
# Russia, South Africa to Continue Cooperation

**Rosatom will continue its joint projects with South Africa despite the court's ruling to cancel the agreement made between the South African Ministry of Energy and the Russian company in 2014.**

The Western Cape High Court (South Africa) ruled on 26 April that the agreement made in 2014 between the South African Ministry of Energy and Rosatom Group to build eight nuclear reactors in the country was "unlawful and subject to cancellation". The reasoning behind the court's decision was that the parliament had not given its prior approval. The judgment was announced only two days before the deadline to provide responses to the request for information (RFI) concerning a 9,600 GW nuclear power plant project. The court also ruled to cancel agreements with the USA and South Korea for the same reason – they were signed without prior discussion in the parliament.

**Expert opinion**

Kelvin Kemm, Chairman of the Board of Directors of the South African Nuclear Energy Corporation (NECSA), said in his interview to the TASS news agency that this decision would not affect the South African program to build 9,600 MW of nuclear capacity.

Knox Msebenzi, Managing Director of the Nuclear Industry Association of South Africa (NIASA), said that the organization 'took yesterday's judgment of the Western Cape High Court into account'. "As an industry, we respect the court's ruling. The Department of Energy is expected to provide guidance on the matter, and we will take their lead on what to do next," Msebenzi said. "We have always supported the idea that transparency, fair trade and best practices are critical foundations for a

successful nuclear construction project. NIASA members who include all vendor countries have signed a declaration to respect the South African law and undertaken to follow the principles of equity and transparency."

According to him, it was "critical to mention" that the court's ruling was not on "nuclear issues", but on the procedures that had been followed. "The reality is that nuclear technology is not new to the country; therefore we have a solid foundation for the proposed project," he said. "It is also not a case of 'either or' when comparing or reviewing the Government's integrated resource and energy plans, but about nuclear being afforded its rightful place within the energy mix and future of the country." According to him, nuclear energy would guarantee base load power needed for industrialization and climate change commitments. Msebenzi added that the country needed a "platform to exchange best practices" with other countries running their national nuclear programs.

Energy Minister Mmamoloko Kubayi directed the Department of Energy to analyze the decision made by the High Court. The Department announced that it would engage with "all relevant parties" and "express its opinion on the matter in due course".

Tiisetso Makhele, a member of the African National Congress and a columnist at News24, wrote that all news reports about "suspension of the nuclear deal" were untrue. There is no nuclear deal between South Africa and the USA, Russia or South Korea, he says. All deals between South Africa and these countries are predominantly cooperation agreements in line with the country's diplomatic and international goals in nuclear as an alternative energy source.

According to him, the court had found that the procedure to conclude the agreements was unlawful as Parliament was not consulted. This finding is similar to the finding of another court on the unlawfulness of South Africa's decision to leave the ICC.

Tiisetso Makhele also said the South Africa was in need of nuclear power. In addition to the much needed expansion of the South African energy mix, nuclear energy is safer, and relatively cheaper. And it is not new to South Africa. The country's first nuclear power station, Koeberg, was constructed near Cape Town in 1976

COOPERATION

# Russia Ready to Help Japan

**President Vladimir Putin: Russia is ready to give Japan a hand with recovery effort at Fukushima 1 and offers the latest technology to cleanse contaminated soil and dispose of radioactive waste.**

The statement was made after the talks with Japan's Prime Minister Shinzo Abe in late April. Earlier a spokesperson for the

