COMMUNITY CHOICE ENERGY FEASIBILITY STUDY RESULTS

Presentation to the County of Santa Barbara Board of Supervisors

Energy & Sustainability Initiatives Division October 3, 2017





Agenda

- CCE Background
- Regional Approach
- Feasibility Study Overview
- Feasibility Study Results
- Drivers of Infeasibility
- Options for Consideration

How Community Choice Energy Works



source PG&E / SCE

buying and building electricity supply

delivery

PG&E / SCE

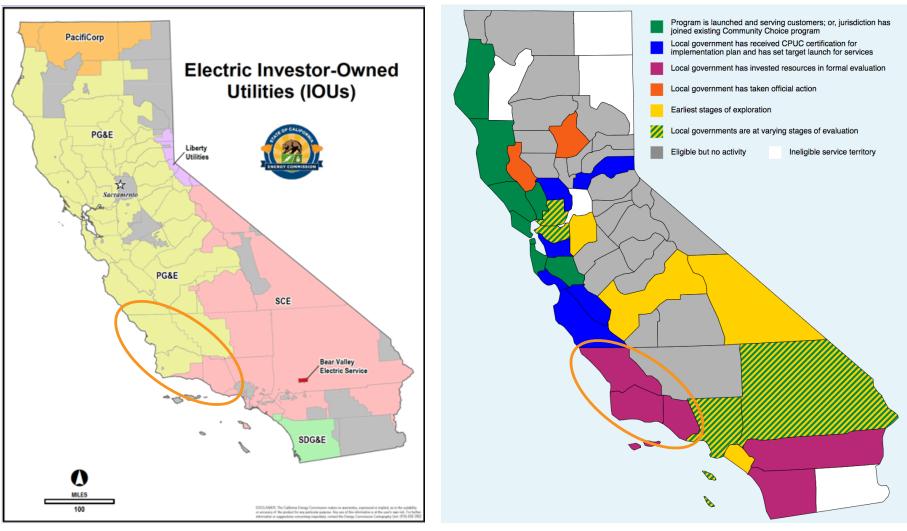
delivering energy, maintaining lines, billing customers customer YOU

benefitting from affordable rates, local control, cleaner energy

CCE vs IOU: Who Does What?

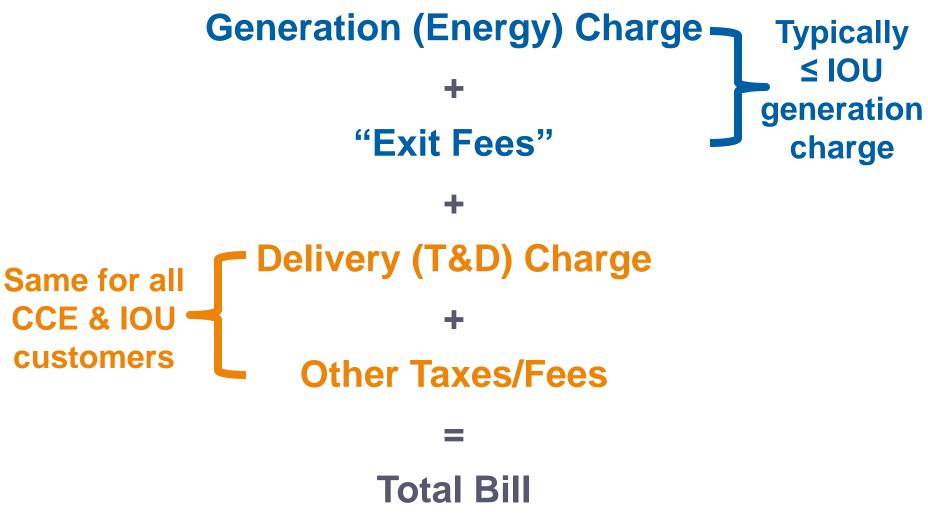
	CCE	IOU	
Electricity Generation			
Purchase/generate electricity for customers	✓		
Balance supply and demand	✓		
Electricity Distribution			
Build/maintain grid infrastructure		✓	
Deliver electricity to customers		✓	
Transaction			
Install/maintain/read meters and bill customers		✓	
Respond to customer outages		✓	
Provide customer service	✓	✓	
Demand Side Management			
Administer EE/DR programs	✓	✓	
Provide incentives for onsite generation (NEM, FIT)	✓	✓	

