

# Advanced Photon Source

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## Comprehensive APS Beam Time Access Policy

### Section where used:

This policy and procedure must be used when requesting any beam time at the APS.

### Changes made in this revision:

- Updated author and reviewers/approvers
- Updates throughout

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## Comprehensive APS Beam Time Access Policy

### 1 INTRODUCTION

All beam time at the APS must be requested, reviewed, and allocated through the Universal Proposal System (UPS). This system is designed to facilitate maximum opportunities for productive use of the APS by qualified researchers through a competitive, proposal-driven, peer-review system. The overall principle underlying this system is peer review that is fair, clear, expedient, and sensitive to the needs of users.

#### 1.1 Applicability

- Applies to all users of APS beam time
- Applies to all types of beam time

#### 1.2 Access Modes

Mechanisms of access exist to accommodate beam time needs ranging from a few hours on short notice to extended visits over a period of years. Proposals and experiment time requests (ETRs) are required for each access mode, but the review and allocation processes differ for each. (These differences are described under the procedures for each mode.) The access modes are as follows:

- General User: Regular, Macromolecular Crystallography, Rapid Access, Rapid Access Mail-in Powder Diffraction
- Partner User
- Collaborative Access Team (CAT) Member
- Collaborative Development (CDT)
- Resource Staff (both APS and CAT)
- Industrial Measurement
- Director's Discretionary

#### 1.3 Conditions

Assignment of beam time is governed by the following four requirements:

1. All general user beam time is subject to scientific review.
2. All beam time is based on proposals created in the Universal Proposal System.
3. Each request for time in a specific run cycle (i.e., an experiment time request or ETR) must be made against a proposal through the Universal Proposal System.
4. All scheduled beam time must be associated with specific experiment time requests in the Beamline Scheduling System.

## 1.4 Calls for Proposals

In general, requests for general user access are solicited, reviewed, and allocated three times per year, in conjunction with the three APS run cycles. Other access modes enable access at any time, as long as beam time is available.

## 1.5 Proposals and Experiment Time Requests

The Universal Proposal System enables the APS and beamline management to collect and document experiment time requests and the system's data supports DOE-mandated reporting activities .

In this system, a proposal describes the work to be performed, and an experiment time request (ETR) against the proposal identifies where and when the user wants to do that work. The proposal and first ETR are created together. For subsequent visits for the same work, a new request for beam time must be created against the original proposal. Thus, a proposal can have multiple ETRs. Proposal lifetimes are provided in the individual proposal type sections.

The various APS user systems (e.g., Universal Proposal System, Beamline Scheduling System, Experiment Safety Assessment Form, and End of Experiment Form) associate each beam usage with a specific set of data:

- Proposal
- Experiment Time Request (ETR)
- Beam time attribute set (e.g., proposal type, proprietary/non-proprietary, access mode, etc.)
- Experiment Safety Assessment Form (ESAF)
- End of Experiment Form (EEF)

## 1.6 Proposal Review and Scoring

The APS maintains several review groups as part of the Universal Proposal System (see the processes described under the procedures for each mode):

Table 1. Review Groups Used by Proposal Type† and/or Status

|   | Pool of reviewers | Proposal Review Panels (PRPs) | Beam Time Allocation Committee | Scientific Advisory Committee sub committee | APS Mgmt. Team                   | Beamline Staff                |
|---|-------------------|-------------------------------|--------------------------------|---|----------------------------------|-------------------------------|
| General User Macromolecular Crystallography (MX)      | X                 |                               | X                              |   |                                  |                               |
| General User Regular and BAGs*                        |                   | X                             | X                              |   |                                  | X (optional technical review) |
| General User Rapid Access (including industry access) |                   |                               |                                |   | X (if via industry inquiry form) | X (required technical review) |
| General User Rapid Access Mail-in Powder Diffraction/ |                   |                               |                                |   |                                  | X                             |
| Partner User proposals                                |                   | X                             |                                | X   | X                                | X                             |
| Project proposals                                     |                   | X                             |                                | X if PRP approved                           | X                                | X if PRP approved             |
| Director's Discretionary Time                         |                   | X                             |                                |   | X                                |                               |

†Resource Staff and CAT Member proposals do not require review.

