

Europe

EU, U.S., Russia, Asian States Sign Nuclear-Fusion Reactor Pact

May 24 (Bloomberg) -- The European Union, the U.S., Russia and Asian nations including China signed a treaty to build the first nuclear-fusion reactor, forging ahead with a 4.6 billion- euro (\$5.9 billion) project to cut oil demand and air pollution.

Japan, India and South Korea also are part of the agreement on the International Thermonuclear Experimental Reactor, or ITER, which aims to show the potential of fusion as an energy source. The seven parties signed the treaty today in Brussels after an accord last year to let France host the site.

``It's a historic moment," Janez Potocnik, EU commissioner for science and research, told reporters at the signing ceremony. ``It's the first time all these important states are engaged in such a project."

Fusion, the process that powers stars, could be cheaper and safer than fission, the action at the core of contemporary nuclear power plants. Like current nuclear installations, fusion power plants would operate without emitting gases such as carbon dioxide that are blamed for global warming.

Efforts to curb greenhouse-gas emissions from fossil fuels, rising oil prices and worries about the safety of existing nuclear plants are helping drive the ITER project. Concerns about security of energy supply amid tensions in the oil-producing Middle East are also propelling the project.

Power Without Gases

Fusion power plants could deliver about 40 percent of global energy consumption by the end of the century, according to Raymond Orbach, director of the Office of Science at the U.S. Department of Energy.

``That will be without greenhouse gases," he said in a Brussels interview. ``That's why we're all investing in ITER."

The EU will pay 40 percent of the ITER construction costs and France and the six non-EU signatories will split the remaining costs evenly among themselves. Construction is due to start next year in the southern French city of Cadarache and to last up to a decade.

The treaty also covers ITER operations, projected to cost 5 billion euros over 25 years. Of the operating costs, the EU will pay 26 percent, the U.S. 13 percent, Japan 13 percent, China, India, South Korea and Russia 10 percent each and France 8 percent,

according to the European Commission, the EU's regulatory arm.

The EU has 25 members including France, which was chosen last June to host ITER over the Japanese city of Rokkasho-Mura. Japan in return was given a bigger role in developing the project and receiving research contracts from it.

After today's treaty approval, some of the signatories need to go through a domestic ratification process.

To contact the reporter on this story:

Jonathan Stearns in Brussels at **jstearns2@bloomberg.net**

Last Updated: May 24, 2006 08:03 EDT