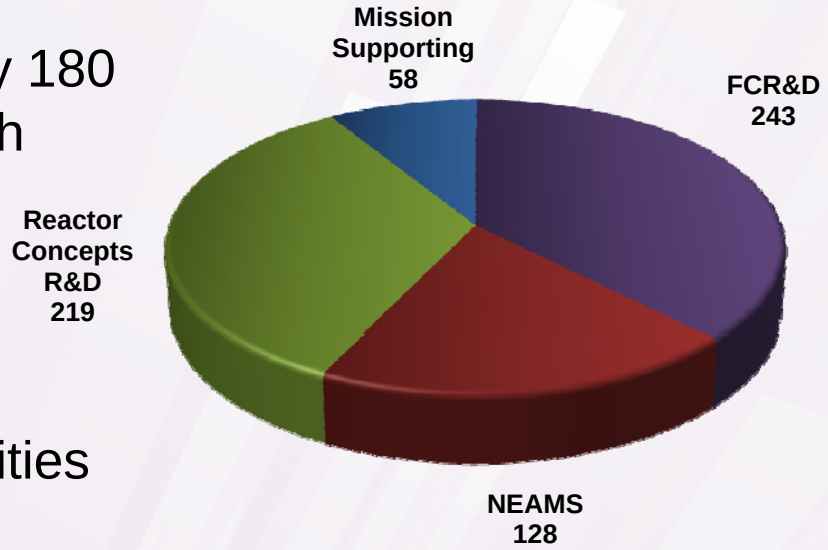
Nuclear Energy University Programs

FY 2012 R&D Pre-Application Demographic Information

NEUP Nuclear Energy University Programs
U.S. Department of Energy

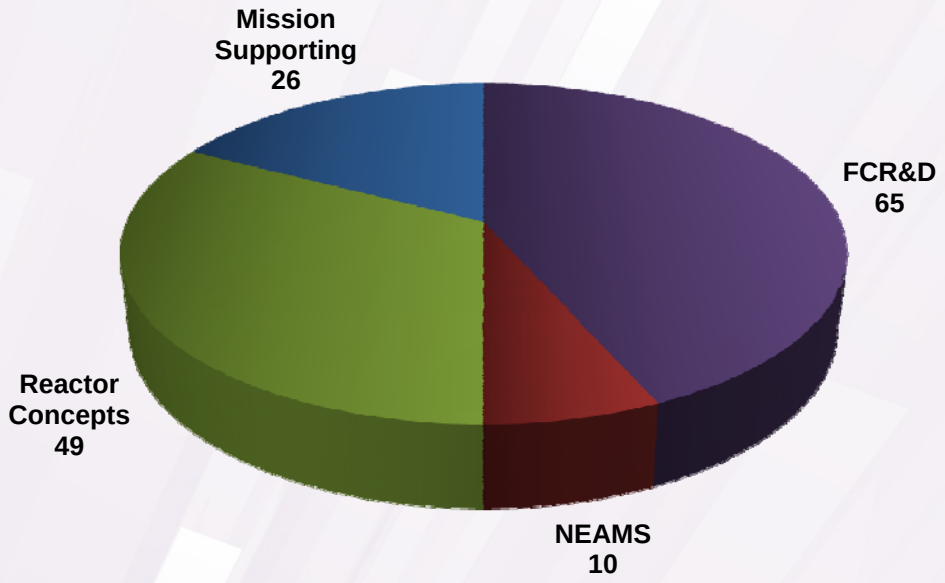
Submitted Pre-Applications

- NEUP received 648 applications in response to the FY 2012 request for pre-applications (RPA)
- Pre-applications were submitted by 180 principal and collaborating research organizations
  - 116 universities
  - 10 national laboratories
  - 35 industry
  - 19 others, including foreign entities
- These organizations represent
  - 41 states and the District of Columbia
  - 4 foreign countries
  - 13 minority-serving institutions (MSI)
  - 1 U.S. territory

