

# California Energy Commission Staff Workshop

California Energy Commission

**DOCKETED**

**14-CHP-01**

TN 73464

JUL 22 2014

## Panel 2

## Update on Small CHP Market

## July 14, 2014

Keith Davidson

# The Panel

2

Moderator:	Keith Davidson	DE Solutions
Panelists:	Debbie Chance	Chevron
	Steve Acevedo	Regatta Solutions
	David Erickson	CPUC
	Jim Reilly	Reilly Associates
	Adam Robinson	Solar Turbines
	Casey Houweling	Houweling's Tomatoes

# Small CHP Market (< 20 MW)

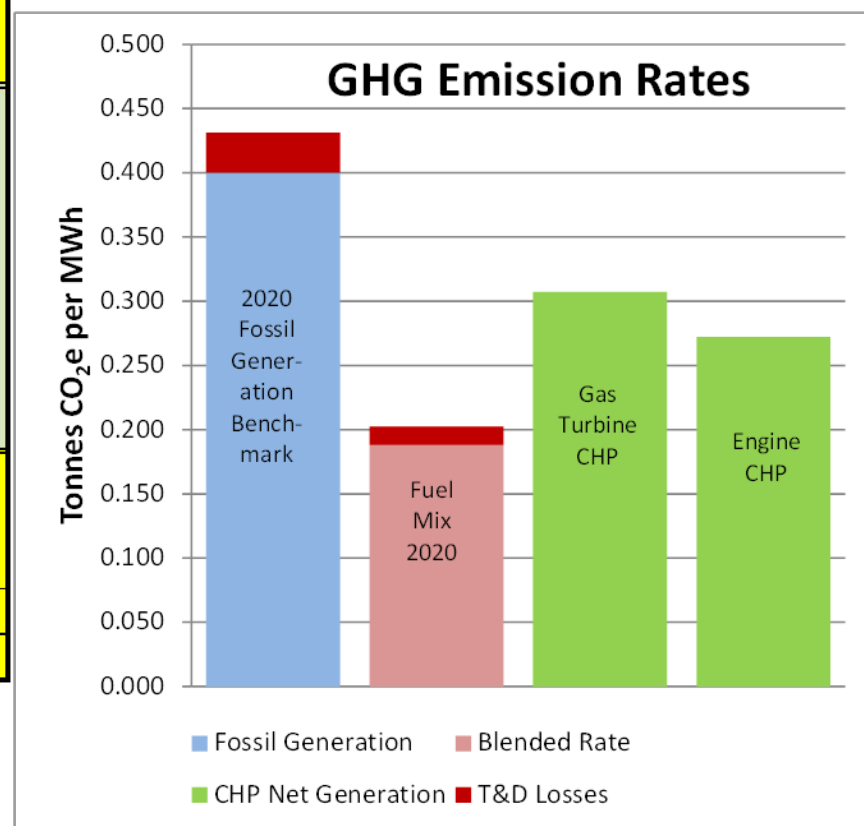
3

- CEC Sponsored CHP Policy Analysis and Market assessment (2011 – 2030)
  - Technical potential for new CHP in 50 kW to 20 MW size range is 11,000 MW
  - With aggressive policy and market support, projected new CHP (< 20 MW) implementation over 20 year period is 3,500 MW
- During this workshop session, we will seek to
  - Share recent CHP experiences
  - Better understand reasons for current lackluster CHP market activity
  - Identify recommendations to put small CHP on a robust implementation trajectory

