

November 19, 2009 ITER Fusion Reactor Faces New Delay

by Daniel Clery

The scientific and engineering team building the ITER fusion reactor was hoping for a green light today for its final design, schedule, and cost estimate, but given the project has a pricetag in the billions of euros it was never going to be that easy. Because of nagging concerns over the construction schedule of the reactor, the ITER council, which represents the seven international partners in the project—China, the European Union, India, Japan, South Korea, Russia, and the United States—did not give the expected rubber stamp to the thousands of pages of documents that fully define the project.

ITER is an experimental reactor that aims to show that nuclear fusion, the power source of the sun and stars, could be used practically to generate energy on earth. A site has been cleared at Cadarache in southern France for construction, and ITER staff have been racing for months to get the full documentation, known as the project baseline, ready for the 18–19 November council meeting at their headquarters. But some council members voiced concern that the schedule, which aimed for the reactor to be running by 2018, was not realistic and that there was too high a risk that some part of the immensely complicated worldwide manufacturing effort would go wrong.

Delays invariably mean increased costs and the council is already concerned over current cost estimates which, sources says, may be as high as twice what partners signed up to at the start of the project in 2006. So the council has now sent ITER staff away for 3 months to better nail down the risks, both technical and organizational, involved in the schedule. Staff must consult with the agencies run by each partner that will order the reactor components to be made, and with the companies that will make them. The council has asked ITER directors to come back in February with an earliest possible date when the reactor could start, if everything were to go right, and a latest possible start date. Discussion of the controversial cost estimates appears to have been put aside until the schedule has been resolved.

http://blogs.sciencemag.org/scienceinsider/2009/11/iter-fusion-rea.html