

## DOCKETED

<b>Docket Number:</b>	17-EPIC-01
<b>Project Title:</b>	Development of the California Energy Commission Electric Program Investment Charge 2018 â€“ 2020 Triennial Investment Plan
<b>TN #:</b>	215891
<b>Document Title:</b>	Pam Seidenman Comments: Advanced Microgrid Solutions EPIC Triennial Planning Comments
<b>Description:</b>	Comment 1
<b>Filer:</b>	System
<b>Organization:</b>	Pam Seidenman
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	2/10/2017 4:33:52 PM
<b>Docketed Date:</b>	2/10/2017

*Comment Received From: Pam Seidenman*

*Submitted On: 2/10/2017*

*Docket Number: 17-EPIC-01*

## **Advanced Microgrid Solutions EPIC Triennial Planning Comments**

*Additional submitted attachment is included below.*

## Stakeholder Input for the 2018 – 2020 EPIC Triennial Investment Plan

### Advanced Microgrid Solutions: Comment 3

#### 1. Please provide a brief description of the proposed initiative.

Address barriers to providing multifamily affordable housing, especially disadvantaged communities, with clean energy and resiliency through energy efficiency and renewable energy combined with energy storage.

#### 2. What technical and/or market barriers would the proposed initiative help overcome? For scientific analysis and tools, what knowledge gaps would the proposed initiative help fill?

There may not be peak demand in multifamily housing, so revenue opportunities may be lacking. (Though this may change with the implementation of time of use tariff schedules.) Financing of storage is challenging as it is a relatively new asset. Developing models for financing of storage at multifamily affordable housing will greatly aid adoption in disadvantaged communities. There is a role for EPIC to play in analyzing the benefits of adding storage to energy efficiency and renewable energy systems in disadvantaged communities.

#### 3. If this initiative is successful, either fully or partially, what would be the expected impact? Who are the primary users and/or beneficiaries?

Families that live in multifamily affordable housing and the developers who develop these buildings can both benefit. The benefits are many and include: reduced electricity costs, long-term electrical cost stability, opportunities to generate revenue through providing grid services like demand response and frequency regulation, reliable backup power, and cleaner air with the reduction of fossil fuel burning power plants that are often located in disadvantaged communities. Finally, the addition of storage to energy efficiency and/or renewable energy enhances the economics of these systems, encouraging investment.

#### 4. Describe what quantitative or qualitative metrics or indicators would be used to evaluate the impacts of the proposed initiative:

- a) kW of clean energy installed in Disadvantaged Communities
- b) Improvement in air quality in Disadvantaged Communities
- c) Decrease in number and/or utilization of fossil fuel burning power plants operating in Disadvantaged Communities
- d) Increase in backup power assets in Disadvantaged Communities

**5. Please provide a list of peer-reviewed references that support the responses for questions 3 and 4. Proposed initiatives that include peer-reviewed references will be given stronger consideration.**

The Resilient Power Project, a joint initiative of Clean Energy Group and Meridian Institute published a report, *Resilience for Free*, describing how resilient power can be provided at little cost to help support those communities that need it most during an emergency.

6. (For technologies only) What competitive advantages does the proposed technology solution have over current benchmark technologies? If the technology is beyond the prototype stage, what strategies do you suggest to bring to scale?

The combination of energy efficiency, solar, and energy storage provides synergies that significantly reduces electricity costs and GHG emission, while providing numerous benefits to the grid.

**7. Category:**

Catalyze Clean Energy Investments in California's Underrepresented and Disadvantaged Communities