



DOCKET

11-IEP-1N

DATE MAY 19 2011

RECD. MAY 19 2011

U.S. Department of Energy
Mike Holland
May 19, 2011
PIER Benefits Assessment
Workshop

Panel: Ongoing RD&D benefits assessments used by other state and federal agencies and research organizations



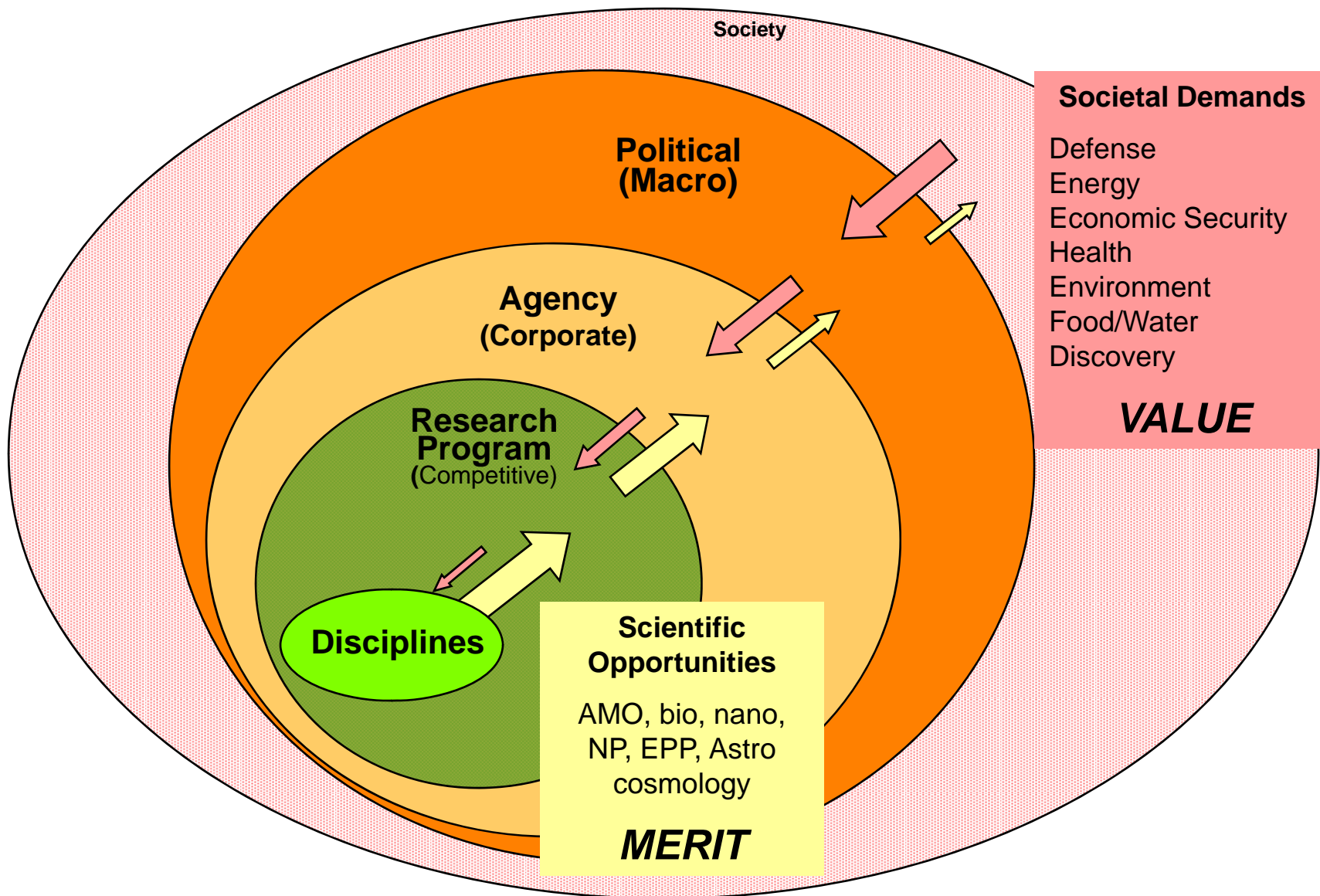
Question 1: What benefit assessment activities has your organization undertaken?

Question 2: What did you measure?

