
COMMUNITY CHOICE AGGREGATION INITIAL FEASIBILITY STUDY *INITIAL RESULTS*

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Presented by:

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Prepared for:

**County of Butte, the Cities of Chico and
Oroville, and the Town of Paradise**

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AGENDA

- **Study Objectives**
- **Butte County Feasibility Study Results Overview**
- **Key Assumptions**
- **Sensitivity Results**
- **Risk Analysis**
- **Summary and Recommendations**

FEASIBILITY STUDY OBJECTIVES

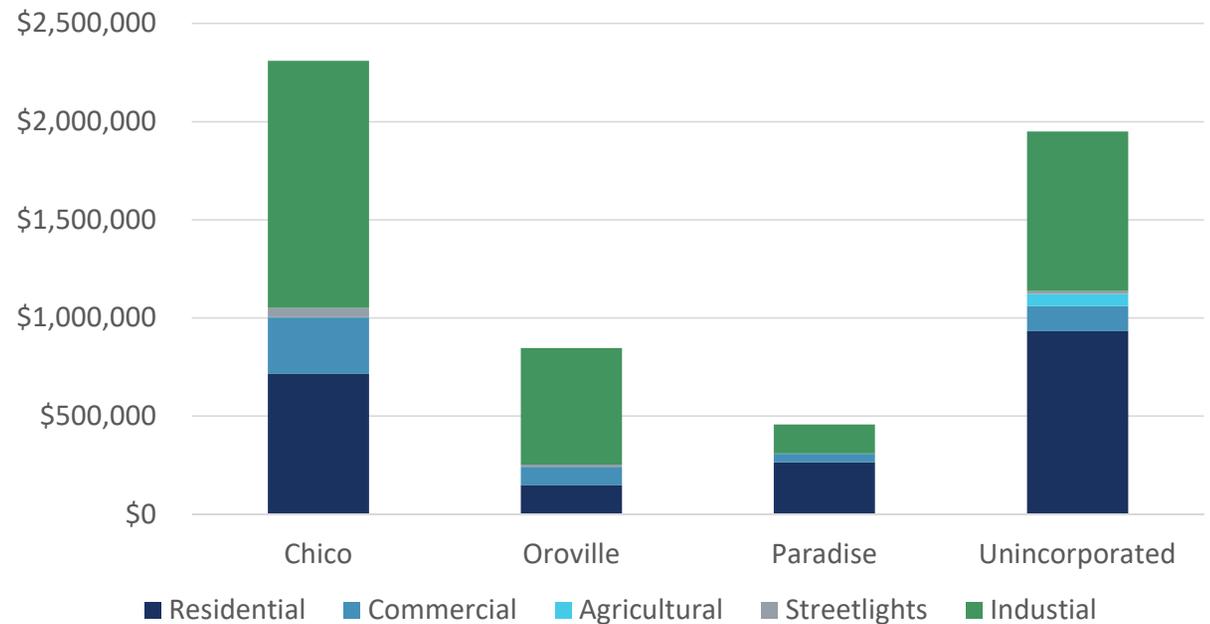
- **Can a Butte County CCA be Financially Feasible Under a Range of Likely Future Conditions?**
 - Methodology: conservatively estimate revenues and costs
- **Analyze Various Governance and Operational Options if Financially Feasible**
- **Evaluate Various Risk Factors**