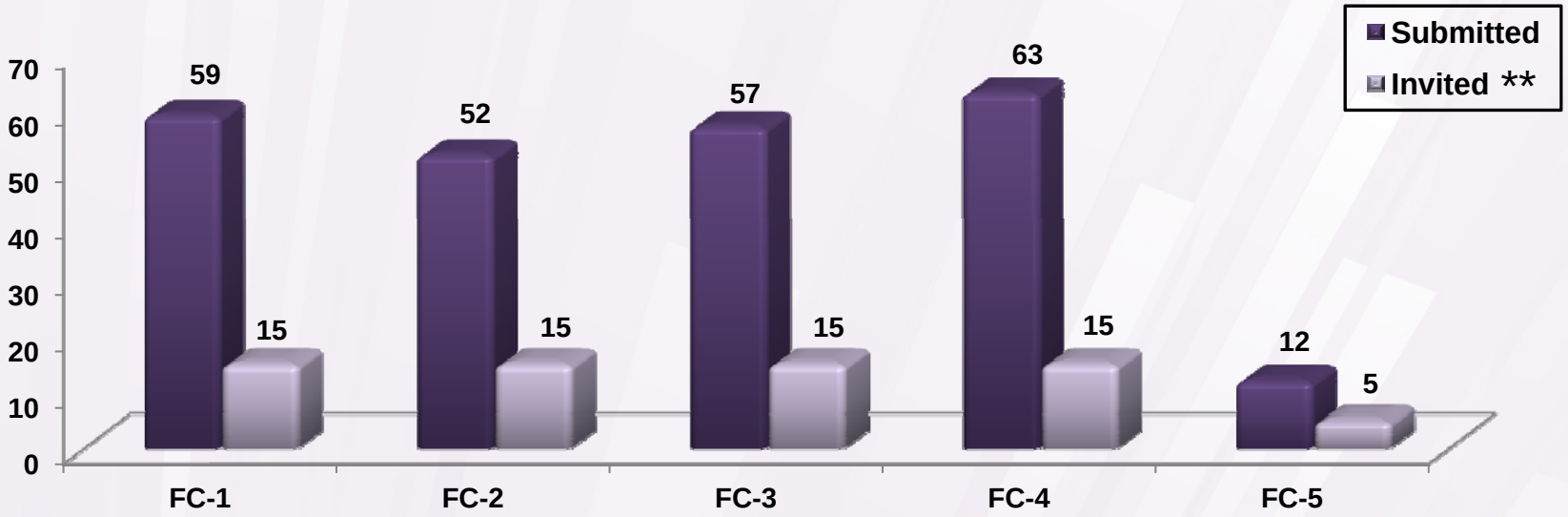


Recommendations - Invited Pre-Applications

- 150 pre-applications to be invited to submit full proposals
- Invited pre-applications were submitted by 96 principal and collaborating research organizations:
  - 69 universities
  - 9 national laboratories
  - 12 industry partners
  - 6 others, including foreign entities
- These organizations represent
  - 34 states
  - 1 foreign country
  - 6 MSI
  - 1 U.S. territory



