



<b>IN THE MATTER OF:</b>	)	<b>Docket No. 19-ERDD-01</b>
	)	
Request for Comments on Upcoming	)	WORKSHOP
Solicitation Regarding Fuel Cell	)	RE: Upcoming Solicitation Regarding
Demonstrations in Rail and Marine	)	Fuel Cell Demonstrations in Rail and
Applications at California Ports	)	Marine Applications at California Ports

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## NOTICE OF STAFF WORKSHOP

California Energy Commission (CEC) staff will conduct a scoping workshop to identify research needs and opportunities for demonstrating fuel cells systems in rail and marine applications at California ports.

**October 17, 2019  
10:00 AM - 12:00 PM**

**Banning's Landing Community Center  
100 E Water Street  
Wilmington, California 90744**

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

### Agenda

The CEC plans to discuss the following topics at this workshop to inform implementation of the 2019-2020 Natural Gas R&D Program Budget Plan:

1. Present the general purpose and objectives of a future CEC grant funding opportunity (GFO) addressing a natural gas-related transportation initiative titled "Demonstrate Advanced Zero Emission Technologies in Rail and Marine Applications at California Ports".
2. Offer stakeholders, experts, and the general public the opportunity to weigh in on technology barriers, performance metrics, value propositions, and fueling infrastructure planning considerations needed to facilitate successful demonstration projects.
3. Gather expert opinions on demonstration requirements to meet the objectives of the solicitation.

The agenda will include an overview of the Natural Gas R&D Program and the relevant research initiative, planning details for a future GFO, and a discussion session to gather comments from stakeholders, experts, and the general public.

This workshop on fuel cell demonstrations in rail and marine applications at California ports will provide information for consideration for future Natural Gas R&D Program plans.

Research suggestions can be provided to our Research Idea Exchange:  
<https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=19-ERDD-01>.

## Background

The 2019-2020 Natural Gas R&D Program Budget Plan identified an initiative under natural gas-related transportation titled “Demonstrate Advanced Zero Emission Technologies in Rail and Marine Applications at California Ports”. Locomotives and commercial harbor craft are among the top three sources of diesel particulate matter at the Port of Los Angeles<sup>1</sup> and Port of Long Beach<sup>2</sup>, and contribute to increased cancer risk in communities surrounding the ports. California ports face challenges with limited zero emission options to address these difficult-to-decarbonize applications. The initiative identified the need to demonstrate fuel cell technologies in locomotives and commercial harbor craft, enable scaled demand of renewable gas for non-road transportation applications that are difficult to electrify, and address integration, economic, and safety barriers to build a foundation for further deployment.

The CEC plans to release a GFO under the 2019-2020 Natural Gas R&D Program Budget Plan to address this initiative and the challenges faced when integrating fuel cell systems in rail and commercial harbor craft applications at California ports. The purpose of this scoping workshop is to solicit feedback from stakeholders, experts, and the general public to determine how the CEC’s funding could facilitate successful technology demonstration projects through the future GFO.

## Questions

CEC staff is seeking input from stakeholders to inform development of a future solicitation. Specifically, staff seeks responses and comments to the following questions:

1. Should funding be limited to new builds or repowers? What are some specific benefits and challenges related to each deployment pathway?
2. Due to limited funding available, should certain applications be prioritized over others?
3. How should fueling infrastructure planning requirements regarding siting, accessibility, safety, distribution, and throughput be approached?

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<sup>1</sup> Starcrest Consulting Group. “Inventory for Air Emissions for Calendar Year 2017”. Prepared for the Port of Los Angeles. July 2018. [https://kentico.portoflosangeles.org/getmedia/880bc597-84bc-4ae6-94e2-59a2e6027f42/2017\\_Air\\_Emissions\\_Inventory](https://kentico.portoflosangeles.org/getmedia/880bc597-84bc-4ae6-94e2-59a2e6027f42/2017_Air_Emissions_Inventory)

<sup>2</sup> Starcrest Consulting Group. “Port of Long Beach 2017 Air Emissions Inventory”. Prepared for the Port of Long Beach. July 2018. <http://www.polb.com/civica/filebank/blobdload.asp?BlobID=14652>

4. How should renewable hydrogen procurement requirements be approached?
5. What specific performance metrics should be measured to compare against diesel and evaluate viability of fuel cell technologies?
6. What players and partnerships are needed to produce a strong project team?
7. What other considerations or requirements should be incorporated into the future GFO?

## Public Comment

**Oral comments:** Staff will accept oral comments during the workshop. Comments may be limited to five minutes per speaker and one speaker per organization. Any comments may become part of the public record for this proceeding.

**Written comments:** Written comments must be submitted to the Docket Unit by **5:00 p.m. on October 24, 2019**. Written comments will also be accepted at the workshop; however, the Energy 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 the docket number 19-ERDD-01 and “Comments on Upcoming Solicitation Regarding Fuel Cell Demonstrations in Rail and Marine Applications at California Ports” 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  
Re: Docket No. 19-ERDD-01  
1516 Ninth Street  
Sacramento, CA 95814-5512

## Public Advisor and Other Commission Contacts

The Energy Commission's Public Advisor's Office provides the public assistance in participating in Energy Commission proceedings. For information on how to participate in this forum, please contact Public Advisor Noemí Gallardo, at [publicadvisor@energy.ca.gov](mailto:publicadvisor@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 Peter Chen at [peter.chen@energy.ca.gov](mailto:peter.chen@energy.ca.gov) or (916) 327-1312.

## Remote Attendance

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4. For Internet audio: If you have a broadband connection, a headset, or a computer microphone and speakers, you may use VoIP (Internet audio). Go to the audio menu and click "Use Computer Headset," then "Call Using Computer."

**Via Telephone:** (no visual presentation): Call 1-866-469-3239 (toll free in the U.S. and Canada) and when prompted, enter the meeting number above. International callers may select a number from <https://energy.webex.com/energy/globalcallin.php>.

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

**Muting:** We greatly appreciate your cooperation in reducing background noise on the audio connection by muting your line when you are not speaking. Mute your line rather than placing your phone on hold. Using WebEx, right click on your name in the panelists or attendees list and select "Mute." If you are using a telephone connection, press "\*6" once to mute and again to unmute.

## 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>.

Dated: September 30, 2019 at Sacramento, California

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Laurie ten Hope  
Deputy Director, Energy Research and Development Division

Mail Lists:  
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