RESULTS OVERVIEW

ANNUAL RATE SAVINGS ONCE OPERATIONAL

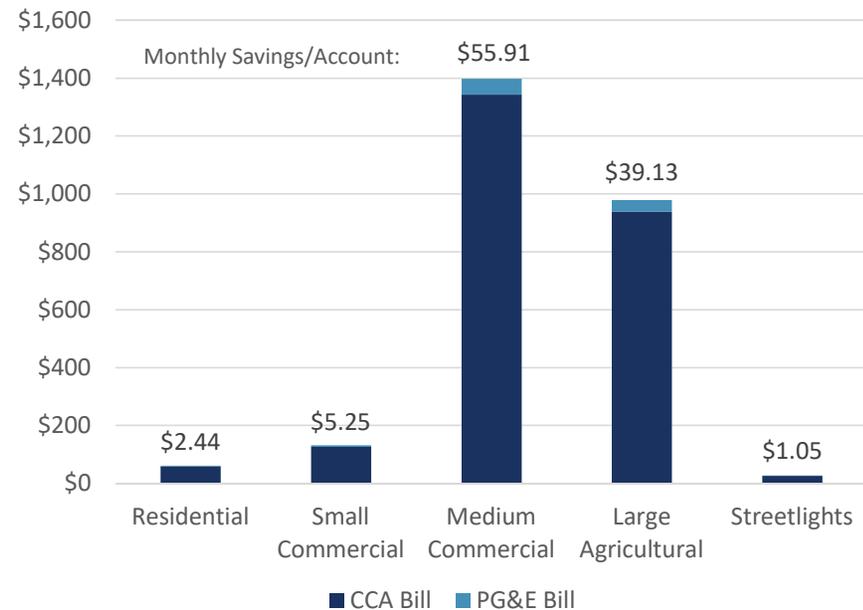
- **RPS Portfolio**
- **2% Savings Off of PG&E Bundled Rate = \$5M**
 - CCA Generation Rate + PG&E PCIA + PG&E Distribution Rate is 2% lower than PG&E Generation Rate + PG&E Distribution Rate
- **Annual Rate Savings for 2-Participant CCA (Chico + Unincorporated) is \$4M**

Annual Rate Savings: 4-Participant CCA



BILL SAVINGS EXAMPLES

- **RPS Portfolio, 2% Rate Savings**
- **Savings is per Account**
 - Nearly 1,500 streetlight accounts (4-Participants); half are in Unincorporated Butte County
- **Industrial Customer Savings Example**
 - 310,000 kWh/month = \$1,200 monthly savings
 - 50,000 kWh/month (average for Participants) = \$200



LOAD AND PHASING – KEY ASSUMPTIONS

4 PARTICIPANTS



Phase	Start	Eligibility	Total Accounts Served	Percentage of Total Load Served
1	Apr 2020	Agriculture, Commercial & Industrial	12,000	30%
2	Aug 2020	Residential	92,400	70%

Rate Class	Participation
Agricultural	85%
Commercial	85%
Industrial	85%
Lighting	100%
Residential	95%

PG&E RATE ANALYSIS – KEY ASSUMPTIONS

- **Diablo Canyon Nuclear Plant Retirement and Departing Load Balance Out Which is Reflected in PG&E Forecast Rates**
- **Market Prices and Variable Cost Increases are Projected to be Main Contributors to PG&E Rate Increases**
 - Variable costs are mainly fuel (natural gas)
- **Average Annual Escalation Rate of 0.5% over 10-Year Period**
 - Conservative
- **Similar Resultant Cost and Trend to Other CCA Feasibility Studies (Contra Costa County, Central Coast)**

POWER SUPPLY –RESOURCE AND COST ASSUMPTIONS

- **Three Portfolios: RPS, 50%, and 75% Renewable**
 - RPS: 80% GHG-free all years
 - 50% and 75% Renewable: 80% GHG-free ramps to 91% GHG-free by 2030
- **Wholesale Market Price Forecast Provided by Proprietary Market Price Forecasting Firm (S&P Global Market Intelligence)**
- **Power Purchase Agreements (PPAs) Priced at \$30 to \$40/MWh (flat)**
- **Geothermal and Local DER Project Costs have Limited Availability with Costs from \$60 to \$120/MWh**
- **Based on a Survey of Recent Renewable PPA Prices, Assumed Renewable Energy Market Price of \$40 to \$49/MWh**

GENERAL ASSUMPTIONS

- **RPS Default Rate for All Customers**
- **Target 2% Total Bill Savings Annually**
- **Base Power Supply, PCIA Scenarios**
 - PCIA increases 20% annually for first two years; decreases ~2% annually thereafter
- **Target Operating Reserves at Three Months of Expenses: \$18.5M (4 Participants)**
- **Working Capital Repayment at 5.5% Interest Rate for 5 Years, Early Repayment Likely**

