Japan ups bid for fusion reactor site

TOKYO, Japan (AP) -- Tokyo would boost its investment in the world's first large-scale nuclear fusion plant by almost U.S. $1 billion if the project's sponsors build the reactor in Japan, a newspaper reported Wednesday.

Construction of the U.S. $12 billion International Thermonuclear Experimental Reactor, or ITER, which would run on the same energy that powers the sun and stars, is scheduled to start this year.

But the project's sponsors -- the European Union, the United States, Russia, Japan, South Korea and China -- remain deadlocked over whether to build the plant in Japan or France.

In an attempt to win the bidding war, Japan will offer to spend 100 billion yen (U.S. $897 million) more than initially agreed, paying 370 billion yen (U.S. $3.35 billion) of the estimated 560 billion yen (U.S. $5 billion) building cost, the national Nihon Keizai financial newspaper said.

Tokyo plans to make its proposal at negotiations scheduled to be held in Vienna in mid-June, the paper said, citing unidentified government sources. Cabinet ministers were to discuss the proposal later Wednesday, the report said.

Science Ministry officials declined to comment.

Japan has proposed the northeastern village of Rokkasho, while the EU has put forward the southern French town of Cadarache. The host is expected to pay nearly half of the construction cost and a big portion of the operating cost.

Tokyo would use half of the additional money to build research facilities in France and set aside the remaining half as a backup fund in case any of the sponsors drops out, the Nihon Keizai reported. Canada already has backed out.

Fusion involves colliding tiny atoms at extremely high temperatures and pressure inside a reactor. When the atoms fuse into a plasma, they release energy that can be used to generate electricity.

The fusion reactor project, first proposed more than a decade ago, is designed to study the potential of fusion power as a cleaner alternative to fossil fuels, such as coal and oil, which are expected to run short in about 50 years.

Fusion power produces no greenhouse gas emissions and only low levels of radioactive waste. The reactor would run on an isotope of hydrogen, an abundant source of fuel that can be extracted from water.
