Frequently Asked Questions (FAQs) for the Research Opportunities in Accelerator Stewardship and Accelerator Development Funding Opportunity Announcement

What's New in FY 2024?

In FY 2024, three major changes apply:

- 1. Track 4b applications must now be led by a domestic company. University and DOE National Laboratory PIs may still participate as subawardees.
- 2. Track 2 topics have been clarified, with specific areas of interest noted.
- 3. Track 1b Ultrafast Laser Technology Program topic has been updated.

What is the "Accelerator Development program"?

The Accelerator Development program addresses supply-chain vulnerabilities that lead to high risks in constructing future Office of Science accelerator facilities by strengthening the domestic industrial production capability for critical accelerator technology components. The Accelerator Development approach is to fund public-private partnerships between national laboratories and domestic industry (with university participation as appropriate), matching technologies and capabilities developed in the national laboratories with needs of the domestic accelerator technology industry. The direct and indirect (i.e., non-accelerator) market may be large and consistent enough for the domestic industrial capability to become sustainable at the end of the Accelerator Development funding period, but, for some accelerator technologies, the capability may require continued long-term federal funding. Other areas might require several funding cycle renewals to become sustainable without additional federal support.

What is a "Stewardship Customer", what is a "stakeholder", and what is considered satisfactory "evidence" of the stakeholder's interest?

"Stakeholder" is used throughout this FOA as a generalization of the term "Stewardship Customer". For the Accelerator Production program, the mission needs of the SC programs are the primary focus. For the Accelerator Stewardship program, the needs of other federal agencies and industry carry similar weight to SC programmatic needs. This difference in programmatic priority should be taken into account when preparing a proposal.

As defined in V.A.2, the term "stakeholder" is used broadly to organizations with a history of financial, intellectual, or physical support for research in the proposed subject matter. Stakeholders may be SC programs (e.g., BES, FES, HEP, or NP), other DOE program offices (e.g., NNSA, EERE, ARPA-E), other Federal agencies (e.g., NIH, NSF, DoD, DHS), or industries that use accelerator technology.

Evidence of the stakeholder's interest may be found in advisory committee reports, workshop reports, white papers, or R&D roadmaps issued by the Stewardship Customer that identify the issue as important. More

significant evidence is provided by substantial and material participation of the stakeholder in the effort (e.g., by co-funding, cost-sharing, in-kind donation or equipment, or donation of effort).

How can teams apply?

Teams of collaborating institutions are always strongly encouraged to apply, and for some Tracks, are required.

For Tracks 1, 2, 4a and 4b:

A single proposal must be submitted by the lead institution, with subawards provided to collaborators if needed. A single award will be issued to the lead institution, which must then write subcontracts to the subawardees to disburse the funds. The sole exception is if a DOE National Laboratory is a subawardee, in which case DOE will provide funds directly to the Lab by field work authorization, per section VIII.A.2.

As always, the participation of Minority-Serving Institutions and businesses owned by members of underrepresented groups is strongly encouraged, as lead institution of a team or as a collaborating member.

For Track 3:

A collaborative proposal must be filed, with the lead application originating from the non-DOE entity, and a collaborative proposal being submitted by the Host Lab. This is to ensure that proposals take accurate account of the capabilities, availability, and cost of working at the national lab, and to ensure the national lab has agreed to support the work.

What are you looking for in a "team"?

Teaming is strongly encouraged for proposals to any Track, and is an explicit review criterion, please see section V.A.2.

"Teaming" in the context of this solicitation means the substantial collaboration of two or more institutions to achieve the proposal's goals. It is a central aim of Accelerator Stewardship that technologies developed for basic research find use in a wealth of other applications, and often an excellent way to achieve this is through teams composed of people with expertise in (1) the accelerator technology, (2) the requirements of the new application, and (3) what's required to make a viable commercial product. Track 1 proposals (applied R&D) are expected to be from multi-institutional teams. Track 2 proposals (basic R&D) are encouraged to be from teams, but this should be determined by the nature of the work. Track 3 proposals (Test Facility Program) must have at least two institutions participating. In the case of Track 3 proposals, teaming between the non-DOE entity and a DOE Office of Science Laboratory is enforced by the requirement that a Collaborative proposal be submitted by both entities. This is to ensure that proposals take accurate account of the capabilities, availability, and cost of working at the national lab, and to ensure the national lab has agreed to support the work.

In the case of Track 4a proposals, teaming among industrial companies, universities, National Laboratories, and a business school or business consulting firm is necessary to ensure the accelerator sector business plan will be developed with a broad perspective and with the input of a sufficiently broad set of stakeholders. The inclusion of a business school or private consulting firm on the team is highly desirable to (1) engage a disinterested party to guide the business plan towards a balanced sector-wide perspective and (2) to provide an academic

perspective on business analysis, somewhat mitigating the difficulties of having any one company reveal its analysis and strategic approach. Applications lacking significant participation from multiple institution types may be considered unresponsive.