CASH FOR WORKING CAPITAL

- **Cash Required to Fund Pre-Startup Activities, Salaries, Bonds**
 - \$600,000
- **Working Capital Required to Cover Expenses During Startup**
 - \$1.5 – 6.1 million
 - Flexible power procurement payment terms reduce working capital requirements
- **Assumed Repayment of All Financing by May 2025 (Likely Earlier)**
- **Financing Options**
 - Line of credit
 - Term loan
 - Turnkey operation – provider fronts the cash

RATE ANALYSIS – BASE CASE INDICATIVE BUNDLED RATES (\$/KWH, 2022)

Rate Class	PG&E	CCA Rates, Renewable Content		
		RPS	50%	75%
Residential	0.2033	0.2007	0.2019	0.2035
Small Commercial	0.2436	0.2440	0.2453	0.2469
Medium Commercial	0.2151	0.2122	0.2135	0.2152
Large Commercial	0.1807	0.1676	0.1688	0.1703
Street Lights	0.2184	0.2002	0.2011	0.2023
Agriculture	0.2405	0.2407	0.2418	0.2432
Industrial	0.1543	0.1395	0.1406	0.1420
Total	0.2057	0.2016	0.2029	0.2044
Initial Max Rate Savings in 2022 from PG&E Bundled Rate		2.0%	1.5%	0.5%
Rate Savings after Fully Operational		3.9-4.4%	2.9-3.9%	0.9-1.4%

RATE ANALYSIS – SENSITIVITY ASSUMPTIONS

■ Generation

- High/Low power cost cases

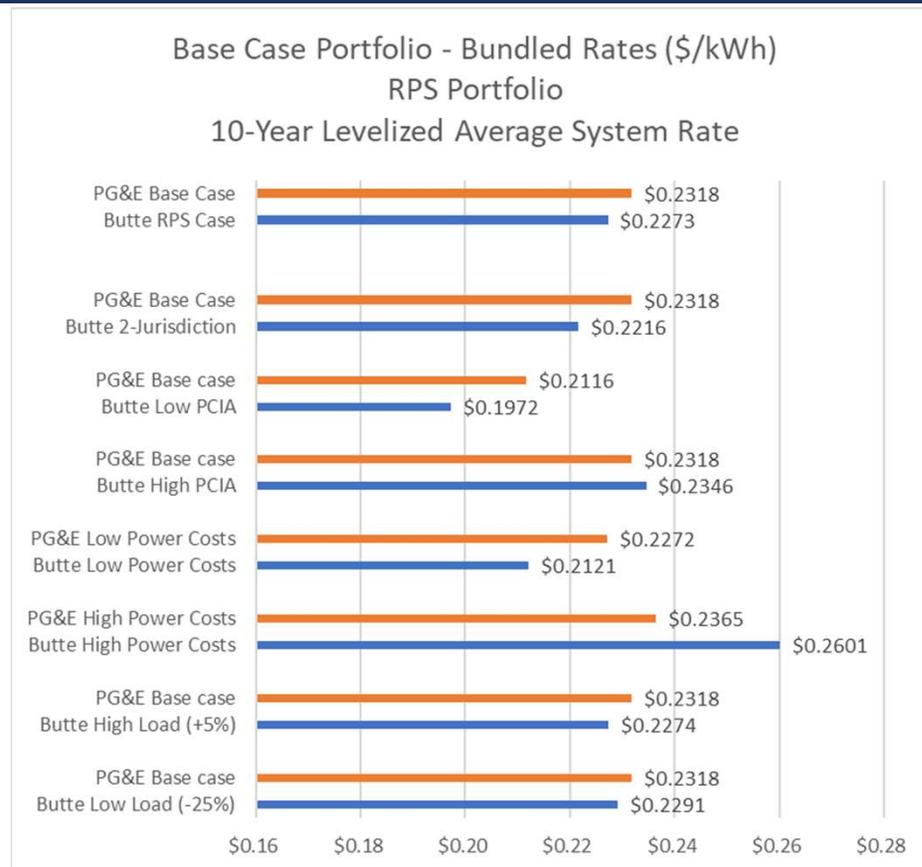
■ PCIA

- *High PCIA*: Based on Portfolio Allocation Methodology level proposed by IOUs
- *Low PCIA*: -2% change in PCIA annually

