SUSTAINABLE GROWTH AS THE MAINSTREAM

2013

Content

Joint-Stock Company Nizhny Novgorod Engineering Company ATOMENERGOPROEKT

(hereinafter referred to as JSC NIAEP or Company).

Details:

Postal address: 3, Svobody sq., Nizhny Novgorod 603006
Tel: +7 (831) 421-7900
Fax: +7 (831) 419-8490; +7 (831) 421-0604
Website: http://www.niaep.ru
E-mail: niaep@niaep.ru

Shareholders:

As of December 31, 2013 the sole shareholder of JSC NIAEP is the Joint-Stock Company Atomic Energy Power Corporation (JSC Atomenergoprom).

Registrar:

The JSC NIAEP registered stock holders' register is kept by the Open Joint-Stock Company Registrator R.O.S.T.
Address: bld. 13 Stromynka St, 18, Moscow.

Auditor:

The JSC NIAEP external auditor is the Limited Liability Company "Financial and Accounting Consultations" (FBK Ltd.).
Postal address: bld. 2AB Myasnitskaya St., 44/1 Moscow 101990 Russia.
Tel.: +7 (495) 737 53 53.
Legal address: bld. 2AB Myasnitskaya St., 44/1 Moscow 101990 Russia.

Authorized capital:

As of December 31, 2013, the authorized capital of the Company amounted to 500,001,877 rubles.

Contact persons :

Kats Vladimir Lazarevich, Executive Director of JSC NIAEP,
Chairman of Committee on public Reporting of JSC NIAEP and JSC ASE,
e-mail: niaep@niaep.ru

Shadrin Evgeniy Alexandrovich, Head of investment department of JSC NIAEP,
e-mail: e.shadrin@niaep.ru


АВТОМАШПРОМПРОЕКТ

About this Report

The 2013 Public Annual Report (hereinafter referred to as the Report) is the sixth Integrated Report of NIAEP disclosing its financial and non-financial performance results. Approved by the sole shareholder of JSC NIAEP as per June 27, 2014 (decision No. 39). The previous Report was issued in 2013. The Report is made in Russian and English and is available online.

Standards and Regulatory Requirements

The Report is made in accordance with the following regulatory documents:

International standards and guidelines:

- Standards of AA1000 series (Institute of Social and Ethical Accountability);
- Guideline for sustainable development, Global Reporting Initiative (GRI G4), Industry-specific Annex to Guidelines GRI G4 for construction companies, Construction and Real Estate Sector Supplement (CRESS);
- International <IR> Framework.

Laws and regulations of the Russian Federation in the field of corporate and financial Reporting

are presented in the electronic Annual Report.

Regulatory documents of State Corporation ROSATOM:

- Policy of State Atomic Energy Corporation ROSATOM in the field of public Reporting;
- Typical public annual accounting standard of key organizations (for the purpose of public accounting) of the State Nuclear Energy Corporation ROSATOM;
- Code of Ethics of the State Nuclear Energy Corporation ROSATOM.

Regulatory documents of JSC NIAEP in the field of public Reporting:

- Provision concerning Committee of the interested parties of JSC NIAEP;
- Provision concerning Committee of public Reporting of JSC NIAEP;
- Corporate standard STP 10.01-11 "Procedure of Preparation of Public Annual Report for Reporting Period".

Application level of GRI Guidelines

The Report corresponds to Core option of the Report preparation "in accordance" with GRI G4 Guidelines..

Scope of Report

This Report covers the activity of the JSC NIAEP–ASE Integrated Company (further in the text, NIAEP–ASE Integrated Company, Company) within the period from January 01, 2013 to December 31, 2013. The Report also includes information about the Joint-Stock Company Atomstroyexport (hereinafter referred to as the JSC ASE) and/or subsidiary affiliated companies of JSC NIAEP. Scopes for each essential aspect were defined by persons responsible for management of the given aspect. Information about scope of each essential aspect is presented in Annex 9.

No material changes in data measurement methods and calculations were made (in comparison with the previous Reporting period).

Defining Report Content

Strategic matters of Reports are defined by managers of JSC NIAEP and representatives of major interested parties in the course of dialogues. Strategic matters of the present Report: “Strategy of JSC NIAEP” and “Innovative activities of JSC NIAEP”.

Materiality determination process

In accordance with International <IR> Framework and GRI G4 Guidelines which recommend covering only essential information in the Reports, a materiality matrix was generated (see Fig. 1) on the basis of polling of the Company management and representatives of major interested parties. Information about approaches of management as for material aspects is presented in Annex 9.

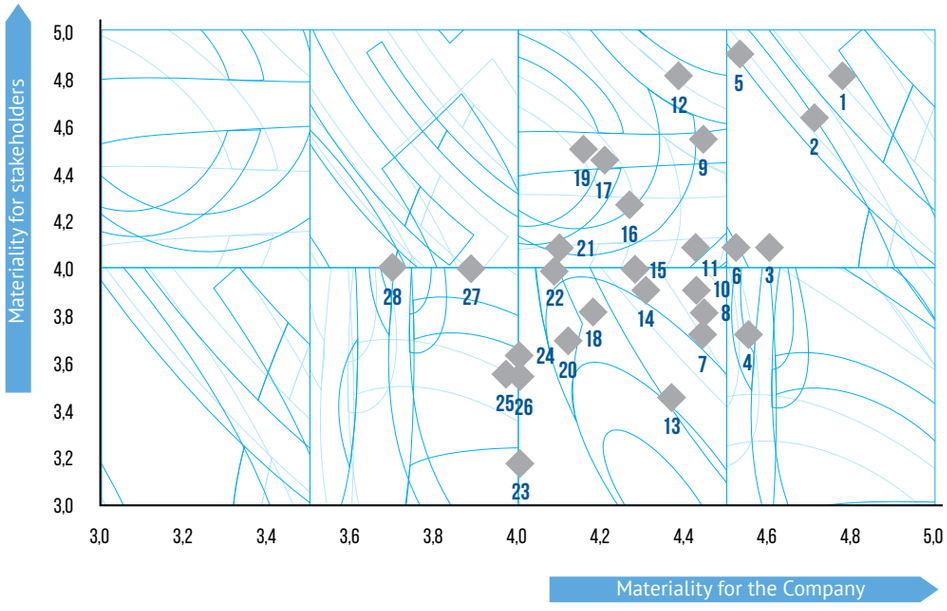
22 GRI indices are presented in the Report (for essential activity aspects) and 139 performance indicators of JSC NIAEP are presented in the Report. Table of using standard Reporting elements and performance indicators of JSC NIAEP is provided in the electronic Annual Report.

Assurance of Report Information Credibility

The Report was externally assured by the Closed Joint-Stock Company NP Consult which confirmed compliance with basic application level of Guidelines on Reporting in the field of sustainable development of GRI G4. The external audit Report on assurance of non-financial statements is given in the Annex 7.

Management and audited financial statements of NIAEP according to the Russian Accounting Standards were used during preparation of this Report. Audit of financial statements has been performed by LLC “FBK” (see Annex 4). The Report Draft was reviewed by the NIAEP Internal Control and Audit Department. Conclusion on results of the review is given in the Annex 6.

The Report has passed procedures of public assurance in accordance with standard AA1000AS. Conclusion on public assurance is presented in Chapter 7.



1. **Economic Performance** [1]
2. Provision of effective construction of new power units
3. **Consumer Health and Safety**
4. Improvement of transparency of Nuclear industry
5. **Market Presence**
6. Industrial safety at all stages of works within the context of changes of laws concerning industrial safety
7. **Training and Education**
8. International cooperation in the field of peaceful application of atomic energy
9. Development of international cooperation, interaction with foreign partners
10. **Occupational Health and Safety**
11. Provision by skilled personnel
12. Innovation activities
13. **Employment**
14. Cooperation of the Company with local enterprises
15. Public adoption of construction projects of Rosatom State Corporation and its agencies
16. Business stability
17. Investment program
18. Development of engineering in the RF
19. Diversification and development of promising business segments
20. Social assistance for employees
21. Compliance of the enterprise labour conditions with international standards of safety and occupational safety
22. Work with personnel
23. Approaches to provision of safety
24. **Compliance (Society)**
25. **Compliance (Product Responsibility)**
26. **Local Communities**
27. Perfection of management mechanism
28. **Procurement Practices**

Fig. 1 . Materiality matrix

Disclaimer on Disclosure of Pro Forma Information

The Report contains pro forma statements with regard to production, financial, economic, and social indicators characterizing further development of the Company. Implementation of assumptions and intentions is directly connected with political, economic, social, and legal situation in Russia and throughout the world. In this connection actual performance results of the Company may differ from the pro forma statements.

1. Bold type is used to highlight the GRI G4 aspects.

Message from the Chairman of the Board of Directors of JSC NIAEP

Dear Colleagues and partners!

Reviewing the 2013 annual results, the NIAEP Board of Directors is pleased to declare: the NIAEP–AES Integrated Company achieved significant results in its activities both in Russia and worldwide. It successfully performs the Strategy of the Rosatom State Corporation on Industry-Specific Engineering Development.

In 2013, the Company implemented several important international projects: in particular, incorporation of Power unit 1 of Kudankulam NPP into Indian power system.

During year under Report, the works were carried out actively at the sites of China, Belarus, Turkey, and Bangladesh. The first concrete was filled in the Power unit 4 of Tianwan NPP in China and Power unit 1 in the Belarus NPP.

The 2013 was a year of new orders: the Russian supplier of reactor technologies was recognized as a high-priority one in Jordan.

New achievements in the international market mostly depend and will depend on capabilities of the NIAEP–ASE Integrated Company to perform properly its obligations just in time and within specified budgets. Success also depends on implementation of state-of-the-art management technologies. It is for a reason, that elements of the Rosatom industrial system are being implemented actively, and innovation technologies on management of construction of complicated engineering facilities are developed.

It has already produced its results. Thus, after evaluation of progress of works at the site of Rostov NPP, the Rosatom State Corporation thought fit to change date of commissioning of Power unit 3 from 2015 to the end of 2014. I am sure that the JSC NIAEP team of specialists will manage to solve this task!

Connection of power unit 1 of Yuzhnouralsk SDPP-2 Power plant to power system also became a milestone event for the Reporting year. It is the first facility of heat power industry which the NIAEP–ASE Integrated Company constructs as a General Contractor. Successful completion of this project will enable to expand engineering business and its diversification.

I consider important the fact that the Company draws special attention to the tasks of sustainable development when achieving its strategic targets. The Board of Directors of JSC NIAEP is sure that the NIAEP–ASE Integrated Company will maintain leading positions in the growing market of NPPs construction, as well as implements project on diversification in the radioactive waste and spent fuel handling units, oil-and-gas facilities and facilities of heat power industry where the Company has advanced competencies and references.

The NIAEP–ASE Integrated Company should become a base for development of engineering business for whole Rosatom State Corporation. Moreover, management and personnel of the Company has a formidable task to become a leading engineering company both in Russia and worldwide.

Kirill Komarov,

Chairman of the Board of Directors of JSC NIAEP,
Deputy General Director –
Director of Department for Development and Global Business of the State Corporation ROSATOM

Message from the President of JSC NIAEP

Dear Colleagues!

The 2013 year was eventful for the NIAEP–ASE Integrated Company. First of all, it was a year of generation of global innovation engineering company.

Due to well coordinated work of big team, an event important both for our Company and the whole Russian nuclear power industry occurred: incorporation of Power unit 1 of Kudankulam NPP (the biggest power generation facility of Russian-indian cooperation) into Indian power system. Currently the Kudankulam NPP is the most advanced (in terms of project solutions and solutions for safety systems) project in the world, which is at the closing stage of the construction.

Currently there are more than 20 Power units in the bag of our Company. We are designing and constructing them both in Russia and abroad. In the autumn the first concrete was filled in the fourth power unit of Tianwan NPP in China and in the first Power unit of Belarus NPP. Works of preparatory period at the site of Akkuyu NPP in Turkey and Rooppur NPP in Bangladesh are carried out actively.

In 2013, we also focused our efforts to strengthen and expand competencies of our Company in the world market of nuclear power facilities construction, to create conditions for promotion of services in new promising markets, as well as to strengthen position in potential countries-customers: Vietnam, Jordan, Hungary, Czech Republic, Finland, Ukraine, and Kazakhstan.

Our non-nuclear construction site is a matter of special attention: Power Unit 1 of Yuzhnouralsk SDPP-2 has been incorporated into power system of Russia. Implementation of this project proves evidently that we are able to construct not only NPPs.

Our strategic targets consist in generation of stable (for a long period of time) engineering company due to expansion of activities scope and diversification beyond of business hard core. In the business hard core (construction of high power NPPs) the Company expects to maintain leading positions in the growing market of NPPs construction mostly due to reduction of construction period and cost.

We actively put Multi-D-technology into practice. On the basis of this technology a control system to manage life cycle of sophisticated engineering facilities is being created. It includes management of cost and project at all phases: designing, purchasing, and delivery of equipment, as well as construction. It is implemented in all facilities of the NIAEP–ASE Integrated Company. Its usage enables to reduce period of construction and cost of projects and at the same time to improve efficiency of labour, quality of works, and safety level of facilities.

International scientific and research forums "Control of life cycle of sophisticated engineering facilities" being hold by our Company have become traditional ones. Such forum took place in Moscow in 2013. We'd love to note the extension of forum influence which becomes a site for regular exchange of opinions of experts of global level. More than 650 representatives from 200 companies all over the world took part in the forum during the Reporting year.

The NIAEP is an open and transparent company which annually Reports on its activity to the interested parties. We are involved in designing and construction in the international markets, and it steps up requirements to public Reporting. I am proud to announce that for the fourth year in a row our Company's Annual Reports were recognized as the best ones in the industry-specific and national competitions of Reports, and we were awarded in the international competition last year. Our latest Report enables to become familiar with the results of our activity in 2013 and our long-range plans for all interested parties.

Valery Limarenko,

President of JSC NIAEP

Key Performance Indices

Index	2011	2012	2013	2014 (plan)
Sales revenue, mln rub.	35,304.7	38,512.4	37,518.4	42,229.3
Net profit, mln rub.	707.6	1,356.0	1,450.7	349.3
Labor productivity, mln. rub./pers.	14,492	12,580	11,143	12,523
Average number of listed employees, pers.	2,435.5	3,074.9	3,367	3,372
Quantity of power generating units under construction within the accounting period, un.	16	21	25	25
Tax deductions to the federal, regional, and local budgets (excluding personal income tax and state duties), mln rub.	5,333.5	2,675.5	3,250.5	1,309.8
Social expenditures, mln rub.	115.3	173.5	174.2	185.6
Internal performance, %	9.0	12.2	14.9	9.8

Key Events of 2013

January	Priority site to arrange Kursk NPP-2 was selected.
February	Construction works in the power unit 2 of Belarus NPP began. The first contract for construction of Akkuyu NPP between branch of JSC ASE in Turkey and company OZDOGU Insaatve Ticaret Ltd. Sti was signed
May	The first compliance audit of the management integrated system of JSC ASE, Moscow branch of JSC NIAEP, Moscow representative office of "NIAEP" was carried out. Positive conclusion on compliance of the system with standards ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 was received.
	Implementation of capital construction enterprise control information system based on SAP ERP began.
	License of Federal Environmental Industrial and Nuclear Supervision service of Russia for right to develop and elaborate nuclear plants and storages for radioactive wastes.
June	Memorandums of Understanding and cooperation between JSC NIAEP and company DASSAULT Systems, between JSC NIAEP and company Intergraph PP&M, as well as between JSC NIAEP and JSC NEOLANT were signed. Reactor vessel of power unit 3 of Rostov NPP was installed. Contract between NIAEP – ASE Integrated company and Bangladesh Atomic Energy Commission for development of documents on justification of investments into construction and environmental impact assessment for construction site of Rooppur NPP was signed.
July	Licenses of Federal Service for Ecological, Technological and Atomic Supervision for right of construction and operation of nuclear plants were received.
	Power Unit 1 of Kudankulam NPP (India) was brought to minimal controlled power level.
	On the basis of certification audit the integrated management system of JSC NIAEP was recognized as corresponding to standards ISO 14001:2004 and BS OHSAS 18001:2007.
September	The Company launched construction of the Tianwan NPP, Power Unit 4.
October	Contract of preparatory period for development of detailed design of Rooppur NPP was signed.
	Power Unit 1 of Kudankulam NPP is connected to Indian power system.
	The first ignition of gas turbine in the power unit 1 of Yuzhnouralsk SDPP-2 was performed.
November	Works on concreting of foundations for power unit 1 of Belarus NPP began. Power Unit 1of Yuzhnouralsk SDPP-2 was incorporated into power system of Russia. Memorandum of Understanding between NIAEP–ASE Integrated Company, Nuclear Energy Corporation of South Africa (NECSA) and NUKEM Technologies GmbH (Germany) was signed.
December	Works on installation of containment pre-stressing system were completed in the Power unit 3 of Rostov NPP.

Awards

	Competitions/conferences/forums	Awards
JSC NIAEP	Annual conference of executive heads in nuclear field	Winner's certificate in the category "International achievement"
	The I-st annual conference of atomic industry builders	Diploma "The best engineering company of atomic industry in 2013"
	International training conference "Internal checks and audit in Russia: concepts and practices"	Commemorative medal and diploma "The most effective company in organization of internal checks and audit in 2013"
	All-Russian review – competition for the best arrangement of sporting events among companies, institutions, and agencies (regional stage)	Winner
	The V-th International forum of suppliers of atomic industry "ATOMEX-2013"	Diploma "The best engineering company"
	National competition "Company of 2013"	Prize winner in special category "For contribution to the development of engineering services market"
	All-Russian Competition "Russian organization of high social effectiveness" (regional stage)	I place in category "For creation and development of jobs in organizations of production sphere"
		II place in category "For support of healthy lifestyle in organizations of production sphere"
		III place in category "For reduction of industrial injuries and occupational morbidity in organizations of production sphere"
NIAEP–ASE Integrated company	The I-st annual conference of builders of atomic industry	Prize "The best contractor at the NPP construction sites in 2013"
Annual Report of JSC NIAEP for 2012	Annual Reports Competition of the State Corporation ROSATOM and its agencies	Top position
	All-Russian competition "Leaders of Russian business: dynamics and responsibility – 2013"	Winner in special category "For informational transparency"
	MarCom Awards	Top platinum awards in the following categories: "The best Annual Report of corporation"; "The best visual format of Annual Report".


ДИПЛОМ
Награждается
ОБЪЕДИНЕННАЯ КОМПАНИЯ ОАО «НИАЭП» – ЗАО «АТОМСТРОЙЭКСПОРТ»
за победу в номинации
МЕЖДУНАРОДНЫЙ ПРОРЫВ


ГРАМОТА
НАГРАЖДАЕТСЯ
ОАО «Нижегородская инжиниринговая компания «Атомэнергопроект»
Лучшая инжиниринговая компания отрасли


THE INSTITUTE OF CERTIFIED FINANCIAL MANAGERS
This is to certify that
"Atomenergoproekt"
Nizhny Novgorod Engineering Company OJSC
achieved the award of
The most effective company in organizing internal audit and control of the Year 2013


Спартакиада России
Диплом
Награждается
команда ОАО "НИАЭП"
за I место


ДИПЛОМ
ОАО «Нижегородская инжиниринговая компания «Атомэнергопроект»

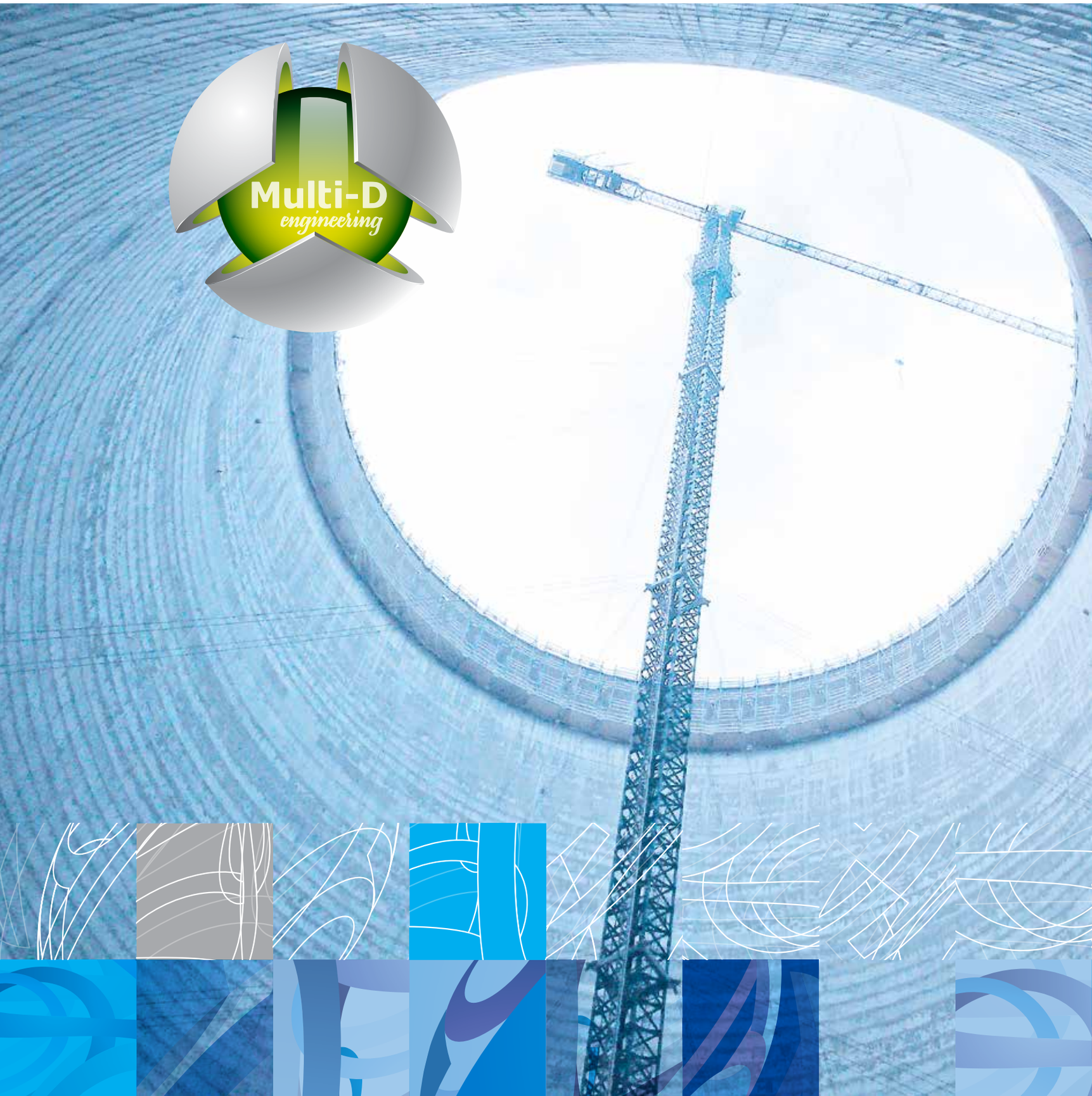

Под патронажем Торгово-промышленной палаты Российской Федерации
национальная премия в области бизнеса
Компания года
ОАО «НИАЭП», управляющая организация ЗАО «Атомстройэкспорт» признано лауреатом премии 2013 года в номинации «За вклад в развитие рынка инжиниринговых услуг»


ПРАВИТЕЛЬСТВО НИЖЕГОРОДСКОЙ ОБЛАСТИ
ДИПЛОМ
награждается
открытое акционерное общество «Нижегородская инжиниринговая компания «Атомэнергопроект»
за I место в ежегодном Нижегородском региональном этапе всероссийского конкурса «Российская организация высокой социальной эффективности» в 2013 году в номинации «За создание и развитие рабочих мест в организациях производственной сферы»


ПРАВИТЕЛЬСТВО НИЖЕГОРОДСКОЙ ОБЛАСТИ
ДИПЛОМ
награждается
открытое акционерное общество «Нижегородская инжиниринговая компания «Атомэнергопроект»
за II место в ежегодном Нижегородском региональном этапе всероссийского конкурса «Российская организация высокой социальной эффективности» в 2013 году в номинации «За формирование здорового образа жизни в организациях производственной сферы»


ПРАВИТЕЛЬСТВО НИЖЕГОРОДСКОЙ ОБЛАСТИ
ДИПЛОМ
награждается
открытое акционерное общество «Нижегородская инжиниринговая компания «Атомэнергопроект»
за III место в ежегодном Нижегородском региональном этапе всероссийского конкурса «Российская организация высокой социальной эффективности» в 2013 году в номинации «За сокращение производственного травматизма и профессиональной заболеваемости в организациях производственной сферы»

Enabling the Future!



General Information about the Company

1

- Description of Activity
- Target Markets

1.1. Description of Activity

Key business lines

The NIAEP–ASE Integrated Company renders services on designing, construction, and decommissioning of sophisticated engineering facilities including:

- **Nuclear power plants**;
- **Radioactive waste and spent fuel handling units**;
- **Heat power engineering facilities**;
- **Oil and gas facilities.**

In addition, the NIAEP–ASE Integrated Company supplies equipment for complex engineering facilities and renders services for NPPs: technical maintenance, repairs, modernization, and asset management

Regions of Operation

The Company operates in[2] 15 countries: Armenia, Bangladesh, Belarus, Bulgaria, Hungary, Vietnam, India, China, Russia, Slovakia, Turkey, Ukraine, Czech Republic, Lithuania, and Jordan.

Subsidiaries, branches, and representative offices

NIAEP Subsidiaries:

- The Limited Liability Company Construction and Erection Department No. 1;
- LLC "NIAEP-Service"[3];
- The Limited Liability Company Volgodonsk Erection Department.

Branches:

- NIAEP Udomlya Branch – Kalinin NPP General Contractor Directorate
- NIAEP Volgodonsk Branch – Rostov NPP General Contractor Directorate,
- NIAEP Baltic Branch - Baltic NPP General Contractor Directorate,
- NIAEP Moscow branch,
- NIAEP Yuzhnouralsk Branch,
- NIAEP Kursk branch,
- NIAEP Navashino Branch – Nizhny Novgorod NPP General Contractor Directorate.

Representative offices:

- NIAEP Volgodonsk agency,
- NIAEP Moscow agency,
- NIAEP St. Petersburg agency,
- NIAEP Kharkov agency,
- NIAEP Belarus agency.

Membership in Associations

The NIAEP is a member of:

- All-Russian Industrial Federation of Employers in Nuclear Power Engineering, Power Engineering and Science Sector;
- Association of Innovative Designing;
- European Utility Requirements Organization (EUR);
- Self-Governing Organization Non-Commercial Partnership SOYUZATOMGEO Association of Organizations for Engineering Surveys During Architectural and Structural Designing, Construction, Reconstruction, and Capital Repair of Atomic Industry Facilities;
- Self-Governing Organization Non-Commercial Partnership SOYUZATOMSTROY Association of Organizations for Construction, Reconstruction, and Capital Repair of Atomic Industry Facilities;
- Self-Governing Organization Non-Commercial Partnership SOYUZATOMPROEKT Association of Organizations for Architectural and Structural Designing of Atomic Industry Facilities;
- Czech Nuclear Forum.

Historical Background

See in electronic Annual Report.

2. Implements projects, tender and pretender activities.
3. As per resolution of JSC NIAEP as a sole participant LLC SMU No. 2 d/d 21.08.2013 No. 22, the name LLC SMU No. 2 was changed to LLC NIAEP-Service, location of this LLC was changed, and new revision No.2 of the Charter was approved.


KKNPP

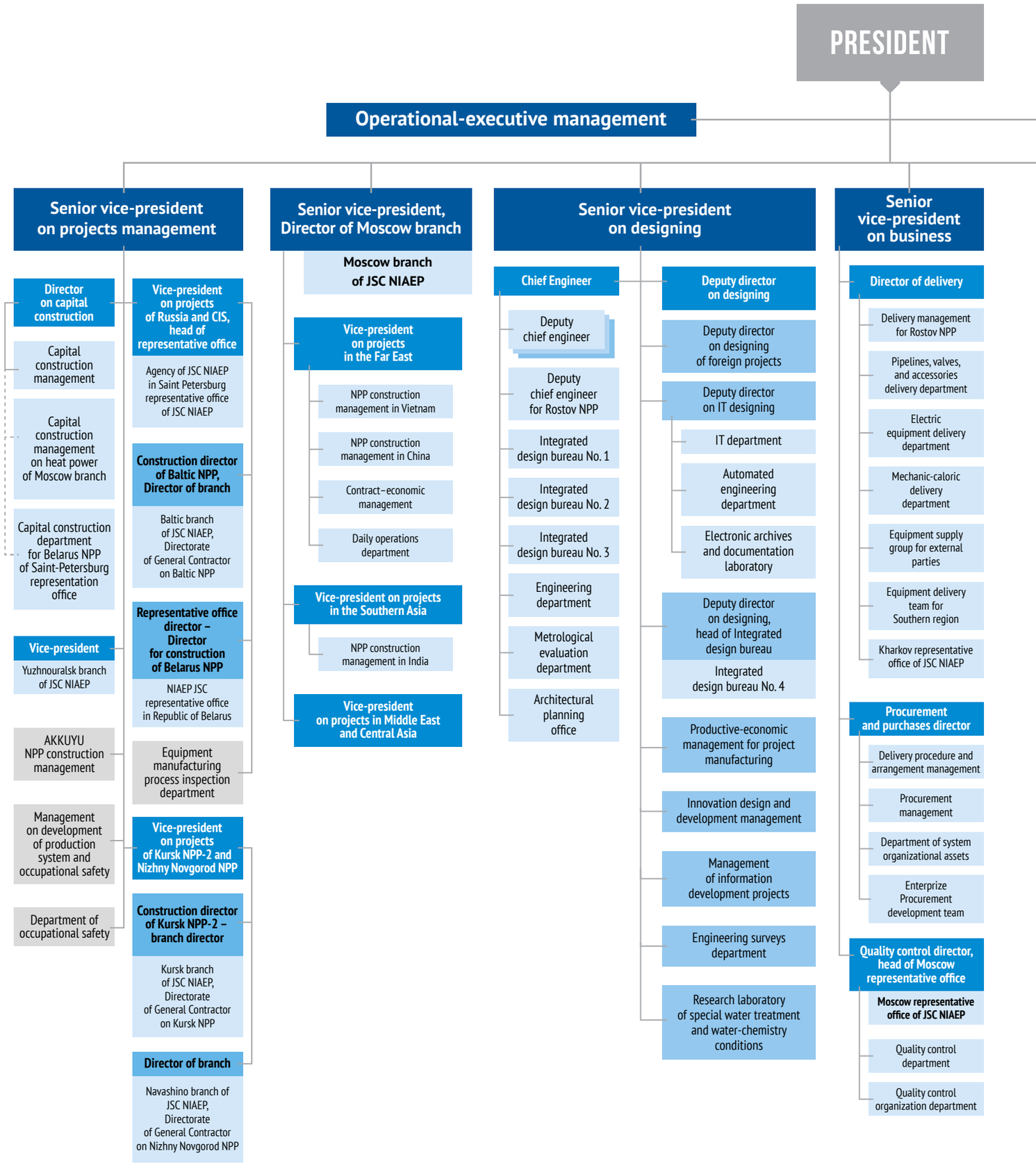
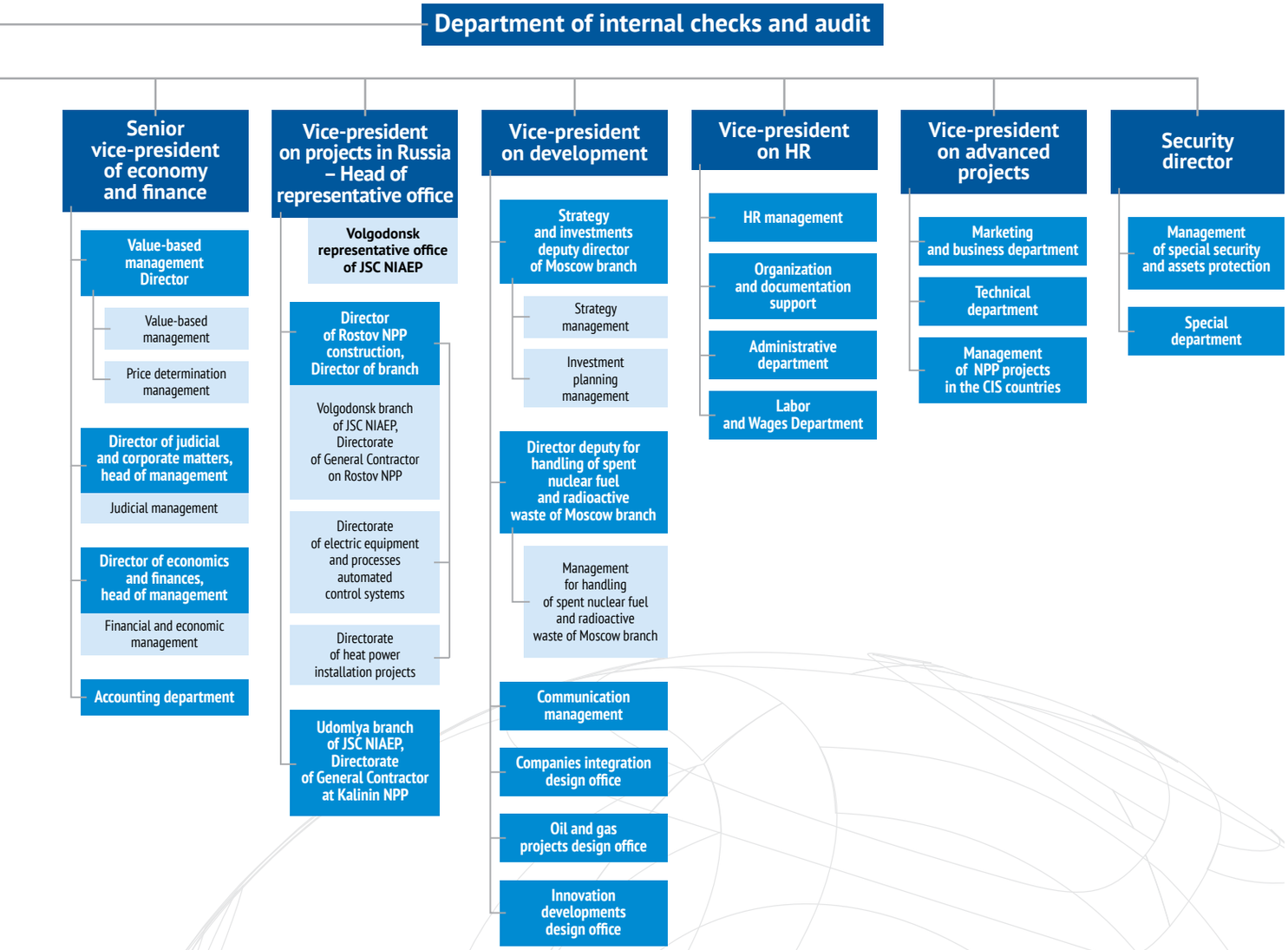


Fig. 2. Structural diagram of JSC NIAEP



APPROVED BY ORDER
OF JSC NIAEP No. 40/27-P
DATED 18.01.2013

1.2. Target Markets

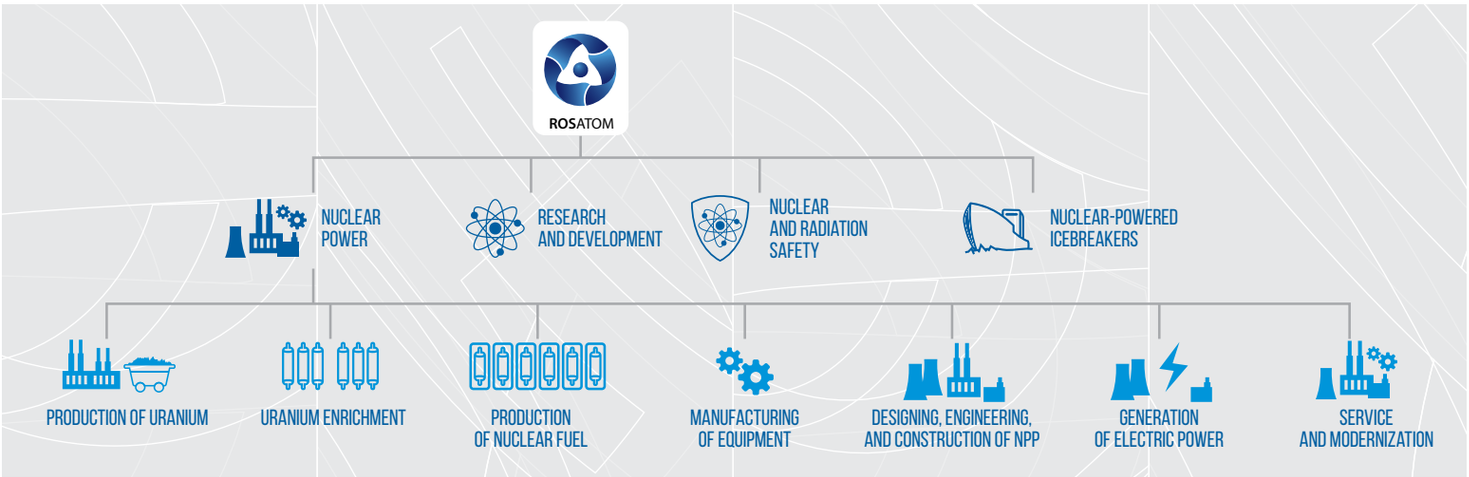


Fig. 3. Function of NIAEP–ASE Integrated Company

Integration of JSC NIAEP and JSC ASE enables to form a company with strong engineering competency which is specialized mostly in implementation of industry-specific orders. The NIAEP–ASE Integrated Company controls construction of sophisticated engineering facilities in the Russian and international markets.

Russian NPP Construction Market

As of end of 2013, 17 NPP Power units were at the stage of designing and construction in the Russian Federation. 8 of them are being constructed by the NIAEP–ASE Integrated Company (see Table 1). Share of the Company in the Russain market of NPPs construction is 53 % (see Fig.4).

The main customer of the Integrated Company in the Russian market is the Rosenergoatom Concern being the member of the Rosatom State Corporation. The Rosatom State Corporation defines the

Table 1. Generating Power Units Being Constructed and Designed in Russia as of 31.12.2013

Company	Facility	Number of Generating Units Being Constructed and Designed
NIAEP–ASE Integrated Company	Baltic NPP (Gen. Des. GI VNIPIET-SPbAEP)	2
	Kursk NPP-2	2
	Nizhny Novgorod NPP	2
	Rostov NPP	2
Atomenergoproekt	Novovoronezh NPP-2	4
FSUE GUSST N3 under the jurisdiction of Spetsstroy of Russia	Leningrad NPP-2[4] (Gen. Des. GI VNIPIET-SPbAEP)	4
Uralenergostroy	Beloyarsk NPP-2 (Gen. Des. GI VNIPIET-SPbAEP)	1

4. Since 06.12.2013, General Contractor of Leningrad NPP-2 is JSC Atomenergoproekt.

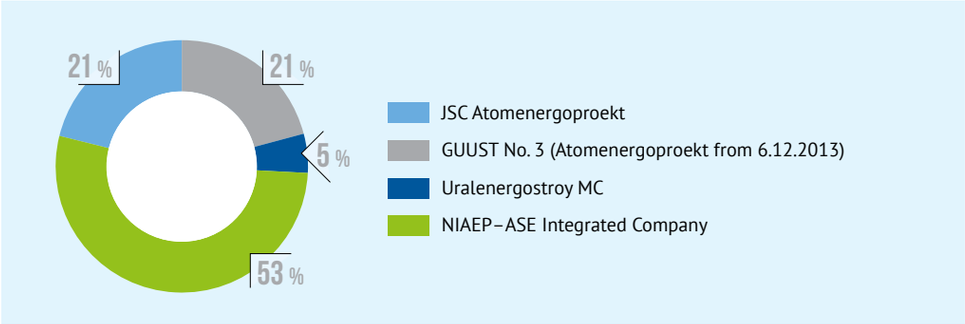


Fig. 4. Shares of the companies in the NPP construction market of Russia from 01.01.2013 to 06.12.2013

Fig. 5. Shares of the companies in the NPP construction market of Russia from 06.12.2013

Russian production distribution market. Information about facilities under construction or being designed by NIAEP in Russia is presented in Chapter 3 "Performance Results of Strategic Importance".

International NPP Construction Market

According to information of IAEA as of April of 2014, 72 Power units of 68.4 MW total generating capacity are under different stages of construction in 15 countries.

According to the IAEA Report, the total NPP generating capacity in the world will increase from 375.3 GW to 501 GW (low scenario) or to 746 GW (high scenario) by 2030.

By 2030, the potential stock of orders of the State Corporation ROSATOM in the international markets may amount to 40 power units. Currently works are already carried out or title establishing documents have been signed with regard to 10 generating units in the international market by NIAEP–ASE Integrated Company. (See Fig. 6).

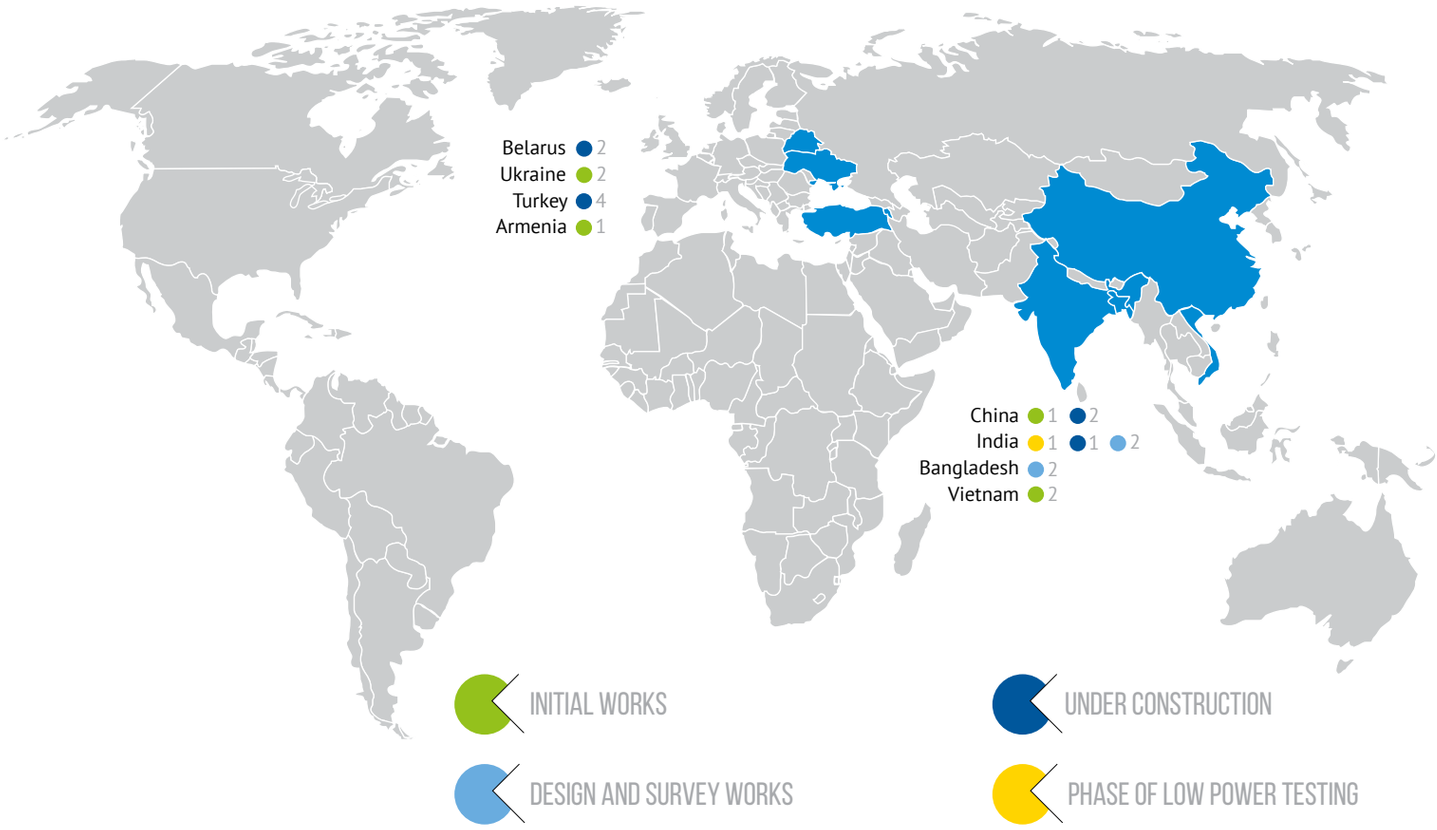


Fig. 6. Potential Market of Projects Abroad

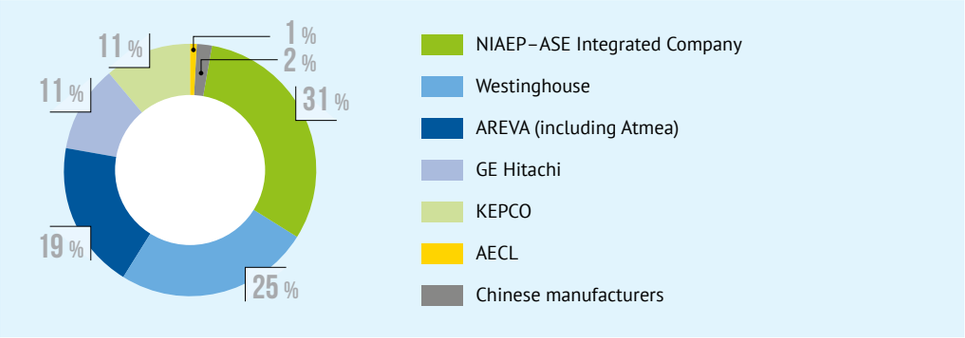


Fig. 7. Share of the NIAEP–ASE Integrated company in the world market of high power NPPs (by power parameter[5])

The share of the Company in the global NPP[6] design and construction market in 2013 amounted to 31 % (See Fig. 7).

Russian and international market of high power NPPs is growing now in absolute terms therefore, one of the key tasks of the NIAEP–ASE Integrated Company for the period till 2030 is to keep the current share 31% in the market of NPPs construction.

Information about facilities which are constructed and designed abroad is presented in Chapter 3 "Results of activity: contribution to implementation of strategy".

Market of research reactors

In 2013, market volume of research reactors (under construction and operating ones) amounted to 248 reactors in 55 countries. 35% of research reactors in the world are constructed on the basis of Russian technologies.

The market is stable: on average one, commissioning of one research reactor (RR) every 1–3 years is expected. The RR in the Republic of South Africa, Vietnam, Argentina, Brazil, the Netherlands, and Russia are planned for construction. Potential projects are possible in the countries-beginners for nuclear power engineering.

The aim of the NIAEP–ASE Integrated Company in this market is to achieve a leading level among global players. Taking into account size of the market and assessment of its development, one order each 2–3 years is required for the Company to achieve leading position. Targeted projects are four research and experimental reactors in Russia, one RR in Vietnam, one in the Republic of South Africa, and one in the Netherlands. Besides, construction of RR in Argentina and Brazil can be considered as promising projects. Key competitive advantages of the NIAEP–ASE Integrated Company in this segment are industry-specific experience and knowledge.

Main competitors in the international market are companies KAERI, AREVA, and INVAR.

Market of services

In 2013, the relevant market of services amounted to 2 bln. US dollars. Due to plans of construction of high power NPPs growth of market of services is expected: predicted market volume by 2030 is 3 bln. Share of the NIAEP–ASE Integrated Company in 2013 was equal to 1 %. Currently the Company renders services (maintenance and repairs, modernization, and assets management for:

- NPP Tianwan (China);
- NPP Mokhovtse (Slovakia).

Objective functional of the NIAEP–ASE Integrated Company is a management of large-scale projects of maintenance & repairs and modernization of NPP in the foreign markets, as well as consultations in the field of assets management and training.

Market of Radioactive Waste and Spent Fuel Reprocessing Facilities Construction

Market of Radioactive Waste and Spent Fuel Reprocessing Facilities (backend) has considerable and long-term potential for growth because of plans to take power plants out of operation in several regions (Western Europe, Japan). The total potential volume of foreign markets of backend till 2030 amounts to 400 billion USA dollars, from which up to 90% of all projects will fall on 10 largest geographical markets.

As per results of 2013, the NIAEP–ASE Integrated Company came into Top-10 of the world companies. Availability of referential competences in the segment of handling with radioactive waste spent nuclear fuel and decommissioning of nuclear and radiation hazardous facilities enables to set a strategic target of coming into five leading majors in the segment. The Company has an actual "window of opportunities" to build its business in the historical target markets of the NIAEP–ASE Integrated Company at that (Fig. 8, 9).

In the context of competitive position, the market remains fragmented (see Fig. 10), and there is a probability of consolidation.

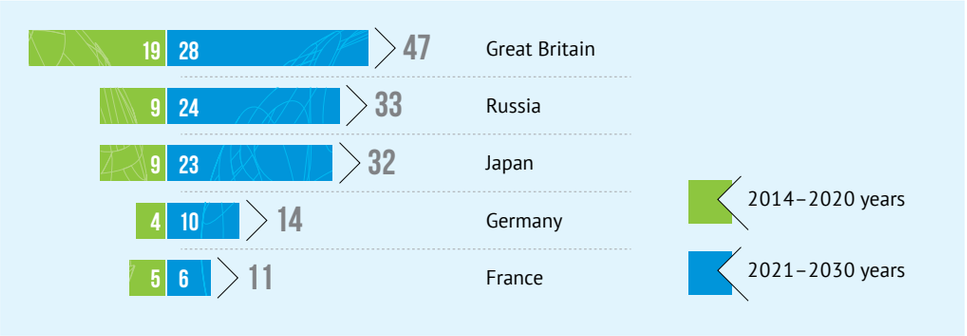


Fig. 8. Potentially Available Markets for the NIAEP–ASE Integrated Company

5. Source: Internal analytics of JSC NIAEP based on expected constructions of NPPs in the world which is presented by State Corporation ROSATOM.
6. The market is defined in the following way: all NPPs in the world to be planned for construction, in accordance with model of markets of State Corporation ROSATOM except for countries where construction of NPPs is carried out by domestic contractors (for example, China, Korea, Russia).

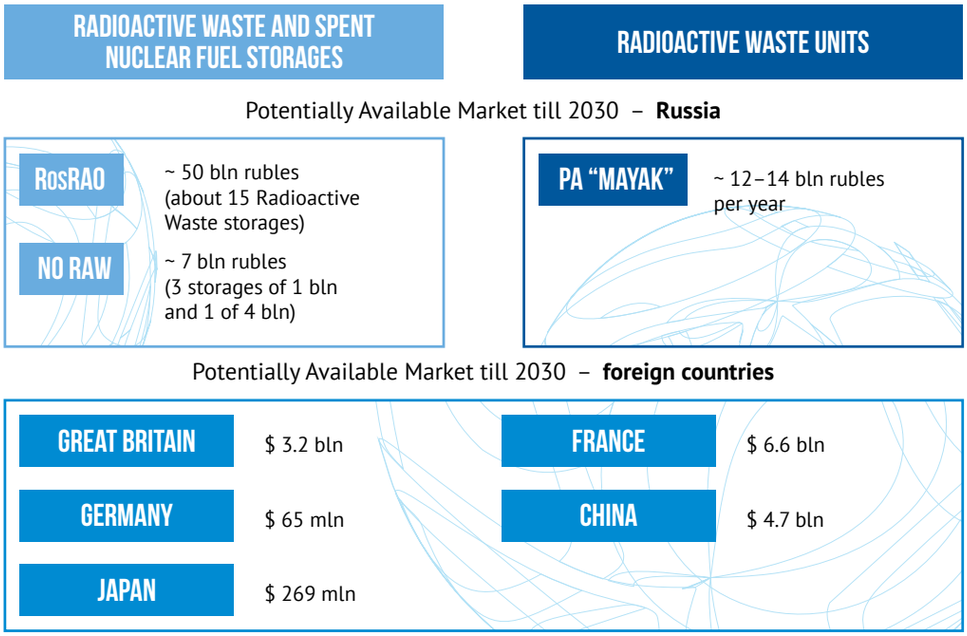


Fig. 9. Potentially Available Market in the Field of Radioactive Waste and Spent Fuel Reprocessing

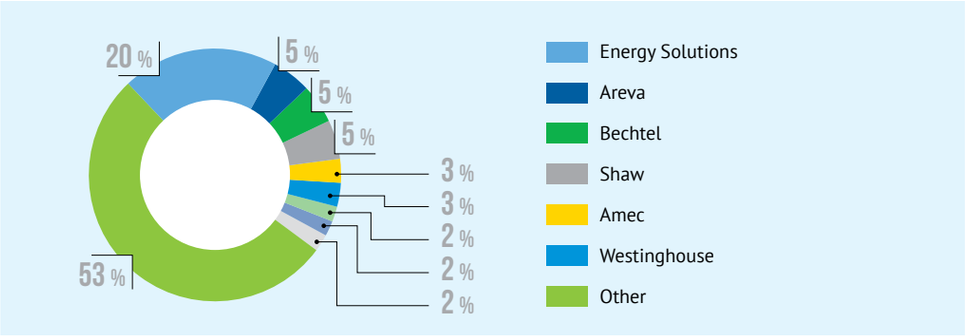


Fig. 10. Structure of main players in the market of construction in the field of handling with Radioactive Waste and Spent Nuclear Fuel

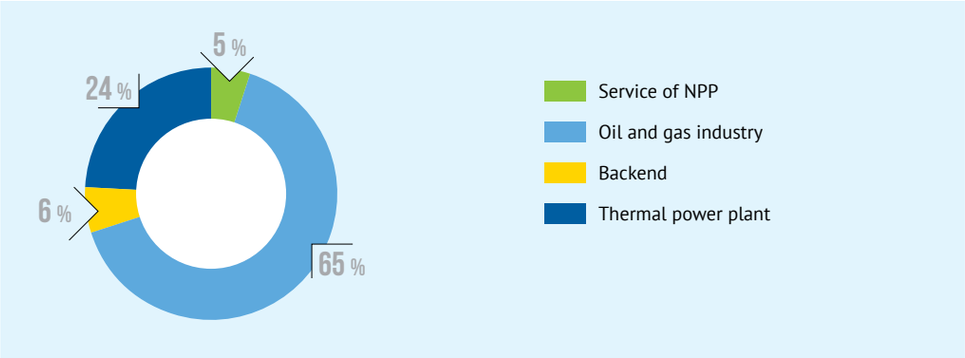


Fig. 11. Volume of oil and gas industry.
Source: State Corporation ROSATOM, examination of Booz&Company

Market of Heat Plants Construction

Currently, the volume of the Russian thermal power market is rather restricted. The existing projects on construction and commissioning of additional facilities till 2020 are contracted within the Capacity Delivery Agreements (CDA) by various contractors. Commissioning of facilities without CDA requires establishment of an investment support mechanism which has not been yet elaborated. According to assessment of Booz & Company, from 2012 to 2020 it is planned to commission heat power plants stations with a total capacity of up to 10 GW. Till 2030 it is planned to commission 25 to 35 GW, in addition modernization of 7 to 10 % of the existing HPP capacities facilities will be required.

The current share of the Integrated Company NIAEP–ASE in the HPP construction market amounts to 14 % of the Russian market due to implementation of the YuSDPP projects. In the conditions of a restricted HPP capacities construction market in Russia till 2030, the NIAEP–ASE Integrated Company has a target to save the current share in the Russian market and international market (India, China, Vietnam, Republic of South Africa, Brazil, and Turkey) as well.

Market of oil and gas facilities construction

Market of oil and gas facilities construction is one of the largest and most growing ones in the longer term, and that is why it is attractive to develop presence of the Company in the segment in order to ensure its stability. As per results of 2013, total volume of the market was equal to ~ 240 bln US dollars, and fivefold growing (up to 1200 bln) is expected till 2030.

Taking into account that currently the NIAEP–ASE Integrated Company does not have required competencies in the field of designing of oil and gas facilities and neither experience and references of projects implementation in this segment, activities of the Company in the medium term in this segment will consist in rendering consultations on projects management in order to minimize risks of the Company. It will enable to generate required knowledge and competencies, as well as to ensure contacts with suppliers and potential customers.

From Idea to Action!

Strategy

2

Interview

Ivan Borisov,
vice president on development

– What challenges did the Company encounter with in 2013?

– Principal external challenge of the last year was severe competition on the international market. We offer our own system engineering solutions and technologies for potential partners. We try to participate in all interesting tenders, and we compete in this field with leading global corporations.