\*Block Allocation Group

Table 2. APS Scientific Review Paradigm for Standard Science and Macromolecular Crystallography Proposals

| Area                | Question   | Response Choices  | Weighting |
|---------------------|--|---|-----------|
| Impact of Research  | How do you rate the impact of the proposed research?<br>Technological impact can include impact to applied fields, industry, and/or industrial processes.<br>Societal impact can include education, training, and outreach activities. | <ol style="list-style-type: none"> <li>1. Revolutionary - Experiment results will significantly advance knowledge in a specific scientific/technology field. Very high probability of publication in a leading scientific journal and/or very high probability of technological/societal impact.</li> <li>2. Significant - The outcome of the proposed research will advance knowledge in a specific scientific/technology field. High probability of publication in a leading scientific journal and/or high probability of technological/societal impact.</li> <li>3. Important - Experiment results likely to produce incremental scientific/technological advances. Likely probability of publication in a non-leading scientific journal and/or some technological/societal impact.</li> <li>4. Minimal - The experiment results will not significantly impact a specific scientific/technology field. Publication may or may not result from this research and/or minimal technological/societal impact.</li> <li>5. Insignificant - Results not likely to make contributions to understanding of fundamental or applied fields. Publication not likely and/or no technological/societal impact.</li> </ol> | 45%       |
| Quality of Research | How do you rate the quality of the proposal's research plan?<br>Viability is based on pure, intrinsic limitations of the proposed technique (not the capability of the beamline).  | <ol style="list-style-type: none"> <li>1. 1 Very High Quality - Planned experiment demonstrates clear viability, optimal understanding of facility resources and experimental team and their resources are above average. Data analysis strategy is very well thought out.</li> <li>2. High Quality - Planned experiment is well thought out, viable, and experimental team and their resources are adequate. Data analysis strategy is sound.</li> <li>3. Moderate - Planned experiment is viable but team would benefit from collaboration with facility staff.</li> </ol>  | 35%       |

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## PROCEDURE

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|                        |  | 4. Below Average - Research planning, resources, and/or data analysis strategy is lacking some important details.<br>5. Poor - Research plan is not well thought out.   |     |
| Facility Justification | Rate the need for facility resource (e.g., beamline, instrument) | 1. Essential - The unique characteristics of the facility resources are shown to be essential for the success of the proposed work.<br>2. Important - The unique characteristics of the facility resources are important for the success of the proposed work.<br>3. Beneficial - The proposed work will likely benefit from the use of the unique facility resources.<br>4. 4 Not required - The proposed work does not take advantage of unique facility resources. | 20% |

One response is selected for each question; a score is calculated based on the weighting assigned to each question.

Beamline staff have the ability to comment on proposals regarding the technical feasibility and other issues for requests on their beamline through the technical review interface in the UPS. They can address any issue that bears on whether beam time should be awarded, including (but not limited to) environment, safety, and health issues; the past performance of an investigator; specific outreach on the part of the beamline management; or a unique suitability of the beamline to accommodate the proposal. These comments are considered in the allocation process.

## 1.7 Available Beam Time Calculations

Available beam time is calculated each cycle for each independently operating beamline. Details of availability are given in the procedure for each mode. Commitments for each access mode are made by agreement between the beamline management and the APS Deputy Director for X-ray Science.

The standard unit of beam time for calculating available time is an eight-hour shift, although smaller units are sometimes used in scheduling. The calculations begin with the “total available user shifts” for the cycle, as determined by the machine operation schedule. A standard operating allowance is deducted from this figure (i.e., to allow for issues around start-up). The result is called the “baseline available shifts.” All calculations for beam time are based on this figure.

## 1.8 Beam Time Allocation

The allocation mechanism is different for each mode; see the appropriate procedures. In general, the number of shifts recommended by a Proposal Review Panel (PRP, see 5.2.3) is used in making a preliminary allocation, but the final number of shifts allocated is at the discretion of the Beam Time Allocation Committee (BAC, see 5.2.4).

- Requests preselected by CAT national user facilities are removed from consideration before the BAC meeting (known as National User Facility or NUF claims).
- The allocation interface in UPS displays both proposal information (number, abstract, experimenters, etc.) and detailed information of each time request, including ETR number, proposal type, requested resource, requested instrument, time request information. The ETR data columns are sortable to facilitate the allocation process.
- Instrument percentages, if specified, are also available in the interface.
- At the BAC meeting allocations are based on score, feasibility, student involvement, beamline staff comments, etc.
- Beamline staff approve the proposed allocations.
- The User Office releases the allocations and the system notifies users of the decision on their requests.
- The allocation decisions are then loaded to the scheduling system, which are responsible for scheduling allocated beam time.



