

**DOCKETED**

<b>Docket Number:</b>	19-ERDD-01
<b>Project Title:</b>	Research Idea Exchange
<b>TN #:</b>	227614
<b>Document Title:</b>	Notice of Staff Workshop
<b>Description:</b>	Lessons Learned and Best Practices from Seven EPIC Funded Microgrids Awarded in 2015
<b>Filer:</b>	Gina Fontanilla
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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<b>Docketed Date:</b>	4/11/2019



<b>IN THE MATTER OF:</b>	)	<b>Docket No. 19-ERDD-01</b>
	)	
<b>Lessons Learned and Best Practices from Seven EPIC Funded Microgrids Awarded in 2015</b>	)	RE: Lessons Learned and Best Practices from Seven EPIC Funded Microgrids Awarded in 2015
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## **NOTICE OF STAFF WORKSHOP**

California Energy Commission staff will conduct a workshop to report information and receive public comments on the lessons learned and best practices obtained from Electric Program Investment Fund (EPIC) grants awarded for microgrid research and development in 2015 (PON-14-301). The Energy Commission has managed seven microgrid awards since 2015 and most of the awardees completed their required activities by the end of March 2019. These microgrids are early adopters and experienced many successes and unexpected challenges during the implementation of their grants. This workshop will discuss the challenges and successes the awardees experienced over the last four years as they designed, installed, and operated their microgrids.

**Friday, April 26, 2019  
9:30 a.m. – 12:30 p.m.**

**Warren-Alquist State Energy Building  
1516 Ninth Street  
First Floor, Art Rosenfeld Hearing Room  
Sacramento, California 95814  
(Wheelchair Accessible)**

Remote access is available by computer or phone via WebEx™  
(Instructions below.)

### **Agenda**

The Energy Commission will discuss previous and ongoing microgrid research and development activities. Staff will provide background information on EPIC and review past research activities on microgrids funded by EPIC program. Representatives from Navigant Consulting will provide an overview of interviews conducted with the seven awardees and a summary of lessons and best practices learned. A panel from the seven microgrids will provide firsthand information on why a microgrid solution was pursued; what challenges and successes were experienced; and future microgrid plans. Attendees may ask questions throughout the workshop. The event will be recorded and posted on the Energy Commission website for public reviewing.

## Background

Procurement and installation of a microgrid is a relatively new process. The lessons learned through initial pilot projects provide valuable information to others that may be planning microgrid implementation. In 2014, the Energy Commission released a competitive solicitation (PON-14-301) and, in 2015, awarded seven grants for the design, installation, and operation of new microgrids. Each project was required to demonstrate key features of interest to the end customer, utility, and that were in support of California's aggressive clean energy goals, specifically, "demonstrating secure, reliable microgrids to build resilient, low-carbon facilities and communities." The awardees were:

1. **Demonstrating a Secure, Reliable, Low Carbon Community Microgrid at Blue Lake Rancheria.** A microgrid that provides renewable energy and backup power to business and government operations for Blue Lake Rancheria, a federally recognized Native American tribal government and a designated regional American Red Cross shelter.
2. **Photovoltaic-Based Microgrid.** A microgrid owned and operated by San Diego Gas and Electric (SDG&E) Company that incorporates the 26 MW Borrego Solar Facility and provide reliable power to residents and businesses in Borrego Springs, a remote desert community on the SDG&E utility network.
3. **City of Fremont Fire Stations Microgrid.** Microgrids installed in Fremont, California, to support resilient operations for three City of Fremont fire stations, pairing solar carports with battery storage systems operated by a third-party microgrid provider.
4. **Charge Bliss Renewable Microgrid.** A microgrid installed at the Kaiser Permanente Richmond Medical Center to provide increased renewable energy and reduce the critical care facility's dependence on diesel backup generators.
5. **Direct Current Building-Scale Microgrid Platform.** A direct current architecture microgrid installed in an American Honda Motors Company warehouse facility to provide reliable power to connected commercial loads, and increased energy efficiency and solar energy utilization.
6. **Las Positas College Microgrid Automation.** A microgrid on a university campus designed to integrate and optimize existing renewable resources and several types of energy storage, provide load management services, and demonstrate a potential model for other California public education facilities.
7. **Laguna Wastewater Treatment Plant Microgrid.** A microgrid installed to support the operation of a City of Santa Rosa critical regional wastewater treatment facility by optimizing existing combined heat power units and incorporating energy storage.