In the case of Track 4b proposals, teaming between domestic industrial companies and National Laboratories is necessary, with university participation as appropriate to insert enabling research developed in that sector into the production effort. Inclusion of a business school or private consulting firm is encouraged for building the business plan. To emphasize the commercial nature of accelerator technology supply chain vulnerabilities, the Track 4b effort will be led by a domestic company.

What are you looking for in Track 4 "Partnerships"?

A successful project in this Track will lead to an enhanced and durable U.S. production capability of one or multiple key accelerator technologies. With this in mind, different forms of partnerships may be needed depending on the technology. The form of these partnerships should be justified by the project goals, and could range from a model in which domestic industrial entities receive specific technology/knowledge transfer or facility use from National Laboratories, to a consortium model. Targeted infrastructure investments well aligned with the partnership model may be appropriate.

What are you looking for in the way of Diversity, Equity, and Inclusion (DE&I) activities in the PIER plan?

While the primary focus of the Accelerator Stewardship and Accelerator Development programs is the advancement of the science, technology, and production of accelerators, workforce development is a vital product of the R&D process. Ensuring that the educational, R&D, and infrastructure development opportunities provided by federal assistance awards are available to all is a critical step towards fully engaging the best and brightest minds to solve the research challenges ahead.

In that spirit, efforts to partner substantively, equitably, and meaningfully with investigators, institutions, and companies that are, that enroll or employ, or that are owned by members of underserved communities¹ are strongly encouraged. Because the Accelerator Stewardship and Accelerator Development programs cover a wide range of activity from basic R&D to industrial R&D, it is expected that DE&I plans will vary widely, but some or all elements of outreach, recruitment, creating an inclusive work environment, training, mentoring, and professional development are expected to be a part of each PIER plan. The PIER plan is required and is explicitly reviewed and scored by merit reviewers (see Section V.A.2). PIER Plans may build from current diversity, equity, inclusion, and accessibility efforts of the key personnel and/or applicant institution, but they should be distinct from those efforts and should be an integral part of the proposed project.

Resources to help compose the PIER plan, including an extensive FAQs, Things to Consider When Developing a PIER Plan, and a webinar, may be found at: https://science.osti.gov/grants/Applicant-and-Awardee-Resources/PIER-Plans. DE&I plans should be reflected in APPENDIX 5: PROMOTING INCLUSIVE AND EQUITABLE RESEARCH (PIER) PLAN, and in the budget and budget explanation.

¹ As defined in Executive Order 14035, Section 2(a), June 25, 2021, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/.

What if a DOE National Lab is a collaborator on my proposal? What should the budget include? Who receives the funding, and what does section VIII.A.2 mean?

Collaborating with a DOE National Laboratory is much like collaborating with any other institution. However, because DOE already has contracts with the Labs, there are some subtle differences:

What should the budget and budget narrative include?

For all proposals, the budget and budget narrative should include (and explain) funding requests from **all** participants, **including** any participating DOE National Laboratories.

Who receives the funding, and what does section VIII.A.2 mean?

In all cases, funds that are destined for a DOE National Laboratory will be provided directly to the lab through the DOE Field Work Authorization System. This applies even if the Lab is a subawardee. We will provide further instructions during award negotiations.

What can we include as "Demonstrations of institutional or third-party commitment", sometimes known as "informal cost sharing"?

The intent of asking for "institutional commitment" is to demonstrate that a non-federal entity has a financial stake in the outcome of the R&D. Consequently, demonstrating "institutional commitment" involves making something valuable available to the project that was paid for <u>by a non-federal source</u>.

If you are employed at a DOE National Laboratory, or any other Federally Funded Research and Development Center (FFRDC), your time, facilities, equipment, and materials are *very likely* to have been funded by the federal government and do not qualify as a demonstration of institutional commitment.

If you are at other institution types (e.g., university, non-profit, for-profit company) you may be able to include items such as:

- The provision of space, facilities, equipment, or resources at no or reduced charge;
- The provision of release time for faculty;
- The provision of a consultant's time at no charge;
- The provision of scholarship support for students;
- The waiver of facilities and administrative costs, in whole or in part; or
- Third party contributions (e.g., state, private entities, etc.),

where the contribution was (or is) paid for by a <u>non-federal source</u>.

Is a Letter of Intent (LOI) required?

No, but a Pre-Application is required. See the Funding Opportunity Announcement section IV.B for further details.

Should I submit my proposal to a specific Office of Science accelerator R&D call or to the Accelerator Stewardship and Accelerator Development solicitation?

If the work you propose <u>predominantly impacts one SC Program</u> (e.g., BES, FES, HEP, NP, or IP), submit the proposal to the respective Office's accelerator R&D call. If the work you propose is cross-cutting (i.e., it impacts several SC Programs, or several federal agencies' missions, and there is a clear stewardship customer), submit the proposal to the Accelerator Stewardship call. See the Funding Opportunity Announcement section V.A.2 "Merit Review Criteria" for further details.

What if I've submitted a substantially similar proposal to another solicitation at another agency? Am I forbidden from submitting my proposal?