– What changes in the international and Russian markets of NPP construction do you expect in the nearest future? How can they influence on activity of the Company?

– Considerable growing of construction of new power units on the background of large-scale decommissioning of nuclear power plants of completed life time is expected for international market of NPP construction. Data base of Power reactor information system of International Atomic Energy Agency even today records annual increase of constructed NPP. For example, in 2013, construction of 10 nuclear power units began in the world, and it is by30% more than during previous year. In total, 72 nuclear power units are under construction now in the world. The Asian countries exhibit maximal activity in construction of power generating units, mostly China which is planning to commission 8.64 GW of new nuclear power units in 2014. Rosatom is one of worldwide leader in the field of NPP construction and it has good prospects for promotion of its technologies in new countries both for construction of new power units and for decommissioning of nuclear facilities. Therefore the NIAEP–ASE Integrated Company as engineering flagman of domestic nuclear power engineering industry has all possibilities to expand essentially volume of its projects in the nearest future. It means new work positions and new technologies without which no serious competition is possible.

– Markets of which countries do you plan to develop in the medium term?

– First of all we are planning to implement projects in the countries which are new ones for the Russian power engineering companies. I mean Akkuyu NPP in Turkey, Belarus NPP, nuclear power plants in Bangladesh, Vietnam, and Jordan. We will also going on our effective cooperation with India (Kudankulam NPP) and China (Tianwan NPP). In general Asian and Middle East regions become priority-oriented for us. Nevertheless, the European projects such as expansion of Paks NPP or construction of new power plant in Armenia are not less important for us. We will surely look toward to expand our presence in Europe.

– What is the function of new businesses in the business-model of the Company?

– We are strategically targeted to diversification into engineering projects in the oil and gas industry and heat power engineering industry while keeping growth around main core of business in the form of construction of nuclear power engineering facilities.

In the conditions of limited potential of market of heat power plants in Russia the Company is planning to keep current share in the Russian market and come to foreign markets. We have a required experience for it due to successfully implemented project of Yuzhnouralsk SDPP-2

Availability of referential competences in the field of handling with radioactive waste and irradiated fuel and decommissioning of facilities enables for the Company to set one more strategic target: coming into number of three leading global companies in this business in the nearest future. Construction of research reactors is also extremely interesting for the Company, and it is close to main core of our business as well. We are able to become one of world leaders in this field.

In case of successful implementation of all targets the Company will come into top-20 of the major engineering companies in the world by 2030.

2.1. Mission and Values

Our Mission

Based on our wide experience in implementation of projects in the nuclear power industry, we manage construction of complex engineering facilities, deliver value for the shareholder and provide achievement of the shareholder's goals on the Russian and international markets.

Our Vision

We strive to establish competitive business which successfully implements projects on construction of complex engineering facilities and is directed at maximization of shareholder value.

Our Values:

- Safety and quality,
- Cooperation and exchange of experience,
- Constant development of competencies,
- Social responsibility.

2.2. Strategy of the Company

2.2.1. External challenges

Table 2. Influence of external challenges on the Company business

External challenges: tendencies	External challenges: detailed description	Influence on the Company
Competitive expansion on the part of Korea and China	• Active promotion of Korean technology APR-1400 in the international market (in particular, won tender in the United Arab Emirates). • Large-scale transfer of technologies by China (in particular, within the frame of contracts with Westinghouse) and attempts to come into international market (Argentina, Turkey). • Growing of competencies and experience by Chinese manufacturers with the use of implementation of large scale program of construction NPPs in the area of China: increase of installed capacity of NPPs from 11 GW (2010) to 128 GW (2035).	Impact on time schedule and CAPEX of projects of the constructed NPPs (reaction of the Company: reduction of cost and time period of NPP construction to 30 %). Growing of available market of PMC services in the segment of high power NPPs.
Consequences of accident in Fukushima NPP in Japan	• Refusal of some advanced countries to develop nuclear power engineering: plans of Germany to close all operating NPPs by 2022, plans of Switzerland on refusal to construct any new NPPs and prolong life of the existing ones, plans of Japan on complete refusal of nuclear power engineering by 2040. • Severization of requirements to safety systems of NPP and improvement of safety culture: development of active and passive safety systems, development of legal framework on safety.	Necessity to construct NPPs in compliance with the most severe safety requirements. Necessity to cooperate with countries (potential customers) on preparation of plan of NPP infrastructure development. Growing of available market in segment of decommissioning/radioactive waste/spent nuclear fuel.
Tendency of some developing countries to expand nuclear power engineering	• Preparation of programs for development of power engineering industry in the developing countries, as well as start of their practical implementation, in particular in Bangladesh, Jordan, United Arab Emirates, Turkey. • In spite of aspiration to develop power engineering industry, the developing countries have no financing sources for nuclear programs and required technologies.	Growing of available market in construction of NPP in accordance of Russian design, market of PMC, as well as services for decommissioning/radioactive waste/spent nuclear fuel. Necessity to finance projects of NPP construction.
Technological trends in power engineering	• Over a midterm and long period: increase of differentiation of reactors depending on power including potential growing of demand to low and medium power reactors. • Reduction of gas prices as a result of expansion of shale gas from the USA. • Achieving of "growing ceiling" by renewable power sources (limitations for networks, accumulated problems with tariffs, subsidies, and government debt).	Impact on time schedule and CAPEX of the projects of NPP to be constructed.

2.2.2. Strategic targets

Strategy of the NIAEP–ASE Integrated Company was developed in 2013.

Principal strategical targets of the Company till 2030:

- competitive ability in the main "core" of business ("core" of business is a construction of high power NPPs): ability to construct several facilities at the same time in different geographical markets within time limits and cost;
- operating stability: ability to fulfill all obligations on the projects is to be implemented. In case one or several projects are canceled or their implementation is postponed (on the basis of investigation of major engineering companies, share of one project in the bag should be equal to 5–10 % taking into account cost of NPP projects in order to ensure stability; parameter of project shares assign requirements for scale of business);
- financial soundness of the Company.

Operating stability of the Company is supposed to be achieved at the expense of expansion of activities and diversification out of "core" of business. In order to develop stable business of the NIAEP–

ASE Integrated Company, it is expedient to be guided by level of diversification beyond limits of basic business 30-40 % (see Fig. 12).

Strategic initiatives of the NIAEP–ASE Integrated Company on creation of competitive, stable (as for operation and finances) within the frame or close to "core" of business, as well as diversification beyond segment of basic presence correspond to strategic targets of State Corporation ROSATOM (see Fig. 13).

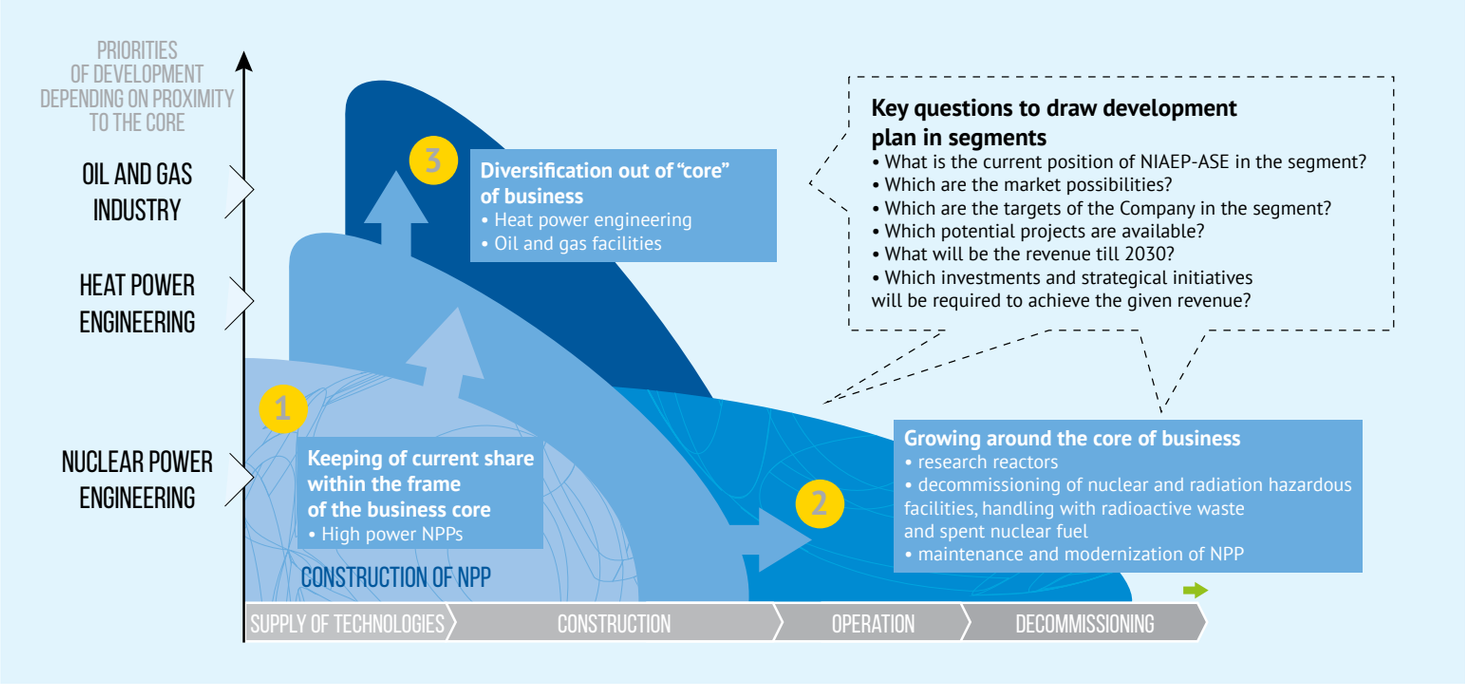


Fig. 12. NIAEP–ASE Integrated Company's Strategic Development Direction

Targets of State Corporation ROSATOM	Strategic goals of NIAEP–ASE				
	Implementation of NPP construction plans in Russia and abroad	Increasing competitiveness of Russian NPP	Diversification in atomic industry	Providing operation stability (diversification)	Poviding financial stability
1 Keeping of nuclear potential of state					
2 Provision of nuclear radiation safety			○		
3 Providing state economy with electric power	○	○			
4 Technological leadership			○	○	
5 Globality	○	○	○	○	○
6 Level	○	○	○	○	○
7 Product competitiveness		○	○	○	○

Fig. 13. Compliance with strategic targets of State Corporation ROSATOM

Plans on diversification of the Company activity

When selecting directions for diversification beyond core of the business, facilities which can be compared with the NPP as for scale and difficulty level were of top priority:

- NPP is one of the largest and most complicated facilities: cost of 1 power unit is from $3 bln; number of construction employees can be about 8 thous. pers., designing and project management personnel, about 300 persons;
- professional services have a big share in the cost of NPP: considerable quantity of technologies concentrated in the limited area require involvement of specialists of different trades at all stages of chain of creation of value.

Capital-intensive facilities of high requirements to engineering namely heat power industry facilities and oil and gas facilities (Fig. 14) can be compared with NPPs as for scale and difficulty level.

Diversification of the NIAEP–ASE Integrated Company by sectors and geographical presence within the framework of implementation of strategic targets will exercise positive influence on development of its activity:

- Impact on the Company:
  - Additional revenue from projects beyond the main "core" and thus leveling of oscillations of sector cycles (in case of correction of demand for NPP);
  - Work in more competitive environment, getting of relevant experience and as a consequence, optimization of business processes;
- Influence on the "core" of business:
  - Additional possibility of risks balancing in the course of project implementation in the main "core": default risk for individual projects and risks of resources under-capacity;
  - Optimization of business processes in the main "core" and effectiveness enhancement and as a consequence, competitive recovery of the Company in the main core.

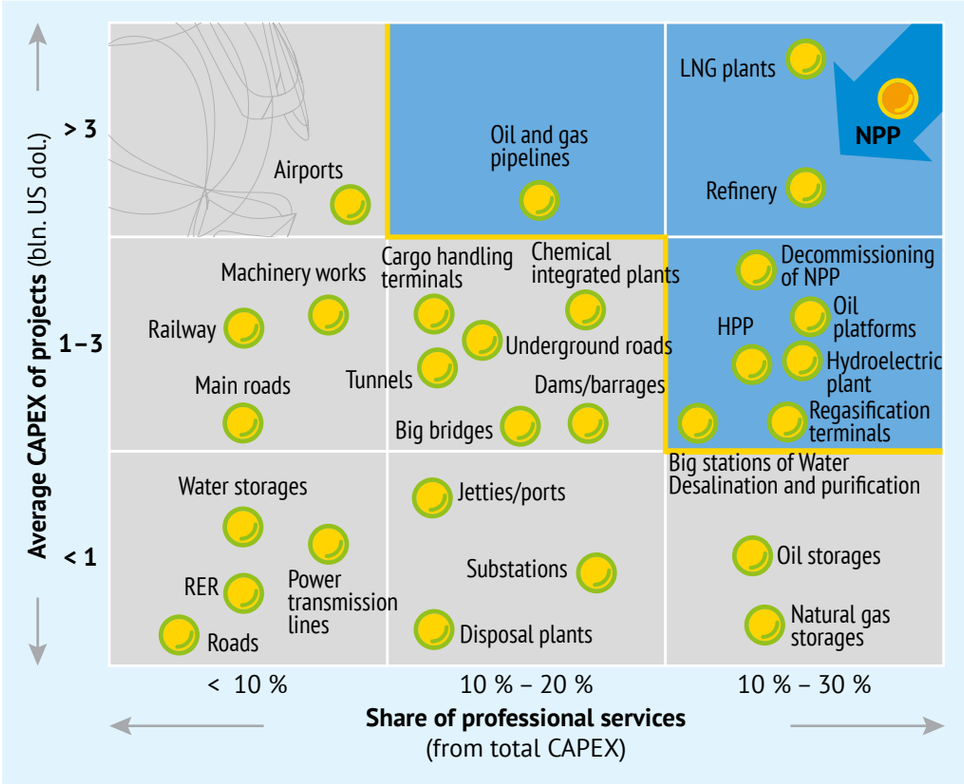


Fig. 14. Correlation of construction facility as per CAPEX[7] and share of professional services

2.2.3. Priority strategic directions for business development of the NIAEP–ASE Integrated Company

Within "core" of business

High power NPPs

Currently within main "core" of business the NIAEP–ASE Integrated Company acts as a General Contractor and General Designer of implementation of roadmap of State Corporation ROSATOM with regard to construction of NPPs in Russia. Abroad the NIAEP–ASE Integrated Company implements projects on construction of NPP in accordance with Russian technologies thus providing contribution to globalization of range of activity for State Corporation ROSATOM.

In order to provide competitive position for the Company on the horizon of planning in a view of existing tendencies in the Russian and international market of high power NPP it is required to maintain current share in the growing market[8] at the expense of:

- competitive recovery of the Company projects including reduction of time period and cost of construction while improving quality of projects management taking into account interests of specific customers;
- development of marketing and commercial functions of the Company.

Results of 2013

Contribution of the Reporting year into implementation of strategy is presented in Chapter 3 "Results of activities: Contribution into implementation of strategy".

Plans for 2014 and midterm:

- preparatory works at Kursk NPP-2, Nizhny Novgorod NPP, Akkuyu NPP (Turkey), Roopur NPP (Bangladesh), Ninh Thuan NPP (Vietnam) and Fujian Sanming NPP (China);
- construction and installation works at Rostov NPP, Belarus NPP and Tianwan NPP (China);
- final works (commissioning of power unit 1) at Kudankulam NPP (India).

7. CAPEX – capital expenditure.
8. Market of high power NPP construction is growing in absolute terms.

Priority for the Company is a formation of bag of orders (maximal participation in tenders) in the countries of South-East Asia, Latin America, Africa, as well as in traditional markets of Central and Eastern Europe and Russia.

Share of the NIAEP–ASE Integrated Company will be kept at a level of 31 % in the main core of business (apart from participation in maximal number of tenders) at the expense of permanent enhancement of efficiency of the Company activity (detailed information is presented in Section "Competitive advantages of the NIAEP–ASE Integrated Company").

Principal risk for implementation of the Company strategy in the segment of high power NPPs is a political nature of solutions on selection of a supplier of nuclear technologies (detailed information is presented in Section 2.3 "Opportunities and risks").

Growing around "core" of business

Research reactors

The aim is to achieve leading level among world players.

Taking into account scope of market and assessment of its development, one order each 2-3 years is required to achieve leading position for the NIAEP–ASE Integrated Company.

Plans for 2014 and for midterm

Priority for the Company is:

- formation of bag of orders and getting of references in the segment at the expense of the following works:
  - Participation in tender for modernization of research reactor Oyster in the Netherlands (its closing is planned for 2014);
  - Signing of contract for development of technical and economic assessment of TSYANT (Nuclear science and technology center), other works on project of TSYANT construction (2014–2019);
  - Participation in the construction project of multi-purpose fast-neutron research reactor at the site of JSC "SSC RIAR" (2014–2015);
- development of attractive projects in the area of Republic of South Africa, as well as in the targeted markets of State Corporation ROSATOM.

Dedicated share of the Company in the segment of research reactors by 2030 is 40%. Targeted markets: Russia, Vietnam, The Netherlands, Republic of South Africa, Argentina, Brasil.

Decommissioning of nuclear and radiation hazardous facilities, handling with radioactive waste and spent nuclear fuel

Strategic aim: coming into number of five leading world companies in the segment by 2030 with a share minimum 10 %.

Plans for 2014 and for midterm

Goal for 2014: growing of scope of orders minimum by 50 % if compared with 2013 due to participation in the projects of following facilities: Mayak FSUE PA, facility in the Andreeva bay, Chernobyl NPP (Ukraine), Ignalina NPP (Lithuania).

For midterm and over a long period priorities for development of the Company presence abroad are markets of historical presence of NUKEM Technologies, as well as markets which are the biggest (as for scope) and the most dynamical (as for rate of growth) ones till 2030. Great Britain, Germany, France, Japan, and Republic of South Africa belong to these markets.

Basic works are as follows:

- formation of partnership in the targeted regions, as well as of local operating subdivisions in the area of the countries where it s a required condition for activities (for example, Great Britain);
- implementation of current projects, formation of bag of orders and getting of references in the segment;
- participation in the Russian and foreign competitions and tenders in the field of handling with radioactive waste and spent nuclear fuel and decommissioning of nuclear and radiation hazardous facilities.

Service and modernization of NPPs

In the segment of services, the NIAEP–ASE Integrated Company will act as a General Contractor for major projects of maintenance and repairs as well as a consultant in the field assets management and training.

Plans for 2014 and for midterm

Goal of the NIAEP–ASE Integrated Company for 2014 is a growth of level of references at the expense of:

- positioning as a General Contractor of maintenance, repair, and modernization,
- development of competencies in "multiaspect" services and preparation of package proposal,
- positioning as a consultant on assets management of NPP (owing to generation and service of information model of NPP1 for planning and modernization) and on training.

In order to improve level of references of the NIAEP–ASE Integrated Company it is required to generate algorithms of interaction with Rusatom Service Company which is dedicated for the given segment.

Activities planned for 2014–2015:

- definition of organizational form for cooperation with Rusatom Service,
- getting of new contracts for NPP in the Eastern Europe.

Principal risk for implementation of the Company strategy in the segment "Maintenance and modernization of NPP is a high competition from the side of local contractors (see Section 2.3 "Opportunities and risks").

Diversification beyond "core" of business

Heat power

Strategic aim: to ensure a share in the segment of heat power which enables to keep revenue of the Company at a level which not lower than the previous one.

Plans for 2014 and for midterm

Primary task for 2014 is a completion of works on construction and commissioning of power unit 2 of Yuzhnouralsk SDPP-2 (till end of November of 2014).

In the conditions of limited potential of market of the heat power plants construction in the RF, the targeted priorities of the Company till 2030 are keeping of the current share in the Russian market and coming to foreign markets (India, China, Vietnam, Republic of South Africa, Brazil, and Turkey) by means of:

- participation in maximal number of tenders in the top-priority target regions,
- completion of creation of projects management system in the segment of heat power generation on the basis of Multi-D (till 2016),
- extension of competencies in designing by means of JV with the leading design institutes.

Oil and gas facilities

Strategic aim: to obtain references by means of implementation of PMC projects. The NIAEP–ASE Integrated Company can be positioned as a PMC-Contractor for specific elements of works, and it can act in this role in the projects with partners.

Priority tasks are as follows:

- to ensure awareness of the Company among industry-specific customers,
- to obtain pilot project as a PMC consultant when constructing oil and gas facilities.

Because of the fact that the NIAEP–ASE Integrated Company has no sufficient competencies in designing of oil and gas facilities nether experience and references for implementation of projects, activities of the Company in the medium term in this segment will consist in rendering consultations on projects management in order to minimize risks of the Company. It will enable to generate required knowledge and competencies, as well as to ensure contacts with suppliers and potential customers.

Plans for 2014 and for midterm

Participation of the Company in 7–10 first-rate exhibition arrangements in Russia and abroad.

Obtaining of pilot projects as a PMC consultant when constructing oil and gas facilities.

The most attractive for profile of the Company in the oil and gas segment is a participation in the projects on construction of following facilities:

- Oil and gas platforms (cost of facility is 3–5 bln US dollars),
- Oil refineries (3-4 bln US dollars),
- LNG plants (2–3 bln US dollars),
- Regasification terminals (1 bln US dollars).

Long-term goal for the NIAEP–ASE Integrated Company is to get a Master Contract for major elements of projects.

Principal risk for implementation of the Company strategy in the segment “Oil and gas facilities” is a high competition from the side of existing players (see Section 2.3 “Opportunities and risks”).

2.3. Creation of Value

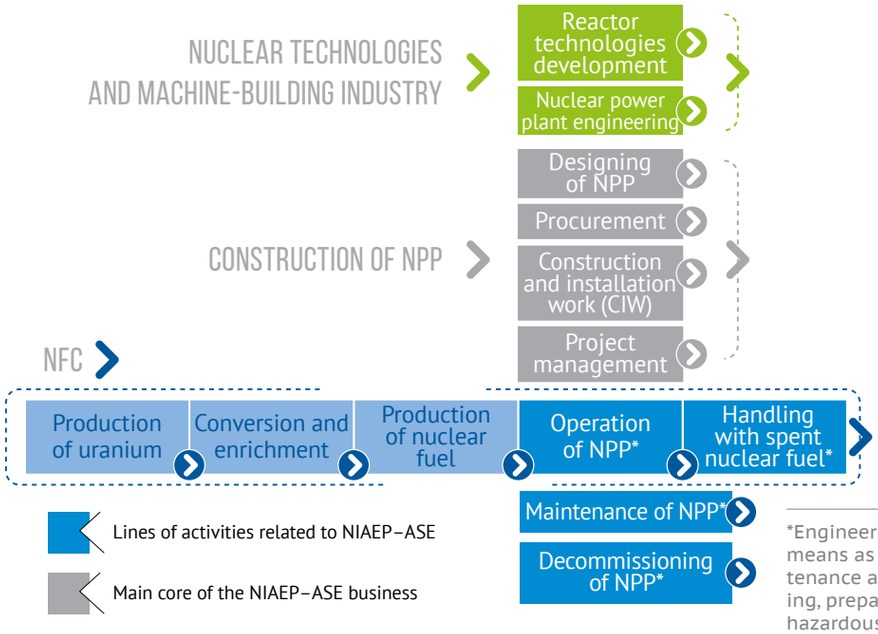


Fig. 15 . Position of the NIAEP–ASE Integrated Company in the value chain of State Corporation ROSATOM

Value Chain

Value chain of the NIAEP–ASE Integrated Company in the engineering business on construction of NPPs is an integrated part of the unified value chain of the whole nuclear industry (Fig. 15). Position and functions of the NIAEP–ASE Integrated Company in the value chain of NPPs construction are defined by importance of role of EPC-contractor in the structure of State Corporation ROSATOM. More than 50 % of the NPP cost within life cycle is defined by operating efficiency of the engineering company (averaged share of investments, services on decommissioning, handling with c spent nuclear fuel in the discounted cost of electric power).

*Engineering business within the frame of the given lines of activities means as follows: in case of service of NPP, modernization, maintenance and repairs, as well as training; in case of decommissioning, preparation, disinfection, dismantling of Nuclear and radiation hazardous facilities and other works; when handling with Spent nuclear fuel – construction of facilities for storage and reprocessing of Spent nuclear fuel; when operating NPP – generation and service of information models for NPP, construction of facilities for storage and reprocessing of radioactive waste

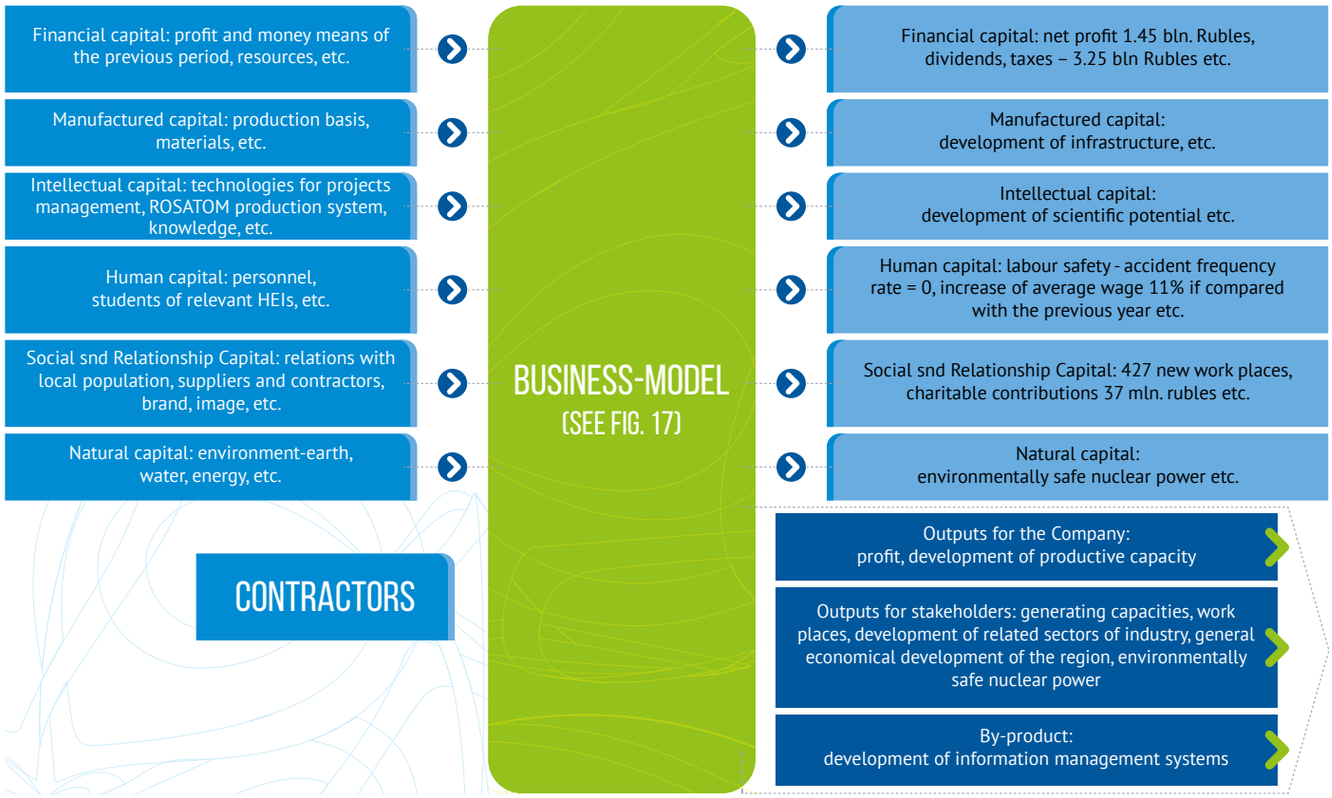


Fig. 16. Value Creation Chain of NIAEP–ASE Integrated Company

Business model

The NIAEP–ASE Integrated Company defines business model (see Fig. 17) as a system, which provides creation of value for short, mid, and long term, and it is aimed to achieve strategical targets.

The business model of the Company is based on its long-term strategy and sustainable development. The business model includes as follows:

- available capitals (detailed information is presented in Chapter "Management of capitals"),
- management system designed to ensure maximal effective usage of available capitals;
- activity on creation of value (in the whole value chain an important part belongs to capitals which are converted (increase/reduce) while participating in the creation of value);
- outputs (products and services);
- results on creation of value and their contribution to long-term capital augmentation of the Company.

Augmentation and loss of capitals occurs as a result of activities for creation of value (see Fig. 16). Detailed information on management of the Company capitals to achieve the set strategic targets is presented in Chapter 5 "Management of capitals".

Detailed description of the Company capitals is presented in appropriate sections of the Report.

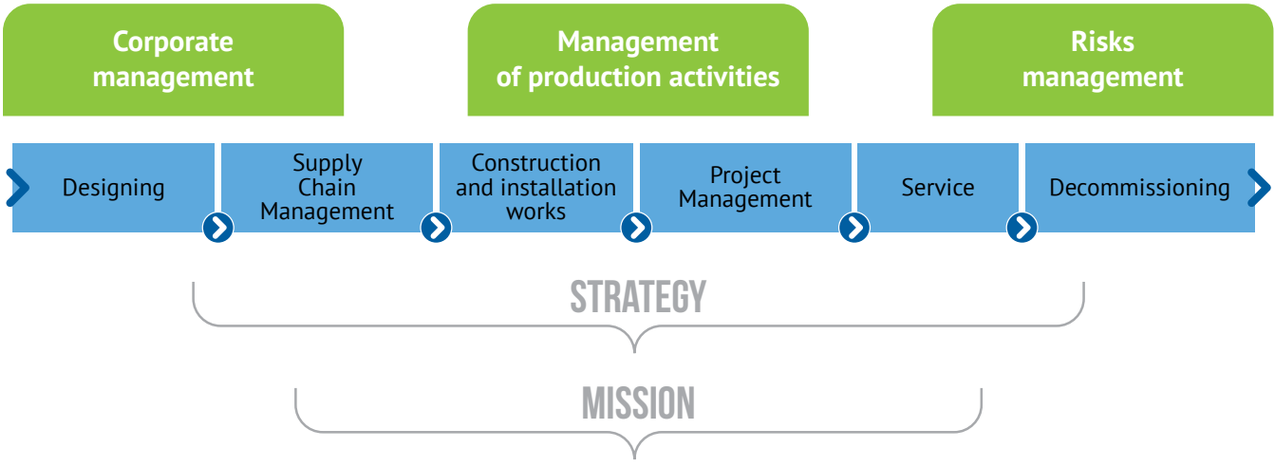


Fig. 17. NIAEP–ASE Integrated Company's Business Model

Table 3. Capitals of the NIAEP–ASE Integrated Company

Capital	Capitals to be used, including		Capital flow, including	
	internal	external	internal	external
Financial capital	Profit and money means of previous period. Reserves of JSC NIAEP	Investments. Loans, credits	Augmentation: Net money inflow, profit	Augmentation: Taxes and deductions, dividends, percent payments
Natural capital	Area for construction. Water, power	Environment	Augmentation: Reduction of construction area, improvement of energy efficiency	Loss: Direct and indirect ecological impact. Augmentation: improvement of facilities safety, reduction of emissions and waste
Manufactured capital	High technology production basis	Public infrastructure	Augmentation: Technological improvements	Augmentation: Development of public infrastructure
Human capital	Personnel. Competencies	Personnel reserve. Students of relevant HEIs	Augmentation: personnel development, growth of employees engagement, labour safety improving and improvement of the personnel quality of life	Augmentation: Support of talented students
Social and Relationship capital	Internal relations of JSC NIAEP. Brand	Population of target areas. Data base of suppliers and customers	Augmentation: Improvement of credibility of the Company, augmentation of bag of orders	Augmentation: new job formation, rise of public welfare
Intellectual capital	Project management system. Innovation technologies. Knowledge. Intellectual property	Russian and foreign scientific research results	Augmentation: Implementation of innovation projects in the manufacturing	Augmentation: Development of scientific potential of nuclear industry, adjustment of innovation technology Multi-D for new business-segments

2.4. Opportunities and Risks

2.4.1. Competitive advantages of the NIAEP–ASE Integrated Company

The NIAEP–ASE Integrated Company as EPC-contractor has competencies and implements projects in all elements of value chain. Availability of unified competencies defines competitive ability and possibility for diversification. Being a EPC-contractor of full cycle, the Company can use its competencies on designing, management of deliveries (procurement) and management of CIW for implementation of projects beyond main "core" of business i.e. for following segments: research reactors, decommissioning of Nuclear and radiation hazardous facilities and handling with radioactive waste and Spent nuclear fuel, service and modernization NPP, heat power industry (Fig. 18).

Competencies of the Company being its basic competitive advantage enables to expand its presence in other segments not only as a EPC-Contractor, but as a PMC-Consultant for NPP and other sophisticated engineering facilities (including oil and gas ones).

Competitive advantages of the NIAEP–ASE Integrated Company are as follows:

- Level of competencies on projects management which enables to implement a project within specified terms and budgets with maximal quality level;
- Availability of references in the Russian and foreign markets;
- Effective technological solutions as for CAPEX.

The above competitive advantages are based on usage of innovation technology Multi-D, which improves competitive ability due to management of quality, terms, and cost of designing, supplies, and management of construction.

Competitive ability of the Company in the main "core" of business mostly depends on effectiveness and independency of project teams, and it is extremely important in the conditions of growth of the projects implemented. Improvement of independency and level of responsibility of project teams which enables to make decisions and respond to changed circumstances more promptly is provided due to arrangement of works on the basis of principles of project management, wherefore:

- Standard of projects management is approved (project office is an individual project).
- The project office is arranged on the basis of matrix principle.
- Training program on principles of project management for the company employees is developed (See details in Sections "Innovation activities", "Human capital").

Demand in competencies for implementation of target horizon for different types of services is presented in Fig. 19.

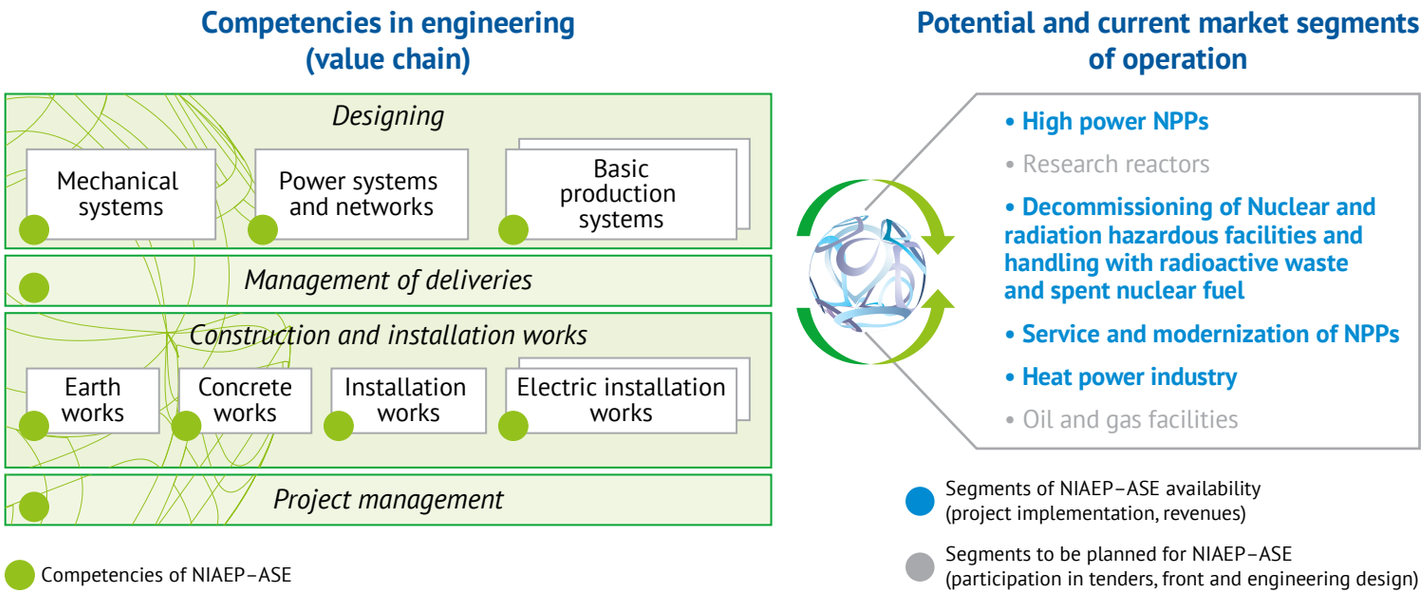


Fig. 18. Competencies of the NIAEP–ASE Integrated Company

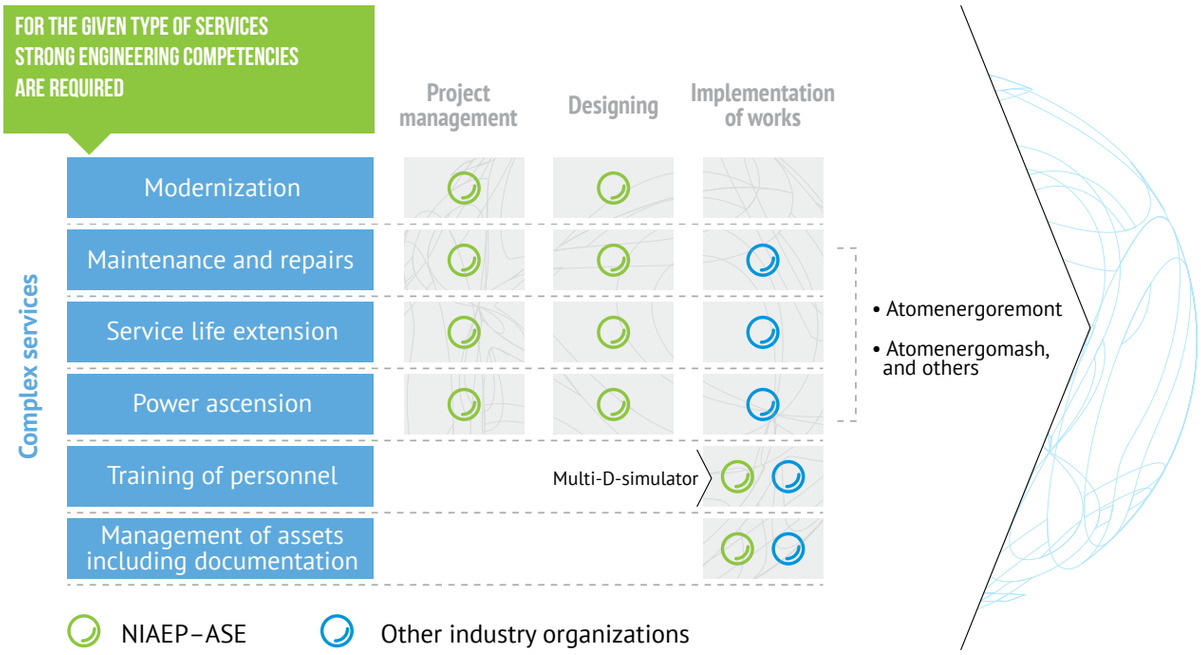


Fig. 19. Demand in competencies for implementation of different types of services

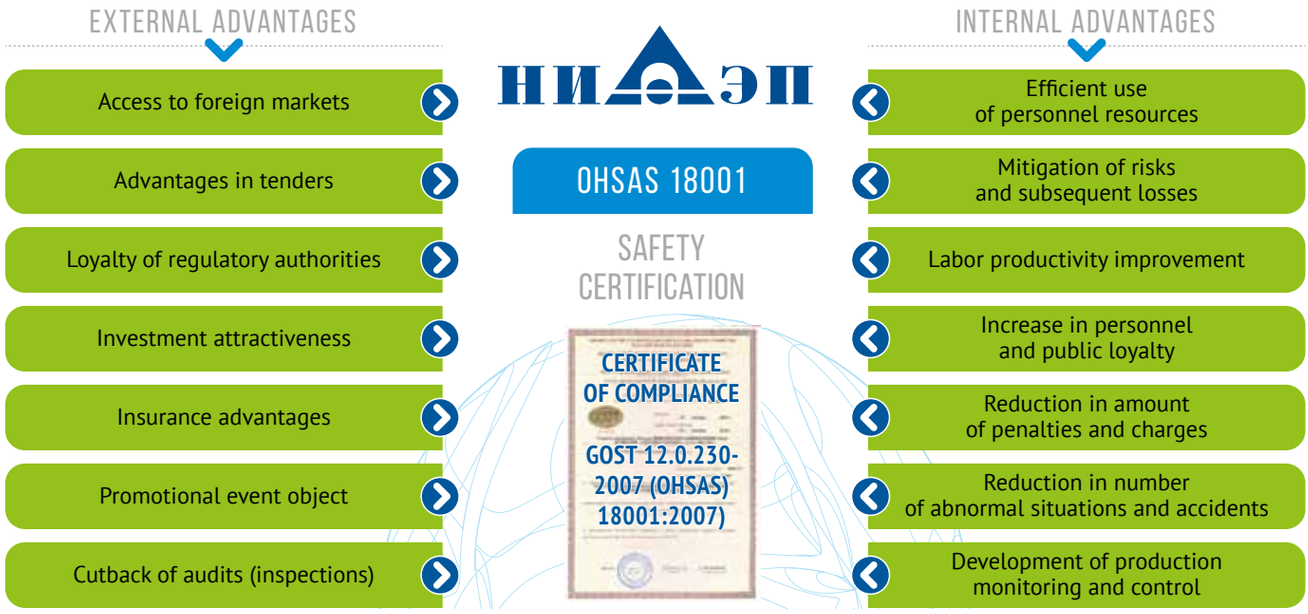


Fig. 20. External and internal competitive advantages of the Integrated Company NIAEP–ASE

2.4.2. Risk management of the NIAEP–ASE Integrated Company

One of the main factors providing achievement of the Company's strategic goals is a risk management. Appropriate functional subdivisions are responsible for specific risks management.

Within the framework of the Company strategic development for midterm and long-term a Policy of risks management of the NIAEP–ASE Integrated Company strategy implementation is developed (See Table 4).

Map of strategic risks of the Company are presented in the electronic Annual Report.

Table 4. Risks management of strategy implementation

No.	Risk	Risk factors	Level of risks	Activities on risks management within the Reporting period
Segment " High power NPPs"				
1	Deterioration of the competitiveness because of development of other power generation sources	Reduction of prices for gas. Interest to development of renewable energy resources.	Average risks	Implementation of program to reduce cost and terms of NPP construction (see sections 5.2.1. "Implementation of production system "Rosatom"; 5.2.2. "Management of construction cost"). Demonstration of advantages of nuclear power generation if compared with renewable energy resources for potential customers.
2	Missing culture of safety and developed elements of nuclear infrastructure on new markets	Low readiness for implementation of projects for construction of NPP of potentially interested countries, incl. because of undeveloped legal framework, production basis, and environmental requirements.	Average risks	Cooperation with countries – potential customers on preparation of infrastructure development plan to achieve a level sufficient for further implementation of NPP construction project (see Section 3.1.1. "Construction of NPPs abroad").
Segment "Research reactors"				
3	No experience in NPP operation of the countries-newcomers	Lack of skilled personnel, understanding of processes, and regulatory base for work with research reactor.	Average risks	Proposals of programs on personnel training for countries-newcomers (see Section 3.1.1. "Construction of NPPs abroad").
Segment "Backend"				
4	High dependency of the segment on political decisions	Dependency of total volume of orders on attention of the state to solving of "legacy" problems.	Average risks	Promotion of projects at a state level.
5	Fine subdivision of orders by legacy holders	Common practice of implementation of NPP decommissioning projects by Concern Rosenergoatom and decommissioning of NFC facilities by fuel company TVEL related to distribution of small volumes of works among contractors of the whole group.	High risks	Conduct of negotiations with Cocern and TVEL for participation in the projects as General Contractor.
6	Absence of final regulatory framework	No determination of bounds of state for decommissioning of legacy facilities. No algorithm of implementation of the RF Government Decree about designation of facilities to extremely radiation hazardous. Necessity of corrections for Provision on decommissioning activity management and industry-specific concept for equipment decommissioning for nuclear facilities.	Average risks	Participation in activity of State corporation Rosatom on preparation of proposals for refinement of legal framework.
Segment "Heat power plants"				
7	High uncertainty of market volumes to 2020	Contracts as per CDA. No algorithm to support investments for commissioning till 2020 not as per CDA.	Average risks	Expansion of area for business availability by coming into foreign markets (see Section 2.2. "Strategy of the Company").
Segment "Oil and gas facilities"				
8	High competitiveness on the part of existing players	Availability of captive companies (for example, Stroygazmontazh, Stroygazconsulting, Stroytransgaz). Considerable experience of projects implementation in the oil and gas industry of existing players.	High risks	Usage of PMC-model and competencies for project management as an "entry point" into segment (see Section 2.2. "Strategy of the Company").

Risks of investment projects

Risks related to non-achievement of the project target parameters: risk of budget overruns project, risk of project completion delay, risk of low quality of project implementation belong to risks of investment projects which occur in the course of construction of nuclear power facilities.

Risks management system of investment project

Main tasks of Risks management system are as follows:

- Support of implementation of the Company strategy;
- Timely identification of risks which arise;
- Optimization of effective capital distribution among projects;
- Improvement of risks understanding and their dependencies;
- Determination of risks owners and their responsibility;
- Development and implementation of required procedures for monitoring and notification about risks;
- Integration of risk management into processes of making management decisions for optimal usage of resources via management of risk balance and profitability;
- Support of continuity (stability) of processes due to revealing, evaluation, and minimization of risks which are able to impact on results of the Company activity;
- Rendering of information support for management and employees of the Company in making management decisions as well as in determining possibilities for optimization of processes.

In 2013, a subdivision of risks management system as a part of Construction budget department was formed. Purpose of this department is risk analysis of NPP construction.

There is an expert council on risk management at power units under construction in the JSC NIAEP. It is a permanent working body for, created for an expertly-analytic support and coordination of works on risks management power units under construction prior to their commissioning.

Regulatory documents for risks management

Following documents were approved in 2013 in order to improve risks management system:

- Order of JSC NIAEP d/d 11.01.2013 No. 40/7-P "About arrangement of works on risks management on power units under construction was issued;
- "Algorithm of regular ascertaining of risk" was approved;
- Orders on usage of regulatory and procedural guidelines on risks management of State Corporation ROSATOM in JSC NIAEP were issued.

Table 5. Results and plans of works on risks management

<table>
<tr><th rowspan="2">Projects/ processes of Risk Management Integrated System</th><th colspan="2">Revealing of risks</th><th colspan="2">Risks assessment</th><th colspan="2">Works on risks management</th></tr>
<tr><th>Results of 2013</th><th>Plans for 2014</th><th>Results of 2013</th><th>Plans for 2014</th><th>Results of 2013</th><th>Plans for 2014</th></tr>
<tr><td>Belarus NPP</td><td rowspan="4">Key risks of NPP construction were revealed</td><td rowspan="3">Updating of list and status of risks</td><td>Quantitative analysis of risks for construction of NPP was performed</td><td rowspan="5">Performance of quantitative analysis of risks</td><td rowspan="2">Remedial measures to reduce key risks were implemented</td><td rowspan="2">Development and implementation of remedial measures to reduce updated key risks</td></tr>
<tr><td>Rostov NPP</td><td rowspan="2">Qualitative assessment of risks for construction of NPP was performed</td></tr>
<tr><td>Kursk NPP-2</td><td rowspan="3">Information for development of remedial measures on risks for construction of NPP was prepared</td><td rowspan="3">Development and implementation of remedial measures</td></tr>
<tr><td>Akkuyu NPP (Turkey)</td><td rowspan="2">Development and implementation of RMS for construction of foreign NPPs</td><td>Quantitative analysis of risks for preparatory period of NPP construction was performed</td></tr>
<tr><td>Hanhikivi-1 NPP (Finland)</td><td>Risk aspects of draft contract for construction of NPP were considered</td><td>–</td><td>–</td></tr>
</table>

Algorithms and results of strategic risks management

Algorithm of strategic risks management is specified in guidelines of State Corporation ROSATOM.

It provides for:

- Drawing up the project risk register;
- Construction of pyramid of risks;
- Separation of key risks;
- Quantitative analysis of risks;
- Assignment of risks owners;
- Development and implementation of remedial measures to minimize risks;
- Monitoring of risks;
- Determination of readiness for risks.

Compliance-risks

Compliance is a provision of assurance that the State Corporation ROSATOM and its agencies correspond to related rules and guidelines, and management of business is carried out at a high level of ethics and well-doing. These rules and guidelines include both statutory requirements and recommendatory guidelines, standards, and rules of international prescriptions for doing business.

Compliance-risk is a risk of application of legal sanctions or sanctions of regulatory bodies, financial loss, loss of reputation or occurrence of any other backwash effects as a result of non-compliance with laws, rules, regulations, and standards.

Following compliance-risks related to activity of the Company are identified in the JSC NIAEP:

- Intergovernmental agreements, international activity (business);
- Intellectual properly;
- Control of foreign exchanges;
- Demands of creditors as per financial documents;
- Recording and Reporting, tax legislation, etc.

On the basis of results of audit of compliance function status "Schedule for development of compliance function in the atomic industry for 2013-2014" is developed in State Corporation ROSATOM.

There is no delay in schedule time for development of compliance function from the side of JSC NIAEP.

2.5. Public Position Concerning Sustainable Development

Approach to sustainable development of the NIAEP – ASE Integrated Company is specified by International Committee of United Nations on environment and development: "Sustainable development is a development which meets the present requirements, but it does not introduce any hazard for ability of future generation to satisfy its own demands". The Company understands sustainable development as a system of successive social, economic and environmental activities making a contribution to achievement of the Company's strategic goal together with development of the society as a whole at the present time and in future.

On the basis of research results of the activities aspects importance and sustainable development of the Company, representatives of the interested parties and management of the Company selected following basic directions forming the Company's public position in the field of sustainable development:

- Safety and quality;
- Staff development;
- Innovative activity;
- Contribution to economic development of regions of operation;
- Social responsibility;
- Environmental protection;
- Transparency and accountability.

Safety and quality

The Company is making efforts to guarantee high level of quality, reliability, and safety of its products and services, maximal compliance with all demands and expectations of consumers, and meeting the requirements specified in Russian and international rules and guidelines on safety of nuclear facilities.

Operational safety of NPP and other facilities depends on quality of work performance at all stages of construction. The Company guarantees high level of quality, reliability and safety of the facilities constructed by it. The Company applies the Quality Management System based on the principles of the Overall Quality Management reflected in the international ISO 9000 standards. NIAEP imposes the highest requirements for the necessary level of safety to its suppliers and contractors and strictly controls the quality of work, equipment and materials.

Staff Development

The Company operates in a high-tech market imposing higher requirements for the level of competence of the professional team. Due to this it is important to involve the best specialists of the industry and constantly improve knowledge and skills in all key aspects.

The Company appreciates competence, creativity, Soft Competencies, and corporate governance of its employees. The main principles in the field of personnel management of the Company include impartial assessment of professional contribution of each employee, opportunity of advancement and interdependency of remuneration level with the employee's performance results. High salary level is provided in the Company, and considerable means are invested into development of personnel and its further training.

Code of ethics and employee behavior for JSC NIAEP was approved in the Company on 29.04.2014.

Innovative Activity

Technical development of the Company is based on innovative approaches to management of NPP power units designing and construction. The JSC NIAEP is making efforts to introduce new information systems and new technologies for designing and construction.

Subdivision of innovation technologies was formed. Its basic activity consists in monitoring of changes, generation and introduction of new regulatory structures, standards, and technologies of work both for basic direction of the Company activity and in related fields.

At a stage of construction, the Company works with contractors and subcontractors: rigorous recruitment, promotion, and introduction of new technologies on their basis, training and certification of personnel.

As a whole, the JSC NIAEP performs innovative improvement of engineering activity in three basic directions:

- study of international practices,
- development and introduction of new technologies in the designing and construction,
- work with personnel, suppliers, contractors and subcontractors, as well as customers in the field of innovations.

Contribution to Economic Development of Regions of Operation

Implementing large-scale projects important for the economy of the regions of operation, the Company realizes its responsibility for establishment of conditions for social and economic development of these regions.

The Company's activity leads to creation of new jobs in the regions of its operation both for suppliers, and for equipment and materials manufacturers. In 2013, minimum 80 % of cash passing through invoices of the JSC NIAEP came to contractors of the JSC NIAEP which created new jobs for their activity.

Social Responsibility

Sustainable development of the Integrated Company directly depends on public acceptance of the activity on construction of nuclear power facilities. The Company lays special emphasis on social stability factor and sees social responsibility as one of the key principles of its activity.

Social influence of the Company is brought both at the internal (personnel), and internal levels (area of operation). The collective agreement specified the NIAEP obligations as an employer in the field of social guarantees and benefits to employees. Social programs for employees and members of their families are implemented.

In the course of projects implementation, local laws and interests of population are observed in the areas of operation. Sponsor and charitable activity is aimed to revive spiritual and national values, to support culture, science and education, to assist in scientific-technical progress, and to promote healthy lifestyle in the regions of operation.

Environmental Protection

The Company is scrupulous when designing and constructing nuclear facilities: it realizes that its activity without paying proper attention to ecological matters can result in negative changes of environment. In order to provide effective nature protection activities and ecological safety, an ecological policy is approved in the Company. It is directed to protection of health of personnel and population, support of quality of environment in the areas of nuclear facilities and rational exploitation of natural resources (http://www.niaep.ru/activity/ecologypolicy/07102100463cb86d94349770b1d80ba3).

The Company complies with international and national ecological laws, standards, and requirements related to its activity and products. Policy of the JSC NIAEP is also directed to maximal saving of energy, water, earth, and other natural resources in the course of production, proper handling with industrial waste, hazardous materials, and technologies.

Special attention is paid to conservation and rational usage of natural capital: reserve of natural resources which can be used by the Company in the purposes of production.

Transparency and accountability

In order to provide transparency following information resources are created: Web-site http://www.niaep.ru, Web-site http://www.atomstroyexport.ru, Internet platform for interaction with the interested parties http://niaep.stakeolderpanel.ru.

Within the frames of its core activity the Company is responsible to its shareholders for performance of investment obligations. In addition, different requirements are imposed to the Integrated Company by the key interested parties, including regional authorities, local self-governing authorities, business partners and local communities. Effective cooperation with the interested parties includes assessment of their expectations and definition of the Company's reciprocal position, as well as taking their expectations into account in corporate policies, development strategy and current activity whenever reasonable. The JSC NIAEP performs special activities for structural interaction with the interested parties: forums, trade fairs, round tables, dialogues, meetings, etc.

The Company undertakes to timely inform the interested parties on all aspects of its activity important for them using public Reporting mechanism. Beginning with 2010 the representatives of main interested parties are involved actively into preparation of public Reports.

Information on activities of the Company in the field of sustainable development is presented in sections of the Report.

The power of Dare!

Results of Activity: Contribution to Implementation of Strategy

3

- Construction of NPP
- Service of NPP
- Construction of Other Facilities of Nuclear Power Industry
- Construction of Complex Engineering Non-nuclear Facilities

3.1. Construction of NPP

3.1.1. Construction of NPP abroad

As of 31.12.2013, the NIAEP–ASE Integrated Company was constructing 9 power units abroad, in four power units the design and survey work was carried out, in six power units – Initial Project Preparation, one power unit was at the stage of lower power testing (see Fig. 21). The Company is designing one power unit abroad as a General Contractor. All works are carried out under the supervision of the IAEA and implemented in accordance with relevant international standards, legislation and non-proliferation regime.

