CITY COUNCIL AGENDA STATEMENT

CITY OF CHULA VISTA

July 23, 2019 File ID: **19-0329**

TITLE

Chula Vista Community Choice Aggregation Feasibility Study

RECOMMENDED ACTION

Council accept the report and identify governance options for staff to further research and evaluate.

SUMMARY

The Community Choice Aggregation (CCA) feasibility study (study) was completed by EES Consulting, Inc. (EES). The study and potential implementation of Community Choice Aggregation help implement the 2017 Climate Action Plan. The study was prepared to evaluate whether a Community Choice Aggregation program was feasible and if it would benefit Chula Vista residents and businesses. The results showed that a CCA is financially feasible and could provide benefits to all participating residents and businesses, as follows:

- Electric retail rates that are estimated to be 2% lower compared with SDG&E rates.
- Benefits are achieved through local decision-making about power supply, rates and customer programs that could include:
  - Economic development incentives;
  - Targeted energy efficiency and demand response programs;
  - Financing of a rate stabilization fund;
  - Build new local renewable resources;
  - Economic development projects.
- The sensitivity analysis indicated that the ranges of prices for different market conditions will in most cases not negatively impact CCA rates compared to SDG&E rates and for those cases that these impacts can be mitigated.
- The CCA could be a means to achieve local control of energy supply enabling the cities to meet their respective Climate Action Plan (CAP) goals.
- While all governance models are viable and offer some savings, a high-level analysis for joining the Regional CCA illustrates the economies of scale, ease of implementation, and other considerations for partnering on CCA efforts.

ENVIRONMENTAL REVIEW

The Director of Development Services has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that the proposed action, adoption of the Chula Vista Community Choice Aggregation Feasibility Study, falls under a Statutory Exemption pursuant to Section 15262 (Feasibility and Planning Studies) of the State CEQA Guidelines. In addition, notwithstanding the foregoing, the Director of Development Services has also determined that the "Project" qualifies for an Exemption pursuant to Section 15061(b)(3) of the California Environmental Quality Act State Guidelines. Thus, no environmental review is required.

BOARD/COMMISSION/COMMITTEE RECOMMENDATION

On July 8, 2019 the Sustainability Commission voted to recommend that City Council accept the CCA Feasibility Study.

DISCUSSION

Background

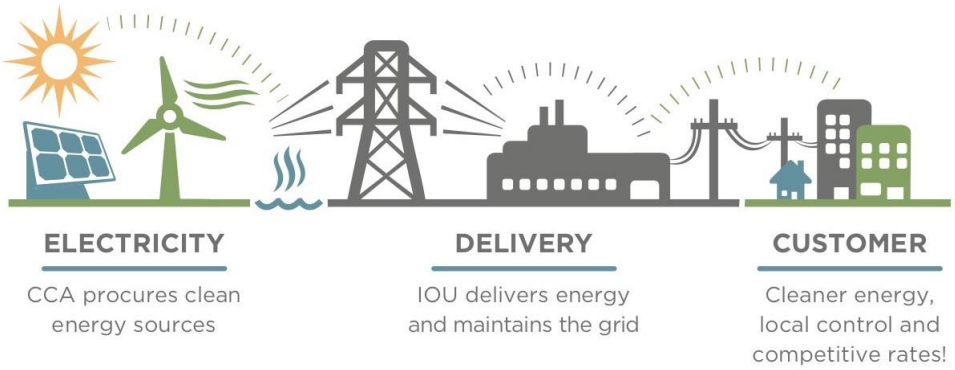
As part of the 2017 Climate Action Plan, the City of Chula Vista identified several actions that should be taken to provide more grid-delivered clean energy to help reach the City's goal of offering our community 100% clean renewable energy by 2035. One of the implementation actions with the largest potential to increase clean energy on the grid was conducting a feasibility study to identify costs and benefits of pursuing a CCA program for Chula Vista. In October of 2018, a Request for Proposal (RFP) was issued seeking a consultant to conduct a CCA feasibility report. In December staff selected EES Consulting, Inc. (EES) and the contract was approved by City Council in February 2019. EES has also conducted CCA feasibility studies for four North San Diego County Cities (Encinitas, Carlsbad, Oceanside, Del Mar) and is working with the County of San Diego. Two CCA community workshops were held in Chula Vista in May 2019 to inform interested residents on the basics of CCAs and what issues would be covered in the feasibility study.