CCE and IOU Service Areas



Source: California Energy Commission

How CCE Competes with IOU: Rates



How CCE Competes with IOU: Choice

• Potentially higher renewable energy content for all customers

	RPS-eligible Renewable	Carbon-free
PG&E	33%	69%
SCE	28%	40%
CCE	35-50%	Up to 100%

- Potentially more voluntary premium renewable energy options
 - Lower-cost 100% renewable opt-up option
 - Higher payments for excess rooftop solar production (Net Energy Metering)
 - Higher payments for new renewable energy projects (Feed-In Tariff)
- Potentially more energy efficiency offerings
- Potentially more transportation electrification incentives

Regional CCE Progress to Date

C	May 2015 SB County BOS received CCE staff & community reports.	Summer-Fall 2015 SLO & Ventura counties and eight cities committed to contribute to CCE study.	Winter 2015-16 CCE feasibility study RFP issued and consultant selected.	Spring-Winter 2016 Electricity load data obtained from utilities; QA/QC performed.	O Summer 2017 Draft feasibility study received; peer review and CCA interviews conducted.
SB County BOS Phase 1 CCE funding; direc explore regiona	E evaluation ected staff to	December 2015 First CCE Advisory Working Group meeting held.	May 2016 Willdan & EnerNex engaged to perform CCE feasibility study.	Winter-Spring 2017 Draft feasibility study developed and reviewed by Advisory Working Group.	Fall 2017 Feasibility study results presented to boards and councils.

Regional Approach: Advisory Working Group

- Ten jurisdictions—plus the Community Environmental Council—helped fund the feasibility study
 - Counties of San Luis Obispo, Santa Barbara, and Ventura
 - Cities of Camarillo, Carpinteria, Moorpark, Ojai, Santa Barbara, Simi Valley, Thousand Oaks, and Ventura
- All 27 eligible jurisdictions across Tri-County Region included in feasibility study
- Advisory Working Group (AWG) oversaw the feasibility study and provided outreach and CCE monitoring support
- Early outreach included:
 - Community feedback on feasibility study scope
 - 2 Community Leader meetings
 - Website (www.CentralCoastPower.org)
 - Listserv

Feasibility Study Background

- Foundational first step in pursuing CCE
- Addresses these questions:
 - What are our expected costs given our unique characteristics?
 - Can we cover our costs while offering competitive rates and meeting policy goals?
- Commitment to thorough, unbiased analysis
 - Willdan (feasibility study): Lancaster, San Diego, San Francisco
 - MRW (peer review): Alameda County, San Diego

Feasibility Study Scope

- 24 different scenarios
 - 8 city/county combinations
 - 3 renewable energy content levels (+ 100% opt-up)
- 10-year study period: 2020-2030
- Pro forma assessment (forming <u>new</u> CCE program only)
 - Power purchase costs
 - Operational costs
 - Reserve/contingency fund
 - Debt service
- Greenhouse gas emissions comparison
- Risk analysis

