SunShot BRIDGE Program



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Agenda

- I) Letters of Intent
- 2) Full Application
- 3) Review Process
- 4) Office of Science



Letters of Intent



The Letters of Intent are used by the DOE to estimate the level of interest so that the appropriate amount of technical merit reviewers can be found. Letters of intent are now required! Letters of intent are due by 5 PM ET, April 27, 2012



Full Application



Submit Application in EERE Exchange by 5 PM ET, May 21, 2012

We strongly encourage you to submit I-2 days prior to avoid any potential technical glitches with EERE Exchange



Key Points

- Triple check your entries in EERE Exchange
 - Submissions could be deemed non-compliant due to an incorrect entry
- Make sure you hit the submit button
 - Any changes made after you hit submit will unsubmit your application and you will need to hit the submit button again
- Follow formatting criteria and page lengths stated in the FOA



Format and Page Limits

- Extra material will be REDACTED OR REMOVED and will NOT be provided to reviewers
 - Sections that exceed page length maximums will be redacted even if overall application is within page limits

Section	Notes
Project Narrative	PDF
Title Page	l page max
Project Narrative	10 page max
Technical Qualifications & Resources	5 page max
Statement of Project Objectives and Project Management Plan	6 page max, includes Milestones Schedule, and Statement of Project Objectives
Project Summary /Abstract File	PDF I page
Summary Slide	PowerPoint, I page max
SF424	SF-LLL, if applicable
SF424A	Excel
Budget Justification	Excel
Environmental Impact Questionnaire	PDF
Draft or recently submitted eligible SC user facility proposal	PDF
Letter indicating when BES, BER or ASCR user facility proposal will be (or has been) submitted and committing to notify DOE of your acceptance/rejection from the facility	PDF

Create a Collaborative Research Team

- The BRIDGE program is intended to fund NEW teams of researchers
- The team must include at least one member who has used an "Eligible SC User Facility" and one member who is new to the facility.
- This Funding Opportunity is an investment NOT just in technology development, but ALSO in expanding the relevant expertise and capabilities within the field of PV and CSP research



Maximize the Impact of the Facility

- The purpose of the experienced facility user on the team is to increase the probability that the project will successfully complete high-impact research and make the most of the resources available.
- DOE encourages newcomers to the facilities in order to increase the skill level and number of experienced researchers who can contribute to the PV and CSP research communities
- Developments that can bring new tools to PV and CSP research are encouraged



Eligible SC Facilities I

Eligible SC User Facility	Capabilities	Centers	Submission Cycle
Argonne National Laboratory (ANL)	Light Source (BES)	Advanced Photon Source (APS)	Triannual
	Microscopy (BES)	Electron Microscopy Center (EMC)	Triannual
	Nanotechnology (BES)	Center for Nanoscale Materials (CNM)	Triannual
	Advanced Scientific Computing Research (ASCR)	Argonne Leadership Computing Facility (ALCF)	Continuous
Brookhaven National Laboratory (BNL)	Nanotechnology (BES)	Center for Functional Materials (CFM)	Triannual
	Light Source (BES)	National Synchrotron Light Source (NSL)	Triannual



Eligible SC Facilities II

Capabilities	Centers	Submission Cycle
Light Source (BES)	Advanced Light Source (ALS)	Semiannual
Microscopy (BES)	National Center for Electron Microscopy (NCEM)	Quarterly
Nanotechnology (BES)	The Molecular Foundry	Semiannual
Advanced Scientific Computing Research (ASCR)	National Energy Research Scientific Computing Center (NERSC)	Continuous. Awards granted annually.
Nanotechnology (BES)	Center for Integrated Nanotechnology - Gateway to Los Alamos Facility (CINT)	Semiannual
Neutron Source (BES)	Leujan Neutron Scattering Center (Lujan Center)	Semiannual
	Light Source (BES) Microscopy (BES) Nanotechnology (BES) Advanced Scientific Computing Research (ASCR) Nanotechnology (BES)	Light Source (BES)Advanced Light Source (ALS)Microscopy (BES)National Center for Electron Microscopy (NCEM)Nanotechnology (BES)The Molecular FoundryAdvanced Scientific Computing Research (ASCR)National Energy Research Scientific Computing Center (NERSC)Nanotechnology (BES)Eenter for Integrated Nanotechnology (BES)Nanotechnology (BES)Center for Integrated Nanotechnology - Gateway to Los Alamos Facility (CINT)Neutron Source (BES)Leujan Neutron Scattering Center (Lujan

Eligible SC Facilities III

Eligible SC User Facility	Capabilities	Centers	Submission Cycle
Oak Ridge National Laboratory (ORNL)	Nanotechnology (BES)	Center for Nanophase Materials Science (CNMS)	Semiannual
	Neutron Source (BES)	Spallation Neutron Source (SNS)	Semiannual
	Electron Microscopy Con(BES)	Shared Research Equipment (ShaRE)	Continuous
	Neutron Source (BES)	High Flux Isotope Reactor (HFIR)	Semiannual
	Advanced Scientific Computing Research (ASCR)	The Oak Ridge Leadership Computing Facility (OLCF)	Continuous (INCITE and ALCC) and Continual for Director's Discretion
	Advanced Scientific Computing Research (ASCR)	National Center for Computational Science (NCCS)	Annual (INCITE) and Continuous (Director's Discretion)



