



U.S. DEPARTMENT OF
ENERGY

Nuclear Energy

Nuclear Science User Facilities

Facility Utilization

Update and Look Ahead



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Deputy Director

FY 2015 NSUF Annual Program Review
Germantown
March 1, 2016

- **University Partners**
- **Industry Partners**
- **National Laboratories**

Notes:

1. Facility Utilization for awarded projects
2. Does not include CRADA or WFO projects
3. An individual award may utilize multiple facilities



U.S. DEPARTMENT OF ENERGY

Nuclear Energy

NSUF – A consortium

A group formed to undertake an enterprise beyond the resources of any one member



■ University of Wisconsin – Madison (2009)

- Ion Beam
- Characterization Laboratory for Irradiated Materials

■ Historical Utilization

- Pilot Project and 3 RTEs completed

■ Carry over work from FY 2014

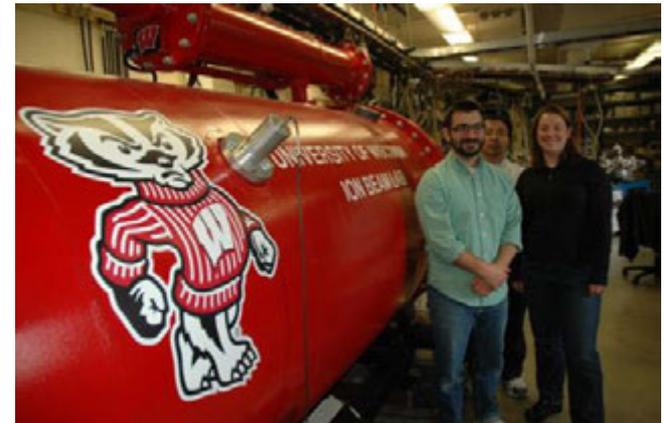
- None

■ FY 2015 New Awards

- 2 RTEs

■ FY 2016 Look Ahead

- 1 CINR Invited Proposal
- 0 RTE Awards (1st Call)
- 1 Pending RTE Proposal (2nd Call)



■ Purdue University (2012)

- IMPACT Spectroscopy Lab

■ Historical Utilization

- None

■ Carry over work from FY 2014

- None

■ FY 2015 New Awards

- None

■ FY 2016 Look Ahead

- Nothing so far
- New professors may help



■ North Carolina State University (2009)

- PULSTAR reactor, Neutron Imaging

■ Historical Utilization

- 1 RTE completed

■ Carry over work from FY 2014

- None

■ FY 2015 New Awards

- None

■ FY 2016 Look Ahead

- 0 CINR Invited Proposal
- 1 RTE Awards (1st Call)
- 1 Pending RTE Proposal (2nd Call)

NC STATE UNIVERSITY



■ University of Nevada Las Vegas (2009)

- Radiochemistry Laboratories

■ Historical Utilization

- Pilot Project completed

■ Carry over work from FY 2014

- None

■ FY 2015 New Awards

- None

■ FY 2016 Look Ahead

- Nothing so far



■ University of Michigan (2009)

- Michigan Ion Beam Laboratory

■ Historical Utilization

- 8 RTEs completed

■ Carry over work from FY 2014

- None

■ FY 2015 New Awards

- 2 RTEs

■ FY 2016 Look Ahead

- 7 CINR Invited Proposals
- 0 RTE Awards (1st Call)
- 1 Pending RTE Proposal (2nd Call)



