

**STATEMENT OF CONGRESSWOMAN ZOE LOFGREN**  
**Mark-up of H.R. 238**  
**House Science Committee**  
**April 2, 2003**

I am pleased that the Committee's en bloc amendment contains the spirit and most of the letter of the FUTURE Act, which was introduced by myself, Congressman Nethercutt, and over 30 bipartisan Members of the House.

I introduced this legislation because I believe it is essential for this nation and the international community to pursue fusion as aggressively. Fusion research has shown dramatic progress over the past decade, and we are now ready to take the next major step toward a demonstration. The bill recognizes this and as I will explain, positions the U.S. to take advantage of this fact.

Fusion powers the sun and if our scientists and engineers can harness it here on earth, we will have an environmentally friendly, safe and virtually unlimited source of energy which no nation will monopolize.

Yet, practical fusion energy is not guaranteed: it is probably the most difficult scientific and technological challenge ever undertaken. So obviously, there are some uncertainties. However, when you contemplate just how few and uncertain our future energy options are, aggressively pursuing fusion is utterly compelling.

Further, when you think about what we are paying today in terms of human lives and dollars for an energy policy that is so heavily reliant on imported oil, it seems self-evident that we must pursue this aggressively almost no matter what the cost or risk.

Let me cite just one statistic: we spend more money importing oil into this country every day than we do every year on fusion research, well over \$250 million per day!

So, what will the Committee's bill accomplish? First, the bill authorizes the Department of Energy to fully participate in the International Thermonuclear Experimental Reactor (ITER) project. ITER is a next step fusion project that will effectively cap off the science and much of the

technology necessary to move ahead and build a demonstration of a first generation fusion energy project. Negotiations to determine the financing and site selection of ITER are now moving forward between Europe, Japan, Russia, Canada, China and now South Korea. Earlier this year, the President announced that the U.S. should join these negotiations.

While the bill authorizes the U.S. to join the project should these negotiations be successful, it contains provisions and protections to help ensure that U.S. negotiators will strike a “good deal” for the U.S. A “good deal” for the U.S. must position the U.S. to provide maximum benefit for our domestic fusion energy research program.

To this end, the bill authorizes increases in our fusion energy science budget. Over the next four years, the bill provides about 40% increase in funding for the Department of Energy’s fusion science budget. The Fiscal Year (FY) 2003 budget was about \$250 million. FY 2004 starts at \$276 million and ends at \$350 million in FY 2007. Specifically, the increases break down the following way: FY 2004, \$276 million; FY 2005, \$300 million; FY 2006, \$340 million and in FY 2007, \$350 million.

The Committee also authorized is separate funding for ITER. ITER is funded in FY 2004 at \$12 million, FY 2005 at \$20 million, FY 2006 at \$50 million and FY 2007 at \$75 million dollars. In addition, the bill requires the Department of Energy to deliver a plan to Congress to ensure that the U.S. research and industrial communities are competitive with those of other nations when it comes to providing fusion energy for our own needs and those of other nations.

The bill directs the Department of Energy to plan how to address issues of fusion materials and fusion technologies that are key to practical fusion energy.

Finally, I want to emphasize that by authorizing separate funding for the ITER project, the bill sends the unmistakable signal that ITER funding is not to come from the already under funded domestic research effort.

I want to thank Chairman Boehlert, Congressman Hall, Congressman Nethercutt and several other Members of the Committee who are cosponsors of Hr 1282 and the staffs on both sides of the aisle for their support and hard work on this issue.