■ Participation

- *High Participation*: +5%
- *Low Participation*: -25%

SENSITIVITY ANALYSIS



RISK ANALYSIS AND MITIGATION

Risk Category and Description	Mitigation Strategies
<p>Customer Participation</p> <ul style="list-style-type: none"> • Customers can choose to opt-out • High opt-out rates reduce sales, increase fixed cost per customer 	<ul style="list-style-type: none"> • Maintain competitive rates • Tailor programs to local customer priorities • Provide customers with a high-level of service and communication
<p>PG&E Rate Competition</p> <ul style="list-style-type: none"> • Low customer participation rates • Unfavorable future power market conditions • Regulated charges could increase in the future 	<ul style="list-style-type: none"> • Diversify power contract portfolio • Maintain financial reserves and a rate stabilization plan • Monitor PG&E rates and CCA charges • Ensure relatively low CCA overhead • Leverage CCA’s tax-exempt borrowing advantage to reduce long-term power supply costs
<p>Local, Agency, and State Policy</p> <ul style="list-style-type: none"> • PCIA and other regulated charges may reduce CCA competitiveness • State energy policy could create burdensome energy procurement requirements 	<ul style="list-style-type: none"> • Track and participate in relevant CPUC/CEC proceedings and legislation • Develop bi-partisan support with emphasis on both environmental/equity and financial/economic benefits associated with a CCA • Lobby for the same government-imposed charges on all CA utilities

GOVERNANCE STRUCTURES

Create Joint Power Authority (JPA)

- Provides Participants with maximum local control
- Allows Participants to target programs specifically for residents
- Greater effort associated with formation of CCA
- Ability to better target County and Cities' own residents in formation and future marketing
- More decision-making required by the cities
- More flexibility and timeliness in formation
- Greater potential for local generation projects

Join Existing JPA

- JPA completes the work without much effort from the Participants
- Potential cost savings due to shared services
- Participants may have less control over the process and operations
- Risk transferred to the JPA
- Less ability to customize for each County/Cities' residents
- Less ability to influence power supply options and choices
- Ability for JPA to have more influence in regulatory issues
- Greater size of JPA might lead to more parties offering power supply contracts
- Greater process in reaching agreement on decisions
- May take longer for formation and implementation due to the number of parties involved

MANAGEMENT STRUCTURES

Full Staffing

- All CCA functions staffed internally
- CCA acquires its own financing
- **Pros:**
 - ⑩ Maximum control over quality of service and long-term decision making
- **Cons:**
 - ⑩ Possible financial risk



Minimal Staffing

- CCA employs program managers to manage contractors
- CCA acquires its own financing
- **Pros:**
 - ⑩ Flexible staffing levels
- **Cons:**
 - ⑩ Less control
 - ⑩ Possible financial risk



Third-Party Turnkey

- CCA employs program managers to manage contractors
- CCA financing provided by third-party
- **Pros:**
 - ⑩ Flexible staffing levels
- **Cons:**
 - ⑩ Possibility of third party abandoning venture
 - ⑩ Reduced control
 - ⑩ Higher rates due to higher 3rd party borrowing rate

SUMMARY AND RECOMMENDATIONS

- **A Butte County CCA is Financially Feasible Under a Range of Sensitivities:**
 - Renewable content of power supply
 - Lower or higher than expected participation rates
 - Small to moderate changes in PCIA or power supply costs
 - 2 or 4 Jurisdictions participating
 - Early repayment of start-up capital very likely
- **\$5 million and \$4 million in Bill Savings Annually for 4-Participant and 2-Participant CCA, Respectively**
 - Promotes economic development
- **Through CCA, Participants Gain Greater Local Control Over Rates, Programs, Power Supply**

NEXT STEPS

- **Recommendation to Begin Forming a CCA and Performing Necessary Analysis to File Implementation Plan with California PUC**
- **Next Steps:**
 - Community meetings/public outreach
 - Identify financing options
 - Board/council decision
 - Development of Implementation Plan (IP)

QUESTIONS/ANSWERS

SCHEDULE OF EVENTS

■ October 2018 is Board/Council Decision



Timeline may be condensed and meet service start date in early 2020