FES Office Hours: How to navigate the DOE funding process

August 7th, 2024

Fusion Energy Sciences
Program Managers

Presentation by John Echols – Program Manager for Fusion Materials and Internal Components



Know your audiences! (2 min)

Anatomy of an FOA (6 min)

What happens after submission? (13 min)

Other resources (17 min min)

Questions from audience (20 min)

Know your audiences!

- Who is your audience?
- How to help ensure you are responsive to your audience
- Get help from others!

Anatomy of an FOA

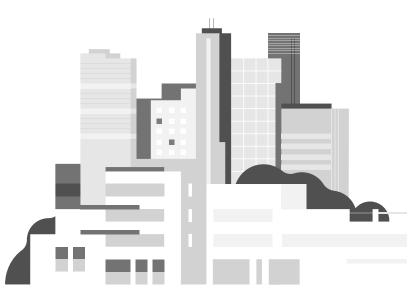
What happens after submission?

FAQ and other resources

Questions from audience



Your employer



The funding body





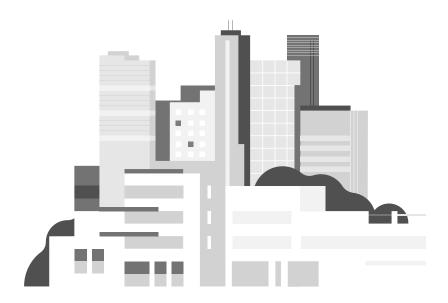
The technical reviewers (subject matter experts)



You want to consider all three audiences seriously



Your employer



Your employer wants you to succeed, utilize their resources and talk to your management about grant applications



The technical reviewers (subject matter experts - SMEs)

Make sure you are aware of the technical work being performed in the field you are proposing in.

Talk to the subject matter experts.



New to a field or subfield? Identifying SMEs? Look at recent conferences, workshops, and publications in this area.



The funding body

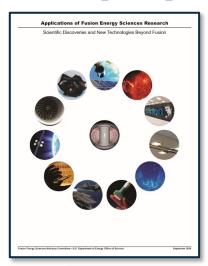


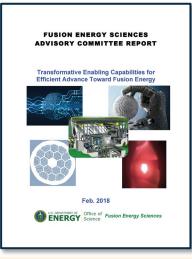


We are stewards of taxpayer money. Our job is to ensure it is spent effectively. We are governed by federal regulations.

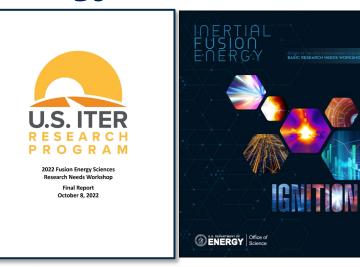


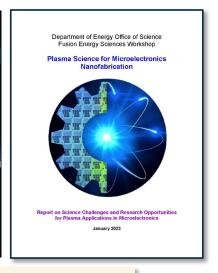
FES program is guided by Advisory Committee, National Academies, workshop reports, and official national strategy documents



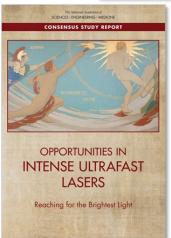


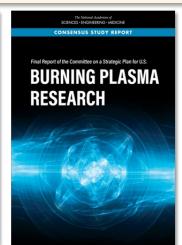


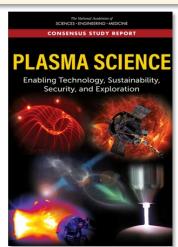


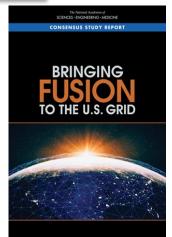


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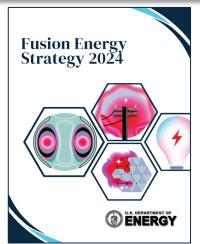


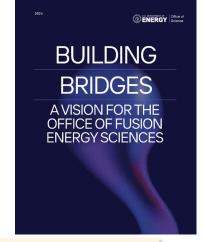




NASEM

Community Workshops





National Strategy



The office of science (SC) keeps busy...Please be organized!

In Fiscal Year 2023, the Office of Science's financial assistance (grants, cooperative agreements, and interagency agreements):

- Obligated \$1.7 billion
- Issued 4,820 requisitions
- Issued 4,730 award modifications
- Published 40 Funding Opportunity Announcements (FOAs) (and 7 program announcements for the labs)
- Received 7,743 applications (7,403 from grants.gov)
- Assigned 37,484 reviews
- Received 2,489 progress reports

FOA constraints aim at streamlining financial assistance process

- Do read the FOA documents and FAQs especially before contacting the program manager
- Do follow the FOA constraints closely when preparing your documents
- Do submit your documents well before the deadline (not at 5pm or 11:59pm of the due date)

SC is unlikely to permit a late submission as it must manage FOA process in a fair and consistent manner



Know your audiences!

