REGULAR MEETING of the Board of Directors of the Peninsula Clean Energy Authority (PCEA)
Thursday, May 28, 2020

PLEASE NOTE: for Video conference: https://meetings.ringcentral.com/j/1498429710
for Audio conference: dial 1-623-404-9000, or 1-773-231-9226,
then enter the Meeting ID: 149 842 9710 followed by #
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NOTE: Please see attached document for additional detailed teleconference instructions.

Supplemental Agenda Packet items. Please find attached:

- Item No. 9  Approve Expenditure of up to $500,000 for Portable Battery Program for Medically Vulnerable Customers (Action)
TO: Honorable Peninsula Clean Energy Authority Board of Directors

FROM: Jan Pepper, Chief Executive Office
Siobhan Doherty, Director of Power Resources
Peter Levitt, Associate Manager of DER Strategy

SUBJECT: Approve Expenditure of up to $500,000 for Portable Battery Program for Medically Vulnerable Customers.

RECOMMENDATION: Approve Expenditure of up to $500,000 for Portable Battery Program for Medically Vulnerable Customers.

BACKGROUND:
In the Energy Resiliency Strategy approved by the Peninsula Clean Energy Board in January 2020, staff prioritized resiliency work to provide backup power options to Peninsula Clean Energy customers who depend on electricity to power medical devices. In 2019, PG&E expanded its public safety power shutoff (PSPS) program and Peninsula Clean Energy’s customers experienced three separate PSPS events. To combat this loss of power some of these customers are purchasing diesel generators in order to meet their power needs. Peninsula Clean Energy aims to reduce greenhouse gas and other emissions through the deployment of portable, all-electric batteries that may replace or partially replace the need for diesel generators for our medically vulnerable customers.

DISCUSSION:
In 2019, PG&E expanded its PSPS program in order to prevent wildfires across the state. A PSPS event occurs when PG&E decides it is necessary to turn off electricity in certain areas because dry conditions and gusty winds have created a heightened fire risk. The expansion of this program can put lives at risk, cause significant economic
impacts, disrupt operations as well as increase greenhouse gas emissions and worsen local air quality when diesel generators are operated for backup power.

In January 2020, staff presented a recommendation and strategy to the Board to approve a budget of $10 million to support resiliency efforts over 3 years. When staff prepared the strategy, our hypothesis and expectation was that the best way to serve the medically vulnerable population was to provide clean energy solutions for single-family homeowners through the installation of solar energy+battery storage systems.

Over the past several months, staff have had extensive conversations with community partners that support the most threatened customers including those that depend on power for medical needs and live in an area that has experienced or is likely to experience a PSPS event. Through this work, we have come to the conclusion that many of the customers most in need of backup power options are renters, live in an apartment, or are otherwise not a good fit for standard solar and battery storage installation. Instead, the clean energy backup power solution that best fits them is a portable electric battery. Additionally, the COVID 19 shelter-in-place orders have severely limited PCE’s ability to deploy solar+storage systems quickly for a meaningful number of customers.

In order to provide this sensitive customer class with clean backup power, staff recommends allocating $500,000 to complete a bulk purchase of these portable batteries to be provided to customers that qualify for the Medical Baseline electricity rate and live in an area that has experienced PSPS events in the past or are likely to experience them in the future with prioritization for low-income customers. The wholesale price of these batteries range from $2,400 - $10,820, depending on which vendor is selected. PCE staff is still evaluating whether the batteries will be provided as loaners, rent-to-own, or purchase.

Similar programs are being developed and implemented by other CCAs and IOUs. Marin Clean Energy and PG&E are both funding the deployment of portable batteries in their respective service territories. Marin Clean Energy recently announced that they will be funding up to $250,000 in portable battery loans, while PG&E has announced a $5 million program for portable battery rental options and hotel vouchers. Both Marin Clean Energy's and PG&E’s programs aim to fund the deployment of Yeti 3000 batteries, which have a capacity of 3kWh each. Marin Clean Energy’s $250,000 will fund up to 100 Yeti batteries, for a total of 300kWh. PG&E’s program will yield 50 Yeti batteries for San Mateo County for a total capacity of 150kWh.

In mid-May, Peninsula Clean Energy sent an informal RFI to eight portable battery companies to evaluate for a potential bulk purchase. Five responded to our questionnaire and we are in the process of conducting some additional diligence and finalizing which vendor(s) to select. Below is a list of three potential portable battery products and the resultant quantity of batteries and battery capacity each would provide our customers, based on a $500,000 budget. Due to different use cases, we may want to purchase two different sizes of batteries to service customers.
<table>
<thead>
<tr>
<th>Brand</th>
<th>Price per battery ($)</th>
<th>Number of batteries based on $500k budget</th>
<th>Capacity per battery (kWh)</th>
<th>Total Capacity (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goalzero Yeti</td>
<td>2,400</td>
<td>208</td>
<td>3.0</td>
<td>624</td>
</tr>
<tr>
<td>SimpliPhi ExpESS</td>
<td>8,900</td>
<td>56</td>
<td>7.6</td>
<td>426</td>
</tr>
<tr>
<td>Humless Complete ESS</td>
<td>10,820</td>
<td>46</td>
<td>10.0</td>
<td>460</td>
</tr>
</tbody>
</table>

Staff is requesting authorization at the Board meeting so that we can finalize the contract(s) with the selected purchaser(s). We are concerned that if we wait until after the next Board meeting, we may not receive the batteries in time to distribute to customers ahead of the fire season. Staff will report back to the board at the June board meeting with the details of what we purchased for this program.

Staff will provide additional details on this program at the May Board meeting.

**FISCAL IMPACT:**

In January 2020, the Board approved a 3-year, $10 million budget for energy resiliency efforts. The $500,000 we are asking you to approve will come out of this budget.
RESOLUTION NO. _____________

PENINSULA CLEAN ENERGY AUTHORITY, COUNTY OF SAN MATEO,
STATE OF CALIFORNIA

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RESOLUTION AUTHORIZING EXPENDITURE OF UP TO $500,000 FOR PORTABLE BATTERY PROGRAM FOR MEDICALLY VULNERABLE CUSTOMERS.

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RESOLVED, by the Peninsula Clean Energy Authority of the County of San Mateo, State of California (“Peninsula Clean Energy” or “PCE”), that

WHEREAS, PCE was formed on February 29, 2016; and

WHEREAS, in October 2019, Peninsula Clean Energy customers experienced three Public Safety Power Shutoff events, wherein over 55,000 Peninsula Clean Energy customers lost electricity; and

WHEREAS, in January 2020, Peninsula Clean Energy’s Board of Directors approved a Resiliency Strategy that budgets $10 million for resiliency programs over three years; and

WHEREAS, within that Resiliency Strategy, Peninsula Clean Energy prioritized programs to meet the needs of medically vulnerable customers and budgeted up to $2,550,000 for such programs; and
WHEREAS, Peninsula Clean Energy would like to reduce future greenhouse gas emissions by reducing the number of diesel generators providing backup power to our customers; and

WHEREAS, many of Peninsula Clean Energy’s customers require power for a medical need; and

WHEREAS, a portable battery can help to provide power in the event of a power outage related to PSPS or other events thereby reducing the need for diesel generators; and

WHEREAS, PCE desires to contract with selected portable battery distributors and order portable batteries as part of the Portable Battery Program for Medically Vulnerable Customers; and

WHEREAS, staff is presenting to the Board for its review an action to approve expenditures for this Program.

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the Board approves the expenditure of up to $500,000 for the acquisition of portable batteries in support of a Portable Battery Program for Medically Vulnerable Customers.

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