

Senate panel orders US withdrawal from ITER

Appropriators cite rising costs and mismanagement for terminating US participation in ITER, but House spending bill would increase funding above administration request for the project.

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Politics and Policy:

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Senate appropriators approved a bill last week that would order the US to withdraw from ITER, the international effort to build a fusion test reactor in France. The move sets up a confrontation with House counterparts, who added \$75 million to the Obama administration's \$150 million request for the project in fiscal year 2015. The Senate measure, approved on 17 June by the subcommittee on energy and water development, would allow just \$75 million to pay for contracts that have already been signed with US industry to build and ship ITER components.

Senator Lamar Alexander (R-TN), ranking minority member of the subcommittee, said that US withdrawal from ITER would save US taxpayers at least \$3.9 billion, and potentially \$6.5 billion. Alexander was referring to two estimates of the US share of construction costs, prepared, respectively, by the Department of Energy's US ITER Project Office and by the Office of Project Assessment in DOE's Office of Science.

The House and Senate bills' disparate treatment of ITER will be reconciled in a conference committee that will be convened following passage by the full chambers. The usual practice in such cases is to split the difference, meaning that US participation could continue at a funding level well below that in the House measure.

Senator Dianne Feinstein (D-CA), the appropriations subcommittee chair, has complained repeatedly about the rising cost of US participation and the ITER central office's management problems, highlighted in an independent US review last year. A US withdrawal from the project

would require negotiations with the six other parties and possible penalties, a Senate staffer noted, because the 2006 agreement establishing the ITER partnership doesn't include provisions for withdrawals before 2017.

The House bill was approved by the full Appropriations Committee on 18 June. The report accompanying it expressed alarm and dismay with the management review's findings, but praised efforts by the governing ITER Council to implement the review's recommendations. The report scolded the administration for shortchanging the US contribution and said that DOE's request of only \$150 million would delay ITER construction by up to two years and result in further cost overruns "for no apparent reason." The project, said the report, "remains the most practical US investment in the fusion energy sciences."

Robert Iotti, chair of ITER's governing council, says the timing of the Senate action "couldn't have been worse," occurring as members of the council gathered in Cadarache, France, for their quarterly meeting on 18–19 June. "I hope this is political posturing," he says. "We understand we need to show progress and we will."

Iotti describes the council meeting as productive and notes that in contrast to previous meetings all of the noncontroversial items were dispensed with in about five minutes. Progress was made toward improving what Iotti says is the biggest single management problem: relations between the central office and the member organizations that supply the components. A search committee was appointed to find a successor to ITER director Osamu Motojima, and that individual could be selected before the next council meeting in November. The first draft of a realistic baseline cost and schedule will be presented at that session, although a final version won't be available for another year, he says.

Since 2006, when the agreement to build the ITER fusion test reactor was signed, the estimated US share of the project has increased by nearly \$3 billion, and the schedule for completing construction has slipped by 20 years, according to a recent report by the Government Accountability Office. But DOE won't be able to precisely estimate its commitment until a new baseline cost and schedule is established by the central office, a process that won't be completed for another year, according to the GAO report.

The US has agreed, as have all the members except the European Union, to provide 9.1% of the components and cash for ITER construction. As host, the EU's share of construction costs is 45%. According to the GAO, the US contribution was put at \$1.1 billion in 2005, when DOE officials estimated construction would be completed in 2013. In 2008 DOE reported that experiments at ITER would begin in 2016, and that the US contribution to construction would wind up the following year. Now, DOE estimates put first experiments off until 2023. Due to a cap of \$225 million on the US commitment set by the administration, the US will be paying for ITER construction until 2033, the GAO report said. But the actual US contribution has never approached the cap level.

The GAO acknowledged that DOE has been able to reduce US ITER costs by \$388 million as of February. Design changes have shaved \$18 million off the cost of the central solenoid magnet and have cut \$34 million from the vacuum auxiliary system. Through March 2014, DOE had spent a total of \$692 million on ITER, according to the GAO.