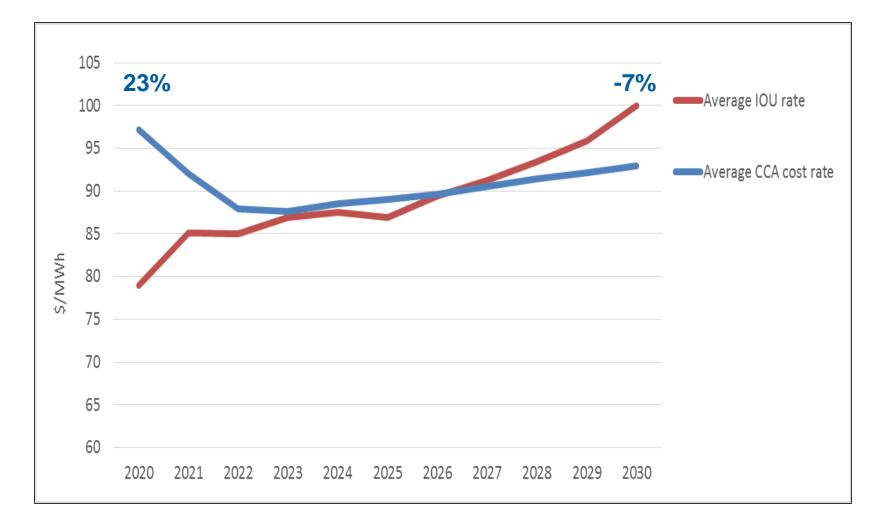
Feasibility Study + Peer Review Results

- Willdan found that none of the 24 scenarios proved viable
 - Holds true even when adjusting for lower power + staffing costs and higher IOU rates
- MRW concurs for SCE jurisdictions, but suggests PG&E jurisdictions may be rate competitive after a couple years
- As renewable energy content increases, power costs increase and rate competitiveness decreases
- Increasing participation size helps economies of scale, but not significantly
- Focused on 50% renewable option for AWG participants and unincorporated Santa Barbara County

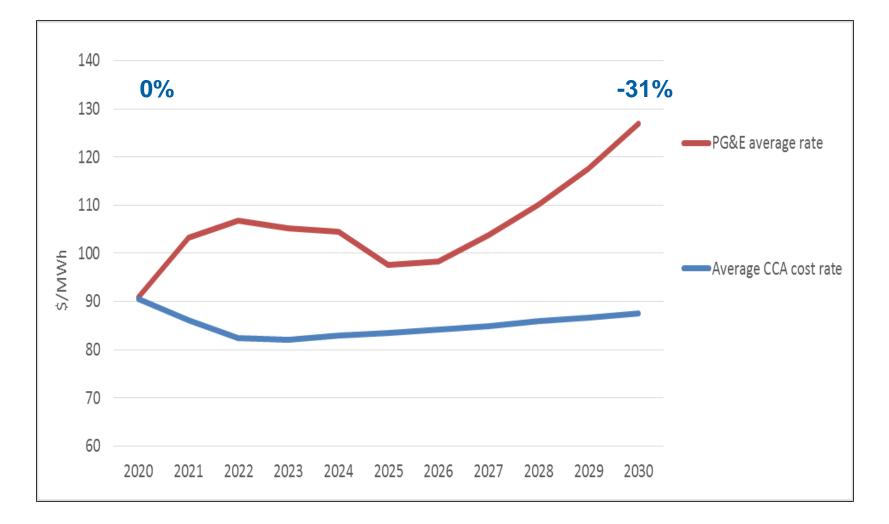
Willdan \$ and GHG Summary for Residential Customers in 2020, AWG and Unincorporated County

		Pacific Gas & Electric		Southern California Edison		
Participation Scenario	Renewable Energy Content	Generation Rate Comparison (% Increase/ Decrease for CCA Customers)	Bill Comparison (\$ Increase/ Decrease for CCA Customers)	Generation Rate Comparison (% Increase/ Decrease for CCA Customers)	Bill Comparison (\$ Increase/ Decrease for CCA Customers)	Proportional GHG Comparison
	RPS Equivalent	22%	\$12.21	41%	\$16.08	6%
Advisory Working Group Jurisdictions	50%	29%	\$15.92	50%	\$19.79	-9%
	75%	43%	\$23.68	70%	\$27.64	-55%
	RPS Equivalent	26%	\$15.08	47%	\$19.29	7%
Unincorporated Santa Barbara County	50%	33%	\$18.97	56%	\$23.23	-9%
	75%	47%	\$27.11	76%	\$31.44	-54%