Because of the similarities in goals and timelines, the City of Chula Vista worked with the City of La Mesa and City of Santee (Partners) to conduct a joint feasibility study. The partnership reduced the cost of the feasibility study to each jurisdiction while allowing each jurisdiction to be evaluated independently. The feasibility study does not commit the City to any future partnerships, however, many jurisdictions do utilize a JPA due to similarities in goals, benefits of economies of scale and an ability to limit risk for individual jurisdictions. Currently, the City of San Diego is pursuing a CCA by utilizing a JPA and Chula Vista and other Cities have participated in ongoing conversations around the formation of a San Diego led JPA. If Chula Vista participated with the City of San Diego by October 1, 2019 the start up costs for CCA implementation would be waived for Chula Vista. However, if the City participated in later years the startup costs proportionate to Chula Vista's share would be due to the City of San Diego.

CCA Basics: What is a CCA and Why are They Important?

A CCA is a program that allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility provider, see graph below. CCAs are an attractive option for communities that want more local control over their electricity sources, more renewable power than is offered by the default utility, and/or lower electricity prices. By aggregating demand, communities gain leverage to negotiate better rates with competitive suppliers and choose greener power sources. CCAs are currently authorized in California, Illinois, Ohio, Massachusetts, New Jersey, New York, and Rhode Island.

Graph 1
CCA Overview



As mentioned, potential benefits of a CCA that have been identified in feasibility studies conducted for other California jurisdictions include: increased customer choice, local control of resource decisions and rates, lower electricity costs, opportunities for innovative new energy programs (energy efficiency, distributed generation, economic development, etc.) and support for local infrastructure investment. Some potential risks from forming a CCA include: loss of customers, regulatory changes, unexpected change in energy market prices. More details about these are provided in the section below with full details included in the attached feasibility study.

How do you form a CCA?

To form a CCA a local government must hold public hearings, pass a law authorizing the CCA then file an Implementation Plan with the California Public Utilities Commission (CPUC) a full year ahead of when they would like to start operating. Participation in CCAs is always voluntary. California CCAs have opt-out provisions, meaning when a community begins a program, customers are given advanced notice and have the choice to opt-out of the CCA program and continue to receive electricity from their current supplier. Customers that do not opt-out are automatically enrolled in the program. Existing CCAs in California can provide the communities they serve with competitively priced, clean energy choices while reinvesting revenues into projects and programs, supporting the local economy. There are

currently 18 CCA programs operating in California that collectively serve more than 4 million accounts, see table below for full list.

Table 1
Existing CCA Programs in California

CCA	Customer Accounts	CCA	Customer Accounts
Solana Energy Alliance	7,300	Sonoma Clean Power	225,000
Rancho Mirage Energy Authority *	14,500	Silicon Valley Clean Energy	270,000
San Jacinto Power*	14,500	Monterey Bay Community Power	277,000
Pico Rivera Innovative Municipal Energy*	17,600	San Jose Clean Energy	332,500
Apple Valley Choice Energy*	25,000	Peninsula Clean Energy	293,000
Lancaster Choice Energy*	50,000	CleanPowerSF	376,000
Valley Clean Energy	54,200	MCE	470,000
Redwood Coast Energy Authority	62,000	East Bay Community Energy	533,000
Pioneer Community Energy	79,500	Clean Power Alliance	972,000

* Also members in CalChoice

In San Diego County, Solana Beach is the only jurisdiction with a CCA program. Their program, the Solana Energy Alliance (SEA), launched in 2018 and serves more than 7,000 households. The City of San Diego is leading an effort to create a Regional CCA JPA and many local jurisdictions are evaluating the opportunity to join, including the City of Chula Vista.

Goals of the Chula Vista CCA Feasibility Study:

The goal of the Study was to determine whether a CCA could be established to meet the greenhouse gas (GHG) emissions reduction goals of the Partner cities while keeping electricity rates comparable to or lower than those of SDG&E. To do this, the Study:

- Evaluated the financial feasibility of a potential CCA for the cities of Chula Vista, La Mesa, and Santee (Partners). Financial feasibility for both a larger Partner CCA and individual CCAs for each city were also evaluated.
- Assessed whether a CCA program can help the cities achieve climate action plan goals, including 100% renewable electricity by 2035.
- Evaluated governance options for CCA.