Anatomy of an FOA

- Where do I find funding opportunities?
- Preapplications, letters of intent, and full applications
- FOA bite by bite

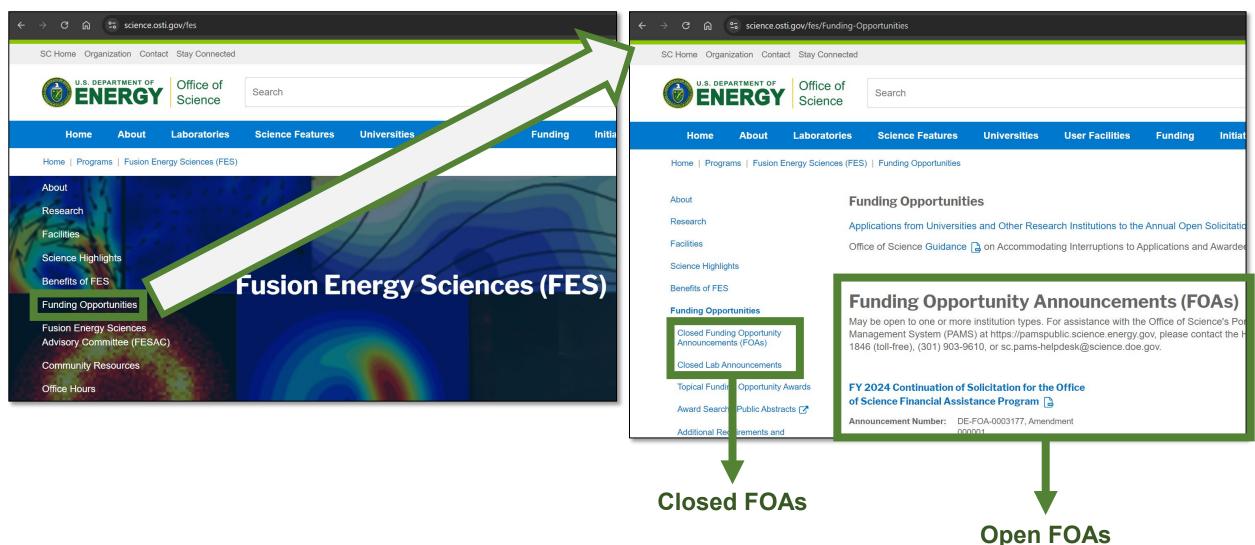
What happens after submission?

FAQ and other resources

Questions from audience



Where do I find the funding opportunities?



http://science.osti.gov/fes/Funding-Opportunities



Where do I find the funding opportunities?

Pay attention to regular public announcements/presentations by DOE leadership and staff

Program leaders will mention plans for FOAs, solicitations, or lab calls for the upcoming fiscal year

Official public notices can be found by regularly visiting FOA web locations

- Energy.gov: See "Funding News" on https://www.energy.gov/science/office-science
- SC OSTI Webpage: <u>FES Funding Opportunities | U.S. DOE Office of Science (SC) (osti.gov)</u>
 - Links to FOA documents: FIRE FOA: https://science.osti.gov/fes/-/media/grants/pdf/foas/2024/DE-FOA-0003361.pdf
 - Sign up for email updates: https://public.govdelivery.com/accounts/USDOEOS/subscriber/new
- Grants.gov: See search tools at https://grants.gov/search-grants

SC always has at least one solicitation available: "The Annual Open Notice"

- Link: FY 2024 Continuation of Solicitation for the Office of Science Financial Assistance Program
- This is SC's annual, broad, open solicitation that covers all research areas and is open throughout the Fiscal Year.
- May be used by existing programs. Always used for supplemental proposals.
- Do contact your program manager before using this call!

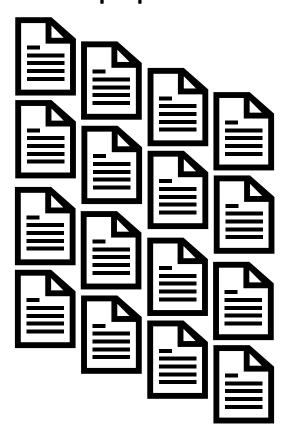


What are LOIs, pre-applications, and full applications?