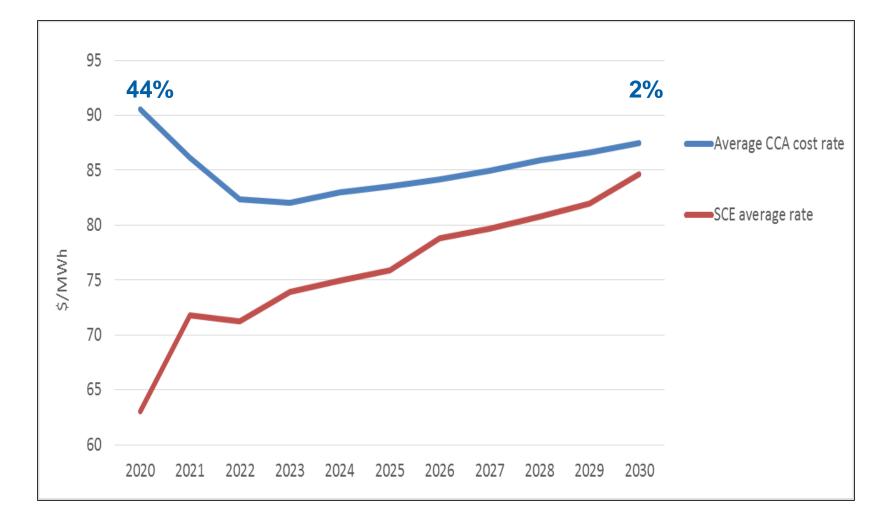
MRW Rate Comparison for All Customers, AWG 50% Renewable



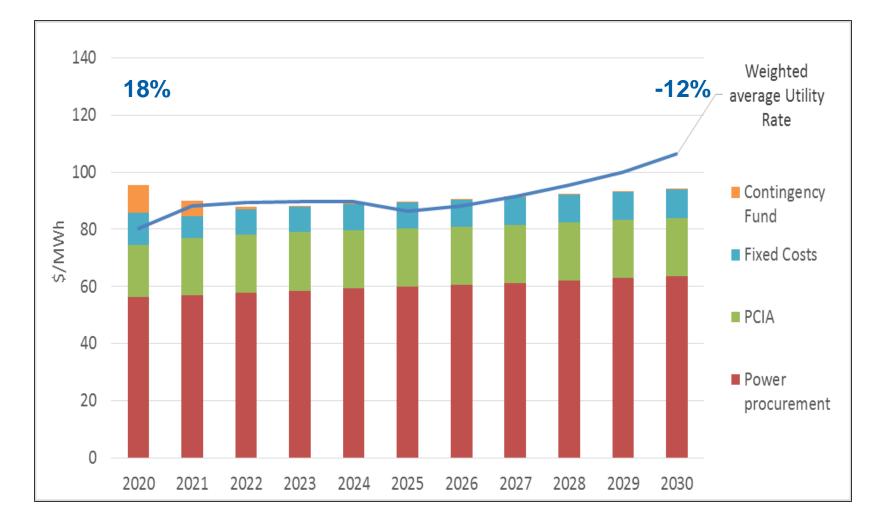
MRW Rate Comparison for PG&E Customers, AWG 50% Renewable



MRW Rate Comparison for SCE Customers, AWG 50% Renewable



MRW Rate Comparison for All Customers, Unincorporated County 50% Renewable



Drivers of Infeasibility

- We're in 2 IOU service areas.
 - Differing rates are problematic, especially with SCE's low rates
 - Coordinating with 2 IOUs and their billing systems is complicated
- As a region, we're big.
 - For the Advisory Working Group scenario, we'd be more than 1.5x the next biggest CCE program upon launch
 - Upfront capital costs to serve such a large load could require a bond issuance
- IOUs have had time to adjust.
 - Potential cost shifting among generation and delivery charges
 - Regulatory/legislative action drives uncertainty and potentially increases costs related to PCIA and other exit fees

CCE Options for Consideration

- Option 1. Join 2 Existing CCE Programs
- Option 2. Form a New CCE Program
- **Option 3.** Not Implement a CCE Program at This Time and Explore Other CCE-related Options
- **Option 4.** Not Implement a CCE Program at This Time and Discontinue CCE Evaluation

Option 1. Join 2 Existing CCE Programs

- Feasibility study did not evaluate joining an existing program(s)
- North County (PG&E): Monterey Bay Community Power
 - Structure: JPA of 19 jurisdictions across Santa Cruz, Monterey, and San Benito Counties
 - Electricity content: RPS-equivalent + 100% carbon-free at rate parity with PG&E
 - Next steps: ordinance, JPA agreement, and 2/3 vote of existing JPA board
 - Join by Thanksgiving to start July 2018
 - Cost: \$0-\$50,000 (to amend implementation plan)
- South County (SCE): Los Angeles Community Choice Energy
 - Structure: JPA of 5+ jurisdictions across LA County
 - Electricity content:
 - RPS-equivalent at 4% rate savings compared to SCE
 - $\circ~$ 50% renewable at 1% rate savings compared to SCE
 - $\circ~$ 100% renewable at 5% rate increase compared to SCE
 - Next steps: ordinance, JPA agreement, and 2/3 vote of existing JPA board
 - Join by New Year's to start Q2/Q3 2018
 - Cost: \$0-\$4M loan (to cover incremental power costs, etc.)

