connected with re-equipment and reconstruction, the human factor, and environmental factors. All of them may lead to the breakdown of major equipment and deterioration of hydrotechnic structures. As estimated by the Company, the probability of the breakdown of equipment and structures stays within the industry-average level. All main production facilities of PJSC RusHydro are insured.

- The execution of repair work in full and the implementation of the re-equipment and reconstruction programme;
- The development of the quality control system for supplied equipment including its manufacturing and shipment/delivery, construction, installation and commissioning, as well as increasing the scope of contractual liability of suppliers/contractors for the manufacture and supply of equipment and materials;
- Filing claims against mala fide suppliers/contractors;
- Following the recommendations given in the course of the inspection of facilities owned by PJSC RusHydro;
- Strengthening onsite control over suppliers/contractors in terms of eliminating injuries, fire incidents, misconduct and thefts;
- The development of regulatory technical documentation aimed at enhancing the quality of designing and construction management processes;
- The introduction of continuous up-to-date equipment troubleshooting procedures, advanced control technologies for business assets including appropriate information technologies;
- Optimising the structure and amount of replacement parts;
- The development of equipment lifecycle management systems at operating hydroelectric power plants.

### The risk of fund shortage including the shortage of external funds for planned investments



Against ongoing stagflation and international sanctions, the risk may be slightly mitigated due to the reconsideration of investment priorities. At that, given that international sanctions continue, the risk of the unavailability of borrowed funds on terms favourable for the Company is growing due to the existing covenants set forth in the Group's loan agreements. Most of the affecting risk factors are represented by the country and external factors of the Group. The risk of external fund shortage is critical for the Company. It is closely bound with the implementation of capital construction projects. The full or partial reduction of financing sources within the framework of the investment programme may cause the late completion of ongoing projects or the Company's being forced to suspend construction or even suspend the construction of a number of facilities. Taking into account high cost of preservation of facilities under construction, which in some cases is comparable with the cost of proceeding with the construction, this fact will affect the economic efficiency of the Company's investment projects, as well as its financial and performance results.

- Maintaining the availability of money and financial resources in sufficient amounts by ensuring adequate loan facilities;
- Implementation of a balanced model of financing the working capital by using short and long-term sources;
- Control over the observance of credit agreements to prevent any violation of financial covenants of the Company;
- Placement of temporarily available funds in short-term financial tools (bank deposits and promissory notes);
- Contracting the contractors using standard financial conditions;
- Managing the interest and currency risks taking into account the credit policy of RusHydro;
- Preparing the flood zones of power plants under construction using the funds of the federal budget and of the budgets of the subjects of the Russian Federation;
- Monitoring the economic situation and undertaking additional prompt measures to manage the liquidity.

## SIGNIFICANT RISKS

### The risk of the shortage of resources for the implementation of working programmes



The significance of the risk is growing due to the growth of the risk of disruption of supplies caused by the counterparty's faults as a consequence of the crisis and fiscal deficit influencing programme implementation due to the occurrence of correlated risks. The possible disruptions of tenders, equipment supplies, and the provision of maintenance services by foreign counterparties, the withdrawal of banking guarantees issued by foreign banks. The risk is highly correlated with the risk of the shortage of funds for investments.

- Prompt performance of claims work in response to low quality of repairs, inadequate quality of equipment, violation of delivery time;
- using the recommendations of the Analytical Centre when making production programmes;
- implementing the Comprehensive Modernisation Programme (CMP) until 2025;
- Monitoring financial information about the suppliers and contractors to prevent the risk of the counterparty's bankruptcy;
- Optimising the process of contract negotiation, amending local regulations of the Company on contractual activity;
- Preparing and introducing corporate standards for re-equipment and reconstruction project management.



### The risk of failure to achieve target values by engineering companies



The risk aggravation is connected with its significant impact on business development opportunities in general. Amid the crisis the key development opportunity includes the enhancement of quality and the reduction of costs at all lifecycle stages of the Group's assets, to a large extent through the mitigation of engineering risks. At that, there is a possibility of the restriction of access to borrowed funds for engineering companies in case of the continuation of international sanctions and difficulties related to obtaining funds in a freely convertible currency. The company regards this risk as significant due to the high importance of engineering business as a part of the lifecycle of business assets.

- Optimisation of the structure and management system of engineering complex of PJSC RusHydro;
- implementation of the development programme of the system of internal control and risk management in the engineering subsidiaries;
- Introducing international experience sharing programmes at repair and engineering subsidiaries and affiliates;
- Carrying out personnel development and scientific personnel training programmes;
- Developing standard bills of work for repair of equipment and hydrotechnic structures;
- Minimising the risks of the inefficient management of non-core operations by their consolidation at specialised maintenance subsidiaries.

### Terrorism risk



This risk is caused by general political and social tensions, the activity of armed groups in the North Caucasus and their attempts to expand their activities to other regions of the Russian Federation, the high probability of local and regional armed conflicts, the growing threat of international terrorism and political instability in a number of developing countries caused by the economic crisis, as well as the activity of extremist organisations, and growing commercial terrorism. In this context, PJSC RusHydro expects the growth of risks related to terrorist activities aimed at hydroelectric power facilities.

Growing risk significance. Growing cyberterrorism threats (currently Russia is #1 in terms of exposure to cyber-attacks, as reported by Kaspersky Lab and organisations). We should note the lack of coordination with international counter-terrorism against the continuation of international sanctions. Upcoming events (the FIFA World Cup 2018, etc.); a large share of foreign management information systems.

- Property insurance against the risk of terrorism and sabotage;
- Increasing the share of equipment certified by the Federal Service for Technical and Export Control of the Russian Federation, and equipment manufactured within Russia;
- Carrying out information security audits.

The armed security of facilities by non-departmental security organisations of the Ministry of Internal Affairs of the Russian Federation and federal state unitary enterprise Departmental Security Service of the Ministry of Energy of the Russian Federation. Moreover, plans for cooperation with law enforcement authorities are developed to ensure the protection of the Company's facilities in case of a terror attack or a risk thereof. Access and internal security control measures have been introduced at hydroelectric power facilities. Measures to prevent thefts and ensure control over third-party access to the Company's facilities are arranged in cooperation with law enforcement agencies. The most dangerous threats are evaluated and the consequence management plans are elaborated in cooperation with the Civil Defence and Emergency Service of the Russian Federation at the location of generating facilities of the Company.

### The risk of failure to achieve target values by retail companies



The risk declines, remains significant for the Company. The risk may depend on slumping demand for electric power and capacity due to decline in production, intense competition with independent power supply companies and the development of energy-saving technologies, as well as consumers' financial insolvency caused by stagflation and the development of energy-saving technologies. The risk factors include a high level of competition, a threat of losing the last resort supplier status in retail regions and the possibility for construction of alternative electric supply facilities by large consumers.

- Monitoring the Company's compliance as a guaranteeing supplier with financial stability criteria in accordance with retail market rules;
- Actively working with consumers to establish a mutually beneficial relationship, including through JSC ESK RusHydro. A programme to retain customers has been approved.
- Introducing a corporate risk management system for PJSC RusHydro in its subsidiary sales companies;
- The plans for anti-recessionary measures to improve profitability and reduce liquidity shortage in each subsidiary sales company have been developed.

### The risk of delays and errors in management system improvement



- Changing structure of the Group Company;
- Conflict of interests between shareholders and the Company's management, conflicts of interest between employees;
- Delayed approvals by the stakeholders of the Company;
- Imperfection of the Company's business processes;
- Imbalance between strategic objectives and the management system model;
- Slow rate of making approvals and management decision-making;
- Rejection of documents on formal grounds / artificial delays in business processes.

- Improving activity regulation and the business process management system;
- Optimising the procurement schedule;
- Improving cooperation with stakeholders.

The internal control department of PJSC RusHydro analyses key business processes in order to improve the Company's control system and enhance its process efficiency. Civil responsibility of the Company's officers to any third parties is insured. PJSC RusHydro introduces corporate management standards in reacquired or established subsidiaries and affiliates, as well as the systems of corporate project management, staff grading (grading means the establishment of a job hierarchy based on the job evaluation, strategy, and corporate culture of the Company), manager certification and implementation of individual personnel development plans.

### The risk of cooperation with stakeholders



- Incorrect interpretation of information by representatives of the target audience, including environmental (ecological) organisations, which can damage the Company's reputation and/or cause its shares to fall;
- Dissemination of false and black information about the Company in the media and social networks, including projects;
- Delayed response to the information in the media.

- Observing the Regulation on Information Activity, the Regulation on Participation in Public Events, and Regulations on Information Disclosure.
- preparing explanatory press releases and materials for mass media;
- the establishment of cooperation with stakeholders as per the key activities of the Company including the organisation of joint public events;
- preparing press releases, representing the official position of the Company concerning key operational matters on a regular basis;
- Carrying out press tours and special events for mass media;
- The regular publication of information on a corporate blog, in Live Journal and Facebook communities.



### The risk of damage caused by natural disasters and man-made accidents outside the Company's facilities



Risk aggravation is connected with the uncertainty of consequences and difficulties in forecasting such risks. This is one of the most significant risks for fuel and energy companies, according to insurance companies. Protection procedures are being improved, but there may be the risk of force-majeure events including incidents similar to the flood of 2013. There is the probability of systemic accidents and damages caused by natural disasters.

- The Company complies with Russian legislation in the field of industrial safety and uses a production control system functioning on a legislative basis.

### The risk of the misconduct or legislation violation of employees



The growing risk; such incidents are possible due to the conflict of interests in case of restructuring (including privatisation), though the efficiency of risk management is constantly improving. The growing probability of such risks all over the world, according to the findings of international consulting companies.

- Introducing the integrated automated control system for the purposes of the distribution of information containing commercial secret;
- Monitoring the observance of the Regulation on Insider Information by the employees.

### The risk of the low efficiency of innovation activity



Risk growth against stagflation and the toughening of international sanctions is caused by the adoption of new requirements for the elaboration and implementation of innovation development programmes by regulatory authorities, the growing gap between the currently used technologies and the best international practices, as well as the lack of financing for design and survey work due to the risk of fund shortage.

However, there arise new opportunities for innovation development, which may increase competitiveness in case of decline in the exchange rate of the Russian national currency.

- The amendment/update of the innovation development programme in order to bring the Company's innovation activity in line with its development strategy; the alteration/elaboration of work methods and infrastructure in order to ensure the implementation of the innovation programme;
- The regular benchmarking of currently used technologies.

### The risk of incorrect water-content and output forecasting



The risk is mitigated, since it is largely the factor of the risks described above, and its occurrence does not directly lead to damages, but may contribute to the possibility of the risks listed above. This risk includes the failure to accurately forecast power output in the medium- and long-term perspectives.

- Optimizing the water resource usage of RusHydro's Energy Saving Programme;
- Developing an industry hydro-meteorological observation system and protecting the interests of the HPPs in inter-agency operational groups under the Federal Agency for Water Resources (Rosvodresurs).
- Integrating the medium-term water-content forecasting model executed by the Dispatching Centre Information System and the Commercial Dispatching Information System.

For more details on the risk register go to [http://www.rushydro.ru/sustainable\\_development/riski/reestr-riskov/](http://www.rushydro.ru/sustainable_development/riski/reestr-riskov/)

## 2.2.3. OTHER RISKS

### 2.2.3.1. COUNTRY RISKS

The Russian economy is not protected against market decline and global economic recessions. Currently investors' fear of country risks reduces the volume of foreign investments into Russia, which has negative impact on the Russian economy. Besides, since Russia produces and exports large volumes of natural gas and oil, the Russian economy is highly sensitive to world energy prices, while slumping prices for natural gas and oil largely affect the economic development indicators of Russia.

Therefore, there may occur events capable of restricting the Company's access to capital and having a negative impact on the purchasing power of product and service consumers. The Company tries to diminish the impact

of such events on its activity by optimising the use of borrowed funds in crisis conditions.

Under the global financial market crisis and the decline in industrial production, there is a risk of reduced demand for electricity, which can result in a reduction in sales and a decrease in corporate revenues, as well as the risk of growth in accounts receivable due to non-payment by electricity consumers.

Exposure to country risk with certain assumptions can be indirectly assessed by a credit rating (excluding political risk for business). Due to external factors such as a decrease in oil prices and the fall of the RUBle at

the end of 2014, Russia's sovereign rating was lowered from BBB with a stable outlook to BBB- with a negative outlook (according to Fitch) and to BB + by the rating agency Standard & Poor's, which is certainly a negative factor, but it has specifics related to the anti-Russian sanctions. Depending on the continuation of this policy or its cancellation, the level of country risk will be subject to change. In this regard, there might be an increase in risks associated with the failure of individual foreign suppliers to fulfil their commitments, the reduction of market outlets and the revision of contracts.

The results of the 4Q2015 and 1Q2016 did not show the worsening of the situation. As reported by Standard



### Alexander Klopov

Deputy General Director for Counter-Terrorist,  
Economic and Information Security

#### **- What are the main security arrangements of RusHydro Group?**

- We consider security as one of the conditions ensuring reliable functioning of the company's production and economic processes. Security consists of three main lines of action - counter-terrorist, economic and information lines.

Our security goals are the prevention and mitigation of risks and threats to the interests of the Company, the public and the government. In the real world, there will always be risks. RusHydro ensures security at its facilities located within the Russian Federation. In order to eliminate threats, we have been controlling them and taking a full range of measures to eliminate them. The security system shall be efficient, reliable and cost-effective.

#### **How does the Company ensure its information security?**

In the current situation, information is a highly valuable intellectual product of a company, since it may result both in positive and negative consequences when in possession, which is why we need a proper set of measures to ensure the information security. In RusHydro, we have a multi-level information security system that suits the Company's needs.



& Poor's International Rating Agency in March 2016, the long-term foreign currency credit rating of Russia stays at the level of BB+ (below investment grade) with a negative outlook. The macroeconomic situation in Russia has not suffered negative changes since previous assessments of S&P and Fitch, as noted by economists, while the ratings presented by the leading rating agencies are based on political prejudice. The Russian outlook may be reviewed up to stable, if the financial situation and economic development perspectives of the country improve. Rating downgrade is likely to occur if geopolitical events lead to the strengthening of sanctions against Russia by foreign countries.

For the purpose of country risk diversification, active work is being conducted together with BRICS partners. A number of contracts has been concluded with Chinese

power companies, which will further enable RusHydro Group to extend cooperation with China both in the area of the construction of new power facilities and electricity export.

According to the Memorandum of Understanding signed in January 2015 by RusHydro and K-Water (Korean Water Resources Corporation) at the Eastern Economic Forum, carried out on September 3-5 in Vladivostok, PJSC RusHydro and "K-water" (Korea Water Resources Corporation) entered into an agreement in the area of hydroelectric power and water resource management. Within the framework of that document, the parties agreed to search for mutually beneficial directions of joint activity in the area of hydroelectric power, renewable energy sources, and projects in the field of integrated water resource management within the territory of

Russia, Southern Korea, and other countries. It is planned to carry out joint research, share technical data on the modernisation of hydrotechnical facilities, and develop new business directions. The parties do not exclude other forms of cooperation, for example, in the area of integrated water resource management including flood control measures, the use of tidal energy, and other types of alternative energy.

We should also note growing cooperation between Russia and its partners from the Shanghai Cooperation Organisation and BRICS, the establishment of new financial institutions, and the inflow of investments of those partners to the country, which could have positive influence on country risks.

### 2.2.3.2. FINANCIAL RISKS

Financial risks can be categorized as the risk of growth interest rates in bank loans, foreign currency risk, inflation risk and liquidity risk. The impact of these risks on the Company's performance is not considered to be material to the Company.

Financial metrics, liquidity, financing sources and RusHydro's performance are not very responsive to changes in the exchange rate and interest rates, because the Company sells energy on the domestic market, as well as settles accounts with resource suppliers, and accrues and receives payments from consumers mainly in the national currency - Russian rubles.

Some of the loans of PJSC RusHydro have been taken at variable interest rates. In order to minimise interest risks, the Company concluded a swap contract to fix the variable interest rate.

The rate of inflation directly depends on the political and economic situation in the country. The negative impact of inflation on the financial and economic activities of the Company manifests in the growth of the following risks:

- the risk of damages connected with the reduction of the actual value of receivables with a significant deferral of or delay in payment;

- the risk of increasing the value of the Company's liabilities;
- the risk of increasing the unit cost of goods, products, works, services due to the increase of energy prices, transportation costs, and salaries;
- the risk of the decrease of the actual value of funds raised to finance the investment programme;
- the risk of increase in the cost of borrowed funds.

In the end of 2015, according to the data of the Federal State Statistic Service of the Russian Federation (Rosstat), the rate of inflation in Russia was 15.5% against 11.4% in 2014 (6.5% in 2013 and 6.6% in 2012). The Ministry of Economic Development of the Russian Federation expects that in 2016 the rate of inflation in Russia will decrease to 6.4 % as per the basic scenario with \$50 p/b and to 8.3 % as per the conservative scenario with \$40 p/b.

As of the end of 2015 the rate of inflation was much lower (below 20% per annum) than the critical inflation rate expected by PJSC RusHydro at which the Company might face difficulties.

The Company manages the liquidity risk by maintaining a sufficient amount of funds and marketable securities in order to remain able to perform its current liabilities. Temporarily available funds are invested into short-term financial instruments, in particular bank deposits and bills of exchange.

With a view to the aggravation of the international situation in 2015, and the worsening of the credit ratings of the Russian Federation expected by international rating agencies, as described above, as well as the existing economic sanctions and possible force majeure circumstances, there exist the risks of the restriction of the Company's access to funds borrowed from foreign counterparties, the growth of the value of the Company's debt liabilities, and losses related to exchange and interest rate growth. The control of those risks can be carried out by the decrease of the lending limit for bank counterparties with decreased rating, the stress-testing of potential losses related to exchange and interest rate growth in accordance with the Company's exchange and interest rate risk management procedure, as well as in the legal support of the contractual framework.



### 2.2.3.3. INDUSTRY RISKS

The Company is specifically exposed to industry risks due to possible changes in the electric power industry.

It is worth noting the decreasing uncertainty of the Company's activity in the wholesale electric power market as a result of the adoption of the long-term competitive capacity auction model in 2015 as prescribed by the Wholesale Electric Power Market Regulations (approved by Decree of the Government of the Russian Federation no. 1172 as of 27.12.2010).

In the context of industry risk management, PJSC RusHydro takes necessary steps to create the favourable legal framework for the functioning of the electricity and power market. For this purpose, the Company participates as an expert in discussions of draft legal acts in the field of electric power at the sites of the Ministry of Energy of the Russian Federation and the NP Market Council Association.

Norms that regulate the activities of Russian energy companies and relate to the establishment of electricity tariffs, power market operations and the relationships between electricity producers and consumers are undergoing significant changes.

Under the existing market model, there is still a risk that electricity prices in the wholesale market will not fully cover the fixed costs of power. The Company is exposed to the risk of growing competitiveness when operating in the retail market as a result of the revitalisation of power supply companies struggling for the provision of services to large consumers. In order to manage this risk, the Company's actions are aimed at maintaining and expanding its customer base.

The government tightens control over the spending of allocated budget funds by electricity sector companies. RusHydro undertakes necessary measures to prevent the negative impact of the abovementioned risks on its activities. In particular, key attention is paid to ensuring

the transparency and reliability of control procedures for budget fund expenditures in investment programme execution and the implementation of risk management measures.

PJSC RusHydro considers risk management measures to be a part of performance indicators set forth by the Strategy Implementation Plan. At the end of 2015 the Company's risk managers prepared the report on the Risk Management Plan implementation for 2015 as a part of the report on the KPI implementation in 2015 (the report has been approved by the Board) based on the information on the implementation of actions, envisaged by the Risk Management Plan in 2015, information received from risk owners, and the independent assessment of the implementation of actions.

Given that the Risk Management Plan was developed for 2015-2016, it will be updated in order to optimise the scope and result of risk management work in 2016.

### 2.2.3.4. INFORMATION ABOUT CIRCUMSTANCES THAT MAY FAIRLY DISRUPT THE COMPANY'S BUSINESS

Risks associated with the region's geographical features include the risk of losses (for example, the risk related to the damage of facilities) due to seismic activity, avalanches and mudslides, possible landslides and rainfall related floods and other adverse weather conditions (hurricanes, heavy snowfalls and frosts).

In general, the regions in which the Company operates have a developed transportation infrastructure and are not exposed to the risks associated with the disruption of the transportation link. However, some generating assets are located in remote areas with harsh climates, including in the Krasnoyarsk Region and in the areas of the Far Eastern Federal District. The Company is constantly working to upgrade the technologies of access and work in harsh climatic conditions in these areas. However, one cannot guarantee that no additional costs will be required to overcome technical difficulties associated with the climate and the accessibility of these locations, which may negatively impact earnings, financial conditions, and the Company's performance and prospects. Within the foreseeable future, these risks are estimated as insignificant.

#### TERROR ATTACKS

With a view to the tense political and social situation, the revitalisation of armed groups in the North Caucasus, the high probability of local and regional armed conflicts, the increasing threat of international terrorism and political instability in a number of developing countries caused by the economic crisis, the activity

of extremist organisations, and developing commercial terrorism, PJSC RusHydro is worried about possible risks associated with terrorist activity, in particular at North-Caucasian facilities. Security is maintained constantly to reduce such risks. The comprehensive programme aimed at ensuring safety and protection of the Company's facilities from terrorism is being implemented. The regular inspections of the antiterrorist security of the Company's facilities and personnel training, in particular by specialized anti-terrorist drills and trainings, are being carried out.

In the report on global risks presented at the annual World Economic Forum in Davos this risk was characterised as one of the three key risks of Russia (Global risks 2015), alongside the risk of interstate conflicts and the random fluctuations in energy prices.

The plan for strengthening the security of the Company's facilities is being implemented. The plan amends the existing security programme applied at the power plants including sites under construction. The factors affecting the security of facilities are being monitored. Information security audit is being conducted.

The armed security of facilities is being provided by federal state unitary enterprise Departmental Security Service of the Ministry of Energy of the Russian Federation. Plans for cooperation with law enforcement authorities are being developed to ensure the protection of facilities in case of a terrorist attack or the threat thereof. Access and internal security control has been

introduced within the Company's facilities. Theft prevention work is being carried out in cooperation with law enforcement agencies. The most dangerous threats are being evaluated and consequence management plans are being elaborated in cooperation with the Civil Defence and Emergency Service of the Russian Federation (at generating facilities). The main equipment of the company is insured, in particular against terror attacks.

#### EARTHQUAKE-PRONE AREAS

Most of the Company's facilities are located in seismically quiet regions. However, such facilities as the Puzhetskaya GeoPP and the Verkhne-Mutnovskaya GeoPP are located in seismic zones, with possible earthquake intensity up to 9 points on the Richter scale. Currently, work to create the seismological network of the Dagestan Branch is underway. In 2014, VNIIG after B.E. Vedenev performed seismic monitoring of the Bureyskaya HPP facilities. The Company has worked out an emergency plan in case of earthquakes and is constantly monitoring the situation. There are seismic monitoring stations at the Company's facilities. Issues relating to the transportation link are worked out in good time with a focus on the above-mentioned risk. Cargo and people delivery schemes are optimized. All corporate facilities comply with earthquake resistance standards.



### SEASONAL FLOOD AREAS

The risk of seasonal floods plays an important role in corporate activities and is regularly included in the list of critical risks. To manage this, a water regime management, including: forecasting and monitoring hydrological regimes within the facilities, reservoir regulation, spillway construction and operation and other measures, has been implemented.

To prepare for the spring-summer flood discharge at the Company's branches, flood commissions are created. They implement numerous measures aimed at ensuring a trouble-free flood season. In particular, they were making a survey of ice conditions in the area of the dam location of the Bureyskaya HPP, inspecting

permanent supports to make sure they are ready for work during the flood period, readiness checks of back-up power supply units (diesel generator sets), releasing the gates of the service spillway from icing and ice fringe so that they could be maneuvered, and performing inspections of hydropower structures, the drainage system of the dam, power house and the installation site, visual inspection of the dam body abutment to the shores from the upper pool and lower pool.

Traditional agreements were signed between the Bureyskaya HPP and the Government of the Amur Region, the administration of the Bureya District and territorial bodies of the Ministry of Emergency Situations and the Russian Technical Supervisory Authority on the procedure to interact on prompt reporting on and rapid

response by the Parties to emergency situations during flood discharge. Agreements were signed between PJSC RusHydro's Branch - the Zeiskaya HPP and the Zeiskoye Reservoir Management Office, the administration of the city of Zeya and the Zeya District on the procedure to interact on prompt reporting on and rapid response by the Parties to emergency situations during the flood discharge through the hydropower structures of the Zeiskaya HPP. Similar work is done at other corporate facilities.

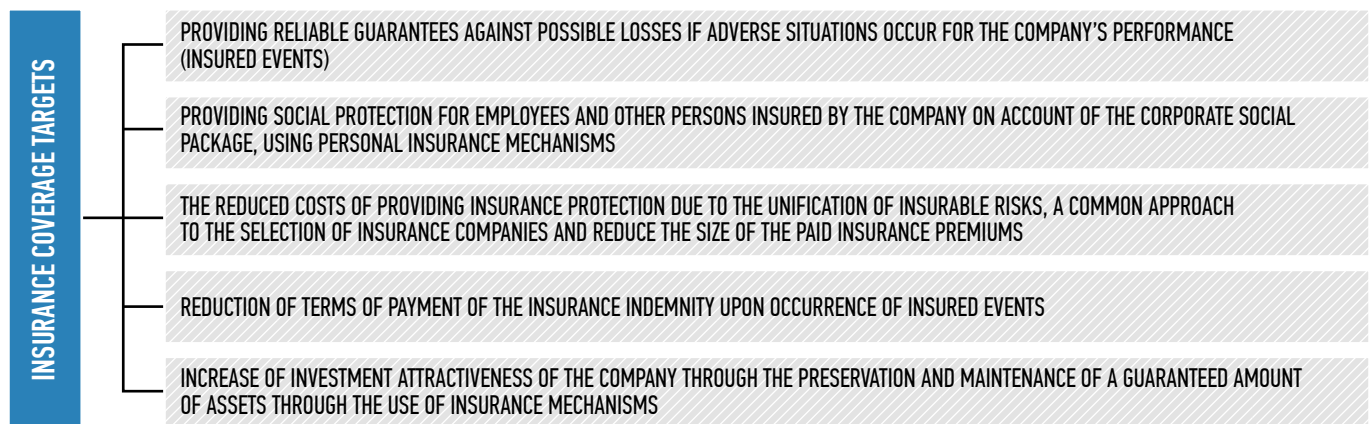
All Company's facilities operate in accordance with the instructions of the interdepartmental working group of the Federal Water Resources Agency. The control of production assets was strengthened. In 2015, no accidents at the Company's facilities were recorded.

## 2.2.4. INSURANCE PROTECTION

RusHydro's insurance protection is built based on the principles of standardisation insurance protection sys-

tem, the optimisation of insurance coverage, the unity of approaches to insurance organisation, and insurance

continuity.



For more details on the insurance protection go to [RusHydro.ru](http://RusHydro.ru) / Sustainable development / Risks

### 2.2.4.1. INSURANCE COMPANY SELECTION

Insurance company selection is carried out on a competitive basis to select those that offer the best quality-to-price ratio for insurance services. Requirements for the insurance cover terms and conditions are formed based on the Company's current risk situation analysis, insurance market supply analysis, and social policy and legal requirements.



#### 2.2.4.2. TYPES OF INSURANCE COVERAGE

In 2015, the insurance coverage for PJSC RusHydro and its subsidiaries included the following types of insurance: property, automobile and water transport insurance, insurance against construction and installation risks, voluntary medical insurance, personal accident and sickness insurance, compulsory civil liability insurance for owners of motor vehicles and water crafts, third party insurance for owners of hazardous production facilities for causing harm in an accident at the hazardous production facility,

civil liability insurance for damage caused as a result of an terrorist attack or sabotage, civil liability insurance for injury resulting from defects of construction work, project documentation preparation work and engineering survey work, and third party insurance for PJSC RusHydro's management team and executives.

RusHydro imposes strict requirements with regard to insuring its assets (property insurance against all risks

and insurance against construction and installation risks), and due to the limited resources of the Russian insurance market also puts forward additional demands and effects control over risk re-insurance. The Company is implementing a policy of openness to foreign insurance community representatives. Each year, the Company organizes insurance engineering surveys for its facilities, and holds road shows, negotiations and follows reinsurers' recommendations.

## 2.3. THE FINANCIAL PERFORMANCE<sup>24</sup>

### 2015 EVENTS

- At year-end 2015, RusHydro recorded net profit in the amount of RUB 27,159 million, which is by RUB 3,028 million (+12,5 %) higher than in the previous year.
- RusHydro Group's revenue (including government's grants) increased by RUB 19,838 million (+ 6 %), amounting to RUB 361,826 million.
- The operating expenses of RusHydro Group increased by RUB 24,265 million (+ 9 %) to RUB 315,103 million, which matches the task of limiting expense growth to the annual inflation rate.
- The total assets of RusHydro Group increased by RUB 54,367 million (+ 3 %) amounting to RUB 938,137 million.
- RusHydro Group equity, as of the end of 2015, amounted to RUB 613,919 million, which is by RUB 18,768 million higher (+3 %) than in the previous year.

Despite the geopolitical situation in 2015, RusHydro managed to maintain a stable financial position, increased revenues<sup>25</sup> 6 %, keep the rate of increase in operating

expenses in the range of inflation, increase the dividend payable by the Group by 15 % and to increase net profit by 12.5 %. The Group's debt burden and relative profitability

indicators remained at a comfortable level.



Sergey Kirov

Member of the Management Board,  
First Deputy General Director

**- How exactly the crisis of 2015 has affected the financial and economic performance of the Company?**

- Indeed, the financial and economic situation of the last year was not easy due to the inherent issues of the Russian economy and, in particular, the sanctions. We were ready to meet these challenges. We undertook a number of preventive measures: we reduced our semi-fixed costs and optimised the investment programme. We also reviewed a number of design assignments for upgrading equipment and new construction projects, and for a number of equipment components, we replaced foreign components with Russian made products. We virtually transferred the cash flow management to the manual mode, especially in the first half of 2015. These actions helped us successfully meet the challenges, and our financial and economic performance by the end of 2015 was fairly stable.

**- What factors RusHydro takes into account when building and optimising its investment portfolio?**

- As to new construction projects, within two years we need to complete the construction of four thermal generation facilities in the Far East that are under construction in compliance with the Presidential Decree on additional RusHydro capitalisation. We launched one of the facilities in 2015. Another start-up is scheduled for 2016 and two start-ups for 2017.

As to harnessing of hydropower potential, the commissioning of Nizhne-Bureyskaya HPP in the Far East is scheduled for the late 2016 - early 2017. The Bureya River has been recently dammed, which is a significant event. This means that the facility is at the final stage of construction. Simultaneously, the construction of the Ust-Srednekamskaya HPP is in progress where the third power unit is being installed.

This is a significant contribution to the Far East energy infrastructure development. After all, to extend their activities in the region the consumers need more power. It is the infrastructure that gives impetus to this region development. The state authorities made a lot of efforts to support the upgrading of the Far East power generating systems and grid facilities.

Similarly, in the Magadan Region, power engineering investments within the framework of the regional development programme are aligned with the investment plans of the gold mining industry. As far as I know, Natalka gold deposit is one of the most large-scale explored gold deposits in Russia.

As to rehabilitation and modernization of main equipment, RusHydro's Integrated Modernisation Program was approved by the Board of Directors in 2012 after a comprehensive examination of the equipment at all HPPs, taking into account the consequences of the Sayano-Shushenskaya HPP accident. The program focuses on the improving the index of equipment obsolescence. We continue implementing this programme.

Based on the current situation, we have somewhat reduced the funding of this program and have been looking for ways to reduce costs, among other things, taking into account the competitive procurement procedures and import substitution program. We also put off some non-urgent works where it is possible.

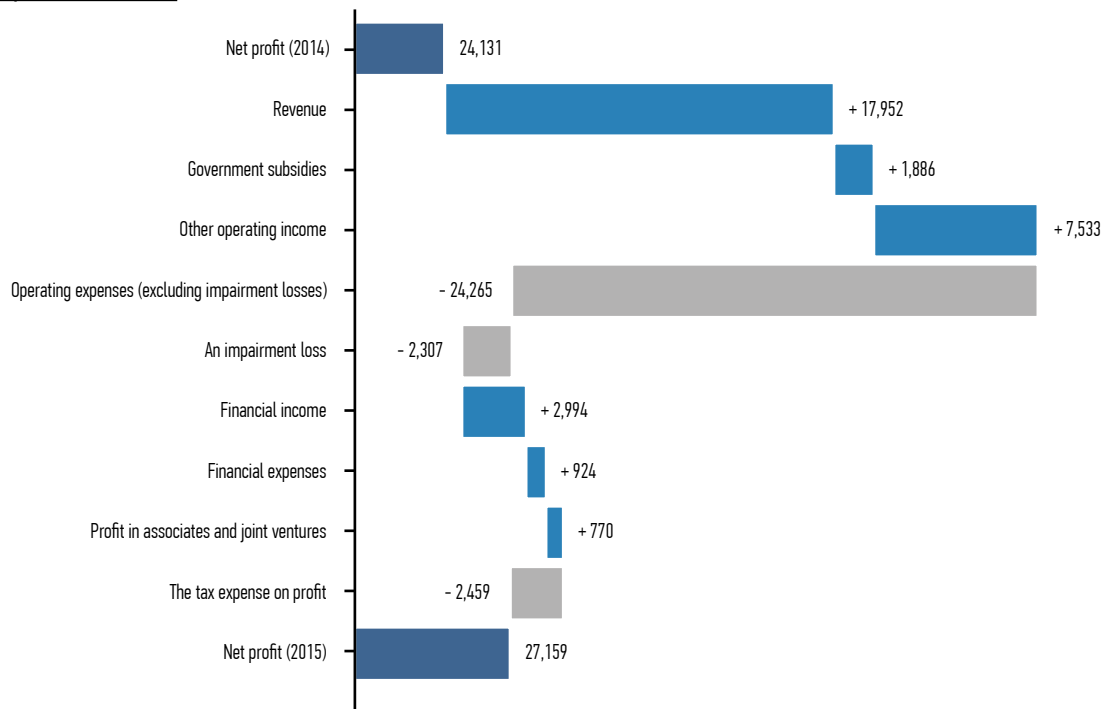
All in all, we have been looking for a balance in order to maintain reliable installed capacity, which generates most of the revenues for Company, and guarantee reliable power supply to our consumers.

The general thrust is to maximize economic efficiency in the framework of general strategic priorities.



### 2.3.1. PROFITABILITY INDICATORS

#### Change in net profit, RUB million



Factors affecting the growth of the Group's net profit in 2015 were: increase in revenue, financial income and government grants.

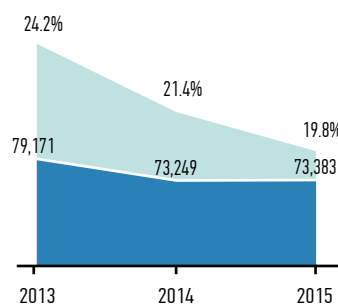
In 2015, the Group recorded a slight increase in EBITDA of 134 million rubles (0.2%) to 73,383 million rubles. The EBITDA margin of the Group remained at a high level and amounted to 19.8% in the end of the reporting year.

By the end of 2015, the Group's net profit achieved of 27,159 million rubles, which exceeded the previous year's result by 3,028 million rubles (12.5%). Group's net profit margin increased to 7.3%.

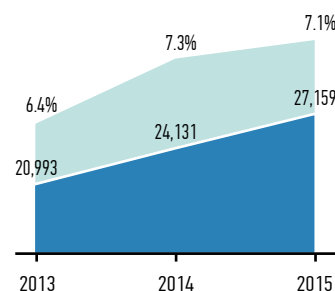
In 2015, relative profitability ratios improved as a result of the increase of Group's net profit while maintaining a stable structure of assets and equity. In 2015, return on assets (ROA) increased from 2.7 to 2.9%, return on equity (ROE) increased from 4.0% to 4.5%.

In 2015, the Annual General meeting of shareholders of PJSC RusHydro (AGM) (minutes dated 26.06.2015 no. 13) resolved to distribute of PJSC RusHydro profits for 2014. The dividends to shareholders amounted to 25% of consolidated net profit of RusHydro Group calculated under IFRS (24,131 million rubles), or 20% of the net profit of PJSC RusHydro calculated under RAS (30,729 million rubles).

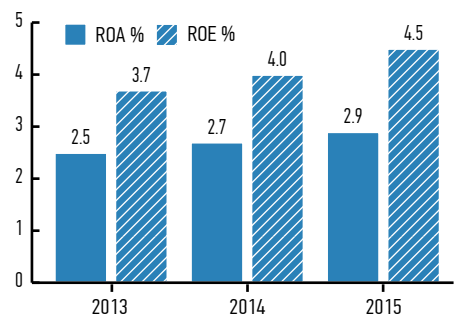
#### EBITDA dynamics, RUB million and EBITDA margin, %



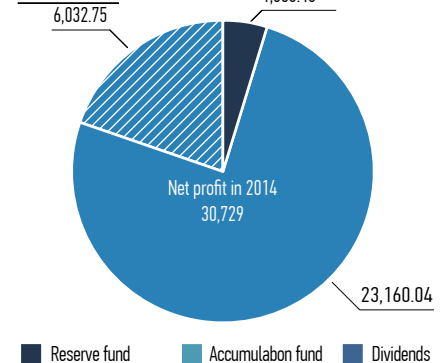
#### Net profit dynamics, RUB million and net margin, %



#### Return on assets and return on equity, %



#### Distribution of the Company's net profit, RUB million

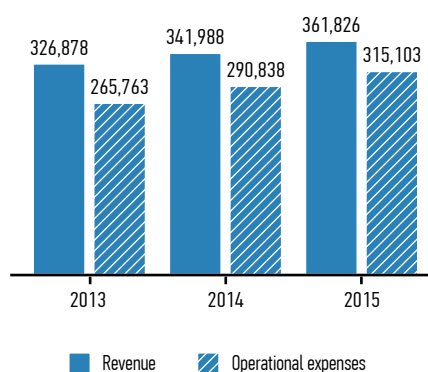




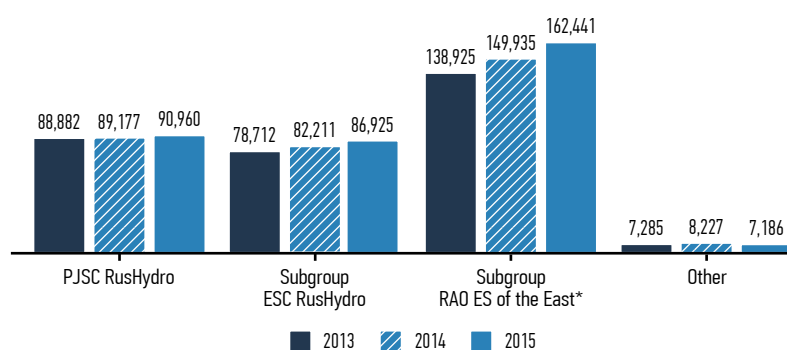
	2013	2014	2015	Change
EBITDA, RUB million	79,171	73,249	73,383	134
EBITDA margin, %	24.2	21.4	19.8	(1.6)
Net profit (loss), RUB million	20,993	24,131	27,159	3,028
Net margin, %	6.4	7.1	7.3	0.3
Net profit (loss) per one share, RUB	0.0638	0.0689	0.0865	0.0176
Return on assets (ROA), %	2.5	2.7	2.9	0.2
Return on equity (ROE), % <sup>26</sup>	3.7	4.0	4.5	0.5

### 2.3.2. REVENUE AND EXPENSES<sup>27</sup>

Revenue and expense dynamics, RUB million



Revenue structure for group companies, (excluding intercompany operations), RUB million



During the reporting year, revenue increased for all segments of RusHydro Group activities including electricity sales, the revenue from which increased RUB 19,838 million (6 %) to RUB 361,826 million.

The revenues increased in all segments of the Group's companies (excluding the Other segment). The highest growth was noted at PJSC RAO Energy Systems of the East where revenue (excluding government grants) grew by RUB 12,506 million (8.3%) to RUB 162,441 million against electricity generation growth. The key factors of the change in the revenues of PJSC RAO Energy Systems of the East from electricity sales are:

- the growth of the average sales rate and net electricity supply;
- the growth of electricity sales as per bilateral electricity purchase and sale contracts between DGK JSC and Inter RAO PJSC;

- the growth of electricity sales to consumers of Amur region (due to the admission of Energokomfort Amur LLC, a subsidiary of DEK PJSC, to the Group on 30/09/2014);

- the growth of the sales of electricity purchased by Yakutskenergo PJSC from Vilyuiskaya HPP-3 JSC.

The growth of the revenues of ESK RusHydro subgroup from electricity sales results from:

- the planned increase in electricity tariffs;
- the growth of electricity consumption in the regions where Krasnoyarskenergosbyt PJSC and CHESK JSC operate;
- attracting new customers by ESC RusHydro JSC.