Fuel Cycle R&D



FC-1: Separations and Waste Forms

FC-2: Advanced Fuels

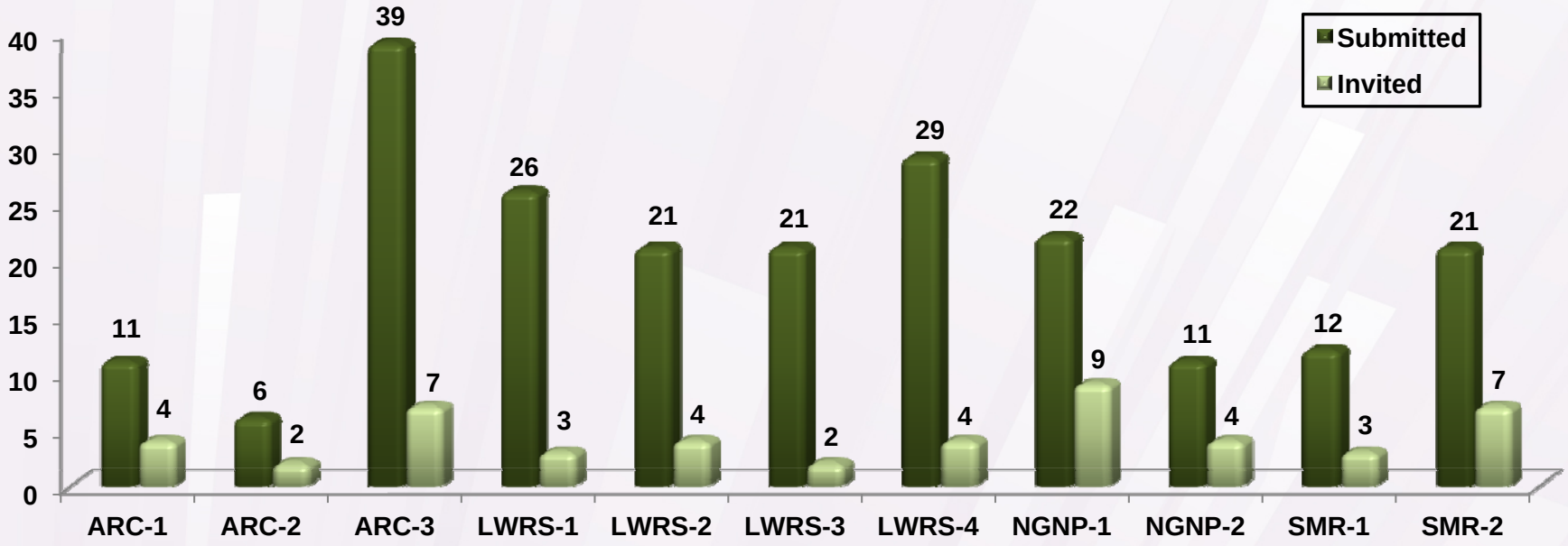
FC-3: Nuclear Materials Safeguarding and Instrumentation