Both the user and the beamline may appeal a decision of the BAC:

- Beamline appeal: If the beamline strongly disagrees with the decision of the BAC (e.g., if the proposed experiment is not technically feasible on the beamline), the beamline coordinator may appeal to the chair of the BAC. This appeal must be made within two working days of receiving the allocation report. In these cases, the BAC Chair is authorized to act on behalf of the BAC to resolve the appeal.
- User appeal: If a proposer has concerns about the review or allocation process, he or she may communicate these concerns in writing to the APS Deputy Director for X-ray Science.

## 1.9 Scheduling

The beamline to which the beam time is allocated is responsible for scheduling and coordinating the user visit. Visits must be scheduled in either the APS Beamline Scheduling System or via a CAT/CDT scheduling system. CAT/CDT beamlines that are not using the APS web-based scheduling system must backfill their scheduling data for each cycle into the APS system.

## 1.10 Alternate Access Modes

Some experiments are carried out by “remote users,” that is, users not located at the facility who control the beamline through computer access. Some beamlines accommodate “mail-in” users: the users send samples by mail and local staff members collect the data on the users’ behalf. Although mail-in and remote users are subject to slightly different administrative requirements (see “Site Access by Users and Visitors” APS\_1426672) for the purposes of allocation and reporting, the rest of this policy is applicable.

## 1.11 User Responsibilities

- All users must complete appropriate training (at a minimum, all core APS user training requirements and sector-specific training) and have a valid User Agreement in place between the Argonne and the institution that sponsors the research (see “Site Access by Users and Visitors” APS\_1426672 and “User Training” APS\_1258434).
- Each experiment must reflect the proposed work described in the proposal.
- When work performed at the APS by a user is submitted for publication, the author must include appropriate acknowledgement of the APS and the beamline in the manuscript (for the text of the required acknowledgement, see <https://www.aps.anl.gov/Science/Publications/Acknowledgment-Statement-for-Publications>),
- Users are required to submit full citations of all publications resulting from their work to the [apspubs@aps.anl.gov](mailto:apspubs@aps.anl.gov) for inclusion in the APS Publications Database.

## 1.12 References

- Introduction to APS (<https://www.aps.anl.gov/Users-Information/Getting-Started/Introduction-to-APS>)
- APS User Info Web site (<https://www.aps.anl.gov/Users-Information/>)
- APS Beamline Directory (<http://www.aps.anl.gov/Beamlines/Directory/>)
- Definitions: <https://www.aps.anl.gov/Users-Information/About-Proposals/Concepts-Definitions-and-Help>

## 2 BACKGROUND

This policy/procedures document was written to supersede the following policies:

- APS\_1299521 “Beam Time Access Framework”
- APS\_1426695 “General User Beam Time”
- APS\_1426696 “Partner User Beam Time”
- APS\_1426697 “Collaborative Access/Development Team Beam Time for Members and Staff”
- APS\_1426698 “APS Staff Beam Time”
- APS\_1426700 “Industrial Measurement Beam Time”
- APS\_1426699 “Director’s Discretionary Beam Time”

Redundant information has been eliminated, and the process description has been shortened by providing links are to Web information where appropriate.

## 3 ACCEPTANCE CRITERIA

N/A

## 4 PREPARATION OR PREREQUISITE ACTIONS

N/A

## 5 PROCEDURE

### 5.1 General Procedure for All Beam Time

The general procedure for requesting beam time at the APS is as follows:

- User registers and obtains a badge number  
([https://beam.aps.anl.gov/pls/apsweb/ufr\\_main\\_pkg.usr\\_start\\_page](https://beam.aps.anl.gov/pls/apsweb/ufr_main_pkg.usr_start_page))

- User accesses the Universal Proposal System to submit a proposal and initial experiment time request (<https://ups.servicenowservices.com/ups>)

Requirements specific for each type of beam time are described in the following sections.

## 5.2 General User Beam Time

### 5.2.1 Definitions

**General User Regular Mode:** This is the default mode and applies to all proposals/ETRs submitted by the proposal deadline and with no special considerations. Reviews and allocations follow standard procedures (see below).

