



Approved by the decision of the annual general meeting of shareholders of NIAEP JSC

Approved by the decision of the sole shareholder of ASE JSC

Approved by the decision of the annual general meeting of shareholders of Atomenergoproekt JSC

## President

Chief Accountant of NIAEP JSC

Chief Accountant of ASE JSC

Chief Accountant of Atomenergoproekt JSC



V.I. Limarenko

E.V. Samogorodskaya

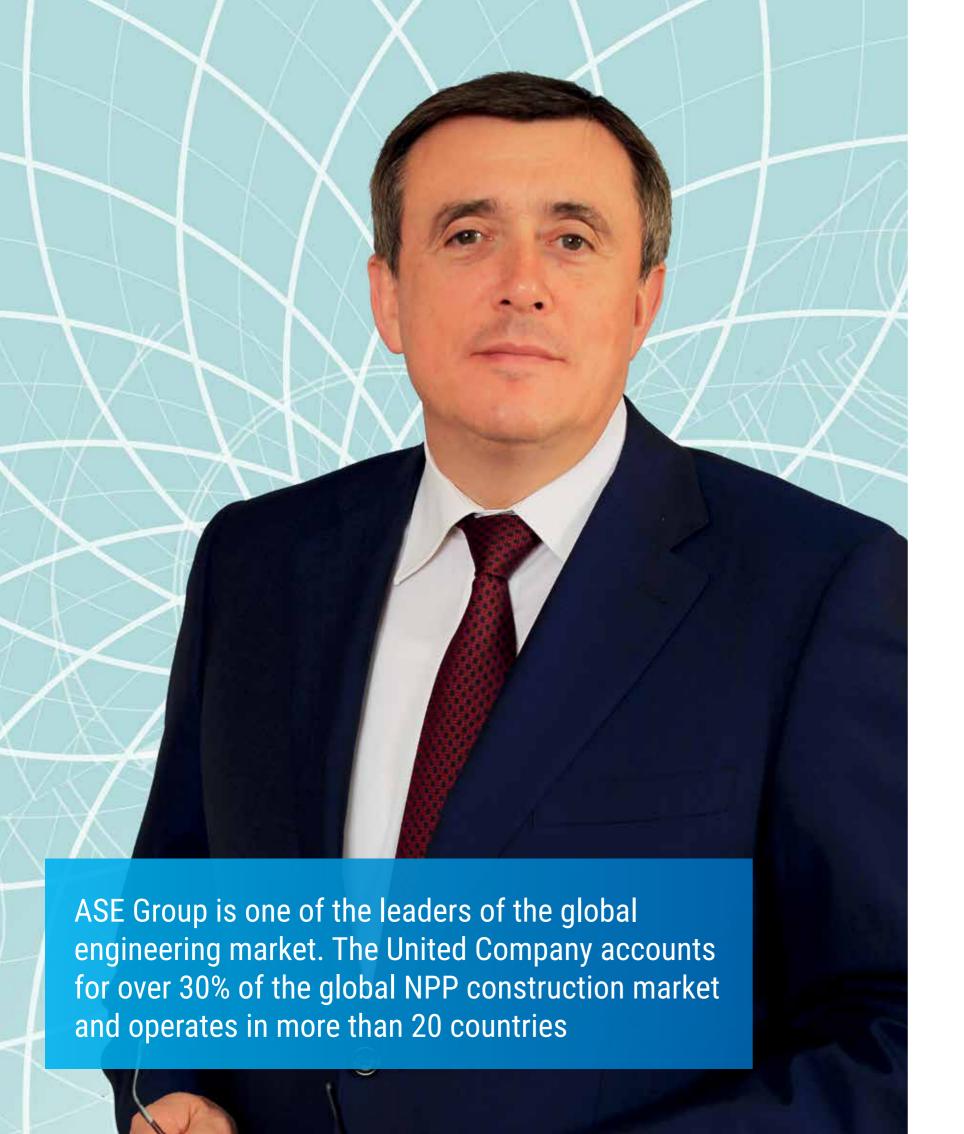
M.Yu. Samotsvetova

E.V. Samogorodskaya

# **Table of Contents**

	Address of the President	2
	About the Company	.4
	Key Performance Indicators	6
	Key Events	.7
	About this Report	.8
1	Strategy overview	1
1.1	Strategy	12
	1.1.1 Mission and Values	.13
	1.1.2 Strategic Goals	.13
	1.1.3 KPIs of the Strategy Implementation	15
	1.1.4 Relation with Strategy of Rosatom State Corporation	.15
	1.1.5 ASE Group Sustainable Development Agenda	.17
1.2	Value Creation. Business Model	21
	1.2.1 Value Creation Chain in Engineering Business	.21
	1.2.2 Business Model	.22
1.3	Target Markets and Priority Directions of Development	24
	1.3.1 NPP Construction Market	24
	1.3.2 Business Diversification Markets	24
1.4	Opportunities and Risks	25
	1.4.1 Risk Management System of ASE Group	.25
	1.4.2 ASE Group Risks	.26
1.5	Corporate Governance	.32
	1.5.1 Corporate Governance Principles of NIAEP JSC	.34
	1.5.2 Corporate Governance System of NIAEP JSC.	.35
	1.5.3 Corporate Governance of Controlled Entities	.40

2	Capital management and performance results	45
2.1	Financial Capital	45
	2.1.1 Financial Capital Management	46
	2.1.2 Financial Results	53
2.2	Natural Capital	56
	2.2.1 Natural Capital Management	59
	2.2.2 Environmental and Radiation Safety of NPPs	61
	2.2.3 Environment Protection	66
	2.2.4 Energy Efficiency	71
2.3	Manufacture Capital	72
	2.3.1 Manufacture Capital Management	74
	2.3.2 Results of Manufacture Activities	79
2.4	Intellectual Capital	86
	2.4.1 Intellectual Capital Management	89
	2.4.2 Intellectual Property	90
2.5	Human Capital	94
	2.5.1 Human Capital Management	97
	2.5.2 HR Policy Implementation Results	102
	2.5.3 Social Policy	105
2.6	Social and Relationship Capital	108
	2.6.1 Social and Relationship Capital Management	111
	2.6.2 Stakeholder Engagement	111
	2.6.3 Social and Economic Results	115
	2.6.4 Public Reporting System	119
	tement of the Chairman he Public Reporting Committee	124
	tement on the Results of Public/Stakeholder Assuran he 2015 Public Annual Report of ASE Group	
Abb	reviations	127
	ssary	
	exes	
ΔIIII	tooto	123



# Address of the President

## Dear Colleagues and Partners,

In 2015, the year of the 70-th anniversary of the Russian nuclear industry, the Engineering Division formation was completed. The process had started three years ago with delegating to NIAEP JSC the functions of the sole executive body of the Atomstroyexport Construction Company. In 2014, Atomenergoproekt JSC (the largest design institute) joined United Company NIAEP-ASE. In December 2015, the NIAEP JSC management scope was extended to include an expert design company ATOMPROEKT JSC (S. Petersburg). Thus, ASE Group headed by NIAEP JSC turned into the center of engineering competence of the nuclear industry. One of the main objectives of the United Company is strengthening of the international presence through integration of expertise and optimization of production relations within a unified system of facilities. The created structure provides the Company with competitive strength and allows extending its order portfolio.

ASE Group is one of the leaders of the global engineering market. The United Company accounts for over 30% of the global NPP construction market and operates in more than 20 countries.

Improvement of financial and economic parameters proves that our strategy is the right one. In 2015, the portfolio of overseas orders amounted to \$70 bln, which is by \$3.2 bln more than was planned. The proceeds of the United Company increased more than 1.6 times to RUB 166.6 bln, compared to consistent proceeds of 2013. Proceeds for overseas projects account for 60%. Within the last two years, the labour productivity increased 1.6 times (in comparable prices).

Among other results of the year, it is worth mentioning the following: the timely delivery of power unit No. 3 for Rostov NPP, lifting of containment dome of power unit No. 4 of Tianwan NPP (China) two months ahead of the schedule, execution of acceptance certificate for a power unit at Bushehr NPP (Iran), and contract singing in Bangladesh.

One of the current major projects is Novovoronezh NPP 2. In 2015, the cold and hot trial tests completed at the first power unit demonstrated that the first in the world NPP of Generation III+ was ready for startup. Fuel loading was started on March 24, 2016. This project is a major achievement of the

engineers who contributed their knowledge and talent, the construction workers who kept working at the site, the installation workers who assembled a sophisticated complex of the power unit systems, the setup technicians who made the innovative equipment operational, the procurement personnel who cared to meet the construction needs, and all employees of the Company who played their own part in the NPP startup.

We keep actively developing the Multi-D technology. This innovation is one of our competitive advantages. The Multi-D technology reduces the duration and the cost of construction projects, while increasing the work quality and safety at nuclear power facilities. The Multi-D technology ensured the early startup of Rostov NPP 3 in 2014 and compliance with the strict schedule of Belarusian NPP construction. In the Republic of Belarus we are building two power units simultaneously, while improving the design replication approaches.

As the United Company, we started development of a solution to a unique task for the industry and for the country, which is the establishment of the unified information space. The unified information space will allow establishing work groups with no need for taking into account the location of the personnel and, when necessary, change work approaches and tools. In other words, ASE Group establishes the standard for processes of state-of-the-art design of complex engineering facilities.

In the context of competition strengthening both in the NPP construction market and the non-nuclear power generation market, a competitive LCOE is one of the keys to success. Therefore, our main objective is not limited to construction of reliable nuclear power plants, but rather includes development of design, construction and project management technologies providing for long-term sustainable development of the Company. One of the main tools is Rosatom Production System, which is being actively implemented at construction sites. RPS is comparable to LEAN technologies used for design works. The implementation of LEAN technologies equips us with a more efficient tool in design replication. All of the above tools provide the company with access to the competitive growth potential.

The approach to sustainable development of ASE Group is based on the approach of the UN World Commission on Environment and Development. Special attention is paid to such components of sustainable development as health and wellbeing of employees, development of regions of presence, charity, etc. In 2015, the Company provided support to 59 environmental, cultural, sports, and youth patriotic education projects. It is important for us not only to leave unique and complex facilities as a heritage for future generations, but also to preserve the environment and natural resources in the course of implementation of our projects.

We are active as an engineering company both on Russian and international markets, therefore, information transparency is very important. It is clear for us that the attitude towards nuclear power industry directly depends on the quality and the scope of information available to a wide range of stakeholders. Therefore, we consider the annual report as one of the most efficient tools for providing information. I am proud to say that our annual reports have been recognized as the best in the industry-specific national and international contests for several years in a row.

We issue reports that meet international standards. We strive for any stakeholder to be able to trace the Company's evolution, to see its milestones, to assess the implementation of the strategic goals and the stability of our business.

This annual report is prepared to enable all stakeholders to become aware of detailed results of our activities in 2015, as well as with our future plans. We will keep developing in all our lines of activities, further promoting a strong engineering division of the Russian nuclear power industry.

> **Valery Limarenko** President of ASE Group





# About the Company

ASE Group (hereinafter referred to as the United Company, Company, Engineering Division of Rosatom) comprises four companies

- NIAEP JSC
- ASE JSC
- Atomenergoproekt JSC
- ATOMPROEKT JSC<sup>1</sup>

#### **Authorized Capital, RUB**

**NIAEP JSC** 

500.001.877

Atomenergoproekt JSC

1.547.504.159

**ASE JSC** 

350,044,835,15/91

#### Registrars

Inscribed stock holders' register of NIAEP JSC is kept by Joint Stock Company Registrator R.O.S.T. Address: Bldg 13, 18 Stromynka, Moscow

Inscribed stock holders' register of ASE JSC is kept by Joint Stock Company STATUS. Address: Bldg 1, 32 Novorogozhskaya St., Moscow

Inscribed stock holders' register of Atomenergoproekt JSC is kept by Joint Stock Company Registrator R.O.S.T. Address: Bldg 13, 18 Stromynka, Moscow

#### **Auditors**

In 2015, the Auditor of Atomenergoproekt JSC, ASE JSC and NIAEP JSC was Limited Liability Company Nexia Pacioli (TIN 7729142599, PSRN 1027739428716)

#### **Contact Details**

#### **NIAEP JSC**

Postal Address: 3 Svobody Sq., Nizhny Novgorod, 603006

Phone: +7 (831) 421-79-00

Fax: +7 (831) 419-84-90; +7 (831) 421-06-04

Website: www.niaep.ru

#### Atomenergoproekt JSC

Postal Address: Bldg 1, 7 Bakuninskaya St., Moscow, 105005

Phone: +7 (495) 633-50-50

Website: www.aep.ru

E-mail: info@aep.ru

#### E-mail: niaep@niaep.ru

#### **ASE JSC**

Postal Address: Bldg 1, 2 Dmitrovskoye Highway, Moscow, 127434

Phone: +7 (495) 737-90-37

Website:

www.atomstroyexport.ru

E-mail: post@atomstroyexport.ru

#### **Shareholders**

The shareholders of **NIAEP JSC** are

Joint Stock Company Atomic **Energy Power Corporation** 

51%

and Joint Stock Company Atomstroyexport

49%

The shareholders of **Atomenergoproekt JSC** are

NIAEP JSC

1 share

and ASE JSC

less 1 share

The sole shareholder of **ASE JSC** is Rosatom State Corporation

#### 1 ATOMPROEKT JSC joined the United Company in December 2015 and was not included in the scope of consolidation of this report. The report of ATOMPROEKT JSC is published at http://atomproekt.com/corporateManagement/Sistema/disclosure/.

#### G4-6, G4-16

#### **Key Business Lines**

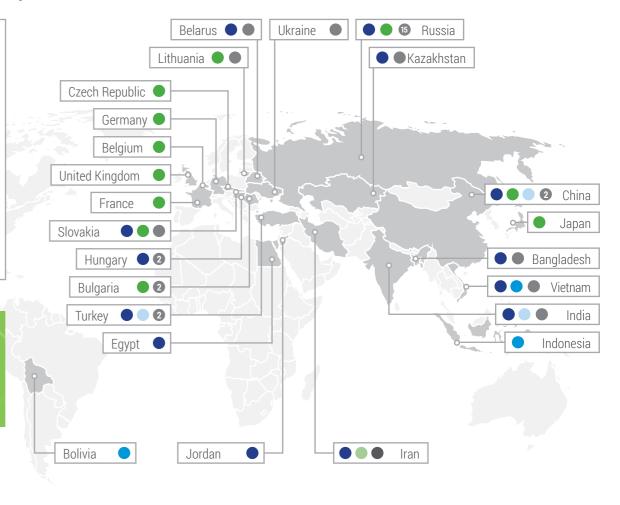
ASE Group is engaged in provision of project management services in the field of construction and retrofit of complex engineering facilities, including designing and construction of:

- Nuclear power plants;
- Research reactor facilities;
- RW and SNF management facilities;
- other engineering projects.

#### **Presence Regions of ASE Group**

- Core projects (NPP construction)
- Research reactors
- Decommissioning of nuclear and radiation hazardous facilities (DC NRHF) RW and SNF management facilities
- Services
- Project management consultancy services
- Offices of ASE Group (with branches, representative offices and subsidiaries)

operates in more than 20 countries (executes bidding and pre-bidding).



#### **Membership in Associations**

- · All-Russian Industrial Federation of Employers in Nuclear Power Engineering, Power Engineering and Science Sector of Russia;
- Association of Innovative Designing;
- European Utility Requirements Organization (EUR);
- Self-Governing Organization Non-Commercial Partnership
- of Engineering-Prospecting Organizations Engaged in Architectural and Structural Designing, Construction, Reconstruction and Overhaul of Nuclear Power Industry Facilities;

SOYUZATOMGEO Association

 Self-Governing Organization Non-commercial Partnership SOYUZATOMSTROY Association of Organizations for Construction, Reconstruction

- and Overhaul of Nuclear Power Industry Facilities;
- Self-Governing Organization Non-Commercial Partnership SOYUZATOMPROEKT Association of Organizations for Architectural and Structural Designing of Nuclear Power Industry Facilities;
- Czech Nuclear Forum.

**Historical Background** 

The historical background of ASE Group is provided in the Interactive Annual Reporting ar2015.niaep.ru





# **Key Performance Indicators**



<sup>2</sup> Consolidation scope comprises NIAEP JSC, ASE JSC, Atomenergoproekt JSC and subsidiaries: NIKIMT-Atomstroy JSC, Energospetsmontazh JSC and Trest RosSEM LLC.

Order portfolio,

number of power units

# **Key Events**

#### March 23, 2015

NIAEP JSC established a branch in Hungary.

#### June 1, 2015

ASE Group and National Project Management Association SOVNET signed a road map for the development of project management in NIAEP JSC for 2015–2017 on June 1 during the forum Atomexpo 2015.

#### June 22, 2015

Certificates were received for the Integrated Management System according to ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007.

#### **August 8, 2015**

ASE-NIAEP and Vietnam
Electricity (EVN) entered into
general framework agreement
on construction of Ninh Thuan
1 NPP.

#### November 11, 2015

Russia and Egypt signed an intergovernmental agreement on El-Dabaa nuclear power plant construction.

#### **September 26, 2015**

Completion of lifting of reactor building containment dome for Tianwan NPP 4 (China).

#### **September 16, 2015**

Permit for startup of power unit No. 3 of Rostov NPP.

#### **September 15, 2015**

ASE Group entered into memorandum of cooperation with Dassault Systemes (France) and European division of IBM.

#### **December 2, 2015**

NIAEP JSC became managing company of ATOMPROEKT JSC

#### **December 15, 2015**

Fuel loading to power unit No. 1 of Kudankulam NPP (India) was started.

#### **December 24, 2015**

Delivery to the Belarusian NPP construction site of reactor pressure vessel for power unit No. 1.

#### **December 25, 2015**

General Contract was signed for construction of Rooppur NPP (Bangladesh).

# $\bigcirc$

#### **April 14, 2016**

ASE Group, International Project Management Association (IPMA) and National Project Management Association (SOVNET) entered into an agreement on cooperation.

#### March 24, 2016

Start of fuel loading to power unit No. 1 of Novovoronezh NPP-2 – the world's first nuclear power plant of 3+ generation.

#### 07.01.2016

The fourth contract was signed on completion on works of preparatory stage of Rooppur NPP (Bangladesh) construction.

# reporting date December 26, 2015

Events after the

Completion of construction and installation works, and commissioning of power unit No. 1 of Novovoronezh NPP-2.

#### **Awards**

#### Industry-oriented contest "Rosatom Person of the Year 2014", "Win of the Year" nomination

1st Prize – Rostov NPP power unit No. 3 construction team. 3rd Prize – Design team in charge of construction of two Kudankulam NPP (India) power units

#### Projects of the Year 2014 (US Power Engineering magazine of the power generation industry)

NPP Projects in Iran (Bushehr NPP) and India (Kudankulam NPP)

#### All-Russian Competition for the Best in Construction Organization in 2014, nomination "Elite of the construction complex of Russia"

First Class Grand Prix

Industry-oriented contest of Rosatom State Corporation acknowledged as the best general designer of the nuclear industry

designer of the nuclear industry diploma of the Best RPS-project in IT

#### Contest "Project Olympus"

Winner in nomination "Project management systems in state corporations, publicly owned companies and development institutes"

#### WorldSkills Hi-Tech Championship

Winner – electric welder of Volgodonsk branch of Trest RosSEM LLC Alexandr Duymamet engaged in Rostov NPP construction

# Contest Russian Entity of High Social Efficiency

1st prize in nomination "For creation and development of work places at production entities" 3rd prize in nomination "For reduction of occupational injuries and illnesses at production entities"



2015

2013

2014



In public annual report (hereinafter referred to as the Report) for 2015, ASE Group discloses financial and non-financial performance results. The Report is made in Russian and English. The report is the eighth integrated report of NIAEP JSC and the first report for ASE Group. The previous Report of NIAEP JSC was issued in 2014. The Company issues integrated reports annually. For convenience, the Report is issued in printed copy and in electronic/interactive format.

# Standards and Regulatory Requirements

The Report was prepared in accordance with the following guidelines:

#### **International Reporting Standards**

- Standards of AA1000 Series (Institute of Social and Ethical Accountability);
- Global Reporting Initiative Guidelines (GRI G4) + GRI CRESS industry-specific supplement for construction companies;
- International Integrated Reporting Framework (International <IR> Framework).

#### Laws and regulations of the Russian Federation for corporate and financial reporting:

- Federal Law on Joint Stock Companies No. 208-FZ dated December 26, 1995 (as amended dated June 29, 2015)
- Bank of Russia Regulation on Disclosing Information by the Issuers of Issue-Grade Securities No. 454-P dated December 30, 2014;
- Bank of Russia Letter on Corporate Governance Code No. 06-52/2463 dated April 10, 2014;
- Federal Law on National Security Information No. 5485-1 dated July 21, 1993;
- Federal Law on Commercial Confidential Information No. 98 dated July 29, 2004;

#### Federal Law on Information, Information Technologies and Information Protection No. 149-FZ dated July 27, 2006;

• Federal Law on Accounting No. 129-FZ of November 21, 1996.

# Regulatory documents of Rosatom State Corporation:

- Policy of Rosatom State Corporation in the field of Public Reporting:
- Public annual accounting standard of key organizations (for the purposes of public accounting) of Rosatom State Corporation;
- Code of Ethics of Rosatom State Corporation.

# Regulatory documents of NIAEP JSC on Public Reporting:

- Regulation on the Stakeholder Committee of NIAEP JSC;
- Regulation on Public Reporting Committee of NIAEP JSC;
- Corporate standard STP 10.01-11 "Procedure for Preparation of Public Annual Report for Reporting Period".

#### **GRI Application Level**

Comprehensive option in accordance with the GRI G4 Guidelines. *The GRI G4 Comparison Table is provided in Annex 5.* 

#### **Report Scope**

This Report covers the activity of ASE Group within the period from January 01, 2015 to December 31, 2015 (ATOMPROEKT JSC joined the United Company in December 2015, therefore, selected data of ATOMPROEKT JSC are included in the Report).

The Report also provides information for material aspects of NIAEP JSC subsidiaries' operations. Scope for each material aspect was defined by persons responsible for management of the given aspect.

Information about the scope of each material aspect is presented in Annex 6.

The reporting scope is defined in accordance with the list of enti-

ties included in the framework of the United Company as provided in Resolution No. 40/535-P On Change to Rules of Interaction between NIAEP JSC and Rosatom State Corporation dated May 30, 2014.

Consolidated accounting statements are provided for ASE Group.

In separate sections, some parameters are provided with consideration for entities participating in the common production chain and have significant impact on the Company's operation. In such cases, the consolidation scope is provided separately.

The consolidation scope changed compared to the previous reporting period. Starting 2015, consolidated financial indicators are formed for ten FRCs (Financial Responsibility Centers): NIAEP JSC, ASE JSC, Atomenergoproekt JSC and seven entities within the governance scope (ASE-Engineering LLC, NUKEM Technologies GmbH, NIAEP-Service LLC, Trest Rosspetsenergomontazh LLC, Nukem Technologies Engineering Services GmbH, NIKIMT Atomstroy JSC, Energospetsmontazh JSC).

The Report comprises target parameters and short-, mid- and long-term forecasts. Timing of plans/forecast disclosure depends on the degree of confidentiality of information.

#### **Defining Report Content**

# Materiality determination process

In accordance with GRI G4
Guidelines and International <IR>

Framework, material aspects were identified during the development of the Report. All works were performed within the framework of dialog with stakeholders based on Rapid Foresight technology.

Before the dialog, polling of the top-management of the Company was performed with identification of the most significant issues. The dialog with stakeholders provided for update of issues and priority assignment of issues/aspects. Based on the dialog outcome, a materiality matrix was generated.

Read more about materiality determination process: http://stakeholderpanel.ru/mero-priyatiya/dialog-ase-2015.html Management approaches to material aspects are provided in Annex 6.

#### G4-19, G4-33, G4-32

Priority issues of the Report are defined by the management of NIAEP JSC and stakeholders' representative in due course of material issues/aspects identification. Priority issues of the Report: "Integration of the United Company ASE-NIAEP-Atomenergoproekt", "Environmental and radiation safety of NPPs".

32 GRI indices are presented in the Report (for material aspects). 104 performance indicators of NIAEP JSC are presented in the Report.

#### **Report Verification**

Independent auditor was hired for verification of non-financial information. Public Reporting Committee is responsible for assurance of independent non-financial audit.

Independent audit of the Report was performed by NP Consult JSC. The independent auditor assured compliance with the comprehensive "in accordance" option of report preparation of the Global Reporting Initiative Guidelines GRI G4.

Statement on the results of Non-Financial Assurance is provided in Annex 6.

For the purposes of the Report, the auditor used managerial and audited financial statements of NIAEP JSC, ASE JSC and Atomenergoproekt JSC prepared in accordance with RAS. Audit of accounting (financial) statements of NIAEP JSC, ASE JSC and Atomenergoproekt JSC was performed by Nexia Pacioli Consulting LLC.

The Auditor's opinions are provided in Annex 2.

The report was verified by the Internal Control and Audit Department of NIAEP JSC.

3 Segment I – material topics to be disclosed. Segment II – topics of less impor-

ing Committee, the two topics of the segment (Nos. 11, 13) were deemed

to be material. Segment III – non-material topics.

tance, with partial or selective disclosure. Following the decision of Public Report-

Statement on the results of verification is provided in Annex 3.

The Report was subject to public/ stakeholder verification procedures aimed at check of materiality and completeness of the reporting data and the Company's response to stakeholders' requests.

Statement on the results of the Stakeholder Assurance is provided in section 2.6.

The Report was subject to public/ expert verification by Non-Financial Reporting Board of the Russian Union of Industrialists and Entrepreneurs.

Statement on the results of the Public Assurance is provided in Annex 17.

# Disclaimer on Disclosure of Forecasted Data

The Report contains statements of forecast nature with regard to production, financial, economic, social and other indicators characterizing further development of the Company. Implementation of plans and intentions depends on changing political, economic, social and legal situation in Russia and worldwide. In this connection, the actual performance results in subsequent reports may differ from the forecasted ones.

Figure 10. Materiality Matrix<sup>3</sup>



Company's impact on economy, social and ecological environment



1. NPP Safety



2. Ensuring environmental and industrial safety at construction sites



3. Creation of Company's order portfolio in the long term4. Implementation of contractual



obligations related to NPP construction abroad



5. Cutting costs and terms of NPP construction

6. Improvement of economic efficiency of construction

7. Implementation of the state program on new power units construction in the RF



8. Ensuring financial stability and creditworthiness of the Company

9. Global advantages of nuclear generation

10. Company's requirements for suppliers' and contractors' activities



11. Anti-corruption activities

12. Achievement of technological supremacy on the global market



13. Company as a responsible employer

- 14. Industrial waste management in construction
- 15. Implementation of innovation projects16. Sustainable development
- aspect management system 17. Occupational health and safety
- 18. Creation of Engineering Division
- 19. Improvement of project management tools
- 20. Company's brand promotion abroad
- 21. Improvement of procurement efficiency
- 22. Products and services market analysis by 2050 (scenarios)
- 23. Disclosure of qualitative indicators of activities (performance)
- 24. Implementation of RPS and LEAN projects25. Improvement of corporate
- governance
  26. Consolidation of design and
- construction assets and competences of Engineering Division
- 27. Improvement of subsidiaries' efficiency
- 28. Market appraisal of intellectual property
- 29. Greenhouse gas emission management

For users' convenience, material aspects of the report and GRI indicators are shown on top of the pages that provide the relevant information.





# Labor Productivity for Own Income (Excluding Subcontracts),

# 3 mln RUB/pers.

Within the last two years, the labor productivity increased 1.6 times (in comparable prices). Increase in figures is achieved by means of development of overseas construction and introduction of Rosatom Production System.



→ Read more about the portfolio of overseas orders p. 15

The portfolio of overseas orders amounted to

\$70.05 bln

which is by 15% more than was in 2014.

ASE Group is one of the leaders of the global engineering market. The United Company accounts for over 30% of the global NPP construction market.

2014 2015 (forecast)
66.8 (target)
70.05
59.5
2016 (forecast)
2014 2015 (2016 (forecast)
163.4 (target)
143 166.6

→ Read more about p. 15

The operating profit ASE Group

166.6 bln RUB

Plans for the operating profit for 2016 247,5 bln RUB

The proceeds of the United Company increased more than 1.6 times, compared to consistent proceeds of 2013. Taking into account the extension of governance scope, growth of order portfolio and ASE Group business (including due to the integration with Atomenergoproekt JSC), the operating profit increased by 3.9 times as compared to 2014.





# 1.1 Strategy



# **Ivan Borisov,**Vice-President for Development

How will integration with ATOMPROEKT JSC influence the Company's activities and prospects?

- 2015 turned out to be very important for the Company's development. The integration of ATOMPROEKT JSC into ASE Group became a milestone for the establishment of a strong Design and Engineering Division of Rosatom State Corporation. The main challenge was similar to the challenge we faced during integration with Moscow AEP, i.e. we needed to retain highly qualified human resources while optimizing and merging administrative functions accumulated by NIAEP JSC – the parent company of the division.

Integration of ATOMPROEKT JSC into the scope of ASE Group was a reasonable step aimed at competences refining (mainly design competences). ATOM-PROEKT was our historical partner possessing almost century-long expertise and competence in integrated designing for power generation and nuclear industry facilities, owning the basic design AES-2006 and BN reactor technology. We are working closely together on wide range of projects in Russia, Belarus, Hungary, and Finland. In addition to the core activities extension, the integration will strengthen the Engineering Division position in new directions, e.g. smalland medium-power reactors within such high-tech project as Proryv.

Thus, ASE Group comprises three design institutes. Such design base will strengthen the competitive position of the Company in the NPP construction market and open new opportunities for achievement of goals in new businesses.

# - What external challenges did the Company encounter in the reporting year? What was the Company's response?

- Speaking about external challenges, it is worth mentioning that due to competitive pressure of new market participants - China and Korea and growth in competitiveness of other generation sources, the main focus of the Company shifted to improvement of competitive properties of power units for NPPs. In 2015, the new members of the division consolidated efforts to continue the work lasting over the latest years to reduce

the time and cost of power units construction. In particular, we developed plans on decreasing the time and cost of construction at Novovoronezh NPP-2, Rostov NPP. Belarusian NPP, Kursk NPP, Paks NPP, Kudankulam NPP, and Bushehr NPP.

# - What are further steps in ASE Group strategy implementation?

- The main strategic goal of the Company in sight till 2030 includes preserving the leading position in the global market for the number of constructed power units and the market share with consideration for market growth tendencies in absolute terms. To retain the market share, we need to offer a new design with LCOE competitive in comparison to other generation sources. Considering expectations of material LCOE decline in all generation sources by 2030, the main focus of 2016 will be implementation of a program aimed at reducing the time and costs of power units construction.

## 1.1.1 Mission and Values

#### Mission - Who are we?

#### **Vision - What is our goal?**

We are a company that manages construction of complex engineering facilities relying on its vast experience in project execution in the nuclear industry, building value for our shareholders and providing for its objectives implementation on both Russian and international markets.

We strive to establish a competitive business by successfully implementing projects on construction of complex engineering facilities which is focused on maximization of the shareholder value.

#### Our Values

- Safety
- Responsibility for Result
- Efficiency
- United TeamOne step ahead
- Respect

The values of ASE Group meet those of Rosatom State Corporation. The strategic objectives of the Company are focused on mission implementation and ensuring of sustainable development.

## 1.1.2 Strategic Goals

The strategic goals of ASE Group are defined by the Company's strategy:

- Leadership in the core business NPP construction;
- Operational stability (diversity);
- · Financial stability.

In December 2015, ATOMPROEKT JSC (owner of VVER-1200 basic design and BN reactor technology) was integrated to the Company. ATOMPROEKT JSC merger did not cause material changes to the strategy of ASE Group. The integration facilitated strengthening of our competitive posi-

tion and competence of ASE Group in its core business and opened additional opportunities for achievement of goals in new businesses.

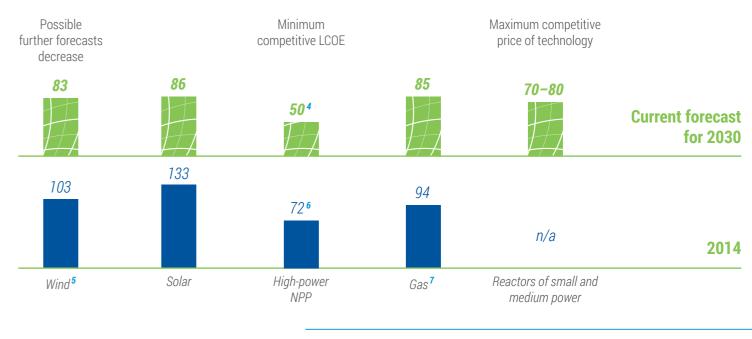
The strategic goals were defined in 2014 within the framework of the Strategy approval and were established till 2030. Comparison of the 2015 results with the results of 2014 evidences a positive trend in achievement of the strategic goals by the Engineering Division.

#### **Leadership in the Core Business**

The main strategic goal of the Company in sight till 2030 includes preserving the leading position in the global market by the number

of constructed power units and the market share with consideration for market growth tendencies in absolute terms and strengthening of competition between traditional and emerging players (stepping-up of China and Korea activities). In addition to the competition strengthening, the NPP construction market is subjected to pressure from other generation sources. Among such competitive generation sources are solar, wind and gas power generations facilities. The current LCOE of nuclear power generation is not competitive compared to the LCOE of other generation sources in the mid- and long run. The long payback period of NPPs decrease investment attractiveness of the nuclear industry projects.

Figure 11. Comparison of LCOE of Different Power Sources, USD/MW\*h





**5** On-shore wind farms

6 Novovoronezh NPP-2 **7** Net of CO<sub>2</sub>





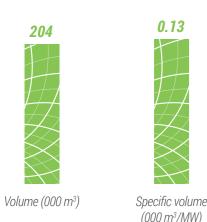
Therefore, achievement of competitive price and payback parameters attractive for investors in comparison to industry competitors (including China and Korea) and other generation sources is a fundamental condition for making nuclear power generation industry competitive on a global scale. The top priority within the operations framework of ASE Group is the implemen-

tation of a program aimed at reduction of the time and cost of NPP construction, including due to the optimization of project physical/natural properties.

The Division managed to keep leadership on the global NPP construction market despite the global NPP construction market growth in absolute terms and the unfavorable global economy situation. Due to the growth of portfolio of overseas orders to \$70.1 bln (in other words the portfolio grew by 15% compared to 2014) the Company retained 30% of the market.

Overseas revenue within the core business increased by 42.5% compared to 2014.

Figure 12. Objectives of Optimization of Physical Parameters of Projects

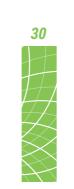


To retain leadership in 2014, the industry Plan on reduction of the time and cost of NPP construction was developed. In 2015, activities on the above plan implementation were continued. In particular, we developed plans on decreasing the time and cost of construction at Novovoronezh NPP-2, Rostov NPP. Belarusian NPP, Kursk NPP, Paks NPP, Kudankulam NPP, and Bushehr NPP.

Labor productivity growth to 3.0 mln RUB/pers. in 2015 (increase by 30% compared to 2014) evidences the Company's ability to meet strategic goals set till 2030.



Concrete and reinforced concrete consumption (000 m³)



Specific concrete and reinforced concrete consumption (000 m³/MW)



0.32

Specific length

Specific length of NI power cable

#### **Operational Stability**

The new business portfolio growth by 47% with revenue growth by 29% (compared to 2014) evidences a positive development trend of the business diversification and assurance of operational stability.

#### **Financial Stability**

ASE Group is a business that does not require use of financial resources of Rosatom State Corporation to support development and is able to create additional resources for development of other divisions.

Labour productivity growth to 3.0 mln RUB/pers. in 2015 (increase by 30% compared to 2014) evidences the Company's ability to meet strategic goals set till 2030.

Figure 13. Operational Stability

# Operational Stability (Diversity) Potential variation of the order portfolio due to rescheduling/cancellation of some projects shall not affect performance of obligations with regard to other projects. Significant growth of the business scale, including due to adjacent markets Target parameters: • share of one project in the portfolio shall not exceed 5%-10%; • share of proceeds from non-core operations amounts to 15%-20%.

## 1.1.3 KPIs of the Strategy Implementation

The following KPIs provide evidence of the Company's operation focusing on meeting strategic goals. The Company exceeded the targets set for 2015 with resulting KPIs of the Engineering Division hitting 107%.



Actual AFCF in 2015 **0.2 bln RUB** 

Figure 14. Labour Productivity for Own Income (Excluding Subcontracts), mln RUB/pers.

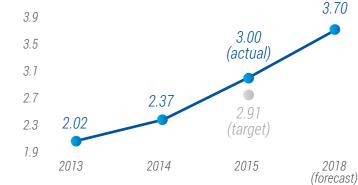


Figure 15. Portfolio of Overseas Orders, bln USD

Target AFCF in 2015

-3.4 bln RUB

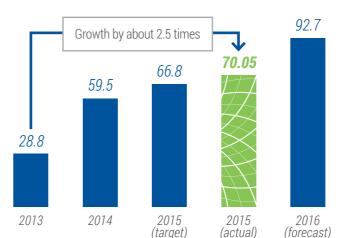
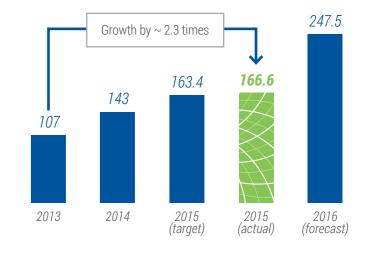


Figure 16. ASE Group Revenue (without ATOMPROEKT JSC), bln RUB



# 1.1.4 Relation with Strategy of Rosatom State Corporation

The strategic goals of ASE Group in creation of competitive, operational and financially stable Engineering Division within the core business and in diversification beyond the segment of presence fully meet the strategic goals of Rosatom State Corporation.

Table 1. Correspondence to Strategic Goals of Rosatom State Corporation

Strategic Goals of Rosatom State Corporation	Implementation of plans on NPP construction in the Russian Federation and abroad	Growth of competitive strength of the Russian NPPs	Diversification in the nuclear industry	Assurance of operational stability	Financial stability
Increase in the share on the international markets	+	+	+		+
New products for Russian and international markets			+	+	+
Reduction of product cost and duration of processes		•		+	+





**Key Capitals and Resources** 





ASE Group of Companies is committed to 2030 sustainable development targets stated by the UN<sup>8</sup>.

We focus on nuclear and radiation safety of nuclear facilities, and we bear responsibility for our activities outputs.

ASE Group is one of the leaders of the global engineering market, and operates in more than 20 countries. Our activities are aimed at meeting the following sustainable development goals:

- · provision of access to affordable, reliable and state-of-the-art sources of energy for all;
- assistance to incremental and sustainable economic growth, complete and productive occupation and decent works for all;
- creation of reliable infrastructure, assistance to development of technologies and innovations useful for life and activities.

Being the Engineering Division of Rosatom State Corporation, we also committed to Rosatom Sustainable Development Agenda <a href="http://ar2014.">http://ar2014.</a> rosatom.ru/#/ru/1347

All aspects of environmental safety are of material importance for us and thoroughly elaborated in designing of NPP construction. We perform systematic environmental control at construc-

We develop and implement innovative technologies for project management and complex engineering facilities construction.

We are responsible employers and make material input in social and economic development of the regions of presence.

We are transparent and accountable to shareholders, consumers, partners, suppliers, employees, population of regions of presence and other stakeholders.

We assist to building-up a peaceful and open society to provide for sustainable development, strive for constructive interaction with stakeholders in all material aspects of operations and support achievement of sustainable development goal in all countries.

• Financing of the Company's operations Company's equity and debt providing for performance and development of its core activity Optimization of resources and costs **Financial Capital** · Ensuring economic stability Increase in the company's order portfolio • The implementation of the production program Company's design and construction facilities, including relevant infrastructure **Manufactured Capital**  Improvement of operating efficiency, including RPS-projects Adapting existing project management technology to the segments of diversification Intellectual Capital Development of new technological solutions to improve operating efficiency designing and construction • R & D and intellectual property protection Provide the company's activities with the **Human Capital** necessary number of qualified staff Company's brand awareness on the international market Social and Promoting positive reputation of nuclear energy as a **Relationship Capital** whole, including companies in the regions of presence (planned presence) Nuclear and radiation safety of NPPs **Natural Capital**  Ensuring environmental safety of the Company's activities

**Strategic Tasks** 

Figure 18. Improvement of Operating Efficiency





Sustainable Development Goals by the UN

**ASE Group Contribution to Sustainable Development** 

Provision of access to affordable, reliable and state-of-the-art sources of energy for all

Provision of univesal access to affordable. reliable and state-ofthe-art power supply

In 2015, order portfolio comprised 32 power units, including 7 power units in the Russian Federation.

Considering the current and planned projects, the first-priority international markets include Asia (India, Bangladesh, Vietnam, China, etc.), Central and South Africa (Republic of South Africa), Middle East and North Africa (Iran, Jordan, etc.) and the CIS (Kazakhstan, Armenia).

See section 1. Strategy

Energy efficiency increase

Initiatives of energy efficiency increase are implemented in two directions:

- design of capital construction facilities with better energy efficiency properties;
- reduction of energy consumption due to implementation of resource saving programs.

In 2015, resources saving amounted to 30%.

See section 2.2.4 Energy efficiency











#### Sustainable Development Goals by the UN

#### **ASE Group Contribution to Sustainable Development**

Extension of infrastructure and upgrade of technologies for modern and state-of-the-art power supply Investment portfolio comprises on-going projects, the objective of which is to implemented programs of design and construction of facilities within the order portfolio, as well as investment projects aimed at operations development.

The key goal of the investment program is catering for production needs of timely execution of contracts for construction of complex engineering facilities (equipment for construction and research works, IT equipment and software for designing).

See section – Investments Management

Assistance to incremental and sustainable economic growth, complete and productive occupation and decent jobs for all

Implementation of development policy aimed at incremental and sustainable economic growth, creation of decent jobs The main objective is not limited to construction of reliable nuclear power plants and includes development of design, construction and project management technologies providing for sustainable development of the Company in the long term. The main tool is Rosatom Production System, which is being actively implemented at all construction sites. Besides the increase in labor productivity to the level of international competitors and cutting of costs, the use of the main industry tool Rosatom Production System is aimed at the increase of salaries and development of new career management rules.

LEAN technologies is a similar technology for designing processes. The implementation of LEAN technologies equips us with a more efficient tool in design replication.

The new business portfolio growth by 47% with revenue growth by 29% (compared to 2014) evidences for positive development trend of the business diversification and operational stability assurance.

During the last two years, the labor productivity increased 1.6 times (in comparable prices).

See section 2.4.2 Innovation Activity Results

Improvement of global resources use efficiency with protection of the environment

The Company acknowledges the principal importance of leaving unique and complex facilities as a legacy for the future generations, and preservation of natural resources during their implementation. This knowledge is reflected in the long-term development strategy of the Company. This strategy is the basis for the Company's business model, where nature is considered as one of the the main capitals.

See sections 1.2.2 Business-Model, 2.2. Natural Capital

Providing employment and decent work for all women and men, including young people and people with disabilities, and fair pay for work of equal value. Total headcount of ASE Group (comprising subsidiaries) amounts to 22,000 persons.

The salary in ASE Group is established based on positions/profession in accordance with the applicable grades. The grading system is based on the properties of the position/profession, its value assessment, place and role in the organization, in other words, salary depends on the employee's qualification, complexity, quantity, quality and conditions of work and is not tied to gender or age.

Training costs amounted to RUB 85. 4 mln.

Expenses for health and safety of the employees amounted to RUB 137.3 mln.

See section 2.5 Human Capital

#### Sustainable Development Goals by the UN

#### **ASE Group Contribution to Sustainable Development**

Creation of reliable infrastructure, promoting inclusive and sustainable industrialization and innovation

Research, technology capacity-building, promotion of innovation

In 2015, the Company initiated a project on development of portfolio of intellectual property rights to complex engineering facilities design and construction management based on the Multi-D technology. There are over 60 proprietary IP (intellectual property) items identified with rights owned by NIAEP JSC. To ensure legal protection of VVER technology, four international applications were filed to register the IP in more than 30 countries around the world.

In 2015, the Company materially increased the output of innovative products compared to the previous year. Revenue from innovative products sales amounted to over RUB 13 bln.

See section 2.4 Intellectual Capital

Transition to rational consumption and production models

Cutting waste by undertaking to prevent their formation, to reduce their amount, to recycle and re-use Radioactive waste resulting from NPP operations is recycled in accordance with the liquid and solid radioactive waste management system.

ASE Group is constantly improving RW and SNF management technologies to reduce the amount of waste after processing. The recycling enhances the radiation safety of nuclear facilities.

See section 2.2. Natural Capital

Application of sustainable production approaches, inclusion of details on rational use of resources in the annual reports

All material aspects are disclosed in the annual reports prepared in compliance with international corporate reporting standards.

See section 2.3 Production Capital

Promotion of the sustainable public procurement practices in accordance with national strategies and priorities

Operations of ASE Group are governed by Federal Law № 223-FZ dated July 18, 2011 and the Uniform Industrial Procurement Standard by Rosatom State Corporation.

In 2015, the procurements were performed in accordance with the annual procurement program based on the schedule of NPP construction milestones, investment and current budgets.

Contracts made with SME totaled RUB 1.41 bln. The SME accounted for 85.59% of the total procurement scope.

In 2015, savings due to open biddings amounted to RUB 7,522.6 mln (or 7.5% of the total biddings).

See section Procurement Management

Assistance to the developing countries in strengthening their scientific and technological potential

To increase industrial capacities and create additional jobs in the regions of presence in the course of projects abroad, we conduct Customer training, localize part of the production, and implement joint research projects. In addition to the above, ASE Group carries out all power units design and construction operation abroad under supervision of the IAEA and in compliance with the applicable international standards, legislation and non-proliferation regime.



Sustainable Develop- ment Goals by the UN	ASE Group Contribution t	o Sustainable Development
Promoting the peaceful and open society to	Non-use of child labor	ASE Group does not use child and forced labor.
provide for sustainable development, creation of effective, accountable and participatory institutions	Anti-corruption activities	ASE Group is committed to law compliance and high ethic standards of business relations.  The adopted anti-corruption policy provides for strengthening the Company's reputation both among our partners and our customers.
at all levels		See section 2.6 Social Capital and Goodwill
	Openness, accountability and transparency	The Company is open and transparent and strives to develop partner and mutually beneficial relations with the stakeholders.
		The Company provides public access to information by:
	Responsible decision-making at all levels, including stakeholders involvement	<ul> <li>interaction with media, including by arrangement of press-tours for journalists and other stakeholders to construction sites;</li> </ul>
		<ul> <li>daily update of information site of the Company http://www.niaep.ru/;</li> </ul>
		participation in expos/forums/conferences/dialog;
	Ensuring public access to information in accord- ance with national legis- lation and international agreements	publication of corporate media and MCT.
		The Company has a Stakeholder Panel.
		The integrated reports disclosing financial and non-financial operation details are prepared in accordance with the international standards and published in Russian and English on annual basis.
		See section 2.6 Social Capital and Goodwill
Strengthening of means of implementation and	Strengthening the Global Partnership for the	Continuous cooperation with international organizations, major groups of stakeholders and the general public.
activity revitalization	purposes of sustainable	See sections 1. Strategy, 2.6. Social Capital and Goodwill
within the framework of the Global Partnership for sustainable development.	development comple- mented by participation of stakeholder aimed to support the achieve- ment of the sustainable development goals in all countries.	see sections 1. Strategy, 2.0. Social Capital and Goodwill
	Effective partnerships between government	



agencies, public and

private sectors and civil

society organizations, based on the experience and strategy of the partner resources use.

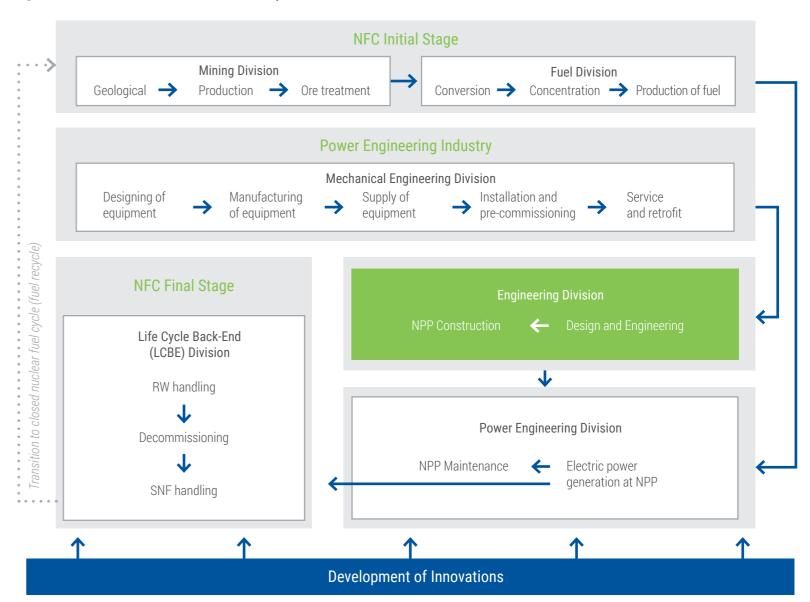
# 1.2 Value Creation. Business Model

# 1.2.1 Value Creation Chain in Engineering Business

The value chain of the engineering division in the of NPP construction is defined by significance mance of the EPC contractor (averaged share of core business is a component part of the uniform value chain of the whole nuclear industry. poration structure - over 60 % of NPP production management services at the current cost of elec-Role and place of ASE Group in the value chain cost throughout the life cycle depends on perfor-

investments, decommissioning and spent fuel trical power).

Figure 19. Value Creation Chain in the Nuclear Industry 10



<sup>10</sup> In addition to core activities of value creation chain comprising construction of high-capacity NPP, the division is also engaged in operations on NPP life cycle extension (LCE) and retrofit, maintenance and repair, as well as training, NRHF decommissioning, including project management, designing, demounting and other operations, and construction of RW and SNF management facilities, including project management, designing, construction and installation (C&I), pre-commissioning operations.



## 1.2.2 Business Model

ASE Group defines its business model as a system enabling value creation in short-, mid- and long-term perspective and aimed at achievement of strategic goals.

The Company's business model is based on its long-term strategy and sustainable development. The business model includes:

- available capitals (both own and shared with other stakeholders);
- management system aimed at maximum efficiency of available capitals use;
- · activity on value creation. Throughout the complete value chain, capitals which change (increase/decrease) while participating in the value creation play an important role in implementation of the strategy;
- products and services;
- results of value creation activity and their contribution to long-term capital growth of the Company.



**11** At the stage of integration. To be completed in 2016

**12** Focus on oil and gas facilities

Energospetsmontazh

**13** Quantitative estimates of waste generation and disposal

#### **Financial Capital**

Company's equity and debt providing for performance and development of its main activity

**Mission and Vision** 

#### **Production Capital**

Company's designt and construction facilities, including respective infrastructure

Strategy

#### **Intellectual Capital**

Unique project management technology (Multi-D)

**High-power NPP** 

Joint scientific and technical council

#### **Human Capital**

Average headcount of enployees, 14,527 persons

#### **Social Capital** and Goodwill

Existing business relations/ contacts with stakeholders

#### **Natural Capital**

Legal framework of environmental management. Construction sites of power units



New Businesses

**Research reactors** 

RW and SNF

**Sophisticated** engineering facilities 12

#### **Project management**

R&D

**Designing and consulting** 

**Supply Management** 

C&I

Company's Services

**Facilities Retrofit** Construction of facilities and Life Extension **Decommissioning** 

**PMC Services** 

## **Production Capital**

In 2015, savings due to open biddings amounted to RUB 7,522.6 mln (or 7.5% of the total biddings). Cutting by 30% of labor time consumption for approval of ToR/TS for equipment and valves without adding value

Integration of large design institute ATOMPROEKT JSC to the scope of the United Company resulting in formation of the industrial center of design competences

#### **Financial Capital**

**Revenue:** increase by 287.5% compared to 2014

**EBITDA:** increase by 409.9% compared to 2014

**NOPAT:** increase by 1,747.8% compared to 2014

#### **Intellectual Capital**

In 2015, the Company initiated a project on development of portfolio of intellectual property rights to the technology for complex engineering facilities design and construction management based on the Multi-D technology, and developed program on the introduction of knowledge management system

#### **Human Capital**

Engagement rate increase by 8% compared to 2014

Labor productivity increase by 33% compared to 2014 (by own revenue)

Voluntary medical insurance expenses increase by 14.5% compared to 2014

#### **Social Capital** and Goodwill

Approval of ASE brand, development of corporate style for the United Company

# **Natural Capital**

Development of WGDLB 13, waste profiles, and received Resolution on waste management procedures

Energy consumption costs cutting by 30% compared to 2014



G4-8



# 1.3 Target Markets and Priority Directions of Development

## 1.3.1 NPP Construction Market

#### **Russian NPP Construction Market**

The United Company operates as an EPC contractor in relation to the majority of power units under construction and is the absolute leader in the Russian market. The United Company's portfolio of orders in the Russian market comprised 7 power units at various stages of implementation. (see section 2.3.2. Production Performance).

Rosenergoatom Concern within Rosatom State Corporation is the main customer of the United Company in the Russian market.

The Russian product markets, scope of work, and deadlines for its completion are defined by Rosatom State Corporation on the basis of the road map of NPP construction in the Russian Federation.

#### International NPP Construction Market

ASE Group portfolio of orders comprised 8 NPP construction projects in different countries (see section 2.3.2. Production Performance).

With consideration to the current and planned projects, the first-priority international markets comprise Asia (India, Bangladesh, Vietnam, China, etc.), Central and South Africa (Republic of South Africa), Middle East and North Africa (Iran, Jordan, etc.) and the CIS (Kazakhstan, Armenia).

## 1.3.2 Business Diversification Markets

Diversification of the Engineering Division activity is mainly aimed at assurance of long-term operational stability of the Company. Projected revenue from non-core operations is expected to amount 15-20% by 2030.

Priority directions of growth still relate to the market segments close to the core business:

- · research reactor facilities;
- decommissioning of nuclear and radiation hazardous facilities (DC NRHF), construction and retrofit of RW and SNF management facilities:
- project management consulting;
- NPP and other industrial facilities service.

#### **Research Reactor Market**

In 2015, the major achievement of ASE Group in the segment of research reactors was winning a tender and execution of contract for preliminary works under the project on con-

struction of experimental small-power gas HTR reactor in Indonesia (project of National Nuclear Agency BATAN). The project provided the company with a positive reference within the new promising segment of the global market. The project was implemented by a consortium of industry companies (OKBM, NUKEM, ATOMPROEKT) managed by ASE Group.

# Market of DC NRHF, Construction and Retrofit of RW and SNF management facilities

In 2015, the major achievement of ASE Group was winning the tender for decommissioning of unit 1 of Philippsburg nuclear power plant (Germany). The tender was the key event of the back-end segment on the Western European market. The project was important in terms of obtaining references and competence in the back-end segment on one of the key international markets for further expansion.

In addition, the United Company successfully completed the scope of works planned under the

contract with JNPC (China) for supply of equipment for SRW management for Tianwan NPP. The project is planned to be completed in 2016.

The 2015, also saw continuation of other current projects of ASE Group within existing contracts related to Ignalina NPP, PA Mayak FSUE, as well as retrofit and construction of on-site SRW handling facilities for operational NPPs (Kursk NPP 1, Smolensk NPP) and NPPs under construction (Belarusian NPP, Kursk NPP 2, Paks NPP).

# Life extension segment of the service market

In service life extension segment of the service market, ASE Group was engaged in the projects of operational facilities of the Russian market (Balakovo, Kursk, Novovoronezh and Smolensk) during the reporting period.

On the international market, ASE Group was, first of all, involved in joint activities with Rusatom Service within the current service contract for Bushehr NPP 1 (Iran).

# Project Management Consulting Market (PMC Services)

The unique project management technology Multi-D provides ASE Group with the capacity to provide the market with consulting services on management of complex engineering facilities. To

gain competences and references required to promote consulting products on the market, and to minimize possible risks, the market convenient for the Company – construction of high-power NPPs was in the focus during the first stage. Thus, within the reporting period, the Company entered in contracts on rendering consulting services related to construction of Kudankulam NPP 3 & 4.

Since the project management consulting market amounts to about 1.5%-2% of the global engineering services, whereas embedded risks are far below risks of general contractor, gaining of competence in the area and increase of ASE Group presence in the market shall be a strategic goal.

# 1.4 Opportunities and Risks

# 1.4.1 Risk Management System of ASE Group

One of the main factors providing achievement of the Company's strategic goals is risk management.

Objectives of the risk management system:

- timely identification of emerging risks affecting achievement of the strategic goals;
- maintenance of stable financial environment of the Engineering Division;
- continuous monitoring of risks and control over risk management plan performance.

#### Risk management activities are implemented at all stages of NPP construction Construction and Search for Designing and Commissioning Contract award Warranty period Customer license acquisition equipment supply and testing Schedule Strategic management management management management management Human capital Internal control Communication and audit **Business-Processes** Safety Corporate managemen governance Project management Integration with the Planning Processes Strategic Mid-term **Budget** Investment planning planning Risk Management Objectives Identification of Risks Quantitative risk Risk Management Development of Risk Activities and Monitoring and Risk Factors Management Activities assessment Readiness for Risk and Reporting

Risk management system of ASE Group is developed on the basis of international standards and proven methodological approaches. The qualitative and quantitative risk assessments are performed.

The risk appetite is stipulated by Rosatom State Corporation in the form of tolerances to risk related to target parameters of projects (completion time, cost).









#### **Performance in 2015**

improvement of the risk management system:

- · change of the risk management system with consideration for transition to project management of complex engineering facilities construction projects (introduction of the risk management coordinator in divisions for facilities construction at sites, hiring of risk experts from employees of a project office);
- In 2015, the United Company continued start of development of central data system for risk management with the objective to enhance efficiency of the risk management;
  - draft risk management programs for NPP construction projects implemented abroad were developed and submitted for consideration of the customers to provide for the customers involvement in the project risk management.

#### Plans for 2016

In 2016, the Company plans to:

- commission the central data system for risk management with the objective to enhance efficiency of the risk management;
- joint work with foreign customers on mutually agreed programs of the project risk management developed within the scope of international contracts.

## 1.4.2 ASE Group Risks

Key risks of ASE Group were updated with consideration for the performance in 2015. No climate change related risks and opportunities assessment was performed.