The growth of the revenues of PJSC RusHydro from the sale of electric power contributed:

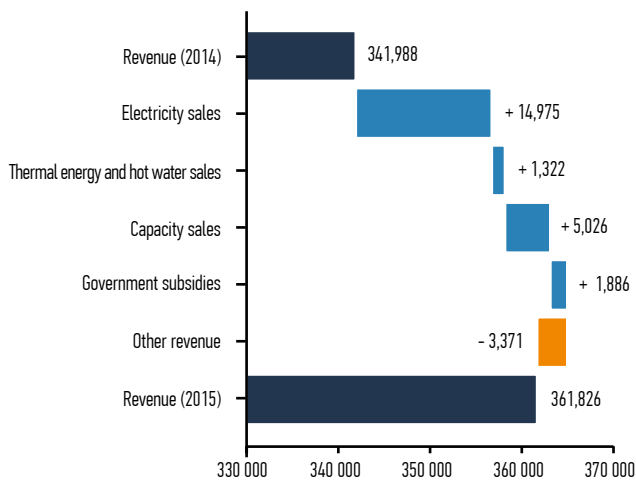
- the growth of power sales prices at the competitive capacity auction for HPPs of the second price zone due to HPP power market liberalisation as of 05/01/2014
- the indexation of regulated tariffs on capacity.

The operational expenses of the RusHydro Group in 2015 increased by 24,265 million rubles (8 %) to 315,103 million rubles, which matches with the task of limiting expense growth to the annual inflation rate (actual inflation according to Rosstat, in the year 2015 was 15.5 %).

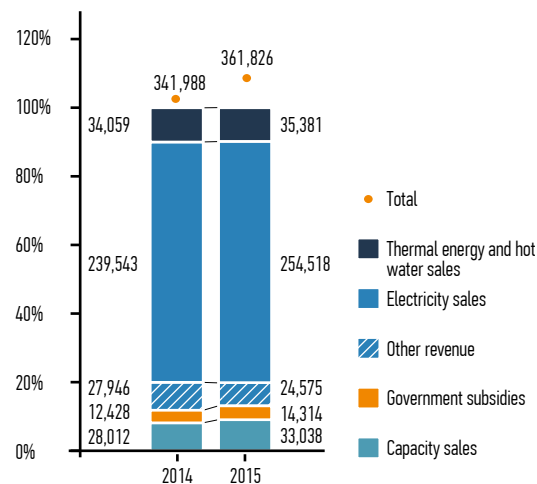


### 2.3.2.1. REVENUE

*Change in revenue, RUB million*



*Revenue structure breakdown by types of activities, RUB million*



In 2015, the total revenue of the Group grew by 6% from RUB 341,988 million to RUB 361,826 million. Revenues grew in all business segments of RusHydro Group (excluding the Other segment), including the sales of electricity where revenues grew by RUB 14,975 million

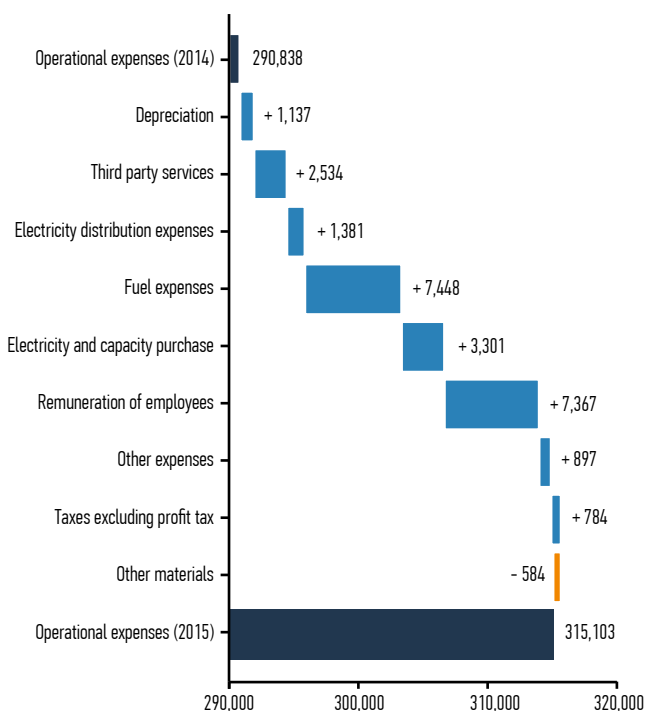
rubles (6%) to RUB 254,518 million.

At the same time, there was an increase in the government grants received by the Group as a compensation of the difference between the approved tariffs for electricity

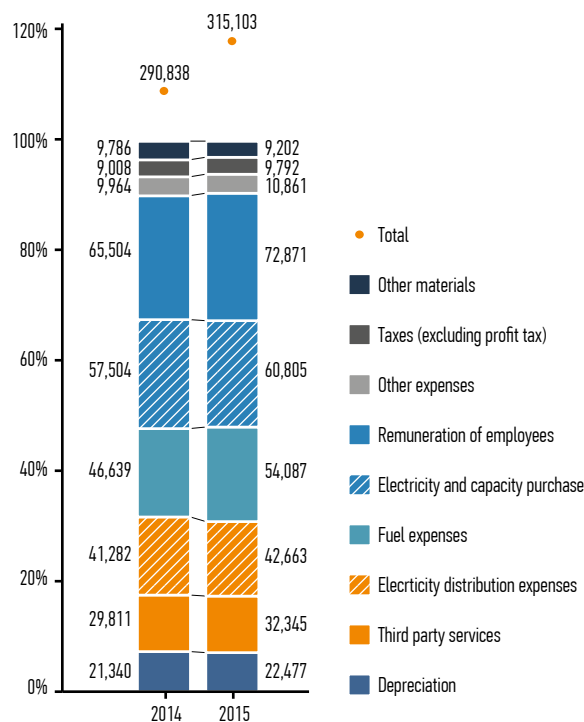
and heat power and reduced consumer tariffs, as well as compensation for fuel losses in the Far East amounting to RUB 1,886 million rubles (15%) up to 14,314 million rubles.

### 2.3.2.2. EXPENSES

*Change in operating expenses, RUB million*



*Structure of operating expenses, RUB million*



The operating costs of the Group (excluding impairment losses) grew by 8% to RUB 315,103 million against RUB 290,838 million in 2014. The expenses grew mainly

as a result of the growth of fuel costs, the employee benefit expenses of subsidiaries, costs for the purchase of electricity and power, and expenses for third-party

services, and losses from the disposal of fixed assets due to the technical incident at the Zagorskaya PSPP-2.



The highest growth among the operating costs of RusHydro Group in 2015 is seen in fuel costs which increased by RUB 7,448 million to RUB 54,087 million (16%). The main reasons for fuel cost growth are the growth of the electricity output of the HPP owned by DGK JSC caused by the decrease of production at Zeyskaya HPP resulting from low water inflow to the HPP, as well as the increase of specific fuel consumption and the growth of the average fuel equivalent price in the segment of RAO Power System of the East Subgroup.

Employee benefit expenses grew by RUB 7,367 million (11%) to RUB 72,871 million. The growth of employee benefit expenses is connected with the performance by the employer of the requirements of the trilateral Sectoral Tariff Agreement in the electric power industry for 2013-2015 on the indexation of salaries in line with the consumer price index in Russia (according to the official data of the Federal State Statistic Service, the consumer price index was 15.5 in 2015).

Within the structure of the Group's operational expenses

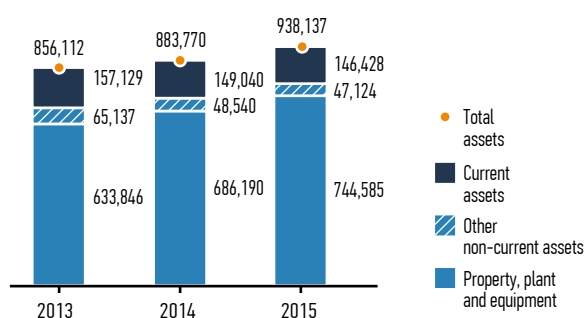
in 2015, labour remuneration expenses form 23 % of the total, being the most significant expense item. At the same time, 19 % of costs are formed by expenses from the purchase of electricity and capacity, 17% are formed by fuel expenses, 14% are formed by expenses on electricity distribution, 7% by amortisation, 3% by taxes paid, excluding profit tax, and 10% on expenses on services provided by third-party contractors, including the services of JSC "SO UES" and JSC "ATS", whereas 4% are formed by other materials and 4% – by other expenses<sup>28</sup>.

### 2.3.3. ASSETS, EQUITY AND LIABILITIES

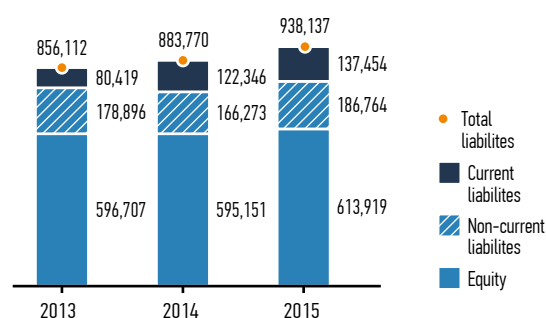
#### Assets, equity and liabilities, RUB mn

	2013	2014	2015	Change 2015/2014, %
Property, plant and equipment	633,846	686,190	744,585	9
Other non-current assets	65,137	48,540	47,124	-3
Current assets	157,129	149,040	146,428	-2
Total assets	856,112	883,770	938,137	6
Equity	596,707	595,151	613,919	3
Liabilities	259,405	288,619	324,218	12
Total liabilities and equity	856,112	883,770	938,137	11

#### Asset structure and dynamics, RUB million



#### Liabilities structure and dynamics, RUB million



As of the end of 2015, the total assets of the RusHydro Group increased RUB 54,367 million (6 %) amounting to RUB 938,137 million. The key factor contributing to Group asset growth during the reporting year was the increase in property, plant and equipment by RUB 58,395 million (9 %) due to further implementation of the investment programme and significant Group investment in infrastructural objects that are nationally significant.

At the same time, other non-current assets decreased 1,416 rubles (3 %). Current assets decreased RUB 2,612

million (2 %). At the same time, cash assets increased RUB 13,631 million (40 %).

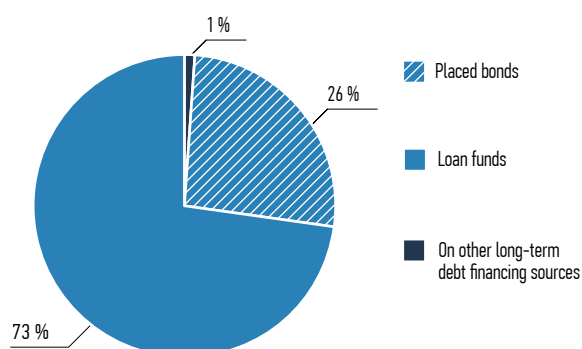
As a result, the share of property, plant and equipment in the Group's 2015 total balance increased to 79 %. The Group maintains a stable asset structure.

RusHydro Group equity, as of the end of 2015, amounted to RUB 613,919 million, which is higher than the amount as of the end of the previous year. Retained earnings and other reserves of the Group increased by 23 558 million

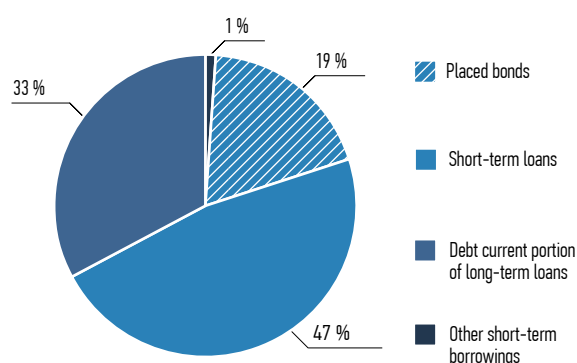
rubles (13 %). The total Group liabilities increased RUB 35,599 million (12 %) and amounted to RUB 324,218 million in 2015, which is due to the necessity of attracting funds for financing investment.

### 2.3.3.1. ANALYSIS OF THE STRUCTURE AND CHANGES IN DEBT. CREDIT RATINGS

*Long-term debt structure, %*



*Short-term debt structure, %*



The Group's net debt (the difference between the total amount of outstanding short-term and long-term borrowed funds and the total amount of cash and cash equivalents) as of the end 2015 amounted to RUB 149,368 million rubles (growth for 2015 was 6 732 million rubles). The relative leverage ratios of Group RusHydro remain at comfortable levels which reaffirms the Group's stable financial position.

The long-term debt of the Group 2015 grew by RUB 15,992 million (13%) to RUB 135,179 million, mainly due to the refinancing of the Euro bonded loan (whereunder the outstanding debt was classified as short-term at the end of 2014), the issue of long-term RUBle bonds of PJSC RusHydro in 2015, as well as the attraction of long-term loans to finance the Group's investment activities. The structure of the long-term debt at the end of 2015 comprises 66.5 % of loan funds, 32.2 % of the bonds placed, and 1.2 % of other long-term debt financing.

The short-term debt of the Group at the end of 2015

amounted to RUB 62,214 million. The growth of the short-term debt by RUB 4,371 million was mainly caused by the conversion of long-term loans and bonds into liabilities because of their maturity in 2016. Therefore, the outstanding short-term debt under the long-term loans amounts to 40.4% of the short-term debt of RusHydro Group, including placed bonds for the total sum of RUB 15 billion with 57.4% of short-term loans and ~ 2,2 % - other short-term borrowings.

As of the end of 2015, more than 91% of the consolidated financial debt Group RusHydro (including the guarantee for obligations of JSC Boguchanskaya HPP on the credit of GK "Vnesheconombank") is RUBle-denominated, which hence the insignificance of currency risk for the Group. At the same time, more than 40% of the overall volume of debt financing are commitments to major Russian State banks. The Group also has open credit lines in the largest Russian banks. The sum of the unused loans amounted to approximately 97 million rubles, which exceeds the needs in the short-term debt refinancing and significantly

#### Target capital structure

Long-term Development Programme of RusHydro Group for 2015-2019, approved by the the Board of Directors of PJSC RusHydro (extract from the minutes № 206 as of 2014, and changes made by the Board of Directors decision as of 04.03.2015 and 06.22.2015) provides for a debt-to-equity ratio of no more than 1.5x to ensure financial stability.

decreases financial risks.

Given the increase in Group total financial debt and deterioration in the macroeconomic environment as of the end of 2015, the amount of interest paid on RusHydro Group term loan means increased only RUB 5,790 million (42 %), amounting to 19,498 million rubles.

#### *Credit ratings (at the end of 2015)*

Rating Agency ▶	Fitch Ratings	Standard & Poor's	Moody's (together with CJSC "Moody's Interfax Rating Agency")
The credit rating on the National scale	AA(rus)	ruAA	Aa2.ru
The credit rating on the International scale (in foreign currency)	BB+	BB	Ba2
Outlook on the credit rating	Negative	Stable	Stable
Outlook revision date in 2015	21.01.2015	04.02.2015	07.12.2015



## 2.3.4. CASH FLOW

### *Cash flow, RUB million*

	2013	2014	2015	Change
Net cash generated by operating activities	62,428	57,926	69,800	11,874
Net cash used in investment activities	(51,155)	(60,433)	(48,381)	12,052
Net cash generated by (used in) financing activities	(16,706)	1,091	(8,584)	(9,675)
Foreign exchange gain (loss) on cash balances	48	1,338	796	(542)
Decrease in cash and cash equivalents	(5,385)	(78)	13,631	13,709
Cash and cash equivalents at the end of the year	34,472	34,394	48,025	13,631

The Group's net cash generated by Group operating activities increased 11,874 million rubles (21 %) to 69,800 million rubles. At the same time, the net flow of funds used in financing activities decreased 12,052 million rubles (20 %), reaching 48,381 million rubles. During 2015, the Group implemented a large-scale investment programme, increasing capital expenditures 8,813 million rubles (20 %) to 48,381 million rubles.

In RusHydro's financial activities, a net cash outflow in the amount of 8,584 million rubles was recorded during the reporting period against the background of an increase in the volume of repaid borrowings compared with the previous year.

Despite the deterioration of macroeconomic conditions, the Group avoided a significant exchange rate loss in 2015 due to a significant share of RUBle-denominated loans in the overall debt structure. At the same time, the foreign exchange gain on RusHydro Group cash balances decreased almost 1.5 times, totaling 795 million rubles.

## 2.4. INVESTMENTS

### EVENTS OF 2015

- Financing of the investment programme was 104.69 billion rubles (83.66 billion rubles accounted for the investment projects of PJSC RusHydro and of 21.03 billion rubles for projects of RAO Energy Systems of the East Group).
- New hydro capacity installed – 178.88 MW, heat capacity – 194,295 Gcal/h, grid – 891,603 km, grids – 891,603 km, transformer capacity – MVA 296.8.

### 2.4.1. INVESTMENT POLICY PRINCIPLES

The Company's investment activity is regulated by the Regulations on the Investment Management Process in the Form of Capital Investments.

Approval of the Company's Investment Programme is the responsibility of the Company's Board of Directors. The investment programmes, before being approved by PJSC RusHydro's Board of Directors, are agreed upon with executive authorities and approved by the Russian Ministry of Energy.

PJSC RUSHYDRO'S INVESTMENT POLICY PRINCIPLES

INVESTMENT DECISIONS AND THE PROJECT'S COMPLIANCE WITH LEGISLATIVELY ESTABLISHED REQUIREMENTS, BUILDING CODES AND ENVIRONMENTAL STANDARDS

FOLLOWING THE SEQUENCE OF STEPS AND STAGES FOR INVESTMENT PROJECT IMPLEMENTATION

INVESTMENT DECISIONS AND THE PROJECT'S COMPLIANCE WITH REQUIREMENTS ON PROFITABILITY AND RISK, ESTABLISHED BY THE COMPANY'S BOARD OF DIRECTORS

ANALYSIS OF COSTS AND BENEFITS FOR ALTERNATIVE INVESTMENT DECISIONS AT THE END OF EACH INVESTMENT PROJECT STAGE WHEN BASIC PARAMETERS CHANGE

FUNDING SOURCES AVAILABLE FOR ALL INVESTMENT PROJECTS

2.4.2. 2015 INVESTMENT PROGRAMME

The Company's 2016-2018 investment programme was approved by Order No 956 of the Russian Ministry of Energy as of December 44, 2015.

25.12.2015 No. 229) approved the Business plan of PJSC RusHydro for 2016, including investment programme for 2016, and noted the Business plan of PJSC RusHydro for years 2017-2020, including investment programme for 2017-2020.

The adjusted Business plan of PJSC RusHydro for 2015 approved by the decision of the Board of Directors (minutes dated 24.12.2015 No. 230). The total investment for 2015 amounted to 83 billion rubles.

In the composition of the Business plan of PJSC RusHydro for 2016-2020 (minutes of the Board of Directors from

GOALS OF THE INVESTMENT PROGRAM

ENSURING THE MOST EFFICIENT WAYS TO IMPLEMENT THE INVESTMENT STRATEGY

PROVIDING FOR GUARANTEED AND UNINTERRUPTED POWER SUPPLY TO INFRASTRUCTURE

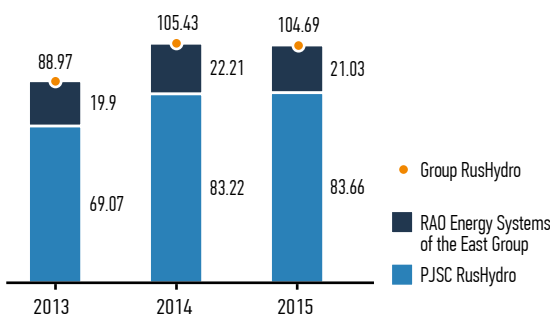
ENSURING GROWING ENERGY CONSUMPTION FOR THE CONSTRUCTION AND RECONSTRUCTION OF FACILITIES

MODERNIZING ENERGY SOURCES

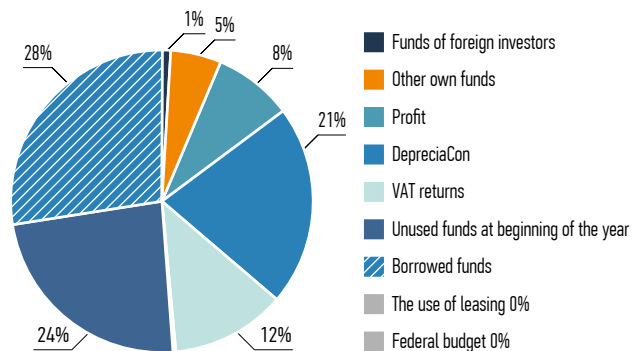
IMPROVING THE ECONOMIC EFFICIENCY OF POWER SUPPLY SERVICES

REDUCING ACCIDENTS AND PHYSICAL WEAR OF GENERATING EQUIPMENT

CAPEX dynamics, RUB billion

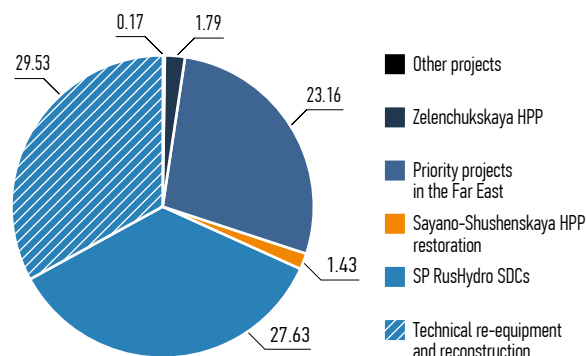


Structure of funding sources used in 2015

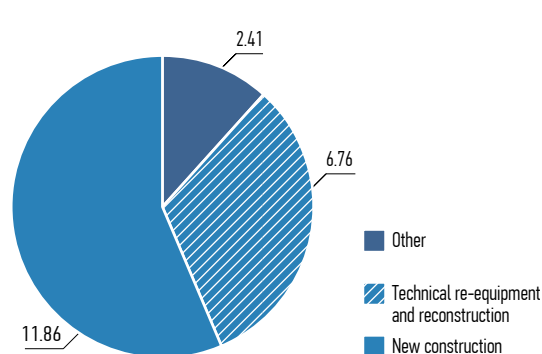




*The main areas of investments of PJSC RusHydro in 2015, RUB billion*



*Main areas of investment, RAO Energy Systems of the East Group in 2015, RUB billion*

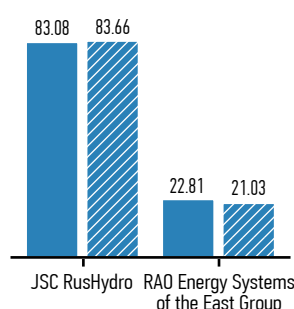


### 2.4.3. FINANCING OF THE INVESTMENT PROGRAMME IN 2015, RUB BILLION

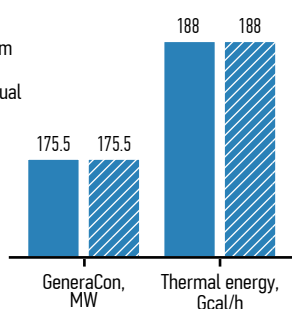
#### Key Investment Projects (under construction)

Object	Design Capacity, MW	Start of Construction	Completion of Construction	Capacity Commissioning 2015, MW	Capacity Commissioning 2016, MW (plan)
<b>PRIORITY PROJECTS IN THE FAR EAST</b>					
<b>The Blagoveschenskaya CHP (2nd stage).</b> The aim of construction is to liquidate the existing capacity deficit and meet future heat energy consumption growth, improve energy supply reliability as well as to meet the irregular part of the load schedules of UES of the East.	120	2011	2015	120	-
<b>The Sakhalinskaya TPP-2 (1st stage).</b> The new TPP will replace the decommissioned capacity of the Sakhalinskaya TPP-2, as well as increase the efficiency of Sakhalin energy system performance.	120	2011	2017	-	-
<b>The CHP in Sovetskaya Gavan.</b> The CHP is constructed to substitute the decommissioned capacity of the Mayskaya TPP and ensure meeting the growing energy needs of the special economic zone in the Sovetskaya Gavan port.	120	2011	2017	-	-
<b>The Yakutskaya TPP-2 (1st stage).</b> The project is realized to replace the decommissioned capacity of the Yakutskaya TPP and meet consumption growth for energy and to enhance energy supply reliability	193.48	2011	2016	-	193.48
<b>TOTAL:</b>				<b>120</b>	<b>193/48</b>
<b>The Gotsatlinskaya HPP.</b> The aim of the project is to supply electricity and capacity to consumers of the deficient UES of the North Caucasus, which will have a beneficial impact on remedying the socio-political situation and improving the social status of the Republic of Dagestan.	100	2007	2016	100	-
<b>The Zelenchukskaya HPP-PSPP.</b> The aim of the project is to enhance the reliability of the energy supply to the North Caucasus energy system and balance the daily schedule of the Kuban River, increase the adjustment capacity in the power system.	140	2009	2016	-	140
<b>The Nizhne-Bureyskaya HPP.</b> This HHP will be a compensating reservoir of the Bureyskaya HPP, levelling daily water fluctuations in the river resulting from the work of the hydropower plant. This will remove the restrictions on the regimes of operation of the Bureyskaya HPP and prevent winter floods in several villages located downstream.	320	2010	2017	-	320
<b>The Zagorskaya PSPP-2.</b> The second stage of the Zagorskaya PSPP is built to partially solve the problem of maneuverable regulation power deficit in the Central Region of Russia.	840	2006	2019	-	-
<b>TOTAL</b>				<b>100</b>	<b>460</b>

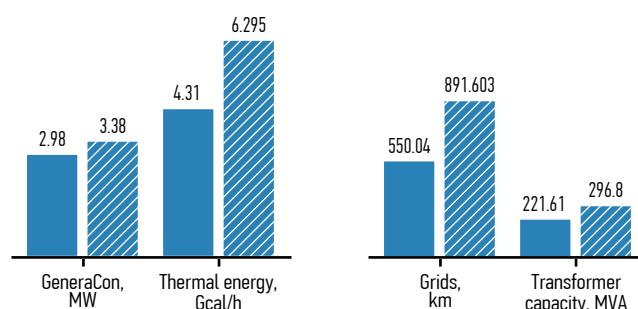
### Financing of the investment programme in 2015, RUB billion



### Capacity commissioning PJSC RusHydro



### Capacity commissioning RAO Energy Systems of the East Group



## 2.4.4. INVESTMENT PLANS

### Investment plans for 2016

	PJSC RusHydro*	RAO Energy Systems of the East Group
The volume of investments, RUB million	99,774.7	33,884.59
<b>Input power:</b>		
Generation, MW	746.08	143.62
Thermal energy, Gcal/h	469.6	449.81
Grids, km		947.41
Transformer capacity, MVA		317.51

\* The investment programme of PJSC RusHydro for 2016-2018 approved by order the RF Ministry of energy 14.12.2015 No. 956. In addition, the composition of the Business plan of PJSC RusHydro for 2016-2020 (minutes of the Board of Directors from 25.12.2015 No. 229) approved the Business plan of PJSC RusHydro for 2016, including investment programme for 2016, as well as note of the Business plan of PJSC RusHydro for 2017-2020 years, including the investment programme for 2017-2020.

#### 2.4.4.1. OPTIMIZATION AND IMPROVEMENT OF INVESTMENT EFFICIENCY

PJSC RusHydro is going to update the Investment Programme<sup>29</sup> of RusHydro Group for 2016-2019. The total sum as per the updated Investment Programme of RusHydro Group for 2016-2019 shall amount to RUB 352.7 billion (VAT included), i.e. RUB 31.8 billion less (-8%) than the planned amount (RUB 384.5 billion).

#### Optimisation parameters of the Investment Programme of RusHydro Group for 2016-2019 (RUB bln, VAT included)

	2016 appr	2016 upd	mod	2017 appr	2017 upd	mod	2018 appr	2018 upd	mod	2019 appr	2019 upd	mod
RusHydro re-equipment and reconstruction	35.0	29.2	-17 %	44.0	28.9	-34 %	46.0	28.8	-37 %	41.8	29.5	-29 %
New thermal power facilities in the Far Eastern Federal District*	35.2	31.3	-11 %	27.2	34.6	27 %	-	-	-	-	-	-
New hydroelectric power facilities	38.2	30.8	-19 %	21.3	32.0	50 %	10.0	15.9	58 %	0.8	7.7	904 %
RAO Energy Systems of the East Group**	25.3	21.5	-15 %	19.7	25.1	27 %	20.1	20.8	3 %	19.9	16.7	-16 %
TOTAL	133.8	112.9	-16 %	112.1	120.4	7 %	76.2	65.5	-14 %	62.4	53.9	-14 %

(Planned settings are reflected on the basis of the investment programmes approved in the business plans of Group companies RusHydro, approved in the established order, including taking into account the parameters of the investment programmes of subjects of electric power industry, approved by the Ministry of energy in accordance with the norms of the decree of the Government of the Russian Federation of 01.12.2009 № 977, adjustment parameters are disclosed in accordance with the draft of consolidated investment programme of RusHydro Group for 2016 (adjustment) and 2017-2019, taken note of by the Board of Directors of PJSC RusHydro (minutes dated 08.04.2016 No. 235))

\* priority objects of power system, built by the decree of the President in the Far East (1st turn Yakutsk GRES-2, CHP in Sovetskaya Gavan, 1st stage of the Sakhalin GRES-2, the Blagoveschenskaya CHP (2nd stage)) and objects accompanying offsite infrastructure, implemented by PJSC RAO Energy System of East.

\*\*including projects Upgrade and new construction, with the exception of objects off-site infrastructure priority projects in the Far East.



In the framework of actualisation and optimisation of the Investment programme was taken into account:

- the reduction of annual volume of financing of projects of technical re-equipment and reconstruction of HPP PJSC RusHydro through the smoothing of the schedule of financing of projects of the Programme of complex modernisation of hydroelectric power stations and reducing their unit cost, including by raising the efficiency of the procurement procedures up to the level of funding is not more than 30 billion rubles per year (inclusive of VAT) with preservation of the quality of works and initially target parameters of reliability and safety of HPP.
- funding for small HPPs in the North Caucasus Federal district is reduced to the extent necessary to complete the development of design documentation in 2016. The construction Zaragizhskaya SHPP is planned to be completed in 2016, with full entry capacity of 30.6 MW.

The Investment Programme of RusHydro Group for 2016–2019 envisages the completion of previously facility building project and the commissioning of new electric power sites of 2.67 GW and thermal power sites of 1,461 Gcal/h.

The key investment projects of the company in the North Caucasus are:

- Zelenchukskaya HPP-PSPP (140 MW in generator mode) in the Karachay-Cherkess Republic;
- Zaramagskaya HPP-1 (342 MW) in the Republic of North Ossetia-Alania.

The key investment projects of RusHydro Group in the Far East are:

- the third hydroelectric unit of Ust-Srednekanskaya HEPP with a capacity of 142.5 MW (Magadan region);
- Nizhne-Bureyskaya HPP (320 MW) in Amur region;

- Priority thermal power facilities constructed in the Far East in accordance with the Decree of President of Russia (Yakutskaya TPP -2 (1st stage), CHP in Sovetskaya Gavan, Sakhalinskaya TPP-2 (1st stage), the Blagoveschenskaya CHP (2nd stage)), and auxiliary off-site facilities such as access motorways/railroads, infrastructure of electric and thermal power output, water-supply and -disposal systems, slag-and ash-disposal systems etc.;

- Vostochnaya CHP (139.5 MW/421 Gcal/h) in Vladivostok.

In 2016–2019 RusHydro Group also plans to commission 231.5 MW of facilities in terms of re-equipment and reconstruction projects (e.g. through the implementation of the Programme for the comprehensive modernisation of HPPs of PJSC RusHydro), 1,166.8 km of overhead transmission lines, and 46.73 km of heat-supply systems, in order to modernise the energy infrastructure in the Far East.

## 2.4.5. COMPREHENSIVE MODERNISATION PROGRAMME OF HPPS

### 2.4.5.1. COMPREHENSIVE MODERNISATION PROGRAMME OF HPPS

Since 2012 PJSC RusHydro has been implementing the Programme of Complex Modernisation (PCM) – a project on the renovation of production facilities and equipment in the power industry, which is unique by its scale. Ac-

ording to the PCM, it is planned to replace more than a half of HPP capital equipment until 2025.

The programme is being implemented using innovative and energy-efficient solutions (the use of fibre-optical

technologies, optical transformers, the deposition of nanostructured materials, the implementation of microprocessor-based control systems, vibration control systems, etc.).

### 2.4.5.2. RESULTS OF PROGRAMME IMPLEMENTATION AND AGENDA 2016

Main results as of 2015:

- Kama HPP finished the scheduled modernisation of hydroelectric units.
- Three Volga HPP hydroelectric units were brought into operation after modernisation.
- Turbines and the mechanical parts of generators were replaced at three Zhigulyovskaya HPP hydroelectric units.
- The reconstruction of five Cheboksary HPP hydroelectric units was initiated, and other two hydroelectric units had already been finished.
- Three Saratov HPP hydroelectric units were brought into operation after modernisation.
- Novosibirsk HPP hydroelectric unit 5 was modernized.

#### *Implementation of the Programme of complex modernisation of HPP*

	The PCM plan (2012–2025), ed.	The fact PCM (2012–2015), ed.	% complete from the PCM plan (2012–2025)
Turbine	201	60	29.9
Generators	187	46	24.6
Transformers	183	42	23.0
High-voltage circuit breakers	398	111	27.9
Hydro facilities	230	175	76.1
Equipment wiring	≈ 10200	3792	37.2
Accessories	> 4200	1479	35.3



### The increase in installed capacity, MW

Object	2015 (fact)	2016 (forecast)*
The Voljskaya HPP	10.5	10.5
Zhigulevskaya HPP	21.0	31.5
Kamskaya HPP	6.0	3.0
Saratovskaya HPP	13.0	6.0
Novosibirskaya HPP	5.0	5.0
Total of PJSC RusHydro	55.5	56.0

\* In accordance with the optimisation parameters of the investment programme of PJSC RusHydro for the year 2016 (adjustment), previously approved by the Board of Directors of PJSC RusHydro for the purposes of disclosure about projects of investment programmes in accordance with the requirements of Government regulations of the Russian Federation dated 21.01.2004 № 24 and taken note of by the Board of Directors of PJSC RusHydro (minutes dated 08.04.2016 No. 235)

## 2.5. INNOVATIVE DEVELOPMENT

### 2.5.1. INNOVATIVE DEVELOPMENT PROGRAMME

The innovative development programme of PJSC RusHydro for 2011–2015 with an outlook to 2021 was approved by the Board of Directors (minutes dated 02.08.2011 № 130).

#### Priority directions for innovation development

SAFETY AND RELIABILITY	NEW GENERATION	ENERGY EFFICIENCY	ENVIRONMENT	THE WATER	EFFICIENT USE OF WATER RESOURCES
<ul style="list-style-type: none"> <li>- PROJECTS THAT INCREASE THE SAFETY AND RELIABILITY OF FACILITY OPERATION</li> <li>- DIAGNOSTICS AND MONITORING</li> <li>- REDUCING THE INFLUENCE OF THE HUMAN FACTOR</li> <li>- EXTENDING THE LIFE OF THE EQUIPMENT</li> </ul>	<ul style="list-style-type: none"> <li>- DEVELOPMENTS IN THE FIELD OF NEW TYPES OF GENERATION</li> </ul>	<ul style="list-style-type: none"> <li>- IMPROVING EXISTING GENERATION TECHNOLOGIES</li> <li>- REDUCING THE LOSSES OF ELECTRIC ENERGY, HEAT AND WATER</li> <li>- ENERGY RECUPERATION</li> </ul>	<ul style="list-style-type: none"> <li>- REDUCING THE HARMFUL ANTHROPOGENIC IMPACT ON NATURE</li> <li>- RECULTIVATION AND RESTORATION OF THE ECOSPHERE</li> </ul>	<ul style="list-style-type: none"> <li>- TECHNOLOGIES RELATED TO WATER RESOURCES</li> <li>- MANAGEMENT, STORAGE, CLEANING AND PREPARATION OF WATER</li> </ul>	<ul style="list-style-type: none"> <li>- MATERIALS AND TECHNOLOGIES FOR CONSTRUCTION</li> <li>- DESIGN TECHNIQUES, DEVELOPMENT OF NEW MATERIALS AND METHODS OF THEIR USE</li> </ul>
GENERATION MATERIALS AND TECHNOLOGIES	IT PROJECTS	HR DEVELOPMENT	CORPORATE PROCESSES	IMPROVING THE EFFICIENCY OF THERMAL POWER	
<ul style="list-style-type: none"> <li>- NEW CONSTRUCTION MATERIALS, PROCESSING TECHNOLOGIES AND MODIFICATIONS WHICH REDUCE COST AND INCREASE GENERATION EFFICIENCY</li> </ul>	<ul style="list-style-type: none"> <li>- KNOWLEDGE MANAGEMENT SYSTEMS</li> <li>- TECHNOLOGICAL PROCESS CONTROL SYSTEMS</li> <li>- MULTIDIMENSIONAL MODELING AND FACILITIES MANAGEMENT SYSTEMS</li> </ul>	<ul style="list-style-type: none"> <li>- PROJECTS AIMED AT INNOVATIVE PERSONNEL TRAINING</li> </ul>	<ul style="list-style-type: none"> <li>- INNOVATIVE PROJECTS IN THE FIELD OF CORPORATE GOVERNANCE AND A VARIETY OF SUPPORTED BUSINESS PROCESSES</li> </ul>	<ul style="list-style-type: none"> <li>- INNOVATIVE PROJECTS AIMED AT THE DEVELOPMENT AND IMPLEMENTATION OF INNOVATIVE SOLUTIONS IN THE FIELD OF THERMAL ENERGY</li> </ul>	



**Kirill Frolov**

Deputy General Director responsible for scientific and project activities

**- What kind of scientific research and development work is been carried out at RusHydro?**

- In 2015 the growth of the works related with innovative subjects was 25% comparing to the previous year, and total share in the revenue mix amounted 12%. It is a worthy indicator.

First of all, the Company pays attention to the issues linked with guaranteeing of the facilities safe operation, fulfillment of the programs of rehabilitation and modernization, Integrated modernization program (IMP) and operations monitoring. Based on priorities existing in 2015 more than ten research and development projects have been implemented. They included continuously operating three-dimensional modeling of geofiltration through facilities of Votkinskaya HPP. Mathematical model and methodology of short and long-term forecast of stream flow to reservoir of Sayano-Shushenskaya HPP accounting for grid modernization have been developed. Precision of level monitoring equipment was improved in order to provide for more accurate monitoring of hydropower facilities conditions. Influence of biological processes on concrete surfaces of the hydraulic structures has been studied.

Approximately 20 % of the works is done for external customers. We fulfill research and development works for external companies from the fields of nuclear power and hydropower engineering, and transport infrastructure. For example, we worked out an alternative option of principal technical solution at the section of the transport bridge across the Kerch Strait. We elaborated a set of technical solutions for protecting supports of the Kerch Strait transport bridge against ice.

Furthermore, solutions in the field of construction materials and structures, including the composite ones, are being developed. Research is conducted in the field of renewable energy sources, including tidal, wave and low head river hydropower. Works in the field of flood protection are being carried out.

**- And what projects are managed by RusHydro?**

- Significant share of the project works falls to the program of technical rehabilitation and modernization and the program of complex modernization. Taking into account the fact that engineering process management during HPP (PSPP) modernization and construction requires a complex approach, the Company returned to the practice of appointing General designers discontinued in 2002 after implementation of new legislation on technical regulation. A General designer, an engineering company, was appointed by PJSC RusHydro to every HPP (PSPP). The main task of the General designer is to guarantee effectiveness and high technological level of the objects of technical rehabilitation and modernization as well as via integrated approach for development of HPP construction documents.

In addition to development of construction documents, the institutes of design and research complex provide field supervision, development of engineering documentation and provide support during all stages of the object life cycle.

The institutes of design and research complex work on the orders of the external customers including the foreign ones; they provide complex engineering and consulting services to power engineering companies, perform expert assessment of the construction documents.

**-What are the specifics of hydropower engineering objects?**

- The specifics of hydro power plants construction are that every project is unique. The uniqueness is determined by natural, engineering and geological conditions where it is necessary to "insert" hydraulic facility with certain performance specifications. Selection of the site for dam location and calculation of hydropower equipment are only two of many tasks solved by the specialists in the process of the hydraulic facility project development.

**- Which of the projects could be called "breakthrough projects" in the reported year?**

- It is hard to choose the most "breakthrough" designs because all of them are innovative ones. For example, at Nizhne-Bureyskaya HPP a technical solution involving absolutely new type of watertight element is being implemented for the first time both in national and in world practice. The element made of clay-cement concrete was erected along the whole height of the dam. Moreover, it ensures flood protection as well. This technical solution has very good perspectives for further implementation in the field of hydrotechnical construction.

A new type of controlling and measuring equipment based on fiber-optics of domestic design is being implemented in order to increase reliability and safety at Zaramaskaya HPP-2. This type of equipment is implemented in the field of hydrotechnical and hydraulic power construction for the first time.