**General User Rapid Access Mode (non-MX):** This mode applies to proposals submitted in the interval between the proposal deadline for a given cycle and the end of the cycle. This mode offers a mechanism for short-turnaround access for beam time to address urgent needs. The decision to set aside a specific amount of time for rapid access requests is made by each beamline for each cycle, and the UPS system administrator loads the time set aside into the UPS.

In the interval between the close of a standard proposal call and the end of a cycle, a separate call will be opened to collect rapid access proposals. The rapid access proposal is valid for a single cycle, single experiment time request.

To fill the time set aside for rapid access, a beamline may choose from among all rapid-access requests naming that beamline. The choice may be made at any time in the cycle. When the beamline is reviewed by the APS, the beamline will be required to justify the scientific impact of the time allocated to rapid-access requests.

**General User Project Mode:** This mode applies to proposals for experiments that require a specific beamline or suite of beamlines for more than one cycle (up to two years). The proposal spokesperson requests project status when creating the proposal and must justify why the work must be done on the specified beamlines and why the goals of the project cannot be achieved effectively under a standard general user proposal.

Each beamline has a cap of the total time that can be assigned to project proposals. This cap is determined by APS management for APS-operated beamlines and by CAT management for CAT-operated beamlines.

These proposals undergo both standard General User review and an additional review by a subcommittee of the APS Scientific Advisory Committee. If either review rejects project status, the proposal becomes a standard General User proposal. If project status is granted, time is guaranteed in each cycle; however, an ETR must still be submitted each cycle.

## 5.2.2 Available Time and Proposal Lifetime

Beamline GU time obligations for APS and CAT beamlines are defined in “BES Light Source Partnership Model” APS\_2284651.

Standard General User proposals are valid for a period of two years or until the number of shifts granted by the review process have been used. Rapid Access proposals (as described under 5.2.1) expire at the end of the cycle for which they were submitted.

## 5.2.3 Scientific Review

Multiple review processes are applicable for the APS general user proposal types proposals: 1) General User-Macromolecular Crystallography (MX), 2) General User-Regular proposals, 3) General User- Rapid Access proposals, 4) General User-Rapid Access Mail-in Powder Diffraction proposals, and 5) Block Allocation Group (BAG) general user proposals. Proposals requiring confidentiality may have additional review needs.

**General User-MX Review:** MX reviewers are drawn from a pool of individuals who have been identified by the user community and have indicated their willingness to participate. Proposals are reviewed on a rolling basis. Each proposal is rated by two external reviewers and the individual scores are averaged. Scores are calculated within the UPS system using the scoring assessment. (see table 2 in 1.6).

**General User-Regular:** Proposal Review Panels (PRPs) are established by the APS, with reviewers selected to provide a balance in techniques and disciplines. Various user groups can nominate candidates; final appointments are made by the APS Deputy Director for X-ray Science, who also appoints each panel chair. Panel members are appointed for two-year terms, renewable by mutual consent. See <https://www.aps.anl.gov/About/Committees/Proposal-Review-Panels> for a list of current PRPs and their membership.

The PRPs meeting before each cycle (three times a year), either at the APS or electronically to establish a consensus score, develop comments, and recommend the amount of time for each new proposal. Scores are calculated within the UPS system using the scoring assessment. (see table 2 in 1.6). Prior to each PRP meeting, the panel chair electronically assigns two primary reviewers for each proposal. Primary reviewers are expected to read the assigned proposals and be prepared to lead the discussion of their contents. All reviewers are expected to be somewhat familiar with all proposals before the PRP meeting and prepared to contribute to the discussion of each proposal. If necessary, panel chairs can shift a proposal to a different panel or request that *ad hoc* reviewers be solicited to supplement the panel’s review. Users are able to view the scores and comments after the review process is complete.

**General User-Rapid Access (non-MX):** ETRs of rapid access proposals appear in a pool of all available rapid access experiment time requests for the selected beamline. These proposals are reviewed for feasibility and scored by the beamline identified in the ETR.

**General User-Rapid Access Mail-in Powder Diffraction:** Proposals for mail-in powder diffraction/ are reviewed using the rapid-access proposal review process.

**Review of Proposals Requiring Confidentiality:** For general user proposals requiring confidentiality (e.g., proprietary, industrial) the proposer must complete the proposal with as much information as possible. If the reviewers conclude they do not have enough information to complete the review, they assign a score of “0,” which triggers a confidential review by the APS Deputy Director for X-ray Science.