The development of effectively operated, customer-driven microgrids can improve the reliability and resiliency of the electric grid. California has set aggressive goals for achieving a low carbon future. Over the last four years, the seven microgrid projects have overcome many challenges in obtaining the desired equipment; interconnecting with their utility; integrating multiple distributed energy systems into one cohesive operating system; and selecting, testing, and operating a successful microgrid controller. In 2018, the Energy Commission awarded a technical support agreement to Navigant Consulting to meet with each grant awardee to obtain firsthand knowledge of the challenges and successes each microgrid experienced during the design, installation, commissioning, and operation of their microgrid. The results of this effort will be presented at this workshop.

## Public Comment

**Oral comments:** Oral comments will be accepted during the workshop. Comments may be limited to three minutes per speaker. Any comments may become part of the public record for this proceeding.

**Written comments:** Written comments must be submitted by **5:00 p.m.** on **May 17, 2019**. Written comments will also be accepted at the workshop; however, the Commission may not have time to review them before the conclusion of the meeting. Written and oral comments, attachments, and associated contact information (e.g. address, phone number, email address) become part of the viewable public record. This information may also become available via any Internet search engine. The Energy Commission encourages use of its electronic commenting system. Visit <https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=19-ERDD-01>, which links to the comment page for this docket. Select or enter a proceeding to be taken to the “Add Comment” page. Enter your contact information and a comment title describing the subject of your comment(s). Comments may be included in the “Comment Text” box or attached in a downloadable, searchable Microsoft® Word (.doc, .docx) or Adobe® Acrobat® (.pdf) file. Maximum file size is 10 MB.

Written comments may also be submitted by email. Include docket number 19-ERDD-01 in the subject line and send to [docket@energy.ca.gov](mailto:docket@energy.ca.gov). If preferred, a paper copy may be submitted to:

California Energy Commission  
Docket Unit, MS-4  
Docket No. 19-ERDD-01  
1516 Ninth Street  
Sacramento, CA 95814-5512

## Public Adviser and Other Commission Contacts

The Energy Commission’s Public Adviser’s Office provides the public assistance in participating in Energy Commission proceedings. For information on how to participate

in this forum, please contact Public Adviser, Alana Mathews, at [PublicAdviser@energy.ca.gov](mailto:PublicAdviser@energy.ca.gov), (916) 654-4489, or toll free at (800) 822-6228.

Please direct requests for reasonable accommodation to Yolanda Rushin at [yolanda.rushin@energy.ca.gov](mailto:yolanda.rushin@energy.ca.gov) or (916) 654-4310 at least five days in advance.

Media inquiries should be directed to the Media and Public Communications Office at [MediaOffice@energy.ca.gov](mailto:MediaOffice@energy.ca.gov) or (916) 654-4989.

Questions on the subject matter of this meeting should be directed to Mike Gravely at [Mike.Gravely@energy.ca.gov](mailto:Mike.Gravely@energy.ca.gov) or (916) 327-1370.

## Remote Attendance

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**Via Mobile Device:** Download the application from [www.webex.com/products/web-conferencing/mobile.html](http://www.webex.com/products/web-conferencing/mobile.html).

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## Availability of Documents

Documents and presentations for this meeting will be available at

[https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-ERDD-01.](https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-ERDD-01)

Dated: April 11, 2019 at Sacramento, California

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Laurie ten Hope  
Deputy Director, Energy Research and Development Division

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