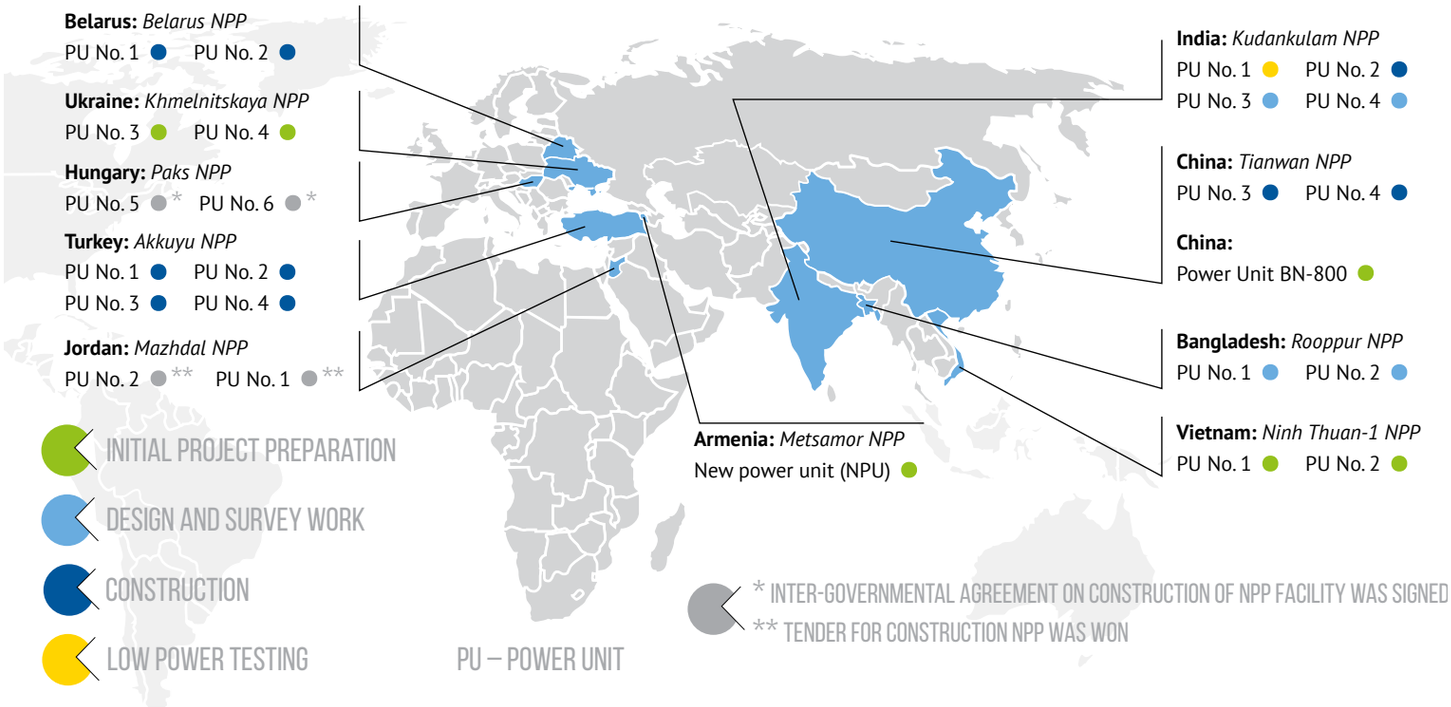


Fig. 21. Power units under construction and those to be designed abroad by the Integrated Company and status of the works performed

Turkey. Akkuyu NPP, Power units 1–4

Description of project

The project implies designing and construction of NPP eastward Mersin. The NPP includes four power units of total installed capacity minimum 4800 MW, as well as development of infrastructure, operation of power plant, purchase and selling of the produced electric power. Design solutions VVER-TOI will be used in the structure of power units.

The project is implemented as per model Build-own-operate[9]. The NIAEP–ASE Integrated Company takes part in the project in accordance with Contract as a General Contractor, and NPP AKKUYU is a Customer.

Results of 2013

Primary engineering surveys, marketing research of Turkish construction market, engineering surveys of phase "Project", and examination of existing infrastructure were carried out. Justification for investments, and sketch design of operating personnel camp were developed. Pit 1 was prepared.

On the basis of results of 2013, scope of works was 1% (by 0.57 % more than the planned value). Development of the project design documentation was completed for 70 %.

Plans for 2014

Development of project documentation including PSAR as well as expert review in Turkish department on atomic power and other regulatory authorities of the Republic of Turkey will be completed in 2014.

Plans for midterm and long-term prospects

In future the parties will cooperate concerning matters of service, modernization of the NPP physical protection, as well as in the field of handling with nuclear fuel and radioactive waste (decommissioning of NPP as well).

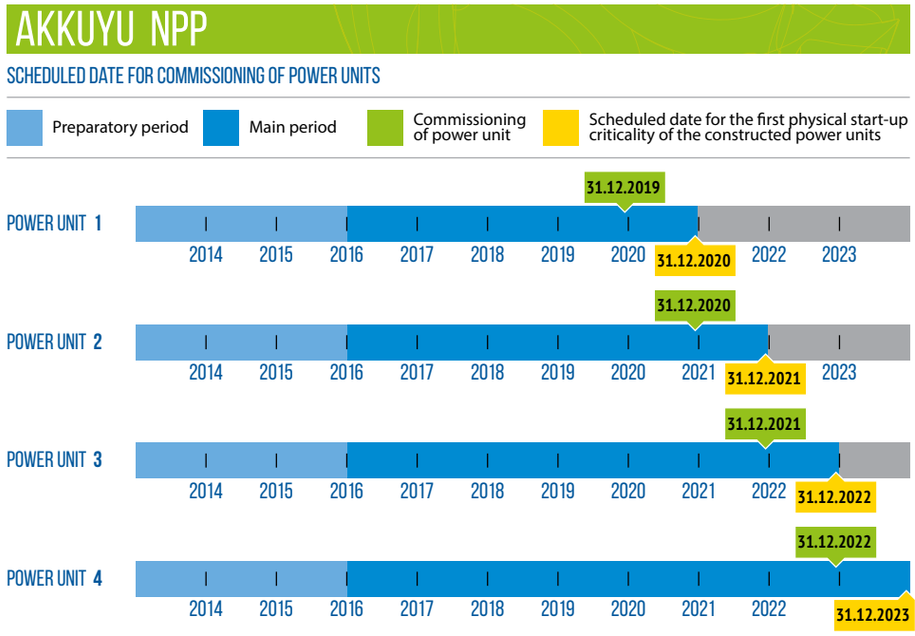


Fig. 22. The planned date of commissioning of Akkuyu NPP power units

Bangladesh. Rooppur NPP, Power units 1, 2

Description of project

The project provides for construction of NPP which includes two power units of 2000 MW capacity as per technology VVER-1000. The NIAEP–ASE Integrated Company is a General Contractor of the project. Year of scheduled start of works is 2013, and year of completion is 2016.

Results of 2013

Following contracts were signed at preparatory stage in 2013:

- for development of investments justification, environmental impact assessment for construction site of NPP and performance of required engineering surveys and ecological investigations;
- for development of project documentation, top-priority project documentation and performance of engineering surveys for project stage of Rooppur NPP.

Coordination with Bangladesh party of contract for performance of top-priority works of preparatory stage of the Rooppur NPP construction is carried out.

Plans for 2014

Works on the concluded contracts, as well as signing of a contract for performance of top-priority works of preparatory stage are planned for 2014. Besides, a contract between JSC ASE and JSC NIAEP for development of project documentation, top-priority project documentation and performance of engineering surveys for project stage will be concluded.

India. Kudankulam NPP, Power units 1, 2

Description of project

The Russian Federation renders technical assistance for India in constructing two power units of NPP Kudankulam with reactors VVER-1000 of capacity 1000 MW each. In accordance with the Contract, the JSC ASE implements the contract from the Russian party, and from the Indian party – Indian Atomic Energy Corporation.

Construction began in 2002. Completion of the construction is planned for 2015.

9. "Build-own-operate" is a contract where obligations on construction, ownership, and operation of a facility are specified.

Results of 2013

In 2013, a permit of regulatory body of India to start Power unit 1 was obtained. The Power unit was started for 50 % of heat power (stage-by-stage). Synchronization of turbine generator 1 with subsequent connection to power system of India was performed.

In power unit 2, simulators of fuel assemblies were loaded to the reactor, and trial run of the regulators drives of reactor control and safety system in the scope required for reactor assembly was carried out.

As of end of 2013, power Unit 1 was ready for 100%, and power Unit 2, for 99%. Contribution of the Reporting period to readiness of the constructed facilities was equal to 2–3 %.

Plans for 2014

Completion of period of reaching a projected production capacity and preliminary acceptance of power Unit 1 are planned for 2014. After that, stage of guarantee maintenance will begin. As for power Unit 2, start of physical start-up for power unit 2 and Synchronization of turbine generator 2 of power unit with its subsequent connection to power system of India are planned.

India. Kudankulam NPP, Power units 3, 4

Description of project

Power units 3, 4 of Kudankulam NPP will be designed on the basis of project for power units 1, 2. The NIAEP – ASE Integrated Company is responsible for implementation of project works, delivery of equipment, and technical support with the help of Russian specialists.

Results of 2013

The Contract was concluded, and top-priority project works as per contractual schedule were carried out.

China. Tianwan NPP, Power units 3, 4

Description of project

Power units 3, 4 – is a second stage of Tianwan NPP (TNPP-2) constructed in accordance with General Contractor, which came into force in 2011. Customer for this project is Jiangsu Nuclear Power Corporation (JNPC). Planned times for commissioning of power units is: power Unit 3 – February of 2018, power Unit 4 – December of 2018. Information on the project is presented in the 2012 Annual Report of JSC NIAEP.

Results of 2013

In 2013, the Company delivered the whole set of technical documentation for technical project including specifications for purchase of equipment in China and third countries.

In the course of the Reporting period the Chinese party performed construction and installation works on power units 3, 4. The first concrete was deposited into foundation of nuclear island of Power unit 4.

Level of readiness of power units of TNPP-2 for the end of 2013 was 8.6 %, and contribution of 2013 was 3.4 % from it.

Plans for 2014

For 2014, delivery of detailed design documentation for the nuclear island and delivery of equipment for power units are planned. Construction of power units will continue, and dome will be installed on the reactor building of power unit 3.

Contribution of 2014 into level of readiness of power units of TNPP-2 should be equal to 15.8 %.

China, Fujian Sanming NPP with fast breeder reactor of BN-800 type (NPP-DBN)

Cooperation of Russia with China on project of the Fujian Sanming NPP began in 2008. The project provides for construction of commercial purpose demonstration NPP with fast breeder reactor which includes two power units with reactors of BN type with capacity of 800 MW each. Customer of the facility is the Chinese National Nuclear Corporation (CNNC).

Information on the project is presented in the 2012 Annual Report of JSC NIAEP.

Results of 2013

Within 2013, materials on cost estimation for construction of Fujian Sanming NPP, draft framework contract and schedule of its preparation and approvals were delivered to the Customer.

Plans for 2014

In case of positive decision of CNNC about cooperation, the framework contract and contract for development of technical project of NPP will be approved in 2014.

Vietnam. Ninh Thuan 1 NPP, Power units 1, 2

Description of project

The project provides for construction of two power units of capacity 1000 MW each. Customer is Electric Power Compa-

ny of Vietnam. Commissioning of power unit 1 of Ninh Thuan 1 NPP will be carried out in 2023, and of power unit 2, in 2024.

Results of 2013

In February of 2013, the parties agreed master schedule for construction of Ninh Thuan 1 NPP on the basis of project NPP-91 developed in China.

In order to determine basic project of Ninh Thuan 1 NPP, seminars on technologies of NPP with reactors VVER of Russian design were held in Hanoi in April and October of 2013, where projects NPP-91, NPP-92, and NPP-2006 were presented. Project NPP-2006 was selected as a basic design by Vietnamese party.

The NIAEP–ASE Integrated Company delivered draft contracts for development of technical project for Ninh Thuan 1 NPP and development of technical project for construction base to Vietnamese party in December of 2013 and January of 2014.

Plans for 2014

In 2014, the parties will prepare and initial a contract for development of technical project for Ninh Thuan 1 NPP and contract for development of technical project for construction base which will be signed after approval of feasibility study in the end of 2014 – beginning of 2015.

Belarus. Belarus NPP, power units 1, 2

Description of project

The project includes construction of two power units with reactors of type VVER-1200 (V-491) of maximal capacity 1200 MW each. General Contractor in accordance with contract is JSC ASE, and Customer is a state institution "Directorate of NPP construction". Scheduled date for commissioning of power unit 1 is 2018, and of power unit 2 is 2020.

Results of 2013

In 2013, works on arrangement of concrete foundation for waterproofing layer of main building and structures for power unit 1, as well as development of ground for foundation pit of power unit 2 and works on arrangement of concrete foundation for power unit 2 were carried out. Contribution of 2013 into degree of readiness of project was 5 %. Project works on Power unit 1 were performed for 5 %, and on power unit 2, for 2 %.

Plans for 2014

Construction and installation works in the Power unit 1 including mounting of molten core catcher are planned. Contribution of 2014 into degree of readiness of project will be about 15 %.

Ukraine. Khmelnitskaya NPP, Power units 3, 4

Description of project

In accordance with Agreement between Government of the Russian Federation and Cabinet of Ministers of Ukraine about cooperation in construction of power units 3, 4 of Khmelnitskaya NPP d/d 09.06.2010, the JSC ASE is a Contractor, and State enterprise NNEGC "Energoatom" is a Customer for project of construction of the second stage of Khmelnitskaya NPP.

Results of 2013

The NIAEP–ASE Integrated Company prepared and delivered documentation "Basic conceptual design solutions on new power units 3 and 4 of Khmelnitskaya NPP on the basis of project NPP-92", as well as indicative commercial offer to State enterprize NNEGC "Energoatom". Comparative analysis of construction of power units as per project V-392 on the basis of feasibility study developed by Ukrainian party and Conceptual design solutions was carried out.

Plans for 2014

Project works will continue provided that cooperation between Russia and Ukraine in the field of nuclear power engineering is kept, in accordance with concept of construction of power units 3, 4 of Khmelnitskaya NPP approved by State enterprise NNEGC "Energoatom".

Armenia. Metsamor NPP, New Power Unit

Description of project

In accordance with inter-governmental agreement signed in 2010, new power unit with VVER of project NPP-92 (capacity 1,060 MW) will be constructed in the area of the Republic of Armenia. The JSC ASE is assigned as a General Contractor, and joint venture JSC "Metsamorenergoatom", as a Customer and operating company.

The Russian and Armenian parties carried out considerable scope of works to provide legal framework for the project and performed the required organizational-technical measures. Dates of project implementation start are not specified because matter of the project financing is not solved yet.

Plans for 2014

The NIAEP–ASE Integrated Company will provide interaction with International Cooperation Department and International Business Department of State Corporation ROSATOM on matters related to future construction of new Power unit.

Kazakhstan. Project of NPP construction

Description of project

In 2006, the JSC ASE Company and National JSC "Kazatomprom" established joint venture on development and promotion of innovative projects of Power units with low and medium capacity to market of Kazakhstan: JSC "Kazakhstan–Russian company "Atomic stations" (JSC "KRCAS").

In accordance with "Comprehensive program of Kazhakhstan-Russian cooperation in the field of peaceful use of atomic energy" d/d 07.12.2006, JSC "KRCAS" and Russian companies carried out considerable scope of works for preparation of the project for implementation.

Results of 2013

In 2013, joint implementation of NPP construction in Kazakhstan was agreed on the top level.

Plans for 2014

In 2014, works on preparation of the project for implementation will go on.

3.1.2. Prospective facilities of foreign market of NPP construction

Hungary. Paks NPP, Power units 5, 6

Description of project

Project of Paks NPP expansion includes designing, construction, commissioning and subsequent decommissioning of new power units with reactors of type VVER in order to substitute capacities of existing power units 1–4.

Results of 2013

In 2013, key terms and conditions of EPC-contract were signed, and project of intergovernmental Russian-Hungarian agreement "About cooperation in peaceful use of atomic energy" was delivered to State Corporation ROSATOM.

Plans for 2014

Signing of EPC-contract with the Customer is planned for 2014.

Madzhal NPP (Jordan)

Description of project

JSC ASE in 2011, the JSC ASE delivered the tender bid for construction of power units 1, 2 of Madzhal NPP to the Customer – Jordan Commission for Atomic Energy (JCAE). The Power units are supposed to be constructed using design solutions of VVER-1000 (NPP-92).

Results of 2013

The JSC ASE is recognized as a winner of tender for construction of NPP. Plan of project works for 2014–2015 is under coordination with management of JCAE.

Plans for 2014

Preparation, approval by the Customer, and signing of the contract for development of JOI, EIA, and surveys at the site of NPP.

Preparation, delivery, and coordination with the Customer of EPC-contract with Annexes.

3.1.3. Construction of NPP in Russia

In 2013, the NIAEP–ASE Integrated Company implemented designing and construction of eight power units in Russia (see Fig. 23) (Construction of Baltic NPP was paused till determination of scheme of power distribution), including construction of six power units as a General Contractor:

- Power units 3, 4, Rostov NPP,
- Power units 1, 2, Baltic NPP,
- Power units 1, 2 Kursk NPP-2.

As a General Contractor, the NIAEP–ASE Integrated Company implemented designing of two power units in Russia in 2013.

No Power units of NPP were commissioned in Russia in 2013 .

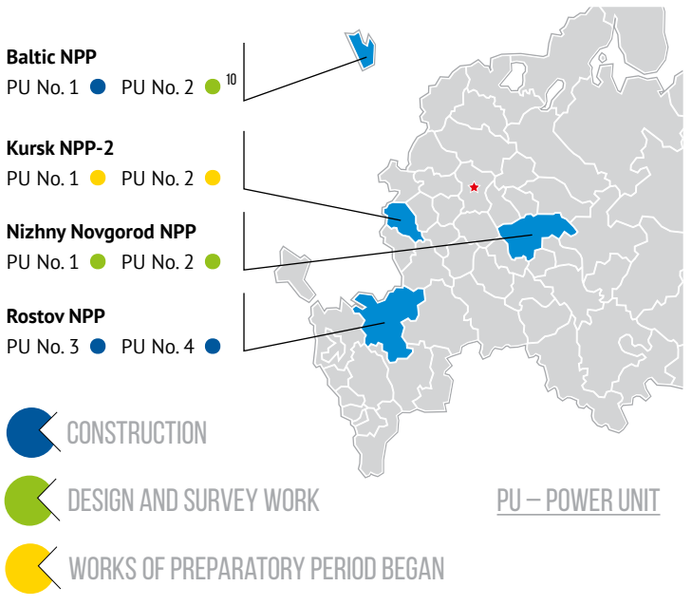


Fig. 23. Power units in Russia which are constructed and designed by JSC NIAEP

Table 6. Progress of power units construction (% of implementation of annual plan)

Power unit	Value	
	Current prices	Prices of 2000
3, Rostov NPP	96.83	95.93
4, Rostov NPP	94.90	95.55
1, Baltic NPP	91.32	93.53
2, Baltic NPP	97.13	96.02
Kursk NPP-2	174.29	148.9

Table 7. Readiness degree of the facilities to be constructed[11]

Power unit	Readiness of the facility for the end of 2013, %	Contribution of 2013 into readiness of facility, % (plan)	Planned degree of readiness for the end of 2014, %	Contribution of 2014 into readiness of facility, % (plan)
3, Rostov NPP	65.54	20.68	88.42	22.89
4, Rostov NPP	25.17	8.36	36.89	11.72
1, Baltic NPP	It is not calculated because of approval of "Activities related to decision on additional arrangement of power units of low and medium capacity at the construction site of Baltic NPP in 2013"			
2, Baltic NPP				
1, Kursk NPP-2	It is not calculated because works of preparatory period are carried out			
2, Kursk NPP-2				

10. Because of decision to expand site of Baltic NPP with power units of low and medium capacity made by State Corporation ROSATOM in the middle of 2013, works to provide integrity of the erected building structures were carried out in the second half of the year.
11. Readiness of the facilities to be constructed is calculated on the basis of prices as of 2000.

Nizhny Novgorod NPP, Navashinskiy region of Nizhegorodskaya oblast

Description of project

Customer of the project is JSC "Concern Rosenergoatom". The NIAEP–ASE Integrated Company performs functions of General Designer in accordance with the contract. Design and survey work started in 2012.

Completion of construction and commissioning of power unit 1 is planned for 2022, and of power unit 2, in 2023.

Results of 2013

In 2013, design documentation on main and auxiliary buildings and structures was developed, and engineering surveys and monitoring of the construction site were carried out. Works on designing of power units were implemented for 70 %. Contribution of 2013 into degree of the facility readiness was equal to 30 %.

Plans for 2014

In 2014, development of design documentation will be completed, and monitoring of the site will be carried out. Contribution of the next year into degree of the facility readiness will be equal to 30%.

Kursk NPP-2, Kurchatovskiy region of Kurskaya oblast

Description of project

The project provides for construction of power plant including two power units. Construction of the facility will begin in 2015. Customer of the project is JSC "Concern Rosenergoatom", and the NIAEP–ASE Integrated Company performs functions of General Contractor in accordance with the Contract.

Commissioning of power unit 1 is planned for 2021, and of power unit 2, in 2023.

Results of 2013

In 2013, development of design documentation on main and auxiliary buildings and structures began, Technical Design Assignment for development of design documentation for preparatory period of power units construction was signed, as well as engineering surveys and monitoring of the construction site were carried out.

Plans for 2014

In 2014, works on preparation of construction site and its external infrastructure for main period of NPP construction will go on. Works on excavation of foundation pit for main buildings and and structures of NPP will begin. Contracting process of equipmenbt with long period of manufacturing will start.

Rostov NPP, Rostov oblast, Volgodonsk

Description of project

The JSC NIAEP performs works on construction of power units 3, 4 of Rostov NPP in accordance with Contract concluded in 2009 with JSC "Concern Rosenergoatom". Construction of power unit 3 began in 2009; scheduled time of completion is 2014. Construction of power unit 4 began in 2009, and scheduled time of completion is 2017.

Results of 2013

In 2013, design documentation on main and auxiliary buildings and structures was issued. Engineering surveys and monitoring of the construction site were performed. Contribution of the year into total scope of works on power unit 3 was equal to 95 %, and as for power unit 4 – 60 %.

Plans for 2014

In 2014, physical start of power unit 3 is planned.

Baltic NPP, Nemanskiy region of Kaliningradskaya oblast

Description of project

Construction and installation works in power units 1, 2 of Baltic NPP were carried out on the basis of agreement between JSC NIAEP and JSC Concern Rosenergoatom signed in 2011. Completion of works on power unit 1 is planned for 2017, and as for power unit 2, for 2018.

Results of 2013

In 2013, "Activities related to decision on additional arrangement of power units of low and medium capacity at the construction site of Baltic NPP were approved".

Information on scope of design and exploration works for the Russian NPPs are presented in electronioc Annual Report.

3.2. Service of NPP

China. Tianwan NPP, Power units 1, 2

The facility was commissioned in 2007 and delivered to the Customer after guarantee maintenance in 2010. In 2011, contract between JSC ASE and owner of NPP (Jiangsu Nuclear Power Corporation) for implementation of works on justification of possibility to increase the interrepair time for equipment, systems, and pipelines of power units 1, 2 of Tianwan NPP when changing 12-months fuel cycle to 18-months fuel cycle was concluded.

In April of 2013, the parties signed additional agreement to the above contract about preparation of the Report for the following topic: "Evaluation of earthquake resistance of power units 1, 2 of Tianwan NPP in case of high earthquake effect".

Dates of contractual works completion taking into account additional agreement is 2014.

Results of 2013

Delivery of documentation to the Customer was completed. Changing of power units 1, 2 to 18-months fuel cycle was approved by supervising body of China (NNSA).

Plans for 2014

In 2014, works on changing of power units 1, 2 to 18-months fuel cycle and evaluation of their seismic resistance are planned.

3.3. Construction of Other Facilities of Nuclear Power Industry

3.3.1. Research reactors

Center of nuclear science and technology, Vietnam

Construction of Center of nuclear science and technology in Vietnam is carried out on the basis of inter-governmental agreement signed in 2011. Customer is VINATOM.

Results of 2013

In 2013, Government of Vietnam approved site for arrangement of research reactor (Dalat, Lamdong province). Schedule of pre-investment stage of construction and design specification for feasibility study-JOI are agreed.

Plans for 2014

It is planned to agree contract for development of feasibility study within 2014.

3.3.2. Storages and reprocessing plants for spent nuclear fuel

Table 8. Projects of construction of reprocessing plants for radioactive waste and Spent nuclear fuel

Country	Project
Ukraine	Construction of new ventilation pipe and associated systems of the II stage of Chernobyl NPP
Russia	Construction of water purification plant of radioactive drains and waters containing medium-active waste of chemical and metallurgical production for FSUE PA "Mayak"
Russia	Construction of Complex of cementationfor liquid and heterogeneous medium-active waste for FSUE PA "Mayak"
Russia	Expansion of building 120/12 to arrange electrical furnace EP-500/5 and storage of vitrified radioactive waste for FSUE PA "Mayak"
Russia	Preparation of sections of design documentation on environment impact assessment and environmental protection for facility in the Andreeva bay
Russia	Designing of complexes on reprocessing and storage of radioactive waste in the facility in the Andreeva bay
India	Design-engineering works in the course of creation of reprocessing plant for liquid radioactive wastes

Table 9. Completed projects on Management of handling with spent nuclear fuel and radioactive waste as of 31.12.2013

Country	Customer	Name of contract	Start of project	Completion of project
RUSSIA	State Corporation ROSATOM	Construction of Complex of cementation for liquid and heterogeneous medium-active waste for FSUE PA "Mayak".	07/2008	12/2013
		Expansion of building 120/12 to arrange electrical furnace EP-500/5 and storage of vitrified radioactive waste for FSUE PA "Mayak".	10/2010	12/2013
	FSUE "FCNRS"	Preparation of sections of design documentation on environment impact assessment and environmental protection for facility in the Andreeva bay.	11/2010	06/2013
	AnsaldoNucleare	Designing of complexes on reprocessing and storage of radioactive waste in the facility in the Andreeva bay.	03/2011	06/2013

Russia, FSUE PA "Mayak"

Construction of water purification plant of radioactive drains and waters containing medium-active waste of chemical and metallurgical production for FSUE PA "Mayak"

The works were performed as per contract of JSC ASE and State Corporation ROSATOM on turn-key terms. Installation of utility networks and large-sized process equipment, ventilation, heating, finishing of internal parts of the building was carried out. The works are completed.

Construction of Complex of cementation for liquid and heterogeneous medium-active waste for FSUE PA "Mayak"

In July of 2008, the JSC ASE signed the contract with the customer of the project, Rosatom State Corporation. The Company performs works on turn-key terms. As per the Contract, obligations of JSC ASE include implementation of construction-assembly and pre-commissioning works.

Results of 2013

Works on mounting of concrete goods of process building, stainless lining, erection of cast-in-situ walls and ceilings, as well as installation of large-sized equipment were implemented.

Plans for 2014:

- Completion of contractual works,
- Discharge of obligations within the frame of warranty period.

Expansion of building 120/12 to arrange electrical furnace EP-500/5 and storage of vitrified radioactive waste for FSUE PA "Mayak"

The project is implemented within the frame of inter-governmental agreement between Russia and Italy on cooperation in the field of recycling of the Russian nuclear submarines excluded from the Navy and safe handling of radioactive waste and Spent nuclear fuel. The agreement was concluded in 2003. The works are

implemented turn-key terms. Customer of the project is Rosatom State Corporation. Contractual works began in October of 2010.

In 2013, works on erection of the extension frame to arrange EP 500/5 and storage for radioactive waste were carried out, as well as delivery of part of process equipment.

The above listed projects for FSUE PA "Mayak" are financed from federal budget of the RF within the frame of implementation of Federal Target Program "Provision of nuclear and radiation safety for 2008 and for the period till 2015".

Preparation of sections of design documentation on environment impact assessment and environmental protection for facility in the Andreeva bay; Designing of complexes on reprocessing and storage of radioactive waste in the facility in the Andreeva bay

Within the frame of inter-governmental agreement between Russia and Italy on cooperation in the field of recycling of the Russian nuclear submarines excluded from the Navy and safe handling with radioactive waste and Spent nuclear fuel d/d 05.11.2003, the JSC ASE is assigned as a Coordinator of the Russian subcontractors in the course of designing, deliveries, and construction of complexes of reprocessing and storage of radioactive waste at the facility in the Andreeva bay.

The works are implemented within the frame of contract for design works between JSC ASE and Company Ansaldo-Nucleare (Italy), contract between JSC ASE and JSC "FCNRS", State Corporation ROSATOM and Ministry of economic development of the Republic of Italy. Works on two contracts are financed by the Government of Italy.

In 2013, works on development of design documentation were continued including sections of environment impact assessment and Ministry of the environmental protection, for complexes of reprocessing and temporary storage of radioactive waste at the facility in the Andreeva bay.

Ukraine

Construction of new ventilation pipe and associated systems of the II stage of Chernobyl NPP

The works were completed in 2013. The project was financed from International fund "Shelter" which administrator is European Bank for Reconstruction and Development.

Slovakia

Fulfillment of obligations of JSC ASE as per contract with JSC "YAVIS" (Jadrova a vyrad'ovaciaspolocnost', a.s.), signed in March of 2008, is paused because of no permit for importation to the area of the RF of metal radioactive waste for reprocessing.

India

Design-engineering works in the course of construction of solidification plant for liquid radioactive waste

Development of project of liquid radioactive waste solidification plant and designer supervision of equipment manufacturing is implemented within the frame of contract for construction of power units 1, 2 of Kudankulam NPP since August of 2008. The works are implemented by internal order within the frame of implementation of obligations as per contract for construction of power units 1, 2 of Kudankulam NPP. Customer for this project is Atomic Energy Corporation of India, LTD.

The plant was commissioned in 2012.

In 2013, works on warranty maintenance of the commissioned Impregnation treatment plant, units of concentration plant, instrumentation and control system of Impregnation treatment plant and concentration plant were implemented.

International cooperation concerning handling of radioactive waste and Spent nuclear fuel

In 2013, in order to develop competencies and getting the reference, joint-stock company "State Specialized Design Institute" (JSC "GSPI"), open joint-stock company "SverdNIIHIMMASH" (OJSC "SverdNIIHIMMASH"), Company NUKEMTechnologiesGmbH (NUKEM Technologies), JSC ASE and JSC NIAEP concluded an agreement on cooperation for implementation of turnkey projects in the field of decommissioning of nuclear and radiation hazardous facilities, handling with the spent nuclear fuel and radioactive waste. The cooperation is based on implementation of following experience and competencies:

- JSC "GSPI" – implementation of design and engineering works for needs of nuclear industry of Russia;
- OJSC "SverdNIIHimmash" – development, manufacturing, and delivery of equipment for nuclear power plants and fuel cycle facilities;
- NUKEM Technologies – technologies and equipment for decommissioning of Nuclear and radiation hazardous facilities, handling with the Spent nuclear fuel and radioactive waste;
- JSC ASE – construction of nuclear power plants with reactors of Russian design and turnkey construction of nuclear systems and plants as a EPCM Contractor;
- JSC NIAEP – construction and commissioning of NPPs in Russia and abroad.

3.4. Construction of Complex Engineering Non-nuclear Facilities

3.4.1. Market of power engineering

Project "Yuzhnouralsk SDPP-2"

The projects provides for construction of two power units of 400 MW capacity in the area of Chelyabinsk Region of RF.

Contract for project implementation on terms of EPC for Power unit 1 was concluded in 2009, and for Power unit 2, in 2012. The contracts provide for delivery of Project Design Documentation, construction and installation works, pre-commissioning works, delivery of equipment, and training of the Customer personnel.

Power Unit 1

Suppliers of main equipment are SiemensAG and JSC "Atomenergomash", and General Designer is JSC "Institute Teploenergoproekt".

In 2013, basic construction, installation, and pre-commissioning works are completed for 96% (main and auxiliary equipment was mounted, installation of waste heat recovery boiler was completed), the equipment is delivered for 98%, and generator is connected to the network.

Works on the project will be completed in March of 2014.

Power Unit 2

Suppliers of main equipment are LLC "Siemens Technologies of gas turbines" and JSC "ZiO-Podolsk", and General Designer is JSC "Institute Teploenergoproekt".

In 2013, main equipment was supplied to the site (power island and waste heat recovery boiler), 95 % of detailed design documentation was delivered to the Customer, thermal envelope of main building was closed. Now Power Island and funnel are under installation and works on open switchgear 500kW are being performed.

Plan on construction of power unit 1 of YuSDPP in 2013 is fulfilled for 86.89 %, and for construction of power unit 2, for 51.57 %.

In 2014, completion of works on construction and commissioning of power unit 2 are planned till end of November 2014.

3.4.2. Market of oil and gas facilities

In 2013, integration into targeted informational-communicative space was carried out (participation in three first-rate exhibition arrangements in CIS (MIOGE (Moscow), KIOGE (Kazakhstan), "Oil, gas, petroleum chemistry" (Tatarstan)). Study of participation as a PMC in the project of construction of the second stage of Taneko began.

Table 10. Degree of readiness of heat power facilities

Power unit	Readiness of facility for the end of 2013, %	Contribution of 2013 into readiness of facility, %	Assumptions of facility readiness for the end of 2014, %	Contribution of 2014 into readiness of facility, % (plan)
No. 1, YuSDPP-2	94.25	38.14	100.00	5.75
No. 2, YuSDPP-2	39.49	36.00	100.00	60.51

Evolution of Innovations!

Innovation Activity

4

- Mechanisms of Projects Management
- Management of Designing and Construction
- Innovation Projects Launched in 2013
- Plans for Starting of Innovation Projects for 2014

Interview

Yuriy Ivanov,
senior vice-president, Director of design

– What is the influence of innovations on production process introduction?

– We have managed that for implementation of mounting operations immediately at the site, with the use of Multi-D technology, the most detailed schedules are developed with planning accuracy up to one weld or mounting operation. Due to innovation tools of visual simulation, quality and rate of construction have improved at the construction sites. Now we transfer this approach from area of mounting to construction base, and it reduces period of construction.

– What is the time period before the innovations are paid back?

– Our experience has shown that application of innovation technologies both in methods of management and in production processes, influences immediately on the payback. For example, usage of Multi-D technology for simulation of complicated installation works within limited space, simulation of emergency situations immediately compensates charges for development of technology. Usage of innovation methods of automatic argon welding for pipeline of big diameter at the Rostov NPP has reduced its installation from 127 to 100 days.

– Which areas of production were improved due to innovation projects?

– Due to introduction of innovation projects, the Company has improved results in construction of facilities, manufacturing of equipment, installation and welding, purchases and deliveries, management of personnel at the construction site, and staff training (of both young professionals, and those already working in the Company). Due to usage of information technologies many processes of work performance at the construction site were optimized.

4.1. Mechanisms of Projects Management

4.1.1. Project office

Project office is a center of management of specific project, and its functions are as follows:

- Provision of information about progress of the project;
- Check of fulfillment of contractual obligations by contractors;
- Management of changes in the project;
- Preparation of proposals on improvement of the project management system;
- Project risks analysis and preparation of proposals to minimize them;
- Monitoring of project implementation;
- Collection and examination of Reporting documentation in the course of project implementation;
- Coordination of activity of structural subdivisions participating in the project implementation;
- Planning as per activity progress charts of the second and third level;
- Development of remedial measures in case of any deviations from the preset parameters of project.

Following documents are accepted to arrange an office for projects management: Corporate standard on projects management, Certificate for projects management system in the JSC NIAEP, Provision on project management office, and Provision on Project Manager.

4.1.2. Portal of Project Manager

The portal provides common information area for all stakeholders of the NPP construction by means of access to following production information modules:

- 3D model,
- Display of equipment arrival,
- Acts of activity progress charts of the second and third level;
- Debtor and creditor indebtedness;
- Storage facilities;
- Monitoring of personnel;
- Management of assignments;
- Help chain;
- Web-cameras;
- Analytics.

4.1.3. Center of projects management

Center of projects management (CPM) is designed to implement a new format of management on the basis of common information area.

The CPM enables to carry out the following:

- control of the power unit construction by setting and monitoring the key indices (deadlines, cost, and quality) of ac-

tivities of all stakeholders of the power unit construction;

- on-line forecasting of changes for key indices in case of control actions or no control actions;
- on-line decision-making on taking control actions both single-handedly and on a collegiate basis;
- managing and examining of the whole bag of orders of the NIAEP–ASE Integrated Company, including in terms of the Company financial activity;
- accumulation of data base of key indices, systemization in order to take the most effective measures for their correction;
- drawing up the Final Report concerning project management on completion of the project together with Project Manager in order to use the Report as "manuals" for further training of specialists on project management.

The CPM is located in the building of Moscow branch of JSC NIAEP inside of a dedicated room equipped with all required multimedia infrastructure, hardware and software.

4.1.4. Integrated schedule of construction

Works to draw up an integrated schedule began in 2013. The enterprise standard was developed. It specifies procedure of development and support of the integrated activity progress chart for sophisticated engineering facilities. Task of the activity progress chart is to facilitate accessibility of information for Project Manager at any phase (designing, delivery, and construction).

Schedules of designing, completing, and construction are combined in the integrated activity progress chart. Detailed schedules of design-estimation documentation, purchase, and deliveries are not presented in the integrated activity progress chart in an explicit form. Information on these schedules is supplied to the activity progress chart from the Design Management information system and Management system for purchases and deliveries of equipment and materials.

4.1.5. Multi-D technology

The Multi-D technology enables (on the basis of 3D–model of the facility) to perform detailed simulation of construction and installation, to optimize construction of NPP at a phase of preparation for production, to analyze different scenarios of resources usage, make alterations into 3D model for its optimization if required. The Multi-D model includes spatial smart model of facility with drawings and 3D-visualization; work schedule based on regulatory standards of production; information on actual volumes. Limit of detailing of Multi-D model corresponds to activity progress chart of the third level. Planning technology of construction and installation work based on this chart is applied stage-by-stage to elevations, rooms, and installation areas.

The Multi-D technology can be also used for construction of heat power plants. Within the frame of joint arrangements with JSC "Institute Teploelektroproekt", the JSC "NIAEP" received from the Customer the 3D model of power unit 2 of Yuzhnouralsk SDPP and chart of the 3rd level, on the basis of which the chart of the 4th level will be constructed and correlated with the 3D-model (maximally detailed chart), and processes of construction will be simulated

4.1.6. Plans for 2014

Work on evaluation of the Company maturity in project management as per standard "Organizational Project Management Maturity Model" is planned for 2014.

4.2. Management of Designing and Construction

4.2.1. Preparation of Industry-specific nomenclature catalogue of equipment and materials for NPP

Unified Industry-specific nomenclature catalogue of equipment and materials (Catalogue) – is a tool for optimization of designing processes and subsequent purchase of equipment for needs of nuclear industry. The Catalogue operates with the use of centralized data base of equipment and materials having its origin in the information of manufacturers.

Preparation of Catalogue was started in 2011 within the frame of creation of type project for optimized and computer-aided power unit of type VVER (VVER TOI).

The centralized data base of equipment and materials for NPP covers 2 thousands of nomenclature production types. For each type a unique template of standardized description of mechanical and operating properties of the product is generated.

Results of 2013

As filling of the Catalogue, following key figures are reached:

- quantity of sample cards of production: 314,785 (+ 53 % for 2013),
- quantity of the registered suppliers: 632 (+ 23 % for 2013),
- quantity of the registered industry-specific users: 146 (+39 % for 2013).

As for target-oriented filling of the Catalogue, following results are reached for needs of basic projects of NPP:

- basic project VVER-TOI (JSC "Atomenergoproekt") – 77 % (technical maximum),
- series NPP-2006 – 45 % (within the frame of Baltic NPP),
- series V-320 – 57 % (as per delivery contracts).

In 2013, scope of user tools was essentially improved and expanded, as well as measures on information safety, fail safety and increase of speed of the Catalogue were taken:

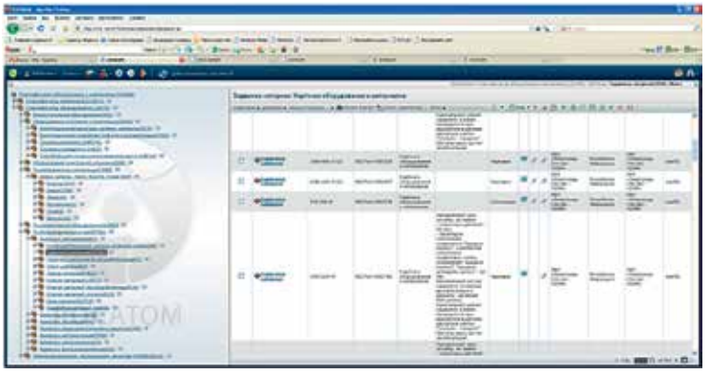


Fig. 24. The database interface describing the parameters of the samples of manufactured products

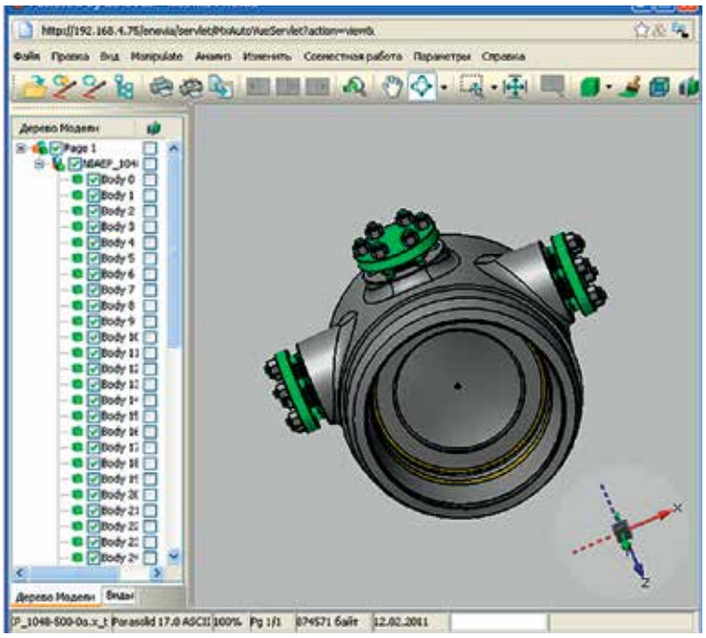


Fig. 25. The database interface of 3D-models of manufactured products

- tool of automatic informing of suppliers about design demand in the form of request from designers was improved,
- mechanism of automatic getting response from the Supplier about readiness of production as for parameters of design demand was implemented;
- module for calculation of limit cost for production samples on the basis of price characteristics was improved,
- tool for calculation of total forecasted cost of power unit as per project/contract specification was implemented,
- Portal for approval of documents of type basic specifications, design specification, and specifications was implemented;
- unified web-service, which enables to transmit information of Catalogue and receive information from external information systems was implemented;

- complex of software tools for Administrator of Catalogue on setting of response rate and improvement of measures of IT-safety was implemented;
- adapters of automatic data transmission from Catalogue to modules SP3D and SP P&ID (implemented in 2012) were improved and commissioned;
- full-time instruction for representatives of more than 50 agencies – suppliers was carried out.

In total for 2013, 105 new agencies, including 50 foreign ones are recorded in the Catalogue.

Plans for 2014

Filling of the Catalogue with the purchased samples of production within the frame of current projects of Akkuyu NPP , Belarus and Rostov NPP.

Improvement of the Catalogue and its development to the level industry-specific information systems of State Corporation ROSATOM due to integration of the Catalogue with the corporative reference-book "Material and equipment in the Unified departmental system of management of reference data" and system CC IPMS of JSC NIAEP.

4.2.2. Creation of electronic technical document control

Works on creation of Electronic technical document control (ETDC) using digital signature (DS) are carried out from 2011. The ETDS is designed to improve communication inside of the Company, as well as between Company and customers in the course of development, getting approvals, and storage of technical documentation.

In 2013, business-processes of ETDC were updated and formalized, and software of digital signature was upgraded for work with higher versions of SPF. Within the framework of designing of Baltic NPP, a pilot operation of system ETDC Smart Plant Foundation was performed. In order to create common information area between JSC "Lead institute "VNIPIET", SPbAEP, and NIAEP – ASE Integrated Company, an environment for preliminary coordination of detailed design documentation on Belarus NPP on the basis of system ETDC SmartPlant Foundation was developed.

4.2.3. Development of integrated control system for capital construction "IPMS NIAEP"

Since 2009, integrated control system for capital construction "IPMS NIAEP"is used in the JSC NIAEP. It consists of modules automatic control processes for design and survey work, capital construction, keeping contracts, completing of equipment and integration of data.

Principal tasks solved with the use of "IPMS NIAEP":

- management of contractual relations;
- management of development of detailed design documentation;
- management of estimate limits, financing by periods;
- check of actual works performance;
- topic-based planning and Reporting;
- management of completing of equipment and materials;
- monitoring of actual manpower and working hours of contractors;
- summary analysis of conditions of facilities to be constructed.

In 2013, a new module "Automated control system for as-built documentation" (ACSABD) was developed. It is designed to check completeness, correctness, timeliness of submission of as-built documentation for the Customer. The ACSABD enables to produce electronic archive of as-built documentation. Site of Rostov NPP became a pilot project for implementation of the module.

Data bases IPMS NIAEP for usage at foreign facilities to be constructed: Belarus NPP and Akkuyu NPP are prepared. Data base of IPMS NIAEP for Belarus NPP" is included into common information area of JSC NIAEP and branch of JSC "Lead Institute VNIPIET SPbAEP to transmit data for purchasing of equipment.

Currently more than 1,350 users are connected to the information system.

For projects of Rostov and Baltic NPP, the IPMS NIAEP is improved by requests of customers and structural subdivisions of JSC NIAEP.

4.2.4. Development of basic accounting system "1C:USO8"

The system is updated in accordance with requirements of the RF laws and Accounting Procedure of State Corporation ROSATOM.

Modernization of the system is carried out in accordance with requests of functional subdivisions:

- Optimization of the role-based access matrix,
- Drawing up of documents on implementation of non-state pension provision program for employees of the Company,
- Automation of business-process "Work with debtor and creditor indebtedness",
- Improvement of modules 1C as per specifications.
- Following subsystems are developed and implemented:
- Inventory management of equipment for projects of JSC ASE;
- "1C8:Factory accounting section", "1C8:Salary and human resources management" for the Republic of Belarus;
- Automatic check of financial Reporting procedures in JSC NIAEP.

4.3. Innovation Projects launched in 2013

4.3.1. Center of monitoring and operating control of project bag of NIAEP (CPM)

The CPM is a multi-user information system with centralized databank which provides as follows:

- Collection, downloading of initial data from "Analytics" module and integration of initial data from other information sources;
- Calculation of consolidated analytic indices of project bag as per a preset algorithm;
- Setting of analytics Reports to display data on Information panel with on-line diagrams, graphics, tables, and indicators;
- Displaying of consolidated analytic indices of project bag on Information panel of CPM;
- Provision of access for users to the required data with the use of Web browser.

Information system CPM is made on platform of software SAS Visual Analytics. The analytic indices are developed to provide clearly evident, informative, and adequate display of actual conditions of the project construction, its financial indicators, as well as contribution of th project into financial position of the Company, achievement of financial targets on Information panel: in the context of project (contract) of NPP construction, activity of branch of JSC NIAEP, businesses of JSC NIAEP (construction and installation works, design and survey work, equipment).

4.3.2. Interface of access to CPM and local monitoring systems of NPP construction

The interface is created on the basis of common information area within the frame of project "Creation of monitoring and on-line management center for capital construction of JSC "NIAEP". Monitoring, predicting, taking decisions and check of their implementation in the course of capital construction projects are performed with the use of this interface.

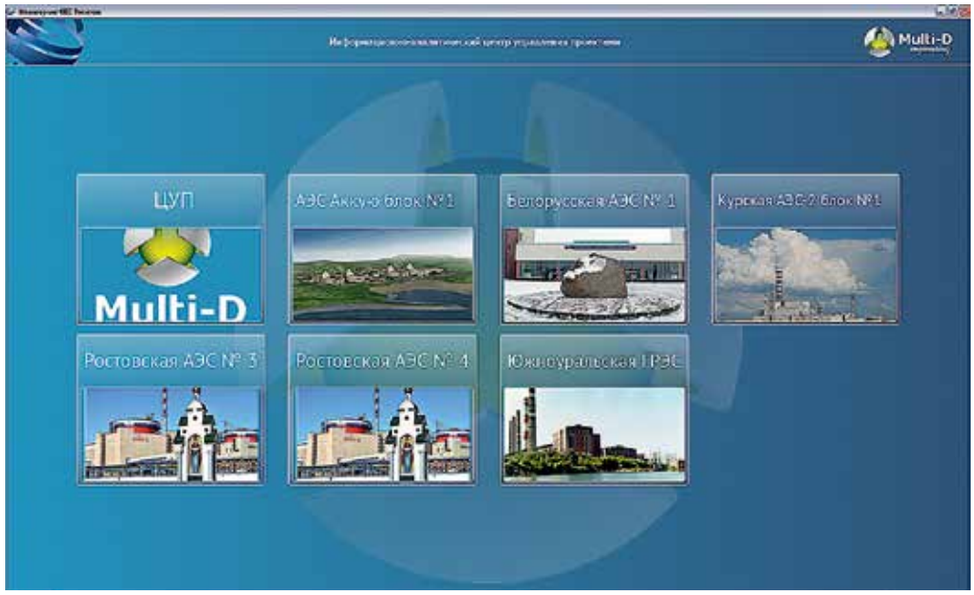


Fig. 26. Interface Monitoring system

4.3.3. Monitoring system for integration of subsystem "Analytics" with systems-sources of initial data

In 2013, the system was improved within the framework of construction of the Rostov NPP.

Basic tasks of subsystem "Analytics":

- monitoring of construction of capital facilities by means of examination of performance indicators of the Company structural subdivisions;
- displaying of analytical indices.

Within the framework of the project, all planned works on integration of subsystem "Analytics" with systems – sources of initial data: 1C: computer-process interface, IS "SIO", IS "Portal of Supplier", IS IPMS" and IS "Primavera" were performed.

Due to improvement, working hours for operation with the subsystem are reduced because of automatic downloading of data into the System from external information systems and accuracy and quality of initial data in the System at the expense of exclusion of any error which can occur in case of manual input of information.

4.3.4. "Portal of Supplier"

Portal of Supplier has been commissioned in the Rostov NPP. It is a unified integrated platform for control of relations between suppliers.

The portal incorporates an archive of documents delivered by suppliers to the Company within the frame of contractual obligations including primary trade and forwarding documents.

On-line joint operation of the Company, suppliers, shippers, and manufacturers with user access rights differentiation is possible in the Portal.

The platform is fully integrated with ERP-system of NIAEP.

Planned results due to implementation of "Portal of Supplier":

- Reduction of errors when drawing primary documents,
- Reduction of time delays in the course

of purchase and delivery of equipment for construction of NPP,

- Improvement of transparency in the course of delivery of equipment for construction of NPP,

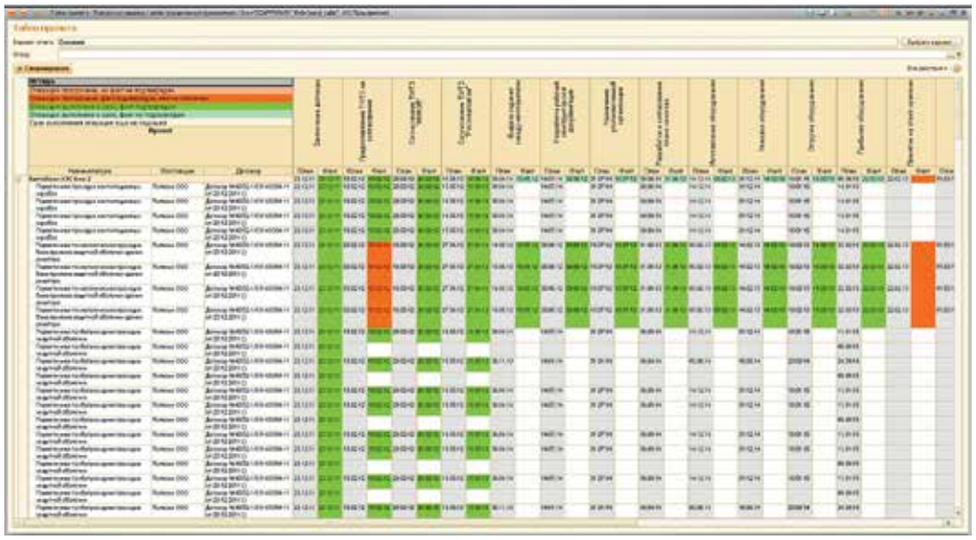


Fig. 27. Interface "Panel of arrivals"

- On-line automatic exchange of documents (notifications, letters of advice etc.) between Company and Supplier.

Economic impacts

Total reduction of working hours for storage operation: 208 man-hours per year. Detailed calculation is presented in electronic Annual Report.

Quality effects:

- simplification and acceleration of logistic processes,
- reduction of time for execution of functions,
- exclusion of errors when inputting equipment storage system.

4.3.5. "Panel of arrivals"

Equipment accounting system "Panel of arrivals" is put in test operation at the Rostov NPP. The given system is implemented on the basis of Portal of Supplier, information web-portal, where the suppliers declare status of equipment in their area of responsibility. Thus, a full data base of equipment for plan-fact analysis timeliness of purchases and deliveries as for each position of equipment is formed. It results in minimization of time losses because of no equipment.

4.3.6. Independent automated system of electronic accounting of personnel working hours

An independent automated system of electronic accounting of personnel working hours (with the use of plastic card with passive RFID tag) is commissioned at the Belarus NPP.

The system assumes installation of stands with scanners in the locations through which the employees come to their working places. The employees have individual plastic cards. Individual information about the employee is stored in the memory of the RFID tags. When the plastic card approaches to the scanner, it is read out, and information about employee is supplied through GSM-modem to the central server.

This system of personnel accounting enables to get on-line the following:

- Information on number of employees at the facilities;
- List of employees staying at the selected facility;
- Report on actual work time at the facility for each employee.

Technical capabilities of the system are presented in the electronic Annual Report.

Economical effects

Total reduction of working hours for structural subdivision (representative agencies of JSC NIAEP in the Republic of Belarus):

- Management – 247.0 man-hours per year;
- HR department – 494 man-hours per year;
- Occupational safety and health department – 988.0 man-hours per year;
- Cost Estimate Department – 247.0 man-hours per year;
- Chief dispatcher Department of Construction and installation works Management – 247.0 man-hours per year;
- Timekeepers – 988.0 man-hours per year.

Quality effects:

- organization of safety on the site,
- raising of authorities awareness about actual number of employees on the site,
- possibility to use information about involved personnel for transfer to another jobs if required,
- generation of data array for future planning of the required quantity of employees,
- automatic calculation of payment for personnel to display it in the Reporting documents with detailing to an employee,
- accounting of hours actually worked for employees of contractors,
- reduction of errors when accounting personnel,
- improvement of personnel discipline,
- increase in labour productivity,
- reduction of time for fulfillment of functions.

4.3.7. Portal of Project Manager

The Portal is a system of information support for Project Manager of sophisticated engineering facility.

In 2013, the Portal of Manager was put into test operation at the Belarus NPP. Following software modules: 3D-model, Spherical panorama, week-daily tasks/ archive are implemented in the system.

Fig. 28. Examples of Reports from independent automated system of electronic accounting of personnel working hours (with the use of plastic card with passive RFID tag)

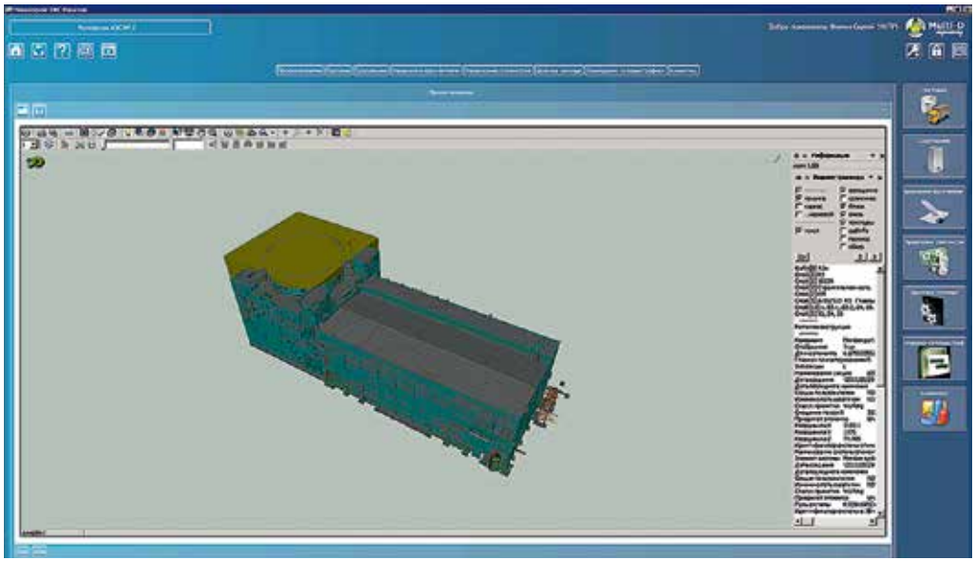


Fig. 29. Interface "Module design"

4.3.8. Development of making decisions support information system "Help chain" for Rostov NPP

"Help chain" is a tool of Manager of project office of capital construction facility. It consists in arrangement of comprehensive interaction of stakeholders in order to solve a problem within highly restricted period of time.