Legend of risk trends in comparison to 2014

/ Impact increase

At the level of 2014

✓ Impact decrease

Low risks

Medium risks

High risks

- Political and country-based risks
- Economic and financial risks
- Project related risks segment: high power NPP
- Reputation risks
- Technological risks
- Research reactors
- DC NRHF, construction and retrofit of RW and SNF management facilities





Possibility

- Services related to NPP life extension and retrofit
- Project management consulting (PMC services)



Risk (factor)	Trend justification	Key activities on risk management and response to risks emerged in 2015. Risk management performance in 2015		
Political and country-based risks				
Continued international tension,		Increase of project support by political forces.		
Political risk	including deterioration of the interna- tional relations of the RF with certain countries.	Intensity of negotiation efforts, including arrangement partner countries representatives' visits.		
(political and economic instability	Trend of "sanctions exchange" started	Arrangement of visits of representatives of foreign customers.		
of target markets)	in 2014 results in increase of possible	Search for new markets.		
	restrictions to sale and services in the area of nuclear technologies, and in restriction of access to foreign equip-	Implementation of import technologies and equipment replacement program.		
	ment and technologies.	Arrangement of support to Rusatom International Network, i.e. GR.		
	Political nature of nuclear technologies supplier selection: high dependence of the general contractor selection on political impact of competing countries.	Result: as of December 31, 2015, the portfolio of overseas orders amounted to \$70.05 bln which was by 18.8% more than in 2014.		
Economic and financial risks				
2 /	Trend to increase in the general ruble	Optimization of the credit portfolio and waiver of "floating" rates.		
interest rates.		Result: Although interest rates were growing on the borrowed funds		
nterest rate risk iunavailability of global		market, ASE Group was not exposed to the risk in the reporting period		
financial resources)				
3 / Risk of state funding	Sequestering of long-term investment programs on the nuclear energy development.	Due to funding cuts, the Company implemented a program aimed at performance of works by own forces instead of subcontracting initially planned.		
availability decrease (change of the Russian macroeco-		The intensification of the management efforts on search of new overseas projects.		
nomic indicators)		Result: The Company suffered no significant losses related to reduction of available state funding.		
4	ASE Group carries out all procurement in accordance with the Uniform Indus-	To minimize counterparty credit risk, the monitoring of the financial condition of counterparties is performed on quarterly basis. The bid-		
Exposure to the credit risk of suppliers and customers	trial Procurement Standard of Rosatom State Corporation, stipulating com-	ding procedure comprises assessment of financial resources capacities. The Company uses guarantees provided by the partner banks of		
(decline of financial and economic stability of suppliers)	pulsory provision of bank guarantees on the advances paid. Therefore, the exposure remained at the level of 2014.	Rosatom State Corporation.  Result: Company suffers no significant losses related to counterparty defaults.		
	Ruble weakening.	The Company develops multi-currency cash flow Budget, which provides		
Exchange risk		for prompt response to influence of fluctuations of ruble exchange rate o current position of ASE Group of Companies.		
(increase of exchange rates volatility)		Result: Optimum balance of assets and liabilities denominated in one currency.		





Risk (factor)

#### Trend justification

Key activities on risk management and response to risks emerged in 2015. Risk management performance in 2015

#### Project related risks segment: high power NPP



Risks of default under EPC-contracts on NPP construction abroad and of default under NPP construction contracts in the RF

- Low quality of DDD from design subcontractors, delays in DDD issue and DDD approval by the Customer
- Delay in delivery
- Risks related to the quality of the equipment supplied
- Improper execution of work by the contractor and the lack of production capacity – the inability to ensure adequate manpower, labor-efficient performance, low percentage of earned value
- Lack of qualified staff in the customer country
- Other risks associated with the failure / improper performance of EPC-contract

Maintenance of risk trends due to active work in all directions

1. Improving incoming inspection procedures for DDD developed by contractors, the phased transfer of DDD for approval to the Customer, close cooperation with the licensing authorities, development of tracking scheme for all changes requested by the Customer, gradual agreement of documentation with the Customer in due course.

Tighter control of compliance with planned timing of the DDD design

Timely provision of data for examination

The introduction of an integrated schedule for design, procurement and construction at the power units construction sites

2. Intensification of work with suppliers and manufacturers on reduction of delivery time to meet the required installation schedule:

- · selection of "effective" suppliers;
- use of equipment made for a similar NPP, delivery of the specified equipment to the construction site within time specified;
- · daily monitoring of delivery schedules;
- routine work with the suppliers on implementation of supply agreement;
- equipment insurance for the period of its transportation.
- 3. Risk mitigation measures:
- to set deadlines of headcount increase for the contracted subcontractors;
- to hire additional subcontractors;
- to apply administrative and financial punishment measures to managers of subcontractors.
- 4. Risk mitigation measures:
- training of qualified staff for the needs of nuclear energy industry using capacities of the relevant Russian schools;
- secondment of necessary qualified staff by the general constructor.

5. Comprehensive insurance of construction and installation risks and liability to cover damages caused to the insured objects as a result of any sudden and unforeseen events during the work under the Contract, including human acts related to both construction and installation works and warranty period.

Result: No significant material losses related to defaults under contracts for NPP construction in Russia and abroad were registered.

#### Risk (factor)



Loss of contract, postponement of EPC-contract related to NPP construction project abroad

- Political nature of general contractor selection.
- Tight competition

#### Trend justification



Increased competitive pressure of China and Korea:

- active promotion of Korean APR-1400 technology to the international market, in particular, bid winning in the UAE;
- large-scale technologies transfer by China, entrance to the international markets (Argentina, South Africa, Iran).

2015. Risk management performance in 2015

Intensification of the work with the Customer

Negotiations between the management of Rosatom State Corporation and the government of a foreign customer

Key activities on risk management and response to risks emerged in

Development of action plans on cooperation with foreign customer

Implementation of the time and cost reduction program in NPP construction

Proactive position of the Company in work with the existing foreign customers in relation to prospective projects



#### Cutting of foreign customer budgets

- Lack of funding in a number of countries where the Company has promising NPP construction projects
- Limited project investment resources in the RF

Changes in the macroeconomic performance of countries participating in projects. Work performance using alternative financing sources, including commercial loans, hiring of partners and investors on alternative markets, including through involvement of Private Institution Rusatom International Network to implementation of measures in relation to alternative financing sources.

Result: Contractual obligations of foreign customers are performed in full.

#### **Reputation risks**



#### Reputation risk

- Large-scale global events in the nuclear power industry
- Publications (in Russia and abroad) aimed at discrediting Russian nuclear technologies on conventional and prospective markets

Public acceptance of nuclear power development and new NPP construction in Russia has a positive effect on the Company's operations perception in the country.

In some cases, the Company's overseas projects are faced with opposition from local public organizations and political structures.

In general, the magnitude of the counteraction is relatively low, however, such events are periodically covered by the media.

Measures aimed at strengthening the positive public attitude towards development of the nuclear energy industry by improvement of information transparency and open communication with all stakeholders

Regular interaction with the public and media in the regions of construction projects, informing the public on all important events related to the core business

Publication of the Company's Reports, including the integrated annual report

Analysis of the stakeholders structure to determine their expectations, expand the stakeholders scope, involve foreign stakeholders

Participation in Russian industrial events and international exhibitions and conferences

Strengthening the brand presence on foreign markets through marketing promotion of the brand





Risk (factor)	Trend justification	Key activities on risk management and response to risks emerged in 2015. Risk management performance in 2015
		Unconditional compliance with the requirements of applicable legislation.
		Result: In 2015, ASE Group gained recognition at several Russian and International contests.
		See section Awards.
		In 2015, German certification body TÜV SÜD Management Service GmbH performed audit and confirmed compliance of quality management system of NIAEP JSC with requirements of ISO 9001:2008.

#### **Technological risks**



Risk of developed technologies non-competitiveness

Competition strengthening

Tighter safety requirements for NPP open development opportunities (This is the reason, why Russian NPPs are leading in terms of safety in the world.)

Sophistication of design solutions, tightening of deadlines and budgets of capital projects

Assessment of innovations at pre-investment phase in accordance with the requirements of Rosatom State Corporation

Design consideration using FRC-2 scientific and technical council Benchmark of foreign technologies and NPP projects

Technology of small and medium power reactors development

Promotion of Multi-D technology on the market for PMC services in new sectors

#### **Additional market segments**

#### **Research reactors**



Loss of contract, postponement of research reactors contracts

- Political nature of general contractor selection
- Absence of expertise in the newcomer-countries

Rise of interest for development of own nuclear power engineering in developing countries. The first step to own nuclear energy industry is a research reactor for research purposes.

In 2015, the Company was active in the segment of research reactors.

Result: Award in the tender and execution of contract for preliminary phase of works under the project on construction of small gas HTR in Indonesia (project of the National Nuclear Agency BATAN). The project provided the company with a positive reference within the new promising segment of the global market.

Risk (factor)

#### Trend justification

Key activities on risk management and response to risks emerged in 2015. Risk management performance in 2015

#### DC NRHF, construction and retrofit of RW and SNF management facilities





Loss of contract, postponement of contracts execution in the segment of RW and SNF

High segment dependence on

to use nuclear power opens the opportunity for the Company (with consideration for European asset -Nukem) to strengthen its presence on the market of RW, SNF management facilities construction and DC NRHF.

Refusal of some European countries In 2015, the Company carried out work on several RW and SNF projects.

> Result: The Company won the tender for decommissioning of unit 1 of Philippsburg nuclear power plant (Germany). The tender was key event of the back-end segment on the Western European market.

> The United Company successfully completed the scope of works planned under the contract with JNPC (China) for supply of equipment for SRW management for Tianwan NPP.

#### Services related to NPP life extension and retrofit



Loss of contract, postponement of contracts in the segment of services related to NPP life extension and retrofit

Tight competition of the local

allow retaining its market position.

Company's reputation and expertise On the international market, ASE Group was involved in joint activities with Rusatom Service within the current service contract for Bushehr NPP 1 (Iran).

> Result: Growing references in the segment of NPPs service and retrofit.

#### **Project management consulting (PMC services)**





Tight competition of the existing players

The unique project management technology Multi-D provides ASE Group with capacity to provide the market with consulting services on management of complex engineering facilities.

Application of best practices obtained by the Company in the main core business to NPP construction provides for build-up of competence in the PMC-services segment.

Result: Thus, in 2015, Company entered into contracts for rendering of consulting services related to construction of Kudankulam NPP 3 & 4.





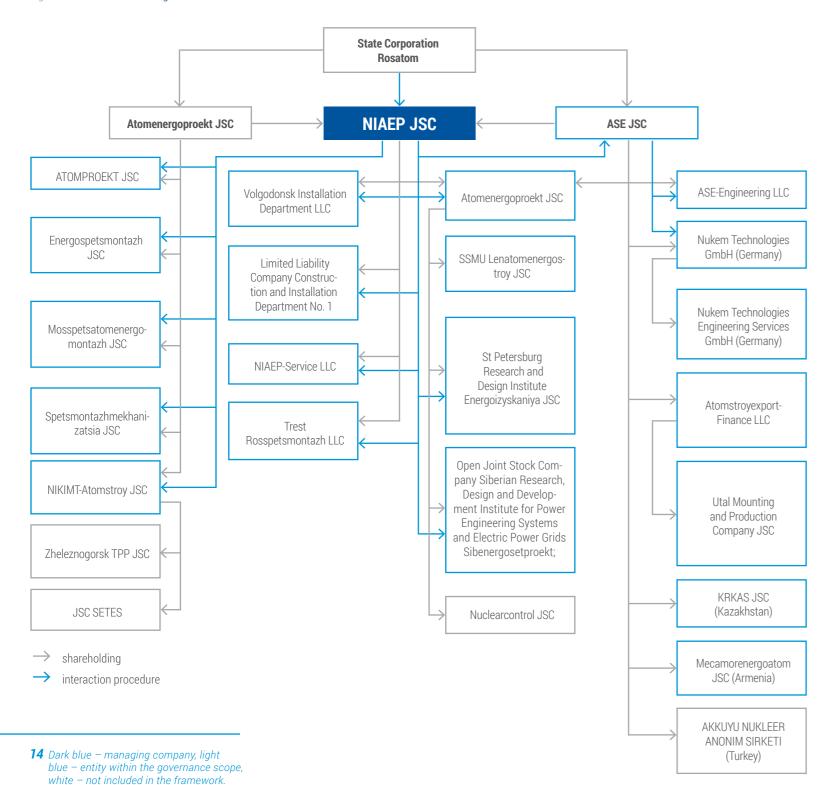
# 1.5 Corporate Governance

ASE Group comprises: NIAEP JSC, ASE JSC, Atomenergoproekt JSC, and ATOMPROEKT JSC joined the United Company in December 2015. Therefore, nies are not independent legal entities. NIAEP JSC

ATOMPROEKT JSC was not included in the scope of the Report consolidation. The specified compa-

acts as the managing company in relation to ASE JSC, Atomenergoproekt JSC and ATOMPROEKT

Figure 21. NIAEP JSC Management Framework 14





G4-34

The framework of ASE Group integration in the mid-term comprises transfer of equity and governance of NIAEP JSC, Atomenergoproekt JSC and ATOMPROEKT JSC to the managing company - ASE JSC.

Within the target ownership structure JSC Atomstroyexport will be performing functions of:

 managing company of the Division (implementation of control functions in accordance with Article 69 of Federal Law No. 208-FZ On Joint Stock Companies dated December 26, 1995),

- manufacturing company (management of construction, procurement and supply),
- · company owning assets of the Division.

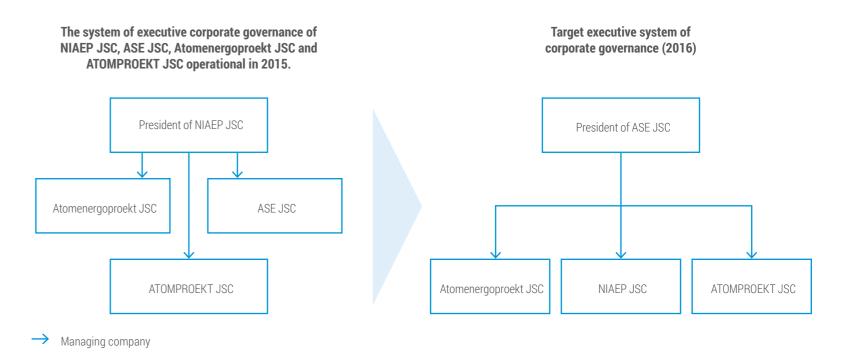
The target model assumes creation of one legal entity operating under ASE brand through

reorganization by means of merger of Atomenergoproekt JSC, ATOMPROEKT JSC and NIAEP JSC to ASE JSC.

In 2016, it is planned to perform transition to the target model through the provision of ASE JSC with managing company functions (in relation to NIAEP JSC, Atomenergoproekt JSC and ATOMPROEKT JSC) following termination of similar agreements with NIAEP JSC.

Figure 22. Intermediate Stage of Transition to the Target Executive Corporate Governance System

# Merger of human resources of Engineering division of Rosatom State Corporation on the Objectives basis of ASE JSC brand recognized both in Russia and abroad Creation of transparent system of executive corporate governance



#### **Key objectives of intermediate stage of transition to target structure (2016)**

Premature termination of powers of NIAEP JSC as managing company

Termination of agreements between NIAEP JSC and ASE JSC, NIAEP JSC and Atomenergoproekt JSC, NIAEP JSC and JSC ATOMPROEKT

Decision making by the governing bodies of NIAEP JSC, Atomenergoproekt JSC and ATOMPROEKT JSC on transfer of powers of sole executive body to managing company – ASE JSC



## 1.5.1 Corporate Governance Principles of NIAEP JSC

Corporate governance of NIAEP JSC is built on structure stipulates for respect of rights and of its value, maintenance of financial stability and the basis of responsibility, transparency, expertise

interests of stakeholders and contributes to and competence. The corporate governance successful activity of the Company, including rise

#### **General Corporate Governance Principles of NIAEP JSC**

#### Principle of protection of rights and interests of shareholders

Corporate governance is based on the protection and respect to the rights and legitimate interests of shareholders and contributes to the efficient operation of the Company, including the growth of assets and maintaining financial stability and profitability. Rights of shareholders are defined in accordance with the Federal Law On Joint Stock Companies and the Charter of the Company.

Corporate governance provides the shareholders with effective opportunity to exercise their rights related to participation in the management of the Company. The procedure for the information exchange between the Company and shareholders is governed by the current legislation of Russia, the Charter, the industry and the Company's bylaws.

#### Principle of efficient management by the **Board of Directors**

The activities of the Board of Directors are based on the strict observance and compliance with interests of shareholders and the responsibility for the operations of the Company.

The Board of Directors is acting in good faith and in the interests of shareholders and the Company. The Board of Directors is accountable in its actions to shareholders.

#### **Principles of transparency** and objectivity of information disclosure

To provide for informed decision making by shareholders and to communicate information to stakeholders, the Board of Directors shall ensure timely disclosure to shareholders and stakeholders of reliable information on the Company, including its financial position, economic performance and results of its operations, ownership and governance

The disclosure and/or publication of any information shall be performed in accordance with the applicable legislation on state and commercial secrets.

#### **Principles of legality and ethics**

The Company operates in compliance with the law, generally accepted principles of business ethics, the Charter and contractual obligations. The relationship between the shareholders and the members of the Board of Directors are based on mutual trust, respect, accountability and control.

#### **Regulatory Framework**

- Civil Code of the Russian Federation,
- Federal Law No. 208-FZ On Joint Stock Companies,
- Federal Law No. 99-FZ dated May 05. 2014 as amended June 29, 2015 No. 210-FZ, dated July 13, 2015 No. 216-FZ, dated November 28, 2015 No. 356-FZ On amendment to Chapter 4 Part 1 of
- the Civil Code of the Russian Federation and on Invalidation of Certain Provisions of the Legislative Acts of the Russian Federation,
- · Rules on Collective Governing Bodies of NIAEP JSC Decisions Follow-Up;
- · Rules on Interaction of Subdivision of NIAEP JSC During Preparation of
- Materials for the Board of Directors Meetings and General Meeting of Shareholders.
- Provision on Interaction of Subdivisions and Officers of NIAEP JSC for the Purposes of Subsidiaries of NIAEP JSC Management.

## 1.5.2 Corporate Governance System of NIAEP JSC

#### **Corporate Governance System**

Corporate governance system of NIAEP JSC is formed by corporate bodies, including the top governing body – the General Shareholder Meeting, collegiate governing body – Board of Directors and the sole executive body – the President (in accordance with cl.11.1 of the Charter of NIAEP JSC, revision No. 3 as approved by the General Shareholders Meeting of NIAEP JSC dated August 25, 2015).

Powers of the governing bodies are defined by the Charter of NIAEP JSC (clauses 12, 13, 14). Shareholders of NIAEP JSC are Atomenergoprom JSC and Atomstroyexport JSC. There

are no specific committees within the Board of Directors of NIAEP JSC. Charter of NIAEP JSC is published at: <a href="http://www.e-disclosure.ru/portal/">http://www.e-disclosure.ru/portal/</a> files.aspx?id=19054&type=1.

Activities of the General Meeting of Shareholders and Board of Directors of NIAEP JSC are aimed at the effective management of the Company and are focused on ensuring high profitability and competitiveness of the business, minimizing risks and possible adverse effects resulting from the Company's business activities, subject to compliance with the legislation of the Russian Federation and international legal provisions, as well as the laws of the states of presence.

The corporate governance system is based on the requirements of Rosatom State Corporation. NIAEP JSC is committed to ensure compliance with the Corporate Governance Code as recommended for application by joint stock companies by the Bank of Russia (Bank of Russia Letter on Corporate Governance Code No. 06-52/2463 dated April 10, 2014). Separate Code rules are implemented by NIAEP JSC with consideration for the special legal status of Rosatom State Corporation (as stipulated by the regulatory legal acts of Russia and reflected in a range of local regulations) ensuring the uniform governance of the nuclear industry.

#### **In Engineering Division**

 the social segment is within the responsibility of Vice-President for Human Resources and Administrative Work;

- · the economics and finance segment is within the responsibility of Senior Vice-President for Economics and Finance:
- the environmental segment is within the responsibility of the Director for Quality Management

#### **General Meeting of Shareholders of** NIAEP JSC

In accordance with Federal Law No. 208-FZ On Joint-Stock Companies dated December 26, 1995 and the Charter of NIAEP JSC, the supreme governing body of the Company is the general meeting of shareholders, whose decisions, including of economic, environmental and social nature are binding for the President of the Company. The President ensures execution of the decisions of supreme governing body by issuing appropriate orders, resolutions and instructions, as well as by delegating authority to top managers and other officers of the Company subject to procedure stipulated by Articles 185-189 of the Civil Code of the Russian Federation by means of power of attorneys.

Agendas of the General Meetings of Shareholders held in 2015 are provided in Annex 8.

The general meeting of shareholders shall decide on matters within its competence, pursuant to procedure stipulated in Article 48 of Federal Law No. 208-FZ On Joint Stock Companies dated December 26, 1995, Chapter 4 Part 1 of the Civil Code. The general meetings of

shareholders held during the last five years were attended by 100% of the shareholders.

No assessment of the supreme governing body activity was performed in NIAEP JSC. No specific measures to develop and enhance the collective knowledge of members of the supreme governing body in relation to the economic, environmental and social issues are taken in NIAEP JSC.

#### **President of NIAEP JSC**

The sole executive body of NIAEP JSC is the President. The President of NIAEP JSC is elected at the general meeting of shareholders. The President ensures implementation of decisions of the general meeting of shareholders and is accountable thereto. The President of the Company is Valery Igorevich Limarenko.

For the details on the committees operating under the President of NIAEP JSC are provided in the 2014 Report of NIAEP JSC.

#### **Board of Directors of NIAEP JSC**

The Board of Directors includes five members, according to the Charter of the Company. All members of the Board of Directors hold senior positions in organizations of the nuclear industry. Members of the Board of Directors have no stakes in the authorized capital of NIAEP JSC and do not own shares of NIAEP JSC. In 2015, the members of the Board of Directors were not changed, and as of December 31, 2015 the Board of Directors was operating on the basis of the resolution of the General Meeting of Shareholders (Minutes No. 2 of June 29, 2015). The Board of Directors includes two executive directors and three non-executive directors, with no independent directors present.

The main objectives of the Board of Directors:

- development and analysis of corporate strategy, and implementation control;
- ensuring monitoring and assessment of executive bodies and senior officers of the company activities;
- increasing capitalization, expansion of market positions, achievement and maintenance of the company competitiveness;







 protection of rights and interests of the Company's shareholders.

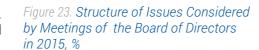
No specific measures to develop and enhance the collective knowledge of members of the Board of Directors in relation to the economic, environmental and social issues are taken in NIAEP JSC.

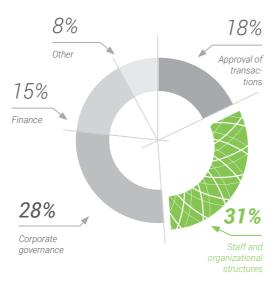
The Board of Directors of NIAEP JSC does not participate in the analysis of effectiveness of the organization's risk management practices related to economic, environmental and social issues and does not analyze the economic,

environmental and social risks and opportunities. The responsibility for these matters is assigned to the relevant departments.

The Board meetings are convened by the chairman on his own initiative, the Board of Directors, following the request of a member of the Board of Directors, auditor or the sole executive body (President) with specification of issues to be included in agenda. No assessment of the supreme governing body activity was performed in NIAEP JSC. The chairman of the Board of Directors does not act as an executive officer.

Report on the Board of Directors on NIAEP JSC operations results is provided in Annex 8.





#### **Members of the Board of Directors of NIAEP JSC**

CVs of the members of the Board of Directors are provided in Annex 9.



K.B. Komarov First Deputy CEO of Rosatom State Corporation for Corporate Development and International Business



S.N. Drozdov Director of International Business Department of Rosatom State Corporation



E.V. Lvakhova Director for investments and operational efficiency management of Rosatom State Corporation



V.I. Limarenko President of NIAEP JSC



I.A. Borisov *Vice-President for Development* of NIAEP JSC



G4-51, G4-52, G4-53

#### **Remuneration of the President** and Members of the Board of Directors

The approach to remuneration of labor of top management is similar to the approach to remuneration of labor of other employees of the Company (see section 2.5.1. Human Capital *Management*). The remuneration of the President of NIAEP JSC is defined by the labor contract as approved by the Board of Directors.

According to the resolution of the General Meeting of Shareholders, the members of the Board of Directors may receive remuneration and/or reimbursement of expenditures connected with performance of their functions as members of the Board of Directors of NIAEP JSC during the period of fulfillment of their obligations thereof. In 2015, the General Meeting of Shareholders did not take relevant decisions, therefore, no remuneration was allocated and paid to the members of the Board of Directors for the reporting period.

#### **Corporate Conflict Management**

In 2015, no corporate conflicts emerged. In accordance with Federal Law No. 208-FZ On Joint Stock Companies of December 26, 1995 (hereinafter referred to as the Law), the Charter of NIAEP JSC contains a clause stipulating that the President of NIAEP JSC shall receive an approval of the Board of Directors to hold concurrent positions in management bodies of other organizations. In addition, in accordance with the Law, shareholders, members of the Board of Directors and the President of the Company shall notify the Board of Directors and the Company's auditor:

- on legal entities where they hold 20 or more percent of voting stocks (shares, equities) on their own or jointly with affiliated persons:
- on legal entities where they hold positions in governing bodies; and
- to the best of his/her knowledge, on closed or expected transactions which may be recognized as transactions in which he/ she has an interest.

The emerging corporate conflicts may be settled in accordance with the legislation of the Russian Federation. In 2015, NIAEP JSC disclosed information on affiliated persons in form of a list of affiliated persons on a quarterly basis.

#### **Financial and Economic Activity Control of NIAEP JSC**

Financial and economic activity is controlled by Internal Control and Audit Division of NIAEP JSC. In accordance with Clause 11.2 of the Charter of NIAEP JSC, since March 18, 2015, there is no review committee in NIAEP JSC.

#### Independent Auditor

In accordance with the decision of the General Meeting of Shareholders dated of June 29, 2014, the independent auditor of NIAEP JSC is Nexia Pacioli Ltd.

#### **Internal Control and Audit Division**

A system of internal control is established in the Company to ensure achievement of the Company's goals and efficient corporate management. The system of internal control operates in accordance with the key principles of Internal Control and Audit Policy of Rosatom State Corporation, and meets requirements of main stakeholders and applicable international standards.

Main changes made in 2015 to the system of internal control and audit of NIAEP JSC com-

- · following conclusion of agreement on delegation of powers of sole executive body of Atomenergoproekt JSC to NIAEP JSC and transfer of internal control and audit functions to the IC&A service of NIAEP JSC, the controlled framework grew almost two times (headcount of entities, number of branches and entities within the governance scope, remoteness, etc.);
- · increase of headcount of IC&A administration of NIAEP JSC following hiring of part controllers (7 out of 14) employed by Atomenergoproekt JSC;
- · department of IC&A of NIAEP JSC was reorganized into division comprising two departments (internal control and audit operations) with audit department trans-

fer to Moscow location. Total headcount of the division is 15 persons.

In 2015, the division undertook 71 control events (64 in 2014 and 80 in 2013). Increase in the number of audits was mainly caused by increase in the number of control events included into consolidated control plan of specialized internal control bodies of Rosatom State Corporation. The main cause for increase in the number of control events is growth of quantity of entities included in the governance scope of NIAEP JSC.

#### Performance in 2015

Neither structure or quantity of controlled business processes has changed (Design and survey work, Purchase and pre-assembly of equipment and materials, Procurement and management of construction and installation subcontractors' services, Management of network scheduling of construction, Construction management, Financial resources management, Information technology, Administrative procurement).

Increase in the quantity of financial and business activities inspections, audits, checks was made possible as a result of the service headcount growth.

The quantity of audits grew in the structure of control measures. The operations with non-current assets and unclaimed movable property (in NIAEP JSC and ASE JSC) were subjected to audit.

Non-competitive approaches to goods, works and services procurement non-conforming to principles of Industry Procurement Policy aimed at improvement of efficient use of resources and market-based pricing of purchased products were identified in entities included in the governance framework of NIAEP JSC, in branches and representative offices of the Company. In 2015, the share of non-competitive procurement was 37.9% in ASE JSC, 37.2% in NIAEP JSC, 84% in Atomenergoproekt JSC





(due to procurement for the purposes of timely start-up of power unit No. 1 of Novovoronezh NPP-2 in accordance with the resolution of Rosatom State Corporation No.1/566 dated May 31, 2013). Considering non-conformances identified in this area, the number of audits will not be decreased in the future.

To improve internal control and increase the efficiency of control activities implemented in 2015, the Company performed audit of business process "NPP Construction Project Management" (using Kursk NPP-2 as case study), and expert-analytical procedure "Analysis of contract activities by design unit of NIAEP JSC". The deliverables of control events and the auditors' recommendations were acknowledged by owners of relevant business processes.

Besides, the experts of Internal Control and Audit Division took part in audits of subsidiaries and affiliates as members of the Audit commissions, and in the centralized inspections carried out by the Audit Department of Rosatom State Corporation in other entities of the industry.

Based on the outputs of control events in relation to entities included in the governance framework of NIAEP, the Company developed plans of measures to correct the identified non-conformities and prevent repetition of the same in future, brought 46 officers to disciplinary responsibility (10 in 2014, 12 in 2013), including 9 senior executives, and one manager was dismissed from service.

Alike to the previous periods, the scope of financial and economic activities check comprises compulsory inspection of purchasing and contractual work, procurement procedures compliance to the Uniform Industrial Procurement Standard, execution of supply contracts (12 inspections were performed in 2015, 9 in 2014, and 30 in 2013). Particular attention was paid to procurements provided by a sole supplier due to high risk exposure.

To reduce exposure related to such business processes, Internal Control and Audit Division monitors implementation of corrective measures plans.

#### Plans for 2016

- to increase the number of control events and capacity of business processes audits with cutting of the time-frames;
- to improve the system for entities and departments selection for inclusion in the plans of control measures to ensure timeliness and completeness of non-conformities identification;
- to add the procedures of milestone achievement verification, as well as the implementation of anti-crisis measures of industry plans in the program of control measures;
- to ensure collaboration with the heads of entities, departments, functional managers in areas of activity to provide for effective planning of control activities and to improve its performance, including by increasing the effectiveness of corrective actions based on the results of inspections, and by application of timely and adequate measures to persons guilty in non-conformances;
- to improve professional qualification of internal controllers and auditors.

# **Share Capital and Securities of NIAEP JSC**

Shareholders of NIAEP JSC comprise Joint Stock Company Atomic Energy Power Corporation (51%) and Joint Stock Company Atomstroyexport (49%). During 2015, no transactions with shares of NIAEP JSC or changes in the share capital were performed. As of December 31, 2015, the authorized capital of the Company amounted to RUB 500,001,877.

The number of actually placed securities amounted to 500,001,877. All shares were placed by means of closed subscription. The nominal cost of one security issued amounts to one ruble. The market value of one uncertified registered ordinary share of NIAEP JSC was estimated to be RUB 15 (as of July 27, 2015).

Table 3. List of Assets of NIAEP JSC

Assets of NIAEP JSC	Ownership of NIAEP JSC (% of the authorized capital)
Limited Liability Company Construction and Installation Department No. 1	100
NIAEP-Service LLC	100
Volgodonsk Installation Department LLC	100
Trest Rosspetsmontazh LLC	99.9

#### Information on Payment of Dividends

In 2015, no dividend payment policy was approved. The procedure of payment of dividends in NIAEP JSC is regulated by Section 8 of the Company's Charter. In accordance with the Charter, pursuant to the results of the first quarter, half-year period, nine month period of

the financial year and/or financial year, the Company is entitled to make decisions on payment of dividends in relation to shares issues, unless otherwise is specified by Federal Law On Joint Stock Companies. The decision on payment of dividends pursuant to the results of the first quarter, half-year period, nine month period of the financial year can be made within three months

after completion of the corresponding period. The decision on payment of dividends, including amount, procedure, form and terms thereof, shall be made by the General Meeting of Shareholders of NIAEP JSC (the amount of dividends shall not exceed the one recommended by the NIAEP JSC Board of Directors).

Table 4. Information on Payment of Dividends Paid as of the Year End

	2012	2013	2014
Amount of dividends paid, RUB	785,793,955	1,343,403,334	1,549,848,230

#### **Report on Major Transactions and Related-Party Transactions**

In 2015, the governing bodies of NIAEP JSC approved two major transactions. The terms of the transactions are commercial secret of NIAEP JSC and shall not be disclosed.

List of related-party transactions, where the President and a member of the Board of Directors of NIAEP JSC V.I. Limarenko has interest, approved in 2015 by the governing bodies of NIAEP JSC in accordance with Federal Law On Joint Stock Companies and Charter of NIAEP JSC:

*Table 5. List of Related-Party Transactions* 

Persons interested in transaction	Subject and material conditions of the transaction	Body approving the transaction	
Insurer – SOGAZ JSC	Agreement on voluntary health insurance for the purposes of arrangement and payment by the Insurer of medical and other services to the	Minutes No. 25 of the meeting	
Insured - NIAEP JSC	insured person of the Insured upon emergence of insured event with the	of the Board of Directors dated	
Beneficiary (insured person) – V.I. Limarenko	Insured's obligation to pay insurance premiums in accordance with the Annex to the Agreement	December 25, 2015	
Insurer – SOGAZ JSC Insured – NIAEP JSC	Agreement on personal accident and sickness insurance with the Insurer's liability to effect insurance payments to the insured person	Minutes No. 25 of the meeting	
	of the Insured upon emergence of insured event with the Insured's	of the Board of Directors dated December 25, 2015	
Beneficiary (insured person) – V.I. Limarenko	obligation to pay insurance premiums in accordance with the Agreement and Annexes thereto		

In 2015, NIAEP JSC entered in related-party transactions, with the shareholders interest, however such transactions are not subject to approval procedure stipulated for related-party transactions (in accordance with Part 2, Article 81 of Federal Law On Joint Stock Companies).

All transaction of NIAEP JSC are made on arm's length conditions. The Company is governed by provisions of the Uniform Industrial Procurement Standard (Procurement Provision) approved by the decision of Rosatom State Corporation Supervisory Board No. 37 dated February 07, 2012. Besides, the Compa-

ny's standard "Arrangement of Procurement Activity in NIAEP JSC and Controlled Entities" is valid in NIAEP JSC.





#### **Improvement of Corporate Governance System**

#### **Performance in 2015**

- changes to the Charter of NIAEP JSC following amendment to Article 4, Part 1 of the Civil Code of Russia;
- · approval of consolidated plan of integration of Atomenergoproekt JSC to the frameworks of NIAEP JSC and of transfer of controlling and ownership
- functions of NIAEP JSC, Atomenergoproekt JSC and their subsidiaries and controlled entities to ASE JSC;
- · approval of Provision on Procedure of Interaction between Supervisors (Coordinators) with Controlled Entities.

#### Plans for 2016

In 2016, it is planned to further improve the corporate governance system, in particular, the development of the map for group of processes "Corporate Governance" of "NIAEP on the basis of "Corporate Governance" group of process map of Rosatom State Corporation, in accordance with international standards of quality management system of organizations and enterprises (ISO).

# 1.5.3 Corporate Governance of Controlled Entities

#### **Corporate Governance System**

The Corporate governance of ASE JSC and Atomenergoproekt JSC (hereinafter referred to as the companies) refers to the general management performed by General Meeting of Shareholders and the Board of Directors and includes relationship with the executive bodies, top management of companies and other stakeholders (employees, customers, partners and counterparties, regulatory and supervisory bodies, state authorities and bodies of state administration) in relation to:

- definition of strategic goals for the activity and efficient management system;
- · creation of work incentives ensuring performance of actions required to achieve the strategic goals by governing bodies and its employees;

· balance of interests of shareholders, the Board of Directors, management and other stakeholders;

• ensure compliance with the legislation of the Russian Federation, Charter, the Company's internal documents, and industry standards.

No specific measures to develop and enhance the collective knowledge of members of the Board of Directors in relation to the economic, environmental and social issues are taken in ASE JSC and Atomenergoproekt JSC.

The Board of Directors of ASE JSC and Atomenergoproekt JSC does not participate in the analysis of effectiveness of the organization's risk management practices related to economic, environmental and social issues and does not analyze the economic, environmental and social risks and opportunities. The respon-

sibility for these matters is assigned to the relevant departments.

Separate Code rules are implemented by the Companies with consideration for the recommendations provided in the letter of the Bank of Russia No. 06-52/2463 dated April 10, 2014, and special legal status of Rosatom State Corporation (as stipulated by the regulatory legal acts of Russia and reflected in a range of local regulations) ensuring the uniform governance of the nuclear industry.

ASE JSC and Atomenergoproekt JSC Governing

- General Meeting of Shareholders;
- Board of Directors:
- President (Sole Executive Body).

#### **Key Documents Governing Corporate Governance System**

- Federal Law No. 208-FZ On Joint Stock Companies as of December 26, 1995 (as revised dated June 29, 2015, as amended December 29, 2015);
- · Charter of the Company;

· Internal documents governing the activities of the General Meeting of Shareholders. Board of Directors, sole executive body of the Company

#### **Sole Executive Body**

Powers of the sole executive body (President) of ASE JSC and Atomenergoproekt JSC are delegated to the managing company - NIAEP JSC. See section 1.5.1. Corporate Governance Principles of NIAEP JSC.

Share of I.V. Limarenko in the share capital of ASE JSC and Atomenergoproekt JSC is 0%. I.V. Limarenko owns 0% of ordinary shares of the Companies.

#### **Boards of Directors**

Main objectives of the Boards of Directors of ASE JSC and Atomenergoproekt JSC:

- development and analysis of corporate strategy, and implementation control;
- · ensuring monitoring and assessment of activities of executive bodies and senior officers of the company;
- · increasing capitalization, expansion of market positions, achievement and maintenance of the competitiveness;
- retention of stable financial position, increase of revenue and profitability;
- protection of rights and interests of the Companies' shareholders.

In 2015, the Board of Directors of ASE JSC comprised:

- · N.S. Drozdov, V.L. Katz, K.B. Komarov, V.N. Savushkin, I.G. Shpagin – elected by the decision of the annual general meeting of shareholders of ASE JSC dated June 27, 2014;
- · O.S. Barabanov, N.S. Drozdov, K.B. Komarov, V.L. Katz, V.N. Savushkin - elected by the decision of the sole shareholder of ASE JSC No. 4 dated May 24, 2015.

By the decision of the sole shareholder of Atomenergoproekt JSC No. 37 dated November 28, 2014 and resolution of the general meeting of shareholders of Atomenergoproekt JSC dated June 30, 2015 (minutes No. 2 dated July 01, 2015), the Board of Directors of Atomenergoproekt JSC comprised: Yu.A. Ivanov, L.V. Yegorov, V.L. Katz, Ye.V. Rzhannikova, N.P. Sheshokin (CVs of the members of the Board of Directors are provided in Annex 9).

All members of the Board of Directors are officers of the entities of nuclear industry. The Board of Directors of ASE JSC includes one executive director and four non-executive directors, with no independent directors present.

The Board of Directors of Atomenergoproekt JSC includes one executive director and four non-executive directors, with no independent directors present.

The members of the Board of Directors of ASE JSC and Atomenergoproekt JSC do not have shares in the authorized capital and ordinary shares of the Companies.

The Boards of Directors of ASE JSC and Atomenergoproekt JSC do not have committees in the structure. The issue of creation of specific committees of the Board of Directors is planned to be considered following integration on the basis of ASE JSC.

Remuneration to the managing company of ASE JSC and Atomenergoproekt JSC is stipulated in accordance with the agreements on delegation of powers of sole executive body.

According to the resolution of the General Meeting of Shareholders, the members of the Boards of Directors may receive remuneration and/or reimbursement of expenditures connected with performance of their functions as members of the Boards of Directors of ASE JSC and Atomenergoproekt JSC during the period of fulfillment of their obligations thereof. In 2015, the General Meeting of Shareholders did not take relevant decisions, therefore, no remuneration was allocated and paid to the members of the Boards of Directors of ASE JSC and Atomenergoproekt JSC for the reporting period (Agenda of the meetings of the Boards of Directors is provided in Annex 8).

Figure 24. Structure of Issues Considered by Meetings of the Board of Directors of ASE JSC in 2015, %

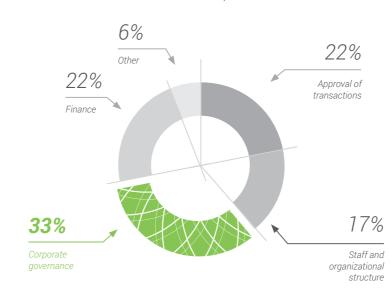
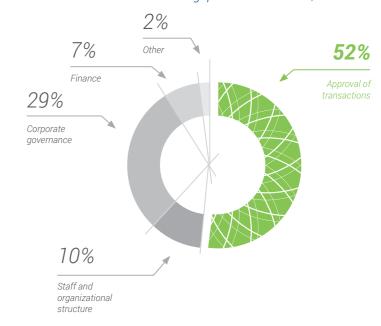


Figure 25. Structure of Issues Considered by Meetings of the Board of Directors of Atomenergoproekt JSC in 2015, %





# **Share Capital and Securities** of ASE JSC

The sole shareholder of ASE JSC is Rosatom State Corporation. During 2015, no transactions with shares or changes in the share capital were performed. As of December 31, 2015, the authorized capital of the Company amounted to RUB 350,044,835,15/91.

The number of issued shares of the ASE JSC amounted to 31,854,080 shares, the number of authorized shares – 1,316,250 shares. Nominal value of share amounted to RUB 10.90/91.

In 2015, no dividend payment policy was approved. As a result of losses for the last three years, no dividends were paid.

Table 6. List of Assets of ASE JSC

Assets of ASE JSC	Ownership of ASE JSC (% of the authorized capital)
Atomenergoproekt JSC	100% less 1 share
NIAEP JSC	49
Nukem Technologies GmbH	100
Atomstroyexport-Finance LLC	100
ASE-Engineering LLC	100
Kazakhstan-Russian Company Nuclear Power Plants LLC	50
MECAMORENERGOATOM JSC	50
AKKUYU NUCLEAR JOINT STOCK COMPANY	2.26

# **Share Capital and Securities** of JSC Atomenergoproekt

Shareholders of Atomenergoproekt JSC comprise NIAEP JSC (1 share) and ASE JSC (100% less 1 share). Subject to Agreement on Sale-Purchase of Shares No. 7756/150045 (registration No. 007/29D dated January 20, 2015) dated February 10, 2015, ASE JSC transferred 1 share of Atomenergoproekt JSC to NIAEP JSC. No other transactions with shares were reported in 2015. As of December 31, 2015 the authorized capital of the Company amounted to RUB 1,547,504,159.

The number of issued shares of Atomenergoproekt JSC amounted to 1,547,504,159 shares, with no authorized shares present. Nominal value of share amounted to RUB 1.

In 2015, no dividend payment policy was approved. Based on the results of 2015, the shareholders have made a decision that no dividends shall be paid.

Table 7. List of Assets of Atomenergoproekt JSC

Assets of Atomenergoproekt JSC	Ownership of Atomenergoproekt JSC (% of the authorized capital)
Specialized Construction and Installation Department Lenatomenergostroy JSC	99.999
St Petersburg Research and Design Institute Energoizyskaniya JSC	100
Open Joint Stock Company Siberian Research, Design and Development Institute for Power Engineering Systems and Electric Power Grids Sibenergosetproekt	100
Nuclearcontrol JSC	36

Table 8. Dividends Paid as of the Year End, RUB

2012	2013	2014
1,671,674,035	275,818,202	0

# Report on Major Transactions and Related-Party Transactions

In 2015, ASE JSC entered in related-party transactions, where the sole shareholder — Rosatom State Corporation had interest, however, in accordance with Part 2, Article 81 of Federal Law On Joint Stock Companies, such transactions are not subject to approval procedure stipulated for related-party transactions.

In 2015, ASE JSC entered and the governing bodies of ASE JSC approved 3 major transactions, the terms of the transactions are commercial secret of ASE JSC and shall not be disclosed.

In 2015, Atomenergoproekt JSC entered in related-party transactions, with the shareholders' (NIAEP JSC, ASE JSC) interest, however, such transactions are not subject to approval

procedure stipulated for related-party transactions (in accordance with Part 2, Article 81 of Federal Law On Joint Stock Companies, such transactions are not subject to approval procedure stipulated for related-party transactions).

In 2015, Atomenergoproekt JSC entered and the governing bodies of Atomenergoproekt JSC approved 4 major transactions.

Table 9. Major Transactions of Atomenergoproekt JSC in 2015

Document	Parties to the transaction	Subject	Price, RUB
Additional agreement to Contract for construction of Novovoronezh NPP-2 with power units No. 1 and No. 2 No. 08108/378 dated August 15, 2008, registration No. 2008/23.1/29946 as revised by Agreement No. 9-1 dated February 22, 2011, registration No. 2008/23.1/29946-11 concluded between Rosenergoatom Concern JSC and Atomenergoproekt JSC	General contractor – Atomenergoproekt JSC  Customer – Rosenergoatom Concern JSC	Change in the terms and procedures of pricing works and services provided under the contract	31,000,000
Additional agreement No. 31 dated March 25, 2015 to contractor's agreement No.103//08108/378 C8 dated February 12, 2009 concluded between United Energy Construction Company JSC and Atomenergoproekt JSC	General contractor – Atomenergoproekt JSC  Contractor – United Energy Construction Company JSC	Change in the price of works performed under the contract	35,776,178,405
Agreement on replacement of party in the Contract No. 2756/LEN2, Registration No. 2008/23.5/30080 dated August 27, 2008 on performance of construction and installation works at Leningrad NPP-2 (as revised by agreement dated February 21, 2012, registration No. 2008/23.5/30080-29)	General contractor – Atomenergoproekt JSC  Customer – Rosenergoatom Concern OJSC	Replacement of party to the contract	27,810,797,030
Additional agreement No. 19 to contractor's agreement No. 259//08108/378 DS 11 dated April 26, 2011 concluded between Atomenergoproekt JSC and Energospetsmontazh JSC	General contractor – Atomenergoproekt JSC  Contractor – Energospetsmontazh JSC	Change in the price of contractt and financing/drawdown schedule in 2015	10,642,697,599

All of the specified transactions made on arm's length conditions. The Companies are governed by the Uniform Industrial Procurement Standard (Procurement Provision) of Rosatom State Corporation.

Besides, the procurement operations of Atomenergoproekt JSC and ASE JSC are governed by the Company's standard "Arrangement of Procurement Activity in NIAEP JSC and Controlled Entities".

# Improvement of Corporate Governance System

In 2015, Charters of ASE JSC and Atomenergoproekt JSC were changed following amendment of Article 4, Part 1 of the Civil Code of the Russian Federation. Each Company has approved own Provisions on Procedure of Interaction between Supervisors (Coordinators) with controlled entities.

In 2016, the Companies plan to continue work on improvement of the governance system, in particular:

- transfer of functions of sole governing body to ASE JSC;
- creation of unified corporate management center;
- development of map for group of processes "Corporate Governance" of NIAEP on the basis of "Corporate Governance" group of processes map of Rosatom State Corporation in accordance with international standards of quality management system of organizations and enterprises (ISO).





Integrated report 2015

## Growth of gross profit up to

21.0 bln RUB

Budget control system, staff motivation system, Rosatom Production System being introduced in the Company and business growth (inclusion of new companies into the governance scope) growth of gross profit in 2013-2015



- → Read more about the dynamics of net profit (mln RUB) p. 54
- → Read more about EBITDA (mln RUB) p. 53

## Growth of EBITDA up to

6.6 bln RUB
Increase by 409.9% compared to 2014



NOPAT Increase by

1,747.8%

compared to 2014



→ Read more about NOPAT (mln RUB) p. 53







Nikolay Podorov, Chief Vice-President for Economy and Finance

# of the reporting year?

- ASE Group still ranks the first in the world in the number of simultaneously constructed in workforce productivity, since it ensures power units. In 2015, the Company's portfo-competitive growth. Thanks to our overseas lio of orders was 32 units, which is more than construction projects and the introduction 30% of the global market in NPP construction. of Rosatom Production System, we man-As compared to 2013, there is a growth of 12 aged to increase this indicator one and a power units, or 60%. This fact demonstrates the half times as in 2013 in comparable prices. business development and the prospects.

All key economic targets planned for 2015 were pany NIAEP play a big part in the managereached. The revenue grew one and a half times, and the mid-term plan implies more than business processes in terms of their impact twofold growth. So, the growth rate is rather on the financial performance. The company high. Key profit drivers are the NPP construc- introduces new methods and standards in tion projects in their active phase. They are economic performance management within the third and fourth units of Chinese Tianwan the budgeting system, key performance NPP, Novovoronezh NPP-2 and Rooppur NPP in indicators system and the real-time plan-Bangladesh. The increase in revenue was also supported by strengthening the budgetary cost control and development of Rosatom Production System at our enterprises.

#### - What financial benefits will ASE Group get due to the integration with ATOMPROEKT JSC?

- Thanks to combined efforts of St Petersburg Institute, which is a remarkable Rosatom's design organization, we plan to increase our portfolio of orders, to enhance performance of the core activities and management, to improve the labor productivity and to support stable growth of ASE Group profits.

# - Please describe the most significant results - What are the 2016 plans and the mid-

We pay a lot of attention to the increase

Economy departments of managing comment efficiency improvement. They control fact analysis system.

# 2.1.1 Financial Capital Management

Financial capital means the backup funds of the Company to be used for goods production/services rendering, created in the course of commercial and investment activities and received through financing (debt or shared financing).

#### Economic and financial performance management

ASE Group has a system of key performance A budget system regulated by the integrated man-visions. Budget system determines targets for indicators (KPIs) management that provides agement system standards is introduced for the economic indicators taking into account United for timely achievement of the set goals due to purposes of comprehensive economic manage. Company strategic goals; by carrying out on-gothe KPI establishment and monitoring by the ment. The system is based on collection, organi- ing plan-fact analysis, it provides real-time inforsenior executive officers. KPIs are set taking zation, processing and analysis of economic information about deviations from the targets required into account development roadmaps, environ- mation related to construction projects, income for decision-making by the Company's manage-

mental forecasts and possible risks forecasts. and expenditure items of the Company's subdiment in general and its subdivisions in particular.

To improve the efficiency of Company's performance indicators management, to improve the quality of cooperation between the services engaged in budgeting, as well as the quality of planning and analysis, a number of standards were introduced:

- CS 136.01-14 Budget System of FRC-2 Overseas Construction;
- · CS 136.02-14 Consolidated Production Plan of FRC-2 Overseas Construction;
- · CS 136.03-14 Consolidated Plan for the Heandcount, Payroll & Insurance Premiums of Subdivisions of FRC-2 Overseas Construction.
- · CS 136.04-14 Consolidated Plan for Operational Costs of Subdivisions of FRC-2 Overseas Construction.

#### Investment management

tivities in the United Company is arranged operation between subdivisions when making in accordance with regulatory documents and implementing investment decisions and standards of State Atomic Energy Corporation Rosatom.

CS 35.02-15 "Investment Activity Management" PROEKT JSC is the authority that makes in- implementation of investment decisions. is the primary internal regulatory document vestment decisions in ASE Group. This is a that governs investment processes of ASE collective body that implements principles of

The management process for investment ac- Group and determines the uniform rules for co- the single industrial investment practice of Ro-

satom State Corporation and its companies. Starting from 2015, the United Company has introduced a Task Group of the Investment The Investment Committee of NIAEP JSC, Committee intended to improve the efficiency ASE JSC, Atomenergoproekt JSC and ATOM- of investment activities and control over the

Table 10. Main Investment Trends of ASE Group/NIAEP JSC, amount of investments, mln RUB

Main Investment Trends (groups of investment projects)	2009-2013	2014	20	)15	%	Reason for deviation from the plan	2016 target
			target	actual	target		
Motorization of construction sites for performance of CIW	2,048	407	751	366	49%	63 % of the deviation is the extension of the invest- ment plans implementation for 2016 due to the rescheduling of Kursk NPP-2 construction; 37 % of the deviation results from the investment plans update and resulting saving due to procure- ment procedures.	1,617
Equipment for engineering survey	110	31	58	51	87%	Saving due to procurement procedures	45
IT projects	1,753	288	745	540	72%	Production demand update, saving due to procure- ment procedures	754
Infrastructure development (incl. ensuring safety )	684	81	288	199	69%	Saving due to procurement procedures	299
R&D	_	_	9	9	99%	Saving due to procurement procedures	14
Other projects (incl. creation and development of required competences)	164	82	150	150	100%	_	69
Total	4,758	889	2,002	1,313	66%		2,797





**Integrated report 2015** 





Groups of projects	Description of projects	Works in 2015
Motorization of construction sites for performance of CIW	Equipping NPP construction sites with required mechanisms having high lifting capacity, equipment and fixtures for construction and installation works. The project implies purchasing construction machinery to fulfill the United Company's duties as the general contractor, including provision of subcontractors with expensive machinery on a rental basis. The project implementation excludes the risk of failure to meet the delivery date of construction as contracts with the subcontractors can be concluded regardless of the availability of construction machinery.	The major portion of investments is spent on the equipment of construction sites for Belarusian NPP (purchasing construction machinery and fixtures for the main construction stage) and Kursk NPP-2 (purchasing machinery and mechanisms for preliminary stage of NPP construction).
Equipment for engineering survey	Equipping the Company with special equipment and machinery for engineering works at construction sites. We plan to purchase geodetic, drilling, and measuring equipment. The basic scope of engineering survey is performed in the first two or three years after the decision on NPP siting (safety of the site location and parameters for making decisions on design solutions on NPP structures and equipment are justified, observation networks are established to monitor safety-related environmental conditions). Further works are performed under monitoring of the facility construction and operation.	Upgrading and extension of the technical facilities for engineering survey at the sites of Novovoronezh NPP-2, Balakovo NPP, Smolensk NPP, Belarusian NPP and Kursk NPP-2. 6 units of machinery and 39 units of special equipment were purchased.
IT projects	Introduction of unified information space systems in NIAEP JSC, ASE JSC, Atomenergoproekt JSC and ATOMPROEKT JSC (serial replication of information systems for NPP projects).  ASE Group's employees were provided with modern computers, office machines and equipment and communication means.	Software-hardware solution for the unified information space of IT infrastructure "Computational Cluster" was delivered in order to deploy new information systems at NPP construction sites.
Infrastructure development	<ul> <li>The projects for the following:</li> <li>safety assurance for ASE Group of Companies, their affiliates and representative offices,</li> <li>renovation of buildings and structures,</li> <li>improvement of labor conditions for the staff,</li> <li>provision of continuous performance of day-to-day operations (including purchasing of truck and passenger transport),</li> <li>infrastructure development at construction sites (arrangements for the construction of facilities).</li> </ul>	Renovation of ASE JSC building in Moscow (construction works, purchase and installation of equipment for operation of the building, improvement activiites); - infrastructure development for affiliates and representative offices (equipment for storage facilities, vehicles for goods and staff transportation).

	Research and development works to extend the scope of the Company's activities and improve its competitiveness	Acceptance of papers on the subject "Design of air ducts for smoke exhaust and ventilation with operating temperature up to 600°C".
R&D (Atomenergoproekt JSC projects)	"Patenting intellectual property of Atomenergoproekt JSC abroad"	A contract for the provision of patenting services for four items of intellectual property was concluded.
	"Nuclear fuel molten core catcher" related to key products and platform technologies of Rosatom State Corporation	First stage of the project was finished.
Other projects	<ul> <li>The projects for the following:</li> <li>consolidation of construction assets to provide growth of construction competences,</li> <li>increase in production self-reliance and increase in work efficiency within the general contract,</li> <li>development of required competences,</li> <li>extension of the order portfolio, entrance into the European market of NPP construction projects.</li> </ul>	The costs took into account the project of increase in the charter capital of Construction and Installation Department No. 1 LLC.

#### **Investment performance indicators**

The Division's investment portfolio includes current projects which are aimed to support business activities and to implement programs for design and construction of facilities in the order portfolio and investment projects focused on the development of business activities.

In the investment program implementation, the primary goal is to provide production reguirements for timely performance of contracts for the construction of complex engineering facilities (providing construction equipment and survey machinery, IT hardware and software). However, maximum economic effect from investments is attained through implementation of ASE Group core activities.

Due to this fact, the major part of the portfolio consists of the projects for retrofitting and extension of technical facilities, which fully meets the needs of the United Company. These projects are cash-consuming (no direct revenue from sales).

The integrated investment performance indicator (IIPI) is the basic indicator defined by Rosatom State Corporation to control the effi-

ciency of the investment program. It takes into account the correspondence of the estimated return profitability of the order portfolio to the expected one, and the fulfillment of key milestones set for the current year. The 2015 IIPI value of the United Company amounted to 112% (with the target value being 100%).

#### **Key 2015 results of the investment** performance improvement

- · updating the standard for the United Company investment activity management taking into account the inclusion of Atomenergoproekt JSC and its subsidiaries into the Engineering Division;
- · establishment of a single center for accounting and control of the United Company's investment activities on the basis of NIAEP JSC Investment Department;
- · introduction of the integrated investment performance indicator into the KPIs for the United Company's senior executives; it takes into account core parameters of the investment program implementation:
- timely achievement of project milestones.

#### Plans for investment activity management for 2016

agers for investment activities.

provision of required portfolio return lev-

el in the current and forecast period;

· determining individual KPIs of project man-

- completing the centralization of control over the Division's investment activities (through organization of control over investment activities of all companies within the management scope);
- optimization of the investment activity management process taking into account all changes in the management scope (in particular, the inclusion of ATOMPRO-EKT JSC into ASE Group).

#### **Construction cost management**

Construction cost management within the concept of the unified information space of ASE Group is organized on a phased basis.







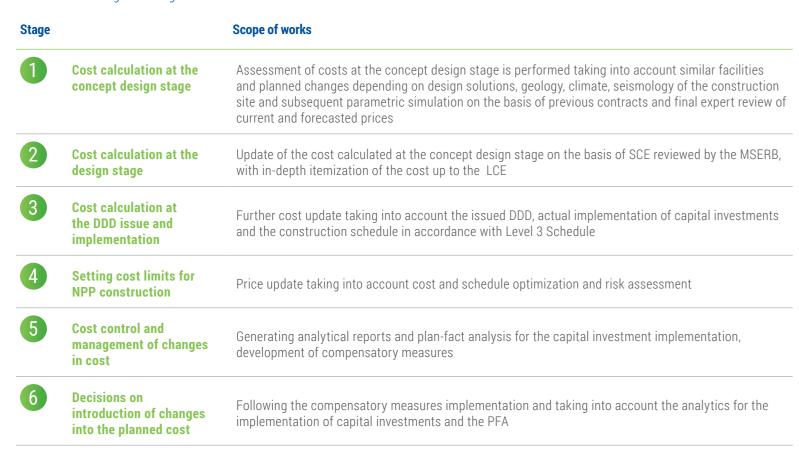
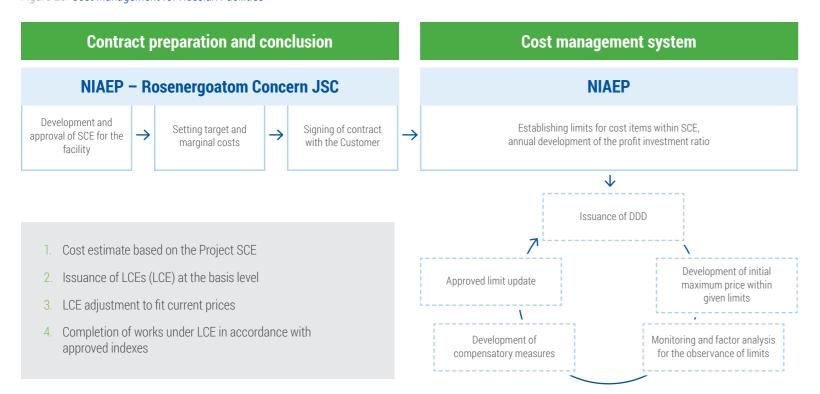
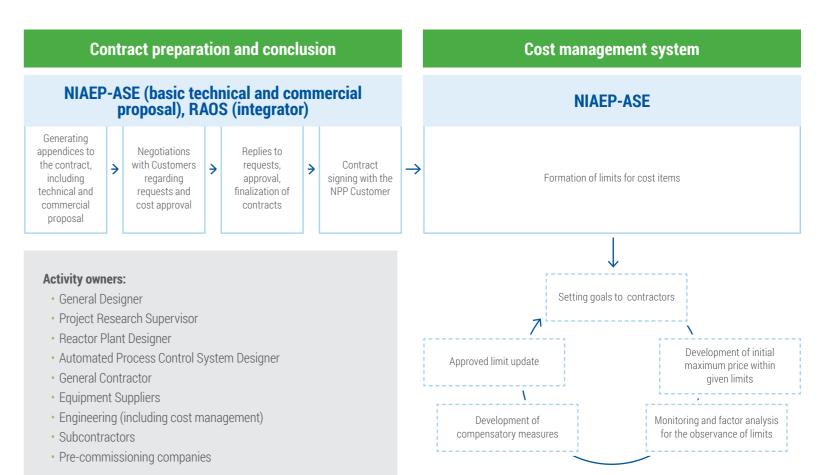


Figure 26. Cost Management for Russian Facilities







#### **Cost management automation**

Procedures for construction cost management at facilities being constructed in Russia are automated by means of the Automated Cost Management System module (NIAEP IPMS ACMS). The system is available to the Investor, to the Customer and to the General Contractor in an online mode.