FC-4: Used Nuclear Fuel Disposition

FC-5: Fuel Cycle Option Analysis

** Invited = Recommended to be invited to submit full proposals

Reactor Concepts R&D



ARC-1: Advanced Reactors Concept Development

ARC-2: Advanced Energy Conversion

ARC-3: Advanced Structural Materials

LWRS-1: Advanced Mitigation Strategies

LWRS-2: Risk-Informed Safety Margin Characterization

LWRS-3: Instrumentation and Control

LWRS-4: Advanced LWR Nuclear Fuel

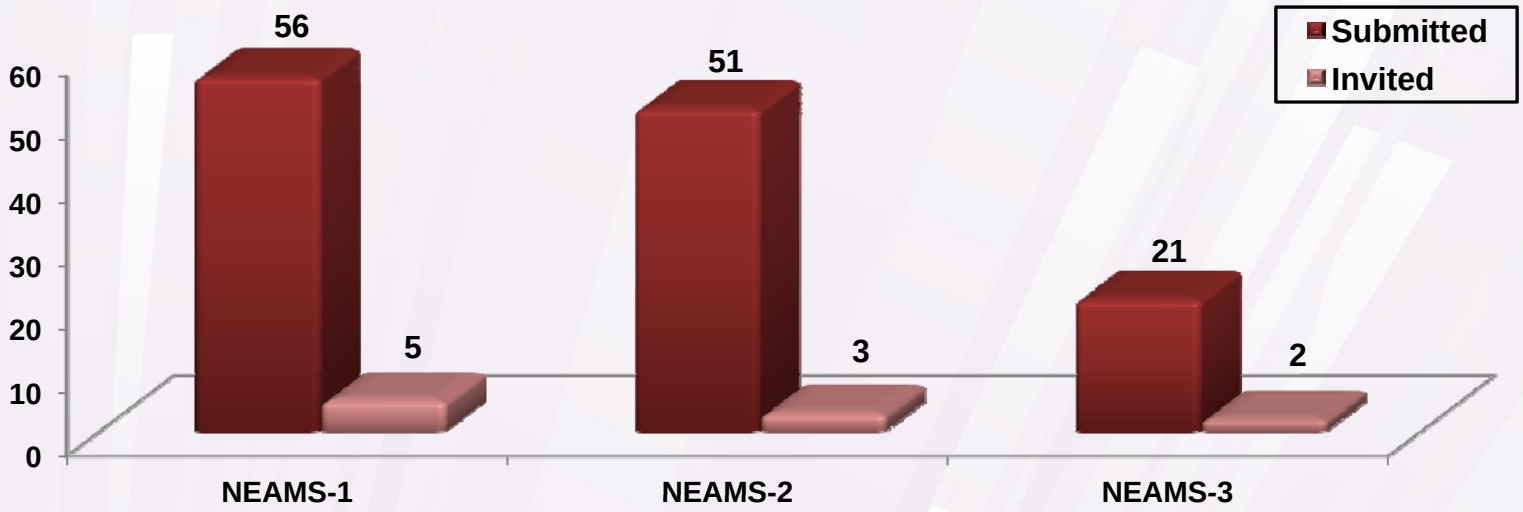
NGNP-1: Computational Methodologies

NGNP-2: Heat Transport, Energy Conversion, Hydrogen, and Nuclear Heat Applications

SMR-1: Advanced Concepts

SMR-2: Advanced Technologies and Analysis Methods

Nuclear Energy Advanced Modeling & Simulation (NEAMS)