■ Massachusetts Institute of Technology

- MIT Reactor, Hot Cells, PIE capability

■ Historical Utilization

- 3 Irradiation projects completed
- 1 RTE completed

■ Carry over work from FY 2014

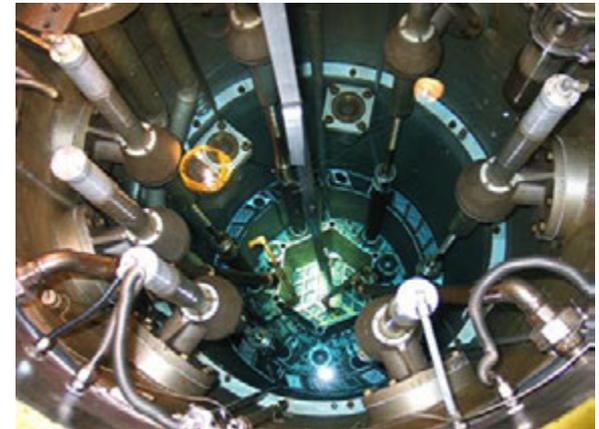
- 1 Irradiation/PIE project

■ FY 2015 New Awards

- 1 Irradiation project

■ FY 2016 Look Ahead

- 4 CINR Invited Proposals
- 0 RTE Awards (1st Call)
- 0 Pending RTE Proposal (2nd Call)



■ Illinois Institute of Technology

- Synchrotron Radiation Research

■ Historical Utilization

- 9 Irradiation projects completed

■ Carry over work from FY 2014

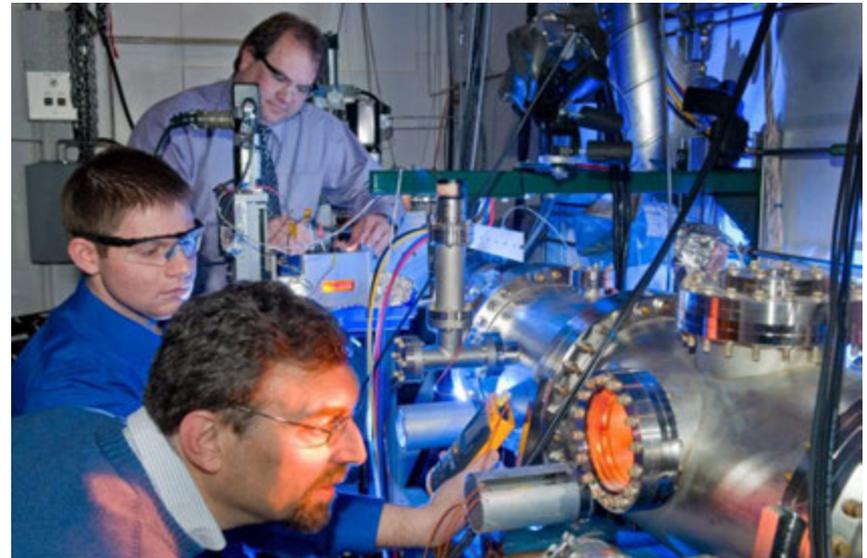
- 2 Irradiation projects

■ FY 2015 New Awards

- 2 Irradiation projects

■ FY 2016 Look Ahead

- 3 CINR Invited Proposals
- 0 RTE Awards (1st Call)
- 1 Pending RTE Proposal (2nd Call)



■ University of California Berkeley (2011)

