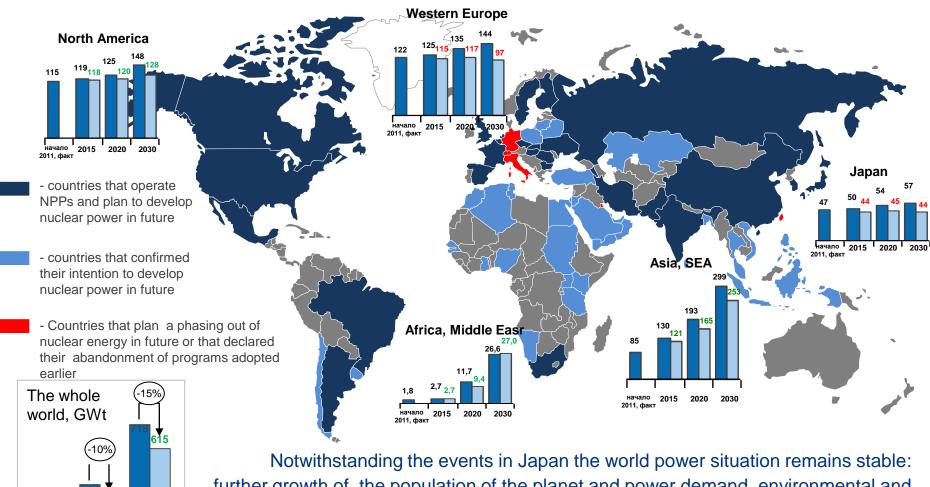


International activity of the State Corporation «Rosatom»: NFC market services

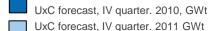
V. I. Korogodin, Deputy Director of the Directorate for nuclear power complex

06.06.2012

World nuclear power development prospects



Notwithstanding the events in Japan the world power situation remains stable: further growth of the population of the planet and power demand, environmental and global warming concerns predestine the necessity of **further development of the world nuclear power** systematically increasing safety.



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2020

2030

NFC world market review – changes that took place in 2011

- One time drop of the demand as a result of Fukushima accident due to the shut down of power units in Japan and Germany. Surplus of uranium and SWU exerted downward pressure on quotations. At the same the volatility on the natural uranium market decreased as most of speculative players left.
- New challenges in the field of NPP safety reduction of reactor fleet growth (only reactors meeting postfukushima requirements), similar approach to the fuel.
- Correction by all key market players of investment and fabrication programs with consideration of the world nuclear fleet development forecasts (in particular, world uranium production in 2011 remained on the level of the previous year and amounted to about 53,65 thousand tons).

NFC world market review- trends of the nearest future

Trends observed in the nuclear industry and nuclear fuel cycle (development and implementation of new safety standards, development of new reactor concepts and approaches to fuel cycle organization, changes in the structure of production capacities etc.) during the next 5-10 years will lead to establishing of «new image» of the world market of NFC products and services.

Main results of the activity of State Corporation «Rosatom» in the Front End NFC world market in 2011

Results of JSC «Atomredmetzoloto»

- ➤ Uranium production increased by 37% up to 7,1 thousand tons
- ➤ The increase of raw material base up to 757,5 thousand tons of uranium is ensured
- > 100% of Mantra Resources Limited shares were bought in Results of JSC «TVEL»
- ➤ Within the frames of TVS-KVADRAT project JSC«TVEL» signed a contract with Vattenfall (Sweden) for LTA delivery
- ➤ Agreements with AREVA on further cooperation in RepU nuclear fuel fabrication were signed
- Delivery of the Russian NF to Temelin-2 unit to substitute US FAs was completed
- > The first fuel reload was delivered to Bushehr NPP
- > Return to the Polish nuclear fuel market for research reactors.
- > A JV for construction of NF fabrication plant was established in Ukraine

Main results of the activity of State Corporation «Rosatom» <u>in the Front End NFC world market in 2011</u>

