

Ameresco Begins Second Phase of Department of Defense Funded Flow Battery Investigation

Ameresco continues research on advanced energy storage systems in partnership with the Environmental Security Technology Certification Program

FRAMINGHAM, Mass.--(BUSINESS WIRE)-- [Ameresco, Inc.](#), (NYSE: AMRC), a leading cleantech integrator specializing in energy efficiency and renewable energy, today announced that it has begun phase-two of a multi-stage investigation into how flow battery technology could support microgrids with the Department of Defense (DoD). Phase-one of the investigation was completed in April 2020 and primarily focused on evaluating the technical and economic feasibility of flow battery energy storage. Phase-two of the investigation shifts attention to physical validation and evaluation of flow batteries at the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) in Golden, CO.

Phase-one of the research won a 2020 Project of the Year award from the Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP). This success paved the way for Ameresco to advance to the second phase of the multi-stage research program, which is being conducted in partnership with NREL, and supported by Invinity Energy Systems (LSE:IES) and S&C Electric Company. Funding for the investigation comes from ESTCP, whose goal is to identify and demonstrate the most promising innovative and cost-effective technologies and methods that address DoD's high-priority environmental requirements.

Research collected from the project's first phase demonstrated that there is an opportunity for Vanadium Flow Battery (VFB) storage technology to decrease diesel generation reliance and lower the cost of critical load support within a military microgrid. Given these results, the objective of phase-two is to validate the reliability and operational performance of VFB battery equipment through Hardware in the Loop (HIL) testing.

"Microgrids offer enormous opportunity to provide resilient power—from military installations, to campuses to communities," said Dr. Martha Symko-Davies, Laboratory Program Manager for NREL's Energy Systems Integration Facility. "Flexible energy storage is a key component to incorporating more variable renewable energy into microgrid systems. We are extremely pleased to bring our [advanced laboratory capabilities](#) and expert researchers to this ESTCP project to further advance the state of the art of the technology. We look forward to sharing results from this effort, which can inform a wide range of military and nonmilitary applications."

If the results of this work justify further investigation of flow battery technology, Ameresco hopes to continue this research with a future field deployment of a flow battery system at a DoD site. This third phase of work would significantly contribute to strengthening the depth

of knowledge available on advanced energy technologies such as flow batteries.

Additionally, Ameresco was recently selected for another ESTCP project which is expected to begin in 2022. The focus of this project is to demonstrate building level energy storage, with a zinc bromide flow battery that can be sited indoors.

“We are very pleased to be continuing our ESTCP funded research to advance the field of study around such important energy storage technologies,” said Nicole Bulgarino, executive vice president of Federal Solutions at Ameresco. “Research like this is crucial to characterizing the performance of novel energy storage technologies like flow batteries, and to identifying under what circumstances they can support microgrid projects with our Federal customers. We’re thrilled to be at the forefront of developing energy storage technologies that not only benefit the industry but the world at-large.”

To learn more about Ameresco’s research or download a copy of the phase-one report, [visit the ESTCP website](#).

About Ameresco, Inc.

Founded in 2000, Ameresco, Inc. (NYSE:AMRC) is a leading cleantech integrator and renewable energy asset developer, owner and operator. Our comprehensive portfolio includes energy efficiency, infrastructure upgrades, asset sustainability and renewable energy solutions delivered to clients throughout North America and the United Kingdom. Ameresco’s sustainability services in support of clients’ pursuit of Net Zero include upgrades to a facility’s energy infrastructure and the development, construction, and operation of distributed energy resources. Ameresco has successfully completed energy saving, environmentally responsible projects with Federal, state and local governments, healthcare and educational institutions, housing authorities, and commercial and industrial customers. With its corporate headquarters in Framingham, MA, Ameresco has more than 1,000 employees providing local expertise in the United States, Canada, and the United Kingdom. For more information, visit www.ameresco.com.

About the Environmental Security Technology Certification Program

Environmental Security Technology Certification Program (ESTCP) is the DoD’s environmental technology demonstration and validation program. The Program was established in 1995 to promote the transfer of innovative technologies that have successfully established proof of concept to field or production use. ESTCP demonstrations collect cost and performance data to overcome the barriers to employ an innovative technology because of concerns regarding technical or programmatic risk, the so-called “Valley of Death.” The Program’s goal is to identify and demonstrate the most promising innovative and cost-effective technologies and methods that address DoD’s high-priority environmental requirements. Projects conduct formal demonstrations at DoD facilities and sites in operational settings to document and validate improved performance and cost savings. To ensure the demonstrated technologies have a real impact, ESTCP collaborates with end-users and regulators throughout the development and execution of each demonstration. Transition challenges are overcome with rigorous and well-documented demonstrations that provide the information needed by all stakeholders for acceptance of the technology.

The announcement of a customer’s entry into a project study contract is not necessarily

indicative of the timing or amount of revenue from such contract, of the company's overall revenue for any particular period or of trends in the company's overall total project backlog. This project was included in our previously reported contracted backlog as of December 31, 2020.

View source version on businesswire.com:

<https://www.businesswire.com/news/home/20210407005156/en/>

Media:

Ameresco: Leila Dillon, 508-661-2264, news@ameresco.com

Source: Ameresco, Inc.