

**Basic Energy Sciences (BES) Response to the Report of the Basic Energy Sciences Advisory Committee
Committee of Visitors (COV) Review of the BES Scientific User Facilities Division
August 2007**

	COV General Recommendation/Comment	BES Response
1	BES should adopt a practice of having a separate document summarizing the reviewers' comments (Executive Summary) and a letter detailing actions requested by BES following the review.	We concur with the COV recommendation. This will be implemented in FY 2008.
2	A timeline of actions and reviews of each facility should be attached to the cover of each review jacket.	We concur with the COV recommendation. This will be implemented in FY 2008.
3	The previous COV report and BES response should be distributed to the next COV prior to their meeting.	We concur with the COV recommendation. The previous report will be mailed to the new COV members prior to the review.
4	The overall basic review system works exceptionally well, do not change it.	We concur with the COV recommendation.
5	The Facilities Division staff should begin to plan for an improved strategy for the review process for the largest facilities.	We concur with the COV recommendation. We already were in the process of modifying the review process for larger facilities such as the SNS and APS. This will be implemented for the next cycle of light sources reviews, which will take place in 2008.
6	To the extent possible, the results of the review should be provided in a timely fashion. In addition, the comments of the reviewers should be summarized separately from the letter containing requested actions by the SUF Division Director. (See similar recommendation at the end of Section IV.)	We have delivered the results of the reviews on a timely fashion to the facilities. We will implement the separation of the reviewers' summary from the BES recommendations and action items. The review process is not only directed at the facility but it is a source of information to BES to provide DOE management guidance to the facility.

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7	The Committee recommends that the planned increase by 5 in the SUFD staff proceed promptly; it is needed for a well managed facilities program. In addition, allowance for increased travel, i.e. funds and time, to facilities to encourage informal evaluation of facilities should be made.	The FY 2007 Joint Resolution did not allow implementation of the planned hires in FY 2007; we were able to hire only one new program manager. We expect to be able to complete the hiring of new staff in FY2008 and FY2009. The same financial limitations that impacted hiring also reduced our ability to visit our facilities more frequently.
8	The Committee recommends that each SUFD review explicitly discuss collaborations between core-research programs and SUFD operations.	We had representatives of the programmatic divisions at all of our reviews. They were active in the executive sessions and were involved as observers in the review process. The BES debriefing of the review results always includes the participation of the programmatic Division Directors as well as program managers with subject matter expertise pertinent to the science performed at the facility. The review folder will list in the future the names of all observers present from headquarters at the review. SUFD works very closely with the programmatic divisions, but this was not always evident in the review folders.
9	Institute a uniform, integrated, and transparent proposal system for all five NSRCs.	We are in the process of completing a format acceptable to all laboratories for proposal submission and evaluation.
10	Include explicit time for facility research and instrumentation review in each SUFD review.	We are implementing this review structure in the large facilities.
11	The committee does not recommend the adoption of a single cost metric; such a metric would not be an effective management tool and its use would lead to poor management behavior.	We concur with the comments.
12	SUFD should plan to discuss in more detail its strategy for developing theory at the full complement of BES facilities during the next COV.	For the Nanoscale Science Research Centers, it was relatively easy to include theory in the activities of the facilities, because it was included in the initial planning of the facilities. We are in the process of addressing this issue for the facilities that have been operating for many years without a theory component. Successful implementation will require strong coordination and cooperation between the host laboratory, the facility, and BES. It will take several years and new resources to successfully achieve this target.

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<p>description of some “first” experiments, which will be carried out when the instrument is complete, would have been useful.</p> <ul style="list-style-type: none"> An essential aspect of these facilities is the need for development of appropriate simulation codes and ready access to adequate computing power to run the codes (likely to be substantial in character). In this context, the disappearance of the sole image-simulation effort in the E-beam facilities (from NCEM) was viewed by the recent review team as a serious backward step. The Subcommittee agrees with this assessment and considers that an effort needs to be made to ensure that image simulation and spectroscopy analysis, together with suitable computer capabilities, be made available to users throughout the DOE E-beam Center network. 	<p>We will address this observation and discuss with the Lab the best path to address this problem.</p>
Sub-panel 3: X-ray Synchrotron Facilities	
<ul style="list-style-type: none"> At the COV meeting, BES Director, Patricia Dehmer, announced a plan for a BES study of the long-range development of future light sources, including storage rings, energy-recovery LINACs, free-electron lasers, and possibly other types of novel machines. The Subcommittee was very favorably impressed with the outline presented. We encourage BES to seek the broadest possible scientific and technical input into the strategic-planning vision. 	<p>We are in the process of organizing such a workshop under the auspices of the Basic Energy Sciences Advisory Committee.</p>
Sub-panel 4: General Comments	
<ul style="list-style-type: none"> Involvement with other BES Divisions: In the 2004 COV report, the COV recommended that close collaborative must be fostered between the Scientific User Facilities Division and the Materials Sciences and Engineering and Chemistry Divisions. The current committee was pleased to hear of the efforts by the SUFD Director in promoting this involvement, including inclusion of the scientific division staff on facilities review teams and specific joint programs. For example, in 	<p>We concur with the comments. SUFD meets periodically with other divisions in BES to discuss areas of joint interest as well as overlaps in research goals.</p>

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<p>the past this has resulted in a number of innovative instrument concepts and the development of new areas of research that are of benefit to both the User Facilities and to the Core Programs. Because of the increasingly major role that the SUFD is playing in BES science, this collaboration is even more important than in the past and the Committee recommends that continuing efforts be made to leverage new programs and science off of these collaborative activities.</p> <ul style="list-style-type: none"> • Costs of operation: Facility costs are always of concern in maximizing the BES budget effectiveness. This topic can be effectively included in the operations phase of the regular, triennial review. Thus, the review team could, for example, be provided with a list of opportunities for optimizing operational efficiency. In addition, during that review facility management could explicitly address the opportunities for increasing efficiencies, along with necessary tradeoffs that would need to be made. 	<p>We concur with the comments.</p>