ACMS operates in Rostov NPP, Kursk NPP-2 and Belarusian NPP. An ACMS module operates in beta testing mode at Novovoronezh NPP-2.

A special IS is being developed for overseas projects (see Section Production capital management). Terms of Reference were developed for the cost management system for overseas NPPs. It takes into account:

- calculation of full construction cost taking into account the specific character of foreign contracts,
- multicurrency support,

- localization of the scope of works,
- · using results of price monitoring,
- · setting cost limits for cost items,
- generation of forecasts for the limits observance,
- limits observance monitoring in the course of construction,
- plan/fact and factor analysis.

Following the Strategic Session of TOP-30 Managers of Rosatom State Corporation, a joint project for the development of the program for introduction of cost management/control system at capital constructions projects within ASE – NI-AEP – AEP area of responsibility was launched.

PMBoK Project Management Guide was used as the basis for industrial approach to cost management, since it is the most recognized and widely spread guide in the world. Using PMBoK provisions (Cost Management, Project Financing Management) will help:

- approach capital investment project management in the most comprehensive way;
- be governed by decision-making principles for the project in terms of cost/financing management;
- provide cooperation between main stakeholders:
- provide integrity of cost management with adjacent areas (time management, supply management, risk management, etc.);
- set requirements for IT tools and methods of cost management;
- provide cost management requirements both in Russia and abroad.





Basic principles of the establishment of cost management methodology for investment construction projects must meet the following requirements:

- take into account relations of stakeholders (Investor-Customer-Contractor);
- · be unified for all kinds of capital invest ment programs;
- · take into account the specific features of overseas construction projects.

In 2016, we plan to develop a program for the introduction of cost management/control system at capital constructions projects within the area of responsibility of ASE - NIAEP -AEP on a stage-by-stage basis:

- to introduce the existing automated cost management system NIAEP IPMS ACMS,
- · to develop methodology of cost manage-
- · to develop cost management/control information system.

#### **Cost Management Unit restructuring**

In 2015, the United Company has changed the structure of its Cost Management Unit. Now it includes four divisions: Cost Management Division, Contract Price Control Division, Commercial Division and Pricing Division. It also includes two departments - Design and Survey Work Pricing Department and Department that controls contract prices for non-core business activities.

Contract Price Control Division is primarily intended to approve prices of expenditure contracts in order to achieve set performance indicators for contracts and contracts for nuclear power facilities under construction abroad, SNF facilities and other facilities.

The methodology to comply with the set cost limits was applied in 2015 during agreement of initial maximum price for lots and contracts for all cost items. We complied with all planned limit factors for all facilities and all cost items.

An automated tracking system for received expenditure contracts for equipment was separately developed. It collects information for equipment cost analysis in accordance with current Uniform Industrial Procurement Standard and regulations.

In 2015, works for 21 constructions projects were performed. We completed more than 3,400 assignments in terms of agreement of lot and contract prices. We agreed upon more than 1,700 initial maximum prices for lots and equipment contracts.

> We managed to reduce delivery costs by

5.7 bln RUB

Pricing Department took part in the development of Reference Book for Benchmark Prices for Design Works for Nuclear Facilities under Construction and The Regulations on Time Limits for Nuclear Facilities Design. These papers are applied in assessment of costs for technical and commercial proposals in terms of nuclear facility design for facilities in Russia and abroad and in review of initial maximum price for procurement activities within Design business of the United Company.

The primary task of Commercial Division in 2015 was to establish price and commercial conditions for NIAEP's and Atomstroyexport's contracts and agreements related to construction projects in order to achieve maximum production and financial results with minimum costs during implementation of the signed contracts and agreements.

The core activity of Pricing Division is cost reduction in the course of nuclear facility construction by means of generating industrial catalogs of physical resources applied in NPP projects. The Industrial Center for Capital Construction Projects of Rosatom State Corporation acts as the coordinator in performing this work.

Cost management mechanisms in terms of construction of Russian and overseas facilities have some conceptual differences: for overseas facilities, the important factors are forecast accuracy of production and current cost of the whole list of physical resources (taking into account required specifications), separation of cost of supplies and services of Russian companies, assessment of the impact on the costs related to the market behavior and on peculiar features of the legislation of the customer country. Besides, there may be special customer's requirements concerning use of local resources, including labor ones.

The construction cost in Russia is determined by means of the basic-index method. The cost is leveled in accordance with current prices by multiplying cost items by the respective index. Cost indicators for expenditure items in the budgeted regulatory base are developed on the basis of the averaging principle.

The cost of physical resources with enhanced technical capabilities that are used during NPP construction is determined by Industrial Price Catalogs for Materials, Goods and Structures, applied during implementation of Rosenergoatom Concern Investment Program. In the recent years, Rosatom State Corporation has been engaged in the development of industry catalogs in cooperation with general contractors.

Table 13. Scope of Catalogs in Terms of NPP Constructions Projects, items

	Rostov NPP	Novovoronezh NPP-2
Total	3,100	3.400
including for 2015	270	650

G4-17



Due to the high market volatility, the catalog update became the important part of the job in 2015. We systematically monitored current prices for resources included into industry catalogs. On the basis of analysis of centralized supply contracts and current factory prices, industry catalogs have been indexed as on the 1st quarter of 2015.

NIAEP experts always take into account interests of subcontractors whose efficiency and financial stability impact greatly the success of construction project implementation in general.

In 2015, extensive effort was related to the construction of Belarusian NPP. Specific requirements of the legislation of Belarus (as compared to Russian) in procurement and pricing required additional control of prices used in cost estimate documents. In some cases, to compensate actual costs of contractors, cost estimate documents were adjusted in the part of applied prices; we developed and agreed with the Customer the mechanism for the use of prices related to new technologies in construction and state-of-the-art physical

resources that impact the efficiency of construction and installation works.

On the other hand, to avoid over-pricing in price proposals of contracting companies we checked the validity of inclusion of labor costs into estimates and calculations as well as the accuracy of conversion ratio used. Such check improves financial discipline and responsibility of construction stakeholders, helps avoid purchasing of construction materials with inflate value in a timely manner and compensates actually incurred expenses.

#### Plans for cost management system improvement

- finalization of cost management methodology taking into account peculiar features of international projects,
- improvement of planning accuracy during contracting stage,
- · development of limit management system, multilevel resources management system with responsibility centers divided by levels,

- development and optimization of cost accounting and control,
- · automation of processes (beta testing of information system is planned for 2016),
- introduction of new revised calculation method for initial maximum price for overseas NPPs in accordance with changes made into the Uniform Industrial Procurement Standard,
- · development of Automated Cost Management System functionality related to overseas constructions projects,
- · staff training for more efficient cost management for NPP construction in terms of project management,
- · establishment of price and commercial conditions for NIAEP JSC and Atomstroyexport JSC contracts and organization of limits for contracts related to constructions projects in order to achieve maximum production and financial results with minimum costs during fulfillment of signed contracts.

## 2.1.2 Financial Results

Taking into account the extension of governance scope, growth of order portfolio and ASE Group business (including due to the integration with Atomenergoproekt JSC), the operating profit increased by 3.9 times as compared to 2014.

Table 14. Key Financial Indicators 15, mln RUB.

Indicator	2013	2014	2015	Δ2015-2014/2014, %	2018 (target)
Revenue	37,518.4	43,000.3	166,607.0	287.5	247,467.9
Administrative expenses	1,714	2,152	2,684	24.7	3,306
Selling expenses	518	545	2,828	418.9	3,479
EBITDA	1,603	1,288	6,569	410	20,970
NOPAT	-427	833	15,399	1,748.6	17,014

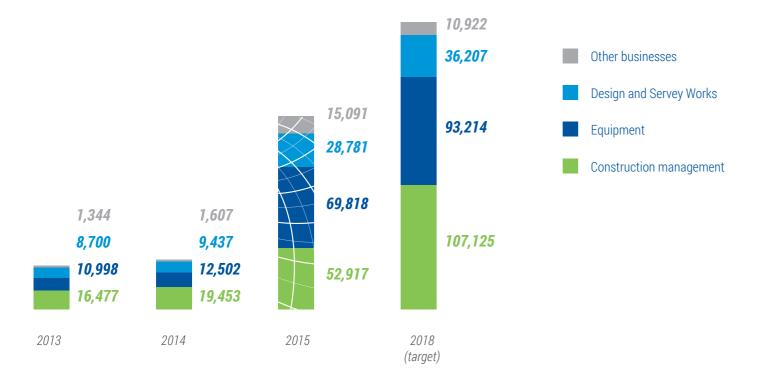
<sup>15</sup> Financial results for 2013-2014 are provided for NIAEP JSC. For 2015 information is provided jointly for ten organizations: NIAEP JSC, ASE JSC, Atomenergoproekt JSC and seven subsidiary companies (ASE Engineering LLC, NUKEM Technologies GmbH, NIAEP Service LLC, Trest Rosspetsenergomontazh LLC, Nukem Technologies Engineering Services GmbH, NIKIMT Atomstroy JSC, Energospetsmontazh JSC).



**Integrated report 2015** 



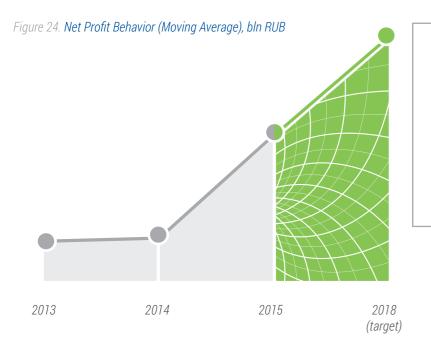
Figure 28. Revenue Structure in Terms of Areas of Business, mln RUB



Taking into account the extension of the governance scope, the operating profit from sales for 2015 amounted to 166.6 bln RUB. The primary part of the profit is the income in terms

cused on the profit-making from equipment in terms of business processes is related to delivery for NPP construction - 69.8 bln RUB, Design and Survey Work business process – 28.8 bln RUB, Construction Management busiof Equipment business process which is foness process - 52.9 bln RUB. Profit behaviour

the completion of different stages of NPP construction.



Budget control system, staff motivation system, Rosatom Production System being introduced in the Company and business growth (inclusion of new companies into the governance scope) provided

growth of gross profit in 2013-2015 up to

and EBITDA up to

**21.0 bln RUB** 

6.6 bln RUB



G4-EC1, G4-EC4

Table 15. Established vs Generated Direct Economic Value, mln RUB

Name	2013	2014	2015	Δ2015-2014 / 2014, %	2018 (target)
Revenue (sales revenue and income from financial investments and asset sale)	38,923	44,772	169,198	277.9%	247,467.9
Generated economic value	37,900	43,825	161,847	269.3%	230,884
incl.:					
Operating expenses <sup>16</sup>	32,204	37,209	133,326	258.3%	206,664
Salary and other payments and privileges to employees	3,617	4,032	19,709	388.8%	18,775
Payments to capital providers	785	1,343	4,072	203.2%	_
Gross tax payments	1,207	1,126	4,654	313.3%	5,444.7
Investments into associations	87	115	86	-25.2%	_
Retained economic value	1,023	947	7,351	676.4%	16,584

During the reporting period, the United Company received neither subsidies nor credits from the Russian state budget.

Pay rise during the reporting period is related to the impact of recurrent indexation of wages, rise of payments that depend on fixed salaries and rise of integrated incentive premiums for high qualification in order to accumulate highly-qualified experts in the company.

Meeting of shareholders made a decision to use net profit of NIAEP JSC as an additional financing of investment program. It was decided not to pay dividends of ASE JSC and Atomenergoproekt JSC. Total payments to capital providers amounted to 0 (zero) rubles.

The behaviour of retained economic value depends on the growth of sale revenue.

Table 16. Added Value/Revenue. %

2013	2014	2015	Δ2015-2014/2014	2018 (target)
14.9	13.9	21.5	54.7	18.3

Increase in figures depends on the growth of division financial results and results from the synergistic effect during integration.

Labor productivity is determined as a measure of individual income per person and amounts to 3 mln RUB per person. (See section Strategy Implementation KPIs.) Increase in figures is achieved by means of development of overseas construction and introduction of Rosatom Production System.

Table 17. Profitability Indices 17, %

Profitability index	2013	2014	2015	Δ2015-2014/2014	2018 (target)
Net profit ROS	3.9	3.8	5.9	55.3	3.1
ROA	1.7	1.99	3.22	61.8	1.83
ROE	33.8	34.5	51.1	48.1	22.7
Return in terms of EBITDA	4.3	3.0	3.9	30	8.5
Return in terms of EBIT	5.2	4.9	11.7	138.8	7.4

**Growth of return in terms of EBITDA** and net profit depends on company business growth, synergistic effect of integration processes and optimization of ASE Group management.

As of 31.12.2015, the portfolio of overseas orders for a decade amounted to

70 bln USD

This amount exceeds the target figure by

3.2 bln

**16** Excluding amortization 17 Financial result is specified without considering the impact of transfer of Zheleznogorskaya TPP property into public property of Krasnoyarsk Territory on a free-of-charge basis.





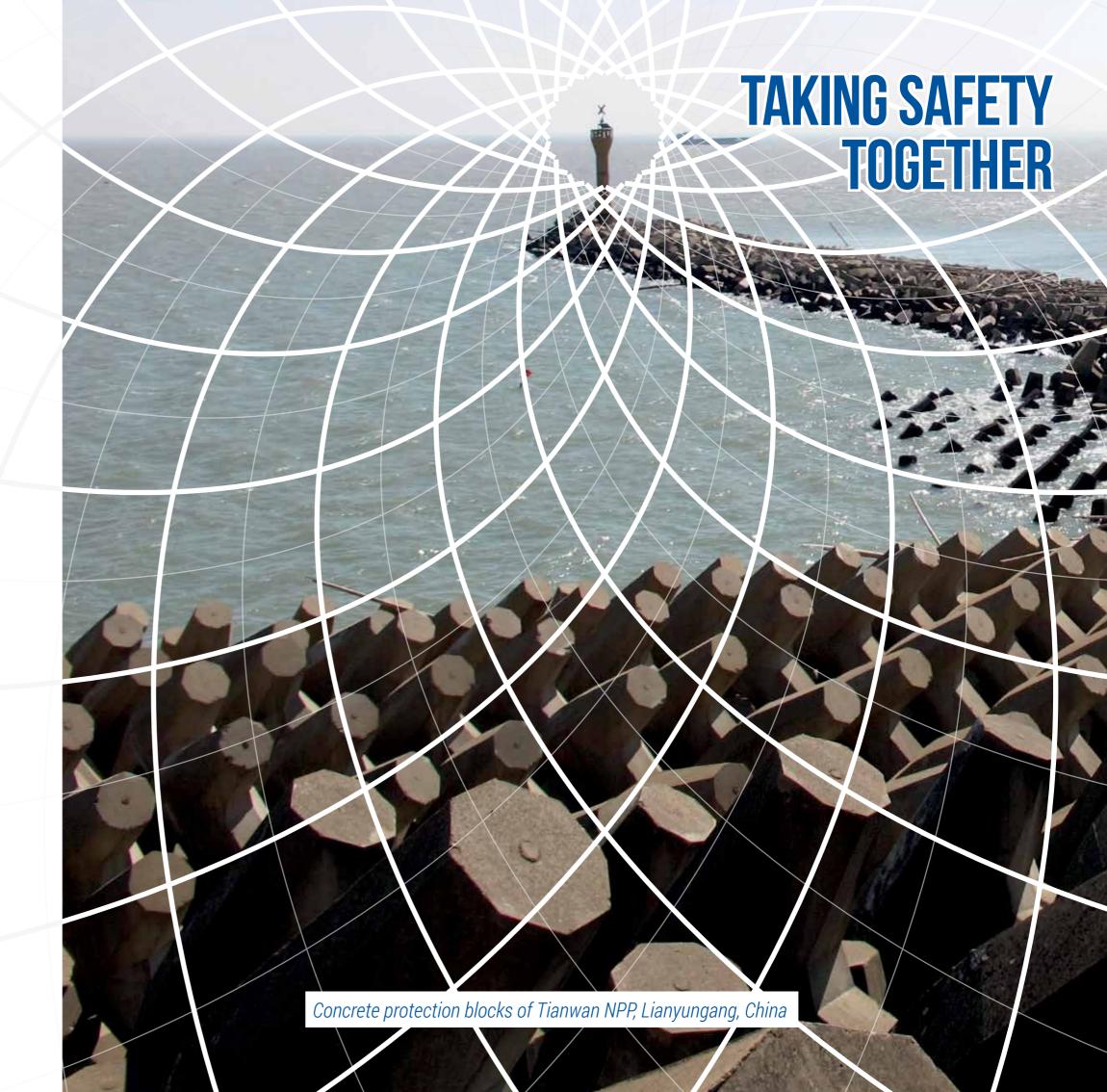
# Reliability and safety designed NPP's

Novovoronezh NPP-2 – the world's first nuclear power plant of 3+ generation

ASE Group NPP design combines the advantages of active and passive safety systems. One of the main passive safety systems is corium trap installed in the bottom part of the containment. It is designed to localize and cool of molten core in case of hypothetical accident that may result in the damage of the core.

During normal operation of NPP's, designed and constructed by ASE Group, the exposure dose for nature and animals is five and more times less than the safe dose.

No emission of ozone-depleting substances is detected in ASE Group.







## Sergey Streltsov, Quality Management Director

- What are the most meaningful results in terms of ensuring radiation and environmental safety for nuclear plants in the reporting period?
- In 2015, our activities satisfied all rules and regulations of the Russian Federation and IAEA in the field of environmental and radiation safety. Our main achievement is that there are no violations that might result in suspension of works by state supervisory bodies and requirements in terms of environment termination of permitting documentation - licenses and certificates.

During the year we arranged radiation monitoring and environmental monitoring at the facilities under constructions; the results showed no excess of standard indicators.

As regards the designing, last year public hearings approved materials related to the justification of environmental impact of replacement power at Leningrad NPP.

In genera for the company, in 2015, by management system, i.e. the quality virtue of measures introduced during design, construction and business activities the amount of generated waste was reduced. In particular, I want to point out works in terms of energy efficiency improvement; they helped to reduce energy consumption costs - the saving amounted to 30%.

- How does the company monitor the duction processes. compliance of environmental standards during NPP design and construction?
- All aspects of environmental safety are crucial for us as any slightest deviation from statutory standards may result in unacceptable consequences. For this of NPP construction projects for all reason, when NPP facility construction unclear organizations is an absolute project is developed all environmental safety aspects are elaborated and included in the project section "List of environment protection measures". The list determines control mechanisms for these aspects. Further, developed design documentation goes to public hearings and state environmental expert review.

As regards to the construction, contracts with contractors include basic protection. Within the framework of those contracts, we perform environmental monitoring at construction sites. Monitoring results from all constructions site are submitted to the Central Office of NIAEP JSC where they are analyzed and respective decisions are taken when necessary.

#### - What are working plans for 2016 and the mid-term?

- Every year we develop plans for the improvement of the integrated management system, environmental management system and occupational safety management system. In 2016, major plans are recertification of environmental management system and updating of in-house standards and permitting documentation taking into account requirements of the legislation and pro-

And the next major task is to develop unified Safety Culture Policy for ASE Group. Protecting people and environment from hazards related to the development and implementation priority. And new, expanded Engineering Division will accept single framework document.

# 2.2.1 Natural Capital Management

Natural capital refers to all renewable and non-renewable natural resources that are used by the Company in any manner whatsoever during goods production / services rendering. Natural capital includes air, water, natural resources, forests and biological variety and health of ecosystem.

#### **Environmental policy**

(www.niaep.ru/client/ecologypolicy).

Environmental Policy is implemented within the frame of environmental management ac- ASE JSC uses environmental management syscording to Plan-Do-Check-Act model pursuant to ISO 14001:2004. Engineering Division tion, renovation and retrofit of NPP, nuclear facilihas implemented and certified environmental management systems that operate within integrated management systems that also include quality management systems and occupational safety management systems.

NIAEP JSC uses environmental management of required export-import operations. systems in R&D, design and construction, surveying and general contracting works for con-

ASE Group accepted Environmental Policy struction, renovation, retrofit of nuclear facilities, power engineering facilities, industrial and civil facilities.

> tems in the integrated management of constructies, heat and power facilities, hydraulic structures, including equipment design, procurement and production management, construction and installation works management, pre-commissioning operations management, warranty management, foreign customers' staff training and performance

#### Top priority in the field of quality, ecology, professional and health safety:

Provision of nuclear, radiation, technical and environmental safety of power assets that are designed and constructed by ASE Group;

Maintenance of favourable environment and provision of safe working environment being aware of our responsibility for life and health of our employees, population and operational staff.

#### **Quality management system**

Quality management system is stipulated in quality procedure "Environmental Works Management" 0301-7.3-003 (hereinafter, QP), QP is compliant with ISO 9001.

Quality management system audit carried out in 2015 confirmed its compliance with established corporate requirements and requirements of ISO 9001

#### Methods of goals achievement in the field of quality, ecology, professional and health safety:

#### To improve:

- integrated management system on the basis of ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 in terms of compliance with Russian legislation and IAEA requirements,
- · information technologies in order to use resources efficiently, to improve production processes, to introduce innovative projects, to involve company employees in the implementation of integrated management system

#### To prevent:

- environment pollution;
- injuries and to establish safe working environment;
- non-conformances at all stages of nuclear facilities lifecycle.

#### **Cooperation with partners:**

- to establish reliable and mutually beneficial relations;
- selection of contracting companies that are able to provide implementation of Environmental Policy during services rendering;
- · openness and availability of environmental information and information in the field of quality and safety of staff and population.

#### **Human capital development:**

- · development of staff professional skills and knowledge in the field of quality, ecology, professional safety and health;
- periodic training and check of employees knowledge of rules and regulations in nuclear field;
- · company staff safety culture development and engagement of staff into the functioning of integrated management system;
- staff motivation, support of their ideas and suggestions focused on the improvement of all Company activities.





#### G4-14, G4-EN27

#### In-process environmental monitoring

IEM results showed no violations.

NIAEP JSC and its subordinate companies developed Provision on Within In-Process Environmental Monitoring, we monitor atmospheric In-Process Environmental Monitoring (IEM) which, among other things, emission, pollution and noise level at the border of controlled access is performed in the form of internal audit at least once a year. In 2015, area with respect to all contracts with contractors. In 2015, monitoring results showed no excess of regulatory values.

#### Results for 2015 in the field of environmental impact management

- Approved:
- drafts of regulations for waste production and waste disposal limits.
- waste disposal limits for the term of 5 years,
- waste certificates
- · We received permitting documents for the pollutant emission into the air.
- We concluded contracts with the contractor for collection and disposal of wastes.
- We arranged training for department managers in branches under programs "Professional training of persons to work with wastes hazard class I-IV", "Assurance of environmental safety by general management system managers".

- We arranged planned activities:
- in-process environmental monitoring,
- · consideration of environmental impact and submission of state statistical reporting in respect with determined indicators and
- contract management and compliance with statutory and regulatory acts for environment protection, monitoring of arrangement of environment protection measures by Subcontractors during construction and installation works.

#### Plans for 2016

- Training implementation for managers, experts and workers in the field of environmental qualification
- · Conclusion of contracts with contractors for industrial and household waste inventory, development of drafts of regulations for waste production and waste disposal limits and waste certificates
- Support of log books maintenance practice for waste management in accordance with waste-handling legislation
- · Contract management and compliance with statutory and regulatory acts for environment protection, monitoring of arrangement of environment protection measures by Subcontractors during construction and installation works

- Support of monitoring practice for qualitative composition of effluents after treatment
- · Updating Production Monitoring Program in the field of waste handling including monitoring of crucial environmental aspects
- · Obtaining of approval for the use of water body for wastewater discharge for Baltic Branch of NIAEP JSC

## Industrial safety

United Company is governed by Russian regulatory and statutory documents and Uniform Industrial Practice of Rosatom State Corporation in the field of industrial safety.

#### **Industrial safety management**

Industrial safety management is governed by the Provision on Industrial Management System for Industrial safety of Hazardous Industrial Facilities.

In 2015, NIAEP JSC has established Quality to be registered in the institutional section of and Safety Inspection Control Division. It controls efficient operation and development of internal control system for nuclear, radiation, industrial safety and environment protection,

as well as compliance of parameters of nuclear facilities under construction related to the non-defense part of the nuclear field with the requirements of federal rules and regulations and statutory documents of Rosatom State Corporation related to safety.

#### **Hazardous Industrial Facilities**

Hazardous Industrial Facilities operated by the companies included into NIAEP JSC governance scope or by subsidiary companies are State Registry of Hazardous Industrial Facilities by the General Inspectorate of Rosatom State Corporation. Safety control results are provided in Annex 10.

All violations detected during inspections have been rectified on a scheduled basis; some violations are scheduled to be rectified during 2016. Violators were obliged to pay penalties.

Outstanding violations are detailed in reports of NIAEP JSC and companies included into NI-AEP JSC governance scope about safety condition for 2015.

The main result of NIAEP JSC activities and companies included into NIAEP JSC governance scope in 2015 is no situations of suspension of works by state inspection authorities and termination of permitting documents (licenses and certificates).

# 2.2.2 Environmental and Radiation Safety of NPPs

of the Russian Federation, the criterion of environmental safety is one of the major criteria from operating equipment and machinery and used when making a decision about possible emission of harmful chemicals during welding implementation of planned business activities. and painting works, dusting during movement In 2015, ASE Group took part in the develop-Pursuant to the Federal Law "On Protection of equipment and machinery and earth works. ment and submission of Materials for License of the Environment", the term "environmental safety" is defined as "the state of protection of While considering NPP as an influencing source cilities: Kursk NPP-2 (power unit No. 1, 2), Smoenvironment and vital interests of people from at the operation stage, we determine the capossible adverse impact of business and other activities, natural and man-caused emergency and chemicals into the atmosphere, discharge, situations and their consequences".

tation, the Company uses safety standards (ba-

are governed by the criterion that any NPP is Assessment, the project must pass state envipotentially a source of three basic types of ef- ronmental expert review during which the comfect on land, water ecosystems and region pop- pliance of projected activities to environmental ulation: radiation, chemical, and heat.

pacity of gas-aerosol release of radionuclides emission temperature and other specifications that are required to describe dissipation of and Handling System, SNFS). Positive findings Any investment construction project involves discharge in the atmosphere; specifications were received from MSERB for all facilities. development of documentation that substanti- of liquid effluents (discharge, composition of ates environmental safety. During development radioactive and chemical contaminants, temof environmental sections of design documen- perature and other effluent factors), amount of waste heat are determined; as well as accurate sic regulatory documents) set out in Annex 10. location of discharge and emission points.

During environmental safety justification we Pursuant to Federal Law On Environmental requirements is determined and the legitimacy

Within the frame of State Environment Policy Basic influencing factors on atmospheric air at of its implementation is defined in order to prevent possible adverse impact of these activities on surrounding environment.

> Substantiation for MSERB in terms of four falensk NPP-2 (power unit No. 1, 2), NPP Service System (Radioactive Waste Management Facility, solid radioactive waste storage facility), NPP Service System (SNF Container Storage









#### NPP safety during design

# Design assessment of environmental impact during construction

Basic factors of adverse environmental impact during NPP construction are as follows:

- emissions and discharge into the environment during execution of construction works, in particular, drilling and blasting, operation of construction base and transport enterprises;
- accumulation of construction waste and waste generated during construction operations;
- smoke emission from bitumen melting furnace at bitumen concrete plant;
- exhaust gases of construction machinery and vehicles;
- household and process wastewater from construction and installation enterprises and industrial sites.

Potential sources of adverse effect may be as follows:

- construction base units (concrete batching and bitumen-concrete facilities, motor transport service, mechanical installation works, etc.);
- storage and lay-down areas for construction materials and structures;
- some types of construction and installation works (earth and concrete works);
- automobile roads (dusting during dry weather).

In order to assess the impact of emission of harmful chemicals (HC) from construction equipment, machinery, mechanisms, welding works, paint and coatings used during NPP construction to atmospheric air, we arranged estimate forecast analysis of HC concentration in the ground air of work area and atmospheric air of inhabited localities at various distance from NPP. Calculations were taken on the assumption of simultaneous operation of all machinery and equipment engaged in the construction, taking into account conservative data for atmospheric condition.

Performed forecast analysis of environmental impact during construction and installation works at NPP showed that levels of impact from construction equipment, machinery, mechanisms, welding works, paint and coatings (taking into account background concentration of contaminants) do not exceed the limits determined by environment protection and sanitary regulatory documents.

Figure 30. Maximum Design Values of Contaminant Concentration (in MPC – maximum permissible concentrations proportions) during Construction and Operation of Kursk NPP-2 in the Nearest Inhabited Localities



The project provides for construction of two phases of treatment facilities at construction and installation site. The capacity of treatment facilities is calculated including required margin and taking into account treatment of peak discharge and does not allow for emergency discharge.

During NPP construction, wastes with different class of hazard are generated; design volumes of waste production are provided in Annex 11.

Design activities to handle construction wastes:

- waste metal is collected and disposed individually by each contracting company;
- waste (roof felt, heat insulant, insulating materials, etc.) are collected and disposed independently by contracting companies by means of transportation to landfills licensed to arrange collection, transportation, han-

dling, disposal, neutralization, and placement of wastes hazard class I-IV issued by Federal Supervisory Natural Resources Management Service;

• waste from reinforced concrete structures is processed for further use at the special site.

During construction and installation works of the main period, generated hazardous waste is also disposed at the special industrial waste landfill.

Thus, carried out forecast analysis using certified methods and software suites show that adverse effect during construction of all designed NPPs is far under permissible values determined in regulatory documents.

# Design assessment of environmental impact during operation

#### In order to ensure NPP safety,

its systems and units are designed on the assumption of the following design-basis environmental and man-caused effect:

safe shutdown earthquake up to

# 8 points,

aircraft impact with weight

## **400 tons**

and speed

150 m/s,

external shock wave with compressive pressure in the front of

30 kPa,

design maximum wind speed up to

56 m/s.

NPP design combines the advantages of active and passive safety systems. One of the main passive safety systems is corium trap installed in the bottom part of the containment. It is designed to localize and cool molten core in case of hypothetical accident that may result in the damage of the core.

This unit protects the integrity of containment and thus to prevent release of radioactive products into the environment even in case of hypothetically severe accidents.

NPP safety is also ensured on the account of physical barriers on the way of emission of radioactive substances into the environment.

# NPP radiation impact on the environment and population

NPPs are designed in such a way that during normal continuous operation, anticipated occurrences and design-basis accidents its radiation impact on the environment and population does not result in the exceeding of determined exposure doses for people. Radiation impact on the environment and population is maintained under determined regulatory limits at the reasonably accessible low level.

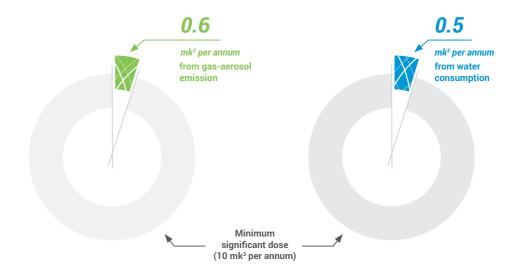
Structural and technical solutions of developed designs provide for the volume of radionuclide emission below permissible levels (pursuant to SP AS-03). Actual annual radionuclide emission into the atmosphere at operating NPPs is at the level of emission of similar European NPPs and are negligible.

Total maximum exposure dose for the population from radionuclides being generated during NPP operation is considered in the range of 2 to 5% from the minimum significant dose generated by natural radionuclides.

Exposure doses for critical components of land and water ecosystems during normal operation of NPP are five or more orders lower than the safety limit.

NPP design combines the advantages of active and passive safety systems. One of the Operation as Compared to the Dose Generated by Natural Radionuclides.

Figure 31. Total Maximum Exposure Dose for the Population from Radionuclides Generated during NPP Operation as Compared to the Dose Generated by Natural Radionuclides.

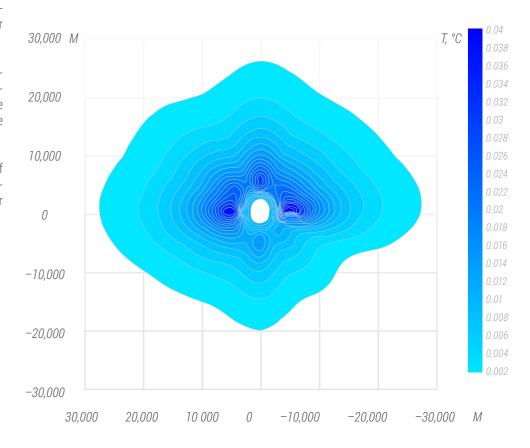


# Thermal effect of NPP on the environment

As a coolant of turbine equipment in developed NPP designs, we propose to use evaporating cooling towers with reverse-flow of coolant for water and air per one power unit.

Predictive estimates of increment of specific humidity and temperature during operation of cooling towers showed that maximum annual value of above-ground increments of humidity and air temperature are observed at the distance of 4500 m from cooling towers and may reach 0.045 g/kg and 0.047 °C respectively.

Figure 32. Predictive Estimates of Temperature Increment during Operation of Cooling Towers









Obtained average annual values of air temperature and specific humidity increments in the surface layer of the atmosphere is notably lower than average annual values and year-to-year variation of these meteorological parameters in the region. Emission of heat and humidity during operation of cooling towers will not significantly impact the microclimate of adjacent territories.

#### Chemical effect on the environment

Technical solutions eliminate the possibility of release of contaminated and crude waste water into the environment. Waste water undergoes full biological and fine cleaning and is repeatedly used in the power plant operating cycle.

Chemical pollutant sources are localized within NPP territory and amount of hazardous pollutants released into the environment do not exceed determined concentration limits

Design estimates showed that the level of noise load at the border of NPP industrial site does not exceed standards determined for living quarters, hospitals, health resorts, sleeping areas of child care centers and residential schools.

#### Waste generated during NPP operation

Radioactive waste generated during NPP operation is processed in accordance with liquid and solid radioactive waste handling system.

During all stages of works for loading, transportation and storage of spent fuel, we provide biological protection for the staff and prevention of radiation effect for the population and environment.

The release of radionuclides from NPP into the environment is monitored by automated radiation monitoring system.

Radiation at the territory adjacent to NPP is monitored by automated environment monitoring system and by laboratory methods.

#### NPP safety during construction

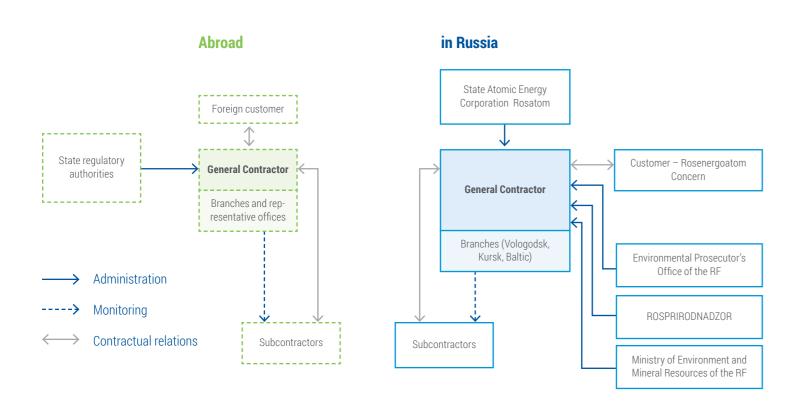
#### **Subcontractors control**

Subcontractors that perform construction, installation and pre-commissioning works under the contracts with the Company perform general operational procedures related to the generation of hazardous waste and emissions.

During contract conclusion these companies must have required environmental permitting documents.

Inspectors of federal environmental authorities and employees of Central Office and branches who are responsible for in-process environmental monitoring supervise the impact of subcontractors on the environment including requirements for environmental documentation.

Figure 33. Cooperation of General Contractor with External Companies during Execution of Works in the Field of Environment Protection in Russia and Abroad

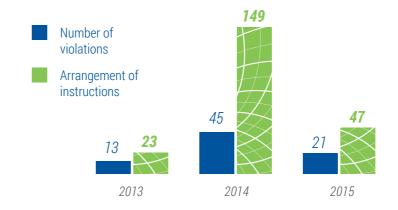


Interaction patterns in Russia and abroad are similar. Customer requirements (in Russia - Rosenergoatom Concern) are transferred to subcontractors, impementation of requirements is monitored by branches at facility construction sites.

In the part of environment protection, the branches do the following:

- · arrange inventory of emission and discharge of pollutants and their sources and production waste;
- conclude contracts with contractors to obtain permitting documents in the part of environment protection and to develop drafts of waste generation standards, drafts of emission requirements;
- track waste management and actual pollutant emissions;
- take part in in-house environmental monitoring;
- arrange training for managers, experts and workers in the field of environment protection.

Figure 34. Number of Detected Violations Included into Instructions Arranged for Subcontractors



All violations detected during 2015 have been eliminated.

#### **Radiation safety**

During construction of nuclear power plants ASE Group arranges radiographic inspection to check quality of weld joints, base metal and welding depositions on equipment and pipelines.

Radiation sources are operated in strict compliance with the requirements of legislative documents in the field of use of nuclear facilities. We have permitting documents to perform activities with ionizing radiation sources. Officials who are responsible for management of safe operation of radiation sources, operation of radiation sources, for production radiation monitoring, accounting and control, and physical protection have been trained and certified and have permits of the Federal Service for Ecological, Technological and Atomic Inspection for the right to perform works in the field of use of nuclear power.

Production radiation monitoring is arranged in accordance with radiation monitoring program approved by Federal Bio-Medical Agency of Russia. No reference levels and permissible limits have been exceeded.

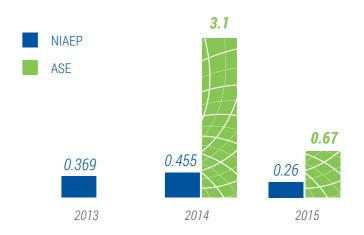
Radioactive substances are managed on the basis of NP-067-11 "Primary Rules for the Management of Radioactive Substances and Wastes in the Company".

Companies are included into the registry of companies of State System of Accounting and Control of RS and RW and submit updated information to the Central Information and Analytical Center of State System of Accounting and Control of RS and RW of NO RAO FSUE on a regular basis.

Training programs and emergency response drill procedures are developed and arranged on a regular basis.

During 2015, commissions of federal and municipal supervision authorities and customers performed repeated inspections of compliance with federal regulations and rules in the field of nuclear power use during radiation source operation. Deviations identified by commissions have been promptly eliminated in the course of commission operation. Indices of exposure doses for the staff are much lower than maximum permissible value (19 mSv/annum).

Figure 35. Index of Exposure Doses for the Staff, mSv/annum



## State supervisory bodies performed inspections during the reporting period; no deviations are detected.

ASE Group activities in 2015, like in the preceding years, comply with all safety requirements and regulations of the Russian Federation and IAEA and completed projects provide minimal environmental and radiation impact on the environment.





**Integrated report 2015** 

## 2.2.3 Environment Protection

#### Impact on the environment

Environmental safety works are carried out within the framework of environment management systems that are accepted in ASE Group and provide environment protection measures within the admissible level of adverse effect on the environment stipulated by the Russian legislation.

Due to the fact that NPP design and construction is carried out taking into account the "conservative approach", when during hypothetic accident analysis values and limits are taken for parameters and specification that intentionally result in more adverse effect, physical and, correspondingly, financial risks that appear due to the climate change are minimal and negligent.

#### Pattern of impact on the environment

The impact of Company activities in general and activities of its branches related to the environment are determined by the following aspects:

- · operation of administrative buildings, bases for survey works, premises, sheds, parking spaces, auxiliary structures (warehouses, premises for security staff) results in production and consumption waste generation, pollution emissions into the atmosphere during welding, installation works, operation of vehicles;
- need to use and discharge water both for drinking and production and, consequently, works are performed to conclude contracts

with contractors for water collection for centralized water supply and disposal of sewage waters to the sewerage networks.

Management in terms of prevention of environmental damage includes use of processes, practical techniques, materials, products, services or power to eliminate, reduce and monitor generation and discharge of any kind of pollution or waste in order to reduce the adverse effect to the environment.

ASE Group management approved procedures to identify environmental aspects of activities in company divisions, including facility construction sites, and to evaluate the importance of environmental aspects

Management of environmental aspects at overseas construction sites is arranged taking into account the scope of contractual obligations and distribution of liability between customer and contractor.

To improve environmental performance, we annually develop programs to achieve environmental goals and to solve tasks; the programs specify action plans in terms of crucial environmental aspects, deadlines and officials responsible, both from the central office and from its branches. At the end of the year we arrange reports about execution of the program to achieve environmental goals and to solve tasks.

#### Impact on biological diversity

Construction of NPPs at environmentally sensitive areas is prohibited by the legislation of the Russian Federation. There are no environmentally sensitive areas (ESA) of regional and federal importance, there are no protected animals and plants at NPP construction sites.

In the region of location of Kursk NPP-2, ESA are represented by Central Black Earth State Natural Biosphere Reserve named after

prof. V. V. Alekhin (federal ESA) and regional health and recreation area Pushkaro-Zhadinskoye Deposit of Medical Turfs, natural monument Buried Valley of Mikulino in open pit of Aleksandrovo deposit of clayey soils and Zheleznogorskiy Arboretum (regional ESA).

In the region of location of Smolensk NPP-2 there are two regional ESA: Birchwood to Perenki Village and Head of the Ugra River.

During normal operation, the exposure dose for nature and animals is five and more times less than the safe dose.

#### Kursk NPP-2 CASE

There are no regional and federal environmentally sensitive areas at the location site of Kursk NPP-2. The only conservation limitation for future construction site is the water conservation zone of Seim river (200 m) where only permitted water development facilities and bridge abutments will be located.

Water bodies located near Kursk NPP-2 of Seim and Reut rivers and designed water reservoircoolant of Kursk NPP-2 are referred to contaminated category.

At the territory of future construction, there are almost no representatives of fauna and its habitats, there is some small amount of plants in the form of small forest and shrubs which are in the form of secondary plants formed as a result of land clearing.

#### Belarusian NPP CASE

There are no regional and federal environmentally sensitive areas at the location site of Belarusian NPP. In the region within 30-km area around NPP site there are 5 environmentally sensitive areas. Site selected for NPP construction comprises mainly agricultural land and small forest plots. The latter do not have the status of protected territory; there are no rare kinds of plants and animals within their limits. They are of no high conservation value and their cutting does not result in adverse effect for biological diversity.

Almost all detected populations of protected species of plants are at a considerable distance from NPP construction site and construction works will not affect them directly.

Primary habitats of protected species of birds and animals are concentrated at a distance of at least 10 km from the site and are associated mainly to large lakes and forestry with water bodies. Therefore, construction will not affect them.

#### Air emissions

Central offices of Company enterprises and branches do not have their own boiler houses and other systems that generate greenhouse gases. The buildings are heated in a centralized way by means of agreements with contractors.

**Integrated report 2015** 

Records for indirect power greenhouse gas emissions (scope 2 and 3) were not kept as there are no approved calculation methods for ASE Group. Due to the same reason no records are kept in terms of reduction of greenhouse gas emissions achieved as a result of emission reduction initiatives. Information is to be disclosed after the calculation method is approved.

In terms of NOx, SOx emission, the data has been calculated. Measurement were taken in NIAEP JSC in 2016 and will be used in the annual report for 2016.





Name of waste

Class 1 – extra-hazardous

Class 2 – highly hazardous

Class 4 – low hazard

Total

Class 3 – moderately hazardous

Class 5 – virtually non-hazardous

2015<sup>21</sup>

0.37

36.2

5.2

41.77

Waste mass, tons

2014

2013

In NIAEP JSC Central Office there is an emission from the boiler house of Lesnoy Uyut recreation facility. There are no stationary sources of hazardous substance emissions into the atmosphere on the books of Kursk, Volgodonsk, Baltic branches of NIAEP JSC. In ASE JSC there also are not stationary sources of emission into the atmosphere.

No emission of ozone-depleting substances is detected in NIAEP JSC, ASE JSC, Atomenergoproekt JSC.

Table 18. Emission of Pollutants into the Atmosphere in NIAEP JSC Central Office, Lesnoy Uyut recreation facility), tons 18

Substance	2014	<b>2015</b> <sup>19</sup>
carbon monoxide	2.779	0.556
sulphur dioxide	0.648	0.13
nitrogen oxide	0.323	0.065
other substances	8.232	1.647
Total	11.982	2.397

Companies included into NIAEP JSC governance scope and NPP construction sites have controlled and uncontrolled emission sources. Controlled emission sources are exhaust air piping, centrifugal collector outlet nozzles, deflectors and roof fans. Uncontrolled emission sources are open warehouses for concrete aggregate materials (sand and gravel), areas for their filling, welding apparatuses that operate at open sites, and vehicles.

#### **Vehicles**

To minimize environmental impact, Company organizations conclude service contracts with contractors for vehicle maintenance. Monitoring results are reported in the form of certificate of routine technical inspection for a vehicle specifying environmental indices for toxicity or exhaust smoking.

Vehicles of Kursk branch and subcontractors' vehicles undergo technical support service in service centers where they are inspected in terms of CO2 level, exchange of air and fuel filters and other spare parts.

#### **Waste generation**

NIAEP JSC, ASE JSC and Atomenergoproekt JSC did not perform transportation, import, export or processing of wastes that are considered hazardous pursuant to annexes I-III and VIII to Basel Convention.

Table 19. Waste Generation in NIAEP JSC (Central Office, Nizhniy Novgorod)

Name of waste	Waste mass, tons				
	2013	2014	2015		
Class 1 – extra-hazardous	0.32	0.23	0.57		
Class 2 – highly hazardous	_	_	0.05		
Class 3 – moderately hazardous	_	_	0.06		
Class 4 – low hazard	299.8	255	182.09		
Class 5 – virtually non-hazardous	2.6	49.2	50.25		
Total	302.72	304.43	233.03		

Table 20. Waste Generation in Kursk Branch of NIAEP JSC

Name of waste	Waste mass, tons			
	2013	2014	2015	
Class 1 – extra-hazardous		_	_	
Class 2 – highly hazardous	formed	_	_	
Class 3 – moderately hazardous	No activities performed	_	_	
Class 4 – low hazard	No activ	3.27	12.5	
Class 5 – virtually non-hazardous		_	_	
Total	_	3.27	12.5	

18 At Lesnoy Uyut recreation facility, 19 Reduction of emission is determined by performed repair of heat the amount of emission of pollutants into the atmosphere is accounted supply systems (boilers). and monitored since 2014.

**20** Growth of waste generation volume is determined by the increase of

service area of industrial site under obligations to keep designated area

**21** In 2015 we arranged inventory, developed draft of WGDLB and obtained Waste Management Permit.

Table 23. Waste generation in ASE JSC (Central Office, Moscow)

Name of waste

Class 1 – extra-hazardous

Class 2 – highly hazardous

Class 4 – low hazard

Total

Class 3 – moderately hazardous

Class 5 – virtually non-hazardous

## Table 22. Waste Generation in Volgodonsk Branch of NIAEP JSC

Table 21. Waste Generation in Baltic Branch of NIAEP JSC

Waste mass, tons

2014

0.02

1,101.4

792.86 1,101.42 668.9

2015

668.9

2013

0.66

792.2

Name of waste	Waste mass, tons		
	2013	2014	2015 <sup>20</sup>
Class 1 – extra-hazardous	0.11	0.19	0.09
Class 2 – highly hazardous	0.19	0.33	0.33
Class 3 – moderately hazardous	_	_	_
Class 4 – low hazard	270.1	351.0	398.2
Class 5 – virtually non-hazardous	103.9	111.8	110.1
Total	374.3	463.3	508.7





clean and in good condition.

**Integrated report 2015** 

#### Water use and discharge

No significant spills are detected in NIAEP JSC, ASE JSC, Atomenergoproekt JSC.

NIAEP JSC, ASE JSC, Atomenergoproekt JSC arrange sewage discharge to the waste water disposal system under respective contracts with contractors. The discharge is not recorded on a centralized basis.

Domestic discharge of NPPs built and being under construction by ASE Group from adjacent territories and from plant operation are arranged:

- from Kalinin NPP to water reservoirs lakes Udomlya and Pes'vo. Both water reservoirs have the status of "commercial fishing" importance;
- from Rostov NPP to cooling pond separated from Tsymlyanskoye water-storage reservoir with special dam. The water-storage reservoir and pond have the status of "commercial fishing" importance;
- from Belarusian NPP the discharge will be performed into the river Veliya – water reservoir of "commercial fishing" importance;

• from Kursk NPP-2: during construction – into the river Seim – object of "commercial fishing" importance; during operation – into the river Seim and new cooling pond that does not have the status of "waterworks" object;

• the customer is responsible for domestic discharge at overseas construction projects.

All waste water from territories of power plants under construction and construction yards as well as from territories of NPPs in operation is discharged after required cleaning by means of surplusing works.

All sewage waters being discharged have required permits from regulatory authorities, meaning that they are discharged within approved standards and do not impact significantly on the biological diversity of

NIKIMT-Atomstroy JSC monitors sewage waters being discharged into the wastewater disposal system. Based on sewage water monitoring results, no specified standards have been exceeded in 2015.

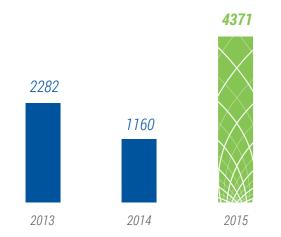
### Costs for environment protection

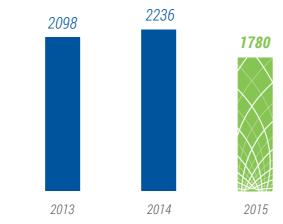
During the accounting year NIAEP JSC, ASE Costs for environment protection in NIAEP JSC JSC, Atomenergoproekt JSC had no significant Central Office and in branch subdivisions at penalties or non-financial sanctions imposed construction sites include costs for: for the violation of environmental legislation and regulatory requirements.

- water resources protection,
- atmospheric air protection,
- waste transfer.

Figure 36. Costs for Environment Protection and Environmental Charges for NIAEP JSC (Central Office, Nizhniy Novgorod), thousand RUB.

Figure 37. Costs for Environment Protection and Environmental Charges for Baltic Branch of NIAEP JSC. thousand RUB.







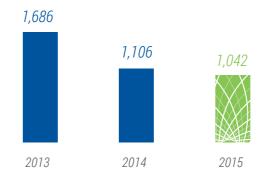
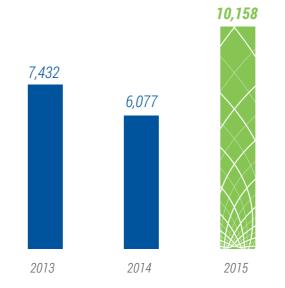


Figure 39. Costs for Environment Protection for ASE Group, thousand RUB.



More detailed information related to costs for environment protection and environmental charges for Baltic, Kursk, Volgodonsk branches and Central Office of NIAEP JSC, Representative Office of NIAEP JSC and ASE JSC in Belarus are given in Annex 12.

Figure 40. Costs for Environment Protection and Environmental Charges for Kursk Branch of NIAEP JSC, thousand RUB.

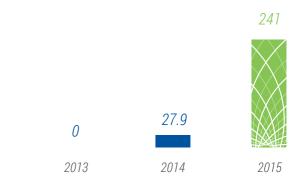


Table 24. Costs for Environment Protection and Environmental Charges for ASE JSC, thousand RUB.

	2013	2014	<b>2015</b> <sup>22</sup>
Current costs, total	1,366.4	1,547.5	2,540.0
incl.:			
Water resources protection	490.9	656.5	1,465.1
Atmospheric air protection	_	_	39.8
Waste transfer	874.5	891.0	1,035.1
Payment for adverse effect	_	_	184.0
Total:	1,366.4	1,547.5	2,724.0

## 2.2.4 Energy Efficiency

activities are being introduced in two areas:

- designing more energy efficient capital constructions projects;
- · reducing energy costs in the course of Company activities on the account of programs related to cost-effective use of resources.

Applicable Energy Saving and Efficiency Improvement Program supposes reduction of energy resources consumption by 2015 (as compared to similar conditions of 2009) by 25%.

The initiatives to improve energy efficiency of the The results of introduction of Energy Saving and Efficiency Improvement Program for 2013-2015 are set out in Annex 13. In 2015, the economy of energy resources amounted to 30%.

#### It is achieved on the account of:

- introduction of utility metering system;
- installation of new energy efficient equipment;
- replacement of wooden and aluminum enclosure structures (windows, gates) in buildings with structures with PVC window

profiles and glass that has low-emission coating and sandwich-panel structures;

- renovation of internal and external lighting systems, repair of water supply and heating systems (replacement of piping and piping heat insulation).
- **22** Costs increase is related to payments for adverse effect on the environment. In 2015, we developed draft of WGDLB, waste certificate and received a Decision on Waste Handling Standards







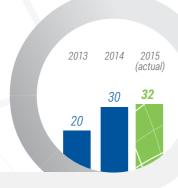




In 2015, order portfolio comprised

32 power units,

including 7 power units in the Russian Federation.



→ Order portfolio, number of power units

Rate of procurement from domestic manufacturers

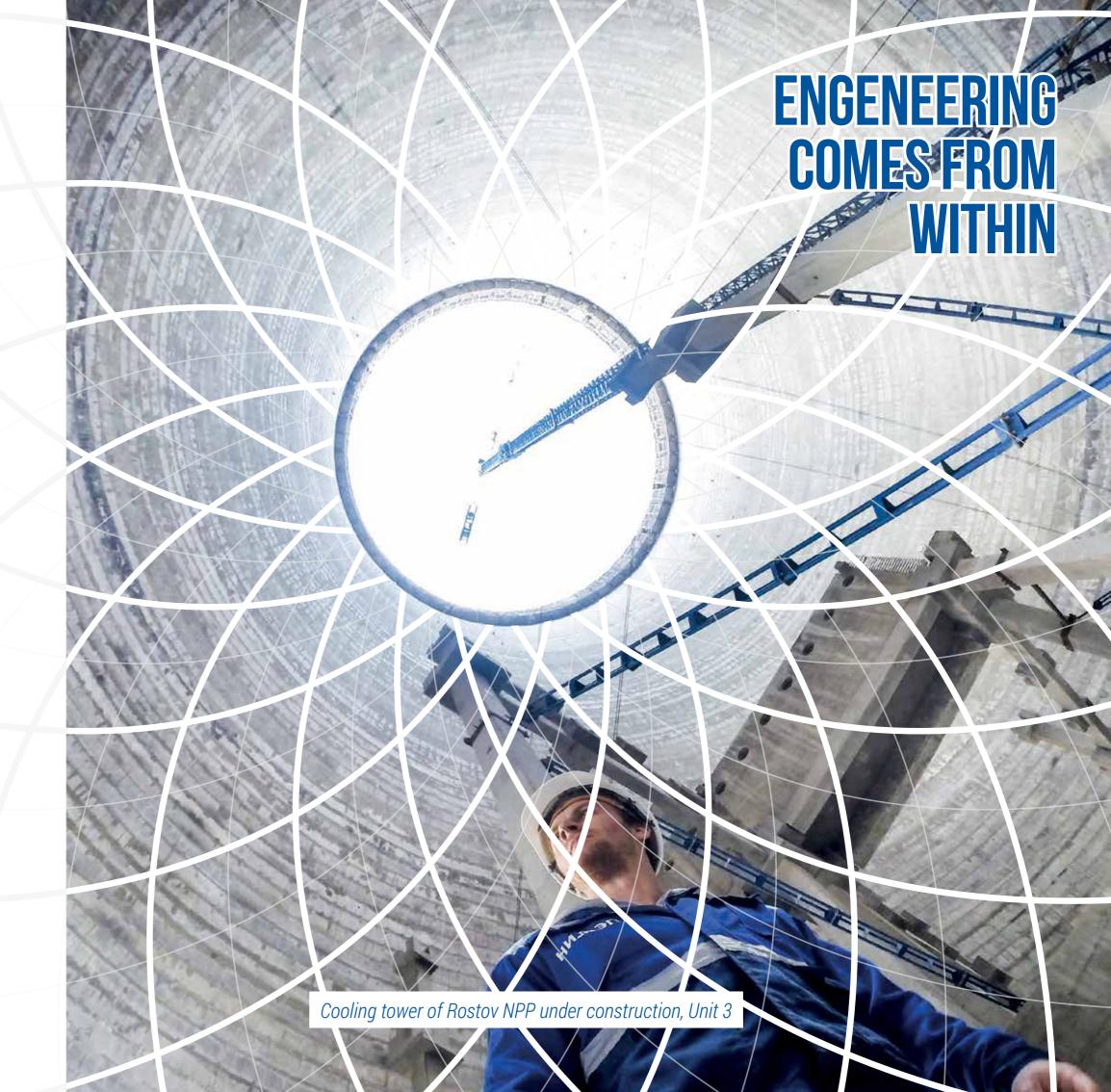
~ 95 % of the total amount of procurement

Apart from work for own use, in 2015, nuclear companies created a wide range of product types that substitute import equivalents in other fields. They include software, pressure sensors, various geophysical equipment, etc.

Savings due to open biddings

7,522.6 mln RUB

In order to improve the disclosure and transparency of procurement activities, we actively use electronic trading platforms.







Yuriy Ivanov, Senior Vice-President for Designs

- What are the most meaningful results of production activities during the reporting year?

- In 2015, we obtained license from Acceptance Certificate, commercial Rostekhnadzor and positive findings from General Board of State Expert Review and MCERB for the construction and installation of power units No. 1 and 2 of Kursk NPP-2. In November 2015, intergovernmental agreement on the construction of El Dabaa NPP in Egypt was signed. The intergovernmental agreement was ratified by both parties and entered into effect in January 2016. During the reporting year, we performed works related to the approval of office documentation to perform integrated survey of power unit No. 2 at Armenian NPP. A contract was concluded between Hungarian Branch of NIAEP JSC and Atomproekt JSC to perform engineering survey, development of design documentation and first-priority DDD, development of information model of NPP Paks 2 and its handover to the Owner. Besides, in 2015 we concluded contract with OKB Gidropress JSC for the development of basic design for reactor unit, we developed detailed schedule of design works and started engineering survey for Paks-2 NPP construction base. According to Final

operation mode started for NPP Bushehr-1. Also, in the reporting year the United Company NIAEP-ASE was appointed to be General Contractor and Designer of Nuclear Science and Technology Center in Bolivia.