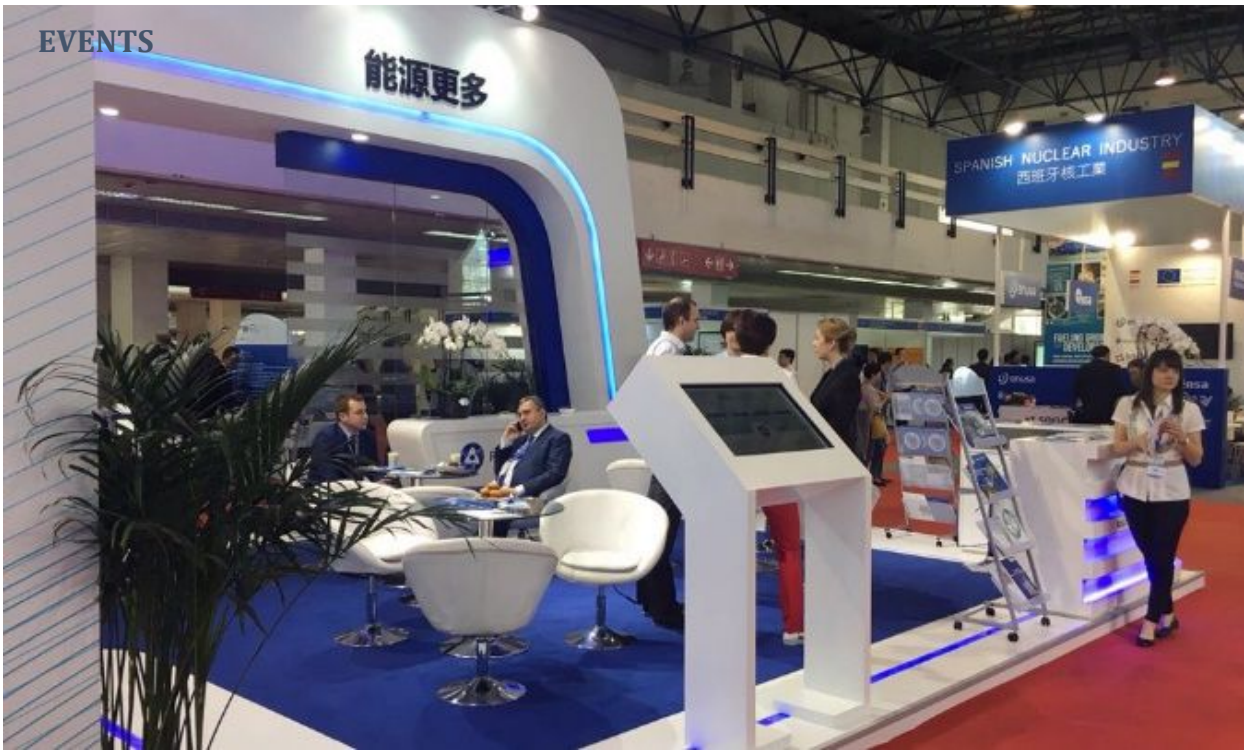
Agency for Natural Resources and Energy of Japan's Ministry of Economy, Trade and Industry told media that Tokyo was ready to cooperate with Moscow in the recovery

operations at Fukushima Daiichi. The Government of Japan is open for close collaboration with Russia in the recovery efforts at Fukushima-1, but wants to clarify some technological and legal aspects. “Cooperation on the disaster cleanup at Fukushima Daiichi was discussed in detail during the visit of Rosatom’s CEO Alexei Likhachov in April,” the spokesperson said. “We value Rosatom’s expertise very much and would like to use it. At the same time, Japan thinks it would be useful to discuss legal aspects of the bilateral cooperation. For instance, we need to be assured that the Russian spent fuel reprocessing technologies fully comply with relevant Japanese regulations. This is why we find it useful to organize a workshop in Tokyo for Russian experts to give detailed answers to the Japanese authorities and business community,” the Agency’s spokesperson said.
Nuclear cooperation between the two countries is yet at its initial stage, but has a very solid basis, he added. Russia and Japan laid the foundation for their civil nuclear cooperation by signing a framework agreement in 2009. The document provides for joint operations at Fukushima Daiichi and supplies of Russia’s nuclear fuel to Japanese nuclear power plants.

