

north american power credit organization

LET'S TALK... COMMUNITY CHOICE AGGREGATION

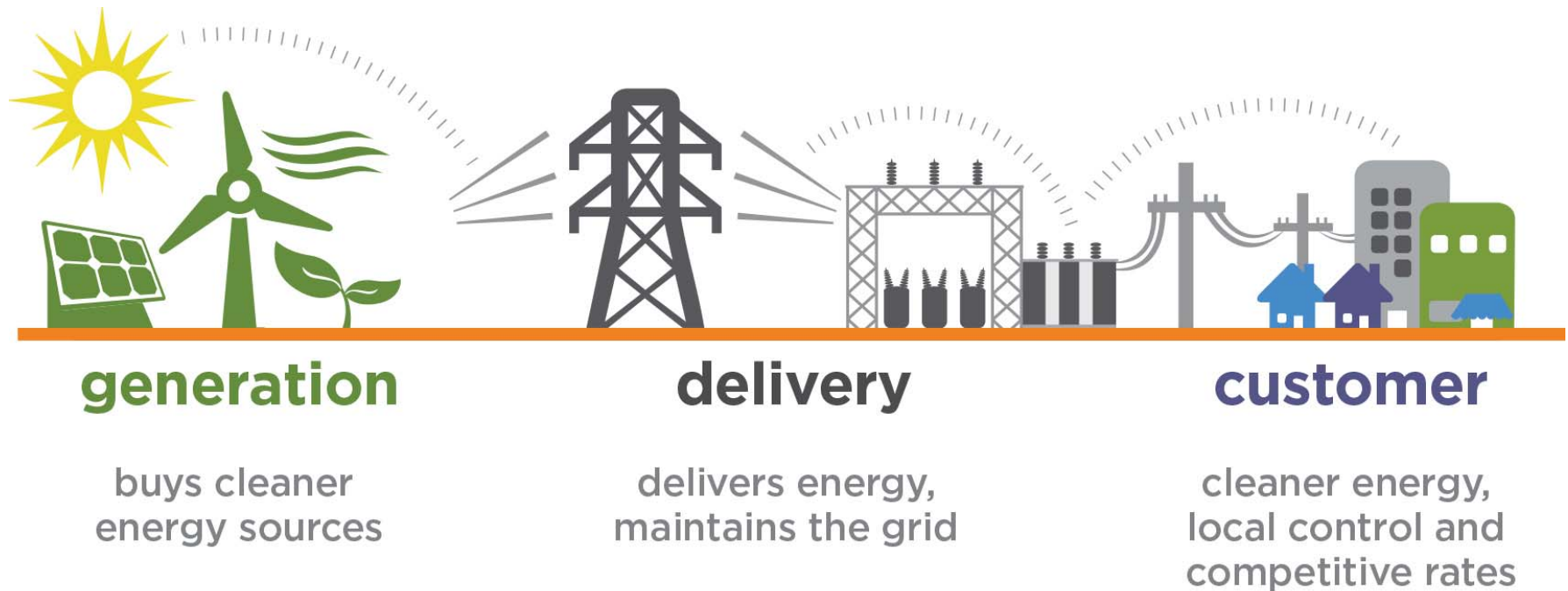
Representatives from various Community Choice Aggregators (CCA) and experts will have an interactive discussion on the status of CCA programs. As a part of this dialogue, we will investigate the credit and risk related issues surrounding this initiative.

Panelist: Barbara Boswell, Bayshore Consulting
 David McNeil, MCE
 Eric Sandler, San Francisco Public Utilities Commission

CCAs Created by the Legislature

- 2000 Energy Crisis prompted interest in greater transparency and local control
- AB 117 (2002, Migden): Enabled energy choice through local government-based entities
- SB 790 (2011, Leno): Established a CCA 'bill of rights' and allowed CCAs to administer efficiency programs