Pre-application Letter of intent Pre-proposals

Sometimes required before full application (Read your FOA carefully)

Full application Full proposal





The FOA cover page has important deadlines and requirements

DEPARTMENT OF ENERGY (DOE) OFFICE OF SCIENCE (SC) FUSION ENERGY SCIENCES (FES)



FUSION INNOVATION RESEARCH ENGLYE (FIRE)
COLLABORATIVES

FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) NUMBER DE-POA-0003361

FOA TYPE: INITIAL CFDA NUMBER 81.049

FOA Issue Date:	May 22, 2024
Submission Deadline for Pre-Applications:	July 9, 2024, at 5 pm ET
	A Pre-Application is required.
	Pre-Applications must be submitted by an
	authorized institutional representative.
Pre-Application Response Date:	July 19, 2024, at 11:59 pm ET
Submission Deadline for Applications:	August 27, 2024 at 11:59 pm ET

FOA Issue Date:	May 22, 2024
Submission Deadline for Pre-Applications:	July 9, 2024, at 5 pm ET
	A Pre-Application is required.
	Pre-Applications must be submitted by an
	authorized institutional representative.
Pre-Application Response Date:	August 9, 2024, at 11:59 pm ET
Submission Deadline for Applications:	September 26, 2024 at 11:59 pm ET



FOA: Bite by bite

Every SC FOA has the same structure, but FOA requirements vary. Do read carefully!

Standard FOA Sections (currently under revision)

- UPDATES AND REMINDERS: Terse descriptions of key considerations and a checklist for avoiding common errors
- I DESCRIPTION: Program and technical information about work scope; Often contains references to guidance documents
- II AWARD INFORMATION: Covers award types, funding amounts/ceilings/floor, number of expected awards, application types
- III ELIGIBILITY: Provides information about the applicants including types of institutions, limitations on submissions, etc.
- IV APPLICATION AND SUBMISSION: Describes application formats/outlines, how to apply, budget details, additional appendices
- V APPLICATION REVIEW: Detailed information about the review process including criteria, overall process, policy factors
- VI AWARD ADMINISTRATION: Describes USG policies concerning how the award is administered, reporting, etc.
- VII QUESTIONS/AGENCY CONTACTS: List of agency contacts including grants.gov, SC, and FES
- VIII SUPPLEMENTARY MATERIAL: Lengthy (~50 pages) section containing background and reference information



Know your audiences!

Anatomy of an FOA

What happens after submission of a full proposal or application?

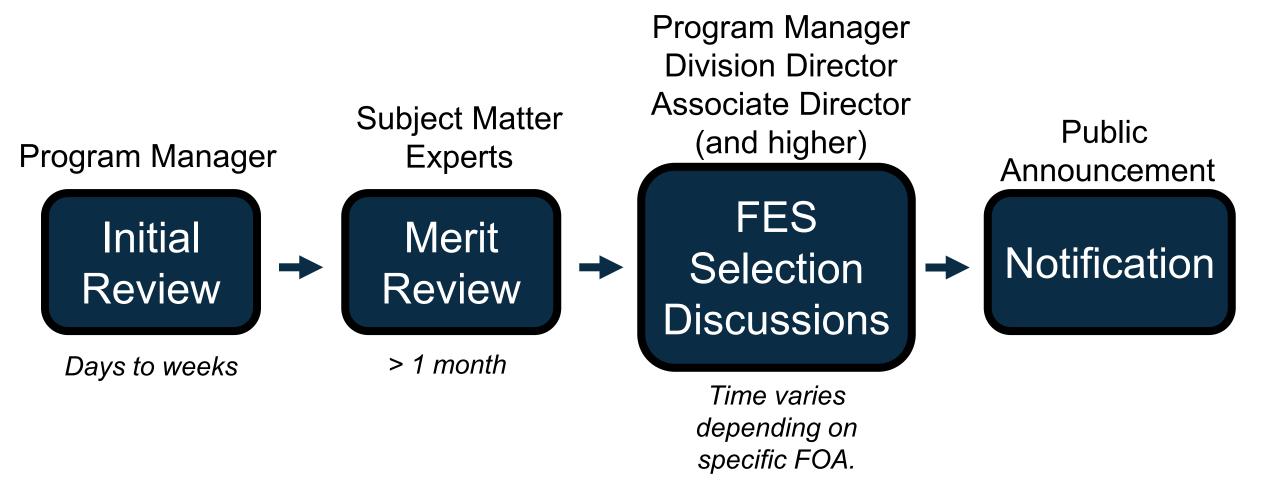
- Program manager compliance review
- Merit review
- Internal DOE decision making process
- Awards
- Example timeline of an application and review, start to finish.