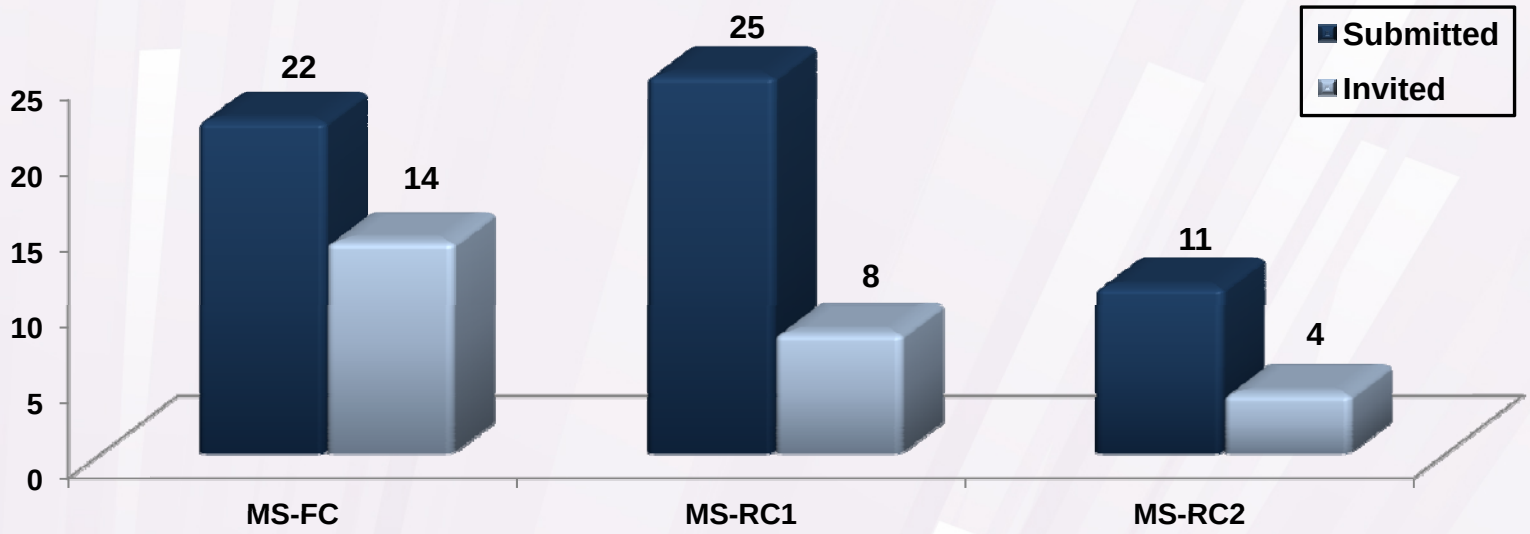


NEAMS-1: Structural Materials for Future Generation Nuclear Reactors

NEAMS-2: Model and Method Development to Support Current and Future Generation Nuclear Reactor Performance and Safety Analysis

NEAMS-3: Development of Phenomena-based Methodology for Uncertainty Quantification

