

Department of Energy Office of Science Washington, DC 20585

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TO:

FROM:

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OFFICE OF SCIENCE ASSOCIATE DIRECTORS

SUBJECT: DESIGNATION OF A USER FACILITY

This memorandum provides the process for the designation of a facility¹ as an Office of Science (SC) user facility.

Such designation connotes that the facility provides state-of-the-art capabilities to a broad segment of the scientific community. Today, the SC user facilities extend the frontiers of measurement science, allowing researchers to probe the subatomic, atomic, molecular, and biological worlds and to understand the correlations between structure and function in each of these size regimes—from the subatomic world to entire biological systems. Other facilities extend the frontiers of computation and simulation, allowing researchers to perform experiments that would be impossible to replicate in the laboratory. Still other facilities provide researchers with the opportunity to build nanosystems from the bottom up and explore the scientific foundations of plasmas and fusion energy. The SC user facilities offer capabilities unmatched anywhere in the world, enabling the U.S. to remain at the forefront of science, technology, and innovation.

The designation of an SC user facility also conveys significant responsibilities and expectations for both the facility and the steward/sponsor program. The process described herein ensures that consistent and appropriate review is applied to requests to designate a facility as an SC user facility.

The process is as follows:

1. At the invitation of the cognizant SC Associate Director (AD), the host institution submits a proposal—signed by the DOE laboratory director or equivalent chief executive of the host institution and the director of the proposed user facility—to the AD, and requests designation of the facility as an SC user facility. The facility must already receive primary funding from the AD. Proposal guidelines are provided below.

¹ A facility may not necessarily be a "bricks and mortar" entity; for example, the geographically distributed ARM Climate Research Facility is an Office of Science user facility.



- 2. If after consideration and possible review, the AD agrees with the proposed action, he/she transmits the proposal and any supporting documentation to the Chair of the SC User Facilities Working Group (the WG) for consideration. If additional funding is required to support operations of the facility as a user facility, the AD must note and agree to provide this funding. The AD must also include a description of the planned process to periodically review the scientific productivity and operations of the proposed user facility.
- 3. The WG reviews the proposal, the AD's proposed process for reviewing the user facility, and any supplemental material provided by the AD, and provides a documented recommendation to the Deputy Director for Science Programs.
- 4. The Deputy Director for Science Programs issues a determination.

Proposal Guidelines

The proposal must include the following:

(1) The reason for proposing the designation of the facility as an SC user facility.

The proposal should identify the unique capabilities that are offered, explain how these capabilities enable fundamental research essential to the DOE mission and show what impact can be achieved by providing broad access to these capabilities (e.g., leveraged investment, collaborative opportunities, increased scientific efficiency). The proposal should describe the potential user base.

The WG will consider the potential "impact" of the proposed user facility on the scientific/technical communities, including the potential for accelerating the pace of scientific discovery, increasing the scale of discovery, enabling unique science, and enabling a range of science.

(2) Evidence that the facility conforms to the SC user facility definition, which is posted on the SC website at <u>http://science.energy.gov/user-facilities</u>. The definition is quoted in boldface below with corresponding guidelines for the content of the proposal:

A user facility is a federally sponsored research facility available for external use to advance scientific or technical knowledge under the following conditions:

- The facility is open to all interested potential users without regard to nationality or institutional affiliation.
 - The proposal should state the facility's access policies and identify the legal instrument(s) that will govern user access (e.g., User Agreements, Work for Others Agreements, CRADAs).
- Allocation of facility resources is determined by merit review of the proposed work.
 - The proposal should provide a plan for soliciting proposals, conducting merit review, and selecting user projects.

- If applicable, the proposal should discuss any segmentation of the treatment of proposals in the open user program (e.g., separate evaluation of proprietary vs. non-proprietary proposals) and/or any facility resources reserved outside of the open user program (e.g., a director's discretionary reserve or a portion of resources reserved for intramural research).
- User fees are not charged for non-proprietary work if the user intends to publish the research results in the open literature. Full cost recovery is required for proprietary work.
 - If the facility will be used for proprietary research the proposal must specifically affirm that the facility will implement full cost recovery and must articulate an auditable approach to calculating user fees in accordance with DOE Order 522.1 and OMB Circular A-25.
- The facility provides resources sufficient for users to conduct work safely and efficiently.
 - The proposal should specifically discuss management processes designed to ensure user safety.
 - The proposal should describe the facility's management structure, including any relevant advisory committees, and provide details regarding the staffing plan that will be implemented to support user operations.
- The facility supports a formal user organization to represent the users and facilitate sharing of information, forming collaborations, and organizing research efforts among users.
 - The proposal should describe the facility's resources and activities in support of this criterion.
- The facility capability does not compete with an available private sector capability.
 - The proposal should include a description of the facility's attributes in this context.
- (3) Evidence that the facility has the systems and personnel resources to comply with SC's reporting and user statistics collection requirements. This material must include a description of how the facility will count users, consistent with the SC policy for defining and counting users.