- Nuclear Materials Laboratory

■ Historical Utilization

- None

■ Carry over work from FY 2014

- None

■ FY 2015 New Awards

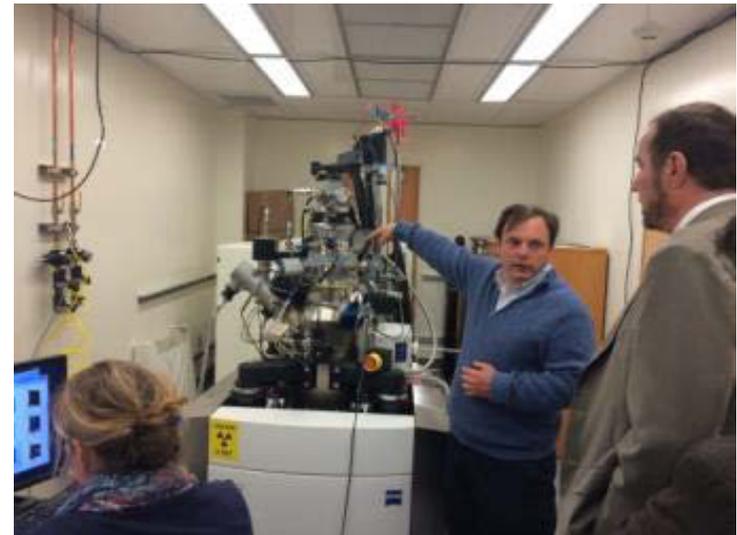
- 2 RTEs

■ FY 2016 Look Ahead

- 0 CINR Invited Proposals
- 0 RTE Awards (1st Call)
- 1 Pending RTE Proposal (2nd Call)



BERKELEY
UNIVERSITY OF CALIFORNIA



■ Westinghouse (2013)

- Materials Center of Excellence

■ Historical Utilization

- None

■ Carry over work from FY 2014

- None

■ FY 2015 New Awards

- None

■ FY 2016 Look Ahead

- 2 CINR Invited Proposals
- 0 RTE Awards (1st Call)
- 0 Pending RTE Proposals (2nd Call)



■ PNNL

- Radiochemistry Processing Laboratory
- Materials Science and Technology Laboratory

■ Historical Utilization

- None completed

■ Carry over work from FY 2014

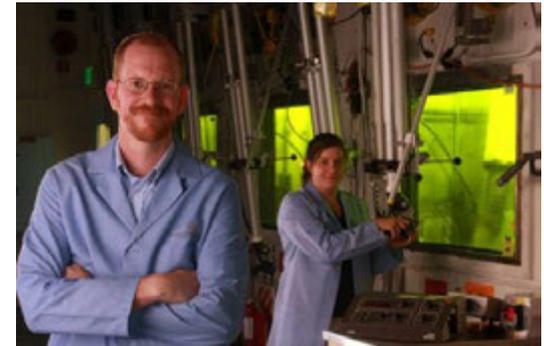
- 1 Post Irradiation Examination (Berkeley)

■ FY 2015 New Awards

- None

■ FY 2016 Look Ahead

- 2 CINR Invited Proposals
- 2 RTE Awards (1st Call)
- 0 Pending RTE Proposals (2nd Call)



■ ORNL

- High Flux Isotope Reactor (HFIR)
- 3025/3525 Hot Cells
- Low Activation Materials Development and Analysis Laboratory (LAMDA)

■ Historical Utilization

- 1 RTE completed

■ Carry over work from FY 2014

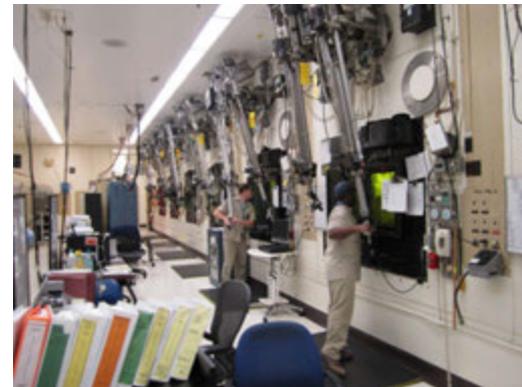
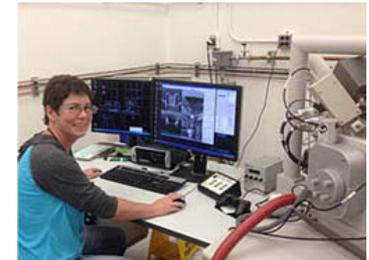
- 1 PIE (UCSB-2)

■ FY 2015 New Awards

- None

■ FY 2016 Look Ahead

- 10 CINR Invited Proposals
- 1 RTE Award (1st Call)
- 7 Pending RTE Proposal (2nd Call)



