Suggestions for Community Input to ReNeW

ReNeW welcomes suggestions regarding its process and, especially, regarding the thrusts on which its final report will be based. The five Theme Workshops to be held in March will be public meetings; any member of the community who wishes to join the discussion is welcome to do so. Furthermore each Theme Workshop will dedicate a special time period for presentations from scientists outside ReNeW who wish to propose research thrusts. To allow sensible planning of the Workshops, scientists who wish to use this dedicated time period are required to submit 2- or 3-page descriptions of the proposed thrust (“white papers”) in advance; deadlines may be found on the Renew web site.

In addition, all members of the fusion community, regardless of whether they attend the Theme Workshop, are welcome to provide input to ReNew for posting on the public page of the ReNeW web site. The mechanism for submission is described at the end of this note.

White papers submitted to ReNeW will be most effective if they are written with awareness of how ReNeW intends to perform its task. For this reason we recommend reading the “Goals and Strategies” document (G&S) on the public site before composing a white paper.

Key points from G&S are:

- The objective of ReNeW is to provide scientific and technical input to OFES, to help that Office develop a strategic plan for U.S. fusion research in the ITER era. It will also help introduce the fusion program to a new federal administration.

- The starting point for ReNeW will be the issues and gaps identified by the Greenwald, TAP and EPACT reports (available from the public web site). ReNeW will avoid repeating the effort that went into these very useful and detailed reports.

- The output of ReNeW will be a program strategy based on a set of approximately 15 scientific and technical research thrusts, where “research thrusts” are defined in detail in G&S.

- The ReNeW research thrusts will span a range of sizes, from relatively small, tightly focused programs (a few $M per year) to much larger, more encompassing efforts (\(\sim $100M\) per year). Such a spectrum will give OFES more flexibility in planning, and seeking support for, fusion research.
It is also important to appreciate the process for developing research thrusts that ReNeW will use. Beginning with the scientific and technical issues identified by the Greenwald, TAP and EPACT documents, ReNeW panels will first determine the scientific and technical requirements for addressing those issues. From these, the panels (working separately and together within a theme) will identify the tools (instruments, theory, hardware, codes, and facilities) needed to meet these requirements. Only then will the panels and theme groups begin to construct research thrusts, by combining the necessary tools into a coherent framework. Schematically:

![Diagram](issues-gaps -> scientific-technical-requirements -> research-thrust)

The main point of this process is to ensure that each research thrust is convincingly grounded in a compelling need of the fusion research program. It will also facilitate identification of the cross-cutting benefits provided by a thrust, which will be helpful in generating a single consolidated list of thrusts prior to and during the June workshop.

**Mechanism for submitting white papers**: White papers in MSWord or PDF formats should be sent as email attachments to the ReNeW Administrator, Emily Hooks: ehooks@mail.utexas.edu. They will then be posted on the ReNeW web site public page:

http://burningplasma.org/renew_whitepapers.html