Question 3: How has your organization addressed attribution (public and private sector)?

Question 4: What are your future plans for benefits assessment?

Context, Context, Context



My Clearest Case



Major Facilities for Materials Research and Related Disciplines

Major Materials Facilities Committee
Commission on Physical Sciences, Mathematics, and Resources
National Research Council

NATIONAL ACADEMY PRESS
Washington, DC 1984

NAS Study called for:

- A 6 GeV synchrotron light source
- An advanced steady state neutron source
- A 1-2 GeV synchrotron light source
- A high-intensity pulsed neutron source

Seitz-Eastman, 1984

The “Trivelpiece Plan”



In 1986, Director of Energy Research crafts a solution:

- Relativistic Heavy Ion Collider (RHIC)
- A 1-2 GeV synchrotron light source (ALS)
- A 6 GeV synchrotron light source (APS)
- An advanced steady state neutron source (ANS)
 - A high-intensity pulsed neutron source (SNS) was eventually substituted

United States Government Department of Energy

memorandum


DATE: January 22, 1986
REPLY TO: MA-22
ATTN OF: MA-22
SUBJECT: Secretarial Site Selection Decisions on Specific Energy Research Projects

TO: The Record

My memorandum of October 21, 1985, prescribes the procedures for Secretarial site selection decisions.

As part of the Internal Review Budget process for FY 1987, as an exception, and in accordance with the Scientific Facilities Initiative, four specific Energy Research projects were sited. These senior management site decisions were made to maintain the technical viability among the Department of Energy laboratories. They are:

- o Relativistic Heavy Ion Collider, Brookhaven National Laboratory, Total Estimated Cost (TEC) (FY 1984 dollars): \$120-\$150 million.
- o One to Two GeV Synchrotron Radiation Source, Lawrence Berkeley Laboratory, TEC: \$80-\$90 million.
- o Six GeV Synchrotron Radiation Source, Argonne National Laboratory, TEC: \$200-\$250 million.
- o Advanced Steady State Research Reactor, Oak Ridge National Laboratory, TEC: \$250-\$350 million.


J. F. Salgado
Under Secretary

JAS PROCEEDS
SECRETARY

CC:
Assistant Secretary, Management and Administration
Assistant Secretary for Environment, Safety and Health
Director of Energy Research
Director of Administration
Director of Project and Facilities Management