Mission Supporting Transformative Research

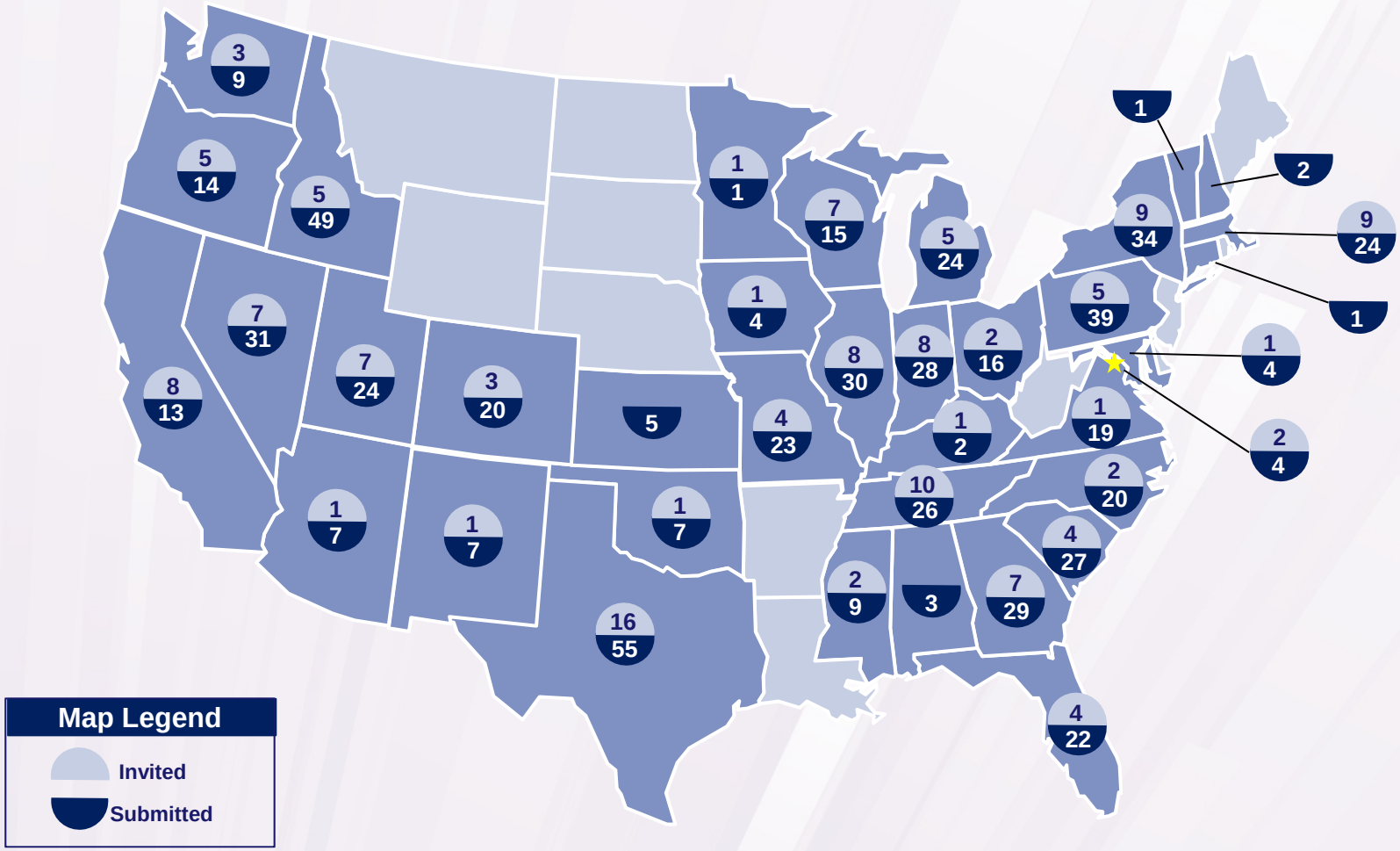
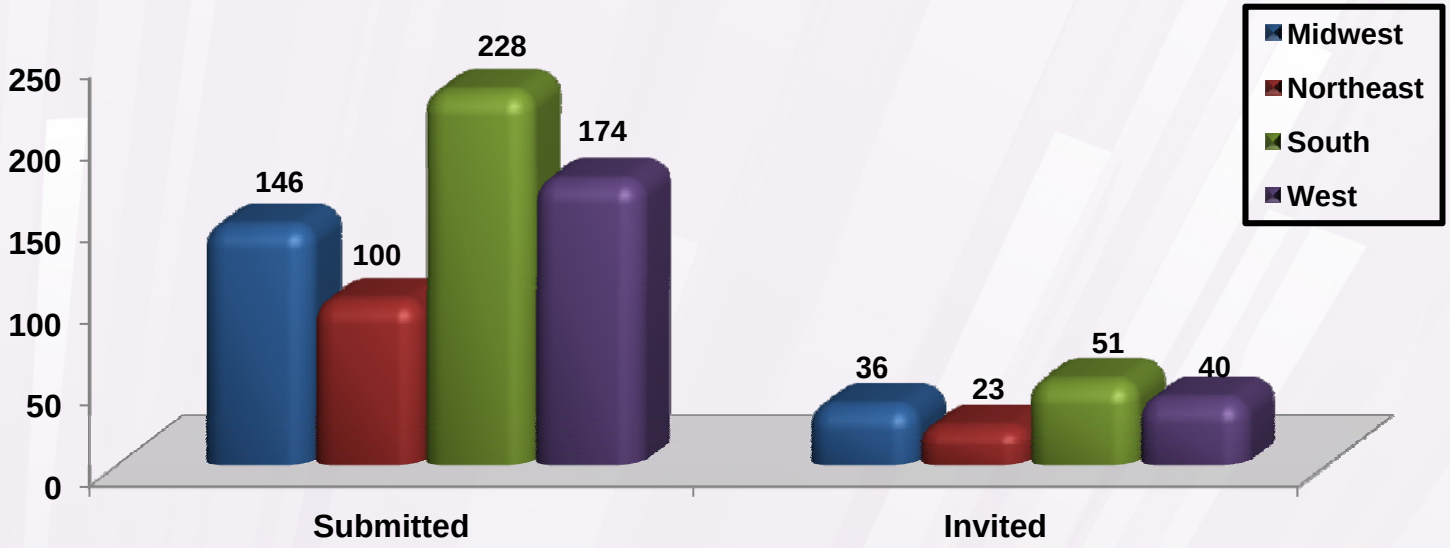


MS-FC: Fuel Cycle R&D

MS-RC1: Reactor Concepts R&D

MS-RC2: Space and Defense RD&D - Radioisotope Thermal Generator Technologies

Pre-Applications by State



Pre-Applications by Region