# Cap-and-Trade Impacts

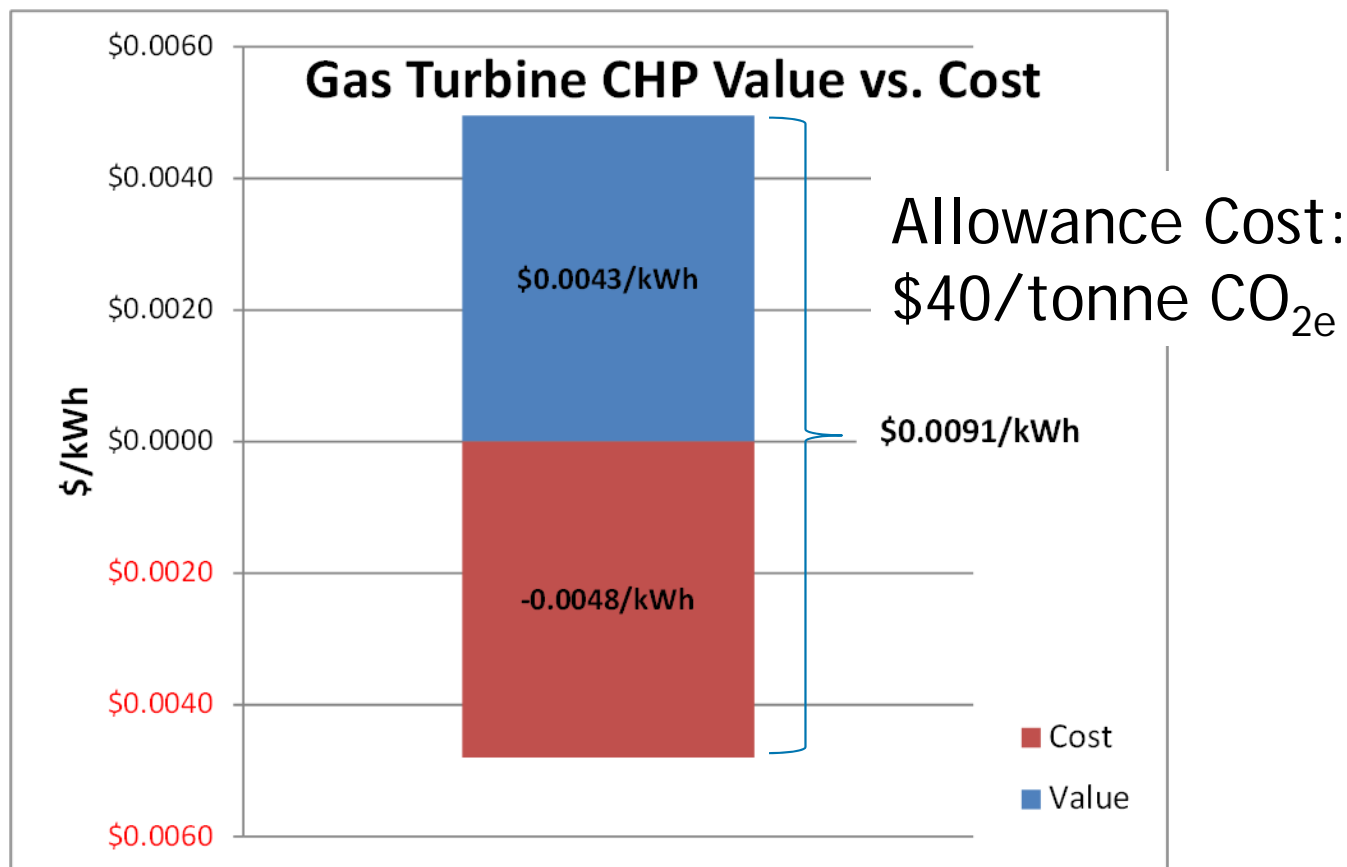
4

CA Fuel Mix	2012 CEC	2020 Ballpark Estimate	2020 Emission Benchmark MTCO <sub>2</sub> /MWh
Natural Gas	43.4%	41.0%	0.400
Nuclear	9.0%	9.0%	
Eligible Renewables	15.4%	33.0%	
Coal	7.5%	0.0%	0.892
Large Hydro	8.3%	11.0%	
Unspecified	16.4%	12.0%	
1/2 Natural Gas	8.2%	6.0%	0.400
1/2 Large Hydro	8.2%	6.0%	
Total	100.0%	100.0%	
Fossil Total	59.1%	47.0%	
Natural Gas Total	51.6%	47.0%	
CA Fuel Mix 2012			0.273
CA Fuel Mix 2020			0.188



