Nuclear Energy University Programs

FY2011 Review Process
**FY2011 NEUP Review Process**

**RPA Proposals**: Submission of three page proposals by university respondents

**Relevancy Panels**: Composed of two Federally selected reviewers representing technical areas

**Peer Review Panels**: Composed of Federally selected University or Laboratory technical peers

**Recommendation Panels**: Composed of Federal Directors and their selected advisors

**SSO Selection**: Presentation of recommendations by NEUP to the SSO

**Invited**: Proposals selected by the SSO to submit a full proposal

**Not Invited**: Proposals not selected by the SSO to submit a full proposal (may submit a full proposal, however, there is no guarantee that a full peer review will be performed)
FY2011 RPA Review Process

3 Page Pre-Proposals

Program “Bin” selected by submitting PI as part of the RPA process

**FCR&D**
Technical Areas: Separations and Waste Forms, Advanced Fuels, Transmutation R&D, MPACT, Used Nuclear Fuel Disposition, and Mission Supporting

**RC**
Technical Areas: Small Modular Reactors, NGNP, LWRS, Advanced Reactor Concepts, and Mission Supporting

**NEAMS**
Technical Areas: Advanced Modeling and Simulation

**NEET**
FY2011 RPA Review Process

3 Page Pre-Proposals:

Program “Bin” selected by submitting PI as part of the RPA process

FCR&D
Technical Areas:
Forms, Advanced Fuels, Transmutation R&D, MPACT, Used Nuclear Fuel Disposition, and Mission Supporting

Relevancy Panels
• Two panelists
Evaluation:
(3) Highly Relevant
(2) Relevant
(1) Low Relevance
(0) Not Relevant

RC
Technical Areas:
Reactors, NGNP, LWRS, Advanced Reactor Concepts, and Mission Supporting

Technical Panels
• Three Peers
Evaluation:
(3) High Merit
(2) Moderate Merit
(1) Low Merit
(0) No Merit

NEAMS
Technical Areas:
Advanced Modeling and Simulation

NEET
Technical Areas:
Simulation
FY2011 RPA Review Process

Weighting & Scoring

- Evaluation terms are numerically converted
  - **Relevancy**
    - (3) Highly Relevant
    - (2) Relevant
    - (1) Low Relevance
    - (0) Not Relevant
  - **Technical**
    - (3) High Merit
    - (2) Moderate Merit
    - (1) Low Merit
    - (0) No Merit

- Scores are weighted and added:
  - **Program Supporting**: 35:65
  - **Mission Supporting**: 20:80

**Example**

A *Program Supporting* proposal is evaluated as **Relevant**, with **High Merit**:

\[ 2 \times 0.35 + 3 \times 0.65 = 2.65 \]

A proposal in the same group is evaluated as **Highly Relevant** with **High Merit**:

\[ 3 \times 0.35 + 3 \times 0.65 = 3.00 \]
Evaluation Criteria: Program vs Mission Supporting

**Program Supporting**

- **Scientific/Technical Merit (65%)**
  - ✔ Advances the state of knowledge in the *selected program workscope*
    - Practicality of scope with respect to the *program workscope*
    - Practicality of scope with respect to requested funding and period of performance
    - Logical path to work accomplishment; Ability of team to perform work

- **Relevancy (35%)**
  - ✔ Aligned with, and directly relevant to, *program objectives*.
    - Submission should define and describe the significance of the proposal to the needs described by program workscopes.