#### - What are plans for 2016 and midterm?

- Primary scope of design and survey works is distributed between the following projects: El Dabaa NPP, Paks-II NPP, Bushehr NPP-2, 3, Belarusian NPP, units 1 and 2, Rooppur NPP, Kudankulam NPP, units 3 and 4, Hanhikivi NPP.

Besides, in December 2016 we plan to commission power unit No. 6 of Novovoronezh NPP-2. In 2017 we plan to launch power unit No. 4 of Rostov NPP.

## 2.3.1 Manufactured Capital Management

Production capital means physical production facilities that the Company uses to produce goods and render services, including buildings, equipment and infrastructure facilities.

In 2015, three CRPs were approved. One of them is the project of LLW Disposal Facility, owing to which we managed to reduce the volume of primary ground digging by 1.5 times; it helped to reduce cost of works by nearly 20%.

In 2016-2017, industrial staff motivation program will be introduced basing on experience of Engineering Division focused on cost and time reduction. Engineering managers will get indicator CRP Number into their annual KPI charts for 2016. We plan to use the Program during facility operation stage as well.

#### Rosatom Production System in ASE Group

Rosatom Production System (RPS) is an industrial project used not only to improve labor productivity up to the level of overseas competitors and to reduce costs, but also to raise salary and to formulate new rules for career development.

The tasks for RPS introduction in the United Company businesses (design, procurement and supply, engineering) are:

- goal-setting in terms of key products,
- optimization of production processes,
- · development of guidelines related to the use of production processes optimization toolset.

#### Systems, processes that include introduced RPS

In terms of RPS introduction, Design business included works under the project "RPS. Economical Engineering". Project tasks:

- to increase labor productivity by means of design unit forces by 30%;
- to reduce average delay in the submission of DDD to production in terms of all packages by 30%;
- to reduce the amount of adjustments into DDD by 30%;
- to increase time period spent by an engineer on value-adding activities by 30%;
- · to introduce RPS culture and economical production in design unit structural subdivisions.

We introduce RPS projects aimed to reduce time spending with no value added (NVA) in processes DDD Adjustment, Non-official Requests Processing, Signing of Adjusted Documentation, etc. We have 5S system implemented in pilot subdivisions of NIAEP JSC design units. As a result of implementation of RPS project Optimization and Reduction of Labor Costs and Time Spending for TOR/Specs Approval Process for Delivered Equipment and Valves, we achieved the target value – reduction of NVA time spending and labor costs for TOR/specs approval for equipment and valves by 30%.

**Integrated report 2015** 

We implemented RPS projects of structural subdivisions' managers from NIAEP JSC and Atomenergoproekt JSC design units. For example, in terms of implementation of RPS project Alignment of Design Flow, Agreement with the Customer, Distribution and Submission of DDD for Belarusian NPP into Production, we achieved goals related to:

- · reduction of time spent on incoming inspection at the Representative Office in Belarus, distribution and submission of DDD for approval – from 24 to 4 days;
- · reduction of amount of adjustments into DDD by 30% (from 58-80 days to 28 days);
- reduction of amount of DDD adjustments for Belarusian NPP in the part of customer's incoming inspection up to 3%.

In terms of implementation of RPS project Provision of Harmonization of Use of Costing Standard Database (CSD-2001) for Construction and Installation Works by NIAEP JSC and Atomenergoproekt JSC during Joint NPP Design in Order to Improve the Efficiency of Estimate Documentation Development Process:

- · we reduced terms for development and approval of estimate documentation from 20 to 10 working days;
- we developed the list of installation prices for key works used by NIAEP JSC and Atomenergoproekt JSC during joint NPP design.

In Engineering business:

- the RPS standards for CIW management, the Final Planner System standard, the standard for use of an in-process control screen and linear analysis were introduced for construction of capital facilities;
- · at Novovoronezh NPP-2 construction site. we established Factory of Production Processes in Construction and trained 630 employees of contractors;
- · we started organization of construction sites in RPS logic;

Besides, in order to engage more employees into the process of submission and introduction of improvement proposals, the United Company launched Ideas Factory - system of collection and introduction of improvement proposals from the employees.

#### **Rosatom production system training**

In 2015 in accordance with developed RPS standard training programs, we arranged training for managers and experts of branches, representative offices and contracting companies at construction sites of Belarusian NPP, Kursk NPP-2, Rostov NPP-4 and Novovoronezh NPP-2 (532 persons).

During Rostov NPP-4 construction, we arranged practice for NIAEP JSC specialized department graduates (19 persons). During practice at working places, they made several dozens of improvement proposals that have been implemented. At specialized department, we started studies for new group of students, who get E.N. Pozdyshev scholarship, and for young specialists of NIAEP JSC who successfully passed RPS theoretical exam; in summer they will have practice at one of construction sites.

In 2015 we launched Factory of Production Processes in Construction. The purpose of this type of training is to get theoretical knowledge about Rosatom production system, to get practical skills to work with RPS tools, to organize present-day production thinking as a way to detect loss of production, to look for methods to eliminate them in order to improve work quality and speed.

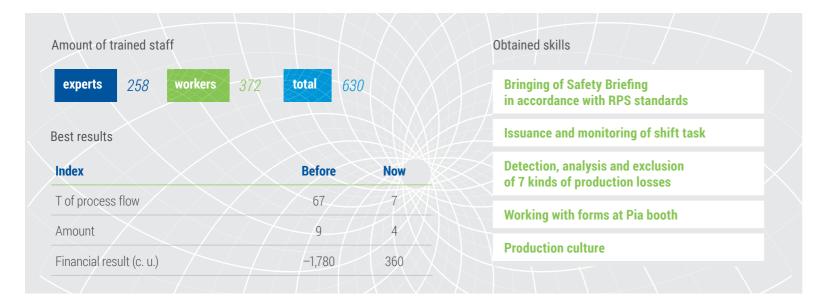
The training for optimal working process is based on specific production examples. First, the students get theoretical knowledge about Rosatom Production System; afterwards, they apply this knowledge in practice, perform economic calculation and build up strategy for the next working round.







Figure 41. Factory of Production Processes in Construction



#### Plans for 2016

For 2016, we have a task to integrate RPS into all areas of the United Company activities.

To improve efficiency of RPS introduction, every subdivision will have experts responsible for RPS; functionally, they will be subordinated to the Director of Industry Center for Planning and Monitoring of Facility Construction.

In the first half-year, we will finish works to create RPS unit at power plant unit No. 2 of Novovoronezh NPP. At the same time, we will improve design unit, procurement unit and construction site of power unit No. 4 of Rostov NPP. There will be personal RPS projects for all managers of these areas (at least two projects per annum); they will be focused both on company improvement in general and achievement of indicators in terms of individual flows. To simplify monitoring of work progress and change indicators at all levels from vice-presidents to department managers, we will introduce information boards that help promptly receive necessary information about subdivision activities.

All subdivisions will have to introduce 5S system at work places and to submit improvement proposals.

In the second half of the year, personal RPS projects and 5S system for submission and review of improvement proposals will be included into all other subdivisions of NIAEP JSC, ASE JSC, Atomenergoproekt JSC and ATOMPROEKT JSC.

As a result, at the end of the year 90% of work performance indicators must be achieved; all 1-2 level managers must implement personal RPS projects and each employee must submit at least one improvement proposal.

### Procurement management

ASE Group procurement activities are performed within the Uniform Industrial Procurement Standard of Rosatom State Corporation. One of the main purposes of procurement activities is to arrange opportunity for maximum number of bidders to take part in procurement. Company procurement and delivery structure is public, clear and transparent; cooperation between suppliers is arranged; it is supported by the achievement of direct economic effects by means of competitiveness (procurement structure is provided in Annual Report of NIAEP JSC for 2013 http://niaep.interity.info/ proizvodstviennyi-kapital).

Council for the improvement of transparency of Rosatom State Corporation activities is the consultative body that is responsible for public auditing of procurement efficiency (including in the part of use of breakthrough technologies and elaboration and implementation of solutions focused on the greater access of small and medium enterprise to the procurement).

One of the important activities to develop and optimize procurement system includes participation of ASE Group in projects being implemented by Rosatom State Corporation in nuclear divisions and organizations, in particular:

- project for the introduction of category management in the part of order aggregation, transfer to three-year planning of needs and improvement of efficiency of stock orders;
- · project for long-term planning during procurement of long-lead equipment (long-term planning will reduce the number of procurement procedures, optimize costs for procurement management, provide additional economy on the account of price-fixing for equipment, reduce risks of procurement appeal and reduce delivery time);





- RPS project of Rosatom State Corporation Optimization of process Procurement Procedure Organization (project goals - to reduce terms of actual organization of procurement procedure, reduce the volume of Uniform Industrial Procurement Standard, reduce the cycle of procurement documentation agreement and reduce time for bid review);
- engagement of small and medium enterprises in procurement (in 2015, ASE Group took an active part in the implementation of solutions focused on development of cooperation with small companies. Measures implemented: typification of procurement documentation, publishing the list of products for procurement at small and medium companies only on the website of Rosatom State Corporation. In 2015, we simplified procurement procedures for SME and changed the procurement selection criteria that include only SME companies).

#### **Working with suppliers** <sup>23</sup>

In 2015, primary scope of suppliers for all facilities under construction included companies registered in Moscow and Moscow Region. Reasonably high rate of suppliers (~ 21%) may be called "local suppliers" meaning they are registered in the regions of facility location.

The level of procurement localization in regions of facilities under construction in 2015 was not high. Procurement for Belarusian and Rostov NPPs was an exception. The share of Belarusian suppliers amounted to 15.3% of procurement for Belarusian NPP. In the procurement for Rostov NPP, suppliers from Rostov amounted to 23%. Procurement localization figures for other facilities are much lower. ASE Group pushes for procurement localization growth.

#### **Import substitution**

By instruction from the President and Chairman of the Government of the Russian Federation, the Ministry of Industry and Trade of the Russian Federation and other ministries, agencies and state corporations develop plans for import substitution contribution in the industry. ASE Group in cooperation with Rosatom State Corporation and other nuclear companies have developed import substitution proposals. As ASE Group operates under

**Integrated report 2015** 

Federal Law No. 223-FZ dated. 18.07.2011 and Uniform Industrial Procurement Standard of Rosatom State Corporation, full implementation of import substitution proposals requires adoption of additional regulatory acts on the level of the Government of the Russian Federation as specified documents do not allow prohibiting or restricting procurement of imported products and do not allow using of prohibitive, restrictive and stimulating measures.

Some import substitution proposals are widely implemented in nuclear field. For example, in 2015, within the framework of import substitution program we managed to create the domestic equivalent of imported bimetal pipes with corrosion-resistant pad weld (they are used for main circulation pipelines for NPP). Apart from work for own use, in 2015, nuclear companies created a wide range of product types that substitute import equivalents in other fields. They include software, pressure sensors, various geophysical equipment, etc.

#### In 2015, the primary amount of procurement was assigned to domestic manufacturers.

Rate of procurement from overseas manufacturers amounted to

## ~ 5% of the total amount of procurement.

Suppliers and contractors must meet economic requirements determined by the legislation of the Russian Federation, including Federal Law No. 223-FZ On Procurement of Goods, Works, Services by Certain Types of Legal Entities dated. 18.07.2011 and Uniform Industrial Procurement Standard of Rosatom State Corporation. Other requirements (social, environmental and other) are governed by regulatory acts of special areas of law (for example, social liability of companies in the form of timely salary payment and deductions to the Pension Fund are governed by labor legislation) and certain acts of Rosatom State Corporation (for example, procurement from suppliers and contractors must be in line with environmental requirements determined by Environemental Policy of Rosatom State Corporation).

Basic equipment is manufactured by Russian companies:

- tanks for passive reflooding of reactor core and tanks for emergency core cooling system Petrozavodskchimmash JSC (St Petersburg),
- steam generators ZiO-Podolsk JSC (Moscow).
- reactor coolant pumps CKBM JSC (St Petersburg),
- relief tank Venta JSC (Ekaterinburg),
- reactor pressure vessel Izhorskive Zavody JSC (St Petersburg),
- unit transformers HC Elektrozavod PA (Moscow),
- turbine and electric generator Power Machines JSC (St Petersburg).

#### **Procurement from small and medium** enterprises

Pursuant to Decree of the Government of the Russian Federation No. 1352 On Peculiarities of Participation of Small and Medium-Sized Business Entities in the Procurement of Goods, Works, Services by Certain Types of Legal Entities dated. 11.12.2014, for 2015 a requirement was announced about the need to conclude procurement contracts for goods, works and services with small and medium enterprises in the amount of at least 9% of aggregate total value of all procurement contracts for goods, works and services for the period of 01.07.2015 – 31.12.2015.

Based on results of 2015, this requirement was met. In 2015, small and medium enterprises took part in 416 procurement procedures. We concluded contracts for the total price of 1.41 bln rubles. Thus, the scope of procurement from small and medium enterprises based n the results of the year amounted to 85.59% of the total procurement scope. Herewith, the rate of competitive procurement in which only SME took part amounted to 39.59%.









During 2015, procurement was arranged in accordance with annual procurement program and on the basis of milestone schedule for NPP power unit construction, investment and current budgets. Procurement plan for 2015 is performed by 100%.

Amount of existing contractual obligations

RUB 207,074 mln incl. VAT

Rate of existing contractual obligations

## 100% of total scope

#### Disclosure and transparency of procurement activities

In order to improve the disclosure and transparency of procurement activities, we actively use electronic trading platforms (ETP).

In 2015, savings due to open biddings amounted to

## **RUB 7,522.6 mln**

(or 7.5% of the total biddings).

Procurement by means of ETP has the following advantages:

- significant economy of working time,
- economy of money for procurement organization and holding,
- disclosure and transparency of procurement process.

Starting from 2012, companies included into ASE Group arrange all bidding procedures for NPP construction by means of ETP. Exceptions (non-electronic form) may be procurement for oveseas NPP construction aimed to engage local suppliers. There are no ETP on some territories of foreign states, in particular, in the Republic of Belarus. The scope of such procurement amounts to ~ 6% of total procurement scope.

Aggregate value of long-term contracts with suppliers amounts to 128,414 mln RUB. Delivery completion dates under concluded contracts vary from 2016 to 2025. Herewith, the primary scope of long-term contracts (more than 94%) will be fulfilled within the period between 2016-2020. Major indicator changes are related to the change of data consolidation pattern.

A surge in terms of item "Other business" is determined by change of data consolidation pattern and significant rise of costs related to insurance and financial services provided in 2015.

Table 25. Aggregate Value of Long-Term Contracts with Suppliers, mln RUB

Name	2013	2014	2015	Δ2015- 2014/2014, %
Total	36,239	177,774	128,414	-27
including:				
construction management	11,120	2,063	46,211	21.4
equipment	4,332	101,616	34,339	-66
design and survey works	18,598	72,204	18,658	-74
other business	2,189	1,891	29,206	1,445

ASE Group provides no preferences to suppliers depending on the locality of the supplier from the point of view of region of activity. Suppliers are selected only on the basis of compliance to requirements and criteria specified in procurement documentation. Winners of specific biddings are also selected in accordance with procurement documentation.

## 2.3.2 Results of Manufactured Activities

#### NPP construction

#### **NPP construction in Russia**

In 2015, the United Company designed and constructed seven power units in Russia:

- power units No. 3, 4 of Rostov NPP (p/u No. 3 is commissioned in 2015):
- power units No. 1. 2 of **Baltic NPP**
- power units No. 1, 2 of **Novovoronezh NPP-2**
- · power units No. 1, 2 of Leningrad NPP-2 (information is provided in ATOMPROEKT JSC annual report).

Group portfolio also includes power units No. 1, 2 of Kursk NPP-2. At present, we are preparing replacing power units for construction.

#### **Rostov NPP**



#### **Facility location:**

Volgodonsk, Rostov Region.

Works started for p/u No. 3 – 2008. Works completed for p/u No. 3 – 2015. Works started for p/u No. 4 – 2008. Works completed for p/u No. 4 – 2018.

#### Performance and quality specifications for power units No. 3, 4:

rated output power measured at generator ter-

2 x 1,000/1,070 MW

supplied thermal power -

2 x 2,683.2 Gcal/h (2 x 3,000/3,120 MW)

p/u efficiency (gross)

33.3%

relative auxiliary consumption of electricity during rated conditions

**5.77%** 

(922.14 mln KW/h per annum)

annual power generation by one p/u - at least

15,976.24

design service life

50 years

#### Primary results in 2015:

**Integrated report 2015** 

In terms of p/u No. 3, we successfully completed pilot operation stage; the unit is accepted for commercial operation.

In terms of p/u No. 4, we continue the main construction period In particular, we delivered foundation for turbine installation, reactor pressure vessel is installed, we energized the plant and started welding works for MCP.

#### Plans for 2016:

In terms of p/u No. 4, we will continue the main construction period. We will complete welding works for MCP and arrangement of monolithic part of building frame. We plan to start testing of equipment





#### **Baltic NPP**



**Facility location:** Neman District, Kaliningrad Region Works started for p/u No. 1, 2 - 2011.

#### Performance and quality specifications for power units No. 1, 2:

rated output power measured at generator ter-

1,194 MW

supplied thermal power

260 Gcal/h (300 MW)

p/u efficiency (gross)

37.17%

relative auxiliary consumption of electricity during rated conditions

7.15%

annual power generation by one p/u - at least

8,552 mln KW\*h

design service life

50 years

#### **Primary results in 2015:**

We continued works related to the erection of temporary buildings and structures, storage facilities for equipment acceptance and storage and built canteen at the construction site.

#### Plans for 2016:

Work performance in accordance with the approved activities for the Baltic NPP project implementation. Specification of the configuration of NPP construction project in Kaliningrad region, taking into account the updated concept of the Baltic NPP project implementation.

#### **Kursk NPP-2**



#### **Facility location:**

Makarovka village, Kurchatov District, Kursk Region.

Works started for p/u No. 1, 2 – 2013.

#### Primary results in 2015:

construction site. We completed works related to the planning for office and amenity building for the general contractor and workshop for reinforced concrete block fabrication, we completed installation of buttresses for road bridge across the Seim river.

#### Plans for 2016:

We continue to prepare infrastructure for the We will continue works of preparatory period of construction: we will erect temporary buildings and structures of storage facilities.



#### **Novovoronezh NPP-2**



#### **Facility location:**

Novovoronezh, Voronezh Region.

Construction site preparation - from 2007. Works started for p/u No. 1 – 2008. Works completed for p/u No. 1 − 2016. Works started for p/u No. 2 – 2008. Works completed for p/u No. 2 – 2018.

#### Performance and quality specifications for power units No. 1, 2:

target output power

2 x 1,198 MW

target thermal power

2 x 174.58 Gcal/h

power generation

9,122.00 mln KW\*h

design service life

50 years

#### Primary results in 2015:

of the open reactor, we completed overall tests of reactor compartment safety systems, we started hot trial phase.

In terms of p/u No. 2, we completed assem bly of inner colonnade, we commissioned remote controlled fire extinguishing system.

#### Plans for 2016:

In terms of p/u No. 1, we completed flooding In terms of p/u No. 1, we plan to start power start-up and pilot operation, as well as obtain the report on conformity. In terms of p/u No. 2, we plan to continue construction and installation works.

#### NPP construction abroad

All power unit design and construction works of the United Company abroad are monitored by IAEA and are performed in accordance with applicable international standards, legislation and non-proliferation regime.

#### Akkuyu NPP

The project provides for NPP design and construction in Turkey; it consists of four power units with aggregate rated power of at least

## 4,800 MW

and infrastructure development, plant operation, purchasing and sale of generated power. Power unit design will use design solutions of

## **VVER.1200E**

The project is being implemented according to BOO scheme\*.

The United Company takes part in the project as general contractor on the basis of the contract; AKKUYU NPP JSC is the Customer.

#### Primary results in 2015:

- we arranged an official groundbreaking ceremony for hydraulic engineering facilities of NPP construction project,
- we obtained provisional license for NPP power generation,
- · we started works in the offshore zone related to the preparation of territory for the NPP.

#### Plans for 2016:

Further implementation of the project is carried out in accordance with the IGA.











<sup>\*</sup>Build-own-operate - contract that provides for construction, ownership and operation obligations.

#### **Belarusian NPP**

The project includes construction of two power units with

**VVER.1200E** (V-491)

reactors and power up to

1,200 MW each

Planned commissioning terms for p/u No. 1 – 2018, p/u No. 2 – 2020.

**General Contractor** is ASE JSC.

**Customer** is state enterprise Nuclear Power plant Construction Directorate.

#### Results in 2015:

In terms of reactor building for p/u No. 1, we arranged installation of aggregate units of the 4th tier of inner containment, we delivered reactor pressure vessel to the construction site and started works for construction of foundation for turbine turbine generator unit. generator unit.

#### Plans for 2016:

In terms of reactor building for p/u No. 1, we plan to install reactor pressure vessel and steam generator and start welding works for main circulation piping. In terms of turbine building, we plan to install

#### **Rooppur NPP**

The project provides for NPP construction in the People's Republic of Bangladesh consisting of two power units with capacity

1,200 MW

each in accordance with

**VVER1200** 

technology.

**General Contractor** is ASE JSC.

Start of preparatory works – 2013, planned completion of preparatory works – 2016. Installations - 2016.

#### Results in 2015:

We continued preparatory works: we com
To complete preparatory works, to prepare pleted works related to the development General Contract for NPP construction.

#### Plans for 2016:

and sign Credit Agreement on financing of of feasibility evaluation study and EIA, de- works related to the main period of conveloped design documentation, signed the struction, obtain site license and approve the design for construction selected by the Parties.

#### El Dabaa NPP

## It is the first NPP in the Arab Republic of Egypt

#### Results in 2015:

Intergovernmental agreement on the construction of NPP was signed.

#### Plans for 2016:

To sign EPC contract, to provide contract financing by the Ministry for Economic Development of the Russian Federation and Ministry of Finance of the Russian Federation in accordance with financial intergovernmental agreement.

#### **Paks NPP**

Design, construction, commissioning and decommissioning of p/u No. 5, 6 with VVER reactors with power of at least

## 1,000 MW each

The Owner is MVM Paks II.

#### Results in 2015:

We registered a branch office of NIAEP JSC in Hungary. We approved survey works program. We started survey works. We developed and submitted to the Owner the Basic Design Structure and PSAR Structure. Design documentation for construction and installation base is under development.

#### Plans for 2016:

To develop the Basic Design and Preliminary Safety Analysis Report. To complete engineering survey at the site.

#### **Tianwan NPP**

Second stage of Tianwan NPP (p/u No. 3, 4) being constructed in China on the basis of ASE-91 design.

#### Results in 2015:

We performed a number of construction and installation works ahead of schedule. We completed milestones in accordance with the schedule. We exceeded project revenue plan for p/u No. 3, 4 for 2015.

#### Plans for 2016:

To complete construction and installation works and to start cold trial for p/u No. 3. To complete installation works for basic equipment of p/u No. 4.

#### **Bushehr-1 NPP**

P/u No. 1 of Bushehr NPP is the first power plant in the Middle East.

#### Results in 2015:

Final acceptance of power unit.

#### Plans for 2016:

To obtain operation license. Operation by Iran.

#### **Bushehr-2 NPP**

Two new power units No. 2, 3 at Bushehr NPP site.

**Integrated report 2015** 

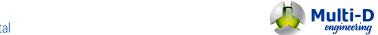
#### Results in 2015:

Engineering survey works.

#### Plans for 2016:

To start works under the Contract.





#### Ninh Thuan-1 NPP

The project provides for the construction of two power units with power

## 1,000 MW each

The Customer is Vietnam Electricity. Commissioning dates are: for p/u No. 1 - 2028, p/u No. 2 - 2029.

#### Results of 2015:

We signed General Framework Agreement that includes the schedule of high priority measures and arranged negotiations related to the approval of contract for site investigation.

#### Plans for 2016:

To sign the contract for site investigation to perform works at NPP construction site and NPP technical design contract.

#### **NPP** in Jordan

## This is the first NPP in the Hashemite Kingdom of Jordan.

**The Owner** is Jordan Atomic Energy Commission (JAEC).

#### Results of 2015:

We sent the term sheet of EPC contract to the To perform works in terms of execution of Owner that has been prepared on the basis of BIS and BID, as well as Appendices to EPC contract. We signed the contract for the optimization of NPP cooling system.

#### Plans for 2016:

Contracts for consulting services to JAEC and optimization of NPP water supply plan. To negotiate with the Owner regarding the term sheet of EPC contract for NPP construction and appendices to it.

#### **Kudankulam NPP**

The project provides for the construction of 4 power units (with expansion flexibility), reactor type

## **VVER-1000**

**The Customer** is Nuclear Power Corporation of India Ltd.

#### Results of 2015:

At p/u No. 1:

- · we performed guarantee tests,
- we completed the first cycle,
- we performed preventive maintenance.

#### At p/u No. 2:

- · we performed hot trial,
- we performed the second unit inspection.

We signed the contract for DDD development for p/u No. 3, 4. We arranged procurement of long-lead equipment for p/u No. 3, 4.

#### Plans for 2016:

To complete warranty maintenance and arrange for final handover of p/u No. 1 to the Customer. To load fuel, to reach minimum controlled reactor power and synchronize p/u No. 2 with Indian grid.

#### **NPP in South Africa**

#### Plans for 2016:

We expect South Africa to announce procurement process.

#### **NPP Mochovce**

Project for the turnkey delivery of in-core instrumentation system, measuring of boron concentration, reactor vessel level monitoring subsystem and delivery of reactor neutron noise diagnostics system.

**Customer** is Slovak Power Plants JSC.

#### Results of 2015:

Equipment is delivered by

92%.

#### Plans for 2016:

To complete deliveries and installation and pre-operational works at p/u No. 3.

#### Construction of other nuclear facilities

#### **Nuclear Science and Technology Center (NSTC) in Bolivia**

#### Results of 2015:

Rosatom State Corporation and Ministry of Hydrocarbons and Power of Bolivia signed Memorandum of understanding in the field of peaceful use of nuclear power.

We performed several rounds of consultations discussing the project of NSTC construction.

#### Plans for 2016:

- · to initial the IGA,
- to conclude Contract for preliminary surveying under the construction project,
- to conclude the Contract for construction.

#### Multipurpose Research Reactor in the RSA

**Plans for 2016:** We expect South Africa to announce procurement process.

Power plant with multi-purpose experimental power reactor on the basis of high-temperature gas cooled small-power reactor technology in the Republic of Indonesia

#### Results of 2015:

FS stage completed.

#### Plans for 2016:

Further participation in the project of reactor construction in cooperation with Russian companies.

#### **Center Nuclear Energy Science and Technology in Vietnam**

#### Results of 2015:

We have prepared and submitted for approval a preliminary FS of CNEST to the Government of Vietnam.

#### Plans for 2016:

Further participation in development of FS for CNEST project and determination of required and safe Center location.





Revenue from sale of innovative products – more than

13 bln RUB

We initiated a project aimed to form intellectual property portfolio for design and construction management of complex engineering facilities on the basis of Multi-D.

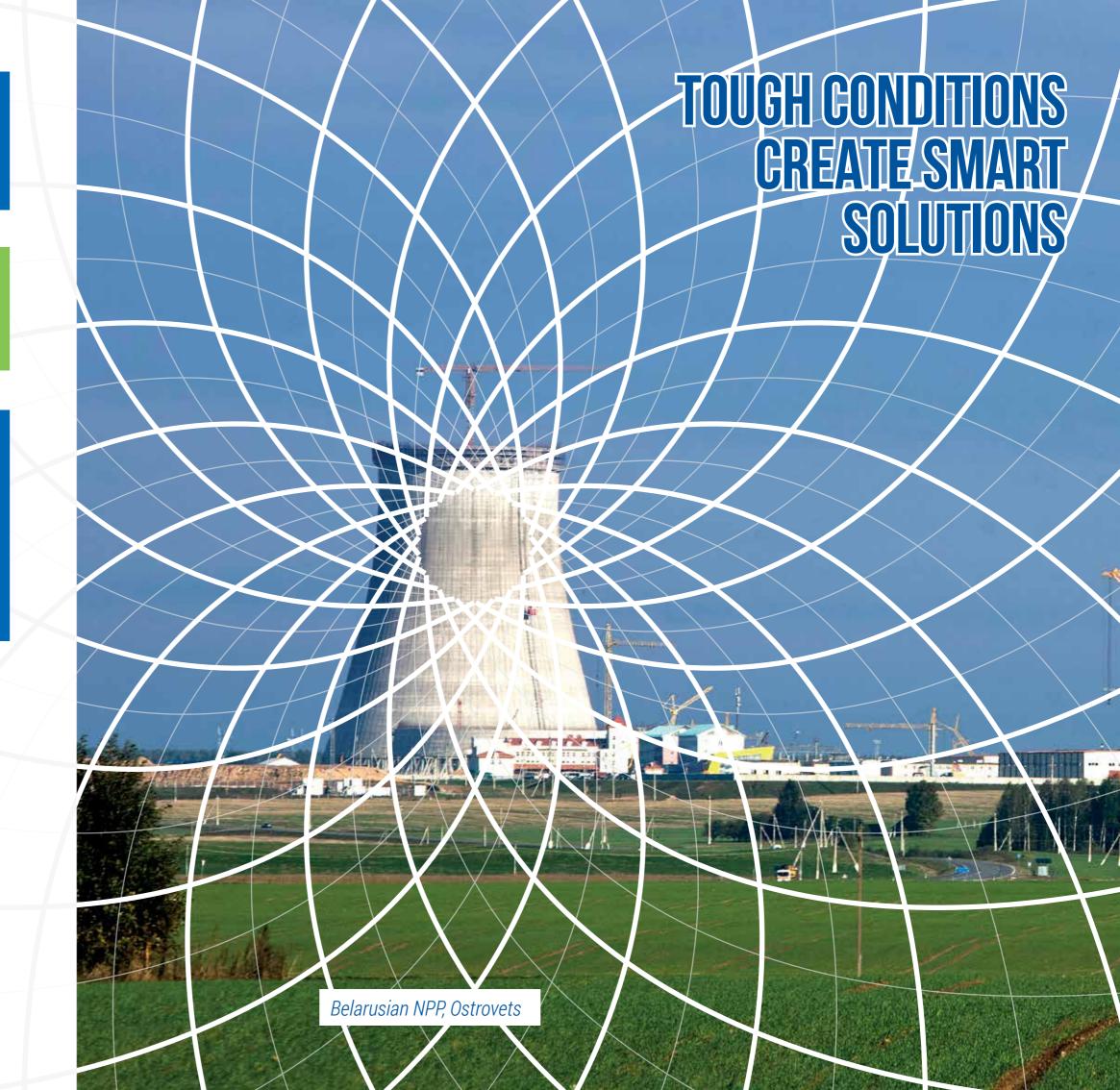
168

IP assets

26

Patents and certificates for IP assets 18

Applications for patents and certificates for IP assets





**Dmitriy Paramonov,** Director for Science and Innovation

#### - What are the most meaningful results of innovation activities during the reporting?

- During 2015, the Engineering Division has considerably upscaled the amount of innovative products being produced as compared to the previous year. Revenue from its sale amounted to more than 13 bln rubles.

We performed technology audit of division companies; its results once again confirmed our priorities: reduction of NPP unit construction time and cost and minimization of operating expenses. We determined technology issues that require immediate attention in order to create the next generation of competitive nuclear technologies.

In 2015, we initiated a project aimed to form ductivity among designers. Thirdly, we get intellectual property portfolio for design and construction management of complex engineering facilities on the basis of Multi-D. We detected due to synergistic effect of integration in more than 60 protectable IP assets (intellectual the development of prospective nuclear property assets), rights to which are assigned to facilities and other products and services NIAEP JSC. To provide legal protection of VVER that are much in demand in the industry. technology we submitted four international applications for IP assets registration in more than 30 world countries. We plan to upscale patenting of existing and emerging technologies in NPP radiation and environmental safety? the field of NPP design and construction.

Last year, we established Joint Science and of radioactive waste and SNF handling Engineering Board of NIAEP-AEP that evaluates scientific and engineering importance and practicability of innovations both from our employees and industry partners.

The participants of innovation activities must of NPP construction (for example, develunderstand the mechanism of the process. It improves transparency of activities and calculation of building structures) prioritize awareness of employees. For this purpose, we radiation safety. developed process regulations R&D Investment Project Management and IP Asset Rights Management as part of group of processes Innovation Activity Management.

#### - What are new opportunities in relation with integration?

- Integration of ATOMPROEKT JSC into ASE Group accomplishes logical and absolutely necessary process of consolidation of primary design assets of Rosatom State Corporation. We laid the groundwork for multiple synergy implementation. Firstly, there is no internal competition between design institutes that previously resulted in inefficient spending of resources and generation of multiple similar designs. We have an opportunity to concentrate efforts and large single capacity, it may make sense resources and to compete with best foreign to get back to small- and medium-power designs. Secondly, we get new opportunities reactors. Also, it may be feasible to create to exchange experience, staff, best tools (for design of typical research reactor for the example, dynamic model of power unit developed in ATOMPROEKT JSC) and best design and engineering solutions within the division. Apart from design quality improvement, it will definitely result in further increase of labor pro-

an opportunity to use design, scientific and engineering resources that are released

### What innovations are being implemented or designed in order to improve

- On the basis of subsidiary company NIKIMT-Atomstroy JSC, we develop an area technology. Waste processing increases radiation safety of nuclear facilities.

In general, all R&D projects and projects related to the reduction of cost and time opment of methods and programs for the

## What are working plans for 2016 and

- For 2016, we plan to implement R&D to reduce construction time, optimize process solutions and safety systems and to reduce operating expenses.

As to the mid-term, we plan to implement developments to build the concept of prospective competitive NPP design, to take part in the development of NPP BN-1200, and to further optimize VVER-TOI design. Depending on the estimates of power consumption growth in distant regions and countries that do not require units of world market.

## 2.4.1 Intellectual Capital Management

Intellectual capital of ASE Group includes such nominal assets as knowledge, information technologies and intellectual property (patents, copyright, etc.). Intellectual capital is crucial for the development of Company innovation activities and achievement of its strategy goals.

Table 26. General Information about ASE Group IP Assets

Intellectual property in action	Engineering Division
Inventions	27
Utility Models	41
Industrial Design	3
DB and computer programs	81
Trademarks	16
Total	168

#### **Knowledge management system**

ASE Group primary tasks to improve knowledge management system:

- to improve efficiency of basic activities of employees on the account of introduction of current information technologies,
- to organize on-line access to actual knowledge and scientific and technical information.
- software integration and unifying,
- · to reduce lifecycle of generation and implementation of new IP assets and technologies in production activities,
- reduction of risk of loss of critical knowledge,

· prevention of uncontrolled disclosure of IP assets and technologies beyond the company.

In 2015, we developed the program to implement knowledge management system in ASE Group; in the framework of the program, the following projects have been initiated:

- Creation of knowledge management system
- Introduction of critical knowledge maintenance
- Detection and protection of key technologies of

the division in Russia and abroad,

- · Integration of scientific and technical information portals.
- Digitizing archives and libraries,
- Introduction of information system for intellectual property right management.

All projects are focused on the improvement of processes for detection, organization, protection, keeping and transfer of knowledge within the division. Their implementation will contribute to the achievement of goals to reduce nuclear facility construction cost and time.

### **Specialized department Complex Engineering Facilities Lifecycle Management**

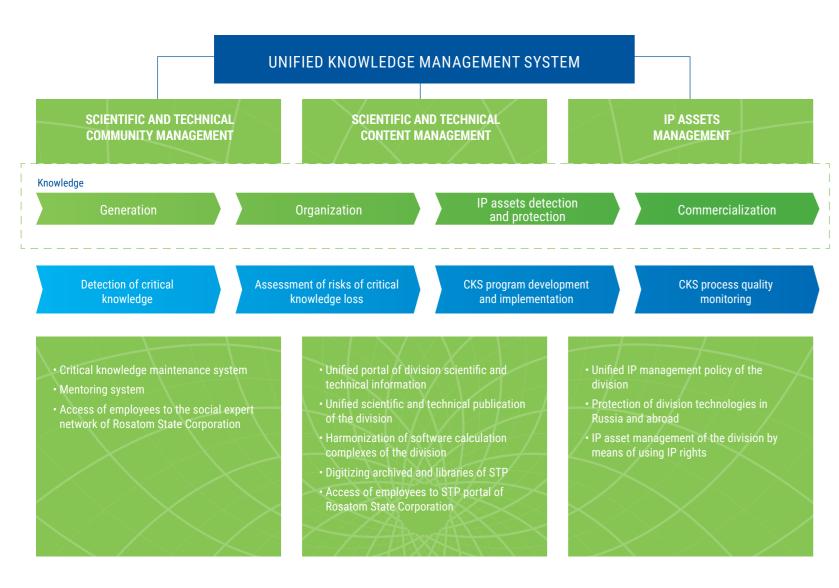
NIAEP JSC arranges target training of students for employment in the Company at the specialized department of Nizhniy Novgorod State Technical University named after P.E. Alekseev Complex Engineering Facilities Lifecycle Management established in 2012 on the basis of Cooperation Agreements between NIAEP JSC and specialized institutions of Nizhniy Novgorod.

During three years of operation, 90 students graduated from the department and obtained state-recognized degrees about professional training. In 2015, 30 students studied in the department: 15 students that are obtaining E.N. Pozdyshev scholarship and 15 young employees employed in NIAEP JSC during the reporting year.

In order to improve the competitiveness at the market of products and engineering services, 58 Company managers visited the seminar Technological Division of Labor - Source of Its Productivity Improvement, Third Industrial Revolution. New Opportunities to Improve the Competitiveness of Engineering Companies.







CK – critical knowledge; MCSN – management of corporate social network of academic experts of Rosatom State Corporation; STP – scientific and technical periodical; IP – intellectual property

## 2.4.2 Intellectual Property

### **Intellectual property rights**

In 2015, we initiated project aimed to form intellectual property portfolio for design and construction management of complex engineering facilities on the basis of Multi-D. Based on the project results, we detected more than 60 protectable IP assets which are assigned to NIAEP JSC.

In 2016, the project detecting key products and basic technologies of ASE Group will continue. Primary project tasks:

- · to detect key products and basic technologies (KP and BT) of ASE Group and their commercially valuable IP assets;
- · to carry out an audit of IP rights and ana-

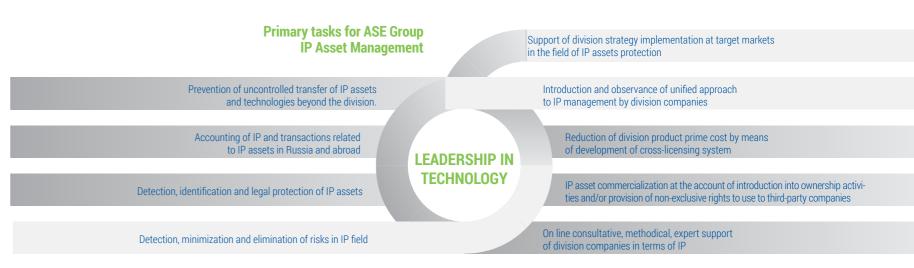
lyze reflection of IP assets on book and tax accounting;

- to detect new technical solutions, protection of which will help us obtain legal protection of KP and BT abroad:
- to create database of IP assets.

#### Table 27. Creating Rights to IP Assets in 2015, units

#### Received patents and certificates for IP assets **Submitted applications for patents and certificates for IP assets** Invention (Russian patents) Invention (Russian applications) Utility Model (Russian patents) Invention (international applications) Databases and computer programs 22 Utility Model (Russian applications) Trademark Data bases and computer programs Trademark Total

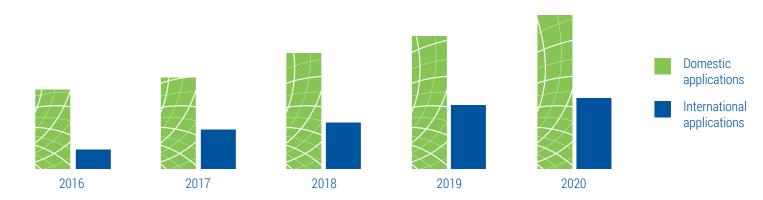
Figure 43. Primary Tasks for ASE Group IP Asset Management



In order to provide legal protection of VVER technology, in 2015 division companies submitted international applications for IP assets registration in more than 30 world countries.

ASE Group plans to upscale patenting of existing and emerging technologies in design and construction in Russia and abroad to improve the competitiveness of exported products and services.

Figure 44. Forecast for Generation of Portfolio That Includes Rights to Key Products and Basic Technologies, applications per year







#### Results of 2015

Innovation products produced by ASE Group in 2015:

- preliminary, DDD and other scientific and technical documentation for the construction of NPP power units (Kursk NPP-2, Akkuyu NPP, Rooppur NPP) based on basic design VVEP.1300TOI;
- and experimental development works external customers.

• results of research and development During ASE Group integration, innovation products came into production under the performed to justify adopted technical supervision of Managing Company - NIAEP design solutions and at the request from JSC. Innovation products are produced both by the United Company organizations and by subsidiary companies.

In 2015, ASE Group employees published more than 30 articles in scientific magazines and collections of papers; 9 articles have been published by Atomenergoproekt JSC employees in magazine Antiseismic Construction. Safety of Structures. Another Collected Works of Atomenergoproekt JSC have been published.

ASE Group employees took part in Russian and international scientific and technical events.

#### Table 28. Technological Development Areas

Projects
Optimization of VVER-TOI and AES-2006 to gain economic effect during NPP construction
Designing a new competitive NPP (VVER of high- or low-power)
Creation of prospective Russian APCS
Detailed assessment of prospects for the commercialization of NPP projects BN and BREST (fast neutron NPP reactor), comparison and selection of technology for further development
Nuclear facility operation management services
Complex engineering facility construction management system
Creation of typical research reactor project
Creation of demineralization complex for NPPs

## Case Technology Audit of Engineering Division

#### In 2015 we carried out:

- · current state analysis and forecast of market and technology development in economy sectors where the Company is present at the moment or may be present in the future;
- shaping of "vision of the future" in the mid-term and for the long run and scenarios of market and technology development including demand for basic types of products/works/services;
- estimate of basic properties (specifications and consumer properties) that must be included into the most prospective technical and process solutions over the mid- and long term;
- · detection of alternative technologies, products, works and services which the Company does not have but which are potentially competitive at respective markets in the long run;
- SWOT-analysis of Company future state: detection of tendencies, barriers, risks and limitations of products/works/services development;
- improvement of monitoring of prospective technologies development in the world including detection of new technologies and innovative solutions.

Legal Protection of Intellectual Property Rights to Design and Construction Management Technology on the Basis of Multi-D



- During NPP design and construction in Russia and abroad, NIAEP JSC widely uses information project management systems based on Multi-D technology.
- In 2015, rendering of PMC services to third-party companies, in particular entering market of services for the creation of project management systems for the construction of complex engineering facilities is considered to be one of promising areas of business development
- · Based on the results of registration and patenting procedures in the Federal Service for Intellectual Property, we will complete the process of technology intellectual property rights portfolio organization and thus provide legal protection during its commercialization.





Pay rise during the reporting period is related to the impact of recurrent indexation of wages, rise of payments that depend on fixed salaries and rise of integrated incentive premiums for high qualification in order to accumulate highly-qualified experts in the company.



-> Read more about salary and other payments and privileges to employees (mln RUB) p. 55

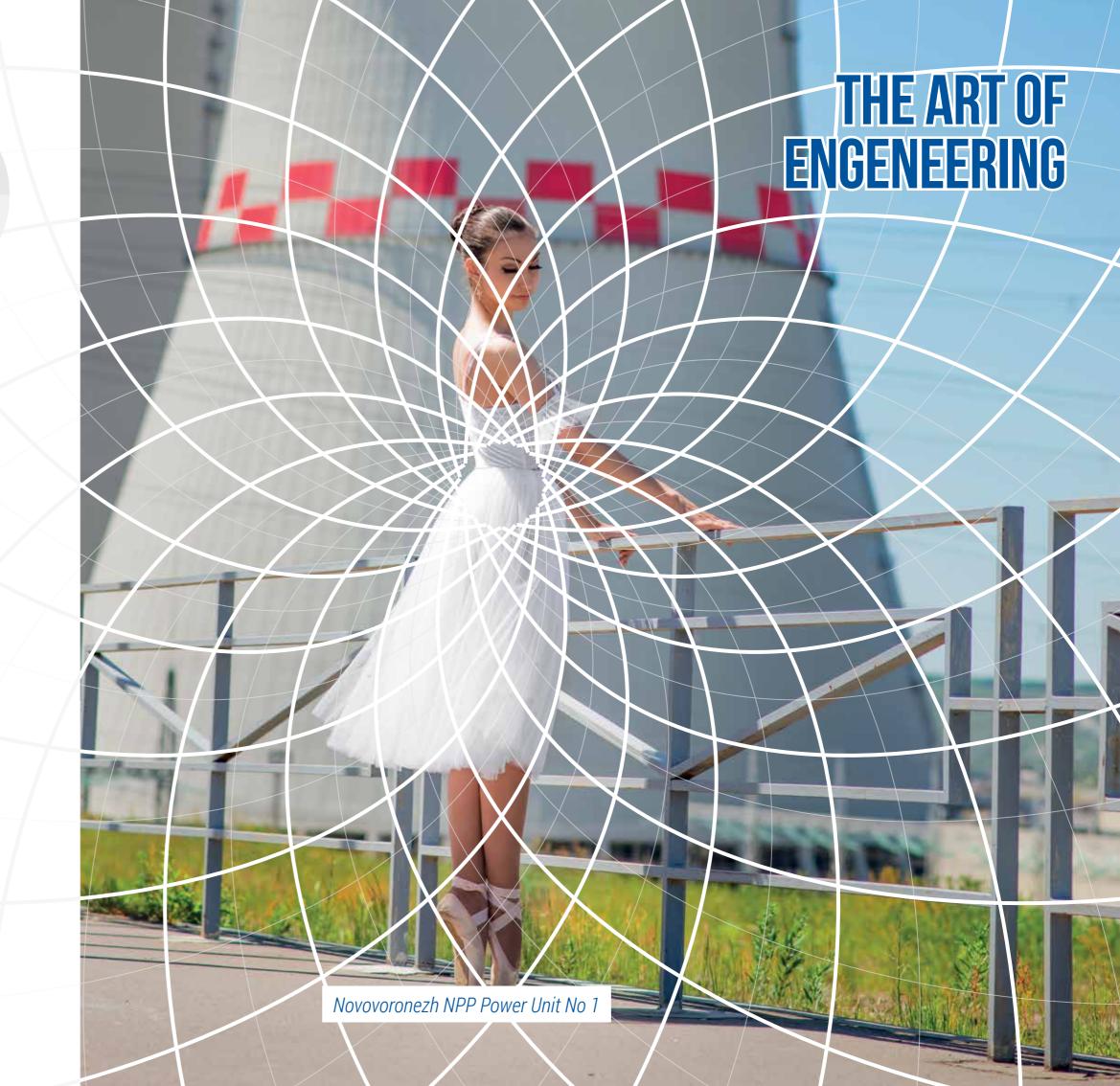
Growth of staff engagement level by

8%

Growth of labor productivity by

33%

compared to 2014 (excluding subcontracts)







Nikolay Sheshokin, Vice President for HR Management and Administrative Activities

#### - What are the most meaningful results in the field of working with staff during the reporting year?

- In 201, during working with staff the primary focus was on the development of employees talent. The company has been working actively to organize, train and promote candidate pool didates took an active part in the implementation of RPS projects at the level of Rosatom great capacity for future work. State Corporation. To train them, we engaged mentors from the company's top officials who — What works are being performed to train shared their experience and knowledge in the field of management, planning, and interpersonal communication. During the year, the growth of appointments from the candidate to training seminars in terms of these areas. pool amounted to 30.43%.

tutors gathered from the most experienced employees of ATOMPROEKT JSC conducted special training. Now it is safe to say that — What are working plans for 2016 and unique knowledge and skills will be transferred mid-term? to the younger generation.

As the company takes part in international projects, the deepest attention must be paid to in the form of innovative ideas, RPS projects this very field. ATOMPROEKT JSC has started and increase of succession candidates English training for employees. The program competences. includes partial compensation of cost for the courses provided that certain level of knowledge is achieved and respective tests are taken; it motivates employees to learn and not just institutions. At the level of Rosatom State attend the class.

for Continuing Education and Training we developed a training program for chief engineers of the projects where special attention is paid to the requirements of regulatory and technical documents (including overseas ones) that govern nuclear facility design and mastering 
In the course of selection of candidates effective methods for the organization and management of nuclear facility projects). We plan to attention to English skills. In case of no start the program in 2016.

#### - What changes are found in Company competency pool in relation with integration with ATOMPROEKT JSC?

- After the accession of ATOMPROEKT JSC, the Common staff Management Service Center United Company achieved at least two important areas that we need to implement jointly EKT JSC was one of the first companies that and that will ensure future development of the moved its business to CPM for PM in 2016. field - NFC closure project and works for further improvement of fast neutron NPP project. St Petersburg ATOMPROEKT acts as the general designer for the project of 4th power unit of both inside the company and in other industry Beloyarsk NPP with reactor BN-800 and takes for vacations, sick leave certificates and companies. During the year, succession can-part in the implementation of PRORYV project perform other routine operations; that will and has grand inventions in these areas and a help company HR department to concen-

## staff and improve NPP radiation and environmental safety?

- Annually, the company sends employees During the last year, 73 dedicated experts has

To provide transfer of knowledge, mentors and been trained and at present implement the received knowledge in practice.

- In 2016, we will continue to work with management candidate pool, it is a long-

We plan to strengthen efforts in working with students of dedicated educational Corporation, we launched TEMP program that engages the most talented people who In cooperation with Rosatom Central Institute are ready to bring new ideas. We stake on the young generation, on their energy, community spirit and desire to develop the field and to strengthen Russian status on the global stage.

> during employment, we will pay special job experience, we focus on the quality point average.

> I'd like to point out that starting from April 1, 2016, ATOMPROEKT JSC has changed to the (CPM for PM) Greenatom JSC. ATOMPRO-CPM for PM obtained transaction processes of HR management. Now service center specialists will prepare and issue HR documents and statements, prepare documents trate on the staff development and improvement of labor productivity.

## 2.5.1 Human Capital Management

The Human Capital Management Policy is based on the Company's vision to create a competitive business which successfully implements projects on construction of complex engineering facilities in the power engineering industry, and aimed at shareholder value maximization. The Human Capital Management Policy contributes to the implementation of business strategy, in particular. one of basic goals is a considerable growth of the scope and profitability of the business due to human capital gains. Growth of human capital implies not only increase in the number of employees, but also in competence, professional, and career advancement and improvement of labor conditions.

#### **Documents governing human capital management**

- · Labor Code of the RF:
- Industry-specific agreement on nuclear energy, industry and science for 2015-2017;
- · Charter of NIAEP JSC;
- Internal Labor Regulations of NIAEP JSC;
- · Corporate Ethics Code of NIAEP JSC;
- · Company's standard Staff Training;
- · Company's standard Recruitment, Employment and Staff Adaptation;
- · Regulation on the qualification of managers and specialists of NIAEP JSC;
- · Regulation on annual performance efficiency assessment in NIAEP JSC;
- Collective bargaining agreement for 2015-2016.

#### **Priority Areas of Activity**

Human capital management strategy of the United Company meets key HR priorities of Rosatom State Corporation.

Table 29. Priority Areas of Activity and Implementation Tools

#### **Priority Areas of Activity**

Development of corporate culture within

Increase in the human resources management efficiency.

#### **Implementation** Mechanism

- staffing the Company with qualified staff through involvement of "the best of the best", efficient staff training, selection and development system, introduction of integrated evaluation and career planning system,
- preservation and transfer of key knowledge and skills through introduction of mentoring system, relocation of key specialists from completed facilities to new facilities under construction,
- improvement of program of succession candidate pool development, drawing up succession plans as for the most important positions.

- uniform HR management principles in all regions of presence with consideration for local peculiarities,
- development of value management system,
- · implementation of uniform approaches to the corporate ethics of ASE Group, stipulating rules and norms of business communication,
- implementation of RPS-projects aimed at the improvement of HR management efficiency,
- improvement of the employees servicing (recruitment, transfer, retiring, time keeping, premiums).





#### Advanced Training of the Staff

ASE Group performs its activities at the high-technology market, which results in high professional requirements for the level of competency of the

The entities of ASE Group implement the system of ongoing professional development of all employees within the whole term of employment. The system covers all levels of staff and implies regular evaluation of performance results.

ASE Group takes part in development of Professional standards<sup>24</sup> aimed at creation of an interlink between labor market and professional education by defining employers' demand for:

- training and advanced training of employees;
- development of a grading system, and requirements for employees certification;
- development of professional education and training system;
- specification of work rates and development of the remuneration plan with consideration for the Company's peculiarities.

The employees of ASE Group take annual training on environmental and radiation safety, waste treatment. In 2015, 73 experts in charge of the above areas attended training.

*Table 30. Training Expenditures* **25** 

	2013	2014	2015
Total for ASE Group, thousand RUB	62,862	76,042	85,404
Share of training expenditures from total staff costs, %	0.55	0.61	0.60

#### **Performance in 2015**

In 2015.

## 6,444 employees,

or 43.4% of the total headcount of the Company, improved skills in the training centers of Rosatom State Corporation and other organizations (see Annex 14).

During 2015, 1,027 top managers and specialists of the design unit were trained under different training and development programs. Special attention is paid to familiarization of employees with the RPS principles. In-house RPS couches trained 30 engineers of the design unit and 1,276 employees of blue-collar employees. The training course "The Basics of RPS" of the Corporate Academy of Rosatom was attended by 80 managers and engineers of Atomenergoproekt JSC, including 43 employees of the design unit. In August 2015, the seminar on RPS tools training was arranged for key HR employees.

24 Professional standard is the characteristics of the qualification (knowledge, skills, professional skills and expertise) required for the employee to perform specific professional operations.

25 Staff training expenditures, expenditures for training per in ASE Group are provided in Annex 14.

# employee and average time count for one employee training



Type of Training	Expenditure, thousand RUB	Key Partners
Compulsory professional education	18,940	<ul><li>Non-state educational establishment Rosatom – CICE&amp;T</li><li>NIKIMT-Atomstroy</li></ul>
Industry-specific educational and development programs	15,234	Rosatom Corporate Academy ANCO
Additional training	31,006	<ul><li>Rosatom Corporate Academy ANO</li><li>Non-state educational establishment Rosatom – CICE&amp;T</li><li>CNTI Progress</li></ul>
Other expenses for assessment, training and development	20,224	<ul><li>Rosatom Corporate Academy ANCO</li><li>CNTI Progress</li><li>Training center Solftline</li></ul>

#### Plans for 2016

Plans for 2016 comprise the development and implementation of five industry professional standards in the field of construction in the areas of Design and Technical Customer.

Given the Company's active involvement in multiple regions, the additional objective is the development of expertise of operations on the global markets.

#### Staff Pool

Development of the staff pool of ASE Group is implemented within the framework of uniform industrial Concept of Creation, Assessment and Development of Staff Pool (2013) developed by Rosatom State Corporation and focused on the creation of a single three-level industry staff reserve for senior, middle and initial management level.

The main objectives of the staff pool development are to provide the Company with managers having expertise in efficient decision-making and establishment of a common corporate culture of management meeting the strategic goals and improving the management efficiency.

#### **Staff Pool Management Principles**

Focus on the industry values and strategic goals of Rosatom State Corporation and the **Engineering Division** 

Ensuring continuity of responsibility of each manager for training, development and appointment of succession pool members for the managerial position

Continuity of processes – systematic review and updating of the staff pool, continuous development of employees

Impartiality – selection to the staff pool is performed on the basis of the performance efficiency estimates and independent assessment by values and competencies

Transparency – uniform requirements and criteria for the staff pool development

Voluntariness personal responsibility – participation in qualifying stages and enrollment into the staff pool can only take place upon an employee's consent. Membership in the staff pool considers the personal motivation to develop

In 2015, the industry-specific staff pool comprised 110 people. The appointment to managerial positions is performed with consideration for priority given to the staff with the relevant expertise and, as a rule, members of the staff pool.

In 2015, the annual selection to the industry-specific staff pool Rosatom's Capital and Rosatom's Talents (in 2016) was performed. The candidates to the staff pool were suggested by heads of departments, and underwent assessment for compliance with selection criteria and to evaluation procedures. 247 employees participated in the assessment. At the beginning of 2016, the candidates who passed the assessment were enrolled to the staff pool.

- In 2016, it is planned to develop a succession plan for critical positions of the 2nd and 3d management levels within ASE Group. Therefore, the relevant tools were developed in 2015. According to the plans, the managers of 1st-to 3d levels will be trained to use these tools.
- identification of four career groups (Engineering, Design, Construction, Procurement) and 50 career specializations;
- development of four career maps (routes);
- specification of profile of competences and skills;
- selection of requirements applicable to positions from the industry list of reguirements and competences and skills.

It is also planned for 2016 to cascade the career and succession management process to the 4th management level and the companies will be added to the staff pool program.





#### Recruitment

During the reporting period, the companies of ASE Group recruited over 200 employees (22% with experience in nuclear industry), including 27 senior and middle managers.

In 2015, the demand for highly qualified specialists and managers grew in the Departments of overseas NPP construction and overseas NPP construction sites.



#### Involvement of Graduates and Cooperation with Higher Educational Institutions

Work with graduates is one of priorities of HR Cooperation with HEIs in the following way: policy of the Company. The main objective is to provide ASE Group with highly qualified staff to meet the strategic goals.

The procedure for work with graduates comprises three steps: search for promising applicants and training in higher schools, adaptation of graduates in the Company, professional development of young specialists.

- special career activities in HEIs (career days, Company, contests, selective activities, etc.);
- and internships;

 work of employees of NIAEP JSC (45 persons) as teachers in educational institutions.

young professionals' contest TeMP, vacan- Since 2008, NIAEP JSC has been implementing cy fairs, meetings with top managers of the program of student construction brigades at construction sites. The students' working season of 2015 was characterized by a record high • arrangement for students' practical training number of sites and students participating in the Group's program.

Table 32. Headcount of Student Construction Brigade Members Recruited to Construction Sites

Headcount, persons	Sites
493	power units No. 1 and No. 2 of Belarusian NPP, power units No. 3 and No. 4 of Rostov NPP
459	power units No. 1 and No. 2 of Belarusian NPP, power units No. 3 and No. 4 of Rostov NPP
Total 1,137	
including:	
678	power units No. 1 and No. 2 of Kursk NPP-2, power units No. 1 and No. 2 of Novovoronezh NPP-2, power units No. 3 and No. 4 of Rostov NPP, facilities of PA Mayak FSUE
459	power units No. 1 and No. 2 of Belarusian NPP, Tianwan NPP (China)
	493 459 <b>Total 1,137</b> including: 678

**26** Demand for employees in 2016 is provided for illustrative purposes on the basis of the data provided by ASE Group departments on vacancies planned to be filled in 2016.