Other resources

Questions from audience



Thorough review and decision involves many individuals and takes time



Example workflow for review and selection of a full proposal / full application



Step 1: Program Managers review proposals to ensure they meets essential application requirements

DEPARTMENT OF ENERGY (DOE) OFFICE OF SCIENCE (SC) FUSION ENERGY SCIENCES (FES)



FUSION INNOVATION RESEARCH ENGINE (FIRE)
COLLABORATIVES

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Example, non-exhaustive list of requirements of the FIRE FOA:

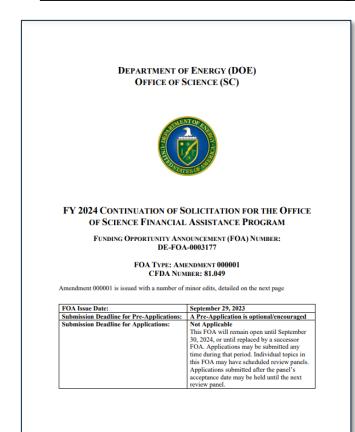
- A pre-application must have been submitted
 - Applications that have not been encouraged by the DOE may be declined without merit review
- Necessary research and related project information presented
- Necessary budgetary justification
- Identification of Merit Review Conflicts
- Promoting Inclusive and Equitable Research (PIER) plan
- Appropriate Data Management Plan (DMP)
- Page limit of 30 pages

This process takes a few to many days depending on the quantity and complexity of proposals



Step 2: Program managers identify subject matter experts and ask for merit reviews of proposals

Merit review can be a lengthy endeavor but is the heart of the decision-making process.



Example Merit Review Criteria from the Open Call:

- Scientific and/or Technical Merit of the Project
- Appropriateness of the Proposed Method or Approach
- Competency of Applicant's Personnel and Adequacy of Proposed Resources
- Reasonableness and Appropriateness of the Proposed Budget.
- Quality and Efficacy of the Promoting Inclusive and Equitable Research (PIER) Plan

This process can take over a month to complete



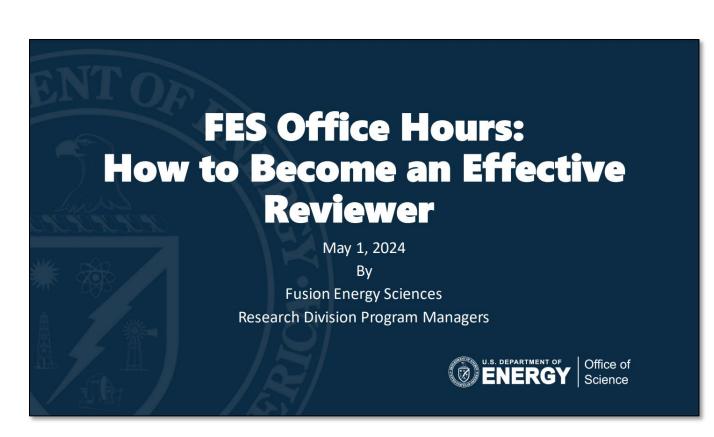
FES had a previous webinar on "How to Become an Effective Reviewer"

Slides

https://science.osti.gov/-/media/fes/pdf/Office-Hours/2024/Effective-Reviewer-Office-Hour-Slides v5.pdf

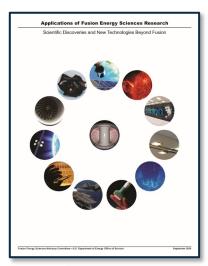
Video

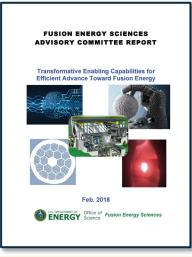
https://www.youtube.com/watch?v=hhMUN oG4QOw





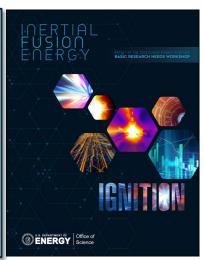
Many parts of review criteria link back to our guiding documents

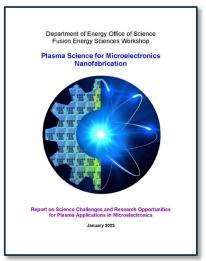




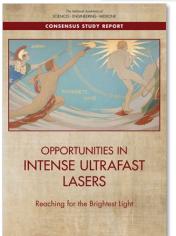




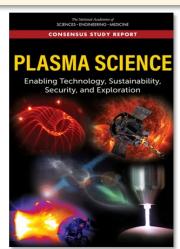


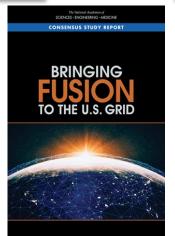


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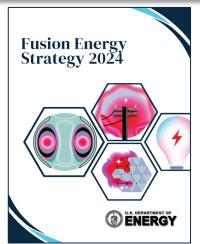