## 5.2.4 Allocation

The APS Deputy Director for X-ray Science appoints two Beam Time Allocation Committees (BACs) to oversee allocation of general user beam time, one for Macromolecular Crystallography and one for regular science proposals. Each has at least three members, who serve two-year terms, renewable by mutual consent. Candidates are solicited from all operational beamlines. The committee meets once each cycle to decide on the allocation of time. General users have the right to appeal a denial of beam time.

**Aging:** To promote equitable access, the scores of unallocated proposals are “aged” at each cycle as part of the allocation process. If a proposal was not allocated time in the previous cycle, its score is improved by 0.2 provided that a new experiment time request is submitted for the upcoming cycle. This is done for a maximum of two cycles for a maximum improvement of 0.4. Rapid Access proposals (non-MX) and General User Rapid Access Mail-in Powder Diffraction proposals do not age.

## 5.2.5 Scheduling

The beamline on which the request is allocated is responsible for scheduling and coordinating the visit. Visits must be scheduled in or retroactively recorded in the Beamline Scheduling System. Beamlines should make every effort to schedule awarded proposals/ETRs in the run for which they were allocated.

## 5.2.6 Beamline Rights and Responsibilities

For general user proposals on which staff members are not collaborating, the beamline may determine that the costs associated with the proposed experiment are in excess of routine expenditures. In these cases, the beamline will advise the APS User Program Office, which will ensure that the general user has a funded operating cost code (user account) in place to cover the supplies, materials, or services required by the general user (see “Establishing and Maintaining Nonproprietary User Accounts” APS\_1186766 and “Establishing and Maintaining Proprietary APS User Accounts” APS\_1186767).

A beamline may request in writing to the Beam Time Allocation Committee (BAC) that a specific general user not be granted time on that beamline. The written request must state the reasons for the exclusion of a particular general user. Appeals to the decision of the BAC for these requests will be decided by the APS Deputy Director for X-ray Science.

The beamline and the APS collaborate to determine which techniques, instruments, and equipment will be made available to general users. The beamline will provide the agreed upon capabilities, as well as the required amount of technical support.

The beamline will also permit the general user to use existing sector laboratory facilities in the Laboratory Office Module (LOM) for tasks that cannot reasonably be done off site.

The host beamline will provide each general user with the technical training required to use the beamline and any ancillary equipment to which the general user has been granted access. If a general user requests the use of individually owned equipment not officially designated for general user use, the beamline may refuse the request, or, at its discretion, require the general user to use it in collaboration with the owner of the equipment.

For CAT-owned beamlines, during scheduled general user access periods, the host beamline will give general users the same level of technical support that it provides to its members.

## 5.3 Partner User Beam Time

### 5.3.1 Definition

Partner user proposals (PUPs) are used for work that contributes to the development of the facility in exchange for a guaranteed specified amount of beam time. The process provides access for projects that

- Require reliable beam time over multiple cycles, and
- Will ultimately benefit the general user community, for example by providing new instrumentation or capabilities that will be available to all users or by expanding a current or new user community.

Proposals are submitted through the web-based Universal Proposal System three times per year. Once reviewed and approved, requests for time (ETRs) must be submitted through the system for each cycle in which time is needed. Any beamline operated by the APS is open to Partner User Proposals; PUPs can also be considered for CAT-operated beamlines, but these PUPs require additional levels of review. See 5.3.3.

With the approval of their Division Directors, APS staff members may participate in PUPs.



## 5.3.2 Available Time and Proposal Lifetime

No more than 30% of the baseline available shifts may be granted to partner user proposals on any one beamline, and the total general user commitment is reduced by the amount of the Partner User commitment. PUPs are eligible for time up to three years (nine run cycles).

## 5.3.3 Scientific Review, Allocation, and Scheduling

Partner user proposals are peer reviewed by the relevant PRP, scored according to the criteria used for general user proposals, then reviewed further by APS management and a subcommittee of the APS Scientific Advisory Committee, which consists of a SAC member, the Chair of the Partner User Council (or designee), *ex officio*; and the Chair of the APS Users Executive Committee (or designee), *ex officio*. Beamline comments are also solicited. The beamline review can address any issues that impact whether beam time should be awarded, including (but not limited to) environmental, safety, and health issues; the past performance of an investigator; specific outreach on the part of the beamline management; or a unique suitability of the beamline to accommodate the proposed work. The final decision on acceptance is made by APS senior management.