How Community Choice Works



Statewide CCA Developments



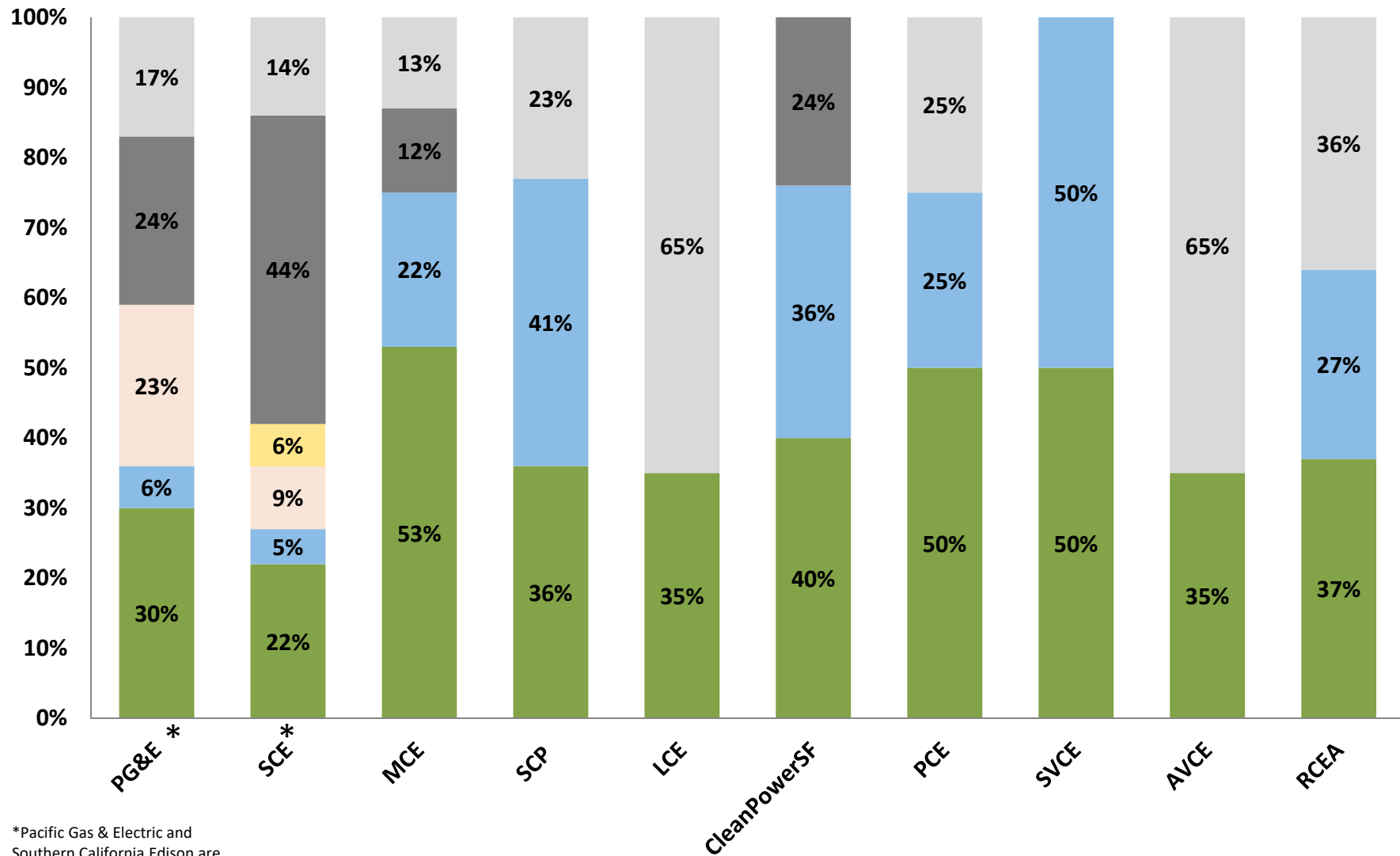
Operating Programs Overview

CalCCA Members	Customer Accounts	Peak Load MW	Minimum RPS (2017)	Uses Unbundled RECs?	Annual Load 2016 GWh	Annual Load Projected 2017 GWh
Apple Valley Clean Energy	29,000	70	35%	8%	n/a	235*
CleanPowerSF	73,000*	93*	35%	None	220	520
Lancaster Choice Energy	52,000	132	35%	8%	590	595
MCE	255,000	520	55%	0 - 3%	2,102	2,743
Peninsula Clean Energy	300,000	660	50%	None	n/a	3,800
Silicon Valley Clean Energy	243,000	688	50%	None	n/a	2,600*
Redwood Coast Energy Authority	60,000	138	37%	None	n/a	730*
Sonoma Clean Power	235,000	512	43%	None	2,330	2,550
CalCCA Member Totals	1,247,000	2,642	43% (avg)	2% (avg)	5,242	10,208

*Represents a partial year due to enrollment process

Snapshot of CCA Portfolios in 2016

(forecast 2017 for new programs, estimated May 2017)



*Pacific Gas & Electric and Southern California Edison are Investor-Owned Utilities included for comparison

■ Renewable
 ■ Large Hydro
 ■ Nuclear
 ■ Coal
 ■ Natural Gas
 ■ Unspecified

CCA Business Models

- Joint Powers Authority
 - MCE
 - Sonoma Clean Energy
- Enterprise Model / Single Jurisdiction
 - SFPUC
 - Lancaster Choice
- Hybrid Model
 - Community Choice Energy Authority