■ INL

- Advanced Test Reactor (ATR)
- Materials and Fuels Complex (MFC)

■ Historical Utilization

- 16 Irradiation / PIE projects
- 15 RTEs

■ Carry over work from FY 2014

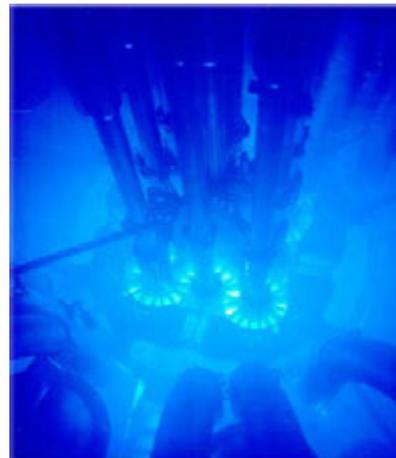
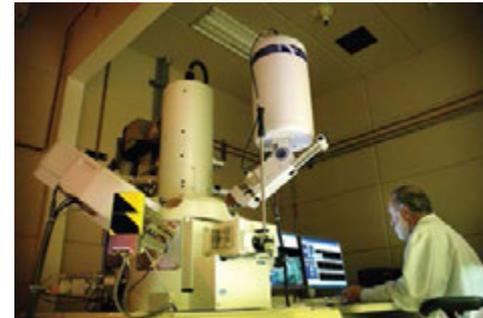
- 6 Irradiation / PIE projects
- 7 RTEs

■ FY 2015 New Awards

- 4 Irradiation / PIE projects

■ FY 2016 Look Ahead

- 12 CINR Invited Proposals
- 0 RTE Award (1st Call)
- 3 Pending RTE Proposals (2nd Call)



■ CAES

- CAES Microscopy and Characterization Suite (MaCS)

■ Historical Utilization

- 8 PIE projects
- 40 RTEs

■ Carry over work from FY 2014

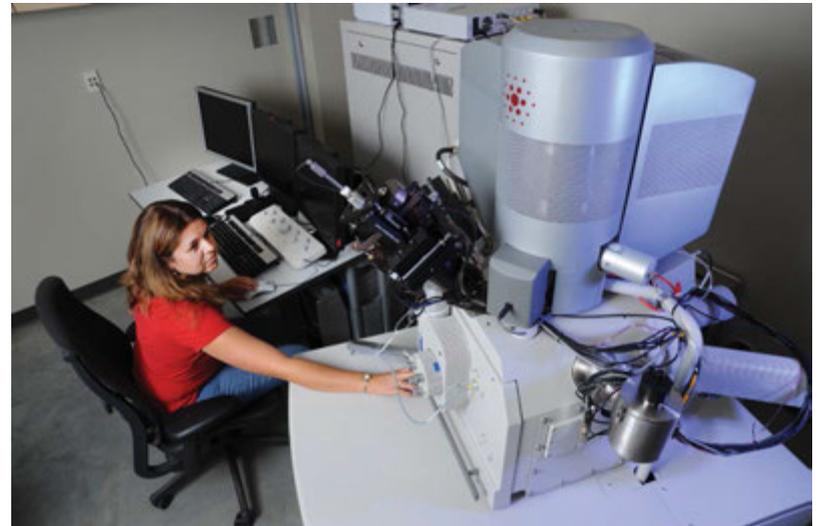
- 4 PIE projects
- 14 RTEs

■ FY 2015 New Awards

- 3 PIE projects
- 22 RTEs

■ FY 2016 Look Ahead

- 12 CINR Invited Proposals
- 8 RTE Awards (1st Call)
- 6 Pending RTE Proposal (2nd Call)



■ Partner Facility visit “revival”

- UC Berkeley
- ORNL

■ Watch List

- Purdue
- UNLV

■ Utilization of facilities outside the INL/CAES on the increase

■ Overall partner facility program healthy