Components of the Chula Vista CCA Feasibility Study:

The CCA feasibility study conducted by EES is organized into the following eight sections:

a. Load Requirements
b. Power Supply Strategy and Costs

c. Partners' CCA Cost of Service
d. Product, Service and Rate Comparisons
e. Environmental/Economic Considerations
f. Sensitivity Analysis
g. CCA Governance
h. Conclusions and Recommendations

a) Load Requirements:
One indicator of the viability of a CCA for the Partners is the number of customers that participate in the CCA as well as the quantity and timing of energy these customers consume. EES conducted a load study and this section of the Study provides an overview of these projected values and the methodology used to estimate them.

b) Power Supply Strategy and Costs:
This section of the Study discusses the CCA's resource strategy, projected power supply costs, and resource portfolios based on the Partners' CCA projected loads. EES conducted an analysis of the long-term resource planning, including the load forecasting and supply planning on a 10- to 20-year time horizon.

c) Partners' CCA Cost of Service:
This section of the Study describes the financial pro forma analysis and cost of service for a CCA for the Partners. It includes estimates of staffing and administrative costs, consultant costs, power supply costs, uncollectable charges, and SDG&E charges. In addition, it provides an estimate of start-up working capital and longer-term financial needs.

d) Product, Service and Rate Comparisons
This section provides a comparison of rates between SDG&E and the Partners' CCA. Rates are evaluated based on the CCA's total electric bundled rates as compared to SDG&E's total bundled rates. Total bundled electric rates include the rates charged by the CCA, including non-bypassable charges, plus SDG&E's delivery charges.

e) Environmental/Economic Considerations
This section provides an overview of the potential environmental and indirect economic impacts to the San Diego area from the implementation of a CCA in the three Cities. In addition, EES also outlined potential future programs that could be offered by the CCA.

f) Sensitivity Analysis
The economic analysis provides a base case scenario for forming a Partner CCA JPA. This base case is predicated on numerous assumptions and estimates that influence the overall results. This section of the Study provides the range of impacts that could result from changes in the most significant variables for the portfolios described in the Power Supply Strategy and Cost of Service sections of this Study. In addition, this section will address uncertainties that should be addressed and mitigated to the maximum extent possible.

g) CCA Governance
This section of the Study further discusses governance options that may be available to the Partners either individually or together as they look to form a CCA. The Study evaluates a Partners CCA JPA and provides the results of the individual city analyses where each city forms an enterprise fund and operates a CCA individually. These include:

- Enterprise – Each city operating its own CCA
- Partner CCA – A 3-city CCA program with Chula Vista, Santee, and La Mesa
- Hybrid CCA – The Partners establish a JPA to share administration costs but each city obtains its own power supply
- Regional CCA– Join the City of San Diego-led efforts to form a Regional CCA
- Partnering with an existing CCA program (Solana Energy Alliance)

h) Conclusions and Recommendations
This section contains conclusions and recommendations of the various sections analyzed as part of the CCA feasibility study. These include:

- Rate Conclusions
- Renewable Energy Conclusions
- Energy Efficiency Conclusions
- Economic Development Conclusions
- Greenhouse Gas (GHG) Emissions Conclusions

CCA Feasibility Study Highlights:

CCA Governance Options

If local jurisdictions would like to pursue a CCA in their community, there are three main ways they are currently governed. Below in Table 2 is a brief description of the three options with a summary of their benefits and risks, for more detailed analysist please see pg. 69 of the report.

Table 2
CCA Governance Options

CCA Governance	Description	Benefit	Risk
Enterprise (City Forms Individual CCA)	The City creates a standalone CCA for its residents that would only serve that jurisdictions residents.	Maximum local control, less complicated governance.	Lack of ability to share non-power supply costs with others, possible financial risk to general fund from CCA obligations, City responsible for all staffing, lack of economies of scale for procurement.

Partner CCA, Regional CCA and Other JPA Options (City Forms or Joins JPA)	The City working with other jurisdictions who jointly create and operate a CCA that serves all member of the participating jurisdictions.	More financially viable than operating individually, due to the ability to spread overhead costs, greater economy of scale for procurement (partnering with a large jurisdiction like San Diego could provide an additional 0.8% rate reductions) and provides a clear separation between the CCA and the City's general fund.	More complicated governance depending on JPA membership and size because the organization needs agreement by all member jurisdictions.
Enterprise JPA (City forms an Enterprise CCA then joins a JPA)	City forms its own CCA program and later joins a JPA formed with other jurisdictions.	Increase economies of scale, increased local control of rates and community outreach. This allows the single jurisdiction to exert some local control over the CCA operations while working collectively to take advantage of economies of scale mainly for non-power supply costs but can also partner to procure power if power purchases are aligned.	Possible financial risk to general fund, loss of some local control in so much as the City is not aligned with other JPA members goals.

