

Energy Storage Technology Advancement Partnership

Wisconsin Distributed Resources Collaborative Meeting
Friday, January 27, 2012
WECC Offices

Clean Energy States Alliance - Anne Margolis

- Nonprofit coalition of regional, state and local (subnational) clean energy funds , working together to develop and promote clean energy technologies and markets
- Provides a forum where:
 - Members can share information;
 - Work together with each other and with federal agencies on joint projects;
 - Join forces to advance their missions in state and federal forums; and
 - Benefit from customized analysis and consulting to refine and improve program offerings.
- WECC an Affiliate Member

ESTAP Background

- **Objective:** to accelerate the commercialization & deployment of promising distributed electrical energy storage technologies in the U.S. through creation of a strategic technical assistance & funding partnership between states & DOE.
- Project is funded by DOE Office of Electricity Delivery & Energy Reliability in conjunction with Sandia National Laboratories.
 - Supported at DOE through Dr. Imre Gyuk, with day-to-day project management by Dan Borneo (previously by Abbas Akhil) at Sandia National Laboratory)
- ~\$1 million available in the first round, (3-4 projects) with additional rounds in subsequent years as part of an ongoing federal-state partnership.
 - Possibly multiple phases
 - Installation only; OR
 - Start with permitting and feasibility.
- Project timeline will probably be 2 years.
- Technologies include: batteries, flywheels, aboveground compressed air, supercapacitors, & modular pumped hydro systems (up to 3 MW in capacity).

Wisconsin Stakeholder Meeting - June 17, 2011

- CESA is establishing and facilitating the partnerships.
- Attendees:
 - Eric Apfelbach (ZBB Energy Corporation)
 - Deb Erwin (Wisconsin Public Service Commission)
 - Mike Andrew (Johnson Controls, Inc)
 - Tom Jahns (University of Wisconsin-Madison)
 - Chris Schoenherr (Department of Administration)
 - Dave Schigoda (Wisconsin Distributed Resources Collaborative)
 - John Bobrowich (Wisconsin Energy Research Consortium)
 - Bud Kehrli (American Superconductor)
 - Dave Jenkins (State Energy Office)
 - Don Wichert (WECC)
 - Andrew Kell (Wisconsin Public Service Commission)
 - Amanda Mott (State Energy Office)

Wisconsin Stakeholder Meeting (cont.)

- **Questions**

- Who can contribute matching funds?
- Amount of matching funds recommended?
- Does the state have to be the lead applicant?
- Must the projects be “shovel ready”?
- Will any other labs participate (other than Sandia)?
- What types of projects are they interested in?
- Others

RFI #1, RFI #2, RQ

- **Request for Information #1 (released early Feb. 2012)**
 - **Lead Applicant - State**
 - **Propose ideas and interest in energy storage projects and partnerships**
 - Johnson Controls, ZBB, American Superconductor, Epic, Utilities, others?
 - **Propose match**
 - **Responses due ~ one month later**
- **Request for Information #2 (Request for Proposal)**
 - **Will use the information from the RFI to draft.**
 - **Identify:**
 - lead applicants;
 - project & project partners;
 - experience in energy storage;
 - Budget;
 - Timeline;
 - Etc.
 - **Responses due ~ one month later**
- **Invitational Request for Quotation**
- **Contracts in place by the end of August 2012**

Tips

- Identify state funding support (those offering match will be much more competitive)
 - Stakeholders
 - State
- Utilities
 - Do we have any utilities working on energy storage projects that we know of?
- DOE wants it's funding to kick a project over the edge and make a project worthwhile.
- Consideration to projects that have been thinking about incorporating renewables
- Consideration to projects that are military installations
- States/stakeholders expressing more interest/excitement in partnering with DOE will be more competitive.
- Quality and caliber of project partners will be looked upon favorably.
- Shovel readiness will be considered.
- Nature of the project will be considered.



Second Wisconsin Energy Storage Stakeholder Group Meeting

Thursday, February 9, 2012

3:30 p.m.

ZBB Energy Corporation

N93 W14475 Whittaker Way

Menomonee Falls, WI 53051 USA

There will be a conference line for those who cannot attend the meeting in person – TBA

ESTAP:

<http://www.cleanenergystates.org/projects/energy-storage-technology-advancement-partnership/>

Questions???

- Amanda Mott, Energy Projects Specialist
- Wisconsin State Energy Office
101 E. Wilson St., 6th Floor
Madison, WI 53702
- 608-261-8404
- Amanda.mott@wisconsin.gov

Thank You!!