Results of JSC «Techsnabexport» (TENEX)

- ➤ The volume of TENNEX's commercial deliveries reached an all-time high of \$ 2,34 bln.
- ➤ In 2011 TENEX concluded 11 new contracts for supply of the Russian NFC products to foreign partners (+ 2 earlier contracts were extended).
- As a result of execution of HEU-LEU Contract with USEC, the Contract for delivery of natural raw material component (NC LEU) with a group of western companies (Areva, Cameco, Nukem), as well as implementation of program of physical transfer to Russia of outstanding NC LEU in whole HEW-LEW Contract was 88% performed from planned within the frames of its 20-year execution.
- ➤ The contract between TENEX and CNEIC for rendering technical support in construction of gaseous centrifuge plant (GCP) on the territory of China was completed on 05.07.2011, nine month ahead of schedule, IV stage of gaseous centrifuge plant was set in operation with production capacity of 500 000 SWU.

Front End of the NFC.

Rosatom development according to global company logic



Complex approach to customers' needs

- > New products
- Package offers
- Improvement of logistical and sales network
- Legal basis (intergovernmental agreements)

Results in 2011

Uranium mining market



* - taking into account Uranium One and its share in mining assets

Uranium enrichment market



29 %**

** - without HEU-LEU deliveries

Fuel fabrication market



NF supply for 45 foreign reactors*** and 12 research reactors

^{*** -} including cooperation with AREVA in RepU fuel fabrication.

7,100 tons

3,500 tons

production volume tons of U

Sales organization

JSC «ARMZ» - the most important element of package offer



Perspective

projects

Khiagda

PIMCU



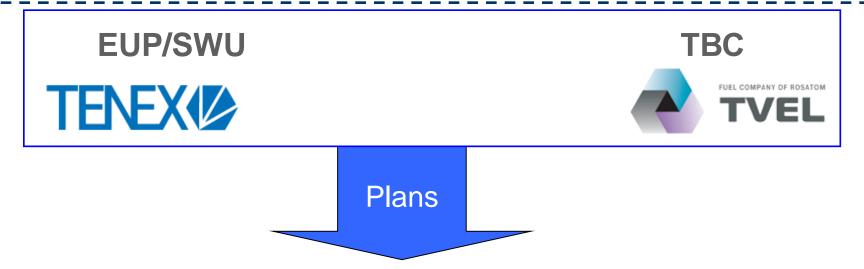
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- ✓RF uranium mines
 ✓Foreign uranium mines
 ✓Stock reserve
 - ✓Additional sources

Complex approach to customers' needs



- ➤ Further development of marketing tools logistics, sales network expansion, including JV, guarantee warehouses, material accounts
- Nuclear fuel zero failure
- New fuel types

- Promotion of package offer (FNF + NFC Back End services)
- ➤ Package offer of NFC products and services ЯТЦ when constructing Russian design NPPs

Corporation's plans for globalization in NFC world markets

EUP and FA - task: growth of revenue with rate faster than rate of market growth Plans for 2012 Mid-term plans Long-term plans

Reliable fuel supply of the Russian design reactors built both in Russia and abroad

Execution of planned construction of the plant in Ukraine

Start of commercial operation of R&D – center in Czech Republic

Completing of the plant construction in Ukraine

Globalization of presence in traditional markets including localization and R&D globalization

NFC products supply assurance for foreign design reactors according to current and new contracts, implementation of strategic partnership projects

Buying out of UEIP shares by Kazakh partner within the frames of UEC project

Start of UEC commercial operation

Uranium mining growth

Leading positions in the world uranium mining

Completion of LTA per contract with Vattenfall, promotion of TVS-KVADRAT in PWR market

Development of cooperation with Areva in NF fabrication

Processing of RepU of Japanese utilities

Assurance of reliable presence in NF segment for foreign design reactors

Development of package offer(FNF + NFC BE services)

Promotion of package offer (FNF + NFC Back End services)