Time is allocated in accordance with the terms of the PUP. The guaranteed time assigned to a partner user group is subtracted from the baseline available shifts (see 1.7) before the Beam Time Allocation Committee meets. The beamline on which the PUP has been allocated is responsible for scheduling the time and coordinating the user visit.

## 5.4 Collaborative Access Team/Collaborative Development Team Beam Time for Members and CAT Resource Staff

### 5.4.1 Definition

Collaborative Access Teams (CATs) are groups of individuals or institutions that have agreements with the APS to design, build, and operate one or more beamlines at the APS. Collaborative Development Teams (CDTs) are similar except that after an initial, agreed-upon period, the APS assumes responsibility for the operation of the beamline(s), and after a transitional period, CDT members become general users.

CAT members and staff submit proposals for their own beamline(s) through the “CAT Members” and “Resource Staff” categories in the Universal Proposal System, respectively, at any time or as specified by CAT management.

### 5.4.2 Available Time and Proposal Lifetime

Beamline GU time obligations for CAT beamlines are defined in “BES Light Source Partnership Model” APS\_2284651.

Proposals for CAT members and resource staff have a lifespan of five years or 15 cycles.

## 5.4.3 National User Facility CATs

Some CATs are funded to serve a national community; although they operate as CATs, they depend on the APS Proposal Review Panels for scientific review. However, before the Beam Time Allocation Committee meets, the CAT selects sufficient proposals to fill the CAT-available time. Those not selected by the CAT are then available for allocation by the Beam Time Allocation Committee.

## 5.4.4 Scientific Review, Allocation, and Scheduling

CAT member and resource proposals are reviewed by processes described in individual CAT management plans. The effectiveness of CAT member and staff time is assessed during Scientific Advisory Committee reviews of the CAT beamlines.

Some CATs, particularly those operating as National User Facilities, prefer to have CAT staff submit general user proposals through the Universal Proposal System. These proposals are then reviewed and allocated through that system in the same manner as that for all other general user proposals.

CAT management/beamline staff determine which CAT member/staff proposals will be allocated and scheduled in any given run period. All beam time for CAT members and staff must be requested via an experiment time request in a proposal.

## 5.5 APS Resource Staff Beam Time

### 5.5.1 Definition

APS staff members request time on their own beamline (e.g., for beamline projects or for their personal research) through the “Resource Staff” category in the Universal Proposal System. Staff members may also request general user time on beamlines other than their own.

### 5.5.2 Available Time and Proposal Lifetime

Beamline GU time obligations for APS beamlines are defined in “BES Light Source Partnership Model” APS\_2284651.

Proposals for resource staff have a lifespan of five years or 15 cycles.

### 5.5.3 Scientific Review, Allocation, and Scheduling

Proposals are reviewed by processes in place within the APS. Experiment time requests against APS resource staff proposals are allocated by the X-ray Science Division Group Leader responsible for the particular beamline. The beamline is responsible for scheduling.



## 5.6 Industry Access to Beam Time

### 5.6.1 Definition

The Rapid Access proposal type is the vehicle for industry access. The purpose for this type of beam time is to provide an expedited mechanism for access for new users with industrially important measurements. These experiments are one-time, usually non-proprietary, measurements to investigate specific problems (e.g., production or performance issues). The intent is to make time available for proof-of-concept experiments that may lead to other avenues of interaction. Initial contact is typically made through a contact questionnaire in the [industry section](#) of the APS web site. Rapid Access requests for industrial measurement access are accepted at any time. The APS Deputy Director for X-ray Science determines if the request is appropriate, sometimes consulting with a particular beamline. The three key criteria are as follows: (1) Can the work be done at the APS? (2) Can the work be done safely? (3) Is there a reasonable chance that useful information can be obtained?

### 5.6.2 Available Time and Proposal Lifetime

See section 5.2.1 General User Rapid Access Mode (non-MX) for details of rapid access mode.

Rapid Access proposals for industrial measurement expire after one visit. Further work can be conducted upon submission, review, and allocation of a general user proposal.

### 5.6.3 Scientific Review, Allocation, and Scheduling

If a request for industrial measurement time is approved, the beamline or User Office can assist (if needed) to create a proposal and experiment time request for the user in the Universal Proposal System. Once entered into the system, the proposal will follow the review and allocation processes associated with either standard proposals or rapid access proposals, as appropriate. Scheduling is handled by the beamline.