Structure of "Help chain" includes control hierarchies in accordance with organizational structure of JSC NIAEP.

IS "Help chain" was tested at the Rostov NPP: processes to control problems which arise in the course of construction of power units 3, 4 were tried and tested with involvement of participants of "Help chain". Organizational part of "Help chain" was developed, and interaction of participants was arranged.

Results of the testing enabled to improve the information system, and then it was commissioned. The information system enables to solve effectively problems which occur at the NPP construction site and to minimize negative impact of problems on the construction processes. It ensures transparency of monitoring of the problems solving process.

4.3.9. LED video screen

In order to increase involvement of employees into process of construction, to comply with deadlines of works and to provide information for all stakeholders, the LED video screen of 6x4 meters size was installed at the Rostov NPP.

Following data are displayed: schedules of works of the first level, key events, phases of construction, information on occupational safety and preventive control of workplace and shop-floor discipline, warnings about emergency situations, news, and messages from managers, as well as presentations.

4.4. Plans for Starting of Innovation Projects for 2014

Starting CPM IS for pilot operation

Project: "Creation of data storages and analytical Reports in the software SAS VA for presentation in the module Analitics of monitoring and operating control of capital construction of JSC NIAEP as for projects of construction of NPP Akkuyu, Kursk NPP-2, and Belarus NPP.

Analitical Reports and information panels with indices will be presented on the basis of "Album of key analytical indices for implementation of project of capital construction facilities developed by projects management office.

Starting of project "Integrated activity progress chart for designing, completing, and construction"

Integrated activity progress chart is a unified chart which includes schedules of designing, completing, and construction.

Information on implementation of schedules for development of design estimate documentation, purchases, and delivery is supplied to the integrated activity progress chart from information system of designing management system and management system for purchases and deliveries of equipment and materials.

The Integrated activity progress chart enables to carry out the following:

- to coordinate works on designing, completing, and construction in the automatic and manual modes;
- to reveal collisions and control changes in schedules of designing, completing, and construction;
- to display baseline programs, critical path, percentage of implementation and hierarchy of works, as well as process dependences in the Gant diagram;
- to display degree of construction and installation works support as for designing and completing.

Creation of control system for requirements for designing and construction of NPP

The system is designed to develop and manage requirements of the interested parties to sophisticated engineering facility.

Development of module "Analytics" of System of monitoring and operating control for capital construction of the facilities of Kursk NPP-2, Belarus NPP, and Akkuyu NPP

The project includes setting of local module of analytics taking into account the performed investigation of construction processes.

Duplication of making decisions support information system "Help chain" at the Kursk NPP-2, YuSDPP, Belarus NPP, and Akkuyu NPP

The commissioned making decisions support information system "Help chain" at the Rostov NPP will be duplicated at the facilities under construction.

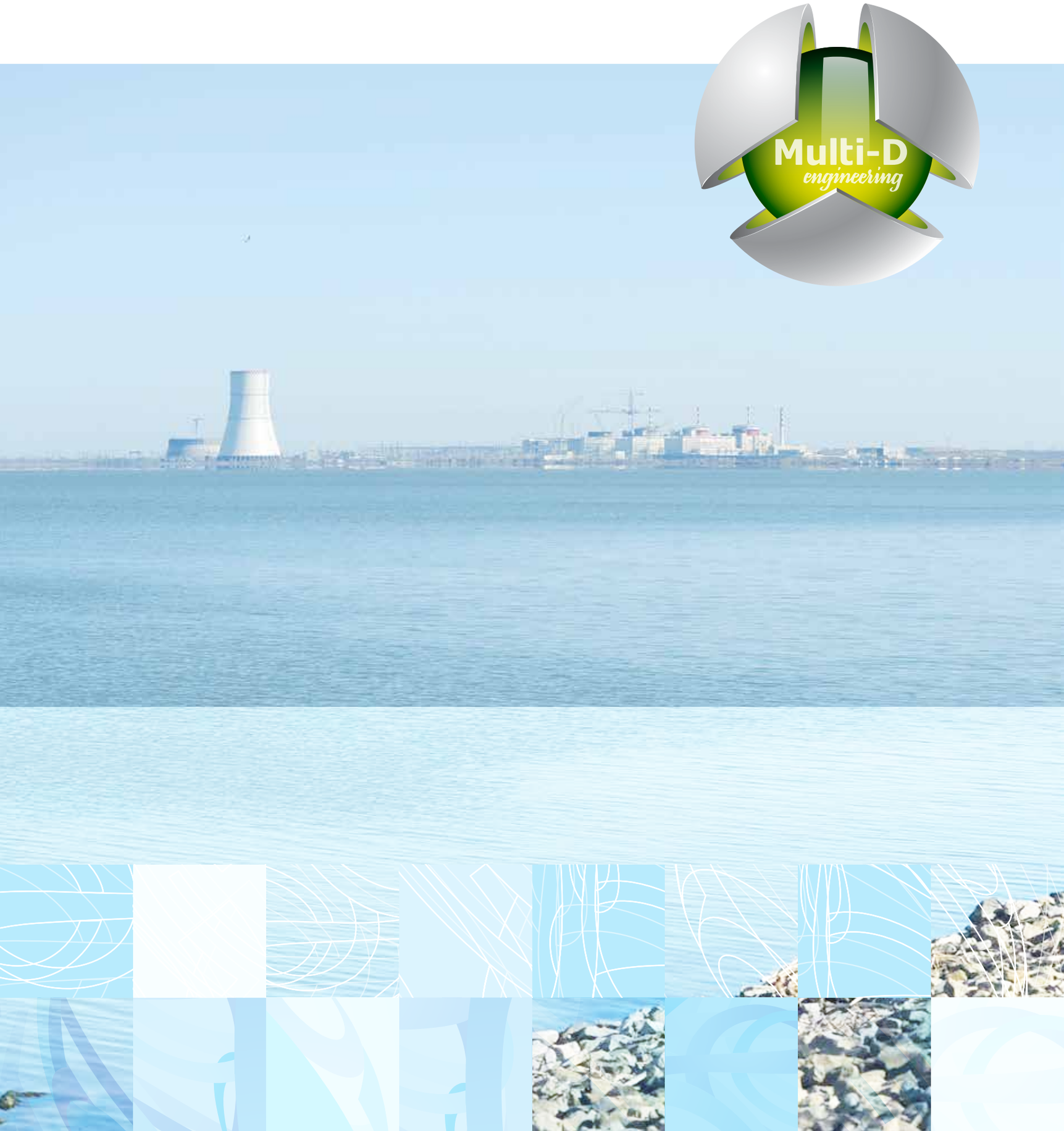
Introduction of bar-coding standards at the facilities of JSC "NIAEP": Panel of arrivals – development of visual model

The project will provide visual display of "Panel of arrivals" in the System of monitoring and operating control for capital construction.

Introduction of bar-coding standards at the facilities of JSC NIAEP: Portal of Supplier, interaction with the Customer

The Project is designed for automation of approval process of documents required for implementation of equipment.

Synergy of the Reliance!



Capital Management

5

- Financial Capital
- Manufactured Capital
- Intellectual Capital
- Human Capital
- Natural Capital
- Social and Relationship Capital

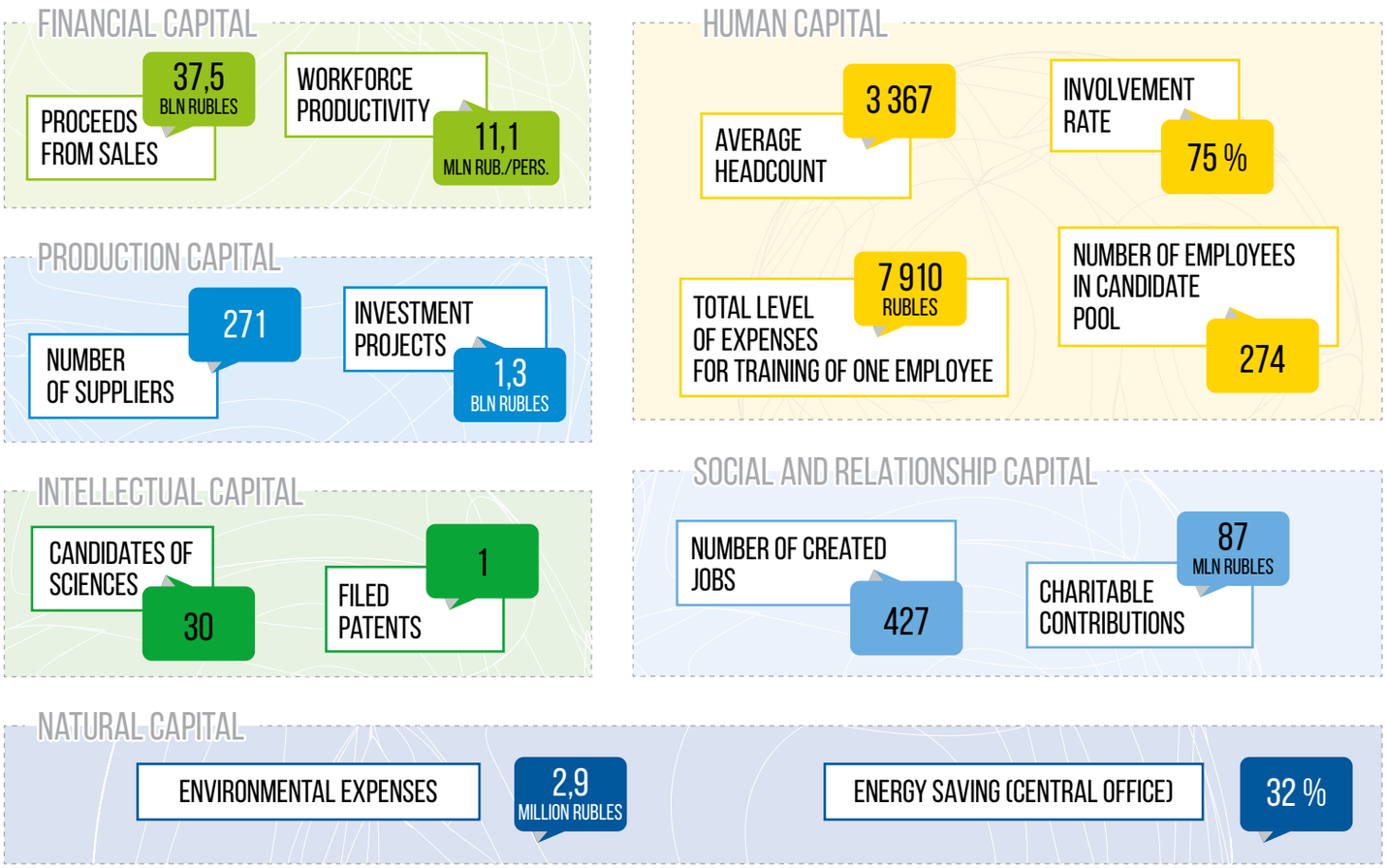


Fig. 30. Types of capital used by the NIAEP–ASE Integrated Company

The NIAEP–ASE Integrated Company employs six types of capitals in its activity (see Section "Value Delivery"): financial, manufactured, intellectual, human, natural, and social and relationship capitals. Some of these capitals are common (used by several entities) or public (used by the company in whole).

The capitals are stocks of value delivery which may change with time – increase or decrease. Efficient capital management is required for achievement of the Company's strategic goals (see Chapter 2 "Strategy" for details). In accordance with terminology adopted in the International Integrated Reporting Framework the capitals are defined as follows:

- **Financial capital** means monetary assets used by the Company for execution of its activity;
- **Manufactured capital** means production physical and infrastructure facilities available to the Company for use in its activity, as well as projects providing for efficient production activity management;
- **Intellectual capital** means R&D products, intangible assets (knowledge, intellectual property), information technologies of the Company, software, internal systems of administrative management, etc.;
- **Human capital** means personnel of the Company; skills, experience, and competences of its employees;
- **Natural capital** means natural physical objects (water, air, soils, energy resources) which the Company uses in its activity, as well as those influenced by the consequences of such activity;
- **Social and Relationship capital** means interrelation of the Company with its key stakeholders.

5.1. Financial Capital

Interview

Vladimir Kats,
Executive Director

– How do you assess the financial results of 2013?

The analysis of the results achieved in 2013 revealed the positive performance characterizing the Company's financials. Earnings before interest, taxes, depreciation and amortization (EBITDA) have increased, what gives reasons to believe that management efforts on improvement of operating margin of profit were efficient. In addition to EBITDA dynamics, the growth of net operating profit after tax (NOPAT) and net profit also confirms efficiency of the decisions made with regard to cost management and tax management systems and methods.

The financial performance dynamics makes assertions about positive cash flow generated by the operating activity, what reduces dependency of the Company on external borrowings and permits to maintain investments complying with the strategic goals. This indicator permits to conclude that management of the Company's assets in the current period was also efficient.

These positive changes are conditioned by effective management of the NPP construction projects both at the design and preparatory and active construction stages. They indicate that the Company's managers understand and take account of the economic performance management methods in the process of decision making.

An important part in achievement of these results was played by new economic performance management methods and standards, budgeting system, key economic performance system, and plan/actual analysis system introduced in the Company.

Economic and Financial Performance Management

Effective economic performance management is required to achieve the strategic goal of financial stability in the Company. For this purpose the Key Performance Indicators (KPI) management system is introduced in the Company which permits to influence the achievement of the Company's goals in whole through definition and control of KPI by top managers. Target values of the indicators are defined with consideration of strategic development plans, forecasted state of external environment, and possible risks.

The tasks of the system consist in preparation of information about planned, forecasted, and actual data on economic and production performance indicators, performance of plan/actual analysis of the specified indicators, in order to reveal deviations and identify operations aimed at achievement of the required development rates of the Company.

Integrated management of economic aspect of the Company's activity is assured by the budgeting system CFO-2 Foreign Construction[12] regulated by the corporate standards of the integrated management system.

To increase efficiency of management of the Company's performance indicators, improve quality of cooperation between the agencies participating in budgeting and quality of planning and analysis, a number of corporate standards were elaborated and introduced in the Reporting (see the electronic Annual Report).

Financial Capital Characteristics

In 2013 proceeds of JSC NIAEP amounted to 37,518.4 million rubles, that is 2.6 % lower than the similar indicator in 2012 – 38,512.4 million rubles. As compared to the year 2012, in 2013 net profit increased by 7 % and amounted to 1,450.7 million rubles. Net profit margin increased from 3.5 % in 2012 to 3.9 % in 2013 (see Table 11).

Increase in operating earnings before interest, taxes, depreciation, and amortization (EBITDA) is conditioned by decrease in net cost of sold goods, products, and services.

Dynamics of gross profit is conditioned by profit improvement in the business-process "Construction Management" with regard to the construc-

12. For the purpose of budgeting the set consolidation scope of CFO-2 Foreign Construction includes the Third Level Financial Responsibility Centers: JSC NIAEP, JSC Atomstroyexport, JSC ASE-Engineering, and Nukem Technologies GmbH.

Table 11. JSC NIAEP Financial Performance

Indicator	2011	2012	2013	(2013–2012)/2012, %
Proceeds from sales, million rubles	35,304.7	38,512.4	37,518.4	-2.6
Net cost from sales, million rubles	33,208.7	35,363.5	33,854.6	-4.3
Gross profit, million rubles	2,096.0	3,148.9	3,663.8	16.4
Operating earnings before interest, taxes, depreciation and amortization (EBITDA), million rubles	475.0	1,089.0	1,603.0	47.2
Net profit, million rubles	707.6	1,356.0	1,450.7	7.0

tion projects of the Rostova NPP Units 1 and 2 and Belarus NPP and profit improvement in the business-process "Engineering and Design (EAD)" with regard to the construction project of the Belarus NPP.

Increase in operating earnings before borrowing interest and taxes (EBIT) is conditioned by decrease in net cost of sold goods, products, and services. Increase in net operating profit after tax is conditioned by decrease in net cost of sold goods, products, and services. Increase in net profit is conditioned by decrease in net cost of sold goods, products, and services.

Within the current and previous periods JSC NIAEP has not received subsidies and loans from the state budget of the Russian Federation.

Decrease in earnings in 2013 is conditioned by dynamic pattern of production program structure and lifecycle periods of the NPP construction projects.

Increase in wages paid within the accounting period is connected with transition of management function of CFO-2 Foreign Construction to JSC NIAEP and establishment of the Moscow Branch for

Table 12. Delivered and Distributed Direct Economic Cost

Indicator	2011	2012	2013	(2013–2012)/2012, %
Income, million rubles	36,085	40,114	38,413	-4.24
Distributed economic cost, million rubles	36,016	37,933	37,115	-2.16
Operating costs, million rubles	32,574	32,854	32,204	-1.98
Wages and other employee payments and benefits, million rubles	2,053	3,007	3,617	20.29
Capital supplier payments, million rubles	582	785	0	-100
Gross tax payments, million rubles	724	1,203	1,207	0.33
Investments in communities, million rubles	83	84	87	3.57
Retained economic cost, million rubles	69	2,181	1,298	-40.47

the specified purposes. Moreover, payroll budget increase is influenced by periodic indexation of wage, increase in payments depending on wage, and increase in integrated incentive bonus (IIC) for high qualification.

Decrease in retained economic cost is conditioned by decrease in earnings at stationary level of operating costs.

Dynamics of proceeds from sales is conditioned by profit improvement in the business-process "Construction Management" with regard to the construction project of the Rostov NPP (Units 1 and 2), Kursk NPP, and Belarus NPP, profit reallocation in the business-process "Equipment", and profit improvement in the business-process "EAD" including with regard to the construction project of the Belarus NPP.

Growth of the Internal Performance (see Table 13) is conditioned by increase in profit on sales and growth of the added value share in sales.

Dynamics of workforce productivity is directly connected with growth of the share of facilities at the stage of design and construction and respective workforce productivity improvement in the engineering and design block in 2013.

Growth of the indicator is conditioned by increase in profit on sales and growth of the added value share in sales.

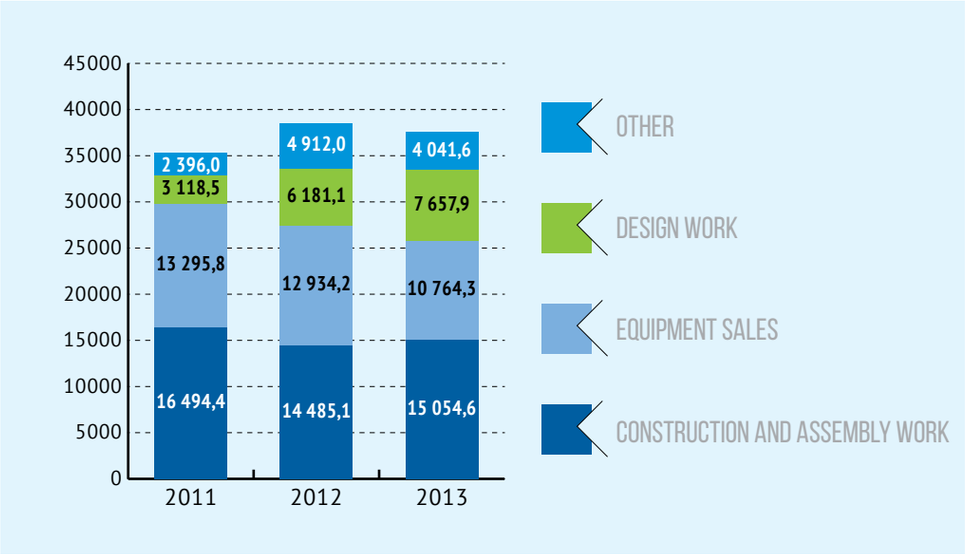


Fig. 31. Earnings Pattern by Areas of Activity, Million Rub.

Table 13. Added Value/Profit (Internal Performance), %

2011	2012	2013	(2013–2012)/2012	2014 (plan)
9.0	12.2	14.9	21.8	9.8

Table 14. Workforce Productivity Broken Down by Areas of Activity, Million Rub .

Indicator	2011 (actual)	2012 (actual)	2013 (actual)	Δ2013–2012/2012, %	2014 (plan)
Total, million rub./person	14,492	12,580	11,143	-11.4	12,523
Including construction management, million rub./person	39,455	22,093	15,019	-32.0	18,327
Equipment, million rub./person	40,712	39,214	18,942	-51.7	19,079
Engineering and design, million rub./person	2,559	5,624	6,263	11.3	6,295
Other business areas, million rub./person	1,013	2,698	1,872	-30.6	3,495

Increase in return on sales by net profit is conditioned by net profit increase by 7 %.

Increase in EBITDA margin is conditioned by improvement of operating earnings before interest, taxes, depreciation, and amortization (EBITDA).

Increase in EBIT margin is conditioned by improvement of operating earnings before borrowing interest, taxes, and depreciation (EBIT).

Decrease in all liquidity ratios in 2013 was conditioned by growth in short-term liabilities with regard to received advance payments (increase by 108%) due to reclassification of long-term liabilities into short-term in accordance with the accounting rules. Only short-term liabilities are taken into account in calculation of current, quick, and absolute liquidity. Assets are completely taken into account in calculation of the ratios without subdivision into short-term and long-term; however, in 2013 long-term assets were also reclassified into short-term.

Table 15. Profitability Indicators, %

Indicator	2011	2012	2013	(2013–2012)/2012, %
Return on sales by net profit (ROS)	2.0	3.5	3.9	10.3
Return on assets (ROA)	0.9	1.7	1.7	-0.7
Return on equity (ROE)	24.8	37.4	33.8	-9.6
EBITDA margin	1.3	2.8	4.3	51.7

Table 16. Liquidity Indicators

Indicator	2011	2012	2013	(2013 – 2012)/2012, %
Current liquidity ratio	1.05	2.23	1.52	-31.8
Quick assets ratio	1.60	0.99	1.07	0.80

Table 17. Expenses of JSC NIAEP, Million Rub.

Type of Expenses	2011 (actual)	2012 (actual)	2013 (actual)	Δ2013–2012/2012, %	2014 (plan)	Δ2014–2013/2013, %
Support expenses, including:	2,083	2,600	3,271	20.5	3,550	8.5
• Auxiliary production	1,872	2,342	3,074	31.3	–	–
• General production expenses	211	258	197	-23.6	–	–
Administrative expenses	1,127	1,439	1,714	19.1	2360	37.7
Commercial expenses	451	618	518	-16.1	727.4	40.4

5.2. Manufactured Capital

Comments

The investment activity of JSC NIAEP is aimed at achievement of strategic goals of the Company itself and the State Corporation Rosatom in whole.

For implementation of the strategy it is required to expand order portfolio and develop production capacity of the Company through execution of investment programs.

In 2013 the Integrated Company implemented its investment decisions in the capacity of the Second Level Financial Responsibility Center "Foreign Construction" within the integrated hierarchical investment management structure of the State Corporation Rosatom. To manage investment projects, the Company employs project-based approach on the basis of the Corporate Standard on Investment Activity Management and Procedure for Adjustment of the Integrated Company's Investment Program. In 2014 it is planned to improve the Corporate Standard on Investment Activity Management through integration of approved regulatory documents concerning the Company's investment activity in it and amending the Standard with regard to improvement of regulatory documents of the State Corporation Rosatom.

Nikolay Podorov,
Director for Economic, Planning and Financial Affairs

Comments

On a short- and mid-term horizon we need to make our subsidiaries SMU 1 and ROSSEM among of the best construction companies in the industry. For this purpose it is required to:

- carry out activities on their financial improvement;
- renew the staff;
- increase workforce productivity manifold;
- increase volume of performed orders considerably;
- elaborate and introduce the technology of NPP main building construction within 48 months by appointing these two companies to the main contractors for construction of new NPP;
- make these companies the best RPS-companies of the industry.

Yury Ivanov,
Senior Vice-President, Director on Design

Manufactured Capital Characteristic

Development of manufactured capital of the NIAEP–ASE Integrated Company is aimed at achievement of strategic goals of the Company itself and the State Corporation Rosatom in whole. Manufactured capital growth is achieved through implementation of investment programs.

Investment decisions of JSC NIAEP are based on the approved Investment Program. The Investment Program for 2013 was approved during the sessions of the Investment Committee of the State Corporation Rosatom. In 2013 the Company's investment plans were updated for up to the year 2016.

Manufactured capital management also includes tasks on control of time and cost of the facilities under construction.

To solve these tasks, the Integrated Company implements a number of projects:

- Elaboration and introduction of the Multi-D technology for optimization of construction and erection work (for details see Chapter 4 "Investment Activity"),
- Introduction of Rosatom Production System,
- Improvement and introduction of the construction cost management procedure,
- Procurement process optimization,
- Investment projects.

5.2.1. Introduction of Rosatom Production System

Since 2009 the Rosatom Production System (RPS) has been introduced at the plants of the industry. RPS is based on the efficiency improvement principles of Toyota acknowledged as one of the most successful companies in this field. RPS permits to increase productivity and quality, reduce costs and work performance time, and achieve the maximum satisfaction of customer's requirements. Application of RPS tools contributes to reduction in construction time of NPP unit and job cost through a more efficient process management system.


ОБЕСПЕЧИМ ПОТОЧНОС
СТРОИТЕЛЬСТВА

In 2013 RPS in the capacity of innovative management method has been introduced into:

- Occupational health and safety management system (OHSMS) on NPP construction sites;
- Construction operations management system.

RPS in Occupational Health and Safety Management System

Introduction of RPS in OHSMS is aimed at assurance of security of personnel life and health and mitigation of occupational risks through implementation of preventive measures in contracting organizations.

Introduction of RPS in OHSMS covers two main directions:

- Promotion of health and safety culture;
- Systematic approach to health and safety.

A number of health and safety measures are elaborated within RPS (for details on health and safety see Section 5.4.5 "Health and Safety"):

- Monitoring of construction site by watch groups, and day-to-day control by the OSH and IS Department of the Volgodonsk Branch of JSC NIAEP;
- Meeting on health and safety (weakly with participation of health and safety departments of the customer, JSC NIAEP, and subcontracting organizations);
- Health and safety audit in subcontracting organizations (monthly);
- Schedule of target inspections of contracting organizations.

RPS in Construction Operations Management System

The main RPS projects are aimed at improvement of safety, quality, and performance of operation within:

- Projects of critical pathway of construction,
- Technically complicated projects,
- Projects admitting considerable schedule delay.

5.2.2. Construction Cost Management

Cost management is regulated by the single field-specific Construction Cost Management Policy applied to facilities built within the frames of implementation of investment projects of the State Corporation Rosatom executed in form of capital investments (hereinafter referred to as the Policy).

The main principles of and approaches to cost management of nuclear energy facilities under construction specified in the Policy form the basis of the JSC NIAEP NPP unit marginal construction cost determination and control model. Using this model, the concept of field-specific NPP construction cost management system based on CC IPMS was elaborated in 2013.

The model employs two construction cost calculation and accounting methods: with regard to marginal construction cost and using conventional construction pricing and accounting. Control of marginal cost parameters and analysis of

Table 18. Construction Time Reduction in 2013

Project	Time Reduction, Days	% of Target State
Rostov NPP	116	10.6
Belarus NPP	23	57.5
Yuzhnouralsk SDPP-2	130	32.7

Table 19. Plans on Project Implementation Time Reduction for 2014

Project	Target		Challenging Target	
	Days	% of Basic State	Days	% of Basic State
Rostov NPP-3	158	18.4	227	26.5
Rostov NPP-4	443	28.4	–	–
FSUE PA "Mayak"	192	27.2	–	–
Belarus NPP	17	6.8	–	–
Yuzhnouralsk SDPP-2	233	19.1	372	30.5

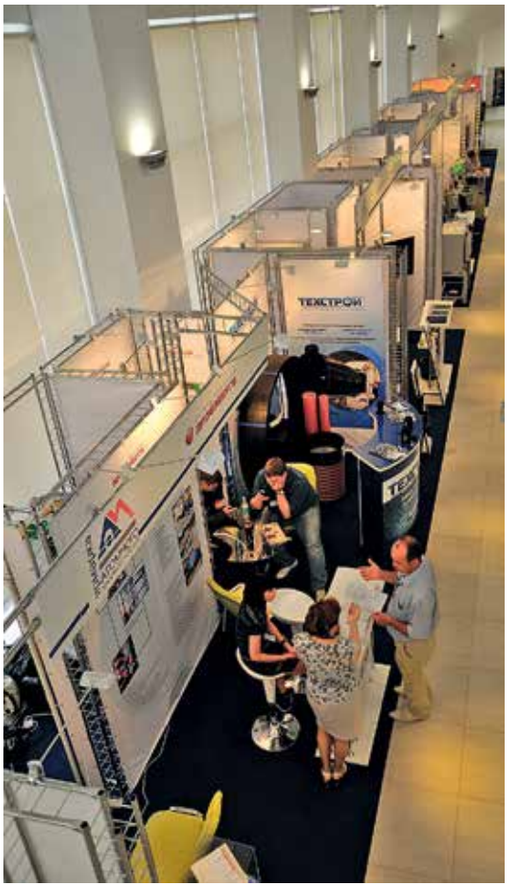
SYSTEM FUNCTIONALITY

INFORMATION USED

Automation of the NPP Unit Construction Cost Management System is implemented within the corporate Information Construction Projects Management System (NIAEP IPMS). ACMS applies the following information:

1. Data of the approved Project in accordance with the structure of cost summary (CS) and summary estimates (SE).
2. Work execution time in accordance with the construction schedules.
3. Subject construction plans.
4. Local estimates (LE), detailed design (DD) specifications.
5. Current prices recalculation rates.
6. Data on actual fulfillment.

Fig 32. System Functionality. Information Used



1. Cost estimation based on Project SE
2. Control at issue and adjustment of LE of marginal basic cost.
3. Recalculation of LE in current prices and control of marginal current cost with regard to LSE
4. Closure of work in accordance with the approved rates

BASIC-INDEX COSTING

Cost estimation based on design documentation → Determination of margins on the basis of LSE → Detailed engineering (calculation on the basis of LE) → Work and equipment acceptance (based on LE) → Elaboration of corrective actions

INPUT COSTING

1. Generation of cost basis of resources
2. Estimation of current cost on the basis of DD using input method.
3. Elaboration of compensatory measures.

Fig. 33. NPP Unit Marginal Construction Cost Determination and Control Model

possible lapse factors are currently performed by means of the module of the Automated Cost Management System (NIAEP IPMS ACMS) accessible to personnel of investor, customer, and general contractor on a real-time basis.

The NPP unit marginal construction cost determination and control model is constantly improved with consideration of emerging requirements and innovations. The process of cost estimation, marginal cost determination, control of fulfillment, and changes management with regard to CIW is schematically represented in Fig. 33.

Currently, within the frames of introduction of CC IPMS in JSC NIAEP, project solutions are being elaborated for this system. Elaboration is based on the processes implemented in NIAEP IPMS ACMS.

Results of 2013

Pursuant to the results of trial operation, additional functions of the NIAEP IPMS ACMS module were elaborated. (See the electronic Annual Report for details).

In order to increase efficiency of construction project management, training in the NIAEP IPMS ACMS system was carried out on NPP construction sites

with informational support of the project manager in 2013.

The procedures stipulated by the NPP unit marginal construction cost determination model were used for working calculations of cost of the foreign facilities: Hanhikivi-1 NPP (Finland).

The Plan for Transition to Input Costing of VVER-TOI NPP Units Construction Abroad was approved. A performance map showing distribution of powers and responsibilities between subdivisions and organizations of the State Corporation Rosatom was elaborated. According to this map, JSC NIAEP is the owner of the UICCEM base and Database of Costs of Materials and Equipment (DBCME). Regional indices of Average Estimate Costs (RIAEC) of materials, products, and structures applied during construction of nuclear power facilities were introduced for the Rostov Region. Methodical monitoring of resources was arranged for updating the RIAEC. This work facilitates a more precise definition and subsequent reduction of construction cost and represents a significant step on transition to input costing of NPP construction.

In 2013 changes were made in the method of calculation of initial maximum price (IMP) for CIW. Given that regional index does not take into account the specifics of construction of NPP units (industrial wage level, applied unique machines and mechanisms, quality of materials, requirements of the safety classes 2 and 3, lack of reduction factor for overhead expenses and estimated profit), a proposal was made to the State Corporation Rosatom on transition for IMP calculation for CIW based on the marginal cost of facilities and types of work with application of scheduled indices of CIW recalculation approved for long-term investment program of the State Corporation Rosatom. Such approach in determination of IMP for CIW is implemented at all power units of the Rostov NPP.

Construction cost management leads to growth of both production and financial capital (see table 20).

Based on the decisions negotiated with the State Corporation Rosatom "Concerning the Procedure for Determination of Additional Payment for Performance of Milestone Activities on Thermal Equipment Installation to Wages of Workers Performing Thermal Equipment Installation Work at Facilities of Rostov NPP Units" and "Concerning Increase in Wages of Construction and Installation Workers Engaged in Construction of Rostov NPP Unit 3" individual indices of recalculation were elaborated and approved with regard to the item "Wages" and CIW cost was recalculated in 2013.

No cost saving at Baltic NPP in 2013 is conditioned by reorientation of NPP construction for 2 power units of 1,200 MW each at low (medium) power NPP according to the Measures Connected with Decision on Additional Accommodation of Low- and Medium-Power Units on Construction Site of Baltic NPP approved by the State Corporation Rosatom.

NPP construction cost by projects is now at the stage of negotiation with the customers.

A list of measures was elaborated permitting to assure cost reduction of up to 30 % in total compared with NPP-2006. With consideration of specifics of every unit, introduction of all measures at all units is impossible; however, various combinations of project-oriented measures may be applied.

Transition to VVER-TOI has already provided for a cost reduction in the amount of 11 % (conservative estimation). Another 3 % is achieved at the design stage. The rest 16 % represent the measures directly influenced by the engineering company at the stage of construction.

Key works on NPP construction length and cost reduction:

- cost reduction through technical solutions at the stage of project,
- cost reduction through technical solutions at the stage of detailed engineering,
- cost reduction through purchased equipment price reduction,
- cost reduction through construction period reduction from 60 to 48 months,
- cost reduction through CIW optimization and increase in workforce productivity,

Table 20. Saving Achieved

No.	Name of NPP Under Construction	2011	2012	2013	Saving Achieved[13] in 2013		2014–2020
		(Actual Capital Investments Development, Million Rubles)	(Actual Capital Investments Development, Million Rubles)	(Actual Capital Investments Development, Million Rubles)	Million Rubles	%	(Planned Value, Million Rubles)
1	Kalinin NPP Unit 4	16,607.7	4,665.8	–	–	–	–
2	Rostov NPP Unit 3	12,814.9	20,146.7	13,815.5	-43.08	-0.31	19,621.9
3	Rostov NPP Unit 4	1,423.1	3,184.2	7,883.5	77.98	0.99	52,674.6
4	Baltic NPP Unit 1	3,642.6	7,743.0	5,095.2	–	–	31,998.9
5	Baltic NPP Unit 2	48.6	810.5	431.4	–	–	31,561.3
6	Kursk NPP-2 Unit 1	–	–	79.7	–	–	155,599.9
TOTAL		**34 536,9**	**32 550,3**	**27 305,4**	**35**		**291,5**

13. Saving is calculated relative to construction cost margin approved for the current year.

- cost reduction through quality improvement and commissioning period reduction.

Plans for 2014

Further development of the cost management system is scheduled with a deeper application and detailing of information in the ACMS system. It is planned to apply all functional of the system elaborated in 2013 at the Rostov NPP Units 3 and 4 and Kursk NPP-2 Units 1 and 2.

The project on automation of NIAEP IMPS ACMS is transformed into industry project of CC IPMS.

It is planned to continue training of the project managers for a more efficient management of NPP construction both in Russia and abroad.

With regard to foreign construction it is planned to use the cost management models for calculation of the following stations: Akkuyu NPP (Turkey); Belarus NPP; NPP in the People's Republic of Bangladesh.

It is planned to supplement the elaborated catalogues with classification of industry materials, within the scope of the newly issued detailed design documentation, and to elaborate the catalogues for industry materials absent in the efficient Costing Standards Database: "multifunction cable penetrations SPO-E", "pipes and products for control equipment installation at NPP", "leveling vessels", etc.

5.2.3. Procurement Activity Optimization

Procurement of equipment and materials within the Reporting year was performed in accordance with the milestone schedule on construction of NPP power units and annual procurement program of JSC NIAEP. The 2013 procurement plan was fulfilled by 100 %.

Table 21. Amount of Concluded Contract Obligations in 2013 (Million Rubles Inclusive of VAT)

Indicator	Total	Rostov NPP		Baltic NPP	Belarus NPP
		Power Unit 3	Power Unit 4	Power Units 1 and 2	Power Units 1 and 2
Amount of Concluded Contract Obligations	**18,294**	2,057	1,570	613	14,054
Nizhny Novgorod Region	**1,236**	45	13	41	1,137
Rostov Region	**475**	91	250	17	117
Moscow Region	**10,837**	1,631	1,112	537	7,556
Leningrad Region	**4,214**	75	63	2	4,073
Other Regions of the Russian Federation	**1,473**	214	132	15	1,112
Republic of Belarus	**59**	–	–	–	59

Table 22. Number of Suppliers in 2013

Indicator	Total	Rostov NPP		Baltic NPP	Belarus NPP
		Power Unit 3	Power Unit 4	Power Units 1 and 2	Power Units 1 and 2
Number of Suppliers	**271**	129	57	24	61
Nizhny Novgorod Region	**24**	11	5	2	6
Rostov Region	**18**	7	7	3	1
Moscow Region	**168**	85	33	16	34
Leningrad Region	**17**	8	5	1	3
Other Regions of the Russian Federation	**32**	18	7	2	5
Republic of Belarus	**12**	–	–	–	12

NPP Equipment Procurement and Supply Stages:

- Generation of technical procurement assignment;
- Lot generation;
- Request for quotations from suppliers for initial (maximum) price generation;
- Purchase request, purchase documentation, purchase publication;
- Bids of participants;
- Expert review of bids, selection of successful bidder;
- Contract conclusion;
- Manufacturing, transportation of equipment to construction site;
- Delivery of equipment to customer.

Tools

In order to improve transparency and openness of the procurement activity, in 2013 the Company continued to optimize the procurement procedures. Electronic trading platforms (ETP) were actively used for this purpose. Procurement using ETP has a number of advantages: saving of working time and money for organization and performance of procurement, as well as transparency and openness of the procurement process.

Fig. 34. Share of Purchases Made by Means of Electronic Trading Platforms of the Total Volume of Competitive Procurements, %

Since 2012 JSC NIAEP has carried out all competitive procedures for NPP construction using ETP. An exception (in non-electronic form) may be made for purchases connected with state or trade secrets and purchases for construction of foreign NPP (in cases stipulated by the regulatory enactments of the Russian Federation) for the purpose of involvement of local suppliers. The volume of such purchases amounts to nearly 1 to 3 % of the total volume of purchases (these non-electronic purchases are excluded from the total volume and not considered in calculation of the rate).

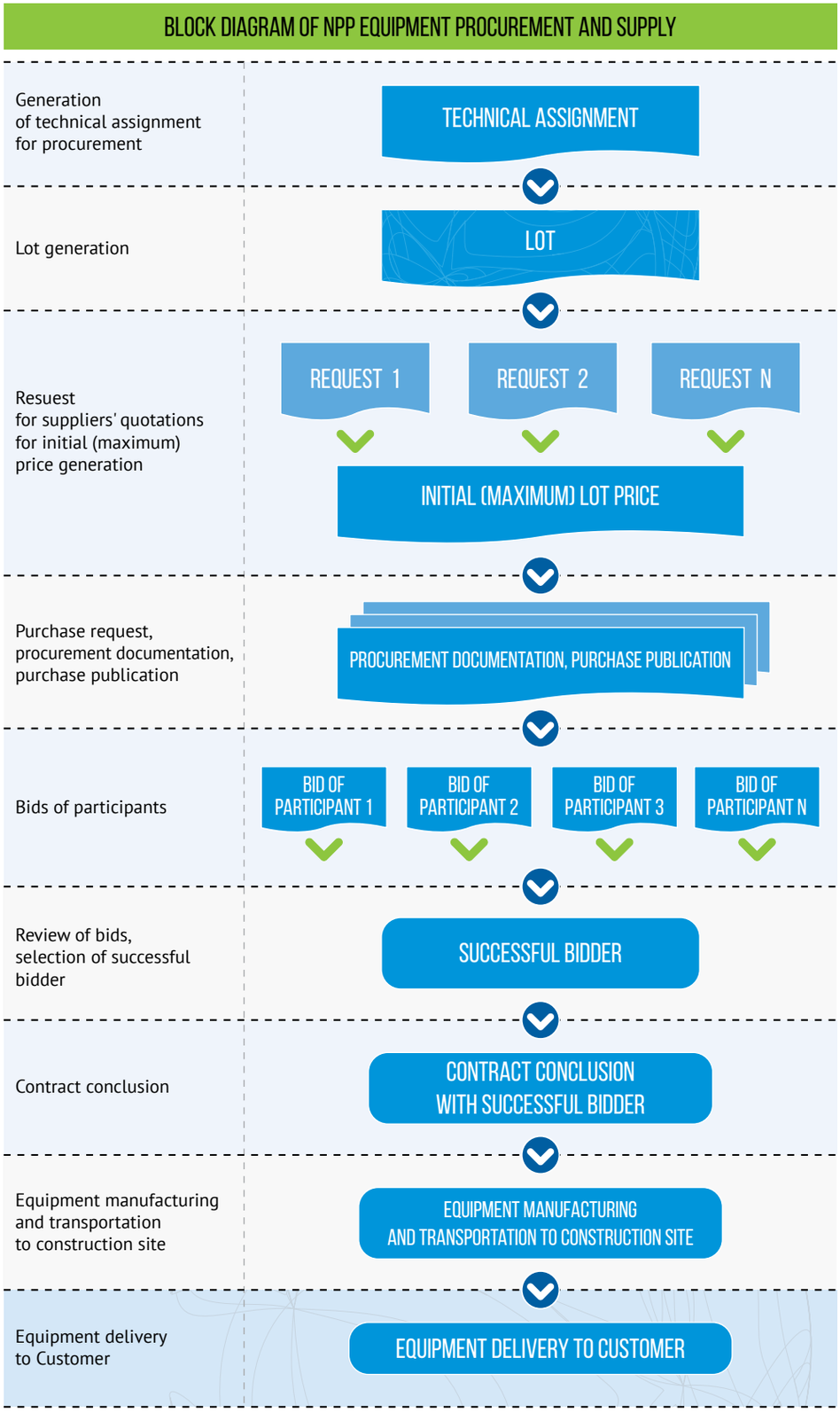


Fig. 35. Diagram of Procurement and Supplies of JSC NIAEP

Amount of cost saving due to performance of open competitive procurement procedures

Performance of open competitive procurement procedures using electronic trading platforms permitted to cut down contract price compared to the initial (maximum) price. Cost saving lead to growth of financial capital (see Table 23).

A significant saving in 2011 was achieved through purchase of equipment of prolonged manufacturing cycle and other primary equipment for the Baltic NPP (Units 1 and 2) and Rostov NPP (Unit 4), at the same time contracting with regard to the major part of construction and assembly work for the Rostov NPP (Units 3 and 4) till completion of construction was performed.

JSC NIAEP gives no preferences to suppliers depending on the regions of their operation. Selection of the suppliers is influenced by their compliance with the requirements and criteria specified in the procurement documentation only. A successful bidder of a certain purchase is also selected in accordance with the procurement documentation.

In 2013 contracts were concluded with 52 equipment suppliers, including 27 non-residents of the Russian Federation.

Table 23. Volume of Savings, Million Rubles Inclusive of VAT

Volume of Savings	2011 (actual)	2012 (actual)	2013 (actual)
Rostov NPP Unit 3	1,017.5	507.4	305.0
Rostov NPP Unit 4	1,084.0	162.9	127.0
Baltic NPP Units 1 and 2	1,825.3	621.6	312.0
Kursk NPP-2 Units 1 and 2	–	–	109.6
TOTAL	**4,377.6**	**1,291.9**	**853.6**

Table 24. Share of Purchases Made from Local Suppliers[14] in 2013

Power Unit	Region	Total Volume of Purchased NPP Equipment (Concluded Contracts), Million Rubles	Volume of NPP Equipment Purchased from Local Suppliers (Concluded Contracts), Million Rubles	Share of Purchases Made from Local Suppliers, %
Rostov NPP Unit 3	Rostov Region	2,057	91	4.4
Rostov NPP Unit 4	Rostov Region	1,570	250	15.9
Baltic NPP Units 1 and 2	Kaliningrad Region	613	0	0.0
Belarus NPP Units 1 and 2	Republic of Belarus	14,054	59	0.4
TOTAL		**18,294**	**400**	**2.2**

14. For the purpose of this Report "local supplier" shall mean an organization registered at the address in the area of NPP construction, for instance, local suppliers for the Rostov NPP shall be located in the Rostov Region. The list contains all regions where purchases were made for NPP under construction.

5.2.4. Investment Projects

Results of 2013

In 2013 the Integrated Company implemented its investment decisions in the capacity of the Second Level Financial Responsibility Center "Foreign Construction" within the frames of the integrated hierarchical investment management structure of the State Corporation Rosatom.

The sources of finance of the investment project include own assets of the Company (depreciation charges and profit), leasing tools are also used.

An incentive program is elaborated to stimulate improvement of performance indicators of the Integrated Company's Project Portfolio: target values of key performance indicators of the investment activity are set for the investment project managers.

Mechanization of Construction Sites for Performance of CIW

The project implies supplying the Company with the required mechanisms of high lifting capacity, equipment, and gear for performance of construction and installation work during construction of power units. Within the project it is planned to purchase construction equipment, including unique one, for performance of general contractor functions by the Company, and to provide the subcontracting organizations with expensive machinery on a contractual basis. Implementation of the project excludes any risk of disruption of construction deadline, as far as it permits to conclude contracts with highly qualified subcontractors whether they have expensive construction equipment or not.

Equipment for Design and Survey Work

Within the frames of implementation of this project it is planned to supply the Company with special equipment and machinery for performance of surveys on construction site. The main scope of survey work is executed within the first two-three years after making the decision on location of NPP (substantiation is performed with regard to safety of site location and criterion of project decision making on NPP structures and equipment, observation networks are established for monitoring of environmental parameters critical for NPP safety). Subsequently, the work is carried out within facility construction and operation monitoring. The project provides for purchase of geodetic equipment, drilling equipment, and measuring instruments.

IT Projects

This area of activity implies procurement of modern software for development of key skills in the field of design and engineering, provision of the Company's employees with modern computer and office equipment, development of communication facilities, including establishment of telecommunication infrastructure of the Company's branches for implementation of field engineering functions (see Chapter "Innovative Activity" for details).

Infrastructure Development

Implementation of the project implies performance of work aimed at reconstruction of buildings and structures, improvement of labor conditions of the personnel, purchase of motor vehicles for assurance of uninterruptible execution of current activity, and infrastructure development on construction sites.

Building of Competency of the NIAEP–ASE Integrated Company through Share Capital Transactions

Implementation of the projects is aimed at consolidation of construction assets, in order to assure growth of construction competency of the Company, increase of production independency, growth of work efficiency within general contract, expansion of order portfolio, entrance to the foreign market of NPP construction projects.

Plans for 2014

It is planned to improve the Corporate Standard on Investment Activity Management through integration of approved regulatory documents concerning the Integrated Company's investment activity in it and amending the Standard with regard to improvement of regulatory documents of the State Corporation Rosatom.

Table 25. Investment Projects Implemented by JSC NIAEP

Investment Projects	Actual Amount of Finance of the Projects, Million Rubles Inclusive of VAT		
	2009–2012	2013	Total (2009–2016)
Mechanization of construction sites for performance of CIW	1,017	533	4,277
Equipment for design and survey work	89	7	208
IT projects	1,239	502	3,249
Infrastructure development	530	135	931
Building of competency of the NIAEP–ASE Integrated Company through share capital transactions	0	164	450
TOTAL	**2,875**	**1,342**	**9,115**

It is planned to continue procurement of modern equipment and machines for construction of facilities using the leasing mechanism. Application of leasing shall speed up modernization of the basic assets and is aimed at keeping the leading positions at the market of engineering services.

The Company places high priority on investments in development of information technologies, what is primarily connected with development and strengthening of the Company's global positions – introduction of intellectual design technologies permitting to increase overall efficiency of the Company's activity due to optimization of certain business processes.

5.3. Intellectual Capital

Intellectual Capital Characteristic

Intellectual capital of the NIAEP–ASE Integrated Company includes knowledge, information technologies, intellectual property, etc. Intellectual capital is of major importance for development and execution of the JSC NIAEP innovation activity, and achievement of its strategic goals in general.

30 specialists with a PhD degree, 1 doctor of science, and three employees with MBA degree work in JSC NIAEP. See details on the Company's employees in the Section 5.4 "Human Capital".

Knowledge Management System

The main strategic goal of the NIAEP–ASE Integrated Company consists in strengthening of its leading positions in the global market of construction of complex engineering facilities, first of all – in the NPP construction market. To achieve success, the Company must use its competence, internal and external connections, and accumulated knowledge. The Knowledge Management System (KMS) shall be smoothly introduced in the Company Management System.

Seeing knowledge management as a combination of single aspects of personnel management, innovation and communication management, as well as application of new information technologies in management, KMS shall contribute to development

Table 26. Share of NIAEP Employees with Higher Education by Branches and Representative Offices, %

Subdivisions	2010	2011	2012	2013
Central Office	67.7	70.3	87.2	92.9
Moscow Branch	–	–	87.1	88.7
Moscow Representative Offices	–	–	97.7	97.8
St. Petersburg Representative Offices	–	–	95.2	100.0
Volgodonsk Branch	49.5	54.4	60.6	62.9
Volgodonsk Representative Offices	61.7	46.7	54.5	70.6
Udomlya Branch	43.0	46.5	53.8	–
Baltic Branch	–	76.7	79.1	58.0
Yuzhnouralsk Branch	–	–	71.0	64.2
Kursk Branchc (established in 2013)	–	–	–	54.2
Representative Office in the Republic of Belarus	–	–	72.9	67.1
Kharkov Representative Offices	–	100.0	100.0	100.0

of intellectual potential of the Company including elaboration and patenting of new knowledge, buildup of intangible assets.

In 2013 the NIAEP–ASE Integrated Company started development of KMS.

The draft structural diagram of KMS of the Integrated Company is given in Fig 36.

It is planned to develop the System in three directions:

- Scientific and educational activity,
- Scientific and technical information and patent activity,
- Methodological support of the Knowledge Management System.

KMS of the NIAEP–ASE Integrated Company correlates with the concept of the Knowledge Management System of the State Corporation Rosatom: it will include most of the components of KMS of the State Corporation Rosatom (see Fig. 36).

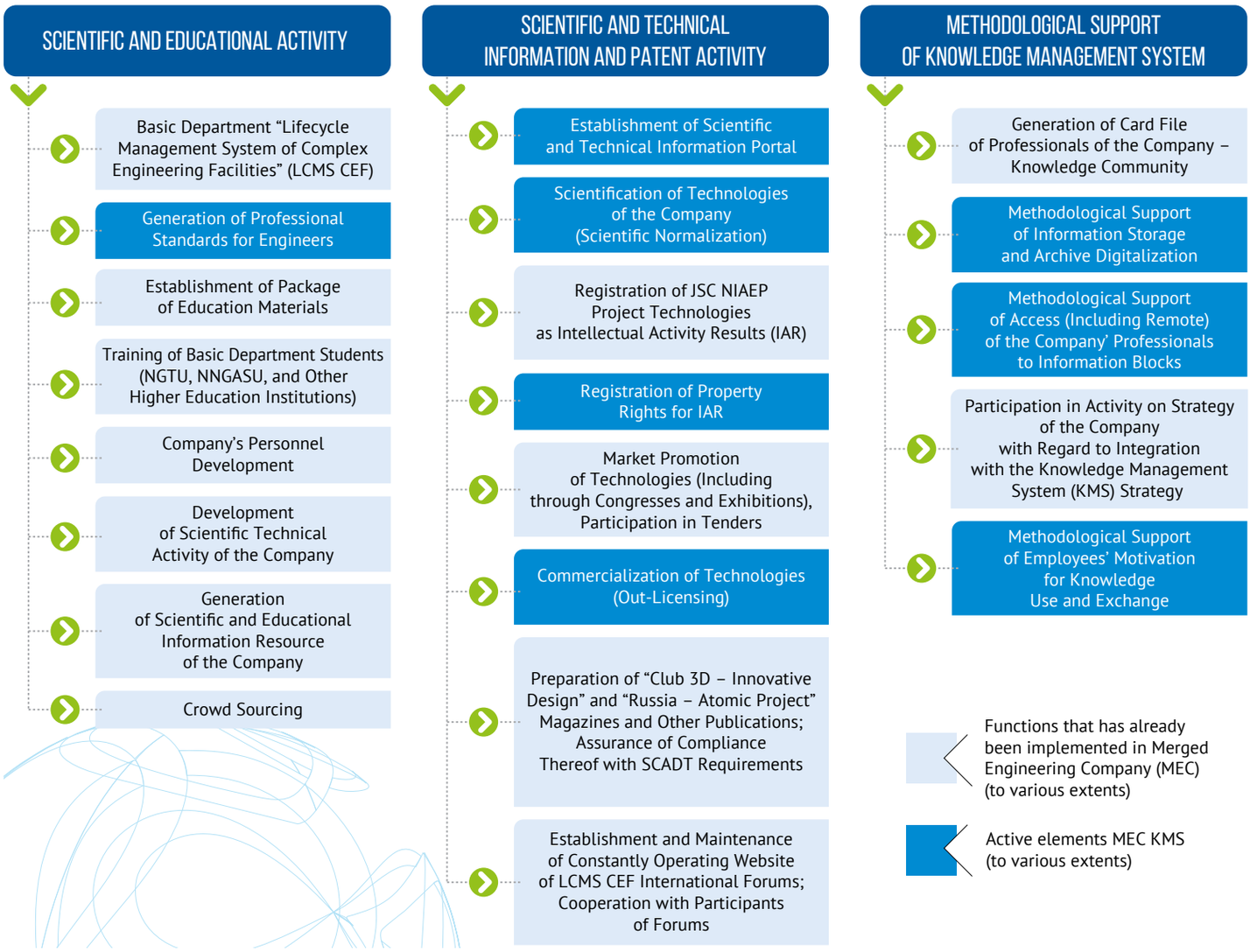


Fig 36. Diagram of Knowledge Management System Building

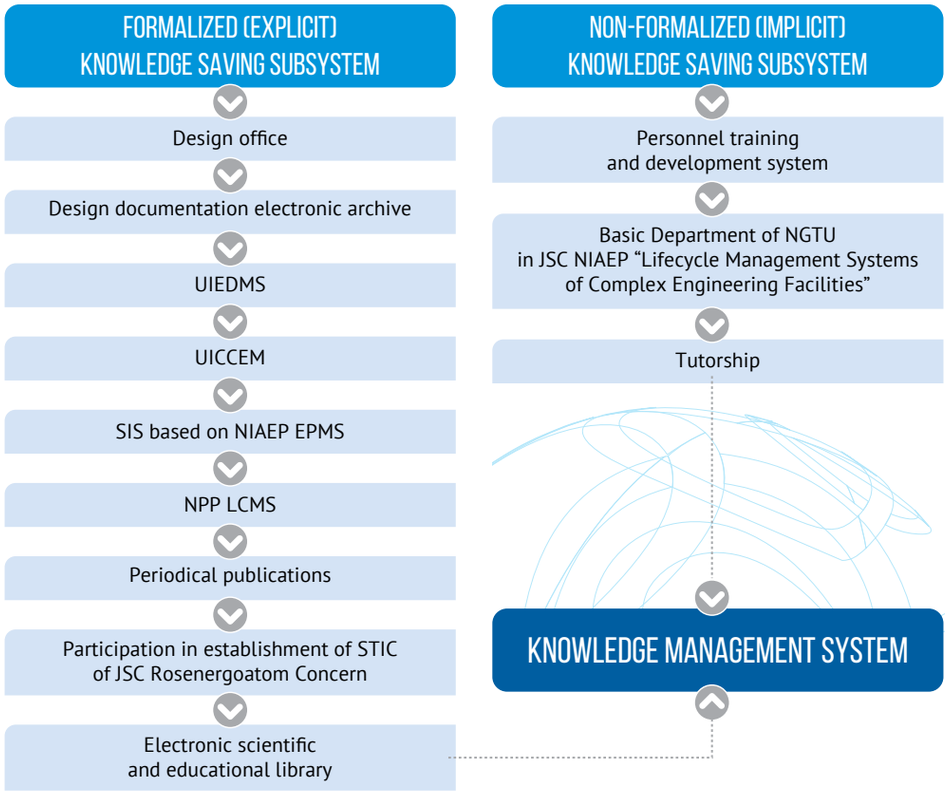


Fig. 37. Structural Diagram of KMS Building

Target Basic Department "Lifecycle Management Systems of Complex Engineering Facilities"

The main KMS project is the Basic Department of the R. E. Alekseyev Nizhny Novgorod State Technical University (NGTU) in JSC NIAEP "Lifecycle Management Systems of Complex Engineering Facilities". From September 2012 teaching of students from NGTU and Nizhny Novgorod University for Architecture and Civil Engineering (NNGASU) started in the Department. The Department is one of the ongoing projects of the Nizhny Novgorod nuclear energy cluster (see details on the cluster at http://www.niaep.ru/client/klaster_atom_energy/).

