

Reciprocal Peer Review of DOE User Facility Proposals

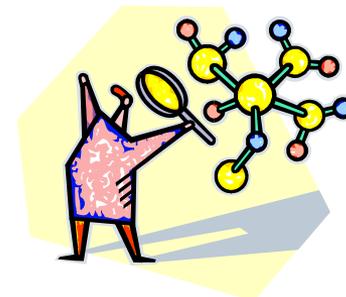
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▶ Roles

- Scientist
 - Hydrogen storage materials
 - Environmental geochemistry - radionuclides
- User
 - NSLS, SSRL, APS
 - ISIS, IPNS, NIST, LANSCE
 - EMSL
- EMSL Capability/Facility Steward
 - Proposal
 - Resource
 - Staff
 - Budget
- User Facility External Reviewer
 - NIST, APS, SSRL



Scientist/User Perspective



- ▶ National User facilities are outstanding benefit to scientific community
 - Unique experimental resources
 - Scientific expertise
 - Exposure to other researchers and techniques
- ▶ Obtaining access can be frustrating due to proposal cycle, review process and scheduling
 - Especially initial access
 - Why do I need to write another proposal when my research is funded by DOE?

Facility Perspective



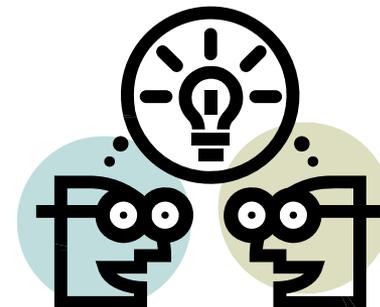
- ▶ Users are wonderful
 - Benefit the Facility by conducting high impact science
 - Appreciative of contribution to their research
 - Always acknowledge facilities in their publications
 - Mentor staff
- ▶ Users are clueless
 - Proposals seldom provide sufficient detail for technical evaluation of feasibility
 - Generally provide unrealistic estimates of hrs needed for experiment
 - Likely not to realize the cost of their access to the facility

External Reviewer Perspective



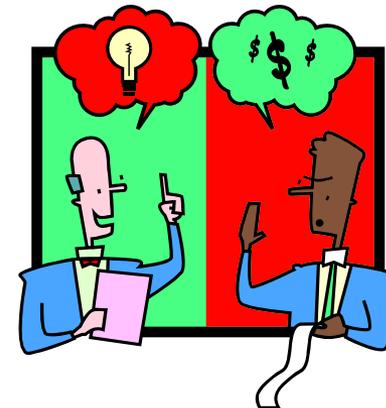
- ▶ Rate the science versus a more technical review
 - Essential to match reviewer expertise and type of review desired
- ▶ Single versus batch review
 - Actually easier to review of several proposals at the same time
- ▶ Proposal often do not contain the information needed for review
 - Either too short or too long

How can we better serve Users (and be better to ourselves)?



- ▶ Clear communication of the goals of the proposal process to User:
 - Ensure that the best science is conducted at DOE facilities
 - Appropriateness of the proposed work for the facility
 - Alignment with facility mission
 - Suitable resources
 - Allocation of resources
 - Selection process is transparent
- ▶ Design proposal request and review process that is consistent with those goals
 - What is purpose of external review?
 - What is purpose of internal review?

Understanding External vs. Internal Review



▶ External Peer Review

- Assures best science is conducted at DOE facilities
- Provides comparative ranking of competing proposals
- Provides transparency

▶ Internal Review

- Alignment with facility mission
- Appropriateness of the proposed work for the facility
- Availability of resources and staff

▶ Does the proposal format ask for the appropriate content to satisfy both types of review?

- Are we asking our external reviews to rate on correct criteria?

Possible Outcomes



- ▶ Can User facilities coordinate the timing of their proposal cycles? Joint call?
- ▶ Can we streamline the proposal review process?
 - If a proposal has been externally peer reviewed by another facility does that satisfy external review?
 - If proposal is funded by a government agency does that satisfy external review?
- ▶ Can we educate users about the cost of their access?
 - Should we provide users with a “bill”?
 - Note: User’s time isn’t free either

Structure and Dynamics of Ammonia Borane, NH_3BH_3

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