Talking about the stage of technology implementation it is worth to mention project of reinforced concrete structures strengthening with the system of external reinforcement of composite materials based on carbon fibers. At the stage of trial operations, project of low-head mini-HPP on the basis of orthogonal turbine deserves attention.



## 2.5.2. RUSHYDRO GROUP'S PROJECTS

### 2.5.2.1. DEVELOPMENT OF RECOMMENDATIONS FOR THE IMPLEMENTATION OF OPTICAL MEASUREMENT TRANSFORMERS OF CURRENT AND VOLTAGE

In the branch of PJSC RusHydro - "Nizhegorodskaya HPP" created a digital testing ground for innovative optical transformers of current and voltage in the experimen-

tal-industrial operation. Introduction at the facilities of PJSC RusHydro solutions "Digital substation" based on optical transformers of current and voltage will lead to

cost savings compared to standard projects.

### 2.5.2.2. PROTOTYPE TESTING OF MINI-HPPS WITH ORTHOGONAL HYDROPOWER UNITS

At the site of Khorobrovskaya small HPP to undergo pilot testing installed the sample unit container type with

orthogonal hydraulic unit. After the test the unit can be put into production. Developed unit designed for creation

of small hydropower plants in remote areas without centralized energy supply.

### 2.5.2.3. RESEARCH AND STUDY THE PSPPS WITH UNDERGROUND RESERVOIRS

In 2015, completed a study of the basic technical issues associated with the construction of the pumped storage power plant at great depths, carried out the necessary

geotechnical, geophysical and hydraulic studies and calculations, developed basic construction solution of PSPPs with underground reservoirs. The obtained results allow

to increase the investment attractiveness and efficiency of the construction of pumped storage power plants in the Central region of the Russian Federation.

### 2.5.2.4. DEVELOPMENT OF TECHNOLOGY FOR THE APPLICATION OF THE SYSTEM OF EXTERNAL REINFORCEMENT OF BUILDING STRUCTURES COMPOSITES FROM CARBON FIBERS FOR HYDRAULIC ENGINEERING

Elaboration of standard technical solutions, technologies, regulations and methods for strengthening building structures hydraulic structures with the use of external reinforcement.

Selected three R & d projects with a total value of more than 100 million rubles

- Technology of strengthening of non-rock basement of hydrotechnical facilities with the help of polymer deposition.
- Develop a method for evaluating the condition of hydraulic engineering structures and hydroelectric generators HPP on the monitoring results of amplitude-frequency characteristics of oscillation in conjunction with a soil base.
- Research opportunities and development of recommendations energy efficiency of the main technological cycle HPP to increase power generation.

## 2.5.3. PLANS FOR 2016

In 2016, the Company will complete the development of the programme of innovative development for the period 2016-2020 with a vision to 2025.

In the field of project activities of the RusHydro Group will work on projects aimed at improving operational efficiency of the Company's divisions and key subsidiaries companies.



## 2.6. THE COMPANY ON THE SECURITIES MARKET

### 2.6.1. INVESTOR RELATIONS

RusHydro actively develops its relations with the market participants and improves Company's transparency. Disclosure is made in compliance with the requirements of the Russian legislation, Russian and foreign regulators of the securities markets, Company's internal regulations and rules of the stock exchanges on which the securities are traded.

The websites [www.rushydro.ru](http://www.rushydro.ru), [www.eng.rushydro.ru](http://www.eng.rushydro.ru) provide information on the activities of PJSC RusHydro (the Board of Directors decisions, information about the upcoming and past meetings of shareholders, financial statements, news of the Company, its subsidiaries and affiliates, etc.).

In 2015, the Company's representatives of participated in the largest international investor conferences, including conferences arranged by Bank of America Merrill Lynch, Deutsche Bank, Raiffeisen Bank, Sberbank, and also in the

VTB Capital Investment Forum "Russia Calling!", and held a number of meetings with representatives of the Russian and foreign investment funds. Also, in April 2015, RusHydro held the Investor Day, a meeting of analysts and investors with the Company's management.

The Company regularly holds conference calls for analysts, investors and rating agencies on the financial results. A schedule of key Investor Relations events- IR Calendar is published on the Company's website. ([http://www.rushydro.ru/investors/IR\\_events/](http://www.rushydro.ru/investors/IR_events/)).

Shareholders can get the answers to their queries related to exercise of their rights by calling the hotline arranged by registrar of the Company JSC "ROST Registrar" or sending a request via e-mail. Depository receipt holders may contact the depository bank The Bank of New York Mellon, or PJSC RusHydro on all issues.

#### Offer to buy back shares of PJSC RAO Energy Systems of the East.

11.03.2015 in accordance with the decision of the Board of Directors, the Group's subsidiary Vostok-Finance LLC has announced a voluntary offer to purchase shares of PJSC RAO Energy Systems of the East. As part of the offer the shareholders of PJSC RAO Energy Systems of the East may submit an application for sale of their ordinary and preference shares of PJSC RAO Energy Systems of the East or their exchange for ordinary shares in the Company. As of 31.12.2015 the obligation to offer to purchase the shares was reflected in the amount of 2,108 million rubles.

### 2.6.2. AUTHORIZED SHARE CAPITAL

#### *Authorized share capital of PJSC RusHydro as of December 31, 2015*

Nominal value, rubles	Number of ordinary shares	Nominal value of 1 share	Number of authorized ordinary shares	State registration number of the issue
386,255,464,890	386,255,464,890	1 RUBle	54,047,237,489	1-01-55038-E

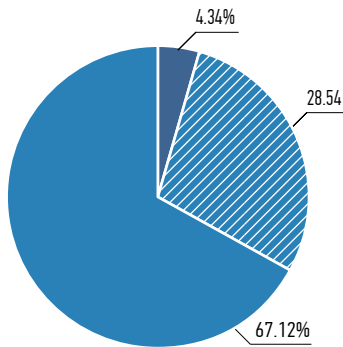
#### *List of shareholders owning more than 2% shares (as of December 31, 2015)*

Shareholder name	Type of registered entity	Number shares	Percentage of share capital
The Russian Federation represented by the Federal Agency for State Property Management	Holder	258,161,535,606	66.8370
Non-bank credit organisation CJSC National Settlement Depository	Nominee holder	112,576,506,772	29.1456
Limited liability company Depository and Corporate Technologies	Nominee holder	8,325,499,208	2.1554

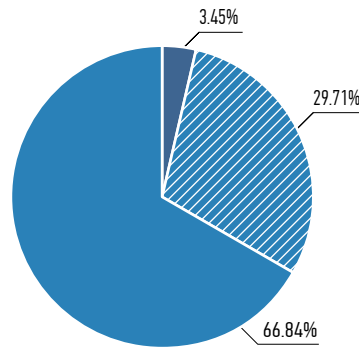
Information about the registered persons as of the end of each quarter is disclosed in the issuer's quarterly reports on <http://www.rushydro.ru/investors/disclosure/greports/>



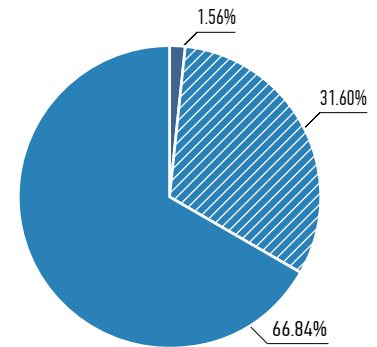
*As of the record date 23.05.2013*



*As of the record date 26.05.2014*



*As of the record date 25.05.2015*



■ Natural persons    ▨ Legal entities    ■ Russian Federation

Source: JSC Registrator R.O.S.T.

The Company's shareholders are more than 340 thousand domestic and foreign investors. The government holds a controlling stake. There were no significant changes in

the structure of owners and holders of share capital during 2015.

As of 31.12.2015, the Group's had 21,786,611,933 avail-

able shares of RusHydro. The Company doesn't own its shares.

The Company did not place shares in 2015.

*The total number of persons entitled to attend the general meeting of shareholders of the issuer, persons*

Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015
351,730	351,730	347,816	347,817	347,603

Source: Quarterly Report

### 2.6.3. STOCK TRADING ON THE RUSSIAN MARKET

Since 2008, RusHydro shares have been included in the quotation list of Tier 1 and traded on the MICEX Stock Exchange under the ticker symbol HYDR, and in March 2013, the Company's shares were among the first on the Russian

Stock Market admitted to trading in the T+2 trading system with partial collateral and deferred trade execution.

The company's shares are components of major stock

market indices both the Russian, such as MICEX, RTS, MICEX the Power, RTS-Utilities, MICEX BMI, an index of companies state-owned shares (SCI) MICEX), and international: MSCI Russia, FTSE All World Emerging Europe.

*2015 Share performance and trade volume dynamics*



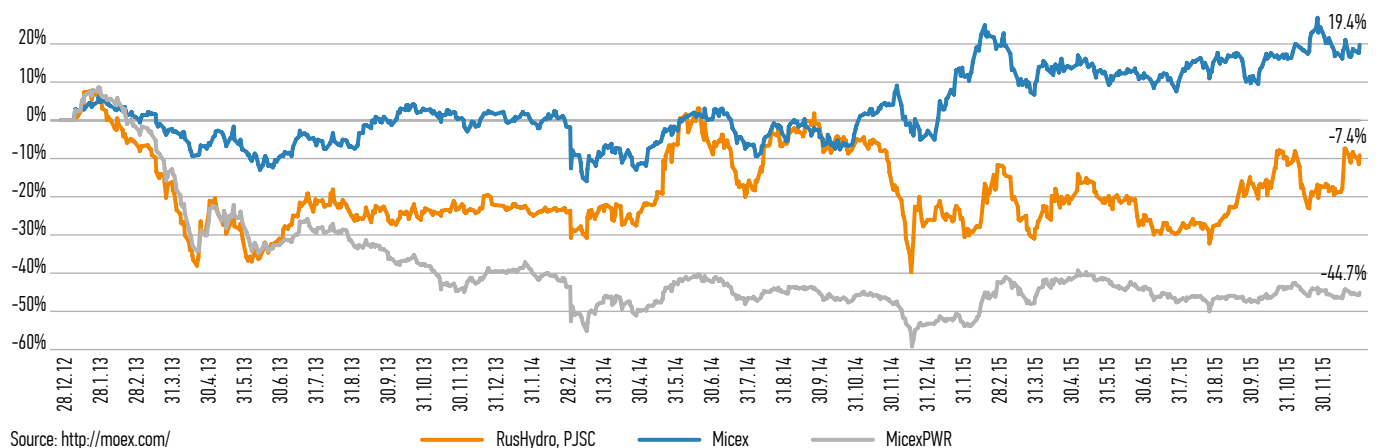


### Trading results for the shares on the stock market

	2013	2014	2015
Trading sectors	T+2	T+Shares and DRs	T+Shares and DRs
Trading currency		RUB	
The highest transaction price	0.7920	0.755	0.679
The lowest transaction price	0.4537	0.441	0.4955
The lowest transaction price	0.5675	0.5415	0.6790
Trading volume	181 billion	130 billion	116 billion

Source: <http://moex.com/>

### 2013-2015 The dynamics of quotations of shares RusHydro compared with the key indices



For the period from 2013 to 2015 the price of RusHydro's shares declined by 7% and the MICEX index rose by 19%, industry MICEX Power index lost 45%.

Key factors influencing the dynamics of quotations of shares of RusHydro in the reporting year:

- The problems of the Russian economy, the weakening of the RUBLE, growth of inflation;
- Changing attitudes of global investors to the emerging markets;
- Actions of the Russian Government to limit the electricity prices growth;
- The competitive capacity auctions (KOM) results of

- the dynamics of electricity prices on the spot market;
- Commissioning of new facilities, including under power delivery contracts;
- Liberalisation of hydro capacity market of Siberia;
- Development of plans aimed at solving the problems of financial stability of PJSC RAO Energy Systems of the East.

#### 2013

In 2013, the MICEX index dynamics was flat, gaining 2% against the background of a slowdown in the Russian economy, as well as affected by outflow of foreign investors from emerging markets. The MICEX PWR index fell by 40% under pressure from the Russian government decisions relating to the limitation of the rate of growth in electricity prices. The shares of RusHydro, which was decreasing in the first half of the year along with the sector, in the second half of the year performed better than the index due to support from strong operating and financial results for the year decreased by 23%.

#### 2014

During 2014, the MICEX index lost 7% and the MICEX PWR index decreased by 23%, while RusHydro lost only 5%. The main negative factors affecting the Russian market were sharp decline in oil prices in the second half of the year and economic sanctions of Western countries. The utility index performed worse than MICEX due to loss of investment attractiveness of the sector on the background restrictive tariff policy, including zero tariff indexation in 2014. Support for RusHydro shares, whose growth reached 31% during the year, had a number of factors, including the liberalization of the capacity market for the Siberian hydropower generation, positive results for the company capacity auctions, electricity price growth in the second price zone in the second half of the year.

#### 2015

In 2015, the MICEX index gained 26% and the MICEX PWR - 18%, RusHydro shares rose by 25%. Support for the Russian market as a whole came from improved attitude of global investors to emerging markets against the background of continued soft monetary policy by leading central banks and expectations in the medium term, as well the recovery of the Russian economy. An additional positive for RusHydro became the continuation of the liberalization of the Siberian hydroelectric power sales, positive outcome of capacity auctions, electricity price growth in the second price zone, commissioning of new capacity, as well as steps undertaken by the Company aimed at improvement of financial profile of PJSC RAO ES of the East.

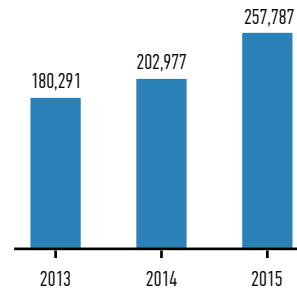


### The Company's market multipliers\*

	2013	2014	2015
P/E	8.6	8.4	9.5
P/S	0.6	0.6	0.7
EV/EBITDA	5.6	6.7	7.9
P/BV	0.2	0.2	0.3

\* The calculation is based on the IFRS financial statements.

### Capitalisation, RUB million



Source: <http://moex.com/>

## 2.6.4. COMPANY SECURITIES ON THE INTERNATIONAL SECURITIES MARKETS

As of December 31, 2015, RusHydro had 224,417,076 depository receipts equivalent to 22,441,707,600 ordinary shares, comprising 5.8% of the outstanding shares of the Company.

### DEVELOPMENT STAGES OF THE DR PROGRAMME

JUNE 2008	JULY 2009	AUGUST 2009	AUGUST 2010	APRIL 2014
LAUNCH OF THE RULE 144A GDR PROGRAMME	LAUNCH OF GDR TRADING ON THE LONDON STOCK EXCHANGE (LSE) IN THE INTERNATIONAL ORDER BOOK (IOB) SECTION	LAUNCH OF THE ADR LEVEL 1 PROGRAMME AND THE CONVERSION OF THE GDR PROGRAMME INTO THE ADR PROGRAMME IN ACCORDANCE WITH REGULATIONS	LAUNCH OF DEPOSITORY RECEIPTS TRADING ON THE OTCQX (USA) TRADING PLATFORM IN THE HIGHEST TIER OF THE UNLISTED MARKET, INTERNATIONAL PREMIER	DEPOSITORY RECEIPTS FOR RUSHYDRO SHARES ARE ADMITTED TO STOCK EXCHANGE'S REPO OPERATIONS TO MOSCOW STOCK EXCHANGE

### Depository receipts programmes

Type of programme	Programme launch date	Depository bank	Ratio	Ticker symbol	CUSIP number	Maximum volume of the programme, shares	Stock Exchange
Rule 144A GDR	17.06.2008	The Bank of New York Mellon	1 GDR = 100 ordinary shares	HYDR	782,183,503	832,131,000	London Stock Exchange (Main Market – IOB)
ADR level 1	07.08.2009	The Bank of New York Mellon	1 ADR = 100 ordinary shares	HYDR	782,183,404		OTCQX

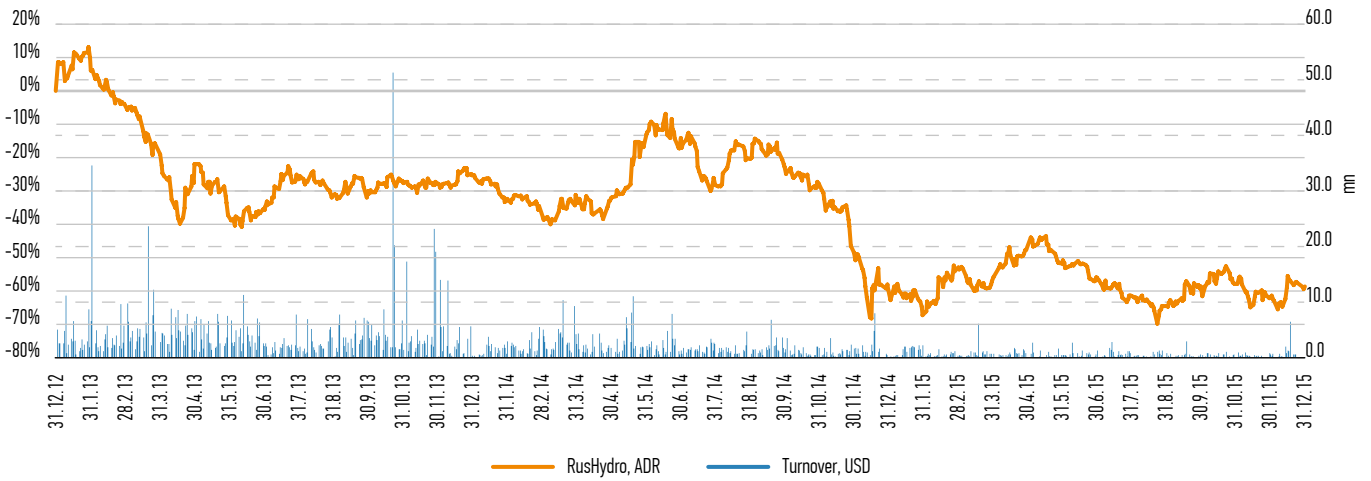
### Results of depository receipts trading on the LSE

	2013	2014	2015
Ticker symbol		HYDR	
Trading currency		USD	
The highest transaction price	2.610	2.151	1.305
The lowest transaction price	1.366	0.736	0.697
Year-end transaction price	1.726	0.932	0.956
Trading volume	473 mn	293 mn	182 mn

Source: Bloomberg



**2014 ADR PERFORMANCE AND TRADING VOLUME, LSE (IOB), 2015**

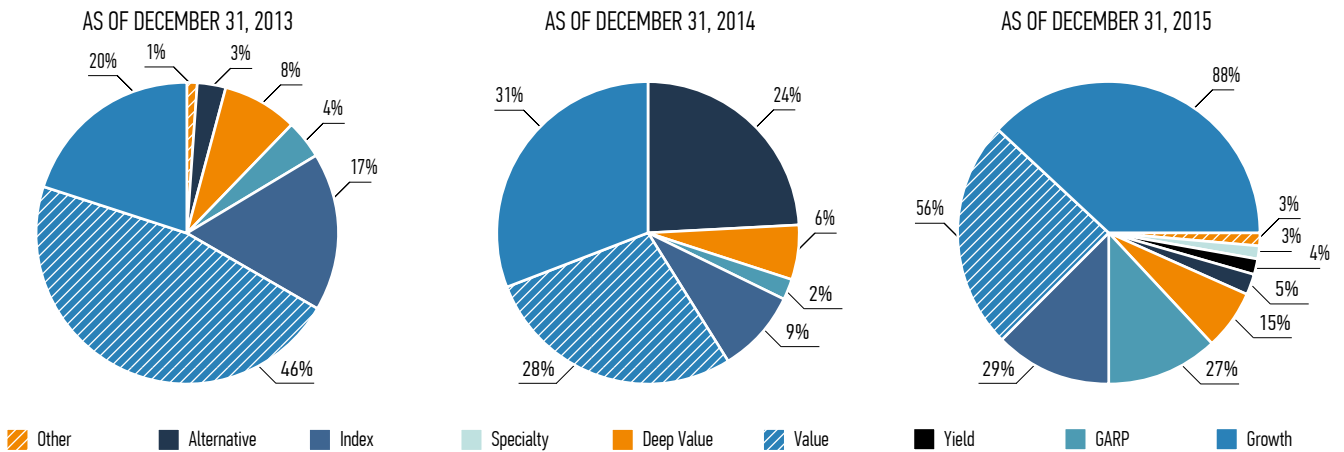


An analysis of the Company's structure of holders of depositary receipts for the past three years shows a significant proportion of investors who hold investment strategy Value (value) and Growth (growth). In 2015, the

number of investors with an active strategy of Growth at Reasonable Price (GARP), also growth in the number of investors with a strategy (Index) has increased significantly.

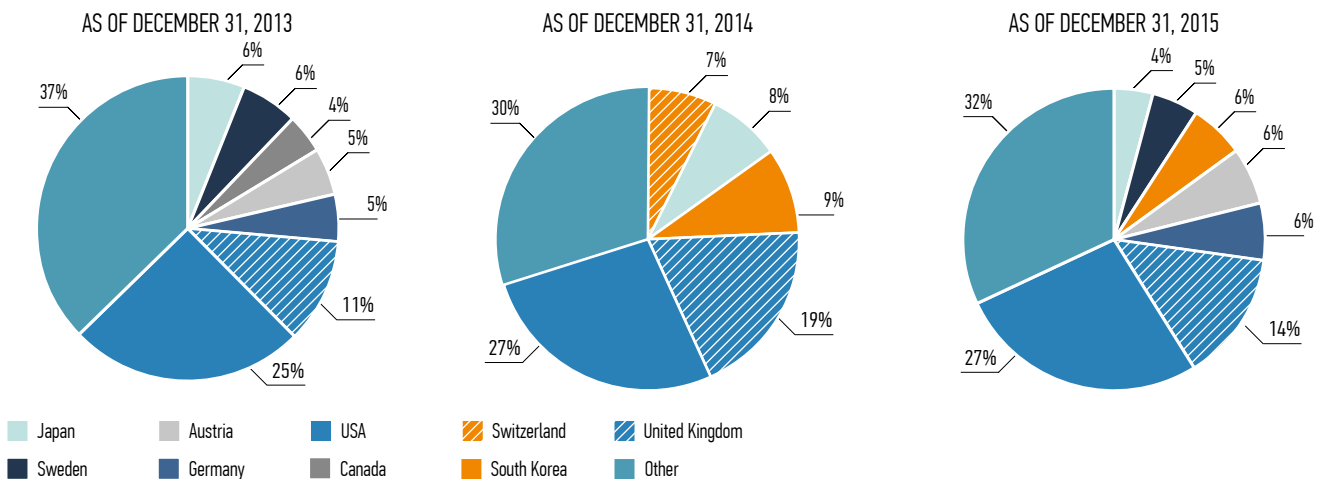
An analysis of the geographical structure of depositary receipts holders demonstrates that the main holders are investors from the United States and the United Kingdom, and during 2015, the number of investors from German increased.

**2013-2015 DISTRIBUTION OF DR HOLDERS BY INVESTMENT STRATEGY**



Source: Depository Bank: The Bank of New York Mellon.

**2013-2015 GEOGRAPHIC DISTRIBUTION OF DR HOLDERS**



Source: Depository Bank: The Bank of New York Mellon.

## 2.6.5. DIVIDEND POLICY

The Company's dividend is aimed at strategic development of RusHydro as well as shareholder value creation through achievement an optimal balance between dividend payouts and capitalisation of the Company's profits.

To ensure transparency in determining the amount of dividend

payments, RusHydro adopted a Provision on dividend policy. The Board of Directors prepares recommendations on the size of the dividend for approval by the General Meeting of shareholders, focusing on net income, determined in accordance with the consolidated financial statements of the Group for RusHydro International Financial Reporting

Standards and Russian Accounting Standards, as well as the Company's need to finance its investment programme. The amount of annual dividends must not be less than 5% of the Company's consolidated net profit under IFRS (<http://www.rushydro.ru/investors/dividends/>).

### 2.6.5.1. PAYMENT OF DECLARED (ACCRUED) DIVIDENDS ON THE COMPANY'S SHARES FOR 2014

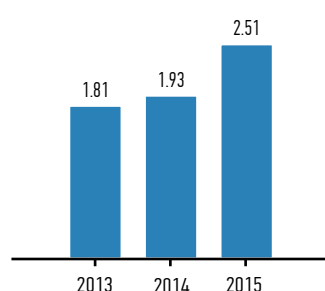
According to the decision of the Annual General Meeting of Shareholders held on June 26, 2015, RUB 6,032,750 were paid as dividends for 2014 (about 20% of the Company's net profit under RAS or 25% of consolidated net profit of RusHydro Group in under IFRS), which is about 15% higher than the amount paid for 2013.

Payments were made in full to all registered shareholders, except for RUB 22,298,396.28, which were not paid for the reasons that may not be controlled by the Company: the absence of registration or incorrect address and mailing address; incorrect bank details of recipients of income referred to in the application (statement), provided by the registrar, the method of payment "bank transfer".

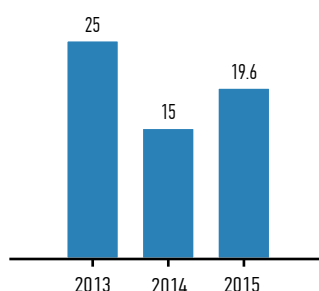
The Company fulfilled its obligations on dividend payment to the federal budget, the amount paid was RUB 4,032,108,851.94.

There was no arrearage in dividends payable to the federal budget by the Company.

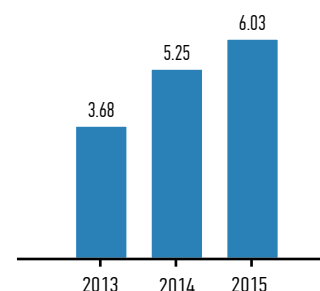
*Dividend yield  
of the company's shares, %*



*Share of net profit calculated based on RAS,  
allocated to dividend payments, %*



*Amount allocated for the dividend payment,  
billion rubles*



### Dividend history

Reporting period, subject to the dividend payment	Total amount of declared (accrued) dividends, RUB thousand	Declared dividends per share, RUB
9M 2005	27,889	0.000,268,289
2005	565,695	0.005,441,922
Q1 2006	223,600	0.002,151
H1 2006	110,588	0.001,063,84
9M 2006	1,146,504	0.005,739,439
Q1 2007	1,119,000	0.007,938,72
2010	2,496,867	0.008,600,91
2011	2,500,000	0.007,893,17
2012	3,675,573	0.009,556,06
2013	5,248,250	0.013,587,51
2014	6,032,750	0.015,618,55



## 2.6.6. BONDS

As of December 31, 2015, RusHydro had eight outstanding bond issues with a total par value of 60 billion rubles. In the end of 2015, the Company fully repaid its Eurobond issue in total amount of RUB 20 bn.

### Main parameters of the bond issue

General parameters			Bonds of series 09	Exchange-traded bonds of B0-P01, P02-B0, B0-P03	Bonds of series 01 and 02	Bonds of series 01 and 02
Type of bond	Documentary non-convertible interest-bearing bearer bonds with mandatory centralized custody	State registration number	4-09-55038-E	4B02-01-55038-E-001P 4B02-02-55038-E-001P 4B02-03-55038-E-001P	4-01-55038-E 4-02-55038-E	4-07-55038-E 4-08-55038-E
Par value	1 000 rubles	Registration date	27.12.2012	03.07.2015	23.09.2010	27.12.2012
Nominal amount of issue	Series 09 - 10 billion rubles;	Placement date /	28.04.2015	08.07.2015	25.04.2011	13.02.2018
	Series B0-P01, P02-B0, B0-P03 - 5 bn. RUB Each	Offer date /	26.10.2017	—	22.04.2016	12.02.2018
	Series 01 - 10 billion rubles;	Maturity date	15.04.2025	04.07.2018	12.04.2021	02.02.2023
	Series 02 - 5 billion rubles;					
Series 07 - 10 billion rubles;						
Series 08 - 10 billion rubles;						
Placement price	100 %	Coupon rate	1-5 coupons - 12.75 %, 6-20 coupons - determined by the Issuer	1-6 coupons - 11.85 %	1-10 coupons - 8 %, 11-20 coupons - the rate set by the issuer	1-10 coupons - 8,5 %, 11-20 coupons - the rate set by the issuer
Placement method	Public offering, bookbuilding	Yield at pricing	13,16 %	12,20 %	8,16 %	8,68 %
Coupon payment	On a semiannual basis	Yield at last transaction price, as of 30.12.2015, %	Series 09 - 11.44 %	Series B0-P01- 12.2 % Series B0-P02 - 12.2 % Series B0-P03 - 12.2 %	Series 01 - 10.36 % Series 02 - 16.47 %	Series 07 - 13.31 % Series 08 - 10.69 %

### Credit ratings Fitch Ratings on bonds of PJSC RusHydro

Date of assignment (confirmation)	Credit rating
21.01.2015	Fitch Ratings affirms the senior unsecured rating for RUBle bonds of PJSC RusHydro (Series 07 and 08) at the level of "BB +".
30.04.2015	Fitch Ratings assigns RUBle bonds of PJSC RusHydro (series 09) senior unsecured rating at "BB +" level.
09.07.2015	Fitch Ratings assigns RUBle bonds of PJSC RusHydro (exchange-traded bonds of B0-P01, P02-BW and B0-P03) senior unsecured rating at "BB +".



**Andrey Kazachenkov**

Member of the Management Board,  
First Deputy General Director

***- How does the Company's financial capital increase?***

- We need to have a stable revenue in the long term, and this is the main part of the RusHydro Group financial capital. The main driver of financial capital formation is the operating efficiency. Therefore, we implement a number of programmes to improve operating and investing activities, and work to reduce costs and generally increase the efficiency of RAO ES of the East. We must meet the call of the times in terms of economic conditions, and reduce inefficient expenses in achieving the goals set by the Russian government.

Besides, we attract funds from the external sources. The company implements its policy on the bond market. We issue bonds in different forms and are one of the most reliable and efficient borrowers on the Russian financial market. It is also possible to attract strategic capital investors for RusHydro by the state decisions. We are a state-owned company, and in forming long-term structure of the Group's capital we are guided by the the goals set by the governmental.

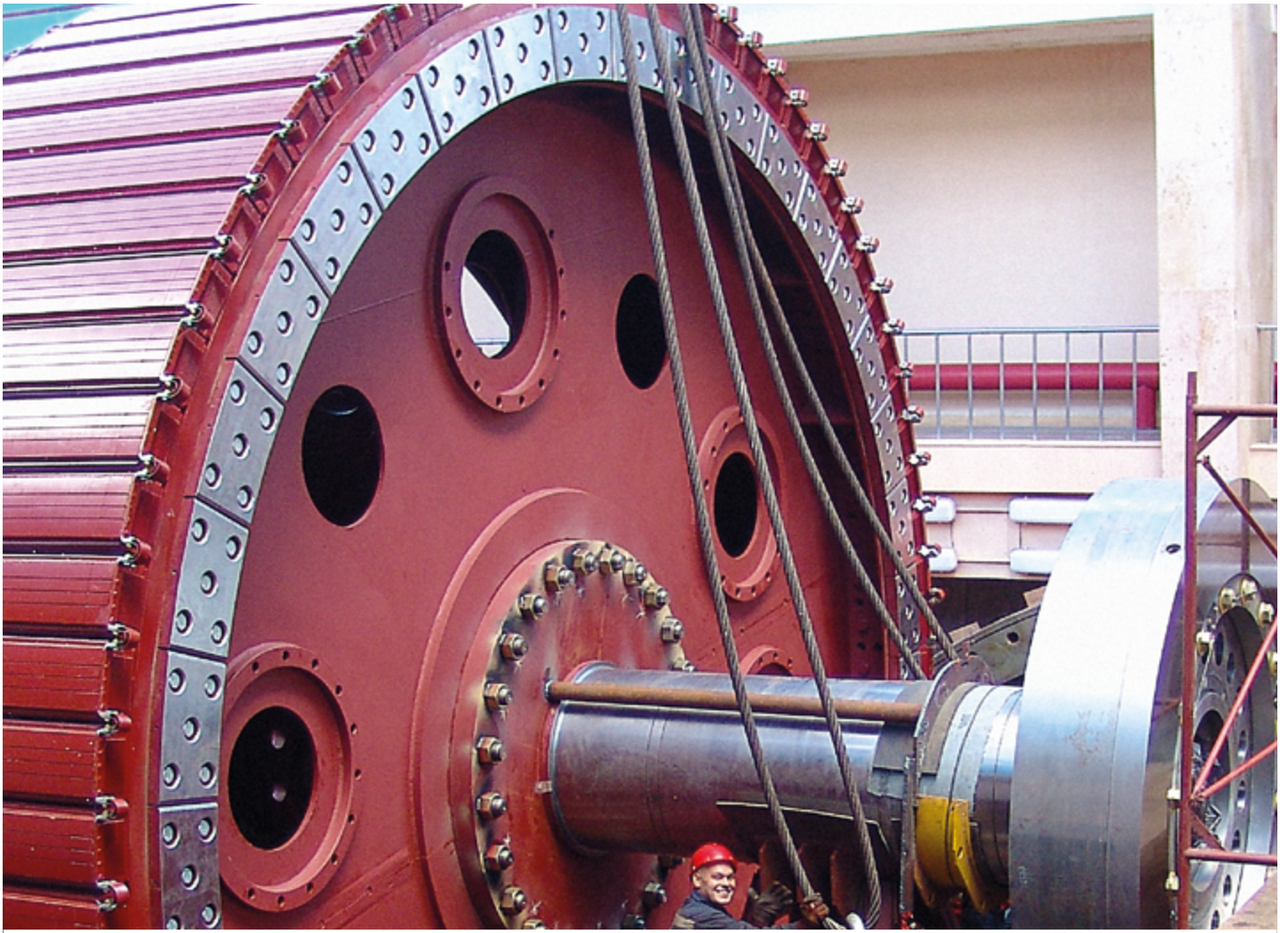
***- The Company has partially changed its management team at the end of 2015. What is the focus of the renewed team?***

- Reliable and safe production activities, improving operational efficiency, rational allocation of the Company's resources, including divestment from non-core activities. Briefly, we are committed to the results.

The last year crisis affected all economic actors, including RusHydro. We see a crisis as an opportunity to become stronger, more competitive, and prepare the ground for the next steps during difficult time. This is especially important for us, because power engineering is not only a matter of reliable power supply, but also the issue of future energy safety. In a broader sense, it is affect the infrastructure for development of regions and the whole country.

***- In your opinion, what will become of RusHydro Group in ten years?***

- It will be the leader of the Russian power industry. It will be the core company for the Russian economy and for the power industry. It will be the company that operates on the principles of transparency and efficiency. The company that operates in the interests of its shareholders, partners, customers and the public.



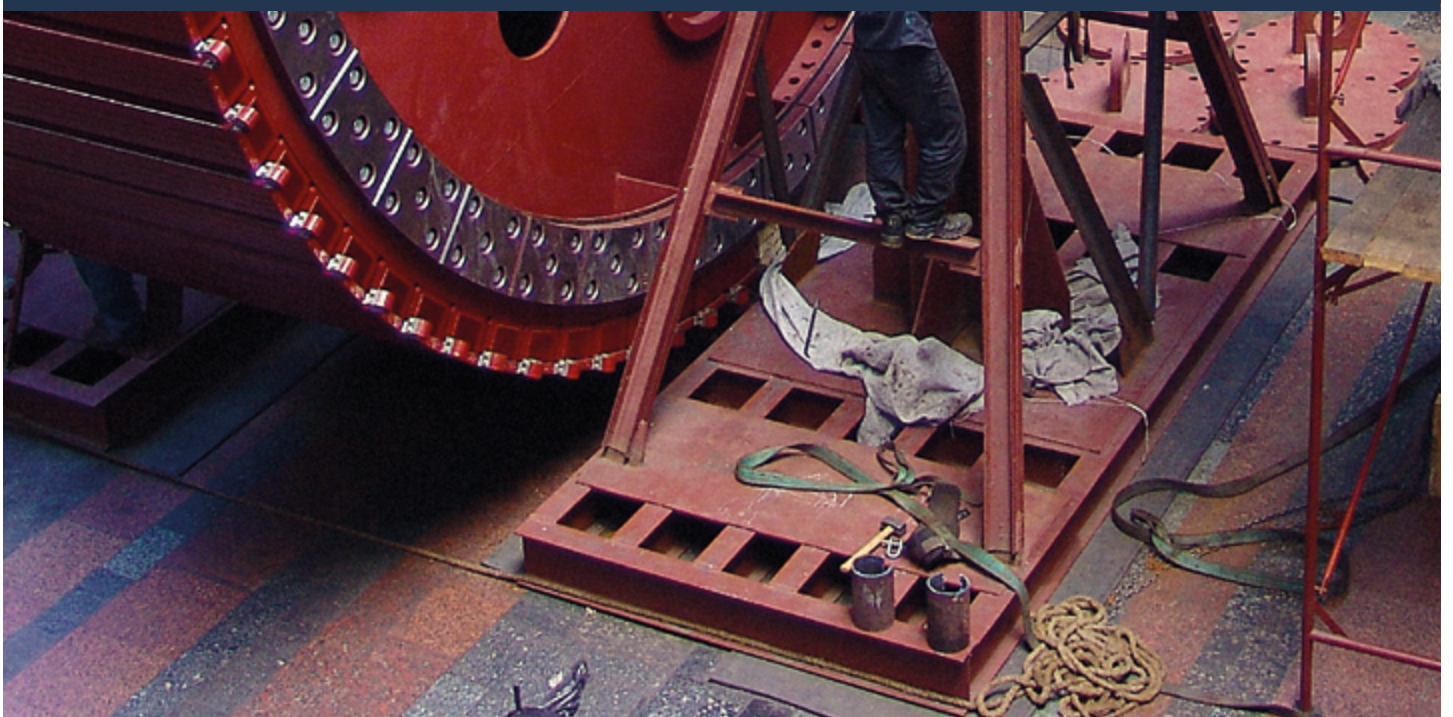
03

PJSC RUSHYDRO

ANNUAL REPORT 2015

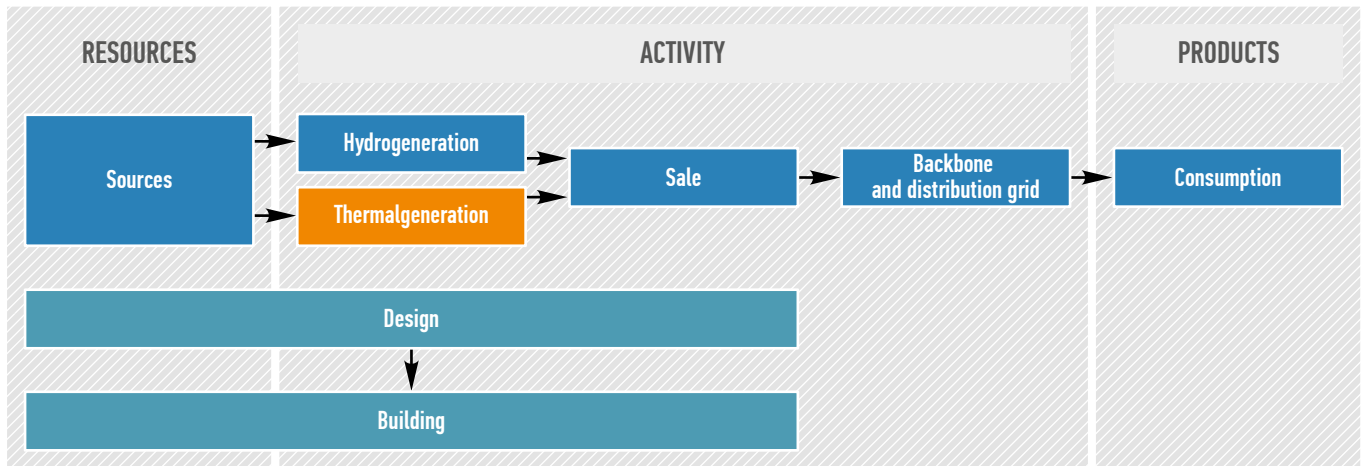
**BUSINESS REVIEW**

**1.89 RUB BILLION – OPERATIONAL EXPENDITURES DECREASING**



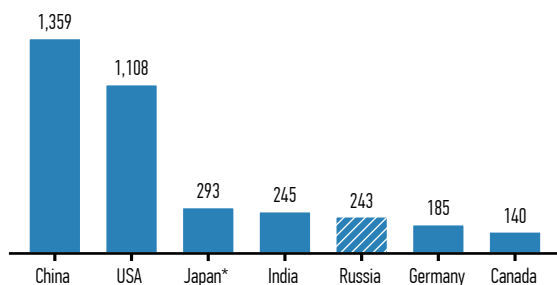


## 3.1. BUSINESS MODEL



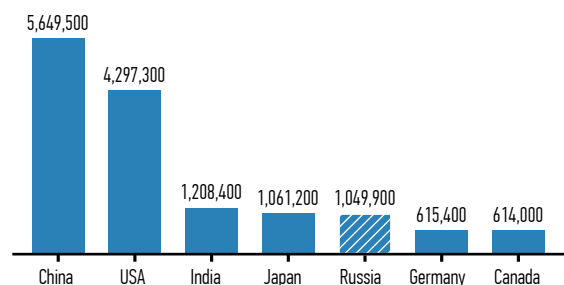
## 3.2. ELECTRICITY AND CAPACITY MARKET OVERVIEW

### 3.2.1. GENERAL INSTALLED CAPACITY AND ELECTRICITY PRODUCTION IN RUSSIAN AND IN THE WORLD



\* in 2012

Source: Russian Ministry of Energy, EIA, CIA (The World Factbook), Ministry of statistics and programme implementation government of India (Energy statistics 2015), Fraunhofer ISE, Presentation «China's Role in Global Emissions», NEB (Canada)



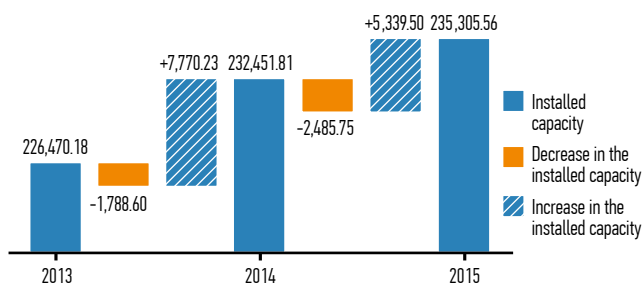
Source: BP Statistical Review of World Energy 2015, Russian Ministry of Energy

The installed capacity of UES of Russia as of December 31, 2015 totalled 235 305.56 MW, that is 1.2 % more than in 2014 (232 451.81 MW.). The growth in the installed capacity of power plants was 5 027 MW (7 694.83 MW in 2014), including:

- commissioning of new capacity in power plants of the UES of Russia counting the power plants of industrial enterprises totalled 4 710.0 MW (7 296.31 MW in 2014);
- an increase in the installed capacity of the existing generating fleet due to its modernisation – by 317.0 MW (398.53 MW in 2014), generating facilities of power plants of the UES of Russia with total capacity of 2 357.25 MW (1 762.6 MW in 2014).