Each governance option includes different impacts to the startup resources and timing which are reviewed below in Table 3.

Table 3
Estimated Costs to Establish CCA by Governance

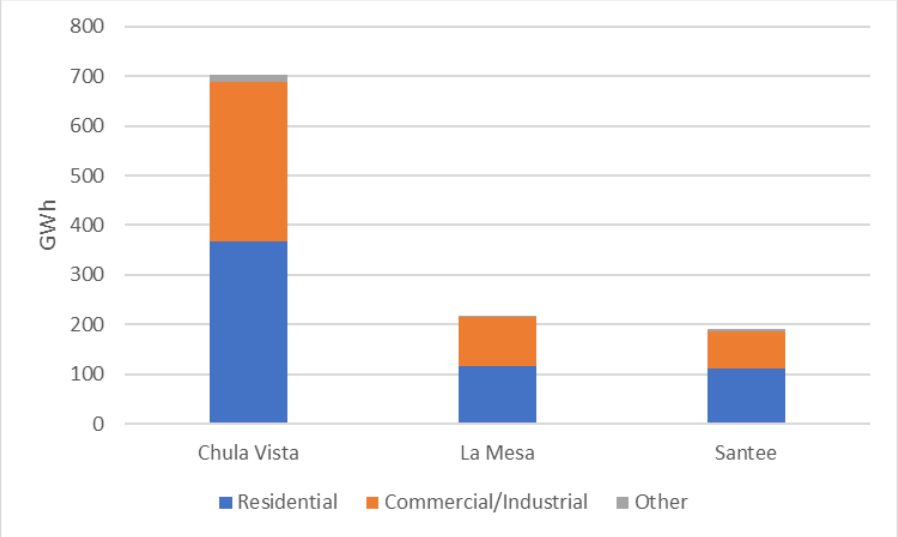
	Enterprise	Partners CCA	Regional CCA	JPA with SEA	Enterprise JPA
Pre-Launch Costs	$600,000-800,000 (each)	$600,000-800,000	$0	Not Determined	$600,000-800,000
Start-Up and Working Capital (Financed)	Chula Vista: $5 million	$8-$10 million	$0	Some fee may be required	Chula Vista: $5 million
	La Mesa: $4 million				La Mesa: $4 million
	Santee: $3 million				Santee: $3 million

Estimated Bundled Rate Discount	Chula Vista: 2% La Mesa: 1% Santee: 1%	2%	At least 2%	Undetermined	2%
Probable Launch Date	2022	2022	2021	2022	2022
Power Supply Cost Allocation	Power supply obtained individually	Power supply obtained at the same time	Shared power costs	Power supply obtained incrementally	Power supply obtained individually

Load and Historical Consumption:

Based on 2017 and 2018 historical data from SDG&E, see Graph 2 below, the Study evaluates the estimated costs and resulting rates of operating a "base case" CCA for the Partners (with RPS of 50% renewable at launch and 100% renewable by 2035) and compares these rates to an SDG&E rate forecast for the years 2021 through 2031.