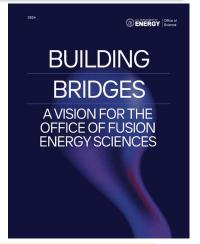




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National Strategy



Step 3: Internal discussion and selection

- Program managers read through all reviews thoroughly and aggregate scores and comments, re-reading proposals as needed.
- Program managers make recommendations to their management, typically discussing all proposals and their reviews
- For some proposals, briefings to SC leadership may be required
- The Selection Official makes final determination on funded proposals. They are the only person who can officially utilize program policy factors.

This process will vary in length depending on the number of proposals and other factors



The Selection Official may consider any of the following program policy factors in making the selection, listed in no order of significance:

DEPARTMENT OF ENERGY (DOE) OFFICE OF SCIENCE (SC)



FY 2024 CONTINUATION OF SOLICITATION FOR THE OFFICE OF SCIENCE FINANCIAL ASSISTANCE PROGRAM

FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) NUMBER: DE-FOA-0003177

> FOA TYPE: AMENDMENT 000001 CFDA NUMBER: 81.049

Amendment 000001 is issued with a number of minor edits, detailed on the next page

FOA Issue Date:	September 29, 2023
Submission Deadline for Pre-Applications:	A Pre-Application is optional/encouraged
Submission Deadline for Applications:	Not Applicable
••	This FOA will remain open until September
	30, 2024, or until replaced by a successor
	FOA. Applications may be submitted any
	time during that period. Individual topics in
	this FOA may have scheduled review panels.
	Applications submitted after the panel's
	acceptance date may be held until the next
	review panel.

Example from OPEN CALL – may vary depending on FOA

- Availability of funds
- Relevance of the proposed activity to SC priorities
- Ensuring an appropriate balance of activities within SC programs
- Performance under current awards, if applicable
- Commitment to sharing the results and products of research
- Promoting principal investigators not previously supported by SC
- Promoting the diversity of supported investigators and researchers
- Promoting the diversity of institutions receiving awards
- Increasing participation of institutions historically underrepresented in the SC research portfolio
- Promoting principal investigators with a commitment to improving diversity, equity, and inclusion in the STEM community
- Institutional history of training and mentoring of students, postdoctoral and early-career researchers
- Participation with multi-institutional teams in accordance with program priorities identified and incorporated in Section I of this FOA



Know your audiences!

Anatomy of an FOA

What happens after submission?

Other resources

Questions from audience



Navigating the funding process and responding to a FOA is difficult.

Watch recent DOE webinars for early career scientists such as:

- 1. https://www.energy.gov/doe-stem/events/bes-early-career-networkgrant-writing-tips-and-insights-workshop
- 2. https://www.energy.gov/science/join-us-office-science-informationalwebinar-initiatives-and-programs

Utilize your institution's grants office or similar early and often

Ask senior colleagues, mentors, and friends who are familiar with the grant-writing process to help guide you.



Past office hours may be of interest to understanding the funding process

Introduction to FES and program mission

https://science.osti.gov/-/media/fes/pdf/Office-Hours/2024/Effective-Reviewer-Office-Hour-Slides v5.pdf

FES topics in the FY 2024 Open Call

https://science.osti.gov/-/media/fes/pdf/Office-Hours/2024/Open-FOA-Office-Hours-Slides-Final.pptx

How to Become an Effective Reviewer

https://science.osti.gov/-/media/fes/pdf/Office-Hours/2024/Effective-Reviewer-Office-Hour-Slides_v5.pdf



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Some questions from attendees upon registration

Ensuring you are responsive

- How do I determine the suitability of my research idea?
- How can we draw attention to our research idea?
- Do you have sample complete proposals (sensitive information redacted)?
- FOAs often don't provide a max price for proposals. Will FES notify if it's interested, but our proposed budget is too high?

Technical details

- What are some common pitfalls when submitting a budget?
- What is cost sharing?
- What do I do if I submit an application with an error?

Funding opportunity trends

- How do I best to keep track of upcoming funding opportunities?
- Funding opportunities for those researchers who might not currently be working on fusion related work?
- Are there any funding opportunities only for junior faculty?
- Are there upcoming early-stage funding opportunities for new private commercial fusion companies?

Other Questions?