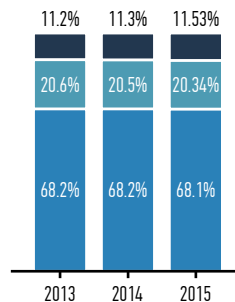


### Installed capacity of power plants UES of Russia, MW

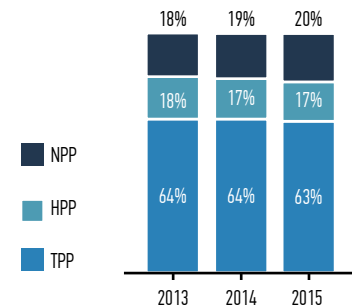


Source: SO UES

### The installed capacity structure of UES of Russia power plants, %

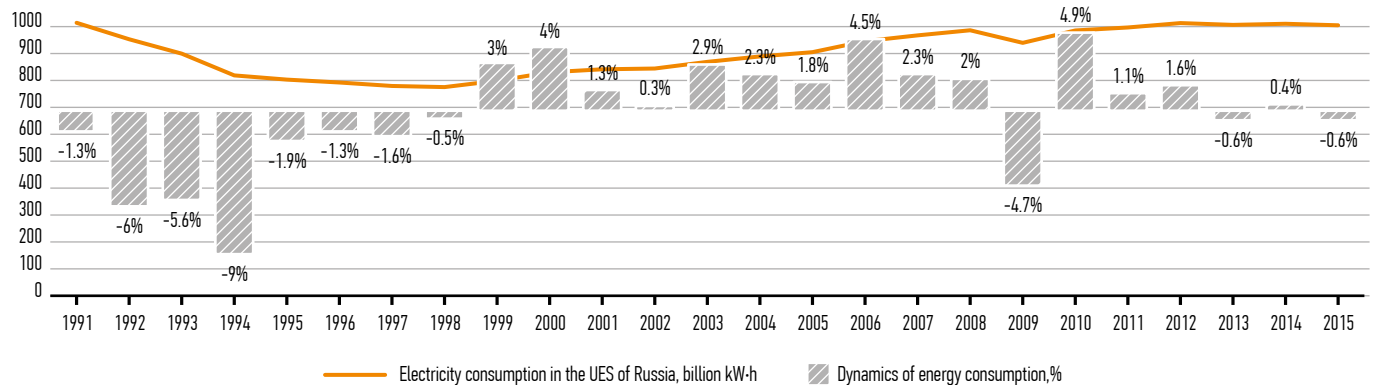


### The structure of power generation by types of UES of Russia power plants, %



In 2015 energy consumption in UES of Russia decreased by 0.6 % and totaled 1,008.25 billion kW-h (1,013.86 billion kW-h in 2014).

### Energy consumption dynamics, 1991-2015



Energy production in UES of Russia increased by 0.2 % up to 1,026.88 billion kW-h (1,024.9 billion kW-h in 2014)

## 3.2.2. COMPETITIVE ADVANTAGES

### RusHydro Group's key competitive advantages

<b>Environmental friendliness</b>	The Group's main segment is hydropower generation, RusHydro also actively in develops other renewable energy sources, contributing to decrease in carbon dioxide emissions and the preservation of fossil fuel resources.
<b>Flexibility</b>	The hydropower industry is the only power industry sector capable of increasing or decreasing the volume of power generation promptly when required to compensate for peak load or excess capacity.
<b>Self-sufficiency</b>	The generation of energy using water resources is independent from the use of hydrocarbons, therefore, the Group's performance is characterized by the high level of predictability of production costs.
<b>Social significance</b>	The hydropower industry is socially significant, as HPP water bodies are used to supply water for industrial and household needs, thus encouraging the development of agricultural and transport facilities. In addition, the HPPs serve as major employment providers in the regions.

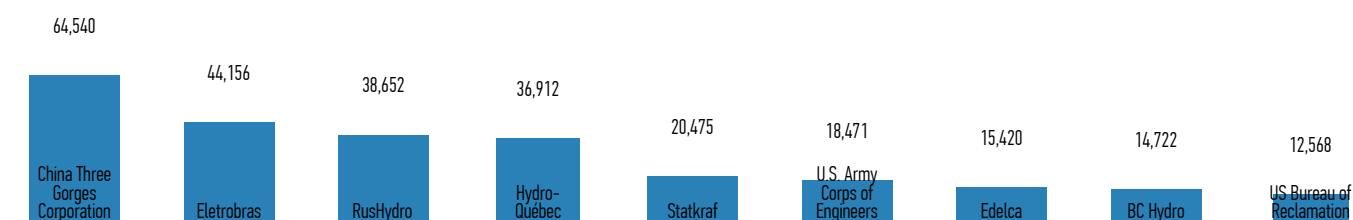
RusHydro Group controls numerous Russian hydropower facilities, and is active in the popularisation of renewable energy sources. Group is fully aware of the significance of the tasks it deals with, striving to continuously develop its performance and participating in Russia's environmental and technological advances, while recognizing the Group's

high social responsibility. The Group currently controls 400 electric power facilities, including 71 hydropower plants, the Kislogubskaya power plant, the only tidal power generation facility in Russia, 3 geothermal power plants generating more than 90% of the country's geothermal energy, thermal power plants and retail companies.

The fleet of assets makes RusHydro Group a unique power generating company globally, and the third largest company among the world's hydropower companies (in terms of installed capacity).



### Installed capacity of the world's major peer group companies, GW



Sources: PJSC RusHydro and competitor data

The world's major hydropower generating companies are controlled by the governments of their respective countries due to the strategic importance of the hydropower industry. Compared with global peers, RusHydro Group activities are characterized by very complex climatic and landscape conditions and widespread operational geography. The Group's facilities are located all over the

country, ranging from Murmansk Region to the Primorie Region and from Chukotka to the Republic of Dagestan. Furthermore, the Group is engaged in international operations, managing the Sevan-Hrazdan Cascade of HPPs in Armenia. The continuous, reliable and safe operation of infrastructural facilities vital for the country, with facilities separated by tens of thousands kilometers, poses a

Herculean task for Group employees, who have successfully dealt with these challenges, striving to implement the Group's Mission and Strategic Goals.

Having implemented a large-scale investment programme, the Group has increased the installed capacity of its generating facilities more than 1.5 times.

#### 3.2.2.1. RUSHYDRO GROUP'S MAJOR RUSSIAN COMPETITORS IN THE ELECTRIC ENERGY GENERATION SPHERE

Russian generating facilities are mostly concentrated in the several large holding companies.

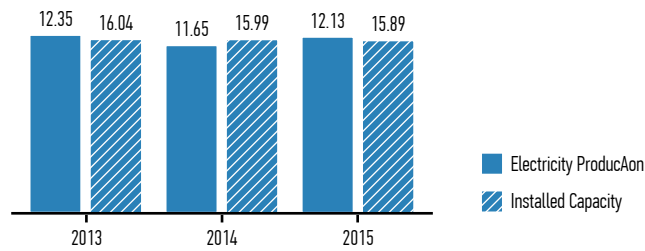
##### RusHydro's major competitors

Nº	Holding companies	Holding Company's Generating Companies	Nº	Holding companies	Holding Company's Generating Companies
1	<b>Rosatom</b>	Rosenergoatom Corporation PPGHO SHK CJSC "VetroOGK"	8	<b>SGK (SUEK)</b>	Kuzbassenergo (TGK – 12) Eniseiskaya TGK (TGK – 13) JSC "Krasnoyarsk CHP – 1" JSC "Kansk CHP" JSC "Nazarovo GRES" JSC "Kemerovo Generation" JSC "Barnaul CHP-3" JSC "Barnaul Generation" JSC "Kuznetsk CHP" JSC "Novo-Kemerovo CHP"
2	<b>Inter RAO</b>	INTER RAO Electricity Generation (incorporates the assets owned by OGK – 1 and OGK – 3)	9	<b>LUKOIL</b>	LLC "LUKOIL-Kubanenergo" LLC "LUKOIL-Rostovenergo" LLC "LUKOIL-Astrakhanenergo" LLC "LUKOIL-Volgogradenergo" LUKOIL – Ekoenergo LLC "LUKOIL-Stavropolenergo"
3	<b>EuroSibEnergo</b>	Irkutskenergo Krasnoyarskaya HPP LLC "Avtozavodskaya CHP" JSC EnSer LLC "Novokondrovskaya CHP"	10	<b>RU-COM</b>	SIBEKO (Novosibirskenergo) JSC "Biyskenergo"
4	<b>Gazprom Energy Holding</b>	TGK – 1 JSC Mosenergo OGK 2 (incorporates the assets owned by former OGK – 2 and OGK – 6) MOEK	11	<b>Sintez Group</b>	TGK – 2
5	<b>KES-Holding</b>	TGK – 5 TGK – 6 TGK – 7 (Volzhskaya TGK) TGK – 9	12	<b>Unexim</b>	Quadra (TGK – 4) LLC "Shekinskaya TPP" Kursk CHP-4
6	<b>E.ON</b>	OGK-4	13	<b>Fortum</b>	Fortum (TGK – 10)
7	<b>Enel</b>	OGK-5	14	<b>RZHD</b>	TGK – 14
			15	<b>TAIF</b>	TGK – 16



The RusHydro Group's main competitors on the power generation market include independent Russian utility companies formed as a result of RAO UES of Russia reform. The Group considers the use of renewable energy sources as one of its priorities and stably increases installed capacity by building new power plants and commissioning new power generation facilities..

*The Group's domestic market share in terms of installed capacity and power generation\*, %*

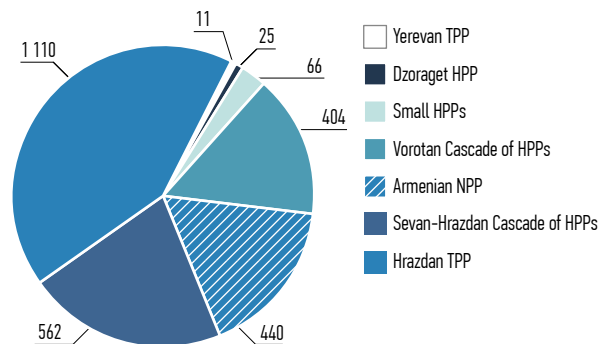


\* The data reflect the ratio of production and installed capacity of RusHydro Group with production and installed capacity in the Russian Federation (according to the Russian Ministry of Energy)

### 3.2.2.2. COMPETITORS AT THE ARMENIAN ELECTRIC ENERGY GENERATION MARKET

In 2011 PJSC RusHydro acquired 90% of the Sevan-Hrazdan Cascade of HPPs shares with total capacity of 562 MW in Armenia. Thus the Group took the significant share of Armenian electric energy generation market.

*Installed capacity of the Armenian market players, MW*



### 3.2.3. PROSPECTS OF THE GROUP DEVELOPMENT

In accordance with the Scheme and the Programme of the Russian Unified Energy System Development in the period of 2015 - 2021, approved by the Order of the Ministry of Energy from 09.09.2015 №627, based on the analysis of the investment programme and the business - plan of PJSC RusHydro, as well as on the results of the data analysis about the other subjects of the Russian electric energy generation industry investment plans, it is expected that:

1. The share of "RusHydro" generating facilities' electricity production will grow steadily from 12.13 % in 2015 to around 13 % in 2019 in the total consumption of the Russian Federation for the period until 2019;
2. The installed capacity of "RusHydro" power plants as a share of the Russian power plants' installed capacity will grow from 15.89 % in 2015 to 16.9 % in 2019.

## 3.3. TARIFF REGULATION

### 3.3.1. STRUCTURE OF ELECTRICITY AND CAPACITY MARKET

Currently, we have a two-level (wholesale and retail) electricity and capacity market in the Russian Federation. According to the law requirements, all the stations with installed capacity of over 25 MW, carry out the sale of electricity on the wholesale market only. Plants with capacity of 5 - 25 MW operate either on wholesale or retail market at their choice.

Almost all of the power plants of PJSC RusHydro are objects of the WECM.

The sellers and buyers on the wholesale electricity and capacity market (WECM) include: generating companies and supply organisations, major electricity consumers, guaranteeing suppliers which became subjects of the wholesale market, the market council, commercial operators and other organisations providing for the functioning of the commercial infrastructure of the wholesale market and the functioning of the engineering infrastructure of the wholesale market (an organisation managing the unified national (all-Russian) electric grid, the system's operator).

The wholesale electricity and capacity market functions within the territory of regions united into price zones. The first price zone includes the territories of the European part of Russia and the Urals, while the second price zone includes Siberia. The WECM's non-price zones include: the Arkhangelsk and Kaliningrad Regions, the Komi Republic and the territories of the Far East, where the capacity wholesale realized on the regulated prices (tariffs).

#### WECM price and non-price zones



1 - First price zone

2 - Second price zone

3, 4, 5 - Non-price zones where due to technical reasons the organization of market relations in the power sector is not yet possible. In these regions, the sales of electricity and power on the wholesale market are carried out at regulated tariffs

### 3.3.2. THE STRUCTURE OF THE WHOLESALE ELECTRICITY AND CAPACITY MARKET

#### Regulated and non-regulated sectors of the wholesale electricity market

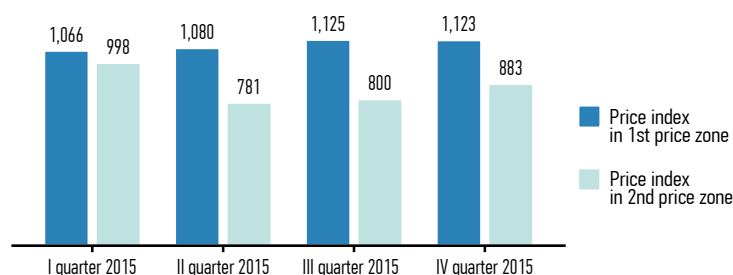
		CSC facilities	HPP non-CSC facilities	1st price zone	2nd price zone	Non-price zone
Electricity	RC	Tariff	Tariff	Tariff	Tariff	
	Quadrupartite contracts					Tariff
	DAM	Non-regulated sector of the wholesale electricity market (NRWEM)				
	NRBECS					
	NRBC					
Capacity	RC		Tariff	Tariff	Tariff	
	Quadrupartite contracts					Tariff
	KOM		WEM	WEM	WEM	
	CSC	WEM				
	NRBECS		WEM	WEM	WEM	

There are numerous sectors functioning on the wholesale electricity market, which differ in terms of the conditions of transactions and supply terms: Regulated contracts (RC), Quadrupartite contracts, The Day Ahead Market (DAM), Non-regulated bilateral electricity and capacity supply contracts (NRBECS), Non-regulated bilateral contracts (NRBC), Capacity auction (KOM), Capacity supply contracts (CSC)



### 3.3.2.1. THE ELECTRICITY AND CAPACITY WHOLESALE PRICE DYNAMICS

#### Equilibrium price index for buying electricity in the first and second price zones, RUB/mW-h



Source: data from the association NP Market Council

In 2015 the average weighted index of the equilibrium prices for electricity in the European part of Russia and the Urals (1st price zone) increased 5,3 % (2014 it increased 3,4 %), up to 1 123 RUB/ MW-h. In Siberia (2nd price zone) the average weighted index of the equilibrium prices increased by 11,9% – from 788,9 up to 883 RUB/ MW-h.

#### Equilibrium price index for buying electricity in the first price zone, RUB/MW-h

1 quarter 2015	2 quarter 2015	3 quarter 2015	4 quarter 2015
<p>The preservation of the value of the DAM index in the 1Q2015 at the level of the 4Q2014 (RUB 1,066 / MW-h) is caused by:</p> <ul style="list-style-type: none"> <li>- the growth of the kPrice index by 3,1%</li> <li>- the growth of NPP and HPP outputs and the planned hourly electricity production volumes at CCGT TPP/ SDPP commissioned as per PDC (except modernisation projects) and at new CCGT launched not as per PDC, by 9.9%.</li> </ul>	<p>The insignificant growth of the index in the 2Q 2015 (by 1.1% to RUB 1,080 / MW-h) is caused by the decrease of NPP and HPP outputs and the planned hourly electricity production rate of CCGT TPP/ SDPP commissioned as per PDC (except modernisation projects) and new CCGT commissioned not in accordance with PDC, by 7.6% and the decrease of the kPrice index by 19.6%.</p>	<p>The Growth of the index in the 3Q2015 by 4.2% to RUB 1,125 / MW-h is caused by the increase of the gas tariff by 7.5% and the decrease of the kPrice index by 6.7%, which resulted in constraining impact on the growth of the index.</p>	<p>The insignificant decrease of the DAM index in the 4Q2015 (-0.2% compared to the 3Q2015) is caused by the increase (+6,2% compared to the 3Q2015) of NPP and HPP outputs and the planned hourly electricity production volumes at the CCGT TPP/ SDPP commissioned as per PDC (except modernisation projects) and at new CCGT launched not as per PDC</p>

#### Equilibrium price index for buying electricity in the second price zone, RUB/mW-h

1 quarter 2015	2 quarter 2015	3 quarter 2015	4 quarter 2015
<p>The growth of the index in 1Q2015 by 5.4% to RUB 998 / MW-h results from the influence of: the increase of the kPrice index by 3.7% and the decrease of hourly average output of Irkutsk HPP by 7.4%.</p>	<p>The decrease of the index in the 2Q2015 by 21.4% to RUB 781 / MW-h is caused by the growth of the total share of planned hourly HPP generation in the total volume of planned GPC generation by 47.3% and the decrease of the kPrice index by 32.8%.</p>	<p>The growth of the DAM index in the 3Q2015 by 2.5% to RUB 800 / MW-h is caused by the decrease of the total share of planned hourly HPP output in Krasnoyarsk region, Novosibirsk region, and the Republic of Khakassia in the total volume of planned hourly generation in the second price zone by 1.8% and the growth of the coal price index in the second price zone by 3.6%.</p>	<p>The increase of the DAM index in the 4Q2015 by 10.3% to RUB 883 / MW-h is caused by the decrease of the total share of planned hourly HPP generation in the total volume of planned hourly GPC generation by 31.0% compared to the value as of the previous quarter.</p>



### 3.3.3. ELECTRICITY AND CAPACITY SALES TARIFFS IN 2015

#### WEM's average weighted tariff dynamics

	2014		2015		Growth 2015-2014		Growth rate	
	The average tariff	NGP	The average tariff	NGP	The average tariff	NGP	The average tariff	HBB, %
	RUB/ thousand kW-h	thousand RUB	RUB/ thousand kW-h	thousand RUB	thousand RUB	thousand RUB	%	%
<b>Wholesale market</b>	<b>325.36</b>	<b>24,898,677</b>	<b>344.51</b>	<b>25,550,702</b>	<b>19.15</b>	<b>652,025</b>	<b>105.89</b>	<b>102.62</b>
Center	378.97	15,792,233	407.02	16,350,774	28.05	558,541	107.40	103.54
Siberia	118.93	2,971,815	122.14	3,018,173	3.21	46,358	102.70	101.56
FarEast	612.69	5,670,109	652.29	5,691,960	39.6	21,851	106.46	100.39
Caucasus	759.63	464,520	881.7	489,795	122.07	25,275	116.07	105.44
<b>Retail market - isolated areas of the Far East</b>		<b>3,152,163</b>		<b>3,332,611</b>		<b>180,448</b>		<b>105.72</b>
<b>Heat energy</b>		<b>153,414</b>		<b>172,488</b>		<b>19,074</b>		<b>112.43</b>
<b>Total</b>		<b>28,204,254</b>		<b>29,055,801</b>		<b>851,547</b>		<b>103.02</b>

#### 3.3.3.1. RESULTS OF ACTIVITY IN WEM IN 2015

WEM tariff growth amounted to 5.72 % due to:

- increased in 2015 tariffs of infrastructure organisations,
- transition to calculation of tariff payment in the non-price zones on available capacity for power generation
- facilities,
- commissioning Zelenchuskaya HPP,
- the return of indexation in the non-price zones in the second half of 2014 and first half of 2015,

- consolidated performance forecast balance of electricity and power, the growth of PDC prices of 2015 for Zaramagsk HPP and Kashkhatau HPP previously brought into operation.

#### 3.3.3.2. RUSHYDRO'S DAM AND KOM PRICE DYNAMICS

##### Price tariff dynamics DAM and KOM

	2013	2014	2015	Growth 2015/2014	Change, %
DAM price, RUB/ MWh	1,018.8	1,139.5	1,206.8	67.3	5.9
Price DAM*, RUB/ MWh	957.8	1,072.9	1,096.0	23.2	2.2
1 <sup>st</sup> price zone DAM price, RUB/ MWh	1,124.4	1,226.9	1,207.1	-19.7	-1.6
2 <sup>nd</sup> price zone DAM price, RUB/ MWh	658.0	776.8	882.5	105.7	13.6
Price KOM*, RUB/ MW monthly	110,577.4	116,190.6	127,564.1	11,373.5	9.8
1 <sup>st</sup> price zone KOM price, RUB/ MW monthly	134,435.7	140,566.7	125,524.0	-15,042.6	-10.7
2 <sup>nd</sup> price price KOM price, RUB/ MW monthly	60,009.3	68,492.8	131,695.6	63,202.8	92.3

An increase in Siberia DAM and KOM prices in 2015 ( 2<sup>nd</sup> price zone) is objectively caused by numerous factors: low water inflows, liberalisation of the capacity market for HPPs, eliminated limits for exchanges between the price zones. There was no any DAM and KOM price growth in the 1<sup>st</sup> price zone in 2015.

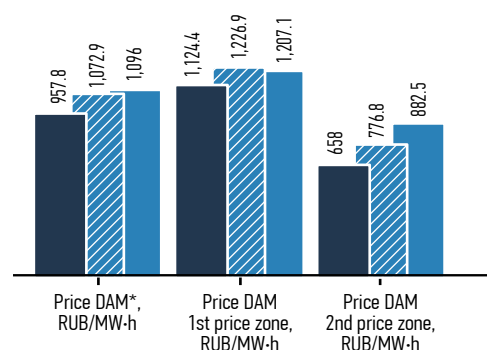
The increase of DAM prices in 2<sup>nd</sup> price zone was caused by:

- sustainable low water inflows in the basin of the Angara-Yenisei cascade,

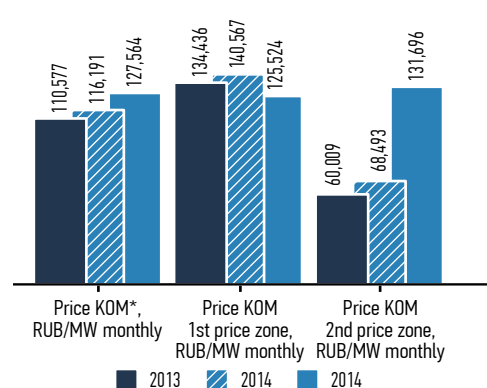
- demand increase for the thermal power generation,
- eliminated limits for exchanges between the price zones,
- significant restrictions on the network flows in the UES of Siberia;

The capacity auctions price increase for HPP in the second price zone due to the "liberalisation" of the market for HPP from 05.01.2014.<sup>30</sup>

##### DAM price dynamics



##### KOM price dynamics



\*Average weighted price DAM/KOM



## 3.4. OPERATIONAL RESULTS

### EVENTS OF 2015

- Installed capacity increased by 217.8 MW (+0.6 %) to 38,652.0 MW.
- Output rose by 5362.5 GW (+4.5%) to 127,379.9 GW.
- Electricity sales growth – by RUB 1,904.4 million.
- The reservoir of Boguchanskaya HPP filled to a design level; the plant reached its design capacity of 2,997 MW and design mode of station operation.
- A unique 14-kilometer tunnel for Zaramagskaya HPP-1 was finished.
- Sayano-Shushenskaya HPP increased its maximum output capacity to the power grid to 5,100 MW due to the modernisation of its automation system.
- 14 hydroelectric units with a total capacity of 1,171 MW were replaced and modernised.

#### RusHydro production assets

Name	Generation (million kW·h)			Productive supply (million kWh)			Installed capacity (MW)		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
The Bureiskaya HPP	6584.7	6065.9	5830.3	6431.9	5921.2	5690	2010	2010	2010
The Zeyskaya HPP	6859.8	6427.8	4280.7	6610.6	6186.8	4043	1330	1330	1330
The Novosibirskaya HPP	2400.3	2117.9	2092.5	2376.3	2096.6	2068.8	460	460	465
The Sayanp-Shushenskaya Cascade of HPPs	24875.3	20374.6	20626	24774.9	20270.4	20454.1	6721	6721	6721
The Kamskaya HPP	1984.8	1998.4	2463.8	1953.4	1967.4	2433.8	537	543	549
The Votkinskaya HPP	2527.4	2792.5	3210.9	2475.8	2735.8	3148.2	1020	1020	1020
The Upper Volga Cascade of HPP	1643.1	863.3	723.3	1607.9	838.3	702.6	466.6	476.6	476.6
The Nizhegorodskaya HPP	1870.6	1281.2	1168.7	1844.2	1259.7	1149.8	520	520	520
The Cheboksarskaya HPP	2291.3	1889.6	1632.6	2230.3	1833.6	1578.3	1370	1370	1370
The Zhigulevskaya HPP	11705.4	10484.1	10398.3	11600.3	10380	10307.1	2362	2383	2404
The Saratovskaya HPP	6001.7	5599.6	5560.3	5895.7	5504.6	5469.1	1369	1378	1391
The Volzhskaya HPP	12839	11565.9	10999.4	12685.8	11416.6	10870.8	2629	2639.5	2650
The Zagorskaya PSPP	1490.4	1859.7	1841.5	1440.2	1808	1791.4	1200	1200	1200
The Kubanskaya Cascade HPPs	1484.2	1383.6	1299.1	1455.6	1353.5	1271.3	476.5	476.5	476.5
Karachaevo-Cerkessia branch	470	1.7	336.2	466.9	-1	331.1	160.6	160.6	160.6
Kabardno-Balkaria branch	575.2	564.7	478.7	567.4	556.7	471.2	157.5	157.5	157.5
North Ossetia branch*	357.5	293.4	267.4	352	287.7	261.3	94.5	94.5	94.5
Dagestan branch	5208.6	4014.1	4196.8	5161.4	3970.2	4156.2	1785.5	1785.5	1885.5
<b>Total</b>	<b>91169.4</b>	<b>79578.1</b>	<b>77406.4</b>	<b>89930.6</b>	<b>78385.9</b>	<b>76198</b>	<b>24669.3</b>	<b>24725.8</b>	<b>24881.3</b>
The Kolymskaya HPP	1923.8	1558.4	1672.8	1880.7	1516.3	1628.1	900	900	900
The Ust-Srednekanskaya HPP	120.9	372.9	280.5	116	360.6	267.8	168	168	168
Geothermal Power Plant	392.4	405.5	409.7	359.5	371.8	376.4	62	62	62
The Pauzhetskaya GeoPP	41.9	42.3	42.3	34.6	35.2	34.8	13.6	13.6	13.6
JSC IEC	467.9	474.7	453.4	458.6	465.3	444.3	561.4	561.4	561.4
The Kamchatka HES*	37.2	38.8	39	35.7	37.5	37.8	24.8	24.8	24.8
The Boguchanskaya HPP	4897.1	8361.7	13076.8	4862.8	8306.9	12995	1998	2997	2997
CJSC Blagoveshchenskaya CHP									120
RAO Energy Systems of the East Group	30000.8	31155.9	33970.2	25779.7	27246.3	29831.9	9070.9	8981.7	8924
<b>Total</b>	<b>129051.5</b>	<b>121988.3</b>	<b>127350.9</b>	<b>123458.3</b>	<b>116725.7</b>	<b>121814.2</b>	<b>37467.9</b>	<b>38434.2</b>	<b>38652</b>



### 3.4.1. INSTALLED CAPACITY

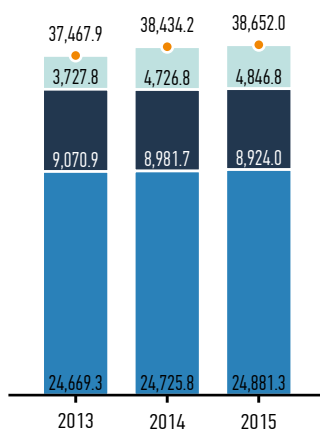
The total installed capacity grew by 217,8 MW to 38,7 MW in 2015. The decrease in capacity of the RAO Energy Systems of the East Group by 57.7 MW was compensated by the commissioning of Gotsalinskaya HPP (with the capacity of 100.0 MW) and Blagoveschensk CHP (120.0 MW of capacity).

The growth of installed capacity also happened due to equipment remarking:

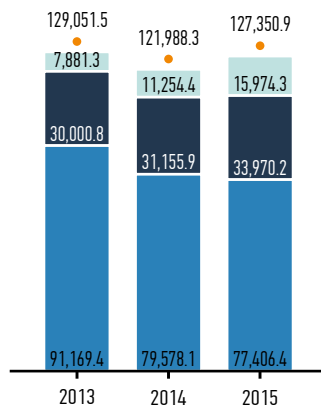
- Novosibirskaya HPP - by 5.0 MW;
- Kamskaya HPP - by 6.0 MW;
- Zhigulevskaya HPP - by 21.0 MW;
- Volzhskaya HPP - by 10.5 MW;
- Saratovskaya HPP - by 13.0 MW.

RusHydro Group has always occupied the first position in the rating of installed capacity among Russian power suppliers. The implemented investment programme gives grounds to expect it to save its leading position.

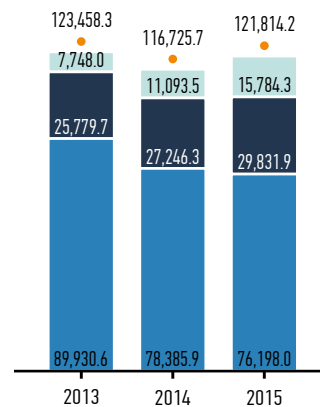
*Installed capacity<sup>31</sup>*  
MW



*RusHydro electricity production dynamics<sup>31</sup>*  
GW



*RusHydro electricity supply dynamics<sup>31</sup>*  
GW



● RusHydro Group  
 ■ Other  
 ■ RAO Energy Systems of East Group  
 ■ PJSC RusHydro

### 3.4.2. ELECTRICITY OUTPUT

In 2015 electricity output grew by 5.36 billion kW-h (+ 4.5%) to 127,3 billion kW-h. Decrease of the electricity output of Zeyskaya HPP (-2,15 billion kW-h) was compensated

for by the growth of the output of Boguchanskaya HPP (+ 4,72 billion kW-h) and at the plants of RAO Energy Systems of the East Group (+ 2,81 billion kW-h)

### 3.4.3. ELECTRICITY AND CAPACITY SALES

For 2015 net sales of electricity and capacity by branches of PJSC RusHydro, which takes into account the purchase of electricity and capacity costs, increased by 2.9% y-o-y and amounted to 91 952.8 million rubles. The main factors that influenced the increase in revenue due to lower volume of electricity production by 2.7%:

- the growth of the DAM price in the second price zone due to:
- the growth of capacity purchase price at the KOM for second price zone HPPs due to the liberalisation of the HPP capacity market dd. 05/01/2014;
- the indexation of adjustable electricity and capacity

- tariffs;
- the decrease of the amount and cost of purchasing electricity.



### RusHydro net revenues changes, RUB mn

	2014	2015	Изм.	Changes, %
<b>Sales</b>	<b>107,296.8</b>	<b>105,923.0</b>	<b>-1,373.9</b>	<b>-1.3</b>
- Cost of electricity sold	76,532.4	73,262.4	-3,269.9	-4.3
- Cost of capacity sold	30,678.2	32,582.6	1,904.4	6.2
- Services of Regional Distribution Grid Company	86.3	77.9	-8.4	-9.7
<b>Purchasing expenses</b>	<b>17,975.5</b>	<b>13,970.2</b>	<b>-4,005.3</b>	<b>-22.3</b>
- Cost of electricity purchased	17,965.1	13,957.3	-4,007.8	-22.3
- Cost of capacity purchased	10.4	12.9	2.4	23.2
<b>Net revenue</b>	<b>89,321.3</b>	<b>91,952.8</b>	<b>2,631.5</b>	<b>2.9</b>

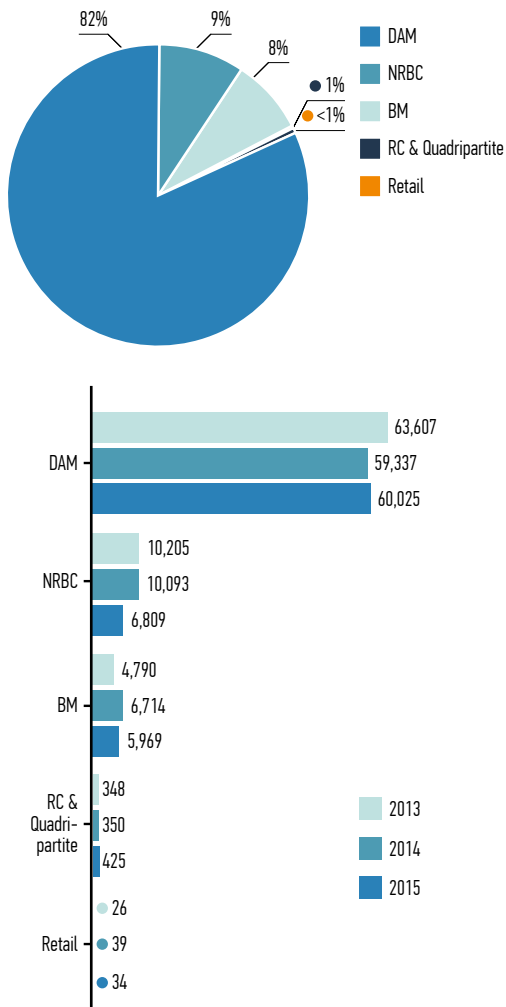
#### 3.4.3.1. ELECTRICITY SALES

Revenues in the DAM occupy the first position in the structure of the electricity sales revenues of the branches of PJSC RusHydro. Thereby, its share grew from 77.5% to 81.9% (+ 5.7%) in 2015 against the decrease of sales as per free bilateral contracts (FBC) by 29.% and the decrease of the volume of electricity sold in the balancing market (BM) by 7.1%.

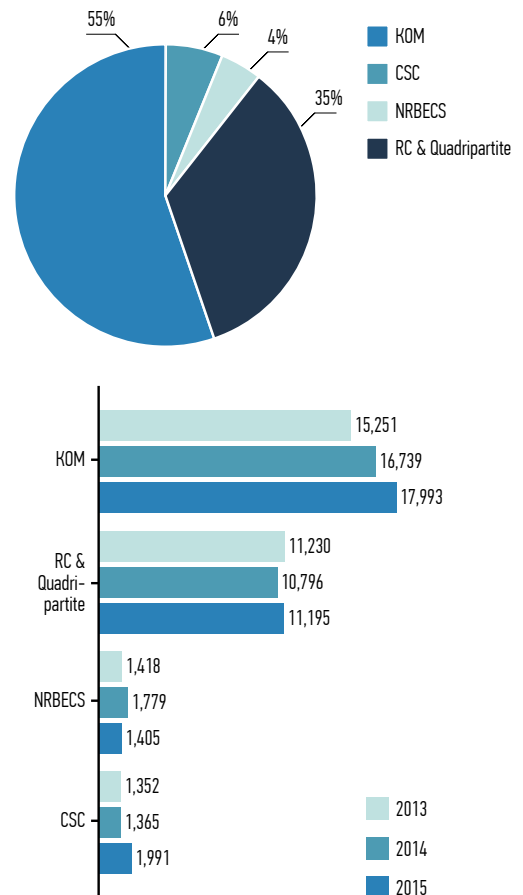
#### 3.4.3.2. CAPACITY SALES

The main part of revenue from sales of capacity by the branches of PJSC RusHydro is formed by contracts signed within the CPA. Following the results of 2015, the share of such contracts grew from 54.6% to 55.2% with the growth of corresponding revenue by 7.5%. 46 % growth was registered as per contracts on capacity provision. In 2015, revenue went down by 21% as per free bilateral contracts

### RusHydro electricity sales and dynamics, RUB million



### Capacity electricity sales and dynamics RUB million





### Optimisation and increase of efficiency of operating activities

Pursuant to directive of the Government of Russian Federation no. 2303p-P13 dated 04/16/2015 on the decrease of operating costs (expenses), RusHydro Group implements a complex of measures aimed at the reduction of the index of the decrease of operating costs (expenses) by at least by 2% per annum starting from 2015.

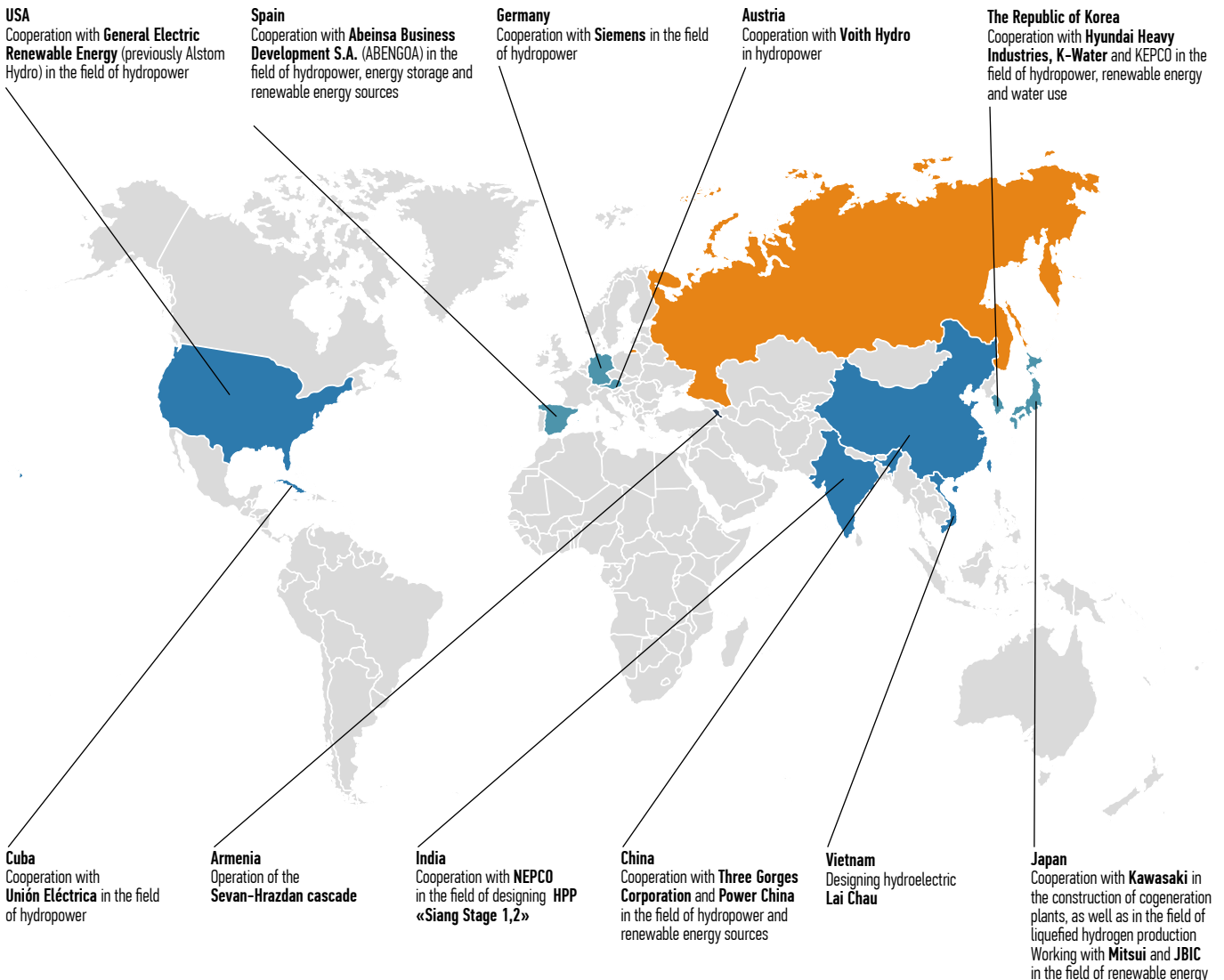
The total effect of the implementation of such actions in 2015 (adjusted to meet inflation) against 2014 amounted to RUB 1.89 billion (adjusted to meet the actual rate of inflation), including RUB 0.64 billion of PJSC RusHydro (-3.9%) and AO – RUB 1.25 billion.