#### Staff Assessment

(EPM) system has been applied in NIAEP JSC since 2010. This system is based on evaluation of fulfillment of the set goals (KPI) by the em- The EPM system allows the employee to underassessment of corporate values and assessment by the Company, by which criteria his or her perof employee's professional, technical knowledge formance will be assessed, how his or her career

The Employee's Performance Management of compliance with the corporate values and for the improvement of performance results, as 100% EPM coverage of the ASE Group.

and skills. Plans for 2016 include the assessment expectations may be embodied, what is required

well as to have feedback on the results of performance for he your from his/her immediate superior. According to the employee's performance ployee, assessment of corporate competence, stand which results are expected from him or her evaluation results, the system of individual material incentives may be reviewed and a decision may be made on transfer to a higher position or inclusion in the staff pool.

#### Performance in 2015

- 1,557 managers of all levels, as well as senior and leading specialists and engineers of the design unit passed annual assessment procedure RECORD.
- 147 employees of NI-**AEP-ASE-Atomenergoproekt** divisions involved in execution of technical customer's functions were qualified through the assessment of professional and technical competences.
- the President of the Company, V.I. Limarenko, passed the 360 Degrees corporate values assessment (colleagues, subordinates, immediate superior, and business partners acted as experts).
- · Within the scope of lean-technology implementation for the construction of Belarusian NPP and Kursk NPP, 16 employees of NIAEP JSC underwent competences development assessment using the Assessment Center approach by the criteria crucial for specialists' activities within the scope of Lean technologies. Following the assessment, 14 persons were included in the lean-experts development program.
- · 84 employees of Atomenergoproekt JSC passed assessment within the framework of middle and initial managers appointment procedure.
- 1,176 blue-collar employees of Energospetsmontazh JSC passed initial assessment to confirm their qualification.

*Table 33. Share of Employees Whose Performance* and Career Development were Assessed

	2013	2014	2015
Share, %	20.3	21	10.91

#### Plans for 2016

- annual RECORD assessment of performance efficiency (1,340 employees);
- · assessment of top managers prior to appointment to positions of TOP-1000 level;

**Integrated report 2015** 

- · corporate values 360 Degree assessment for successors to key positions of TOP-1000 level;
- · employees' assessments when forming industry-specific staff pools (Rosatom Assets, Rosatom Human Capital, Rosatom Talents);
- · competences assessments (functional, managerial competences and skills) of top and middle managers within the scope of career and succession management system (ETWEB);
- assessment of professional and technical competences and skills of HR-management

service and departments of NIAEP performing technical customer's functions.

#### Trade Union

The interests of NIAEP JSC employees are represented by the trade union. The Company has a primary trade union organization of the nuclear power engineering industry employees.





## 22

## 2.5.2 HR Policy Implementation Results

#### General Description of Human Capital

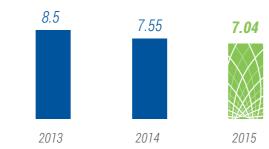


Details on the headcount and staff turnover is provided in Annex 15.

The increase in the staff turnover in 2015 was caused by:

- expiry of the term of employment contracts;
- layoffs following the completion of works at construction sites and administrative changes in the Division;
- · measures taken to increase labor productivity.

Figure 46. Average salary of 10% of the Highest-Paid Employees Relative to Average salary of 10% of the Lowest-Paid Employees of JSC NIAEP



### **Staff Engagement**

The United Company has participated in the staff engagement level survey for five years. The engagement (personal interest of the employees in achievement of the Company's strategic goals) is directly connected with the financial and economic performance of the Engineering Division.

According to the results of the survey carried out in 2015 with participation of 1,000 employees of the Company (24% of the total headcount), the staff engagement level in NIAEP JSC amounted to

**82**%

which is 8% more than in 2014.

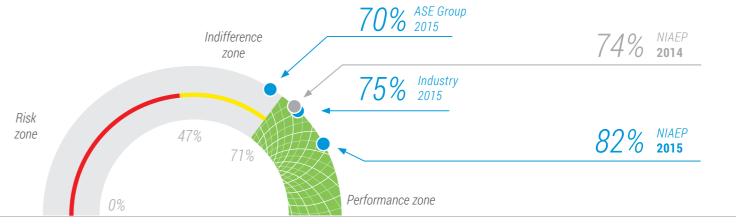
The engagement in ASE Group amounted to

70%.

Table 34. Staff Engagement Level by Categories of Employees, %

Categories of employees	2013	2014	2015
Top managers	92	92	100
Middle managers	70	74	88
Specialists	74	73	81
Workers	93	59	78

#### Figure 47. Staff Engagement in NIAEP JSC



#### Source: Aon Hewitt Employee Research Database

The results of the survey have shown that the strong side of the United Company is satisfaction of the employees with the colleagues, mutual support and respect within the team, employees' appreciation of help and support from their immediate superiors. The United Company NIAEP JSC – ASE JSC has a good advantage compared to other companies of the industry. Its employees are more satisfied with the employer's reputation, availability of resources for work, and the top-management which is regarded as efficient.

The main weaknesses of the United Company, as in previous years, are poor personal life/work balance, lack of carrier opportunities, and

insufficient acknowledgment of the employees' contributions by the management.

Within the framework of the common corporate culture development and improvement of engagement in 2016, the Engagement Management and Rosatom Values projects are planned to be implemented at all branches and entities within ASE Group governance scope in all regions of presence.

In December 2015, the project was started at Belarusian construction site of TrestRosSEM. Since February 2016, the project was launched in ATOMPROEKT JSC, VDMU LLC, ESM JSC, SMU-1 LLC, SPbNIII EIZ JSC, Siber Orgstroyproekt JSC, TrestRosSEM LLC (Volgodonsk).

#### **Labor Remuneration**

The United Company seeks to provide for fair evaluation of labor of its employees. In all operation areas, both minimum and average salaries in the Company are competitive.

Table 35. Payroll and Social Payments\*, mln RUB

	2013	2014	2015	Δ (2015-2014)/ 2014	2016 (target)
NIAEP JSC	3,812	4,228	5,091	20.4%	5,934
Atomenergoproekt JSC	5,443	6,193	5,370	-13.3%	3,885
ASE JSC	755	971	954	-1.8%	1,502
Total for ASE Group	10,010	11,392	11,416	0.2%	11,322

<sup>\*</sup> Remuneration details are provided in Annex 15.

**Integrated report 2015** 

The main objective of the remuneration and motivation system is to provide decent compensation for the achievement of strategic and current goals of the Company.

According to Regulations on Labor Remuneration employees (introduced in accordance with the Single Unified Labor Remuneration System of Rosatom State Corporation), unified approach to arrangement of labor remuneration and incentive mechanism is applicable in NIAEP JSC.

The Company's KPIs are described in the NI-AEP JSC President's Chart of KPIs and translated or decomposed for subordinated workers and structural subdivisions.

The approach to top management remuneration is provided in section 1.5. Corporate Governance





specialists, employees and workers, or their mance during the year.

ry condition of payment of bonuses to managare paid once a year within the payroll fund and ers. Individual KPIs may also be applicable to with consideration for the Company's perfor-

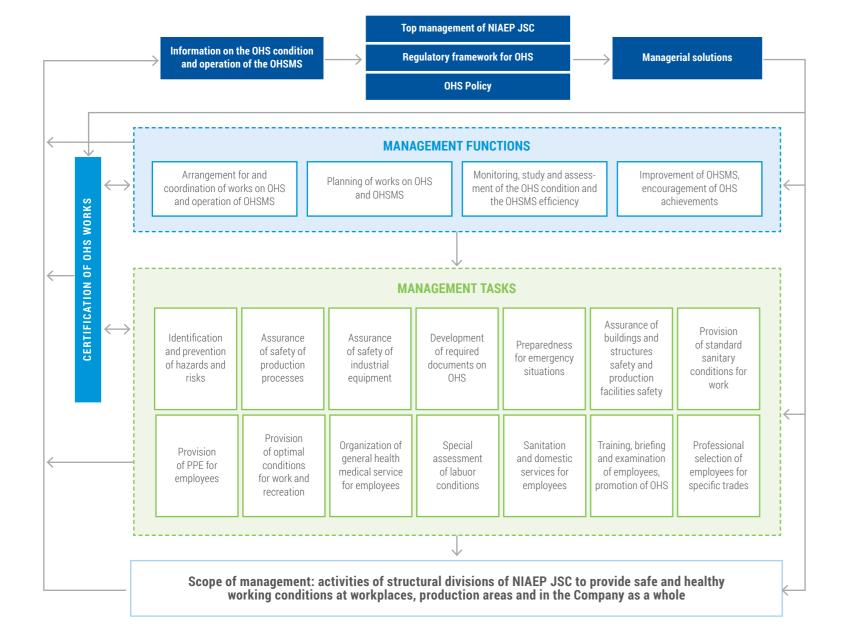
The KPIs are compulsory for managers of all performance is assessed using the KPIs chart Divisions of NIAEP JSC located overseas implelevels. The approved KPIs chart is a compulso- of their immediate superior. KPI based bonuses ment Regulations on Labor Remuneration within the scope of local legislation requirements.

#### Occupational Safety

of occupational safety and health of its em- of occupational injuries and diseases, improve- for 2016-2017. Collective Labor Agreements ployees, which is stated in the Quality, Ecology, ment of labor conditions of the employees, and comprise 100% of NIAEP JSC and Atomenergo-Occupational Safety and Health Policy of NI- conducts training of managers and specialists proekt JSC employees. ASE JSC has no Collec-AEP JSC applied to controlled companies. To for competence development in the field of ocachieve this goal, the Company improves the cupational safety. This activity of the employer is paid based on a relevant resolution. The res-Occupational Health and Safety Management is stipulated by the current Collective Labor olution is applicable to all employees.

The priority goal of the Company is assurance System, implements measures on prevention Agreement (Occupational Safety Agreement)

Figure 48. Occupational Health and Safety Management System



Accounting, analysis, investigation, notification and reporting on accidents and occupational diseases is performed in compliance with:

- · Labor Code of the RF:
- · Decree of the Ministry of Labor and Social Development of the Russian Federation No. 73 On Approval of Forms for Investigation and Registration of On-the-job Accidents and Provisions for Special Investigation of On-the-job Accidents in Specific Industries and Entities dated October 24, 2002;
- Decree of the Government of the RF No. 967 On Approval of Provision for Investigation and Registering of Occupational Diseases dated December 15, 2000;
- Provision P 04.04-13. The procedure for accidents investigation at NIAEP JSC;
- order of NIAEP JSC No. 395 On Approval of the Procedure for NIAEP JSC and Rosatom State Corporation Management Notification on Emergency Situations.



ASE Group has an integrated management system comprising occupational health and safety management system OHSAS 18001: 2007. Following internal inspections and external audits, 100% of employees of controlled working and independent contractors operate in accordance

In NIAEP JSC, the interests of the staff regarding arrangement of healthy and safe labor conditions are represented by the OHS inspectors appointed at the general meetings of independent structural subdivisions for the period of two years. The share of the employees represented in joint OHS committees amounts to about 25%.

The Company does not have employees engaged in professional activities related to high exposure to risks of injury or certain diseases. Coefficient of occupational diseases is estimated to be 0 (zero). In 2015, ASE Group registered 5 accidents involving employees of the Group and 8 accidents at construction sites with involvement of the employees of the contractors.

Information on accidents is provided in Annex 16.

Table 36. Expenses for OHS, mln RUB

Company	2013	2014	2015
NIAEP JSC	50.05	90.05	137.3
ASE JSC	17.2	67.7	23.7
Atomenergoproekt JSC	43.0	75.0	96.0
Total for ASE Group	110.25	232.75	257.0

## 2.5.3 Social Policy

#### Social and Labor Relations

**Integrated report 2015** 

ASE Group activity in the field of social and labor relations is based on the norms of the Labor Code of the Russian Federation, industry requlating document Industry Agreement on Nuclear Energy, Industry and Science for 2015-2017, and the companies' bylaws. All social benefits and guarantees to the Company's employees are implemented in accordance with the Uniform Social Policy of Rosatom State Corporation within

the existing corporate social programs.

Obligations of NIAEP JSC and Atomenergoproekt JSC as the employer in the field of social guarantees and benefits to the employees with indication of certain payment amounts and mechanisms, as well as occupational safety and health obligations are established by the Collective Labor Agreement. The Agreement applies to all employees of the Company, regardless of their membership in the trade union. In ASE JSC, the list of social benefits is stipulated by the relevant local regulations that cover all employees of the Company.





Thus, the share of employees covered by social programs is equal to

100%.

If employees are dismissed due to staff reduction, the employer renders assistance in their re-qualification and employment. Employees dismissed due to staff reduction are provided with up to 8 hours per week to find a new job.

#### **Pension Benefits**

All Company's employees are entitled to receive state work pension in accordance with the legislation. Implementation of the program on Non-State Pension Benefits to the employees (launched in 2013) continued in 2015. 160 persons participate in the Program on Non-State Pension Benefits. The minimum amount of personal and corporate contributions depends on the age and duration of service in the Company.

Expenses of the Company for the implementation of the program in the reporting period amounted to about

## RUB 28 mln.

In accordance with the Regulations on Non-State Pension Benefits for the Employees of NIAEP JSC, the Company acts as a guarantor of non-state pension benefits with regard to funding the non-state pensions till allocation thereof, and Non-State Pension Fund Atomgarant – with regard to payments of the allocated non-state pensions.

#### **Assistance to Veterans**

ASE Group regulatory documents stipulate social guaranties for veterans. The entities have a social support program for retired employees providing for one-off and monthly social welfare payments to retired employees. Retired employees and veterans of the Company receive monthly social support of up to RUB 35,000.

More than

## **RUB 7.5 mln**

were allocated for monthly payments to pensioners in the reporting year.

In cooperation with the Veterans' Council, the Company arranged for leisure and entertainment activities. Pensioners are welcome to attend corporate festive events and the fitness center of the Company. Every year, the traditional motorboat Volga tour is arranged for veterans. Payments on account of the Victory Day amounted to RUB 50 thousand to every veteran.

In 2015, the nuclear industry of Russia celebrated an anniversary. Therefore, the personal extra pension payments were increased by RUB 2,000.

Veterans of the Company took part in the anniversary celebrations arranged by Rosatom State Corporation and the Engineering Division.

#### Health Insurance

For a number of years, the companies of ASE Group conclude contracts with health insurance companies on arrangement of and payment for medical care to the employees. The employees of the Central Offices, branches and representative offices are insured according to uniform programs. The employees may insure members of their families at corporate rates. Employees of ASE Group are insured by the employer against accidents and occupational diseases. All employees sent on business trips abroad are obligatorily provided with certificates of insurance at the expense of the employer.

Social expenses structure comprises medical programs, health resort treatment, support to unemployed pensioners, assistance in improvement of living conditions, non-state pension benefits, award policy, arrangement and conduct of sports and entertainment events, catering, financial aid, social taxes, maintenance of social infrastructure.

Table 37. Expenses for Voluntary Health Insurance, thousand RUB

Company	2013	2014	2015	2016, (target)
NIAEP JSC	29.17	20.90	52.24	57.42
ASE JSC	3.45	6.78	6.53	4.91
Atomenergoproekt JSC	38.87	48.0	27.91	37.31
Total for ASE Group	71.49	75.68	86.68	99.64

The employees, including members of their families, receive partial reimbursement of expenses for:

- children's summer camps;
- recreation centers, tourist camps and recreation centers;
- health resort treatment.

Expenses for healthcare of employees, including voluntary health insurance, health resort treatment, employees' recovery at recreation centers are growing. Special attention is paid to the issues of preventive treatment and early detection of serious diseases, including coronary heart diseases and cancerous diseases.

In 2015, part of Atomenergoproekt JSC employees were transferred to NIAEP JSC, which resulted in material increase in expenses related to healthcare of employees of NIAEP JSC and reduction of the corresponding expenses in Atomenergoproekt JSC.

All employees of the Company may pass medical examination for timely detection and treatment of diseases. Financial assistance is guaranteed to the employees and their children for paid treatment in case of serious diseases. For the purpose of health maintenance and promotion, preventive and sports events are arranged.

#### Financial Assistance

A considerable part of social payments (over 10%) of ASE Group are aimed to provide financial assistance to the employees.

In 2015, NIAEP JSC performed over three thousand payments of financial aid for the total of

## **RUB 29 bln**

Similar payments were made in ASE JSC and Atomenergoproekt JSC.

In 2015, ASE Group made payments at the birth of a child (up to RUB 55,000), at marriage (up to RUB 25,000), in case of close relatives' death (up to RUB 20,000), in case of serious disease of an employee or a family member (up to RUB 500,000), monthly payments to large-family employees and non-working women on parental leave, and some other benefits. In 2015, annual allowance to families with three or more children under 18 amounted to RUB 36,000 per child.

#### **Expenses for Social Policy**

In 2015, funds allocated by ASE Group to social undertakings exceeded the same in 2014 by 7.6%. All payments and benefits are applicable to full-time employees of the Company, for whom the employment by the Company is the main job (regardless of the employment type).

The Company renders assistance to transferred employees and workers having no own lodgings by providing them with temporary accommodation. In 2015, the procedure for the reimbursement of expenses of ASE JSC and Atomenergoproekt JSC employees to rent premises developed in accordance with new industry-specific requirements was approved.

Table 38. Social Payments per Employee, thousand RUB

Company	2013	2014	2015	(target)
NIAEP JSC	51.98	60.55	54.80	53.50
ASE JSC	34.76	32.4	42.53	43.54
Atomenergoproekt JSC	23.26	27.43	44.45	50.50

Besides, NIAEP JSC implements a program on rendering assistance to employees in purchasing accommodation. The program is implemented through reimbursement of expenses for payment of interests on residential loans within the amounts allocated for these purposes in the Company's budget, as well as through provision of interest-free loans for initial payments on credit agreements. Within the reporting period, payments were received by 90 participants of the program. Based on the results of the next application campaign, another 20 employees took part in the program.

Trade unions participate in a considerable scope of work on arrangement of rehabilitation and recreation of employees and their families. In 2015, the Company arranged off-site health days, pleasure boat trips on Volga and Moscow rivers, festivals and creative competitions.

Assets of NIAEP include Lesnoy Uyut recreation camp. During 2015, over 1,200 persons went to the recreation camp (in 2013 – 580 persons).

Over 1,300 employees are actively involved in sports. The Company arranges sport groups and rentes swimming pools, gyms, mini-football, volleyball and other sports training facilities. In 2015, NIAEP won for the fourth time the annual All-Russian tournament Rosatom Cup, for the fifth time won the ninth Games of the enterprises of Nizhny Novgorod region, became the winner of the regional part of the All-Russian contest for the best sports and sports activities arrangement in enterprises, institutions and organizations of the Ministry of Sports.

*Table 39. Total Social Expenses (thousand rubles)* 

**Integrated report 2015** 

Company	2013	2014	2015, (target)	2015, (actual)	2016, (target)
NIAEP JSC	174,232	195,974	205,454	199,319	215,171
ASE JSC	24,193	31,300	31,696	33,885	30,083
Atomenergoproekt JSC	87,919	111,346	155,704	131,046	132,991
Total for ASE Group	286,344	338,620	392,854	364,250	378,245





The Company is open and transparent and strives to develop partner and mutually beneficial relations with the stakeholders.

In 2015, the principal part of investments

88%

In 2015, the principal part of investments was channeled in the regions of the Russian Federation.

The geographic footprint of the Company's investment projects comprises many regions of Russia and countries of Southeast Asia, Middle East and Europe.

To increase industrial capacities and create additional jobs in the regions of presence in the course of projects abroad, we conduct Customer training, localize part of the production, and implement joint research projects. In addition to the above, ASE Group carries out all power units design and construction operation abroad under supervision of the IAEA and in compliance with the applicable international standards, legislation and non-proliferation regime.





## Nina Dementsova, Head of Communications Division

#### How did integration with ATOMPROEKT JSC influence communication with stakeholders?

- In 2015, the establishment of the Engineering Division of Rosatom State Corporation was completed, all of the NPP design and construction assets are uniformly governed and called ASE Group. Our design competence received reinforcement, which resulted in expansion of stakeholders' scope. The stakeholders' scope increased due to the inclusion of the stakeholders of ATOMPROEKT JSC. Thus, the activities NPP-2 and Hanhikivi NPP in Finland.

regions, and the geographic footprint of activities includes 20 countries around the world. The issues related to maintenance and strengthening of company's social capital and goodwill and reputation capital is strengthened due to communications and media activities of the company improvement. In 2015, the company

expanded the information presence, intensified — Is there any special re-branding related work with the media on coverage of activities, including manufacturing, social and innovation segments. Measures are taken to strengthen the positive public attitude towards development of the nuclear energy industry by improvement of on the merger under ASE brand was made information transparency and open communication with all stakeholders.

#### How does the company communicate with stakeholders in the regions of NPP construction?

- In general, the scope of stakeholders is wide and includes customers, partners, regulators, government representatives, the media, and others. The interaction with each of the stakeholder group is based on specific mechanisms, whereas some approaches are of broad-spec-

In general, ASE focuses on promotion and improvement of the international image of Russian projects. Information on events in the company is regularly published on internal and external web resources, in numerous Rus-stakeholders in the reporting process. sian and foreign information media, in social networks. We take part in numerous international exhibitions, forums and conferences. The annual report is one of the main disclosure tools. For several years now, the report is prepared in compliance with international standards to make it convenient and understandable to our foreign readers.

Focused efforts of communication with specific engine of progress.' groups of stakeholders comprise, inter alia, creation of new jobs in Russian regions of presence in cooperation with local population and government. More than half of the company's top managers reside in locations critical for the Group's operations. Community liaison offices were created to provide assistance in recruitwere extended to include projects of Leningrad ing staff for ASE subsidiaries, contractors and subcontractors operating on the construction sites. Community liaison offices are structures At the same time, ASE expands its presence in engaged in recruiting of technical and construction staff. All professionals recruited by means of community liaison offices reside in communities located within 100 km radius of the NPP construction site. It is worth noting that salary are becoming more complicated. The social of all employees of subsidiaries and contractors are above the average salary in the region. This is just one example of interaction in the NPP construction region.

## to integration?

- To solve the reputation issues in the new environment, we started work on company's brand improvement. Decision and we gradually move to use the common name – ASE Group. It has been six months from now, the Company starts being presented as ASE Group for the purposes of external communications. At the same time we introduce the new corporate identity elements. Re-branding process is rather slow and is far from being completed.

## - What are the plans for 2016 and the mid-

- The expansion of the regions of presence results in expansion and complication of our work scope., accordingly. Thus, in particular, to enhance transparency and strengthen relationships, we plan to increase involvement of our overseas Though, the essence of interaction remains the same: we are committed to constant improvement of the Russian nuclear power industry, promotion of information on nuclear and environmental safety of our projects, give rise to public acceptance of nuclear technologies, and timely respond to political and economic challenges. Our information motto is "Nuclear power is the

## 2.6.1 Social and Relationship Capital Management

Social and relationship capital management includes arrangement of positive interaction with all stakeholders, encouraging public acceptance of nuclear technologies, brand management, contributions to the regions of presence development, charity, etc.

## 2.6.2 Stakeholder Engagement

The United Company strives to give rise to partner and mutually beneficial relations with stakeholders.

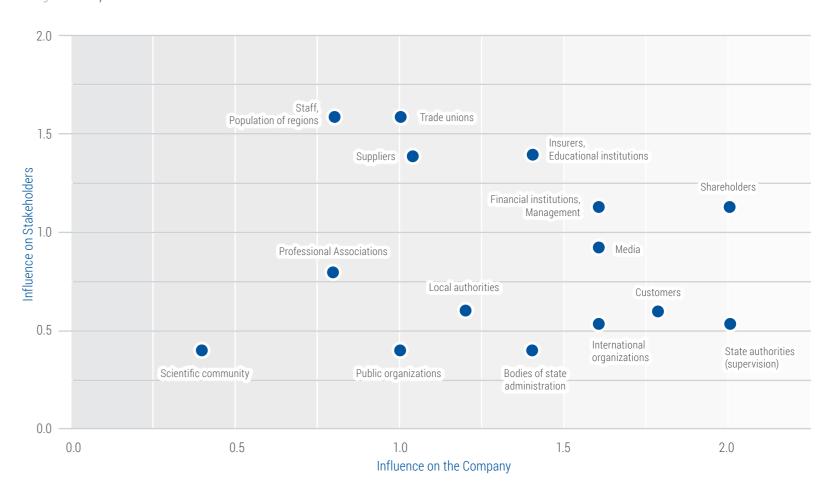
Principles of interaction with the stakeholders comprise:

 principle of inclusivity and responsiveness: the United Company takes into account demands and needs of the main stakeholders at all stag-

es of management process, including interests of those who has no possibility to express their opinion (for example, future generations); principle of materiality: the United Company cooperates with stakeholders on all issues critical for the Company and stakeholders.

Due to the wide framework of ASE Group activities in multiple directions. stakeholder engagement matters are governed and regulated for each specific direction of activity.

Figure 49. Map of Stakeholders 27



27 The map of stakeholders is updated once in two years following the polling of Public Reporting Committee and the Stakeholder Panel.











G4-24, G4-25

#### Table 40. Key Stakeholders

Key Stakeholders	Major Interests	Basic Ways of Cooperation
Shareholders: Rosatom State Corporation, Atomenergoprom JSC,	Strategy implementation. Economic efficiency	Participation in implementation of strategic goals of the shareholder. Improvement of corporate governance system. Implementation of Rosatom Production System.  KPI compliance
Atomstroyexport JSC	Business stability. Business process transparency	See sections 1.1. Strategy, 1.5. Corporate Govern- ance, 1.3. Target Markets and Priority Directions of
Customers:  Rosenergoatom Concern JSC, NPPD Company of Iran, Slovenské elektrárne, a.s., NPCIL, Akkuyu NPP, Jiangsu Nuclear Power Corporation (JNPC), China Nuclear Power Engineering Company (CNPE), China Nuclear Energy Industry Corporation (CNEIC), DSAE GU, EVN, FSNPC, Energoatom NNEGC	<ul> <li>Fulfillment of construction plans</li> <li>NPP Construction Time and Cost Reduction</li> <li>Improvement of work quality</li> </ul>	Development.  Participation in Head office operations. Implementation of state-of-art engineering technologies. Bilateral visits.  See sections 1.5. Corporate Governance, 1.3. Target Markets and Priority Directions of Development
Partners: suppliers and contractors.	Getting new orders Financial condition of the Company     Prospects for cooperation	Conducting open bidding. Conclusion of long- term agreements with transparent pricing rules. Participation in trade fairs and forums. Bilateral visits. Formation of strategic partnership. See section 2.3. Manufacturing Capital
Bodies representing interests of the Company's employees: trade union, Young Professionals Board, Board of Veterans	<ul> <li>Development of the Company Professional and career devel- opment</li> <li>Occupational safety Decent compensation</li> </ul>	Training and professional advancement programs Programs of staff advanced training Social support to employees Social Partnership See section 2.5. Human Capital.
Local authorities	<ul> <li>Environmental and radiation safety</li> <li>Development of infrastructure Taxes</li> <li>Employment</li> <li>Implementation of social programs</li> </ul>	Agreements on cooperation Social and charity programs EIA Community liaison offices Public reporting See section 2.6.3. Social and Economic Results.
State authorities (supervision): Federal Service for Environmental, Technological and Nuclear Supervision.	Compliance with Russian and international legislation requirements	Obtaining licenses Inspections Reporting Development of suggestions on legislative improvement See section 2.2. Natural Capital.
International organizations, including of nuclear sector: IAEA, WANO, WNA, Nuclear Energy Agency of OECD	<ul> <li>Development of nuclear power engineering industry</li> <li>Environmental and radiation safety</li> </ul>	International conferences/fairs/forums  Joint programs  Work in joint committees, boards, expert panels on nuclear power development

Key Stakeholders	Major Interests	Basic Ways of Cooperation
Professional associations: Chamber of Commerce and Industry of the RF, Russian Union of Industrialists and Entrepreneurs, etc.	• Prospects for cooperation	Forums/conferences/fairs
	Development of nuclear pow- er engineering industry	EIA
	<ul> <li>Environmental and radiation safety</li> </ul>	Work in joint committees, boards, expert panels on nuclear power development
State authorities:	<ul> <li>Development of infrastructure</li> </ul>	Public reporting
RF Government, RF Duma, RF Federal Council, etc.	Taxes	Contributions to the development of the regions of presence
	• Employment	
	<ul> <li>Implementation of social programs</li> </ul>	See section 2.3.1 Production Capital Manage- ment, 2.6.3. Social and Economic Results.
	Civil liability for damage due to defects in the works in the	Insurance against risks of civil and other types of liability
Insurance companies: SOGAZ JSC	field of construction, design- ing and engineering surveys which influence safety of capital facilities	See section 1.4 Opportunities and Risks, 2.3.1. Production Capital Management, 2.5.3. Social Policy.
Financial institution:	- 1 10	Crediting
AKB SAROVBUSINESSBANK JSC, Volgo-Vyatka Bank, Sberbank of Russia JSC, etc.	Financing, crediting	See section 1.5. Corporate Governance.
		Joint programs
Scientific community:	Nuclear science development	R&D projects
Research Institutes, Academy of Sciences, etc.	Innovation technologies development	Scientific conferences
	development	See section 2.4.1. Intellectual Capital Manage- ment.
Management of the Company	• Implementation of the Com-	Improvement of corporate governance system
management of the company	pany's strategy	Program on efficiency increase
		Community liaison offices
Donulation of the Commonula analysis areas	Creation of vacancies	Social and charity programs
Population of the Company's operation areas: dwellers, potential employees	Contributions to the development of the regions of	EIA
	presence	See section 2.5. Human Capital, 2.6.3. Social and Economic Results.
		Press-conferences and press-tours
Mass media:	Ensuring prompt access to information on the Company's	Public reporting
industry-specific and others	activity	Update of websites, official blog, resources in social networks





Key Stakeholders	Major Interests	Basic Ways of Cooperation
Educational institutions: Moscow Engineering and Physics Institute, Nizhny Novgorod State Technical University named after. R.E. Alekseev (NGTU), Nizhny Novgorod State University of Architecture and Civil Engineering (NNGASU), Lobachevsky State University of Nizhny Novgorod, Ivanovo Power Engineering Institute, etc.	<ul><li>Target training of specialists</li><li>Nuclear science development</li><li>Innovation technologies development</li></ul>	Training, retraining and advanced training of employees  Arrangement of internship for students  R&D projects  See section 2.5. Human Capital.
Public environmental organizations: interregional environmental movement Oka, etc.	<ul><li>Social and charity programs</li><li>Social partnership</li><li>Environment protection</li></ul>	Social and charity programs  Ecological expeditions  EIA  Public reporting  See section 2.2. Natural Capital.

#### Cooperation with International Organizations

- cooperation with the IAEA, including the promotion of innovative technologies and products. In 2015, the Company arranged a special exposition on NPP life cycle management technologies in Austria Center (within the scope of IAEA General Conference).
- cooperation with the Nuclear Energy Agency of Organization for Economic Cooperation and Development (NEA / OECD) within the scope of VIII International Exhibition and Conference AtomEco-2015. The Company's representatives took part in the International Conference on Decommissioning of Nuclear Installations: Strategies, Practices and Challenges.
- visits of international delegations, including the visit of the Permanent Representatives of the International Organizations in Vienna from 20 foreign countries at the IAEA (Asia, Africa, Latin America and Europe) to Rostov NPP. In 2015, ASE Group accepted delegations from China, Jordan, Bangladesh and Hungary.

### Stakeholders Informing

Stakeholders informing and ASE Group brand promotion are performed by means of:

- · media coverage of all stages of the NPP construction in the regions of
- promotion of ASE Group products and services, including Multi-D innovative project management system for the construction of complex engineering facilities;
- participation in exhibitions (in 2015, the Company took part in 7 Russian and 13 international exhibitions and conferences):
- organization of press-tours for journalists and other stakeholders to construction sites:
- participation in various competitive events (contests of annual reports, contests of media, press-services of energy companies and regional administrations MediaTEK, annual contest of the design activities professional management in the public sector Design Olympus, etc.).

Daily update of the Corporate site http://www.niaep.ru/.

The tools for employees' informing include internal portals, corporate newspaper Vestnik OK! and specialized publication Vestnik Stroyploschadok.

The main objective of the corporate newspaper is information support and improvement of the employees' engagement in the company's activities. The audience of the publication is over 18,000 persons employed by ASE Group, including branches, subsidiaries and affiliates in more than eight Russian regions, the CIS and other foreign countries. The newspaper is published on monthly basis in e-form. Each new release is placed on the internal websites of ASE Group enterprises, and is sent by e-mail to employees. Within the information support to integration processes, the newspaper posts interviews with the top management dedicated to integration processes, and publishes the column "A Question to the President".

The special corporate publication Vestnik Stroyploschadok has been published since 2016. The publication is intended for distribution at the construction sites of ASE Group. The demand for specialized publications is conditioned by the peculiarity of work of employees on the construction sites, who are deprived of the daily access to computer, as well as bulky information important for the construction participants though of less interest for the others.

## 2.6.3 Social and Economic Results

#### Taxes to the Federal, Regional and Local Budgets

The Company has a significant influence on the budget revenues in the company habitat.

Table 41. NIAEP JSC Charged and Paid Taxes 28, thousand RUB

2013		20	14	2015	
Charged	Paid	Charged	Paid	Charged	Paid
3,629,406	3,703,839	1,397,009	1,481,821	1,422,809	2,068,631
2,661,376	2,585,326	262,849	448,098	112,556	717,967
27,112	289,204	22,099	25,303	17,440	17,312
2,125	2,160	2,190	2,135	1,026	1,314
166,950	90,905	192,575	206,914	137,854	211,745
771,843	736,244	917,296	799,371	1,153,933	1,120,293
	2,661,376 27,112 2,125 166,950	Charged         Paid           3,629,406         3,703,839           2,661,376         2,585,326           27,112         289,204           2,125         2,160           166,950         90,905	Charged         Paid         Charged           3,629,406         3,703,839         1,397,009           2,661,376         2,585,326         262,849           27,112         289,204         22,099           2,125         2,160         2,190           166,950         90,905         192,575	Charged         Paid         Charged         Paid           3,629,406         3,703,839         1,397,009         1,481,821           2,661,376         2,585,326         262,849         448,098           27,112         289,204         22,099         25,303           2,125         2,160         2,190         2,135           166,950         90,905         192,575         206,914	Charged         Paid         Charged         Paid         Charged           3,629,406         3,703,839         1,397,009         1,481,821         1,422,809           2,661,376         2,585,326         262,849         448,098         112,556           27,112         289,204         22,099         25,303         17,440           2,125         2,160         2,190         2,135         1,026           166,950         90,905         192,575         206,914         137,854

Table 42. ASE JSC Charged and Paid Taxes 29, thousand RUB

	2013		20	2014		115
	Charged	Paid	Charged	Paid	Charged	Paid
Total	(762,768)	(993,358)	196,095	(335,282)	(7,653,390)	(2,925,287)
Including as follows:						
Federal Budget	(803,164)	(1,032,781)	(7,792)	(531,717)	(7,889,858)	(3,148,035)
Budgets of the territorial entities of the Russia	31,236	32,549	31,726	31,580	24,154	25,372
Local Budgets	9,160	6,874	4,797	7,672	10,079	6,974
Insurance Premiums to the Non-Budget Funds	_	_	167,364	157,183	202,235	190,402

Table 43. Atomenergoproekt JSC Charged and Paid Taxes 30, thousand RUB

	2013		20	2014		2015	
	Charged	Paid	Charged	Paid	Charged	Paid	
Total	533,173	(104,473)	483,902	1,094,654	221,180	4,947	
including as follows:	·						
Federal Budget	495,760	(456,468)	(506,303)	126,368	(780,494)	(1,024,477)	
Budgets of the territorial entities of the Russia	28,270	342,793	26,230	25,798	37,836	37,041	
Local Budgets	9,143	9,202	7,846	7,967	7,550	8,664	
Insurance Premiums to Non-Budget Funds	_	_	956,129	934,521	956,288	983,719	

**<sup>28</sup>** Reduction of tax payments to the federal budget is related to the significant VAT refund from the budget (for work completion on the sites the advance VAT is declared as part of the tax deductions). Reduction of tax payments to the budget of the territorial entities of the Russia is related to the residual cost reduction of the fixed assets.











**<sup>29</sup>** Income charge tax for all periods in 2015 is equal to 3,336,488,376.85 rubles. Reduction of tax payments to the federal budget is related to material VAT refund from the budget. The amount is significant due to export nature of ASE JSC operations.

**<sup>30</sup>** In the accounting period the previous period income tax to be refunded additionally from the budget in the amount of 1,510,000 rubles. As on December 31, 2015 the balance of non-refunded VAT was equal to 63,378,000 rubles, including VAT for purchase of the fixed and intangible assets in the amount of 3,833,000 rubles, services - 22,901,000 rubles, goods purchased - 36,644,000 rubles.

#### Contributions to the Habitat Development

#### **Investments in Regions**

Activities of the ASE Group of companies cause direct (through infrastructure investment projects) and indirect influence on the habitat development. The economic effect of the Group is not estimated on the public infrastructure. Belarusian NPP, Novovoronezh NPP and Zheleznogorsk TPP were taken as cases of influence.

The geographic footprint of the Company's investment projects comprises many regions of Russia and countries of Southeast Asia, Middle East and Europe. The geographic allocation of

the investments is mainly associated with facilities construction and maintenance schedule, and demand of the Company's branches and representative offices for infrastructure.

In 2015, the principal part of investments was channeled in the regions of the Russian Federation (Nizhny Novgorod, Moscow). These cities concentrate the main design capacities, and head offices of the companies of ASE Group. In 2016, the investments channel to Kursk region is planned to increase as a result of the

planned construction cranes purchase for the use during Kursk NPP-2 construction.

The share of investments to foreign projects in 2016 will not change significantly. The main investment will be directed to the projects related to the construction of the Belarusian NPP. Besides, the investments are provided for the support and development of production facilities of the representative offices of the Company and increase in production capacities in Hungary and Iran.

#### **Influence on Local Population in the Habitats**

Construction and commissioning of the nuclear facilities, including NPP units, create new jobs. Most employees are hired from among local residents at a radial distance of 100 km from the construction site. In addition, each power unit construction job contributes to creation of 10-12 jobs in allied industries (metallurgy, machine building

and others.). For number of organizations involved in the NPP construction in 2015 see Section 2.3.1. Production Capital Management (Supplier Relationship Management).

The community liaison offices are established in the regions to attract the technical and con-

struction personnel. In 2013-2015 over 6,000 persons contacted the Community liaison offices, with over 1,000 persons hired. In 2015, the new Community liaison office was open in Novovoronezh (recruitment to Novovoronezh NPP-2 construction).

Table 44. Employment through the Community Liaison Offices, men

	Rostov	/ NPP	Novovoronezh NPP-2		FSUE PA Mayak		Total	
	Were contacting	Hired	Were contacting	Hired	Were contacting	Hired	Were contacting	Hired
2013	1,687	427	0	0	0	0	1,687	427
2014	2,339	362	0	0	554	150	2,893	512
2015	1,171	63	315	45	0	0	1,486	108
Total:	5,197	852	315	45	554	150	6,066	1,047

## study for Novovoronezh NPP



The Novovoronezh NPP project is embedded into the long-term development concept of Novovoronezh. The economic relations are expected to be strengthened with the surrounding regions (Khokholsky, Repevsky districts), thereby providing support to farmers while providing the city with food.

During construction, the investments in the Novovoronezh infrastructure were about 4.5 bln rubles, including 150 mln rubles for reconstruction of the boiler house and heating networks, 245 mln rubles were invested in the construction of Rekordy Stadium within co-financing. The new sports facility became a gift to the city for the 50th anniversary of Novovoronezh NPP. The sport facility was built in framework of the agreement implementation between the Government of Voronezh region and Rosatom State Corporation

International Children's Day in Novovoronezh

stipulating the transfer of additional tax revenues to the municipalities due to the nuclear power plant operation. The NPP provides the creation of new jobs (average salary of a novice engineer is 23,800 rubles). Over 8,000 persons take part in construction of power units 6&7 of the fourth phase of Novovoronezh NPP.

The construction of the Belorussian NPP at distance of 18 km north of Ostrovets has changed the life of the town. Ostrovets is gradually transforming into a power engineers' town.



Preschool in Ostrovets, constructed under the urban development plan

In 2015, the population grew from

**8.300** persons

in 2013 to

9,100 persons

The town population is expected to grow up to 40,000 persons.

Three new residential areas are constructed for future employees of NPP. The construction of the first area for 3,200 residents has been already completed.

In 2016, it is planned to complete the second one, and completion of the third area is planned in 2017.

Along the transport axis between the city center and NPP, it is planned to allocate the NPP staff training center, a hotel for 150 beds, the NPP information center, fitness center.

Recreational areas and entertainment complex for youth are planned to be constructed on the right bank of the Losha river. Additionally, a children's health camp for 200 beds will be constructed in the forest park. On the right bank of the water reservoir, there will be a rehabilitation center for the NPP employees.

Besides, the urban development plan comprises construction of the new schools and preschools, arrangement of the educational organization complex for the dual education, as well as the reconstruction of the central hospital.

In 2015, the gymnasium for

# 510 pupils

and preschool for

## 190 children

were constructed.

There are also plans on construction of the new industrial zone to accommodate high-tech enterprises, creation of conditions for development of small and medium-sized enterprises, arrangement of the logistics center (taking into account the near-border location of the town and the presence of the major road and rail routes of international importance).

Key principles of the power engineers' town arrangement are embedded into the master plan providing the environmental friendly model of development. The plans provide for the arrangement of landscape and recreational areas: parks, forest parks, embankments, squares, boulevards, and maximum preservation of the existing greenfield areas on the construction sites.





#### study for Zheleznogorsk TPP

Zheleznogorsk TPP is located in Sosnovoborsk. It was built to provide heat and additional jobs to the population of the Krasnoyarsk Territory.

Construction customer, general contractor, and the TPP operator (since 2012) is represented by NIKIMT- Atomstroy JSC. The construction project was implemented within the framework of the agreement between the Russian Ministry of Atomic Energy and the US Department of Energy.

The Zheleznogorsk TPP was put into commercial operation on October 10, 2012. Works on development of infrastructure, and improving safety of TPP operation were carried out in 2012-2014. Since 2014, the TPP has operated as an independent legal entity and a subsidiary of NIKIMT-Atomstroy JSC. In 2015, the property complex of Zheleznogorsk TPP was transferred free of charge to Krasnoyarsk Territory.

#### Charity

In accordance with the corporate values and principles of the social responsibility, ASE Group charity activity in the habitats is focused on the following:

- implementation of social responsibility;
- support of high social and culture standards in the regions of the nuclear facilities location,
- · contributions to the development of the habitats.

In 2015, ASE Group contributed to charity

## RUB 86 mln.

Table 45. Funds for Charity Allocated by ASE Group, mln rubles

Recipient	Objectives	<b>2013</b> <sup>31</sup>	<b>2014</b> <sup>31</sup>	<b>2015</b> <sup>32</sup>
Total funds allocated for cl	harity purposes,	79.39	87.59	86
including:				
Municipalities, entities and public organizations in the habitats	Arrangement of charity events, strengthening of production facilities and improvement of sites, social, culture and sportive events, provision of assistance to veterans of war, labor and disabled people	12.39	19.4	59
Public orthodox organizations in the habitats	Construction and reconstruction of churches	59.0	61.0	18.0
Winners of charity projects contest (59 projects)	Support of the culture, sport, patriotic, environmental initiatives in the habitats	8.0	7.0	9.0

pared for approval of the list at a meeting of the regions and the Republic of Belarus. Board of Directors.

The Charity Committee of Rosatom State Cor- In 2016, NIAEP JSC will hold an annual contest poration has approved the list of charitable of charitable projects in the habitats. The coninitiatives of NIAEP JSC for 2016 amounting to test is open for non-commercial organizations of 195.42 mln rubles. The documents are being pre- the Voronezh, Kursk, Nizhny Novgorod, Rostov

The grant fund of the contest is equal to

RUB 11 mln.

31 NIAEP JSC

**32** ASE Group

G4-S03, G4-S04, G4-S05, G4-57, G4-58



#### **Anti-Corruption Enforcement**

fight against corruption in the nuclear power industry, the Unified Industrial Anti-Corruption Policy of Rosatom State Corporation and its entities and Standard guidelines are approved on assessment of corruption risks in the entities of Rosatom State Corporation. Anti-corruption policy is mandatory for all employees of the Company.

Adoption of the Policy in NIAEP JSC shows the commitment of the Company to the law and high ethical standards for business relations, and strengthens the Company's reputation among other companies and customers. To some extent the reputation of the Company can serve as protection against the corruption attacks Analysis of the committed unlawful acts shows from the side of unscrupulous representatives of other companies and governmental authorities. Thus, the latter shall refrain from offering or extortion, illegal remuneration, because they know that such proposal will be rejected. Anti-corruptivities. To identify affiliation of legal persons tion measures essentially decrease risks of im- and individuals as well as presence of conflict position of sanctions on the Company because of interests, the employees of Assets Security of Bribery of Public Officials (including foreign Department (ASD) assess the loyalty and busiones). The corruption preventive measures, ness reputation of participants of procurement when selecting counterparties and establishing procedures. In 2015, ASD considered 1,861 prorelations with them, reduce the probability of imposition of sanctions on the Company because violations identified. of the undue actions of dealers and partners.

To provide the common approach to prevent and Within the framework of the anti-corruption policy implementation the following local regulatory legal acts are developed:

- forcement agencies,
- Regulation on the "Box of trust" for the written notes of employees of NIAEP JSC, Atomstroyexport JSC, partner and other persons concerning cases of corruption.

#### **Anti-Corruption Enforcement Results**

that the majority of the revealed violations is related to procurement. That is why one of the principal directions in the field of corruption prevention is monitoring of procurement ac-

The most important line of activity to prevent and reveal the illegal corruptive actions is check of information received via dedicated communication channels of hotline of Rosatom State Corporation. • Regulations for interaction of NIAEP JSC and In 2015, ASD carried out 16 checks of notices on Atomstroyexport JSC employees with law enthe above channels. The checks resulted in disciplinary liability of two employees due to breaches of requirements for procurement documentation and tender evaluation of the participants.

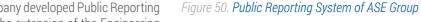
> The ASD carried out 74 initiative audits of procurement, contractual and financial activity of the representative offices, branches and subsidiaries in 2015. On the basis of the results, 48 files were submitted to the law-enforcement authorities, disciplinary actions were taken against 25 employees (reprimands were declared to 3 ones, admonitions were given to 19 ones, 5 ones were fired).

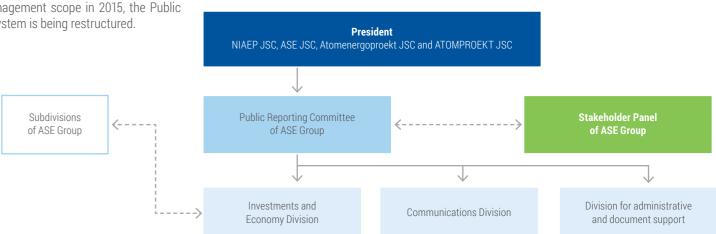
In 2015, the total damage avoided by ASE Group amounted to

**RUB 94.43 mln.** 

## 2.6.4 Public Reporting System

In 2010, the Company developed Public Reporting System. Due to the extension of the Engineering Division management scope in 2015, the Public Reporting System is being restructured.









**Integrated report 2015** 

Table 46. Report Awards in 2014, in Industry, National and International Contests

Contests/Rating	Awards/Achievements
INDUSTRY-SPECIFIC CONTESTS	
Industry-specific contest of public reporting of Rosatom State Corporation	<ul> <li>1st place in the general industrial rating of the public reporting of Rosatom State Corporation</li> <li>winner in the nomination The Best Public Annual Report of a Division of Rosatom State Corporation</li> <li>winner in the nomination The Best Stakeholder Engagement Practice.</li> </ul>
NATIONAL CONTESTS	
Rating of the annual reports of RAEX agency (Expert RA)	• 15th place (31st place in 2014)
Rating of corporate transparency among the major Russian companies on the basis of results of the annual study performed by the Russian Regional Integrated Reporting Network (2015)	<ul> <li>1st place in the rating of corporate transparency among the major Russian companies (729 companies)</li> <li>winner in the nomination The Leader in Corporate Transparency among State Companies</li> <li>winner in the special nomination Development of Disclosure Mechanisms</li> </ul>
XII contest of annual reports of joint stock companies (International Investment Forum Sochi-2015)	• Winner in the nomination The Best Debut
Interregional contest of corporate media resources Silver lines – Volga and Ural 2015	Diploma for Professional approach to information provision
INTERNATIONAL CONTEST	
Corporate communications contest MarCom Awards (USA)	Platinum award in nomination The Annual Report of Body Corporate
Vision Awards LACP (USA)	<ul> <li>9th of TOP-50 of The Best Annual Reports of the World</li> <li>Platinum award in the nominations The Best Industry-Specific Report and The Best Cover</li> </ul>
Australasian Reporting Awards (ARA)	Bronze award
The 28th Annual Awards for Publication Excellence Competition	• Winner in nomination Printed Annual Report More than 32 Pages

#### *Table 47. Performance in 2015*

Line	Results
Improvement of regulatory and methodological base	The following updated (taking into account the changing international and Russian requirements for corporate reporting and regulatory legal acts of Rosatom State Corporation):  • Standard of public reporting of the Company;  • Provision on Committee of Public Annual Reporting of NIAEP JSC;  • Rules and Procedures for Committee of Public Annual Reporting of NIAEP JSC;
Improved reporting quality	The Report for 2014 was included into database of IIRC ( <a href="http://examples.integratedreporting.org">http://examples.integratedreporting.org</a> ) as an example of the best international practices of disclosure on risks and opportunities.
Improvement of the Public Reporting System	<ul> <li>Improvement of on-line platform for stakeholder engagement (<a href="http://niaep.stakeholderpanel.ru/">http://niaep.stakeholderpanel.ru/</a>), designed to discuss essential for stakeholders aspects of the projects, documents and other issues related to public reporting of the Company.</li> </ul>
	<ul> <li>NIAEP participation in the activities of the Russian Regional Integrated Reporting Network within the scope of Rosatom State Corporation initiative and pilot program of the International Integrated Reporting Council.</li> </ul>





Table 48. Plans on Development of the Public Reporting System in 2016 and in the mid-term

# Improvement of the Public **Reporting System**

- · Integration of public reporting systems of the Engineering Division organizations of Rosatom State Corporation following the extension of the governance framework
- · Study of the global corporate reporting trends Preparing the program of ASE Group public reporting development until 2021

#### Improvement of reporting quality

- Inspection/analysis of material effects of the Engineering Division entities of Rosatom State Corporation and determination of reporting boundaries following the extension of the governance framework
- Study on the best practices of the integrated reports preparation
- Study of the existing processes of information collection for the purpose of public reporting of ASE Group and preparing the comments to improve them
- Polling of the stakeholders of ASE Group within an interactive platform VZS

#### Improvement of interaction with the stakeholders

- Improving the stakeholder engagement, in particular in the regions of ASE Group presence overseas
- · Carrying out two studies: study of the best Russian and foreign practices of stakeholder engagement and study of the stakeholders' requests for the public reporting of the Company and its products overseas

#### Stakeholders Engagement during Preparation of the Report

countability of the Engineering Division the of the Company and representatives of key representatives of the key stakeholders are involved in the preparation of the report through materiality matrix development. participation in dialogs on the issues represent-Reporting International Framework.

Public consultations and three dialogs with representatives of the key stakeholders were held in the course of preparation of the present Report (minutes of the dialogs with stakeholders are published in http:// stakeholderpanel.ru/ru/).

sues/aspects for disclosure in the Report was Novgorod, as well as representatives of Mos-sequent periods under review. held on November 18, 2015 in the Moscow cow branch of NIAEP JSC, Novovoronezh NPP branch of NIAEP JSC. For the first time in Rus- and stakeholders from Novovoronezh took part sia the dialog was carried out with the use of in the event by means of video-conference the Rapid Foresight technology, which allowed communication.

ing the Division's activities of public interest and Two dialogs on topics of priority for the Report: and the rest of proposals were about developon reflection thereof in the upcoming report, as "Integration of the United Company ASE-NIwell as participation in the assurance of the AEP-Atomenergoproekt" and "Environmental report. Stakeholder engagement is defined by and radiation safety of NPP" took place on Febthe international standards AA1000SES, Instiruary 10, 2016 in the Moscow office of NIAEP tute of Social and Ethical Accountability, Global SC. Representatives of the head office of NI-Reporting Initiative (GRI, version G4), Integrated AEP JSC and stakeholders from Nizhny Novgo- The Company arranged the special work relatrod, as well as representatives of ATOMPROEKT communication.

held on April 19, 2016 in Moscow branch of NI-

In order to increase the transparency and ac- by means of common efforts of top managers 68 proposals and recommendations were presented in the course of dialogs.

> 88.2% proposals were related to requests for publication of certain information in the Report, ment of the Public Reporting System or matters concerning stakeholder engagement. Proposals related to activity of the Company were submitted to the appropriate subdivisions.

ed to the recommendations for Draft Report (as JSC and stakeholders from St Petersburg took for structure, contents, format of presentation part in dialogs by means of video-conference of the reporting information) and improvement of the Public Reporting System. As a result, 77.9% of proposals were fully or partly taken Public consultations on the Draft Report were into account; 11.8% of proposals were not included (the reasonable explanations were pro-AEP JSC. Representatives of the head office vided); 10.3% of proposals will be included or The dialog on definitions of the material is- of NIAEP JSC and stakeholders from Nizhny considered when preparing the reports of sub-



G4-27, G4-37

Table 49. Consideration of the Important Proposals to Disclose Information in the Report, expressed by Stakeholders in Course of Dialogs\*

Proposals of the Stakeholders	Stakeholders/Authors of Proposals	Consideration of the Company Proposals
Explain key actions (administrative and conceptual) of the Company to cut terms and costs of construction.	NRC Kurchatov Institute	Considered in Sections Strategy, Financial Capital Management and Manufactured Capital Management.
Demonstrate in the report the results of the environmental expeditions to NPP by the environmental organizations.	Interregional Environmental Movement "Oka"	Not considered. It is rationally to consider the results of the environmental expeditions to NPP in reports of Concern Rosatom JSC (ASE Group does not take part in NPP operation).
Highlight disclosure of social issues, HR policy	ANCO Institute of Environmental Projects Consulting	Considered in Human Capital and Social and Relationship Capital sections.
Disclose data on RW and SNF management systems both at the stage of operation and decommissioning of the facilities.	North-West division of the Nuclear Society of Russia	Not considered. It is rationally to address the issue to Concern Rosatom JSC (ASE Group does not take part in NPP operation).
Bring the values of ASE Group stipulated in the public annual report in compliance with values of Rosatom State Corporation.	Rosatom State Corporation	Considered in Strategy section.
Disclose details of localization of works and procurement for foreign projects.	NRC Kurchatov Institute	Considered in Manufactured Capital Management section.
Disclose details of human capital management following the grouping (hiring, laying off, additional training, increase/decrease in salary, etc.).	Baltic Bank PJSC	Considered in Human Capital section.
Provide details of order portfolio by the individual facilities.	Baltic Bank PJSC	Considered to the permitted extent in Strategy, Financial Capital Management sections.
Disclose information about changes in the requirements to the design documents for suppliers and contractors as a result of the company reorganization.	FSUE FRPS NIIIS named after Yu.E. Sedakov	Considered in Manufactured Capital Management section.
Summarize the Company outlook by main directions of activities following the grouping.	Afrikantov Mechanical Engineering Experimental Design Bureau JSC	Considered in several sections.
Highlight in the Organization Chart the place and specialization of ASE key entities following the merger.	Government of Nizhny Novgorod	Considered in Strategy section.



Proposals of the Stakeholders	Stakeholders/Authors of Proposals	Consideration of the Company Proposals
Provide information for small and medium-sized businesses regarding segments in which the cooperation is possible with ASE Group.	Chamber of Commerce (Nizhny Novgorod)	Not considered. Small and medium-sized businesses can obtain data on needs of NPP projects implemented by ASE Group in electronic catalog online: eoncom.niaep.ru.
Disclose the success stories of import replacement by companies providing supplies to ASE Group.	Administration of Nizhny Novgorod Region	Considered in Manufactured Capital Management section.
Specify the SME purchase share of total procurement, or specify the volume of procurement.	Atomenergomash JSC	Considered in Procurement Management section.

 $<sup>{\</sup>it *The\ complete\ list\ of\ stakeholders'\ proposals\ is\ provided\ on\ the\ Stakeholder\ Engagement\ Platform.}$ 

Table 50. Obligations to Consider Proposals in the Reports of the Further Periods

Proposals of Stakeholders	Stakeholders/Authors of Proposals	Obligations
Disclose investments for occupational safety culture.	NRC Kurchatov Institute	Will be considered when preparing the concepts of the further reports.
Include in the report the results of audits of the environmental organizations and their surveys on the NPP sites.	Interregional Environmental Movement "Oka"	Will be considered when preparing concepts of the further reports.

Table 53. Compliance with Obligations Undertaken by the Company when Preparing the Report for 2014

Proposals of the Stakeholders	Compliance with obligations
Present the financial indicators in comparison with indicators of competitors and similar companies in the industry	Partially fulfilled. Comparison performed of LCOE of nuclear energy with other types of energy (see section 1.1.2. Strategic Goals). Comparison performed of labor productivity with Fluor indicators.
Involve the foreign stakeholders in preparation of the Report	Partially fulfilled. The register of foreign stakeholders filed, the stakeholders ranking performed, the pilot interaction schemes developed. The report for 2016 is planned to be supplemented with some foreign stakeholders. Plans for 2016 also comprise the study of the best practices of the major international companies on stakeholder engagement.
Make "Global Advantages of Nuclear Power Generation" a priority topic for report of 2015	Not included. Reason: during the joint development of the material aspects, the managers of the company and representatives of the stakeholders selected the following topics: "Integration of the United Company ASE-NIAEP-Atomenergoproekt", "Environmental and radiation safety of NPP".



# Statement of the Chairman of the Public Reporting Committee



Nikolay Podorov, Chairman of the Public Reporting Committee of ASE Group, Vice-President for Economy and Finance

We are active as engineering company on both Russian and international markets, therefore information transparency is the matter of high importance. It is clear for us, that attitude toward nuclear power industry is in direct dependence on quality and scope of information available to wide range of stakeholders. Therefore, we consider the annual report as one of the most efficient communication and information provision tools.

This is the eighth report prepared by NIAEP JSC, and the first report issued under ASE Group brand. Therefore, the information scope was extended to include the majority of consolidated data on ASE JSC, NIAEP JSC, Atomenergoproekt JSC, NIKITIM-Atmostroy JSC, ESM PJSC and TrestRosSEM LLC, and selected data on ATOMPROEKT JSC, which joined ASE Group in December 2015 and is preparing a separate annual report. Despite the extension of the report scope as a result of the company expansion, we are committed to limit the scope of the report and to focus on material aspects and priority topics. The priority subjects to be disclosed in the current report comprise "Integration of the United Company ASE-NIAEP-Atomenergoproekt" and "Environmental and radiation safety of NPP". Part of the report details were published in interactive/eversion at <a href="http://www.niaep.ru/information">http://www.niaep.ru/information</a>\_ disclosure/Annual reports/.