Graph 2
2018 Load by City

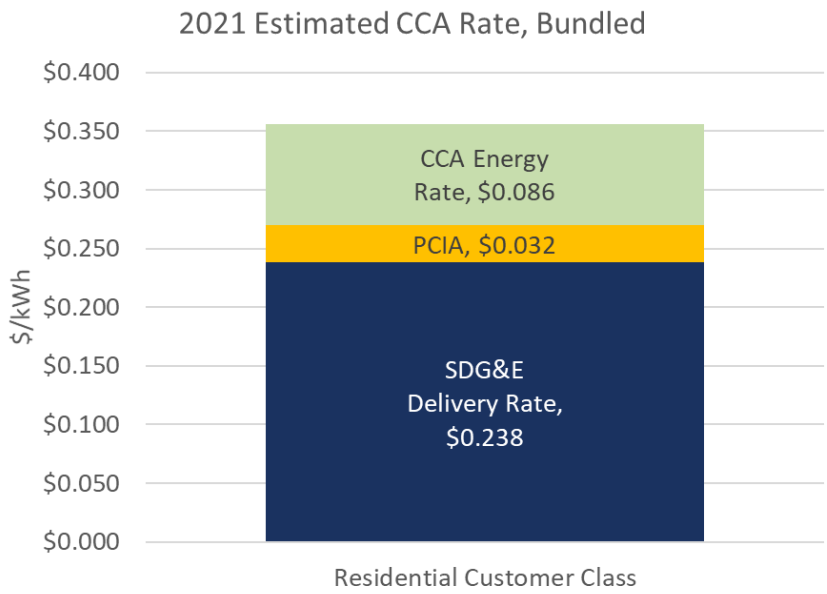


What makes up the estimated CCA Rate?

Power Supply Costs:	Non-Power Supply Costs:	Pass-Through Charges from SDG&E
• Wholesale purchases • Renewable purchases • Procurement of resource adequacy (RA) capacity (System, Local and Flexible capacity products) • Other power supply and charges	• Start-up costs • CCE staffing and administration costs • Consulting support • SDG&E and regulatory charges • Financing costs	○ Transmission and distribution charges ○ Power Charge Indifference Adjustment (PCIA)

The information above is used to determine the projected retail rates for the CCA, see Graph 3 below.

Graph 3



Evaluation of Resource Portfolios

Renewable resources refer to resources that qualify under State and Federal RPS, such as solar and wind power. GHG-free power refers to energy sourced from any non-GHG emitting resource, including both the RPS-compliant sources mentioned above as well as nuclear power and large hydroelectric power. For this Study, no nuclear resources were included in the resource portfolio analysis. The various CCA rates, see table below for description of various RPS options, are then compared to the SDG&E projected rates for the Partners' CCA service area.

Table 4
Partner CCA Resource Portfolios Evaluated

	% Renewable[1] at Launch (2021)	% Renewable in 2030	Meets 100% Renewable by 2035
Scenario 1: SDG&E Equivalent Renewable Portfolio	46%	60%	No
Scenario 2: 50% Renewable at Launch, with 100% by 2035 Portfolio	50%	90%	Yes
Scenario 3: 75% Renewable at Launch, with 100% by 2030 Portfolio	75%	100%	Yes

Scenario 4: 100% Renewables Portfolio at Launch	100%	100%	Yes

[1]Renewable includes only RPS eligible resources. All eligible renewable resources are greenhouse gas free in this study.

Based on this comparison, the related economic development and greenhouse gas (GHG) comparisons are made.

CCA Feasibility Study Key Findings

The Study found that if implemented the CCA would provide multiple potential benefits including:

Rate Results – The Partners' CCA is expected have 2% lower electricity bills for CCA customers under all but one of the RPS options, see table 3 below. This is expected to also be feasible for a Chula Vista Enterprise CCA program. This 2% rate reduction for CCA customers would equate to an annual $7.2 million in rate savings. An additional rate reduction of 0.8% is possible due to economies of scale provided by the Regional JPA governance option.

Table 35
Rate Comparisons, Total Bill $/kWh

Rate Class	2021 SDG&E *	1: SDG&E Equivalent Renewable	2: 50% to 100% Renewable by 2035	3: 75% to 100% Renewable by 2030	4: 100% Renewable
Residential	0.3576	0.3504	0.3504	0.3504	0.3540
Commercial & Industrial	0.2491	0.2442	0.2442	0.2442	0.2467
Lighting	0.1804	0.1768	0.1768	0.1768	0.1786
Agricultural	0.1240	0.1215	0.1215	0.1215	0.1228
Total	**0.3077**	**0.3016**	**0.3016**	**0.3016**	**0.3046**
Bill Savings		**2.00%**	**2.00%**	**2.00%**	**1.00%**

*SDG&E bundled average rate projected based on SDG&E's 2019 Rates. Includes current time-of-use rate structure.

Renewable Energy Results – An outcome of forming a CCA would be an increase in the proportion of energy generated and supplied by renewable resources. The "base case" scenario would provide on average 15% more renewable energy over the study period than the modeled SDG&E rate, which would roughly equate to 155 MW of renewable energy per year. If large jurisdictions in SDG&E territory implement a CCA program it could significantly impact SDG&E's RPS due to excess energy resources SDG&E maintains or sells off because SDG&E is only required to meet the state RPS requirement which was modeled in the Study.

