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Astana – Ust-Kamenogorsk

**The construction of nuclear fuel fabrication plant has started in Kazakhstan.**

**National Atomic Company Kazatomprom and China General Nuclear Power Corporation (CGNPC) have proceeded to implementation of a joint innovative project in the nuclear sector. This has become known during the teleconference with participation of the President of the Republic of Kazakhstan Nursultan Nazarbayev.**

Construction of this FA Manufacturing Plant is one of the breakthrough projects to be implemented under Kazatomprom's strategy which focuses on development of a vertically integrated fuel cycle company with advanced nuclear fuel fabrication capabilities.

The plant will be managed through a joint venture "Ulba-FA", the founders of which are Ulba Metallurgical Plant JSC (51%) (Kazatomprom's subsidiary) and CGN-URC (49%) (subsidiary of CGNPC).

FA production technology will be provided by the French company AREVA, the world's leader in this segment. The relevant Contract was signed between AREVA NP and Ulba-FA LLP. The Agreement provides a license for fuel fabrication technology, engineering documentation, supply of the key production equipment, personnel training and others.

Askar Zhumagaliyev, CEO of Kazatomprom noted: *"This FA manufacturing plant construction is the result of a long-term cooperation of Kazakhstan, China and France and one of the strategic steps of Kazatomprom towards production diversification. Maintaining our uranium mining leadership, we are planning to offer to the market the fuel for nuclear power plants of Kazakhstan's origin, which will allow us to strengthen our position on the global nuclear market».*

Zhang Shanming, CGNPC Director General stated: *"CGNPC has been cooperating with Kazatomprom in uranium mining, natural uranium trading and nuclear fuel pellets fabrication since 2006. Execution of the joint fuel project allowed both companies to take their cooperation to a new level. This project is an example of successful cooperation within the "One Belt, One Road" and "Bright Path" initiatives".*

Philippe Knoche, CEO of AREVA declared: *"AREVA is proud to be selected as a full scope technology provider for this future fuel plant. This contract reinforces the strong links between AREVA, Kazatomprom and CGNPC. Our team is already mobilized for the successful implementation of the project and we have started the production of the necessary equipment".*

It should be noted that this project will allow to establish a modern, completely automated production with the capacity of 200 tonnes of fuel assemblies per year, which will be further used in NPPs as nuclear fuel. The enterprise is expected to have a guaranteed market outlet for 20 years.

Investments would comprise over KZT 49 billion, half of which is to be provided by the Chinese side. This project will also create 129 direct new jobs and create additional economic benefit through support goods and services in Kazakhstan. Initial FA production is scheduled for 2020.

## *Reference.*

**Fuel assembly** is the finished, manufactured product to be used as fuel for nuclear power plants. FA fabrication is a final stage of nuclear power plant fuel cycle production and is one of the most significant, as a FA is loaded into a reactor and will work under high temperatures and in an environment subject to radiation, for about 4-5 years. FA fabrication is a large-scale, highly automated, mechanical process and is divided into the following key stages: fuel elements fabrication; skeleton fabrication; FA fabrication; FA storage; FA loading into containers and their delivery. The uranium contained in these fuel assemblies will originate from uranium mines in Kazakhstan, which will have been further process into fuel pellets manufactured in existing facilities at the Ulba Metallurgical Plant.

**NAC Kazatomprom JSC** is the national operator of the Republic of Kazakhstan for export of uranium and its compounds, rare metals, nuclear fuel for nuclear power plants, special purpose equipment, technologies and double-use materials. The main activities of the company are: geological exploration, uranium production, manufacture of nuclear fuel cycle products and construction materials. Today the Company has more than 26,000 employees. Kazatomprom is among the leading uranium production companies in the world.

**Ulba Metallurgical Plant JSC** is one of the most recognized world leading manufacturers of uranium dioxide fuel pellets for NPPs and products containing beryllium, tantalum and niobium. The company is a part of the National Atomic Company Kazatomprom.

**China General Nuclear Power Corporation (CGNPC)** is a large enterprise under supervision of State-owned Assets Supervision and Administration Commission (SASAC) of the State Council of China. CGNPC's main business is clean energy, including nuclear, solar, wind and hydro power. CGNPC has more than 30 years' experience in nuclear power plant (NPP) construction and operation. In CGNPC NPP fleet, 16 NPPs are in operation with a total capacity of 17.09 GWe, and 12 NPPs are in construction with a total capacity of 14.65 GWe. CGNPC has more NPPs in constructions than any other enterprise or company in the world. In addition to nuclear power, CGNPC is also an active player in wind, solar and hydro power development. CGNPC has dedicated subsidiaries to invest respectively in wind and solar power. Both subsidiaries are able to deliver EPC or turnkey wind or solar power project. CGNPC is one of the leading enterprises in China in none-nuclear clean energy power.

**AREVA NP** is a major international player in the nuclear energy market recognized for its innovative solutions and value-added technologies for designing, building, maintaining, and advancing the global nuclear fleet. The company designs, manufactures, and installs components and fuel for nuclear power plants and offers a full range of reactor services. With 14,000 employees worldwide, every day AREVA NP's expertise helps its customers improve the safety and performance of their nuclear plants and achieve their economic and societal goals. AREVA NP is a subsidiary of the AREVA group.