We are responsible for the information published in the report, and believe that the report includes all compulsory elements, is prepared on the basis of principles and fundamental concepts and meets the International Integrated Reporting Framework (International <IR> Framework).

The report was prepared by collective efforts of our company. In line with established tradition, the representatives of our key stakeholders took part in the report preparation. This year, to define material aspects and priority issues, we have used the innovative Rapid Foresight technology. Foresight (looking into the future, vision) is a technology of interactive communication making it possible for the participants to agree on the common vision and to define the desired image of the future (e.g. annual report). The use of the technology has allowed to develop a materiality matrix by means of short dialog and joint efforts of the top management of the company and stakeholders.

I wish to express my gratitude to the representatives of our stakeholders for the ongoing cooperation and interest in the activities of the Company. Our collaboration (meetings, dialogs, research) results in understanding of development direction.

The requirements for public reporting are becoming stricter every year. In the shortrun we'll be faced with difficult tasks. We plan to expand the range of stakeholders involved in the process of the report preparation. First of all, these are our foreign partners. Besides, we should extend the system of the integrated annual reporting to entities included in the extended governance framework, to continue preparation of integrated annual reports for ASE Group. We keep looking for ways of development and improvement of the annual reports, and will continue using the state-of-the-art methods and approaches. I am confident that we will succeed!

# Statement on the Results of Public/ Stakeholder Assurance of the 2015 Public Annual Report of ASE Group

#### Introduction

ASE Group of Companies (hereinafter referred to as the Company) has provided us with a possibility to evaluate the Annual Report for 2015 (hereinafter, the Report), including the completeness and the importance of the disclosed information and response of the Company to requests of the stakeholders. For this purpose, we and our representatives were given a possibility to participate in the public consultations on Draft Report which took place on April 19, 2015, as well as in three dialogs with the stakeholders:

- dialog on definitions of the material issues/ aspects to be disclosed in the Report, which took place on November 18, 2015. For the first time in Russia, the dialog was carried out with the use of the Rapid Foresight technology, which allowed by means of common efforts of top managers of the Company and representatives of the key stakeholders to implement the full cycle of the materiality matrix development.
- dialog on disclosure of a priority topic "Integration of the United Company ASE-NIAEP-Atomenergoproekt", which took place on February 10, 2016;
- dialog on disclosure of a priority topic "Environmental and radiation safety of NPP", which took place on February 10, 2016.

#### **Report Assessment Procedure**

Our conclusion is based on the comparative analysis of two versions of the Report (Draft Report for public consultations and final version of the Report) and submitted materials following the results of the dialogs and consultations (records of events, summary tables on comments of the stakeholders), as well as comments made by ASE Group managers and employees in the course of the external assurance of the Report.

In the process of the external assurance of the Report we did not set a task to check the data collection and analyze the system of the Company. Reliability of the actual data presented in the Report is not a part of the external assurance. All participants of the public consultations could freely express their opinion. We have not received any remuneration from the Company for participation in the external assurance procedure.

# Assessment, Comments and Recommendations

We agree in the positive assessment of the Report concerning its format and the scope of disclosed information. It is extremely important that the Integrated Report is prepared on a voluntary basis, and it is a good example of improvement of transparency and openness on the part of the Company. In the process of preparation of the Report the Company demonstrated a high level of aspiration for assurance of public and environmental acceptability of nuclear energy industry development, as well as readiness for open dialog with the stakeholders in various directions of its activity. It is evident that the Company's management is aware of constructiveness and prospects for cooperation with the stakeholders.

In 2015, the Engineering Division of Rosatom State Corporation was established completely, all of the NPP design and construction assets were collected under the common governance framework, and the Report was for the first time prepared with such a wide scope comprising NIAEP JSC, ASE JSC and Atomenergoproekt JSC.

ASE Group operates in 20 countries of the world. Following the integration the stakeholders' scope has been increased due to stakeholders of ATOMPROEKT JSC. Therefore, the importance of the report preparation in compliance with international standards and absolute transparency of operations, including for the foreign stakeholders is extremely high.

The Report is prepared in accordance with the International Integrated Reporting Framework (International <IR>> Framework), AA1000 Series

Standards (Institute of Social and Ethical Accountability), Sustainability Reporting Guidelines (Global Reporting Initiative G4, comprehensive level), and the industry-specific application the Construction and Real Estate Sector Disclosures GRI CRESS.

The integrated nature of the Report facilitated the integrated disclosure of information on the core activity of the Company, its performance in the field of sustainable development, strategy and plans for the future.

We assess the disclosure of information in the Report as sufficient both in terms of the use of international public reporting standards and in terms of response to the stakeholders' comments raised during the Report preparation. Besides, despite material extension of the reporting scope, the Company managed to comply with the principle of conciseness.

To our opinion, it is the Integrated Report that shall present the official position of the Company's management on all key socially important issues and activity areas of the Company.

#### **Materiality of Information**

We consider that ASE Group has taken into account the requirements of international standards for determination of materiality. During the report preparation, the Company was using the Rapid Foresight technology to define the material topics. The innovative technology allowed the top management of the Company and members of the Stakeholders Panel to develop a materiality matrix. The suggested material topics were checked for compliance with GRI G4 Guidelines. The material topics were disclosed in sufficient details. The disclosure was performed in compliance with GRI G4 Guidelines. This means that the information disclosed in the Report is important both for the Company and for the stakeholders.

Priority topics of the Report are "Integration of the United Company ASE-NIAEP-Atomenergoproekt" and "Environmental and radiation safety of NPP". All important information on the priority topics is disclosed.





#### **Completeness of Information**

We also consider that reduction in the scope of the Report when disclosing all material information complies with the best international reporting practices and enables to present a full description of the activity of the Company, including the creation of value. Availability of references to other information sources in the Report enables to get all required information. Besides, the Company has presented part of the reporting information in the form of graphics, tables and diagrams, and it makes the Report more friendly for readers.

We recommend the Company to pay attention to the need to disclose the following information in the further reports: detailed description of markets where the Company has business activities (basic competitors, trends, prospects, etc.); detailed description of both direct and indirect Company's influence on the regions of presence; description of the environmental impact of contractors at the construction sites.

We also hope that ASE Group, being a global corporation, will involve the new stakeholders (primarily, the foreign ones) in the reporting process with sufficient expedience and efficiency.

#### **Response of the Company to Suggestions and Recommendations** of the Stakeholders

We consider that the Company has demonstrated a significant progress in development of cooperation with the stakeholders and introduction of the public reporting practice into its activities. In the course of the Report preparation, four dialogs with the stakeholders were carried out.

The Company has responded to the stakeholders' comments by introducing Relationship Capital" and "Human Capital".

updates and additional information into the final version of the Report. In particular, the following Sections were redeveloped and supplemented with the requested information: "Manufactured Capital", "Social and

Director of the Marketing and Business Development Department of Rusatom Overseas INC, JSC

Director of International Environmental Safety Center, Senior Researcher of NIKIET JSC named after N.A. Dollezhalva

Director of ANO Ecological Projects Consulting Institute

President of the Nizhny Novgorod State Technical University n.a. R.E. Alekseev (NGTU)

Acting Director General of Rosenerogatom Concern JSC

Executive Director of Strategic Assets Department in Gazprombank JSC

First Deputy Director of Moscow Office of World Association of Nuclear Operators

Chairman of the Trade Union of NIAEP JSC

Director of Corporate Insurance JSC SOGAZ

Counselor of the Governor, Chairman of the Government of Nizhny Novgorod Region

First Deputy Director – Chief Engineer of Afrikantov Experimental Design Bureau JSC for Mechanical Engineering

Deputy General Director for Operational Support, JSC AKKUYU NUCLEAR

Chairman of Interregional Environmental Movement "Oka"

In addition to NIAEP JSC, the Report includes the financial, operational and other indicators for ASE JSC, Atomenergoproekt JSC and another seven entities within the governance framework, including ASE-Engineering LLC, NUKEM Technologies GmbH, LLC NIAEP-Service LLC, Trest Rosspetsenergomontazh LLC, Nukem Technologies Engineering Services GmbH, NIKIMT Atomstroy, PJSC Energospetsmontazh JSC. The Company undertook to disclose information in subsequent reports on some matters or explained the reason why this requested information could not be disclosed.

In addition, the Company undertook to improve the Public Reporting System in future. Thus, when preparing the Report, the Company has demonstrated its readiness to respond to suggestions and recommendations of the stakeholders and arising issues in a constructive way. We hope that the Company will go on with consistent introduction of the principles of responsible corporate behavior into its activities through development of the Public Reporting System and cooperation with the stakeholders.



# **Abbreviations**

GRI - Global Reporting Initiative

DC NRHF - Decommissioning of Nuclear and Radiation Hazardous Facilities

MSEREB - Russian Main State Expert Review Board

SC - Subsidiary Company

UIPS - Unified Industry Procurement Standard

SULRS - Single Uniform Labor Remuneration

LRW - Liquid Radioactive Waste

RR - Research Reactor

CAPEX - Capital Expenses

KPI – Key Performance Indicators

LCE – Local Cost Estimate

IGA - Intergovernment Agreement

IIRC - International Integrated Reporting Council

EPM – Environment Protection Measures

IFRS - International Financial Reporting Standards

NCP - Non-Commercial Partnership

JOI – Justification of Investments

EIA – Environmental Impact Assessment

LLC - Limited Liability Company

EP - Environment Protection

OS - Occupational Safety

SNF - Spent Nuclear Fuel

RPS - Rosatom Production System

DED - Design Estimate Documentation

PFA - Plan-Fact Analysis

RW - Radioactive Waste

DDD - Detailed Design Documentation

RAS - Russian Accounting Standards

PPE – Personal Protection Equipment

CIW – Construction and Installation Works

CCE - Consolidated Cost Estimate

CS - Corporate Standard

M&R - Maintenance and Repair

p/u - Power Unit

SFSF - Spent Fuel Storage Facility

# Glossary

**LCOE (Levelized Cost of Electricity)** – Levelized cost of electricity [kW\*h] in the life cycle is estimated as value of 1 kW\*h production.

It is defined as the payment amount for energy by adding up all the costs (capital expenditures, operating costs, including fuel costs, the costs of SNF and RW management, staff costs, repair costs, third-party services payment, insurance and tax deductions for decommissioning of NPP) throughout the life cycle of the plant (taking into account the factor of time value of money), and correlated to the (design or actual) capacity of NPP.

Worldskills is the international non-commercial movement aimed at improving the profile and recognition of skilled people, and developing professional education by harmonization of the best practices and professional standards all over the world by arrangement and conduct of professional skills contests.

**EPC-Companies (EPC-contractor)** – (EPC – engineering, procurement, construction) – companies implementing the project on a turnkey basis. The EPC Company's functions include engineering, procurement and construction.

**EPCM-Companies** – (EPCM – Engineering, Procurement, Construction, Management) companies applying the methods and means of turnkey portfolio management. The EPCM Company's functions include engineering, procurement, construction and project management.

**ISO** is a series of the international standards on company management administration system intended for assurance of predictable and stable level of services.

**Equipment Business** is the economic activity of ASE Group aimed at gaining revenue from supply of equipment for NPP construction.

**VVER.1000** is a safe NPP design developed with consideration fof the national experience in construction and operation of the previous reactor plant (V-320) at Zaporizhye, Balakovo, Yuzhnouralsk and Kalinin NPP and the latest world achievements in the field of NPP design and operation. According to the international classification, VVER.1000 is included into the category of nuclear power plants of the III generation. When designing the nuclear power plant, the designers focused on maximum reduction in the human factor. Such concept was implemented in two directions. Firstly, the design included the passive safety systems. This term refers to systems operating almost without any external power supply and requiring no human intervention. Secondly, the concept of the double-purpose active safety systems was adopted, which considerably reduced the possibility of undetected failures. To avoid the uncontrolled chain reaction in the reactor, the special control rods made of





neutron-absorbing materials are used which immediately suppress nuclear reaction when inserted in the core.

**VVER.1200E** is the most advanced typical design of the Russian nuclear power plant of generation 3+ with improved technical and economic indices. This project is aimed at achievement of modern safety and reliability indicators with optimized capital investments in power plant construction. VVER reactor with a minimum electric power of 1,150 MW (and possible boost up to 1,200 MW) is supposed to be used. According to the approved technical assignment, designs of two nuclear power plants were developed, namely Novovoronezh NPP-2 (General Contractor – Atomenergoproekt JSC, Moscow) and Leningrad NPP-2 (General Contractor – St Petersburg Scientific and Research Engineering Institute Atomenergoproekt JSC).

BN-800 is a sodium-cooled fast reactor for final fine-tuning technologies of the fastfission reactors using the uranium-plutonium MOX-fuel. Electrical power is equal to 880 MW.

**Back-End** means a final lifecycle stage of the nuclear energy facilities and materials.

VVER.1300TOI is a standard optimized and information-based design for a two-unit NPP with VVER.1300 reactor (pressurized-water reactor). The VVER-TOI design is developed on the basis of the VVER.1200E design materials with maximum consideration for the experience obtained by industry organizations designing NPP based on the VVER technologies (Novovoronezh NPP-2). Design solutions are optimized to minimize failures having adverse effect on economic performance of the power unit.

**General Contractor** is a turnkey contract party which assigns performance of certain types and packages of work under the contract to the specialized contracting organizations subcontractors. The General Contractor is fully responsible to the customer for performance of the contractual work package and proper quality thereof, timely removal of defects and faults, etc.

**Customer** (Developer) is a person or entity intending to carry out construction, reconstruction or other type of construction work which requires a construction permit.

**Expenses for EP** (environment protection) is the amount of expenses of enterprises (organizations, institutions), individual entrepreneurs, the state (budgets of Russia, constituent entities of the Russian Federation and the budgets of subjects of the Russian Federation, and municipalities) for the purposes of nature protection (collection, treatment, reduction, prevention or elimination of pollution, contamination as such, or any other types and elements of environmental degradation, which are the result of entrepreneurial activities), carried out at the expense of all sources of financing.

**Engineering** means engineering and consulting services of research, design and engineering, calculation and analytical nature, preparation of feasibility studies of designs, elaboration of recommendations in the field of production and management administration, i.e. a package of commercial services for preparation and support of the production and product distribution process, maintenance and operation of industrial, infrastructure and other facilities.

**Local Supplier** is the supplier registered in the region of the facility location.

Plan-Do-Check-Adjust Model (planningaction-check-adjustment) is a recurring in cycles process of decision making implemented in the quality management.

**Design Documentation** is a documentation containing materials in written form and in form of maps (diagrams) and defining architectural, functional and process, structural and engineering solutions, to support construction and reconstruction of the capital facilities and their parts, and overhaul, if structural and other reliability and safety parameters of the capital facilities are affected.

Design and Survey Works is a complex of works on engineering surveys, elaboration of feasibility studies of construction, preparation of designs, design documentation and estimate documentation for performance of construction (new construction, extension, reconstruction, technical re-equipment) of facilities, buildings and structures.

**Detailed Design Documentation** is the documentation developed on the basis of the approved design documentation and intended for the performance of construction works.

Radioactive Substances are substances containing the radioactive nuclides.

**Construction** is the whole process of NPP erection from design and survey works to commissioning to the customer for operation.

**Environmental Safety** is the protection of environment and vital human interests against possible negative effects of economic and other activities, natural and man-made emergency situations and their consequences.

NPP Power Unit (Unit) is a part of a nuclear power plant representing a set of main and auxiliary equipment, combined in a single process system designed to generate electricity by using one or two turbine units with/without heat generating by converting the nuclear fuel energy.

## **Annexes**

Annex 1. Accounting Statements	130
Annex 2. Auditor's Opinion on Financial Statements	152
Annex 3. Opinion of Internal Control and Audit Department	164
Annex 4. Non-Financial Auditor's Opinion	166
Annex 5. GRI Content Index	169
Annex 6. Index of Material Aspects Management Approaches	173
Annex 7. Organizational Structure of ASE Group	178
Annex 8. Report of the Board of Directors on Performance Results	180
Annex 9. Details of Members of the Board of Directors	182

Annex 10. Safety Control	185
Annex 11. Estimated Waste Generation at NPP Construction	186
Annex 12. Environment Protection Expenses	188
Annex 13. Energy Consumption	190
Annex 14. Staff Training	192
Annex 15. Staff Description	195
Annex 16. Injury Rate	202
Annex 17. Conclustion on Public Verification by RUIE Board	204





# Annex 1. Accounting Statements

#### **Accounting Statements of NIAEP JSC for 2015**

Balance Sheet as of December 31, 2015

Organization **NIZHNY NOVGOROD ENGINEERING COMPANY Atomenergoproekt JSC** 

Taxpayer's Identification Number

Type of economic activity: **Architecture, industrial design, and engineering and construction** 

Legal form of organization/Form of ownership Joint Stock Company / Federal ownership

Unit of measurement: THOUS. RUB

Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes
Form of OKUD 0710001
Date (dd.mm.yyyy) 31 I 12 I 2015
As per OKPO 08841271
TIN 5260216123
As per OKVED 74.20.1
As per OKOPF/OKFS 12247 12
As per OKEI 384

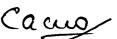
Clarifications	Index Name	Code	As of December 31, 2015	As of December 31, 2014	As of December 31, 2013
	ASSETS I. FIXED ASSETS				
7.1	Intangible assets	1110	16,566	18,245	17,087
	Results of research and development	1120	-	-	-
	Non-financial development assets	1130	-	-	-
	Financial development assets	1140	-	-	-
	PP&E (property, plant and equipment)	1150	1,005,701	985,147	945,050
7.3	Buildings, machinery and other PP&E	1151	866,481	806,490	859,942
7.4	Unaccomplished capital investments into PP&E	1152	139,220	81,854	85,108
7.3	Advance payments which are paid to capital construction suppliers and contractors and suppliers of PP&E	1153	-	97,403	-
7.3	Income-bearing investments in tangible assets	1160	350,638	389,193	455,736
7.8	Financial Investments	1170	299,674	149,609	8,617
7.20	Deferred tax assets	1180	485,837	207,475	200,713
7.6	Other fixed assets,	1190	6,889,023	11,653,456	20,966,577
	including:		-	-	-
	payments as per agency agreements	1191	3,185,784	5,789,365	15,421,060
	VAT for advance and preliminary payments	1192	3,213,418	5,237,732	4,252,007
	Deferred expenses	1193	445,220	502,237	713,065
	TOTAL for Section I	1100	9,007,549	13,413,208	22,594,800
	II. CURRENT ASSETS		-	-	-
7.7	Inventory Stocks	1210	2,661,743	3,858,802	2,855,717
7.7	Raw materials, materials and other similar assets	1211	605,437	826,174	1,252,868
7.7	Expenditures for work-in-progress	1212	203,386	182,838	62,621
7.7	Finished products and goods for resale	1213	1,842,920	2,850,750	1,580,228
	Goods delivered		-	-	-
	Other inventory stocks and expenditures		-	-	-
	VAT for advance and preliminary payments	1220	176,078	151,500	152,782
7.11	Accounts receivable	1230	36,845,573	45,160,850	31,706,688
7.11	Settlements with buyers and customers	1231	8,602,130	16,084,186	9,299,242
7.11	Advances paid	1232	25,606,115	27,862,136	20,964,680
7.11	Other receivables,	1233	1,556,073	910,327	899,188
	including advances for amounts of consignors	1234	-	-	-
7.22	Accrued revenue not presented for payment	1235	69,255	213,206	545,576
7.8	Financial investments (except for money equivalents)	1240	16,201	10,018,490	21,663,277

710	Ozala and manageminalanta	1000	0.045.510	1,000,000	1.045.001
7.10	Cash and money equivalents	1250	2,345,510	1,602,392	1,245,381
	Other current assets including VAT for advance and preliminary	1260	2,534,650	3,098,831	6,270,532
	payments	1261	2,440,321	359,8517	6,241,574
	Total for Section II	1200	43,569,755	64,500,078	63,285,375
	BALANCE	1600	52,377,304	77,013,288	85,581,175
	LIABILITIES III. EQUITY AND RESERVES				
	Equity capital (joint stock capital, legal capital, contributions of partners)	1310	500,002	500,002	500,002
	Treasury shares	1320	-	-	-
	Re-assessment of fixed assets	1340	-	-	-
	Additional capital (without re-assessment)	1360	1,136	(102)	(101)
	Reserve capital	1380	25,000	25,000	25,000
	Reserve capital formed in accordance with the law	1381	-	-	-
	Reserve capital formed in accordance with the bylaw	1382	25,000	25,000	25,000
	Retained profit (uncovered loss)	1370	2,978,391	4,033,710	3,745,209
	Total for Section III	1300	3,504,529	4,658,610	4,271,110
	IV. LONG-TERM LIABILITIES Loans and credits	1410	-	-	-
	Deferred tax liabilities	1420	-	-	-
	Estimated liabilities	1430	-	-	-
7.14	Other liabilities,	1450	21,085,743	34,534,944	28,638,079
	including advances received	1450	21,085,743	34,338,245	27,940,021
	Total for Section IV	1400	21,085,743	34,534,244	28,538,079
	V. SHORT-TERM LIABILITIES	1510	-	-	_
	Loans and credits				
7.14	Accounts payable	1520	26,237,901	37,732,785	52,060,217
7.14	Suppliers and contractors	1521	8,675,107	12,431,931	9,457,847
7.14	Advances received	1522	15,997,850	23,590,353	40,962,442
7.14	Payables to employees	1523	12,331	25,490	122,574
	Accounts payable to state non-budgetary funds	15224	50,250	43,178	39,556
7.16	Tax liabilities	1525	22,702	34,143	132,402
7.14	Other creditors,	1526	1,481,852	1,607,700	1,345,595
	including:				
	VAT for advance and preliminary payments	1527	695,291	1,050,401	926,756
	payments for amounts of consignors and agents	1528	-	-	-
	Deferred revenue	1530	36	36	_
	Estimated liabilities	1540	1,767,025	1,086,901	891,769
	Settlements with founders as for equity payments (legal capital)	1545	-	-	-
	Targeted financing	1546	-	-	-
	Payables to the customers	1547	-	-	-
	Other liabilities	1550	-	-	-
	Total for Section V	1500	28,007,032	38,819,732	52,971,966
	BALANCE	1700	52,577,304	77,913,286	85,881,178

Director N.G. Podorov

February 25, 2016

Chief Accountant **E.V. Samogorodskaya** 









#### Statement of Changes in Capital for 2015

Organization **NIZHNY NOVGOROD** 

**ENGINEERING COMPANY Atomenergoproekt JSC** 

Taxpayer's Identification Number

Type of economic activity: Architecture, industrial design,

and engineering and construction

Unit of measurement: THOUS. RUB

Legal form of organization/Form of ownership

Joint Stock Company / Federal ownership

Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes
Form of OKUD 0710009
Date (dd.mm.yyyy) 31 | 12 | 2015
As per OKPO 06841271
TIN 5260214123
As per OKVED 74.20.1
As per OKOPF/OKFS 12247 12
As per OKEI 384

#### I. Movement of Capital The shareholders' contribution to the Retained **Authorized** profit share capital prior **Additional** Treasury Reserve **Clarifications Total** to the registration capital capital (uncovered of changes in artiloss) cles of association Capital value as of December 31, 2015 3100 300,002 101 25,000 3,745,210 4,271,111 For 2014 3210 1,430,925 1,630,925 Capital increase – total: including: 3211 1,430,925 1,630,925 Net profit Revaluation of assets 3212 Expenses directly related to capital increase 3213 Additional share issue 3214 increase in par value of shares 3215 Legal entity reorganization 3216 Use of field reserves for investments 3217 The contribution to the share capital prior to the registration of changes in articles 3216

Indoor Manage	0.4.	As of December 31,	Changes in capital for 2014		As of December 31,
Index Name	Code	2013	due to net profit	due to other factors	2014
Capital – total before adjustments	3400	4,288,140	286,881	-	4,075,021
adjustment due to: change in the accounting policy	3410	(17,023)	620	-	(18,401)
correction of errors	3420			-	-
after adjustments,	3400	4,271,111	287,381	-	4,658,612
including Retained profit (uncovered loss) before adjustments	3401	3,763,238	288,882	-	4,050,121
adjustment due to: change in the accounting policy	3411	(17,029)	620	-	(16,409)
correction of errors	3421	-	-	-	-
after adjustments	3401	3,746,210	287,602	-	4,039,112
other capital items covered by adjustments: (item) before adjustments	3402	524,901	(1)	-	524,000
adjustment due to: change in the accounting policy	3412	-	-	-	-
correction of errors	3422	-	-	-	-
after adjustments	3412	524,901	(1)	-	524,901

3. Net assets				
Index Name	Code	As of December 31, 2015	As of December 31, 2014	As of December 31, 2013
Net assets	3600	3,504,540	4,558,612	4,271,111

Director N.G. Podorov

February 25, 2016

Chief Accountant **E.V. Samogorodskaya** 





of association





#### Cash Flow Statement for January-December, 2015

Organization **NIZHNY NOVGOROD ENGINEERING COMPANY Atomenergoproekt JSC** 

Taxpayer's Identification Number

Type of economic activity: Architecture, industrial design, and engineering and construction

Legal form of organization/Form of ownership

Joint Stock Company / Federal ownership Unit of measurement: **THOUS. RUB** 

Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes Form of OKUD **0710009** Date (dd.mm.yyyy) **31 I 12 I 2015** As per OKPO **06841271** TIN **5260216123** As per OKVED **74.20.1** As per OKOPF/OKFS **12247 12** As per OKEI 384

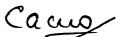
Index Name	Code	For January- December, 2015	For January- December, 2014
Cash flows from Operating Activities			
Income – total,	4110	38,298,244	29,558,825
including from sale of goods, products, works and services	4111	36,636,489	28,545,732
rental charges, license fees, royalties, commission fees and similar charges	4112	132,075	83,351
from resale of financial assets	4113	-	-
other income	4119	1,529,650	1,029,743
Payments – total,	4120	(45,660,781)	(39,160,442)
including: payments to suppliers (contractors) for raw products, materials, works, services	4121	(38,552,088)	(32,550,050)
in connection with remuneration of employeesremuneration of employees	4122	(6,208,914)	(5,072,483)
interest on debt liabilities	4123	-	-
tax on profits of organizations	4124	(542,718)	(268,038)
other payments	4129	(357,061)	(1,259,870)
Balance of cash flows from operating activities	4100	(7,362,537)	(9,501,816)
Cash flows from investing activities			
Income – total,	4210	14,345,410	28,903,916
including: from sales of non-current assets (except for financial investments)	4211	3,964	799
from sales of shares of other organizations (participatory interest)	4212	-	-
from repayment of granted loans, from sales of debt securities (rights of claim on financial assets against third parties)	4213	14,000,000	28,000,000
dividends, interest on debt financial investments and similar receipts from participatory interest in other organizations	4214	341,446	903,117
other income	4219	-	-
Payments – total,	4220	(4,264,882)	(17,289,690)

ncluding o connection with acquisition, creation, modernization, reconstruction and preparation for sage of non-current assets	4221	(264,882)	(280,448)
connection with acquisition of shares of other organizations (participatory interest)	4222	-	(242)
connection with acquisition of debt securities (rights of claim on financial assets against nird parties), granting of loans to third parties	4223	(4,000,000)	(17,000,000)
sterest on debt liabilities included in the value of an investment asset	4224	-	-
ther payments	4229	-	-
alance of cash flows from investing activities	4200	10,080,528	11,614,226
ash flows from financial operations			
ncome – total,	4310	-	-
ncluding btaining of credits and loans	4311	-	-
nonetary contributions from owners (participants)	4312	-	-
om issue of shares, increase in participatory interest	4313	-	-
om issue of bonds, promissory notes and other debt securities, etc.	4314	-	-
udget allocations and other targeted funding	4315	-	-
ther income	4319	-	-
ayments – total,	4320	(1,976,172)	(1,764,386)
ncluding			
ayments to owners (participants) in connection with repurchase of shares (participatory sterest) of the company or cessation of their membership	4321	-	-
ayment of dividends and payments in connection with distribution of profit among owners participants)	4322	(1,451,123)	(1,343,403)
connection with redemption (repurchase) of promissory notes and other debt securities, eturn of credits and loans	4323	-	-
ther payments	4329	(525,049)	(420,983)
alance of cash flows from financial operations	4300	(1,976,172)	(1,764,388)
alance of cash flows for the reporting period	4400	741,819	348,224
pening balance of cash and cash equivalents	4450	1,602,392	1,245,381
losing balance of cash and cash equivalents	4500	2,345,510	1,602,392
ncidence of changes in the exchange rates of foreign currencies against the ruble	4490	1,299	8,787

Director

N.G. Podorov

Chief Accountant E.V. Samogorodskaya











#### Profit and Loss Statement for January-December, 2015

Organization NIZHNY NOVGOROD
ENGINEERING COMPANY Atomenergoproekt JSC

Taxpayer's Identification Number

Type of economic activity: **Architecture, industrial design, and engineering and construction** 

Legal form of organization/Form of ownership Joint Stock Company / Federal ownership

Unit of measurement: **THOUS. RUB** 

Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes
Form of OKUD 0710009
Date (dd.mm.yyyy) 31 I 12 I 2015
As per OKPO 06841271
TIN 5260216123
As per OKVED 74.20.1
As per OKOPF/OKFS 12247 12
As per OKEI 384

Clarifications	Index Name	Code	For January- December, 2015	For January- December, 2014
7.21	Revenue,	2110	48,356,439	43,000,321
	including:			
	construction and installation works		13,097,257	17,734,895
	wholesale and retail		15,831,913	12,193,795
	design works		12,046,937	8,115,504
	Other services, works		7,380,322	4,966,127
7.21	Prime cost of sales,	2120	(42,813,516)	(38,911,500)
	including:			
	construction and installation works		(12,907,845)	(16,962,626)
	wholesale and retail		(15,074,195)	(11,589,142)
	design works		(9,189,093)	(6,130,265)
	Other services, works		(5,642,383)	(4,209,476)
	Gross profit (loss) 2100	2100	5,542,923	4,088,812
	Commercial expenses	2210	(574,148)	(544,612)
	Administrative expenses	2220	(2,683,758)	(2,152,373)
	Profit (loss) on sales	2200	2,285,019	1,391,827
	Income from participation in other organizations	2310	12,242	175

7.23	Interests receivable	2320	388,931	1,066,583
	Interests payable	2330	( )	( )
7.23	Other income	2340	370,233	706,847
7.23	Other expenses	2350	(2,337,017)	(1,058,628)
	Profit (loss) before tax	2330	697,408	2,104,604
7.20	Current profit tax,	2410	(486,383)	(558,430)
	including permanent tax liabilities (assets)	2421	(117,690)	(134,945)
7.20	Changes in deferred tax liabilities	2430	45,046	21,228
7.20	Changes in deferred tax assets	2450	204,100	(3,070)
7.20	Others	2450	14,964	(4,483)
	Redistribution of income taxes in the consolidated group of taxpayers	2455	19,394	71,058
	Net profit	2400	494,529	1,630,905
				Form 0710002 p. 2
	FOR REFERENCE Result of the re-assessment of non-current assets not included in the net income (loss) of the reporting period	2510	-	-
	Result of other transactions not included in the net profit (loss) of the reporting period	2520	1,238	(1)
_	Cumulative financial result of the reporting period	2500	495,767	1,630,904
	Basic earnings (loss) per share	2900	0.99	3.26

Director N.G. Podorov

February 25, 2016

Chief Accountant **E.V. Samogorodskaya** 







#### **Accounting Statements of Atomenergoproekt JSC for 2015**

Balance Sheet as of December 31, 2015

Organization Atomenergoproekt JSC

Taxpayer's Identification Number

Type of economic activity: **Designing related to construction of engineering structures including hydrotechnical facilities, design of transport flows** 

Legal form of organization/Form of ownership

Joint Stock Company / Property of state-owned corporations

Unit of measurement: THOUS. RUB

Address: Bldg 1, 7 Bakuninskaya St., 105005 Moscow, Russian Federation

Codes
Form of OKUD 0710001
Date (dd.mm.yyyy) 31 I 12 I 2015
As per OKPO 08634359
TIN 7701796320
As per OKVED 74.20.13
As per OKOPF/OKFS 12200 61
As per OKEI 384

Clarifications	Index Name	Code	As of Thursday, December 31, 2015	As of Wednesday, December 31, 2014	As of December 31, 2013
	ASSETS I. FIXED ASSETS		·	·	·
7.1	Intangible assets	1110	7,892	2,841	2,060
	Results of research and development	1120	28,524	33,524	38,524
	Non-financial development assets	1130	0	0	0
	Financial development assets	1140	0	0	0
7.3	PP&E (property, plant and equipment)	1150	1,235,097	1,389,647	1,472,799
7.3	Buildings, machinery and other PP&E	1151	1,193,810	1,356,337	1,453,565
7.3	Unaccomplished capital investments into PP&E	1152	38,725	28,441	17,379
	Advance payments which are paid to capital			-,	,
7.5	construction suppliers and contractors and suppliers of permanent facilities	1153	2,562	4,869	1,855
	Income-bearing investments in tangible assets	1160	0	0	0
7.6	Financial Investments	1170	167,285	326,124	499,722
7.15	Deferred tax assets	1180	421,322	316,124	0
74.78	Other fixed assets	1190	1,761,089	1,847,383	6,037,001
7.4,7.8	Deferred expenses on software licenses	1190-1	378,204	489,722	209,119
7.4,7.8	Settlements with customers for construction of roads/interest terms	1190-2	541,943	2,687	
7.4,7.8	Settlement of insurance operations with FA, IFA in CAPEX, R&D	1190-3	634,877	1,290,696	
7.4,7.8	VAT for advance and preliminary payments	1190-4			5,555,452
7.4,7.8	Other	1190-5	206,065	64,278	272,430
	TOTAL for Section I	1100	3,621,209	3,915,643	8,050,106
	II. CURRENT ASSETS				
7.7	Inventory Stocks	1211	605,437	826,174	1,252,868
7.5	Raw materials, materials and other similar assets	1211	2,590,097	2,554,569	1,266,919
7.5	Expenditures for work-in-progress	1212	424	80	105
7.5	Finished products and goods for resale	1213	4,086,635	5,138,741	8,413,385
7.5	Goods delivered	1214	0	0	0
7.5	Other inventory stocks and expenditures	1219	0	0	0
7.12	VAT for advance and preliminary payments	1220	63,378	189,382	89,435
7.8	Accounts receivable	1230	17,722,016	30,065,452	34,138,616
7.8	Settlements with buyers and customers	1231	10,007,642	11,761,252	7,658,257
7.8	Advances paid	1232	6,840,549	17,013,865	23,830,013
7.8,7.12	Other receivables	1233	284,518	524,047	449,327
7.8,7.12	Accrued revenue not presented for payment	1234	589,507	766,288	2,201,019
7.8	Financial investments (except for money equivalents)	1240	1,409,104	159,500	10,932,000
7.7	Cash assets and money equivalents	1250	146,102	283,571	294,603
7.4,7.8	Other current assets	1260	1,389,608	4,170,983	2,530,107
7.4,7.8	VAT for assets received	1260-1	1,352,388	4,151,563	2,528,054
7.4,7.8	Shortage and loss due to inventory stocks damage	1260-2	26	26	

1.1,1.0	Deterred expenses on software needses	1200 0	01,137	13,031	2,000
	Total for Section II	1200	2,7407,364	42,562,278	57,665,170
	BALANCE	1600	31,028,573	49,477,921	65,715,276
	LIABILITIES				
	III. EQUITY AND RESERVES				
	Equity capital (joint stock capital, legal capital,	1310	1,547,504	1,547,504	1,547,504
	contributions of partners)				
	Treasury shares	1320	0	0	0
	The shareholders' contribution to the share capital	4000			
	prior to the registration of changes in articles of	1330			
	association	10.40			
	Re-assessment of non-current assets	1340	0	0	0
	Additional capital (without re-assessment)	1350	401,702	401,702	401,702
	Reserve capital	1360	77,375	77,375	72,570
	Reserve provision formed in accordance with the law	1361	0	0	0
	Reserve provisions formed in accordance with the	1362	77,375	77,375	72,570
	bylaw	1070	-		
	Retained profit (uncovered loss)	1370	2,829,407	1,843,583	1,542,746
	Total for Section III	1300	4,855,988	3,870,164	3,564,522
	LONG-TERM LIABILITIES	1410	0	0	0
	Loans and credits  Deferred tax liabilities	1410	0	0	53,392
			0	0	53,392 
	Estimated liabilities Other liabilities	1430 1450			
			2,286,102	743,039	36,438,798
	Settlements with suppliers for works and services Settlements with customers for construction of	1450-1	269,654	0	20,098
	roads/services	1450-2	1,708,206	0	36,418,200
	Settlements for real estate and personal properties				
	FA, IFA, DA	1450-3	308,012	742,000	0
	Settlement for dispersed amounts	1450-4	230	1,039	0
	Total for Section IV	1400	2,286,102	743,039	36,492,190
	V. SHORT-TERM LIABILITIES	1100	2,200,102	1 10,000	00,132,130
	Loans and credits	1510	2,391,562	1,450,754	0
	Accounts payable	1520	20,189,800	38,328,687	42,612,627
	Suppliers and contractors	1521	9,870,337	9,327,856	5,046,957
	Advances received	1522	8,853,311	27,212,427	16,569,397
	Payables to employees	1523	4,907	4,676	3,005
	Accounts payable to state non-budgetary funds	15224	9,479	24,980	0
	Tax liabilities	1525	433,695	193,572	823,913
	Other creditors	1526	1,006,071	1,565,176	2,169,355
	Settlements with responsible member of Tax				
	Consolidated Group/Tax	1526-1	478,801	291,830	203,478
	VAT for assets provided	1526-2	380,798	602,631	1,665,274
	VAT for construction contracts	1526-3	84,627	112,129	224,661
	Other	1526-4	63,845	558,586	75,942
	Deferred revenue	1530	85	104	123
	Estimated liabilities	1540	1,305,036	2,085,173	1,045,814
	Targeted financing	1546	0	0	0
	Payables to the customers	1547	0	0	0
	Other liabilities	1550	0	0	0
	Total for Section V	1500	23,886,483	41,864,718	25,658,564
	BALANCE	1700	31,028,573	46,477,921	65,715,276

1260-3

37,194

19,394

2,053

Director L.N. Egorov

7.4,7.8

Deferred expenses on software licenses

February 16, 2016

the

Chief Accountant I.M. Seredenko









#### Cash Flow Statement for January-December, 2015

Organization Atomenergoproekt JSC

Taxpayer's Identification Number

Type of economic activity: **Designing related to construction of engineering structures including hydrotechnical facilities, design of transport flows** 

Legal form of organization/Form of ownership

Joint Stock Company / Property of state-owned corporations

Unit of measurement: THOUS. RUB

Address: Bldg 1, 7 Bakuninskaya St., 105005 Moscow, Russian Federation

Codes
Form of OKUD 0710004
Date (dd.mm.yyyy) 31 I 12 I 2015
As per OKPO 08634359
TIN 7701796320
As per OKVED 74.20.13
As per OKOPF/OKFS 12200 61
As per OKEI 384

Index Name	Code	For January- December, 2015	For January- December, 2014
Cash flows from Operating Activities			
Income – total,	4110	45,212,037	37,289,815
including from sale of goods, products, works and services	4111	37,991,521	36,135,579
rental charges, license fees, royalties, commission fees and similar charges	4112	64,199	88,679
from resale of financial assets	4113		
other income	4119	7,156,317	1,065,557
Payments – total,	4120	(44,837,628)	(43,118,151)
including: payments to suppliers (contractors) for raw products, materials, works, services	4121	(33,913,739)	(42,447,377)
in connection with remuneration of employees	4122	(5,360,821)	(5,828,946)
interest on debt liabilities	4123	(804,369)	(168,104)
tax on profits of organizations	4124	(258,992)	(196,893)
Including to Tax Consolidated Group	4125	(258,992)	(196,893)
other payments	4129	(4,499,707)	(476,831)
Balance of cash flows from operating activities	4100	374,409	(11,828,336)
Cash flows from investing activities			
Income – total,	4210	55,031	28,597,250
including: from sales of non-current assets (except for financial investments)	4211		
from sales of shares of other organizations (participatory interest)	4212		
from return on granted loans, from sales of debt securities (rights of claim on financial assets against third parties)	4213	20,000	28,350,543
dividends, interest on debt financial investments and similar receipts from participatory interest in other organizations	4214	35,031	246,707
other income	4219		
Payments – total,	4220	(1,430,303)	(17,820,420)

including in connection with acquisition, creation, modernization, reconstruction and preparation for usage of non-current assets	4221	(264,882)	(280,448)
in connection with acquisition of shares of other organizations (participatory interest)	4222		
in connection with acquisition of debt securities (rights of claim on financial assets against third parties), granting of loans to third parties	4223	(1,380,055)	(17,700,843)
interest on debt liabilities included in the value of an investment asset	4224		
other payments	4229	(257)	(71)
Balance of cash flows from investing activities	4200	(1,375,272)	10,776,830
Cash flows from financial operations			
Income – total,	4310	47,648,030	27,170,000
including obtaining of credits and loans	4311	47,648,030	27,170,000
monetary contributions from owners (participants)	4312		
from issue of shares, increase in participatory interest	4313		
from issue of bonds, promissory notes and other debt securities, etc.	4314		
Budget allocations and other targeted funding	4315		
other income	4319		
Payments – total,	4320	(46,785,379)	(26,128,818)
including			
payments to owners (participants) in connection with repurchase of shares (participatory interest) of the company or cessation of their membership	4321		
payment of dividends and payments in connection with distribution of profit among owners (participants)	4322		(275,818)
in connection with redemption (repurchase) of promissory notes and other debt securities, return of credits and loans	4323	(46,708,030)	(25,720,000)
other payments	4329	(77,349)	(133,000)
Balance of cash flows from financial operations	4300	862,651	1,041,182
Balance of cash flows for the reporting period	4400	(138,212)	(10,324)
Opening balance of cash and cash equivalents	4450	283,571	294,603
Closing balance of cash and cash equivalents	4500	145,947	283,571
Incidence of changes in the exchange rates of foreign currencies against the ruble	4490	588	(708)

Director L.N. Egorov

February 16, 2016

Chief Accountant I.M. Seredenko









# Statement of Changes in Capital for 2015

Organization **Atomenergoproekt JSC**Taxpayer's Identification Number

Type of economic activity: **Designing related to construction of engineering structures, including hydrotechnical facilities, design of transport flows** 

Legal form of organization/Form of ownership

Joint Stock Company / **Property of state-owned corporation**s

Unit of measurement: THOUS. RUB

Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes
Form of OKUD 0710003
Date (dd.mm.yyyy) 31 I 12 I 2015
As per OKPO 08634359
TIN 7701796320
As per OKVED 74.20.13
As per OKOPF/OKFS 12200 61
As per OKEI 384

### . Movement of Capital The shareholders' contribution to the Retained profit share capital prior **Additional Treasury** Reserve Clarifications **Total** to the registration capital capital (uncovered of changes in artiloss) cles of association Capital value as of December 31, 2013 3100 1,547,504 401,702 72,570 1,542,745 3,564,522 For 2014 3210 4,805 501,400 586,265 Capital increase - total, including: 3211 501,400 581,400 Net profit 3212 revaluation of assets expenses directly related to capital increase 3213 4,805 4,805 additional share issue 3214 increase in par value of shares 3215 legal entity reorganization 3216 Use of field reserves for investments 3217 The contribution to the share capital prior to the registration of changes in articles of 3218 association

AC3-ASE

# Profit and Loss Statement for January-December, 2015

# Organization Atomenergoproekt JSC

Taxpayer's Identification Number

Type of economic activity: **Designing related to construction of engineering structures, including hydrotechnical facilities, design of transport flows** 

Legal form of organization/Form of ownership

Joint Stock Company / Property of state-owned corporations

Unit of measurement: THOUS. RUB

Address: Bldg 1, 7 Bakuninskaya St., 105005 Moscow, Russian Federation

Form of OKUD **0710002**Date (dd.mm.yyyy) **31 I 12 I 2015** 

As per OKPO **08634359** TIN **7701796320** 

As per OKVED **74.20.13**As per OKOPF/OKFS **12200 61** 

As per OKEI 384

Codes

Clarifications	Index Name	Code	For January- December, 2015	For January- December, 2014
7.17	Revenue	2110	47,418,268	60,309,856
7.17	Design and survey works, services	2111	11,398,426	6,430,230
7.17	Services of hydro contractors at NPP construction	2112	23,571,913	34,354,726
7.17	Sales of equipment for NPP construction to Customer	2113	12,430,658	19,493,634
7.17	Others	2114	17.271	31,266
7.17	Cost of sales	2120	(43,990,856)	(57,492,591)
7.17	Design and survey works, services	2121	(6,239,821)	(4,833,727)
7.17	Services of hydro contractors at NPP construction	2122	(23,744,619)	(34,113,674)
7.17	Sales of equipment for NPP construction to Customer	2123	(11,776,361)	(18,501,523)
7.17	Others	2124	(230,055)	(43,667)
	Gross profit (loss)	2100	5,427,412	2,817,265
1	Business expenses	2210	(698,590)	(570,076)
1	Administrative expenses	2220	(1,893,433)	(2,121,766)
-	Profit (loss) on sales	2200	2,835,389	125,423
7.19	Income from participation in other organizations	2310	1,170	3,559
7.19	Interests receivable	2320	9,628	263,042
7.19	Interests payable	2330	(805,178)	(168,857)
7.19	Other income	2340	1,160,773	1,979,379
7.19	Other expenses	2350	(1,779,676)	(1,701,657)
7.16	Profit (loss) before tax	2330	1,503,106	500,889
7.16	Current profit tax.	2410	(484,801)	(338,872)
7.16	including permanent tax liabilities (assets)	2421	(42,876)	130,431
7.16	Changes in deferred tax liabilities	2430	(406,366)	(64,847)
7.16	Changes in deferred tax assets	2450	547,904	434,363
7.16	Others	2450	1,510	2,536
7.16	Redistribution of income taxes in the consolidated group of taxpayers	2455	1,021	47,391
1	Net profit	2,400	1,162,374	581,460
-			.,	Form 0710002 p. 2
		2110	47,418,268	60,309,856
	Result of the re-assessment of non-current assets not included in the net income (loss) of the reporting period	2510		
	Result of other transactions not included in the net profit (loss) of the reporting period	2520		
	Cumulative financial result of the reporting period	2500	1,162,374	581,460
	For reference:		, ,	2 2 1, 100
	Basic earnings (loss) per share	2900		
	Diluted earnings (loss) per share	2910		
	<u> </u>			

Director L.N. Egorov

February 16, 2016

the

Chief Accountant I.M. Seredenko







# **Accounting Statements of Atomstroyexport JSC for 2015**

Balance Sheet as of December 31, 2015

Organization Atomstroyexport JSC Taxpayer's Identification Number Type of economic activity: international economic activity Legal form of organization/Form of ownership Joint Stock Company / Property of state-owned corporations Unit of measurement: **THOUS. RUB** 

Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes Form of OKUD **0710001** Date (dd.mm.yyyy) 31 I 12 I 2015 As per OKPO **485480206** TIN 7701186067 As per OKVED **45.21.52** As per OKOPF/OKFS **12267 61** As per OKEI 384

Clarifications	Index Name	Code	As of December 31, 2015	As of December 31, 2014	As of December 31, 2013
	ASSETS I. FIXED ASSETS		·	,	
6.1	Intangible assets	1110	8,859	20,771	27,038
	Results of research and development	1120			
6.2	PP&E (property, plant and equipment)	1150	2,055,914	2,209,005	2,454,250
	Buildings, machinery and other PP&E	1151	2,007,709	2,094,767	2,304,325
6.3	Unaccomplished capital investments into PP&E	1152	59,205	114,248	142,791
0.0	Advance payments which are paid to capital	1102	03,200	111,210	112,131
	construction suppliers and contractors and suppliers of PP&E	1153			7,133
	Income-bearing investments in tangible assets	1160			
6.6	Financial Investments	1170	18,333,515	12,482,468	2,972,288
0.0	Stocks and shares	1170.1	12,438,434	12,481,485	2,972,288
	Bills	1170.2	1274	983	=,0 : =,=0 0
	Loans provided	1170.3	5,893,807		
6.15	Deferred tax assets	1180	-,,	583,762	
6.4	Other fixed assets	1190	26,905,757	22,819,211	21,740,432
6.9	Long-term receivables, total	1191	25,420,803	22,563,278	20,729,371
	Settlements with buyers and customers	1192	505,398	335,444	1,412,997
	Advances to suppliers and contractors	1193	7,073,785	5,010,113	1,427,824
	Advances to Agents (commissioners)	1194	14,329,223	12,600,592	9,644,518
	Claims settlements	1195	4,051,942	4,061,787	7,376,539
	Other receivables	1196	449,455	474,342	857,493
	Deferred expenses	1198	484,954	255,934	1,011,061
	TOTAL for Section I	1100	47,316,046	38,116,217	27,184,006
	II. CURRENT ASSETS				
6.5	Inventory Stocks	1210	15,009,071	10,810,624	9,627,551
	Raw materials, materials and other similar assets	1211	194,344	483,633	255,859
	Expenditures for work-in-progress	1212	697,530	550,093	434,858
	Finished products and goods for resale	1213	10,129,966	8,941,192	8,845,620
	Goods delivered	1214	3,987,232	835,706	91,214
	Other inventory stocks and expenditures	1219			
	Value added tax on assets purchased	1220	3,183,949	1,835,351	1,217,734
6.9	Accounts receivable	1230	52,744,060	34,139,588	30,076,662
	Settlements with buyers and customers	1231	22,862,959	19,852,257	7,496,975
	Advances paid	1232	19,656,447	7,971,736	5,415,629
	Settlements of financial issues	1233.1	31,565	50,000	8,952,001
	Other receivables	1233	5,818,469	2,067,094	1,786,244
	Accrued revenue not presented for payment	1234	4,374,620	3,748,501	6,425,813

( Name	Code	31, 2015	31, 2014	31, 2013
	1110	8,859	20,771	27,038
evelopment	1120			
equipment)	1150	2,055,914	2,209,005	2,454,250
d other PP&E	1151	2,007,709	2,094,767	2,304,325
investments into PP&E	1152	59,205	114,248	142,791
ch are paid to capital				
and contractors and	1153			7,133
nts in tangible assets	1160			
	1170	18,333,515	12,482,468	2,972,288
	1170.1	12,438,434	12,481,485	2,972,288
	1170.2	1274	983	
	1170.3	5,893,807		
	1180		583,762	
	1190	26,905,757	22,819,211	21,740,432
otal	1191	25,420,803	22,563,278	20,729,371
s and customers	1192	505,398	335,444	1,412,997
nd contractors	1193	7,073,785	5,010,113	1,427,824
mmissioners)	1194	14,329,223	12,600,592	9,644,518
	1195	4,051,942	4,061,787	7,376,539
	1196	449,455	474,342	857,493
	1198	484,954	255,934	1,011,061
	1100	47,316,046	38,116,217	27,184,006
	1210	15,009,071	10,810,624	9,627,551
s and other similar assets	1211	194,344	483,633	255,859
n-progress	1212	697,530	550,093	434,858
loods for resale	1213	10,129,966	8,941,192	8,845,620
	1214	3,987,232	835,706	91,214
and expenditures	1219			
purchased	1220	3,183,949	1,835,351	1,217,734
	1230	52,744,060	34,139,588	30,076,662
s and customers	1231	22,862,959	19,852,257	7,496,975
	1232	19,656,447	7,971,736	5,415,629
issues	1233.1	31,565	50,000	8,952,001
	1233	5,818,469	2,067,094	1,786,244
esented for navment	1234	4.374.620	3 748 501	6 425 813



(legal capital) 1546 Targeted financing 1547 Payables to the customers 1550 Other liabilities 1500 Total for Section V 68.774.889 30.362.863 BALANCE 1700 206,762,331 111,631,763 Chief Accountant M.Yu. Samotsvetova

1240

1250

1250.1

1250.2

1260

1200

1310

1320

1330

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1410

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1453

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1520

1521

1522

1523

15224

1525

1526

1530

1540

1545

476

87,520,531

76,499,213

11,021,318

979,199

168,437,286

208,762,331

350,045

( )

64,278,752

(43,334,991)

21,283,811

6,059,500

810,618

54,454

10,9748,959

4,339,445

105,388,481

21,032

116,683,631

26,822,153

41,253,364

28.605.442

5,649,423

4,110

6,853

8,569

6,978,957

699,472

5,720,218

19,942,518

19,942,518

1,068,247

73.618.648

11,631,763

350,045

63,982,161

5

(56,179,193)

8,163,018

26,815,000

182,638

46,118,454

732,590

45,381,980

3,884

73,116,092

1,676,191

28,390,680

23,735,170

2,238,971

1,648

4,519

7,168

2,403,204

295,782

February 17, 2016



198

146,02,019

13,252,019

125,000

240,648

66.764.806

82,968,817

75,319

53.580.924

5

(52,101,776)

1,664,472

33,332,805

105,199

309

32,795,772

3,772,222

28,847,542

176,008

66,234,086

222,295

14,776,571

9,919,522

3,709,765

13,443

1,205

9,316

1,123,320

171,394

16.170.280

82,958,817

Director

A.I. Kozhinov

6.6,6.7

6.8

Exclusion of cash equivalents

Monetary assets

Other current assets

III. EQUITY AND RESERVES

contributions of partners)

Total for Section II

Treasury shares

association

Reserve capital

Total for Section III

Loans and credits

Deferred tax liabilities

Advances received

Other creditors

Total for Section IV

Loans and credits

Accounts payable

Tax liabilities

Other creditors

Deferred revenue

Estimated liabilities

Estimated liabilities

Other liabilities

LONG-TERM LIABILITIES

BALANCE

LIABILITIES

Cash assets and money equivalents

Short-term depositary account of up to 3 months

Equity capital (joint stock capital, legal capital,

The shareholders' contribution to the share capital

Reserve capital formed in accordance with the law

Reserve capital formed in accordance with the bylaw

Accounts payable to state non-budgetary funds

Settlements with founders as for equity payments

prior to the registration of changes in articles of

Re-assessment of non-current assets

Retained profit (uncovered loss)

Suppliers and contractors

V. SHORT-TERM LIABILITIES

Suppliers and contractors

Advances received Payables to employees

Additional capital (without re-assessment)

# Cash Flow Statement as of January-December, 2015

Organization **Atomstroyexport JSC** Taxpayer's Identification Number Type of economic activity: international economic activity Legal form of organization/Form of ownership Joint Stock Company / Mixed Unit of measurement: THOUS. RUB Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes Form of OKUD **0710004** Date (dd.mm.yyyy) 31 I 12 I 2015 As per OKPO **48548926** TIN 7701186067 As per OKVED **45.21.52** As per OKOPF/OKFS 67 41 As per OKEI **384/385** 

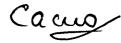
L. L. Maria	0.1.	Ongoing	g activity	Discontinui	ng operation	Organization in general	
Index Name	Code	for 2015	for 2014	for 2015	for 2015	for 2014	for 2015
Cash flows from operating activities							
Income – total,	4110	158,057,592	59,430,171	351,004	17,716	158,408,596	59,447,887
including from sale of goods, products, works and services	4111	156,466,548	57,233,827			156,466,548	57,233,827
rental charges, license fees, royalties, commission fees and similar charges	4112	210,930	233,290			210,930	233,290
from resale of financial assets	4113						
other income	4119	1,380,114	1,963,054	351,004	17,716	1,731,118	1,980,770
Payments – total,	4120	(99,166,316)	(51,607,792)	(841,633)	(1,022,477)	(100,007,949)	(52,630,269)
including payments to suppliers (contractors) for raw products, materials, works, services	4121	(83,579,286)	(40,822,467)	(806,109)	(99,460)	(84,385,395)	(41,821,927)
in connection with salaries	4122	(1,111,741)	(919,173)	(5,880)	(7,019)	(1,117,621)	(926,192)
interest on debt liabilities	4123	(3,178,461)	(3,161,831)	( )	( )	(3,1784,61)	(3,161,831)
tax on profits of organizations	4124		(73,862)	( )	( )		(73,862)
other payments	4129	(11,296,828)	(6,630,459)	(29,644)	(15,998)	(11,326,472)	(6,646,457)
Balance of cash flows from operating activities	4100	58,891,274	7,822,379	(490,629)	(1,004,761)	58,400,647	6,817,618
Cash flows from investing activities Income – total,	4210	26,733,131	49,326,328		1,111	26,733,131	49,327,439
including from sales of non-current assets (except for financial investments)	4211	345	363,475		1,111	345	364,586
from sales of shares of other organizations (participatory interest)	4212	500,000	8,452,000			500,000	8,452,000
from return on granted loans, from sales of debt securities (rights of claim on financial assets against third parties),	4213	25,149,398	39,574,938			25,149,398	39,574,938
including loans repayment	4214	25,149,207	39,574,889			25,149,207	39,574,889
from return on granted loans, from sales of debt securities (rights of claim on financial assets against third parties)	4215						
Short-term depositary account with duration of up to 3 months	4236		49				49
dividends, interest on debt financial investments and similar receipts from participatory interest in other organizations,	4214	938,952	745,080			938,952	745,080
including dividends and other similar revenue from participation in other companies	4230	660,700				660,700	
Interest received on debt financial investments	4231	278,252	745,080			278,252	745,080
other income	4219	144,436	190,835			144,436	190,835
Payments – total,	4220	(26,841,253)	(55,142,442)	(115)		(26,841,368)	(55,142,442)

including in connection with acquisition, creation, modernization, reconstruction and preparation for usage of non-current assets	4221	(93,033)	(40,728)	(115)	( )	(93,148)	(40,728)
in connection with acquisition of shares of other organizations (participatory interest)	4222		(10,009,031)				(10,009,031)
in connection with acquisition of debt securities (rights of claim on financial assets against third parties), granting of loans to third parties,	4223	(26,748,220)	(45,092,683)			(26,748,220)	(45,092,683)
including							
Acquisition of debt securities	4223.1		(15,294)				(15,294)
Loans to third parties	4223.2	(26,747,847)	(45,077,389)			(26,747,847)	(45,077,389)
Short-term depositary account with duration of up to 3 months	4223.3	(373)				(373)	
interest on debt liabilities included in the value of an investment asset	4224						
other payments	4229						
Balance of cash flows from investing activities	4220	(108,122)	(5,816,114)	(115)	1,111	(108,237)	(5,815,003)
Cash flows from financial operations							
Income – total,	4310	17,383,609	14,390,000			17,383,609	14,390,000
including of credits and loans	4311	17,383,609	4,390,000			17,383,609	4,390,000
monetary contributions from owners (participants)	4312						
from issue of shares, increase in participatory interest	4313		10,000				10,000,000
from issue of bonds, promissory notes and other debt securities, etc.	4314						
Budget allocations and other targeted funding,	4315						
including Budget allocations	4330						
Revenue of sectoral provisions	4331						
Other target financing	4332						
other income	4332						
Payments – total,	4319	(15,951,283)	(10,237,523)			(15,951,283)	(10,237,523)
including	4020	(10,901,200)	(10,231,323)			(10,901,200)	(10,201,020)
payments to owners (participants) in connection with repurchase of shares (participatory interest) of the company or cessation of their membership	4321						
payment of dividends and payments in connection with distribution of profit among owners (participants)	4322						
in connection with redemption (repurchase) of promissory notes and other debt securities, return of credits and loans	4323	(13,022,104)	(94,644,90)			(13,022,104)	(9,464,490)
other payments,	4329	(2,929,179)	(773,033)			(2,929,179)	(773,033)
including	4329.1	(2,701,223)				(2,701,223)	
Liabilities settlement at SWOP transaction closing		(∠,1∪1,∠∠3)				(∠,1∪1,∠∠3)	
Special provisions funds	4340						
Balance of cash flows from financial operations	4300	1,432,326	4,152,477			1,432,326	4,152,477
Balance of cash flows for the reporting period	4400	59,233,992	6,158,742	(490,744)	(1,003,650)	59,724,736	5,155,092
Opening balance of cash and cash equivalents	4450					19,942,518	14,602,019
Closing balance of cash and cash equivalents	4500					87,520,531	19,942,518
Incidence of changes in the exchange rates of foreign currencies against the ruble	4490	7,810,990	148,189	42,287	37,218	7,853,277	185,407

Director A.I. Kozhinov

February 17, 2016

Chief Accountant M.Yu. Samotsvetova











# 2. Adjustments due to change in the accounting policy and correction of errors

			Changes in c	apital for 2015	
Index Name	Code	As of December 31 2014	due to net profit	due to other factors	As of December 31 2015
Capital – total before adjustments	3400				
adjustment due to: change in the accounting policy	3410				
correction of errors	3420				
after adjustments,	3500				
Including: undistributed profit (uncovered loss): before adjustments	3401				
adjustment due to: change in the accounting policy	3411				
correction of errors	3421				
after adjustments	3501				
other capital items covered by adjustments: (by items) before adjustments	3402				
adjustment due to: change in the accounting policy	3412				
correction of errors	3422				
after adjustments	3502				

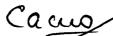
# 3. Net assets

	Index Name	Code	As of December 31, 2015	As of December 31 , 2014	As of December 31, 2013
Net assets		3600	21,293,811	8,153,018	1,554,752

Director A.I. Kozhinov

February 17, 2016

Chief Accountant M.Yu. Samotsvetova



# Cash Flow Statement as of January-December, 2015

Organization Atomstroyexport JSC Taxpayer's Identification Number Type of economic activity: international economic activity Legal form of organization/Form of ownership Joint Stock Company / Mixed Unit of measurement: **THOUS. RUB** Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Codes Form of OKUD **0710002** Date (dd.mm.yyyy) **31 I 12 I 2014** As per OKPO **48548926** TIN 7701186067 As per OKVED **45.21.52** As per OKOPF/OKFS **12267 41** As per OKEI **384 (385)** 

			Ongoing	activity	Discontinui	ng operation	Organizatio	on in general
Clarifications	Index Name	Code	For January- December, 2015	For January- December, 2014	For January- December, 2015	For January- December, 2014	For January- December, 2015	For January- December, 2014
No. 1.11,1.14,6.16,6.23	Revenue	2110	87,076,985	41,677,139	458,265	345,779	87,535,251	42,022,918
	Machine building products	2111	13,003,354	8,341,521			13,003,354	8,341,521
	Metallurgy products	2112	11,631,501	1,349,625			11,631,501	1,349,625
	Products and equipment of nuclear industry	2113	4,835,084	955,163			4,835,084	955,163
	Piping fixtures	2114	4,453,406	674,603			4,453,406	674,603
	Construction works	2115	15,323,387	12,827,694			15,323,387	12,827,694
	Services related to real estate, renting, computer technology, research, other services related to business	2116	31,493,876	16,337,476			31,493,876	16,337,476
	Others	2117	6,336,378	1,191,057	458,265	345,779	6,794,643	1,536,836
No. 1.12,1.14,6.14,6.16,6.23	Cost of sales	2120	(70,150,206)	(38,115,522)	(337,657)	(326,423)	(70,487,863)	(38,441,945)
	Machine building products	2121	(10,826,736)	(5,957,684)			(10,826,736)	(5,957,684)
	Metallurgy products	2122	(7,216,846)	(994,944)			(7,216,845)	(994,944)
	Products and equipment of nuclear industry	2123	(3,372,919)	(729,237)			(3,372,919)	(729,237)
	Piping fixtures	2124	(2,607,724)	(382,532)			(2,607,724)	(382,532)



	Construction works	2125	(16,782,390)	(16,068,702)			(16,782,390)	(16,068,702)
	Services related to real estate, renting, computer technology, research, other services related to business	2126	(25,150,745)	(13,022,507)			(25,150,745)	(13,022,507)
	Others	2127	(4,192,846)	(959,916)	(337,657)	(326,423)	(4,530,503)	(1,286,339)
	Gross profit (loss)	2100	16,926,780	3,561,617	12,608	19,356	17,047,388	3,580,973
No. 1.12,6.14	Business expenses	2210	(1,800,321)	(606,270)			(1,800,321)	(606,270)
No. 1.12,6.14,6.23	Administrative expenses	2220	(1,285,441)	(985,308)	(9,205)	(9,523)	(1,294,646)	(994,831)
	Profit (loss) on sales	2230	13,841,018	1,970,039	111,403	9,833	13,952,421	1,979,872
	Income from participation in other organizations	2310	660,700				660,700	
No. 1.11,6.18,6.23	Interests receivable	2320	694,414	813,267	521	1161	694,935	814,428
No. 1.12,6.18	Interests payable	2330	(2,816,311)	(2,973,659)			(2,816,311)	(2,973,659)
No. 1.11,5,6.18,	Other income	2340	10,493,162	4,940,382	2,243,231	4,083,022	12,736,393	9,026,404
6.23	Revenues in the form of foreign exchange differences	2341	8,946,388	3,750,485	1,873,428	3,882,735	10,819,816	7,633,220
	Income from currency purchase and sale transactions	2342	64,933				57,975	
	Revenue from the reversal of allowances for bad debts	2343	5,569					
	Other expenses	2350	(5,057,982)	(4,551,976)	(2,595,085)	(7,759,429)	(7,653,067)	(12,311,405)
No.1.12,5,6.14,6.18,6.23	Expenses for bad debt provisions	2351		(42,244)	(2,471,774)	(7,606,431)	(2,466,205)	(7,648,675)
	***Currency	2352		(49,070)	(7,018)	(1)		(49,071)
	Negative currency margin	2352	(2,701,223)	(7444,06)			(2,701,223)	(744,406)
	Profit (loss) before tax,	2300	17,815,001	198,053	(239,930)	(3,665,413)	17,575,071	(3,467,360)
	Current profit tax	2410	(3,191,208)	(996,324)	142,262	(385,269)	(3,048,946)	(1,381,593)
No. 6.15,6.23	including permanent tax liabilities (assets)	2420	(98,408)	198,917	(308,796)	(1,521,505)	(407,204)	(1,322,588)

No. 6.15,6.23	Changes in deferred tax liabilities	2430	(659,890)	1,139,633	(495,492)	(428,636)	(1,155,382)	710,997
No. 6.15,6.23	Changes in deferred tax assets	2450	189,689	15,996	92,421	25,484	282,110	41,480
No. 6.15,6.23	Others	2460	(505,758)	(63,615)			(55,758)	(63,615)
	Redistribution of income taxes in the consolidated group of taxpayers	2470	(160,631)	59,620	(142,262)	23,054	(302,893)	82,674
	Net profit (loss)	2400	13,487,203	353,363	(643,001)	(4,430,780)	12,844,202	4,077,417
	FOR REFERENCE							
	Result of re-assessment of non-current assets not included in the net income (loss) of the reporting period	2510						
No. 1.1	Result of other transactions not included in the net profit (loss) of the reporting period	2520	242,994	634,911	53,597	41,052	296,591	675,963
	Cumulative financial result of the reporting period	2500	13,730,197	988,274	(589,404)	(4,389,728)	13,140,793	(3,401,454)
No.6.19	Basic earnings (loss) per share	2900		(1)				(1)
	Diluted earnings (loss) per share	2910						

Director **A.I. Kozhinov**  Alter

Chief Accountant M.Yu. Samotsvetova



Attorney-in-Fact No. 5-367 dated April 01, 2015

February 17, 2016





# Annex 2. Auditor's Opinion on the Financial Statements

Auditor's Opinion on Verification of the Annual Financial Statements for NIAEP JSC





# AUDITOR'S OPINION on the Accounting (Financial) Statements for Nizhny Novgorod Engineering Company ATOMENERGOPROEKT Joint-Stock for 2015

AC3-ASE

LLC Nexia Pacioli

Auditor's opinion on annual accounting (financial) statements of NIAEP JSC for 2015

to Shareholders of Nizhny Novgorod Engineering Company ATOMENERGOPROEKT JSC

# Information about the Auditee

Full name Nizhny Novgorod Engineering Company ATOMENERGOPROEKT JSC

Abbreviated name NIAEP JSC

State registration Registered by Nizhny Novgorod Inspection of the Federal Tax Service of Russia (Nizhny

Novgorod, December 18, 2007), Registration Certificate: series 52 No.003505627.