Teaching is conducted by the academic teaching staff of NGTU, NNGASU and leading specialists of the Company.

In addition to target preparation of students for work in JSC NIAEP and development of the Company's personnel, activities of the Department include preparation of scientific specialists, performance of scientific work, and elaboration of methodological programs.

In 2013 seven specialists from among the managers of the Company have entered the PhD programs in NGTU.

The Scientific and Technical Development Department of JSC NIAEP in cooperation with the Basic Department of NGTU work on adaptation of the training course to the requirements of the international standard IPMA, so that the attendees could subsequently pass the examination for international certificate of project management specialist.

In the Reporting year the teaching materials on preparation of engineering specialists were elaborated.

The second academic year started in the Basic Department in 2013. 19 students of NGTU and NNGASU and 12 young professionals who were employed by JSC NIAEP in the Reporting year study in the Department. Detailed information on cooperation in the field of preparation of scientific specialists and scientific work is given in the Section 5.4 "Human Capital".

The education plan includes lectures and practical training at workplaces in the Company. To pass practical trainings, the students were employed on the basis of fixed-term employment contracts for the position of technical specialists. A qualified tutor was assigned to every hired student.

In July 2013 practical training of 28 attendees of the Basic Department with a group of 6 students from the Czech technical higher education institutions took place on the construction site of the Rostov NPP Units 3 and 4. In summer 2014 it is also planned to carry out practical training for the Basic Department attendees on one of the NPP units under construction.

52 specialist from the Republic of Belarus completed training in the field of information technologies applied within the Single Information Space.

Knowledge Exchange

A component of the introduced KMS and nuclear energy cluster is formed by periodical publications of the NIAEP–ASE Integrated Company. Since 2010 JSC NIAEP and Innovative Design Association have published the Club 3D: Innovative Design international magazine. The magazine is focused on experience exchange and development of competitive design, construction, and operation technologies for complex engineering facilities. The magazine is published in Russian and English. In addition, jointly with the publishing house Courier-Media the Company publishes the Atomic Project magazine intended for specialists in the field of production and supply of equipment and materials for nuclear power industry.

Congress and exhibition events contribute to knowledge exchange and market promotion of technologies. In 2013 the Third International Research and Practice Forum "Lifecycle Management of Complex Engineering Facilities" was held. It was devoted to operational support tools for complex engineering facilities.

Intellectual Property

A component part of KMS includes consistent registration of projects and technologies as intellectual activity results (IAR) with possible subsequent assignment of property rights for IAR. Using the potential of the introduced KMS for execution of informational and sci-tech functions of work with intellectual property items is one of the priority tasks for 2014.

A project on scientification (normalization in accordance with scientific standards) of innovative technologies elaborated by the Company is implemented for development of scientific and research work within KMS.

Design patent for the Equipment and Materials Uniform Specialized Catalogue is at the stage of registration.

Results of 2013

In 2013 the course "How to make your own company a learning organization: technologies, opportunities, restrictions, best business practices" was read for top and middle managers.

In 2013 the first stage of education started for the specialists of the NIAEP–ASE Integrated Company in the field of project management. It is planned to teach a total of 200 specialists from the NIAEP–ASE Integrated Company and S&A.

In the 2012–2013 academic year the employees of the Central Office (770 persons) participated in the Programs of Technical and Economic Training for Engineers and Technicians. Studies on High-Technology Enterprise Management and Personnel Training System Organization were completed by 30 managers of structural subdivisions of the Central Office. Training program on Project Management System on the basis of the Volgodonsk training center was followed by 59 top and middle managers.

The following courses were carried out in 2013 within the frames of intercompany education:

- Introduction to uniform industry catalogues of equipment and materials;
- Designing management systems;
- Electronic document management;
- Single information space data model;
- Procurement and supply system. Tender documentation preparation;
- Bar coding of equipment and materials in stock;
- Calendar network planning; weakly and daily jobs. Work with Primavera program;
- Legal support of contractual and claim-action work;
- NPP cost management system.

Based on the project office (archive of the Company's design developments) and electronic library of periodical and exclusive publications, a public scientific and education informational resource is generated in the NIAEP–ASE Integrated Company.

Proposals were elaborated on participation of JSC NIAEP in establishment of the Scientific and Technical Information Center of JSC Rosenergoatom Concern (STIC). Participation in activity of STIC is important for JSC NIAEP for development of projects implemented by the Company and improvement of work of the Basic Department.

5.4. Human Capital

Comments

Human resourcing of innovative development means the complete process of HR management, both recruitment and maintenance of constant personnel development based on the needs of innovative processes going on in the Company.

This is especially important in connection with high requirements for quality of specialists. Attention is primarily paid to professional profile of specialists with description of the required education, experience, knowledge, and skills. We started the work on description of position profiles for the design block and we plan to go on with it in 2014.

Personnel development consists in systematic growth of modern knowledge and abilities and respective efficiency improvement.

This requires new approaches for cooperation with education institutions – adjustment of educational programs to motivate students for participation in innovative production, broadening their knowledge through self-studying of a number of subjects, and involvement in our activity at the stage of learning. The strategy of development of the NIAEP–ASE Integrated Company imposes new requirements for young professionals. Taking into account the amount of annually launched facilities, reduced time of design and construction, recent graduates must be ready for full-fledged activity, including development and implementation of investment projects, at the very first stage of employment.

Establishment of the Basic Department in the Nizhny Novgorod Technical University founded in 2012 is aimed at soling this task. The Department is called "Lifecycle Management System of Complex Engineering Facilities". Not only NGTU students, but also employees of the NIAEP–ASE Integrated Company study there. Our employees are also engaged in teaching in the Department.

For four years we have been actively implementing the program on selection of the best students of the specialized universities including NGTU and Nizhny Novgorod State University of Architecture and Civil Engineering. These students are already members of our team. They receive monthly allowance in the amount of 5 thousand rubles. This year all scholars were employed in the Company and combined work with education. We are also glad to hire those students who passed practical training in our Company and acquired perfect reputation. In total 187 graduates of these universities were employed within three years.

We believe that practice makes perfect and look for possibilities to expand internships for students at production facilities and train our employees on innovative programs.

I would like to mention that selection of the best high school graduates is of the highest priority for us in 2014; we introduce a program on selection of senior high school students who will enter specialized higher education institutions according to a target-based plan.

Nikolay Sheshokin, Vice-President for HR Management

Employees of the Company are one of its key capitals facilitating activity of the Company and achievement of its strategic goals. Growth of human capital implies not only increase in headcount, but also growth in terms of competency, career and professional development (also see Section 5.3 "Intellectual Capital"), as well as improvement of labor conditions.

5.4.1. Approaches to Human Capital Management

The basic strategic goal in the field of HR management consists in achievement of a certain advantage of the NIAEP–ASE Integrated Company through improvement of efficiency and qualification of its employees and maintenance of key competence.

The main HR management tasks include:

- Assurance of uniform principles and approaches to HR management in all operation areas with consideration of local specifics and in accordance with the applicable law;
- Staffing the Company with qualified personnel in accordance with the needs of business through involvement of the best of the best, efficient personnel training and development system, introduction of integrated evaluation and career planning system;
- Preservation and transfer of key knowledge and abilities through introduction of tutorship system, relocation of key specialists from completed facilities to new construction sites;
- Development of efficient remuneration and compensation system with consideration of dynamics of market changes and financial possibilities of the Company.

Regulatory framework of social and labor relations in JSC NIAEP is described in the electronic Annual Report.

In social partnership with JSC NIAEP the employees are represented by the employee association. The primary association of nuclear energy and industry workers is established in the Company.

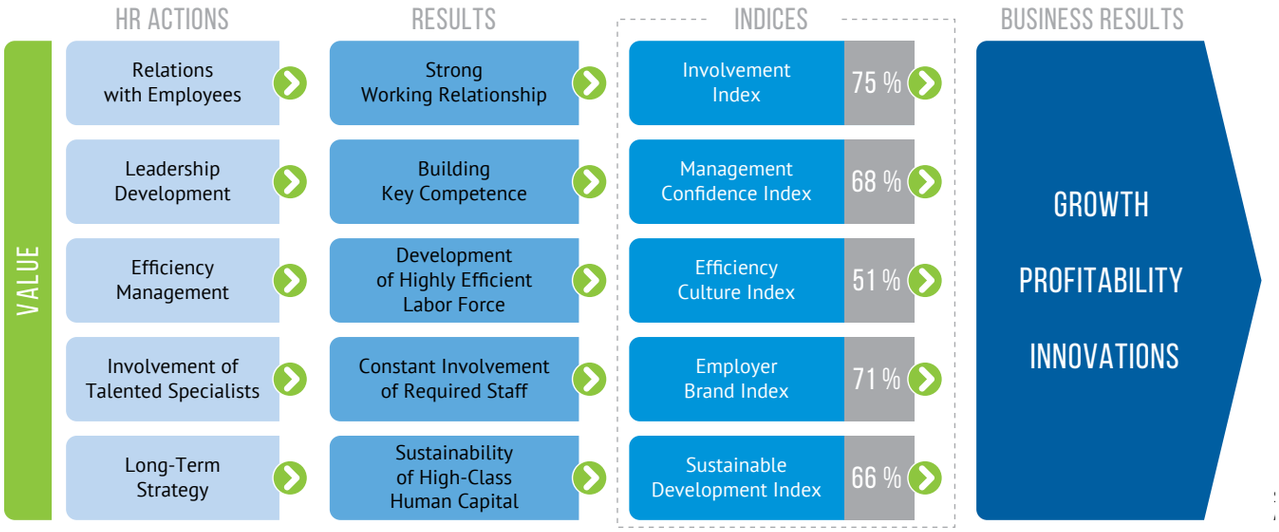


Fig. 38. Human Capital as a Source of Sustainable Business Results.
Source: Aon Hewitt Employee Research

Personnel Involvement

Within the project of the State Corporation Rosatom, JSC NIAEP has participated in the personnel involvement level survey for three years. Involvement (personal interest of the employees in achievement of the Company's strategic goals) is directly connected with financial performance of the Company. According to the results of survey carried out in 2013 with participation of 709 employees of the Company, personnel involvement level in JSC NIAEP amounted to 75 % (see Table 27), that is 7 % higher than the industry-level in whole.

Invariably high involvement index of the NIAEP–ASE Integrated Company reflects the situation in the Company where the main success factors include satisfaction of the employees with the top managers having clear vision of the future, attractive image of JSC NIAEP in the labor market, and belief of the employees in stability and success of the Company in long-term perspective.

According to the involvement level, for four years JSC NIAEP has referred to the effectiveness zone including the major world companies in terms of economics. The slight index decrease in 2013 is

Table 27. JSC NIAEP Personnel Involvement Level, %

	2012	2013	2014 (plan)
Involvement Level	80	75	75

Table 28. JSC NIAEP Personnel Involvement Level by Management Levels,%

Management Level	2012	2013
Top managers	100	92
Middle managers	80	70
Specialists	78	74
Workers	89	93

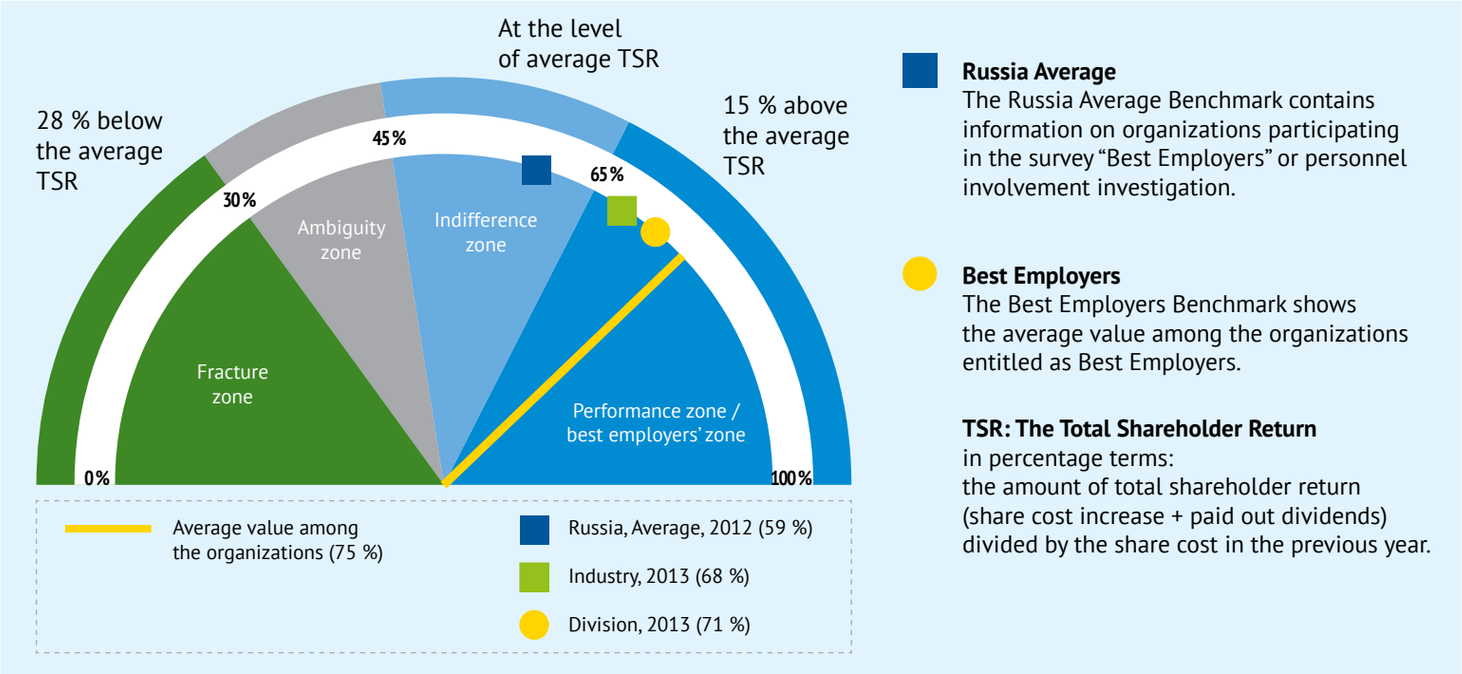


Fig. 39. JSC NIAEP Personnel Involvement.
Source: Aon Hewitt Employee Research Database

conditioned by personnel turnover and recruitment of a considerable number of new employees.

The Corporate Ethics Code of JSC NIAEP applied in the Company regulates norms and rules of corporate business conduct. The Code informs the employees on ethical conduct values and principles defining relationship between the employees inside the Company and with business partners and serving as an instrument for prevention of possible violations and conflict situations.

The Code is a part of the Company's corporate culture and each new employee must confirm his or her agreement with the provisions of the Code by personal signature on a certificate stored in personal record.

5.4.2. General Characteristic of Human Capital

The total headcount of employees of the NIAEP–ASE Integrated Company including subsidiaries amounts to 6 thousand persons.

As of December 31, 2013, the total headcount of the JSC NIAEP employees amounts to 3,431 persons: 1,728 employees in the Central Office of JSC NIAEP, 1,703 employees in other branches and representative offices. The headcount of subsidiaries amounts to 2,324 persons.

Information on the personnel headcount of JSC NIAP and JSC ASE broken down by type of employment, employment contract, region, and gender as of December 31, 2013, as well as percentage of new employees of JSC NIAEP by region, age, and gender is available in the electronic Annual Report.

According to the Collective Agreement, if employee is dismissed due to staffing

Table 29. JSC NIAEP Employees by Gender and Age as of December 31, 2013

Categories of Employees	Up to 30				31–50 years				Above 50 years			
	m	f	Total	Average age	m	f	Total	Average age	m	f	Total	Average age
Managers	50	18	68	28.3	328	155	483	40.2	220	96	316	56.9
Specialists	415	436	851	26.9	379	562	941	38.1	174	243	417	57.5
Officers	–	14	14	26.1	1	22	23	38.4	1	11	12	55.2
Workers	40	21	61	26.6	99	46	145	41.1	74	26	100	55.7
TOTAL	**505**	**489**	**994**	**27.0**	**807**	**785**	**1592**	**39.0**	**469**	**376**	**845**	**57.0**

Table 30. JSC NIAEP Employees by Gender, Average Age of Employees by Categories as of December 31, 2013 (Exclusive of S&A)

Categories of Employees	Male	Female	Average Age
Managers	598	269	45.4
Specialists	968	1,241	37.4
Officers	2	47	39.0
Workers	213	93	42.9

Table 31. Employee Turnover in 2013 by Region and Gender

Subdivisions	Average Payroll Headcount in 2013[15], Persons	Number of Employees Who Left the Company[16], Persons	Employee Turnover Rate in 2013, %	Men		Women		Share of New Employees (of Average Payroll Headcount at the End of Period), %
				Employees Who Left the Company, Persons	Employee Turnover Rate, %	Employees Who Left the Company, Persons	Employee Turnover Rate, %	
Total Headcount	**3,363.6**	**393**	**11.68**	**236**	**7.02**	**157**	**4.67**	**19.7**
Central Office, Nizhny Novgorod	1,721.3	74	4.3	45	2.6	29	1.68	13
Baltic Branch, Sovetsk	155.6	52	33.4	37	23.78	15	9.64	18
Volgodonsk Branch, Volgodonsk	537	86	16.0	48	8.94	38	7.08	17.9
Moscow Branch, Moscow	472	99	21.0	52	11.02	47	9.96	20
Yuzhnouralsk Branch, Uvelsky Settl.	132	22	16.7	17	12.88	5	3.79	32.5
Representative office in the Republic of Belarus, Ostrovets	212.4	32	15.1	23	10.83	9	4.24	54.6
Volgodonsk Representative office, Volgodonsk	6.56	0	0.0	0	0.00	0	0.00	17.6
Moscow Representative office, Moscow	39.61	1	2.5	0	0.00	1	2.52	8.7
St. Petersburg Representative office, St. Petersburg	41.59	9	21.6	8	19.24	1	2.40	24.3
Kharkov Representative office, Kharkov	6.7	0	0.0	0	0.00	0	0.00	25
Kursk Branch, Kurchatov	38.8	5	12.9	5	12.89	0	0.00	35.4

15. The average payroll headcount is calculated for each month by summing up the payroll personnel headcount for every calendar day of the months, i.e. from the 1st to the 30th or 31st day (for February – to the 28th or 29th day) including holidays (non-business days) and weekends, and by division of the derived amount by the number of calendar days of the month.
16. The employees who left the Company include the persons resigned of their own will or by mutual agreement of the parties, retired, dismissed due to transfer to another employer, etc.

reduction, the employer provides assistance in further employment, including in the companies within the State Corporation Rosatom.

Age and Education of Employees

The share of employees younger than 35 years has annually increased in JSC NIAEP (see Table 32). The Company is interested in involvement and retention of young professionals including recent graduates (see details in the Section 5.3 "Intellectual Capital").

Gender Composition

The employees of the NIAEP–ASE Integrated Company include 2,012 women and 2,434 men (45.3 % of women, 54.7 % of men).

5.4.3. Labor Remuneration

JSC NIAEP seeks to provide for fair evaluation of labor of its employees. In all operation areas the Company offers competitive minimum and average wages.

In accordance with the clause 6.2.3 of the Industry Agreement on Nuclear Ener-

Table 32. Share of JSC NIAEP Employees Under 35 Years Old, %

	2009	2010	2011	2012	2013
Young Professionals (up to 35 years old inclusive)	38.8	40.9	44.2	43.7	45.5

Table 33. Personnel Headcount Broken Down by Gender

	2011			2012			2013		
	m	f	Total	m	f	Total	m	f	Total
JSC NIAEP	1,254	1,277	2,531	1,731	1,648	3,379	1,781	1,650	3,431
JSC ASE	617	422	1,039	415	262	677	653	362	1,015
TOTAL	**1,871**	**1,699**	**3,570**	**2,146**	**1,910**	**4,056**	**2,434**	**2,012**	**4,446**

gy, Industry, and Science for 2012– 2014 the Company undertakes to set the minimum wage of at least 1.4 of subsistence level (and at least 1.25 of subsistence level for employees of certain categories of organizations).

In accordance with scenario of development, workforce productivity gains shall be at the level of at least 5 % per year in real prices. Growth of average wage is at the level of 5 % in real prices, provided achievement of the planned workforce productivity gains.

Information on male-to-female basic wage ratio in JSC NIAEP in 2013 broken down by regions and categories of workers is available in the electronic Annual Report.

Table 34. Average Monthly Wage by Regions in 2011

Subdivisions	Average Payroll Headcount, Persons	Wage Pool, Thousand Rubles	Average Monthly Wage, Thousand Rubles	% Relative to Previous Year
2011				
Nizhny Novgorod Region	1446.82	1,539,457.35	88.669	1.02
Rostov Region	496.08	232,308.87	39.024	0.84
Tver Region	477.98	265,940.09	46.365	1.07
Kaliningrad Region	10.13	11,587.56	95.324	–
Kharkov Region	4.5	3,620.64	67.049	–
Moscow	–	–	–	–
Republic of Belarus	–	–	–	–
Chelyabinsk Region	–	–	–	–
Kursk Region	–	–	–	–
TOTAL	**2,435.51**	**2,052,914.51**	**70.242**	**1.02**
2012				
Nizhny Novgorod Region	1,644.00	1,934,555.79	98.061	1.11
Rostov Region	513.30	247,140.07	40.123	1.03
Tver Region	205.60	164,558.39	66.698	1.44
Kaliningrad Region	136.60	104,706.73	63.877	0.67
Kharkov Region	6.00	5,858.77	81.372	–
Moscow	475.60	499,025.81	87.438	–
Republic of Belarus	57.10	30,678.20	44.773	–
Chelyabinsk Region	36.70	20,044.70	45.515	–
Kursk Region	–	–	,	–
TOTAL	**3,074.90**	**3,006,568.46**	**81.481**	**1.16**

Table 34. Average Monthly Wage by Regions (the end)

Subdivisions	Average Payroll Headcount, Persons	Wage Pool, Thousand Rubles	Average Monthly Wage, Thousand Rubles	% Relative to Previous Year
2013				
Nizhny Novgorod Region	1801.9	2,328,413.79	107.68	1.10
Rostov Region	544.2	276,322.12	42.31	1.05
Tver Region	0	–	–	0.00
Kaliningrad Region	155.6	139,318.62	74.61	1.17
Kharkov Region	6.7	7,865.39	97.83	1.20
Moscow	472	640,858.52	113.15	1.29
Republic of Belarus	212.4	112,460.61	44.12	0.99
Chelyabinsk Region	132	81,117.18	51.21	1.13
Kursk Region	38.8	30,200.83	64.86	–
TOTAL	**3,363.6**	**3,616,557.06**	**89.60**	**1.10**

Table 35. Level of Average Wage Relative to Average Labor Market Level in 2013

Region	Average Monthly Wage (Thousand Rubles)	Average Monthly Wage (Thousand Rubles) in Regional Labor Market [17]	Wage Ratio
Nizhny Novgorod Region	107.7	23.8	4.5
Rostov Region	42.3	21.6	1.9
Kursk Region	64.9	21.1	3.1
Kaliningrad Region	74.6	25.4	2.9
Kharkov Region, Ukraine	97.8	–	–
Moscow	113.2	56.3	2.0
Republic of Belarus	44.1	18.4[18]	2.4
Chelyabinsk Region	51.2	25.8	1.98

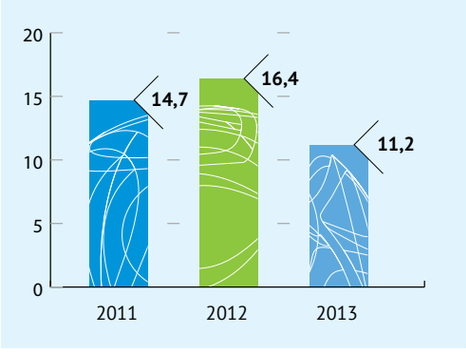


Fig. 41. Average Wage of 10 % of the Least Highly-Paid Employees Relative to Average Wage of 10 % of the Most Highly-Paid Employees of the Company

Payroll Calculation Principle. KPI System

The Regulations on Labor Remuneration to the JSC NIAEP Employees (Regulations) introduced in accordance with the Single Uniform Labor Remuneration System of the State Corporation Rosatom (SULRS) assures encouragement of the employees for improvement of production and economic performance based on incentive mechanism.

The Regulations provides for uniform principles and approaches to organization of labor remuneration and sets the

17. Source: Federal State Statistics Service.
18. Source: National Statistics Committee of the Republic of Belarus

Table 36. Ratio of Basic Low-Level Wage to Minimum Wage in Significant Operation Areas[19] of JSC NIAEP

Region	Basic Low-Level Wage[20]	Minimum Wage Index in Region[21]	Wage Ratio
Central Office (Nizhny Novgorod Region)	7,700	5,205	1.48
Volgodonsk Branch (Rostov Region)	7700	5,205	1.48
Representative office of JSC NIAEP in the Republic of Belarus (Grodno Region)	7,700	4,802	1.61
Kursk Branch (Kursk Region)	14,600	5,554	2.62
Baltic Branch (Kaliningrad Region)	7,700	7,000	1.10
Moscow Branch (Moscow)	20,600	12,200	1.69
Yuzhnouralsk Branch (Chelyabinsk Region)	11,753	7,200	1.63

procedure for SULRS application and determination of wage size.

Wage consists of:

1. Salary (basic salary);
2. Incentive payments:
   - Integrated incentive markup (IIM);
   - Integrated incentive markup for fulfillment of KPI (IIM KPI);
3. Incentive payments:
   - Bonus for fulfillment of KPI;
   - Bonus for fulfillment of a very important task;
4. Compensatory payments for fulfillment of work in conditions other than normal (including markups for work with information presenting a state secret);
5. Other payments stipulated by the Labor Code of the Russian Federation.

The amount of wage rate (basic salary), IIM, and bonuses for KPI fulfillment depends on the employee's position level, his or her professional competences and effectiveness.

A grade and an inter-grade zone are assigned to every position and profession of a certain qualification category in the corporate schedule of the Company.

The position (profession) grade is based on characteristics of this position (profession) and its value for the Company. The inter-grade zones are intended to range the structural subdivisions and single positions (professions) according to priority principle.

IIM is introduced as an instrument facilitating determination of the employee's money remuneration corresponding to his or her professional competence and effectiveness of labor (professional status). IIM KPI is generally paid to workers of large production subdivisions.

If works are performed in conditions other than normal, the employees receive additional payments and compensatory markups.

The employees are given bonuses pursuant to the results of KPI fulfillment once a year at the expense and within the margins of the wage pool with consideration of the Company's performance results for the year. The Company's KPI are described in the JSC NIAEP President Map of KPI (see details in the Section 6 "Corporate Management") and translated or decomposed for subordinated workers and structural subdivisions. KPIs are established for one year in accordance with the major goals of a worker or structural subdivision and functional workload.

For the purpose of flat incentives the employees may receive bonuses for fulfillment of very important tasks pursuant to the Decision of the JSC NIAEP President. Very important tasks include tasks connected with special requirements for time-frame and quality and imposing higher responsibility and significance.

The approach to labor remuneration of top managers is equal to the approach of labor remuneration of other workers. Issues connected with labor remuneration of JSC NIAEP President are regulated by the Labor Agreement, Decisions of the Board of Directors, and Regulations on Labor Remuneration to the Employees of JSC NIAEP.

Evaluation of own performance by the top managing body is performed through setting of KPI to the employees and assessment of KPI fulfillment by the employees. Based on performance evaluation the size of bonus is determined at year-end.

19. Significant operation areas of JSC NIAEP are regions of operation of the Company in Russia and abroad where JSC NIAEP has economic, environmental, and social influence within the frames of production activity.
20. Low-level wage is determined by position and qualification of employee and does not depend on gender assignment.
21. Source: Federal State Statistics Service.

The sum of governmental and departmental incentives awarded to the employees for special labor achievements and considerable personal contribution to performance of production plans amounted to 75 thousand rubles in the Reporting period.

5.4.4. Personnel development

The personnel training and development system is elaborated and updated with consideration of tasks and strategic priorities of the Company. The system covers all levels of personnel and implies regular evaluation of performance results.

The activity on personnel preparation is regulated by the Corporate Standard on Personnel Training.

1,746 employees of the Company upgraded their qualification and completed training in the training centers of the State Corporation Rosatom in 2013.

Target training for 86 managers and specialists was carried out in 2013 on the subjects as follows:

- High-technology enterprise management;
- Personnel training system organization;
- Production logistics;
- Innovative management and designing methods;
- Management and engineering of complex technical facilities;
- Introduction of IT technologies in design and production.

In 2013 expenditures for training of one employee amounted to 7,910 rubles (3,115 rubles in 2011, and 3,800 rubles in 2012).

Considerable reduction in training expenditures in JSC ASE is connected with merger of JSC NIAEP and JSC ASE at the end of 2011. After JSC NIAEP became the managing company of JSC ASE, a large part of the employees (over 500) from JSC ASE was transferred to JSC NIAEP.

Work with Staff Pool

Improvement of staff pool quality is one of the major tasks of JSC NIAEP. Staff pool is established in the Company.

During appointment of employees to managing positions in JSC NIAEP, priority is given to internal candidates selected

Table 37. Number of NIAEP Employees Who Completed Training

	2011	2012	2013
Central Office	586	951	1,029
Moscow Branch	0	149	49
Volgodonsk Branch	101	187	138
Baltic Branch	0	97	43
Yuzhnouralsk Branch	0	20	295
Representative office in the Republic of Belarus	0	25	175
Kursk Branch	–	–	17

Table 38. Personnel Training Expenditures, Thousand Rubles

Training Expenditures, Thousand Rubles	2011	2012	2013
JSC NIAEP	7,961	13,807	26,500
Share of training expenditures of the total personnel expenditures, %	0.31	0.3	0.58
JSC ASE	7,469	668	732
Share of training expenditures of the total personnel expenditures, %	0.28	0.12	0.09

Table 39. Average Number of Training Hours per One Employee of JSC NIAEP

Categories of Employees	2011	2012		2013	
	JSC NIAEP	JSC NIAEP	JSC ASE	JSC NIAEP	JSC ASE
Managers	1.3	6.7	6.7	22.9	9.2
Specialists	17.2	9.8	5.6	18.2	7.0
Workers	16	22.4	3.9	6.8	0

Table 40. JSC NIAEP Staff Pool Structure in 2013

Staff Pool Structure	Number of Employees Included in Staff Pool	Number of Manager Vacancies Filled in 2013	Number of Vacancies for Managers Filled from Staff Pool in 2013	
			Persons	%
Top Managers	5	5	5	100
Senior Managers	11	4	2	50
Middle and Initial Managers	258	215	100	46.5
TOTAL	**274**	**223**	**107**	**48**

normally from the staff pool. In 2013 48 % of vacancies were filled by managers from the staff pool (see Table 40).

JSC NIAEP takes active position on inclusion of managers and efficient specialists in field-specific pools of the State Corporation Rosatom. Pursuant to the results of assessment of the State Corporation Rosatom, four top-managers of JSC NIAEP were included in the Rosatom Assets pool in 2013. One employee was included in each of the Rosatom Capital and Rosatom Talents pools.

The program on corporate competence development for the employees included in the staff pool has been executed in JSC NIAEP for two years. Forty employees included in the staff pool of JSC NIAEP have completed training within this program.

Personnel Assessment

The employee's performance management (EPM) system has been applied in JSC NIAEP since 2010. This system is based on evaluation of fulfillment of set goals (KPI) by the employees and assessment of compliance with the required level of corporate competence.

The EPM system permits the employee to understand which results are expected from him or her by JSC NIAEP, by which criteria his or her performance will be assessed, how his or her career expectations may be embodied, what is required for improvement of performance results and recognition of merits. Performance results are used for decision making in the process of HR management. According to the employee's performance 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.

In 2013 managers and specialists of the NIAEP–ASE Integrated Company took part in various assessment procedures:

- 51 employees of JSC NIAEP passed assessment of managerial abilities development level through online testing;
- 830 managers of all management levels passed annual assessment procedure RECORD (coverage of managers who passed assessment is 76.2 % of men and 66.7 % of women).

Plans on personnel assessment for 2014:

- 850 employees will be subject to annual performance assessment procedure RECORD;
- 100 employees will be subject to test of managerial abilities development level;
- managers appointed to a position of TOP-1000 level will be subject to assessment.

Table 41. Share of Employees Subject to Assessment of Performance and Career Development

Year	2011	2012	2013 (with Consideration of JSC ASE)
Share, %	8.7	6.5	18.7

Table 42. Work with Students in 2013

	2011	2012	2013
Number of students who completed practical training	107	85	130
Number of students employed according to the results of practical training	14	18	15
Number of students studying in higher education institutions within target preparation programs	35	42	37
Number of young professionals employed after graduation from higher education institutions, including specialized ones	36	89	47

Involvement of Graduates and Work with Higher Education Institutions

Planning its long-term development, the Company seeks to involve graduates of field-specific higher education institutions.

A system of cooperation with higher education institutions is employed in the Company facilitating inflow of talented and promising graduates.

In 2010 JSC NIAEP instituted the E.N. Pozdyshev monthly grant in the amount of 5 thousand rubles. 38 senior students from the NGTU and NNGASU specialized higher education institutions took part in the competitive selection in 2013. According to the results of the competition, 15 scholars were selected.

Target Basic Department "Lifecycle Management Systems of Complex Engineering Facilities

NGTU and NNGASU students receive specialized education in the Basic Department of JSC NIAEP for subsequent work in the NIAEP–ASE Integrated Company. See details in the Section 5.3 "Intellectual Capital".

5.4.5. Occupational Safety Assurance

The main principles of the Occupational Health and Safety Management System, as well as procedures required for its introduction, efficient functioning and development, are defined by the Occupational Health and Safety Management System of the State Corporation Rosatom. The Integrated Management System (IMS) was introduced and is currently applied in the Company. It permits to build the system of management and monitoring of works in the field of occupational safety management.

The priority goal of the Company consists in assurance of occupational safety and health of its employees, what is stated in the Quality, Ecology, Occupational Safety and Health Policy of JSC NIAEP (see the electronic Annual Report).

To achieve this goal, the Company improves the Occupational Health and Safety Management System, implements measures on prevention of occupation-

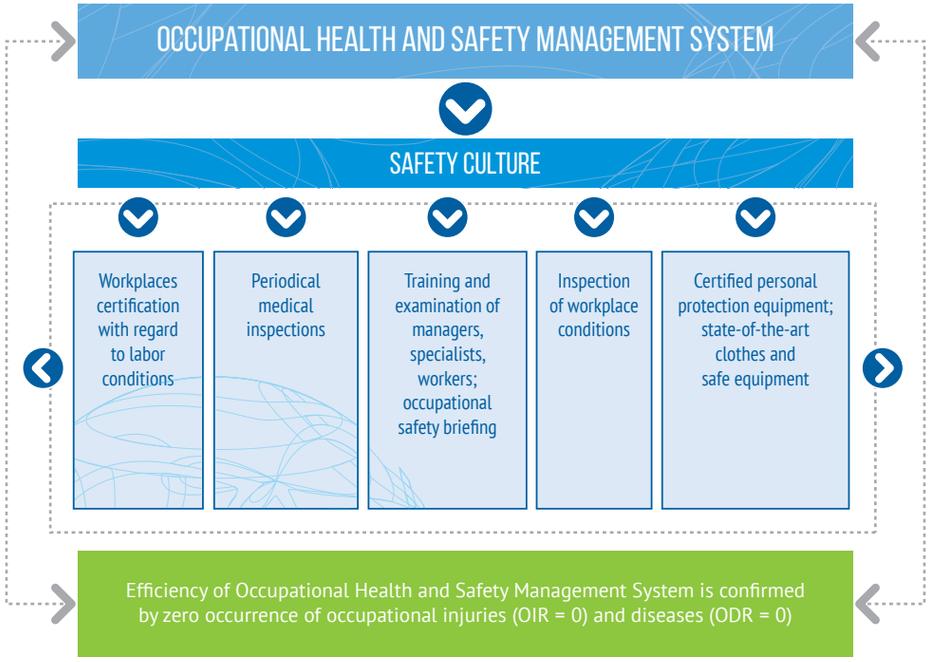


Fig. 41. Occupational Safety Management System

al injuries and diseases, improvement of labor conditions of the employees, and conducts training of managers and specialists for competence development in the field of occupational safety. This activity of the employer is stipulated by the current Collective Agreement (Occupational Safety Agreement) and is of special social significance.

The Company has performed identification of possible hazards and risks and set strategic goals in the field of OHS, elaborated programs for achievement of goals, and assured complete involvement of the personnel in development of the current Occupational Health and Safety Management System. The main documents regulating the activity in the field of occupational health and safety see in the electronic Annual Report.

One of the effective instruments for occupational safety assurance consists in certification of workplaces with regard to labor conditions. For impartial assessment of labor conditions, the analysis of several parameters is performed (electromagnetic fields and radiations, microclimate parameters, illumination of workplaces, intensity of labor process, occupational injury rate assessment, etc.) in strict compliance with the current sanitary norms and labor legislation of the Russian Federation.

Measures pursuant to the results of workplaces certification are specified in the Collective Agreement for 2013-2014: the employer provides the employees with certified personal protection equipment in addition to Standard Norms of Personal Protection Equipment Provided Free of Charge.

The Company pays special attention to periodical medical inspections of its employees working in conditions of exposure to various workplace factors. Medical services to such employees are rendered by regional field-specific medical centers of the Federal Medical and Biological Agency of the Russian Federation.

To control the state of labor conditions and OHS at workplaces, JSC NIAEP has arranged a 3-level administrative public control system. Control is executed by managers of various level with participation of OHS inspectors and OHS professionals.

An important part of the Occupational Health and Safety Management System is training in the field of OHS. The employees participate in introductory briefing, primary briefing at workplace, refresh briefing, unscheduled and target briefing on occupational health and safety, as well as fire safety briefing and training on first-aid to persons injured in accidents at workplaces.

The JSC NIAEP Management implements a package of works on maintenance of occupational labor conditions in compliance with the requirements of national standards and sanitary and health norms.

Funding allocated for occupational health and safety is increased year-to-year: in 2011 over 20 million rubles were allocated for activities on occupational health and safety, in 2012 – 29.2 million rubles, in 2013 expenses for improvement of labor conditions amounted to 50 million rubles.

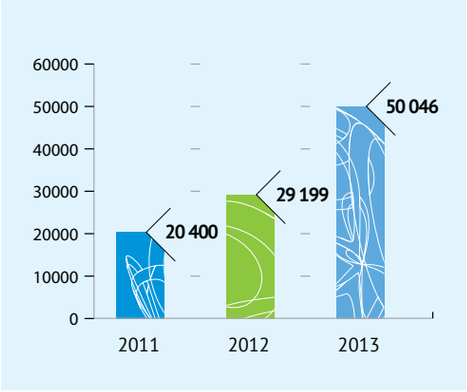


Fig. 42. Expenses for Occupational Health and Safety Activities, Thousand Rubles.

These assets are spent for:

- Organization of work on certification of workplaces with regard to labor conditions, professional risk assessment;
- Organization of OHS training and knowledge assessment for managers, specialists, and workers;
- Organization of training for managers on first-aid to persons injured in accidents at workplaces;
- Organization of obligatory primary and periodical medical inspections (examinations);
- Organization of medical examination of drivers;
- Organization of health resort treatment;
- Obligatory social insurance against occupational accidents and diseases;
- Vaccination of the employees;
- Provision of the employees working in harmful or dangerous labor conditions, abnormal temperature and climatic conditions, or exposed to contamination, with special clothes, shoes, and other personal protection equipment, according to the established procedure;
- Construction of new and reconstruction of existing heating and ventilation systems in production and utility buildings, installation of air heat curtains, air conditioning plants, to assure normal thermal conditions and microclimate, pureness of air environment in the working and maintenance areas of rooms;
- Modernization of computer equipment, procurement of furniture, purchase of network filters for computers;
- Maintenance of artificial general and local illumination systems in proper state.

For safe performance of work on construction sites and reduction in occupational injury rate, Corporate Standard "Organization of Search and Engagement of Contractors for Performance of Work on Sites of JSC NIAEP" was elaborated and introduced in the Company. Contracts with subcontracting organizations include sections on cooperation and mutual responsibility for compliance with occupational health and safety norms and rules; on termination of contract for serious and systematic violations of labor legislation requirements and OHS rules; on informing the Company's management on any abnormal situation.

The Company implements a number of OHS activities: daily monitoring of construction site – inspection of construction facilities by professionals of OHS departments of customer, general contractor, and contracting organizations; weekly meetings on occupational health and safety – professionals of the OHS departments render regular assistance in implementation of positive OHS practices, causes of revealed violations are subject to detailed consideration; the Occupational Safety Days are held on a monthly basis with demonstration of video of photographic materials and

summing up the occupational health and safety activities. Monthly target inspections of contractors are carried out, in order to assess their performance in the field of OHS.

Measures planned for 2014 include checks for compliance of contracting organizations with safety requirements, training in the field of OHS and first-aid, increase in role of the OHS Department with consideration of the necessity to assure supervision over safety state in the process of work performance by the contractors and subsidiaries on power unit construction sites.

In the NIAEP–ASE Integrated Company the interests of the labor collective regarding arrangement of health and safe labor conditions are represented by the OHS inspectors appointed at the general meetings of independent structural subdivisions for the period of 2 years. The share of the employees represented in joint OHS committees amounts to 3 %[22].

There are no employees engaged in professional activity connected with high occupational injury rate or high risk of certain diseases in the Company. Official agreements (of global and local level) with the employee associations cover issues on health and safety in full scope and apply to 100 % of the employees of the NIAEP–ASE Integrated Company.

Positive image of our Company among the industry players and partners has been formed due to constant attention of management to the issues of labor protection and high evaluation of the OHS Department activity by the state supervision and regulatory agencies. This is confirmed by:

- Certificate of Compliance No. 21 of December 19, 2013 (Reg. No. 002043) confirming that organization of occupational health and safety activities in JSC NIAEP complies with the established state normative OHS requirements (issued by the Non-Profit Organization of OHS Centers of the Privolzhsky Federal District, Reg. No. ROSS RU.V516.04LG00.11 of March 31, 2011);
- Certificate of Compliance with the requirements of international standard BS OHSAS 180001:2007 (Reg. No. 508399 BSOH), issued on July 31, 2013 by the international certification body DQS, confirming that JSC NIAEP has introduced and maintains the Occupational Health and Safety Management System.

According to the results of external and internal audits, the share of employees, controlled workers (except for independent contractors), acting in compliance with the Occupational Health and Safety Management System OHSAS 18001:2007 amounts to 100 %.

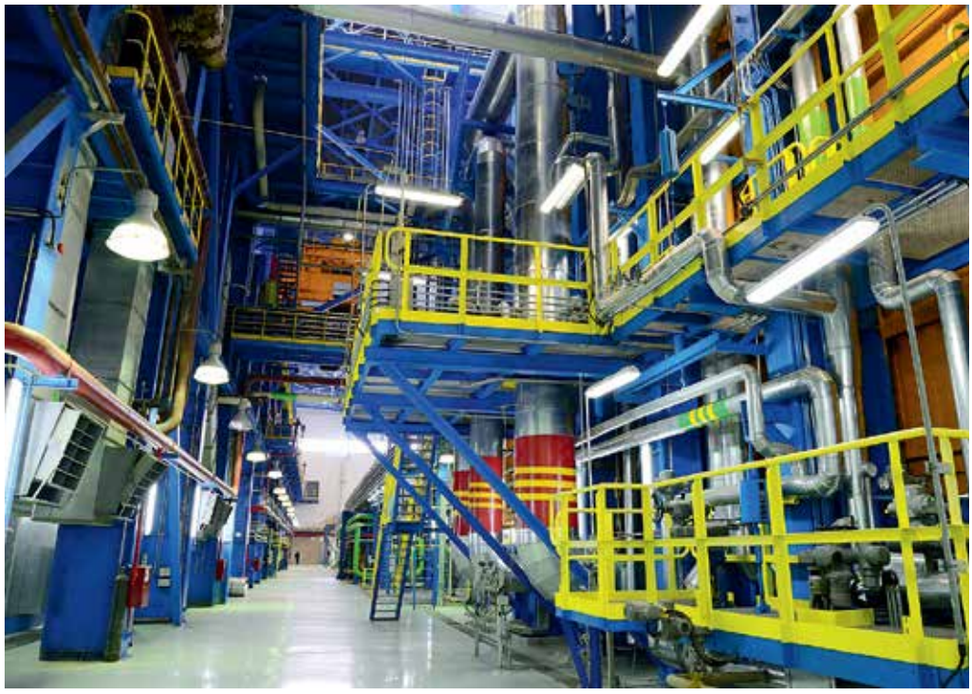


Table 44. Types and Level of Occupational Injury Rate

Rate	Value
Occupational injury rate (OIR)	0
Occupational diseases rate (ODR)	0
Lost days factor (LDF)	0
Workplace absence factor (WAF)	0
Total amount of occupational deaths	0

22. Health and safety inspectors in the Central Office of JSC NIAEP, JSC ASE, Moscow Branch of JSC NIAEP, Moscow Representative Office of JSC NIAEP, Volgodonsk Branch of JSC NIAEP, Kursk Branch of JSC NIAEP, and Labor Protection Commission of JSC NIAEP.

5.4.6. Social Policy

Regulation of Social and Labor Relations

The JSC NIAEP activity in the field of social and labor relations is based on the norms of the Labor Code of the Russian Federation, industry regulating document "Industry Agreement on Nuclear Energy, Industry, and Science for 2012–2014", and documents regulating the JSC NIAEP activity – Charter of JSC NIAEP, Internal Labor Regulations, Corporate Ethics Code and Collective Agreement of JSC NIAEP.

All social benefits and guarantees to the Company's employees are implemented in accordance with the uniform social policy of the State Corporation Rosatom within the existing corporate social programs.

Obligations of JSC NIAEP in the capacity of employer in the field of social guarantees and benefits to the employees with indication of certain payment amounts and mechanisms are established by the Collective Agreement and Annexes to it. The Agreement applies to all employees of the Company, regardless of their membership in the employee association. Thus, the share of employees covered by social programs is equal to 100 % .

On January 1, 2013 the Collective Agreement of JSC NIAEP for 2013–2014 has entered into force. The new Agreement provides for new types of one-time social payments, monthly payments to employees on maternity leaves (2 thousand rubles per month); assistance to employees in case of serious illness of child (up to 300 thousand rubles), increase in payments to veterans (twice – from 1 to 2 thousand rubles per month).

In accordance with the Collective Agreement, the contents of the Agreement and all amendments and additions to it shall be brought to the notice of the employees within a month from the date of signing. Informing shall be made through publication of the document text in the corporate electronic network. In addition, local regulatory acts of the Company reflecting all considerable changes in the Company's activity shall be published in the corporate electronic network on the day of signing.

The volume of money allocated for social activities and the amount of social payments per one employee increase year-to-year (see Fig. 44). All payments and benefits are paid to the Company's payroll employees having their main job in the Company (regardless of type of employment).

Non-State Pension Benefits

All Company's employees are entitled to receive state work pension in accordance with the legislation. In 2013 implementation of the program on non-state pension benefits to the employees has been launched. In accordance with the

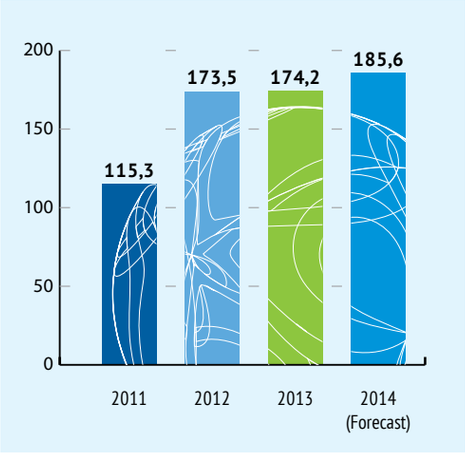


Fig. 43. Total Social Expenses, Million Rubles

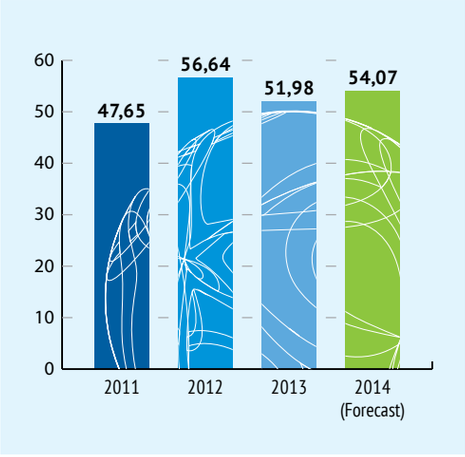


Fig. 44. Amount of Social Payments per One Employee, Thousand Rubles

provisions of the Collective Agreement of JSC NIAEP for 2013–2014, the Regulations on Non-State Pension Benefits for the Employees were approved. The Regulations were elaborated on the basis of the program on industry pension benefits and based on joint contributions of the employee and the employer to the employee's personal account in the non-state pension fund. 177 persons participated in the program on non-state pension benefits in 2013. The minimum amount of personal and corporate contributions depends on the age and length of service in the Company (see the electronic Annual Report. [redacted]) Expenses of the Company for implementation of the program in the Reporting period amounted to nearly 500 thousand rubles.

In accordance with the Regulations on Non-State Pension Benefits for the Employees of JSC NIAEP, the Company acts in the capacity of a guarantor of non-state pension benefits with regard to funding the non-state pensions till allocation thereof, and the Non-State Pension Fund Atomgarant – with regard to payments of the allocated non-state pensions.

Health Insurance and Health Care

For a number of years JSC NIAEP and JSC ASE has concluded contracts with health insurance companies on arrangement of and payment for medical care to the employees. The number of employees insured within voluntary health insurance (VHI) programs increases yearly (see Fig. 45). The employees of the Central Office, branches and representative offices are insured according to uniform programs. The employees may insure members of their families at corporate rates.

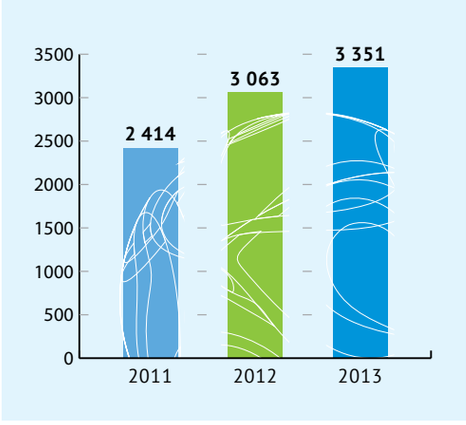


Fig. 45. Number of VHI Insured Employees of JSC NIAEP

All employees 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.

The employees including members of their families receive partial reimbursement of expenses for:

- children's holiday camps;
- recreation centers, touristic camps, and recreation houses,
- health resort treatment.

Special attention is paid to the issues of preventive treatment and early detection of serious diseases, including coronary heart diseases, influenza, cancerous and other diseases. The employer shall inform the employees on normative requirements for occupational working conditions, required and obligatory personal and collective protection equipment for prevention of diseases. All employees of the Company may pass medical examination for timely detection and treatment of diseases. Vaccination of the employees against influenza is performed annually. The Collective Agreement guarantees financial assistance to the employees and their children for paid treatment in case of serious diseases.

For the purpose of health maintenance and promotion, preventive and sporting events are arranged. A considerable scope of work on health improvement and rest of the employees and members of their families is performed by the Company's administration jointly with the Employee Association.

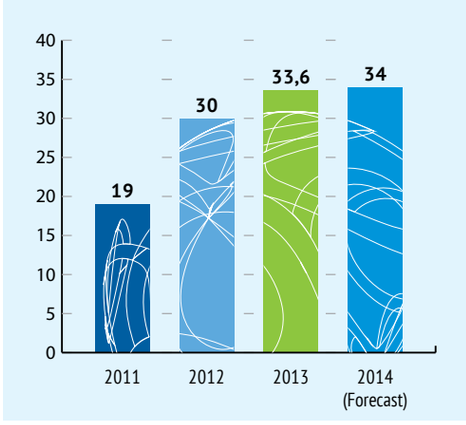


Fig. 46. Expenses of JSC NIAEP for Health Care of Employees, Million Rubles

Over 600 employees of the Company actively go in for sports. All persons interested are welcome in sport groups, rented swimming pools, and training halls for five-a-side, volleyball, and other sports. In 2013 the JSC NIAEP team took the first place in the Friendship Festival held among the companies of the State Corporation ROSATOM and NGTU, and in the 2nd All-Russian Competition "ROSATOM Cup 2013" with over 30 participating teams formed by the employees of the State Corporation Rosatom companies.

Financial Assistance

A considerable part of social payments refers to financial assistance to the employees. The amount of payments for health protection of the employees increases yearly, including voluntarily health insurance of the employees, health resort treatment, rest and health improvement in recreation camps.

970 financial assistance payments were made to the JSC NIAEP employees in the Reporting period for the total amount exceeding 21 million rubles. Similar payments were made in JSC ASE and LLC NIAEP-Servis. All payments were made in accordance with the Regulations on Financial Assistance.

The employees receive 25 thousand rubles on marriage and 55 thousand rubles on childbirth. In the Reporting period the allowance to families with three and more children under 18 years old amounted to 36 thousand rubles per year for each child.

A program on rendering help to the employees in procurement of lodgings is implemented in the Company. 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 65 participants of the program. According to the results of application campaign in 2013, 20 more employees became the participants of the program; the absolute majority was represented by the employees at the age

Table 45. Number of Employees Who Took Child-Care Leave and Returned from Such Leave in 2013, and the Share of Employees Who Remained in the Company after Child-Care Leave as of December 31, 2012

Indicator	Women	Men
Number of employees who had an opportunity to take a child-care leave, persons	93	0
Number of employees who took a child-care leave, persons	93	0
Number of employees returned from a child-care leave, persons	46	0
Number of employees who remained in the Company 12 months after a child-care leave, persons	46	0
Share of employees who remained in the Company 12 months after a child-care leave, (%)	100	0

of up to 35 years. Thus, at the end of the Reporting period the total amount of the program participants amounted to 85 persons. In addition, the Company renders assistance to transferred employees and workers having no own lodgings by provision them with temporary accommodation.

The volume of the Company's target expenses for assistance to the employees in procurement of lodgings increases yearly (see Fig. 47).

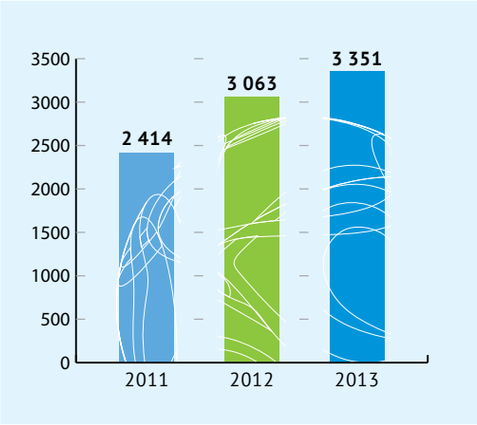


Fig. 47. Volume of Payments for Assistance to Employees in Procurement of Lodgings, Million Rubles

If employees are dismissed due to personnel or staff reduction, the employer renders assistance in their re-qualification and employment. In accordance with the Collective Agreement, when the employees retire on pension, one-time payments are made in the amount of up to two basic salaries. Pensioners and long-service employees of the Company receive monthly social assistance of up to 2,300 rubles per month. See details on assistance to veterans in the Section 5.6.4 "Veterans Assistance".

5.5. Natural Capital

Comments

Environmental goals of the Company set in 2013 were fulfilled in full scope. Activities on achievement of these goals were performed in accordance with the obligations of JSC NIAEP stipulated by the Environmental Policy. The elaborated design documentation incorporated advanced process solutions aimed at mitigation of adverse environmental impact and efficient use of natural resources in the period of construction and operation of nuclear energy facilities.