No, but you must list the duplicative proposal in Appendix 2: Current and Pending Support. Concurrent submission of an application to other organizations for simultaneous consideration will not prejudice its review. We will, however, contact the other agency prior to making an award to establish the disposition of the duplicate request.

How many proposals may one PI (or one institution) submit?

Two per PI, no limit per institution. This limitation applies to pre-applications as well as full applications. However, PIs are strongly encouraged to focus their effort on one proposal where their interests and capabilities align well with the objectives of the solicitation and they can write a strong proposal.

Are letters of endorsement from collaborators helpful?

Beginning in FY 2023, attached letters may only be Letters of Commitment (i.e., letters from subawardees, collaborators, and consultants acknowledging their potential involvement, agreeing to provide access to the people or facilities concerned, and the terms under which these will be made available). Letters whose sole purpose is to provide an endorsement for the proposed work, but which do not convey an intent to materially participate, are no longer allowed.

Can DOE labs apply to Track 2?

No. See the Funding Opportunity Announcement, section III.A, Eligibility.

Can DOE labs apply to Track 3?

Yes, in fact they must submit a Collaborative Application together with the non-DOE entity. This is done to ensure the hosting Lab is fully aware of—and able to commit—the resources the non-DOE entity will need.

Who can lead a Track 4 proposal?

For Track 4a business plans, the lead institution can be any recognized entity (domestic industrial entity, National Laboratory, other FFRDC, or university). Teaming requirements apply.

For Track 4b partnerships, the lead institution must be a domestic industrial entity. Teaming requirements apply.

Can labs apply to the Funding Opportunity Announcement (FOA)?

Yes, as this is a "unified FOA" and there is no corresponding National Laboratory Program Announcement. Labs may apply to the FOA in Tracks 1, 3 (collaborative), and 4a. Teaming requirements apply.

Can labs submit a "Renewal" proposal?

A proposal for additional funding to continue an active project can be submitted under the FOA. The proposal must be marked "New" on the 424 R&R form in Grants.gov, the proposal narrative should make clear this is a continuation of a prior project, and the products of the current project should be listed in Appendix 7. The use of the available template (which can be requested from the Technical/Scientific Program Contacts found in Section I of the FOA) is recommended for reporting the products of the current project.

Can non-DOE Federally Funded Research and Development Centers (FFRDCs) apply to this FOA?

Yes, to Tracks 1, 3, and 4a only. Teaming requirements apply.

Can Track 2 applications include a DOE Lab as a subaward?

Yes. The university must lead the effort, and such an arrangement must not be used to circumvent the restrictions on Track 2 eligibility. See the Funding Opportunity Announcement, sections III.A and VIII.A.2.

What is the typical award size?

The award size depends on the Track, the topic, the work scope, the available funding, and other factors. Track 1 awards generally average approximately \$2M/3 years (except design studies, which are limited to \$200k and one year), Track 2 awards generally average \$500k/3 years, Track 3 awards are limited to no more than \$300k/1 year, Track 4a awards are limited to no more than \$200k/1 year, and Track 4b awards are limited to \$2M/2 years. That said, the requested budget should always be driven by the research goals and proposed work scope, not the other way around.

What is the typical award duration?

The typical award duration is 3 years for Track 1 and Track 2 proposals, 12 months for Track 3 and Track 4a, and 2 years for Track 4b. Exceptions include design studies, for which the award duration is typically limited to 1 year. The duration should be chosen considering the research goals, proposed work scope, and FOA requirements.

What does the language in section II.B "Estimated Funding" mean?

Budget numbers listed in section II.B refer to the specific fiscal year. For example "It is anticipated that approximately \$X,XXX,XXX will be available in FY 20YY" means that the sum of all FY 20YY year obligations incurred as a result of new awards under this solicitation (including awards to all applicants) will not exceed \$X,XXX,XXX. This amount does not include prior-year or subsequent-year obligations and is subject to appropriated funds being available.

"Total value of awards" refers to value of all grants, interagency agreements, and laboratory work authorizations awarded under this year's FOA over the full duration of the award. This number is subject to the availability of appropriated funding in this and future years.

What is the "Full Forward Funding" requirement?

Since 2014, DOE has been required by statute to fully forward fund awards of \$1,000,000 or less in the year in which the award begins. This means, for example, that an award of \$100,000 per year over 3 years must have the total value of \$300,000 set aside in the year the award is made. The PI will receive \$100,000 in the first year, and the balance will be held at headquarters for release in subsequent years. This means the subsequent years of the award are paid for up front, and that the entire value of the proposal then must be obligated from the "Estimated Funding" number listed in II.B.

Can the submitting institution be a foreign organization?

No. See the Funding Opportunity Announcement, section III.A, Eligibility.

Can a subawardee be a foreign organization?

Yes. Per 48 CFR 970.5227-3(f) preference should be given in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. For all proposals, a rationale needs to be included in the proposal on how the foreign subaward preferentially enhances the domestic technical vendor capability relative to foreign competitors.

Can a fee be charged?

Yes, per 2 CFR 605.15, a fee may be requested only by small business applicants.