Included into the Unified State Register of Legal Entities under the Principal State Registration

Number 1075260029240.

Place of location Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Postal address Address: 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Information about the Auditor

Full name Nexia Pacioli Limited Liability Company

Abbreviated name Nexia Pacioli LLC

State registration Registration Certificate No. 856.235 dated June 23, 1995, issued by the Moscow Registration

Chamber;

State Registration Certificate, series 77 No.005390060 dated October 22, 2002 issued by Interdistrict Tax Inspectorate of the Ministry for Taxes and Levies of Russia No.39 for Moscow Included into the Unified State Register of Legal Entities under the Principal State Registration

Number 1027739428716.

Place of location 2 Malaya Polyanka St., Moscow, 119180

Postal address 2 Malaya Polyanka St., Moscow, 119180

Membership in the self-regulatory organization of audi-

tors

It is a member of self-regulatory organization of auditors Non-Commercial Partnership Institute

of Professional Auditors;

Included into the Register of Auditors and Audit Organizations of the above self-regulatory orga-

nization of auditors on October 30, 2009 under the Principal Registration Number 10202000073.



Auditor's opinion on annual accounting (financial) statements of NIAEP JSC for 2015

We have audited the attached accounting statements of NIAEP JSC consisting of:

- Balance Sheet as of December 31, 2015;
- Statement on Financial Results as of January-December, 2015;
- Statement of Changes in Capital as of January-December, 2015;
- Cash Flow Statement as of January-December, 2015;
- Explanatory Notes to Accounting (Financial) Statements, 2015.

## RESPONSIBILITY OF THE AUDITED ENTITY FOR

# ACCOUNTING (FINANCIAL) STATEMENTS

Management of the audited entity is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with the accounting principles of the Russian Federation, and for internal control system necessary for preparation of the consolidated financial statements free from material misstatement, whether due to fraud or error.

# RESPONSIBILITY OF AUDITOR

Our responsibility is related to expression of opinion on accounting (financial) statements accuracy based on audit performed by our company. We have performed audit in accordance with audit activity standards of the Russian Federation. These standards require compliance with the applied bona mores, as well as planning and auditing in such a manner as to be sure that there are no material misstatements in the Accounting Statements.

The audit included audit procedures directed at obtaining audit evidences confirming the Accounting (Financial) Statements indices and information disclosure. The audit procedures are selected according to our opinion based on estimation of material misstatements risk occurred as a result of frauds or errors. In the course of assessment of this risk we have considered the internal control system providing execution and accuracy of the Accounting (Financial) Statements in order to select relevant audit procedures but not to express an opinion on efficiency of the internal control system.

LLC Nexia Pacioli

Auditor's opinion on annual accounting (financial) statements of NIAEP JSC for 2015

The audit also included an assessment of the applied accounting policy and justification of the estimated figures received by the Audited Entity management, as well as estimation of the Accounting (Financial) Statements representation as a whole.

We suppose that the audit evidences obtained in the course of the audit ensure the good reason for expression of opinion on the Accounting (Financial) Statements accuracy.

# Opinion

In our opinion, the Accounting (Financial) Statements in all material respects represent true financial state of NIAEP JSC as of December 31, 2015, results of its financial and economic activities and cash flow within 2015 in accordance with the Russian Rules for Accounting Statements Preparation.

Deputy Director General for Audit of /signature/
Nexia Pacioli LLC
(Auditor's Qualification Certificate
No.02-000361, no expiration date)
Included into the Register of Auditors and Audit
Organizations NP "Institute of Professional Auditors"
under Principal Registration Number 29502000246)

**Integrated report 2015** 

March 01, 2016. stamp here



O.V. Danilov









# **AUDITOR'S OPINION**

on annual accounting (financial) statements for Atomstroyexport Joint Stock Company for 2015



LLC Nexia Pacioli

Auditor's opinion on annual accounting (financial) statements of Atomstroyexport JSC for 2015

To shareholders of Atomstroyexport JSC

# Information about the Audited Entity

Full name Atomstroyexport Joint Stock Company

Abbreviated name Atomstroyexport JSC or ASE JSC

Registration Certificate No. 72.219 dated March 25, 1998, issued by the Moscow Registration State registration

> Chamber; State Registration Certificate, series 77 No.005387005 dated November 01, 2002 issued by Interdistrict Tax Inspectorate of the Ministry for Taxes and Levies of Russia No.39 for

Moscow

Included into the Unified State Register of Legal Entities under the Principal State Registration

Number 1027739496014.

Place of location 3 Svobody Sq., Nizhny Novgorod, 603006, Russia

Postal address Bldg 1, 2 Dmitrovskoye Highway, Moscow, 127434, Russia

Information about the Auditor

Full name Nexia Pacioli Limited Liability Company

Nexia Pacioli LLC Abbreviated name

State registration Registration Certificate No. 856.235 dated June 23, 1995, issued by the Moscow Registration

Chamber;

State Registration Certificate, series 77 No.005390060 dated October 22, 2002 issued by Interdistrict Tax Inspectorate of the Ministry for Taxes and Levies of Russia No.39 for Moscow Included into the Unified State Register of Legal Entities under the Principal State Registration

Number 1027739428716.

Place of location 2 Malaya Polyanka St., Moscow, 119180

Postal address 2 Malaya Polyanka St., Moscow, 119180

Membership in the self-regulatory organization of audi-

tors

It is a member of self-regulatory organization of auditors Non-Commercial Partnership Institute

of Professional Auditors;

Included into the Register of Auditors and Audit Organizations of the above self-regulatory organization of auditors on October 30, 2009 under the Principal Registration Number 10202000073.



Auditor's opinion on annual accounting (financial) statements of Atomstroyexport JSC for 2015

We have audited the attached accounting statements of Atomstroyexport JSC consisting of:

- Balance Sheet as of December 31, 2015;
- Statement on Financial Results as of January-December, 2015;
- Statement of Changes in Capital as of January-December, 2015;
- Cash Flow Statement as of January-December, 2015;
- Explanations to the Balance Sheet and Statement on Financial Results, 2015.

## RESPONSIBILITY OF THE AUDITED ENTITY FOR

### ACCOUNTING (FINANCIAL) STATEMENTS

Management of the audited entity is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with the accounting principles of the Russian Federation, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements free from material misstatement, whether due to fraud or error.

### RESPONSIBILITY OF AUDITOR

Our responsibility is related to expression of opinion about accounting (financial) statements accuracy based on audit performed by our company. We audited in accordance with federal standards of audit activities of the Russian Federation. These standards require compliance with the applied bona mores, as well as planning and auditing in such a manner as to be sure that there are no material misstatements in the Accounting Statements.

The audit included the holding of audit procedures directed to obtain audit evidences confirming the Accounting (Financial) Statements indices and information disclosure. The audit procedures are selected according to our opinion based on estimation of material misstatements risk occurred as a result of frauds or mistakes. In the course of assessment of this risk we considered internal quality system providing execution and accuracy of the Accounting (Financial) Statements in order to select the proper audit procedures but not to express an opinion about efficiency of the internal control system.

LLC Nexia Pacioli

Auditor's opinion on annual accounting (financial) statements of Atomstroyexport JSC for 2015

The audit also included an assessment of the applied accounting policy and soundness of estimated figures received by the Auditee's management, as well as estimation of the Accounting (Financial) Statements representation as a whole.

We suppose that the audit evidences obtained in the course of the audit ensure good reason for expression of opinion about the Accounting (Financial) Statements accuracy.

# Opinion

In our opinion the Accounting (Financial) Statement represents (in all material respects) true financial position of JSC Atomstroyexport as of December 31, 2015, results of its financial and economic activity and cash flow within 2015 in accordance with the Russian Rules of Accounting Statements Preparation.

Deputy Director General for Audit of /signature/ Nexia Pacioli LLC (Auditor's Qualification Certificate No.02-000361, no expiration date) Included into the Register of Auditors and Audit Organizations NP "Institute of Professional Auditors" under Principal Registration Number 29502000246)

March 01, 2016. stamp here











# **AUDITOR'S OPINION**

on annual accounting (financial) statements for Atomstroyexport Joint Stock Company for 2015



LLC Nexia Pacioli

Auditor's opinion on annual accounting (financial) statements of Atomenergoproekt JSC for 2015

To shareholders of Atomenergoproekt JSC

# Information about the Audited Entity

Full name Atomenergoproekt Joint Stock Company

Abbreviated name Atomenergoproekt JSC

State registration State Registration Certificate, series 77 No.010386150 dated August 19, 2008 issued by

> Interdistrict Tax Inspectorate of the Ministry for Taxes and Levies of Russia No.39 for Moscow Included into the Unified State Register of Legal Entities under the Principal State Registration

Number 1087746998646 dated August 19, 2008.

Place of location Bldg 1, 7 Bakuninskaya St., 105005 Moscow, Russian Federation

Postal address Bldg 1, 7 Bakuninskaya St., 105005 Moscow, Russian Federation

Information about the Auditor

Full name Nexia Pacioli Limited Liability Company

Abbreviated name Nexia Pacioli LLC

State registration Registration Certificate No. 856.235 dated June 23, 1995, issued by the Moscow Registration

Chamber:

State Registration Certificate, series 77 No.005390060 dated October 22, 2002 issued by Interdistrict Tax Inspectorate of the Ministry for Taxes and Levies of Russia No.39 for Moscow Included into the Unified State Register of Legal Entities under the Principal State Registration

Number 1027739428716.

Place of location 2 Malaya Polyanka St., Moscow, 119180

Postal address 2 Malaya Polyanka St., Moscow, 119180

Membership in the self-regulatory organization of audi-

tors

It is a member of self-regulatory organization of auditors Non-Commercial Partnership Institute

of Professional Auditors;

Included into the Register of Auditors and Audit Organizations of the above self-regulatory orga-

nization of auditors on October 30, 2009 under the Principal Registration Number 10202000073.







Auditor's opinion on annual accounting (financial) statements of Atomenergoproekt JSC for 2015

We have audited the attached accounting statements of Atomenergoproekt JSC consisting of:

- Balance Sheet as of December 31, 2015;
- Statement on Financial Results as of January-December, 2015;
- Statement of Changes in Capital as of January-December, 2015;
- · Cash Flow Statement as of January-December, 2015;
- Explanatory Notes to Accounting (Financial) Statements, 2015.

## RESPONSIBILITY OF THE AUDITED ENTITY FOR

### ACCOUNTING (FINANCIAL) STATEMENTS

Management of the audited entity is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with the accounting principles of the Russian Federation, and for such internal control system necessary for preparation of the consolidated financial statements free from material misstatement, whether due to fraud or error.

### RESPONSIBILITY OF AUDITOR

Our responsibility involves expression of opinion about accounting (financial) statements accuracy based on audit performed by our company. We have performed audit in accordance with audit activity standards of the Russian Federation. These standards require compliance with the applied bona mores, as well as planning and auditing in such a manner as to be sure that there are no material misstatements in the Accounting Statements.

The audit included audit procedures aimed at obtaining audit evidences confirming the Accounting (Financial) Statements indices and information disclosure. The audit procedures are selected according to our opinion based on estimation of material misstatements risk occurred as a result of frauds or errors. In the course of assessment of this risk we considered the internal control system providing execution and accuracy of the Accounting (Financial) Statements in order to select proper audit procedures but not to express an opinion on efficiency of the internal control system.

LLC Nexia Pacioli

Auditor's opinion on annual accounting (financial) statements of Atomenergoproekt JSC for 2015

The audit also included an assessment of the applied accounting policy and soundness of estimated figures received by the Audited Entity management, as well as estimation of the Accounting (Financial) Statements representation as a whole.

We suppose that the audit evidences obtained in the course of the audit ensure good reason for expression of opinion about the Accounting (Financial) Statements accuracy.

# Opinion

In our opinion the Accounting (Financial) Statements represent true financial position of Atomstroyexport JSC as of December 31, 2015, results of its financial and economic activity and cash flow within 2015 in all material respects in accordance with the Russian Rules of Accounting Statements Preparation.

### OTHER MATTERS

Audit of Accounting (Financial) Statements for 2014 was performed by Auditor – FBK LLC. On the basis of the audit performed, the Auditor provided on March 02, 2015 the unmodified opinion on accuracy of the Accounting (Financial) Statements for 2014.

Deputy Director General for Audit of /signature/
Nexia Pacioli LLC
(Auditor's Qualification Certificate
No.02-000361, no expiration date)
Included into the Register of Auditors and Audit
Organizations NP "Institute of Professional Auditors"
under Principal Registration Number 29502000246)

**Integrated report 2015** 

Annexes

February 29, 2016. stamp here



O.V. Danilov





# Annex 3. Statement of Internal Control and Audit Department

# **Statement of Internal Control and Audit Department** on results of internal audit of public accounting of ASE Group for 2015

Internal audit of preparation of the Public Annual Report of ASE Group for 2015 has been held in accordance with Provision on Internal Audit of the Public Annual Accounting approved by the Order No. 40/868-P/356 dated September 27, 2012 taking into account the requirements of Rosatom State Corporation policy on public reporting, Standard of the Company "Preparation procedure for public annual report for accounting period" (STP 10.01-14), basic provisions of Sustainability Reporting Guidance GRI (version G4.0), International Standard of Integrated Reporting, series of international standards of cooperation with stakeholders AA1000, recommendations of RUIE (Russian Union of Industrialists and Entrepreneurs) for usage in the course of management and corporate nonfinancial Reporting.

Essential differences of Public Report for 2015 and report for the previous year are conditioned by the promotion of ASE Group brand overseas and the Company global positioning, as well as choice of priority topics "Integration of the United Company ASE-NIAEP-Atomenergoproekt" (under ASE Group brand) and "Environmental and radiation safety of NPP".

All activities specified in the Schedule are carried out as of time of presentation of the Draft Report for approval.

The report covers ASE Group activities from January 01, 2015 till December 31, 2015. Selected details on ATOMPROEKT JSC were included in the report. The Report also provides for essential aspects of NIAEP JSC subsidiaries operations.

Consolidate accounting statements are provided for ASE Group.

In the course of the audit the following activities have been performed:

- assessment of compliance of public reports preparation with the existing law and internal regulatory requirements that govern business process of public reports preparation was performed:
- assessment of availability and effectiveness of Internal Control System for Public Reporting (including analysis of regulation and formalization of key processes relative to preparation of public reports and analysis of effectiveness of key control procedures implementation providing accurate public reports) was carried out;
- essential differences between the audited Report and similar Report for the previous year were noted.

In opinion of auditors, Content of the Report, completeness and accuracy of the information to be disclosed ensures reliable and balanced awareness of the stakeholders about essential aspects of the United Company ASE-NIAEP-Atomenergoproekt (under one ASE Group of companies) activity for the reporting period. They confirm that the Company has an effective management system of different aspects of sustainability performance and reaction to requests of the stakeholders.

Results of the conducted audit allow to make a conclusion on compliance of Public Report preparation of the United Company ASE-NIAEP-Atomenergoproekt (under one ASE Group of companies) for 2015 with the existing laws, Sustainability Reporting Guidance GRI G4, International Standards of Cooperation with Stakeholders AA1000, Policy of Rosatom State Corporation and internal regulatory requirements of NIAEP JSC that govern a business-process of the public reports preparation.

System of the internal control of preparation of the Company public reporting ensures completeness and accuracy of non-financial information presented in the Report.

Head of department /signature/

V.S. Petrovsky





# Annex 4. Report on the Results of Independent Assurance



# Report on results of independent assurance of Public Annual Report of ASE Group for 2015

T/0.: +7 (495) 221-73-7

### Introduction

The subject of assurance is the annual report of ASE Group (hereinafter referred to as the Report) for the period from January 1, 2015 to December 31, 2015. Our statement is addressed to the management of Joint-Stock Company "Nizhny Engineering Company Novgorod "Atomenergoproect" (hereinafter referred to as JSC "NIAEP").

### Responsibilities

The management of JSC "NIAEP" bears full responsibility for the preparation and accuracy of the Report. We are responsible for the results of independent assurance of the Report only to JSC "NIAEP" within the engagement and do not assume any responsibility to any third party.

### Scope, criteria and level of assurance

The subject of assurance is the Report of ASE Group (JSC NIAEP, JSC ASE, JSC Atomenergoproekt, JSC ATOMPROEKT), including information on JSC NIAEP, JSC ASE, JSC Atomenergoproekt'. For certain material aspects information on subsidiaries of JSC "NIAEP", which impacts is considered to be material, is disclosed.

The Report was evaluated considering the following criteria:

- · Nature and level of compliance with the principles of the AA1000 Accountability Principle Standard 2008 - inclusivity, materiality, responsiveness.
- · Compliance of the Report with the GRI Sustainability Reporting Guidelines G4 (Comprehensive option) including requirements of the Construction and Real Estate Sector Disclosures

The engagement was planned and performed in accordance with AA1000 Assurance Standard 2008 (moderate level of assurance) and International Standard on Assurance Engagement ISAE 3000 "Assurance engagements other than

Selected data of JSC ATOMPROEKT are included in the Report due to the fact that JSC ATOMPROEKT joined the United Company in December 2015.





audits or reviews of historical financial information" (limited level of assurance). The statement corresponds to type 2, as defined by AA1000AS 2008, in accordance with the limitations specified in section "Limitations of the engagement" of the present statement.

The selective verification of information in the Report performed under aforementioned levels of assurance does not claim to provide a high level of assurance. The work was based on the supporting materials provided by the management of the entity and its employees, publicly available information and analytical methods of confirmation. In relation to the quantitative information contained in the Report the work performed cannot be considered sufficient for identification of all possible deficiencies and misstatements. However, the collected evidence is sufficient for expressing our conclusion in accordance with the above levels of

### Methodology of assurance

In our engagement, we have performed the following procedures:

- · Study and selective testing of systems and processes implemented by ASE Group to ensure and analyze the compliance of the activities with AA1000APS 2008 principles; collection of evidence confirming practical implementation of these principles.
- · Interviewing the management of JSC "NIAEP" and JSC ASE and obtaining documentary confirmation.
- · Participation in the Report public presentation, study of minutes of public dialogues.
- · Study of information available on the websites of ASE Group companies related to their activities in the context of sustainable
- · Study of public statements of third parties concerning economic, environmental and social aspects of the ASE Group activities, in order to check validity of the declarations made in the Report.

Независимая фирма «ЭНПИ Консаит», член

«Моор Стипніс Интернеции Лимитед», в ассоциации с АКГ «МООР СТИВЕНС РУС»



- · Analysis of the current system of internal audit of non-financial reporting in
- · Selective review of documents and data on the efficiency of the management systems of economic, environmental and social aspects of sustainable development in ASE Group.
- · Study of the existing processes of collection, processing, documenting, verification, analysis and selection of data to be included into the Report.
- · Comparison of Russian and English versions of the Report.
- · Analysis of information in the Report for compliance with the aforementioned criteria.

### Limitations of the engagement

The assurance is limited to the period from January 1, 2015 to December 31, 2015.

The evaluation of reliability of the information on performance in the Report was conducted in relation to compliance with the criteria to be applied to prepare sustainability report 'in accordance' with the G4 Guidelines and nonfinancial information referred to in the GRI Content Index. In respect to the quantitative performance indicators the conformity assessment to external and internal reporting documents provided to us is performed.

Assurance does not apply to forward-looking statements, as well as statements expressing the opinions, beliefs and intentions of ASE Group to take any action relating to the future. The assurance on the statements which are based on expert opinion is not performed.

Assurance is performed only in relation to the English version of the Report in the MS Word format which includes information to be published in a hard-copy form as well as in digital form on the JSC "NIAEP" website.

We had no chance to verify that the Report was subjected to public/expert assurance by Non-Financial Reporting Board of the Russian Union of Industrialists and Entrepreneurs due to the fact that the date of signing this statement preceded the planned date of the procedure completion.

# Conclusions

The following conclusions are based on the assurance work performed within the limitations of the engagement specified above.

### Nature and extent of compliance with AA1000 APS 2008 principles

As a result and within the scope of our work, we did not identify material non-compliance with criteria of AA1000APS 2008 in respect to adherence to the principles (Inclusivity, Materiality, and Responsiveness).

### Compliance of the Report with the GRI Sustainability Reporting Guidelines G4 (Comprehensive option)

In order to form an opinion on this issue, we have performed analysis of implementation of GRI G4 Guidelines concerning principles and standard disclosures for the chosen option to prepare a report 'in accordance' with the Guidelines.

- · General standard disclosures are reported mainly in compliance with the requirements of GRI G4 for the chosen 'in accordance' option. General standard disclosure G4-10 is reported with omissions (breakdown of total number of employees by contract and employment type, as well as data on supervised workers is not reported).
- · Disclosures on management approach are reported for material aspects. Sector Disclosures requirements to Disclosures on Management Approach are taken into account for most aspects.
- · Indicators required for the Comprehensive option are reported mainly in accordance with guidance contained in GRI G4. If it is not possible to disclose required information the Report identifies the information that has been omitted. The reasons for omissions and explained for all indicators except G4-EN23. Remeasurement of historical data on G4-EC1 in view of change in consolidation perimeter was not performed.

As a result and within the scope of our work, we did not identify any material misstatements in the Report information referred to in the GRI Content In-

# Overall assessment of the Report

· As a result and within the scope of our work, we did not identify material non-compliance with requirements to the report prepared 'in accordance' with the Comprehensive option of the G4 Guidelines including requirements of the Construction and Real Estate Sector Dis-

### Recommendations

1. To increase comparability of information it is reasonable to disclose GRI indicators in relation to target values.



- 2. Consider the possibility of increasing the extent of disclosure of information on the material aspects concerning subsidiaries and contrac-
- 3. Increase the extent of disclosure of indicators in relation to which GRI guidance is not fully taken into account (disclosures with omissions). In particular consider the possibility of changes in the reporting systems to disclose information on personnel by gender in the following reporting periods.
- 4. Explain reason of omission in accordance disclosure with omissions,
- 5. Take into account remarks in the foregoing sections of the statement.

### Statement of competence and independence

JSC "NP Consult", an independent audit firm, professionally rendering assurance services, is a li-

censed provider of assurance services in accordance with AA1000AS. JSC "NP Consult" is a member of self-regulated organization Nonprofit Partnership "Institute of Professional Auditors" and acts in accordance with the IFAC Code of Ethics. The company employs a system of quality control of audit services, including control of compliance with ethi-

JSC "NP Consult" states that the present statement is an independent auditor's assessment. JSC "NP Consult" and its staff have no relations with JSC "NIAEP", or its subsidiaries and affiliates that could with GRI recommendation for every case of result in the conflict of interest related to the independent assurance of the Report.



General Director JSC "NP Consult"

Moscow, July 8, 2016



V.Y. Skobarev



G4-32

# Annex 5. GRI Content Index

Table 54. General Standard Disclosures 33

General Standard Disclosures	Page	Omissions
Strategy and Analysis		
G4-1	3	
G4-2	26	
Organizational Profile		
G4-3	4	
G4-4	23	
G4-5	4	
G4-6	5	
G4-7	4	
G4-8	24	
G4-9	4, 6	
G4-10	195	Public Reporting Committee has decided to limit the staff disclosure scope following the stakeholders' request. No details on headcount with breakdown by type of employment, availability of labor agreement, full-time/outsource employee. No details on headcount of contractors and subcontractors involved in the construction.
G4-11	104	
G4-12	77	
G4-13	7	
G4-14	61	
G4-15	34	
G4-16	5	
Identified Material Aspects and Boundaries		
G4-17	53	
G4-18	8	
G4-19	9	
G4-20	173	
G4-21	173	
G4-22	8	
G4-23	8	

**33** The Report on the results of independent assurance is provided in Annex 4.



General Standard Disclosures	Page	Omissions
Stakeholder Engagement		
G4-24	112	
G4-25	112	
G4-26	121	
G4-27	121	
Report Profile		
G4-28	8	
G4-29	8	
G4-30	8	
G4-31	208	
G4-32	9, 169	
G4-33	9	
Governance		
G4-34	33	
<u>G4-35</u>	35	
G4-36	35	
G4-37	122	
G4-38	35	
G4-39	35	
G4-40	35	
G4-41	35	
G4-42	35	
G4-43	36	
G4-44	36	
G4-45	36	
G4-46	36	
G4-47	180	
G4-48	Cover page	
G4-49	36	
G4-50	180	
G4-51	37	
G4-52	37	
G4-53	37	
G4-54	202	

General Standard Disclosures	Page	Omissions
G4-55	202	
Ethics and Noncircumvention		
G4-56	34	
G4-57	119	
G4-58	119	

# Table 55. Correlation of Identified Material Topics with GRI Material Aspects

All topics of the first sector of materiality matrix were referred as material, as well as selected topics of the second sector of the materiality matrix though considered as material by the Public Reporting Committee.

Identified Material Topic	GRI Aspect
NPP Safety	Products and services
Provision for environmental and industrial safety at construction sites	Emissions, Effluents and Waste
Compliance with requirements (Environmental category)	
Creation of order portfolio for long-run	-
Provision for financial stability and creditworthiness of the Company	Economic performance
Cutting costs and terms of NPP construction	-
Implementation of contractual obligations on NPP construction abroad	-
Anti-Corruption Enforcement	Anti-Corruption Enforcement
Company as responsible employer	Occupational health and safety, Training and education

# Table 56. Specific Standard Disclosures

Material Aspects	DMA and Indicators	Omissions
Economic performance	DMA – p. 173-177	
	EC1 - p. 55	Breakdown by payments to the state is excluded, all payments are made directly to the state.
	EC2 - p. 26	
	EC3 - p. 106	_
	EC4 - p. 55	





Material Aspects	DMA and Indicators	Omissions
Emission	DMA – p. 173–177	-
	EN15 - p. 68	No details on greenhouse gases emissions in CO <sub>2</sub> equivalent by current construction pro-
	EN16 – p. 67	jects were provided. Although same information on subsidiaries and contractors is material, it cannot be disclosed in view of absence of guidelines on greenhouse gases emissions
	EN17 – p. 67	recalculation to CO <sub>2</sub> approved by Rosatom State Corporation. The information will be disclosed in subsequent report of ASE Group subject to availability of guidelines on greenhouse
	EN18 - p. 68	gases emissions recalculation to CO <sub>2</sub> approved by Rosatom State Corporation.
	EN19 - p. 68	
	EN20 - p. 68	
	EN21 – p. 67	
Effluents and Waste	DMA – p. 173–177	
	EN22 - p. 70	
	EN23 - p. 68-69	No breakdown by treatment approaches.
	EN24 - p. 70	
	EN25 – p. 68	
	EN26 - p. 70	
	CRE3	Is not update due to the specifics of NPP construction.
	CRE4 - p. 67	
Compliance with requirements	DMA – p. 173–177	
(Environmental category)	EN29 - p. 70	
Products and services	DMA – p. 173–177	
	EN27 - p. 61	
	EN28	Not applicable to NPP construction
Anti-Corruption Enforcement	DMA – p. 173–177	
	S03 - p. 119	
	SO4 - p. 119	Public Reporting Committee decided to limit staff disclosure scope following the stakeholders' request. No details on number and share of employees attended training in the area of anti-corruption enforcement.
	SO5 – p. 119	
Occupational health and safety	DMA – p. 173–177	
	LA5 – p. 104	
	LA6 – p. 202	Public Reporting Committee decided to limit staff disclosure scope following the stakeholders' request. No breakdown by gender, lost day rate, absentee rate is provided.
	LA7 – p. 104	
	LA8 - p. 104	
	CRE6 - p. 104	



G4-20, G4-21

Material Aspects	DMA and Indicators	Omissions
Training and education	DMA – p. 173–177	
	LA9 – p. 192	Public Reporting Committee decided to limit staff disclosure scope following the stakeholders' request. No breakdown by gender is provided.
	LA10 - p. 98	
	LA11 - p. 101	Public Reporting Committee decided to limit staff disclosure scope following the stakeholders' request. No breakdown by gender and categories of employees, and training type is provided.

# Annex 6. Index of Material Aspects Management Approaches

Table 57. Index of Material Aspects Management Approach

Material Aspect		Page, notes
Economic performance	Materiality rationale	46-53
	Boundaries	since 2015, ASE Group, 2013-2014 – NIAEP JSC
	Policies	46-53
	Commitments	46-53
	Goals and targets	46-53
	Responsibilities	Senior vice-president of economic affairs and finances
	Resources	21
	Actions	46-53
	Mechanisms for monitoring the effective- ness of the management approach	46-53
	Results	53-55
	Changes to the management approach	55
	Specific DMA	25–31



Material Aspect		Page, notes
Emission	Materiality rationale	58-61
	Boundaries	NIAEP JSC, ASE JSC
		No details are disclosed in relation to the other companies of ASE Group and contractors in the absence of a calculation guideline approved by Rosatom State Corporation.
	Policies	58-61
	Commitments	58-61, 66-71
	Goals and targets	58-61, 66-71
	Responsibilities	Director for Quality
	Resources	21
	Actions	66–71
	Mechanisms for monitoring the effectiveness of the management approach	66–71
	Results	66–71
	Changes to the management approach	
Effluents and Waste	Materiality rationale	58-61
	Boundaries	NIAEP JSC, ASE JSC
		No details are disclosed in relation to the other companies of ASE Group and contractors in the absence of a calculation guide-line approved by Rosatom State Corporation.
	Policies	58-61
-	Commitments	58-61, 68-70
	Goals and targets	58-61, 68-70
-	Responsibilities	Director for Quality
	Resources	21
	Actions	68–70
	Mechanisms for monitoring the effectiveness of the management approach	58-61, 68-70
	Results	68-70
	Changes to the management approach	_

	Actions	66-71
	Mechanisms for monitoring the effectiveness of the management approach	66–71
	Results	66-71
	Changes to the management approach	_
ffluents and Waste	Materiality rationale	58-61
	Boundaries	NIAEP JSC, ASE JSC
		No details are disclosed in relation to the other companies of ASE Group and contractors in the absence of a calculation guide line approved by Rosatom State Corporation.
	Policies	58-61
	Commitments	58-61, 68-70
	Goals and targets	58-61, 68-70
	Responsibilities	Director for Quality
	Resources	21
	Actions	68-70
	Mechanisms for monitoring the effectiveness of the management approach	58-61, 68-70
	Results	68-70
	Changes to the management approach	_
9-ASE		7

Material Aspect		Page, notes
Compliance with requirements (Environmental category)	Materiality rationale	58-61
Torrifferital category)	Boundaries	NIAEP JSC, ASE JSC, Atomenergoproekt JSC
	Policies	58-61
	Commitments	Director for Quality
	Goals and targets	58-61
	Responsibilities	58-61
	Resources	58-61
	Actions	70-71
	Mechanisms for monitoring the effectiveness of the management approach	58-61
	Results	70–71
	Changes to the management approach	_
Products and services	Materiality rationale	61–65
	Boundaries	NIAEP JSC, ASE JSC, Atomenergoproekt JSC
	Policies	61–65
	Commitments	61–65
	Goals and targets	61–65
	Responsibilities	Director for Quality
	Resources	61–65
	Actions	61–65
	Mechanisms for monitoring the effectiveness of the management approach	61–65
	Results	61–65
	Changes to the management approach	_





Material Aspect		Page, notes
Anti-Corruption Enforcement	Materiality rationale	119
	Boundaries	NIAEP JSC, ASE JSC, Atomenergoproekt JSC
	Policies	119
	Commitments	119
	Goals and targets	119
	Responsibilities	Deputy Director for Security – Head of Special Security and Protection of Russian Projects Assets Department
	Resources	119
	Actions	119
	Mechanisms for monitoring the effectiveness of the management approach	119
	Results	119
	Changes to the management approach	-
Occupational health and safety	Materiality rationale	104–105
	Boundaries	NIAEP JSC, ASE JSC, Atomenergoproekt JSC, subsidiaries and contractors
	Policies	104–105
	Commitments	104–105
	Goals and targets	104–105
	Responsibilities	Director for Quality
	Resources	104–105
	Actions	104-105
	Mechanisms for monitoring the effectiveness of the management approach	104-105
	Results	104–105
	Changes to the management approach	_
	Specific DMA	104-105



Material Aspect		Page, notes
Training and education	Materiality rationale	98-102
	Boundaries	NIAEP JSC, ASE JSC, Atomenergoproekt JSC, subsidiaries
	Policies	98-102
	Commitments	98-102
	Goals and targets	98-102
	Responsibilities	Vice-President for Human Resources and Administrative Work
	Resources	98-102
	Actions	98-102
	Mechanisms for monitoring the effectivene of the management approach	ess 98-102
	Results	98-102
	Changes to the management approach	_
	Specific DMA	98-102



Annex 7. Organizational Structure of ASE Group 5 2 8 President 3 4 6 Vice-President Vice-President for Projects in India and China Senior Vice-President for Senior Vice-President for Economy and Director of Industry Center for Facility Construction Department Vice-President Vice-President Vice-President Senior Vice-President for Personnel Vice-President for Director for Legal and Director for Safety **Technical Director Executive Director** for Internal Control for Russian Projects Management for Foreign Projects Management Moscow Branch Director Management and Administrative Work for Commerce Development Corporate Issues Finance Planning and Control and Audit Rostov NPP Constructio Division for Safety and Protection of Russian and Foreign Assets Unit for the Managemer Design Manufacturing Division Personnel Managemer Division NAEP JSC Moscow Branch Division for Projects Management Methodolog and Calendar and Networ Planning Procurement Division Division for Legal and Corporate Issues Project Management Division of Construction Projects in China Division for Science and Innovations Supply Division for NIAEP JSC Udomlya Branch - "General ontractor's Directorate Kalinin NPP" Construction Project Management Division Unit for the Management of Construction Projects in India **NIAEP JSC** and Document Support Cost Management Divis Russia and abroad Rooppur NPP Construction Project Management Division IT Division Kursk and Smolensk NPP Capital Construction Administration and Maintenance Division Unit for Construction Projects Management Quality Assurance Division Division for Small, Medium NIAEP JSC Navashino Branch - "General Contractor's Directorate a Nizhny Novgorod NPP" Novovoronezh NPP Construction Project Management Division Project Management Division for the Construction of Facilities for Spent Nuclear Fuel and Radioactive Waste Management Senior Vice-President for Russian Projects Management ASE JSC Representative Office in Ostrovets (Belarus) **Quality Director Director for Finance** Vice-President Director for Safety ASE JSC Branch Office in Turkey Division for Finance and Accounting Division for Safety and Protection of Russian and Foreign Assets Quality Assurance Division Division for the Management of NPP Construction Projects in India (including NIAEP JSC Baltic Branch "General Contractor's Directorate at Baltic NPP" NIAEP JSC Yuzhnourals Branch ASE JSC Representative Office in Budapest Branch in Belene ectorate at Kudankula ASE JSC Representati Office in Bratislava (Slovakia) ASE JSC Branch in Belene (Bulgaria) **ASE JSC** Division for the Management of NPP in Mumhai) Export Control Division Director of **Deputy Director for** Novovoronezh First Deputy Director General **Branch - Directorate** Novovoronezh NPP-2 Accounting Division Novovoronezh Branch JSC AEP Deputy Director General - Director fo Director for **Director for Personnel** Head of Safety Director for Legal and Corporate Issues **Equipment Supplies** Management Department Design Personnel Management Division Division for Safety and Protection of Russian and Foreign Assets Design Manufacturing Division Director for **Equipment Supplies** Administrative Issues Volgograd Design Branc Novovoronezh Design an Survey Branch Head of Organizational Administration Balakovo Design and Survey Branch Department Director for Kurchatov Design and Survey Branch Functional verticals: **Equipment Supplies** 1. - management of construction projects on the territory of Russia; Division for Administrativ and Document Support Desnogorsk Design and Survey Branch 2. - management of construction projects abroad; Quality Assurance Divisior 3. - design manufacturing management; Maloyaroslavets Design a Survey Branch 4. - management of supplies, procurement and quality assurance; Head of the Department 5. - management of economy and finance, accounting and reporting; for Foreign Economic Relations VNIPIET Branch 6. - management of personnel and administrative work; Organizations within AEP JSC Branch Office in Ankara (Turkey) 7. - safety management; the scope of NIAEP Division for Export Control, Customs Clearance and External Relations 8. - management of legal and corporate issues. JSC management





G4-47, G4-50

# Annex 8. Report of the Board of Directors on Performance Results

Table 58. Structure of items on agenda for the meetings of the Board of Directors of NIAEP JSC in 2015

	Items on the agenda	Number and share in the agenda
1	Approval of the Company's budget	2 (5.13%)
2	Decision on participation of NIAEP JSC in Atomenergoproekt JSC	1 (2.6%)
3	Issues related to preparation, convocation and conduct of general meetings of shareholders of NIAEP JSC	5 (12.82%)
4	Inclusion of candidates from the Company's shareholders to candidates lists for the Board of Directors positions	1 (2.6%)
5	Pricing of major and related-party transactions	4 (10.26%)
6	Approval of major and related party transactions	3 (7.7%)
7	Share buyback pricing	1 (2.6%)
8	Election of the Chairman and Secretary of the Board of Directors of the Company	4 (10.26%)
9	Issues related to approval of the list of planned charity initiatives in 2015, concerning approval of donations	2 (5.13%)
10	Terms and conditions of employment agreement of the CEO, concerning remuneration of the CEO on the basis of KPI performance in 2014	5 (12.82%)
11	Issues related to establishment and closing down of branches, concerning approval of regulations on branches and representative offices	6 (15.4%)
12	Preliminary approval of NIAEP JSC annual report	1 (2.6%)
13	Preliminary approval of annual account statements of NIAEP JSC for 2014	1 (2.6%)
14	Recommendations on NIAEP JSC revenue allocation for 2014, including by dividends	1 (2.6%)
15	Approval of Collective Agreement for 2015-2017	1 (2.6%)
16	Determining the amount of the NIAEP JSC auditor's remuneration	1 (2.6%)



Table 59. Structure of Items on Agenda for the Meetings of the Board of Directors of ASE JSC in 2015

	Items on the agenda	Number and share in the agenda
1	Pricing of related-party transactions	3 (16.6%)
2	Issues related to preparation, convocation and conduct of general meetings of shareholders	3 (16.6%)
3	Election of the Chairman of the Board of Directors	2 (11.1%)
4	Approval of transactions related to acquisition, disposition, assignment of the rights for use of real estate property	1 ( 5.5%)
5	Establishment and closing down of branches and representative offices, approval of regulations thereon	3 ( 16.6%)
6	Approval of the Company's budget	2 (11.1%)
7	Preliminary approval of ASE JSC annual report	1 (5.5%)
8	Recommendations on profit distribution, including by dividends size	1 (5.5%)
9	Making amendments to ASE JSC Charter	1 (5.5%)
10	Determining the amount of the ASE JSC auditor's remuneration	1 (5.5%)

Table 60. Structure of Items on Agenda for the Meetings of the Board of Directors of Atomenergoproekt JSC in 2015

	Items on the agenda	Number and share in the agenda
1	Pricing of related-party and major transactions	4 (6.7%)
2	Issues related to preparation, convocation and conduct of general meetings of shareholders	7 (11.8%)
3	Election of the Chairman and Secretary of the Board of Directors of the Company, and termination of their power	8 (13.5%)
4	Approval of transactions related to acquisition, disposition, assignment of the right for use of real estate property	18 (30.5%)
5	Establishment and closing down of branches and representative offices, approval of regulations thereon	6 (10.1%)
6	Approval of the Company's budget	2 (3.3%)
7	Preliminary approval of the annual report	1 (1.6%)
8	Making amendments to the Charter	1 (1.6%)
9	Determining the amount of the auditor's remuneration	1 (1.6%)
10	Making transactions related to soliciting loans, and credits, issue of grantees	7 (11.8%)
11	Changes to financial policy	1 (1.6%)
12	Preliminary approval of account statements	1 (1.6%)
13	Major transaction approval	1 (1.6%)
14	Discontinuation of participation in Nuclear control JSC	1 (1.6%)



# Annex 9. Details of Members of the Board of Directors

# Table 61. Board of Directors of NIAEP JSC

Kirill Borisovich KOMAROV (since October 07, 2014)	
Date of birth	1973
Place of birth	Leningrad
Education	1997, The Ural State Law Academy, Judicial and Prosecutorial Department
	Candidate of Legal Sciences
Position at primary place of employment	First Deputy General Director of Rosatom State Corporation for Development and International Business

Ekaterina Viktorovna LYAKHOVA (since October 07, 2014)	
Date of birth	1975
Place of birth	Sverdlovsk
Education	The Ural State Law Academy
	MBA at Lomonosov Moscow State University
	Executive MBA, Institute of Business Studies at the Russian Presidential Academy of National Economy and Public Administration. University Antverpen Management School.
Position at primary place of employment	Director for Investment and Operating Efficiency Management of Rosatom State Corporation

Nikolay Sergeevich DROZDOV (since October 07, 2014)		
Date of birth	1972	
Place of birth	Moscow	
Education	1993, G.V. Plekhanov Russian University of Economics. Specialty: Economics and Social Planning, qualification: Economist	
Position at primary place of employment	Director of International Business Department of Rosatom State Corporation	

Valery Igorevich LIMARENKO (since October 07, 2014)	
Date of birth	1960
Place of birth	Kharkov
Education	Kharkov Aviation Institute. Doctor of Economic Sciences.
Position at primary place of employment	President of NIAEP JSC

Ivan Alekseevich BORISOV (since October 07, 2014)	
Date of birth	1981
Place of birth	Leningrad
Education	St Petersburg State University
Position at primary place of employment	Vice-President for Development NIAEP JSC

# Table 62. Board of Directors of ASE JSC (with changes in the composition during 2015)

Kirill Borisovich KOMAROV (see the Board of Directors of NIAEP JSC) (since July 29, 2007)	
Nikolay Sergeevich DROZDOV (see the Board of Directors of NIAEP JSC) (since November 14, 2013)  Vladimir Lazarevich KATZ (since December 10, 2012)	
Place of birth	Gorky
Education	1973, Nizhny Novgorod State Technical University, specialty of Physical and power systems, qualification of engineer-physicist
Position at primary place of employment	Deputy General Director for Development and Sales of Services of ATOMPROEKT JSC

Vladimir Nikolaevich SAVUSHKIN (since December 10, 2012)	
Date of birth	1954
Place of birth	Moscow
Education	1979, Moscow Automotive Institute, specialty Internal Combustion Engines, qualification of an engineer-mechanic.
	1989, Russian Foreign Trade Academy of the Ministry for the Economic Development of the Russian Federation, specialty of Foreign Economic Relations (economics of foreign communications), qualification of Economist with knowledge of foreign language
Position at primary place of employment	Senior Vice-President, Director of Moscow branch of NIAEP JSC, and Senior Vice-President of ASE JSC

Oleg Stanislavovich BAR	Oleg Stanislavovich BARABANOV (since May 24, 2015)	
Date of birth	1971	
Place of birth	Moscow	
Education	Higher Technical (mining engineer), a degree in economics (economist), Ph.D.	
Position at primary place of employment	Director on Development and Restructuring of Rosatom State Corporation	





Igor Georgievich SHAGIN (exited BD on May 24, 2015)	
Date of birth	1971
Place of birth	Vologda
Education	1997, The Urals State Law Academy, qualification "Lawyer"
Position at primary place of employment	Administrative Director of JSC Rusatom Overseas Inc.

# Table 63. Board of Directors of Atomenergoproekt JSC

Leonid Valentinovich EGOROV (since June 30, 2014)	
Date of birth	1956
Place of birth	Kirov
Education	1978, Kirov Polytechnic University
Position at primary place of employment	Atomenergoproekt JSC First Deputy General Director

Yuriy Alekseevich IVANOV	Yuriy Alekseevich IVANOV (since November 27, 2014)			
Date of birth	1953			
Place of birth	th Perm region, Krasnovisherskiy district, Mutikha			
Education	tion 1976, Gorky Polytechnic University named after A.A. Zhdanov			
Position at primary place of employment	NIAEP JSC Senior Vice-President for Design			

Vladimir Lazarevich KATZ (see the Board of Directors of ASE JSC) (since November 27, 2014)			
Ekatrina Valeryevna RZHANNIKOVA (since November 27, 2014)			
Date of birth	1974		
Place of birth	Nizhny Novgorod		
Education	2006, Nizhny Novgorod State University named after Lobachevsky		
	1996, Volgo-Vaystkaya Academy of State Service		
Position at primary place of employment	NIAEP JSC Director for Legal and Corporate Affairs		

Nikolay Pavlovich SHESHOKIN (since November 27, 2014)				
Date of birth	1954			
Place of birth	Gorky			
Education	1981, All-Russian Correspondence Institute of Railway Transport Engineers			
Position at primary place of employment	NIAEP JSC Vice-President for Human Resources and Administrative Work			

# Annex 10. Safety Control

# **Safety Control Results**

In 2015, NIAEP JSC and entities within its framework were subjected to inspections of the state supervisory (oversight) authorities, and internal control bodies, including:

- inspections by structural units of Rostekhnadzor (of inter-territorial bodies of Rostekhnadzor and above) 21 inspections, comprising:
- at the construction site of power units No. 6,
   No. 7 of Novovoronezh NPP 8 inspections;
- at the construction site of power units No. 3,
   No. 4 of Rostov NPP 9 inspections;
- inspections of the head office of NIAEP JSC – 3 inspections;
- inspections of entities within the governance framework of NIAEP JSC-3 inspections (NIKIMT JSC -Atomstroy – 3 inspections).
- 2. Inspections by authorities of the Russian Federation Prosecutor's Office 4, including:
- at the construction site of power units No. 6, No. 7 of Novovoronezh NPP – 2 (branch of NIKIMT JSC -Atomstroy, Directorate at the Novovoronezh NPP, Trading Company Metallist JSC);
- at the construction site of power units No. 3, No. 4 of Rostov NPP – 2 (SMU-1 LLC, MSU-3, Energospetsmontazh JSC in Volgodonsk).
- 3. Inspection by Emercom of Russia 2 (NIKIMT JSC Atomstroy, MSU-58 Energospetsmontazh JSC, Glazov).
- 4. Inspection by FMBA of Russia 2 (Volgodonsk branch of NIAEP JSC, MSU-58 Energospetsmontazh JSC, Sarov).
- 5. Inspection by the Committee for Natural Resources, Environmental Protection and Ecological Safety of St Petersburg 1 (Saint-Petersburg Research and Design Institute Energoizyskaniya JSC).
- 6. Inspection by the State Inspectorate of Construction Supervision in Kursk region 1 (Kursk Branch of NIAEP JSC, Kurchatov).

- 7. Inspections by non-governmental control bodies SRO NP SOYUZATOMSTROY 2 (Volgodonsk branch of NIAEP JSC, Kursk branch NIAEP JSC).
- 8. Inspections by General Inspectorate of Rosatom State Corporation 3 (construction sites for power units No. 6, No. 7 Novovoronezh NPP; No. 3, No. 4 Rostov NPP; No. 1, No. 2 Kursk NPP-2).
- 9. Internal audits by Control panels of NIAEP JSC of NPP construction sites and entities within the governance scope of NIAEP JSC- 9 (WF NIAEP JSC, KF NIAEP JSC, VdMU branch LLC of ASE JSC in Ozersk, branch of NIKIMT-Atomstroy JSC in Ozersk, the NF-DS Atomenergoproekt JSC, Novovoronezh, branches of Energospetsmontazh JSC in Novovoronezh: VSL, FES, MSU-4, UMiAT; KPIF of Atomenergoproekt JSC in Kurchatov, St Petersburg Research and Design Institute Energoizyskaniya JSC, Siberian Design and Research Institute Orgstroyproekt JSC in Angarsk).

# **Safety Standards**

For the purposes of the environmental parts of the design documents the following main regulations are used:

- 10. Federal Law of the RF No. 7-FZ On Protection of Environment, 2002:
- 11. Environmental Doctrine of the Russian Federation No. 1225-p, 2002;
- Basics of environmental policy of Ministry of Nuclear Energy of Russia; Order No. 67 dated February 19, 2003);
- 13. Regulation on assessment of planned economic and other activity impact on the environment of the Russian Federation. Approved by the Order of the State Committee of the RF on Environment Protection No. 372 dated May 16, 2000. Registered with the Ministry of Justice on July 04, 2000 with registration No. 2302;
- 14. Sanitary rules for design and operation of nuclear power plants (SPAS-03) SanPiN 2.6.1.24-03:

- 15. Radiation Safety Standards (NRB-99/2009). SanPiN 2.6.1. 2523-09. M.: 2009;
- 16. Basic Sanitary Rules of Radiation Safety Provision (OSPORB 99/2010) SanPiN 2.6.1. 2612-10. M.: 2010;
- 17. Guidelines for the calculation of allowable discharges by NPP of radioactive nuclear substances in surface water. MUK 2.6.1.29-2000. M., 2000;
- 18. Basic principles for evaluating the effects of ionizing radiation on living organisms, except man. ICRP Publication 91, M., 76 p.
- 19. The methodology for calculating emissions of pollutants into the atmosphere from stationary diesel plants: SPb.: Integral, 2001, Approved by the Ministry of Natural Resources of the Russian Federation on February 14, 2001;
- 20. The list of air pollutants codes and substances: SPb., Integral, 2008;
- 21. Maximum permissible concentration (MPC) of harmful substances in the working area atmosphere: Hygienic standards. GN 2.2.5.131-03.-M: Russian Register of Potentially Hazardous Chemical and Biological Substances, Ministry of Health of Russia, 2003-268;
- 22. Approach to estimate emissions of pollutants into atmosphere from combustion of fuel in boilers with capacity less than 30 tons of steam per hour, or less than 20 Gcal per hour, Moscow, 1999; Approved by the State Committee of the RF on Environment Protection dated July 9, 1999.
- 23. Building regulations of the Russian Federation, Protection against noise (SNIP 23-03-2003), put into effect by the decision No. 136 of the Russian State Construction Committee dated June 30, 2003;
- 24. Sanitary norms, Noise in the workplace, in residential and in public buildings and in residential areas (SN 2.2.4 / 2.1.8-562-96) approved and put into effect by Resolution No. 36 of the State Committee of the Russian Federation dated October 31, 1996;





- 25. Atmospheric dispersion at nuclear power plant siting. Safety Series No. 50-SG-53. IAEA, Vienna, 1982, 105 p.
- 26. Guidelines for determining permissible emissions of radioactive substances into the atmosphere (DV-98). Volume 2, M., 1999, 303 p.
- 27. Legal and technical document 38.220.56-84. Volume 1. Safety in the nuclear industry. Part 1. General NPP safety provisions. Approaches
- to calculating the spread of radioactive substances from NPPs and exposure of the neighboring population. The international economic association INTERATOMENERGO. Moscow, Energoatomizdat, 1984, 52 p.
- 28. Hygienic requirements for surface water protection. Sanitary rules and norms San-PiN 2.1.5.980-00. M., Russian Federation Ministry of Health, 2002.
- to calculating the spread of radioactive substances from NPPs and exposure of the State Committee for Nature Protection, 1991.
  - 30. Guidelines on Approaches to calculation of the maximum allowable thermal discharges into the cooling pond of NPPs RD 52.26-161-88.