Sergey Streltsov,
Director of Quality Control –
Head of Moscow Representative Office

5.5.1. Company's Environmental Policy

The Company employees responsible approach to design and construction of nuclear and thermal power facilities and understands that operation of subdivisions and branches of the Company may lead to adverse changes in the environment. The principles underlying the Company's Environmental Policy are described in the Report of JSC NIAEP for 2012 (Section 7.4.1 Environmental Policy).

The Company's priorities include:

- Mitigation of adverse impact on the environment,
- Personnel and population health protection,
- Assurance of nuclear and radiation safety of facilities under construction.
- In terms of environmental impact the JSC NIAEP activity may be assessed from two points of view:
- Environmental safety of the Company's activity in the capacity of business entity;
- Environmental safety of NPP units at all lifecycle stages (detailed information is given in the Subsection "Nuclear and Radiation Safety of Nuclear Energy Facilities").

Maximum impact on the environment is exerted in the process of construction of power units.

Natural capital means the Company's stock of natural resources which may be used for production purposes and is of great importance for the Company; therefore, particular attention is paid to preservation and efficient use of this capital.

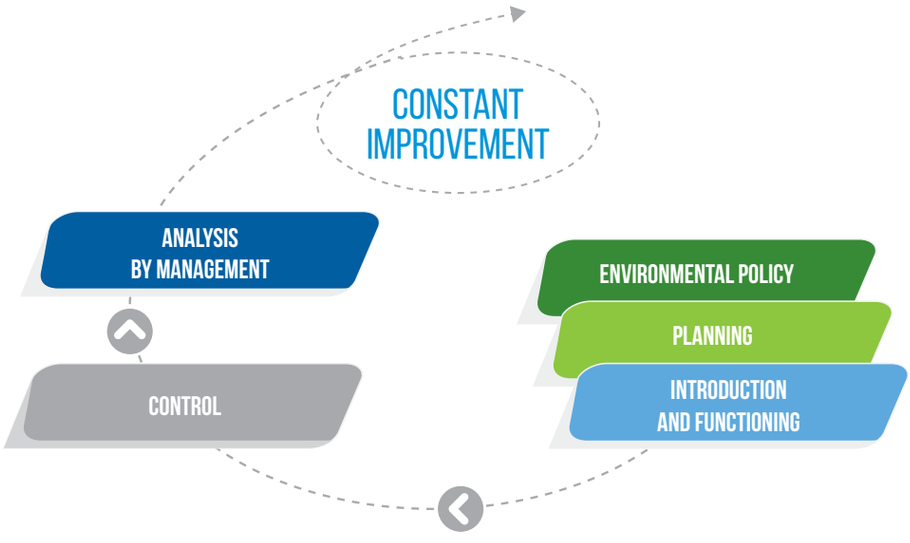
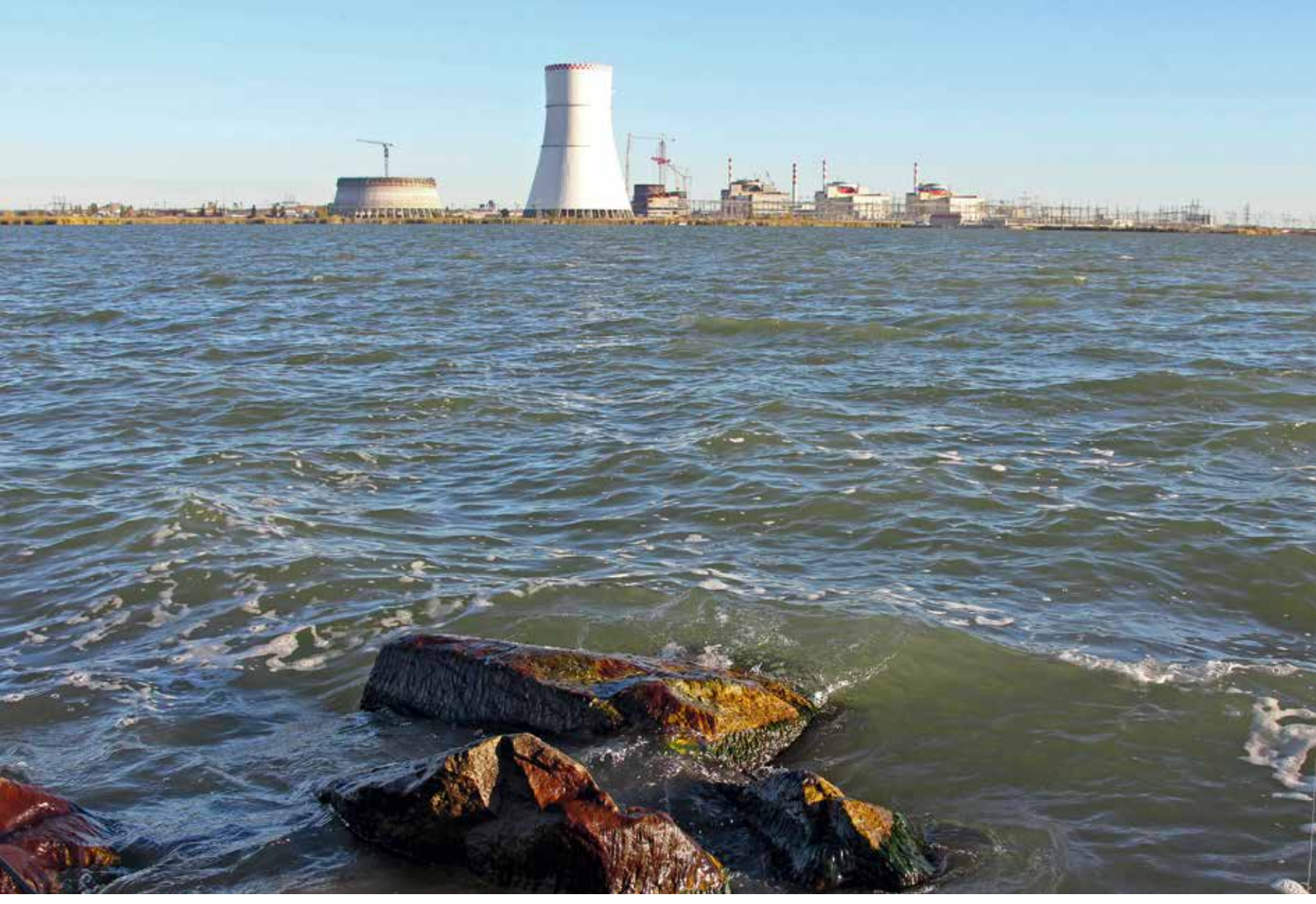


Fig. 48. Company's Environmental Policy

To control environmental impact of the Company's production activity, the Central Office applies:

- Regulations on Assurance of Environmental Safety and Environmental Protection during Construction of Launching Site Facilities,
- Regulations on Production Environmental Monitoring,
- Production Environmental Monitoring Program,
- Plans of Activities on Waste Generation and Disposal Reduction.

These documents provide for assignment of responsibility between construction subjects, specify the scheme of cooperation with environmental agencies, regulate issues of environmental activity



planning and production environmental monitoring, etc.

In the process of generation of goals and tasks of the environmental policy for 2014 the Company's top management relied on results of the environmental audit carried out in 2012 by LLC Region-Audit Ekologiya and Environmental Management System (EMS) prepared for introduction of the regulatory documents.

The Company's environmental policy together with the production environmental monitoring system and annual environmental measures are implemented within EMS based on Plan-Do-Check-Act model including planning, implementation, control, and action processes (see Fig. 48).

Environmental Management System

In addition to the Environmental Policy, the Environmental Management System includes environmental aspects of subdivisions and the Company in whole, tasks and goals, required regulatory material, EMS qualified auditors. On a trial basis, this system was tried in a number of subdivisions, and single components of EMS – in the Central Office of JSC NIAEP and Volgodonsk Branch.

EMS is the main part of the integrated management system: quality management, environmental management, and occupational health and safety management system based on the requirements of the standards ISO 9001:2008, ISO 14001:2004, and OHSAS-18001:2007 with consideration of provisions of the Russian legislation and IAEA.

Results of 2013

Within the frames of EMS introduction in 2013 it was planned to:

- Update the elaborated materials,
- Carry out internal audits of the subdivisions and perform corrective actions pursuant to the audit results,
- Perform certification audit of EMS for compliance with ISO 14001:2004.

Environmental goals set by the Company's top management were fulfilled prematurely in July 2013, when JSC NIAEP procured the certificate on EMS introduction and maintenance compliant with the requirements of the international standard ISO 14001:2004 and issued by the German company DQS.

Corporate Standard on performance of production environmental monitoring (PEM) was elaborated and introduced – "Regulations on Production Environmental Monitoring". Due to implementation of PEM in the Central Office of the Company in 2013 over 70 checks for compliance with environmental legislation were carried out. Systematic PEM has been performed in the Volgodonsk Branch for several years.

The Baltic and Volgodonsk Branches of the Company obtained environmental permits – waste generation standards and waste burial limits.

The Company's specialists were trained in the field of environmental audit and safe handling of waste (5 employees). Funding of these activities in the Reporting year amounted to 350.5 thousand rubles.

29 internal audits were performed in the Central Office of JSC NIAEP in 2013. In the course of the audits the activity of subdivisions was checked for compliance with the requirements of the international standards ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2007. In whole, the results of the carried out internal audits showed that IMS corresponds to the scheduled measures and requirements of ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2007.

Environmental agencies have not applied any penalties to the Central Office and branches of JSC NIAEP for non-compliance with the environmental legislation in 2013.

Plans for 2014 :

- Performance of 33 internal audits of the JSC NIAEP subdivisions,
- Procurement of missing permits for the Central Office in the second quarter,
- No annual above-limit waste disposal payments.

5.5.2. Subcontracting Organizations Operation Monitoring

The main production activity connected with generation of hazardous waste and emissions is carried out by subcontracting organizations performing contraction, assembly, and setup work under the contracts with the Company.

The mandatory requirement for contract conclusion with such organizations consists in availability of the required environmental permits (hazardous waste management licenses, waste disposal limits agreed with local environmental agencies, waste certificates, draft maximum permissible emissions, charges for adverse environmental impact, and certificates of compliance with general contractor's directives).

Monitoring of environmental impact of the subcontracting organizations, including requirements for environmental documentation, shall be performed by inspectors of federal environmental agencies, as well as employees of the Central Office and branches responsible for production environmental monitoring.

5.5.3. Environmental Expenditures

Table 45. Environmental Expenditures and Charges with Regard to the Central Office, Thousand Rubles

Year	2011	2012	2013
Central Office			
Current expenditures including:	454.1	713.4	679.1
• water resources protection	100.7	62.45	120.0
• atmospheric air protection	–	–	–
• waste treatment	353.4	650.97	559.1
Pollution charge	1,607.3	1,830.5	1,603.0
TOTAL	**2,061.4**	**2,543.9**	**2,282.1**
Volgodonsk Branch			
Current expenditures including:	324	363	407
• water resources protection	–	–	–
• atmospheric air protection	–	2	–
• waste treatment	324	363	407
Pollution charge	512	1,044	1,279
TOTAL	**836**	**1,407**	**1,786**
Baltic Branch[23]			
Current expenditures including:	–	271	1,852
• water resources protection	–	–	–
• atmospheric air protection	–	0.318	–
• waste treatment	–	1,271	1,852
Pollution charge	–	197.7	246
TOTAL	**–**	**1,469**	**2,098**
Kursk Branch[24]			
Current expenditures including:	–	–	0.1
• water resources protection	–	–	–
• atmospheric air protection	–	–	0.1
• waste treatment	–	–	–
Pollution charge	–	–	14.3
TOTAL	**–**	**–**	**14.4**

23. Baltic branch was founded in the end of 2011.
24. Kursk branch was founded in the end of 2012.

5.5.4. Energy Efficiency Improvement

Environmental policy of JSC NIAEP is based on efficient use of natural resources. The initiatives on improvement of energy efficiency of the JSC NIAEP activity are implemented in two focus areas:

- Designing more energy efficient capital facilities,
- Reducing energy consumption in the Company's activity through implementation of programs on efficient use of resources.

The design solutions introduced within the first focus area assure increase in gross performance factor of the elaborated VVER-TOI NPP design compared to the NPP-2006 design from 37 to 38 %.

Since 2010 the program on energy saving and energy efficiency improvement in the Central Office for 2010–2014 has been implemented in the Company and by 2015 a reduction in consumption of energy resources by 17 % is expected.

In 2013 energy saving in the Central Office amounted to 32 % (compared to 10.87 % in 2012). Economic benefit due to implementation of measures on energy saving in the Central Office amounted to 4,818 thousand rubles in 2013. Such programs are also implemented in the Company's branches.

Energy saving is achieved through the following measures:

- Introduction of automated electric energy monitoring and accounting system,
- Installation of new energy efficient equipment,
- Reconstruction of the internal and external illumination systems.

In the process of its activity the Company uses various kinds of energy resources subject to strict accounting. Data on energy consumption by JSC NIAEP branches are represented in the electronic Annual Report.

In the process of production activity of the Company and its branches such types of energy resources as nuclear energy, flue gas, coal, oil shale, and peat were not used.

5.5.5. Key Environmental Impact Indicators of the Company

The activity of the NIAEP–ASE Integrated Company and its subdivisions has impact on all components of the environment: ground surface and subsoil, water, air, and human health.

Pursuant to the results of 2013, the total impact of JSC NIAEP on biosphere components does not exceed the permissible value agreed upon with regulating environmental authorities.

Environmental impact of the Company is caused by production of industrial and household waste, atmospheric pollutant emissions, and wastewater discharges to water bodies.

Waste Production

Production waste generated during construction of nuclear energy facilities is similar to waste produced during construction of heat power plants (SDPP and HPP) of comparable capacity. However, fuel facilities typical of coal and residual plants are not needed in the process of subsequent operation of nuclear power plants, and, therefore, no environmental protection from toxic products of coal and fuel oil burning is required.

Waste transfer is performed under the contracts by organizations holding waste management licenses.

Characteristics of waste produced in the Central Office and branches of the Company according to the data of annual statistical Reporting forms 2-TP (waste) are available in the electronic Annual Report.

In the process of construction of NPP units waste is not subject to processing and recycling.

Wastewater Discharge

Wastewater discharge on production sites of JSC NIAEP is within norms set by the legislation of the Russian Federation.

Wastewater produced on the construction site of the Rostov NPP Units 3 and 4 is transferred from the household and production buildings of the Branch and subcontracting organizations to the NPP sewerage networks and further to treatment facilities.

Storm and drainage water produced on the construction site comes by the storm water system equipped with local treatment facilities to the water cooling system separated by a dam from the Tsimlyansk Reservoir. Wastewater composition is controlled by the Rostov NPP laboratory being land and water user within the

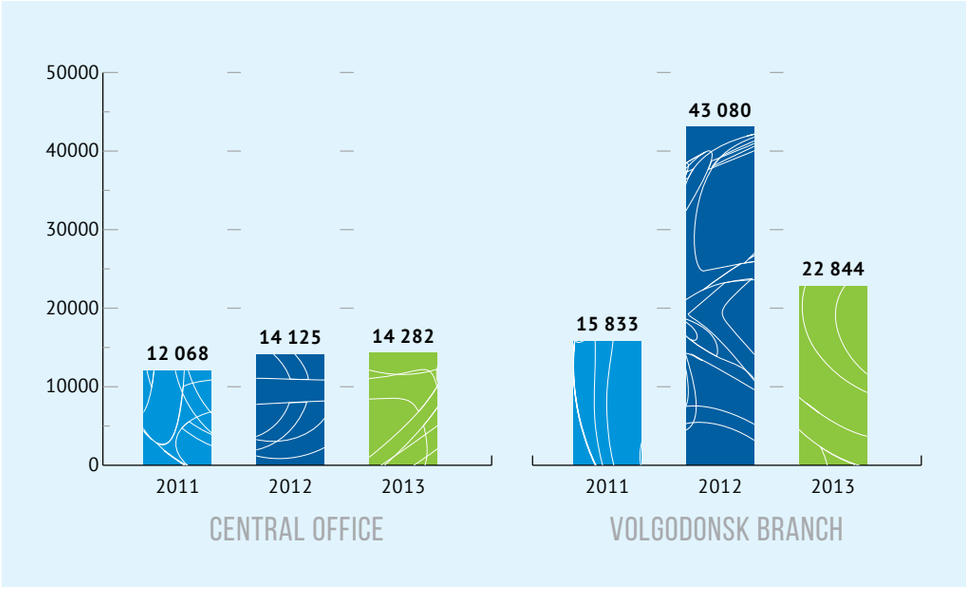


Fig. 49. Wastewater Discharge[25], m³

25. There are no discharges in other branches of JSC NIAEP

Production Environmental Monitoring Program.

Utility runoffs produced on the Baltic NPP construction site are removed by means of motor vehicles on the basis of contracts concluded with contracting organizations.

Considerable differences in values for 2011-2013 are connected with specifics of JSC NIAEP activity. Environmental impact differs at various stages of power unit construction.

Significant increase in water consumption and wastewater discharge at Volgodonsk NPP in 2012 is conditioned by intensification of activities. This multiple increase in environmental impact is admissible, it is stipulated by the respective norms and limits agreed upon with environmental agencies.

No measures on reduction in water consumption were taken on the construction site and in the Central Office of the Company in 2013, as far as operating procedures were carried out within the frames of established regulations.

No spills of any liquids were registered on the Company's construction sites in 2013.

Atmospheric Pollutant Emissions

Information on the volume of atmospheric pollutant emissions on NPP construction sites in 2013 are represented on the basis of averaged data on the subcontracting organizations and branches. The data were based on draft maximum permissible atmospheric emissions, results of instrumental gauging performed by specialized organization in real-time mode, calculations of fuel balance of companies and environmental payments made by companies.

There are no stationary sources of atmospheric pollutant emissions in the Baltic Branch and Central Office of the Company.

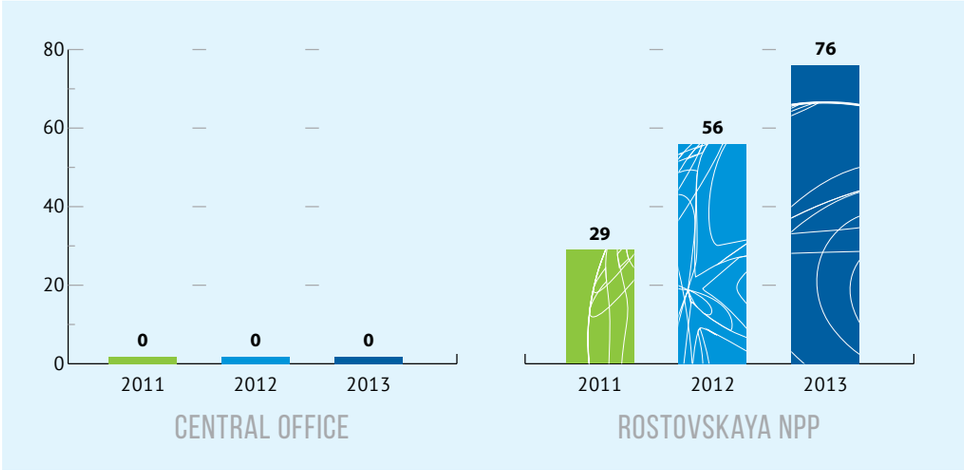


Fig. 50. Atmospheric Pollutant Emissions, t

Increase in atmospheric pollutant emissions in 2013 is connected with considerable growth of production volumes.

The Company's branches and subcontracting organizations did not apply ozone-destroying substances in the process of construction and no emissions took place.

Greenhouse Gas Emissions

Direct Emissions

There are no own boiler rooms and other systems producing greenhouse gases in the Central Office and branches of the Company, therefore, the sources of direct greenhouse gas emissions of the Central Office, representative offices, and branches of the Company include motor vehicles and construction machines.

Motor vehicles emissions were calculated by single gas components on the basis of annual fuel consumption.

The initiatives on abatement of direct emissions are mainly reduced to regular technical monitoring of emissions from motor vehicles and construction machines and adjustment of values for their maintenance within the admissible limits. In order to reduce direct emissions, new vehicles and construction machines with better environmental parameters are procured. For instance, five motor cars of the 4th environmental class were purchased for the Central Office of the Company in 2013.

Indirect Emissions

Information of indirect greenhouse gas emissions in the Company's activity is available in the electronic Annual Report.

As part of the initiative on abatement of indirect greenhouse gas emissions, modern equipment is procured which employs state-of-the-art fuel injection technologies, catalytic after-oxidants of combustion products, etc.

Table 46. Greenhouse Gas Emissions from Motor Vehicles, t of CO_2 – Equivalent

Producer	Fuel Type and Amount in 2013		Greenhouse Gas Amount		
	Petrol	Diesel Fuel	2011	2012	2013
Central Office	200.0	54.0	1,300.1	874.4	821.2
Volgodonsk Branch	883.8	2,240.9	9,481.2	9,113.6	1,033.1
Baltic Branch	70.1	6.3	–	254.8	247.7

5.5.6. Nuclear and Radiation Safety of Nuclear Energy Facilities Regulatory Framework

Regulatory Framework

Nuclear and radiation safety in the nuclear industry is assured under compliance with regulatory and legal requirements.

The requirements of regulatory documents are complied with both during elaboration of design documentation and at subsequent stages: NPP construction, operation, and decommissioning.

See details in the electronic Annual Report.

Technical Solutions on Safety Assurance

Nuclear energy industry is one of the most promising sources of electric energy in the near future due to introduction of global restrictions on greenhouse gas emissions, reduction in world stock of hydrocarbon fuel, and insufficient level of development of alternative energy sources. However, this conversion is possible only provided strict compliance with nuclear and radiation safety regulations.

A nuclear power plant is designed with a large margin of stability to inside and outside impact factors. See Fig. 51 below for schematic representation of possible outside impacts which shall be eliminated in the new VVER-TOI NPP design.

After the accident at the Japanese NPP in Fukushima the analysis thereof was performed and the decision was made to fit out the existing and designed NPP with additional equipment and technical solutions for prevention of similar accidents at home-designed NPP.

Radiation safety at home-designed NPP is achieved through consecutive implementation of the defense-in-depth concept based on application of a system of physical barriers preventing distribution of ionizing radiation and radioactive substances in the environment and a system of technical and organizational measures on protection of barriers and maintenance of their efficiency, as well as protection of personnel, population, and environment.

Assessment of NPP impact on human health and environment is implemented at every stage of NPP lifecycle (see Fig. 52).

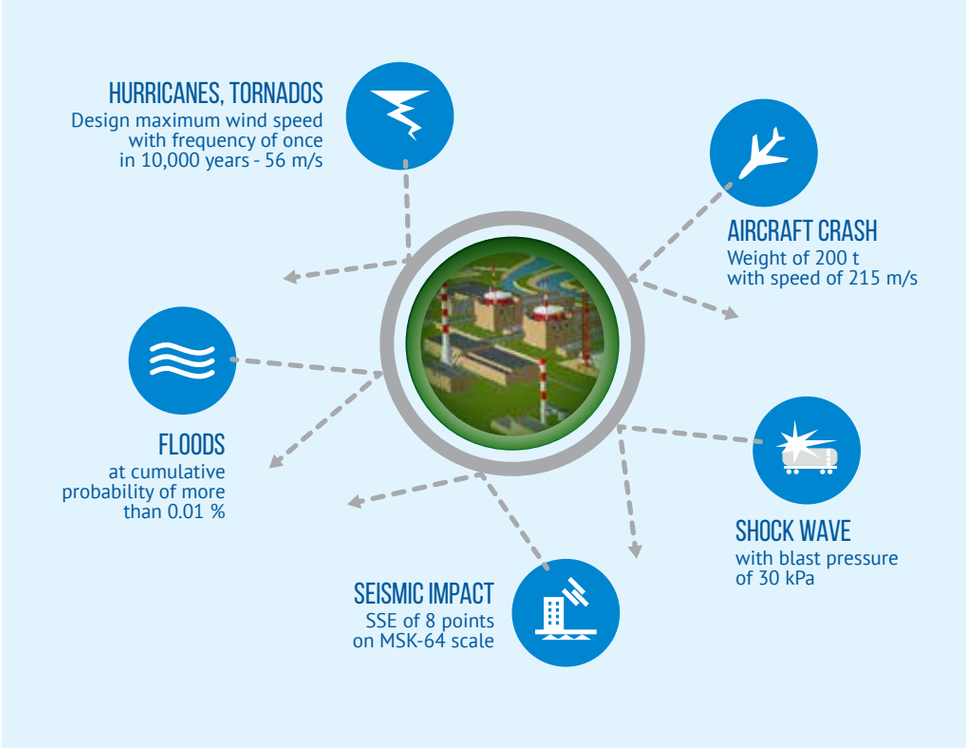


Fig. 51. Diagram of Possible Outside Impacts of Designed NPP

Justification of environmental safety of nuclear power facilities is started at the investment concept stage and executed in the Declaration of Intention of new nuclear power source establishment.

The main tasks on environmental impact assessment are solved at the design stage. Environmental safety of NPP designed for construction in Russia is confirmed by comparison of design indices and values achieved in the process of operation of similar power units with admissible limits according to current norms.

Radioactive substances are not discharged to water sources during operation of NPP. Radioactivity level of water supplied from the surface water sources for cooling down the turbine condensers remains almost unchanged, even in case of hypothetical beyond-design basis accident. The calculated values do not reach the admissible norms and are from 4 to 14 % of the exposure dose limit for a very short period with quick restoration of initial water quality.

The Company has no own production plants connected with use of radioactive substances and requiring assurance of nuclear and radiation safety.

After required endorsements the elaborated design documentation for NPP unit is subject to obligatory external expert assessment.

In addition, at every stage of NPP lifecycle it is required to procure licenses of the Federal Service for Environmental, Process, and Nuclear Supervision (four licenses for every power unit). License justification materials (based on environmental impact assessment) are prepared for procurement of every license and pass state environmental expert assessment after public consultations.

Consumer Health and Safety

NPP complies with the safety requirements, if its radiation impact on personnel, population, and environment in normal and abnormal operation conditions including design-basis accidents does not lead to violation of established personnel and public exposure doses, standards on emissions and discharges, admissible concentrations of radioac-

Fig. 52. Organizational Measures on NPP Safety

tive substances in the environment, and is limited in case of beyond-design basis accidents.

This is also achieved through compliance with the requirements of federal rules and regulations in the field of nuclear energy use, IAEA standards, and other regulatory documents.

In 2013 the Federal Service for Environmental, Process, and Nuclear Supervision has carried out five on-site examinations in JSC NIAEP, to check validity of licenses for construction of nuclear power plants, and three inspections in the Central Office of JSC NIAEP.

In the Reporting period the Company was not subject to material penalties and nonfinancial sanctions for non-compliance with legislation and regulatory requirements relating to provision and use of products and services.

Public Exposure

According to the main applicable standard "Sanitary Rules of Design and Operation of Nuclear Power Plants", in normal operation conditions the basic public exposure limit amounts to 1 millisievert per year for a 70-year life period on the average.

For the Kursk NPP-2 units this value is designed to be 10 microsievert per year (i.e. 0.01 millisievert per year), what is 100 lower than the current standard.

Given that actual radiation level from the existing Kursk NPP Unit 1 is again almost 100 times below the rated design level, it will give an increase in the natural radiation background equal to 1 millisievert per year in the area of Kurchatov by a value that is almost indefinable by radiation dosage meters. Even in case of hypothetical beyond-design basis accidents the calculated rates will not exceed 10 % of the admissible norms (100 μSv/year).

Public Relations

The obligatory requirement for license justification materials consists in their openness and access of all interested persons, public and scientific organizations to them. After prior acquaintance, public consultations are held with regard to materials on assessment of environmental impact of the designed facility (power unit or several power units to be constructed) in the region of planned construction.

After a positive conclusion is issued by the state environmental expert commission, the license justification materials are subject to additional expert review carried out by Scientific and Technical Center for Nuclear and Radiation Safety (STC NRS). This expert review is aimed at identification of nuclear and radiation safety level; other factors are also taken into account, including environmental safety, fire safety, etc.

Only after a positive conclusion of STC NRS Federal Service for Environmental, Technological and Nuclear Oversight is received issues licenses for a certain stage of NPP lifecycle: location, construction, operation, and decommissioning. As of today, JSC NIAEP has obtained the licenses for location of the Nizhny Novgorod NPP Units 1 and 2 and Tver NPP Units 1 and 2, and operation of the Kalinin NPP Unit 4.

As in the previous year, in 2013 the activity of JSC NIAEP has complied with all safety standards and requirements of the Russian Federation and IAEA, and en-

Table 47. Percent of Significant Categories of Products and Services Assessed in Terms of Impact on Health and Safety for Identification of Improvement Opportunities, %

Categories of Products	2011	2012	2013	2014 (plan)
Design products	100	100	100	100
Construction facilities	100	100	100	100

Table 48. Number of Cases of Non-Compliance with Requirements of Legislation and Voluntary Codes with Regard to Impact of Products and Services on Health and Safety

Inspection Subject	2011	2012	2013
Cases of non-compliance with regulatory requirements leading to penalties or charges	Volgodonsk Branch – 11	Central Office – 1 Volgodonsk Branch – 7	Volgodonsk Branch – 5
Cases of non-compliance with regulatory requirements leading to warning	0	0	0
Cases of non-compliance with voluntary codes	0	0	0
TOTAL	**11**	**8**	**5**

In 2013 EIA materials on operation of the Kursk NPP-2 Units 1 and 2 within the license justification materials were submitted for public consultations and preceding public discussions in the 10 largest settlements of the Kurchatov District and the Town of Kurchatov.

vironmental and radiation impact of the implemented projects has been at the minimum level.

In 2014 JSC NIAEP will continue its activity in the field of natural capital management improvement with consideration of own operating experience and requirements of environmental legislation.

5.6. Social and Relationship Capital

5.6.1. Influence on Local Population in Operation Areas

Activity of the NIAEP–ASE Integrated Company facilitates establishment of new jobs both in the operation areas and within the frames of business activity of suppliers and manufacturers of equipment and materials.

In 2013 at least 82 % of the assets passing through the accounts of JSC NIAEP came to the counteragents of JSC NIAEP who created new jobs for performance of their activity. This index is expected to grow up to 89 % in 2014.

Priority of employment is placed on the local population, provided that qualified labor is available in the area of operation. Over half of the JSC NIAEP top managers in significant operation areas are hired from among the local population.

Community liaison offices are established, to facilitate staffing of JSC NIAEP S&A, contracting and subcontracting organizations engaged on construction sites.

All professionals hired through the community liaison offices[26] are citizens of the Russian Federation. 95 % of them live in towns and settlements located within 100 km from NPP construction sites on a permanent basis. 100 % of employees of the subsidiaries and contracting organizations receive wages exceeding average salary rate established in the respective operation areas.

The share of local population among engineers and technicians employed for performance of work on construction of facilities abroad in the JSC ASE subdivisions in 2013 amounted to nearly 41 %.

No voluntary or involuntary resettlement of local population took place due to construction of the Company's facilities in the Reporting period.

In 2013 JSC NIAEP won the regional stage of the All-Russian Contest "Russian Organization of High Social Efficiency" in the category "For Creation and Development of Jobs in Production Companies".

Table 49. Creation of Jobs in Significant Operation Areas

Branch	Number of created jobs[27]
Central Office (Nizhny Novgorod Region)	86,6
Volgodonsk Branch (Rostov Region)	22,5
Representative office of JSC NIAEP in the Republic of Belarus (Grodno Region, Republic of Belarus)	182
Kursk Branch (Kursk Region)	49
Baltic Branch (Kaliningrad Region)	0
Moscow Branch (Moscow Region)	55
Yuzhnouralsk Branch (Chelyabinsk Region)	32

Table 50. Share of Top Managers[28] Hired from Local Population[29]

Operation Area	Share, %
Nizhny Novgorod	100
Moscow	80
St. Petersburg	0
Rostov Region	40
Kursk Region	16,7
Kaliningrad Region	0
Chelyabinsk Region	0
Ukraine	0
Republic of Belarus	14,3

26. There are no community offices in the Republic of Belarus; at least 70 % of the employees working in the Belarus Representative office of JSC NIAEP are citizens of the Republic of Belarus.
27. With regard to some branches the amount of jobs is expressed by a non-integral number, as far as some employees (due to low scope of work in certain directions) are employed on a part-time basis (0.3; 0.5) or as secondary job employees.
28. Top managers include managers of the 1st, 2nd, and 3rd management levels of JSC NIAEP (see Section "Corporate Structure of JSC NIAEP").
29. For the purpose of this Report the term "local population" shall mean population permanently registered at the address in the Company's operation area, for instance, local population of the Rostov Region resides in the Rostov Region. Significant operation areas of JSC NIAEP are regions of presence of the Company in Russia and abroad, where JSC NIAEP has economic, environmental, and social influence within the frames of production activity.

5.6.2. Economic Influence on Suppliers and Contractors

The main principle underlying the influence of JSC NIAEP in the capacity of general contractor on the contractors consists in the possibility to impose sanctions for non-fulfillment of obligations stipulated by the contract and withdraw deferred payment till fulfillment of contractual obligations in full scope. The sanctions are established by the contract being an integral art of procurement documentation and are equal for all participants.

See details in the Section 5.2.3 "Procurement Activity Optimization".

5.6.3. Anti-Corruption Enforcement

Anti-corruption enforcement in JSC NIAEP is regulated by the following regulatory documents:

- Federal Law No. 208 "On Anti-Corruption" of December 25, 2008;
- National Anti-Corruption Strategy approved by the President of the Russian Federation on April 13, 2010;
- 2012-2013 Nuclear Industry Anti-Corruption and Anti-Fraud Integrated Program approved by the State Corporation Rosatom on August 20, 2012;
- 2012-2013 JSC NIAEP Anti-Corruption and Anti-Fraud Integrated Program (hereinafter referred to as the Integrated Program).

Structural subdivisions responsible for anti-corruption enforcement:

- Special Safety and Assets Security Department (SSASD),
- Internal Control and Audit Department (ICAD),
- HR Management and Personnel Development Department,
- PR and Information Policy Department.

Tasks and Objectives of the Integrated Program

The Integrated Program is aimed at arrangement of conditions for corruption and fraud abatement in JSC NIAEP.

The tasks of the Integrated Program include:

- Improvement of regulatory framework covering the anti-corruption and anti-fraud enforcement activity;
- Training of the employees on anti-corruption practices, methods of settling conflicts of interests, and anti-fraud enforcement;
- Development of efficient control system;
- Arrangement of conditions impeding corruption and fraud;
- Application of measures on disciplinary, administrative, and criminal enforcement, if required.

The most important anti-corruption factor is a control system checking compliance of all employees with the legal requirements of the Russian Federation and local regulatory enactments of the State Corporation Rosatom and JSC NIAEP in the field of procurement and contractual activity (see details on procurement activity in the Section 5.2 "Production Capital").

Integrated Program Activities

Activities carried out by SSASD within the frames of the Integrated Program are

of long-term and regular nature:

1. Day-to-day meetings held by the Security Director;
2. Participation in procedures for procurement of goods, works, and services for the needs of JSC NIAEP with inspection of participants and decision making on the procurement procedure winner;
3. Participation in preparation of draft contracts and additional agreements with suppliers and contractors;
4. Receivables analysis;
5. Participation in inspections of financial and economic activity of the Central Office subdivisions, JSC NIAEP branches and subsidiaries;
6. Arrangement of hotline operation;
7. Internal investigations on fraud and misappropriation; submission of materials to law-enforcement authorities;
8. Provision of facilities with engineering and technical security equipment and special control toolbox;
9. Inspection of personal data of candidates appointed to corruption-hazardous positions;
10. Informing the employees on the Program implementation activities by example of other enterprises of the industry;
11. Informing the employees on results of internal investigations with regard to revealed violations;
12. Internal investigations on supplies of adulterated and low-quality products to NPP construction sites.

Results of 2013

Systematic violations on the part of director were revealed in the process of financial and economic inspection of the recreation camp "Lesnoy Uyut" belonging to JSC NIAEP. Damage to the Company exceeded 1.6 million rubles. The camp director was dismissed, and investigation materials were submitted to law-enforcement authorities to bring the director to criminal liability for fraud. Three employees were brought to disciplinary liability.

SSASD together with the Department of the Federal Security Service for the Kaliningrad region elicited the instance of fraud, supposedly on the part of JSC Trest Gidromontazh (double payment for construction work). Damage to JSC NIAEP exceeded 4.5 million rubles. Criminal case was initiated under the large-scale fraud article.

Pursuant to messages Reported to the hotline, 12 inspections were carried out. Information contained in one message was confirmed. According to that message, the customer – LLC Kaliningrad Builders Association – has not discharged its debt in the amount exceeding 1 million rubles after acceptance of construction work. After interference of SSASD the debt was settled.

In addition, SSASD performed authenticity checks of contract performance bank guarantees. 27 of 339 bank guarantees were found false; damage to JSC NIAEP in the amount of over 66.1 million rubles was prevented. As recommended to the JSC NIAEP structural subdivision responsible for measures on supporting contract relations, contractors shall be obliged to transfer bank guarantees by means of S.W.I.F.T. banking system.

Pursuant to the results of checks performed by SSASD in 2013, 26 materials in total were submitted to the law-enforcement authorities.

In 2013 JSC NIAEP appointed 40 employees to corruption-hazardous positions, 35 of these persons were tested by SSASD for reliability, what amounted to 87.5 % of the total number of business units analyzed for risks.

SSASD was not confronted with any conflict of interests of the persons engaged in procurement of goods and services in JSC NIAEP.

In 2013 no legal actions were brought against the Company in connection with obstruction of competition and antitrust infringement.

In the Reporting period the Company was not subject to large penalties and nonfinancial sanctions for non-compliance with legislation and normative requirements.

5.6.4. Veterans Assistance

The Collective Agreement provides for social guarantees not only to working employees, but also to retired long-service employees. The Company implements the program on social assistance to pensioners. Nearly 7 million rubles were allocated for monthly payments to pensioners in the Reporting period. Payments were received by 260 persons. In cooperation with the Council of Long-Service Employees the Company arranged leisure and entertainment activities for pensioners and involved them to participate in significant events of the Company. Pensioners are welcome on corporate festive events and attend fitness center of the Company. In June 2013 traditional motorboat Volga tour was arranged for the retired employees and veterans. Payments on account of the Victory Day amount to 50 thousand rubles to every veteran.

5.6.5. Youth Policy

The Company's youth policy is focused on creation of conditions for involvement, encouragement of initiative, improvement of professional skills, and assistance in self-realization of recent graduates. The professional orientation and adaptation program for young professionals was elaborated in the Company.

To increase efficiency of work with young professionals and create conditions for displaying youth initiatives, in 2011 Youth Board was established in JSC NIAEP. The Board is a managing and representative body of young professionals and workers at the age of up to 35 years.

The results of activity of the Youth Board in 2013 are as follows:

- The First Scientific Youth Forum of JSC NIAEP "Generation ATOMNEXT: Future in Our Hands" was held;
- Recent graduates employed in JSC NIAEP took part in the 8th International Youth Environmental Forum in Slavutich;
- Recent graduates employed in the NIAEP–ASE Integrated Company took part in the Innovations Forum of Young Energy Workers "Forsazh-2013";
- Youth team of the Company took the first place in the Friendship Festival held among the companies of the State Corporation ROSATOM and NGTU.

5.6.6. Investments in Social Infrastructure and Charity

Since 2008 JSC NIAEP has been engaged in charitable activity within its operation areas in accordance with the Concept on Charitable Activity and

Cooperation with Local Communities. The JSC NIAEP subdivisions perform charity work on a centralized basis on behalf of the Company in whole; this refers to 100 % of the total number of subdivisions.

The JSC NIAEP priorities in the field of charity are stated with consideration of specifics of the nuclear power industry and conditioned by the necessity of well-balanced coexistence with other participants of public processes:

- Human life and health preservation;
- Assurance of environmental acceptability of nuclear technologies and production plants based on application of such technologies, including:
  - Maintenance of active dialog with professional communities on burning issues of monitoring and improvement of the environment and subsoil state and finding solutions by application of knowledge, technologies, and resources available in the nuclear industry,
  - Implementation of local initiatives on life quality improvement and maintenance of favorable environment for operation of the companies;
- Supporting educational initiatives;
- Supporting high social and cultural standards in the areas of location of nuclear industry facilities;
- Contribution to establishment of professional management traditions in the field of social and economic development in the areas of location of nuclear industry facilities.

The amount of funds allocated by the Company to charity amounted to 87 million rubles in 2013.

JSC NIAEP makes no contributions for political goals and does not participate in state policy elaboration and lobbying.

Plans for 2014

The Charity Committee of the State Corporation Rosatom and the Board of Directors of JSC NIAEP approved the List of Charity Initiatives of JSC NIAEP for 2014 with a budget of 87.6 million rubles.

In 2014 JSC NIAEP will hold the third annual Charity Projects Competition in the operation areas. Non-commercial organizations from the Nizhny Novgorod, Rostov, Kursk, Chelyabinsk Regions, and the Republic of Belarus will be invited for participation in the Competition in the categories "Culture and Sport", "Young Generation", "Patriotic Initiatives", and "Environment". In 2014 the total grant funding of the Competition will amount to 7 million rubles.

5.6.7. Cooperation with Stakeholders

In its activity the NIAEP–ASE Integrated Company strives for establishment of partnership and mutually beneficial relations with stakeholders.

Principles and Mechanisms of Cooperation with Stakeholders

Participation of the interested parties (stakeholders) in solving common problems and tasks is a fundamental condition of successful performance of JSC NIAEP.

Involvement principle

JSC NIAEP takes account of demands and needs of the main interested parties at all stages of management process, including interests of the parties unable to express their opinions, for instance, future generations.

Significance principle

JSC NIAEP makes joint assessment of significance of information disclosure

Table 51. Amount of Funds Allocated by JSC NIAEP to Charity

Recipient	Aim	Assets, Million Rubles
Public orthodox organizations (Nizhny Novgorod Region, Rostov Region, Republic of Belarus).	Construction and restoration of churches	59
Municipal formations, institutions and public organizations of the Nizhny Novgorod, Rostov, Kursk Regions, and Republic of Belarus	Organization of charitable events, strengthening of material and technical facilities and improvement of territories, holding cultural mass and sporting events, rendering assistance to veterans of war, labor, and disabled people	7
Winners of the Charity Projects Competition in the operation areas (34 organizations)	Categories: "Culture and Sport", "Young Generation", "Patriotic Initiatives", "Environment"	8
Other		13

aspects for stakeholders (see Section "Information on Report" for details).

Response principle

JSC NIAEP timely responds to questions, feedback, and suggestions of the stakeholders.

The Company uses various mechanisms and tools for cooperation (see Table). Cooperation with all groups of stakeholders is implemented at the level of organization.

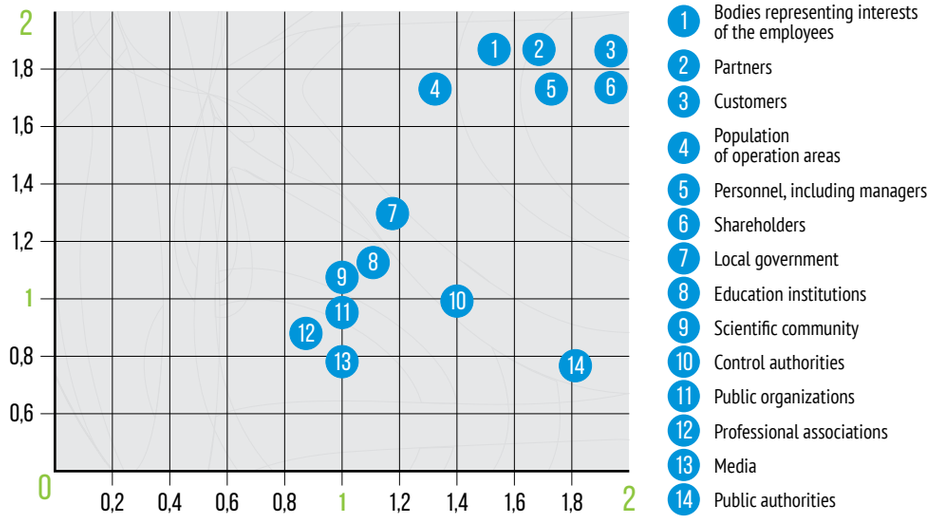


Fig. 53. Rank Map of Stakeholders[30]

Table 52. Key Stakeholders and Their Interests

IP Determination Criteria	Key Stakeholders	Interests
Responsibility, consequence	State Authorities: Ministries of the Russian Federation, the State Duma of the Russian Federation, the Federation Council of the RF etc.	Environmental and radiation safety. Infrastructure development. Taxes, employment, implementation of social programs.
	Local government authorities: Representatives of the Municipal Authorities, Dumas of Municipal Entities etc.	Environmental and radiation safety. Infrastructure development. Taxes, employment, implementation of social programs.
	State Control (Supervisory) Authorities	Environmental and radiation safety.
	Shareholder: State Corporation Rosatom, JSC Atomenergoprom	Performance of activity in accordance with the Shareholder Strategy within the frames of corporate procedures
	Customers: JSC Rosenergoatom Concern, NPPD Company of Iran, JSC Slovakian Power Stations, IKAEL, JSC Akkuyu NPP Jiangsu Nuclear Power Corporation (JNPC), Chinese Nuclear Power Engineering Corporation (CNPE), Chinese Nuclear Energy Industry Corporation (CNEIC), State Company Directorate for Nuclear Power Plant Construction (GU DSAE), GP NAEK Energoatom, EVN, FSNPC, etc.	Compliance with construction plans and schedules, construction cost reduction, work quality improvement
	Management of NIAEP–ASE Integrated Company	Company's performance efficiency
Dependency	Partners: Suppliers, subcontractors	New orders, construction facilities, supplier selection procedures, Company's financial state. Prospects for cooperation

30. The rank map of stakeholders is based on the annual poll of JSC NIAEP top-managers and members of the Public Reporting Committee. Every respondent has assessed the degree of impact of the Company's performance on various groups of stakeholders and vice-versa on three-point scale. After calculation of average grades the rates of impact were determined and represented on the map.

Table 52. Key Stakeholders and Their Interests (end)

IP Determination Criteria	Key Stakeholders	Interests
Representative Office	Employees of the Company, employee association, Young Professionals Board, Long-Service Employees Board	HR and social policy. Development of the Company. Personnel development prospects
	Professional associations: Chamber of Commerce and Industry, Russian Union of Industrialists and Entrepreneurs, etc.	Prospects for cooperation
	Scientific community: Research institutes, Academy of Sciences, etc.	Prospects for cooperation
	Population of operation areas: Residents of operation areas, potential employees	Jobs, positive influence of the Company on life of the local population
	Mass media: Industry-specific and other media	Development prospects, environmental safety, transparency
	Education institutions: National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), R. E. Alekseyev Nizhny Novgorod State Technical University, V. P. Chkalov Nizhny Novgorod State University of Architecture and Civil Engineering, N. I. Lobachevsky Nizhny Novgorod State University, Ivanovo State Power Engineering University, etc.	Joint elaboration of educational programs, internship for students, target preparation of students, personnel development, scientific activity
	Public organizations	Social and charitable programs, social partnership, public consultations

Table 53. Cooperation with Stakeholders in 2013

Stakeholders	Expectations	Cooperation Ways	Activity and Results in 2013
SHAREHOLDER JSC Atomenergoprom	Performance of activity in accordance with the Shareholder Strategy within the frames of corporate procedures	Active participation in solving the strategic tasks of the shareholder, improvement of the corporate management system	See Chapter 6 "Corporate Management"
CUSTOMERS JSC Rosenergoatom Concern, JSC Slovakian Power Stations, IKAEL, JSC Akkuyu NPP Jiangsu Nuclear Power Corporation (JNPC), Chinese Nuclear Power Engineering Corporation (CNPE), Chinese Nuclear Energy Industry Corporation (CNEIC), State Company Directorate for Nuclear Power Plant Construction (GU DSAE), GP NAEK Energoatom, EVN, FSNPC, etc.	Compliance with construction plans and schedules, construction cost reduction, work quality improvement	Improvement of the management system, participation in operation of headquarters, assimilation of modern engineering technologies	See Chapter 3 "Important Performance Results in Terms of Strategy"
PARTNERS Suppliers, subcontractors	New orders. Acquisition of information on construction facilities, supplier selection procedures, Company's financial state. Prospects for cooperation	Holding of open tenders, conclusion of long-term contracts with transparent pricing rules, participation in trade shows and conferences, bilateral visits, meetings, establishment of strategic partnerships	See Chapter 3 "Important Performance Results in Terms of Strategy" and Chapter 5.2 "Production Capital"
PERSONNEL Employees of the Company, employee association, Young Professionals Board, Long-Service Employees Board	Stable labor compensation, development prospects, social guarantees	Social partnership, social and charitable programs, staff pool generation, preparation and professional development programs	See Section 5.4 "Human Capital"
EDUCATION INSTITUTIONS National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), R. E. Alekseyev Nizhny Novgorod State Technical University, V. P. Chkalov Nizhny Novgorod State University of Architecture and Civil Engineering, N. I. Lobachevsky Nizhny Novgorod State University, Ivanovo State Power Engineering University, etc.	Acquisition of information on the Company's development prospects and employment of graduates	Joint elaboration of educational programs, organization of internship for students, targeted preparation of specialists	See Section "Cooperation with Higher Education Institutions and Involvement of Graduates"
PUBLIC ORGANIZATIONS	Acquisition of information on the Company's development prospects, environmental and radiation safety	Social and charitable programs, social partnership, public consultations, public Reporting	See Section 5.5. "Natural Capital" and Section 5.6. "Social Capital"
LOCAL GOVERNMENT BODIES IN OPERATION AREAS	Acquisition of information on the Company's development prospects, infrastructure development, tax liabilities, creation of jobs in operation areas, implementation of social programs	Cooperation agreements, social and charitable programs, public consultations, public Reporting	See Section 5.6 "Social Capital", Section 7.1 "Public Reporting System"
LOCAL POPULATION Residents of operation areas, potential employees	Creation of jobs, positive influence of the Company on life of the local population	Community liaison offices, social and charitable programs, public consultations	See Section 5.6 "Social Capital"
MASS MEDIA	Acquisition of information on the Company's development prospects, environmental safety, transparency	Press conference, public Reporting	See Section 5.6.5 "Cooperation with Stakeholders", Section 7.1 "Public Reporting System"

Feedback on the Company

As a person who is constantly in touch with representatives of nuclear industry institutions responsible for work with mass media, I would like to mark efficiency and high qualification of the employees of the JSC NIAEP– ASE Communication Department.

Unfortunately, there are many examples in my practice, when representatives of institutions responsible for PR avoid contacts with mass media or do not respond to electronic messages or phone calls. This is by no means the case with the work style of the Communication Department of the Integrated Company.

In addition, I would like to express my feedback that in its operation the Department may apply such forms of work as interview with Vice-President and Directors of the NIAEP–ASE Integrated Company more actively. I am sure that this will permit the Company to become even more communicative, professional, and friendly.

Philip Chaffee, Deputy Editor of Nuclear Intelligence Weekly.

We are interested in the experience of JSC NIAEP and its structural modifications. It is possible to combine the experience of JSC NIAEP and specialists of Tatarstan for efficient use of technologies and equipment of JSC NIAEP in managing the complex engineering facilities.

Rustam Minnikhanov, President of the Republic of Tatarstan

It is pleasant to see how pioneers create their projects on the basis of the platform 3DEXPERIENCE. The innovative approach of the JSC NIAEP management is a unique example which demonstrates that advanced methods of transmission and perception of complex technical information in the process of implementation of engineering projects are required for the field of construction of complex engineering facilities in the nuclear power industry. The approach of NIAEP is a leading world-class method applied in NPP construction in combination with our own industrial focus which brought Dassault Systemes to generation of industrial solution on optimization of construction operations. This will permit energy companies to optimize expenses, dates of project launch and return on investment. This is what I call improvement of the company's field of expertise.

Monica Menghini, executive Vice-President for Industries, Marketing, and Corporate Relations of Dassault Systemes

Within the frames of the program on Public Control in Nuclear Power Industry the Environmental Movement Oka performs large-scale environmental field expeditions to power units of JSC NIAEP both already built and under construction. In 2013 we carried out surveys at the Kalinin NPP Unit 4, and in 2014 we plan a field party to the Rostov NPP. The obtained results confirm that JSC NIAEP designs and builds world-class nuclear power units in terms of reliability, environmental safety, and competitiveness. Our survey on the subject "New Markets of Electric Power and Development of Russian Nuclear Power Industry" shows that being the leading engineering company in Russia JSC NIAEP faces enormous prospects in promotion of environmentally safe and clean atomic energy generation.

Alan Khasiyev, Chairman of the Interregional Environmental Movement Oka

The social project of our company "IT Practice for Elderly People" was the winner of the charitable projects contest held by JSC NIAEP in 2013.

Senior citizens and challenged persons gained knowledge and practical skills of application of modern digital resources which helped to make their day-to-day life easier and more comfortable in the information-oriented society. An especially important event was the establishment of consultative IT cabinet for elderly people which continues its operation after completion of the project itself.

One pleasant fact is that charitable activity of JSC NIAEP covers burning social issues and contributes to development of additional resources to solve these issues through competitive mechanisms. We are sincerely grateful to the Company.

Natalya Simonova, Director of the Nizhny Novgorod Regional Charitable Public Organization "Zabota", member of the Charitable Council of the Nizhny Novgorod Region

In 2013 the project of the Union of Journalists of the Nizhny Novgorod Region "Impartially: Concerning the Development of Nizhny Novgorod Science and Innovation Technologies" won the social projects contest held by JSC NIAEP. Thanks to support of the Company, exclusive meetings with leading scientists and familiarization tours to technologically advanced plants were arranged for journalists of the region and news students of the Nizhny Novgorod higher education institutions. In the course of these meetings and tours the project participants obtained first hand information about scientific and innovative capacity of the field.

Irina Panchenko, Deputy Chairman of the Board of Directors of the Public Organization "Union of Journalists of the Nizhny Novgorod Region"

Transparency as the Lifeline!

Corporate Management

6

6.1. Corporate Management Principles

Corporate Management Principles:

- The principle of protection of shareholder rights and legitimate interests. Shareholder rights are defined by the Federal Law "On Joint-Stock Companies" and Charter of JSC NIAEP. The procedure for information exchange between the Company and a shareholder is regulated by the current legislation of the Russian Federation, Charter, industry and corporate documents of the Company.
- The principle of efficient management of the Board of Directors. The Board of Directors acts in good faith and for the benefit of a shareholder and the Company. The Board of Directors assures complete transparency of its activity towards the shareholder.
- The principles of transparency and fair presentation of information about the Company's activity. JSC NIAEP assures timely disclosure of reliable information about its financial state, economic indicators, performance results, structure of property and management to the shareholder and stakeholders. Information shall be disclosed with consideration of legislative provisions on state and commercial secret.
- The principles of legitimacy and ethics. JSC NIAEP acts in strict compliance with legislation, generally accepted business ethic norms, Charter, and contractual obligations. Relations between the shareholder and members of the Board of Directors are based on mutual trust, respect, accountability, and control.

Information on compliance with the Corporate Code of Conduct of JSC NIAEP is represented in the Annex No. 2

6.2. Regulatory Framework

Regulatory Framework:

- Federal Law No. 208 "On Joint-Stock Companies" of December 26, 1995 (revised on December 28, 2013);
- Regulations on Monitoring of Decision Making by the Governing Boards of JSC NIAEP;
- Regulations on Cooperation of the Structural Subdivisions of JSC NIAEP on Preparation of Materials for Sessions of the Board of Directors and General Shareholder Meeting of JSC NIAEP;
- Regulations on Cooperation of the Structural Subdivisions and Officers of JSC NIAEP on Management of the Subsidiaries of JSC NIAEP.

6.3. Corporate Management Bodies

Management bodies of the Company are:

- General Shareholder Meeting;
- Board of Directors;
- President.

Authorities of the management bodies are defined in the Charter of JSC NIAEP approved by the General Shareholder Meeting on August 26, 2013.

General Shareholder Meeting

The sole shareholder of JSC NIAEP is JSC Atomny Energopromyshlenny Kompleks. Rights, obligations, and powers of the sole shareholder are regulated by the Federal Law No. 208 of December 26, 1995 "On Joint-Stock Companies" and the Charter of JSC NIAEP. Decisions on issues relating to the competence of the General Shareholder Meeting are made by the sole shareholder alone and executed in written form.

Board of Directors

Members of the Board of Directors are selected by the sole shareholder on the basis of a list of candidates proposed by the Company's Board of Directors. In accordance with the Company's Charter, five members are included in the Board of Directors.

