

HOTLINE

The Princeton Plasma Physics Laboratory is a United States Department of Energy Facility

Energy Secretary Abraham Visits



At left, PPPL Director Rob Goldston shows the National Spherical Torus Experiment to (from left) U.S. Congressman Rush Holt, Energy Secretary Spencer Abraham, U.S. Congressman Rodney Frelinghuysen, DOE Office of Science Director Raymond Orbach, and Princeton University President Shirley Tilghman. At right, Secretary Abraham addresses PPPL staff in the Gottlieb Auditorium.

Energy Secretary Spencer Abraham came to PPPL on January 30 with exciting news for the entire fusion community: the U.S. is joining the negotiations for the International Thermonuclear Experimental Reactor (ITER) project.

“Now is the time to expand our scope and embrace international efforts to realize the promise of fusion energy. Now it is time to take the next step on the way to having fusion deliver electricity to the grid. Therefore, I am pleased to announce that President Bush has decided that the United States will join the international negotiations on ITER,” said Secretary Abraham.

PPPL staff, filling the MBG Auditorium to capacity, greeted the news with enthusiasm, giving the Secretary a round of applause. Also in the audience were Department

of Energy and Princeton University officials, dignitaries from Japan, Germany, Spain, France, Russia, the United Kingdom, Italy, Canada, the European Union, and China, as well as U.S. Congressmen Rodney Frelinghuysen and Rush Holt.

The Secretary stressed that the decision to join ITER does not mean a lesser role for the domestic fusion program. “It is imperative that we maintain and enhance our strong domestic research program — at Princeton, at the Universities, and at our other labs.”

ITER (Latin for “the way”) began in the 1980s as a collaboration among the United States, the Soviet Union, Japan, and Europe with the goal of designing and building a fusion test reactor that would demonstrate the feasibility of

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Energy Secretary Abraham Tours PPPL and Makes Announcement



Clockwise from top left: U.S. Energy Secretary Spencer Abraham arrives at PPPL. From left are U.S. Congressman Rodney Frelinghuysen, Abraham, Princeton University President Shirley Tilghman, and PPPL Director Rob Goldston; (from left) PPPL External Affairs Head John DeLooper, Abraham, ITER-Canada CEO and President Murray Stewart, and PPPL's Andrew Post-Zwicker in the Lobby with science education displays; (from left) Goldston, PPPL's Hantao Ji and Masaaki Yamada, and Abraham at the Magnetic Reconnection Experiment display; at the National Spherical Torus Experiment (NSTX) are (from left beginning with front row) PPPL's Joe Winston, NSTX Program Head Martin Peng, and NSTX Project Head Masa Ono and (back row) DOE's Ray Orbach, U.S. Congressman Rush Holt, Abraham, Frelinghuysen, Tilghman, Goldston, and DOE's Anne Davies; Goldston (at left) shows Abraham the NSTX machine.



*Clockwise beginning with top left: At the test cell of the former Tokamak Fusion Test Reactor (TFTR) are (from left) U.S. Congressman Rodney Frelinghuysen, Princeton Borough Mayor Marvin Reed, Princeton University President Shirley Tilghman, DOE's Anne Davies, Energy Secretary Spencer Abraham, PPPL's Erik Perry, U.S. Congressman Rush Holt, PPPL's Michael Williams, DOE's Raymond Orbach, and PPPL Director Rob Goldston. The group is standing behind two plaques, including a DOE "Exceptional Public Service Award" to the TFTR Decontamination & Decommissioning (D&D) Team and a plaque noting the machine's dates of operation and milestones; **Tilghman introduces Abraham**; PPPL'ers applaud the Secretary; **Abraham fields questions from the media**; **Abraham (right) addresses staff while Orbach applauds.***

Abraham

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nuclear fusion as a source of energy. The U.S. removed itself from the collaboration in 1998. A National Research Council panel concluded in 2002, however, that revisions in the ITER plan and recent advances in fusion science warranted rejoining the effort, which presently involves Canada, Europe, Japan, and the Russian Federation. China has recently joined the negotiations as well. Canada, the European Union, and Japan have offered sites for the projects. The selection will be part of the negotiation and governmental decision making progress.

The U.S. proposes to provide a number of hardware components for ITER construction, to be involved in the project construction management, and to participate in the ITER scientific research and technology development. The nature and details of the U.S. participation and contributions would be determined during the negotiations. The U.S. share of the construction cost is expected to be about 10 percent of the total.

As the first step in our renewed commitment to ITER, PPPL Director Rob Goldston and DOE officials will go to Russia this month to participate in negotiations over plans for

the \$5 billion project, which is scheduled to begin construction in 2006 and be operational by about 2014. Fusion research on ITER would last for up to 20 years.

While at PPPL, Secretary Abraham also toured the National Spherical Torus Experiment and the former Tokamak Fusion Test Reactor (TFTR), where he unveiled two plaques — one noting TFTR accomplishments and milestones and the other an award for the safe decontamination and decommissioning (D&D) of the machine. He also talked to PPPL project heads in the Lobby before addressing staff in the Auditorium, where he lauded PPPL's accomplishments and ability to join the best basic science with the best management.

"It [PPPL] is a model for all our DOE labs. Let me congratulate all of you on a job well done," he told staff.

In a follow-up note to staff, Director Goldston praised the announcement and the support for the domestic fusion program. "I was very pleased that in addition to announcing that the U.S. will join the ITER negotiations, the Secretary also called for a strong domestic research program in parallel with ITER," he said. "The combination of joining our allies on ITER and enhancing research at home is what I believe is required for the U.S. to have a leadership role in the eventual commercialization of practical fusion energy." ●



TFTR D&D staff and Energy Secretary Spencer Abraham (in red tie at front) at the former Tokamak Fusion Test Reactor test cell. — Photos for this special issue were taken by Mike Anderson, Tom Meighan, and Elle Starkman. —

Hotline

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