# Annex 11. Estimated Waste Generation at NPP Construction

Table 64. Estimated Waste Generation at NPP Construction

		Construction Waste	
Item	Volume, m <sup>3</sup>	Hazard Class acc. to Federal Classificatory Catalog of Wastes	Code
Scrap brick	230.18	5	81220101205
Waste of concrete and mortar:	35,349.50	5	82220101215
Gypsum plasterboard	11.58	4	82411001204
Insulation of lightweight aggregate concrete slabs, m <sup>3</sup>	67.77	5	82220101215
Wood and construction timber waste:			
- board lumber		4	30531101424
- parquet work	1.20	5	30531102395
- flake board	1.51	4	30531312434
- construction veneer		4	30531201294
Asphalt concrete and asphalt mix waste:			
asphalt mix	751.10	4	83020001714
Chemical wastes:			
Rolled roofing and waterproofing materials (tar paper, ruberoid, etc.).	477.52	4	82621001514
Polymer pipes	237.12	4	82621001514
Acid proof tiles	0.44	5	82320101215
Polyethylene film	2.18	4	45711901204
Linoleum	4.74	4	82710001514
Paintwork materials wastes (containers)	23.24	4	43811102514

	Construction Waste		
ltem	Volume, m³	Hazard Class acc. to Federal Classificatory Catalog of Wastes	Code
Clay based wastes:			
Porcelain gres	2.49	5	82320101215
Ceramic tiles	6.30	5	82320101215
Asbestos waste:			
Pipes, t	2.63	4	45551001514
Asbestos sheets	3.01	4	45551002514
Glass wastes and similar wastes;			
Glass	1.94	5	45110100205
Heat insulation quill	1,093.50	4	45711901204
Dismantling and removal of structures			
Brickbats	140.00	5	82310101215
Vaste of prefabricated reinforced concrete	389.00	5	82230101215
Rolled materials	61.65	4	82621001514
Rock blanket	30,500.00	5	83010001715
Cast-in-place concrete waste	552.80	5	82220101215
Dismantling of concrete pavement	2,766.00	5	82220101215
Disassembly of cladding tiles	120.00	5	82320101215
Construction waste dismantling	24.50	4	81290101724
Dismantling of crush outline	7,640.00	5	83010001715
Dismantling of temporary roads:			
Vaste of prefabricated reinforced concrete	66,270.00	5	82230101215
Dismantling of cement-concrete pavement	15,600.00	5	82220101215
Asphalt mix	70.00	4	83020001714
Fotal:	162,668.90	_	_
Solid household waste			
Solid household waste	3,440	5	73610001305
Total:	166,109.15	_	_







# Annex 12. Environment Protection Expenses

Table 65. Environment Protection Expenses and Environmental Charges of NIAEP JSC (head office, Nizhny Novgorod), thousand RUB

Purpose	2013	2014	2015
Total costs, including:	678.892	903.0	4106.377
- water resources protection	119.714	212.0	295.308
- atmospheric air protection	_	0.0	2,915.263
- waste transfer	559.178	691.0	895.806
Pollution charge	1,603.562	257.522	264.828
Total:	2,282.454	1,160.522	4,371.205

Expense increase was caused by repair of heat supply equipment (boilers) at recreation camp Lesnoy Uyut.

Table 66. Environment Protection Expenses and Environmental Charges of Volgodonsk branch of NIAEP JSC, thousand RUB

Purpose	2013	2014	2015
Total costs, including:	407	444	463
- water resources protection	_	_	_
- atmospheric air protection	_	_	_
- waste transfer	407	444	463
Pollution charge	1,279	662	579
Total:	1,686	1,106	1,042

Environmental charges decrease by 5.8% was associated with pollution charge decrease.

Table 67. Environment Protection Expenses and Environmental Charges Baltic branch, thousand RUB

Purpose	2013	2014	2015
Total costs, including:	1,852	1,981	1,629
- water resources protection	_	_	271
- atmospheric air protection	_	_	
- waste transfer	1,852	1,981	1,358
Pollution charge	246	255	151
Total:	2,098	2,236	1,780

Reduction of expenses was associated with decrease of pollution charge and contractor's fee for waste transfer.



Table 68. Environment Protection Expenses and Environmental Charges of Kursk branch of NIAEP JSC, thousand RUB

Purpose	2013	2014	2015
Total costs, including:	-	27.9	241.0
- water resources protection	_	_	_
- atmospheric air protection	_	_	_
- waste transfer	_	27.9	241.0
Pollution charge	_	27.9	241.0
Total:	_	27.9	241.0

Since 2014 the costs are recognized upon their occurrence;

Expenses increase in 2015 was associated with pollution charge growth.

Table 69. Environment Protection Expenses and Environmental Charges of Belarusian Representative Office of NIAEP JSC, thousand RUB

Purpose	2014	2015
Total costs, including:	_	29,295.912
- water resources protection	_	_
- atmospheric air protection	_	_
- waste transfer	_	29,295.912
Pollution charge	_	1,209.280
Total:	_	30,505.192

Since 2015 the costs are recognized upon their occurrence.

Table 70. Environment Protection Expenses and Environmental Charges of ASE JSC (head office, Moscow), thousand RUB

Purpose	2013	2014	2015
Total costs, including:	1,366.44	1,547.5	2,540.003
- water resources protection	490.94	656.5	1,465.1
- atmospheric air protection	_	_	39.839
- waste transfer	874.5	891	1,035.064
Pollution charge	_	_	184
Total:	1,366.44	1,547.5	2,724.003

Expense increase in 2015 was associated with recognition of pollution charge.

In 2015, the WGDLB project and waste profiles were developed, and Resolution on waste handling procedures was obtained.



# Annex 13. Energy Consumption

# Table 71. Energy Resources Consumption of Kursk branch of NIAEP JSC in 2014, in Monetary Terms, mln

Energy resources consumed	2014	2015
Electrical energy	_	0.518
Heat/water	_	0.001
Gasoline	0.801	1.175
Diesel	1.953	2.136

# Table 72. Energy Resources Consumption by ASE JSC (head office, Moscow) in Monetary Terms, mln RUB

Energy resources consumed	2013	2014	2015
Electrical energy	13.84	14.23	16.4
Heat/water	9.81	10.99	11.7
Gasoline	3.338	3.521	4.419
Diesel	0.136	0.131	0.158

# Table 73. Energy Resources Consumption of Belarusian Representative Office of NIAEP JSC in Monetary Terms, mln BYR (Belarusian Rubles)

Energy resources consumed		2014	2015
Electrical energy	NIAEP JSC	502,795,577	297,637,687
	ASE JSC	940,876,338	1,874,079,150
Heat/water	NIAEP JSC	421,395,501	495,512,965
	ASE JSC	259,280,537	1,044,300,446

# Table 74. Energy Consumption by NIAEP JSC and Its Branches, kW\*h

Consumer	Comment	2013	2014	2015
NIAEP JSC (head office, Nizhny Novgorod)	Data were provided for all divisions of the head office, including recreation camp Lesnoy Uyut.	2,833,093	3,270,000	4,086,231
Volgodonsk branch	Reduction in energy consumption was associated with decline of construction and mounting works following completion of power unit No. 3 of Rostov NPP construction.	22,860,163	24,198,799	17,974,421
Baltic branch	Energy consumption grew following the commissioning of storage facilities of the Customer and the General Contractor equipped with lighting and heating.	4,385,607	1,932,168	2,665,220
Kursk branch	In 2013-2014, no internal consumption of power resources was reported by Kursk branch.	_	_	155,693
Belarusian representative office (NIAEP JSC/ASE JSC)		128,051.05 / _	285,685.73 / 480,621.47	325,799.48 / 743,345.01

# Table 75. Energy Consumption in ASE JSC, kW\*h

Consumer	2013	2014	2015
ASE JSC (head office, Moscow)	3,671,310.0	3,669,243.0	3,752,676.0

# Table 76 Heat/Water Consumption, Gcal

Consumer	2013	2014	2015
NIAEP JSC (head office, Nizhny Novgorod)	3,466	3,648.6	5,040
Volgodonsk branch	41,425.5	37,631.8	35,348.2
Baltic branch	216.03	0.0 36	0.0 36
Analytical comment to the data provided:			Heating by electric boilers
Kursk branch	_	_	2,354.497
Belarusian representative office (NIAEP JSC/ASE JSC)	- / 4.51	242.541 / 490.231	530.726 / 1,085.331

# **Details on Power Resources Used by Atomenergoproekt JSC**

# Table 77. NIKIMT-Atomstroy JSC, mln RUB

Energy resources consumed	2013	2014	2015
Electrical energy	10.487	10.480	10.285
Heat energy (hot water)	0.154	0.098	2.32
Heat energy (heating)	2.739	2.294	3.78
Water (cold)	1.843	1.473	36.49
Natural gas	4.780	4.499	4.424

# Consumption of NVNPP-2:

- energy consumption of construction site of NVNPP-2 in NF-DS 21.53 Gcal/h;
- energy consumption of buildings in NF-DS 21.53 Gcal/h;
- energy consumed for heating.

# Table 78. Electricity Consumption kW\*h

Consumer	2013	2014	2015
NF-DS	2,552,027	3,609,973	3,450,142

# Table 79. Heat/Water Consumption, m<sup>3</sup>

Consumer	2013	2014	2015
NF-DS, heat Gcal	10,519	9,783	11,458
NF-DS, water m <sup>3</sup>	44,307	46,037	49,240







# Table 80. Gasoline Consumption, t

Consumer	2013	2014	2015
Not consumed	_	_	_

# Table 81. Diesel Fuel Consumption, t

Consumer	2013	2014	2015
NF-DS	91.28	90.07	92.28

# Table 82. Energy Resources Consumption in Monetary Terms, mln RUB

Энергоресурс	2014	2015
Electrical energy	17.32	16.03
Heat/water	2.12	2.5
Gasoline	0	0
Diesel	2.26	2.32

# Annex 14. Staff Training

# Table 83. Number of Employees Trained

	2013	2014	2015
NIAEP JSC	1,729	1,323	1,423
ASE JSC	119	210	120
Atomenergoproekt JSC	1,380	1,702	1,114
Trest RosSEM LLC	_	102 <sup>34</sup>	423
NIKIMT-Atomstroy JSC	518	648	1,190
Energospetsmontazh JSC	692	593	2,174
Total	4,438	4,578	6,444

**<sup>34</sup>** Trest RosSEM LLC was included in ASE Group framework in Q3 2014, data for 2014 is limited to Q3 and Q4.



Figure 51. Training Expenditures per Employee, RUB

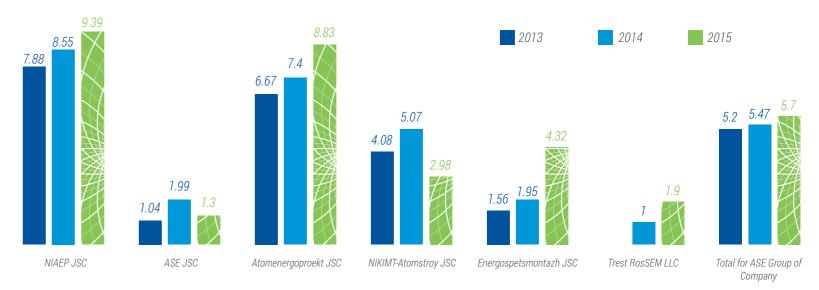


Table 84. Staff Training Expenditures, thousand RUB (10.1.2.3)

Training Expenditures	2013	2014	2015
NIAEP JSC	26,500	28,115	34,159
Share of training expenditures from total staff costs, %	0.58	0.69	0.69
ASE JSC	732	1,919	1,040
Share of training expenditures from total staff costs, %	0.09	0.21	0.11
Atomenergoproekt JSC	25,396	30,142	26,019
Share of training expenditures from total staff costs, %	0.61	0.62	0.62
Trest RosSEM LLC 35	_	1,109	4,163
Share of training expenditures from total staff costs, %	_	0.38	0.35
NIKIMT-Atomstroy JSC	6,719	9,766	7,338
Share of training expenditures from total staff costs, %	0.65	0.77	0.45
Energospetsmontazh JSC	3,515	4,991	12,621
Share of training expenditures from total staff costs, %	0.39	0.44	0.92
Total for ASE Group	62,862	76,042	85,340
Share of training expenditures from total staff costs, %	0.55	0.61	0.60

**<sup>35</sup>** Trest RosSEM LLC was included in ASE Group framework in Q3 2014, data for 2014 is limited to Q3 and Q4.



*Table 85. Average Number of Training Hours per Employee* 

Categories		Managers	Specialists and office staff	Workers
	2013			
NIAEP JSC		22.9	18.2	6.8
ASE JSC		9.2	7.0	0
Atomenergoproekt JSC		45.4	13.9	7.3
NIKIMT-Atomstroy JSC		21.5	11.6	6.9
Energospetsmontazh JSC		8.0	9.91	11.2
Trest RosSEM LLC		was n	ot included in the framewo	rk of ASE Group
Total for ASE Group		25.8	14.7	8.5
	2014			
NIAEP JSC		34.9	22.7	8.0
ASE JSC		11.1	3.4	10.2
Atomenergoproekt JSC		57.8	18.0	13.4
NIKIMT-Atomstroy JSC		51.3	8.3	30.1
Energospetsmontazh JSC		12.0	4.5	14.4
Trest RosSEM LLC 36		21.6	3.8	5.4
Total for ASE Group		36.9	16.8	14.6
	2015			
NIAEP JSC		35.3	15.2	11.2
ASE JSC		5.4	2.7	5.8
Atomenergoproekt JSC		39.2	16.8	14.7
NIKIMT-Atomstroy JSC		54.7	9.0	18.9
Energospetsmontazh JSC		50.8	9.3	67.3
Trest RosSEM LLC		22.3	3.0	6.2
Total for ASE Group		36.8	13.8	31.2

**<sup>36</sup>** Trest RosSEM LLC was included in ASE Group framework in Q3 2014, data for 2014 is limited to Q3 and Q4.







# Annex 15. Staff Description

Table 86. Total Headcount 37, persons

		Total Headcount								
Company	Categories of employees	U	Jnder 30		30-50				Over 50	
		m	f	total	m	f	total	m	f	total
NIAEP JSC	Managers	29	13	42	335	143	478	214	100	314
	Specialists	433	464	897	639	818	1,457	199	282	481
	Managers	0	13	13	1	22	23	1	14	15
	Workers	25	14	39	130	40	170	97	30	127
	Total	487	504	991	1,105	1,023	2,128	511	426	937
Atomenergoproekt JSC	Managers	9	5	14	114	61	175	94	43	137
	Specialists	268	248	516	453	518	971	237	451	688
	Managers	5	8	13	2	15	17	3	11	14
	Workers	20	4	24	107	32	139	85	26	111
	Total	302	265	567	676	626	1302	419	531	950
ASE JSC	Managers	5	3	8	63	31	94	119	8	127
	Specialists	17	24	41	55	90	145	58	52	110
	Managers	0	2	2	2	1	3	0	0	0
	Workers	29	10	39	86	11	97	73	10	83
	Total	51	39	90	206	133	339	250	70	320
TrestRosSEM LLC	Managers	20	2	22	34	2	37	17	2	19
	Specialists	57	5	63	97	7	104	47	7	54
	Managers			0			0			0
	Workers	493	46	538	839	56	895	409	60	468
	Total	570	53	623	971	65	1,036	473	69	542

**37** Headcount as of December 31, 2015



					Tota	al Headcour	nt			
Company	Categories of employees		Under 30			30-50			Over 50	
		m	f	total	m	f	total	m	f	total
NIKIMT-Atomstroy JSC	Managers	34	19	53	73	43	116	61	23	84
	Specialists	112	106	218	97	188	285	82	86	168
	Managers	1	11	12	1	7	8	0	8	8
	Workers	201	9	210	479	44	523	243	48	291
	Total	348	145	493	650	282	932	386	165	551
Energospetsmontazh JSC	Managers	49	5	54	124	54	178	68	26	94
	Specialists	28	45	73	32	64	96	11	30	41
	Managers	0	2	2	1	7	8	1	1	2
	Workers	521	46	567	925	85	1,010	531	70	601
	Total	598	98	696	1,082	210	1,292	611	127	738
Total for ASE Group of	Managers	146	47	193	743	334	1,078	573	202	775
Companies	Specialists	915	892	1,808	1,373	1,685	3,058	634	908	1,542
	Managers	6	36	42	7	52	59	5	34	39
	Workers	1,289	129	1,417	2,566	268	2,834	1,438	244	1,681
	Total	2,356	1,104	3,460	4,690	2,339	7,029	2,650	1,388	4,038

Table 87. Share of Newly Recruited Staff in the Reporting Period

			Share of newly recruited staff in the reporting period								
Company	Age group	2013				2014		2015			
		m	f	total	m	f	total	m	f	total	
NIAEP JSC	Total	517	407	924	194	199	393	540	444	984	
	Under 30	234	196	430	79	96	175	211	181	392	
	31 – 50	182	157	339	86	83	169	253	216	469	
	Over 50	101	54	155	29	20	49	76	47	123	

			Share of newly recruited staff in the reporting period							
Company	Age group		2013			2014			2015	
		m	f	total	m	f	total	m	f	total
Atomenergoproekt JSC	Total	1,046	215	1,261	382	206	588	86	69	155
	Under 30	425	93	518	169	95	264	29	38	67
	31 – 50	486	99	585	142	92	234	39	22	61
	Over 50	135	23	158	71	19	90	18	9	27
ASE JSC	Total	335	178	513	134	55	189	94	42	136
	Under 30	50	42	92	18	6	24	12	4	16
	31 – 50	149	70	219	68	31	99	42	31	73
	Over 50	136	66	202	48	18	66	40	7	47
TrestRosSEM LLC	Total	899	53	952	1,179	98	1,277	1,131	85	1,216
	Under 30	346	22	368	414	36	450	411	34	445
	31 - 50	434	19	453	562	46	608	526	31	557
	Over 50	119	12	131	203	16	219	194	20	214
NIKIMT-Atomstroy JSC	Total	580	139	719	705	154	859	1,684	165	1,849
	Under 30	138	34	172	182	48	230	532	64	596
	31 – 50	274	53	327	364	80	444	846	62	908
	Over 50	168	52	220	159	26	185	306	39	345
Energospetsmontazh JSC	Total	850	177	1,027	2,170	253	2,423	1,860	186	2,046
	Under 30		36	36	815	109	924	662	77	739
	31 – 50	592	74	666	1057	87	1144	836	81	917
		258	67	325	298	57	355	362	28	390
Total for ASE Group of Companies	Total	4,227	1,169	5,396	4,764	965	5,729	5,395	991	6,386
Companies	Under 30	1,193	423	1,616	1,677	390	2,067	1,857	398	2,255
	31 - 50	2,117	472	2,589	2,279	419	2,698	2,542	443	2,985
	Over 50	917	274	1,191	808	156	964	996	150	1,146





Table 88. Share of Newly Recruited Staff in the Reporting Period

			S	hare of ne	wly recruit	ed staff in	the reporti	ng period		
Company	Age group		2013			2014			2015	
		m	f	total	m	f	total	m	f	total
NIAEP JSC	Total	29.6	25.2	27.5	11.5	12.4	12.0	28.6	25.4	27.1
	Under 30	47.3	40.9	44.1	19.5	22.2	20.9	48.3	40.0	44.1
	31 – 50	23.0	20.4	21.7	10.3	10.3	10.3	25.5	23.6	24.6
	Over 50	22.0	14.6	18.7	6.5	5.5	6.1	16.6	12.3	14.6
Atomenergoproekt JSC	Total	57.6	17.8	41.7	15.4	13.0	14.5	5.5	5.0	5.3
	Under 30	80.4	47.2	71.4	25.9	32.3	27.9	8.7	16.9	12.0
	31 – 50	60.1	19.9	44.8	12.2	13.3	12.6	5.2	3.7	4.5
	Over 50	28.2	4.5	15.9	10.6	3.2	7.1	3.7	1.6	2.6
ASE JSC	Total	74.2	72.7	73.7	20.6	17.8	19.7	17.1	16.9	17.1
	Under 30	123.8	87.1	103.9	26.8	10.8	19.5	25.6	13.5	20.9
	31 – 50	86.8	57.8	74.8	24.9	21.1	23.6	18.4	24.0	20.4
	Over 50	56.8	87.4	64.1	15.4	17.0	15.8	14.7	7.8	13.0
TrestRosSEM LLC	Total	47.2	26.0	45.1	59.3	50.3	58.5	56.4	46.2	55.6
	Under 30	52.7	44.9	52.1	73.7	69.2	73.3	72.1	64.2	71.4
	31 – 50	51.5	20.4	48.4	62.9	60.5	62.7	54.7	50.0	54.4
	Over 50	29.3	19.4	28.0	38.2	23.9	36.6	41.0	29.0	39.5
NIKIMT-Atomstroy JSC	Total	56.7	22.5	43.8	57.9	23.2	45.6	93.9	26.8	76.8
	Under 30	66.0	27.9	52.0	61.3	35.8	53.4	126.1	52.0	109.4
	31 – 50	58.4	21.5	45.7	68.3	30.4	55.8	102.4	24.4	84.1
	Over 50	48.7	20.9	37.0	41.0	9.7	28.2	56.1	16.3	44.0
Energospetsmontazh JSC	Total	43.6	44.1	43.7	100.1	62.5	94.2	75.3	45.9	71.2
	Under 30	0.0	46.2	6.1	135.4	114.7	132.6	96.9	81.9	95.1
	31 – 50	62.0	36.6	57.6	131,0	54.7	118.7	48.6	29.7	46.0
	Over 50	53.5	55.4	53.9	39.2	37.7	38.9	540.3	73.7	371.4
Total for ASE Group of	Total	47.5	27.2	40.9	46.7	20.3	38.3	52.5	21.6	43.0
Companies	Under 30	48.8	43.5	47.3	64.9	36.7	56.6	74.5	40.8	65.0
	31 – 50	52.4	24.5	43.4	50.6	19.6	40.6	46.4	19.9	38.7
	Over 50	38.0	19.7	31.3	26.0	10.0	20.7	43.4	10.9	31.2

Table 89 Headcount Turnover Rate, %

Company         Age-groups         2013         void         f         fotal         f         total         total         m         f         total         m         f         total         total         f         total         total         total         total         f         total         total         f         total         f         total         100 </th <th></th> <th></th> <th colspan="4">Headcou</th> <th colspan="5">eadcount turnover rate</th>			Headcou				eadcount turnover rate				
NAEPJSC	Company	Age groups		2013			2014			2015	
			m	f	total	m	f	total	m	f	total
Number	NIAEP JSC	Total	25.1	23.3	24.2	18.0	19.0	18.5	19.4	15.6	17.6
Mathematic		Under 30	24.2	21.9	23.1	25.2	23.8	24.5	22.0	17.5	19.7
Momenergoproekt JSC   Total   38.1   6.1   25.3   30.6   16.2   25.0   67.2   38.8   63.9		31 – 50	24.4	20.3	22.4	12.5	13.6	13.0	17.3	12.8	15.1
Inder 30   49.8   2.0   36.8   40.0   12.9   31.6   76.7   54.4   67.7     31-50   41.0   4.6   27.1   27.1   7.3   19.7   67.4   36.2   53.7     Over 50   20.4   9.1   14.6   27.7   28.1   27.9   60.1   35.4   40.8     ASE JSC   Total   17.5   26.6   20.7   33.1   41.2   35.7   31.3   36.7   30.0     Over 50   17.5   20.7   18.8   32.7   56.6   35.9   47.2   40.6   30.4   36.5     Over 50   16.7   26.5   19.0   28.5   39.7   31.3   24.9   44.8   29.8     TestRosSEMILC   Total   43.8   16.2   41.2   31.6   30.3   31.5   43.2   42.9   43.2     Over 50   29.1   97   26.5   19.0   28.5   39.7   31.3   36.7   37.1   32.5   35.5     Over 50   29.1   11.8   39.8   32.0   27.6   31.6   38.5   40.3   38.5     Over 50   29.1   97   26.5   19.4   20.9   19.6   40.8   34.8   40.0     Over 50   29.1   97   26.5   19.4   20.9   19.6   40.8   34.8   40.0     Over 50   29.1   97   26.5   19.4   20.9   19.6   40.8   34.8   40.0     Over 50   29.1   97   26.5   19.4   20.9   19.6   40.8   34.8   40.0     Over 50   24.1   11.2   18.7   48.2   22.1   37.6   44.4   40.6   43.2     Energospetsmontazh JSC   Total   62.2   42.1   58.8   82.2   55.1   78.0   73.0   39.8   68.9     Over 50   24.1   11.2   18.7   48.2   22.1   37.6   44.4   40.6   43.2     Energospetsmontazh JSC   Total   62.2   42.1   58.8   82.2   55.1   78.0   73.0   39.8   68.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   40.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   40.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   40.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   40.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   30.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   30.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   76.3   30.9     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   52.3   50.6   40.9     Over 50   61.2   57.0   60.4   38.9   50.7   48.8   79.9   41.9   62.8     Over 50   61.2   57.		Over 50	27.2	31.2	29.0	21.8	25.2	23.4	21.6	20.4	21.1
NIKIMIT-Atomstroy JSC   Total   14.0   4.6   27.1   27.1   7.3   19.7   67.4   36.2   53.7   10.0	Atomenergoproekt JSC	Total	38.1	6.1	25.3	30.6	16.2	25.0	67.2	38.8	53.9
Number   N		Under 30	49.8	2.0	36.8	40.0	12.9	31.6	76.7	54.4	67.7
Total   17.5   26.6   20.7   33.1   41.2   35.7   31.3   36.7   33.0		31 – 50	41.0	4.6	27.1	27.1	7.3	19.7	67.4	36.2	53.7
Under 30   22.3   41.5   32.7   56.6   35.9   47.2   40.6   30.4   36.5     31 - 50   17.5   20.7   18.8   32.7   44.3   36.7   37.1   32.5   35.5     Over 50   16.7   26.5   19.0   28.5   39.7   31.3   24.9   44.8   29.8     TrestRosSEM LLC		Over 50	20.4	9.1	14.6	27.7	28.1	27.9	60.1	35.4	46.8
NIKIMT-Atomstroy JSC   Total   2.0.7   18.8   32.7   44.3   36.7   37.1   32.5   35.5	ASE JSC	Total	17.5	26.6	20.7	33.1	41.2	35.7	31.3	36.7	33.0
TrestRosSEM LLC   Total   43.8   16.2   41.2   31.6   30.3   31.5   43.2   42.9   43.2		Under 30	22.3	41.5	32.7	56.6	35.9	47.2	40.6	30.4	36.6
TrestRosSEM LLC         Total         43.8         16.2         41.2         31.6         30.3         31.5         43.2         42.9         43.2           Under 30         54.2         32.7         52.7         42.5         46.2         42.8         53.2         56.6         53.5           31 − 50         42.9         11.8         39.8         32.0         27.6         31.6         38.5         40.3         38.6           Over 50         29.1         9.7         26.5         19.4         20.9         19.6         40.8         34.8         40.0           NIKIMT-Atomstroy JSC         Total         23.4         15.9         20.5         58.4         30.3         48.5         77.4         49.5         70.3           Under 30         22.0         19.7         21.1         65.7         43.3         58.7         107.1         87.0         102.6           31 − 50         23.5         18.7         21.8         61.7         31.9         51.9         84.0         39.8         73.6           Energospetsmontazh JSC         Total         62.2         42.1         58.8         82.2         55.1         78.0         73.0         39.8         68.9		31 – 50	17.5	20.7	18.8	32.7	44.3	36.7	37.1	32.5	35.5
Under 30   54.2   32.7   52.7   42.5   46.2   42.8   53.2   56.6   53.5     31 - 50   42.9   11.8   39.8   32.0   27.6   31.6   38.5   40.3   38.6     Over 50   29.1   9.7   26.5   19.4   20.9   19.6   40.8   34.8   40.0     NIKIMT-Atomstroy JSC   Total   23.4   15.9   20.5   58.4   30.3   48.5   77.4   49.5   70.3     Under 30   22.0   19.7   21.1   65.7   43.3   58.7   107.1   87.0   102.6     31 - 50   23.5   18.7   21.8   61.7   31.9   51.9   84.0   39.8   73.6     Over 50   24.1   11.2   18.7   48.2   22.1   37.6   44.4   40.6   43.2     Energospetsmontazh JSC   Total   62.2   42.1   58.8   82.2   55.1   78.0   73.0   39.8   68.9     Under 30   68.1   39.7   64.4   104.8   76.8   101.0   94.0   66.0   90.6     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   523.9   76.3   361.9     Total for ASE Group of Companies   Total   39.3   19.0   32.7   43.2   24.6   37.3   55.2   31.6   47.9     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     Under 30   46.8   20.6   39.8   63.7   63.8   63.8     Under 30   46.8		Over 50	16.7	26.5	19.0	28.5	39.7	31.3	24.9	44.8	29.8
NIKIMT-Atomstroy JSC   Total   23.4   15.9   20.5   58.4   30.3   48.5   77.4   49.5   70.3	TrestRosSEM LLC	Total	43.8	16.2	41.2	31.6	30.3	31.5	43.2	42.9	43.2
NIKIMT-Atomstroy JSC		Under 30	54.2	32.7	52.7	42.5	46.2	42.8	53.2	56.6	53.5
NIKIMT-Atomstroy JSC		31 – 50	42.9	11.8	39.8	32.0	27.6	31.6	38.5	40.3	38.6
Under 30 22.0 19.7 21.1 65.7 43.3 58.7 107.1 87.0 102.6 31 - 50 23.5 18.7 21.8 61.7 31.9 51.9 84.0 39.8 73.6 Over 50 24.1 11.2 18.7 48.2 22.1 37.6 44.4 40.6 43.2 Energospetsmontazh JSC Total 62.2 42.1 58.8 82.2 55.1 78.0 73.0 39.8 68.9 Under 30 68.1 39.7 64.4 104.8 76.8 101.0 94.0 66.0 90.6 31 - 50 59.5 34.2 55.1 106.3 52.8 97.5 48.1 25.6 45.0 Over 50 61.2 57.0 60.4 38.9 43.7 39.7 523.9 76.3 361.9 Total for ASE Group of Companies Under 30 46.8 20.6 39.3 56.7 29.7 48.8 70.9 41.9 62.8 31 - 50 39.5 17.1 32.2 43.9 19.3 36.0 48.4 25.6 41.8		Over 50	29.1	9.7	26.5	19.4	20.9	19.6	40.8	34.8	40.0
31 - 50   23.5   18.7   21.8   61.7   31.9   51.9   84.0   39.8   73.6     Over 50   24.1   11.2   18.7   48.2   22.1   37.6   44.4   40.6   43.2     Energospetsmontazh JSC   Total   62.2   42.1   58.8   82.2   55.1   78.0   73.0   39.8   68.9     Under 30   68.1   39.7   64.4   104.8   76.8   101.0   94.0   66.0   90.6     31 - 50   59.5   34.2   55.1   106.3   52.8   97.5   48.1   25.6   45.0     Over 50   61.2   57.0   60.4   38.9   43.7   39.7   523.9   76.3   361.9      Total for ASE Group of Companies   Total   39.3   19.0   32.7   43.2   24.6   37.3   55.2   31.6   47.9     Under 30   46.8   20.6   39.3   56.7   29.7   48.8   70.9   41.9   62.8     31 - 50   39.5   17.1   32.2   43.9   19.3   36.0   48.4   25.6   41.8	NIKIMT-Atomstroy JSC	Total	23.4	15.9	20.5	58.4	30.3	48.5	77.4	49.5	70.3
Over 50         24.1         11.2         18.7         48.2         22.1         37.6         44.4         40.6         43.2           Energospetsmontazh JSC         Total         62.2         42.1         58.8         82.2         55.1         78.0         73,0         39.8         68.9           Under 30         68.1         39.7         64.4         104.8         76.8         101.0         94.0         66.0         90.6           31 - 50         59.5         34.2         55.1         106.3         52.8         97.5         48.1         25.6         45.0           Over 50         61.2         57.0         60.4         38.9         43.7         39.7         523.9         76.3         361.9           Total for ASE Group of Companies           Under 30         46.8         20.6         39.3         56.7         29.7         48.8         70.9         41.9         62.8           31 - 50         39.5         17.1         32.2         43.9         19.3         36.0         48.4         25.6         41.8		Under 30	22.0	19.7	21.1	65.7	43.3	58.7	107.1	87.0	102.6
Energospetsmontazh JSC         Total         62.2         42.1         58.8         82.2         55.1         78.0         73,0         39.8         68.9           Under 30         68.1         39.7         64.4         104.8         76.8         101.0         94.0         66.0         90.6           31 - 50         59.5         34.2         55.1         106.3         52.8         97.5         48.1         25.6         45.0           Over 50         61.2         57.0         60.4         38.9         43.7         39.7         523.9         76.3         361.9           Total for ASE Group of Companies         Total         39.3         19.0         32.7         43.2         24.6         37.3         55.2         31.6         47.9           Under 30         46.8         20.6         39.3         56.7         29.7         48.8         70.9         41.9         62.8           31 - 50         39.5         17.1         32.2         43.9         19.3         36.0         48.4         25.6         41.8		31 – 50	23.5	18.7	21.8	61.7	31.9	51.9	84.0	39.8	73.6
Under 30 68.1 39.7 64.4 104.8 76.8 101.0 94.0 66.0 90.6  31 - 50 59.5 34.2 55.1 106.3 52.8 97.5 48.1 25.6 45.0  Over 50 61.2 57.0 60.4 38.9 43.7 39.7 523.9 76.3 361.9  Total for ASE Group of Companies  Under 30 46.8 20.6 39.3 56.7 29.7 48.8 70.9 41.9 62.8  31 - 50 39.5 17.1 32.2 43.9 19.3 36.0 48.4 25.6 41.8		Over 50	24.1	11.2	18.7	48.2	22.1	37.6	44.4	40.6	43.2
31 - 50   59.5   34.2   55.1   106.3   52.8   97.5   48.1   25.6   45.0	Energospetsmontazh JSC	Total	62.2	42.1	58.8	82.2	55.1	78.0	73,0	39.8	68.9
Over 50         61.2         57.0         60.4         38.9         43.7         39.7         523.9         76.3         361.9           Total for ASE Group of Companies           Under 30         46.8         20.6         39.3         56.7         29.7         48.8         70.9         41.9         62.8           31 - 50         39.5         17.1         32.2         43.9         19.3         36.0         48.4         25.6         41.8		Under 30	68.1	39.7	64.4	104.8	76.8	101.0	94.0	66.0	90.6
Total for ASE Group of Companies         Total Onder 30         39.3         19.0         32.7         43.2         24.6         37.3         55.2         31.6         47.9           Under 30         46.8         20.6         39.3         56.7         29.7         48.8         70.9         41.9         62.8           31 - 50         39.5         17.1         32.2         43.9         19.3         36.0         48.4         25.6         41.8		31 – 50	59.5	34.2	55.1	106.3	52.8	97.5	48.1	25.6	45.0
Companies     Under 30     46.8     20.6     39.3     56.7     29.7     48.8     70.9     41.9     62.8       31 - 50     39.5     17.1     32.2     43.9     19.3     36.0     48.4     25.6     41.8		Over 50	61.2	57.0	60.4	38.9	43.7	39.7	523.9	76.3	361.9
Under 30 46.8 20.6 39.3 56.7 29.7 48.8 70.9 41.9 62.8 31 - 50 39.5 17.1 32.2 43.9 19.3 36.0 48.4 25.6 41.8		Total	39.3	19.0	32.7	43.2	24.6	37.3	55.2	31.6	47.9
	Companies	Under 30	46.8	20.6	39.3	56.7	29.7	48.8	70.9	41.9	62.8
Over 50 31.5 20.5 27.5 30.8 28.4 30.0 54.1 33.9 46.5		31 - 50	39.5	17.1	32.2	43.9	19.3	36.0	48.4	25.6	41.8
		Over 50	31.5	20.5	27.5	30.8	28.4	30.0	54.1	33.9	46.5





Table 90. Average Monthly Salary in ASE Group

				2015	
Company	Name of a branch/representative office	Region	Average salary, THOUS. RUB	Average salary on the labor market of the region, THOUS. RUB	Wage comparison
NIAEP JSC	Head Office	Nizhny Novgorod Region	132.1	26.1	5.1
	NIAEP JSC Representative Office in the Republic of Belarus	Republic of Belarus	54.4	30.8	1.8
	Volgodonsk branch	Rostov region	64.1	24.1	2.7
	Kursk branch	Kursk region	75.0	23.3	3.2
	Moscow branch	Moscow	132.0	62.2	2.1
Atomenergoproekt JSC	Moscow	Moscow	133.1	62.2	2.1
000	Maloyaroslavets research and development branch of Atomenergoproekt JSC (MIF)	Kaluga region	79.0	28.9	2.7
	Balakovo research and development branch of Atomenergoproekt JSC	Saratov region	102.0	22.2	4.6
	Volgograd research and development branch of Atomenergoproekt JSC (VPF)	Volgograd region	86.4	23.5	3.7
	Kurchatov research and development branch of Atomenergoproekt JSC (KPIF)	Kursk region	80.0	23.3	3.4
	Desnogorsk research and development branch of Atomenergoproekt JSC (DPIF)	Somlensk region	72.7	22.6	3.2
	Novovoronezh research and development branch of Atomenergoproekt JSC (NPIF)	Voronezh region	90.8	24.6	3.7
	NVNPP-2 construction administration — Novovoronezh branch of Atomenergoproekt JSC (NF-DS)	Voronezh region	95.9	24.6	3.9
	Hotel Don – Novovoronezh branch of Atomenergoproekt JSC (NF-Hotel)	Voronezh region	31.4	24.6	1.3
	Branch VNIPIET Atomenergoproekt JSC	St Petersburg	103.5	42.4	2.4
ASE JSC		Moscow	125.0	62.2	2.0
	ASE branch in Ozersk	Chelyabinsk region	59.3	29.3	2.0

Table 91. Ratio of Average Salary of 10% of the Employees with the Highest Salary Relative to Average Salary of 10% of the Employees with the Lowest Salary of ASE Group of companies

Company	2013	2014	2015
NIAEP JSC	11.13	9.33	9.27
Atomenergoproekt JSC	8.08	7.37	7.10
ASE JSC	23.58	19.83	15.53
TrestRosSEM LLC	5.35	4.32	3.16
NIKIMT-Atomstroy JSC	5.66	6.00	5.10
Energospetsmontazh PJSC	2.71	2.61	2.44
Total for ASE Group	8.50	7.55	7.04

Table 92. Relation of the Basic Salary of Male and Female Employees by Categories (in key regions of operation) 38

			Salary, m	nln RUB	Refere	nce
Company	Category	females	males	Ratio of base salary of male and female employees	number of male employees	number of female employees
NIAEP JSC	Managers	22,200	22,200	1.00	571	247
	Specialists	20,800	20,800	1.00	1,271	1,576
	Office staff	16,900	16,900	1.00	2	47
	Workers	9,000	12,800	1.42	229	84
Atomenergoproekt	Managers	50,200	50,200	1.00	1,426	1,412
JSC	Specialists	39,800	42,890	1.08	_	
	Office staff	23,600	25,300	1.07	_	
	Workers	18,900	23,671	1.25		
ASE JSC	Managers	22,200	27,100	1.22	89	32
	Specialists	20,800	20,800	1.00	52	117
	Office staff	20,800		0.00	0	2
	Workers	12,900	12,900	1.00	180	30

<sup>38</sup> The salary in ASE Group is established based on positions/profession in accordance with the applicable grades. Whereas, a grade is based on the characteristics of the position/profession, its value, place and role for the organization, i.e. salary depends on the employee's qualification, complexity of the work performed, its quantity, quality and conditions of work, and it is not gender-related.





G4-54, G4-55, G4-LA6

Table 93. Relation between the Highest and the Average Salary of Employees

Company	The ratio of the total annual remuneration of the most highly paid official of the organization in each country with significant economic activity to the average annual remuneration of all employees (excluding the most highly paid official) in the same country.	The percentage of the total annual remuneration growth of the most highly paid official in each country with significant economic activity to the degree of increase in the average annual remuneration of all employees (excluding the most highly paid official) in the same country.
NIAEP JSC	30.7	1.2
Atomenergoproekt JSC	8.1	0.9
ASE JSC	23.4	0.5

# Annex 16. Injury Rate

Table 94. Accidents Involving Employees of NIAEP JSC and Other Companies within Its Framework

Facility	Entity	Injury factor	Severity of injury							
Headquarters (Nizhny Novgorod)	NIAEP JSC	Falling (from stairs)								
Rostov NPP	Energospetsmontazh - MSU-4 branch JSC	Movable objects impact (pipe block collapse)	Severe							
	CMU No.1 LLC	Influence of smoke, fire and flame	Severe							
	Trest RosSEM LLC	Falling	Minor							
Novovoronezh-2 NPP	Energospetsmontazh JSC - MSU-4 branch	Falling into the elevator shaft (trespassing the guarding fence)	Severe, lethal							
Kursk-2 NPP	In 2015, no accidents were registered (as of Dec	In 2015, no accidents were registered (as of December 01, 2015)								
Baltic NPP	In 2015, no accidents were registered (as of Dec	In 2015, no accidents were registered (as of December 01, 2015)								
Belarusian NPP	In 2015, no accidents were registered (as of December 01, 2015)									

# Table 95. Accidents at NPP Construction Sites Involving Contractors' Employees, 2015

NPP construction site	Entity	Injury factor	Severity of injury		
Rostov NPP	Mostosroytelny trest No. 6 JSC Mostooryad No. 37	Movable objects impact	Minor		
	Mostosroytelny trest No. 6 JSC Mostooryad No. 37	Falling from a height	Lethal		
Novovoronezh-2 NPP	Mostostroy No. 6 JSC – branch of Mostooryad No. 37	Falling from a height (collapse of the drift eliminator bearing angle)	Lethal		



Belarusian NPP	Grodnopromstroy JSC	Fall, collapse of buildings and structures, Minor sliding of objects, materials, soil, etc.						
	Stroitel JSC	Fall, collapse of buildings and structures, sliding of objects, materials, soil, etc.	Heavy					
	SU-61 Gomelpromstroy JSC	Falling from a height	Lethal					
	Gomelpromstroy JSC	Falling from a height	Lethal					
	Construction directorate No. 83 Construction Trest No. 8	Falling in movement	Severe					
Kursk-2 NPP	In 2015, no accidents were registered (as of December 01, 2015)							
Baltic NPP	In 2015, no accidents were registered (as of December 01, 2015)							
Table 96. LTIFR Data								

Division (including entities within its framework)	Quantity of injured		Rh per a 1,000 of employees		Quantity of completed man-hours		LTIFR			Basic LTIFR	Average head- count			
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2015	2015
ASE Group (including branches, representative offices, subsidiaries),	0	1	5	0	0.24	0.26	6,502,288	8,326,482	38,375,120	0	0.12	0.13	0.35	19,460
including:														
NIAEP JSC	0	0	1/f	0	0	0.27	3,604,833	6,388,420	5,186,296	0	0	0.38	0	3,635
Atomstroyexport JSC	0	1/f	0	0	1.04	0	2,898,047	1,785,708	1,397,985	0	0.56	0	0.19	803
Atomenergoproekt JSC	1/f	0	0	0.7	0	0	22,400,054	6,729,600	5,098,437	0.04	0	0	0.06	2,948
ASE-Engineering LLC	0	0	0	0	0	0	34,560	31,552	31,552	0	0	0	0	16
VdMU LLC	2/m	0	0	3	0	0	1,623,482	1,922,534	1,691,087	1.23	0	0	0	806
Trest RosSEM LLC	1/m	1/m	1/m	0.08	0.08	0.45	1,908,930	1,558,270	1,292,976	0.52	0.64	0.77	0.52	2,188
SPb NIII EIZ	0	0	0	0	0	0	309,384	313,459	226,724	0	0	0	0	144
Spetsmontazhmekhanizatia JSC	_	_	0	_	_	0	_	_	108,460	_	_	0	_	_
Energospetsmontazh PJSC	0	1/m	2/m	0	0.69	0.69	4,943,862	5,476,846	5,579,810	0	0.18	0.36	0.4	2,810
NIKIMT-Atomstroy JSC	3/m	1/m	0	_	_	0	819,716	249,692	3,896,672	3.65	4.0	0	3.83	1,976
SMU-1 LLC	_	1/m	1/m	_	0.86	1.02	1,937,032	2,058,506	1,670,574	_	0.48	0.59	0.48	973
Siberian Orgstroyproekt JSC	0	0	0	0	0	0	436,515	426,665	346,932	0	0	0	0	0



# Annex 17. Statement on the results of the Public/Expert Assurance by RUIE Board



# The RSPP Council on Non-Financial Reporting Opinion on the results of review of the ASE Group of Companies' Annual Report for 2015 for the purpose of public assurance

Upon the initiative of ASE Group of Companies (hereinafter, the Group of Companies, the Group, the Company), the Council on Non-Financial Reporting of the Russian Union of Industrialists and Entrepreneurs (hereinafter referred to as the Council) established in accordance with the Board decision (Resolution dated 28.06.2007) has reviewed the ASE Group of Companies' Annual Report for 2015 (hereinafter referred to as the Report).

ASE Group of Companies addressed RSPP with a request to arrange a public assurance review of the Report by the Council, to foster an opinion regarding the completeness and relevance of the information provided in the Report on responsible business practices in terms of the principles of the Social Charter of Russian Business.

The Council members studied the content of the Report submitted by ASE Group of Companies during the period from 1 to 20 of July, 2016 and have prepared this Opinion in accordance with the Procedure for Public Assurance Review of Corporate Non-Financial Reports approved by the Council. The Council members possess the required competence in the area of corporate responsibility, sustainable development and non-financial reporting. They conform to the norms of ethics regarding independent and unbiased assessments; they have expressed their personal expert opinion rather than an opinion of the organizations they represent.

The Report has been evaluated on the basis of the following criteria of completeness and importance of the information provided in the Report: information is acknowledged to be relevant since it reflects the ASE Group of Companies activity in the implementation of responsible business practice principles, which are described in the Social Charter of Russian Business (www.rspp.ru). Completeness means a comprehensive description of the Company's activities in the Report, i.e. its underlying values and strategic benchmarks, management system and structure, achievements and key performance results and the system of interaction with the stakeholders.

The application by the Group of Companies of international reporting systems was taken into account as part of the process of the Report public assurance review. However, the confirmation of the Report conformity level to the international reporting systems is beyond the scope of this Opinion.

ASE Group of Companies is responsible for information and statements contained in the Report. Reliability of actual data provided in the Report is beyond the scope of the public assurance review.

This Opinion has been prepared for ASE Group of Companies. The Company can use it both for internal purposes and interaction with the stakeholders by publishing the Opinion without changes.

# **Conclusions**

Following the performed analysis of the Report, as well as the public information posted on the official corporate web-site of ASE Group of Companies and panel discussion of the results of independent Report evaluation by the RSPP Council members, the Council confirms the following:

The ASE Group of Companies' Annual Report for 2015 contains relevant information on key areas of the responsible business practices in accordance with the principles of the Social Charter of Russian Business. The Report provides sufficient information regarding the Group's activities in the abovementioned areas.

The ASE Group of Companies' Report for 2015 contains relevant information regarding the following aspects of responsible business practices:

Economic freedom and responsibility: The Report characterizes the industrial and commercial activity of the Group of Companies, the role of the Group in the Russian economy, and the position of the nuclear power industry in the global market of energy resources. The results achieved by the Group of Companies are provided timewise and key assets-wise. The main strategic goals and the level of their achievement are shown via the fulfillment of the planned KPIs, and interrelation of the Group strategy with Rosatom State Corporation strategy for the period up to 2030. The Report contains the description of the Group's business-model which covers assets, resources and value creation processes. The investment program and the main investment projects in Russia and abroad are addressed. Safety issues of the designed and constructed NPPs are reflected. The description of the system and results of inspections, including those with participation of representatives of the international nuclear organizations (IAEA, OSART) are included. The Report provides information on the system of corporate management considering the organizational changes that have taken place during the reporting period, and the implementation of the Corporate Governance Code. The system of risk management, as well as integrated management system operating in accordance with international standards ISO 9001:2008, ISO14001:2004, OHSAS 18001:2007 are presented. The report provides information on the measures aimed at prevention of corruption and availability of corporate documents regarding this issue. The Report presents the Company's position regarding the interconnection of the sustainable growth agenda with the UN Millennium Goals until 2030 and the Group's strategic goals.

Partnership in business: The Report provides information about the principles, formats and tools of interface with the stakeholders, including the updated interface chart. The Report covers information about business partnership during the activities of the Group companies and in the course of the Report preparation. The Report contains information on cooperation with the nuclear authorities, including the state supervision bodies, and with foreign business partners. The Report mentions the main customers and partners, as well certain signed Agreements, including those for project management development. The Report provides information about approaches to development of intellectual rights portfolio for technology of managing the design and construction of complex engineering facilities on the basis of state-of-the-art technologies and describes the system of development and monitoring of procurement activity.

The Report provides information on the growth of procurement volume from small and medium enterprises. It reflects the priorities of internal social policy in the field of health and labor safety, development of labor pool, personnel training, and social guarantees to personnel, as well as information on the results of investigation of personnel involvement, personnel incentive policy and interface with trade unions. The Report addresses the system of employment of new personnel in the local labor markets and via community liaison





in the area of international cooperation.

Human rights: The issues related to observance of human rights are mainly reported that the ASE Group of Companies activities in the area of social and labor relations are based on the Labor Code laws and are governed by the Industrial Agreement for Nuclear Power, Industry and Science for 2015-2017. It follows from the Report that the Company employees have equal possibilities both for implementation of their labor rights and development of their labor potential. The Report addresses priorities in the area of social politics, labor safety, and personnel motivation as well the implementation of the KPI system, mentoring and social partnership.

**Environment protection:** The Report declares that environment protection pertains to the important tasks of ASE Group of Companies. Reliability and safety of the designed nuclear power plants for the community and the environment is an absolute priority of the ASE Group of Companies. The Report covers the implementation of the main directions of Environmental policy, performance indicators in the area of environmental impact management, and provides data on the expenses for nature preservation activities.

Information on waste handling and impact on atmospheric air is also provided. The Report contains data regarding the results of implementation of the Program for Power Saving and Energy Efficiency for 2013-2015 and mentions cooperation with the public environmental organizations.

# Participation in the community development:

The Report contains information covering the Group of Companies' contribution to the social and economic development of the areas where it is operating, including contribution achieved by means of implementing investment projects, creating new jobs and running business activities. It mentions the availability of the community liaison offices whose aims is providing assistance to the local community in employment with the Group of Companies. The Report dwells on charity activities priorities that correspond to the Rosatom State Corporation priorities in this area and provides information about the annual competition of social projects with the participation of local non-commercial organizations.

investments are included

# **Final provisions**

covered in the labor relations section. It is The ASE Group of Companies' Annual Report for 2015 shows a focused effort on implementation of the strategic goals of the Rosatom State Corporation Engineering Division in Russia and abroad.

> The topics covering a wide range of issues regarding responsible business practices that are relevant for the stakeholders are presented. The Report demonstrates an integrated approach to disclosing information in key areas, including economic, environmental and social activities. Significant amount of the performance indicators is given timewise. Approaches to the interface with the stakeholders, including those developed in the course of the Report preparation, are covered as part of the implementation of the Group of Companies strategy.

> The Report was prepared using the recommendations that are applied in Russian and international reporting practice, including the following: Guide GRI G4 (extended version), International Integrated Reporting Standard (IIRC), AA100 standards and others. The use of these documents makes it possible to compare the information with the data of other companies operating in the industry both in Russia and abroad.

The Report presented is the first Annual Report of ASE Group of Companies' and the eighth report for the main group entity, NIAEP JSC, that comprehensively covers the activities of the Company divisions, including the financial and the non-financial issues and the results. Consistency in the reporting process in a more comprehensive and structured way, development and the Group adherence to the principles of openness and transparency is confirmed.

Application of different forms of independent Report evaluation (professional audit. stakeholder assurance and public assurance) confirms a responsible attitude of the ASE Group of Companies to the obligations related to providing information to the stakeholders and the quality of disclosed information.

### Recommendations

While recognizing the merits of the Report, the Council draws the Group's attention to a number

offices and highlights the Company initiatives Data on the scope of the Group social of aspects regarding information significance and completeness of information disclosure, which are important to the stakeholders. The Council recommends taking these aspects into account in the following reporting cycles.

> The context of global development, also in the area of the nuclear power industry, is acquiring special relevance nowadays. The Report declares the Group's adherence to the UN goals in the area of sustainable development for a period until 2030, and covers the Group's contribution to sustainable development. We recommend to continue covering this topic in the future and to give more focus to interconnections between sustainable development goals, which are the Company's priority, and material aspects of the activities, which have been chosen by the Company to be covered in the Report considering the opinion of the stakeholders.

> To ensure completeness of information related to reaching the Group of Companies' strategic goals, we recommend to give more attention to the future plans and to provide more quantitative indicators that will make it possible to evaluate the achieved progress in the future.

> Since the term of Federal Target Program "Assurance of Nuclear and Radiological Safety in 2008 and for a period until 2015" has expired, taking into account special relevance of nuclear safety issue for the stakeholders, we recommend paying special attention to future goals and activities of the Group in this area.

> Ensuring the safety of nuclear facilities is declared to be the strategic task and is referred to priority issues, also upon the results of consultations with the stakeholders. We recommend to address this topic in the future including the following information: decisions taken at the designing stage, which shall ensure high reliability during the future plant operation, also considering various factors of potential or non-standard external impact and the quality of the facility operation; measures taken at the construction stage, including sufficiency and reliability of control over the quality of works performed by the contractors. Information on the conformity of the Group of Companies activity in this area to current international trends in the nuclear power industry will be useful for the stakeholders.

> In order to ensure a proper understanding of the impact of ASE Group of Companies activity

on the environment, we believe it advisable to present the description of the direct impact of the current activities of the Company on the environment separately from the future impacts, which are envisaged in the design solutions.

The waste handling issue deserves a more detailed coverage in the following reporting cycles regardless of the report priorities, since this topic is related to one of the most acute problems of the industry. It is important to show the extent of compliance of the Group's approaches with the international practice, to discuss whether a change of technologies takes place and whether new solutions in this area are implemented. The Report pays attention to the description of businessmodel and formation of capital according to the procedure of the Integrated Reporting Standard. In this regard, it should be noted

that the Standard focuses on more a detailed coverage of the abovementioned topics, including the analysis of the Company activity in terms of the status of the capital and value creation not only for the Company itself but for the community.

It is necessary to provide more information on the contribution to the development of the regions of operation, including information on the priority directions of social investments, project selection procedure, criteria and assessment of efficiency of application of funds allocated to charity programs and social projects in the regions.

ASE Group of Companies has accumulated considerable experience of cooperation with the stakeholders also within the frameworks of preparation of annual reports. We recommend continuing this practice, extending it in

the future to foreign representatives of the stakeholders. It is especially efficient for the reporting process considering the geography of Group's activity and the scale outside the Russian Federation. It also seems reasonable to present in more detail the procedure for determining issues of importance considering the recommendations of the international reporting standards applied by the Company and to increase the number of participants in the dialogues.

Giving a positive evaluation of the Report and supporting the Group of Companies adherence to the principles of responsible business practices and procedure of reporting process development, the RSPP Council on Non-Financial Reporting confirms that the ASE Group of Companies' Annual Report for 2015 has passed its public assurance review.

Chairman of the RSPP Council on Non-Financial Reporting

Deputy Chairman of the RSPP Council on Non-Financial Reporting



F.T. Prokopov

E.N. Feoktistova





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# **Subsidiaries** of NIAEP JSC

- Limited Liability Company Construction and Installation Department No. 1
- NIAEP-Service LLC
- Volgodonsk Installation Department LLC
- Trest RosSEM LLC

# **Subsidiaries** of ASE JSC

- Atomenergoproekt JSC
- · Nukem Technologies GmbH
- ASE-Engineering LLC

**Subsidiaries of** 

JSC

JSC

**Atomenergoproekt JSC** 

Siberian Orgstroyproekt JSC

SPb NII Energoizyskaniya

SSMU Lenatomenergostroy

# **Branch offices of NIAEP JSC**

- NIAEP Udomlya Branch
- NIAEP Volgodonsk Branch
- NIAEP Baltic Branch
- NIAEP Moscow Branch
- NIAEP Kursk Branch

# Following the resolution of the Board of Directors

- Branch of NIAEP JSC in Hungary was established.
- NIAEP Yuzhnouralsk branch was dissolved.

# **Branch offices of ASE JSC**

- Belene branch of ASE JSC (the Republic of Bulgaria)
- Branch of ASE JSC in the Republic of Turkey
- Branch of ASE JSC in Ozersk, Chelyabinsk region
- Branch of ASE JSC in the People's Republic of Bangladesh

# Following the resolution of the Board of Directors

- Branch of ASE JSC in Moscow was established.
- Leningrad NPP 2
   construction administration
   Sosnovoborsk branch of
   ASE JSC was dissolved.

# Branch offices of Atomenergoproekt JSC

- Balakovo research and development branch of Atomenergoproekt JSC
- Volgograd research and development branch of Atomenergoproekt JSC
- Desnogorsk research and development branch of Atomenergoproekt JSC
- Kurchatov research and development branch of Atomenergoproekt JSC
- Maloyaroslavets research and development branch of Atomenergoproekt JSC
- Novovoronezh research and development branch of Atomenergoproekt JSC
- Hotel Don Novovoronezh branch of Atomenergoproekt JSC
- NVNPP-2 construction administration Novovoronezh branch of Atomenergoproekt JSC
- VVER Design Center Moscow design and engineering branch of Atomenergoproekt JSC
- VNIPIET in St Petersburg, branch of Atomenergoproekt JSC
- Branch of Atomenergoproekt JSC in Ankara (the Republic of Turkey)

# Representative Offices of NIAEP JSC

- NIAEP Volgodonsk Representative Office;
- NIAEP Moscow Representative Office;
- NIAEP St Petersburg Representative Office;
- NIAEP Kharkov Representative Office;
- NIAEP Representative Office in the Republic of Belarus

# **Representative Offices of ASE JSC**

- Representative office of ASE JSC in the Islamic Republic of Iran
- Representative office of ASE JSC in the People's Republic of China (Beijing, Lianyungang)
- Representative Office of ASE JSC in the Republic of Belarus
- Representative Office of ASE JSC in the Republic of India
- Representative Office of ASE JSC in the Republic of Hungary
- Representative office of ASE JSC in the Slovak Republic
- Representative Office of ASE JSC in the Republic of Bulgaria
- Representative office of ASE JSC in the Socialist Republic of Vietnam
- Representative office of ASE JSC in the People's Republic of China

- Following the resolution of the Board of Directors, the following representative offices were dissolved:
- Representative office of ASE JSC in Ukraine (Slavutich)
- Representative office of ASE JSC in the Czech Republic (Prague)
- Representative office of Atomenergoproekt JSC in the Czech Republic
- Representative Office of Atomenergoproekt JSC in the Republic of Bulgaria