### 5.6.4 Declaration of Significance

Within 12 months of completion of industrial measurement beam time, the spokesperson must provide the APS with follow-up information on the significance of the work as specified in "Evaluation of Unpublished Research" APS\_1426363. This follow-up deadline can be extended upon request.

## 5.7 Director's Discretionary Beam Time

### 5.7.1 Definition

Very rarely, cases arise in which the prospective user cannot provide enough information for an adequate review through the general user process because of the confidential nature of the research (e.g., proprietary, industrially sensitive, or classified projects). These cases are handled through the use of Director's Discretionary beam time.

## 5.7.2 Available Time and Proposal Lifetime

All beamlines offering general user beam time are available for Director's Discretionary beam time. The APS can allocate up to 5% of the beam time on a single beamline as needed. This beam time is deducted from the beamline's general user obligation. At each cycle, the time set aside for this mode of access is subtracted from the baseline available shifts (see 1.7).

The lifetime for a Director's Discretionary proposal is the same as for standard general user proposals (up to two years or six cycles).

## 5.7.3 Scientific Review, Allocation, and Scheduling

The first review of a Director's Discretionary time proposal is through the standard general user review process. If the reviewers conclude they do not have sufficient information to provide a review, they assign a score of "0." Proposals with this score are automatically sent to the APS Deputy Director for X-ray Science for further consideration. The Aps User Office asks the proposal spokesperson to provide additional information about the potential impact and importance of the research to the APS Deputy Director, who reviews the proposal and communicates the decision to the APS User Office before the meeting of the Beam Time Allocation Committee.

The Aps User Office notifies the beamline when a proposal has been accepted for Director's Discretionary time. The time is then subtracted for that cycle from the baseline available shifts on the beamline. The beamline is then responsible for scheduling the time and coordinating the user visit.

## 5.7.4 Declaration of Significance

Within 12 months of completion of the Director's Discretionary time, the spokesperson must provide the APS with follow-up information on the significance of the work as specified in "Evaluation of Unpublished Research" APS\_1426363. This follow-up deadline can be extended upon request.

## 6 DOCUMENTS/RECORDS CREATED BY THIS PROCEDURE

The documents/records listed below will be created in the execution of this procedure.

| <b>Description of Document/Record (include ID number, if applicable)</b> | <b>Custodian</b>                  | <b>Storage Location and Medium</b>   |
|--|-----------------------------------|--|
| Proposal   | APS proposal system administrator | Universal Proposal System  |
| Experiment Time Requests   | APS proposal system administrator | Universal Proposal System  |
| Scientific peer review comments  | APS proposal system administrator | Universal Proposal System  |
| Beamline technical review comments                                       | APS proposal system administrator | Universal Proposal System  |
| SAC review results (for PUPs)  | APS proposal system administrator | User Office private server   |
| APS decision comments (for PUPs)   | APS proposal system administrator | User Office private server   |
| Final allocation tables by beamline                                      | APR proposal system administrator | Universal Proposal System  |
| Allocation emails to users   | APS proposal system administrator | Universal Proposal System  |
| Scheduled beam time record   | AES/Project Specialist            | Beamline Scheduling System   |
| Scheduled beam time notification email                                   | Beamline Scheduling Coordinator   | Beamline e-mail server, with back-up in APS Information Services if sent from the Beamline Scheduling System |

## 7 TRAINING REQUIRED

No training is required to execute this procedure.

## 8 FEEDBACK AND IMPROVEMENT

If you are using this procedure and have comments or suggested improvements for it, please go to the [APS Policies and Procedures Comment Form](#) \* to submit your input to a Procedure Administrator. If you are reviewing this procedure in workflow, your input must be entered in the comment box when you approve or reject the procedure.

|                                    |               |
|------------------------------------|---------------|
| <b>PROCEDURE</b>                   | Page 20 of 20 |
| ICMS Content ID: APS_1700813       |               |
| DNS #: APS-PPR-ADM-000-A020-000019 |               |
| Revision #: 5                      |               |

Instructions for execution-time modifications to a policy/procedure can be found in the following document: “Field Modification of APS Policy/Procedure” [APS\\_1408152](#).

\* <https://www.aps.anl.gov/Document-Central/APS-Policies-and-Procedures-Comment-Form>