Japan May Consider Sharing Fusion Project

By Associated Press

January 28, 2004, 8:38 AM EST

TOKYO -- Japan would consider sharing with France the right to host the world's first large-scale nuclear fusion plant, if an international consortium can't decide between the two next month, a top government official said Wednesday.

France and Japan are bidding for the plant, which would generate energy by reproducing the sun's power source -- an estimated US$12 billion effort to find an alternative to fossil fuels like coal and oil.

The project's sponsors -- the European Union, the United States, Russia, Japan, South Korea and China -- had met in December to choose the site for the International Thermonuclear Experimental Reactor, known as ITER. But they failed to reach a consensus.

Science Minister Takeo Kawamura told reporters on Wednesday that Tokyo's first priority would be to break the deadlock at the next meeting, expected to be held in late February.

"We don't want to stop the momentum behind this project," he said.

"But if we can't agree at the next meeting ... the two bidding nations could hold talks to consider how we might divide up the facilities, for instance, into the reactor and information center portions," he added, without elaborating.

At the December meeting, the United States and South Korea had sided with Japan's proposed site of Rokkasho, on the northern tip of Japan's main island of Honshu. Russia and China cast their votes with the EU's site at Cadarache, in southeastern France. Canada, which had been at past meetings, didn't attend and will likely withdraw.

At stake is international prestige and thousands of jobs for the local economy. The host country will shoulder 48 percent of the estimated US$5 billion cost of construction over 10 years, while the others each would pay for about 10 percent.

Earlier this month, Kawamura flew to China and Russia to seek their support for the Rokkasho site.

He said Wednesday that he pitched Japan's technological expertise and outlined the benefits of having such a key project in Asia. He also tried to allay Chinese officials' worries about building the reactor in earthquake-prone Japan.

Although he received no commitments from the two nations, Kawamura said: "I'm convinced that Japan's site would be chosen based on an objective scientific and technological assessment."

French Prime Minister Jean Pierre Raffarin told reporters earlier this month that the Europeans were prepared to go it alone, if necessary.

Fusion, which powers the sun and stars, involves colliding atoms at very high pressure and temperature inside a reactor. When the atoms fuse into a plasma, they release energy that can be used to generate electricity.

The process produces low levels of radioactive waste but no greenhouse gases. The risk of a radioactive meltdown is small.

The reactor would run on an isotope of hydrogen, a virtually limitless source of fuel that can be extracted from water. Fossil fuels are expected to run short around the middle of this century.

Copyright © 2004, The Associated Press