



POSITION STATEMENT

INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER)

**(Adopted by the IEEE-USA
Board of Directors, 14 Nov. 2008)**

IEEE-USA urges federal legislators to maintain consistent and adequate funding for the International Thermonuclear Experimental Reactor (ITER) project. ITER's objective is to demonstrate the scientific and technological feasibility of fusion energy for peaceful purposes. Success on ITER will be an historic achievement for mankind, bringing the dream of harnessing the sun's power one step closer to reality.

The importance of the ITER mission is evidenced by participation of all the major industrial nations of the world, including the United States, Europe, Russia, China, Korea, Japan and India. U.S. participation in ITER is the centerpiece of the U.S. fusion research program, and its importance to the future of the nation, and the world, has never been greater. Since the signing of the international agreement and the official creation of ITER in October 2007, the project has made good progress toward mobilizing resources, assembling an international project team, and creating a technical baseline. This process proceeded smoothly until the *Fiscal Year 2008 Consolidation Appropriations Act* nearly eliminated funding for U.S. participation in the project. The situation was later stabilized, and the core U.S. project team remained intact. But this scenario indicated the fragility of the U.S. commitment, and it sent a discouraging message to its international partners.

The question of U.S. participation in the ITER project has been subject to extreme scrutiny by the U.S. fusion community, Department of Energy (DOE), Congress, and many other scientific bodies over the years -- with the consistent conclusion that U.S. participation is appropriate, justified, and of great value.

Most recently, the National Research Council issued the report *A Review of the DOE Plan for U.S. Fusion Community Participation in the ITER Program* (http://www.nap.edu/catalog.php?record_id=12449), which again underscores the value of the project, but expresses serious concerns with respect to U.S. funding. According to the report,

“Fluctuations in the U.S. commitment to ITER will undoubtedly have a large negative impact on the ability of the U.S. fusion community to influence the developing ITER research program; to capitalize on research at ITER to help achieve U.S. fusion energy goals; to participate in obtaining important scientific results on burning plasmas from ITER; and to be an effective participant in and beneficiary of future international scientific collaborations.” (Exec Sum, p.1)

IEEE-USA shares this opinion and urges the DOE and Congress to provide greater funding stability. It is essential that the United States continue its participation in ITER at a meaningful level, and that Congress provides a consistent level of support, according to its long-term strategy for investing in science and technology to sustain U.S. economic competitiveness and prosperity.

This statement was developed by the IEEE-USA Energy Policy Committee and represents the considered judgment of a group of U.S. IEEE members with expertise in the subject field. IEEE-USA advances the public good and promotes the careers and public policy interests of the 215,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. The positions taken by IEEE-USA do not necessarily reflect the views of IEEE or its other organizational units.