Option 2. Form a New CCE Program

- Feasibility study found this option infeasible
- Option 2a. Unincorporated County CCE Program
 - Structure: Enterprise fund within new or existing County department
 - Electricity content: TBD at County Board discretion
 - Next steps: Develop implementation plan for CPUC review
 - Cost: \$41.7M (3 months working capital) to \$60.8M (5 months)
- Option 2b. Regional CCE Program
 - Structure: JPA of 2+ jurisdictions
 - Electricity content: TBD at JPA Board discretion
 - Next steps: Determine if other jurisdictions want to pursue; develop implementation plan
 - Cost: \$175.6M (3 months) to \$255.8M for AWG (5 months)

Option 3. Not Implement CCE at This Time and Keep Exploring CCE Options

- "Wait and see" approach lets market and policy environment stabilize before further considering CCE
- Can continue exploring local renewable energy generation, green job creation, and greenhouse gas reduction opportunities
- Additional CCE Study Options:
 - Feasibility of serving residential and government customers only
 - Feasibility of self-generating power for CCE customers upon CCE launch
 - Legislative options for offering CCE to a portion of the unincorporated county
 - Cost: \$25-50,000+ for additional study; legislative cost unknown
- Other CCE-related Options:
 - Aggregation of government accounts (e.g., RES-BCT)
 - Renewable energy development on County land and/or facilitation of private development
 - Legislative options for expanding Direct Access to allow the County to purchase power from non-IOU providers
 - Cost: unknown

Option 4. Not Implement CCE at This Time and Stop Exploring CCE Options

- Next steps:
 - Discontinue CCE Advisory Working Group and return unspent outside contributions
 - Staff to shift to other policy/program priorities (e.g., Energy and Climate Action Plan, emPower, possible Regional Energy Network)
- Cost: none

Options Analysis: Summary of Benefits and Risks

Options	Benefits	Risks		
1. Join 2 Existing CCE Programs	 May offer cleaner electricity product than IOUs May ameliorate negative impact of SCE's lower rates on CCE rates for North County May be less time-consuming than creating a new program May lower rates due to lower start-up costs and spreading costs over more customers May allow programs and electricity products to be better tailored to North and South County Spreads risk among JPA participants 	 Carries greater risk of CPUC rejecting program May not find willing host for both parts of the county Dilutes local control May increase rates (who's study is right?) May require more complex logistical coordination May create customer/brand confusion Any new generation and economic development may not occur in SB County 		
2. Form a New CCE Program	 May offer cleaner electricity product than IOUs Increases local control (especially Option 2a) and may increase accessibility of customers to decision-makers Simplifies and streamlines decision-making (Option 2a) May be less time-consuming than forming a JPA May stimulate local economic development and new generation 	 Not shown to be financially viable Increases County's financial risk exposure May increase rates and provide less financial stability due to smaller, less diverse customer base, reduced purchasing power, and possibly less advantageous credit terms Presents fewer resources due to smaller size 		
3. Not Implement CCE at This Time and Keep Exploring CCE Options	 May identify other more cost-effective options for achieving similar policy goals May avoid significant market and policy risk and cost 	May miss opportunity to offer CCE to community		
4. Not Implement CCE at This Time and Stop Exploring CCE Options	 May avoid significant market and policy risk and cost Can reallocate funding to other policy priorities 	May miss opportunity to offer CCE to community 24		

Recommended Action

Provide staff with direction regarding CCE options:

- Option 1. Join 2 Existing CCE Programs
- Option 2. Form a New CCE Program
- Option 3. Not Implement a CCE Program at This Time and Explore Other CCE-related Options
- Option 4. Not Implement a CCE Program at This Time and Discontinue CCE Evaluation

Provide other direction to staff.

QUESTIONS?