Energy Efficiency Results – The CCA has the potential for future increased energy investment and savings with further reduction in emissions due to expanded energy efficiency programs through CPUC or excess revenue funding.

Economic Development Results – The CCA would lead to 40 direct jobs and it is estimated that the electric bill savings of $7.1 million could create additional indirect and induced jobs in the County.

Greenhouse Gas (GHG) Emissions Results – The Study shows that a path to 100% renewable energy by 2035 is feasible and, based on the CCA RPS selected, could provide a significant amount of increased renewable energy resources in earlier years. The average estimated GHG emission reductions are forecast range from 55,261 to 173,106 tons CO2e per year, see table below. These emission reductions are for a Partner CCA with all three partner cities, Chula Vista proportion of emissions reductions would range from 33,166 to 110,158, which represent Chula Vista's 64% of total Partner energy load.

Table 6
Comparison of Average Annual GHG Emissions from Electricity by Resource Portfolio (2021-2030)

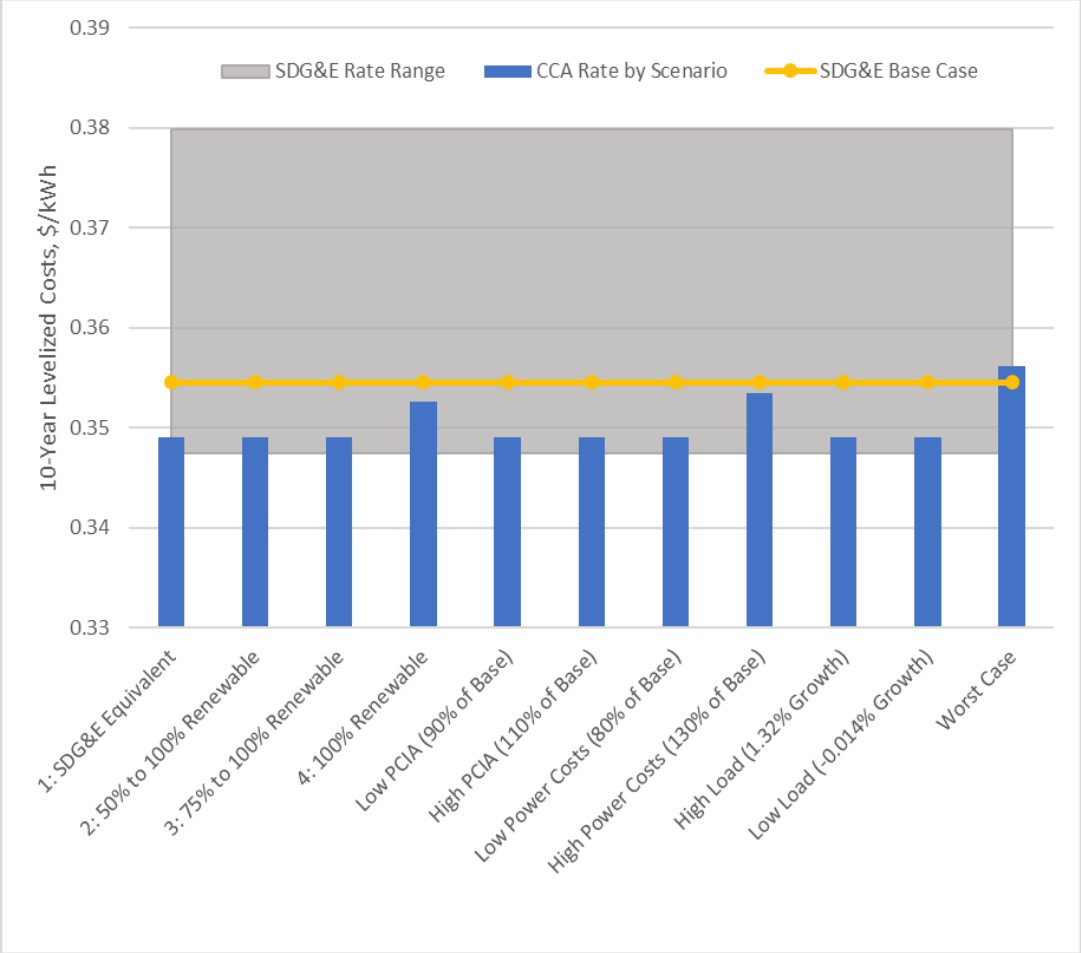
	1: SDG&E Equivalent Renewable Portfolio	2: 50% to 100% Renewable by 2035	3: 75% to 100% Renewable by 2030	4: 100% Renewable	SDG&E
Avg./GHG Share	53%	68%	88%	100%	53%
Avg. Emissions (Metric Tons CO2)	173,106	117,845	45,274	0	173,106
Difference SDG&E Portfolio (Metric Tons CO2)	0	55,261	127,832	173,106	0
Savings expressed as Number of Cars Off the Road[1]	0	12,000	28,000	37,000	0