As of December 31, 2013, the members of the Board of Directors act on the basis of the sole shareholder's decision of June 27, 2013.

The members of the Board of Directors are as follows:

1. Kirill Borisovich Komarov (Chairman);
2. Ivan Alekseyevich Borisov;
3. Yevgeniya Gennadyevna Gorbunova;
4. Valery Igorevich Limarenko;
5. Yekaterina Viktorovna Lyakhova.





Kirill Borisovich Komarov	Yekaterina Viktorovna Lyakhova	Ivan Alekseyevich Borisov	Yevgeniya Gennadyevna Gorbunova	Valery Igorevich Limarenko
Year and place of birth				
29.12.1973, Leningrad	07.06.1975, Sverdlovsk	21.04.1981, Leningrad	23.05.1972, Moscow	19.10.1960, Kharkov
Education				
The Urals State Law Academy. Candidate of Juridical Sciences.	The Urals State Law Academy. MBA degree in M.V.Lomonosov MSU and Executive MBA degree, Institute of Business Studies within the Russian Presidential Academy of National Economy and Public Administration and University Antverpen Management School.	St. Petersburg State University.	Moscow Institute of Economics and Statistics.	Kharkov Aviation Institute. Doctor of Economic Sciences.
Working career				
1993–2000 – Head of Financial Legislation Department, Vice President – Head of Legal Services of the Legal Consulting Company CJSC "YURKON" (Ekaterinburg). 2000–2005 – Director of Legal Affairs and Project Management, First Deputy General Director, General Director of CJSC "RENOVA – Development" in RENOVA group of companies.2005–2006 – Deputy Head of the Federal Agency of Water Resources.2006–2007 – Vice-President of JSC "TVEL", General Director of JSC "Atomenergomash". 2007–2010 – Deputy Director of JSC "Atomenergoprom", Executive Director of JSC "Atomenergoprom".	1995–1996 – Legal Counsel of Ural State Medical Academy. 1996–2000 – Specialist, Head of Department for Financial Legislation and Legislation on Privatization in the Legal Consulting Company CJSC "YURKON" (Ekaterinburg). 2000–2008 – Head of Legal Department of CJSC "RENOVA", Chief Representative of "RENOVA PROJECT LIMITED" in the Republic of Cyprus in RENOVA group of companies. 2008–2010 – General Director of JSC "Koltsovo-Invest". 2010–2011 – Vice-President for Corporate Governance of JSC "TVEL".	2002–2004 – General Director of LLC "EM-Design" (St. Petersburg). 2004–2005 – Director for Foundry Production at "Penztyazhpromarmatura", General Director of LLC "Casting and Reinforcing Plant" "Penztyazhpromarmatura" (Penza). 2005–2008 – Deputy General Director of LLC "Truboprovodnaya Armatura", Executive Director of LLC "Intelenergomash" (St. Petersburg). 2008–2009 – Deputy Director of the Center for Organizational Development and Project Management of the State Corporation "Rosatom". 2009–2010 – Deputy Director for Advanced Development and Systems	1994–1999 – Economist of the Credit Department for debit operations, Head of Project Financing Department of JSC "Metallinvestbank". 1999–2003 – Head of Economic Department of CJSC "United Metallurgical Company". 2003–2005 – Vice-president of CJSC "United Metallurgical Company". 2005–2009 – Director for Organizational Development of JSC "FGC UES". 2010–2013 – Director for Organizational Development of the State Corporation "Rosatom". Since 2013 – Director for Development and Restructuring of the State Corporation "Rosatom".	1983–2001 – Work in CATU Sarov, scientific activity in RFNC of VNIIEF. 1996–2001 – Deputy of Sarov City Duma, First Deputy Chairman of the Duma for Economics and Finance. 2001–2003 – Minister of Construction and Housing and Communal Services of the Government of Nizhny Novgorod Region. 2003–2005 – Chief Federal Inspector in Nizhny Novgorod Region. 2005–2007 – Deputy Governor, Deputy Chairman of the Government of Nizhny Novgorod Region for Construction, Energy, Housing and Communal Services and Information Technologies.

Kirill Borisovich Komarov	Yekaterina Viktorovna Lyakhova	Ivan Alekseyevich Borisov	Yevgeniya Gennadyevna Gorbunova	Valery Igorevich Limarenko
2010–2011 – Executive Director of NEC Directorate of the State Corporation "Rosatom". Since 2011– Deputy General Director of the State Corporation "Rosatom" for development and international business. Since April 2010 – combines the positions held with the position of the Director of JSC "Atomenergoprom". Since 2012 – Chairman of the Board of Directors of JSC "NIAEP".	Since 2011 – Director for Investment Management and Operational Efficiency of the State Corporation "Rosatom". Since 2012 – a Member of the Board of Directors of JSC "NIAEP".	Engineering of the State Corporation "Rosatom". 2010–2011 – Deputy Director of Department for Strategic Management – - Head of Department for Strategy and Long-Term Planning of the State Corporation "Rosatom". 2011–2013 – Director for Development and Restructuring (Block for Development and International Business of State Corporation "Rosatom"). Since 2013 – Vice-President for Development of JSC "NIAEP". Since 2012 – a Member of the Board of Directors of JSC "NIAEP".	Since 2012 – a Member of the Board of Directors of JSC "NIAEP".	2007–2012 – Director of JSC "NIAEP". Since 2012 – President of JSC "NIAEP". Since 2007 – a Member of the Board of Directors of JSC "NIAEP"
Share in the charter capital and holding of shares of JSC "NIAEP"				
Has no share in the charter capital of JSC "NIAEP", holds no shares of the company.	Has no share in the charter capital of JSC "NIAEP", holds no shares of the company.	Has no share in the charter capital of JSC "NIAEP", holds no shares of the company.	Has no share in the charter capital of JSC "NIAEP", holds no shares of the company.	Has no share in the charter capital of JSC "NIAEP", holds no shares of the company.

In 2013 the Board of Directors remained unchanged. Independent directors are not included in the Board of Directors of JSC NIAEP.

There are no profile committees under the Board of Directors. The Chairman of the Board of Directors may not be the Company's executive manager at the same time (4-39). The Report of the Board of Directors on performance results of JSC NIAEP is represented in the Annex No. 1.

45 sessions of the Board of Directors were held in 2013. The main decisions of the Board of Directors are represented in the electronic Annual Report.

CEO of JSC NIAEP

Since 2007 the sole executive body of the Company has been Director of JSC NIAEP. In November 2012 the position of Director was renamed in President. President of JSC NIAEP is elected by the sole shareholder and subordinated to it. President of JSC NIAEP is Valery Igorevich Limarenko.

Table 54. Main KPI of the President of JSC NIAEP V. I. Limarenko for 2013

KPI Name	KPI Fulfillment, %
Adjusted free cash flow of the State Corporation Rosatom	115,36
Adjusted free cash flow of JSC NIAEP	541,67
Fulfillment rate of REA investment program with regard to responsibility of JSC NIAEP	111,5

Remuneration of the President and Members of the Board of Directors of JSC NIAEP

The amount of remuneration of the President of JSC NIAEP is defined by the labor contract and calculated in accordance with the Single Unified Labor Compensation System. The amount of remuneration depends on fulfillment of KPI approved by the State Corporation Rosatom.

According to the decision of the sole shareholder, 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 JSC NIAEP during the period of fulfillment of their obligations thereof. The amount of remuneration and reimbursement shall be determined by the sole shareholder's decision.

Pursuant to the results of work of the JSC NIAEP Board of Directors in 2013, no such decision was made by the sole shareholder; during the Reporting period remuneration to the members of the Board of Directors was neither allocated nor paid.

6.4. Financial and Economic Activity Control

Financial and economic activity of JSC NIAEP is controlled by the Review Committee, independent auditor, and Internal Control and Audit Department.

Review Committee

The Review Committee is annually elected by the sole shareholder of JSC NIAEP.

By the decision of June 27, 2013, the Review Committee was elected including the members as follows:

- Vera Yevgenyevna Topilskaya, Head of the Book-Keeping and Accounting Methodology Department of the State Corporation Rosatom, Chairman of the Committee;
- Aleksey Alekseyevich Pimenov, Deputy Head of the Department for Economic Affairs and Controlling of the State Corporation Rosatom, Secretary of the Committee;
- Elena Vladimirovna Samogorodskaya, Chief Accountant of JSC NIAEP, member of the Committee.

The expertise of the Review Committee is defined by the Federal Law "On Joint-Stock Companies", Charter of JSC NIAEP, and Regulations on the Review Committee of JSC NIAEP. The Review Committee is accountable to the shareholder only. The conclusion of the Review Committee on the performance results for 2013 is given in the Annex No. 6.

In 2013 no decision was made on remuneration and reimbursement of expenditures to the Review Committee members of JSC NIAEP, remuneration was not paid, and expenditures were not reimbursed.

Independent Auditor

In accordance with the decision of the sole shareholder of June 27, 2013, the independent auditor of JSC NIAEP is the Limited Liability Company Financial and Accounting Consultants.

Internal Control and Audit Department

The internal control system is established in JSC NIAEP, to assure fulfillment of the Company's missions and efficient corporate management. The Company's internal control system functions in accordance with the main principles of the Policy in the field of internal control and audit of the State Corporation Rosatom. To define the flow of control procedures in the course of implementation of the main business processes, the system of normative documents assigning responsibility for their proper execution is elaborated in the Company.

In addition to the control procedures included in the business processes, the Internal Control and Audit Department performs control and inspection activities and audit of the business processes in accordance with the approved plan of control measures coordinated with the State Corporation Rosatom and by decisions of the Company's management bodies, orders and directions of the Company's sole executive body. The Internal Control and Audit Department checks the process of preparation of public Reports for compliance with the requirements of the Policy of the State Corporation Rosatom in the field of public Reporting and internal regulatory acts of JSC NIAEP in the field of public Reporting (see Annex No. 6).

80 control activities were performed in 2013 (83 in 2012 and 72 in 2011). Slight decrease compared with the previous period is the first of all connected with decrease in performed unscheduled field audits carried out by order of the management. In 2012 multiple checks were performed in the JSC ASE subdivisions subordinated to JSC NIAEP.

To improve the internal financial records control system, audit of the business processes "Banking Transactions Accounting" and "Receivables Management" was performed within implementation of control activities in 2013. Specialists of the Internal Control and Audit Department have actively participated in audits of subsidiaries and affiliates in the capacity of members of the Review Committees.

Pursuant to the results of audits and internal investigations, plans on elimination of the revealed violations and their exclusion in the future were elab-

In 2013 JSC NIAEP was acknowledged the most efficient company with regard to organization of internal control and audit, according to the Institute of Professional Financial Managers.

orated, 12 officers were brought to account under disciplinary procedures (11 in 2012 and 6 in 2011), including 5 top managers.

In the course of the scheduled checks and internal investigations the largest number of violations in 2013 was revealed in such business processes as "Batching and Procurement of Equipment and Materials" and "Management of Services of Subcontracting CIW Organizations". In order to mitigate the risks in these business processes, the Internal Control and Audit Department monitors fulfillment of plans of activities on elimination of the revealed violations.

Audit of financial and economic activity of the subdivisions includes obligatory inspection of procurement and contract activity, checks of the carried out procurement procedures for compliance with the Unified Industrial Procurement Standard, and control of execution of procurement contracts (30 inspections of procurement activity were performed in 2013). Special attention shall be paid to purchases from a single supplier.

Plans for 2014:

- Carrying out of internal audit of the most important business processes, to monitor reliability and efficiency of the internal control system of JSC NIAEP, its branches, representations, subsidiaries and affiliates;
- Expanding the spheres of audit of financial and economic activity and procurement and contract operations in accordance with the approved plan of control activities coordinated with the State Corporation Rosatom and by decisions of the Company's management bodies, orders and directions of the Company's sole executive body, including strengthening of control over construction and assembly work performance on delivered facilities;
- Further introduction of regulatory documents elaborated by the State Corporation Rosatom within the processes "Internal Control and Internal Audit";
- Advanced training of the employees of the Internal Control and Audit Department, and sharing experience with the internal control and audit subdivisions of the State Corporation Rosatom and its organizations.

6.5. Share Capital and Securities

No changes took place in the share capital of JSC NIAEP in 2013. As of December 31, 2013 the amount of the Company's share capital equaled to 500,001,877 rubles.

The actually placed securities amounted to 500,001,877. All shares were placed by closed subscription. Nominal value of one security amounts to one ruble.

6.6. Information on Dividend Payout

Procedure for dividend payout is regulated by the Charter of JSC NIAEP. Pursuant to the results of the first quarter, half-year, nine months of a financial year and/or the financial yea in whole, the Company is entitled to make a decision on distribution of dividends. The decision on distribution of dividends may be made within three months after completion of the respective period.

The decision on distribution of dividends, including on the amount, procedure, form, and time is made by the sole shareholder of JSC NIAEP. The dividend amount may not exceed the one recommended by the Company's Board of Directors.

Table 55. Information on Dividend Payout, Million Rubles

Dividend payout made for the year	2011	2012	2013
Dividend amount paid	585,2	785,8	1 343,4

6.7. Report on Large Transactions and Interested-Party Transactions

No large transactions were closed by JSC NIAEP in 2013.

In 2013 JSC NIAEP has made interested-party transactions including with the sole shareholder. In accordance with the provisions of the Federal Law "On Joint-Stock Companies", the approval procedure stipulated for the interested-party transactions is not applicable to the transactions closed.

6.8. Plans on Improvement of Corporate Management System

In 2014 it is planned to:

- approve the Code of Ethics and Business Conduct of JSC NIAEP Employees,
- establish the Ethics Committee of JSC NIAEP,
- elaborate the Codes of Ethics of JSC ASE, LLC VdMU, LLC SMU No. 1, LLC NIAEP-Servis, LLC Trest RosSEM, LLC ASE-Engineering, and NUKEM Technologies.

From Energy to the Breath!

Cooperation with Stakeholders in the Course of Report

7

- JSC NIAEP Public Reporting System
- Dialogs with Stakeholders during Preparation of Report for 2013
- Accounting of Suggestions of Stakeholders
- Conclusion on Public Acknowledgement of the Report

7.1. JSC NIAEP Public Reporting System

7.1.1. Public Reporting System

Public Reporting Committee of JSC NIAEP – JSC ASE

The Committee is a standing management board under the President of JSC NIAEP.

The main goal of the Committee consists in organization and coordination of the public Reporting processes in the NIAEP–ASE Integrated Company in accordance with the advanced international and Russian requirements in the field of corporate Reporting.

The main tasks of the Committee are as follows:

- Improvement of the public Reporting system in accordance with changes in the international and Russian requirements in the field of corporate Reporting;
- Decision making on annual preparation of Reports and control of execution thereof;
- Improvement of cooperation with the stakeholders;
- Decision making on external assurance of nonfinancial part of the public Annual Report.

Stakeholder Panel of JSC NIAEP

Stakeholder Panel [31] operates in JSC NIAEP on a constant basis, to provide for cooperation between the Company and its stakeholders. The Stakeholder Panel is a body within the Company's public Reporting system which carries out its activity on a voluntary basis. The procedure for formation of the Panel is approved by the Regulations on the Stakeholder Panel[32].

In accordance with the specified Regulations, the Panel includes representatives of all main stakeholders of the Company. The Panel's membership is subject to annual review in the sessions of the Public Reporting Committee. External experts from among the leading subject matter experts may be engaged in discussion of certain issues.

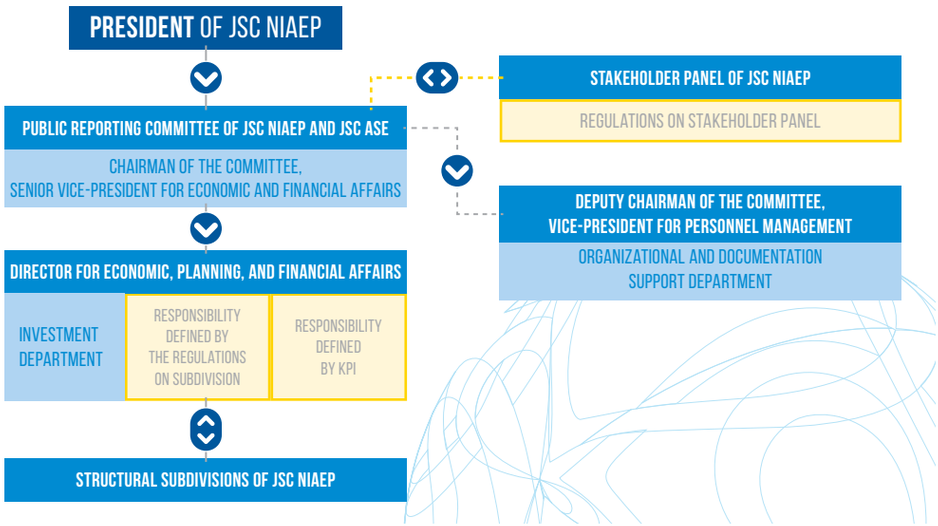


Fig. 54. JSC NIAEP Public Reporting System

Tasks and Functions of the Panel:

- Evaluation of significance and completeness of information disclosed in public Reports of NIAEP;
- Elaboration of recommendations on improvement of quality of public Reports;
- Participation in generation of agenda of the NIAEP–ASE Integrated Company in the field of sustainable development;
- Control of fulfillment of JSC NIAEP obligations to the stakeholders pursuant to the results of Reporting campaigns;
- Discussion of draft regulatory documents in the field of public Reporting and presentation of recommendations on finalization thereof;
- Public control of public Reporting processes.

Responsible Subdivisions

Investment Department

The department responsible for preparation of Report and development of the public Reporting system is the Investment Department. Its field of expertise includes:

- Elaboration of Annual Report concept;
- Preparation of draft and final versions of the Report;
- Accounting of suggestions of the stakeholders and commentaries of the Public Reporting Committee of JSC NIAEP, Public Reporting Committee of the State Corporation Rosatom, independent nonfinancial auditor, coordinating structural subdivisions of JSC NIAEP and State Corporation Rosatom, and finalization of Reports on the basis of these suggestions and commentaries;
- Arrangement of JSC NIAEP participation in industrial, national, and international Reporting contests;
- Facilitation of performance of independent nonfinancial audit of the Report;

31. http://niaep.stakeholderpanel.ru.
32. http://niaep.stakeholderpanel.ru/ru/documents/draft-regulations-on-the-commission-of-the-stakeholders-of-jsc-niaep/.

- Organization of public acknowledgment of the Report;
- Arrangement of dialogs with the stakeholders in the process of preparation of the Report and public consultations on the draft Report;
- Elaboration and introduction of rules, regulations, procedures in the field of public Reporting of JSC NIAEP;
- Assurance of participation of the employees in educational activities.

Organizational and Documentation Support Department

The field of expertise of the Organizational and Documentation Support Department regarding preparation of public Reports includes:

- Organizational support of dialogs with the stakeholders and public consultations,
- Preparation of graphic printed version of the Report,
- Preparation of promotional materials.

Interactive Platform for Cooperation with Stakeholders

An internet platform for cooperation with stakeholders was elaborated and started in 2013 (http://niaep.stakeholderpanel.ru/). The project is intended for organization of discussion of projects, documents, and other issues relating to the Company's performance and important for the stakeholders.

This platform accommodates documents relating to public Reporting and announcements of events. Registered users may communicate with each other, participate in discussion of draft Report, ask questions, and contribute suggestions.

Results of 2013:

- JSC NIAEP became a participant of the Pilot Program of the International Integrated Reporting Council;
- JSC NIAEP Public Reporting Standard was updated;
- Internet platform for cooperation with stakeholders was started;
- The level of involvement of stakeholders' representatives into the dialogues on preparation of Reports due to use of modern IT (online dialogues in several cities at the same time) was raised;
- Powers of Public Reporting Committee were expanded;
- Reporting liability was assigned to sole organization department (investment department) and in KPI of the department head;
- Process of passportization of indicators and indexes was started (passports of 50% indicators were prepared).

2014 and Midterm Plans on Improvement of Public Reporting System and Reporting Quality

See tables 56–57.

Table 56. 2014 and Midterm Plans on Improvement of Public Reporting System

Improvement of regulatory and methodological Reporting system	Updating the corporate documents in the field of public Reporting
	Completion of classification of indicators and rates in 2014
	Development of input information collection and processing system (assignment of personal responsibility for delivery of information)
Personnel development	Participation in workshops of the State Corporation Rosatom, webinars of the International Integrated Reporting Council, sessions of the Business Club of the Russian Regional Integrated Reporting Network, consideration of the best practices, etc.

Table 57. 2014 and Midterm Plans on Improvement of Reporting Quality

Report preparation	Reaching the comprehensive level of the GRI Guidelines (version G4).
	Transition to an earlier start of Reporting campaign (September – October).
Increase in the number of stakeholders participating in preparation of the Report	Increase in the level of involvement of the Stakeholder Panel in the activity on preparation of the Report: • cooperation of the top management with the stakeholders within the annual agenda of the Stakeholder Panel; • expert interviewing.
	Development of IT cooperation with the stakeholders (improvement of the Internet platform – researching, etc.).
Report promotion	Participation in the international and Russian corporate Reporting contests (improvement of the achieved positions).
	Development of electronic Report distribution forms.
	Using the Report in the Company: • Improvement of readability of the Report by the employees (using the Report as a reference and analytical source of information), • Feedback on quality and usefulness of the Report (personnel survey, top management interview).
	Distribution of the Report among the main groups of stakeholders (direct mail, distribution in discussion boards, trade shows, during meetings with business partners, etc.).

Comment

Our Company has been engaged in preparation of integrated Reports and improvement of the public Reporting system for six years.

We strive to be an open and transparent business structure. This is the required precondition for successful operation at the nuclear power markets, therefore, constructive cooperation with the stakeholders including through Reports is of great importance for us. It is unquestionable that the Reports contribute to formation of the engineering company's reputation as a modern and responsible company providing high-quality products.

Several years ago we made the decision to prepare integrated Reports. This was due to two reasons. The first one: we strive for compliance with the best international practices, with regard to corporate management as well. In the recent years, the largest international corporations switch to integrated Reporting as the most useful and called-for form. The second reason consists in advertency to our stakeholders – partners, contractors, public authorities, and public organizations. They obtain brief, important, and at the same time comprehensive information on the key aspects of our activity through integrated Reports.

We consider it important to work with Reporting on a systematic basis. In the reporting year much prominence was given to development of the Public Reporting System of the NIAEP-ASE Integrated Company. In addition we became participants of the Pilot Program of the International Council on Integrated Reporting last year. A serious step was taken towards improvement of Reporting quality – the Report for the year 2013 was prepared in accordance with the International Integrated Reporting Standard and revised edition of the GRI Guidelines (G4) issued last year.

We believe that during the last six years we have made considerable advancements in terms of informational transparency of our company, and now we clearly understand the necessity of constant improvement of both our approach to Reporting, and quality of Reports. Application of the best international Reporting practices, introduction of modern information systems, and improvement of cooperation with our stakeholders to increase usefulness of a Reporting document – these are the main directions of Reporting development for the next few years.

Vladimir Kats,
Executive Director, Chairman of the Public Reporting Committee of JSC NIAEP and JSC ASE

7.2. Dialogs with Stakeholders during Preparation of Report 2013

Four dialogs were held with representatives of the main stakeholders during preparation of the Report in accordance with the Standard on Cooperation with Stakeholders AA1000SES. These activities were aimed at acquisition of requests and suggestions from the stakeholders on disclosure of priority subjects, sustainable development issues, and capital management in the Report.

Dialog No. 1. Concept of Annual Report for 2013

The dialog took place on December 16, 2013 in the Moscow Branch of JSC NIAEP. Participants of the dialog held in form of a video conference included representatives of the Central Office of JSC NIAEP and stakeholders from Nizhny Novgorod, as well as management of the Volgodonsk and Yuzhnouralsk Branches, and Representative Office of JSC NIAEP in the Republic of Belarus.

Draft concept of the Report was presented for discussion.

External and internal stakeholders were polled, and, pursuant to the results of the polling, aspects of Reporting information were prioritized in terms of their importance for the stakeholders. The results of the polling were used for generation of significance matrix.

Dialog No. 2. Disclosure of JSN NIAEP Strategy in the Public Annual Report for 2013

The dialog took place on February 20, 2014 in the Moscow Branch of JSC NIAEP. Participant of the dialog held in form of a video conference included representatives of the Central Office of JSC NIAEP and stakeholders from Nizhny Novgorod.

During the event the participants discussed the JSC NIAEP strategy in the main business core and new business areas, and disclosure of information on the strategy in the Report.

Dialog No. 3. Disclosure of Information on JSC NIAEP Innovative Activity in the Public Annual Report for 2013

The dialog took place on February 20, 2014 in the Moscow Branch of JSC NIAEP. Participant of the dialog held in form of a video conference included representatives of the Central Office of JSC NIAEP and stakeholders from Nizhny Novgorod.

Innovative technologies of project management in JSC NIAEP and prospects for introduction of new innovative technologies were discussed in the process of the dialog.

Public Consultations on Draft Report

Public consultations took place on April 24, 2014 in the Central Office of JSC NIAEP in Nizhny Novgorod. Participant of the dialog held in form of a video conference included representatives of the Moscow Branch of JSC NIAEP and stakeholders from Moscow. Draft Report was presented for discussion.

7.3. Accounting of Suggestions of Stakeholders

In the course of the dialogs during preparation of the Report 81 suggestions and recommendations were put forward. 88.6 % of suggestions included requests for publication of certain information in the Report, other suggestions related to development of the public Reporting system or other issues of cooperation with the stakeholders.

The Company organized special work on reviewing the recommendations made in relation to the Draft Report (by structure, composition, and form of presentation of Reporting information) and improvement of the public Reporting system. As a result, 79 % of suggestions were taken in to account, 12.4 % were not taken into account, and 8.6 % will be taken into account or reviewed in the process of preparation of the Report for 2014.

Protocols of the dialogues are specified on the Internet-Platform for cooperation with stakeholders at http://niaep.stakeholderpanel.ru/ru/download/

Table 58. Record of Important Suggestions on Disclosure of Information in the Report Put Forward by the Stakeholders during the Dialogs

Stakeholder Suggestions	Taking Account of Suggestions by the Company
Make sustainable development or any of its aspects the priority subject of the Report.	Not taken into account, priority subjects are defined in the Report concept.
Disclose information on certain achievements of the Company within implementation of the strategy in each of the market segments.	Taken into account in the Section 2.2.2. "Strategic Directions of Business Development of the NIAEP–ASE Integrated Company" and in the Chapter 3 "Strategically Important Performance Results".
Disclose information on personnel training within the frames of the projects implemented by the Nuclear Energy and Applied Physics Institute of the Nizhny Novgorod Technical University, Nizhny Novgorod University of Architecture and Civil Engineering in cooperation with JSC Atomenergoproekt.	Taken into account in the Subsection "Involvement of Graduates and Cooperation with Higher Education Institutions".
Disclose information on the Far East development; analyze problems of diversification in this region.	Not taken into account. According to the results of the carried out survey, the issue is of low immediacy for the major group of the stakeholders.
Disclose interconnection of strategic goals of JSC NIAEP with the strategy of the State Corporation Rosatom, visualize contribution of JSC NIAEP to achievement of goals of the State Corporation.	Taken into account in the Section 2.2.2 "Strategic Goals".
Disclose information on the level of involvement of the personnel.	Taken into account in the Section 5.4.2. "Approaches to Human Capital Management".
Disclose information on the intended presence of the Company at the market of oil-and-gas facilities construction.	Taken into account in the Section 2.2.3 "Priority Strategic Directions of Business Development of the NIAEP–ASE Integrated Company".
Emphasize in the Report that information shall be disclosed with consideration of interests of the investors, as if the Company was preparing for IPO.	Not taken into account. JSC NIAEP does not plan to sell shares by public offering (including in form of depositary receipts for shares).
Reflect the project management mechanisms.	Taken into account in the Section 4.1.1. "Project Management Mechanisms".
Disclose information on cost management mechanisms.	Taken into account in the Section 5.2.2. "Construction Cost Management".
Include information on cooperation of the Company with higher education institutions and prospects for development thereof in the Report.	Taken into account in the Subsection "Involvement of Graduates and Cooperation with Higher Education Institutions" in the Section "Intellectual Capital".

Table 59. Obligations on Taking Account of Suggestions in Subsequent Reports

Stakeholder Suggestions	Management Response
Reflect efficiency rates of investments in the Report.	Will be taken into account in subsequent Reports.
Build the text of the Report with regard to new businesses, carry out their SWOT-analysis or any other similar analysis.	
Describe work of JSC NIAEP with regard to medium- and low-power reactors.	
Specify operations on the VVER-TOI project requirements management system with regard to Kursk and Nizhny Novgorod NPP.	Will be taken into account in subsequent Reports at the respective stage of implementation of the projects.

Table 60. Fulfillment of Obligations Assumed by the Company during Preparation of the 2012 Report

Stakeholder Suggestions Which the Company Undertook to Take into Account When Preparing the 2013 Report	Fulfillment of Obligations
Consider the possibility of making competitiveness at the Russian and world markets in conditions of Russia's accession to WTO the priority subject of the Report.	Not taken into account, priority subjects are defined in the Report concept.
Perform a comparative analysis of the products by cost, quality, and safety with the products and services of competitors at the Russian and world markets.	Partially taken into account, Section 2.2. "Company's Strategy".
Disclose rates connected with performance, added value, quality, and cost of trial and innovative products.	Partially taken into account, Section 5.1. "Financial Capital".
Represent information on cooperation with enterprises of the Nizhny Novgorod atomic energy cluster, including with regard to the Kola NPP VVER-500 project.	Partially taken into account, Section 5.3. "Intellectual Capital".
Consider the subject of business model as priority one.	Not taken into account, priority subjects are defined in the Report concept.
Specify the forms of cooperation with counteragents, forms of contracting.	Partially taken into account, Section 5.2.3. "Procurement Activity Optimization".
Publish the new updated corporate structure of the Company in the Report for 2013.	Taken into account, Section 1.1. "General Information on the Company".
Pay more attention to international cooperation, i.e. create new model of participation of the Company's projects in the third countries.	Not taken into account, the issue does not relate to the public Annual Report.
Show the place of the NIAEP–ASE Integrated Company in the structure of the State Corporation Rosatom schematically.	Taken into account, Chapter 2 "Strategy".

7.4. Stakeholder Assurance of the Report

Background Information

The Joint-Stock Company NIZHNY NOVGOROD ENGINEERING COMPANY ATOMENERGOPROEKT (hereinafter referred to as JSC NIAEP or Company) offered us to assess the 2013 Report of JSC NIAEP (hereinafter referred to as the Report) including completeness and significance of information disclosed in it and response of the Company to requests of the stakeholders. For this purpose, our company and representatives were given a chance to participate in public consultations on the Draft Report which took place on April 24, 2014, and in three dialogs with the stakeholders:

- Dialog No. 1 – 2013 Annual Report Concept, December 16, 2013;
- Dialog No. 2 – Disclosure of JSC NIAEP Strategy in the Public Annual Report, February 20, 2014;
- Dialog No. 3 – Disclosure of Information on JSC NIAEP Investment Activity in the Public Annual Report, February 20, 2014.

Report Assessment Procedure

Our conclusion is based on comparative analysis of two versions of the Report (Draft Report for public consultations and final version of the Report) and provided materials on the results of carried out dialogs and consultations (records of events, summary tables on commentaries of the stakeholders), as well as commentaries given by JSC NIAEP managers and employees in the course of the public acknowledgement of the Report.

In the process of the public acknowledgement of the Report we did not set a task to check the data collection and analysis system of the Company. Reliability of actual data presented in the Report is not part of the public acknowledgement either.

All participants of the public consultations could freely express their opinion.

We have not received any remuneration from the Company for participation in the public acknowledgement procedure.

Assessments, Comments, Recommendations

We agree in positive assessment of the Report – its format and scope of disclosed information. The Report 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 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 seen that the Company's management is aware of constructiveness and prospects for cooperation with the stakeholders.

The absolute merit of the Report consists in application of international standards during its preparation: Sustainable Reporting Guidelines, Global Reporting Initiative (GRI, version G4), standard series AA1000 of the Institute of Social and Ethical Accountability, International Integrated Reporting Standard. Integrated nature of the Report facilitated integrated disclosure of information on sustainability of business, including activity aspects connected with sustainable development.

No facts which prejudice truthfulness of the information disclosed in the Report are known to us. We assess disclosure of information in the Report as sufficient both speaking of international public Reporting standards and in terms of response to stakeholders' commentaries stated in the process of the Report preparation. To our opinion, it is the integrated Report which must present the official position of the Company's management on all key socially important issues and activity areas of the Company.

We recommend the Company to pay attention to the necessity of disclosure of the following information in subsequent Reports: detailed comparative analysis of the main indices of competitors and JSC NIAEP, division of cost into cost for the Company and for the stakeholders, connection of strategic goals and sustainable development goals.

Materiality and Comprehensiveness of Information

We consider that JSC NIAEP has taken into account the requirements of international standards on determination of materiality. At the very beginning of work on the Report the Company questioned its top managers and representatives of the main groups of stakeholders, to define significant aspects of activity which must be reflected in the Report. Information on these aspects is disclosed in the Report sufficiently completely. This means that the information disclosed in the Report is material both for the Company and for its stakeholders.

The priority subjects of the Report are "Strategy of JSC NIAEP" and "Innovative Activity of JSC NIAEP". We consider that the priority subjects are presented in the Report in detail.

We also consider that reduction in the volume of the Report's printed version complies with the best international Reporting practices and permits to present the real picture of value delivery in the Company. Presentation of detailed information in the interactive version of the Report and availability of references to other sources of information permits the stakeholders to get all the required and additional information.

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 public Reporting practice in its activity. In the course of the Report preparation four activities with the stakeholders were carried out. We would like to make a pointed reference to establishment of the Internet platform for cooperation with the stakeholders.

We also consider it positive that cooperation started prior to preparation of the Report itself at the stage of concept generation. The stakeholders were given the opportunity to express their opinions and recommendations on disclosure of information in the Report and development of the public Reporting system in whole.

The Company responded to the stakeholders' comments by introducing updates and additional information in the final version of the Report. In particular, the Sections "Strategy", "Value Delivery", "Human Capital", "Intellectual Capital", and others were revised and supplemented with requested information. With regard to a number of requests the Company undertook to either disclose information in subsequent Reports or give the reasons due to which the requested information may not be disclosed. Various technical mistakes and shortcomings revealed by the participants of the dialogs were removed from the final version of the Report.

In addition, the Company undertook to further improve the public Reporting system. Thus, when preparing the Report, the Company has demonstrated its readiness to respond to suggestions and recommendations of the stakeholders and brought up issues in a constructive way. We hope that the Company will go on with consistent introduction of the principles of responsible corporate behavior in its activity through development of the public Reporting system and cooperation with the stakeholders.

Approvals Page of Public Representation of 2013 Annual Public Report of JSC NIAEP

I.A. Alushkina	President of the bank OAO "AKB Sarovbusinessbank"
S.M. Dmitriev	Principal of R.E. Alekseev Nizhny Novgorod Technical State University
D.L. Zverev	Director – Chief Designer of Joint Stock Company "Afrikantov Experimental Design Bureau for Mechanical Engineering"
V.A. Ivanov	Vice governor, Fist Deputy Head of the Government of Nizhny-Novgorod region
A.M. Kazarin	Director of the branch of OAO "Lead Institute "VNIPIET" (All-Russia Science Research and Design Institute of Power Engineering Technology) of SPBAEP
K.B. Komarov	Deputy Director General on Development and International business of Rosatom State Corporation
M.R. Mustafin	Director General of JSC "Atomenergoproekt"
S.G. Novikov	Director of communications' department of Rosatom State Corporation
A.V. Hasiev	Head of trans-regional environmental movement "Oka"
V.N. Tsybanev	Director General of Nizhny Novgorod association of manufacturers and business owners

List of Abbreviations

- **GRI** – Global Reporting Initiative.
- **DC NRHF** – decommissioning of nuclear and radiation hazardous facilities.
- **SULCS** – Single Unified Labor Compensation System.
- **LRW** – liquid radioactive waste.
- **RR** – research reactor.
- **KPI** – key performance indicators.
- **LSE** – local summary estimate.
- **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** – environmental protection.
- **SNF** – spent nuclear fuel.
- **RPS** – Rosatom Production System.
- **RAW** – radioactive waste.
- **RAP** – Russian Accounting Principles.
- **CIW** – construction and installation work.
- **CS** – corporate standard.
- **M&R** – maintenance and repair.

Glossary

- **CAPEX** – (Capital Expenditure) – capital used by companies for purchase or modernization of physical assets (residential or industrial immovable property, equipment, technologies).
- **EPC Companies** – (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 project portfolio management. The EPCM Company's functions include engineering, procurement, construction, and project management.
- **ERP System** (Enterprise Resource Planning System) is the Company's resource planning system.
- **ISO** is a series of international standards on company management administration system intended for assurance of predictable and stable quality level of services.
- **NPP-91/99** is NPP design elaborated by the St. Petersburg Institute Atomenergoproekt. The design is based on the concept of NPP with VVER-1000/428. From 1995 to 1999 the materials on the VVER-1000/428 NPP design were subject to IAEA expert assessments. By the beginning of 2000, units of nuclear power plants with VVER-1000 have worked over 130 reactor-years; the main technical parameters, reliability, and safety of work of the systems and equipment were confirmed. Currently, construction of the first two units of the Tianwan Nuclear Power Plant with VVER-1000/428 comes to an end in China. The NPP-91/99 power unit is intended for electric energy generation in basic mode.
- **NPP-92** is safe NPP design elaborated with consideration of native experience in construction and operation of the previous reactor plant (V-320) at the Zaporizhia, Balakovo, Yuzhnouralsk and Kalinin NPP and the latest world achievements in the field of NPP design and operation. According to the international classification, NPP-92 refers to nuclear power plants of the generation III. When designing the nuclear power plant, the designers focused on maximum reduction in the human factor effort. Such concept was implemented in two directions. Firstly, the design included passive safety systems. This term refers to systems operating almost without any external power supply and requiring no human intervention. Secondly, the concept of double-purpose active safety systems was adopted, what considerably reduced the possibility of undetected failures. To avoid uncontrolled chain reaction in the reactor, special control rods made of neutron-absorbing materials are used which immediately suppress nuclear reaction when inserted in the core.
- **NPP-2006** is so far the most advanced typical design of the Russian nuclear power plant of the generation 3+ with improved technical and economic indices. This design is aimed at achievement of modern safety and reliability indicators with optimized capital investments in power plant construction. VVER reactor wit 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 elaborated, namely Novovoronezh NPP-2 (General Contractor – JSC Atomenergoproekt, Moscow) and Leningrad NPP-2 (General Contractor – JSC St. Petersburg Scientific and Research Engineering Institute Atomenergoproekt).
- **BN-800** is a fast-fission reactor with primary sodium for finishing operation of the fast-fission reactor technology using uranium-plutonium MOX-fuel. It is planned to be launched in September 2014 at the Beloyarsk NPP Unit 4 in the Sverdlovsk Region. Electrical power amounts to 880 MW.
- **Back End** means finals lifecycle stage of nuclear energy facilities and materials.
- **VVER-TOI** is a typical optimized and informative-advanced design of two-unit NPP with VVER-1300 reactor (water pressurized reactor). The VVER-TOI design is elaborated on the basis of the NPP-2006 design materials with maximum

consideration of 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.

- **Vendor** is a company manufacturing and supplying products and services under its trademark.
- **General Contractor** is a turnkey contract party which assigns performance of certain types and packages of work under the contract to specialized contracting organizations – subcontractors. The General Contractor is completely responsible to the customer for performance of the contractual work package and proper quality thereof, timely removal of defects and faults, etc.
- **Power Delivery Contract** means generating company's obligation to the market representatives on commissioning and introduction of new generation into the wholesale market in future.
- **Customer (Developer)** is a person or entity intending to carry out construction, reconstruction or other type of construction work which requires a building permit.
- **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 on preparation and support of the production and product distribution process, maintenance and operation of industrial, infrastructure, and other facilities.
- **Cash Pooling** means centralization of dividend flow from commercial operations and subsequent distribution of investment resources between subsidiaries.
- **Design Documentation** is 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 capital facilities and their parts, and overhaul, if structural and other reliability and safety parameters of the capital facilities are affected.
- **Design and Exploration** is a package of work 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.
- **Design Documentation** is documentation elaborated on the basis of the approved detailed design and intended for performance of construction work.
- **Radioactive Substances** are substances containing radioactive nuclides.
- **Construction** is the whole process of NPP erection from design and exploration to delivery to the customer and commissioning.
- **Power Unit** is a power plant generator producing electric power.
- **Nuclear Energy** – internal energy of atomic nuclei released at nuclear fission or nuclear reactions.

Approved by the decision of the sole shareholder

Approved by the decision of the Board of Directors

President		V.I. Limarenko
Chief Accountant		E.V. Samogorodskaya

Annexes

8

Annex No. 1.
Report of the Board of Directors on Performance Results of JSC NIAEP

45 sessions of the Board of Directors were held in 2013, decisions were made on 57 agenda items.

Seq. No.	Session Date	Minutes Number	Agenda
1	16.01.2013	1	On introduction of amendments No. 2 to the Charter of the Limited Liability Company "Construction and Erection Department (SMU) No. 2" with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
2	23.01.2013	2	1. On changing the conditions of JSC NIAEP President labor contract defined by the parties.
3	01.02.2013	3	1. Concerning the approval of the budget and planned indicators of financial and business activity of JSC NIAEP for 2012.
4	04.02.2013	4	1. Concerning the approval of the transaction covering works and services to the value exceeding five hundred (500) million rubles and relating to contract conclusion between JSC NIAEP and Akkuyu NPP Branch of JSC Rosenergoatom Concern for provision of engineering services by turbine hall designer on elaboration of documentation for construction of turbine hall of the AKKUYU NPP Units 1, 2, 3, and 4 (Republic of Turkey).
5	20.02.2013	5	1. Concerning the approval of the transactions covering property, work, and services to the value of over five hundred (500) million rubles concluded by JSC NIAEP.
6	19.03.2013	6	1. Concerning the approval of the transactions connected with conclusion of additional agreements to the contracts for performance of construction and assembly work at the facilities of the Rostov NPP Units 3 and 4 between JSC NIAEP and subcontracting organizations.
7	20.03.2013	7	1. Concerning the approval of the transaction connected with provision of consultancy services and concluded between JSC NIAEP and Booz and Company Ltd.
8	21.03.2013	8	1. Concerning the approval of the transaction covering property, works, and services to the value of over five hundred (500) million rubles on conclusion of the contract for performance of construction and assembly work package at the facilities of the Baltic NPP Unit 1 between JSC NIAEP and LLC SMU No. 1.
9	22.03.2013	9	1. Concerning the proposal to the sole shareholder of JSC NIAEP – JSC Atomenergoprom – on making the decision on participation of JSC NIAEP in the World Nuclear Association.
10	29.03.2013	10	1. Concerning liquidation of the Baltic Branch of LLC SMU No. 1, and introduction of changes to the Charter of LLC SMU No. 1 with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
11	08.04.2013	11	1. Concerning the approval of the transactions covering property, works, and services to the value of over five hundred (500) million rubles concluded by JSC NIAEP.
12	22.04.2013	12	1. Concerning the approval of the Regulations on the Volgodonsk Branch of the Joint-Stock Company NIZHNY NOVGOROD ENGINEERING COMPANY ATOMENERGOPROEKT – "Directorate of the General Contractor at the Rostovskaya Nuclear Power Plant" as amended.
13	26.04.2013	13	1. Concerning the approval of the List of Charitable Initiatives of JSC NIAEP for 2013.
14	13.05.2013	14	1. Concerning the proposal to the sole shareholder of JSC NIAEP – JSC Atomenergoprom – on making the decision on participation of JSC NIAEP in the Pilot Program of the International Integrated Reporting Council.
15	14.05.2013	15	1. Concerning the approval of the transaction covering property, works, and services to the value of over five hundred (500) million rubles on conclusion of the contract for performance of construction and installation work at the facilities of the Baltic NPP Unit 1 between JSC NIAEP and CJSC SEZAM.
16	23.05.2013	16	1. Concerning the approval of the transaction covering property, works, and services to the value of over five hundred (500) million rubles concluded between JSC NIAEP and subcontractor selected pursuant to the results of an open competitive tender.
17	24.05.2013	17	1. Concerning the payment of remuneration to President of JSC NIAEP pursuant to the results of fulfillment of the key performance indicators in 2012.
18	27.05.2013	18	1. Concerning the approval of the transaction covering property, works, and services to the value of over five hundred (500) million rubles on conclusion of the contract for replacement of a party in the contract No. 40/90.029-13 of February 19, 2013 for performance of construction and assembly work at the facilities of the Baltic NPP Unit 1 between JSC NIAEP, LLC SMU No. 1, and LLC SMU No. 2 being the subsidiaries of JSC NIAEP.
19	27.05.2013	19	1. Determination of the date of drawing up the list of persons entitled to participate in the annual general shareholder meeting of JSC NIAEP. 2. Preliminary approval of the Annual Report of JSC NIAEP. 3. Preliminary approval of the annual accounting Reports, including the statement of profit and loss of JSC NIAEP, pursuant to the results of 2012. 4. Recommendations to the sole shareholder on distribution of profit of JSC NIAEP pursuant to the results of 2012, including by dividend size of JSC NIAEP shares and payment order thereof in accordance with the results of the financial year. 5. Concerning the appeal to the sole shareholder of JSC NIAEP with a proposal to make decision on the issues relating to the competence of the annual general shareholder meeting of JSC NIAEP.
20	31.05.2013	20	1. Concerning the approval of the transactions covering property, works, and services to the value of over five hundred (500) million rubles on conclusion of additional agreements to the contracts for performance of construction and assembly work at the facilities of the Rostov NPP Unit 3 between JSC NIAEP and LLC Corporation of AK Elektrosevkavmontazh.
21	31.05.2013	21	1. Concerning the approval of the transaction covering property, works, and services to the value of over five hundred (500) million rubles on conclusion of the contract for performance of work and provision of services to the General Contractor on elaboration and delivery of documentation required and sufficient for procurement of the permits for construction of the Kursk NPP-2 Units 1 and 2 within the scope of work of JSC Atomenergoproekt between JSC NIAEP and JSC Atomenergoproekt.
22	04.06.2013	22	1. Concerning the approval of the transactions covering property, works, and services to the value of over five hundred (500) million rubles concluded between JSC NIAEP and JSC Atomstroyexport.

Seq. No.	Session Date	Minutes Number	Agenda
23	07.06.2013	23	1. Concerning the decision making on the issues relating to the field of expertise of the annual general shareholder meeting (sole shareholder) of LLC SMU No. 1 and LLC VdMU with one hundred (100) percent of the charter capital belonging of JSC NIAEP.
24	29.07.2013	24	Concerning the election of the Chairman of the Board of Directors of JSC NIAEP. Concerning the election of the Secretary of the Board of Directors of JSC NIAEP. Determination of the amount of payment for the auditor services rendered to JSC NIAEP on audit of the statements and Reports for 2013.
25	01.08.2013	25	Concerning the approval of amendment No. 2 to the Regulations on the Volgodonsk Representative Office of JSC NIAEP. Concerning the approval of amendments and additions No. 1 to the Regulations on the Udomlya Branch of JSC NIAEP.
26	02.08.2013	26	1. Concerning the approval of the Charter of LLC SMU No. 2 in the new wording No. 2 with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
27	05.08.2013	27	1. Concerning the approval of the budget of LLC VdMU for 2012 with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
28	06.08.2013	28	1. Concerning the approval of the transaction covering works to the value of over five hundred (500) million rubles on conclusion of the contract between JSC NIAEP and JSC Atomstroyexport for elaboration of JOI and EIA for the Rooppur NPP site and performance of the required engineering surveys.
29	07.08.2013	29	1. Concerning the decision making on the issues relating to the field of expertise of the annual general shareholder meeting (sole shareholder) of LLC SMU No. 2 with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
30	14.08.2013	30	1. Concerning the proposal to the sole shareholder of JSC NIAEP – Open Joint-Stock Company Atomenergoprom – on making the decision on approval of the Charter of JSC NIAEP in new wording.
31	10.09.2013	31	1. Concerning the approval of the transaction covering works to the value of over five hundred (500) million rubles on conclusion of the contract between JSC NIAEP and JSC Atomenergoproekt for elaboration of JOI and EIA for the Rooppur NPP site and performance of the required engineering surveys.
32	23.09.2013	32	1. Concerning the approval of the transaction covering works to the value of over five hundred (500) million rubles on conclusion of the contract between JSC NIAEP and JSC Atomstroyexport for provision of the Belarus NPP construction management services in the territory of the Republic of Belarus.
33	24.09.2013	33	1. On changing the conditions of JSC NIAEP President labor contract defined by the parties.
34	25.09.2013	34	1. Concerning the approval of the transaction covering works to the value of over five hundred (500) million rubles on conclusion of the contract between JSC NIAEP and JSC Rosenergoatom Concern for elaboration of the detailed design documentation (DDD) in full scope, its support at all design stages within the activity on service life extension of the Kalinin NPP Unit 2, approval (if required) of DDD in third-party organizations, and collection of input data for detailed engineering.
35	26.09.2013	35	1. Concerning the approval of the transaction covering works to the value of over five hundred (500) million rubles on conclusion of the contract between JSC NIAEP and JSC Rosenergoatom Concern for elaboration of the detailed design documentation for replacement of the cable facilities within implementation of the investment project on service life extension of the Kalinin NPP Unit 1.
36	27.09.2013	36	1. Concerning the decision making on the issue of approval of the auditor for LLC NIAEP-Servis with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
37	17.10.2013	37	1. Concerning the approval of the transaction covering services to the value of over five hundred (500) million rubles on conclusion of the additional agreement No. 1 to the contract No. 7763/13316 of June 5, 2013 for provision of engineering services between JSC NIAEP and JSC Atomstroyexport.
38	22.10.2013	38	1. Concerning the proposal to the sole shareholder of JSC NIAEP – Open Joint-Stock Company Atomenergoprom – on making the decision on approval of the Charter of JSC NIAEP in new wording.
39	22.10.2013	39	1. Concerning the approval of the transaction covering services to the value of over five hundred (500) million rubles on conclusion of the contract between JSC NIAEP and JSC Atomstroyexport.
40	23.10.2013	40	1. Concerning the approval of the 2013 budget of LLC VdMU with one hundred (100) percent of the charter capital belonging to JSC NIAEP.
41	15.11.2013	41	1. Concerning the proposal to the sole shareholder of JSC NIAEP – Open Joint-Stock Company Atomenergoprom – on making the decision on introduction of changes No. 2 to the Charter of JSC NIAEP.
42	22.11.2013	42	1. Concerning the approval of the transaction connected with disposal of immovable property by JSC NIAEP.
43	20.12.2013	43	1. Concerning determination of the conditions of the JSC NIAEP President labor contract.
44	25.12.2013	44	1. Concerning determination of the price of purchased services within the interested-party transaction connected with conclusion of the voluntary medical insurance contract between JSC NIAEP and JSC SOGAZ. 2. Concerning the approval of the interested-party transaction connected with conclusion of the voluntary medical insurance contract between JSC NIAEP and JSC SOGAZ. 3. Concerning determination of the price of purchased services within the interested-party transaction connected with conclusion of the accident and illness insurance contract between JSC NIAEP and JSC SOGAZ. 4. Concerning the approval of the interested-party transaction connected with conclusion of the accident and illness insurance contract between JSC NIAEP and JSC SOGAZ.
45	26.12.2013	45	1. Concerning the decision making on participation of JSC NIAEP in the Limited Liability Company Trest Rosspetsenergomontazh (LLC Trest RosSEM). Concerning the decision making on the issue related to the field of expertise of the general shareholder meeting (sole shareholder) of LLC SMU No.1 with one hundred (100) percent of the charter capital belonging to JSC NIAEP.

Annex No. 2.
Information on Compliance with Corporate Code of Conduct in NIAEP JSC

As a result of the performed analysis, it is stated that the existing activity practice of administrative bodies mostly complies with Corporate Code of Conduct as for main positions. Some provisions of the Code cannot be applied because of availability of one shareholder.

