

Staff Report Item 6

TO: East Bay Community Energy Executive Committee Members

FROM: Taj Ait-Laoussine, VP, Technology and Analytics

SUBJECT: Bay Area Air Quality Management District Award

DATE: June 29, 2018

Recommendation

Receive an update from staff on BAAQMD Grant Award for project to examine solar and storage to enhance grid resiliency

Background

The following is a summary of the proposal that was submitted to the BAAQMD:

Goals: Deploying solar and storage on critical facilities can cut GHGs and criteria pollutant emissions from existing buildings diesel backup generators, illustrate the potential and capabilities of clean energy technologies, inspire the private sector to take action, create a model that can be replicated across the United States, and increase disaster preparedness and resiliency in the Bay Area.

Solar power is affordable now and rapidly growing in the Bay Area and across the country. Battery storage is becoming cost competitive, aided by state programs to accelerate deployment and the growth of electric vehicles.

Together, distributed solar and storage create "resilient solar." When the grid is functioning, resilient solar provides clean energy and energy services that reduce air pollution, lower customer costs, and improve grid reliability. If the grid goes down, it can provide backup energy, which is especially important for the "critical facilities" that provide services during emergencies, such as fire and police stations, call centers, and emergency shelters. Typically,

diesel generators are used for backup power, creating pockets of air pollutants when these units are fired up, both during frequent testing and during a crisis. And unlike other backup energy strategies diesel generators, resilient solar has a financial payback, creating the opportunity of getting "resilience for free," as one report described it.

To take advantage of the newly economical solar and storage technologies, East Bay Community Energy (EBCE) and Peninsula Clean Energy (PCE) are seeking funding for a joint exercise to collaborate with partners in Alameda and San Mateo counties, research the potential for resilient solar systems on critical facilities, and to develop a financial model that results in affordable and widespread deployment.