80069

Highly Productive Light Sources



SSRL



NSLS

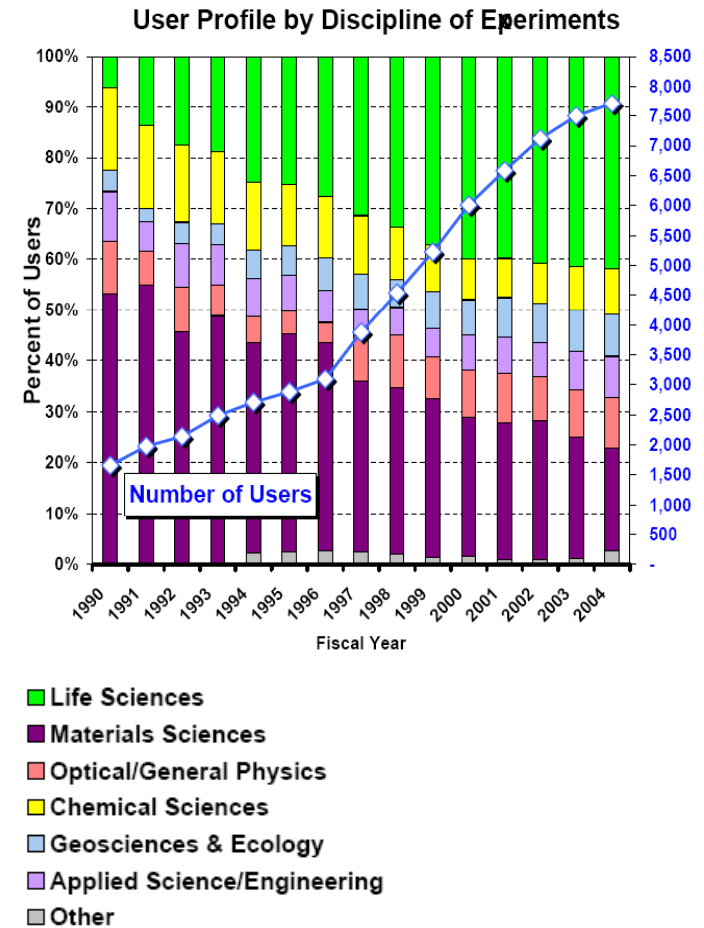


APS

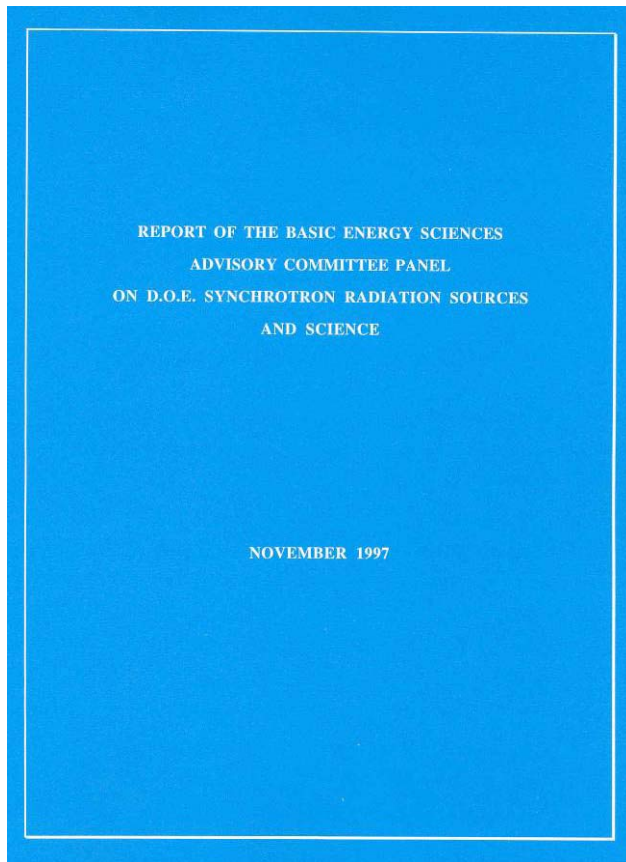


ALS

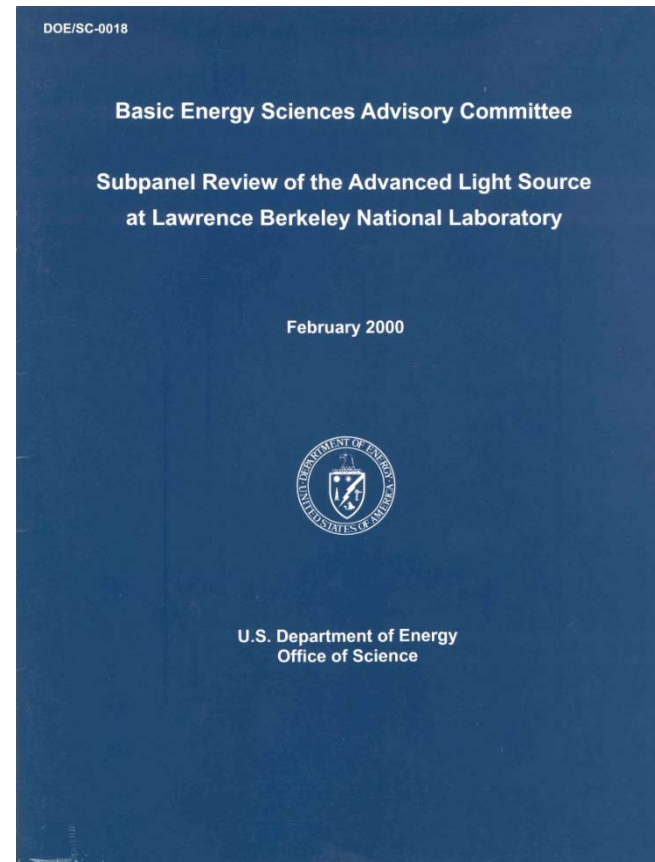
SSRL, NSLS: pre-existing
 APS, ALS: “Trivelpiece Plan”



...With Systematic Evaluation



- Birgeneau-Shen, 1997**
- **ALS in trouble**



- Petroff report, 2000**
- **ALS fixed**