No	Provision of Corporate Code of Conduct	Complied/ Not complied	Remarks
General Shareholders Meeting			
1.	Notification of the shareholders on summon of General Shareholders Meeting at least 30 days prior to its conduction despite of the issues of agenda, if otherwise not stipulated by the law	Not applicable	Availability of the sole shareholder governs specific decision-making
2.	Possibility for the shareholders to get aware of list of people having a right to participate in the General Shareholders Meetings beginning from the day of notification on General Shareholders Meeting to the closing day of attendee General Shareholders Meeting, and in case of absentee meeting, until the end of acceptance of voting bulletins	Not applicable	Availability of the sole shareholder results in specific decision-making
3.	Possibility for the shareholders to recognize the information (materials) to be provided with when preparing for the General Shareholders Meeting by electronic means, including by Internet	Complied	
4.	Possibility for the shareholder to include an item in the agenda of the General Shareholders Meeting or to request for summon of the General Shareholders Meeting without providing with an extract from the shareholder register, if his shares rights are subject to be recorded in the recording system of the shareholder register, and in case his shares right is recorded at the depot account, it is sufficient to get extract from depot account to execute the said rights.	Complied	
5.	Availability of requirement in the Charter and other internal documents of the Joint Stock Company for mandatory attendance of sole executive body, members of Management Board, members of Board of Directors, members of auditing committee, and auditor of the Joint Stock Company at the General Shareholders Meeting	Not applicable	Availability of the sole shareholder results in specific decision-making
6.	Mandatory attendance of the candidates at the General Shareholders Meeting when considering election of the members of the Board of Directors, sole executive body, Members of Management Board, members of Auditing committee, as well as when approving an auditor of the Joint Stock Company	Not applicable	Availability of the sole shareholder results in specific decision-making
7.	Availability in the internal documents of the Joint Stock Company of attendees' registration procedure in respect of General Shareholders Meeting	Not applicable	Availability of the sole shareholder results in specific decision-making
Board of Directors			
8.	Availability of the right of the Board of Directors in the JSC Charter to approve annually financial and economic plan of the Joint Stock Company	Complied	Article 13, clause 13.2, sub-clause 33 of JSC Charter
9.	Availability of procedure of risk management in JSC approved by the Board of Directors	Not complied	NIAEP JSC and CJSC ASE collective decree 17.12.2013 No. 40/1225-P/007/446-P put in operation "Regulations for processes of "Rosatom"State corporation and its organisations". risk control
10.	Availability of the right of the Board of Directors in the JSC Charter to adopt a decision on suspension of powers of sole executive body to be appointed by General Shareholders Meeting	Complied	Article 13, clause 13.2, sub-clause 28 of JSC Charter
11.	Availability of the right of the Board of Directors in the JSC Charter to set requirements to qualification and amount of remuneration for sole executive body, members of the Management Board, and Heads of the Main Departments of the JSC	Complied	Article 14, clause 14.7 of JSC Charter
12.	Availability of the right of the Board of Directors to approve terms and conditions of the Agreements with single-person executive body and members of Management Board	Complied	Article 14, clause 14.7 of JSC Charter
13.	Availability in the Charter or internal documents of JSC of a requirement that when approving terms and conditions of the Agreements with sole executive body (managing organization or managing director) and members of Management Board, votes of members of Board of Directors being a sole executive body and members of Management Board are not taken into account when counting voices	Not complied	
14.	Availability in the Board of Directors of the JSC at least 3 independent directors corresponding to requirements of Corporate Code of conduct	Not complied	Board of Directors is determined upon a decision of sole shareholder of the Company

No	Provision of Corporate Code of Conduct	Complied/ Not complied	Remarks
15.	Absence in the Board of Directors of Joint Stock Company of persons guilty of economic crimes or crimes against state authorities, interests of public service and service in the local self-government authorities, or those to whom administrative penalties for entrepreneurship or financial, fiscal or security market infringements were applied	Complied	Applied in practice
16.	Absence in the Board of Directors of Joint Stock Company of persons being a participant, general director (managing director), member of management board or employee of legal entity competing with Joint Stock Company	Complied	Applied in practice
17.	Availability in the Charter of Joint Stock Company a requirement to elect Board of Directors by cumulative voting	Not applicable	Due to availability of sole shareholder
18.	Availability in the internal documents of the Joint Stock Company of a duty of members of Board of Directors to retain from actions that lead or may lead to a conflict of interests between them and Joint Stock Company, and in case of conflict, a duty to disclose information about this conflict to Board of Directors	Complied	Sub-clause 3.5 of Regulations on Board of Directors of the Company
19.	Availability in the internal documents of the Joint Stock Company of a duty of Board of Directors to notify in written about intention to enter into transactions with securities of Joint Stock Company which Board of Directors they are members of, or its subsidiaries or affiliates, as well as to disclose information about transactions with securities which they have made.	Not applicable	Members of Board of Directors do not own Company's shares
20.	Availability in the internal documents of the Joint Stock Company of a requirement to conduct meetings of Board of Directors at least once per six weeks	Complied	Sub-clause 5.1 of Regulations on Board of Directors of the Company
21.	Conduction of meetings of Board of Directors of the Joint Stock Company during a year of Annual Report of the Company at least once per six weeks	Complied	Applied in practice
22.	Availability in the internal documents of the Joint Stock Company of a procedure to conduct meetings of Board of Directors	Complied	Sub-clauses 13.4, 13.5, Article 13 of the Company's Charter; Section 7 of Regulations on Board of Directors of the Company
23.	Availability in the internal documents of the Joint Stock Company of a provision about necessity to approve transactions in amount of 10 and more per cents of assets of the Company by Board of Directors, except for transactions made in the course of routine business activity	Not applicable	By the Company's Charter
24.	Availability in the internal documents of the Joint Stock Company of a right of the Board of Directors members to receive from executive bodies and heads of main departments of the Company an information necessary to fulfill its functions and responsibilities for failure to submit such information	Complied	This subject is not under the competence of the Board of Directors. According to Regulations for JSC NIAEP and State Corporation ROSATOM interaction, such transactions take place after Curator's approval
25.	Availability of Strategic Planning Committee of Board of Directors or transferring functions of the said committee to other committee (except for audit committee and personnel and remuneration committee)	Not complied	Sub-clause 1, clause 3.1 of Regulation on Board of Directors of the Company
26.	Availability of committee of Board of Directors (audit committee) that recommends an auditor of Joint Stock Company to the Board of Directors and interacts with it and internal audit commission	Not complied	Currently the committees of Board of Directors are not established
27.	Availability of only independent and non-executive directors in the audit committee	Not applicable	Currently the committees of Board of Directors are not established
28.	Management of audit committee by independent director	Not applicable	Currently an audit committee is not established
29.	Availability in the internal documents of the Joint Stock Company of an access right for all members of audit committee to all documents and information of Joint Stock Company on the basis of non-disclosure of confidential information	Not applicable	Currently an audit committee is not established
30.	Set-up of the committee of Board of Directors (Personnel and Remuneration Committee) whose duty is to determine the criteria for Board of Directors candidates selection and work out policy of Joint Stock Company in view of remuneration	Not complied	Currently an audit committee is not established
31.	Management of Personnel and Remuneration Committee by an independent director	Not applicable	Currently the committees of Board of Directors are not established
32.	Absence of officials of the Joint Stock Company in the Personnel and Remuneration Committee	Not applicable	Currently the Personnel and Remuneration Committee is not established
33.	Set-up of Risks Committee of Board of Directors or transferring functions of this committee to other committee (except for audit committee and Personnel and Remuneration Committee)	Not complied	Currently the Personnel and Remuneration Committee is not established

No	Provision of Corporate Code of Conduct	Complied/ Not complied	Remarks
34.	Set-up of the committee of Board of Directors for settlement of corporative conflicts or transferring duties of this committee to other committee (except for audit committee and Personnel and Remuneration Committee)	Not complied	Expert Council for Risk Control on Power Units under Construction was formed in the JSC NIAEP as per the JSC NIAEP Decree No. 40/7-P dated 11.01.2013
35.	Absence of officials of Joint Stock Company in the committee for settlement of corporate conflicts	Not applicable	Currently the committees of Board of Directors are not established
36.	Management of the committee for settlement of corporate conflicts by independent director	Not applicable	Currently the committee for settlement of corporate conflicts is not established
37.	Availability of the internal documents approved by Board of Directors of Joint Stock Company which stipulate a procedure of forming and activities of committees of Board of Directors	Not complied	Currently the committee for settlement of corporate conflicts is not established
38.	Availability in the Charter of the Joint Stock Company of a procedure how to determine a quorum of Board of Directors which enables to provide mandatory participation of independent directors in the meetings of Board of Directors	Not complied	Currently the committees of Board of Directors are not established
Executive bodies			
39.	Availability of collective executive body (of management) of the Joint Stock Company	Not complied	Clause 11.1 of the Company's Charter stipulates only availability of sole executive body of the Company, namely president
40.	Availability in the Charter or internal documents of the Joint Stock Company of a provision about necessity to approve by management board of real estate transactions and receiving of loans, if transactions hereto are not considered as large-scale transactions and their closing does not refer to routine business activity of the Joint Stock Company	Not applicable	The Company's Charter does not stipulate availability of collective executive body
41.	Availability in the internal documents of the Joint Stock Company of a procedure for approving operations beyond financial and economic plan of the Joint Stock Company	Not complied	
42.	Absence in the executive bodies of persons being participants, general director (executive manager), member of management board or employee of the legal entity competing with the Joint Stock Company	Complied	Applied in practice
43.	Absence in the executive bodies of the Joint Stock Company of the persons guilty in economic crimes or crimes against state authorities, interests of public service and service in the local self-government authorities, or those to whom administrative penalties for entrepreneurship or financial, fiscal or security market infringements were applied. If functions of the sole executive body are fulfilled by managing organization or by managing director, it corresponds to general director and members of managing organization or managing director subject to requirements to general director and members of management board of the Joint Stock Company	Complied	Applied in practice
44.	Availability in the Charter or internal documents of the Joint Stock Company of a prohibition for the managing organization (managing director) to perform similar functions in the competing company, and to have property relations with the Joint Stock Company in addition to rendering of services by managing organization (managing director)	Not complied	
45.	Availability in the internal documents of the Joint Stock Company of a duty of executive bodies to restrain from actions that lead or may lead to a conflict between their interests and interests of the Joint Stock Company, and in case of the conflict, a duty to notify Board of Directors	Complied	Article 14, clause 14.8 of the Company's Charter
46.	Availability in the Charter and internal documents of the Joint Stock Company the criteria to select the managing organization (managing director)	Not complied	
47.	Representation by the executive bodies of the Joint Stock Company of monthly Reports on the work done to Board of Directors	Complied	Article 13, clause 13.2, sub-clause 32 of the Company's Charter
48.	Stipulating of a responsibility for infringement of provisions on use of confidential and insider information in the agreements entered into by the Joint Stock Company with general director (managing organization, managing director) and members of management board	Complied	
Secretary of the Company			
49.	Availability in the Joint Stock Company of special official (Secretary of the Company) in purpose of providing compliance by the bodies and officials of the Joint Stock Company with procedural formalities which guarantee execution of rights and legal interests of the Company shareholders	Complied	The Company has a Secretary of Board of Directors
50.	Availability in the Charter or internal documents of the Joint Stock Company of the Company's Secretary appointment procedure and duties of the Company's Secretary	Complied	Clause 4.2 of Regulations on Board of Directors of the Company

No	Provision of Corporate Code of Conduct	Complied/ Not complied	Remarks
51.	Availability in the Charter of the Joint Stock Company of the requirements to a candidate of the Company's Secretary	Complied	Clause 4.7 of Regulations on Board of Directors of the Company
Material Corporate Actions			
52.	Availability in the Charter or internal documents of the Joint Stock Company of a requirement to approve large-scale transaction prior to its closing	Complied	Article 12, clause 12.1, sub-clause 15, Article 13, clause 13.2, sub-clause 15 of the Company's Charter
53.	Mandatory attraction of an independent appraiser for assessment of market value of the property being a subject of the large-scale transaction	Not complied	Assessment is performed in accordance with Articles 77-78 of Federal Law on Joint Stock Companies
54.	Availability in the Charter of a prohibition for taking any action, when purchasing major stock of shares of the Joint Stock Company (merger), aimed at the protection of interests of executive bodies (member of these bodies) and members of Board of Directors of the Company, as well as shareholders making position of other shareholders worse in comparison with the present position (in particular, prohibition to take a resolution by Board of Directors before the end of expected term of purchasing shares on emission of additional shares, on emission of securities transferred to shares, or securities granting the right to purchase shares of the Company, even if the Charter gives him the right for such decision)	Not applicable	Sole shareholder in the Company
55.	Availability in the charter of the Joint Stock Company of a requirement on mandatory attraction of an independent appraiser for assessment of current market value of shares and possible variation of their market value as a result of the merger	Complied	Article 13, clause 13.2, sub-clause 5 of the Company's Charter
56.	Absence in the Charter of the Joint Stock Company of the liberation for the buyer from obligation to suggest to shareholders selling their ordinary shares of the Company (issuable securities transferred to ordinary shares) during merger	Not applicable	
57.	Availability in the Charter or internal documents of the Joint Stock Company of a requirement on mandatory attraction of an independent appraiser for determining ratio of conversion of shares while reorganization	Not complied	
Disclosure of information			
58.	Availability of the internal document approved by Board of Directors determining rules and approaches of the Joint Stock Company regarding disclosure of information (Regulation for information policy)	Not complied	The Company discloses information in accordance with acting law on Joint Stock Companies, requirements of order FFMS d/d, 04.10.2011, No. 11-46/pz-n6
59.	Availability in the internal documents of the Joint Stock Company of a requirement on disclosure of information, about purposes of shares disposal, about persons, who intend to purchase shares under distribution, including the major stock of shares, and whether senior officials of the Joint Stock Company will participate in the acquisition of the shares under distribution	Not applicable	100 % of the Company's shares belong to the sole shareholder
60.	Availability in the internal documents of the Joint Stock Company of a list of information, documents, and materials to be submitted to shareholders for resolution of issues being put into agenda of General Shareholders Meeting	Not applicable	100 % of the Company's shares belong to the sole shareholder
61.	Availability of web-site in Internet which belongs to the Company and regular disclosure of information about Joint Stock Company at this web-site	Complied	Page address on web-site: http://www.e-disclosure.ru/portal/company.aspx?id=19054 Web-site of NIAEP JSC: http://www.niaep.ru
62.	Availability in the internal documents of the Joint Stock Company of a requirement on disclosure of information about transactions of the Joint Stock Companies with persons referred pursuant to the Charter to senior officials of the Joint Stock Company, as well as on transactions of the Joint Stock Company with organizations, where 20 or more percents of the equity capital belong to senior officials of the Company or those who such persons can materially influence on	Not complied	
63.	Availability in the internal documents of the Joint Stock Company of a requirement on disclosing of information about all transactions that can affect market value of the Company's shares	Not applicable	100 % of the Company's shares belong to the sole shareholder
64.	Availability of the internal document approved by Board of Directors on use of material information about activity of the Joint Stock Company, shares and other securities of the Company and transactions with them, which is not public and disclosing of that information may materially affect the market value of shares and other securities of the Joint Stock Company	Not applicable	

No	Provision of Corporate Code of Conduct	Complied/ Not complied	Remarks
Control of financial and economic activity			
65.	Availability of the procedures approved by Board of Directors for internal control for financial and economic activity of the Joint Stock Company	Not complied	The Board of Directors did not approve internal control procedures
66.	Availability of special department of the Joint Stock Company providing compliance with internal control procedures (internal auditing service)	Complied	Special department – Internal Control and Audit Department is established in the Company
67.	Availability in the internal documents of the Joint Stock Company of a requirement on determining a structure and content of internal audit department of the Joint Stock Company by Board of Directors	Complied	Provision on Internal Control and Audit Department
68.	Absence in the Internal Audit Department of persons guilty in economic crimes or crimes against state authorities, interests of public service and service in the local self-government authorities, or those to whom administrative penalties for entrepreneurship or financial, fiscal or security market infringements were applied	Complied	Applied in practice
69.	Absence in the Internal Audit Department of persons being members of executive bodies, as well as persons being participants, general director (managing director), member of management board or employee of the legal entity competing with the Joint Stock Company	Complied	Applied in practice
70.	Availability in the internal documents of Joint Stock Company of a term for representing to the Internal Audit Department of documents and materials for assessment of financial and economic operation, as well as responsibility of officials of the Joint Stock Company for failure to represent documents and materials within the determined term	Complied	Applied in practice
71.	Availability in the internal documents of the Joint Stock Company of a duty of Internal Audit Department to notify about the revealed infringements to audit committee, and in case of its absence, to Board of Directors of the Joint Stock Company	Not complied	
72.	Availability in the Charter of the Joint Stock Company of a requirement on preliminary assessment by the Internal Audit Department of reasonability of operations not stipulated by financial plan of the Joint Stock Company (non-standard operations)	Not complied	
73.	Availability in the internal documents of the joint Stock Company of a procedure to approve a non-standard operation by Board of Directors	Not complied	
74.	Availability of the internal document approved by Board of Directors determining a procedure of financial and economic activity checks by the internal audit committee	Complied	Section 7 of Provision on audit commission of the Company
75.	Assessment by audit committee of audit statement prior to its presentation to the shareholders at the General Shareholders Meeting	Not applicable	Currently the committees of Board of Directors are not established
Dividends			
76.	Availability of the internal document approved by Board of Directors which should be used by Board of Directors when making decisions on dividends amount (Regulation on dividend policy)	Not applicable	The Company has no approved provision on dividend policy
77.	Availability in the Regulation on dividend policy of a procedure for determination of minimal share of net profit of the Joint Stock Company for dividends payment, and conditions, when privileged shares dividends are not paid or paid partially, and which size is determined in the Charter of Joint Stock Company	Not applicable	The Company has no approved dividend policy
78.	Publication of information on dividend policy of the Joint Stock Company and amendments in the periodicals stipulated by the Charter of the Joint Stock Company for publication of information on General Shareholders Meetings, and publication of information hereto on the web-site of the Joint Stock Company in Internet	Not applicable	The Company has no approved dividend policy

Annex No. 3.
Balance Sheet as of 2013

Balance sheet
as of 31 December, 2013

		Codes		
	OMB No.	0710001		
	Date (day, month, year)	31	12	2013
Organization "ATOMENERGOPROEKT" NIZHNY NOVGOROD ENGINEERING COMPANY, OJSC	RNNBO	08841271		
Individual Taxpayer Number	VAT ID	5260214123		
Business profile: Architecture, industrial design, and engineering and construction	OKVED	74.20.1		
Legal form of organization / form of ownership: Open joint-stock company / Federal ownership	OKOPF/Russian National Classifier of Ownership Patterns	12247	12	
Unit of measurement: RUR thous	All-Russia Classifier of Measurement Units	384		
Location (address) ,,,,,,,,,				

Clarifications	Line item	Code	as of 31 December, 2013	2012	2011
	ASSET				
	I. FIXED ASSETS				
7.1	Intangible assets	1110	17 087	1 929	1 293
	Results of explorations and developments	1120	-	-	-
	Non-financial development assets	1130	-	-	-
	Financial development assets	1140	-	-	-
7.3	PP&E (property, plant and equipment)	1150	945 050	876 774	835 050
7.3	Buildings, machines, equipment, and other PP&E	1151	859 942	839 455	776 966
7.3	Unaccomplished capital investments	1152	85 108	31 212	47 907
	Advance payments which are paid to capital construction suppliers and contractors and suppliers of permanent facilities	1153	-	6 107	10 177
7.3	Income-bearing investments in tangible assets	1160	466 756	447 585	412 380
7.5	Financial investments	1170	8 617	8 702	8 802
7.18	Deffered tax assets	1180	217 742	244 460	149 262
7.4	Other fixed assets	1190	4 975 104	7 039 566	6 216 898
	Total for Section I	1100	6 630 356	8 619 016	7 623 685
	II. CURRENT ASSETS				
7.6	Inventory	1210	2 885 717	2 335 285	2 643 610
7.6	Raw materials, materials, and other similar values	1211	1 262 868	1 191 361	1 017 289
7.6	Expenditures for work in progress	1212	62 621	9 078	26 794
7.6	Finished-products and goods for resale	1213	1 560 228	1 134 846	1 599 527
	Goods delivered	1214	-	-	-
	Expenses of future periods	1215	-	-	-
	Other inventories and expenditures	1216	-	-	-
	Input value added tax	1220	152 782	153 456	302 483
7.9	Accounts receivable	1230	47 690 160	43 813 195	30 226 205
7.9	Long-term receivables – total	1231	15 981 473	26 720 866	14 686 667
7.9	Settlements with purchasers and clients	1232	8 310	7 712	8 174
7.9	Advances paid	1233	546 243	1 484 494	145 105
7.9	Other receivables	1234	15 426 920	25 228 660	14 533 388
7.9	Current receivables - total	1235	31 708 687	17 092 329	15 539 538
7.9	Settlements with purchasers and clients	1236	9 299 242	5 382 143	4 866 749
7.9	Advances paid	1237	5 933 406	7 675 840	9 383 653
7.9	Other receivables	1238	15 930 463	3 927 034	975 019
7.20	Accrued revenue not called for payment	1239	545 576	107 312	314 117
	Financial investments	1240	21 023 277	18 200 000	30 320 000
7.8	Cash	1250	1 245 381	2 202 662	3 836 217
	Other current assets	1260	6 270 532	3 024 722	3 764 168
	Total for section II	1200	79 267 849	69 729 320	71 092 683
	STATEMENT	1600	85 898 205	78 348 336	78 716 368

Форма 0710001 с.2

Clarifications	Line item	Code	as of 31 December, 2013	2012	2011
	LIABILITIES				
	III. EQUITY AND RESERVES, TARGET FINANCING				
	Equity capital (joint-stock capital, legal capital, contributions of partners)	1310	500 002	500 002	500 002
	Shares repurchased	1320	-	-	-
	Reapprisal of fixed assets	1340	-	-	-
	Restitutable shares reserve (without reapprisal)	1350	(101)	286	103
	Surplus	1360	25 000	25 000	25 000
	Surplus funds formed in accordance with the law	1361	-	-	-
	Surplus funds formed in accordance with c constitutive documents	1362	25 000	25 000	25 000
	Retained Profit (uncovered loss)	1370	3 763 239	3 098 309	2 327 501
	Total for section III	1300	4 288 140	3 623 597	2 852 606
	IV. LONG-TERM LIABILITIES				
	Loan proceeds	1410	-	-	-
	Deferred tax liabilities	1420	-	-	-
	Provisions for contingent liabilities	1430	-	-	-
7.12	Other liabilities	1450	28 638 079	44 267 316	39 997 447
	Total for Section IV	1400	28 638 079	44 267 316	39 997 447
	V. CURRENT LIABILITIES				
	Loan proceeds	1510	-	-	-
7.12	Accounts payable	1520	51 153 461	29 267 415	34 766 388
7.12	Suppliers and contractors	1521	8 173 269	8 690 178	5 392 070
7.12	Advances received	1522	40 982 442	19 662 985	24 529 960
7.12	Payables to employees	1523	122 574	94 822	40 193
	Payables to State non-budgetary funds	1524	39 556	29 529	4 704
7.14	Tax liabilities	1525	132 402	235 601	4 085 938
	Other payables	1526	1 703 218	554 300	713 523
	Income of future periods	1530	-	-	-
7.17	Estimated liabilities	1540	891 769	1 010 054	757 788
	Settlements with founders as for equity payments (legal capital)	1545			
7.12	Other liabilities	1550	926 756	179 954	342 139
	Total for sectionV	1500	52 971 986	30 457 423	35 866 315
	STATEMENT	1700	85 898 205	78 348 336	78 716 368

Chief executive officer — Sherbokin Nikolai Pavlovich (Print full name) — Chief accountant — (Signature) — Samogorodskaya Elena Vladimirovna (Print full name)

Cash Flow Statement

for January – December, 2013

		Codes	
		0710004	
		31 12	2013
Company	"ATOMENERGOPROEKT" NIZHNY NOVGOROD ENGINEERING COMPANY, OJSC	08841271	
Individual Taxpayer Identification Number	Acc. to Russian National Classifier of Economic Activity (OKVED)	5260214123	
Type of Economic Activity		74.20.1	
Form of Incorporation/Form of Ownership: Open Joint-Stock Company / Federal Ownership		12247	12
Unit of Measurement: in Thousand Rubles		384	

Index Name	Code	For January – December, 2013	For January – December, 2012
Cash Flow from Operating Activity			
Income – Total	4110	40 371 354	38 386 727
Including: Sales of Products, Goods, Works, and Services	4111	39 277 171	37 270 801
Lease Payments, License Payments, Royalty, Fees, and Other Similar Payments	4112	46 828	80 223
Resale of Financial Investments	4113	-	-
	4114	-	-
Other Income	4119	1 047 355	1 035 703
Payments – Total	4120	(37 814 714)	(52 079 084)
Including: to Suppliers (Contractors) for Stock, Materials, Works, and Services	4121	(31 912 290)	(41 681 388)
in Connection with Payment for Labor of Employees	4122	(3 753 028)	(3 082 967)
interests on Liability	4123	-	-
income Tax	4124	(654 235)	(515 581)
	4125	-	-
Other Payments	4129	(1 495 161)	(6 799 148)
Balance of Cash Flow from Operating Activities	4100	2 556 640	(13 692 357)
Cash Flow from Investment Activities Income – Total	4210	28 481 893	46 533 271
Including: from Sale of Fixed Assets (Except for Financial Investments)	4211	3 411	178
from Sale of Shares (Ownership Interests) in Other	4212	-	-
from Repayment of Loans, from Sale of Debt Securities (Receivables Related to Third Persons)	4213	27 700 000	45 620 000
from Dividends, Interests on Debt Financial Investments, and Similar Income from Shares in Capital of Other Organizations	4214	778 482	913 093
	4215	-	-
Other Income	4219	-	-
Payments – Total	4220	(30 948 277)	(33 797 010)
Including: in Connection with Purchase, Establishment, Modernization, Reconstruction, and Preparation for Use of Fixed Assets	4221	(376 607)	(297 010)
in Connection with Purchase of Shares (Ownership Interests) in Other Organizations	4222	(71 670)	-
in Connection with Purchase of Debt Securities (Receivables Related to Third Persons), Granting of Loans to Third Persons	4223	(30 500 000)	(33 500 000)
Interests on Liabilities Included in Investment Asset Value	4224	-	-
	4225	-	-
Other Payments	4229	-	-
Balance of Cash Flow from Investment Activities	4200	(2 466 384)	12 736 261

Index Name	Code	For January – December, 2013	For January – December, 2012
Cash Flow from Financial Activity			
Income – Total	4310	-	-
Including: Borrowing	4311	-	-
Cash Deposits of Owners (Members)	4312	-	-
Share Issue, Membership Interest Increase	4313	-	-
Issue of Obligations, Promissory Notes, and Other Debt Securities, etc.	4314	-	-
	4315	-	-
Other Income	4319	-	-
Payments – Total	4320	(1 047 587)	(677 156)
Including: to Owners (Members) in Connection with Repurchase of Shares (Membership Interests) of the Company or Cessation of Membership	4321	-	-
for Payout of Dividends and Other Payments Within Appropriation of Profit to Owners (Members)	4322	(785 794)	(585 239)
in Connection with Discharge (Repurchase) of Bills and Other Debt Securities, Repayment of Loans	4323	-	-
	4324	-	-
Other Payments	4329	(261 793)	(91 917)
Balance of Cash Flow from Financial Activity	4300	(1 047 587)	(677 156)
Balance of Cash Flow for the Reporting Period	4400	**(957 331)**	**(1 633 252)**
Opening Cash Balance	4450	**2 202 662**	**3 836 217**
Closing Cash Balance	4500	**1 245 381**	**2 202 662**
Effect of Exchange Rate Changes	4490	50	(303)

Chief executive officer [redacted] Shestopalov Nikolai Pavlovich (Print full name) Chief accountant (Signature) Samogorodskaya Elena Vladimirovna (Print full name)

Statement of Changes in Capital
for the Year 2013

			Codes
		OKUD	0710003
		Date (Number, Month, Year)	31 12 2013
Company	Joint-Stock Company NIZHNY NOVGOROD ENGINEERING COMPANY ATOMENERGOPROEKT	OKPO	08841271
Individual Taxpayer Identification Number		INN	5260214123
Type of Economic Activity	Activity in the Field of Architecture, Engineering and Design in Industry and Construction	OKVED	74.20.1
Form of Incorporation/Form of Ownership	Open Joint-Stock Company / Federal Ownership	OKFS	
Unit of Measurement: Thousand Rubles (Million Rubles)		OKFS)	384

1. Movement of Capital

Index Name	Code	Charter Capital	Treasury Shares	Added Capital	Surplus	Retained Surplus (Unrecovered Loss)	Total
Capital value as of December 31, 2011	3100	500 002		103	25 000	2 327 501	2 852 606
For 2012							
Capital increase – total:	3210			183		1 356 047	1 356 230
Including: Net Profit	3211					1 356 047	1 356 047
Revaluation of Assets	3212						
Income Assigned Directly to Capital Increase	3213			183			183
Additional Share Issue	3214						
Share Denomination Increase	3215						
Legal Entity Reorganization	3216						
Use of Field Reserves for Investments	3217						

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Index Name	Code	Charter Capital	Treasury Shares	Added Capital	Surplus	Retained Surplus (Unrecovered Loss)	Total
Capital decrease – total:	3220					(585 239)	(585 239)
Including: Loss	3221						
Revaluation of Assets	3222						
Expenses Assigned Directly to Capital Decrease	3223						
Share Denomination Decrease	3224						
Share Number Decrease	3225						
Legal Entity Reorganization	3226						
Dividends	3227					(585 239)	(585 239)
Change in Added Capital	3230						
Change in Surplus	3240						
Capital Value as of December 31, 2012	3200	500 002		286	25 000	3 098 309	3 623 597
For 2013							
Capital increase – total:	3310					1 450 723	1 450 723
Including: Net Profit	3311					1 450 723	1 450 723
Revaluation of Assets	3312						
Income Assigned Directly to Capital Increase	3313						
Additional Share Issue	3314						
Share Denomination Increase	3315						
Legal Entity Reorganization	3316						
Use of Field Reserves for Investments	3317						
Capital decrease – total:	3320			(387)		(785 793)	(786 180)
Including: Loss	3321						
Revaluation of Assets	3322						
Expenses Assigned Directly to Capital Decrease	3323			(387)			(387)
Share Denomination Decrease	3324						
Share Number Decrease	3325						
Legal Entity Reorganization	3326						
Dividends	3327					(785 793)	(785 793)
Change in Added Capital	3330						
Change in Surplus	3340						
Capital Value as of December 31, 2013	3300	500 002		(101)	25 000	3 763 239	4 288 140

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2. Adjustments in Connection with Changes in Accounting Principle and Correction of Errors

Index Name	Code	As of December 31, 2011	Changes in Capital for 2012		As of December 31, 2012
			Due to Net Profit (Loss)	Due to Other Factors	
Capital – Total					
Prior to Adjustments	3400	2 863 349	770 633	183	3 634 165
Adjustment Due to:					
Change in Accounting Principle	3410	(10 743)	175		(10 568)
Correction of Errors	3420				
After Adjustments	3500	2 852 606	770 808	183	3 623 597
Including:					
Retained Surplus (Unrecovered Loss):					
Prior to Adjustments	3401	2 338 244	770 633		3 108 877
Adjustment Due to:					
Change in Accounting Principle	3411	(10743)	175		(10 568)
Correction of Errors	3421				
After Adjustments	3501	2 327 501	770 808		3 098 309
Other Adjusted Items of Capital (by Items)					
Prior to Adjustments	3402	525 105		183	525 288
Adjustment Due to:					
Change in Accounting Principle	3412				
Correction of Errors	3422				
After Adjustments	3502	525 105		183	525 288

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3. Net Assets

Index Name	Code	As of December 31, 2011	As of December 31, 2012	As of December 31, 2013
Net Assets	3600	4 288 140	3 623 597	2 852 606

Head (Signature) N.P. Shestakin (Full name)

February 18, 2014

Chief accountant (Signature) E.V. Samogorodskaya (Full name)

Balance sheet

as of 31 December, 2013

			Code		
		OMB No.	0710002		
		Date (day, month, year)	31	12	2013
Organization	"ATOMENERGOPROEKT" NIZHNY NOVGOROD ENGINEERING COMPANY, OJSC	RNNBO	08841271		
Individual Taxpayer Number		VAT ID	5260214123		
Business profile	Architecture, industrial design, and engineering and construction	OKVED	74.20.1		
Legal form of organization / form of ownership	Open joint-stock company / Federal ownership	OKOPF/Russian National Classifier of Ownership Patterns	12247	12	
Unit of measurement: RUR thous		All-Russia Classifier of Measurement Units	384		

Clarifications	Line item	Code	Jan.-Dec. of 2013	Jan.-Dec. of 2012
7.19	Revenue	2110	37 518 429	38 512 419
	D T.H.			
	Construction and installation works		15 054 639	14 485 121
	Wholesale and retail trade		10 764 389	12 934 272
	Designing works		7 657 928	6 181 155
7.19	Cost of sales	2120	(33 854 638)	(35 363 553)
	D T.H.			
	Construction and installation works		(14 640 742)	(14 406 703)
	Wholesale and retail trade		(10 235 093)	(12 267 186)
	Designing works		(6 017 104)	(4 690 500)
	Gross profit (losses)	2100	3 663 791	3 148 866
	Selling expenses	2210	(518 388)	(617 878)
	Administrative expenses	2220	(1 714 449)	(1 438 900)
	Profit (loss) from sales	2200	1 430 954	1 092 088
7.21	Participation capital	2310	7 985	6 651
7.21	Interest receivable	2320	895 252	997 146
	Interest payable	2330	( )	( )
7.21	Other income	2340	501 802	426 722
7.21	Miscellaneous expenses	2350	(897 728)	(719 443)
	Profit before taxes	**2300**	**1 938 265**	**1 803 164**
7.18	Current income tax	2410	(426 729)	(545 023)
7.18	Including permanent tax liabilities (assets)	2421	(67 883)	(89 421)
7.18	Changing of deferred tax liabilities	2430	(87 577)	34 023
7.18	Changing of tax assets	2450	58 770	61 175
	Miscellaneous	2460	(72 051)	2 708
	Reallocation of profits tax within tax consolidated group	2465	40 046	
	Net profit (loss)	**2400**	**1 450 724**	**1 356 047**

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Clarifications	Line item	Code	Jan.-Dec. of 2013	Jan.-Dec. of 2012
	FOR REFERENCE surplus on revaluation of fixed assets not included into net profit (loss) of the period	2510		
	Result of other operations not included into net profit (loss) of the period	2520	(387)	286
	Gross financial result of the period *	2500	1 450 337	1 356 333
7.22	base profit (loss) rouble per share	2900	2,9	2,71
	diluted profit (loss) per share	2910		

Head (Signature) N.P. Sheshokin (Full name)

March 28, 2014

Chief accountant (Signature) E.V. Samogorodskaya (Full name)

Annex No. 4.
Auditor's Report confirming authenticity of annual statements

ФБК
PKF Accountants & business advisers

Audit Report

To shareholders of
Open Joint Stock Company
"NIZHNY NOVGOROD ENGINEERING COMPANY
"ATOMENERGOPROEKT"

Auditee

Name:

Open Joint Stock Company NIZHNY NOVGOROD ENGINEERING COMPANY "ATOMENERGOPROEKT" (further in the text, NIAEP JSC).

Place of location:

603006, Russian Federation, Nizhny Novgorod, pl. Svobody, 3.

State registration:

Registered by Nizhny Novgorod Inspection of Federal Tax Service of Russia (Nizhny Novgorod, 18, December 2007), registration certificate: series 52 No. 003548218 and included into Unified State Register of Legal Entities on 18 December, 2007 under principal number of registration entry 1075260029240.

Auditor

Name:

Limited liability company "Financial and bookkeeping advisor" (FBK LLC)

Place of location:

101990, Moscow, ul. Myasnitskaya, 44/1, bld. 2AB.

State registration:

Registered by Moscow Chamber of Registration on 5 November, 1993, registration certificate: series YuZ 3 No. 484 583 RP and included into Unified State Register of Legal Entities on 24 July, 2002 under principal number of registration entry 1027700058286.

Information about self-regulatory organization of auditors:

Non-profit partnership "Moscow Audit Chamber".

Number in the register of self-regulatory organizations of auditors:

Certificate of membership in non-profit partnership "Moscow Audit Chamber" No. 5353, ORNZ-10201039470.

We audited the attached accounting statements of NIAEP JSC consisting of balance sheet as of December 31, 2013, Profit and Loss Statement, statement of changes in equity, and cash flow statement for 2013, as well as explanatory notes to accounting statements for 2013.

14.03.14

NIAEP JSC
Auditor Report
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ФБК
PKF Accountants & business advisers

Responsibility of auditee for accounting statements

Management of auditee is responsible for execution and accuracy of the above accounting statements in accordance with the Russian accounting principles and for internal control system required for preparation of accounting statements without any material misstatements due to frauds and mistakes.

Responsibility of auditor

Our responsibility is related to expression of opinion about accounting statements accuracy based on audit performed by our company. We audited in accordance with federal standards of audit activities. These standards require compliance with the applied bona mores, as well as planning and audit in such 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 accounting statements indexes 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 accounting statements in order to select proper audit procedures (not to express an opinion about efficiency of internal control system). 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 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 accounting statements accuracy.

Opinion

According to our opinion the accounting statement represent (in all material respects) true financial position of NIAEP JSC as of December 31, 2013, results of its financial and economic activity and cash flow within 2013 in accordance with Russian Rules of Accounting Statements Preparation.

Vice-president of FBK LLC — A.V. Tikhonovsky, pursuant to power of attorney dtd 15.01.2013 No. 4/13

Date of auditor report

March 3, 2014

NIAEP JSC
Auditor Report
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Annex No. 5.
Report of Audit Commission

Report of Audit Commission
on results of financial and economic activity
and annual accounting (financial) statements
check for 2013

Moscow **May 8, 2014**

In accordance with decision of sole shareholder, "Atomenergoprom" JSC, d/d 04.04.2013 No. 31, following members of the Audit Commission of "NIZHNY NOVGOROD ENGINEERING COMPANY "Atomenergoproekt" (further in the text, Company) are elected:

Audit commission	Name	Post for the time of election
Chairman	Topilskaya Vera Evgenyevna	Head of accounting methodology department of "Rosatom" State corporation
Secretary	Pimenov Aleksey Aleksevich	Deputy Head of Directorate, Head of financial and economic and budget administration department of "Rosatom" State corporation
Member of commission	Samogorolskaya Elena Vladimirovna	Chief accountant of NIAEP JSC

The Audit Commission audited financial and economic activities of the Company for the period from 01.01.2013 to 31.12.2013 as per powers specified in Federal Law of 26.12.1995 No. 208-FZ "Concerning Joint Stock Companies", the Company Charter, and Provision on Company Audit Commission".

General information about Company:

Full name: Open Joint Stock Company "NIZHNY NOVGOROD ENGINEERING COMPANY "Atomenergoproekt".

Abbreviated company name: NIAEP JSC.

Registered address: Russian Federation, 603006, Nizhny Novgorod, pl. Svobody, No. 3.

Equity capital of the Company as of 31.12.2013 is equal to 500,001,877 (five hundred millions one thousand eight hundred and seventy seven) rubles.

Shareholding structure of the Company as of 31.12.2013: "Atomenergoprom" JSC is an owner of 100% voting shares.

As of 31.12.2013, the Company has 7 branches, 6 offices, and 3 subsidiary companies.

Core activities of the Company in accordance with the Charter are designing, engineering surveys, construction of buildings and structures, heat, nuclear, and other electric power stations, construction of hydraulic engineering structures, conclusion and execution of contracts at a level of intergovernmental agreements, and handling of nuclear waste.

Head of the Company in the period of audit was:

President - Limarenko Valery Igorevich.

Person responsible for accounting and financial reporting:

Chief accountant - Samogorodskaya Elena Vladimirovna.

Financial and economic activities of the Company for 2013 were audited using selective method (cameral method).

In the course of audit, Chairman of Audit Commission requested additional materials and documents.

On the basis of the audit, the Audit Commission in view of report of LLC FBK auditor on financial (accounting) reporting of the Company acknowledges the Annual Report, annual financial (accounting) statements, and results of financial and economic activities of the Company for the period from 01.01.2013 to 31.12.2013 inclusive.

Information on audit are presented in Annex No.1 "Report of audit commission on results of financial and economic activity and annual accounting (financial) statements check of NIZHNY NOVGOROD ENGINEERING COMPANY "Atomenergoproekt" JSC.

Principal conclusions based on the audit results:

1. NPM in 2013 shows growth from 2% to 3.51% due to increase of financial income.
2. Net asset value of the Company as of 31.12.2012 was 3 634 165 RUR thousands, equity capital of the Company was 500 002 RUR thousands, and it corresponds to the requirements on net asset - equity capital ratio specified in Federal Law of 26.12.1995 No. 208-FZ "Concerning Joint-Stock Companies" (as subsequently amended).
3. Property, liabilities, and capital of the Company are presented in the accounting statements of the Company on a reasonable basis and to the full extent.
4. As per Auditor report of FBK LLC, financial (accounting) statements of the Company give a true and fair view (in any material aspect) of its financial situation as of 31, December 2013 and results of its financial and business activities for the period from 01.01.2013 to 31.12.2013 inclusive.

5. According to opinion of Audit Commission, the accounting statements express reliably in any material aspect a financial situation of the Company as of December 31, 2013, results of its financial and business activities and cash flow

Chairman of Audit Commission	V.E Topilskaya
Members of Audit Commission:	A.A. Pimenov
	E.V. Samogorodskaya

Read and Understood:

President of NIAEP JSC	V.I. Limarenko
Chief accountant of NIAEP JSC	G.V. Samogorodskaya

Annex No. 6.
Conclusion of Internal Control and Audit

on accordance of public Report process organization to requirements of "Rosatom" State Corporation Public Report Policy and to Public Report local normative-regulatory documents of NIAEP JSC.

CONCLUSION

of internal check and audit department on results of internal audit of public accounting of NIAEP JSC for the year 2013

Internal audit of the preparation of 2013 public annual Report of JSC NIAEP has been held in accordance with the Regulations on internal audit of public annual accounting approved by the order No. 40/868-P/356 as per 27.09.2012 taking into account requirements of State Corporation "Rosatom" policy of the public Reporting, Standard of the enterprise "Preparation procedure for public annual Report for accounting period" (STP 10.01-11), basic provisions of Sustainability Reporting Guidance GRI (edition G4.0), International standard of integrated Reporting, series of AA1000 international standards on cooperation with the parties involved, and recommendations of RUIE (Russian Union of Industrialists and Entrepreneurs) for usage in the course of management and corporate nonfinancial Reporting.

Subject to the requirements of the standard of enterprise STP 10.01-11 the Company has developed local regulatory documents governing activity in public annual Reporting.

Upon the Order No. 803 dd. 09.09.2011 "On functional responsibility center of public Reporting" the Company has established a Committee on public Reporting of JSC NIAEP, a collective body to control public annual Reporting system. Chairman of Committee: Vladimir Kats, JSC NIAEP Senior Vice-President for Economic and Financial Affairs.

Investments management team of Planning and Economic Department of JSC NIAEP is responsible for preparation and promotion of public Report.

Participation of structural subdivisions in the preparation of Reports is regulated by new revision of Provision on interaction of structural subdivisions in the course of public disclosure of information in NIAEP JSC approved by Order No. 40/59-P d/d 31.01.2013, as well as by Regulations of public annual accounts of NIAEP JSC approved by Order No.40/1246-P/007/456-P d/d 19.12.2013.

The Regulations include the Matrix of responsibility and competences' distribution, which defines the main internal control process in the process of public Reporting development.

Concept of Public annual Report of JSC NIAEP for 2013 developed in accordance with Standard of the enterprise "Preparation procedure for public annual Report for accounting period" (STP 10.01-11) is approved by President of JSC NIAEP and agreed with Committee on Public accounts of Rosatom State Corporation (Protocol No.8 as per 18.12.2013). The Concept includes a Schedule for Report preparation, list of developed indicators and indices, planned events concerning the cooperation with the parties involved, including 4 dialogs and public hearings on Report draft.

The plan of actions for the preparation of the public annual Report of JSC "NIAEP" for 2013 has also been approved by the order of the President of the Company. The implementation of these activities and plans has been checked during the audit.

Development of the first version of the Report was completed as scheduled, on 08.04.2014. A public hearing on the draft of the public annual Report of JSC "NIAEP" for 2013 (Dialogue 144) was held on April 24, 2014.

There are significant differences between the public Report for 2013 and the Report for the previous year due to the increased promotion of the Report to stakeholders, the increase in the level of involvement of stakeholders in the dialogues of JSC "NIAEP", as well as the selection of priority of disclosed topics, which in the Report for 2013 are presented by innovation activities of the Integrated Company NIAEP-ASE and its strategy.

The new sections, containing a wealth of information about the original information systems and individual software tools embedded in the process of construction of complex engineering facilities, determined not only the direction of interaction with stakeholders, but also the requirements for internal audit of the Report in terms of assessment of adequacy, reliability and efficiency of internal control procedures in the process of generating the Report.

All activities stipulated in the Scheduled Plan had been implemented by the time of submission of the draft Report for approval.

The Report shows the performance indicators of the Integrated Company NIAEP-ASE. Accounting data and financial performance are presented for JSC "NIAEP". Information about the activities of subsidiaries and affiliates (SA) is presented only in the field of personnel management.

Audit results show that proper interaction with stakeholders was ensured in the process of preparing the public Report for 2013. Order No.40/1246-P/007/456-P as of 19.12.2013 approved the Charter of the Committee of stakeholders of the Joint-Stock Company, the main tasks and functions of which are to assess the materiality and completeness of the information presented in the Report, to control the Company's execution of its obligations before stakeholders, etc.

During the preparation of the Report, four Dialogues were held, including the final Public Hearing on the Draft Report. Conducting dialogues was preceded by the publication of the order on the date, venue, participants and program of the event. The auditors of internal control and audit participated in all the dialogues. All dialogues were conducted on the NIAEP-ASE site combined via video connection.

In the course of audit:

- an assessment of compliance of public Reports preparation with the existing law and internal regulatory requirements that govern a business-process of public Reports preparation was performed;

- an 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;

- significant differences were pointed out between the audited Report and the similar Report for the previous year. Such directions of the Company development as innovation, which is largely the basic strategy of the Integrated Company NIAEP-ASE, were first described in the Report for 2013 in much detail;

- taking into account the great interest of stakeholders to the Report content characterizing innovation activities of the Company, the audit conducted random testing of individual controls aimed at minimizing the risk of distortion of the Report information.

According to auditors' opinion the Report's content, the completeness and accuracy of information to be disclosed ensure reliable and balanced awareness of interested parties about significant aspects of activity of NIAEP – ASE integrated company for the Reporting period. They confirm the presence of effective management system in the Company by different aspects of sustainability performance and reaction to requests of the interested parties.

The results of the conducted audit allow to make a conclusion on compliance of Public Report preparation of NIAEP JSC for 2013 with the acting law, Sustainability Reporting Guidance GRI (edition G4.0), International standard of integrated Reporting, series of AA1000 international standards on cooperation with the parties involved, Policy of State Corporation "Rosatom" and internal regulatory requirements of JSC NIAEP that govern a business-process of the public Reports preparation.

System of internal checks of preparation of the Company public Reporting is reliable and effective and ensures completeness and accuracy of non-financial information presented in the Report.

Head of department, Chief controller V.S. Petrovsky

Annex No. 7.
Conclusion of Non-financial Auditor

ЭНПИ® КОНСАЛТ
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REPORT
on results of independent assurance
of Public Annual Report
of Joint Stock Company
NIZHNY NOVGOROD ENGINEERING COMPANY "Atomenergoproekt"
for 2013

Moscow

ИТаР ПРОФЕССИОНАЛЬНЫЕ АУДИТОРОВ

РОО

ENPI Consult",
member of "Moore Stephens International Limited"
(worldwide network of independent firms)
in association with "Moore Stephens Rus"

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Introduction

The present audit assurance relates to Report of sustainability of the Joint Stock Company "NIZHNY NOVGOROD ENGINEERING COMPANY "Atomenergoproekt" (hereinafter referred to as the Report) for the period from 1, January to 31, December, 2013.

The present Report is addressed to management of Open Joint Stock Company "NIZHNY NOVGOROD ENGINEERING COMPANY "Atomenergoproekt" (hereinafter referred to as NIIEP JSC).

Resposibility of parties

Management of NIIEP JSC bears full responsibility for preparation and accuracy of this Report.

We bear responsibility for results of work on independent assurance of the Report only to "NIIEP JSC within the framework of requirements specifications agreed with it, and we do not assume responsibility to any third parties.

Scope, criteria, and level of assurance

Object to be assured is a Report including information on head office and branches of NIIEP JSC. As for matters of personnel management, activity of subsidiaries and affiliates (further in the text, SaA) is partially described. Information on "Atomstroyexport" company under control is also presented (as for certain aspects).

The Report was evaluated using following criteria:

- nature and degree of compliance with principles of Standard AA1000 "Accountably Principle Standard 2008" by the Company: inclusiveness (involvement), importance, and reaction.
- compliance of the Report with level A+ (self-evaluation of the Company) as per Manual GRIG3.1.

Our check was planned and implemented in accordance with AL 1000 Assurance Standard 2008 and International Standard ISAK 3000 "Assignments on assurance other than audit and review of historical financial information".

This assurance corresponds to type 2 as per definition of standard AA1000AS2008 taking into account restrictions specified in Section "Limits of assurance" of the present conclusions.

When rendering services we met following requirements related to level of assurance:

- Moderate: in accordance with standard AL 1000 AS2008.
- Limited: in accordance with standard 1SAE3000 "Assignments on assurance other than audit and review of historical financial information".

Selective verification of information in the Report cannot ensure high level of guaranties for assurance. Works on assurance were based on supporting information of the Company management and its employees, on data from accessible sources, and analytic methods of confirmation. As for quantitative information in the Report, the work which is carried out can not be considered as a sufficient one to reveal all possible inaccuracies and misrepresentations. Nevertheless, confirmations collected by us are sufficient to form our opinion in accordance with the above levels of assurance.

Methodology of assurance

Following procedures have been performed within the framework of works on assurance:

- Study and testing (on a sample basis) of systems and processes implemented by NIAEP JSC in order to provide and examine correspondence of activity to principles of LL1000 APS, as well as control of productivity in the field of sustainable development.
- Collection of evidences supporting implementation of system processes where principles of AA 1000 APS are used.
- Questionnaire and interviews with representatives of NIAEP JSC's top management.
- Study of documents and applications of management in order to get confirmations regarding compliance of activity with principles of AA 1000 APS.
- Study of protocols of public dialogues and consultations with the interested parties.
- Study of conclusion on results of public assurance of the Report.
- Study of information about activities regarding matters of sustainable development which is available on web-sites of NIAEP JSC.
- Study of the published comments of the third parties concerning economical, ecological, and social aspects of the NIAEP JSC activities in order to check relevancy of comments expressed in the Report.
- Analysis of non-financial reporting of foreign companies of similar market segment for benchmarking.
- Analysis of processes of the non-financial reporting internal audit.
- Selective study of documents and data on effectiveness systems to control economical, ecological, and social aspects of sustainable development which exist in NIAEP JSC.
- Study of existing processes of collection/ processing, documenting, verification, analysis, and selection of data subject to be included into Report.
- Validity checks of affirmations, comments, and data included into Report.
- Analysis of information in the Report for compliance with principles of standard AA 1000 APS, recommendations GRIG3.1 (level A+).

Limits of assurance

The assurance is limited by time period of the reporting period (01.01- 31.12.2013).

Evaluation of accuracy of the information about effectiveness presented in the report is carried out only regarding compliance with the recommendations of management GRIG3.1 for level A+.

Assurance regarding accuracy of figures covered in the report (as for quantitative disclosures of effectiveness) is limited to evaluation of correspondence to data of the audited accounting statements, as well as documents on internal and external reporting on other industrial-economical, ecological, and social aspects of activity.

The assurance is not carried out regarding forward-looking statements and comments which express opinions, beliefs, or intentions of "NIAEP JSC" to take any measures related to future.

Assurance concerning affirmations which sources are expert judgments, is not carried out.

The assurance is carried out only for the Russian copy in MSWord format.

Conclusions

Following conclusions are based on the work performed by us within the scope and limits which are stated above.

1. The Report as a whole covers adequately the implemented mechanisms of control and effectiveness figures of "NIAEP" JSC regarding activity on economical, social, and ecological aspects of sustainable development.
2. As a result of our work, we did not reveal any essential distortions regarding information describing activity of "NIAEP" JSC in the field of sustainable development and its results which are presented in the Report.

Nature and degree of compliance with principles AA 1000 APS

Involvement

The NIAEP JSC cooperates with wide range of the interested parties. In the course of preparation of the Report, the NIAEP JSC has conducted three dialogues with the interested parties, as well as public consultations on the Draft Report.

The Company uses different methods of cooperation which are particular for different groups of the interested parties including joint ventures, web-site of the Company, publications in mass media, etc.

On the basis of our work results we can conclude that the NIAEP JSC understands composition of its interested parties and has mechanisms of cooperation with them and taking their opinions into account within the framework of our activity.

Importance

The Report covers economical, social, and ecological aspects of the NIAEP JSC activity which are essential for major interested parties.

Concept of the report including key matters and performance indicators was presented during the first dialogue with the interested parties and improved on the basis of their remarks.

Reaction

The Report shows aspiration of "NIAEP" JSC to take essential interests of the interested parties into account in its activity. Information on proposals of the interested parties within the course of public dialogues and consultations regarding report is presented in the Report. The Company took into account all remarks and proposals and amended the present report or undertook obligations for the next reporting period.

Compliance of the Report with level A+ as per Manual GRIG3.1

In order to form opinion on the given matter, we carried out analysis of compliance (when preparing the Report) with recommendations of OKIG3.1 regarding principles and standard elements of reporting for the declared level of application.

Principles to specify contents of the Report

Importance

- Information included into Report covers matters and performance indicators which reflect essential impacts of "NIAEP" JSC on economics, environment and society or are able to influence considerably on evaluations and decisions of the interested parties.

Coverage of the interested parties

- The "NIAEP" JSC has presented in the Report an information about interested parties and algorithms to take into account their interests while specifying contents of the Report.

Context of sustainable development

- The Report represents results of the "NIAEP" JSC activity in a broad context of sustainable development taking into account industrial –economical, social, and ecological aspects.

Completeness

- Within the declared limits, the Report covers information about activity of "NIAEP" JSC with sufficient degree of completeness, as well as essential aspects as for subsidiaries.
- In order to ensure completeness of information, the Company has used industrial technical protocol GRI for building contractors.

Principles to ensure quality of the Report

Balanceness

- The Report has a balanced content, and it reflects both results of activities and matters which require to be solved.

Comparability

- Comparability of the Report with non-financial statements of other companies is provided by usage of Manual GRIG3.1 as a basis to cover performance indicators in the field of sustainable development.
- Comparability of financial information in relation to reporting of other companies is not provided to the full extent because of usage of federal statutes and Provisions on accounting (not international standards of financial statements) for its disclosure.
- The majority of numerical values is given for three years and with projected value for next year, and it enables to carry out analysis of industrial trends of the Company.

Accuracy

- Accuracy of representation of actual information in the report is sufficient for the interested parties to evaluate results of the "NIAEP" JSC activity in the field of sustainable development.
- Calculations for performance indicators are based on procedures approved in the protocols for indices GRIG3.1.

Timeliness

- The Report is prepared in order to submit it for the Annual General Meeting of Shareholders.

Clarity

- As a whole the information is presented in the Report in a clear and understandable manner for the key groups of the interested parties.
- Annex "Glossary" is available in the Report, and it facilitates understanding of the presented information for the users of the Report.

Reliability

- Information on effectiveness presented in the Report is based on internal reporting documents of "NIAEP" JSC and Rosatom State Corporation, as well as statements submitted to supervisory bodies.
- Check of effectiveness of supervision and procedure of preparation of non-financial reporting are of competency of internal checks and audit department. In the course of check, the detailed documents on results of the performed check were submitted for us.
- We did not reveal any facts which put in doubt reliability of the information presented in the Report.

Standard elements of reporting

Strategies and characteristics

- Information on characteristics of the Company, strategy, control, obligations of the company, cooperation with the interested parties and reporting parameters are described in the Report. This information should be disclosed in accordance with recommendations of GRIG3.1 regarding content of the Report.

Management approaches

- Management approaches on essential aspects of industrial-economical, social, and ecological field are presented in the Report. Particularly, strategic goals and algorithms of their achievement are covered.

Performance indicators

- All basic indicators are covered in the Report in accordance with protocols to indices GRIG3.1.

General evaluation of Report

- Our work enables to conclude that composition and quantity of disclosures required to ensure compliance of the Report with level A+ are presented in the Report and are reasonably given in Index GR1.

The Report complies with the Policy of Rosatom State Corporation and typical standard of public annual statements of key companies of Rosatom State Corporation.

Process of public reporting, structure and content of the Report as a whole correspond to the requirements of Policy of Rosatom State corporation in the field of public reporting and typical standard of public annual statements of key companies of Rosatom" State Corporation.

Recommendations

1. Consider possibility to increase degree of disclosure of information on personnel management in the SaA in the next Report.

2. Disclose information on algorithms to transfer own policies of personnel management to SaAs in the next Report.

3. Increase degree of disclosure of information on Moscow branch of "NIAEP" JSC and Atomstroyexport JSC in the next Report.

4. Consider possibility to increase degree of disclosure of information on the Company policy in implementation of principles of important business practice in the supply chains in order to provide compliance with the best practices of the reports preparation in similar foreign companies.

Declaration on competence and independence

ENPI Consult JSC is an independent auditor company rendering professional services on assurance. The ENPI Consult JSC is a member of self-regulating organization of auditors "Institute of Professional Auditors". It operates in accordance with Code of conducts for Professional Accountants IFAC. Quality management system of auditing services including Ethics Compliance Program is used in the Company.

The ENPI Consult JSC declares formally that the present Conclusion is an evaluation of an independent auditor. The ENPI Consult JSC and its employees have no relations with "NIAEP" JSC, its subsidiaries and affiliates, which could cause conflict of interests when rendering services on independent assurance of the Report.

The ENPI Consult JSC is an organizational stakeholder of GRI, licensed provider of assurance services in accordance with requirements of standard AA 1000 AS.

A team of reporting assurance in the field of sustainable development includes specialists of ENPI Consult JSC. They have a required experience of rendering services on audit and preparation of reports in accordance with GRIG3/3.1, as well as on training to prepare similar reports. Its leading specialists were trained in assurance of reports in the field of sustainable development in the training center of accountability.

Deputy Director General
of Closed Joint Stock Company
"ENPI Consult"

V.Yu. Skobaryov

Moscow
May 16, 2013.

Annex No. 8.
GRI Content Index

General Standard Reporting Items

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Specific Standard Disclosures

Material Aspects	DMA and Indicators	Not Reported Information	External Assurance
Market Presence	DMA – p. 167-168		assurance
	EC5 – p. 94		assurance
	EC6 – p. 112	Information on contractors and subcontractors is not Reported, as far as the Company gives no preferences depending on the area of their operation.	assurance (including validation)
Economic performance	DMA – p. 167-168		assurance
	EC1 – p. 70		assurance
	EC3 – p. 101		assurance
	EC4 – p. 70		assurance (including validation)

Material Aspects	DMA and Indicators	Not Reported Information	External Assurance
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	PR2 – p. 111		assurance
Employment	DMA – p. 167-168		assurance
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	LA7 – p. 99		assurance
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Training and education	DMA – p. 167-168		assurance
	LA9 – p. 95	Information on breakdown by sex and categories of educational programs is not Reported, as far as this information is not available at the moment. Expected data date – Reporting period for the year 2015.	assurance
	LA10 – p. 103		assurance
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	SO1 – p. 115		assurance
	CRE7 – p. 113		assurance
Compliance (society)	DMA – p. 167-168		assurance
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Annex No. 9.
Disclosure on Management Approaches to Material Aspects

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Economic performance	Justification of materiality	P. 69
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	Objectives and tasks	p. 69
	Duties	Planning and Economic Department, Financial Department
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	Results	p. 70-72
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Procurement practices	Justification of materiality	p. 78-80
	Limits	JSC NIAEP
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	Specific DMA	p. 78-80
Customer health and safe	Justification of materiality	p. 110
	Limits	JSC NIAEP
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	Obligations	p. 110
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	Specific DMA	p. 110-111
Employment	Justification of materiality	p. 87, 112
	Limits	JSC NIAEP
	Policy	p. 112
	Obligations	p. 112
	Objectives and tasks	p. 87, 112
	Duties	HR Department
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32. The stated material aspects were not acknowledged material outside the Company.

Material Aspect[32]		Page, Comments
Occupational health and safety	Justification of materiality	p. 97-99
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