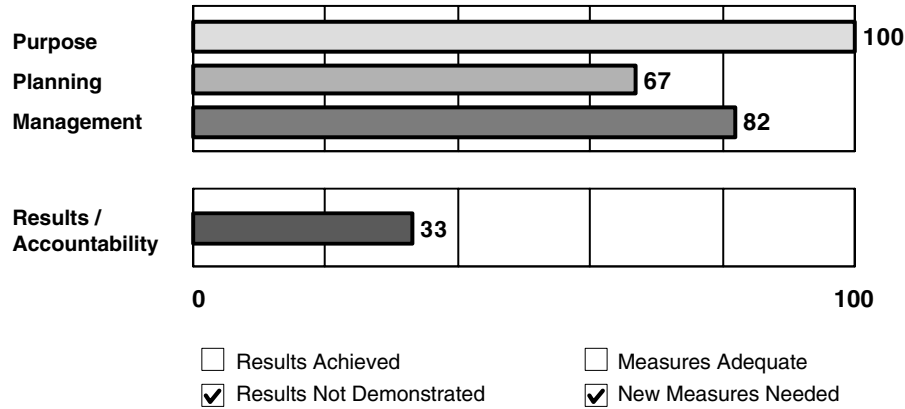


**Program: Nuclear Physics**

**Agency:** Department of Energy

**Bureau:** Office of Science



**Key Performance Measures**

**Year Target Actual**

Key Performance Measure	Year	Target	Actual
Long-term Measure: Measures under development			
Annual Measure: Measures under development			

**Rating: Results Not Demonstrated**

**Program Type:** Research and Development

**Program Summary:**

The Office of Science's Nuclear Physics (NP) program operates nuclear accelerator facilities and funds research in fundamental nuclear physics and related fields, such as nuclear astrophysics. It also develops the technologies and trained workforce needed to underpin DOE's missions for nuclear-related national security, energy, and environmental quality.

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 NP 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 measuring and then predicting scientific progress. Other findings include:

1. The program is well-managed with a strong focus on training nuclear scientists and utilizing existing facilities in order to maximize scientific returns.
2. The program coordinates its research strategy with the National Science Foundation through a jointly sponsored advisory committee; however, the program does not yet have regular reviews of its research portfolio and processes by ad hoc panels composed of outside experts external to its advisory committee.

To address these findings:

1. The 2004 Budget provides funds to operate the program's user facilities at 83 percent of maximum capacity (compared with 80 percent in 2003 and 72 percent in 2002), while ceasing operations at one of its smaller facilities.
2. The Administration will work to reform its performance measures and goals, while being sensitive to the difficulties that basic research programs face in attempting to predict future scientific progress.
3. The Department will institute a formal committee of visitors process for the program by September, 2003.

**Program Funding Level (in millions of dollars)**

<u>2002 Actual</u>	<u>2003 Estimate</u>	<u>2004 Estimate</u>
359	382	389