**Mission Supporting**

- **Scientific/Technical Merit (80%)**
  - ✔ Advances the state of knowledge in an area *supporting the overall NE mission*
    - Practicality of scope with respect to NE’s *mission*
    - Practicality of scope with respect to requested funding and period of performance
    - Logical path to work accomplishment; Ability of team to perform work

- **Relevancy (20%)**
  - ✔ Aligned with, and directly relevant to, *NE mission*.
    - Submissions should sufficiently capture a clear and supportive connection to the NE mission.
FY2011 RPA Review Process

Weighting & Scoring

- Evaluation terms are numerically converted

<table>
<thead>
<tr>
<th>Relevancy</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) Highly Relevant</td>
<td>(3) High Merit</td>
</tr>
<tr>
<td>(2) Relevant</td>
<td>(2) Moderate Merit</td>
</tr>
<tr>
<td>(1) Low Relevance</td>
<td>(1) Low Merit</td>
</tr>
<tr>
<td>(0) Not Relevant</td>
<td>(0) No Merit</td>
</tr>
</tbody>
</table>

- Scores are weighted and added:

**Recommendation Panels (3)**

- Federal Directors / Technical Liaisons

**Example**

- A Program Supporting proposal is evaluated as Relevant, with High Merit:
  \[2 \times 0.35 + 3 \times 0.65 = 2.65\]

- A proposal in the same group is evaluated as Highly Relevant with High Merit:
  \[3 \times 0.35 + 3 \times 0.65 = 3.00\]
FY2011 RPA Review Process

3 Page Pre-Proposals

Program “Bin” selected by submitting PI as part of the RPA process

Technical Areas: Separations and Waste Forms, Advanced Fuels, Transmutation R&D, MPACT, Used Nuclear Fuel Disposition, and Mission Supporting

Relevancy Panels (11)

Evaluation:
• Evaluation terms are numerically converted

Relevancy
(3) Highly Relevant
(2) Relevant
(1) Low Relevance
(0) Not Relevant

Technical
(3) High Merit
(2) Moderate Merit
(1) Low Merit
(0) No Merit

Scores are averaged:
Program Supporting 35:65 Mission Supporting 20:80

Recommendation Panels (3)
Federal Directors / Technical Liaisons

Example
A Program Supporting proposal is evaluated as Relevant, with High Merit:
2(.35) + 3(.65) = 2.65

A proposal in the same group is evaluated as Highly Relevant with High Merit:
3(.35) + 3(.65) = 3.00

Invited

Not Invited
**Invited Relevancy Review:** Relevancy review of all invited proposals by two federally selected relevancy reviewers
- All proposals are passed forward for full peer review

**Not Invited Relevancy Review:** Relevancy review of “not invited” proposals by federally selected relevancy reviewers will be performed
- Only those Program Supporting proposals that are “Highly Relevant” may be passed forward for full peer review
- Only those Mission Supporting proposals that are scored “Relevant” may be passed forward for full peer review

**Peer Review:** Full technical review by a 3 member panel of peers (“Not Invited” proposals as requested by NE program management)

**Recommendation Panels:** Composed of Federal Directors and their selected advisors

**SSO Selection:** Proposals selected by the SSO for funding
FY2011 RFP Review Process

Invited
- 10 page proposal submitted as invited by the SS0

Not Invited
- 10 page proposal submitted by individuals wanting to submit a proposal at their own risk (no guarantee of peer review)
FY2011 RFP Review Process

Technical Review of Invited Proposals

- Proposals are scored by individual reviewers:
  - Peer Review
    - S&T Merit
    - Research Plan
    - Capabilities
    - Team
    - Minority Bonus

Relevancy Review of Invited Proposals

- Proposals are scored by individual reviewers:
  - Relevancy
    - High Relevant
    - Relevant
    - Low Relevant
    - Not Relevant
**FY2011 RFP Review Process**

- **Invited Proposals**
  - 10 page proposal submitted as invited by SS0
  - Proposals are scored by individual reviewers:
    - Peer Review
    - S&T Merit Research Plan
    - Capabilities
  - Minority Bonus

- **Not Invited Proposals**
  - 10 page proposal submitted by individuals wanting to submit a proposal, even though they are not “encouraged”
  - Proposals are scored by individual reviewers:
    - Relevancy
      - High Relevant
      - Relevant
      - Low Relevant
      - Not Relevant
    - Program Supporting proposals evaluated as “High Relevant” are passed forward by request of NE program management
    - Mission Supporting proposals evaluated as “Relevant” or higher are passed forward by request of NE program management
FY2011 RFP Review Process