CCA Risk Fundamentals

- 7 year track record of success
- Stable customer base: Opt-in program
- Rate setting, budget and contracting autonomy
- Limited / No support from local governments
- Focus on managing risk and building reserves
- Strength in numbers;
 - CCAs expected to serve over 80% of eligible California communities by 2022
 - CalCCA trade association formed to represent CCAs in the regulatory and legislative arenas
 - Increasing cooperation between CCAs on operational matters

GOVERNANCE STRUCTURES

JPA Model

MCE

Sonoma Clean Power

Peninsula Clean Energy

Redwood Coast Energy

Silicon Valley Clean Energy

LA County CCE

Monterey Bay Community Power

Enterprise model

Solana Beach CCA

Apple Valley Choice Energy

CleanPowerSF

Hybrid JPA

Lancaster Choice Energy

PRIME (Pico Rivera)

San Jacinto Power

Many more emerging CCAs in various forms of evaluation/implementation across California

COMPARISON OF STRUCTURES

	JPA	Enterprise	Hybrid JPA
Rate Setting	1 Vote	Full Control	Full Control
Revenue Control	1 Vote	Full Control	Full Control
RPS Decisions	1 Vote	Full Control	Full Control
Operating Risk	None	Full Risk	Shared Risk
Program Control	1 Vote	Full Control	Full Control
Administrative Costs	None	Full Cost	Shared Cost
Long-Term Personnel Liab.	Incurred	Incurred	None

CleanPowerSF

NAPCO Credit Conference

Eric Sandler, CFO
San Francisco Public Utilities Commission
September 18, 2017



San Francisco
**Water
Power
Sewer**



San Francisco Public Utilities Commission—SFPUC

- Department of City & County of San Francisco
 - Governed by appointed five-member Commission
 - \$1.1 billion operating budget
 - \$8.0 billion 10-year capital plan
 - 2,300 + employees
- Three separate enterprise funds
 - **Water**—retail/wholesale water service to service area population of 2.6 million, ratings AA-/AA-, \$4.3 billion outstanding debt
 - **Wastewater**—wastewater collection and treatment to service area population of 850,000, ratings AA/AA-, \$950 million outstanding debt
 - **Power**—retail electricity service City’s municipal buildings/operations, wholesale electricity to MID/TID/WSPP, public utility ratings AA-/A+, \$39 million outstanding debt
- CleanPowerSF operated as financially independent component of Power Enterprise

CleanPowerSF Goals and Objectives



Lead with **Affordable** and
Reliable Service



Provide **Cleaner** Electricity
Alternatives



Invest in **Local Renewable
Projects** and **Local Jobs**

*While Providing for Long-Term Rate
and Financial Stability*

**Balanced
Program
Design**

Allows
Delivery
Across
Competing
Objectives
While
Providing
Financial
Stability



CleanPowerSF Launch Strategy

- Long-term goal of independent credit rating
- Established CleanPowerSF as separate sub-fund within Power Enterprise
 - Segregated revenues/expenses/assets/liabilities
 - Auto-appropriated fund for supplier payments
 - Quarterly financial statements
- Commission adopted financial policies for rate setting and reserves
 - Operating and rate stabilization reserves
- Specific Power Enterprise support
 - \$8 million working capital loan
 - Super-subordinate net-revenue pledge to support LOC for collateral posting for power contracts



CleanPowerSF Launch

- Launched in May 2016
 - Phase I—76,000 residential & commercial customer accts
 - ~ 20% of projected customer base
 - 60MW average size



- Two Products:
 - **Green**: 40% renewable
 - **SuperGreen**: 100% renewable

CleanPowerSF Current Program Stats

- Approx. 535 gigawatt-hours (GWh) per year in sales
- Annual sales revenue of approximately \$38 million
- Opt-out rate to date is 3.4%
- ~3% Opted up to **SuperGreen**
- Commission adopted a plan for city-wide roll out by 2019
 - 360,000 customer accounts
 - 420 MW of average demand
 - 3,600 GWh/year
 - \$260 million annual revenues





Increased Appetite for CCA Credit

- **Summer 2015**—solicitation for letters of credit
 - Two responses
 - No interest from banks to extend credit based solely on CCA net revenue pledge
 - Two banks offered to extend credit with a subordinate net revenue pledge of the Power Enterprise
- **Summer 2017**—solicitation for credit facilities
 - Four responses
 - Three money center banks offered to extend credit based on CCA net revenue pledge alone
 - One bank offered to extend credit with a subordinate net revenue pledge of power enterprise