*The total scheduled effect of the implementation of actions on the reduction of operating costs in 2016*

	Bln RUB	% of the level of 2015 including inflationary expectations
PJSC RusHydro	3.73	(-14 %)
PJSC RAO Energy Systems of East	5.23	(-7 %)
TOTAL by the Group	8.96	- 9.2 %

## 3.5. INTERNATIONAL COOPERATION

### International Cooperation of PJSC RusHydro





### 3.5.1. TARGETS AND GOALS OF INTERNATIONAL ACTIVITIES

The attraction of investments, innovative technologies, and equipment to RusHydro projects and the expansion of the Group's presence in foreign markets based on its long-term experience in designing, building, and operating energy facilities are the main objectives of the Company within its international activity.

RusHydro focuses on long-term and mutually advantageous cooperation with foreign partners, which corresponds to the geostrategic interests of the Russian Federation.

The main directions of international activity:

- the representation of RusHydro and the interests of the Russian power industry in political, sectoral, and business areas;

- bilateral cooperation with foreign energy companies and energy equipment producers, including the development of joint ventures and the localisation of production within the territory of Russia;
- cooperation with intergovernmental organisations and sectoral and business associations;
- the promotion of the attraction of foreign investments to RusHydro projects;
- cooperation in experience exchange, innovations, and new technologies in hydropower, thermal power, RES, and heat supply;
- the monitoring of processes in the global energy industry.

Conducting its international activity, the Company follows such principles as:

- the mutual benefit and transparency of joint activity;
- the long-term nature of cooperation;
- ensuring available warranty and post-warranty maintenance in case of the acquisition of modern foreign technologies and foreign equipment;
- the preparation of complex decisions taking into account the specifics of the Russian power market;
- the improvement of economic efficiency.

### 3.5.2. INTERNATIONAL PARTNERSHIP

#### *Intercorporate documents signed in 2015*

Agreement	Area of cooperation	Advantages
A cooperation Agreement between PJSC RusHydro and Korean K-water Corporation (05.09.2015)	Cooperation in the joint research of projects on the construction of new HPPs in the Republic of Dagestan, in the field of the determination of joint projects of cooperation in hydropower and water resources administration in the Far East including Primorsky Krai, and in the field of technological exchange.	- the possibilities of the attraction of investments and technologies.
An additional Cooperation Agreement between PJSC RusHydro and Chinese PowerChina Company in the field of PSPP (01.06.2015)	Cooperation on the investment, design, construction, operation and technological development of hydropower sites in Russia; the assessment of the technical and economic parameters of the Leningrad PSPP project.	- the possibilities of the attraction of investments and technologies..
An additional Cooperation Agreement between PJSC RusHydro and Chinese Three Gorges Corporation to the general provisions of the Shareholders Agreement on joint venture development (13.03.2015)	Includes the analysis of the possibilities of the development of a joint venture for the operation and technological development of Nizhne-Bureyskaya HPP JSC, on the basis of which the implementation of the flood-control HPP construction project on the tributaries of the Amur River is being considered.	- opportunities to attract investments for flood-control HPP construction projects; - opportunities to expand the export supply of electricity to Asia-Pacific countries.
An agreement between PJSC RusHydro and Chinese China Three Gorges Corporation on the Intention to Develop a Joint Venture for the Operation of Nizhne-Bureyskaya HPP (08.05.2015)	Includes the execution of the economic and technical assessment of the project on the development of a joint venture for the operation of Nizhne-Bureyskaya HPP JSC	- opportunities to attract investments for flood-control HPP construction projects; - opportunities to expand the export of electricity to Asia-Pacific countries.
A Memorandum of Understanding between PJSC RusHydro and Abeinsa Business Development S.A. (16.06.2015)	Cooperation in joint exploration, research, engineering, and investments in the field of the construction, modernisation, and reconstruction of generating facilities.	- the possibilities of the attraction of investments

The largest world generating and engineering companies and power equipment producers including Chinese Three Gorges Corporation and PowerChina, Korean Korea Water Resources Corporation (K-water), Belarusian Belenergo Company, Japanese Kawasaki Heavy Industries, Austrian Voith Hydro Company, and American GE Renewable Energy (fka Alstom Hydro) Company are the main partners of RusHydro.

Opportunities for the joint implementation of hydroenergy projects are being examined together with Chinese PowerChina Company. In particular, the development of pumped storage power plants (PSPP) in Russia is being explored. The possibility of the construction of the Leningradskaya PSPP is considered a pilot project. At the same time, RusHydro considers the possibility of

the construction of flood-control HPPs on the tributaries of the Amur River in cooperation with Chinese Three Gorges Corporation.



In 2015 RusHydro was cooperating on the project of hydropower equipment production localisation in the territory of the Russian Federation in cooperation with Voith Hydro Company and the use of this equipment for RusHydro HPPs modernisation.

The expansion of partnership with the foreign companies is carried out within the implementation of the complex

modernisation of the assets of RusHydro in the area of thermal generation in the Far East of Russia.

The Company concluded a number of agreements on cooperation and the implementation of joint projects with the largest foreign power corporations within the reporting year.

RusHydro participates in the meetings of intergovernmental commissions on trade and economic and scientific and technical cooperation between Russia and foreign countries under the auspices of the Ministry of Energy of the Russian Federation on a regular basis. Those events result in the establishment of working contacts with foreign business partners.

### 3.5.3. COOPERATION WITH INTERNATIONAL ORGANISATIONS

RusHydro pays considerable attention to participation in the activity of international power organisations. RusHydro representatives participate in committees and working groups of a number of non-profit partnerships and international organisations being the members of such organisations as:

- the Global Sustainable Electricity Partnership (GSEP),
- the International Hydropower Association (IHA),
- the International Commission on Large Dams (ICOLD),
- the Association for Hydro-Environment Engineering and Research (IAHR).

The Company develops cooperation within international government organisations and integration associations including the Eurasian Economic Union (EEU); the Eurasian Economic Commission (EEC); the CIS Electric Power Council (CIS EPC); the Asia Pacific Economic Cooperation (APEC); and the Shanghai Cooperation Organisation (SCO).

RusHydro cooperates with professional sectoral international organisations through joint scientific researches, participation in expert groups, professional seminars (The Canadian Technological Association (CEATI), the International Council for Big Electric Systems of High Voltage (CIGRE), etc.).

The Company is an active participant of large international forums, exhibitions,

and conferences on thermal power, hydropower, RES, and heat supply.

RusHydro is a usual participant of the Saint Petersburg International Economic Forum, the Krasnoyarsk economic forum, the international Hydro conference, and the Hydro Vision Russia.

In 2015 RusHydro Group sponsored and actively participated in the East Economic Forum which was an efficient platform for the establishment and strengthening of relations with foreign partners, especially from Asia-Pacific countries, and attracting investors to Far East energy infrastructure development projects.



**Sergey Tsoy**

First Deputy General Director,  
Official Secretary

***- The global geopolitical situation became quite tough in 2015. Did it in any way affect RusHydro's international activities?***

- Of course, the processes of the global economy and Western sanctions have affected our activities. There has been a decline in business activities of Western companies. Unfortunately, I must admit that while the global leaders still have the same business interest in Russian market they have to follow the current political decisions.

At the same time, our company uses a risk management system that also includes the political risks. One way to manage such risks is the diversification of international activities.

By the way, speaking of import substitution, we have been engaged in it consistently and systematically. For example, jointly with an Austrian company Voith Hydro, we have been constructing a plant for manufacturing state-of-the-art hydraulic equipment in the Saratov Region. - What regions of the world are most attractive to RusHydro in the current situation?

- Eastern regions are highly promising. There is evidence of growing interest of our current and new partners that cooperate with RusHydro in Russia, primarily in the Far East. So, we pretty much have intensified activities with our colleagues from China and South Korea. We think that one of the most promising focus areas is wide cooperation with Japan. This is a new line of business for us. Nevertheless, we are engaged in negotiations with our Japanese colleagues concerning projects in supplies, introduction of power generation systems using renewable sources of energy, which is of particular interest to the Far East regions that have been isolated in terms of energy, and projects in heat supply to the region. We continue discussing step-by-step implementation of the Far East – Japan power bridge project in cooperation with our colleagues from grid companies and Inter RAO.

A new vision and new approaches to organizing the activities of the Company's design institutes: we are considering design and engineering services markets. First of all, they include India, Cuba (small HPPs), the CIS and Asia-Pacific countries. This is a very challenging work that requires reviewing approaches to R&D activities, acquisition of competitive advantages, and development of new approaches in the field of project financing and public-private partnerships. In the context of the sanctions, the current economic situation forces us to engage in new lines of business. The results will be available a bit later – when summarizing the results of the St.-Petersburg and Eastern Economic Forum, where we are going to sign a whole range of specific cooperation agreements.

***- What prospects do you see in terms of international cooperation?***

- Comparing the current situation, for example, with the same period of 2014, we have stepped to a new stage in our international activities. They will expand, but their focus will largely shift to the cooperation with partners from Asia-Pacific countries, the SCO and the Eurasian Economic Community, particularly due to the current projects for alignment of the Silk Road infrastructure with regional infrastructures, which moves our cooperation to a fundamentally new level. This is a very interesting and, what is more, promising line of business that allows employing virtually all our skills, ranging from design works to operation of facilities. As for the cooperation with European countries, it will largely depend on the abilities of our Western partners. We have always been open for any kind of mutually beneficial cooperation.

No sanctions will prevent us from doing our work. If difficulties arise, we overcome them.



04

PJSC RUSHYDRO

ANNUAL REPORT 2015

## CORPORATE GOVERNANCE

**8** – THE HIGHEST CORPORATE GOVERNANCE RATING  
"ADVANCE PRACTICES OF CORPORATE GOVERNANCE"





## 4.1. CORPORATE GOVERNANCE SYSTEM

### EVENTS OF 2015

- The second year of the highest corporate governance rating - 8
- Establishment of the Committee on Energy Development of the Far East
- The Board of Directors has approved an action plan ("roadmap") for the implementation of key provisions of the Corporate Governance Code in the new edition
- "Association of Independent Corporate Directors" conducted an independent assessment of the Board of Directors..

#### 4.1.1. OBSERVANCE OF THE CORPORATE GOVERNANCE PRINCIPLES

RusHydro is one of the largest Russian utility holding companies with the State being the main shareholder of the Company. The total number of the Company shareholders exceeds 360 thousand. The Group's corporate governance practices are based on the observance of the requirements of the Russian law and of the requirements set for the companies listed at Moscow and London stock exchanges. The Group also maintains balance of the interests of the State and of all stakeholders.

Further improvement of the corporate governance system is stated by the Long-term Development Programme of PJSC RusHydro as one of the key directions. The Company's

#### PJSC RusHydro's rating is confirmed at level 8 "Best corporate governance practice"

According to the results of the monitoring conducted in 2015, the PJSC RusHydro rating was confirmed by the Russian Institute of Directors (RID) at level 8 "Best corporate governance practice" as per the scale of the National Corporate Governance Rating. At the present time, four Russian companies have the rating at this level 8: the PJSC RusHydro, OJSC Magnitogorsk Iron & Steel Works, OJSC Joint-Stock Financial Corporation "Sistema" and PJSC TransContainer.

Read more on the RID web-site <http://rid.ru/nacionalnyj-rejting/rezultaty-nrku>

And on the PJSC RusHydro web-site <http://www.rushydro.ru/press/news/100035.html#1>

#### *Compliance with the principles of the Corporate Governance Code\**

Section	The principles recommended by the Code	Principles, the Company fully observed	Principles, the Company partially observed	Principles, the Company are not observed
Shareholder rights and equality of shareholders in the exercise of their rights	13	9	3	1
Board of Directors	37	12	8	7
Corporate Secretary	2	-	2	-
The system of remuneration of members of the Board of Directors, executive bodies and other key management employees of the Company	10	3	6	1
Risk management and internal control system	6	5	1	-
Disclosure of information about the Company, the Company's information policy	7	1	6	-
Significant Corporate Actions	5	-	4	1
In total	80	30	40	10

\* Full report on observance of the principles and recommendations of the Corporate Governance Code and an explanation of the deviations from the criteria for assessing compliance with corporate governance principles see in Appendix to the annual report of PJSC RusHydro.



#### In 2015 the Board of Directors approved:

- Regulations on enhancement of the investment and operating efficiency and cost reduction,
- Regulation on internal audit,
- Regulation on Quality Management System,
- Regulation on Risk Management System.

Standard regulations are introduced in all subsidiaries and dependent companies, complying with requirements of the applicable law, as well as unified standards according to the following areas of activity:

- procurement policy,
- credit policy,
- internal control and risk management,
- insurance,
- business planning, etc

work and its result in the specified direction are much more significant due to the approval in 2014 of the Corporate Governance Code (The Code) which replaced the Corporate Code of Conduct 2002.

In the reporting year, PJSC RusHydro conducted works on updating the PJSC RusHydro's Corporate Governance Code. Draft of the Code new version taking into account the specific character of the PJSC RusHydro's activity, as well as the existing corporate governance practice, has undergone examination and was agreed upon by the key stakeholders of the Company, in particular, of the federal executive authorities, experts of the working group on creation of the international financial center in the Russian Federation, professional security market participants, rating agencies, and the operator of the Company depository programme – The Bank of New York Mellon. The experts noted the positive fact of the Company intention to continue work on improvement of the corporate governance practice.

A report on the observance by RusHydro of principles and recommendations of the Code of Corporate Governance approved by the Bank of Russia and the British Code of Corporate Governance compliance report is to be found in the Supplement to the Annual Report. The observance of corporate governance principles by RusHydro was assessed by comparing each Code provision with the Company's corporate governance practices, taking into account confirming internal documents.

## 4.1.2. CORPORATE GOVERNANCE STRUCTURE

The Group's highest governance body is the General Meeting of Shareholders which provides for the implementation of shareholders' right to participate in corporate governance. The Board of Directors is responsible for the development of the strategy and control over the executive bodies, providing for the observance of rights and legitimate interests of the Company shareholders. To facilitate the development of the most efficient solutions the Board of Directors has five committees, with two of the committees – the Audit Committee and the HR and Remuneration Committee consisting exclusively of independent directors. The Management Board is responsible for achieving goals, implementing development strategies and managing the Company's daily operations. The work of the Management Board is organized by the Chairman, the Chief Executive Officer, who is the sole executive body of the Company.

#### Internal Policies and Procedures regulating the process of report preparation

Order on Annual Report preparation and Corporate Social Responsibility and Sustainable Development Report for the year 2015

- Code of Corporate Ethics of PJSC RusHydro
- Internal Audit Policy of PJSC RusHydro (New version)
- Internal Audit Policy and risk management of PJSC RusHydro

#### Liability insurance of the corporate body members and officials

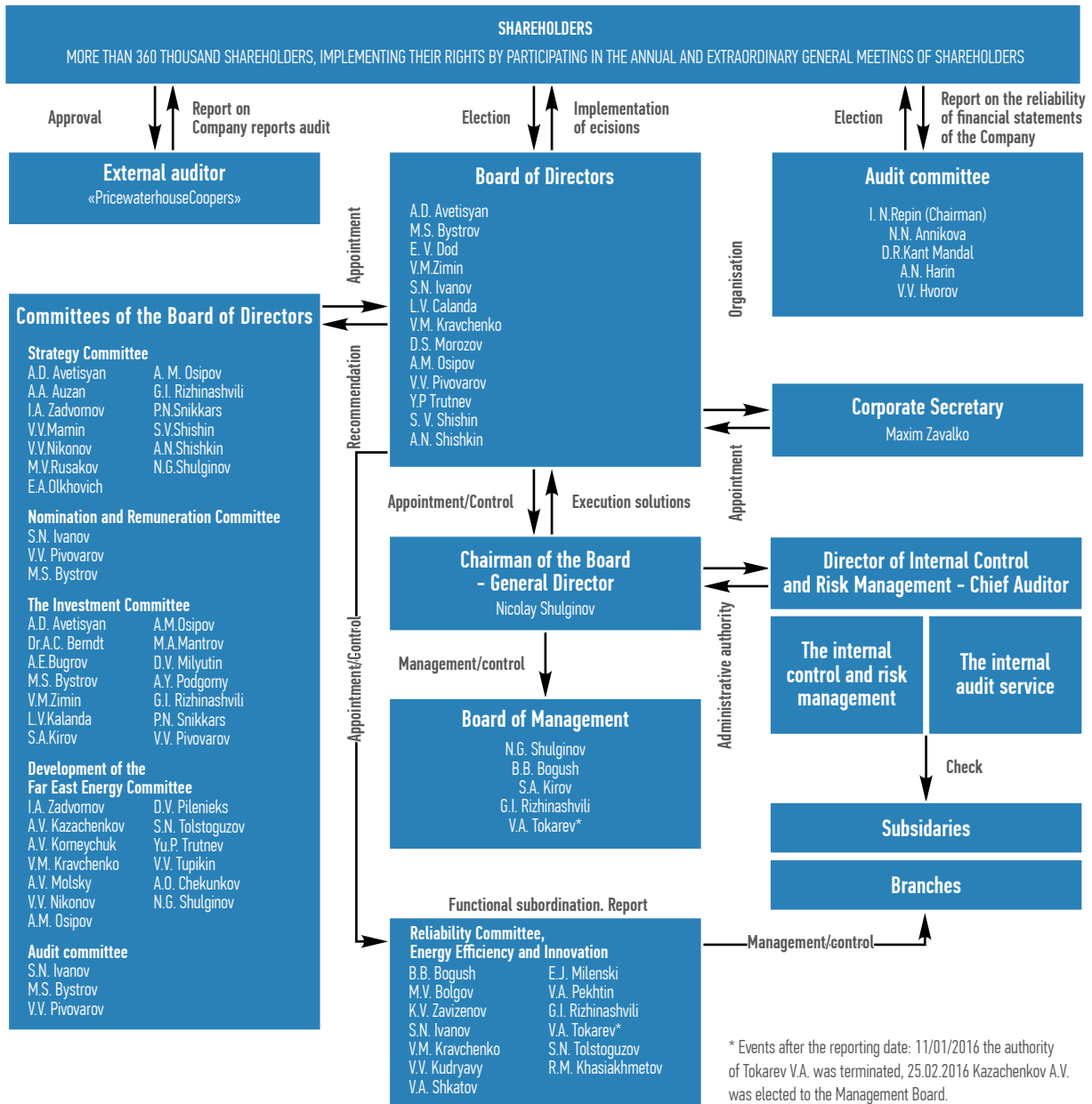
Insurance of liability and financial risks of directors, officials and the Company (according to the international classification – Directors & Officers Insurance, D&O) is used while defending the Company (which refers to the Company and its subsidiaries) and members of its corporate bodies against possible third parties' suits which may arise as a result of the professional activities of the Company's directors and officials. D&O insurance is "Best Practices" for the companies entering the markets of foreign capital and is used as additional defense when adding the company shares to the listing of the most foreign stock exchanges.

An open tender is carried out each year to select an insurance company for the D&O insurance contract. The insurance contract, which is concluded for a one-year term, implies a six-year period for the disclosure of insurance claims against the officers who have resigned. Coverage for the insurance event amounts to 30 mn US dollars, the additional insurance coverage 1 mn US dollars is fixed for the independent director, and total additional insurance coverage for the independent directors is 2 mn US dollars.

The liability coverage for the members of the governing bodies complies with the international insurance standards in terms of the volume of the insured risks, the limits of indemnity, and other insurance conditions.



### Corporate Governance Structure



### 4.1.3. GOVERNANCE OVER THE COMPANY'S SUBSIDIARIES

JSC RusHydro has its share in the chartered capital of the companies engaged in design, construction, repair, service, rehabilitation and modernisation of power facilities, as well as in production and electricity sales.

The Company interacts with subsidiaries and dependent companies for the purpose of implementing its strategy and ensuring sustainable economic development and investment attractiveness, as well as protecting the rights and interests of the Company and its subsidiaries and dependent companies.

The Company exercises governance over the dependent companies via its representatives at the general meetings of shareholders and in the Boards of Directors and control bodies of said dependent companies. The governance is exercised in accordance with the Articles of Association and the Interaction Policy of PJSC RusHydro with organisations in which the Company has its interest.

Making decisions relating to governance over dependent companies 100%-owned by PJSC RusHydro is within the framework of reference for the Company's Management Board. The Company's position on strategic issues

relating to the activities of the dependent companies (concerning re-organisation, liquidation, changes in the charter capital, approval of major transactions, the interest of a dependent company in other organisations) is determined by the Company's Board of Directors.

PJSC RusHydro pays significant attention to improving corporate governance concerning its subsidiaries and dependent companies, implementing initiatives to increase the level of transparency of the dependent companies and controlling the adherence of the dependent companies to legal requirements pertaining to mandatory information disclosure.

## 4.2. GOVERNING BODIES

### 4.2.1. GENERAL MEETING OF SHAREHOLDERS

The annual General Meeting of Shareholders was held June 26, 2015 in Krasnoyarsk (Minutes No 13 dated June 26, 2015). The shareholders have approved the annual report, the annual accounting statement, and the allocation of profit according to 2014 results. Other approvals covered dividend amounts and the date for preparing the list of persons entitled to receive dividends. The shareholders have also elected the Board of Directors, the Audit Committee and the auditor (JSC PricewaterhouseCoopers Audit). Decisions were also made concerning the payment of remuneration to members of the Board of Directors based on results of their work from 27.06.2014 to 26.06.2015. Remuneration is to be paid in the amount and in accordance with the procedure set by the Payment of Remunerations to Members of the Board of Directors. The shareholders have also approved participation of JSC RusHydro in Non-Profit Partnership RCBC and interested party transactions. (Protocol of the meeting on site RusHydro.ru)

#### **There is no conflict of interest of the executive bodies' members.**

In accordance with the Code of Corporate Ethics of PJSC RusHydro approved by the Board of Directors on 21.05.2012 (Minutes No.152) and in force within the year 2015, the Board of Directors members must refrain from the actions which would lead to the conflict of interest, and in case of any conflict of interest, the Board of Directors member must disclose the information about the conflict of interest to the Human Resources and Compensation Committee and/or the Board of Directors.

Within the year 2015, no notices from the Board of Directors members about existence of any conflict of interest were submitted to the Board of Directors and the Human Resources and Compensation Committee.

### 4.2.2. THE BOARD OF DIRECTORS

The Board of Directors acts on the basis of the Policy on the procedure for convening and conducting meetings of PJSC RusHydro's Board of Directors. (<http://www.rushydro.ru/upload/iblock/d79/Prilozhenie-4-k-protokolu-godovogo-obshego-sobraniya-aktionerov-ot-26.06.2015--13.pdf>).

According to the Articles of Association, the Board of Directors consists of 13 members. The current membership of the Board of Directors was elected at the General Meeting of Shareholders on June 26, 2014. Directors elected to the Board

are highly professional and experienced in the power industry, economics and corporate governance. Many Directors have academic titles, while some are graduates of international business schools.

#### **"The Association of Independent Corporate Directors" (AICD) conducted remotely the assessment of the Company Board of Directors**

Recommendations on the evaluation results:

- Increase in number of the informal meetings of members of the Board of Directors and meetings of the Board of Directors of the joint-stock company (held by personal attendance)
- Consideration of the strategic directions of the activities by the Board of Directors of the Joint-Stock Company (at the BD meetings held by personal attendance)
- Consideration by the Board of Directors of the issues connected with the risk management system
- Induction of the members of the Board of Directors of the Joint-Stock Company and familiarisation with the particularities of the Joint-Stock Company activities (provision of the informational materials, familiarisation trips to the Joint-Stock Company facilities, etc.)
- Provision of the informational materials mailing (Joint-Stock Company news / changes in the RF legislation) to the members of the Board of Directors of the Joint-Stock Company.

Key recommendations of AICD considered in Company and in operation of the Board of Directors, including the systematic increase of Board of Directors meetings, which conducted in presentia.

"The Association of Independent Corporate Directors" has no link with the Company, except for the relations of the Board of Directors estimates.

At present PJSC RusHydro are preparing the launch of the assessment of BD in 2015



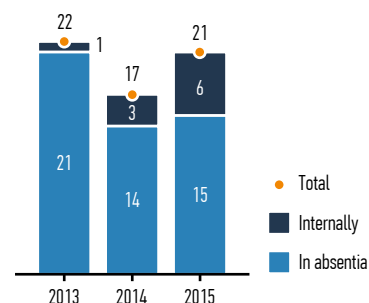
#### 4.2.2.1. THE COMPOSITION AND ATTENDANCE OF THE BOARD OF DIRECTORS

##### Attendance and participation of the Board members in the work of the committees

Composition since 26/06/2015	Attendance		Participation in committees					
	Visited	%	Strategy Committee	The Audit Committee	The Committee on the Human Resources and Remuneration	The Investment Committee	Reliability Committee, Energy Efficiency and Innovation	Committee for Development of the Far Eastern Energy Sector
Avetisyan A. D. *	7/12	58	2/5			1/6		
Bystrov M. S.	17/21	81		5/6	2/2	12/12		
Dod E. V.	18/21	85,71						
Zimin V.M.	20/21	95,24				10/12		
Ivanov S. N. *	12/12	100		6/6	2/2		3/4	
Calanda L. V.	20/21	95,24				12/12		
Kravchenko V. M.	19/21	90,48					3/4	
Morozov D. S.	20/21	95,24						
Osipov A. M. *	11/12	91,67	1/5			0/6		V
Pivovarov V. V.	21/21	100	2/3	6/6	2/2			
Trutnev Y. P. *	12/12	100						V
Shishin S. V.	17/21	80,95	3/5					
Shishkin A. N.	17/21	80,95	5/8					
<b>Board members, out-of-ended 06.26.2015</b>								
Poluboyarinov M. I.	9/9	100						
Danilov-Danilyan V. I.	9/9	100	3/3					
Ayuev B. I.	9/9	100						
Volkov E. P/	8/9	89						

\* Elected in 2015

##### The number of meetings of the Board of Directors



The Board of Directors conducts regular meetings in accordance with the approved Action Plan which contains issues to consider, the Board members responsible for the preparation of materials, the schedule and the form of conducting meetings. In 2015, the Board of Directors conducted 21 meetings, 6 meetings were conducted in presentia.

The average attendance at Board of Directors meetings in 2014 amounted to 90%.

#### 4.2.2.1.1. INDEPENDENT MEMBERS OF THE BOARD OF DIRECTORS

The composition of the Company's Board of Directors includes three independent directors who meet the criteria of the Corporate Governance Code of PJSC RusHydro<sup>33</sup> and the UK Corporate governance Code<sup>34</sup>:

- S.N. Ivanov – General Director of JSC "Erko";
- M.S. Bystrov - Chairman of the Board of the Association "NP Market Council", OJSC "ATS";

- V.V. Pivovarov - "Altera Capital" LLC President.

Independent Director S.N. Ivanov is the Deputy Chairman of the Board of Directors of PJSC RusHydro.

Requirements to disclose information about the interest of members of the Board of directors / executive body member provided in the Code of Ethics ([http://www.rushydro.ru/corporate/regulations\\_and\\_docs/documents/board/](http://www.rushydro.ru/corporate/regulations_and_docs/documents/board/)).



#### 4.2.2.1.2. COMPOSITION OF THE BOARD OF DIRECTORS\*

##### Yury Trutnev (Chairman of the Board of Directors)

1956 year of birth. Education: Perm Polytechnic Institute (mining engineer).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2004-2012 - Minister of Natural Resources and Environment; 2012-2013 - Assistant to the President of the Russian Federation; Since 2012 - Member of the Supervisory Board of the State Corporation "Rosatom"; Since 2013 - Deputy Chairman of the Russian Government - Presidential Plenipotentiary in the Far Eastern Federal District.

*Membership in the Board of Directors since 2015*

##### Artem Avetisyan

1976 year of birth. Education: Finance Academy under the Government of the Russian Federation (estimated activity "Finance and Credit").

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2008-2011 - President of "NEO Centre"; Since 2011 - the director of the direction of the "New Business" ANO "Agency of strategic projects for the promotion of new initiatives"; 2012-2015 - Member of the Supervisory Board of JSC "Rosselkhozbank"; Since 2012 - Member of the Supervisory Board of OJSC "SME Bank"; From 2014 - Vice-President of "NEO Centre"; From 2015 - President of "Commercial Bank" Uniastrum"; He is Chairman of the Board of JSC "Commercial Bank" Regional credit".

*Membership in the Board of Directors since 2015*

##### Maxim Bystrov (Independent Director)

1964 year of birth. Education: Moscow Civil Engineering Institute. VV Kuibyshev (hydraulic engineering structures and river hydro power plants). All-Russian Academy of Foreign Trade, (the world economy).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2010-2013 - Deputy Plenipotentiary Representative of RF President in the North Caucasian Federal District; Since 2013 - Chairman of the Board of OJSC "ATS", the Association "NP Market Council"; He is a member of the BoD PJSC "FGC UES", JSC "UES"; Chairman of the Board of JSC "Resorts of the North Caucasus", "Management Company Airport Mineralnye Vody"

*Membership in the Board of Directors since 2013*

##### Evgeny Dod

1973 year of birth. Education: Moscow Aviation Institute - State Technical University (economics and management at the enterprises of mechanical engineering). Candidate of Economic Sciences.

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2009 - 2015 - Chairman of the Board - General Director of PJSC RusHydro; Since 2008 - Member of the Board of SPA "RSPP" and LLC "RSPP"; Since 2010 - Member of the Supervisory Board of NP

"Hydropower of Russia"; 2010-2013 - Member of the Supervisory Board of OJSC "RRDB"; Since 2011 - Member of the Board of Governors of ANO "ISED"; Since 2012 - member of the Presidium of RNA WEC; Since 2013 - member of the Board of Trustees and the Board BUT Charitable Fund "Ownership" Fund; 2014-2015 - member of RusHydro International B.V. of the Supervisory Board; 2015 - He is Chairman of the Board of PJSC RAO Energy Systems of the East Group

*Membership in the Board of Directors since 2010*

##### Victor Zimin

1962 year of birth. Education: Tomsk State University of Architecture and Civil Engineering (cars and motor-car economy).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): Since 2009 - Head and Chairman of the Government of the Republic of Khakassia.

*Membership in the Board of Directors since 2010*

##### Sergey Ivanov (independent director)

1961 year of birth. Education: Moscow Engineering Physics Institute (theoretical nuclear physics). Doctor of Economic Sciences. Corresponding Member of the Russian Academy of Sciences.

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): Since 2009 - Chairman of the Presidium of the ANO "National Energy Security Institute"; Since 2010 - General Director of JSC "Erko"; Since 2013 - General Director of the managing company LLC "LENSET", LLC "Lisiteya", LLC "Pasiphae", LLC "Metis", LLC "Amalthea", LLC "Oberon", JSC Corporation "Nechernozemagropromstroy".

He is a member of the BoD "Erko", CJSC INPK "RET", JSC Corporation "Nechernozemagropromstroy".

*Membership in the Board of Directors since 2015*

##### Larisa Calanda

1964 year of birth. Education: Sverdlovsk Institute of Law (Law). Postgraduate Institute of Philosophy and Law of the Academy of Sciences of Belarus.

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): Since 2006 - Vice-President, Secretary of State - Vice-President of OAO "NK" Rosneft"; Since 2007 - Acting General Director of JSC "ROSNEFTEGAZ"; Since 2008 - Deputy Chairman of the Board of OJSC "NK" Rosneft "

He is a member of the BoD "ROSNEFTEGAZ".

*Membership in the Board of Directors since 2014*

\* E.V. Dod - the share in the authorized capital - 0.118435%; the share of the ordinary shares - 0.118435%. The remaining Board members do not have a stake in the authorized capital of the issuer and does not own the shares. Board members also do not own the Company's shares indirectly (in accordance with the submitted data on 11.05.2016). The Company and the companies included in the group did not give out loans to members of the Board of Directors



### Vyacheslav Kravchenko

1967 year of birth. Education: Moscow State University. University (jurisprudence).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2008-2011 – General Director of LLC "RN-Energo"; 2010-2012 – General Director of JSC "United Energy Company"; Since 2011 – a state representative in the Supervisory Board of NP "Market Council"; Since 2013 – Deputy Minister of Energy; 2013-2014 – Member of the Supervisory Board of OJSC "RRDB"; 2012-2014 – Chairman of the Board of OJSC "ATS".

Is a member of the BoD PJSC "FGC UES", JSC "SO UES", PJSC "MOESK", PJSC "IDGC of Siberia"

*Membership in the Board of Directors since 2014*

### Denis Morozov

1973 year of birth. Education: Moscow State University. University (economics, law); The Swiss Banking School; Harvard Business School (Management); School of International Relations and Public Management at Columbia University (public administration, management of economic policy). Candidate of Economic Sciences.

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2010 – President, General Director of OJSC "Uralkali"; Since 2011 – the Russian representative to the Board of the European Bank for Reconstruction and Development, the executive director of the Russian Federation, Belarus and Tajikistan; 2012-2015 – Member of the Supervisory Board of "ALROSA" (JSC); From 2014 – Chairman of the Supervisory Board of JSC "Rosselkhozbank".

He is a member of the BoD PJSC "Rossetti".

*Membership in the Board of Directors since 2013*

### Alexander Osipov

1969 year of birth. Education: Rostov-on-Don Institute of National Economy (Economic informatics and automation); Stavropol State University (jurisprudence); Academy of National Economy under the Government of the Russian Federation (financial management organisation).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2009-2013 – General Director of "Center of assessment and audit"; Since 2013 – First Deputy Minister of Development of the Far East.

He is a member of the BD JSC "FEEMC", JSC "Fund for the Development of the Far East and the Baikal region"

*Membership in the Board of Directors since 2015*

### Vyacheslav Pivovarov (independent director)

1972 year of birth. Education: State Academy of Management Sergo Ordzhonikidze (the world economy); American University of Paris (Applied Economics);

Stanford Business School

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): Since 2011 – the president, the General Director of "Altera Capital"; 2009 – 2011 – a freelance Advisor to the Minister of Economic Development.

*Membership in the Board of Directors since 2013*

### Sergey Shishkin

1963 year of birth. Education: Higher School of the KGB Border; University KGB; Russian Academy of Public Administration under the President of the Russian Federation (state and municipal administration).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): Since 2007 – Senior Vice President of JSC "Bank VTB"; Since 2011 – Member of the Supervisory Board of JSC "RRDB".

*Membership in the Board of Directors since 2011*

### Andrey Shishkin

1959 year of birth. Education: Moscow Institute of Petrochemical and Gas Industry. THEM. Gubkin (power-engineer).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2010 – 2012 – Deputy Minister of Energy; Since 2012 – Vice-President of "Rosneft"; Since 2013 – Member of the Supervisory Board of NP "Market Council"; From 2015 – General Director of LLC "RN-Active".

He is a member of the BoD JSC "Tyumen Energy Retail Company", OAO "Rossetti", JSC "United Shipbuilding Company", LLC "RN-CIR", LLC "National Oil Consortium"; Chairman of the Board of JSC "FECSR", RIG Research Pte. Ltd.

*Membership in the Board of Directors since 2014*

### INFORMATION CONCERNING THE CORPORATE SECRETARY OF THE COMPANY

#### Zavalko Maxim Valentinovich\*

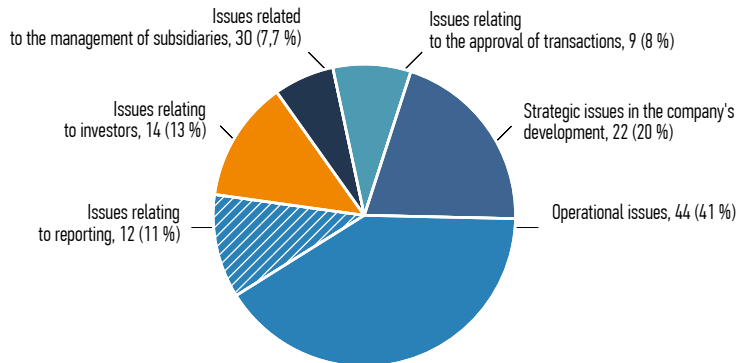
1977 year of birth. Education: Moscow State Institute of International Relations (International Law); Financial University under the Government of the Russian Federation (MBA Finance).

Experience over the past 5 years and participated in the management bodies of other organisations (on 31.12.2015): 2010 – present – Head of the Corporate Governance Department/Deputy Head of Corporate Governance and Property Department, Corporate Secretary of PJSC RusHydro; Member of the Board of Directors / Deputy Chairman of the Board of Directors of several companies RusHydro Group..

\* M.V. Zavalko – the share in the authorized capital – 0,000071 %; the share of the ordinary shares – 0,000071 %. Corporate Secretary also do not own the Company's shares indirectly. The Company and the companies included in the group did not give out loans to Corporate Secretary.

#### 4.2.2.2. INFORMATION ON THE BOARD OF DIRECTORS

##### 4.2.2.2.1. THE STRUCTURE OF THE ISSUES ADDRESSED



For more information about the issues reviewed by the Board of Directors can be found [RusHydro.ru](http://RusHydro.ru) and in the annex to the annual report of the number.

During the reporting year, the Board of Directors reviewed more than one hundred issues. Apart from operating performance, other matters included: convening the annual General Meeting of Shareholders, the execution of orders, the approval of interested party transactions, the development of a transparent purchasing management system and improvement in purchasing control efficiency, and issues relating to subsidiary governance. The Board of Directors made numerous important decisions concerning corporate development.

##### The consideration of matters on the approval and implementation of the business plan:

- the approval of the business plan of the Company for 2015, including PJSC RusHydro Investment programme for 2015;
- the intermediate results of the implementation of the Company's Business plan in 2015, including actual information as of the first half of 2015 (including

reports on the implementation of the Investment programme (including Generating Objects Complex Modernisation Programmes) and the Annual Complex Purchase Programme for the first half of 2015);

- the approval of the Company's business plan for 2016 - 2020.

##### The consideration of matters on the election of governing bodies and the KPI system:

- the formation of the Committees of the Company's Board of Directors;
- the formation of the governing bodies of PJSC RusHydro (the election of the Board Chairman (General Director));
- the approval of PJSC RusHydro's KPIs list for 2016.

##### The consideration of matters on the development of the Far East:

Requirements to disclose information about the interest of members of the Board of directors / executive body member provided in the Code of Ethics ([http://www.rushydro.ru/corporate/regulations\\_and\\_docs/documents/board/](http://www.rushydro.ru/corporate/regulations_and_docs/documents/board/)).

- the priorities of the Company: the approval of the procedure for the transaction on the refinancing of the borrowings of PJSC RAO ES of East;
- the status of the implementation of the priority projects on the construction of four sites in the Far East (Yakutsk SDPP-2 (the 1st phase), Blagoveshchensk CHP (2nd stage), CHP in Sovetskaya Gavan, and Sakhalin SDPP-2 (the 1st turn)).

##### The consideration of matters on strategic activities:

- the approval of the Long-term Development Programme (LTDP) of PJSC RusHydro. The discussion of the LTDP by the Board of Directors was performed through joint attendance (minutes No. 212 dated 03/04/2015 and No. 218 dated 22/06/2015)
- the approval of the scheduled plan for the development of the RusHydro Development Strategy for the period until 2020 with a view to 2025 (minutes No.230 dated 25.12.2015).

##### The consideration of matters on risk management:

- the approval of a policy in the field of the internal control and risk management of PJSC RusHydro, according to the road map on the implementation of the provisions of the Corporate Management Code (minutes No.227 dated 16/11/2015).

#### 4.2.3. THE COMMITTEES OF THE BOARD OF DIRECTORS

PJSC RusHydro's Board of Directors has five committees attached to it for the purpose of the preliminary investigation of essential issues referred to the competence of the Board of Directors. The committees are as follows: the Investment Committee, the HR and Remuneration Committee, the Reliability, Energy efficiency and Inno-

ventions Committee.

