

The FESAC Subcommittee formed to address the DOE Office of Science charge on proposed scientific user facilities invites community input in the form of short, directed white papers. The instructions for composing these white papers are given below. The final report for this charge must be delivered to DOE by March 22, 2013. This leaves little time for the Subcommittee to do its work and report to FESAC. Hence the **DUE DATE FOR WHITE PAPERS IS THURSDAY, FEB 14.**

Documents pertaining to this call for white papers:

(<http://science.energy.gov/fes/fesac/reports/>)

- * The charge letter dated 12/20/2012 from Dr. Brinkman, Director, Office of Science, DOE
- * Letter from Dr. Edmund Synakowski, Associate Director, Fusion Energy Sciences to Dr. Martin Greenwald, FESAC Chair
- * 1-page descriptions of four facilities proposed by FES as described in Step 1 of Dr. Brinkman's letter

Instructions for white papers:

- * **DUE DATE: THURSDAY, FEB 14, 2013**
- * Recommended length of 4 pages or less (1 in margins, 12 pt font, single-spaced)
- * Papers should include references to supporting material, but must be self-contained in providing the information requested below
- * Email papers to John Sarff (jssarff@wisc.edu) and Don Rej (drej@lanl.gov)
- * **Required contents for the white paper:**
 - Summary of the research that will be performed on the facility and how this research leads to world-leading science.
 - Description of the facility (new, upgrade, or coordinated program using multiple facilities). A graphic that would represent the facility in a 1-page description is recommended.
 - Description of the facility's impact beyond the FES mission, if relevant.
 - Context for the facility with respect to research gaps, needs, and opportunities as described in recent FES planning documents: ReNeW, Priorities-Gaps-Opportunities, MFE Priorities Subcommittee Report (available soon), etc.
 - Context of the facility relative to the world effort in fusion and plasma science research. Describe how the facility would extend beyond existing research capabilities, noting important differences in physical parameters.
 - Provide an estimate of the construction cost, annual operation cost, and schedule. Also include an estimate of the value of the existing facility for proposed upgrades. Describe the basis for these estimates.
 - Assess the readiness of the facility concept using the criteria and categories indicated in Dr. Brinkman's letter. Justify this assessment by referring to specific scientific and engineering requirements for the proposed facility.
 - (a) Ready to initiate construction.
 - (b) Significant scientific/engineering challenges need to be resolved before initiating construction.
 - (c) Mission and technical requirements are not yet fully defined.

FESAC Subcommittee on Future Facilities

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