In early April, Rosatom CEO Alexei Likhachov visited Japan to have talks with Hiroshige Seko, Japan’s Minister of Economy, Trade and Industry, and Hirokazu Matsuno, Minister of Education, Culture, Sports, Science and Technology. The talks were a logical continuation of the memorandum on civil nuclear cooperation signed last December and focused on the possibility of using Russian radioactive waste disposal and nuclear decommissioning solutions.
The Russian delegation inspected the site of Fukushima 1 to see the progress of cleanup operations. “Our Japanese partners are making noticeable headway in their recovery efforts. Russia has offered technologies that are both feasible and cost efficient,” Mr. Likhachov noted. According to him, cleanup operations are the best example of how the two countries work together in the nuclear area. “Solutions we offer are both effective and efficient and can save a part of those tens of billions of US dollars to be spent on disaster cleanup. The first project is already on its way as we won a contract for the development of a neutron detector to be used for radiological assessment of the reactor core. I believe that this project will be a small breakthrough that will open doors for more contracts,” Alexei Likhachov said. Rosatom has repeatedly voiced its readiness to help Japan recover from the effects of the Fukushima accident.

In the autumn of 2014, the Japanese government selected Rosatom’s subsidiaries RosRAO and Khlopin Radium Institute as partners for the pilot project to test a new technology for removing tritium from liquid radioactive waste accumulated after the accident at Fukushima 1, where tritium content is hundred times higher than the maximum permitted level. Technologies in current use at the station are capable of cleaning the waste from cesium and strontium isotopes, but not from tritium. Russian nuclear engineers created a pilot cleanup plant that was successfully tested earlier this year at one of RosRAO's test sites. In late 2015, German-based Nukem Technologies (controlled by Rosatom's subsidiary AtomStroyExport) and Japan's Mitsubishi Heavy Industries concluded a contract to carry out four feasibility studies for the recovery projects to be run at Fukushima.

EVENTS




# Rosatom Paid Visit to China

**Rosatom took part in the 12th China International Exhibition on Nuclear Power Industry in Beijing.**

In late April, Beijing hosted the 12th China International Exhibition on Nuclear Power Industry (CIENPI) that brought together global nuclear industry leaders to share experience and demonstrate their best practices and solutions in nuclear technology. Rosatom presented its most advanced VVER-1200 and BN-800 reactor units, nuclear fuel fabrication capabilities, integrated offer giving lifelong access to the entire range of Rosatom's products and services, as well as other solutions.

Rosatom was welcomed at CIENPI 2017 as a guest of honor. Its partnership with China comprises many civil nuclear projects, including the Tianwan Nuclear Power Plant where Rosatom built the first two 1,000 MW reactors. They were commissioned in 2006 and 2007 respectively and have been operating without failure till now. Tianwan NPP is a major example of economic cooperation between China and Russia. Another step was made in 2010 when Rosatom signed a framework agreement for the construction of Tianwan Units 3 and 4 based on VVER-1000 reactors with a capacity of 1,060 MW each. The construction is progressing in accordance with the schedule to commission the new units in 2018.

Russia is committed to continuing the bilateral cooperation by participating in the plant's next phase (Tianwan Units 7 and 8) and other nuclear construction projects in China. According to Sergei Dyomin, Vice-President for East Asia at Rusatom International Network, the scope of Russia-China cooperation in nuclear is impressive. He mentioned that the two parties studied the possibility of building VVER reactors at new sites in China.

Nuclear power plants are far from being the only area of mutual interests. Rosatom took part in the construction of four gas centrifuge facilities and a nuclear fuel fabrication plant. Rosatom Group was also involved in the China Experimental Fast Reactor (CEFR) project. It was designed in Russia based on the BN-600 prototype and reached its full capacity on 22 December 2014. Negotiations are underway to build fast neutron reactors in China. In May 2014, Rosatom and the Chinese Atomic Energy Agency (CAEA) signed a memorandum of understanding to jointly construct floating nuclear stations.

The Russian-Chinese cooperation has long been gathering pace. A good example is Rosatom's regional center opened in Beijing (China) during the Nuclear Industry China international exhibition in April 2016. “Rosatom’s office in Beijing will consolidate our efforts in the region and bring more Russian nuclear companies to East Asian,” Rusatom International Network President Alexander Merten said at the event.