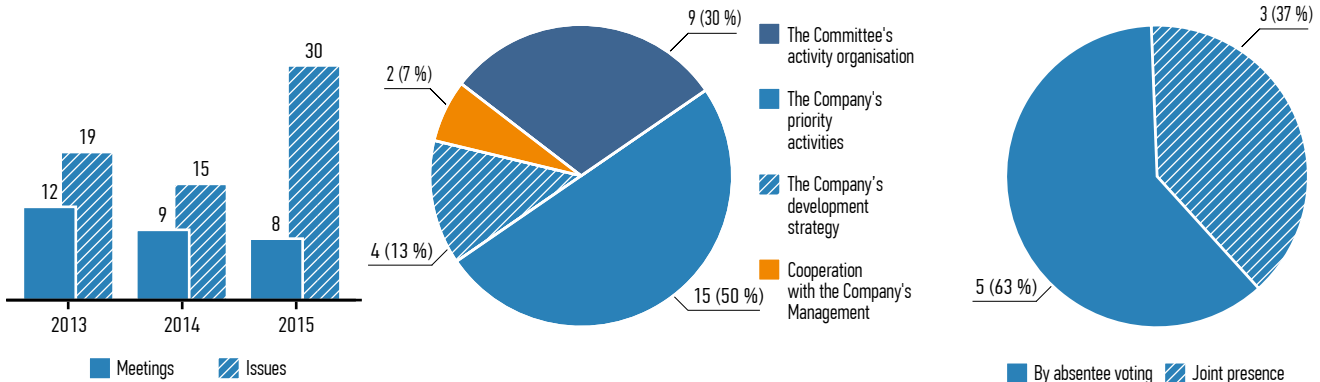
The committees are staffed with highly trained and experienced specialists who improve the efficiency and quality of the Board of Directors' functioning. The Committees' quantitative composition is optimized

to enable comprehensive discussion of issues under review, taking into account differing opinions. The Committees function based on the Policy on Committees attached to the Company's Board of Directors.



## THE STRATEGY COMMITTEE

*The Strategy Committee. Number of meetings, issues considered by committee and number of meetings held in the form of joint presence/by absentee voting.*



The Strategy Committee develops recommendations for the Board of Directors concerning Company's current development strategy.

*Previous composition: A.A. Auzan, E.E.Gorev V.I.Dani-  
lov-Danilyan, A. B. Malyshev\*, M. A. Mantrov, V.E.Me-  
zhevich E.A.Olkhovich, V.V.Pivovarov, G.I. Rizhinashvili,  
M.V.Rusakov, A.L.Textler, A.N.Shishkin N.G.Shulginov*

*Current composition: A.D. Avetisyan, A.A. Auzan\*, I.A.  
Zadornov, V.V.Mamin, V.V. Nikonov, M.V.Rusakov, E.A.  
Olkhovich, A. M. Osipov, G.I. Rizhinashvili, P.N.Snikkars,  
S.V.Shishin, A.N.Shishkin, N.G.Shulginov*

### The strategy Committee in the field of the Company's development strategy:

- recommended the BD to approve the Development Priorities Implementation Report of PJSC RusHydro for 2014 ;
- recommended the BD to approve the Development Strategy Scheduled Plan of RusHydro Group for the period until 2020 with a prospect until 2025;
- recommended the BD to take into consideration information on the course of the implementation of the Long-term Development Programme of RusHydro Group;
- recommended the management of PJSC RusHydro to submit proposals on the adjustment of the Long-term

Development Programme of RusHydro Group in 2016 within scheduled updating.

### The strategy Committee in the field of the Company's priority activities:

- recommended the BD to examine information on the implementation of priority projects on the construction of four objects in the Far East (Yakutsk SDPP-2 (the 1st phase), Blagoveshchensk CHP (2nd stage), CHP in Sovetskaya Gavan, and Sakhalin SDPP-2 (the 1st phase));
- recommended the BD to examine information on the implementation of priority Group's companies (13 issues);
- recommended the BD to approve the decision on the conclusion of Electricity Purchase and Free Bilateral Sales Contracts with guaranteeing suppliers operating within the regions of the Russian Federation included into the second price zone of the WEM.

### The strategy Committee in the field of the Committee's activity organisation:

- recommended the BD to examine the report of the Committee Chairman on the results of Committee activity in 2014-2015 corporate year;
- recommended the BD to elect the Committee Chairman;

- approved the Committee's work plan for the 2nd half of 2015;

- appointed the Committee's Vice-Chairman;
- considered the latest version of the resolution on the Strategy Committee;
- appointed the Committee's Secretary;
- recommended the BD to examine the report of the Committee's Chairman on the activity of the Committee in 2015;
- approved the Committee's work plan for the first half of 2016.

### The strategy Committee in the field of cooperation with the Company's Management::

- issued instructions and developed recommendations on various matters of competence;
- considered the reports of the Company's management on the execution of instructions.

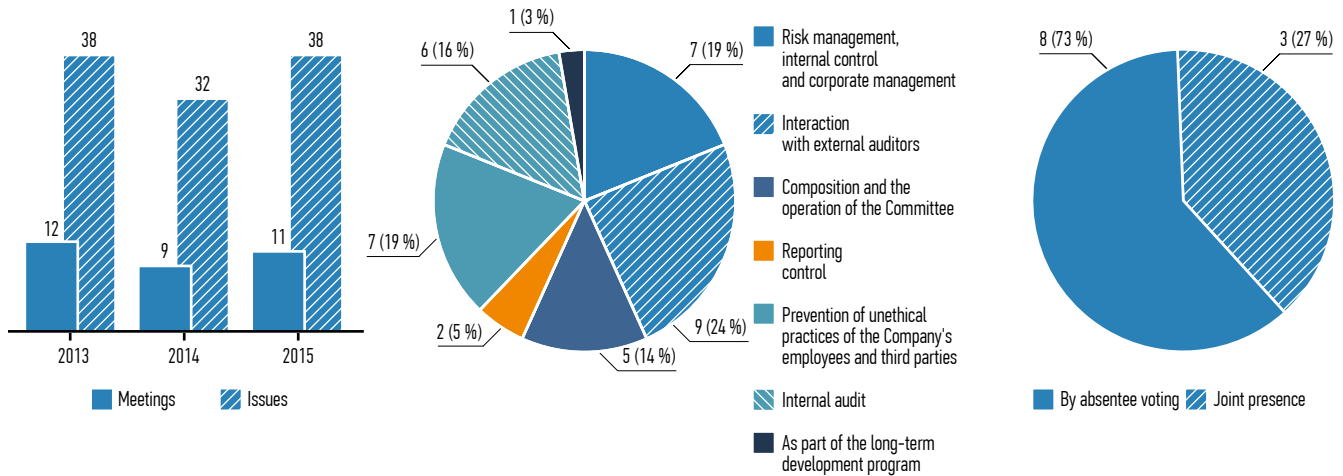
Provision on the Strategy Committee (<http://www.eng.rushydro.ru/upload/iblock/2ed/Prilozhenie-5-Polozhenie-o-Komitete-po-strategii-v-novoj-redaktsii.pdf>)

A list of all issues reviewed at the meetings of the Committee is available in the Supplement to this Report and at the corporate website at (<http://www.rushydro.ru/corporate/committees/stratcom/>)

\* Committee Chairman



**The Audit Committee. Number of meetings, issues considered by committee and number of meetings held in the form of joint presence/by absentee voting.**



### THE AUDIT COMMITTEE

Provide the Board of Directors of control over financial and economic activities of the Company. Definition of tasks for the internal audit of the Company. Making recommendations on the selection of an independent auditor, as well as the order of interaction with the Audit Commission and the external auditor.

*Previous composition: V.I. Danilov-Danilian, A.N. Shishkin, E.P. Volkov\*\*\**

*Current composition: S.N. Ivanov, M.S. Bystrov, V.V. Pivovarov*

#### The Audit Committee recommended that the BD In the sphere of the internal audit:

- recommended the Board of Directors to approve the redrafted Policy on Internal Audit and the Regulation on the Audit Committee;
- approved the Annual scheduled plan of supervisory measures of internal audit for 2016 ;
- approved the reports on the implementation of the Annual scheduled plan of supervisory measures of internal audit;
- approved the Head of the Internal Audit Service.

#### The Audit Committee recommended that the BD In the sphere of risk management, internal control and corporate management:

- recommended the BD to adopt the Policy on internal control and risk management;
- approved the actions aimed at the development of the risk management system of PJSC RusHydro and the

programme of development of internal control and risk management system of RusHydro Group;

- considered the plans of actions aimed at the elimination of identified deficiencies based on the results of field inspections of the RF Ministry of Energy;
- considered the Report of the Audit Committee of PJSC RusHydro based on audit results for 2014.

#### The Audit Committee recommended that the BD in the sphere of prevention of unethical practices of the Company's employees and third parties:

- recommended the BD to approve the Anticorruption policy and the Policy of competitive interests management;
- approved the reports on the observance by PJSC RusHydro of the Russian legislation in the sphere of insider information misuse and market abuse prevention and of the Regulation on the insider information.

#### The Audit Committee recommended that the BD as part of the long-term development programme:

- recommended the BD to approve the Technical specifications for the inspection of the long-term development programme implementation by RusHydro Group in 2015-2017.

#### The Audit Committee recommended that the BD in the sphere of reporting control:

- preliminary considered the statements of PJSC RusHydro prepared in accordance with RAS and IFRS;
- preliminary considered the Annual progress report of PJSC RusHydro for 2014 and suggested its presen-

tation for approval by the Annual General Meeting of Shareholders.

#### The Audit Committee recommended that the BD in the sphere of interaction with external auditors:

- checked out the Plan of PvK Audit JSC on audits in RusHydro Group for 2015 and reports of PvK Audit JSC on the results of the financial statements audit in PJSC RusHydro prepared in accordance with Russian Accounting Standards, as well as the Report on review of the consolidated interim condensed financial information of RusHydro group prepared in accordance with IFRS.

#### The Audit Committee recommended that the BD in the sphere of the composition and the operation of the Committee:

- approved the Progress report of the Committee
- appointed the Secretary of the Committee
- agreed on the redrafted Regulations on the Committee.
- approved the Committee's Work Plan for 2015-2016 corporate year.

Provision on the Audit Committee

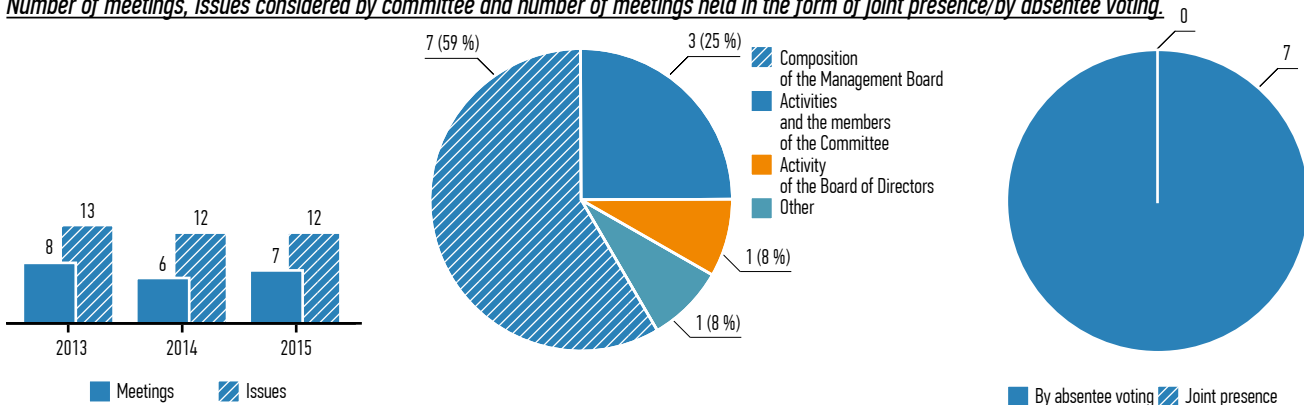
(<http://www.eng.rushydro.ru/upload/iblock/f25/Prilozhenie-1-Polozhenie-o-Komitete-po-auditu-v-novoj-redaktsii.pdf>)

A list of all issues reviewed at the meetings of the Committee is available in the Supplement to this Report and at the corporate website at (<http://www.rushydro.ru/corporate/committees/audit/>).



### The Human Resources and Remuneration Committee.

#### Number of meetings, issues considered by committee and number of meetings held in the form of joint presence/by absentee voting.



### THE HUMAN RESOURCES AND REMUNERATION COMMITTEE

Attracting qualified managers to manage the Company and to create the necessary incentives for their successful work. Development of principles and criteria for determining the remuneration and incentives of members of the Board of Directors, Chairman of the Board and Board members. Issuing recommendations (conclusions) to the Board of Directors on these matters.

*Previous composition: V.I. Danilov-Danilian, A.N. Shishkin, E.P. Volkov*

*Current composition: .N. Ivanov, V.V. Pivovarov, M.S. Bystrov*

#### **Human Resources and Compensation Committee recommended that the BD regarding the activity of the Board of Directors:**

- to check up the Report on the results of the remote evaluation of PJSC RusHydro BD performance for the 2014 corporate year and the plan of measures to improve the performance of the Board of Directors.

#### **Human Resources and Compensation Committee recommended that the BD regarding the composition of the Management Board:**

- to determine the number of members of the Management Board – 6 persons
- to elect N.G. Shulginov as the sole executive body from 15.09.2015 and S.A. Kirov – as the Board Member,
- to agree on the positions overlapping by S.A. Kirov, D.I. Rizhinashvili and N.G. Shulginov, PJSC RusHydro Board Member,
- to terminate the powers of E.V. Dod, the sole executive body of the Company, on 14.09.2015 and M.A. Mantrov, the Board Member, on 08.10.2015

#### **Human Resources and Compensation Committee recommended that the BD other:**

- to approve the redrafted Corporate Governance Code of PJSC RusHydro.

#### **Human Resources and Compensation Committee recommended that the BD moreover, the Committee made decisions on the activities and members of the Committee:**

- approved the progress report of the Committee over the period from 08.08.2014 to 31.05.2015,
- elected S. Lyazer as the Secretary of the Committee,
- elected S.N. Ivanov as the Deputy Chairman of the Committee.

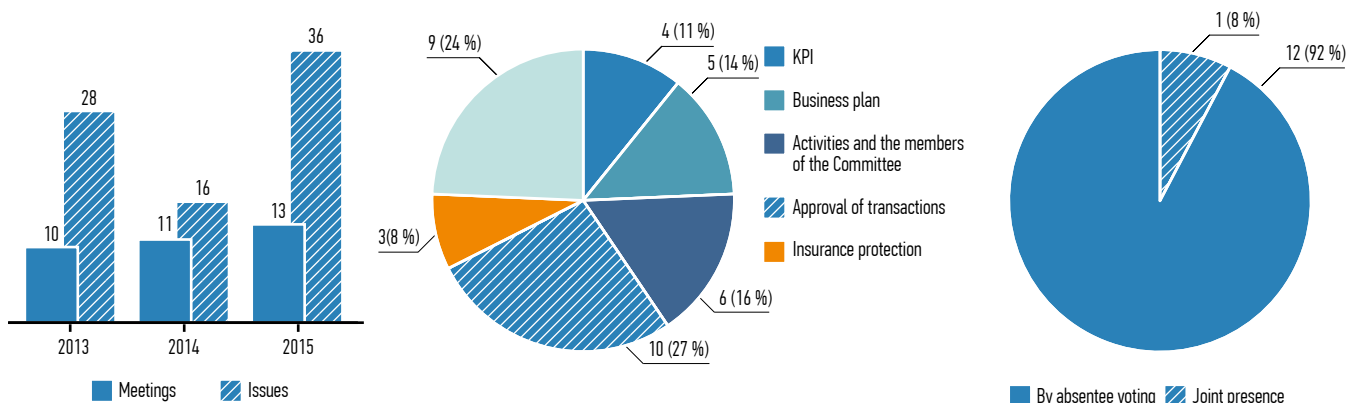
Provision on the Human Resources and Remuneration Committee (<http://www.eng.rushydro.ru/upload/iblock/024/Prilozhenie-3-Polozhenie-o-Komitete-pokadram-i-voznagrazhdeniyam-v-novoj-redaktsii.pdf>)

A list of all issues reviewed at the meetings of the Committee is available in the Supplement to this Report and at the corporate website at <http://www.rushydro.ru/corporate/committees/hr/>



### The Investments Committee.

Number of meetings, issues considered by committee and number of meetings held in the form of joint presence/by absentee voting.



### THE INVESTMENTS COMMITTEE

Preliminary consideration of investment projects and programmes. Improvement and investment policy of the Company.

*Previous composition: B.B. Bogush, A.E. Bugrov, M.S. Bystrov\*, V.I. Danilov-Danilyan, V.M. Zimin, S.N. Ivanov, A.V. Ilyenko, L.V. Kalanda, S.A. Kirov, M.A. Mantrov, G.I. Rizhinashvili, P.N. Snikkars.*

*Current composition: A.D. Avetisyan, Dr. A.C. Berndt, A.E. Bugrov, M.S. Bystrov\*, V.M. Zimin, L.V. Kalanda, S.A. Kirov, A.M. Osipov, M.A. Mantrov, D.V. Milyutin, A.Y. Podgorniy, G.I. Rizhinashvili, P.N. Snikkars, V.V. Pivovarov\*\**

#### Investment Committee recommended that the BD on key performance indicators:

- to consider the key performance indicators of PJSC RusHydro.

#### Investment Committee recommended that the BD on the business plan:

- to consider the business plan of the Company for 2015-2019,
- to approve the programme of stock obligations of PJSC RusHydro
- to consider the recommendations for the Annual General Meeting of Shareholders: on the distribution of profits and losses and the dividend payout (declaration) according to results of 2014 financial year,
- to consider the interim results of the Company's business plan execution in 2015.

#### Investment Committee recommended that the BD on the activity and members of the Committee

- to approve the progress report of the Investment Committee,

- to consider the candidacy of the Chairman of the Investment Committee,
- to adopt the Investment Committee's work plan for 2015-2016.

#### Investment Committee recommended that the BD on the approval of transactions

- to consider the recommendations on the approval of transactions of interest.

#### Investment Committee recommended that the BD on the insurance protection

- to approve the Company's Insurers for 2016,
- to approve the Insurance protection programme of PJSC RusHydro for 2016,
- to approve the Regulations on the organisation of insurance protection of PJSC RusHydro.

#### Investment Committee recommended that the BD on other

- to consider the optimisation and improvement of charitable contributions and sponsorship costs effectiveness.
- to consider the stand of PJSC RusHydro (PJSC RusHydro representatives) on the agenda issue of management bodies of Yakutskaya GRES-2 JSC.
- to consider the stand of PJSC RusHydro (PJSC RusHydro representatives) on the agenda issue of the General Meeting of Members.
- to approve the Regulations on the increase of the investment and the operating efficiency and on PJSC RusHydro costs cutting.

#### Investment Committee recommended that the BD moreover, the Committee made decisions on the activities and the members of the Committee:

- to elect M.S. Bystrov as the Chairman of the Investment Committee,
- to elect P.N. Snikkars as the Deputy Chairman of the Investment Committee,
- to elect Yu.A. Grigorieva as the Secretary of the Committee.

Provision on the Investment Committee (<http://www.eng.rushydro.ru/upload/iblock/570/Prilozhenie-2-Polozhenie-o-Komitete-po-investitsiyam-v-novoj-redaktsii.pdf>)

A list of all issues reviewed at the meetings of the Committee is available in the Supplement to this Report and at the corporate website at (<http://www.rushydro.ru/corporate/committees/Investments/>).

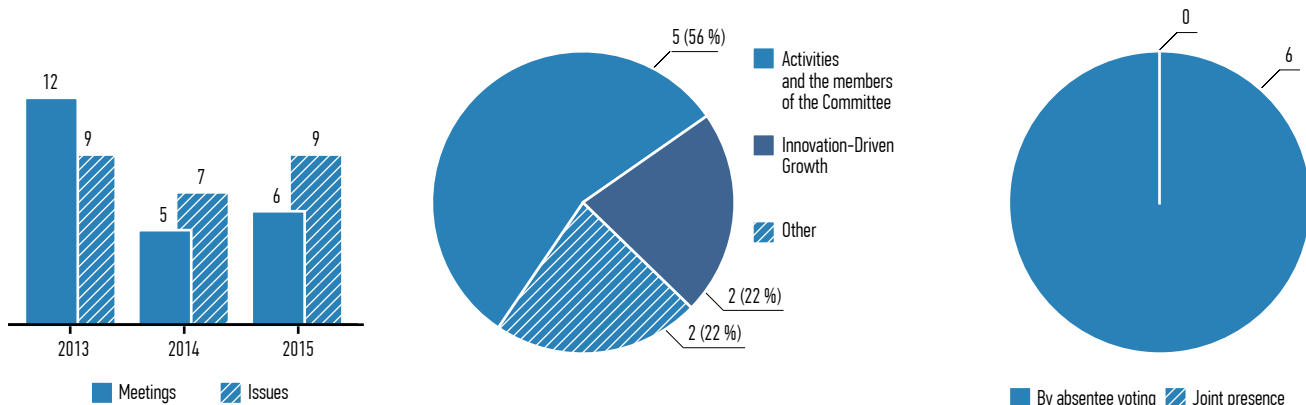
\* Committee Chairman

\*\* 14th member of the Committee was elected by the Decision of the Board of Directors (Minutes as of 17.09.2015 No 222) 14th member of the Committee was elected by the Decision of the Board of Directors (Minutes as of 17.09.2015 No 222)



### The Committee on reliability, energy efficiency and innovations.

#### Number of meetings, issues considered by committee and number of meetings held in the form of joint presence/by absentee voting.



### THE COMMITTEE ON RELIABILITY, ENERGY EFFICIENCY AND INNOVATIONS

Preliminary consideration of the formation of technical policy, environmental policy, energy conservation and efficiency policies. Development of standards organizations in the sphere of technical regulation, long-term planning of hydropower development and energy on the basis of other renewable energy sources.

*Previous composition: M.V. Bolgov, M.S. Bystrov, E.P. Volkov, V.V. Kudryavy, E.J. Milenski, S.A. Pavlushko, V.A. Pekhtin, G.I. Rizhinashvili, V.A. Tokarev, R.M. Khasiakhmetov, V.A. Shkatov*

*Current composition: B.B. Bogush, M.V. Bolgov, K.V. Zaviszenov, S.N. Ivanov, V.M. Kravchenko, V.V. Kudryavy, E.J. Milenski, V.A. Pekhtin, G.I. Rizhinashvili, V.A. Tokarev, S.N. Tolstoguzov, R.M. Khasiakhmetov, V.A. Shkatov*

#### **Reliability, Energy Efficiency and Innovation Committee recommended the BD in the sphere of Innovation-Driven Growth:**

- to consider the draft of basic provisions of the Innovation-Driven Growth Project of PJSC RusHydro

taking into account the recommendations following the results of the audit.

- to approve the report on the implementation of the medium-term plan of the development of the Innovation-Driven Growth Project

#### **Reliability, Energy Efficiency and Innovation Committee recommended the BD other**

- to approve the redrafted environmental policy of PJSC RusHydro,
- to approve the Regulations on PJSC RusHydro production quality management.

#### **Reliability, Energy Efficiency and Innovation Committee recommended the BD moreover, the Committee made decisions on the activities and the members of the Committee:**

- elected V.V. Kudryavy as the Chairman of the Committee,

- elected V.M. Kravchenko, the RF Energy Minister, the member of the Board of Directors of PJSC RusHydro, as the Deputy Chairman of the Committee,

- elected M.E. Lunazi, the Deputy Director of the Department of Production Process Development and Standardisation of PJSC RusHydro, as the Secretary of the Committee,

- approved the progress report of the Committee,
- approved the work plan of the Committee.

Provision on the Energy Efficiency, Reliability and Innovations Committee (<http://www.eng.rushydro.ru/upload/iblock/063/Prilozhenie-4-Polozhenie-o-Komitete-po-nadezhnosti-energoeffektivnosti-innovatsiyam-v-novoj-redaktsii.pdf>)

A list of all issues reviewed at the meetings of the Committee is available in the Supplement to this Report and at the corporate website at (<http://www.rushydro.ru/corporate/committees/reliability/>).

### COMMITTEE FOR DEVELOPMENT OF THE FAR EASTERN ENERGY SECTOR

Development of proposals for energy development in the Far Eastern Federal District of the zone of responsibility of the Company and its subsidiaries. Preparation and submission of recommendations (conclusions) to the Board of Directors on the development of Far East Energy.

*Current composition: I.A. Zadvornov, A.V. Kazachenkov, A.V. Korneychuk, V.M. Kravchenko, A.V. Molsky, V.V. Nikonov, A.M. Osipov, D.V. Pilenieks, S.N. Tolstoguzov, Yu.P. Trutnev\*, V.V. Tupikin, A.O. Chekunkov, N.G. Shulginov.* There was no Committee meetings in 2015..

\* Committee Chairman

#### 4.2.4. THE MANAGEMENT BOARD AND THE CHAIRMAN OF THE MANAGEMENT BOARD, THE CHIEF EXECUTIVE OFFICER

The Management Board acts based on the Policy on the Management Board, being guided by the decisions of the General Meetings of Shareholders and of the Company's

Board of Directors. The general management of the Company's activities is performed by the Chairman of the Management Board, the Company's Chief Executive

Officer, Shulginov Nikolay Grigorievich, elected by the decision of the Board of Directors in 2015.

##### 4.2.4.1. THE COMPOSITION AND THE ATTENDANCE OF MEMBERS OF THE BOARD\*

Management Board includes managers responsible for managing financial and economic activities, production activities, capital construction and engineering activities, innovations and strategy formation. Information about the terms of office of Board members in accordance with the employment contract are disclosed in Appendix № 18.

On the average, the attendance at Management Board meetings in 2014 amounts to 80% of all meetings. Shulginov Nikolay Grigorievich, the Chairman of the Board, took part in all meetings.

##### Composition of the Management Board

Shulginov N.G. (since 15/09/2015)

Bogush B.B.

Kirov S.A. (since 16/03/2015)

Rizhinashvili G.I.

Tokarev V.A.\*

##### Board members which have left the Management Board

Dod E.V. - the authority terminated 14/09/2015

Mantrov MA - the authority terminated 10/08/2015

Reporting forms the Company's management Board of Directors:

- Annual report on the activities of Management,
- A quarterly report on the implementation business plan and the Company's programme.

Members of the Board in 2015 with RusHydro shares.

\* Events after the reporting date: 11/01/2016 the authority of Tokarev V.A. was terminated, 25.02.2016 Kazachenkov A.V. was elected to the Management Board.

##### 4.2.4.2. REPORT ON THE ACTIVITIES OF THE MANAGEMENT BOARD

In 2015, the Management Board conducted 66 meetings (14 meetings were conducted in presentia), with more than 554 issues reviewed, said issues being related to the Company's current activities. Other activities included preliminary discussion for all strategically significant issues referred to the competence of the Board of Directors. The Management Board prepared reports on the fulfillment of the Key Performance Indicators, and the Company's Business Plan. The Management Board also approved the target values for the Key Performance Indicators of the Company's subsidiaries and dependent companies. The Management Board reviewed reports on the achievement of said target values.

During the year, one decision was made on the early termination of powers of individual members of the Management Board in 2015. In order to optimize the management of PJSC RusHydro, the Board of Directors of the system it was decided to dismiss (to terminate the authority) of the Management Board member Mantrov MA and to terminate concluded with him employment contract 08.10.2015



#### 4.2.4.3. MEMBERS OF THE MANAGEMENT BOARD\*



##### Nicholay Shulginov

Born in 1951. Education: Novocherkassk Red Banner of Labour Polytechnic Institute. Sergo Ordzhonikidze (Power supply of industrial enterprises and municipalities) & PhD in Technical Sciences

Experience over the past 5 years and participated in the management bodies of other organisations:

2004-2015 - Deputy Chairman of the Board, First Deputy Chairman of the Management Board of OAO "UES SO", From 2015 - Chairman of the Board - General Director of PJSC RusHydro. He is a member of the BoD PJSC "FGC UES", a member of the Supervisory Board of NP "Scientific and Technical Council of the Unified Energy System"

Membership on the Management Board since 2015.

Membership of the Strategy Committee at the Board of Directors.

Does not own shares of the Company.



##### Boris Bogush

1952 year of birth. Education: Saratov Polytechnic Institute (Mechanical Engineer), Academy of National Economy under the Government of the Russian Federation (the company's management development).

Born in 1952. Education: Saratov Polytechnic Institute (Mechanical Engineer), Academy of National Economy under the Government of the Russian Federation (the company's management development).

Experience over the past 5 years and participated in the management bodies of other organisations:

Since 2009 - Managing Director, Head of Business Unit "Production", First Deputy General Director of PJSC

RusHydro - Chief Engineer PJSC RusHydro. He is a member of the BoD of "VolgaGidro", a member of the Board of Trustees, Foundation "Awareness", a member of the Supervisory Board of NP "Hydropower of Russia"

Membership on the Management Board since 2010.

Membership of the Reliability, Energy Efficiency and Innovation Committee at the Board of Directors.

Share of the Issuer's ordinary shares - 0,004241 %.



##### Kazachenkov Andrey\*\*

Born in 1980. Education: St. Petersburg State Engineering and Economic University (Economics and Management), University of Wisconsin (Madison, USA), (Master of Business Administration).

Experience over the past 5 years and participated in the management bodies of other organisations:

2009-2015 - Chairman's Advisor, Deputy Chairman of Management Board, First Deputy Chairman of Management Board of JSC FGC UES. From 2016 - Member of the Management Board, First Deputy Director General of PJSC "RusHydro". From 2016 - Member of the Board of Directors of PJSC RAO Energy Systems of the East

Membership on the Management Board since 2016.

Membership of the Committee for Development of the Far Eastern Energy Sector at the Board of Directors.

Does not own shares of the Company.

\* Company and the companies included in the group did not give out loans to members of the Board. Board members do not own shares of the Company indirectly (in accordance with the submitted data on 05.11.2016).

\*\* The authority terminated in January 2016.



### Sergey Kirov

Born in 1976. Education: Perm State Agricultural Academy, DN Pryanishnikova (economics and management of agricultural production), Regional interdisciplinary retraining center at Perm Technical University (Economics and Management).

Experience over the past 5 years and participated in the management bodies of other organisations:

2010-2014 - General Director of "RusHydro IT service". Since 2010 - Director for Economy, Deputy General Director for Economy, Investment and procurement activities, First Deputy General Director of PJSC RusHydro. 2010 - 2014 - Member of the BoD of "RusHydro IT service".

Membership on the Management Board since 2014.

Membership of the Investment Committee at the Board of Directors.

Does not own shares of the Company.



### George Rizhinashvili

Born in 1981. Education: Moscow State University, MV University (economics) Ph.D.

Experience over the past 5 years and participated in the management bodies of other organisations:

Since 2009 - Member of the Board, First Deputy General Director of PJSC RusHydro. 2010-2014 - Member of the Supervisory Board of NP "CESC UES". He is a member of the Board of Trustees Foundation "Awareness".

Membership on the Management Board since 2009.

Membership of the Reliability, Energy Efficiency and Innovation, Strategy and Investment Committees at the Board of Directors.

Share of the Issuer's ordinary shares - 0,014193 %.



## 4.3. EXTERNAL AND INTERNAL CONTROL

RusHydro has an efficient system of financial and operating performance control, ensuring smooth interactions between the Company's governing bodies and the integrated internal and external control system.

The main principles, tasks, methods and processes of the control system are determined in internal documents approved by PJSC RusHydro's Board of Directors, namely the following:

- The Corporate Governance Code;
- The Internal Control and Risk Management Policy;
- The Internal Audit Policy;
- The Policy on the Audit Committee of the Board of Directors

In 2015, the Department of Internal Audit, Control and Risk Management is divided into two business units: the Internal Audit Service and the Department of control and risk management.

- The Policy on the Internal Audit Commission

### 4.3.1. THE EXTERNAL INDEPENDENT AUDITOR

PJSC RusHydro's financial (accounting) statements are subjected to an independent external audit in accordance with Russian and international accounting standards. Selection of the external auditor performing the independent audit of the accounting (financial) statements of the PJSC RusHydro as per RAS (Russian Accounting Standards) and IFRS for the years 2015-2017 was conducted by open tender. Procurement organisation and procedure were defined in accordance with the Regulation on the goods procurement procedure for the needs of PJSC RusHydro,

approved by the decision of the Board of Directors, based on the decision of the Central procurement committee of the PJSC RusHydro No. 470 as of 04.12.2014.

According to the results of the procurement procedure the Joint-Stock Company PricewaterhouseCoopers Audit (JSC PwC Audit) was selected as an auditor of accounting (financial) statements 2015-2017.

In 2015, JSC PwC audited the Company's 2014 RUS and IFRS statements. The Audit Committee positively

assessed the conclusion of the external auditor and recommended that the Board of Directors present the conclusion to the General Meeting of Shareholders. The conclusion was presented at the General Meeting of Shareholders in June 2015, along with other materials made available to shareholders. The actual amount of award to be given JSC "PwC Audit" at the end of 2014, is 121 577 600 rubles.

In 2013 and 2014 the JSC "PwC Audit" also carried out an audit of the financial (accounting) statements.

#### 4.3.1.1. COOPERATION OF THE EXTERNAL AUDITOR AND AUDIT COMMITTEE OF THE PJSC RUSHYDRO

##### 4.3.1.1.1. AUDIT COMMITTEE EVALUATIONS OF THE INTERNAL AUDIT PROCEDURE EFFICIENCY

Audit Committee evaluates the work of the external auditor during the regular consideration and hearing of the auditor on the work performed, the main detected notes, deviations from the plan of activities previously approved and etc.

In 2015 the Reports of the CJSC PwC Audit (Auditor of the Joint-Stock Company) were considered:

- according to the results of the interim audit of the financial statements as per RAS for 9 months of the year 2014, for the 1st half year of the year 2015;

- according to conduct of audit of the consolidated financial statements of the RusHydro Group as per IFRS and accounting of the PJSC RusHydro as per RAS for the year 2014;

- according to the audit results of the Joint-Stock Company accounting for 6 months of the year 2014, for 9 months of the year 2014, for the year 2014, prepared in accordance with the Russian Accounting Standards;

- according to the inspection results of the consolidated interim condensed financial information of the RusHydro

Group as per IFRS for 6 months, expired June 30, 2014 and 12 months expired December 31, 2014;

- open tender documentation is approved for the right to conclude the contract for rendering the services on conduct of an audit of the PJSC RusHydro accounting prepared in accordance with the Russian Accounting Standards (RAS), and audit (review) of the consolidated financial statements of the RusHydro Group prepared in accordance with the international financial reporting standard (IFRS) for 2015-2017.

##### 4.3.1.1.2. AUDIT COMMITTEE EVALUATIONS OF THE AUDIT OPINIONS

The Audit Committee evaluates the audit opinions presented by the external auditor. According to the results of the evaluation the Committee takes into account the audit opinion and independent evaluation of the external auditor and recommends the Board of Directors of the PJSC RusHydro to submit the audit opinion at the annual General

Meeting of the shareholders of the Joint-Stock Company.

The Audit Committee consists of the independent directors. All the AC members have an experience of work in executive positions. The Audit Committee Chairperson is S.N. Ivanov

- Doctor of Economics. The committee includes: V.V. Pivo-

varov, having higher economic education and graduated from the American University in Paris with a specialisation in Applied Economics and Stanford Graduate Business School, MBA. M.S. Bystrov, having higher education in the field of the world economy.

### 4.3.2. INTERNAL AUDIT COMMISSION

The Internal Audit Commission operates in accordance with the norms of Russian law, the Articles of Association and the Policy on the Internal Commission. The five Commission members are elected by the General Meeting of Shareholders for a period of one year.

In 2015, the Internal Audit Commission checked the Company's 2014 financial and performance results. The Commission's opinion on the audit results were presented to the General Meeting of Shareholders (June 27, 2014). The audit confirmed that the data contained in the Company's reports and financial documents is true and that the accounting practices and financial statements comply with current legal requirements and the Company's internal regulations. In the opinion of the Commission, the Company's financial and operating activities were performed in the interests of the Company and its shareholders.

#### Members of the Audit Committee\*

Composition exercising powers to 27/06/2014 on 06/26/2015	Composition exercising authority on 26.06.2015 to re-election at the AGM (27.06.2016)
Yudin A. I. (chairman)	Repin I. N. (chairman)
Repin I. N.	Annikova N. N.
Bogachev A. E.	Kant Mandal D. R.
Kant Mandal D. R.	Harin A. N.
Hvorov V. V.	Hvorov V. V.

\* Members of the Auditing Commission of PJSC RusHydro does not own shares of the Company and does not hold positions in the management bodies of the Company.

### 4.3.3. INTERNAL AUDIT SERVICE

#### **PURPOSE:**

The purpose of the internal audit of PJSC RusHydro is to assist the Board of Directors and executive bodies of the RusHydro Group in enhancement of efficiency of the RusHydro Group management, improvement of its activities.

In 2015 the Internal Audit Service was formed in the PJSC RusHydro, which is in reporting line of the Board of Directors represented by the Audit Committee.

The Internal Audit Service tasks and duties include:

- organisation and conduct of internal audits of the Joint-Stock Company and SDCs, processes and directions of the activity;
- evaluation of efficiency of the internal control system, risk management system, corporate governance of the Joint-Stock Company and SDCs.
- organisation of the methodological support and control over activities of the Joint-Stock Company representatives in the SDCs revision commissions.
- cooperation with the Audit Committee at the Board of Directors of the Joint-Stock Company.

Work priorities of the internal audit of the Joint-Stock Company in accordance with the purposes of the RusHydro Group, taking into account the available resources and risk-based approach to planning of the monitoring activities, are defined by the Scheduled plan for monitoring activities which is annually approved by the Audit Committee.

#### **Audit Committee evaluations of the external audit procedure efficiency**

The Audit Committee evaluates /approves quarterly reports of the Internal Audit Service on performed monitoring activities and their results. During audit the execution of the approved scheduled plan of the Internal Audit Service is also evaluated.

#### **RESULTS**

Within the year 2015 more than 25 planned monitoring activities were conducted, during which the audit evidence was collected and analysed in order to evaluate the internal control system efficiency, risk management and corporate governance, including:

- audits of branches and subsidiaries performing construction, operation, repair of the generation facilities, sales activities;
- focused audits, aimed at discovery of possibilities to improve business processes of the Joint-Stock Company and activities of the key subsidiaries;
- sample estimates of execution of the activities on the Joint-Stock Company critical risks management.

According to the results of conduct of the monitoring activities by the Joint-Stock Company and the SDCs management the corrective measures are developed and implemented which action is aimed at addressing identified issues, enhancement of the internal control

system efficiency, avoiding repetition of the violations in advance.

The Audit Committee quarterly considers the report of the head of the Internal Audit Service on execution of the Scheduled plan for the monitoring activities, which contains a short description of the revealed significant violations, notes and deficiencies in the Joint-Stock Company and its SDCs activities, includes the information about the significant risks, control and corporate governance problems, as well as proposals for their remedy, enhancement of the internal control system efficiency.

General principles and approaches to the internal audit system of the Joint-Stock Company are fixed in the Internal Audit Policy<sup>35</sup>, which was significantly modified in 2015. The new version of the Policy takes into account the requirements of the Corporate Governance Code of the PJSC RusHydro, Methodological recommendations and instructions of Rosimushchestvo, provides higher degree of conformity of the Internal Audit Service of the PJSC RusHydro to the Internal professional standards of internal audit.

Page address in the Internet, where its full text is posted: [http://www.rushydro.ru/corporate/regulations\\_and\\_docs/documents/board/](http://www.rushydro.ru/corporate/regulations_and_docs/documents/board/)

In 2015 the Internal Auditors Code of Ethics of the RusHydro Group was approved, which defines professional principles of the internal audit activity and establishes the rules of the internal auditors conduct. The Code purpose is maintenance and distribution of high ethic standards



of the internal auditor profession in the RusHydro Group. According to the results of evaluation (feedback) as per

the results of conduct of the monitoring activities, high efficiency of the internal audit performance was noted in 2015 in terms of detection of defects, which correction

will allow reduce/exclude negative effect on the Joint-Stock Company and SDCs efficient performance.

#### 4.3.4. RISK CONTROL AND MANAGEMENT DEPARTMENT

##### **PURPOSE:**

Internal control and risk management system (IC&RMS) is created in accordance with the international standards, regulatory requirements and recommendations in the field of ICS&RM, which general principles and approaches are fixed in the Internal Control and Risk Management Policy.

In 2015 the version of the Internal Control and Risk Management Policy was updated<sup>36</sup>. The main purpose of the PJSC RusHydro Internal Control and Risk Management Policy is to define the main principles of organisation, operation and mutual integration of systems of internal control and risk management. It is obligatory for applying by all organisation units and branches of the Joint-Stock Company and in relations between organisations being art of the RusHydro Group.

The Policy is places on the Company web-site ([http://www.rushydro.ru/corporate/regulations\\_and\\_docs/documents/board/](http://www.rushydro.ru/corporate/regulations_and_docs/documents/board/)).

##### **INTERNAL CONTROL**

The functioning process of the Internal Control System (ICS) of the Joint-Stock Company is aimed at provision of the reasonable confidence in achieving the goals according to the directions:

- activity efficiency and performance;
- observance of the applicable regulatory acts and internal regulation documents ;
- reliability of reporting;
- soundness of assets and fraud and illegal actions prevention.