Eligible SC Facilities IV

Eligible SC User Facility	Capabilities	Centers	Submission Cycle	
Pacific Northwest National Laboratory (PNNL)	Processing (BER)	Environmental Molecular Sciences Laboratory (EMSL)	Annual	
Sandia National Laboratory (SNL)	Nanotechnology (BES)	Center for Integrated Nanotechnology - Core Facility (CINT)	Semiannual	
Scientific Discovery through Advanced Computing (SciDAC)	Advanced Scientific Computing Research (ASCR)	FASTMath, QUEST, and SUPER	N/A	
SLAC National Accelerator Laboratory	Light Source (BES)	Stanford Synchrotron Radiation Lightsource (SSRL)	Triannual	
	Light Source (BES)	Linac Coherent Light Source (LCLS)	Semiannual	



Criteria Weighting for Full Applications

Diversity and Strength of the Collaborative Research Team	30%
Use of Eligible SC User Facilities	20%
Scientific Strength and Contribution	30%
Publications, Intellectual Property, and Impact	20%



Selection Criteria – Part I

<u>Criterion 1: Diversity and Strength of the Collaborative Research Team</u> (CRT) (Weight: 30%)

- The degree to which the proposed CRT includes collaboration between researchers with demonstrated expertise at a relevant facility and researchers without such expertise, who share coherent scientific goals and complementary theoretical, computational or experimental approaches.
- The diversity of backgrounds and levels of experience among the members of the CRT. (e.g. Are there differing skill sets between researchers and a range of experience levels among the researchers?)
- The level of proposed collaboration, communication and mentoring between the researchers of the CRT.



Selection Criteria – Part II

Criterion 2: Use of Eligible SC User Facilities (Weight: 20%)

- The quality of the eligible SC user facility proposal.
- The appropriateness of the eligible SC user facility for the given research.
- The extent that the proposed use of the eligible SC user facility will provide a unique superior capability currently not available to researchers of the CRT.
- The degree to which the proposed research has potential for continuation of activity either within the facility or through broad dissemination beyond the funding period.
- The extent that the proposed use of the eligible SC user facility is an innovative or novel application of the SC user facility and its resources towards the research.



Selection Criteria – Part III

Criterion 3: Scientific Strength and Contribution (Weight: 30%)

- The extent to which the proposed collaboration has potential for developing a new or significantly improving a current PV or CSP device or system
- The extent to which the proposed collaboration has the potential to provide an understanding of a concept that will enable the technology to overcome barriers that limit substantial cost reduction and can lead to achieving the 6¢/kWh SunShot Initiative goal.
- The extent to which the proposed collaboration has the potential to create a standard process, characterization, or analysis tool/technique that will become widely adopted by the PV or CSP applied research and development community.
- The extent to which the applicant demonstrates the project's technical merit and relevance to the PV or CSP industry.



Selection Criteria – Part IV

Criterion 4: Publications, Intellectual Property, and Impact (Weight: 20%)

- The extent to which the applicant demonstrates an understanding of and commitment to the intellectual property related requirements of the eligible SC user Facility.
- The degree of commitment of the applicant to publish or otherwise disseminate the results of the collaboration or commercialize the results in the near term (i.e., within five years of the award period).
- The degree to which the likely results of the collaboration will have a significant impact upon the solar research community or to the U.S. PV or CSP industry (e.g., resulting in new experimental technique, analysis tool or technology adoption).
- The degree to which the likely results of the collaboration will support the goals of the SunShot Initiative.



Review Process

- At least 3 expert reviewers from the research community and government will review each application
- DOE Review comments will be released to applicants in July or August
- Selections will be made internal to DOE
- Pending funding availability, DOE will make selections
- Selectees must provide verification of acceptance to facility to begin negotiation
- Some alternate selections may be awarded in the event that a top rated applicant does not gain access to a facility



FAQ – Cost Share

See Section III in FOA

- Recipients and sub-recipients that are Institutions of Higher Education, non-profit organizations, national laboratories, or U.S. Federally Funded Research and Development Centers (FFRDC) funded under this FOA are eligible for a waiver of the 20% cost share requirement.
- Recipients and sub-recipients not eligible for the cost share waiver as defined above must provide at least 20% of that recipient or sub-recipient's allowable project costs (i.e., the sum of the Government share and the recipient share of allowable costs equals the allowable cost of the project) which must come from non-Federal sources unless otherwise allowed by law (see also Appendix B titled "Cost Share Information").
- Cash or in-kind contributions
- Cost share shall be incurred in equal installments over the life of the award
- All expenditures must be allowable, allocable, and reasonable in accordance with the applicable Federal cost principles



U.S. Department of Energy

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