

Office of Management and Budget
Program Assessment Rating Tool Performance Measures

RE: <http://www.whitehouse.gov/omb/budget/fy2005/part.html>

Basic Energy Sciences, Office of Science, U.S. Department of Energy

Annual Measures

RE: FY 2005 Budget Request, http://www.sc.doe.gov/bes/budgets/BES_FY2005budget.pdf, pp. 274-275.

- Average achieved operation time of the scientific user facilities as a percentage of the total scheduled annual operating time. (*Efficiency measure*)
 - How will progress be measured? - Progress will be tracked quarterly through the Department of Energy's tracking system –Joule. Results will be reported in the Department's Performance and Accountability report that is published soon after the end of each fiscal year.
 - Targets -

• 2001 – >90%	96%
• 2002 – >90%	96%
• 2003 – >90%	91%
• 2004 – >90%	
• 2005 – >90%	

- Cost-weighted mean percent variance from established cost and schedule baselines for major construction, upgrade, or equipment procurement projects (Cost variance listed first). (*Efficiency measure*)
 - How will progress be measured? - Progress will be tracked quarterly through the Department of Energy's tracking system –Joule. Results will be reported in the Department's Performance and Accountability report that is published soon after the end of each fiscal year.
 - Targets

• 2001 – <10%, <10%	+0.4%, -6.3%
• 2002 – <10%, <10%	-0.2%, -1.8%
• 2003 – <10%, <10%	-0.5%, -1.4%
• 2004 – <10%, <10%	
• 2005 – <10%, <10%	

- Improve Spatial Resolution: Demonstrated spatial resolutions for imaging in the hard and soft x-ray regions, and spatial information limit for an electron microscope (measured in nanometers).
 - How will progress be measured? - Progress will be tracked quarterly through the Department of Energy's tracking system –Joule. Results will be reported in the Department's Performance and Accountability report that is published soon after the end of each fiscal year.

- Targets
 - 2002 – - 150, 24, 0.09
 - 2003 – - 130, 20, 0.09
 - 2004 – $\leq 115, \leq 19, \leq 0.08$
 - 2005 – $\leq 100, \leq 18, \leq 0.08$
- Improve temporal resolution: Demonstrated duration (measured in femtoseconds) and intensity (measured in millions photons per pulse) of an x-ray pulse.
 - How will progress be measured? - Progress will be tracked quarterly through the Department of Energy's tracking system –Joule. Results will be reported in the Department's Performance and Accountability report that is published soon after the end of each fiscal year.
 - Targets
 - 2002 – - 100, 0.0003
 - 2003 – - 500, 1.0
 - 2004 – $\leq 200, \geq 0.005$ (at greatly increased average brightness)
 - 2005 – $\leq 100, \geq 100$
- Number of reacting species and billions of grid points in a three-dimensional combustion reacting flow computer simulation, as a part of the Scientific Discovery through Advanced Computing (SciDAC) effort.
 - How will progress be measured? - Progress will be tracked quarterly through the Department of Energy's tracking system –Joule. Results will be reported in the Department's Performance and Accountability report that is published soon after the end of each fiscal year.
 - Targets
 - 2002 – - 8, 0.0005
 - 2003 – - 8, 0.001
 - 2004 – $\geq 44, \geq 0.0005$
 - 2005 – $\geq 44, \geq 7$