



Legislation Text

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Report to Mayor and City Council

Monday, November 28, 2016

Discussion

SUBJECT:

CONSIDER AN AGREEMENT WITH CHARGE BLISS, INC. TO DEVELOP A NET ZERO ADVANCED ENERGY COMMUNITY WITHIN THE CITY OF CARSON, CALIFORNIA, ENERGY COMMISSION SOLICITATION NO. GFO-15-312 (CITY COUNCIL)

I. SUMMARY

On February 2, 2016, the City Council approved a Letter of Interest to participate in a grant opportunity titled, "The EPIC Challenge: Accelerating the Deployment of Advanced Energy Communities, GFO-15-312," through the California Energy Commission (CEC) Electric Program Investment Charge (EPIC) program (Exhibit No. 1).

The Phase I grant application was submitted by Charge Bliss, Inc. (Charge Bliss) and, at the request of the South Bay Council of Governments, the City of Carson agreed to participate as the demonstration site for the grant. The CEC is especially interested in funding demonstration programs for disadvantaged communities in areas suffering from poor air quality. The application submitted by Charge Bliss was successful and Charge Bliss was awarded a \$1.5 million dollar grant to develop a shovel-ready, net zero Alternative Energy Community project for the City of Carson. The project would propose energy projects on City facilities.

The CEC's competitive grant solicitation will be funded in two phases. Phase I focuses on the development of innovative planning, permitting, and financing approaches for Advanced Energy Communities, and the deliverable is a "shovel ready" project plan. Only recipients of Phase I funding will be eligible to compete for Phase II project funding. The total amount available in Phase II is a potential of \$14 million from the CEC.

II. RECOMMENDATION

1. AUTHORIZE the Mayor to execute the Phase I Agreement with Charge Bliss, Inc., following approval as to form by the City Attorney.

III. ALTERNATIVES

TAKE another action the City Council deems appropriate.

IV. BACKGROUND

The purpose of the CEC's solicitation is to fund a competition that will challenge project teams comprised of developers, local government, researchers, utilities, and other project partners to create innovative and replicable approaches for accelerating the deployment of Advanced Energy Communities (AECs). The CEC is particularly interested in demonstration projects in disadvantaged communities suffering from poor air quality.

The benefits associated with AECs include the opportunity to:

- Minimize the need for new energy infrastructure costs such as transmission and distribution upgrades.
- Provide energy savings by achieving and maintaining zero net energy community status.
- Support grid reliability and resiliency by incorporating technologies such as energy storage.
- Provide easier grid integration and alignment with the California Public Utilities Commission's (CPUC) Long-Term Procurement Plan, and the California Independent System Operator's local capacity requirements process.
- Provide for replication and scaling to further drive down costs.
- Be financially attractive from a market standpoint (developers, home buyers, renters).
- Provide affordable access to renewable energy generation, energy efficiency upgrades, and water efficiency and reuse technologies that reduce electricity consumption for all electric ratepayers within the community.
- Make use of smart-grid technologies throughout the community.
- Align with other state energy and environmental policy goals at the community level such as the Sustainable Communities and Environmental Protection Act (Senate Bill 375 (Steinberg, Chapter 728, Statutes of 2008) and Governor Brown's Executive Order B-29-15 for the drought.

There are other very practical benefits of the project, including the ability to store power to mitigate black outs. There are regional benefits, as the application could bring a potential of \$28 million in energy systems to the City. Also, Carson will continue to be seen as a regional leader in "Green" technologies and in community sustainability. The project also has the very real potential of creating long term reduction in energy costs to our City facilities.

Phase I: Planning and Permitting Advanced Energy Communities. The CEC is soliciting projects that will demonstrate the feasibility of innovative planning, permitting and financing approaches at the local and regional levels to incentivize the development of Advanced Energy Communities. Projects must combine regulatory streamlining strategies

with a real-world development example to produce a shovel-ready AEC, and a case study that describes the actions, challenges and lessons learned from the project. Receiving an award from Phase I is a prerequisite for applying for and receiving an award from Phase II.

With the receipt of the \$1.5 million CEC award, the Charge Bliss engineers and planners can now design the alternative energy project for the City, including the development of plans and specifications for submittal to the CEC for construction funding. The project would include solar generation, battery storage, electrical vehicle charging stations, power conditioning and controls for City facilities. In consultation with City staff, Charge Bliss will also build alternative financial models for funding the system's improvements. Funding for Phase II will require a 50% match from the City, which could be a variety of sources. The City Council will need to review and accept the final technical, planning and financial proposal prior to Charge Bliss being authorized to submit for the Phase II grant.

It is anticipated that the Phase I will require approximately twelve months for working with staff and Charge Bliss. Charge Bliss will be required to assess the current state of the City's building systems. They are required under the CEC grant to incorporate local students into the project through STEM programs. Charge Bliss, in working with City staff, will be placing monitoring equipment at key locations and building electrical systems to study loads and provide accurate data for system design. Phase I plans would need to be "shovel ready" and have successfully completed the City's planning and plan check process in order to move forward to Phase II. As of the drafting of the staff report, the City and Charge Bliss are finalizing the Phase I agreement (Exhibit No. 2).

Phase II: Advanced Energy Community Build-out. Grant recipients selected for funding from Phase I will be eligible to apply for additional funding from Phase II for the construction, commissioning, and evaluation of their AEC. Details and criteria for Phase II will be provided on a future date.

V. FISCAL IMPACT

The City will be required as part of the Phase I grant to devote staff time to working with the Charge Bliss Team in a support role, such as gathering information like electrical bills or assisting the team's engineers in gaining access to electrical panels as part of plan development. The City will also work with Charge Bliss on the financial model.

VI. EXHIBITS

1. Minutes February 2, 2016, Item No. 19. (Pg. 4)
2. Draft Agreement. (Pgs. 5-20)

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