[1] Passenger cars, based on 4.6 metric tons of CO2 per year assuming 22 mpg and 11,500 miles per year.

The Study found that creating a CCA was feasible and included numerus potential benefits for the partners but not without risk. As a part of the study (pg. 56) the consultants evaluated a range of sensitivities of key CCA operations where risk is perceived including: SDG&E rates and surcharges, regulatory risks, power supply costs, SDG&E RPS portfolio, availability of renewable and GHG-free resources, financial risks, and loads and customer participation rates. Graph 3, below, provides a comparison of the average system rate under several of the scenarios listed above. This sensitivity shows that under most unfavorable market conditions CCA rates will maintain similar or lower than utility rates but that there is a significant risk to the CCA if the CCAs power costs increase based on the high-power cost scenario without any offsetting PCIA benefits. The CCA's rates could also be higher than SDG&E's under a

"Worst Case" scenario. This scenario could arise when the CCA does not achieve enough customer participation, CCA power supply costs are high and SDG&E charges a higher PCIA rate. However, as noted in the study for the most impactful risk area, power costs, the market has seen steady decreases in the cost of renewable energy and this trend is expected to continue. Additionally, the risk areas can be managed and mitigated as described in Exhibit 29 of the Study "Comparison of Risks, Mitigation Strategies, and Risk Severity" (pg 57).

Graph 4
Scenario 2 Portfolio – Bundled Rates ($/kWh)
10-Year Levelized Average System Rate



<u>CCA Feasibility Study Key Conclusions:</u>
Based on the analysis conducted by EES , the following conclusions are made:

- The formation of a CCA is financially feasible and could yield considerable benefits for all participating residents and businesses.
- Financial benefits include electric retail rates that are 2% lower compared with SDG&E rates.
- Benefits are also achieved through local decision-making about power supply, rates and customer programs. Specific programs could include economic development incentives, and

targeted energy efficiency and demand response programs. CCA start-up costs could be fully recovered within the first three years of CCA operations.
    - After this cost recovery, revenues that exceed costs could be used to finance a rate stabilization fund, new local renewable resources, economic development projects and/or lower customer electric rates.
- The sensitivity analysis shows that the ranges of prices for different market conditions will for the most part not negatively impact CCA rates compared to SDG&E rates. Where negative impacts may exist, those risks can be mitigated
- The CCA could be a means to achieve local control of energy supply, and for cities to meet their respective Climate Action Plan (CAP) goals.
- Local electric rate savings are expected to stimulate economic development.

Next Steps

After acceptance of the Study, staff will return to City Council in August to receive guidance on CCA implementation. To launch a CCA by 2021 the City would have to participate in the City of San Diego's Regional CCA JPA option and vote to join by September 2019. If any other governance options are desired the earliest CCA start date would be 2022 due to CPUC filling requirements.

DECISION-MAKER CONFLICT

Staff has reviewed the decision contemplated by this action and has determined that it is not site-specific and consequently, the real property holdings of the City Council members do not create a disqualifying real property-related financial conflict of interest under the Political Reform Act (Cal. Gov't Code § 87100, et seq.).

Staff is not independently aware of and has not been informed by any City Council member, of any other fact that may constitute a basis for a decision-maker conflict of interest in this matter.

CURRENT-YEAR FISCAL IMPACT

The CCA feasibility study is being implemented using existing departmental budgets resulting in no new fiscal impact in the current year.

ONGOING FISCAL IMPACT

There is no new or ongoing fiscal impact created by the CCA feasibility study.

ATTACHMENTS

1. Community Choice Aggregation Feasibility Study

Staff Contact: Cory Downs