FSP Program Advisory Committee

Ray Fonck, University of Wisconsin (chair)

Allen Boozer, Columbia University

Leslie Greengard, Courant Institute, NYU

Brian Gross, Geophysical Fluid Dynamics Laboratory

Gregory Hammett, Princeton Plasma Physics Laboratory

Wayne Houlberg, ITER Organization

Earl Marmar, Massachussetts Institute of Technology

Daniel Meiron, California Institute of Technology

Michael Norman, University of California at San Diego

Carl Sovinec, University of Wisconsin

Rick Stevens, University of Chicago and Argonne National Laboratory

Tony Taylor, General Atomics

James Van Dam, University of Texas - Austin

Importance of FSP

- can provide major advances for fusion
    (fusion plasmas cannot be understood without large-scale computation)

- fusion is a excellent candidate to incorporate advances in computational science

FSP is a tremendous opportunity,
and a substantial scientific and management challenge

The role of PPPL

- Responsible for facilitating success of FSP,

- Will assist in issues such as management, community outreach…..

- PPPL responsibility for national FSP is distinct from its scientific participation in FSP (~ a firewall)

The charge to the PAC

1. Science drivers:

The definition of the science drivers and the associated analysis of gaps (in the science and in the simulation capabilities) are planned to be completed within six months.

Do the science drivers and associated gaps analysis provide a compelling case for integrated modeling?

2. The plan for the project definition phase:

The project definition phase will produce a plan for the 15-year FSP, including the delivery of near-term (< 5 year) software capability of major value to the user community.

Development of the multi-year plan includes science needs, physics modules, validation and verification, integration frameworks, and project management.

Do the plans for project definition provide an appropriate roadmap for accomplishing these tasks, properly prioritized, on a relatively tight time schedule?

3. Community engagement:

The FSP project definition team must engage and include the relevant expertise from the FES and ASCR communities

Do the plans provide an effective approach for needed community outreach?

FSP PAC Agenda

<u>September 17</u>

9:00 AM	Welcome & PAC Charge (S. Prager)
	FSP Task Overview (W. Tang)
10:15 AM	Coffee Break
10:30 AM	Science Drivers & Associated Gaps Analysis (A. Kritz)
11:15 AM	Physics Integration/Frameworks (J. Cary)
12:00 PM	LUNCH (PAC CLOSED SESSION)
2:00 PM	Advanced Components/Modules with Mathematical Verification (X. Tang)
2:45 PM	Coffee Break
3:00 PM	Experimental Validation with Theoretical Verification (M. Greenwald)
3:45 PM	FSP Management Plan (D. Kothe)
4:30 PM	PAC CLOSED SESSION
5:30 PM	CLARIFYING QUESTIONS FROM PAC TO FSP TEAM
7:00 PM	FSP PAC DINNER (at Wyndham Hotel)

<u>SEPTEMBER 18</u>

9:00 AM	RESPONSE OF FSP TEAM TO PAC QUESTIONS & ASSOCIATED DISCUSSIONS
9:30 AM	PAC FINAL CLOSED SESSION (with Lunch) in DCR (Director's Conference Room)
1:00	PAC Outbrief
1:30 PM	Meeting Adjournment