The functions on construction and improvement of the internal control system are imposed on the Risk Control and Management Department. The main functions and tasks of the internal control units include:

- Arrangement of functioning of the effective corporate internal control system, corruption management system in the Joint-Stock Company

- Development and monitoring of execution of the plans and programmes of the risk management and internal control corporate system improvement of the Joint-Stock Company and SDCs
- Cooperation with territorial bodies of the executive authority of the Russian Federation, Accounting Chamber of the Russian Federation, Revision commission of the Joint-Stock Company and other monitoring bodies on the internal audit and control issues, and during their conduct of the Joint-Stock Company and SDCs audits

##### **RISK MANAGEMENT**

Risk Management System is specified in item 2.2. Risk management (reference) and on the Company web-site

##### **RESULTS**

The Company has the control environment providing achievement of the strategic targets of the Group. In order to identify all possible risks and most effective methods of control and risk management in the Company, RusHydro improving the internal control and risk management system on an ongoing basis.

In accordance with the new version of the Internal Control and Risk Management Policy, approved by the Board of Directors in 2015, further improvement of the IC&RMS is performed in the Joint-Stock Company. Regulation on the internal control system management of the Joint-Stock Company and Guidelines for designing and implementation of the control procedures in business processes, their formalisation in the control matrices are approved.

In 2015 within the plan of works on the ICS improvement of six business processes in the Joint-Stock Company the active work continued in terms of the IC&RMS improvement in the key business processes, including the ones exposed to the risk of possible execution of illegal actions by the Joint-Stock Company employees.

The business processes owners in cooperation with the employees of the Risk Control and Management Department carried out the analysis of the key business processes of the Joint-Stock Company and appropriate

risks in order to determine the key supervision points and control means, evaluation of their conformity. Also the evaluation of the organisation efficiency ("design") of the existing control procedures was carried out. As a result of the business processes analysis the evaluation of the existing control procedures was carried out, the deficient control procedures were also revealed which absence can lead to occurrence of the risk events. Lists of the deficient control procedures were agreed upon with the business processes owners. Where necessary the ICS documentation updating took place (matrices updating of the "risks — control procedures").

The Joint-Stock Company ICS provides the control over implementation of the LTDP, which programme activities include production programmes, investment programmes and innovative development programmes.

The additional control procedures have been developed in the Joint-Stock Company in terms of using the funds of the federal budget. In particular:

- separate financial accounts of budget cash flow are used;
- monthly reports from the subsidiaries to the PJSC RusHydro on the federal budget expenditure;
- banking support of all the transactions connected with expenditure of the federal budget funds, on the part of Sberbank, including the analysis and acceptance of all payments on the project related to the Far East development, financed from the federal budget funds.

Not only basic documents in the field of risk management are approved in the Joint-Stock Company, but the single documents on management of the individual risk groups, in particular, for example, conflict of interest management policy is approved, Code of Corporate Ethics is adopted. Also a number of other local normative acts in the field of control environment formation are adopted. Thus, the integrated programme of the anti-corruption efforts is implemented in the Joint-Stock Company, in particular, anti-corruption policy has been developed and "helpline" acts in the format of channels to inform about the cases of breach of the ethic requirements, common norms of behavior and different ethic problems

## 4.4. REPORT ON REMUNERATION TO THE MANAGEMENT AND CONTROL AUTHORITIES

### Members of the Board of Directors Remuneration

Payment of remuneration to the members of the Board of Directors is made in accordance with Regulation on remuneration payment to the members of the Board of Directors of the PJSC RusHydro.

#### Remuneration structure:

- Basic part of remuneration of each member of the Board of Directors is 900,000 rubles.
- The amount of remuneration depends on quantity of the meetings in which the member of the Board of Directors took place.
- The amount of remuneration increases if the member of the Board of Directors is:
  - Chairperson of the Board of Directors (by 30 %),
  - Chairperson of the Board of Directors Committee (by 20 %),
  - the member of the Board of Directors Committee (by 10 %).
- Total amount of remuneration taking into account the bonuses established by the Regulation, may not exceed 1,000,000 rubles.

### Member of the Management Board Remuneration

Payment of remuneration and compensation to the members of the Management Board of the issuer is made in accordance with the terms of labour agreements and Regulation on the procedure of remuneration and compensation payment to the members of the PJSC RusHydro Board of Management, approved by the decision of the Board of Directors of the Joint-Stock Company as of 16.11.2010 (Minutes as of 19.11.2010 No. 111).

The additional agreements with the members of the Board of Management concerning the payment of remuneration and other financial rewards and incentives in the current financial year, have not been signed by the Company.

#### Remuneration structure:

- For implementation of the KPI set by the Board of Directors for the Company. The Regulation provides the quarterly and annual remuneration (for the Board Chairperson only the Company KPI are established, for other members of the Board – the Company KPI (50

### The remuneration of the Board members, RUB

	2013	2014	2015
Remuneration for participation in the work of the management body	4,852,958.59	7,442,307.68	7,861,990.94
In total	4,852,958.59	7,442,307.68	7,861,990.94
The costs associated with the performance of the functions of a member of management, the Company compensated			336,214.43

### The remuneration of the Management Board members, RUB

	2013	2014	2015
Salary	111,936,811.92	127,367,216.24	97,827,885.72
Premium	500,324,406.00	755,549,861.00	625,844,823.00
In total	612,261,217.92	882,917,077.24	723,672,708.72*
The costs associated with the performance of the functions of a member of management, the Company compensated		26,024,539.35	7,788,019.40

\* The above amounts include remuneration for the 1-4 quarter of 2015. The amount of remuneration of the Board in 2015 includes interest on the results of the 2014 Board members employed by the company in 2014. The quantitative composition of the Management Board members in 2015 significantly reduced in comparison with the year 2014 (from 14 to 5 pers.).

### The number of Management Board, persons

2014 год		2015 год	
Jan	Dec	Jan	Dec
14	5	6	5

### Remuneration of the members of the Audit Commission, RUB

	2013	2014	2015
Fee for participation in the body of control over financial and economic activities of the issuer	242,450.00	497,000.00	342,200.00
In total	242,450.00	497,000.00	342,200.00

% of premium) and individual KPI (50% of premium), taking into account distribution of tasks, powers and responsibility between the members of the Board);

- For implementation of the annual integrated indicator of the RusHydro Group Long-term Development Programme implementation (including 12 LTDP KPI) the additional bonus award of the Board members is provided by the Regulation.
- "Golden parachutes" for early termination of the contract are not provided. Maximum amount of com-

penation repaid under early discharge of the Board member, is limited to three-fold average monthly earnings of the Board member.

### Remuneration to the members of the Audit Commission

Payment of remuneration to the members of the Revision Committee is made in accordance with Regulation on remuneration payment to the members of the PJSC RusHydro Revision Committee as of 26.06.2015 (Minutes as of 26.06.2015 No.13).



## 4.5. BUSINESS ETHICS AND ANTI-CORRUPTION

### 4.5.1. CONTROL OVER MAJOR AND INTERESTED PARTY TRANSACTIONS

RusHydro has an efficient system of internal control over transactions in place. The policy adopted by the Company regulates a unified procedure for reconciliation, conclusion and execution of contracts concluded on behalf of RusHydro. The contract drafts are subjected to the corporate expert assessment in order to comply

with the laws and to reduce the risk of challenging the contracts by the agents and shareholders of RusHydro.

In 2015 PJSC RusHydro concluded interested party transactions listed in the Supplement to the Annual Report, together with information on the related subjects, inter-

ested parties and approvals. All transactions have been approved by the Board of Directors or the General Meeting of Shareholders in accordance with the requirement of the law, therefore the transactions concluded contain no conflict of interests.

### 4.5.2. PREVENTING THE USE OF INSIDER INFORMATION

A new version of the Insider Information Policy was approved in September 2014. The Policy regulates the Company practices of observing the Russian law pertaining to the prevention of illegal use of insider information and market manipulation. The Policy has been developed taking into account the international practices of corporate governance, including the requirements of the Disclosure and Transparency Rules of the UK Financial Conduct Authority. The Policy sets the categories of persons included by RusHydro in the list of insiders. The Policy also regulates the access to the confidential insider information and the rules of its protection, as well as the limitations imposed on the use of such information by insiders for the purposes of operations with the Company's financial tools and the transfer of data on insider information to third parties. The list includes the employees of RusHydro having access to the data and documents containing insider information due to the performance of their duties as employees of the Company. In 2015 the Company:

- Revised procedure for inclusion of the Company's employees in the list of insider information. According to the new order in insider information list can be involved first deputy and deputy Director General of the Company;
- A new version of the insider information list was approved;
- Issued 30 notices on the inclusion and exclusion of persons in/from the list.

The insider information list is drawn in Russian and in English languages to be published at the Company's

List of insider information is published

- Corporate website of ([www.rushydro.ru](http://www.rushydro.ru) and [www.eng.rushydro.ru](http://www.eng.rushydro.ru)).
- In the news bulletin of the authorized agency "Interfax" ([www.e-disclosure.ru](http://www.e-disclosure.ru)).
- In the (<http://www.londonstockexchange.com/arket-news/market-news-home.html>).

website at [www.rushydro.ru](http://www.rushydro.ru) and [www.eng.rushydro.ru](http://www.eng.rushydro.ru). The insider information is published by the Company in Russian language in the newsfeed of Interfax, the authorized information agency at [www.e-disclosure.ru](http://www.e-disclosure.ru). The English language version of the information is published in RNS newsfeed at <http://www.londonstockexchange.com/exchange/prices-andnews/news/market-news/market-news-home.html>.

The observance of the requirements pertaining to insider information is controlled by the Company's Auditor, who submits the resulting reports to the Audit Committee on a quarterly basis. The Audit Committee includes information on the observance of the abovementioned requirements in the corresponding report to be approved by the Board of Directors.

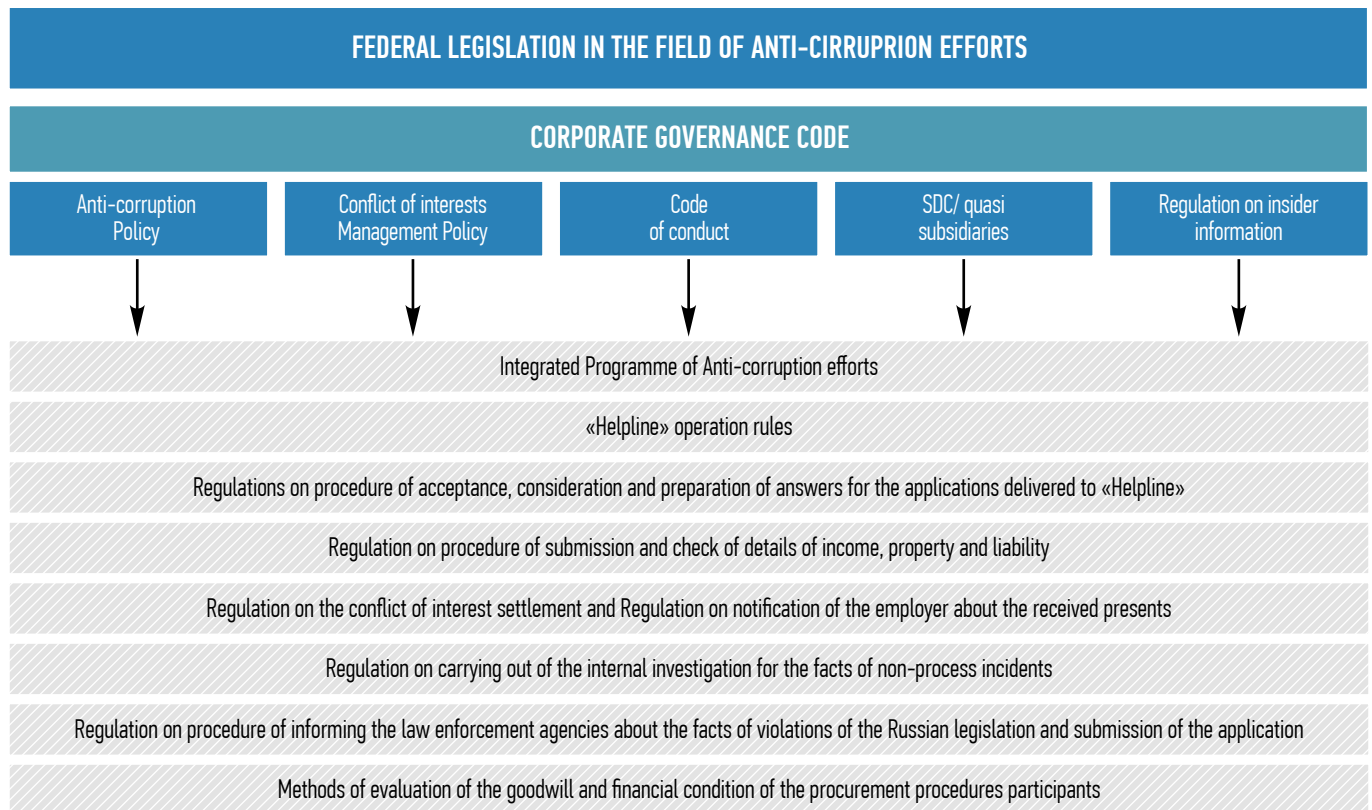
### 4.5.3. ANTI-CORRUPTION EFFORTS

The Company carries out regular work on prevention and detection of the corruption offence, elimination (minimisation) of the reasons and conditions generating corruption in PJSC RusHydro.

The work is based on the Anti-corruption Policy, Code of conduct, Conflict of interests Management Policy, Integrated Programme of Anti-corruption efforts and a number of other local normative documents forming the

elements of corporate culture, rules and procedures to ensure prevention of corruption in the PJSC RusHydro.

*Internal regulation guiding anti-corruption efforts forms basis of the anti-corruption system of PJSC RusHydro*



As per the provisions of the Anti-corruption Policy all the Company employees and members of the Board of Directors must observe the norms of the Russian legislation and international law in the field of anti-corruption efforts. The obligations are assigned to the employees and members of the Board of Directors by the Code of Conduct to act in the interests of the Company and to avoid the conflict of interests. The members of the Board of Directors must notify the Company about occurrence or the risk of occurrence of the conflict of interests (as well as of its affiliation).

In addition the Company employees filling the positions exposed to corruption risks<sup>1</sup>, shall:

- abstain from actions leading or potentially leading to a conflict between the employee's interests and the Company interests;
- notify about known cases of corruption offence and illegal actions, the receipt of gifts and etc., and disclose information on any commercial activities not related to the Company interests;

- submit the information in writing about the absence of conflicts of interest on a quarterly basis;
- submit the details of income, property and liability in relation to himself/herself, members of his/her family and nearest relatives on a quarterly basis.

PJSC RusHydro is a participant of the Anti-corruption Charter of the Russian business accepted by business community in 2012 for implementation of the National Anti-Corruption Plan. The Charter was initiated by the Russian Chamber of Commerce and Industry, the Russian Union of Industrialists and Entrepreneurs (RSPP), All-Russian Public Organisation Business Russia and all-Russian Small and Medium Business NGO OPORA ROSSII. In 2014 RSPP monitoring of execution of the Anti-corruption charter of the Russian business analysed the data on the implementation of anti-corruption initiatives in over 50 companies included in the Consolidated Charter members' Register. In the opinion of the experts the PJSC RusHydro anti-corruption practices were recognized among the best.

Anti-corruption efforts in the Company (in accordance with the Integrated Programme of anti-corruption efforts) are carried out according to four directions:

- improvement of the local normative documents (acts) basis;
- corruption prevention and control;
- check of the messages of possible facts of corruption (illegal actions, conflicts of interest and etc.);
- internal control system improvement.

The Joint-Stock Company declares prohibition of the corrupt practices in its activities, in this regard the main direction of anti-corruption effort is aimed at prevention and precaution of the corruption facts, such as detection and prevention of the conflicts of interest, assessment of possible corruption risks, typical for the Company activities.

Evaluation of the corruption risks is carried out in order to



identify certain business processes associated with higher probability corruption offence by employees. Within the

internal control procedures the examinations of the key business processes are carried out in terms of sufficiency

and effectiveness of control procedures available for them in order to minimize the risks of illegal actions.

#### 4.5.3.1. HELPLINE

"Helpline" functions on a permanent basis in the Company (<http://www.rushydro.ru/form/>) – communication channel for applications of the PJSC RusHydro employees and third persons (including the anonymous ones) related to the issues of fraud and corruption management,

suppression of illegal actions and conflicts of interests, the Company activities improvement.

In 2015 the Company Helpline received 522 calls, of which 111 calls were submitted for review due to the se-

lection results in accordance with the criteria established by the Rules of the Helpline functioning – 111 calls, 411 calls were rejected, as they were not related to the issues of corruption management and suppression of illegal actions.

#### "Helpline" statistics

Total amount	522
Rejected (spam)	411
Considered	105
Under Consideration	6



In 7 cases out of 111 considered on the basis of helpline calls data, facts of illegal actions and breaches of the applicants' rights were confirmed, as well as within the frame of the conducted internal investigation (Two internal investigations have been initiated as per the Helpline calls during the reporting period).

#### Measures of organizational influence:

- explanatory work of personnel;
- personnel testing in order to check knowledge;
- introduction of alterations into the applicable LNA and standards of the JSC;
- forwarding to the Internal Audit Service of the proposals on a conduct of audit of financial and operational activities.

#### 4.5.3.2. ADHERENCE TO THE CODE OF CONDUCT

The PJSC RusHydro Code of Corporate Ethics is applicable in the Company (the Code first version was approved by the minutes of the meeting of the Board of Directors of the PJSC RusHydro as of 21.05.2012 No. 152), the new version of the Code of Corporate Ethics was approved by the minutes of the meeting of the Board of Directors of the PJSC RusHydro as of 08.04.2016 No. 235. It takes into account the actual recommendations of the Code of Corporate Ethics, approved by the Bank of Russia and other requirements and recommendations issued by regulating authorities by now.

In accordance with the Code of Corporate Ethics the Company employees must:

- not give preference to any Joint-Stock Company counterparties, organisation, be independent from their influence;
- exclude the actions connected with influence of any personal, material/financial and other interests, preventing from faithful execution of its employment duties;

- observe impersonality excluding the possible influence of decisions of the political parties and public associations on its labour activity;
- not use official position for exercising influence on activity of the public authorities, self-governing authorities, organisations, officials, state (municipal) officials and citizens while solving the personal issues;
- not undertake illegal actions;
- in terms of prevention of the conflict of interests:
  - take measures to avoid occurrence of the conflict of interests and regulate of the occurred cases of conflict of interests;
  - refrain from combined job at the plants /in the organisations not included in the RusHydro Group, except for teaching, creative and scientific activities, if it does not lead to the conflict of interests;
- not recourse directly or indirectly to any personal loan or service from any individual or legal entity, having business relations with the Company or seeking such relations. It does not cover the organisations which offer such loans or services during its normal course of business.
- declare of existence or potential occurrence of personal interest, which influences or may influence the proper execution of official duties.
- The Code of Corporate Ethics also defines that the employees are prohibited:
  - to give presents in relation to execution of the official (job) duties to the state and municipal employees;
  - to accept remuneration (loans, money or other reward, services, payments for entertainment, holiday, transportation expenses) and gifts from individuals and legal entities<sup>38</sup>.



#### 4.5.3.3. PREVENTING THE CONFLICT OF INTERESTS

To identify and prevent the conflict of interests of corporate employees, the Company established requirements for senior managers of the RusHydro Group to present annual declarations on income, property and material obligations in relation to themselves and their nearest relatives. The Company has a procedure for the disclosure of the chain of beneficiaries by agents and a HR Commission is in place.

The Company established an automated process for checking declarations. The automation is implemented in the form of Affiliated Persons' Customer software<sup>1</sup>. To develop the software module intended to identify and control affiliated persons, in 2014, the Company established an automated process for collecting information and identifying conflicts of interest.

Starting from 2014, all declarations of Company employees and their relatives are submitted, processed and analysed using the software in question. The implementation of this software resulted in a considerable decrease in labour costs related to the checks of submitted data, thus allowing for the minimisation of risks associated with the human factor.

In 2015, as part of the declaration campaign (information check about income for 2014) has been analyze more than 3 thousand declarations for participation in the activities of commercial organisations and a existing of conflict of interest. After audit the disciplinary measures was applied to RusHydro Group employee.

The conflict of interests check conducted in 2015 showed that there appeared a tendency for a decrease in the

number of the conflict of interest violations by the employees, which is proof of the positive results of the Company's activities.

To provide for additional transparency, the Company made its requirements for the contractors more stringent – in particular, when concluding contracts, each contractor shall provide information and confirming documents relative to the entire chain of owners of the contractor, including the ultimate final beneficiaries. The Company contractors shall also sign a guarantee letter on non-involvement of fly-by-night companies in the performance of the contractors' contractual obligations.

As part of the procurement procedures and the procedures for the conclusion of contracts audited chain of 669 contractors' beneficiaries.



05

*PJSC RUSHYDRO*

*ANNUAL REPORT 2015*

***SUSTAINABLE DEVELOPMENT***

**325.5** RUB MILLION – OCCUPATIONAL SAFETY AND HEALTH EXPENDITURE





## 5.1. SUSTAINABLE DEVELOPMENT MANAGEMENT

The Company is aware of its responsibility (economic, social and ecological) as a producer of electrical power necessary for society. Sustainable business development is the important value and is reflected in the mission and strategic goals of PJSC RusHydro.

Ensuring operation of the generation facilities that is reliable and safe for the society and environment, taking into account the economic feasibility of funds allocation aimed at minimisation of risks and reduction of possible damage, is one of the strategic goals of the RusHydro Group.

The Company uses its best endeavors in order to increase the share of the renewable resources of energy in power balance of the country. Achievement of this goal is provided due to commissioning of new generating capacities and increase of the "clean" energy generation, produced at the available capacities of the Company under simultaneous enhancement of energy efficiency.

PJSC RusHydro is also seeking maximisation of its value /cost for the state, shareholders, society and employees.

Implementation of the activities in the field of sustainable development is performed by the designed Blocks in the area of their functional responsibility:

- social responsibility – Personnel Management Block;
- interaction with public authorities in the presence regions and creation of the favourable social climate for the effective development of the Company – Block of interaction with public authorities and civil society, administrative support and international cooperation;
- economic responsibility – Block of economic planning and investments, Block of production activities, Block of capital construction and engineering activities, Block of financial and corporate and legal administration;
- generation of electric power, enhancement of energy efficiency and ecological responsibility – Block of production activities.

The issues related to the sustainable development are systematically put on the agenda of the meetings of committees at the Board of Directors.

Areas of activities in the field of the sustainable development

- ensuring energy security of the Russian Federation
- development of the electric power industry and enhancement of energy efficiency
- positive economic and social impact in the regions of presence
- minimisation of the environmental impact, including the impact on the planet climate
- responsible personnel management practice
- enhancement of transparency and accountability
- structural interaction with the interested parties

Since 2007 PJSC RusHydro has prepared Sustainable Development Report on an annual basis, reflecting the management approaches and the most significant results of the Company's activities in the economic, ecological and social spheres.

## 5.2. INTERACTION WITH STAKEHOLDERS

Traditional concept of the sustainable development provides that this is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (The UN International Commission for Environment and Development, 1987). This approach may be implemented only taking into account the interests of the key stakeholders (interested parties) upon structural interaction with them and integration of

this practice into all business processes of the Company.

By virtue of scale and specific character of the activities the RusHydro Group has a wide range of the interested parties. The focused work with the stakeholders is aimed first of all at achieving the Company's strategic goals.

Due to existence of several areas of the core activities (electrical power generation, sales, development of in-

novative technologies, etc.) each area has its interested parties, and the Company builds systematic and planned interaction with them. At the same time, the Company organises interaction with a wide range of the interested parties through public accounting, corporate web-sites, contacts with journalists, exhibitions and forums, etc.

About stakeholders engagement see Sustainability Report

### Interaction with the territorial authorities

Aware of the need for a mutually beneficial long-term cooperation with the regional and municipal authorities, aimed at sustainable socio-economic development of regions and to increase the efficiency of activities in the regions, PJSC RusHydro concluded a cooperation agreement with the regional authorities. As of 31.12.2015, the acts of a cooperation agreement

with the authorities of the following regions:

- Republic of Altai,
- Republic of Bashkortostan,
- Republic of Dagestan,
- Republic of Khakassia,
- Krasnoyarsk Territory,
- Stavropol Territory,
- Amur Region,

- Irkutsk Region
- Moscow Region,
- Sverdlovsk Region.

The Company believes that the stable contacts with the regional authorities in the implementation of regional programmes of socio-economic development and investment projects of PJSC RusHydro will serve as the key to success in the regions.



### Interaction with the Stakeholders

Stakeholders	Stakeholders' interests	Basic mechanisms of interaction
Federal, regional and municipal authorities	<ul style="list-style-type: none"> <li>- Provision of reliable and uninterrupted power supply</li> <li>- Support of development of the regions of presence</li> <li>- Development and modernisation of electrical energy</li> <li>- Development of the renewable and alternative sources of energy</li> </ul>	<ul style="list-style-type: none"> <li>- Agreements for social and economic cooperation with the subjects of the Russian Federation</li> <li>- Investments in development of the regions of presence</li> <li>- Conduct of public hearings on the power plants construction project</li> <li>- Work in joint committees, commissions, expert groups on the issues of the fuel power complex development</li> </ul>
Shareholders and investors	<ul style="list-style-type: none"> <li>- Economic efficiency</li> <li>- Company's business continuity</li> <li>- Transparency of business processes</li> </ul>	<ul style="list-style-type: none"> <li>- Shareholders meetings and other corporate events</li> <li>- IR-presentations and IR-events</li> <li>- Disclosure of financial results</li> </ul>
Employees	<ul style="list-style-type: none"> <li>- Professional and career development</li> <li>- Safe working conditions</li> <li>- Worthful compensation terms</li> </ul>	<ul style="list-style-type: none"> <li>- Personnel development</li> <li>- Social support of employees</li> <li>- Informing and communication through internal channels</li> <li>- Cooperation with trade union organisations</li> </ul>
Regulatory and supervisory bodies	<ul style="list-style-type: none"> <li>- Observance of requirements of the Russian and international law</li> </ul>	<ul style="list-style-type: none"> <li>- Reporting</li> <li>- Working out of proposals on legislation improvement</li> </ul>
Business partners, suppliers and contractors	<ul style="list-style-type: none"> <li>- Fair competition and responsible conduct in the market</li> <li>- Transparency of activities, as well as transparency of procurement activity</li> </ul>	<ul style="list-style-type: none"> <li>- Forums, exhibitions, conferences, dialogues</li> <li>- Open and competitive procurement procedures</li> <li>- Common projects</li> </ul>
Customers and consumers	<ul style="list-style-type: none"> <li>- Sound power supply</li> <li>- Improvement of the products and services quality</li> <li>- High standards of service</li> </ul>	<ul style="list-style-type: none"> <li>- Online consultations on the web-sites of the sales companies</li> <li>- "Helpline"</li> <li>- Mobile service centers</li> <li>- Virtual reception area</li> <li>- Contact center</li> <li>- Personal accounts of the consumers of the guaranteed suppliers</li> <li>- Development of the client offices</li> </ul>
Local communities in the regions in which the Company operates	<ul style="list-style-type: none"> <li>- Improvement of quality of life in the regions of presence</li> <li>- Reduction of negative impact on the environment</li> </ul>	<ul style="list-style-type: none"> <li>- Investments in development of the regions of presence</li> <li>- Social programmes and projects, including charitable and ecological programmes and projects</li> <li>- Conduct of public hearings on the construction facilities</li> </ul>
Professional associations and non-profit organisations	<ul style="list-style-type: none"> <li>- Development and modernisation of the electrical energy industry</li> <li>- Transparency of activities</li> </ul>	<ul style="list-style-type: none"> <li>- Cooperation with specialised Russian and international organisation</li> <li>- Participation in professional and business associations</li> <li>- Cooperation with public organisations</li> </ul>
Higher Education establishments and other educational institutions	<ul style="list-style-type: none"> <li>- Targeted personnel training</li> <li>- Development of the sectoral science</li> <li>- Development of innovative technologies, incl. the ones reducing negative impact on the environment</li> </ul>	<ul style="list-style-type: none"> <li>- Cooperation in the field of scientific and research activity</li> <li>- Personnel preparation, retraining and competence development</li> <li>- Orders for R&amp;D</li> </ul>
Mass media	<ul style="list-style-type: none"> <li>- Provision of the real time access to the information about the Company's activities</li> </ul>	<ul style="list-style-type: none"> <li>- Arrangement of events for mass media</li> <li>- Initiation of publications in the all-Russian, regional and local mass media</li> <li>- Updating of information on the corporate web-sites, official blog <a href="http://blog.rushydro.ru/">http://blog.rushydro.ru/</a> and company resources in social networks (Facebook, Live Journal, Instagram, etc.)</li> </ul>

## 5.3. PERSONNEL AND SOCIAL POLICY

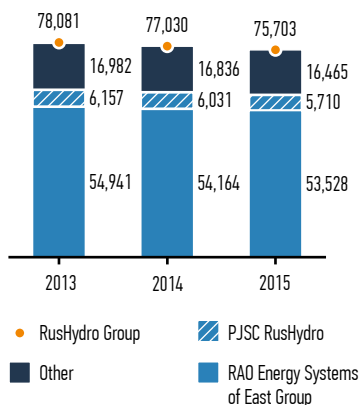
### EVENTS OF 2015

- The share of employees with higher education increased from 76.2 to 78.6%.
- 143.8 million rubles were transferred for development of human resources.
- 35% of the personnel members of the talent pool got promoted.

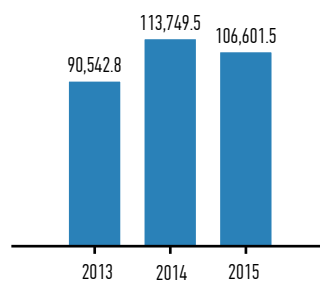
### 5.3.1. HR POLICY

#### 5.3.1.1.1. PERSONNEL CHARACTERISTICS

*The average number of personnel of RusHydro Group, persons*

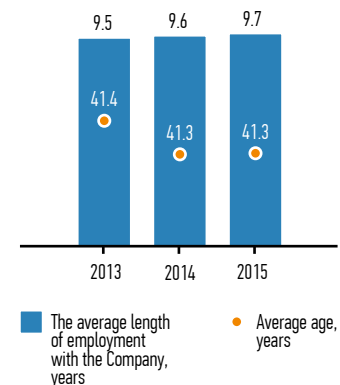


*The average monthly salary in the PJSC RusHydro \*, RUB*



\* Reducing the average monthly wage in PJSC RusHydro in 2015 due to the change in the timing of the approval and payment of performance bonuses on the basis of the Company's performance award for 2015

*Average duration of work and the average age of employees, years*



The average number of the Company's personnel decreased by 1,7 % compared to 2014 and by 3 % compared to 2013, due to the implementation of measures to optimize the number of administrative staff and mea-

asures to reduce non-core activities of the Company's branches. Average duration of work for PJSC RusHydro for 2013-2015 increased from 9.5 to 9.7 years. The average age of employees is 41.3 years.

#### 5.3.1.1.2. PERSONNEL STRUCTURE

During the last 3 years the structure of the personnel has remained stable with a tendency to a decrease in the average age and the increase in the share of highly skilled workers.

In recent years, there is a tendency to increase the proportion of professionals and employees, and reduce

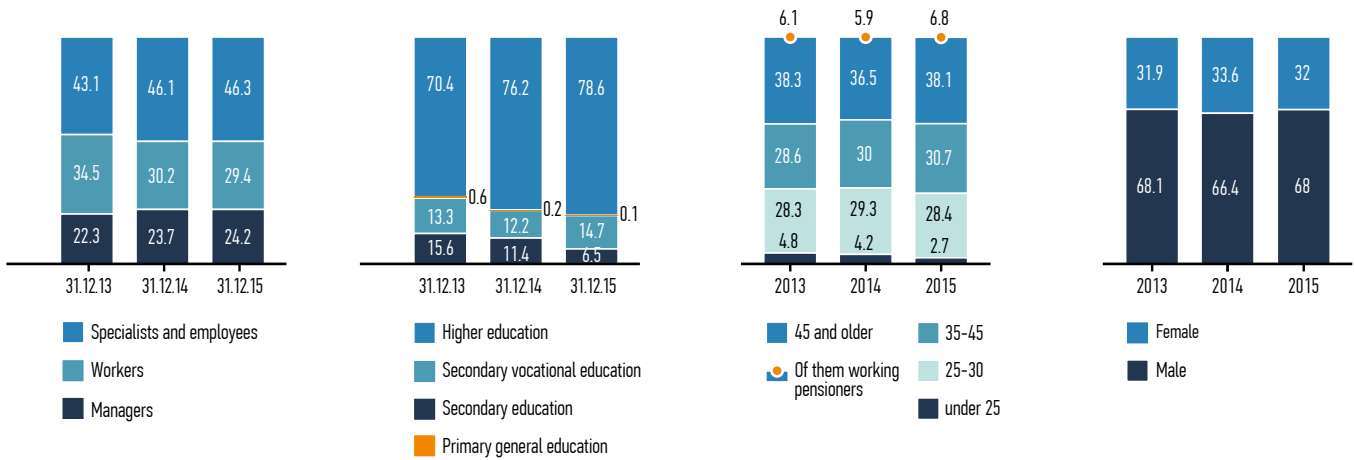
the proportion of workers. This is due to upgrading the efficiency of branches, strengthen security and improve the reliability of power facilities.

In connection with the improvement of the production process and rehabilitation and modernisation programme conducted by the HPP increased qualification require-

ments for employees. In this regard, the Company carried out a policy to attract specialists with higher education who have received appropriate training, including university graduates, which have signed a partnership agreement. At the end of 2015 the proportion of employees with higher education increased from 76.2 to 78.6%.



**Personnel of PJSC RusHydro structure by categories, by education, by age and by gender, %**



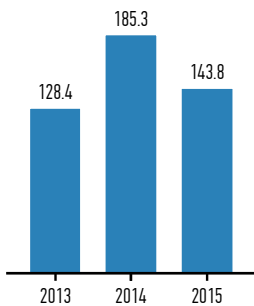
**5.3.1.2. TRAINING AND DEVELOPMENT**

Training and Development PJSC RusHydro is a strategic priority for the Company. It is connected with the requirements of regulatory authorities, production needs to meet

the new professional activities, professional development and training of personnel reserve.

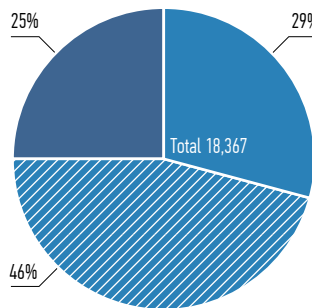
Funds aimed at the development of human resources in 2015 are 143.8 million rubles.

**Expenditures on human resource development\*, RUB million**

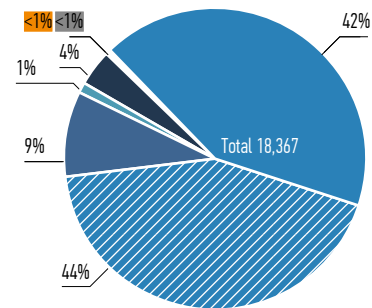


\* The costs of 2013 and 2015, unlike, do not reflect the costs of the All-Russian competition of operating personnel HPP conducted every two years.

**Training of personnel by categories and by areas of training in 2015**



Managers  
Specialists  
Workers



Normative learning according to the requirements of regulatory bodies  
Technological and regulatory training, necessary for the performance of official duties  
Organizational and managerial learning  
Project learning  
Corporate standards learning  
Higher education  
Second profession

**5.3.1.3. TALENT POOL**

In order to ensure timely and high-quality training to key positions in the Company is actively working with talent pool based on the following principles:

- Strategically - consistency problems with the personnel reserve, development objectives of the Company and formed strategic organisational competencies;

- Reliability - use of technology assessment and training, with high reliability and prognostic;
- Development - creating opportunities for professional development of employees of the Company.

In 2015 was completed training of personnel reserve of young professionals, of which 35% were promoted,

and 77% of project works reservists used in practical activities of the Company. Also, in the reporting year, preparations were current talent pool for key positions of the branches of the chief engineer of the Company services.

### 5.3.1.4. PERSONNEL ASSESSMENT

Company personnel are periodically certified for compliance with the position, in which assessed the profes-

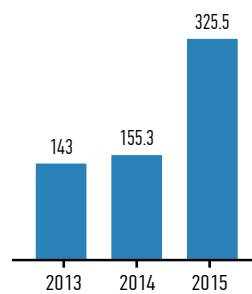
sional, business and personal qualities of employees and the results of their professional activity. Attestation are

managers, specialists and employees of the Company, regardless of sex once every three years.

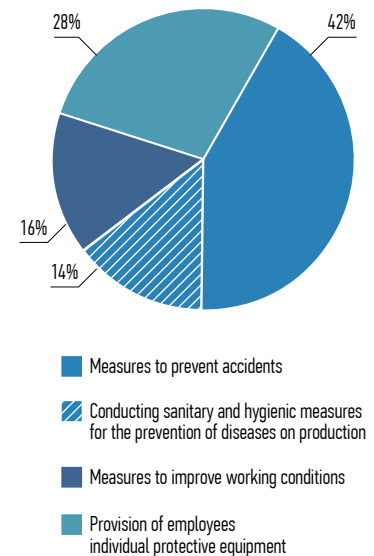
*The percentage of PJSC RusHydro branch employees who underwent performance and career development assessment, by gender, %*



*Company costs for Occupational Safety and Health, RUB million*



*Structure of costs for Occupational Safety and Health, %*



### 5.3.1.5. OCCUPATIONAL SAFETY AND HEALTH

PJSC RusHydro as a responsible and socially oriented employer improves the OSH management system and occupational safety, conform to the latest world trends. The company is taking measures to prevent accidents

and diseases at work, to improve working conditions, to provide workers with personal protective equipment, and organizes medical examinations and a special assessment of the working conditions of staff. The costs

of health and safety in the Company in 2015 amounted to 325.5 mil rubles. The cost of providing workers with personal protective equipment in 2015 amounted to 91.7 mil rubles.

## 5.3.2. SOCIAL POLICY

RusHydro's Social Policy was adopted in 2013 to address the problems of forming long-term human resource management as a major asset, staffing new facilities, performing production programmes and attracting young professionals into the industry.

### Voluntary medical insurance

Voluntary medical insurance (VMI) is a part of the benefits package of the Company employees. The Programme covers 100 % of the personnel, except part-time employees and employees on trial. Within the VMI, the services are rendered for outpatient care, emergency and planned hospital treatment, emergency medical services, insurance of the persons travelling abroad. Furthermore, within the programme the employees may

pass preventive medical examination, vaccination and preventive examinations.

### Non-state pension provision

In 2015, PJSC RusHydro as a socially responsible Company continued implementation of the programmes of the non-state pension provision (NSPP) of its employees. The Company partner's for the NSPP programme is the JSC Non-State Pension Fund of Electrical Energy.

NSPP includes several types of pension plans and programmes providing the financing of pension accruals for different target groups of employees. The most popular pension plan is the parity one, providing the Company participation in formation of the employee's pension

accruals on the parity basis.

Over 50 % of employees took part in the NSPP programmes in the year 2015.

The employees' provision with decent replacement income after retirement makes it possible to predict and manage the need in personnel of the required qualification, timely plan the replacement of the vacant positions and solve the task of reducing average age of the labour force.

### Personnel housing improvements

In 2015, PJSC RusHydro continued to implement the programme of the personnel housing improvements. The priority right for participation in the programme is granted



to the young specialists under 30 years old, not having their own dwelling; to the specialists invited for work in the branches and moved in this connection from another location; to the key and highly-skilled professionals.

