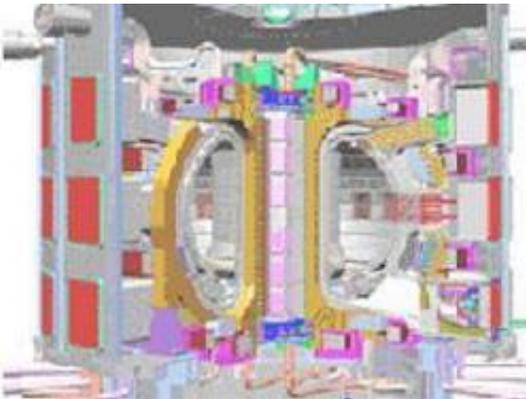




Pact on ITER reactor signed in Paris

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PARIS, November 21 (Itar-Tass) - A pact on the legal and financial aspects of the construction at Cadarache (Southern France) of the world's first international thermonuclear experimental reactor (ITER) was signed at the Elysee Palace here on Tuesday. Representatives of Russia, USA, European Union, China, Republic of Korea, Japan, and India have affixed their signatures to it.

The signature ceremony was held in the presence of President Jacques Chirac and President of the European Commission Jose Manuel Barroso.

The signed document, which is yet to be ratified by several parties to the project, stipulates that construction of the joint ITER experimental reactor is to begin early in 2007. It is planned to commission it in 2018. Thanks to their work on the ITER reactor, scientists expect to attain within the next forty years the level of industrial electricity generation by means of thermonuclear fusion at new power plants.

The total cost of the project, in which approximately one thousand scientists are taking part, is almost ten billion euros. The European Union is to shoulder fifty per cent of the cost of the project, and Russia, USA, China, Japan, and the Republic of Korea – ten per cent each. India's share will form a reserve fund of 500 million euros. The contributions of countries will come mostly in the form of technological equipment.

The centre for processing the obtained data and managing the project will be located at Rokkasho (Japan).

Russia will play a key role in the development of the experimental project, since its scientists had evolved the concept of controlling the thermonuclear synthesis and had carried out a broad range of experimental works on "Tokamak" thermonuclear installations.

The ITER reactor and future electric power plants of similar design will generate energy on the basis of the synthesis reaction of heavy hydrogen isotopes – deuterium and tritium -- at a temperature of more than 100 million degrees. Such technologies permit to the amount of the reactor's radioactive wastes to the minimum. The ITER reactor's designed thermonuclear capacity is 500 megawatts. The hydrogen deuterium isotope, to be used as fuel for the reactor, is obtained from seawater. Tritium is formed in the course of the reaction occurring within the reactor. One kilogram of such fuel is equivalent to ten million litres of petroleum.

Specialists claim that ITER is much safer than the conventional nuclear power plants. It practically rules out any uncontrollable surge of power and explosion in the reactor zone.

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