Technical Review of Invited Proposals

- Proposals are scored by individual reviewers:
  - Peer Review
  - S&T Merit
  - Research Plan
  - Capabilities
  - Team
  - Minority Bonus

Relevancy Review of Not Invited Proposals

- Proposals are scored by individual reviewers:
  - High Relevant
  - Relevant
  - Low Relevant
  - Not Relevant

- Those proposals that were passed forward through relevancy review are technically reviewed:
  - Peer Review
  - S&T Merit
  - Research Plan
  - Capabilities
  - Team
  - Minority Bonus

Technical Review of Not Invited Proposals

- Proposals are scored by individual reviewers:
  - High Relevant
  - Relevant
  - Low Relevant
  - Not Relevant

- Program Supporting proposals evaluated as “High Relevant” or higher are passed forward by request of NE program management
- Mission Supporting proposals evaluated as “Relevant” or higher are passed forward by request of NE program management

Invited

- 10 page proposal submitted as invited by the SS0

Not Invited

- 10 page proposal submitted by individuals wanting to submit a proposal, even though they are not “encouraged” to do so.
FY2011 RFP Review Process

- **Invited Proposals**
  - Proposals are scored by individual reviewers:
    - Peer Review
    - S&T Merit
    - Research Plan
    - Capabilities
    - Team
    - Minority Bonus
  - Proposals are passed forward by request of NE program management

- **Not Invited Proposals**
  - Proposals are reviewed for relevancy:
    - High Relevant
    - Relevant
    - Low Relevant
    - Not Relevant
    - Program Supporting proposals evaluated as “High Relevant” or higher are passed forward by request of NE program management

- **Relevancy Review of Invited Proposals**
  - Proposals are scored by individual reviewers:
    - Relevancy
    - Technical Review
  - Relevancy and Technical scores are weighted and added.

- **Program Supporting**
  - 35:65

- **Mission Supporting**
  - 20:80
FY2011 RFP Review Process

**Technical Review of Invited Proposals**
- Proposals are scored by individual reviewers:
  - Peer Review
  - S&T Merit
  - Research Plan
  - Capabilities
  - Team
  - Minority Bonus

**Relevancy Review of Not Invited Proposals**
- Technical Review of Not Invited Proposals
- Proposals are scored by individual reviewers:
  - Relevancy
  - High Relevant
  - Relevant
  - Low Relevant
  - Not Relevant

- Those proposals that pass through relevancy review are technically reviewed:
  - Peer Review
  - S&T Merit: (30%)
  - Research Plan: (35%)
  - Capabilities: (20%)
  - Team: (15%)
  - Minority Bonus: (5%)

**Recommendation Panel**
Federal Directors / Technical Liaisons
FY2011 RFP Review Process

Invited
- Proposals are scored by individual reviewers:
  - Peer Review: S&T Merit, Research Plan, Capabilities, Team, Minority Bonus
  - Relevancy Review: High Relevant, Relevant, Low Relevant, Not Relevant
- Proposals are technically reviewed:
  - Peer Review: S&T Merit, Research Plan, Capabilities, Team, Minority Bonus

Not Invited
- Proposals are scored by individual reviewers:
  - Relevancy Review: High Relevant, Relevant, Low Relevant, Not Relevant
- Proposals that were passed forward through relevancy review are technically reviewed:
  - Peer Review: S&T Merit, Research Plan, Capabilities, Team, Minority Bonus

Scoring
- Relevancy and Technical scores are weighted and added.
- Program Supporting proposals evaluated as “High Relevant” or higher are passed forward by request of NE program management.
- Mission Supporting proposals evaluated as “High Relevant” or higher are passed forward by request of NE program management.

Recommendation
- Federal Directors / Technical Liaisons
- SSO Selection

Funded
- Not Funded