### Collective contracts

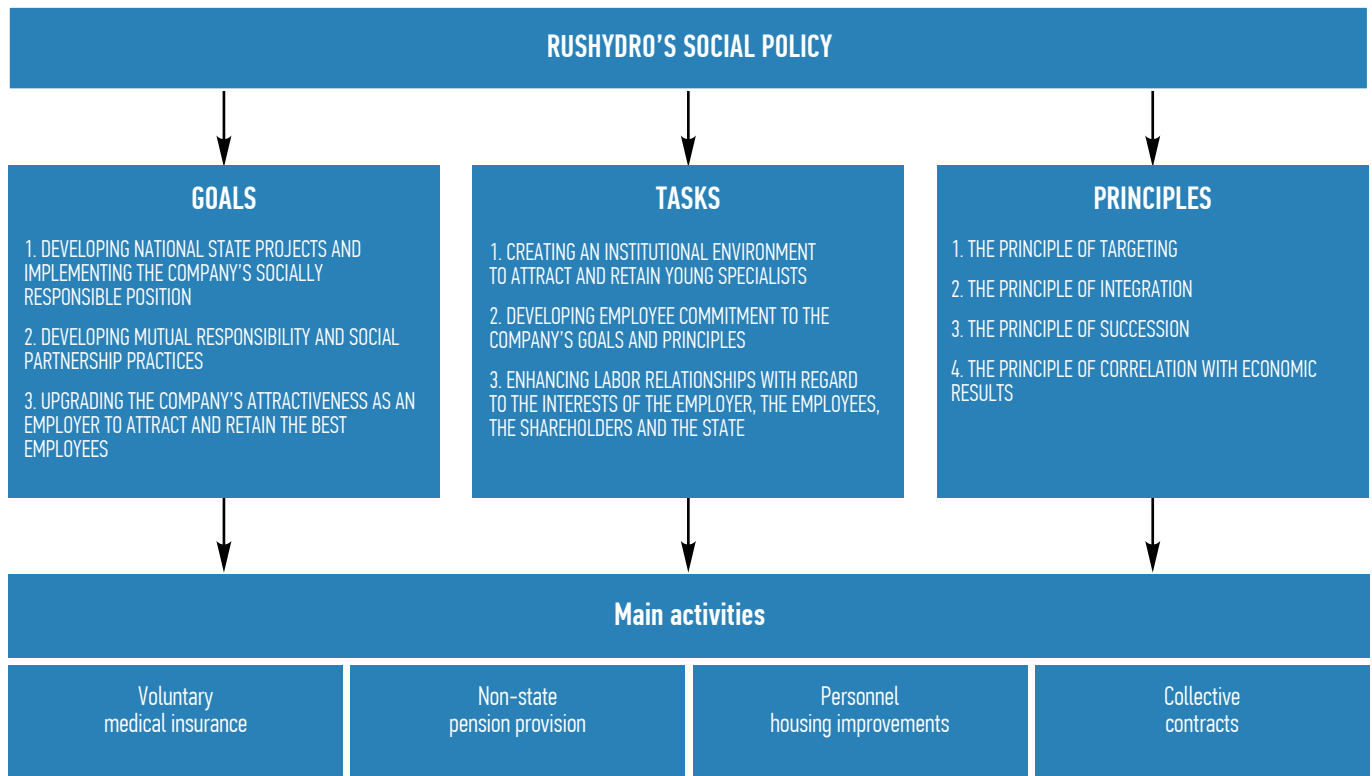
In 2015, the collective contracts concluded in January,

2014 were applied in all the Company branches.

The collective contracts specify the provision of the branch employees with such social benefits and guarantees as: voluntary medical insurance, non-state pension provision, housing improvements, payments in connection with marriage registration and birth of a child, reimbursement of expenses for children support at the

pre-school educational institutions, etc. The collective contracts also cover the benefits for the persons willing to become adoptive or foster parents.

The implemented Social policy enables the Company to develop dynamically, remaining competitive and attractive in the labour market in the regions of its presence.





## 5.4. SAFETY AND ENVIRONMENTAL PROTECTION

### EVENTS OF 2015

- From 774.21 to 763.65 million m<sup>3</sup> decreased the amount of water intaken.
- From 603.82 to 587.67 million m<sup>3</sup> by volume of wastewater.
- The proportion of reused water decreased by 6.2 %.

#### 5.4.1. INDUSTRIAL SAFETY

Ensuring a reliable energy supply and the safe operation of equipment and hydro-power engineering for the population and the environment is one of RusHydro's key strategic objectives.

Approaches used to ensure energy supply reliability and the safety of equipment, buildings and structures are fixed in the provisions of RusHydro's Technical Policy,

which came into effect in 2011. The instrument used to implement the Technical Policy is the Production Programme which is developed based on the results of evaluating equipment condition, the forecasts for energy consumption in the regions and the water inflows of rivers, as well as industry standard requirements. The Programme's activities are planned for the medium (6

years) and long-term (15 years).

To identify and analyse insurance risks at production assets, the Company conducts surveys (independent technical expert assessment), and introduces a system of key performance indicators (KPIs) and limits (control figures), including monitoring how the object can be protected in the event of natural disasters.

#### 5.4.2. ECOLOGICAL SAFETY

The Company fulfills Russian legislative requirements in the field of environmental protection; participates in the performance of Russia's obligations that arise from international conventions within the environmental protection sphere, as ratified by the Russian Federation; and aims to continually reduce its (negative) influence on the environment and to prevent environmental pollution.

The introduction of new techniques and technologies under the Comprehensive HPPs Modernisation Programme is carried out subject to the Company's Environmental Policy objectives and principles, which reduces production's environmental impact.

The Company supports the industry and international initiatives to reduce industrial load on the environment and the population, and to promote and establish environmental responsibility standards. The Company carries out compulsory compensatory measures to reduce the environmental load in zones impacted by the Company's facilities:

- Reconstruction of existing equipment and new treatment facilities within the framework of the comprehensive reconstruction of HPP;
- Replacement of hydraulic units of HPP with modernized units, allowing to minimize the impact on aquatic biological resources, as they pass through hydraulic turbines tract; to eliminate the leakage of oil into the environment in the process of operation of turbine equipment;
- Replacement of oil-filled electrical equipment for equipment not containing oil (vacuum and gas-insulated);
- Reconstruction of gas-cleaning equipment;
- Implementation of the programme of switching RAO energy system of the East Group facilities from coal to gas;
- Installation of fish-protection equipment at HPP under construction;
- Reconstruction and repair of hydraulic structures to maintain the proper condition of water protection zones, conducting shore protection works;
- Reproduction of aquatic biological resources at the expense of compensation of harm;
- Voluntary action on populating water bodies with fish and improvement of natural areas and protected areas;
- Voluntary environmental programmes aimed at promotion of careful attitude to the nature (cooperation with nature reserves, national parks and other protected natural areas, as well as educational institutions and environmental organisations).



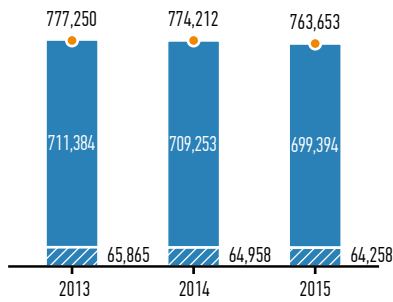
5.4.2.1. WATER USE

The RusHydro Group facilities are drawing water from surface sources, from underground sources (wells) and receives water through municipal water supply systems.

92% of the water intake of the Group falls on RAO Energy Systems of the East Group, this percentage has been stable over the past three years. The intake of RAO Energy

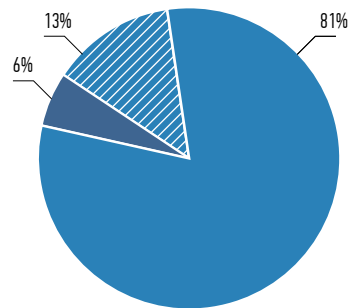
Systems of the East Group is carried out mainly from surface water (81%), the rest of the Group RusHydro almost entirely (98%) water intake from surface water bodies.

*Total water withdrawal at Group RusHydro, thousand m<sup>3</sup>*



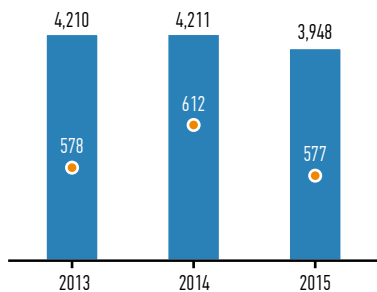
- Group RusHydro
- RAO Energy Systems of the East Group
- ▨ Other

*The structure of water intake in 2015, %*



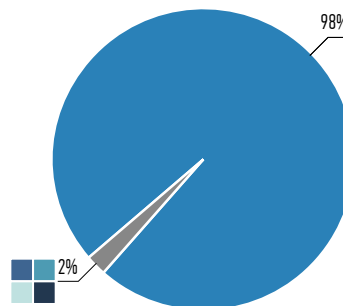
- Surface water, including swamps, rivers, lakes, etc.: 566,880 thousand m<sup>3</sup>
- ▨ Municipal water systems: 92,266 thousand m<sup>3</sup>
- Groundwater bodies: 40,288 thousand m<sup>3</sup>

*Percentage and total volume of reusable water*



- The total volume of reusable water, thousand m<sup>3</sup>
- The share of recycled and reused water, % from total amount of abstracted water

*The structure of water intake in the Group RusHydro (not including PJSC RAO Energy Systems of the East Group), 2015, %*



- Surface water, including swamps, rivers, lakes, etc.: 62,768 thousand m<sup>3</sup>
- Groundwater bodies: 545 thousand m<sup>3</sup>
- Municipal water systems: 334 thousand m<sup>3</sup>
- From other water supply: 606 thousand m<sup>3</sup>
- Rainwater, collected and stored by the organization: 6 thousand m<sup>3</sup>

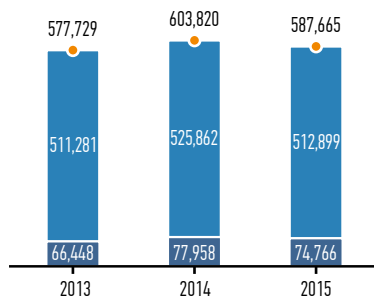
5.4.2.2. DISCHARGES

87 % of the wastewater discharge Group accounts for PJSC RusHydro RAO Energy Systems of the East Group", this percentage has been stable over the past 3 years.

More than 50 % of wastewater discharges of RAO Energy Systems of the East Group normative clean, 35% are contaminated without treatment. Other companies

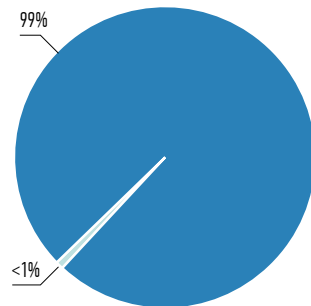
of the Group in 2015 dropped more than 90 % of the standard pure water.

**The total volume of wastewater discharges to water bodies, thousand m<sup>3</sup>**



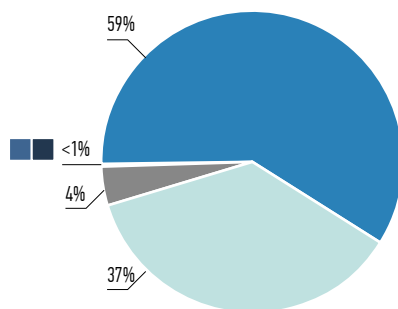
- Group RusHydro
- RAO Energy Systems of the East Group
- Other

**The total volume of Disposals by the receiving entity, thousand m<sup>3</sup>/year**



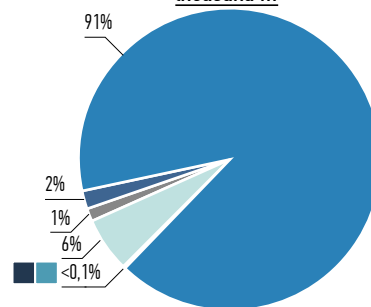
- In a water body: 587,665 thousand m<sup>3</sup>/year
- On the terrain: 4,263 thousand m<sup>3</sup>/year

**The total volume of wastewater discharges to water bodies, RAO Energy Systems of the East Group thousand m<sup>3</sup>**



- Standard quality clean water (no treatment): 341,554 thousand m<sup>3</sup>
- Water treated to standard quality at the mechanical treatment plant: 225 thousand m<sup>3</sup>
- Water treated to standard quality at physical/chemical treatment plants: 433 thousand m<sup>3</sup>
- Insufficiently treated polluted water: 23,804 thousand m<sup>3</sup>
- Polluted water without treatment: 211,409 thousand m<sup>3</sup>

**The total volume of wastewater discharges to water bodies, Group RusHydro (instead of RAO Energy Systems of the East Group), thousand m<sup>3</sup>**



- Standard quality clean water (no treatment): 67,709 thousand m<sup>3</sup>
- Water treated to standard quality at the mechanical treatment plant: 1,428 thousand m<sup>3</sup>
- Water treated to standard quality at biological purification plants: 16 thousand m<sup>3</sup>
- Water treated to standard quality at physical/chemical treatment plants: 41 thousand m<sup>3</sup>
- Insufficiently treated polluted water: 1,018 thousand m<sup>3</sup>
- Polluted water without treatment: 4,556 thousand m<sup>3</sup>



## 5.5. ENERGY EFFICIENCY

### EVENTS OF 2015

- Total investment in energy efficiency amounted to 35 538 million rubles.
- The overall effect of the effort aimed at increase of energy efficiency amounted to 268.9 thousand. KW-h.

#### 5.5.1. PROGRAMME IN THE FIELD OF ENERGY SAVING AND ENHANCEMENT OF ENERGY EFFICIENCY OF THE PJSC RUSHYDRO

Hydropower is the main business segment of the Company, is one of the most energy-efficient electric power sectors. In addition, the company actively participates in the development of electricity generation based on other renewable sources - tidal, geothermal and wind energy, which are environmentally friendly and have a high degree of energy efficiency. At the sites of PJSC RusHydro there is scope to further improve energy efficiency through the modernisation of the main equipment and the introduction of innovative energy-saving technologies, optimizing the use of water resources, as well as reducing power consumption for own needs.

The Company adopted the Programme<sup>39</sup> concerning energy saving and energy efficiency improvement of PJSC RusHydro for the 2010 to 2015 period. In 2015, the Programme<sup>40</sup> concerning energy saving and energy efficiency improvement of PJSC RusHydro for the 2016- to 2020 period was approved. The Programme conforms to the Technical policy of PJSC RusHydro and contains the list of the main works on enhancement of efficiency of using energy and water resources and a number of the high-priority energy saving solutions. The programme is prepared based on the results of the energy survey carried out in 2010-2014.

Energy Saving Programme for 2010-2015 done.

In 2015 26 energy audits of the production facilities were conducted, included in 10 branches of the PJSC RusHydro:

The Volzhskaya HPP, the Zhigulevskaya HPP, the Saratovskaya HPP, the Kamskaya HPP, the Zagorskaya PSPP, the Votkinskaya HPP, the Cascade of the Kubanskiye HPPs, the Cheboksarskaya HPP, the Sayano-Shushenskaya HPP named after P.S. Neporozhniy, the Dagestan Branch.

According to the audit results energy performance certificates of the branches have been developed, programmes of energy saving and enhancement of energy efficiency, the recommendations have been prepared.

##### 5.5.1.1. THE PROGRAMME IMPLEMENTATION RESULTS

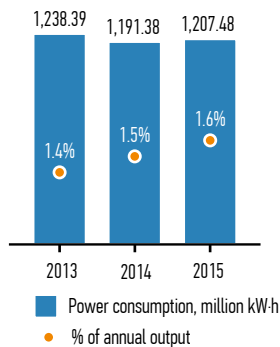
*Volume by type of energy resource consumption, PJSC RusHydro*

Type of energy resource	Consumption			
	2013	2014	2015	2015
Thermal energy, Gcal	23,486	23,618	23,856	23,742
Electrical energy, millions, KW-h	1,238.393	1,191.381	1,207.481	941,451
Gasoline, liter	1,472,341	737,726	1842	53
Diesel fuel, l.	723,809	392,129	17,955	515
<b>Gas Natural, m<sup>3</sup></b>	100,571	55	58,668	421

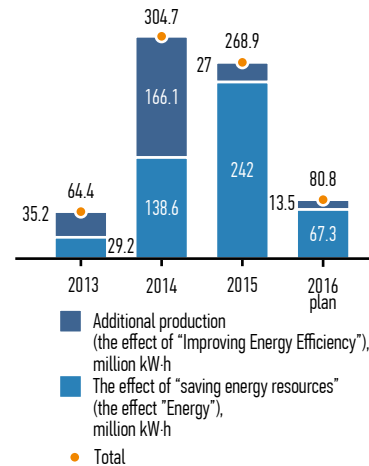
As a result of the measures undertaken in terms of improving energy efficiency, electric power consumption for the needs of the power plant reduced by 4.24 % as compared with the 2013 level.

Moreover, in 2015, due to selection of the optimal equipment composition, optimisation of the repairing campaign, work of the hydroelectric power plants at the exceed values of pressure heads in relation to long-time average annual values, and decrease of sterile spill by redistribution of the reserves of the automatic secondary regulation to the other HPP cascade, the additional electrical generation is provided in the volume of 590.3 mn kWh, that is equivalent to fuel saving in the volume of 203.35 thousand tonnes of fuel equivalent per year.

***Dynamics of energy consumption  
and the share of consumption  
from the annual output of PJSC RusHydro***



***The effects of "Energy Saving"  
and "Energy efficiency", million kW-h***



### 5.5.1.2. DEVELOPMENT OF THE FORECASTING SYSTEM OF THE AUXILIARY POWER VOLUMES

The possibility of the accurate forecasting of the generated energy volumes in the medium and long-term perspective is an important condition for optimisation of the mode management. For these purposes the RusHydro Group constantly develops its own forecasting system. In 2015:

- the project was completed on creation of network of hydro and meteorological observations on the rivers Sulak and Samur (the Dagestan Branch). For the period 2012-2014 21 points were assembled. Within the year 2015 the works were carried out on calibration and settings for validity check of the submitted information;
- the project was completed on creation of the network of hydro and meteorological observations of the Sayano-Shushenskaya HPP reservoir : 8 automated level gauges (ALG) were created, as well as 20 aviation snow-measuring points in the reservoir basin and 2 ALG in the tail bay of the SSH HPP. The activities were initiated on transfer of ownership rights for the objects of observation network of the FSBI "Srednesibirsky UGMS" (Central Siberian Administration for Hydrometeorological and Environmental Monitoring);
- within the implementation of the system of the medium-term planning at the HPP of the Far East and Siberia:
- the module of the medium-term planning was implemented in the industrial operation for the Novosibirskaya, the Sayano-Shushenskaya and Mainskaya HPP;
- the medium-term planning module development continues for the HPP of the Angaro-Enisey Cascade, Zeyskaya, Bureyskaya, Kolymskaya and Ust-Srednekanskaya HPP;
- the module has been developed for collection, processing, storage and distribution of actual and forecasting hydrometeorological and aquicultural data in the territory of the Bureysky reservoir basin.

### 5.5.1.3. ENERGY CONSUMER STIMULATION TO IMPROVING ENERGY EFFICIENCY

The RusHydro Group provides services of energy surveys and energy performance certificates both to the Group's organisations, and external enterprises and consumers.

In 2015, the Company continued to develop the regional centers of energy saving and energy efficiency that were created by the power supply subsidiary companies in different regions of Russia. Thus, the Center of energy efficiency that was created on the basis of the PJSC Ryazan Energy Sales Company and equipped under the principle

of "Smart house", consists of five sections — training and presentations, domestic, administrative office, industrial equipment and street lighting, where the samples of the energy-efficient equipment and domestic appliances are presented. There is a possibility in the centre to visualise the process of consumption and receipt of economic effect from conduct of certain energy-efficient activities.

With support from Ministry of Energy of the Russian Federation and Ministry of Education and Science of the

Russian Federation within the frames of the year of light and light technologies based on the regional centers of energy efficiency, and branches of the PJSC RusHydro, an all-Russian lesson on energy efficiency and solicitous attitude to energy resources was conducted in 2015. The lessons were conducted in 21 regions at schools, lyceums, adult education centers, orphan asylums. 3800 people participated in this event.

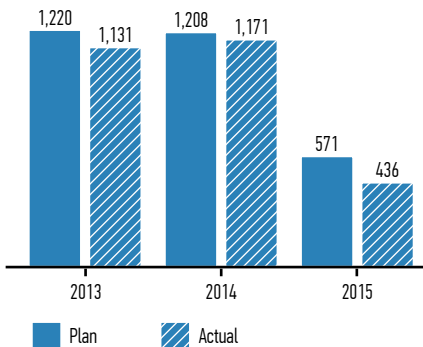


## 5.6. CHARITY

Charity and Sponsorship Programme embodied by the Company is based on the Concept of charity and sponsorship activities and on the Statement of charity and sponsorship activities of PJSC RusHydro.

The Programme bears a purposive character and includes projects to support orphan asylums, educational and medical organisations for children, educational programmes and sports for children. Also the Programme supports charity environmental actions and projects preserving cultural and religious heritage.

### Planned and actual charity expenditures\* RUB million



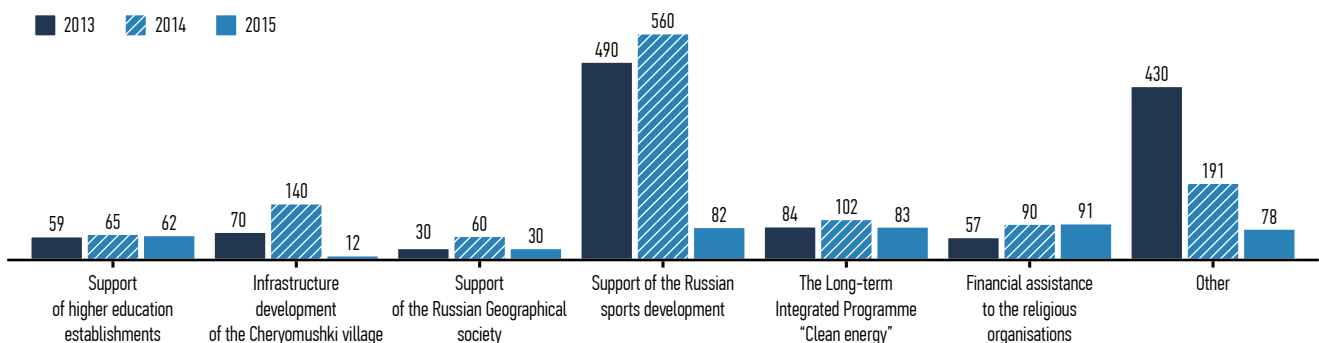
\* The difference between the financial amounts of 2013-2015 is due to a onetime actions of financial support to HC "Dynamo" (500 million rubles) and FC "Alania" (440 million rubles). This way the Company participated in the realisation of the state programme of development of hockey including the support of junior sports, education of coaches, and theory combined with methodical work.

Starting from 2014 the RusHydro Group has developed the corporate volunteering and supported individual participation of the employees in different social projects. The Company conducts the charitable actions on fund raising for the people in need, fairs with participation of the charitable funds, blood drive on a regular basis. In 2015, the amount of donations of only the central office employees has been over 930 thousand rubles.

### The main Charity Projects

Support areas	Projects
Support of higher education establishments	Financial support of the education institutions: <ul style="list-style-type: none"> <li>- The Moscow State University of Civil Engineering,</li> <li>- The Saint Petersburg State Polytechnical University,</li> <li>- The Moscow Power Engineering Institute and its Branch in Volzhsky,</li> <li>- The Sayano-Shushenskiy Branch of the Siberian Federal University,</li> <li>- The Saint Tikhon Academy of Humanities.</li> </ul>
Infrastructure development of the Cheryomushki village	The comprehensive development programme of the infrastructure of the Cheryomushki Village on updating and modernisation of the social objects of the rural settlement is completed. In 2015, Production-and-training information and innovative center was built and completely equipped with modern equipment in Cheryomushki. Additionally the company helped to organise the repair and partial re-equipment of kindergardens "Malysh" and "Schelkunchik" v. Cheryomushki.
Support of the Russian Geographical society	Creation of total grant funding for studying of catastrophic natural phenomena and rare animal species, and financing of the publishing activities and organisation of ecological and geographical expeditions.
Support of the Russian sports development	RusHydro Group support the RF Whitewater Federation, the Practical Shooting Federation of Russia, the Russian Union of Martial Arts and other organisations.
The Long-term Integrated Programme "Clean energy"	"Clean energy" programme implements in terms of the basic directions: assistance to orphan asylums and boarding schools, charitable ecological projects, support of the children sport and educational projects in the Company presence regions. Also The federal projects include: <ul style="list-style-type: none"> <li>- The "Ecological paths" project on organisation of tours jointly with the reserves, on the recreation development. In 12 regions of the Company's presence 14 ecological paths are opened, including five paths in the reporting year.</li> <li>- The "Born by Energy" action which equips maternity hospitals and the maternity wards of hospitals in the cities in which the Company's facilities are located with expensive diagnostic and rehabilitation equipment.</li> </ul> In cooperation with DETGIZ Publishing House a book was published for children named "From the mast to the keel".
Financial assistance to the religious organisations	Financing of the construction of the Church of the Saint Knyazh Alexandr Nevsky in Khoroshev (Moscow) and support of the Sretensky stavropighial monastery.
Other	<ul style="list-style-type: none"> <li>- In 2015, the company supported the charitable funds: "Galchonok" ("young daw"), "Shag vmeste" ("step together"), helping the children with ICP, the hospice relief fund "Vera" ("belief"), Social Organisation for Persons with Disabilities "Center of humanitarian programmes", "Books with pictures for little blind children".</li> <li>- Also the company supported the activities timed to coincide with the 70-th anniversary of Victory in the Great Patriotic War.</li> </ul>

### The main Charity Projects expenses, RUB million.





## CONTACTS

<b>Full name</b>	<b>"Public Joint Stock Company Federal Hydro-Generating Company – RusHydro"</b>
Abbreviated name	PJSC RusHydro
PSRN	1042401810494
TIN	2460066195
IEC	246601001
OKPO	75782411
OKVED	40.10.12
number and date of issue of the certificate of state registration as a legal entity	1042401810494 26.12.2004
main activity	40.10.12 Production of electricity by hydroelectric power plants
Information about the listing of strategic enterprises and strategic joint-stock companies	Presidential Decree of 21.05.2012 №688 PJSC "RusHydro" on the list of strategic enterprises and strategic joint-stock companies, approved by Presidential Decree of August 4, 2004 N 1009 "On approval of the list of strategic enterprises and strategic joint-stock companies"
<b>Location</b>	43 Dubrovinskogo Street, Bldg 1, Krasnoyarsk, the Krasnoyarsk Region, Russia, 660017
Mailing address	7 Malaya Dmitrovka Street, Moscow, Russia, 127006
Telephone	+7 (800) 333-8000
Fax	+7 (495) 225-3737
E-mail	office@rushydro.ru
Internet address in Russian	www.rushydro.ru
Internet address in English	www.eng.rushydro.ru
<b>Bank Details</b>	
Current account	40702810438090001390
Bank	PAO Sberbank, Moscow, Russia
BIC	044525225
Correspondence account:	3010181020000000225
<b>Shareholder relations</b>	
Hotline Telephone	+7 (800) 555-9997 (free for residents of all Russian regions)
E-mail	rushydro@rrost.ru
Corporate Governance and Property Management Department, Corporate Secretary	Maxim Valentinovich Zavalko
Telephone	+ 7 (800) 333-80-00 ext. 1025
E-mail	corpupr@rushydro.ru
<b>Registrar</b>	
Full name	Joint Stock Company Registrar R.O.S.T.
Abbreviated name	JSC Registrar R.O.S.T
<b>Location</b>	13 Stromynka Street, Building 18, Moscow, Russia
Mailing address	P.O. Box 9, 18 Stromynka Street, Moscow, Russia, 107996
Telephone	+7 (495) 771-7335
Fax	+7 (495) 771-7334
E-mail	rost@rrost.ru
Internet address in Russian	www.rrost.ru
License No	№ 10-000-1-00264 as of 03.12.2002

**Investor relations**

IR Department	Alexander Yevgenyevich Goldin
Telephone	+7 (800) 333-8000 ext.1319
IR Department	Timur Gumyarovich Ahmedjanov
Telephone	+7 (800) 333-8000 ext.1607
E-mail	ir@rushydro.ru

**Media relations**

First Deputy Director General, State Secretary	Tsoy Sergey Petrovich
Telephone	+7 (800) 333-8000, ext.1853
E-mail	press@rushydro.ru

**Depository Bank (Depository Receipt)**

Full name	The Bank of New York Mellon
	Roman Kumitts
Telephone	+1 212 815 5984
E-mail	roman.kumitts@bnymellon.com
	Maria Mozhina
Telephone	+1 212 815 28 46
E-mail	maria.mozhina@bnymellon.com

**Depository (bonds)**

Full name	National Settlement Depository
Abbreviated name	NSD
<b>Location</b>	12 Spartakovskaya St., Moscow, Russia, 105066
Mailing address	+7 (495) 234-48-27
Telephone	+7 (495) 956-09-38
Fax	bonds@nsd.ru
E-mail	www.nsd.ru

**Auditor**

Full name	Joint Stock Company PricewaterhouseCoopers Audit
Abbreviated name	JSC PwC Audit
<b>Location</b>	10 Butyrsky Val Street, Moscow, Russia, 125047
Mailing address	+7 (495) 967-6000
Telephone	+7 (495) 967-6001
Fax	pwc.russia@ru.pwc.com
E-mail	www.pwc.ru

## GLOSSARY OF KEY TERMS AND ABBREVIATIONS

<b>Company, RusHydro</b>	PJSC RusHydro, including its branches and executive office
<b>The RusHydro Group</b>	PJSC RusHydro, including its subsidiaries and dependent companies (SDCs)
<b>PJSC RAO Energy Systems of the East</b>	Public Joint Stock Company RAO Energy Systems of East
<b>RAO Energy Systems of the East Group</b>	PJSC RAO Energy Systems of the East, including its subsidiaries and dependent companies
<b>FTS</b>	Federal Tariff Service
<b>Gcal</b>	Gigacalorie – a unit of measurement for heating energy
<b>Gcal/h</b>	Gigacalorie-Hour – a unit of measurement for heating power
<b>HPP</b>	Hydropower plant – the power plant as a unified production and technological complex, combining hydro-technical constructions and equipment that transforms mechanical energy from water into electric energy. In the text of the annual report, except when otherwise noted, tidal power stations and PS HPPs are included as HPPs
<b>HTC</b>	Hydro-technical constructions – dams, hydropower plant constructions, spillways, drain and water-discharge constructions, tunnels, channels, pumping stations, navigation locks, boat lifts; buildings used to protect from floods and the destruction of water reservoir shores; dam constructions, protecting the liquid waste reservoirs of production and agricultural organisations; devices that protect against washing-away and other constructions designed to use water resources and to prevent any negative impact from water and liquid waste
<b>IES</b>	Integrated Energy System (IES) – aggregated production and other electricity property assets, connected via a unified production process (including production in the form of the combined generation of electrical and heat energy) and the supply of electrical energy under the conditions of a centralized operating and dispatch management.
<b>Installed capacity</b>	Total nominal active capacity of generators at electric power plants which are part of the Group's structure
<b>JSC RAO UES of Russia</b>	The Russian energy company (until July 1st, 2008). Full name – Open Joint Stock Company Unified Energy System of Russia. The Company previously united almost all of Russia's energy sector under its umbrella. JSC RAO UES of Russia ceased to exist as of June 30th, 2008 due to comprehensive energy sector reform
<b>kW-h</b>	Kilowatt-Hour – a unit of measurement for produced electricity
<b>MW</b>	Megawatt – a unit of measurement for electrical capacity
<b>NM WEM</b>	The new model of the wholesale electricity and capacity market foresees the transformation of the regulated sector of the wholesale market into a system of regulated contracts (RCs), concluded by wholesale market participants. Electricity and capacity will be sold under RCs. The volume of electricity not sold under RCs will be sold/purchased at free prices on the "day-ahead market" (at prices established as a result of the competitive choice of price applications and with free agreements, where prices are regulated by participants in the agreement(s)). At the same time, if the volume from the price application of purchases did not undergo competitive choice on the day-ahead market, the purchaser will have to buy the respective volumes for consumption on the balancing market
<b>PS HPP</b>	Pump storage hydropower plant – pump-storage power plant, which works by transforming electricity from other power plants into the potential energy of water; during reverse transformation, accumulated energy is contributed to the energy system primarily to cover deficits that may occur during peak load periods
<b>HTC</b>	Hydro-technical constructions – dams, hydropower plant constructions, spillways, drain and water-discharge constructions, tunnels, channels, pumping stations, navigation locks, boat lifts; buildings used to protect from floods and the destruction of water reservoir shores; dam constructions, protecting the liquid waste reservoirs of production and agricultural organisations; devices that protect against washing-away and other constructions designed to use water resources and to prevent any negative impact from water and liquid waste



<b>RC</b>	Regulated contracts are concluded by participants in the wholesale market for a term of 1 to 3 years. The prices in each of these agreements are tariffs for energy suppliers and the capacity set by the Russian FTS. The primary condition of the RC is "take or pay". The supplier has to provide the agreed upon amount of electricity (capacity) and (only for electricity) buy in the market at competitive prices on either the day-ahead market or via a free bilateral agreement. The purchaser has to pay for the agreed upon amount independent of its own planned consumption
<b>RES</b>	Renewable energy sources – examples include: hydro, solar, wind, geo-thermal, hydraulic energy, energy from water currents, waves, tides, the temperature gradient of sea water, temperature differences between air masses and the ocean, heat from the Earth, animal bio-masses and vegetable and household waste
<b>SDCs</b>	Subsidiaries and dependent companies – entities, in which another (main) economic entity due to its majority or greater participation in the charter capital or in accordance with a concluded agreement or in another way, has the opportunity to determine the decisions adopted by said entities.
<b>TGCs</b>	Territorial generating companies – companies formed during the inter-regional integration of generating assets of JSCenergy (regional generating companies), except generating assets that are included in the OGK(s)
<b>WEM, WECM</b>	Wholesale electricity market (capacity) – sphere for the turnover of electrical energy (capacity) within the framework of Russia's integrated energy system within the country's unified economic space with the participation of large electricity producers and consumers that have the status of wholesale market objects, confirmed in full accordance with the Russian Federal Law "On the electric power industry" (by the Russian Government). The criteria for including large electricity producers and consumers in the category of large producers and large consumers are also established by the Russian government
<b>WGCs</b>	Generating companies of the wholesale electricity market (WEM) – companies formed on the basis of the power plants.
<b>WPS</b>	Wind electric plants include two or more wind energy installations designed to convert wind energy into electric energy and its transmission to consumers



## FOOTNOTES

- 1 Rating 8 has been awarded to 4 Russian companies: PJSC RusHydro, OJSC MMK, AKF Sistema OJSC, and TransContainer PJSC (<http://rid.ru/nacionalnyj-rejting/rezultaty-nrku>)
- 2 Boguchanskaya HPP is not included in the consolidation perimeter of the RusHydro Group, it is a joint venture of the Group.
- 3 The Strategic Plan approved by PJSC RusHydro's Board of Directors (Minutes № 100 as of June 16, 2010).
- 4 Instruction № Pr-3086 as of 27.12.2013.
- 5 Minutes № 3 as of 30.01.2014.
- 6 Minutes № 16 as of 15.10.2014.
- 7 Minutes № 206 as of 21.11.2014.
- 8 Minutes № 218 as of 22.06.2015
- 9 Minutes № 212 as of 03.04.2015
- 10 Minutes № 228 as of 11.12.2015
- 11 Minutes № 227 as of 16.11.2015
- 12 Directive from 7/17/2014 № 4955p-P13
- 13 Minutes № 63 as of 14.11.2014
- 14 Minutes № 206 as of 21.11.2014
- 15 Instruction № ISH-P13-2583as of 15.04.2014
- 16 Order of 23.01.2003 № 91-p
- 17 Minutes № 227 as of 16.11.2015
- 18 KPIs are calculated in accordance with the Method of calculation and evaluation of key performance indicators Long-term development programme of RusHydro Group, approved by the Board of Directors (Minutes as of 21.11.2014, No. 206), with amendments and additions, in accordance with the decisions of the Board of Directors (Minutes as of 03.04.2015 № 212 and Minutes as of 22.06.2015 № 218).
- 19 Achieving the target level of TSR.
- 20 At PJSC RusHydro.
- 21 At PJSC RusHydro is the reverse and shows the number of people per 100 MW of available capacity. Its decline shows the growth of labour productivity.
- 22 At PJSC RusHydro.
- 23 P.4 Minutes as of 25/12/2015 No 230: Admit the key performance indicators of the long-term development programme of the Group RusHydro " Compliance with the capacity commissioning schedule for core new construction facilities " in terms of postponement of entering project "Construction of the Sahalin GRES-2 (1st stage) ", " Construction of Yakutskaya GRES-2 (1st stage) ", " Construction of CHP in Sovetskaya Gavan "
- 24 This section of the report prepared based on the consolidated financial statements of RusHydro Group for 2015 in accordance with International financial reporting standards.
- 25 Taking into account government subsidies.
- 26 Calculated in accordance with the Method of calculation and evaluation of key performance indicators of PJSC RusHydro, approved by the Board of Directors (minutes dated 26.12.2014 No. 2018), taking into account changes and the additions brought by the decision of the Board of Directors from 22.06.2015 (extract from minutes №218
- 27 In this Report subsection, General revenues include state subsidies; operating expenses are presented excluding impairment losses.
- 28 In item "other expenses" included: loss on disposal of fixed assets, the cost of water use, travel expenses, expenditure on social services, expenditure on purchase of petroleum products for resale loss/(gain) on disposal of subsidiaries and associated companies, the income associated with the reduction of payments to pensioners and a reduction in the pension system, other costs
- 29 The Investment Programme of RusHydro Group includes the investment programmes of PJSC RusHydro and its subsidiaries engaged in the construction of new generating facilities, and the Investment Programme of RAO Energy Systems of the East Group.
- 30 RF Government Decree № 374 dated 28.04.2014 "On Amendments to the Rules of the wholesale market of electric energy and power regarding features of the participation in the wholesale market of electric power industry entities that own hydroelectric power plants located in the second price zone of the wholesale market": from 05.01.2014 to 31.12. 2015 HPP's power, located in the second price zone, sold according to the results of KOM on the selling price of power under regulated contracts in the amount of 35% of the power sold according to the results of KOM.
- 31 The data are based on JSC Boguchanskaya HPP (owned by PJSC RusHydro and United Company Rusal PLC), with the HPP-2 JSC KamGEK excluding HPP-1 and HPP-3 PJSC KamGEK, held in trust PJSC RusHydro.



- 32 Resolution of the Government of the Russian Federation no.274 dd. 04/28/2014 on the introduction of amendments to the regulations of the electricity and capacity wholesale market regarding the features of participation in the wholesale market of power industry subjects owning hydroelectric power stations located in the second price zone of the wholesale market: from 05/01/2014 to 31/12/2015 the capacity of HPPs located in the second price zone shall be sold in accordance with the results of KOM at the capacity sale price as per adjustable contracts in the amount of 35% of the capacity volume sold as per the results of CPA.
- 33 Corporate Governance Code of the PJSC RusHydro provides that in exceptional cases the Board of Directors may recognize independent the candidate (member of the Board of Directors) despite the existence of any formal criteria of his connection with the Joint-Stock Company, the Joint-Stock Company significant shareholder, the significant counterparty or the Joint-Stock Company competitor, if such connection does not influence the ability of the respective person to make independent, objective and fair judgments. Guided by this recommendation of the Corporate Governance Code of the PJSC RusHydro the Board of Directors recognized independent the member of the Board of Directors of the Joint-Stock Company M. S. Bystrov.
- 34 In terms of the criterion "represents a significant shareholder" UK Corporate Governance Code of the PJSC RusHydro takes up the following position: despite the fact that the members of the Board of Directors V.V. Pivovarov and S.N. Ivanov are proposed for the block of shares owned by the Russian Federation, they are not a party of any agreements with the Russian Federation, which subject might be a special voting procedure in accordance with instructions/directives of the Russian Federation. Moreover, the Russian Federation nominated these candidates as independent. This approach is supported by ISS. M. S. Bystrov was put forward for the minority interest. However, ISS did not recognize him independent. UK Corporate governance Code does not contain definitions "material business relationship". We believe that M. S. Bystrov meets the criterion.
- 35 Approved by the Board of Directors (Minutes as of 10.12.2015 No. 228)
- 36 Approved by the Board of Directors (Minutes as of 16.11.2015 No. 227)
- 37 List of the positions exposed to corruption risks is defined in the Anti-corruption Policy of the PJSC RusHydro.
- 38 Exception shall be the gifts received by the employees in relation to the protocol events, business trips and other formal events, with a value of up to three thousand rubles.
- 39 Programme regarding energy saving and energy efficiency improvement of PJSC RusHydro for the 2010 to 2015 period. approved by the Board of PJSC RusHydro minutes as of 12.04.2010, No 462pr / 1 and approved by the Ministry of Energy Letter from 14.10.2010 № 02-0403.
- 40 Programme regarding energy saving and energy efficiency improvement improvement of PJSC RusHydro for the 2016- to 2020 period approved by the Board of PJSC RusHydro minutes as of 03.13.2015, No 900pr / 5.

## **RESPONSIBILITY STATEMENT**

We hereby confirm that to the best of our knowledge:

- (A) The consolidated financial statements, prepared in accordance with IFRS, give a true and fair view of the assets, liabilities, financial position and profit or loss of RusHydro, and the undertakings included in the consolidation, taken as a whole; and
- (B) The annual report includes a fair review of the development and performance of the Company's business and position, together with a description of the principal risks and uncertainties that the Company faces.

*Chairman of the Management Board – General Director*

**N.G. Shulginov**



*Head of Department of Corporate Accounting and Reporting - Chief Accountant*

**D.V. Finkel**



## **DISCLAIMER FOR THE PUBLICATION OF FORECAST DATA**

The report contains information about the plans and intentions of PJSC RusHydro for the medium and long term. The plans are forward-looking in nature and their feasibility depends on a number of economic, political and legal factors which are outside the influence of the Company (the global financial economic and political situation, the situation on key markets, changes in tax, customs and environmental legislation and so forth). For this reason, the actual performance indicators in future years may differ from the forward-looking statements, published in the report.