## Kirill Komarov Took Post with WNA

**Kirill Komarov, Rosatom’s First Deputy CEO for Corporate Development and International Business, was elected Vice Chairman of the WNA Board of Management.**

Toronto, 25 April – The Board of Management of the World Nuclear Association (WNA) elected Kirill Komarov, Rosatom’s First Deputy CEO for Corporate Development and International Business, for the position of Vice Chairman. The Board of Management defines WNA’s strategic objectives and is involved in the development of the Harmony Program aimed at increasing the share of nuclear power in the global energy mix up to 25% by 2050.

“The election of a Russian candidate as the Vice Chairman of the Board of Management means recognition of Russia’s achievements in nuclear on the global scale,” says Vladimir Gutenyov, Deputy Chairman of the Russian Parliamentary Committee for Economic Policy, Innovative Development and Entrepreneurship. “For the last few years, Rosatom has turned into a leader in nuclear technology development. In 2016, the company was awarded construction contracts for 34 nuclear power units outside Russia. In financial terms, this ten-year contract portfolio is worth more than 130 billion US dollars. On the domestic market, Rosatom outperformed the competition by launching the world's first Generation 3+ unit at Novovoronezh. The unit is fully compliant with the latest safety regulations, including the post-Fukushima requirements. In Russia, the nuclear power industry has long been associated with professionalism and cutting edge technologies, maintaining public acceptance of the industry at a persistently high level of over 70%. Russia is the world’s only country to operate commercial fast neutron reactors (BN-600 and BN-800 at Beloyarsk NPP). This technology holds much promise in terms of closing the nuclear fuel cycle and creating a nuclear power industry of the future. It is no coincidence that Russia’s

Yekaterinburg, which is situated near the Beloyarsk NPP, will play host to a fast breeder technology forum to take place this summer under the auspices of the International Atomic Energy Association," he noted.

The World Nuclear Association was formed in London in 2001 and now includes 170 member companies from 38 countries, including France, Indonesia, Czech Republic, Finland, Japan, South Korea, USA and many more. WNA is the largest international organization to unite nuclear fuel service providers, engineering and nuclear construction vendors, and transport companies operating in the nuclear power industry.

## IN BRIEF

### TVEL Signed Fuel Supply Contracts with China

Fuel Company of ROSATOM TVEL, China Nuclear Energy Industry Corporation (CNEIC) and Jiangsu Nuclear Power Corporation (JNPC) signed a pack of contractual documents.

They cover Russian nuclear fuel supply, zirconium component parts for fuel assemblies and engineering services for Tianwan NPP worth about US $1 billion.The contracts were signed during the visit of TVEL's delegation led by Yuri Olenin to the People's Republic of China. During the meeting with leadership of JNPC, CNEIC, CNNP и CNFC Yuri Olenin noted the successful nuclear cooperation of Russia and China. He said: "Over many years TVEL has ensured uninterruptible supplies of highly effective and safe fuel and components for Tianwan NPP units. Our cooperation is not limited to fuel supplies. We render services to follow-on fuel operations and make units to operate in more economical fuel cycles."

According to the signed contractual documents, TVEL will supply to the PRC zirconium components, additional batches of fuel for Tianwan-1 and additional TVS-2M for Tianwan-2 as well as render engineering services for units 1 and 2 of Phase 2 of the plant.

### TENEX representative joins the WNA administrative bodies

The Director General of TENEX Mrs. Lyudmila Zalimskaya has been reelected a member of the WNA Board of Management for another two-year term.

In the end of April 2017, a delegation from TENEX participated in the World Nuclear Fuel Cycle (WNFC) international conference held in Toronto, Canada. The event is traditionally organized by the Nuclear Energy Institute (NEI) and World Nuclear Association (WNA). During the WNFC conference the representatives from the global nuclear industry companies and the world's leading experts discuss the vital issues of nuclear fuel cycle development. The Director General of TENEX Mrs. Lyudmila Zalimskaya has been reelected a member of the WNA Board of Management for another two-year term, while the head of the Company's Backend Department Mr. Mikhail Baryshnikov has become the Chair of the Working Group on Sustainable Used Fuel Management.