MICROGRID TECHNOLOGIES
COMPETITION

ALASKA CENTER FOR MICROGRID TECHNOLOGIES COMMERCIALIZATION

7/11/2016

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COLLABORATORS:
ALASKA CENTER FOR ENERGY AND POWER
BUSINESS ENTERPRISE INSTITUTE
UNIVERSITY OF ALASKA CENTER FOR ECONOMIC DEVELOPMENT
AND
ALASKA SMALL BUSINESS DEVELOPMENT CENTER
AT THE
UNIVERSITY OF ALASKA

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Alaska Center for Energy and Power
and
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at the
University of Alaska

PLEASE SEND ALL INQUIRIES TO ACMTC.QUESTIONS@ALASKA.EDU
Remote communities need to know how to deploy new energy technologies in their region, and companies need to know that their technology can operate efficiently in remote areas, cold weather, and harsh conditions.

To address these needs, the Alaska Center for Microgrid Technologies Commercialization has launched a competition for companies who want to improve their technology for use in remote, austere, or tough microgrid environments.

Through this competition, ACEP will provide services valued up to $275,000 to companies who are interested in R&D support to accelerate commercialization for products intended to improve operation and technical efficiency of small energy systems – known as microgrids.

Microgrids are everywhere from airports to military bases to remote communities, and usage is estimated to grow into a $20 Billion market by 2020.

Alaska is home to more than 200 small community microgrids and approximately 12% of the developed microgrids in the world. Alaska is poised to play a large part in the microgrid industry, with the market potential exceeding $290M by 2020 (Navigant Research, 2015).
The Rewards

The competition will have one grand prizewinner that will receive **up to 25 days of R&D time** in the **ACEP Power Systems Integration Laboratory**. This includes R&D support and in-system testing of their technology, to prove its feasibility, and improve it for use in microgrids around the world.

<table>
<thead>
<tr>
<th>Technology Seed Support**</th>
<th>Microgrid Project</th>
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<tr>
<td>5 small projects</td>
<td>1 Microgrid Project</td>
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<tr>
<td>R&amp;D to commercialization review (Up to 125 man-hours)</td>
<td>Up to 25 days R&amp;D in the ACEP Power Systems Integration Laboratory</td>
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Through the use of the Alaska Center for Energy and Power’s facilities and expertise, we’ll help you prove your technology and its financial feasibility for use around the world.

*R&D time* for the grand prizewinner includes access to ACEP Power Systems Integration (PSI) Laboratory and associated staff for *in-system R&D and testing* of their technology. Lab days awarded can be expended on R&D and review work, retooling of the PSI Lab and installation of the winner’s equipment (cost of materials excluded), and operation of the laboratory for in-system R&D and testing (PSI Lab equipment operated solely by ACEP Staff).

**Technology Seed Support** is limited to R&D support (e.g., drafting, specification development, identification of necessary improvements, support of software development, interface specification), design reviews and consulting with the objective of accelerating a successful commercialization trajectory.
How to Apply

Step 1: Submit a Short Expression of Interest
If you’re interested in the competition, please submit the very short questionnaire here to let us know about your project, your needs, and how we can reach you. As the competition nears, we will send you updates and reminders.

Expressions of interest are due by: July 22nd, 2016.

Step 2: Register your business with SBDC
By registering your business with the Alaska Small Business Development Center (SBDC), you will confirm your interest in this competition, as well as gain access to the free and confidential business advising that the SBDC provides, including assistance with some of the requirements listed below such as business planning, financial planning, and market analysis. Please click here to express your interest, receive reminders about the competition, and submit a formal application.

Step 3: Review our Eligibility Requirements
We’re looking for big projects with the potential of a big economic impact. To make sure that we’re taking on the best projects, we’ve assembled an independent advisory team that will review projects for eligibility.

To be considered, applicants must submit the following items:

☐ A technology, product, or service description
☐ A project plan
☐ A financial plan
☐ A commercialization plan

1 Full application instructions will be made available to those registered in Step 1 prior to the opening of the application period.
A market analysis

Qualified Applicants will demonstrate that:

- The project will positively impact microgrids by increasing technical efficiency, renewable contribution, and stability of microgrid systems
- The project can be conducted within necessary technical and safety protocols
- The project can be completed within the budget and within 18 months (grand prize), or 6 months (small awards) of the award
- The project will lead to the commercialization of a product, service, or technology
- The applicant provides matching funds through either cash or in-kind support through the provision of goods and/or labor

Preference will be given to applicants who demonstrate:

- The potential for large economic impact, i.e., reduction of energy cost in remote microgrids and creation of jobs in the U.S. EDA Western Region, with preference on Alaska
- A proof of concept, a prototype, and/or intellectual property ownership
- Business ownership and/or a business plan
- A letter of endorsement from an Alaskan utility for their technology
- A physical presence in the U.S. EDA Western Region

Step 4: Submit a Formal Application
We anticipate our formal application period to be from July 22, 2016 to August 26, 2016.

Send an electronic copy of your application in PDF format to acmtc.competition@alaska.edu. Emails have to be received no later than 11:59pm on August 26th, 2016 to be considered.

Selection and Testing

Selection of the top projects will begin on August 27th, 2016 and winning applicants will be contacted via email by October 7th, 2016 to finalize any contracts. An additional pitch presentation may be required for a subset of applicants in the above time frame should the review team deem this necessary to make selections. A minimum of one business day notice will be give for pitch presentations.

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2 Allowable matching funds are: provision of cash for additional ACEP staff time and/or lab time (see budget worksheet for rates); in-kind: internal labor not to exceed industry typical rates, and provision of additional supplies (valued at acceptable market rates) necessary for integration of equipment in PSI Lab (applicable only for grand prize, labor for installation by ACEP staff will be billed against award or cash match).


4 Do not use this email address for general inquiries.
Disclaimers

Work is contingent upon availability of funding, eligibility, and legal requirements.

Laboratory R&D and testing is contingent upon safety review by ACEP staff and approval by University of Alaska Fairbanks Environmental Health and Safety and Risk Management.

All persons present in the laboratory during R&D and testing are required to provide their own PPE in accordance with general and specific laboratory rules.

Awards will be made under a Master Agreement issued by the University of Alaska Fairbanks. This master agreement will include timelines, services provided, scope of work, and time and matching/in-kind budget (see Agreement between UAF/ACEP and Awardee for general terms). The Master Agreement for each awardee will determine IP ownership, the work to be completed, and the method of collaboration.

Successful applicants are required to accept terms and conditions provided in the award contract. These terms are not negotiable.

All funds awarded will be spent at ACEP. Awards will not be made in cash or actual monetary funding, but in form of R&D man-hours or laboratory time.