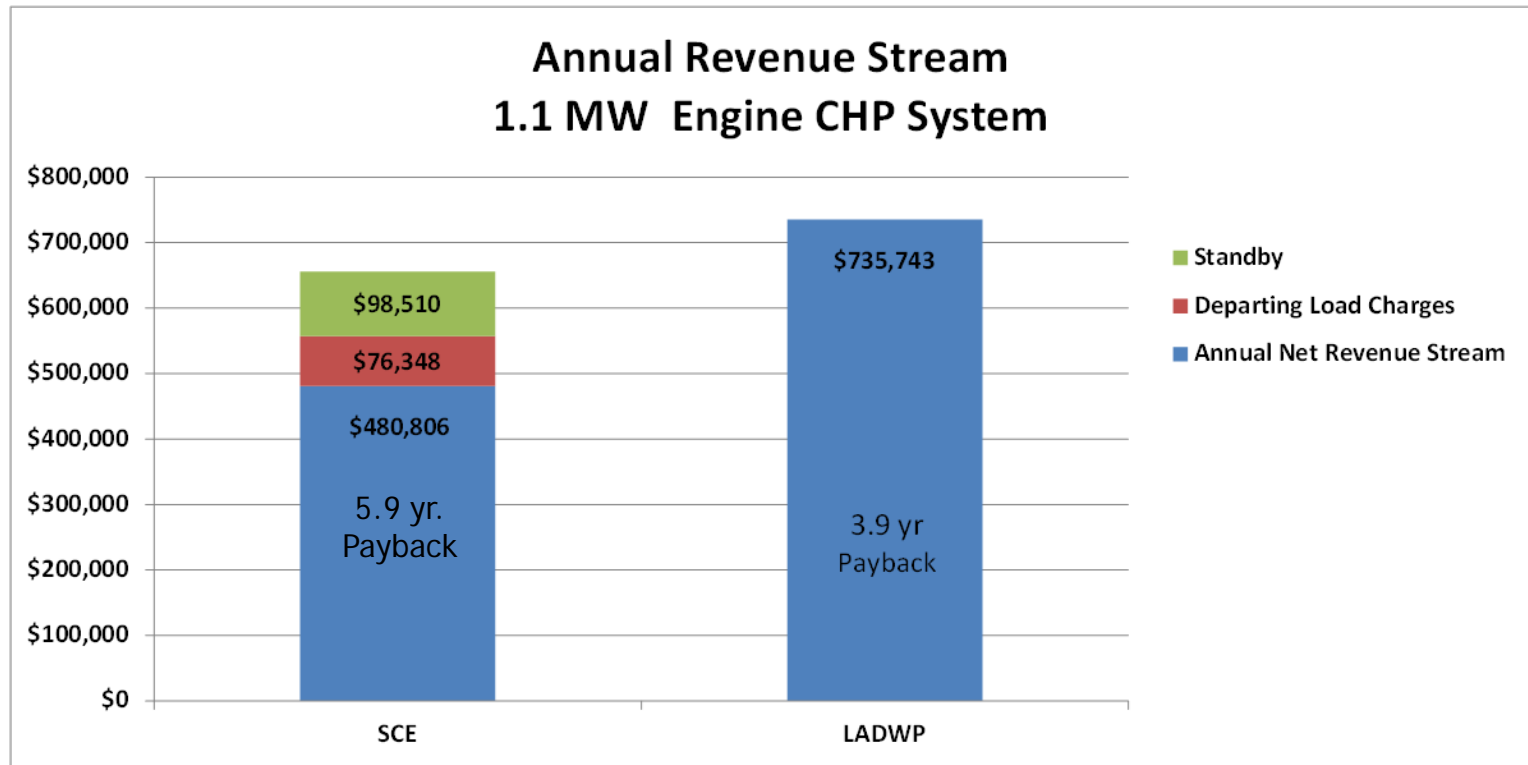
# CHP Value vs. Cost

5



# Rate Design Affects CHP Economics

6



# Contact Information

7

Keith Davidson  
DE Solutions, Inc.

[kdavidson@de-solutions.com](mailto:kdavidson@de-solutions.com)

[www.de-solutions.com](http://www.de-solutions.com)

(858) 832-1242