

Massive closure of nuclear power plants may result in energy crisis in France

✘ The government of France, the EU's largest producer of nuclear energy, has recently announced that it plans to significantly reduce the country's reliance on nuclear energy in the coming years according to the new President Francois Hollande, despite sharp criticism from local analysts.

According French government plans, there is an acute need to change the country's state policy in the field of energy, because, according to numerous surveys, many local citizens are unhappy with the dominance of nuclear power within the French energy distribution balance.

The plans have a purely political purpose in view of recent decisions of the governments of neighboring Belgium, Switzerland and Germany to shut down old nuclear reactors and to suspend implementation of many projects in the field of nuclear energy.

France adopted a vigorous nuclear energy development program after the Second World War, as part of its efforts to recover industrial production and ensure national security.

Another reason for the development of nuclear power was the oil embargo, imposed by the OPEC countries against France and other countries that supported Israel in its conflict with Egypt and Syria in 1973. At that time, the global price for oil increased by four times, triggering the need to look for other sources of energy.

Forty years later France has become one of the world's leaders in the field of nuclear energy, exporting electricity, produced by its nuclear power plants abroad at relatively low

prices. In the case of the domestic market, the French government continues to subsidize electricity costs, resulting in increased power consumption. France uses electricity for heat generation and to heat buildings in the winter months, which allows the country to save on hydrocarbons, significantly reducing the volume of CO2 emissions.

Currently, the share of nuclear energy in total power generation in France is estimated at 75%, but, should the current French leadership's plans go ahead, that share will be reduced to 50% by 2025. Instead of nuclear energy, the government believes that it can make up the shortfall by developing renewables.

To date, the country has 58 nuclear power units with a total installed capacity of 63 GW, of which at least 26 units should be closed by 2025. Many of the reactors are getting old, given that they were built more than 20 years ago.

At the same time local analysts believe that Hollande's plans will be difficult to implement as this will lead to a sharp rise in prices for electricity in the country.

According to Christophe Behar, Director of Nuclear Energy at the French Atomic Energy Commission, the cost of energy production from French nuclear reactors is almost 40% lower, compared to other EU countries, which translates to high competitiveness of the French nuclear industry in the global market, easing the burden on the French economy.

Clearly, the development of renewable energy, as a replacement of nuclear power, would not allow current electricity usage trends to continue; these could be cut back by half, at increased cost. France would also have to accelerate its activities in the development of other traditional energy sources, such as coal in order to make up the shortfall. Coal was the main source of energy in France in the past, however

since 1960s its production has significantly declined. In 2002, coal production in France amounted to only 2.1 million tons and its current share in the country's energy balance is estimated at only 2%.

At the same time, the situation with other traditional energy sources, such as oil and gas also, is even more complicated, as their reserves in the country are extremely small.

In the meantime, President Hollande's government plans have already prompted sharp criticism from many French analysts and public associations. According to analysts from the French Electrical Union, France's professional association in the field of electric power, massive closure of nuclear power units will result in a significant increase of energy prices in the country with a corresponding increase of carbon emissions.

A similar position is shared by the French Accounts Chamber, according to which the best way for the country is to extend the service of existing nuclear power plants.

French analysts believe that amid the current negative economic conditions in the EU, Hollande will probably suspend the closure of nuclear power plants. He has already agreed to complete the construction of the third unit of Flamanville plant, which will be equipped with the EPR reactor and said that would not prevent the construction of another EPR at the Penly plant.

At the same time, if Hollande's government (noting, however, that it is a shaky coalition of Socialists and Greens – who have been pressuring Hollande to cut nuclear power) manages to go ahead with plans to shut down some nuclear plants, even if only in part, French nuclear industry lobbying at the international level would lose strength, leaving Russian nuclear lobbyists can remain alone in the world.