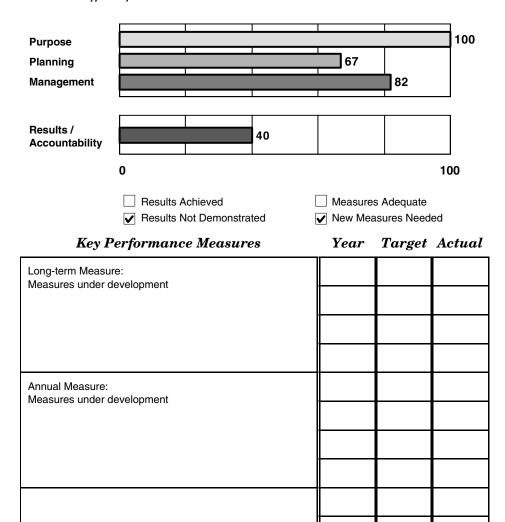
Program: Basic Energy Sciences

Agency: Department of Energy Bureau: Office of Science



Rating: Results Not Demonstrated

Program Type: Research and Development

Program Summary:

The Office of Science's Basic Energy Sciences (BES) program funds research in materials sciences, chemistry, geosciences, and aspects of biosciences, and provides national user facilities for over 7,000 researchers annually that are funded by DOE, other federal research agencies, foreign institutions, and the private sector.

The program received a perfect score in the purpose section and a high score in the management section, mainly as a result of standard management practices within the Office of Science that lead the BES program to have a well defined mission, merit-based reviews for awarding contracts and grants, and highly-regarded large project management practices. The primary cause for the lower scores for planning and results is the program's current lack of adequate long-term and annual performance measures. Nevertheless, the program has made significant strides toward developing such measures despite the problems inherent in predicting and then measuring scientific progress. Other findings include:

- 1. The program is focused and well managed, and was the first Office of Science program to institute a process whereby an ad hoc panel of outside experts favorably reviewed the program's research portfolio and processes. A recent GAO report validated the program's merit-based peer review process for awarding contracts and grants.
- 2. The program's construction projects, including the large Spallation Neutron Source, are all well within 10 percent of their original cost and schedule estimates.

To address these findings:

1. The 2004 Budget provides funds to operate the program's user facilities at 100 percent of maximum capacity (the same as in 2003 and an increase of 16 percent over 2002), and to design or start construction on four new nanoscale science research centers, which are the only approved new scientific facility construction starts in the Office of Science budget. The reduction in funding from 2003 includes the decreasing costs needed for Spallation Neutron Source construction.

2. The Administration will work to reform its performance measures, while being sensitive to the difficulties that basic research programs face in attempting to predict future scientific progress.

Program Funding Level (in millions of dollars)

2002 Actual	2003 Estimate	2004 Estimate
997	1,020	1,009